SmartTune Wizard - Details

)ptimization Details

;martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

)ptimization Status

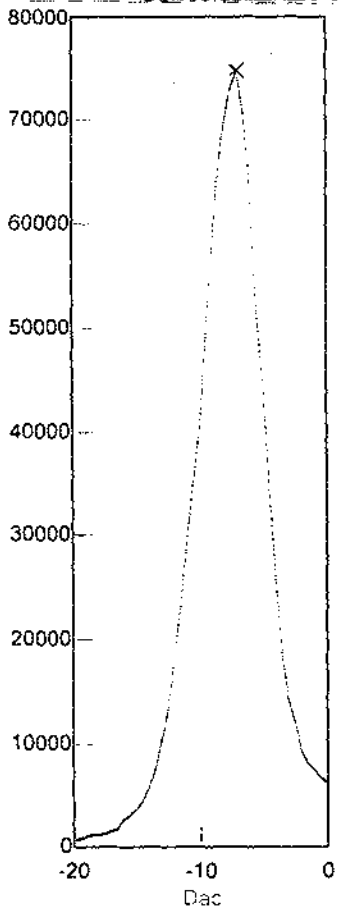
;tart Time: 5/11/2012 11:06:48 AM

)aily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 6949.17
Obtained Intensity (Mg 23.985): 48346.19
Obtained Intensity (In 114.904): 102382.11
Obtained Intensity (Pb 207.977): 40349.46
Obtained Intensity (U 238.05): 71184.42
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.021 (=1945.76 / 93860.95)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=1278.36 / 93860.95)
[Passed] Optimum value(s): N/A

:nd Time: 5/11/2012 11:09:23 AM

US52 : 00786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50000
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30000
20000
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0
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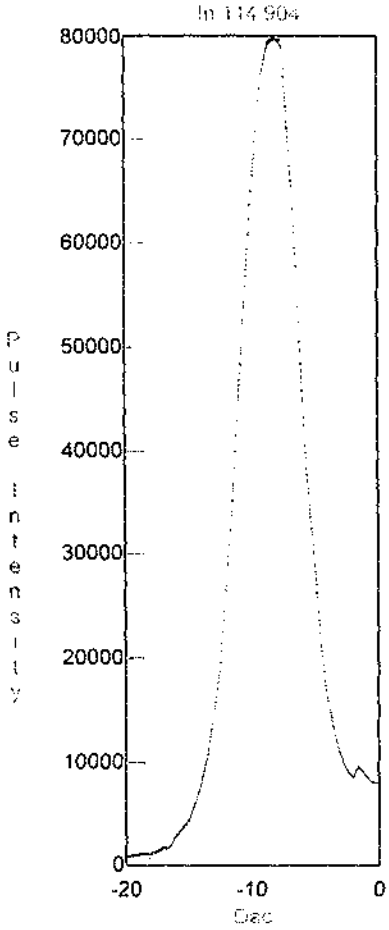
0
Dac


In 114.904
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60000
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40000
30000
20000
10000
0
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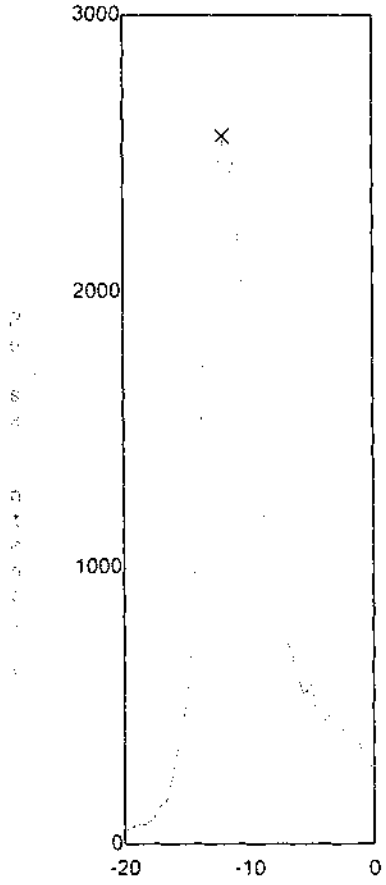
-10
0
Dac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1000
0
-20
-10
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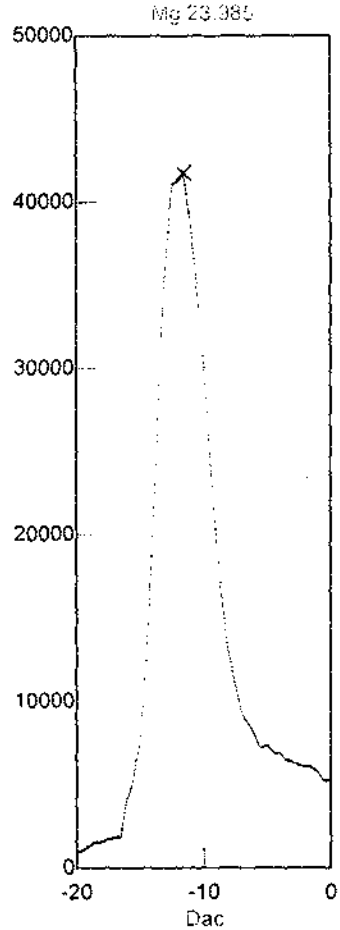
Mg 23.985
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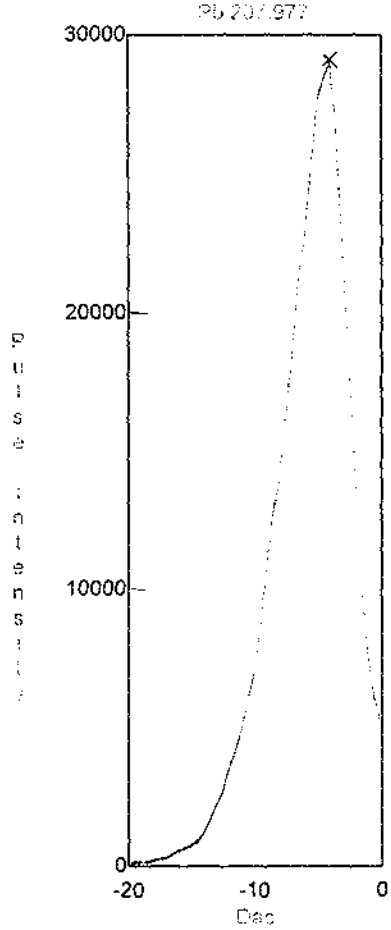
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
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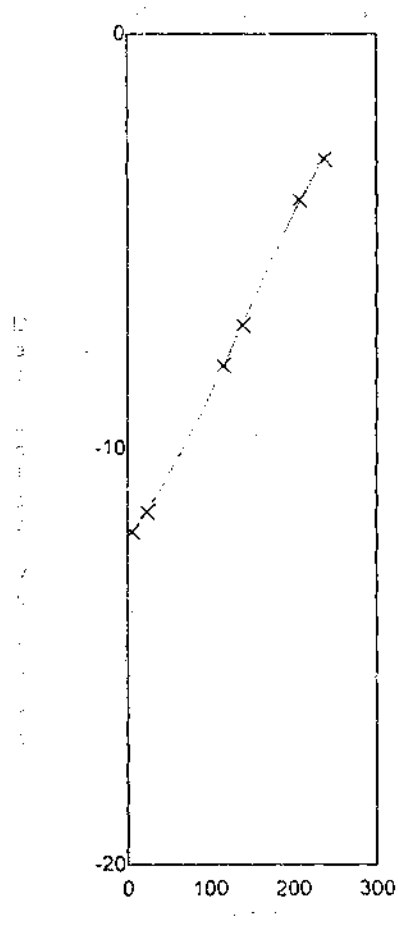
20000
10000
0
-20
-10
0
Dac


0
-10
-20
0
100
200
300

SmartTune Wizard - Summary

ptimization Summary

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

tart Time: 5/11/2012 10:38:24 AM
nd Time: 5/11/2012 10:42:35 AM

utoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.22

US52 : 00788

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/11/2012 10:33:37 AM
End Time: 5/11/2012 10:38:01 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.701)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.699)

US52 : 00789

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/11/2012 10:32:24 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.56 mm	-0.57 mm	72534.31

End Time: 5/11/2012 10:33:26 AM

US52 : 00796

SmartTune Wizard - Summary

)ptimization Summary

;martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

;tart Time: 5/11/2012 10:27:20 AM
:nd Time: 5/11/2012 10:29:55 AM

)aily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 4218.53
Obtained Intensity (Mg 23.985): 31349.13
Obtained Intensity (In 114.904): 58468.94
Obtained Intensity (Pb 207.977): 22394.39
Obtained Intensity (U 238.05): 43747.60
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=881.11 / 57258.52)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=780.10 / 57258.52)

US52 : 00791

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:41:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1633546	1
	Be	9		ug/L				10	14
	C	13		ug/L				107220	2
	Cl	37		ug/L				5888067	3
>	Sc	45		ug/L				1420932	1
	V	51		ug/L				8382	0
	V-1	51		ug/L				237	2
	Cr	52		ug/L				24727	0
	Cr	53		ug/L				189	10
	Mn	55		ug/L				577	0
	Co	59		ug/L				72	6
>	Ge	72		ug/L				673872	1
	Ni	60		ug/L				128	9
	Ni	62		ug/L				326	1
	Cu	63		ug/L				417	3
	Cu	65		ug/L				53	15
	Zn	66		ug/L				309	1
	Zn	67		ug/L				51	4
	Zn	68		ug/L				727	1
	As	75		ug/L				1616	2
	As-1	75		ug/L				9903	0
	Se	82		ug/L				-46	108
	Se	78		ug/L				10084	0
	Mo	98		ug/L				25	9
	Y	89		ug/L				452178	1
	Kr	83		ug/L				2458	4
>	In	115		ug/L				1233632	0
	Ag	107		ug/L				39	32
	Cd	111		ug/L				133	1
	Cd	114		ug/L				38	7
	Sb	121		ug/L				94	12
	Sb	123		ug/L				60	16
	Ba	135		ug/L				218	8
	Ba	137		ug/L				388	0
>	Tb	159		ug/L				1368167	1
	Tl	205		ug/L				31	12
	Pb	208		ug/L				215	5
	Bi	209		ug/L				3022716	0
	Th	232		ug/L				209	4
	U	238		ug/L				12	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:45:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1615601	2
	Be	9	0.200	ug/L	0.012	5	10	1081	5
	C	13		ug/L			107220	117494	0
	Cl	37		ug/L			5888067	5940247	1
>	Sc	45		ug/L			1420932	1398806	0
	V	51	0.200	ug/L	0.004	2	8382	13884	0
	V-1	51	0.200	ug/L	0.002	0	237	5555	1
	Cr	52	0.500	ug/L	0.029	5	24727	36297	1
	Cr	53	0.500	ug/L	0.015	2	189	1438	2
	Mn	55	0.500	ug/L	0.014	2	577	15660	2
	Co	59	0.200	ug/L	0.006	2	72	4420	2
>	Ge	72		ug/L			673872	678934	0
	Ni	60	0.500	ug/L	0.011	2	128	2339	1
	Ni	62	0.500	ug/L	0.025	4	326	666	2
	Cu	63	0.500	ug/L	0.011	2	417	5560	1
	Cu	65	0.500	ug/L	0.004	0	53	2379	1
	Zn	66	4.000	ug/L	0.057	1	309	11115	1
	Zn	67	4.000	ug/L	0.097	2	51	1694	1
	Zn	68	4.000	ug/L	0.064	1	727	8131	1
	As	75	0.200	ug/L	0.003	1	1616	2053	1
	As-1	75	0.200	ug/L	0.076	37	9903	10318	0
	Se	82	0.500	ug/L	0.030	6	-46	100	9
	Se	78	0.500	ug/L	0.332	66	10084	10360	0
	Mo	98	0.200	ug/L	0.005	2	25	1147	2
	Y	89		ug/L			452178	465980	0
	Kr	83		ug/L			2458	2361	0
>	In	115		ug/L			1233632	1243578	0
	Ag	107	0.200	ug/L	0.011	5	39	2765	5
	Cd	111	0.100	ug/L	0.002	1	133	779	0
	Cd	114	0.100	ug/L	0.005	5	38	1650	4
	Sb	121	0.200	ug/L	0.006	2	94	3778	3
	Sb	123	0.200	ug/L	0.002	0	60	2837	1
	Ba	135	0.500	ug/L	0.006	1	218	2823	0
	Ba	137	0.500	ug/L	0.003	0	388	4887	1
>	Tb	159		ug/L			1368167	1372110	0
	Tl	205	0.200	ug/L	0.004	1	31	8977	1
	Pb	208	0.100	ug/L	0.003	3	215	6194	2
	Bi	209		ug/L			3022716	3066398	0
	Th	232	0.200	ug/L	0.002	1	209	8933	1
	U	238	0.200	ug/L	0.003	1	12	10993	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:49:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1681684	0
[	Be	9	10.000	ug/L	0.003	0	10	53753	0
	C	13		ug/L			107220	119291	0
	Cl	37		ug/L			5888067	5954339	2
[>	Sc	45		ug/L			1420932	1482485	1
|	V	51	10.000	ug/L	0.096	0	8382	274293	0
|	V-1	51	10.000	ug/L	0.222	2	237	265911	1
|	Cr	52	9.997	ug/L	0.021	0	24727	250325	1
|	Cr	53	9.999	ug/L	0.407	4	189	25606	3
|	Mn	55	10.000	ug/L	0.087	0	577	314625	1
[	Co	59	10.000	ug/L	0.160	1	72	220230	1
[>	Ge	72		ug/L			673872	695763	0
|	Ni	60	10.001	ug/L	0.051	0	128	47659	0
|	Ni	62	9.999	ug/L	0.152	1	326	6925	1
|	Cu	63	9.999	ug/L	0.169	1	417	103385	1
|	Cu	65	9.999	ug/L	0.163	1	53	45056	2
|	Zn	66	10.037	ug/L	0.187	1	309	28760	2
|	Zn	67	10.142	ug/L	0.243	2	51	4737	2
|	Zn	68	10.063	ug/L	0.105	1	727	20606	0
|	As	75	10.000	ug/L	0.167	1	1616	25636	1
|	As-1	75	10.001	ug/L	0.155	1	9903	33120	1
|	Se	82	10.000	ug/L	0.082	0	-46	2974	0
|	Se	78	10.009	ug/L	0.288	2	10084	16881	0
[	Mo	98	10.000	ug/L	0.021	0	25	57026	0
	Y	89		ug/L			452178	470829	0
	Kr	83		ug/L			2458	2364	1
[>	In	115		ug/L			1233632	1257178	1
|	Ag	107	10.000	ug/L	0.275	2	39	141471	2
|	Cd	111	10.000	ug/L	0.127	1	133	63890	0
|	Cd	114	10.000	ug/L	0.165	1	38	157184	0
|	Sb	121	10.000	ug/L	0.129	1	94	192719	0
|	Sb	123	10.000	ug/L	0.107	1	60	145939	0
|	Ba	135	10.000	ug/L	0.095	0	218	52752	2
[	Ba	137	9.999	ug/L	0.139	1	388	89418	0
[>	Tb	159		ug/L			1368167	1409840	1
|	Tl	205	10.000	ug/L	0.149	1	31	444259	0
|	Pb	208	10.000	ug/L	0.150	1	215	581453	0
|	Bi	209		ug/L			3022716	3092112	1
|	Th	232	10.000	ug/L	0.405	4	209	496634	2
[	U	238	10.000	ug/L	0.135	1	12	558572	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:53:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1672859	4
	Be	9	20.037	ug/L	0.687	3	10	107821	1
	C	13		ug/L			107220	120316	2
	Cl	37		ug/L			5888067	5943636	3
>	Sc	45		ug/L			1420932	1451130	2
	V	51	20.192	ug/L	0.550	2	8382	554155	0
	V-1	51	20.190	ug/L	0.547	2	237	545855	0
	Cr	52	20.101	ug/L	0.359	1	24727	476144	0
	Cr	53	20.096	ug/L	0.374	1	189	51149	1
	Mn	55	20.036	ug/L	0.474	2	577	620727	1
	Co	59	20.071	ug/L	0.206	1	72	438864	1
>	Ge	72		ug/L			673872	696343	2
	Ni	60	19.926	ug/L	0.246	1	128	93501	1
	Ni	62	20.018	ug/L	0.882	4	326	13578	1
	Cu	63	19.964	ug/L	0.407	2	417	204652	1
	Cu	65	20.042	ug/L	0.441	2	53	91061	0
	Zn	66	19.889	ug/L	0.359	1	309	55649	1
	Zn	67	20.061	ug/L	0.813	4	51	9416	1
	Zn	68	19.926	ug/L	0.544	2	727	39594	1
	As	75	20.014	ug/L	0.400	1	1616	49807	2
	As-1	75	20.051	ug/L	0.511	2	9903	56637	2
	Se	82	19.889	ug/L	0.467	2	-46	5835	0
	Se	78	20.038	ug/L	0.835	4	10084	23473	0
	Mo	98	20.108	ug/L	0.538	2	25	117216	1
	Y	89		ug/L			452178	458752	0
	Kr	83		ug/L			2458	2334	1
>	In	115		ug/L			1233632	1251671	0
	Ag	107	19.851	ug/L	0.297	1	39	271495	1
	Cd	111	20.024	ug/L	0.357	1	133	127865	1
	Cd	114	20.037	ug/L	0.056	0	38	315913	0
	Sb	121	20.009	ug/L	0.221	1	94	384595	1
	Sb	123	20.013	ug/L	0.133	0	60	291522	1
	Ba	135	20.033	ug/L	0.190	0	218	105687	0
	Ba	137	20.062	ug/L	0.149	0	388	180443	0
>	Tb	159		ug/L			1368167	1394837	0
	Tl	205	20.067	ug/L	0.158	0	31	894016	0
	Pb	208	20.065	ug/L	0.066	0	215	1169383	0
	Bi	209		ug/L			3022716	3031431	0
	Th	232	20.197	ug/L	0.489	2	209	1033347	2
	U	238	20.118	ug/L	0.074	0	12	1138839	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:58:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1689687	1
[	Be	9	49.677	ug/L	1.788	3	10	261767	3
	C	13		ug/L			107220	115844	1
	Cl	37		ug/L			5888067	6158685	3
[>	Sc	45		ug/L			1420932	1451743	1
|	V	51	49.780	ug/L	1.146	2	8382	1326059	3
|	V-1	51	49.808	ug/L	0.877	1	237	1322050	2
|	Cr	52	49.818	ug/L	0.686	1	24727	1123594	2
|	Cr	53	49.910	ug/L	1.384	2	189	125684	1
|	Mn	55	49.929	ug/L	1.041	2	577	1535961	1
[	Co	59	49.857	ug/L	1.377	2	72	1075212	3
[>	Ge	72		ug/L			673872	681872	1
|	Ni	60	50.030	ug/L	1.217	2	128	230380	1
|	Ni	62	49.821	ug/L	1.681	3	326	32043	1
|	Cu	63	49.831	ug/L	1.055	2	417	491329	0
|	Cu	65	49.933	ug/L	1.368	2	53	220626	1
|	Zn	66	49.961	ug/L	2.061	4	309	135883	2
|	Zn	67	49.644	ug/L	0.645	1	51	21998	0
|	Zn	68	49.923	ug/L	0.504	1	727	95352	0
|	As	75	49.941	ug/L	0.818	1	1616	118575	0
|	As-1	75	50.092	ug/L	0.675	1	9903	124603	1
|	Se	82	49.712	ug/L	0.659	1	-46	13954	0
|	Se	78	50.312	ug/L	0.246	0	10084	43354	1
[	Mo	98	49.789	ug/L	0.990	1	25	278365	1
	Y	89		ug/L			452178	462066	0
	Kr	83		ug/L			2458	2410	1
[>	In	115		ug/L			1233632	1232976	0
|	Ag	107	49.892	ug/L	0.690	1	39	664940	1
|	Cd	111	49.822	ug/L	0.676	1	133	307719	1
|	Cd	114	49.792	ug/L	0.117	0	38	757531	0
|	Sb	121	49.785	ug/L	0.410	0	94	922621	0
|	Sb	123	49.760	ug/L	0.324	0	60	697183	0
|	Ba	135	50.000	ug/L	0.702	1	218	259510	1
[	Ba	137	50.057	ug/L	0.225	0	388	445462	0
[>	Tb	159		ug/L			1368167	1408226	1
|	Tl	205	49.959	ug/L	0.358	0	31	2237867	0
|	Pb	208	49.727	ug/L	0.722	1	215	2847548	0
|	Bi	209		ug/L			3022716	3008400	0
|	Th	232	50.112	ug/L	1.248	2	209	2616994	1
[	U	238	49.963	ug/L	0.941	1	12	2844425	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:04:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1613507	2
[	Be	9	100.429	ug/L	1.216	1	10	512588	1
	C	13		ug/L			107220	117960	0
	Cl	37		ug/L			5888067	6121899	0
[>	Sc	45		ug/L			1420932	1439658	0
|	V	51	101.391	ug/L	0.849	0	8382	2798520	0
|	V-1	51	101.200	ug/L	1.079	1	237	2774370	1
|	Cr	52	100.782	ug/L	2.663	2	24727	2287147	2
|	Cr	53	100.105	ug/L	1.047	1	189	250724	1
|	Mn	55	100.595	ug/L	1.379	1	577	3130605	1
[	Co	59	100.635	ug/L	1.766	1	72	2198800	2
[>	Ge	72		ug/L			673872	676164	0
|	Ni	60	100.173	ug/L	1.680	1	128	460014	1
|	Ni	62	100.238	ug/L	0.960	0	326	64127	0
|	Cu	63	99.978	ug/L	0.562	0	417	976610	1
|	Cu	65	99.316	ug/L	0.401	0	53	425523	0
|	Zn	66	99.614	ug/L	1.780	1	309	265075	1
|	Zn	67	99.808	ug/L	1.164	1	51	43536	1
|	Zn	68	99.786	ug/L	1.713	1	727	186957	1
|	As	75	99.880	ug/L	1.044	1	1616	232645	0
|	As-1	75	99.943	ug/L	1.013	1	9903	236226	0
|	Se	82	99.645	ug/L	0.045	0	-46	27461	0
|	Se	78	99.934	ug/L	1.552	1	10084	75266	1
[	Mo	98	100.804	ug/L	1.199	1	25	574283	1
	Y	89		ug/L			452178	467175	1
	Kr	83		ug/L			2458	2468	0
[>	In	115		ug/L			1233632	1202300	1
|	Ag	107	99.949	ug/L	2.941	2	39	1296654	2
|	Cd	111	99.907	ug/L	0.757	0	133	599730	1
|	Cd	114	100.092	ug/L	0.538	0	38	1489382	0
|	Sb	121	100.762	ug/L	1.287	1	94	1868075	0
|	Sb	123	100.966	ug/L	1.589	1	60	1425203	1
|	Ba	135	100.542	ug/L	0.513	0	218	517961	0
[	Ba	137	100.586	ug/L	1.641	1	388	889767	0
[>	Tb	159		ug/L			1368167	1384264	1
|	Tl	205	99.855	ug/L	0.886	0	31	4375559	0
|	Pb	208	100.195	ug/L	1.306	1	215	5676706	0
|	Bi	209		ug/L			3022716	2917086	0
|	Th	232	100.350	ug/L	1.601	1	209	5212258	0
[	U	238	100.126	ug/L	1.966	1	12	5626796	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:10:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1610812	0
	Be	9	0.004	ug/L	0.002	52	10	32	35
	C	13		ug/L			107220	108711	0
	Cl	37		ug/L			5888067	6111018	3
>	Sc	45		ug/L			1420932	1428244	0
	V	51	0.026	ug/L	0.022	85	8382	9147	6
	V-1	51	0.012	ug/L	0.023	187	237	578	110
	Cr	52	0.067	ug/L	0.033	49	24727	26352	3
	Cr	53	0.019	ug/L	0.034	181	189	237	36
	Mn	55	0.016	ug/L	0.030	185	577	1085	86
	Co	59	0.016	ug/L	0.028	170	72	425	141
>	Ge	72		ug/L			673872	670341	1
	Ni	60	-0.001	ug/L	0.025	1977	128	123	95
	Ni	62	0.357	ug/L	0.034	9	326	549	4
	Cu	63	0.037	ug/L	0.013	35	417	777	18
	Cu	65	0.008	ug/L	0.017	209	53	88	85
	Zn	66	0.019	ug/L	0.018	93	309	358	15
	Zn	67	-0.001	ug/L	0.002	185	51	51	3
	Zn	68	0.025	ug/L	0.010	39	727	769	3
	As	75	0.021	ug/L	0.006	30	1616	1655	1
	As-1	75	0.044	ug/L	0.030	68	9903	9948	1
	Se	82	0.071	ug/L	0.040	55	-46	-26	38
	Se	78	0.117	ug/L	0.117	100	10084	10106	1
	Mo	98	0.017	ug/L	0.005	27	25	122	21
	Y	89		ug/L			452178	452208	1
	Kr	83		ug/L			2458	2415	0
>	In	115		ug/L			1233632	1223209	0
	Ag	107	0.002	ug/L	0.002	112	39	68	49
	Cd	111	0.000	ug/L	0.002	466	133	135	10
	Cd	114	0.001	ug/L	0.001	59	38	60	22
	Sb	121	0.058	ug/L	0.012	20	94	1178	19
	Sb	123	0.059	ug/L	0.012	20	60	908	18
	Ba	135	0.002	ug/L	0.004	252	218	225	9
	Ba	137	-0.001	ug/L	0.002	193	388	376	3
>	Tb	159		ug/L			1368167	1339613	0
	Tl	205	0.008	ug/L	0.001	7	31	380	7
	Pb	208	0.001	ug/L	0.001	60	215	279	14
	Bi	209		ug/L			3022716	3028523	0
	Th	232	0.137	ug/L	0.018	12	209	7090	12
	U	238	0.003	ug/L	0.001	29	12	159	27

Sample Information

Sample Date/Time: Friday, May 11, 2012 12:04:01
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9997**	0.019	0.20	10	20	50	100
V-1	51	**0.9997**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.016	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.022	0.50	10	20	50	100
Co	59	**0.9999**	0.015	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.014	0.50	10	20	50	100
Cu	65	**0.9999**	0.006	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**1.0000**	0.001	4.00	10	20	50	100
Zn	68	**1.0000**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9994**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.011	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**0.9999**	0.015	0.20	10	20	50	100
Sb	123	**0.9998**	0.012	0.20	10	20	50	100
Ba	135	**1.0000**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**1.0000**	0.032	0.20	10	20	50	100
Pb	208	**1.0000**	0.041	0.10	10	20	50	100
Bi	209							
Th	232	**1.0000**	0.038	0.20	10	20	50	100
U	238	**1.0000**	0.041	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:25:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1633509	0
	Be	9	51.658	ug/L	0.431	0	10	266986	0
	C	13		ug/L			107220	116389	3
	Cl	37		ug/L			5888067	5951471	1
>	Sc	45		ug/L			1420932	1463758	0
	V	51	49.569	ug/L	0.356	0	8382	1395526	1
	V-1	51	49.736	ug/L	0.231	0	237	1386448	0
	Cr	52	50.213	ug/L	0.514	1	24727	1171485	1
	Cr	53	50.806	ug/L	0.885	1	189	129474	1
	Mn	55	49.244	ug/L	0.637	1	577	1558447	1
	Co	59	51.629	ug/L	0.647	1	72	1146960	1
>	Ge	72		ug/L			673872	700417	3
	Ni	60	48.952	ug/L	0.844	1	128	232880	2
	Ni	62	49.461	ug/L	1.680	3	326	32927	1
	Cu	63	50.135	ug/L	1.561	3	417	507220	1
	Cu	65	50.028	ug/L	1.904	3	53	221892	1
	Zn	66	47.951	ug/L	1.299	2	309	132273	0
	Zn	67	49.373	ug/L	1.012	2	51	22325	1
	Zn	68	49.305	ug/L	2.150	4	727	95991	1
	As	75	49.266	ug/L	0.862	1	1616	119679	1
	As-1	75	48.589	ug/L	1.304	2	9903	124194	0
	Se	82	80.088	ug/L	1.484	1	-46	21753	1
	Se	78	75.959	ug/L	3.045	4	10084	61703	0
	Mo	98	48.875	ug/L	1.246	2	25	288289	0
	Y	89		ug/L			452178	468128	2
	Kr	83		ug/L			2458	2472	0
>	In	115		ug/L			1233632	1246340	0
	Ag	107	50.163	ug/L	0.849	1	39	674633	1
	Cd	111	49.660	ug/L	0.678	1	133	309070	1
	Cd	114	49.015	ug/L	0.450	0	38	756094	0
	Sb	121	47.703	ug/L	0.501	1	94	916895	0
	Sb	123	47.673	ug/L	0.397	0	60	697634	0
	Ba	135	49.309	ug/L	0.520	1	218	263445	0
	Ba	137	49.411	ug/L	0.394	0	388	453326	0
>	Tb	159		ug/L			1368167	1400713	1
	Tl	205	51.119	ug/L	0.439	0	31	2266625	0
	Pb	208	49.741	ug/L	0.392	0	215	2851892	0
	Bi	209		ug/L			3022716	3003278	0
	Th	232	51.300	ug/L	0.437	0	209	2696742	1
	U	238	51.305	ug/L	0.324	0	12	2917904	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:30:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1585606	1
[	Be	9	0.003	ug/L	0.001	21	10	26	12
	C	13		ug/L			107220	106729	1
	Cl	37		ug/L			5888067	6079625	1
[>	Sc	45		ug/L			1420932	1438523	1
[	V	51	0.011	ug/L	0.002	23	8382	8784	1
[	V-1	51	-0.001	ug/L	0.001	146	237	220	14
[	Cr	52	0.037	ug/L	0.010	28	24727	25859	1
[	Cr	53	-0.003	ug/L	0.003	100	189	183	3
[	Mn	55	-0.001	ug/L	0.000	15	577	561	1
[	Co	59	0.000	ug/L	0.000	238	72	74	6
[>	Ge	72		ug/L			673872	675390	1
[	Ni	60	-0.015	ug/L	0.002	11	128	59	12
[	Ni	62	0.107	ug/L	0.048	44	326	395	6
[	Cu	63	0.008	ug/L	0.004	46	417	499	6
[	Cu	65	0.000	ug/L	0.003	893	53	54	25
[	Zn	66	0.008	ug/L	0.005	64	309	331	2
[	Zn	67	-0.003	ug/L	0.004	147	51	50	4
[	Zn	68	0.023	ug/L	0.018	76	727	771	4
[	As	75	0.006	ug/L	0.018	304	1616	1633	3
[	As-1	75	0.032	ug/L	0.039	122	9903	9998	1
[	Se	82	0.077	ug/L	0.030	39	-46	-26	30
[	Se	78	0.092	ug/L	0.128	138	10084	10167	1
[	Mo	98	0.012	ug/L	0.002	18	25	93	12
	Y	89		ug/L			452178	460735	0
	Kr	83		ug/L			2458	2400	2
[>	In	115		ug/L			1233632	1223919	0
[	Ag	107	0.001	ug/L	0.002	154	39	55	47
[	Cd	111	-0.001	ug/L	0.002	195	133	127	7
[	Cd	114	0.001	ug/L	0.001	102	38	49	23
[	Sb	121	0.027	ug/L	0.006	23	94	604	20
[	Sb	123	0.027	ug/L	0.009	31	60	450	27
[	Ba	135	-0.001	ug/L	0.003	441	218	213	7
[	Ba	137	-0.002	ug/L	0.002	130	388	370	5
[>	Tb	159		ug/L			1368167	1334722	0
[	Tl	205	0.004	ug/L	0.000	9	31	204	8
[	Pb	208	0.001	ug/L	0.000	48	215	266	10
[	Bi	209		ug/L			3022716	3008378	0
[	Th	232	0.100	ug/L	0.017	17	209	5192	16
[	U	238	0.002	ug/L	0.000	11	12	115	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:34:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1650190	1
[	Be	9	49.795	ug/L	0.381	0	10	259966	1
	C	13		ug/L			107220	108824	1
	Cl	37		ug/L			5888067	6083796	1
[>	Sc	45		ug/L			1420932	1497620	1
	V	51	46.683	ug/L	1.251	2	8382	1344988	2
	V-1	51	46.811	ug/L	1.357	2	237	1334903	2
	Cr	52	47.528	ug/L	1.060	2	24727	1135691	1
	Cr	53	47.986	ug/L	1.184	2	189	125107	1
	Mn	55	47.055	ug/L	0.880	1	577	1523534	1
[	Co	59	47.204	ug/L	0.844	1	72	1072742	0
[>	Ge	72		ug/L			673872	680016	1
	Ni	60	49.190	ug/L	0.130	0	128	227261	1
	Ni	62	50.297	ug/L	0.477	0	326	32522	0
	Cu	63	49.892	ug/L	0.806	1	417	490271	0
	Cu	65	50.975	ug/L	1.223	2	53	219630	1
	Zn	66	49.612	ug/L	0.601	1	309	132919	0
	Zn	67	51.280	ug/L	1.493	2	51	22515	1
	Zn	68	50.964	ug/L	0.988	1	727	96378	1
	As	75	49.913	ug/L	0.861	1	1616	117724	0
	As-1	75	49.912	ug/L	1.166	2	9903	123628	0
	Se	82	52.723	ug/L	0.466	0	-46	13892	0
	Se	78	50.203	ug/L	1.354	2	10084	43064	0
[	Mo	98	47.936	ug/L	0.884	1	25	274624	0
	Y	89		ug/L			452178	465245	2
	Kr	83		ug/L			2458	2400	2
[>	In	115		ug/L			1233632	1235825	2
	Ag	107	49.125	ug/L	1.449	2	39	654829	0
	Cd	111	49.584	ug/L	0.743	1	133	305931	0
	Cd	114	49.562	ug/L	1.185	2	38	757819	0
	Sb	121	48.298	ug/L	1.161	2	94	920192	0
	Sb	123	47.998	ug/L	1.049	2	60	696249	0
	Ba	135	48.669	ug/L	0.877	1	218	257772	0
[	Ba	137	48.304	ug/L	1.415	2	388	439256	0
[>	Tb	159		ug/L			1368167	1390835	0
	Tl	205	50.617	ug/L	0.430	0	31	2228602	0
	Pb	208	49.668	ug/L	0.298	0	215	2827726	0
	Bi	209		ug/L			3022716	2999599	0
	Th	232	50.556	ug/L	0.755	1	209	2638631	0
[	U	238	51.192	ug/L	0.518	1	12	2890819	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:39:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1633546	1588845	1
	Be	**9**	**0.002**	ug/L	0.001	70	10	20	34
	C	**13**		ug/L			107220	107372	2
	Cl	**37**		ug/L			5888067	5953035	1
>	**Sc**	**45**		ug/L			1420932	1432635	1
	V	**51**	**0.019**	ug/L	0.003	15	8382	8959	1
	V-1	**51**	**-0.001**	ug/L	0.000	20	237	210	2
	Cr	**52**	**0.061**	ug/L	0.011	17	24727	26297	1
	Cr	**53**	**-0.007**	ug/L	0.000	6	189	173	1
	Mn	**55**	**-0.001**	ug/L	0.000	49	577	561	2
	Co	**59**	**-0.000**	ug/L	0.000	64	72	64	9
>	**Ge**	**72**		ug/L			673872	678893	0
	Ni	**60**	**-0.017**	ug/L	0.002	9	128	48	16
	Ni	**62**	**0.091**	ug/L	0.049	54	326	386	8
	Cu	**63**	**0.009**	ug/L	0.002	24	417	504	4
	Cu	**65**	**0.000**	ug/L	0.003	915	53	54	21
	Zn	**66**	**0.006**	ug/L	0.007	122	309	326	5
	Zn	**67**	**0.005**	ug/L	0.012	229	51	54	9
	Zn	**68**	**0.024**	ug/L	0.011	48	727	777	3
	As	**75**	**0.018**	ug/L	0.032	176	1616	1670	3
	As-1	**75**	**0.037**	ug/L	0.046	126	9903	10060	0
	Se	**82**	**0.107**	ug/L	0.056	52	-46	-18	79
	Se	**78**	**0.104**	ug/L	0.186	177	10084	10227	0
	Mo	**98**	**0.013**	ug/L	0.001	5	25	99	4
	Y	**89**		ug/L			452178	455315	1
	Kr	**83**		ug/L			2458	2421	3
>	**In**	**115**		ug/L			1233632	1224396	1
	Ag	**107**	**0.000**	ug/L	0.001	903	39	39	21
	Cd	**111**	**0.000**	ug/L	0.002	1993	133	133	7
	Cd	**114**	**0.000**	ug/L	0.000	3128	38	38	12
	Sb	**121**	**0.071**	ug/L	0.001	1	94	1436	0
	Sb	**123**	**0.071**	ug/L	0.002	3	60	1087	4
	Ba	**135**	**0.003**	ug/L	0.004	151	218	232	11
	Ba	**137**	**-0.000**	ug/L	0.002	685	388	383	3
>	**Tb**	**159**		ug/L			1368167	1323420	0
	Tl	**205**	**0.004**	ug/L	0.000	7	31	200	6
	Pb	**208**	**0.001**	ug/L	0.000	41	215	241	5
	Bi	**209**		ug/L			3022716	3024172	1
	Th	**232**	**0.132**	ug/L	0.031	23	209	6767	22
	U	**238**	**0.002**	ug/L	0.000	18	12	138	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:43:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1571800	1
	Be	9	0.217	ug/L	0.012	5	10	1090	6
	C	13		ug/L			107220	113707	2
	Cl	37		ug/L			5888067	6008386	1
>	Sc	45		ug/L			1420932	1448382	1
	V	51	0.198	ug/L	0.011	5	8382	14018	1
	V-1	51	0.193	ug/L	0.002	0	237	5559	1
	Cr	52	0.531	ug/L	0.040	7	24727	37195	1
	Cr	53	0.518	ug/L	0.007	1	189	1498	2
	Mn	55	0.496	ug/L	0.010	2	577	16122	0
	Co	59	0.198	ug/L	0.003	1	72	4424	2
>	Ge	72		ug/L			673872	683079	0
	Ni	60	0.484	ug/L	0.015	3	128	2376	3
	Ni	62	0.499	ug/L	0.032	6	326	652	3
	Cu	63	0.529	ug/L	0.004	0	417	5639	1
	Cu	65	0.540	ug/L	0.007	1	53	2391	0
	Zn	66	4.066	ug/L	0.061	1	309	11231	0
	Zn	67	3.771	ug/L	0.094	2	51	1711	2
	Zn	68	3.960	ug/L	0.079	2	727	8203	1
	As	75	0.195	ug/L	0.042	21	1616	2093	4
	As-1	75	0.139	ug/L	0.028	19	9903	10357	0
	Se	82	0.639	ug/L	0.066	10	-46	122	14
	Se	78	0.322	ug/L	0.040	12	10084	10434	0
	Mo	98	0.193	ug/L	0.006	3	25	1136	3
	Y	89		ug/L			452178	456374	1
	Kr	83		ug/L			2458	2387	1
>	In	115		ug/L			1233632	1236595	0
	Ag	107	0.197	ug/L	0.001	0	39	2673	0
	Cd	111	0.109	ug/L	0.005	4	133	803	2
	Cd	114	0.104	ug/L	0.001	1	38	1630	1
	Sb	121	0.213	ug/L	0.005	2	94	4150	2
	Sb	123	0.213	ug/L	0.001	0	60	3148	0
	Ba	135	0.445	ug/L	0.004	0	218	2577	0
	Ba	137	0.443	ug/L	0.014	3	388	4417	2
>	Tb	159		ug/L			1368167	1327033	1
	Tl	205	0.209	ug/L	0.008	3	31	8813	2
	Pb	208	0.113	ug/L	0.004	3	215	6323	2
	Bi	209		ug/L			3022716	3020615	0
	Th	232	0.232	ug/L	0.010	4	209	11773	3
	U	238	0.204	ug/L	0.007	3	12	11001	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:48:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1646452	1
[	Be	9	0.002	ug/L	0.001	51	10	21	24
	C	13		ug/L			107220	240241	3
	Cl	37		ug/L			5888067	15574543	1
[>	Sc	45		ug/L			1420932	1447311	1
[	V	51	0.107	ug/L	0.025	23	8382	11502	6
[	V-1	51	0.809	ug/L	0.006	0	237	22541	0
[	Cr	52	0.862	ug/L	0.066	7	24727	44641	2
[	Cr	53	3.332	ug/L	0.071	2	189	8574	1
[	Mn	55	0.090	ug/L	0.002	1	577	3409	1
[	Co	59	0.020	ug/L	0.000	1	72	502	1
[>	Ge	72		ug/L			673872	657513	2
[	Ni	60	0.368	ug/L	0.014	3	128	1767	1
[	Ni	62	5.190	ug/L	0.831	16	326	3537	16
[	Cu	63	1.185	ug/L	0.064	5	417	11669	7
[	Cu	65	0.358	ug/L	0.009	2	53	1544	3
[	Zn	66	0.674	ug/L	0.028	4	309	2044	4
[	Zn	67	5.796	ug/L	0.179	3	51	2506	3
[	Zn	68	0.163	ug/L	0.020	11	727	1005	2
[	As	75	0.043	ug/L	0.026	60	1616	1672	1
[	As-1	75	0.272	ug/L	0.106	38	9903	10259	0
[	Se	82	-0.228	ug/L	0.068	29	-46	-103	15
[	Se	78	1.010	ug/L	0.256	25	10084	10477	0
[	Mo	98	416.555	ug/L	3.248	0	25	2307404	1
	Y	89		ug/L			452178	460696	0
	Kr	83		ug/L			2458	2759	2
[>	In	115		ug/L			1233632	1231851	0
[	Ag	107	0.024	ug/L	0.001	5	39	352	4
[	Cd	111	0.083	ug/L	0.013	16	133	645	13
[	Cd	114	0.184	ug/L	0.006	3	38	2841	3
[	Sb	121	0.057	ug/L	0.002	2	94	1174	2
[	Sb	123	0.060	ug/L	0.001	2	60	927	2
[	Ba	135	0.006	ug/L	0.004	56	218	250	7
[	Ba	137	-0.001	ug/L	0.003	463	388	382	5
[>	Tb	159		ug/L			1368167	1398371	0
[	Tl	205	0.006	ug/L	0.003	53	31	278	47
[	Pb	208	0.035	ug/L	0.001	2	215	2230	2
[	Bi	209		ug/L			3022716	2811971	0
[	Th	232	0.254	ug/L	0.106	41	209	13525	41
[	U	238	0.002	ug/L	0.000	14	12	100	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:53:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1676843	1
[	Be	9	0.000	ug/L	0.001	339	10	12	30
	C	13		ug/L			107220	227869	1
	Cl	37		ug/L			5888067	15879559	1
[>	Sc	45		ug/L			1420932	1473806	1
[	V	51	0.029	ug/L	0.153	519	8382	9476	43
[	V-1	51	0.804	ug/L	0.012	1	237	22806	1
[	Cr	52	19.644	ug/L	0.637	3	24727	476896	1
[	Cr	53	22.622	ug/L	0.147	0	189	58152	1
[	Mn	55	18.997	ug/L	0.193	1	577	605660	0
[	Co	59	18.451	ug/L	0.177	0	72	412698	0
[>	Ge	72		ug/L			673872	666050	1
[	Ni	60	18.870	ug/L	0.423	2	128	85453	1
[	Ni	62	24.579	ug/L 125%	0.370	1	326	15731	0
[	Cu	63	20.640	ug/L	0.794	3	417	198861	2
[	Cu	65	20.042	ug/L	0.475	2	53	84614	1
[	Zn	66	18.661	ug/L	0.328	1	309	49160	1
[	Zn	67	22.033	ug/L	0.383	1	51	9505	0
[	Zn	68	17.662	ug/L	0.170	0	727	33188	1
[	As	75	18.628	ug/L	0.294	1	1616	44035	0
[	As-1	75	19.209	ug/L	0.315	1	9903	52626	0
[	Se	82	-0.292	ug/L	0.024	8	-46	-121	5
[	Se	78	0.933	ug/L	0.159	17	10084	10565	0
[	Mo	98	435.187	ug/L	10.118	2	25	2441764	1
	Y	89		ug/L			452178	465224	1
	Kr	83		ug/L			2458	2925	1
[>	In	115		ug/L			1233632	1241672	0
[	Ag	107	20.503	ug/L	0.389	1	39	274730	1
[	Cd	111	19.070	ug/L	0.144	0	33	113325	0
[	Cd	114	18.892	ug/L	0.061	0	38	290362	0
[	Sb	121	0.066	ug/L	0.002	3	94	1365	3
[	Sb	123	0.068	ug/L	0.003	4	60	1052	4
[	Ba	135	0.009	ug/L	0.004	41	218	265	6
[	Ba	137	0.004	ug/L	0.004	94	388	431	8
[>	Tb	159		ug/L			1368167	1418857	0
[	Tl	205	0.003	ug/L	0.000	8	31	156	7
[	Pb	208	0.038	ug/L	0.000	0	215	2422	1
[	Bi	209		ug/L			3022716	2836612	0
[	Th	232	0.104	ug/L	0.023	22	209	5761	20
[	U	238	0.002	ug/L	0.000	13	12	99	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:58:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1607191	0
[	Be	9	0.001	ug/L	0.001	96	10	13	22
	C	13		ug/L			107220	117869	1
	Cl	37		ug/L			5888067	5722222	0
[>	Sc	45		ug/L			1420932	1387019	1
|	V	51	0.025	ug/L	0.004	16	8382	8832	0
|	V-1	51	0.046	ug/L	0.009	19	237	1454	15
|	Cr	52	0.257	ug/L	0.020	7	24727	29691	0
|	Cr	53	0.336	ug/L	0.020	5	189	995	3
|	Mn	55	0.014	ug/L	0.002	12	577	994	4
[	Co	59	0.000	ug/L	0.001	1039	72	71	15
[>	Ge	72		ug/L			673872	668334	0
|	Ni	60	0.019	ug/L	0.003	13	128	214	5
|	Ni	62	0.287	ug/L	0.072	25	326	503	8
|	Cu	63	0.057	ug/L	0.005	8	417	965	4
|	Cu	65	0.042	ug/L	0.004	9	53	231	6
|	Zn	66	0.749	ug/L	0.009	1	309	2274	0
|	Zn	67	0.704	ug/L	0.016	2	51	354	1
|	Zn	68	0.726	ug/L	0.024	3	727	2061	2
|	As	75	0.067	ug/L	0.050	74	1616	1756	7
|	As-1	75	0.020	ug/L	0.051	257	9903	9865	0
|	Se	82	0.013	ug/L	0.140	1067	-46	-42	84
|	Se	78	0.041	ug/L	0.189	459	10084	10027	0
[	Mo	98	0.060	ug/L	0.009	15	25	361	13
	Y	89		ug/L			452178	452430	1
	Kr	83		ug/L			2458	2598	2
[>	In	115		ug/L			1233632	1254121	1
|	Ag	107	-0.001	ug/L	0.000	25	39	29	10
|	Cd	111	-0.001	ug/L	0.002	239	133	129	13
|	Cd	114	0.001	ug/L	0.000	21	38	53	7
|	Sb	121	0.004	ug/L	0.001	27	94	178	14
|	Sb	123	0.004	ug/L	0.001	36	60	117	18
|	Ba	135	-0.021	ug/L	0.001	4	218	109	2
[	Ba	137	-0.024	ug/L	0.001	3	338	178	3
[>	Tb	159		ug/L			1368167	1377157	0
|	Tl	205	0.002	ug/L	0.000	24	31	112	18
|	Pb	208	0.011	ug/L	0.000	2	215	844	1
|	Bi	209		ug/L			3022716	3041626	0
|	Th	232	0.000	ug/L	0.000	63	209	230	4
[	U	238	0.000	ug/L	0.000	79	12	18	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:04:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1600294	2
[	Be	9	0.001	ug/L	0.001	104	10	16	38
	C	13		ug/L			107220	118396	1
	Cl	37		ug/L			5888067	5795080	3
[>	Sc	45		ug/L			1420932	1422925	1
[	V	51	0.012	ug/L	0.009	71	8382	8722	1
[	V-1	51	0.022	ug/L	0.003	11	237	837	9
[	Cr	52	0.221	ug/L	0.028	12	24727	29667	0
[	Cr	53	0.259	ug/L	0.019	7	189	831	6
[	Mn	55	0.030	ug/L	0.001	2	577	1509	1
[	Co	59	0.000	ug/L	0.001	210	72	80	21
[>	Ge	72		ug/L			673872	668820	2
[	Ni	60	0.017	ug/L	0.000	1	128	203	1
[	Ni	62	0.045	ug/L	0.020	44	326	352	5
[	Cu	63	0.034	ug/L	0.004	11	417	744	7
[	Cu	65	0.034	ug/L	0.004	11	53	195	8
[	Zn	66	0.892	ug/L	0.042	4	309	2651	2
[	Zn	67	0.772	ug/L	0.036	4	51	384	3
[	Zn	68	0.868	ug/L	0.024	2	727	2324	2
[	As	75	0.047	ug/L	0.015	32	1516	1712	2
[	As-1	75	0.060	ug/L	0.114	189	9903	9961	0
[	Se	82	-0.027	ug/L	0.070	254	-46	-53	32
[	Se	78	0.181	ug/L	0.390	215	10084	10122	0
[	Mo	98	0.020	ug/L	0.008	39	25	140	34
	Y	89		ug/L			452178	459868	1
	Kr	83		ug/L			2458	2575	0
[>	In	115		ug/L			1233632	1244065	0
[	Ag	107	-0.001	ug/L	0.001	98	39	27	42
[	Cd	111	-0.002	ug/L	0.002	122	133	123	11
[	Cd	114	0.000	ug/L	0.000	31	38	45	5
[	Sb	121	0.002	ug/L	0.001	45	94	137	13
[	Sb	123	0.004	ug/L	0.001	27	60	124	13
[	Ba	135	0.017	ug/L	0.003	17	218	313	4
[	Ba	137	0.018	ug/L	0.005	28	388	556	7
[>	Tb	159		ug/L			1368167	1378711	0
[	Tl	205	0.001	ug/L	0.000	10	31	66	4
[	Pb	208	0.008	ug/L	0.000	1	215	681	0
[	Bi	209		ug/L			3022716	3041685	0
[	Th	232	0.001	ug/L	0.000	16	209	269	3
[	U	238	0.000	ug/L	0.000	247	12	14	37

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:12:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1674423	4
[	Be	9	50.732	ug/L	1.617	3	10	268514	2
	C	13		ug/L			107220	115446	3
	Cl	37		ug/L			5888067	5871286	4
[>	Sc	45		ug/L			1420932	1413046	3
[	V	51	48.018	ug/L	1.381	2	8382	1304505	0
[	V-1	51	48.140	ug/L	1.438	2	237	1294723	1
[	Cr	52	48.260	ug/L	0.954	1	24727	1087617	2
[	Cr	53	48.692	ug/L	0.505	1	189	119772	2
[	Mn	55	48.664	ug/L	0.972	1	577	1486160	1
[	Co	59	47.858	ug/L	2.088	4	72	1025501	2
[>	Ge	72		ug/L			673872	645354	1
[	Ni	60	49.313	ug/L	0.879	1	128	216261	3
[	Ni	62	50.096	ug/L	0.723	1	326	30748	2
[	Cu	63	50.556	ug/L	0.977	1	417	471461	1
[	Cu	65	51.972	ug/L	0.151	0	53	212556	1
[	Zn	66	50.532	ug/L	0.248	0	309	128500	2
[	Zn	67	51.797	ug/L	0.224	0	51	21587	2
[	Zn	68	50.703	ug/L	0.545	1	727	91004	1
[	As	75	52.128	ug/L	0.420	0	1616	116625	1
[	As-1	75	51.057	ug/L	0.596	1	9903	119824	2
[	Se	82	57.472	ug/L	0.896	1	-46	14373	0
[	Se	78	51.634	ug/L	0.311	0	10084	41764	1
[	Mo	98	52.787	ug/L	1.726	3	25	286950	2
	Y	89		ug/L			452178	467977	0
	Kr	83		ug/L			2458	2619	2
[>	In	115		ug/L			1233632	1246525	1
[	Ag	107	54.171	ug/L	0.330	0	39	728701	1
[	Cd	111	50.075	ug/L	0.388	0	133	311693	0
[	Cd	114	49.520	ug/L	0.375	0	38	764025	1
[	Sb	121	48.634	ug/L	0.735	1	94	934873	0
[	Sb	123	48.668	ug/L	0.592	1	60	712255	0
[	Ba	135	48.600	ug/L	0.865	1	218	259713	2
[	Ba	137	49.014	ug/L	0.362	0	388	449740	0
[>	Tb	159		ug/L			1368167	1411099	0
[	Tl	205	50.570	ug/L	1.307	2	31	2258692	1
[	Pb	208	49.156	ug/L	0.596	1	215	2839219	0
[	Bi	209		ug/L			3022716	2984886	0
[	Th	232	49.157	ug/L	1.621	3	209	2602707	2
[	U	238	49.410	ug/L	1.460	2	12	2830481	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:16:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1656210	2
	Be	9	0.002	ug/L	0.002	81	10	21	39
	C	13		ug/L			107220	114751	1
	Cl	37		ug/L			5888067	5979626	5
>	Sc	45		ug/L			1420932	1396140	0
	V	51	0.011	ug/L	0.013	110	8382	8539	3
	V-1	51	0.008	ug/L	0.002	24	237	438	10
	Cr	52	0.033	ug/L	0.044	131	24727	25020	3
	Cr	53	0.021	ug/L	0.008	38	189	236	7
	Mn	55	0.002	ug/L	0.001	74	577	620	5
	Co	59	-0.000	ug/L	0.001	1350244	72	70	26
>	Ge	72		ug/L			673872	654249	1
	Ni	60	-0.016	ug/L	0.002	10	128	52	15
	Ni	62	-0.046	ug/L	0.044	95	326	288	10
	Cu	63	-0.004	ug/L	0.010	263	417	371	26
	Cu	65	0.000	ug/L	0.002	726	53	52	17
	Zn	66	0.012	ug/L	0.003	27	309	330	3
	Zn	67	0.001	ug/L	0.016	2846	51	50	12
	Zn	68	0.000	ug/L	0.017	6899	727	706	3
	As	75	0.083	ug/L	0.010	11	1616	1754	2
	As-1	75	0.087	ug/L	0.054	62	9903	9803	0
	Se	82	0.027	ug/L	0.022	81	-46	-38	16
	Se	78	0.276	ug/L	0.237	85	10084	9963	0
	Mo	98	0.061	ug/L	0.072	117	25	365	110
	Y	89		ug/L			452178	451766	1
	Kr	83		ug/L			2458	2578	1
>	In	115		ug/L			1233632	1237662	0
	Ag	107	0.005	ug/L	0.010	202	39	105	127
	Cd	111	0.001	ug/L	0.007	655	133	140	30
	Cd	114	0.005	ug/L	0.007	155	38	109	100
	Sb	121	0.116	ug/L	0.015	13	2394	2318	13
	Sb	123	0.114	ug/L	0.016	14	1760	1714	13
	Ba	135	0.002	ug/L	0.005	276	218	228	11
	Ba	137	-0.001	ug/L	0.002	142	388	379	4
>	Tb	159		ug/L			1368167	1345070	0
	Tl	205	0.005	ug/L	0.003	51	31	244	44
	Pb	208	0.002	ug/L	0.002	133	215	301	39
	Bi	209		ug/L			3022716	3013531	0
	Th	232	0.149	ug/L	0.053	35	209	7736	35
	U	238	0.005	ug/L	0.003	58	12	258	55

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:20:17
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1706987	2
[	Be	9	24.937	ug/L	0.731	2	10	134623	1
	C	13		ug/L			107220	129359	1
	Cl	37		ug/L			5888067	6021105	2
[>	Sc	45		ug/L			1420932	1461131	1
[	V	51	24.030	ug/L	0.199	0	8382	679690	0
[	V-1	51	24.065	ug/L	0.214	0	237	669746	1
[	Cr	52	24.584	ug/L	0.330	1	24727	585474	1
[	Cr	53	24.716	ug/L	0.182	0	189	62978	1
[	Mn	55	24.696	ug/L	0.073	0	577	780509	1
[	Co	59	24.986	ug/L	1.057	4	72	553939	3
[>	Ge	72		ug/L			673872	667054	0
[	Ni	60	26.022	ug/L	0.479	1	128	117982	1
[	Ni	62	25.617	ug/L	0.110	0	326	16408	0
[	Cu	63	26.724	ug/L	0.747	2	417	257800	2
[	Cu	65	26.847	ug/L	0.722	2	53	113506	2
[	Zn	66	79.351	ug/L	2.610	3	309	208365	2
[	Zn	67	73.654	ug/L	1.216	1	51	31705	1
[	Zn	68	77.888	ug/L	0.764	0	727	144122	0
[	As	75	28.003	ug/L	0.637	2	1616	65493	1
[	As-1	75	25.825	ug/L	0.458	1	9903	67487	1
[	Se	82	83.650	ug/L	1.613	1	-46	21647	1
[	Se	78	76.374	ug/L	1.193	1	10084	59070	1
[	Mo	98	26.285	ug/L	0.590	2	25	147737	1
	Y	89		ug/L			452178	474877	1
	Kr	83		ug/L			2458	2660	1
[>	In	115		ug/L			1233632	1270113	0
[	Ag	107	27.527	ug/L	0.416	1	39	377315	1
[	Cd	111	24.680	ug/L	0.168	0	133	156600	0
[	Cd	114	24.093	ug/L	0.313	1	38	378749	0
[	Sb	121	24.504	ug/L	0.308	1	94	480025	1
[	Sb	123	24.332	ug/L	0.253	1	60	362886	0
[	Ba	135	24.347	ug/L	0.394	1	218	132669	1
[	Ba	137	24.145	ug/L	0.504	2	388	225937	1
[>	Tb	159		ug/L			1368167	1391924	1
[	Tl	205	25.495	ug/L	0.433	1	31	1123316	0
[	Pb	208	25.895	ug/L	0.268	1	215	1475441	0
[	Bi	209		ug/L			3022716	3082639	1
[	Th	232	24.786	ug/L	0.386	1	209	1294679	0
[	U	238	25.141	ug/L	0.402	1	12	1420770	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:24:25
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1674164	1
[	Be	9	24.648	ug/L	0.119	0	10	130569	1
	C	13		ug/L			107220	135920	3
	Cl	37		ug/L			5888067	6022271	1
[>	Sc	45		ug/L			1420932	1435571	1
[	V	51	23.702	ug/L	0.404	1	6382	658745	0
[	V-1	51	23.712	ug/L	0.552	2	237	648260	1
[	Cr	52	24.759	ug/L	0.320	1	24727	579090	0
[	Cr	53	24.808	ug/L	0.716	2	189	62084	1
[	Mn	55	24.488	ug/L	0.129	0	577	760343	1
[	Co	59	24.852	ug/L	0.759	3	72	541295	1
[>	Ge	72		ug/L			673872	678322	1
[	Ni	60	24.869	ug/L	0.243	0	128	114661	1
[	Ni	62	24.822	ug/L	0.195	0	326	16177	1
[	Cu	63	25.549	ug/L	0.266	1	417	250655	1
[	Cu	65	26.051	ug/L	0.514	1	53	111987	0
[	Zn	66	76.540	ug/L	2.364	3	309	204341	1
[	Zn	67	73.479	ug/L	1.770	2	51	32160	1
[	Zn	68	74.646	ug/L	1.768	2	727	140454	0
[	As	75	26.632	ug/L	0.208	0	1616	63432	2
[	As-1	75	24.293	ug/L	0.064	0	9903	65148	1
[	Se	82	80.989	ug/L	0.660	0	-46	21311	1
[	Se	78	73.136	ug/L	1.542	2	10084	57941	0
[	Mo	98	25.419	ug/L	0.281	1	25	145288	1
	Y	89		ug/L			452178	459473	2
	Kr	83		ug/L			2458	2661	2
[>	In	115		ug/L			1233632	1261244	2
[	Ag	107	27.472	ug/L	0.576	2	39	373810	0
[	Cd	111	24.339	ug/L	0.471	1	133	153332	1
[	Cd	114	24.231	ug/L	0.405	1	38	378191	0
[	Sb	121	24.161	ug/L	0.570	2	94	469848	0
[	Sb	123	24.146	ug/L	0.417	1	60	357529	1
[	Ba	135	24.213	ug/L	0.510	2	218	130990	0
[	Ba	137	24.362	ug/L	0.977	4	388	226257	1
[>	Tb	159		ug/L			1368167	1386280	0
[	Tl	205	25.342	ug/L	0.129	0	31	1112173	0
[	Pb	208	25.474	ug/L	0.133	0	215	1445638	0
[	Bi	209		ug/L			3022716	3078283	1
[	Th	232	24.669	ug/L	0.271	1	209	1283527	1
[	U	238	24.849	ug/L	0.189	0	12	1398709	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:28:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1602687	0
[	Be	9	0.089	ug/L	0.004	4	10	459	5
	C	13		ug/L			107220	142958	4
	Cl	37		ug/L			5888067	7727537	2
[>	Sc	45		ug/L			1420932	1556933	0
[	V	51	47.513	ug/L	0.319	0	8382	1423153	1
[	V-1	51	47.854	ug/L	0.397	0	237	1418885	1
[	Cr	52	9.355	ug/L	0.209	2	24727	254186	2
[	Cr	53	10.032	ug/L	0.086	0	189	27357	0
[	Mn	55	265.216	ug/L	6.278	2	577	8923885	1
[	Co	59	0.305	ug/L	0.007	2	72	7282	1
[>	Ge	72		ug/L			673872	610411	1
[	Ni	60	0.580	ug/L	0.009	1	128	2518	1
[	Ni	62	71.035	ug/L	5.352	7	326	41129	8
[	Cu	63	13.538	ug/L	0.231	1	417	119722	3
[	Cu	65	0.890	ug/L	0.043	4	53	3487	4
[	Zn	66	1.242	ug/L	0.067	5	309	3258	3
[	Zn	67	2.932	ug/L	0.114	3	51	1199	2
[	Zn	68	3.151	ug/L	0.037	1	727	5967	0
[	As	75	350.801	ug/L	4.459	1	1616	733898	0
[	As-1	75	358.736	ug/L	4.596	1	9903	742168	0
[	Se	82	0.497	ug/L	0.099	19	-46	75	30
[	Se	78	2.250	ug/L	0.408	18	10084	10457	2
[	Mo	98	0.544	ug/L	0.007	1	25	2823	0
	Y	89		ug/L			452178	499688	3
	Kr	83		ug/L			2458	2560	2
[>	In	115		ug/L			1233632	1130416	0
[	Ag	107	0.018	ug/L	0.000	0	39	258	1
[	Cd	111	-0.069	ug/L	0.042	60	133	-266	87
[	Cd	114	0.005	ug/L	0.001	10	38	109	7
[	Sb	121	0.069	ug/L	0.005	7	94	1284	6
[	Sb	123	0.069	ug/L	0.003	3	60	976	3
[	Ba	135	7.859	ug/L	0.038	0	218	38249	0
[	Ba	137	7.830	ug/L	0.047	0	388	65451	0
[>	Tb	159		ug/L			1368167	1343381	0
[	Tl	205	0.003	ug/L	0.001	21	31	166	16
[	Pb	208	0.039	ug/L	0.001	1	215	2364	1
[	Bi	209		ug/L			3022716	2526519	0
[	Th	232	0.563	ug/L	0.274	48	209	28554	47
[	U	238	0.109	ug/L	0.001	0	12	5941	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JPOST REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:32:40
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1578930	1
	Be	9	22.645	ug/L	0.514	2	10	113106	1
	C	13		ug/L			107220	142405	2
	Cl	37		ug/L			5888067	7432647	2
>	Sc	45		ug/L			1420932	1535880	3
	V	51	71.885	ug/L	1.727	2	8382	2118430	1
	V-1	51	72.258	ug/L	1.715	2	237	2112401	0
	Cr	52	31.640	ug/L	0.522	1	24727	784250	2
	Cr	53	32.401	ug/L	0.456	1	189	86692	1
	Mn	55	285.888	ug/L	8.235	2	577	9485878	1
	Co	59	22.538	ug/L	0.476	2	72	525179	1
>	Ge	72		ug/L			673872	614022	0
	Ni	60	25.055	ug/L	0.465	1	128	104569	1
	Ni	62	93.366	ug/L	11.577	12	326	54291	12
	Cu	63	37.296	ug/L	0.524	1	417	331083	2
	Cu	65	26.061	ug/L	0.302	1	53	101434	1
	Zn	66	69.045	ug/L	0.855	1	309	166948	1
	Zn	67	67.553	ug/L	0.879	1	51	26774	1
	Zn	68	71.055	ug/L	0.997	1	727	121083	1
	As	75	366.169	ug/L	1.817	0	1616	770594	0
	As-1	75	373.286	ug/L	2.326	0	9903	776546	0
	Se	82	74.363	ug/L	0.281	0	-46	17710	0
	Se	78	73.854	ug/L	1.499	2	10084	52880	1
	Mo	98	26.735	ug/L	0.385	1	25	138331	1
	Y	89		ug/L			452178	486990	2
	Kr	83		ug/L			2458	2487	0
>	In	115		ug/L			1233632	1131617	1
	Ag	107	24.320	ug/L	0.131	0	39	296992	0
	Cd	111	23.222	ug/L	0.141	0	133	131286	0
	Cd	114	23.044	ug/L	0.041	0	38	322772	1
	Sb	121	24.135	ug/L	0.282	1	94	421217	0
	Sb	123	23.926	ug/L	0.087	0	60	317923	0
	Ba	135	34.021	ug/L	0.262	0	218	165090	0
	Ba	137	33.935	ug/L	0.310	0	388	282793	1
>	Tb	159		ug/L			1368167	1336203	0
	Tl	205	24.373	ug/L	0.130	0	31	1030984	0
	Pb	208	24.184	ug/L	0.217	0	215	1322856	0
	Bi	209		ug/L			3022716	2540699	0
	Th	232	26.075	ug/L	0.312	1	209	1307554	0
	U	238	25.714	ug/L	0.193	0	12	1395042	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:38:12
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1655434	0
[	Be	9	0.032	ug/L	0.032	101	10	176	95
	C	13		ug/L			107220	125692	0
	Cl	37		ug/L			5888067	6334958	3
[>	Sc	45		ug/L			1420932	1547916	0
[	V	51	1.070	ug/L	0.060	5	8382	40780	3
[	V-1	51	1.156	ug/L	0.065	5	237	34309	4
[	Cr	52	0.515	ug/L	0.020	3	24727	39363	1
[	Cr	53	0.807	ug/L	0.019	2	189	2378	1
[	Mn	55	325.498	ug/L	2.338	0	577	10890032	0
[	Co	59	0.187	ug/L	0.018	9	72	4461	8
[>	Ge	72		ug/L			673872	657538	1
[	Ni	60	0.826	ug/L	0.010	1	128	3813	2
[	Ni	62	12.994	ug/L	2.541	19	326	8340	16
[	Cu	63	1.641	ug/L	0.221	13	417	15957	11
[	Cu	65	0.338	ug/L	0.014	4	53	1459	3
[	Zn	66	0.712	ug/L	0.025	3	309	2142	3
[	Zn	67	0.804	ug/L	0.031	3	51	391	1
[	Zn	68	2.207	ug/L	0.091	4	727	4713	1
[	As	75	9.645	ug/L	0.114	1	1616	23268	1
[	As-1	75	9.993	ug/L	0.204	2	9903	31660	0
[	Se	82	0.071	ug/L	0.076	106	-46	-27	71
[	Se	78	0.754	ug/L	0.381	50	10084	10315	0
[	Mo	98	7.682	ug/L	0.048	0	25	42580	2
	Y	89		ug/L			452178	454046	2
	Kr	83		ug/L			2458	2555	2
[>	In	115		ug/L			1233632	1239557	0
[	Ag	107	0.002	ug/L	0.002	100	39	61	35
[	Cd	111	0.008	ug/L	0.001	16	133	184	5
[	Cd	114	0.009	ug/L	0.002	20	38	181	16
[	Sb	121	0.072	ug/L	0.001	0	94	1468	0
[	Sb	123	0.071	ug/L	0.001	1	60	1097	1
[	Ba	135	2.843	ug/L	0.024	0	218	15315	1
[	Ba	137	2.823	ug/L	0.031	1	388	26123	0
[>	Tb	159		ug/L			1368167	1411167	0
[	Tl	205	0.004	ug/L	0.001	19	31	222	17
[	Pb	208	0.023	ug/L	0.001	4	215	1542	4
[	Bi	209		ug/L			3022716	2910770	1
[	Th	232	0.163	ug/L	0.060	36	209	8848	36
[	U	238	0.024	ug/L	0.028	115	12	1388	115

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:42:19
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1622535	0
	Be	9	0.011	ug/L	0.002	15	10	66	12
	C	13		ug/L			107220	125684	2
	Cl	37		ug/L			5888067	8670975	2
>	Sc	45		ug/L			1420932	1517447	1
	V	51	1.525	ug/L	0.071	4	8382	53169	1
	V-1	51	1.699	ug/L	0.084	4	237	49308	3
	Cr	52	0.315	ug/L	0.027	8	24727	33858	0
	Cr	53	0.906	ug/L	0.068	7	189	2591	5
	Mn	55	318.404	ug/L	8.613	2	577	10440097	1
	Co	59	0.163	ug/L	0.003	1	72	3829	2
>	Ge	72		ug/L			673872	629952	0
	Ni	60	0.800	ug/L	0.006	0	128	3540	0
	Ni	62	13.765	ug/L	1.535	11	326	8468	10
	Cu	63	2.663	ug/L	0.155	5	417	24616	5
	Cu	65	0.506	ug/L	0.000	0	53	2069	0
	Zn	66	0.717	ug/L	0.017	2	309	2063	2
	Zn	67	1.157	ug/L	0.064	5	51	518	5
	Zn	68	2.151	ug/L	0.075	3	727	4420	3
	As	75	3.407	ug/L	0.044	1	1616	8852	0
	As-1	75	3.743	ug/L	0.059	1	9903	17153	0
	Se	82	0.116	ug/L	0.058	49	-46	-15	92
	Se	78	1.297	ug/L	0.108	8	10084	10214	0
	Mo	98	2.647	ug/L	0.022	0	25	14070	0
	Y	89		ug/L			452178	448820	0
	Kr	83		ug/L			2458	2504	0
>	In	115		ug/L			1232632	1210166	0
	Ag	107	0.002	ug/L	0.000	14	39	68	7
	Cd	111	0.003	ug/L	0.001	43	133	151	5
	Cd	114	0.004	ug/L	0.001	14	38	96	9
	Sb	121	0.273	ug/L	0.003	1	94	5181	1
	Sb	123	0.282	ug/L	0.009	3	60	4062	2
	Ba	135	8.482	ug/L	0.157	1	218	44176	1
	Ba	137	8.411	ug/L	0.138	1	388	75240	0
>	Tb	159		ug/L			1368167	1391006	0
	Tl	205	0.002	ug/L	0.000	18	31	132	13
	Pb	208	0.047	ug/L	0.001	1	215	2887	0
	Bi	209		ug/L			3022716	2828068	0
	Th	232	0.067	ug/L	0.011	16	209	3722	15
	U	238	0.098	ug/L	0.002	1	12	5557	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:46:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1603289	2
	Be	9	0.014	ug/L	0.001	8	10	80	5
	C	13		ug/L			107220	125420	0
	Cl	37		ug/L			5888067	6027664	1
>	Sc	45		ug/L			1420932	1488444	0
	V	51	0.410	ug/L	0.012	2	8382	20449	1
	V-1	51	0.438	ug/L	0.012	2	237	12648	2
	Cr	52	0.494	ug/L	0.016	3	24727	37357	0
	Cr	53	0.591	ug/L	0.015	2	189	1726	1
	Mn	55	168.483	ug/L	3.304	1	577	5420696	2
	Co	59	0.262	ug/L	0.008	3	72	5986	2
>	Ge	72		ug/L			673872	636456	1
	Ni	60	1.828	ug/L	0.067	3	128	8016	2
	Ni	62	9.914	ug/L	1.163	11	326	6252	12
	Cu	63	1.689	ug/L	0.063	3	417	15915	4
	Cu	65	0.871	ug/L	0.049	5	53	3559	4
	Zn	66	0.726	ug/L	0.027	3	309	2107	2
	Zn	67	0.885	ug/L	0.063	7	51	411	5
	Zn	68	2.093	ug/L	0.065	3	727	4362	2
	As	75	1.395	ug/L	0.076	5	1616	4561	2
	As-1	75	1.541	ug/L	0.050	3	9903	12636	0
	Se	82	0.273	ug/L	0.059	21	-46	23	62
	Se	78	0.913	ug/L	0.027	2	10084	10084	1
	Mo	98	11.956	ug/L	0.413	3	25	64116	2
	Y	89		ug/L			452178	455405	0
	Kr	83		ug/L			2458	2501	1
>	In	115		ug/L			1233632	1239508	0
	Ag	107	0.000	ug/L	0.001	269	39	43	25
	Cd	111	0.007	ug/L	0.001	21	133	176	4
	Cd	114	0.010	ug/L	0.001	5	38	193	4
	Sb	121	0.244	ug/L	0.003	1	94	4752	1
	Sb	123	0.241	ug/L	0.004	1	60	3568	1
	Ba	135	4.436	ug/L	0.015	0	218	23768	0
	Ba	137	4.463	ug/L	0.027	0	388	41075	0
>	Tb	159		ug/L			1368167	1405525	0
	Tl	205	0.005	ug/L	0.000	10	31	235	8
	Pb	208	0.012	ug/L	0.001	5	215	923	4
	Bi	209		ug/L			3022716	2883103	0
	Th	232	0.036	ug/L	0.003	8	209	2100	7
	U	238	0.366	ug/L	0.004	1	12	20909	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:50:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1620236	1
[	Be	9	0.012	ug/L	0.002	15	10	73	13
	C	13		ug/L			107220	126592	1
	Cl	37		ug/L			5888067	8523173	1
[>	Sc	45		ug/L			1420932	1458038	0
[	V	51	1.557	ug/L	0.007	0	8382	51981	0
[	V-1	51	1.684	ug/L	0.011	0	237	47002	0
[	Cr	52	0.351	ug/L	0.024	6	24727	33345	2
[	Cr	53	0.782	ug/L	0.006	0	189	2175	1
[	Mn	55	332.096	ug/L	9.668	2	577	10465484	2
[	Co	59	0.168	ug/L	0.003	1	72	3792	1
[>	Ge	72		ug/L			673872	623890	1
[	Ni	60	0.698	ug/L	0.024	3	128	3075	2
[	Ni	62	9.219	ug/L	1.321	14	326	5721	14
[	Cu	63	2.913	ug/L	0.079	2	417	26628	2
[	Cu	65	1.063	ug/L	0.011	1	53	4248	0
[	Zn	66	2.249	ug/L	0.081	3	309	5799	2
[	Zn	67	2.566	ug/L	0.187	7	51	1078	5
[	Zn	68	3.645	ug/L	0.087	2	727	6950	2
[	As	75	3.672	ug/L	0.136	3	1616	9329	1
[	As-1	75	3.916	ug/L	0.163	4	9903	17346	0
[	Se	82	0.171	ug/L	0.057	33	-46	-1	774
[	Se	78	1.086	ug/L	0.254	23	10084	9988	0
[	Mo	98	2.888	ug/L	0.113	3	25	15197	2
	Y	89		ug/L			452178	447552	0
	Kr	83		ug/L			2458	2533	2
[>	In	115		ug/L			1233632	1201969	0
[	Ag	107	0.000	ug/L	0.000	139	39	41	11
[	Cd	111	-0.002	ug/L	0.000	25	133	119	1
[	Cd	114	0.002	ug/L	0.000	24	38	68	9
[	Sb	121	0.285	ug/L	0.004	1	94	5367	2
[	Sb	123	0.283	ug/L	0.001	0	60	4058	1
[	Ba	135	8.759	ug/L	0.108	1	218	45303	0
[	Ba	137	8.798	ug/L	0.206	2	388	78150	1
[>	Tb	159		ug/L			1368167	1411662	0
[	Tl	205	0.003	ug/L	0.000	11	31	172	9
[	Pb	208	0.065	ug/L	0.001	2	215	3989	2
[	Bi	209		ug/L			3022716	2791988	0
[	Th	232	0.030	ug/L	0.004	14	209	1798	11
[	U	238	0.104	ug/L	0.001	0	12	5991	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:54:42
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1619244	0
	Be	9	0.014	ug/L	0.002	17	10	80	14
	C	13		ug/L			107220	126590	0
	Cl	37		ug/L			5888067	6005394	2
>	Sc	45		ug/L			1420932	1481907	3
	V	51	0.381	ug/L	0.024	6	8382	19534	2
	V-1	51	0.409	ug/L	0.016	3	237	11769	0
	Cr	52	0.472	ug/L	0.041	8	24727	36675	1
	Cr	53	0.569	ug/L	0.036	6	189	1661	3
	Mn	55	166.329	ug/L	1.476	0	577	5326846	2
	Co	59	0.260	ug/L	0.008	3	72	5913	1
>	Ge	72		ug/L			673872	638118	2
	Ni	60	1.068	ug/L	0.067	6	128	4749	6
	Ni	62	5.555	ug/L	0.840	15	326	3646	14
	Cu	63	1.071	ug/L	0.069	6	417	10262	5
	Cu	65	0.531	ug/L	0.020	3	53	2198	5
	Zn	66	0.610	ug/L	0.024	3	309	1820	1
	Zn	67	0.726	ug/L	0.026	3	51	347	3
	Zn	68	1.922	ug/L	0.073	3	727	4072	1
	As	75	1.287	ug/L	0.027	2	1616	4339	1
	As-1	75	1.335	ug/L	0.116	8	9903	12226	0
	Se	82	0.105	ug/L	0.077	73	-46	-18	107
	Se	78	0.520	ug/L	0.333	63	10064	9866	0
	Mo	98	11.207	ug/L	0.216	1	25	60262	1
	Y	89		ug/L			452178	452526	1
	Kr	83		ug/L			2458	2596	3
>	In	115		ug/L			1233632	1215211	0
	Ag	107	-0.001	ug/L	0.001	58	39	26	26
	Cd	111	0.002	ug/L	0.001	74	133	143	6
	Cd	114	0.006	ug/L	0.001	10	38	124	7
	Sb	121	0.238	ug/L	0.005	1	94	4556	2
	Sb	123	0.231	ug/L	0.007	3	60	3356	3
	Ba	135	4.334	ug/L	0.078	1	218	22774	1
	Ba	137	4.313	ug/L	0.030	0	388	38929	0
>	Tb	159		ug/L			1368167	1423842	1
	Tl	205	0.005	ug/L	0.000	2	31	250	2
	Pb	208	0.006	ug/L	0.000	3	215	564	2
	Bi	209		ug/L			3022716	2867083	0
	Th	232	0.017	ug/L	0.001	5	209	1137	5
	U	238	0.345	ug/L	0.013	3	12	19932	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:58:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1618293	1
	Be	9	0.014	ug/L	0.002	17	10	82	16
	C	13		ug/L			107220	125782	1
	Cl	37		ug/L			5888067	6055887	1
>	Sc	45		ug/L			1420932	1475260	1
	V	51	0.387	ug/L	0.013	3	8382	19620	1
	V-1	51	0.408	ug/L	0.010	2	237	11711	2
	Cr	52	0.493	ug/L	0.031	6	24727	37001	0
	Cr	53	0.568	ug/L	0.017	3	189	1651	1
	Mn	55	172.521	ug/L	2.777	1	577	5500536	0
	Co	59	0.263	ug/L	0.005	1	72	5956	1
>	Ge	72		ug/L			673872	632331	0
	Ni	60	1.073	ug/L	0.033	3	128	4728	3
	Ni	62	3.383	ug/L	0.103	3	326	2319	2
	Cu	63	0.907	ug/L	0.022	2	417	8674	1
	Cu	65	0.506	ug/L	0.010	1	53	2078	2
	Zn	66	0.911	ug/L	0.040	4	309	2554	3
	Zn	67	0.981	ug/L	0.026	2	51	448	2
	Zn	68	2.241	ug/L	0.113	5	727	4593	4
	As	75	1.330	ug/L	0.016	1	1616	4393	0
	As-1	75	1.415	ug/L	0.018	1	9903	12288	0
	Se	82	0.103	ug/L	0.050	49	-46	-18	66
	Se	78	0.680	ug/L	0.063	9	10084	9877	0
	Mo	98	11.739	ug/L	0.079	0	25	62564	1
	Y	89		ug/L			452178	451767	1
	Kr	83		ug/L			2458	2600	2
>	In	115		ug/L			1232532	1237181	0
	Ag	107	-0.000	ug/L	0.000	75	39	33	12
	Cd	111	0.004	ug/L	0.002	40	133	160	7
	Cd	114	0.006	ug/L	0.001	14	38	126	10
	Sb	121	0.241	ug/L	0.002	0	94	4698	0
	Sb	123	0.236	ug/L	0.006	2	60	3492	1
	Ba	135	4.379	ug/L	0.059	1	218	23423	0
	Ba	137	4.371	ug/L	0.032	0	388	40166	0
>	Tb	159		ug/L			1368167	1423182	0
	Tl	205	0.004	ug/L	0.000	8	31	217	6
	Pb	208	0.008	ug/L	0.001	7	215	691	5
	Bi	209		ug/L			3022716	2876448	0
	Th	232	0.018	ug/L	0.002	9	209	1167	7
	U	238	0.353	ug/L	0.001	0	12	20393	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 14:04:03
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1580480	2
	Be	9	50.457	ug/L	0.490	0	10	252286	2
	C	13		ug/L			107220	113240	0
	Cl	37		ug/L			5888067	6192850	1
>	Sc	45		ug/L			1420932	1378609	1
	V	51	47.507	ug/L	1.036	2	8382	1259770	0
	V-1	51	47.955	ug/L	0.734	1	237	1258872	0
	Cr	52	48.363	ug/L	1.001	2	24727	1063401	0
	Cr	53	49.943	ug/L	0.272	0	189	119877	1
	Mn	55	46.944	ug/L	1.224	2	577	1399095	1
	Co	59	49.248	ug/L	0.461	0	72	1030466	2
>	Ge	72		ug/L			673872	632532	1
	Ni	60	49.361	ug/L	0.928	1	128	212108	2
	Ni	62	51.514	ug/L	0.413	0	326	30980	2
	Cu	63	51.359	ug/L	1.453	2	417	469338	1
	Cu	65	50.874	ug/L	1.008	1	53	203887	0
	Zn	66	49.853	ug/L	1.315	2	309	124211	0
	Zn	67	51.353	ug/L	0.756	1	51	20975	1
	Zn	68	50.393	ug/L	0.814	1	727	88668	2
	As	75	50.925	ug/L	0.505	0	1616	111708	2
	As-1	75	50.662	ug/L	0.402	0	9903	116599	1
	Se	82	54.606	ug/L	0.419	0	-46	13385	1
	Se	78	51.522	ug/L	0.969	1	10084	40861	0
	Mo	98	50.415	ug/L	0.313	0	25	268675	1
	Y	89		ug/L			452178	437177	1
	Kr	83		ug/L			2458	2518	0
>	In	115		ug/L			1233632	1235536	1
	Ag	107	51.325	ug/L	1.130	2	39	684395	3
	Cd	111	49.863	ug/L	0.787	1	133	307649	1
	Cd	114	49.744	ug/L	0.329	0	38	760667	0
	Sb	121	48.444	ug/L	0.690	1	94	923003	0
	Sb	123	47.830	ug/L	0.937	1	60	693782	0
	Ba	135	48.784	ug/L	0.510	1	218	258370	0
	Ba	137	48.961	ug/L	0.394	0	388	445290	0
>	Tb	159		ug/L			1368167	1403812	2
	Tl	205	51.034	ug/L	1.671	3	31	2266873	1
	Pb	208	49.620	ug/L	1.016	2	215	2850493	0
	Bi	209		ug/L			3022716	3000970	1
	Th	232	50.043	ug/L	2.332	4	209	2634490	2
	U	238	50.093	ug/L	0.593	1	12	2854736	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 14:10:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1517146	0
	Be	9	-0.001	ug/L	0.000	66	10	6	36
	C	13		ug/L			107220	108304	2
	Cl	37		ug/L			5888067	5920832	0
>	Sc	45		ug/L			1420932	1340315	3
	V	51	0.015	ug/L	0.005	33	8382	8280	2
	V-1	51	0.001	ug/L	0.000	40	237	249	1
	Cr	52	0.049	ug/L	0.023	47	24727	24342	2
	Cr	53	0.002	ug/L	0.007	427	189	182	6
	Mn	55	0.002	ug/L	0.001	70	577	590	2
	Co	59	0.000	ug/L	0.000	323	72	69	8
>	Ge	72		ug/L			673872	625739	2
	Ni	60	-0.020	ug/L	0.001	5	128	34	11
	Ni	62	1.202	ug/L	0.084	7	326	1010	3
	Cu	63	0.091	ug/L	0.013	13	417	1210	7
	Cu	65	-0.001	ug/L	0.002	430	53	47	17
	Zn	66	0.010	ug/L	0.013	126	309	311	8
	Zn	67	-0.004	ug/L	0.023	604	51	46	18
	Zn	68	-0.001	ug/L	0.030	5494	727	674	6
	As	75	0.091	ug/L	0.036	39	1616	1696	5
	As-1	75	0.194	ug/L	0.090	46	9903	9600	1
	Se	82	0.094	ug/L	0.109	116	-46	-20	130
	Se	78	0.644	ug/L	0.335	52	10084	9751	1
	Mo	98	0.009	ug/L	0.000	3	25	72	2
	Y	89		ug/L			452178	426021	0
	Kr	83		ug/L			2458	2435	2
>	In	115		ug/L			1233632	1188154	0
	Ag	107	-0.000	ug/L	0.000	111	39	32	19
	Cd	111	-0.002	ug/L	0.002	79	133	115	9
	Cd	114	-0.000	ug/L	0.000	917	38	36	11
	Sb	121	0.055	ug/L	0.005	8	94	1094	7
	Sb	123	0.056	ug/L	0.004	6	60	840	5
	Ba	135	-0.000	ug/L	0.005	1289	218	208	11
	Ba	137	-0.003	ug/L	0.002	77	388	347	5
>	Tb	159		ug/L			1368167	1334169	0
	Tl	205	0.002	ug/L	0.000	13	31	125	10
	Pb	208	0.001	ug/L	0.000	47	215	245	6
	Bi	209		ug/L			3022716	2995248	0
	Th	232	0.075	ug/L	0.013	16	209	3954	15
	U	238	0.001	ug/L	0.000	10	12	89	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:18:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

DEL

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1570495	2
[	Be	9	U 0.001	ug/L	0.001	105	10	14	31
	C	13		ug/L			107220	129297	1
	Cl	37		ug/L			5888067	5886146	1
[>	Sc	45		ug/L			1420932	1402964	0
[	V	51	0.036	ug/L	0.013	35	8382	9247	3
[	V-1	51	0.008	ug/L	0.000	6	237	434	3
[	Cr	52	U 0.169	ug/L	0.033	19	24727	28122	2
[	Cr	53	0.071	ug/L	0.011	15	189	359	7
[	Mn	55	0.048	ug/L	0.002	3	577	2029	2
[	Co	59	0.000	ug/L	0.000	250	72	75	14
[>	Ge	72		ug/L			673872	634444	0
[	Ni	60	U -0.012	ug/L	0.002	20	128	70	14
[	Ni	62	0.917	ug/L	0.019	2	326	854	1
[	Cu	63	U 0.302	ug/L	0.013	4	417	3158	4
[	Cu	65	0.249	ug/L	0.007	2	53	1052	2
[	Zn	66	U 0.664	ug/L	0.012	1	309	1947	1
[	Zn	67	0.626	ug/L	0.042	6	51	304	5
[	Zn	68	0.674	ug/L	0.038	5	727	1864	3
[	As	75	U 0.097	ug/L	0.012	12	1616	1731	1
[	As-1	75	0.210	ug/L	0.038	18	9903	9769	0
[	Se	82	U 0.006	ug/L	0.045	812	-46	-42	26
[	Se	78	0.716	ug/L	0.164	22	10084	9932	0
[	Mo	98	0.006	ug/L	0.001	16	25	55	9
	Y	89		ug/L			452178	444269	0
	Kr	83		ug/L			2458	2567	1
[>	In	115		ug/L			1233632	1226652	0
[	Ag	107	U -0.000	ug/L	0.000	673	39	38	13
[	Cd	111	U -0.002	ug/L	0.003	198	133	123	15
[	Cd	114	0.001	ug/L	0.001	81	38	49	17
[	Sb	121	U 0.014	ug/L	0.003	22	94	351	15
[	Sb	123	0.014	ug/L	0.002	15	60	260	11
[	Ba	135	-0.023	ug/L	0.002	7	218	93	10
[	Ba	137	-0.027	ug/L	0.001	3	388	144	6
[>	Tb	159		ug/L			1368167	1364268	1
[	Tl	205	U 0.004	ug/L	0.002	43	31	221	37
[	Pb	208	U 0.012	ug/L	0.001	4	215	866	1
[	Bi	209		ug/L			3022716	3045639	0
[	Th	232	0.055	ug/L	0.011	19	209	3034	17
[	U	238	0.000	ug/L	0.000	37	12	36	26

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.14.12 Analyst: JWB Page: 1 of 4

All corrections made by analyst unless otherwise noted. 5.14.12 JWB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			2934-14
		1			2933-5
		2			2935-12
		3			6 -13
		4			25 7BBFA
		5			2935-05
		Rinse Sample			r = 0.9997
		SO			
		ICV			2930-2
		ICB		✓	
		CCV1		✓	
		CCB1		✓	
		DI		✓	
		Low Check			
		ICSA			
		ICSAB			102%
		B1			
		B2			
		ERA P197-500		10 ✓	Use Calc.
		CCV2		✓	
		CCB2			
		SO			
		CCV3		✓	
		CCB3		✓	

US52 : 0082H

Analytical Resources, Incorporated
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ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.14.12 Analyst: JLB Page: 2 of 4

All corrections made by analyst unless otherwise noted. 5.15.12 JLB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	US15 MB1	REN	2	
	✓	MB2			Cu 0.5720 nr
		MB2QK			
		MB3QK			
		A-L		10	
		A		2	Ni CAF Ni, Cl
		ADUP			
		AQK			
		B		10	As, Cl 2x Cl 5/16/12 JLB
		H			
		CCV4			100% 110.3% 5/15/12 JLB
		CCB4			
		US15 MB2	REN	2	(Cu U.)
		G-L		10	Ni, Cl.
		G		2	
		GDUP			
		GQK			
		LRL00			
		B3			
		B4			
		CCV6			
		CCB5			
		US52 MB1	REN	2	Cu 1.092, Zn 4.0 nr
		US52 MB2	REN	1	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5-14-12 **Analyst:** JMB **Page:** 3 of 4

All corrections made by analyst unless otherwise noted. 5-15 BMB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US52 MB2SPK	REN	2	
		MB1SPK		6	
		A-L		10	rrAs X500 rrCr10X
		A		2	X100
		ADUP			
		ASPK		✓	
Z		~~APOST~~			
		BG		✓	
		CCV6		✓	0.0us 110.4% Acceptable
		CCB6			
		US52G-L	REN	10	As rr
		G		2	Zn rr
		GDUP		✓	
		GSPK		✓	
Z		~~GPOST~~			0.00spk#1, spk#2 (Y0)
		B			
		C			
	✓	D			rr As 10X
		E			
	✓	F			rr As 10X
		CCV7		✓	
		CCB7		✓	
Z		~~US52J-L~~	REN	10	rr As 100X rr Zn 10X
		J		2	100X

Analytical Resources, Incorporated
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ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.14.12 **Analyst:** JW **Page:** 4 of 4

All corrections made by analyst unless otherwise noted. 5.15.12 JW

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US52JDUP	2EN	2 ✓	rr Ag 100 ppt
		J ~~JDUP~~		✓	↓
Z		~~JSPK~~ ~~JPOST~~			0.06 spk#1, spk#2 (1/10)
		H			
		I			reran Ag (noisy) ~~rerun Ag~~ CRDL OK JW 5.15.12
		K			
		L	↓	↓	
		CCV8		✓	
		CCB8			^{62}Ni high
		US52 P-L	REN	10	^{67}Zn u.
		P		2	↓
		PDUP		✓	
		PSPK		✓	↓
Z		~~PSPK~~ ~~PPOST~~			0.06 spk#1, spk#2 (1/10)
	✓	M			Ag rerun 10x
		N			
	✓	O			Ag rerun 10x
		Q			
		R	↓	↓	
		CCV9			^{62}Ni high
		CCB9			↓
		Rinse / DI			
				JW 5.15.12	

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.14.12

MZ	Analyst 5.17.12	Peer 5.17.12	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	see log of 1ppb 5/17/12
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	see log
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	see log
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	see log
Matrix Spikes	✓	✓	US15 CAF
Matrix Duplicates	✓	✓	↓
Method Blanks	✓	✓	see log
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	US15 CAF

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/14/2012 12:06:49 PM

aily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 5670.26
Obtained Intensity (Mg 23.985): 42907.93
Obtained Intensity (In 114.904): 86700.19
Obtained Intensity (Pb 207.977): 35333.15
Obtained Intensity (U 238.05): 64521.71
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (CeO 155.9 / Ce 139.905): 0.014 (=1192.29 / 83650.41)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.011 (=885.38 / 83650.41)
Passed] Optimum value(s): N/A

nd Time: 5/14/2012 12:09:24 PM

US52 : 00829

SmartTune Wizard - Summary

ptimization Summary

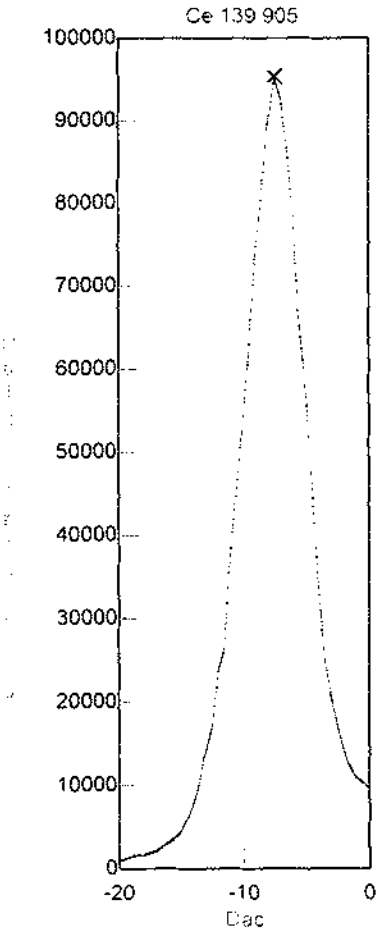
martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

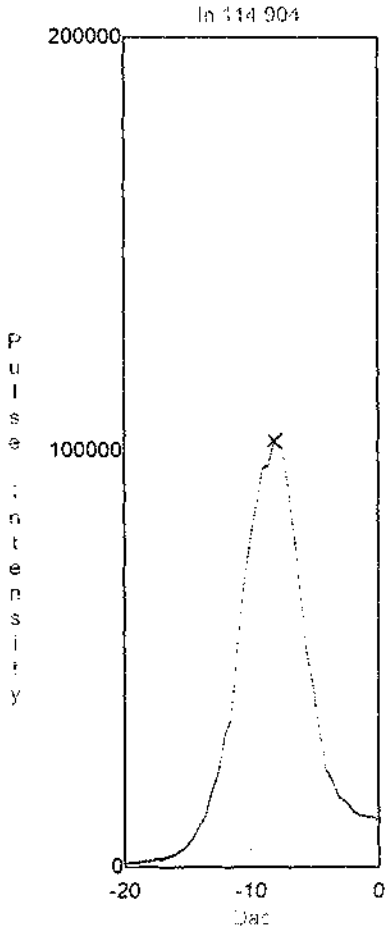
tart Time: 5/14/2012 12:02:33 PM
nd Time: 5/14/2012 12:05:08 PM

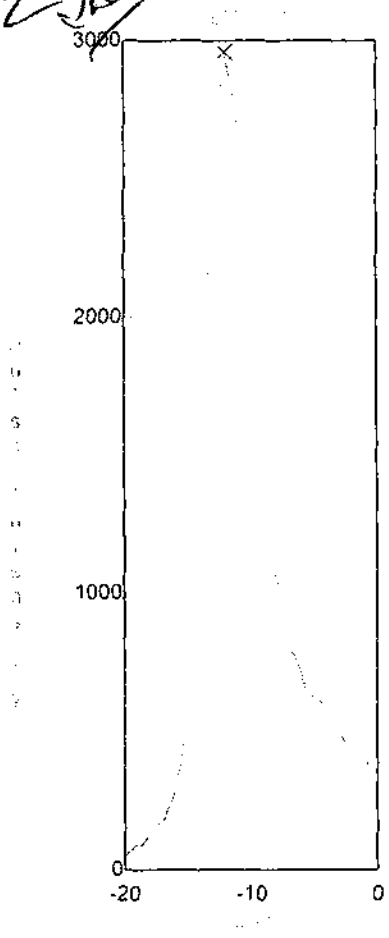
aily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 7314.01
Obtained Intensity (Mg 23.985): 51446.53
Obtained Intensity (In 114.904): 100931.29
Obtained Intensity (Pb 207.977): 39643.41
Obtained Intensity (U 238.05): 72320.06
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.024 (=2264.37 / 93497.32)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.015 (=1379.58 / 93497.32)

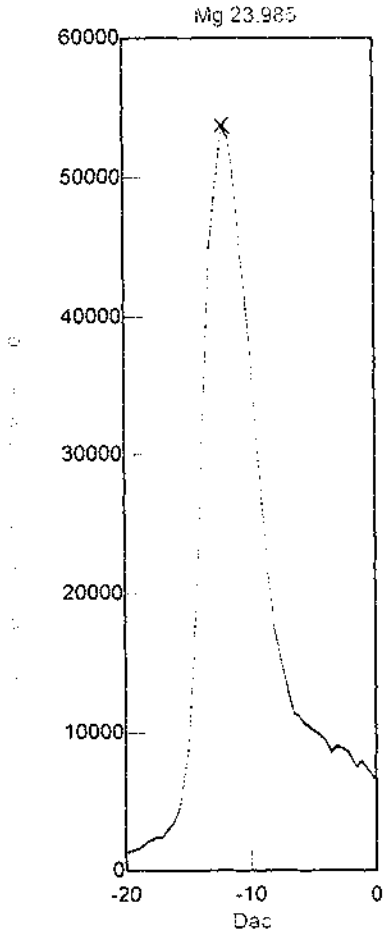
US52 : 00830

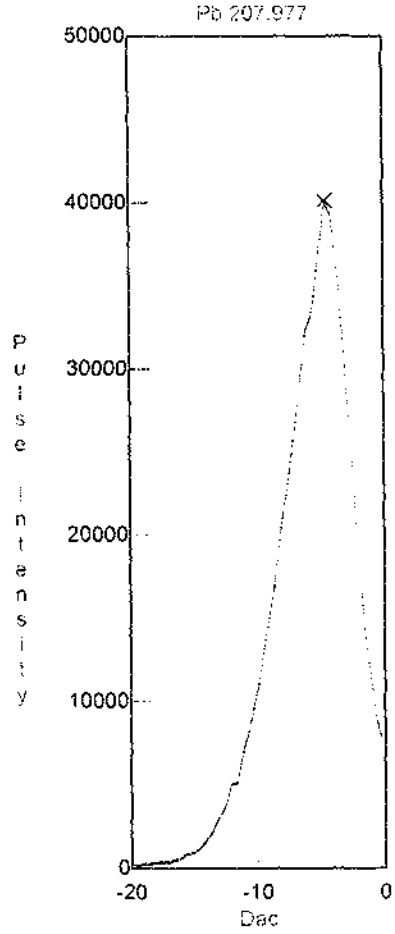
5/14/12 JH

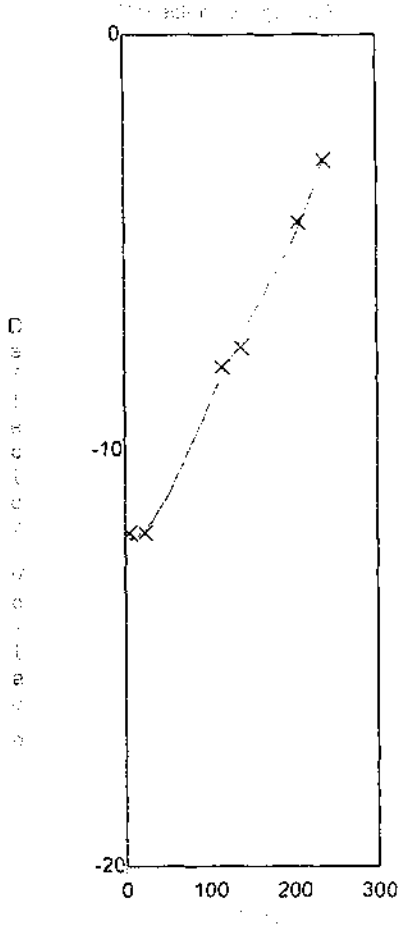

Ce 139.905
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
200000
100000
0
-20
-10
0
Dac
Pulse Intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


0
-10
-20
0
100
200
300

SmartTune Wizard - Summary

ptimization Summary

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

tart Time: 5/14/2012 11:57:34 AM
nd Time: 5/14/2012 12:01:46 PM

utoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.998; Intercept = -12.02

US52 : 00832

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/14/2012 11:54:33 AM

ass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.706)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.723)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.711)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.717)
Passed] Optimum value(s): N/A

nd Time: 5/14/2012 11:56:46 AM

US52 : 00833

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/14/2012 11:53:18 AM

orch Alignment
Optimization Settings:
Method: Torch Alignment.mth.
Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
Passed]	1.54 mm	-0.71 mm	105652.53

nd Time: 5/14/2012 11:54:05 AM

US52 : 00834

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/14/2012 11:46:25 AM

Daily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 5461.32
Obtained Intensity (Mg 23.985): 39610.05
Obtained Intensity (In 114.904): 80645.28
Obtained Intensity (Pb 207.977): 33613.19
Obtained Intensity (U 238.05): 59795.97
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=1175.62 / 76597.03)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=786.37 / 76597.03)
[Passed] Optimum value(s): N/A

End Time: 5/14/2012 11:49:32 AM

US52 : 00835

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:37:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1248591	2
	Be	9		ug/L				4	13
	C	13		ug/L				97995	3
	Cl	37		ug/L				5673060	0
>	Sc	45		ug/L				1149011	2
	V	51		ug/L				6706	2
	V-1	51		ug/L				146	15
	Cr	52		ug/L				19805	2
	Cr	53		ug/L				140	1
	Mn	55		ug/L				400	0
	Co	59		ug/L				52	12
>	Ge	72		ug/L				544756	3
	Ni	60		ug/L				24	20
	Ni	62		ug/L				415	3
	Cu	63		ug/L				375	3
	Cu	65		ug/L				28	14
	Zn	66		ug/L				209	1
	Zn	67		ug/L				32	4
	Zn	68		ug/L				594	2
	As	75		ug/L				1176	0
	As-1	75		ug/L				8096	1
	Se	82		ug/L				-5	622
	Se	78		ug/L				8179	1
	Mo	98		ug/L				13	17
	Y	89		ug/L				370208	1
	Kr	83		ug/L				1639	5
>	In	115		ug/L				982225	2
	Ag	107		ug/L				10	26
	Cd	111		ug/L				94	8
	Cd	114		ug/L				28	26
	Sb	121		ug/L				43	12
	Sb	123		ug/L				30	18
	Ba	135		ug/L				31	16
	Ba	137		ug/L				53	15
>	Tb	159		ug/L				1075407	1
	Tl	205		ug/L				17	29
	Pb	208		ug/L				170	7
	Bi	209		ug/L				2537124	1
	Th	232		ug/L				43	11
	U	238		ug/L				6	44

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:41:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1250328	0
	Be	9	0.200	ug/L	0.006	2	4	869	3
	C	13		ug/L			97995	97561	1
	Cl	37		ug/L			5673060	5812574	4
>	Sc	45		ug/L			1149011	1166619	0
	V	51	0.200	ug/L	0.012	6	6706	11216	1
	V-1	51	0.200	ug/L	0.001	0	146	4662	0
	Cr	52	0.500	ug/L	0.041	8	19805	29143	1
	Cr	53	0.500	ug/L	0.005	0	140	1197	1
	Mn	55	0.500	ug/L	0.004	0	400	12959	0
	Co	59	0.200	ug/L	0.004	2	52	3589	2
>	Ge	72		ug/L			544756	550934	0
	Ni	60	0.500	ug/L	0.003	0	24	1972	0
	Ni	62	0.500	ug/L	0.017	3	415	718	2
	Cu	63	0.500	ug/L	0.020	3	375	4627	3
	Cu	65	0.500	ug/L	0.009	1	28	1950	1
	Zn	66	4.000	ug/L	0.066	1	209	9074	1
	Zn	67	4.000	ug/L	0.125	3	32	1387	3
	Zn	68	4.000	ug/L	0.127	3	594	6621	2
	As	75	0.200	ug/L	0.015	7	1176	1573	1
	As-1	75	0.200	ug/L	0.050	25	8096	8532	0
	Se	82	0.500	ug/L	0.030	5	-5	113	6
	Se	78	0.500	ug/L	0.188	37	8179	8519	0
	Mo	98	0.200	ug/L	0.007	3	13	955	2
	Y	89		ug/L			370208	373561	2
	Kr	83		ug/L			1639	1638	1
>	In	115		ug/L			982225	977403	1
	Ag	107	0.200	ug/L	0.006	3	10	1946	2
	Cd	111	0.100	ug/L	0.011	11	94	622	9
	Cd	114	0.100	ug/L	0.006	5	28	1365	6
	Sb	121	0.200	ug/L	0.005	2	43	3339	1
	Sb	123	0.200	ug/L	0.001	0	30	2520	1
	Ba	135	0.500	ug/L	0.011	2	31	2320	3
	Ba	137	0.500	ug/L	0.009	1	53	4003	2
>	Tb	159		ug/L			1075407	1067329	1
	Tl	205	0.200	ug/L	0.005	2	17	7449	1
	Pb	208	0.100	ug/L	0.003	3	170	5293	2
	Bi	209		ug/L			2537124	2536907	1
	Th	232	0.200	ug/L	0.007	3	43	8072	4
	U	238	0.200	ug/L	0.003	1	6	10096	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:45:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1238966	0
	Be	9	10.000	ug/L	0.051	0	4	41736	0
	C	13		ug/L			97995	93252	0
	Cl	37		ug/L			5673060	5772921	1
>	Sc	45		ug/L			1149011	1194771	2
	V	51	10.000	ug/L	0.269	2	6706	224649	1
	V-1	51	10.000	ug/L	0.294	2	146	220196	2
	Cr	52	9.999	ug/L	0.351	3	19805	198423	1
	Cr	53	9.999	ug/L	0.200	2	140	20998	0
	Mn	55	9.999	ug/L	0.092	0	400	247013	2
	Co	59	10.000	ug/L	0.090	0	52	175767	2
>	Ge	72		ug/L			544756	549127	0
	Ni	60	9.999	ug/L	0.053	0	24	36984	0
	Ni	62	9.997	ug/L	0.082	0	415	5700	0
	Cu	63	9.999	ug/L	0.070	0	375	80875	1
	Cu	65	9.998	ug/L	0.080	0	28	35688	0
	Zn	66	10.003	ug/L	0.086	0	209	22345	0
	Zn	67	10.115	ug/L	0.193	1	32	3712	1
	Zn	68	10.056	ug/L	0.248	2	594	16236	2
	As	75	10.000	ug/L	0.031	0	1176	20693	0
	As-1	75	10.000	ug/L	0.030	0	8096	27251	0
	Se	82	9.999	ug/L	0.147	1	-5	2242	1
	Se	78	10.002	ug/L	0.201	2	8179	13544	1
	Mo	98	10.000	ug/L	0.087	0	13	46365	1
	Y	89		ug/L			370208	379311	2
	Kr	83		ug/L			1639	1662	1
>	In	115		ug/L			982225	1010213	0
	Ag	107	10.000	ug/L	0.132	1	10	92708	0
	Cd	111	10.000	ug/L	0.010	0	94	51731	0
	Cd	114	10.000	ug/L	0.115	1	28	128207	0
	Sb	121	10.000	ug/L	0.038	0	43	158419	0
	Sb	123	10.000	ug/L	0.095	0	30	118387	1
	Ba	135	9.998	ug/L	0.071	0	31	43842	0
	Ba	137	9.998	ug/L	0.060	0	53	75225	0
>	Tb	159		ug/L			1075407	1098925	0
	Tl	205	10.000	ug/L	0.119	1	17	360264	0
	Pb	208	10.000	ug/L	0.065	0	170	476217	0
	Bi	209		ug/L			2537124	2570814	0
	Th	232	10.000	ug/L	0.311	3	43	449857	2
	U	238	10.000	ug/L	0.062	0	6	481950	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:49:43
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1238662	1
	Be	9	19.736	ug/L	0.738	3	4	78181	2
	C	13		ug/L			97995	91843	2
	Cl	37		ug/L			5673060	5925168	1
>	Sc	45		ug/L			1149011	1195856	1
	V	51	19.885	ug/L	0.404	2	6706	430577	0
	V-1	51	19.846	ug/L	0.415	2	146	424236	0
	Cr	52	19.944	ug/L	0.613	3	19805	371765	1
	Cr	53	19.810	ug/L	0.753	3	140	39981	2
	Mn	55	19.888	ug/L	0.524	2	400	480476	1
	Co	59	19.822	ug/L	0.466	2	52	336639	0
>	Ge	72		ug/L			544756	550619	3
	Ni	60	19.853	ug/L	0.710	3	24	71469	1
	Ni	62	19.818	ug/L	0.836	4	415	10542	1
	Cu	63	19.851	ug/L	1.149	5	375	155832	2
	Cu	65	19.878	ug/L	0.821	4	28	69376	1
	Zn	66	19.862	ug/L	0.627	3	209	43226	0
	Zn	67	19.956	ug/L	0.936	4	32	7249	1
	Zn	68	19.855	ug/L	0.456	2	594	30787	1
	As	75	19.862	ug/L	0.518	2	1176	38976	1
	As-1	75	19.873	ug/L	0.735	3	8096	45253	0
	Se	82	19.863	ug/L	0.520	2	-5	4349	0
	Se	78	19.889	ug/L	1.386	6	8179	18588	0
	Mo	98	19.914	ug/L	1.005	5	13	90910	2
	Y	89		ug/L			370208	385164	2
	Kr	83		ug/L			1639	1625	5
>	In	115		ug/L			982225	983508	1
	Ag	107	20.041	ug/L	0.388	1	10	182351	0
	Cd	111	19.950	ug/L	0.437	2	94	99378	1
	Cd	114	19.974	ug/L	0.067	0	28	248028	0
	Sb	121	20.010	ug/L	0.368	1	43	309159	1
	Sb	123	20.026	ug/L	0.215	1	30	231962	0
	Ba	135	20.016	ug/L	0.230	1	31	85691	1
	Ba	137	20.014	ug/L	0.459	2	53	146956	1
>	Tb	159		ug/L			1075407	1088372	0
	Tl	205	19.888	ug/L	0.261	1	17	694133	0
	Pb	208	19.929	ug/L	0.215	1	170	926686	0
	Bi	209		ug/L			2537124	2552652	1
	Th	232	20.097	ug/L	0.241	1	43	913128	1
	U	238	19.935	ug/L	0.382	1	6	939381	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:54:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1239420	0
	Be	9	50.350	ug/L	1.288	2	4	206855	1
	C	13		ug/L			97995	96930	2
	Cl	37		ug/L			5673060	5980409	2
>	Sc	45		ug/L			1149011	1187276	0
	V	51	50.495	ug/L	0.457	0	6706	1130646	1
	V-1	51	50.475	ug/L	0.266	0	146	1124612	0
	Cr	52	50.514	ug/L	0.800	1	19805	951600	1
	Cr	53	50.446	ug/L	0.443	0	140	105601	0
	Mn	55	50.512	ug/L	0.751	1	400	1276497	1
	Co	59	50.482	ug/L	0.223	0	52	894488	1
>	Ge	72		ug/L			544756	552765	2
	Ni	60	50.385	ug/L	1.642	3	24	189391	2
	Ni	62	50.303	ug/L	0.962	1	415	27037	0
	Cu	63	50.318	ug/L	0.727	1	375	409429	2
	Cu	65	50.335	ug/L	1.153	2	28	182517	1
	Zn	66	50.164	ug/L	0.946	1	209	111075	0
	Zn	67	50.092	ug/L	1.661	3	32	18390	1
	Zn	68	50.159	ug/L	1.511	3	594	78375	2
	As	75	50.357	ug/L	0.457	0	1176	100977	1
	As-1	75	50.355	ug/L	0.677	1	8096	106036	0
	Se	82	50.196	ug/L	0.742	1	-5	11269	1
	Se	78	50.200	ug/L	1.554	3	8179	35012	0
	Mo	98	50.251	ug/L	2.764	5	13	236261	3
	Y	89		ug/L			370208	379567	1
	Kr	83		ug/L			1639	1706	2
>	In	115		ug/L			982225	975350	0
	Ag	107	50.294	ug/L	0.972	1	10	467617	1
	Cd	111	50.378	ug/L	0.019	0	94	258544	0
	Cd	114	50.336	ug/L	0.284	0	28	641418	0
	Sb	121	50.540	ug/L	0.263	0	43	818570	0
	Sb	123	50.518	ug/L	0.184	0	30	611991	0
	Ba	135	50.566	ug/L	0.627	1	31	227515	1
	Ba	137	50.573	ug/L	0.343	0	53	390603	0
>	Tb	159		ug/L			1075407	1094615	0
	Tl	205	50.456	ug/L	0.665	1	17	1855816	1
	Pb	208	50.411	ug/L	0.385	0	170	2458334	0
	Bi	209		ug/L			2537124	2507956	0
	Th	232	50.742	ug/L	0.448	0	43	2504375	0
	U	238	50.613	ug/L	0.298	0	6	2555427	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:59:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1197446	1
	Be	9	99.844	ug/L	1.384	1	4	394258	0
	C	13		ug/L			97995	92048	1
	Cl	37		ug/L			5673060	5932262	2
>	Sc	45		ug/L			1149011	1172003	1
	V	51	100.779	ug/L	1.582	1	6706	2279514	0
	V-1	51	100.730	ug/L	1.656	1	146	2270293	0
	Cr	52	100.372	ug/L	2.456	2	19805	1869288	1
	Cr	53	100.201	ug/L	3.244	3	140	208280	2
	Mn	55	100.368	ug/L	1.782	1	400	2534429	1
	Co	59	99.979	ug/L	2.609	2	52	1747120	1
>	Ge	72		ug/L			544756	535747	0
	Ni	60	99.813	ug/L	0.798	0	24	361465	0
	Ni	62	100.271	ug/L	1.831	1	415	52316	2
	Cu	63	99.603	ug/L	1.771	1	375	774779	0
	Cu	65	99.788	ug/L	0.875	0	28	348290	0
	Zn	66	99.576	ug/L	2.045	2	209	210570	1
	Zn	67	99.220	ug/L	1.783	1	32	34396	0
	Zn	68	99.177	ug/L	0.968	0	594	145694	0
	As	75	100.082	ug/L	0.606	0	1176	193908	0
	As-1	75	100.079	ug/L	0.677	0	8096	196919	0
	Se	82	100.049	ug/L	0.363	0	-5	21813	0
	Se	78	100.079	ug/L	0.536	0	8179	59814	0
	Mo	98	100.642	ug/L	0.918	0	13	468975	0
	Y	89		ug/L			370208	377266	0
	Kr	83		ug/L			1639	1787	2
>	In	115		ug/L			982225	963315	1
	Ag	107	99.894	ug/L	3.046	3	10	913892	1
	Cd	111	100.022	ug/L	1.630	1	94	507194	0
	Cd	114	99.745	ug/L	1.432	1	28	1244580	0
	Sb	121	99.817	ug/L	2.163	2	43	1586766	1
	Sb	123	99.941	ug/L	2.049	2	30	1193234	1
	Ba	135	100.153	ug/L	1.324	1	31	447264	0
	Ba	137	100.211	ug/L	2.208	2	53	769641	0
>	Tb	159		ug/L			1075407	1073684	1
	Tl	205	100.070	ug/L	1.490	1	17	3618284	0
	Pb	208	100.212	ug/L	1.266	1	170	4826923	0
	Bi	209		ug/L			2537124	2399540	0
	Th	232	100.532	ug/L	3.221	3	43	4953134	1
	U	238	100.149	ug/L	1.075	1	6	4984070	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:06:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1187389	1
	Be	9	0.005	ug/L	0.002	30	4	25	26
	C	13		ug/L			97995	93444	3
	Cl	37		ug/L			5673060	5799690	2
>	Sc	45		ug/L			1149011	1147031	1
	V	51	-0.009	ug/L	0.012	136	6706	6502	2
	V-1	51	0.001	ug/L	0.001	190	146	163	19
	Cr	52	-0.035	ug/L	0.044	123	19805	19124	2
	Cr	53	-0.003	ug/L	0.004	128	140	133	4
	Mn	55	0.004	ug/L	0.006	142	400	498	26
	Co	59	0.001	ug/L	0.001	62	52	67	15
>	Ge	72		ug/L			544756	540398	2
	Ni	60	0.000	ug/L	0.001	1275	24	24	10
	Ni	62	0.517	ug/L	0.129	25	415	681	8
	Cu	63	0.026	ug/L	0.005	17	375	577	4
	Cu	65	0.004	ug/L	0.002	49	28	41	17
	Zn	66	0.009	ug/L	0.004	43	209	227	5
	Zn	67	0.013	ug/L	0.017	130	32	37	15
	Zn	68	0.013	ug/L	0.020	152	594	608	4
	As	75	0.072	ug/L	0.020	27	1176	1305	1
	As-1	75	0.075	ug/L	0.058	77	8096	8173	0
	Se	82	0.022	ug/L	0.138	630	-5	0	3723
	Se	78	0.283	ug/L	0.218	76	8179	8260	0
	Mo	98	0.027	ug/L	0.016	58	13	143	54
	Y	89		ug/L			370208	377018	1
	Kr	83		ug/L			1639	1792	3
>	In	115		ug/L			982225	973263	2
	Ag	107	0.007	ug/L	0.009	124	10	77	110
	Cd	111	0.007	ug/L	0.008	107	94	131	33
	Cd	114	0.005	ug/L	0.009	167	28	95	119
	Sb	121	0.118	ug/L	0.007	5	43	1936	6
	Sb	123	0.122	ug/L	0.011	9	30	1502	8
	Ba	135	0.004	ug/L	0.003	77	31	49	30
	Ba	137	0.004	ug/L	0.002	60	53	82	23
>	Tb	159		ug/L			1075407	1047058	0
	Tl	205	0.005	ug/L	0.003	57	17	210	53
	Pb	208	0.002	ug/L	0.003	149	170	258	53
	Bi	209		ug/L			2537124	2491223	1
	Th	232	0.141	ug/L	0.036	25	43	6800	26
	U	238	0.005	ug/L	0.002	42	6	229	41

Sample Information

Sample Date/Time: Monday, May 14, 2012 12:59:47
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9998**	0.019	0.20	10	20	50	100
V-1	51	**0.9999**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.016	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.022	0.50	10	20	50	100
Co	59	**0.9999**	0.015	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**0.9999**	0.015	0.50	10	20	50	100
Cu	65	**1.0000**	0.007	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.004	0.20	10	20	50	100
As-1	75	**1.0000**	0.004	0.20	10	20	50	100
Se	82	**0.9997**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.009	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.009	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.013	0.10	10	20	50	100
Sb	121	**0.9999**	0.017	0.20	10	20	50	100
Sb	123	**0.9999**	0.012	0.20	10	20	50	100
Ba	135	**0.9999**	0.005	0.50	10	20	50	100
Ba	137	**0.9999**	0.008	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.034	0.20	10	20	50	100
Pb	208	**1.0000**	0.045	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.046	0.20	10	20	50	100
U	238	**0.9999**	0.046	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:15:48
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1189479	0
	Be	9		ug/L				14	18
	C	13		ug/L				92537	1
	Cl	37		ug/L				5664278	2
>	Sc	45		ug/L				1146320	2
	V	51		ug/L				6433	1
	V-1	51		ug/L				136	13
	Cr	52		ug/L				19074	1
	Cr	53		ug/L				141	3
	Mn	55		ug/L				395	10
	Co	59		ug/L				68	40
>	Ge	72		ug/L				524719	0
	Ni	60		ug/L				25	63
	Ni	62		ug/L				547	1
	Cu	63		ug/L				464	6
	Cu	65		ug/L				38	19
	Zn	66		ug/L				211	5
	Zn	67		ug/L				38	30
	Zn	68		ug/L				621	3
	As	75		ug/L				1367	1
	As-1	75		ug/L				8254	0
	Se	82		ug/L				2	600
	Se	78		ug/L				8327	0
	Mo	98		ug/L				28	13
	Y	89		ug/L				367134	2
	Kr	83		ug/L				1842	2
>	In	115		ug/L				978081	1
	Ag	107		ug/L				15	19
	Cd	111		ug/L				78	9
	Cd	114		ug/L				26	22
	Sb	121		ug/L				468	13
	Sb	123		ug/L				370	12
	Ba	135		ug/L				33	13
	Ba	137		ug/L				61	3
>	Tb	159		ug/L				1048717	0
	Tl	205		ug/L				58	15
	Pb	208		ug/L				189	7
	Bi	209		ug/L				2472390	2
	Th	232		ug/L				1843	6
	U	238		ug/L				29	6

US52 : 00844

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:19:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1201273	1
	Be	9	51.806	ug/L	1.939	3	14	205170	2
	C	13		ug/L			92537	96033	0
	Cl	37		ug/L			5664278	5728561	1
>	Sc	45		ug/L			1146320	1186374	1
	V	51	50.207	ug/L	1.091	2	6433	1152856	2
	V-1	51	50.126	ug/L	1.047	2	136	1143799	2
	Cr	52	50.635	ug/L	1.034	2	19074	963996	0
	Cr	53	50.356	ug/L	0.987	1	141	106035	0
	Mn	55	49.263	ug/L	1.194	2	395	1259342	1
	Co	59	50.287	ug/L	0.555	1	68	889660	0
>	Ge	72		ug/L			524719	540214	1
	Ni	60	51.519	ug/L	0.841	1	25	188126	0
	Ni	62	50.763	ug/L	0.961	1	547	27053	0
	Cu	63	51.416	ug/L	0.879	1	464	403574	1
	Cu	65	51.517	ug/L	1.670	3	38	181291	2
	Zn	66	50.902	ug/L	0.654	1	211	108670	2
	Zn	67	51.093	ug/L	0.765	1	38	17882	0
	Zn	68	51.642	ug/L	0.222	0	621	76832	1
	As	75	51.583	ug/L	0.658	1	1367	101576	0
	As-1	75	50.561	ug/L	1.103	2	8254	104744	0
	Se	82	83.505	ug/L	1.836	2	2	17562	2
	Se	78	78.124	ug/L	2.486	3	8327	49291	1
	Mo	98	51.200	ug/L	0.567	1	28	240590	1
	Y	89		ug/L			367134	383893	1
	Kr	83		ug/L			1842	1935	0
>	In	115		ug/L			978081	967790	1
	Ag	107	49.847	ug/L	0.471	0	15	458268	2
	Cd	111	49.740	ug/L	0.714	1	78	253435	1
	Cd	114	50.615	ug/L	0.946	1	26	634430	0
	Sb	121	51.000	ug/L	0.975	1	468	814928	1
	Sb	123	51.090	ug/L	0.866	1	370	613154	1
	Ba	135	50.740	ug/L	0.992	1	33	227634	0
	Ba	137	50.941	ug/L	1.036	2	61	393071	0
>	Tb	159		ug/L			1048717	1068668	1
	Tl	205	51.275	ug/L	1.224	2	58	1845162	0
	Pb	208	50.595	ug/L	1.152	2	189	2425402	0
	Bi	209		ug/L			2472390	2462633	0
	Th	232	52.571	ug/L	0.698	1	1843	2580466	1
	U	238	52.287	ug/L	1.561	2	29	2589415	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:26:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1181666	2
	Be	9	0.001	ug/L	0.000	47	14	18	9
	C	13		ug/L			92537	91701	1
	Cl	37		ug/L			5664278	5648033	2
>	Sc	45		ug/L			1146320	1123173	2
	V	51	0.009	ug/L	0.014	151	6433	6499	2
	V-1	51	-0.000	ug/L	0.001	202	136	127	8
	Cr	52	0.023	ug/L	0.049	210	19074	19088	2
	Cr	53	-0.010	ug/L	0.003	27	141	119	4
	Mn	55	-0.001	ug/L	0.000	39	395	372	0
	Co	59	-0.001	ug/L	0.000	51	68	56	7
>	Ge	72		ug/L			524719	528105	1
	Ni	60	-0.001	ug/L	0.002	163	25	21	30
	Ni	62	0.056	ug/L	0.030	52	547	579	2
	Cu	63	0.000	ug/L	0.005	2988	464	468	7
	Cu	65	-0.001	ug/L	0.001	67	38	35	4
	Zn	66	-0.005	ug/L	0.004	82	211	202	6
	Zn	67	-0.009	ug/L	0.024	260	38	35	21
	Zn	68	-0.032	ug/L	0.010	32	621	579	3
	As	75	0.034	ug/L	0.028	81	1367	1440	4
	As-1	75	-0.114	ug/L	0.032	27	8254	8095	1
	Se	82	-0.019	ug/L	0.118	627	2	0	2663
	Se	78	-0.353	ug/L	0.140	39	8327	8200	0
	Mo	98	0.006	ug/L	0.001	24	28	55	12
	Y	89		ug/L			367134	367470	0
	Kr	83		ug/L			1842	1986	0
>	In	115		ug/L			978081	959629	2
	Ag	107	0.001	ug/L	0.000	26	15	24	8
	Cd	111	0.004	ug/L	0.001	20	78	94	2
	Cd	114	0.000	ug/L	0.001	247	26	28	24
	Sb	121	0.001	ug/L	0.005	750	468	470	17
	Sb	123	-0.001	ug/L	0.001	145	370	352	6
	Ba	135	-0.001	ug/L	0.002	150	33	27	25
	Ba	137	-0.001	ug/L	0.001	119	61	53	12
>	Tb	159		ug/L			1048717	1038297	1
	Tl	205	0.002	ug/L	0.000	5	58	112	2
	Pb	208	-0.000	ug/L	0.000	58	189	166	6
	Bi	209		ug/L			2472390	2468837	1
	Th	232	0.068	ug/L	0.029	43	1843	5048	27
	U	238	0.001	ug/L	0.000	15	29	74	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:30:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1184630	1
	Be	9	51.228	ug/L	1.284	2	14	200099	0
	C	13		ug/L			92537	92510	0
	Cl	37		ug/L			5664278	5815291	0
>	Sc	45		ug/L			1146320	1172618	2
	V	51	50.249	ug/L	1.076	2	6433	1140100	0
	V-1	51	50.277	ug/L	1.237	2	136	1133535	0
	Cr	52	50.257	ug/L	0.753	1	19074	945799	1
	Cr	53	50.353	ug/L	1.286	2	141	104775	0
	Mn	55	49.654	ug/L	1.050	2	395	1254406	0
	Co	59	50.776	ug/L	1.564	3	68	887747	2
>	Ge	72		ug/L			524719	545009	1
	Ni	60	50.251	ug/L	0.709	1	25	185115	0
	Ni	62	50.310	ug/L	1.541	3	547	27049	1
	Cu	63	50.562	ug/L	0.865	1	464	400360	0
	Cu	65	50.278	ug/L	1.507	2	38	178480	1
	Zn	66	51.267	ug/L	0.778	1	211	110393	1
	Zn	67	52.270	ug/L	0.371	0	38	18459	2
	Zn	68	51.542	ug/L	1.095	2	621	77349	1
	As	75	50.059	ug/L	0.821	1	1367	99481	0
	As-1	75	49.587	ug/L	0.926	1	8254	103801	1
	Se	82	53.210	ug/L	0.672	1	2	11289	0
	Se	78	49.243	ug/L	0.933	1	8327	34544	1
	Mo	98	49.467	ug/L	0.420	0	28	234497	1
	Y	89		ug/L			367134	377268	1
	Kr	83		ug/L			1842	1981	2
>	In	115		ug/L			978081	958365	0
	Ag	107	50.599	ug/L	1.282	2	15	460617	2
	Cd	111	51.316	ug/L	0.910	1	78	258932	1
	Cd	114	51.193	ug/L	0.797	1	26	635544	1
	Sb	121	50.811	ug/L	0.242	0	468	804134	0
	Sb	123	50.621	ug/L	0.225	0	370	601715	0
	Ba	135	50.328	ug/L	0.580	1	33	223633	0
	Ba	137	50.280	ug/L	1.357	2	61	384242	2
>	Tb	159		ug/L			1048717	1060489	0
	Tl	205	50.696	ug/L	0.368	0	58	1810837	1
	Pb	208	50.451	ug/L	0.260	0	189	2400659	0
	Bi	209		ug/L			2472390	2443880	1
	Th	232	52.089	ug/L	0.969	1	1843	2537396	1
	U	238	52.474	ug/L	0.144	0	29	2579665	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:36:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1166154	0
	Be	9	0.002	ug/L	0.002	83	14	21	28
	C	13		ug/L			92537	92409	1
	Cl	37		ug/L			5664278	5561577	1
>	Sc	45		ug/L			1146320	1131545	2
	V	51	0.004	ug/L	0.009	248	6433	6427	1
	V-1	51	0.001	ug/L	0.000	47	136	146	5
	Cr	52	0.007	ug/L	0.030	450	19074	18937	1
	Cr	53	-0.004	ug/L	0.007	150	141	131	11
	Mn	55	0.001	ug/L	0.000	20	395	404	3
	Co	59	-0.001	ug/L	0.000	66	68	57	12
>	Ge	72		ug/L			524719	524974	1
	Ni	60	-0.001	ug/L	0.001	155	25	22	20
	Ni	62	0.036	ug/L	0.033	91	547	565	3
	Cu	63	0.003	ug/L	0.005	188	464	487	9
	Cu	65	0.001	ug/L	0.003	434	38	40	24
	Zn	66	0.003	ug/L	0.011	359	211	218	11
	Zn	67	-0.011	ug/L	0.016	144	38	34	15
	Zn	68	-0.010	ug/L	0.033	343	621	608	6
	As	75	0.043	ug/L	0.020	47	1367	1448	1
	As-1	75	-0.015	ug/L	0.045	301	8254	8230	0
	Se	82	0.029	ug/L	0.064	225	2	8	154
	Se	78	-0.006	ug/L	0.146	2353	8327	8327	0
	Mo	98	0.007	ug/L	0.000	6	28	61	4
	Y	89		ug/L			367134	371954	0
	Kr	83		ug/L			1842	1957	1
>	In	115		ug/L			978081	945486	1
	Ag	107	0.001	ug/L	0.001	102	15	20	29
	Cd	111	0.001	ug/L	0.001	121	78	80	9
	Cd	114	0.000	ug/L	0.000	306	26	26	15
	Sb	121	0.034	ug/L	0.004	12	468	988	4
	Sb	123	0.035	ug/L	0.004	11	370	769	4
	Ba	135	0.001	ug/L	0.000	19	33	35	1
	Ba	137	-0.000	ug/L	0.001	149	61	56	7
>	Tb	159		ug/L			1048717	1037938	0
	Tl	205	0.002	ug/L	0.000	25	58	111	12
	Pb	208	-0.000	ug/L	0.000	79	189	173	7
	Bi	209		ug/L			2472390	2460928	0
	Th	232	0.099	ug/L	0.033	33	1843	6546	24
	U	238	0.001	ug/L	0.001	60	29	86	40

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:40:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1183476	1
	Be	9	0.002	ug/L	0.001	44	14	20	12
	C	13		ug/L			92537	89565	2
	Cl	37		ug/L			5664278	5534492	1
>	Sc	45		ug/L			1146320	1145658	2
	V	51	0.010	ug/L	0.006	61	6433	6649	2
	V-1	51	0.003	ug/L	0.001	19	136	211	8
	Cr	52	0.039	ug/L	0.023	59	19774	19755	1
	Cr	53	0.016	ug/L	0.004	25	141	173	3
	Mn	55	0.023	ug/L	0.003	11	395	955	5
	Co	59	0.002	ug/L	0.001	51	68	97	13
>	Ge	72		ug/L			524719	531617	0
	Ni	60	0.065	ug/L	0.003	4	25	261	4
	Ni	62	-0.013	ug/L	0.047	358	547	547	3
	Cu	63	0.076	ug/L	0.003	3	464	1060	2
	Cu	65	0.070	ug/L	0.004	5	38	280	4
	Zn	66	1.016	ug/L	0.042	4	211	2343	3
	Zn	67	0.838	ug/L	0.074	8	38	326	7
	Zn	68	1.001	ug/L	0.030	2	621	2082	2
	As	75	0.054	ug/L	0.029	52	1367	1489	2
	As-1	75	-0.072	ug/L	0.067	92	8254	8227	0
	Se	82	-0.036	ug/L	0.113	317	2	-4	495
	Se	78	-0.263	ug/L	0.217	82	8327	8301	0
	Mo	98	0.005	ug/L	0.002	35	28	50	16
	Y	89		ug/L			367134	374070	3
	Kr	83		ug/L			1842	2020	1
>	In	115		ug/L			976081	964127	1
	Ag	107	0.005	ug/L	0.001	28	15	62	22
	Cd	111	0.002	ug/L	0.002	108	78	88	15
	Cd	114	0.003	ug/L	0.002	67	26	58	35
	Sb	121	-0.006	ug/L	0.003	53	468	372	11
	Sb	123	-0.006	ug/L	0.004	57	370	289	13
	Ba	135	0.067	ug/L	0.004	6	33	332	4
	Ba	137	0.069	ug/L	0.005	7	61	589	5
>	Tb	159		ug/L			1048717	1033776	1
	Tl	205	0.003	ug/L	0.001	21	58	162	13
	Pb	208	0.025	ug/L	0.001	2	189	1362	3
	Bi	209		ug/L			2472390	2482116	1
	Th	232	0.019	ug/L	0.010	53	1843	2722	19
	U	238	0.001	ug/L	0.000	36	29	69	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:44:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1161234	1
	Be	9	0.219	ug/L	0.002	0	14	853	1
	C	13		ug/L			92537	94600	1
	Cl	37		ug/L			5664278	5457064	0
>	Sc	45		ug/L			1146320	1148652	2
	V	51	0.212	ug/L	0.005	2	6433	11128	1
	V-1	51	0.208	ug/L	0.009	4	136	4726	2
	Cr	52	0.536	ug/L	0.001	0	19074	28798	2
	Cr	53	0.523	ug/L	0.019	3	141	1206	0
	Mn	55	0.520	ug/L	0.008	1	395	13263	0
	Co	59	0.207	ug/L	0.008	4	68	3605	1
>	Ge	72		ug/L			524719	531693	2
	Ni	60	0.537	ug/L	0.023	4	25	1956	1
	Ni	62	0.482	ug/L	0.092	19	547	801	3
	Cu	63	0.556	ug/L	0.015	2	464	4761	0
	Cu	65	0.575	ug/L	0.031	5	38	2027	2
	Zn	66	4.359	ug/L	0.118	2	211	9350	1
	Zn	67	3.880	ug/L	0.110	2	38	1372	1
	Zn	68	4.222	ug/L	0.080	1	621	6759	1
	As	75	0.294	ug/L	0.038	12	1367	1946	3
	As-1	75	0.106	ug/L	0.113	106	8254	8558	0
	Se	82	0.712	ug/L	0.167	23	2	150	23
	Se	78	0.150	ug/L	0.378	251	8327	8512	0
	Mo	98	0.207	ug/L	0.010	4	28	985	2
	Y	89		ug/L			367134	368614	1
	Kr	83		ug/L			1842	1948	3
>	In	115		ug/L			978081	954289	1
	Ag	107	0.209	ug/L	0.012	5	15	1904	4
	Cd	111	0.119	ug/L	0.002	2	78	675	0
	Cd	114	0.112	ug/L	0.001	0	26	1412	2
	Sb	121	0.191	ug/L	0.008	3	468	3457	2
	Sb	123	0.187	ug/L	0.002	0	370	2568	2
	Ba	135	0.518	ug/L	0.009	1	33	2323	0
	Ba	137	0.513	ug/L	0.007	1	61	3962	0
>	Tb	159		ug/L			1048717	1026138	0
	Tl	205	0.214	ug/L	0.005	2	58	7452	1
	Pb	208	0.114	ug/L	0.003	2	189	5429	2
	Bi	209		ug/L			2472390	2466479	0
	Th	232	0.174	ug/L	0.004	2	1843	10009	2
	U	238	0.214	ug/L	0.002	0	29	10189	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:49:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1256950	4
	Be	9	0.000	ug/L	0.000	122	14	16	12
	C	13		ug/L			92537	203875	1
	Cl	37		ug/L			5664278	13746475	4
>	Sc	45		ug/L			1146320	1200977	2
	V	51	0.093	ug/L	0.017	18	6433	8881	2
	V-1	51	0.938	ug/L	0.007	0	136	21796	2
	Cr	52	0.829	ug/L	0.071	8	19074	35618	1
	Cr	53	3.761	ug/L	0.020	0	141	8154	2
	Mn	55	0.100	ug/L	0.004	4	395	2997	2
	Co	59	0.017	ug/L	0.001	3	68	374	3
>	Ge	72		ug/L			524719	531632	2
	Ni	60	0.370	ug/L	0.012	3	25	1356	3
	Ni	62	4.499	ug/L	1.005	22	547	2872	20
	Cu	63	1.042	ug/L	0.077	7	464	8518	9
	Cu	65	0.364	ug/L	0.002	0	38	1299	3
	Zn	66	0.680	ug/L	0.028	4	211	1638	1
	Zn	67	5.357	ug/L	0.119	2	38	1879	0
	Zn	68	0.159	ug/L	0.019	12	621	860	1
	As	75	0.021	ug/L	0.031	149	1367	1425	5
	As-1	75	0.033	ug/L	0.113	344	8254	8421	0
	Se	82	-0.291	ug/L	0.146	50	2	-56	51
	Se	78	0.321	ug/L	0.493	153	8327	8597	0
	Mo	98	421.479	ug/L	7.097	1	28	1948450	1
	Y	89		ug/L			367134	372933	0
	Kr	83		ug/L			1842	2238	2
>	In	115		ug/L			978081	986263	2
	Ag	107	0.026	ug/L	0.002	5	15	255	7
	Cd	111	0.137	ug/L	0.015	11	78	789	8
	Cd	114	0.200	ug/L	0.013	6	26	2577	4
	Sb	121	0.032	ug/L	0.003	9	468	995	5
	Sb	123	0.030	ug/L	0.003	11	370	744	4
	Ba	135	0.040	ug/L	0.002	5	33	217	4
	Ba	137	0.035	ug/L	0.002	5	61	334	3
>	Tb	159		ug/L			1048717	1120942	1
	Tl	205	0.003	ug/L	0.001	50	58	158	30
	Pb	208	0.035	ug/L	0.002	5	189	1986	3
	Bi	209		ug/L			2472390	2419573	2
	Th	232	0.206	ug/L	0.104	50	1843	12562	42
	U	238	0.001	ug/L	0.000	16	29	81	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:55:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1259031	1
	Be	9	-0.001	ug/L	0.001	112	14	12	20
	C	13		ug/L			92537	198827	1
	Cl	37		ug/L			5664278	14117489	1
>	Sc	45		ug/L			1146320	1207485	1
	V	51	0.285	ug/L	0.128	45	6433	13424	23
	V-1	51	0.937	ug/L	0.011	1	136	21912	1
	Cr	52	20.945	ug/L	0.343	1	19074	417677	1
	Cr	53	23.252	ug/L	0.630	2	141	49911	1
	Mn	55	19.612	ug/L	0.149	0	395	510618	1
	Co	59	18.877	ug/L	0.172	0	68	339957	0
>	Ge	72		ug/L			524719	524128	1
	Ni	60	20.020	ug/L	0.567	2	25	70939	1
	Ni	62	24.228	ug/L	1.054	4	547	12812	3
	Cu	63	21.397	ug/L	0.402	1	464	163213	0
	Cu	65	20.071	ug/L	0.184	0	38	68565	0
	Zn	66	19.764	ug/L	0.726	3	211	41052	2
	Zn	67	22.863	ug/L	0.359	1	38	7785	0
	Zn	68	18.938	ug/L	0.595	3	621	27725	2
	As	75	19.576	ug/L	0.308	1	1367	38246	0
	As-1	75	20.019	ug/L	0.377	1	8254	45218	0
	Se	82	-0.246	ug/L	0.052	21	2	-47	21
	Se	78	0.583	ug/L	0.241	41	8327	8612	0
	Mo	98	431.920	ug/L	6.572	1	28	1968948	1
	Y	89		ug/L			367134	370716	1
	Kr	83		ug/L			1842	2256	0
>	In	115		ug/L			978081	992259	1
	Ag	107	20.096	ug/L	0.647	3	15	189412	2
	Cd	111	19.400	ug/L	0.049	0	78	101401	1
	Cd	114	19.733	ug/L	0.238	1	26	253649	0
	Sb	121	0.044	ug/L	0.003	6	468	1194	3
	Sb	123	0.041	ug/L	0.001	1	370	879	1
	Ba	135	0.043	ug/L	0.001	3	33	231	1
	Ba	137	0.037	ug/L	0.001	3	61	358	2
>	Tb	159		ug/L			1048717	1138747	0
	Tl	205	0.002	ug/L	0.000	18	58	124	8
	Pb	208	0.037	ug/L	0.001	3	189	2111	3
	Bi	209		ug/L			2472390	2406285	0
	Th	232	0.061	ug/L	0.020	33	1843	5180	20
	U	238	0.001	ug/L	0.000	3	29	76	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:00:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1189479	1231767	0
[	Be	9	-0.001	ug/L	0.001	66	14	10	23
	C	13		ug/L			92537	104284	4
	Cl	37		ug/L			5664278	5827914	1
[>	Sc	45		ug/L			1146320	1180019	2
[	V	51	0.003	ug/L	0.009	254	6433	6696	1
[	V-1	51	0.092	ug/L	0.009	10	136	2231	11
[	Cr	52	0.180	ug/L	0.071	39	19074	22952	3
[	Cr	53	0.488	ug/L	0.033	6	141	1166	5
[	Mn	55	0.013	ug/L	0.002	12	395	746	3
[	Co	59	-0.001	ug/L	0.000	81	68	59	15
[>	Ge	72		ug/L			524719	529210	0
[	Ni	60	0.040	ug/L	0.005	11	25	167	9
[	Ni	62	0.256	ug/L	0.143	55	547	682	10
[	Cu	63	0.066	ug/L	0.008	11	464	975	6
[	Cu	65	0.055	ug/L	0.007	13	38	227	11
[	Zn	66	0.818	ug/L	0.019	2	211	1920	1
[	Zn	67	0.755	ug/L	0.048	6	38	297	5
[	Zn	68	0.824	ug/L	0.058	6	621	1818	4
[	As	75	0.044	ug/L	0.004	9	1367	1462	0
[	As-1	75	-0.067	ug/L	0.006	8	8254	8199	0
[	Se	82	-0.178	ug/L	0.092	51	2	-34	55
[	Se	78	-0.225	ug/L	0.068	30	8327	8284	0
[	Mo	98	0.048	ug/L	0.008	16	28	247	14
	Y	89		ug/L			367134	368896	3
	Kr	83		ug/L			1842	2093	1
[>	In	115		ug/L			978081	991994	0
[	Ag	107	-0.000	ug/L	0.000	42	15	13	7
[	Cd	111	0.001	ug/L	0.000	14	78	82	1
[	Cd	114	0.001	ug/L	0.001	140	26	33	29
[	Sb	121	-0.022	ug/L	0.001	5	468	117	16
[	Sb	123	-0.024	ug/L	0.001	2	370	83	10
[	Ba	135	0.015	ug/L	0.001	8	33	103	6
[	Ba	137	0.013	ug/L	0.001	10	61	163	5
[>	Tb	159		ug/L			1048717	1102205	1
[	Tl	205	0.001	ug/L	0.001	78	58	92	27
[	Pb	208	0.012	ug/L	0.000	2	189	803	2
[	Bi	209		ug/L			2472390	2593715	1
[	Th	232	-0.034	ug/L	0.001	1	1843	221	14
[	U	238	-0.000	ug/L	0.000	19	29	12	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:05:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1241138	0
	Be	9	0.000	ug/L	0.001	4695	14	14	23
	C	13		ug/L			92537	102494	2
	Cl	37		ug/L			5664278	5618080	1
>	Sc	45		ug/L			1146320	1162404	0
	V	51	0.014	ug/L	0.016	117	6433	6826	4
	V-1	51	0.054	ug/L	0.002	3	136	1338	4
	Cr	52	0.238	ug/L	0.063	26	19074	23684	4
	Cr	53	0.377	ug/L	0.023	5	141	921	5
	Mn	55	0.034	ug/L	0.002	5	395	1263	2
	Co	59	0.000	ug/L	0.000	196	68	71	5
>	Ge	72		ug/L			524719	534537	1
	Ni	60	0.036	ug/L	0.002	5	25	157	4
	Ni	62	-0.077	ug/L	0.102	131	547	517	8
	Cu	63	0.036	ug/L	0.003	8	464	751	1
	Cu	65	0.040	ug/L	0.006	14	38	176	9
	Zn	66	0.957	ug/L	0.034	3	211	2232	2
	Zn	67	0.920	ug/L	0.054	5	38	357	4
	Zn	68	0.952	ug/L	0.080	8	621	2022	4
	As	75	0.056	ug/L	0.023	41	1367	1500	1
	As-1	75	-0.075	ug/L	0.071	94	8254	8266	0
	Se	82	-0.040	ug/L	0.068	167	2	-5	246
	Se	78	-0.248	ug/L	0.255	103	8327	8354	0
	Mo	98	0.015	ug/L	0.004	28	28	98	18
	Y	89		ug/L			367134	366875	1
	Kr	83		ug/L			1842	2055	1
>	In	115		ug/L			978081	1003402	1
	Ag	107	0.000	ug/L	0.000	106	15	19	20
	Cd	111	0.001	ug/L	0.002	471	78	83	17
	Cd	114	0.001	ug/L	0.001	78	26	37	21
	Sb	121	-0.021	ug/L	0.000	2	468	133	5
	Sb	123	-0.023	ug/L	0.002	7	370	99	18
	Ba	135	0.054	ug/L	0.005	9	33	285	10
	Ba	137	0.056	ug/L	0.003	5	61	511	6
>	Tb	159		ug/L			1048717	1096425	1
	Tl	205	-0.000	ug/L	0.000	50	58	50	10
	Pb	208	0.008	ug/L	0.001	8	189	594	4
	Bi	209		ug/L			2472390	2551854	0
	Th	232	-0.034	ug/L	0.000	0	1843	193	6
	U	238	-0.000	ug/L	0.000	22	29	8	58

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ERA P197-500 5/14/12 JAD
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 14:11:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1245891	1
	Be	9	6.888	ug/L	0.202	2	14	28307	1
	C	13		ug/L			92537	140311	2
	Cl	37		ug/L			5664278	5713097	1
>	Sc	45		ug/L			1146320	1166383	1
	V	51	52.587	ug/L	1.594	3	6433	1186552	1
	V-1	51	52.641	ug/L	1.510	2	136	1180651	1
	Cr	52	58.307	ug/L	1.204	2	19074	1088396	1
	Cr	53	58.507	ug/L	0.756	1	141	121101	0
	Mn	55	49.195	ug/L	0.995	2	395	1236443	1
	Co	59	95.425	ug/L	2.281	2	68	1659826	2
>	Ge	72		ug/L			524719	535215	0
	Ni	60	75.596	ug/L	1.652	2	25	273504	1
	Ni	62	74.818	ug/L	1.940	2	547	39246	2
	Cu	63	32.162	ug/L	0.554	1	464	250300	1
	Cu	65	31.880	ug/L	0.112	0	38	111194	0
	Zn	66	51.906	ug/L	1.067	2	211	109773	2
	Zn	67	50.829	ug/L	0.452	0	38	17627	0
	Zn	68	52.587	ug/L	1.125	2	621	77500	1
	As	75	22.860	ug/L	0.188	0	1367	45379	0
	As-1	75	22.392	ug/L	0.214	0	8254	50656	0
	Se	82	35.393	ug/L	0.652	1	2	7376	1
	Se	78	33.112	ug/L	0.764	2	8327	25595	1
	Mo	98	57.790	ug/L	0.258	0	28	269049	0
	Y	89		ug/L			367134	373880	1
	Kr	83		ug/L			1842	2027	0
>	In	115		ug/L			978081	1005827	2
	Ag	107	45.563	ug/L	0.898	1	15	435231	0
	Cd	111	15.479	ug/L	0.431	2	78	81995	0
	Cd	114	15.494	ug/L	0.498	3	26	201808	1
	Sb	121	32.431	ug/L	0.870	2	468	538623	0
	Sb	123	32.431	ug/L	0.638	1	370	404606	0
	Ba	135	47.231	ug/L	1.247	2	33	220190	1
	Ba	137	47.126	ug/L	1.310	2	61	377864	0
>	Tb	159		ug/L			1048717	1118655	1
	Tl	205	18.820	ug/L	0.221	1	58	709086	0
	Pb	208	216.229	ug/L	2.633	1	189	10851538	0
	Bi	209		ug/L			2472390	2581762	0
	Th	232	-0.034	ug/L	0.000	0	1843	225	6
	U	238	-0.000	ug/L	0.000	28	29	18	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:18:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1255386	3
	Be	9	52.511	ug/L	1.440	2	14	217300	0
	C	13		ug/L			92537	98879	1
	Cl	37		ug/L			5664278	5875937	3
>	Sc	45		ug/L			1146320	1191859	2
	V	51	48.395	ug/L	2.250	4	6433	1115633	1
	V-1	51	48.401	ug/L	2.620	5	136	1108386	2
	Cr	52	49.664	ug/L	1.271	2	19074	950049	1
	Cr	53	49.689	ug/L	2.402	4	141	105038	2
	Mn	55	49.738	ug/L	1.445	2	395	1276831	0
	Co	59	49.382	ug/L	2.222	4	68	876992	1
>	Ge	72		ug/L			524719	522903	1
	Ni	60	51.498	ug/L	0.688	1	25	182048	2
	Ni	62	51.101	ug/L	0.570	1	547	26358	0
	Cu	63	51.976	ug/L	0.684	1	464	394876	0
	Cu	65	50.961	ug/L	0.807	1	38	173611	1
	Zn	66	52.864	ug/L	0.938	1	211	109232	2
	Zn	67	52.255	ug/L	1.480	2	38	17700	1
	Zn	68	53.141	ug/L	0.525	0	621	76510	1
	As	75	51.775	ug/L	0.892	1	1367	98672	0
	As-1	75	51.631	ug/L	1.036	2	8254	103354	0
	Se	82	54.944	ug/L	0.768	1	2	11185	1
	Se	78	52.297	ug/L	0.988	1	8327	34683	0
	Mo	98	51.605	ug/L	0.775	1	28	234693	0
	Y	89		ug/L			367134	371328	1
	Kr	83		ug/L			1842	2034	1
>	In	115		ug/L			978081	983741	0
	Ag	107	53.274	ug/L	0.661	1	15	497849	1
	Cd	111	50.637	ug/L	0.321	0	78	262282	0
	Cd	114	51.256	ug/L	0.528	1	26	653203	1
	Sb	121	51.640	ug/L	0.570	1	468	838894	1
	Sb	123	52.305	ug/L	0.762	1	370	638176	1
	Ba	135	50.064	ug/L	0.361	0	33	228361	0
	Ba	137	50.090	ug/L	0.238	0	61	392964	0
>	Tb	159		ug/L			1048717	1106834	0
	Tl	205	50.134	ug/L	0.973	1	58	1868892	1
	Pb	208	49.625	ug/L	0.496	0	189	2464449	0
	Bi	209		ug/L			2472390	2479983	0
	Th	232	48.742	ug/L	1.125	2	1843	2478202	1
	U	238	49.222	ug/L	0.427	0	29	2525500	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:24:17
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1230151	1
	Be	9	0.002	ug/L	0.004	235	14	21	75
	C	13		ug/L			92537	98522	0
	Cl	37		ug/L			5664278	5836764	2
>	Sc	45		ug/L			1146320	1169869	1
	V	51	-0.005	ug/L	0.010	175	6433	6441	3
	V-1	51	0.015	ug/L	0.004	24	136	482	17
	Cr	52	-0.028	ug/L	0.029	104	19074	18948	2
	Cr	53	0.044	ug/L	0.010	22	141	235	7
	Mn	55	0.002	ug/L	0.003	142	395	460	17
	Co	59	0.001	ug/L	0.003	284	68	89	64
>	Ge	72		ug/L			524719	515489	1
	Ni	60	0.001	ug/L	0.005	347	25	30	55
	Ni	62	-0.320	ug/L	0.039	12	547	378	6
	Cu	63	-0.019	ug/L	0.005	24	464	314	12
	Cu	65	0.003	ug/L	0.002	66	38	48	16
	Zn	66	0.013	ug/L	0.006	46	211	233	3
	Zn	67	0.005	ug/L	0.013	272	38	39	12
	Zn	68	-0.017	ug/L	0.006	35	621	586	3
	As	75	0.088	ug/L	0.021	23	1367	1507	3
	As-1	75	0.030	ug/L	0.099	325	8254	8162	0
	Se	82	-0.063	ug/L	0.065	101	2	-9	129
	Se	78	0.148	ug/L	0.360	243	8327	8252	0
	Mo	98	0.012	ug/L	0.002	15	28	80	10
	Y	89		ug/L			367134	357172	3
	Kr	83		ug/L			1842	2080	1
>	In	115		ug/L			978081	980184	1
	Ag	107	0.001	ug/L	0.000	8	15	21	2
	Cd	111	0.006	ug/L	0.005	80	78	110	24
	Cd	114	0.006	ug/L	0.010	170	26	104	128
	Sb	121	0.046	ug/L	0.017	36	468	1214	24
	Sb	123	0.043	ug/L	0.016	37	370	894	23
	Ba	135	0.008	ug/L	0.014	181	33	69	94
	Ba	137	0.007	ug/L	0.014	189	61	120	93
>	Tb	159		ug/L			1048717	1063976	0
	Tl	205	0.007	ug/L	0.010	148	58	304	120
	Pb	208	0.005	ug/L	0.009	188	189	417	102
	Bi	209		ug/L			2472490	2462412	1
	Th	232	0.068	ug/L	0.027	39	1843	5202	25
	U	238	0.004	ug/L	0.006	130	29	247	115

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:34:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1240584	1
	Be	9		ug/L				15	17
	C	13		ug/L				97520	1
	Cl	37		ug/L				5649089	1
>	Sc	45		ug/L				1178780	1
	V	51		ug/L				6492	2
	V-1	51		ug/L				377	4
	Cr	52		ug/L				19113	2
	Cr	53		ug/L				204	3
	Mn	55		ug/L				416	7
	Co	59		ug/L				65	8
>	Ge	72		ug/L				516864	0
	Ni	60		ug/L				27	9
	Ni	62		ug/L				330	8
	Cu	63		ug/L				294	3
	Cu	65		ug/L				45	9
	Zn	66		ug/L				231	10
	Zn	67		ug/L				33	4
	Zn	68		ug/L				616	2
	As	75		ug/L				1496	3
	As-1	75		ug/L				8213	0
	Se	82		ug/L				-25	64
	Se	78		ug/L				8312	0
	Mo	98		ug/L				32	26
	Y	89		ug/L				357323	0
	Kr	83		ug/L				2130	0
>	In	115		ug/L				968294	0
	Ag	107		ug/L				18	62
	Cd	111		ug/L				91	12
	Cd	114		ug/L				34	16
	Sb	121		ug/L				276	18
	Sb	123		ug/L				203	15
	Ba	135		ug/L				32	38
	Ba	137		ug/L				60	21
>	Tb	159		ug/L				1066450	0
	Tl	205		ug/L				58	44
	Pb	208		ug/L				178	13
	Bi	209		ug/L				2499497	1
	Th	232		ug/L				1052	11
	U	238		ug/L				23	41

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:38:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1247833	1
	Be	9	52.532	ug/L	0.915	1	15	216157	0
	C	13		ug/L			97520	98085	2
	Cl	37		ug/L			5649089	5753999	0
>	Sc	45		ug/L			1178780	1166353	1
	V	51	49.594	ug/L	1.236	2	6492	1119345	1
	V-1	51	49.537	ug/L	1.461	2	377	1111314	1
	Cr	52	48.942	ug/L	0.983	2	19113	916181	0
	Cr	53	48.743	ug/L	1.821	3	204	100960	2
	Mn	55	49.092	ug/L	0.738	1	416	1233972	1
	Co	59	50.261	ug/L	0.087	0	65	874237	1
>	Ge	72		ug/L			516864	519411	0
	Ni	60	51.249	ug/L	0.371	0	27	179953	0
	Ni	62	51.324	ug/L	0.623	1	330	26086	0
	Cu	63	51.328	ug/L	1.044	2	294	387260	2
	Cu	65	51.476	ug/L	0.836	1	45	174237	2
	Zn	66	52.439	ug/L	1.090	2	231	107658	2
	Zn	67	53.034	ug/L	0.363	0	33	17843	0
	Zn	68	52.887	ug/L	0.470	0	616	75647	1
	As	75	51.806	ug/L	0.366	0	1496	98236	0
	As-1	75	51.606	ug/L	0.635	1	8213	102717	0
	Se	82	54.783	ug/L	0.599	1	-25	11050	1
	Se	78	51.568	ug/L	0.767	1	8312	34201	1
	Mo	98	51.047	ug/L	0.458	0	32	230644	0
	Y	89		ug/L			357323	361352	0
	Kr	83		ug/L			2130	2112	3
>	In	115		ug/L			968294	970530	1
	Ag	107	53.155	ug/L	0.625	1	218	490028	0
	Cd	111	50.964	ug/L	0.778	1	91	260421	1
	Cd	114	51.257	ug/L	0.106	0	34	644464	1
	Sb	121	51.842	ug/L	0.873	1	276	830556	0
	Sb	123	52.148	ug/L	0.470	0	203	627525	0
	Ba	135	50.177	ug/L	0.417	0	32	225788	0
	Ba	137	50.413	ug/L	1.376	2	60	390108	1
>	Tb	159		ug/L			1066450	1079177	1
	Tl	205	50.301	ug/L	0.273	0	58	1828286	0
	Pb	208	49.770	ug/L	0.697	1	178	2409753	0
	Bi	209		ug/L			2499497	2459702	0
	Th	232	49.645	ug/L	1.065	2	1052	2459969	1
	U	238	50.000	ug/L	0.685	1	23	2501365	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:44:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1197222	1
	Be	9	0.001	ug/L	0.002	163	15	19	43
	C	13		ug/L			97520	96973	4
	Cl	37		ug/L			5649089	5640609	1
>	Sc	45		ug/L			1178780	1139464	0
	V	51	-0.001	ug/L	0.004	303	6492	6249	0
	V-1	51	-0.003	ug/L	0.001	41	377	297	9
	Cr	52	-0.002	ug/L	0.012	609	19113	18438	0
	Cr	53	-0.009	ug/L	0.008	87	204	180	8
	Mn	55	0.002	ug/L	0.001	44	416	461	5
	Co	59	-0.000	ug/L	0.000	67	65	57	7
>	Ge	72		ug/L			516864	519088	1
	Ni	60	-0.001	ug/L	0.001	107	27	24	16
	Ni	62	-0.030	ug/L	0.034	113	330	317	6
	Cu	63	0.009	ug/L	0.002	23	294	360	2
	Cu	65	0.009	ug/L	0.001	12	45	76	5
	Zn	66	0.312	ug/L	0.019	6	231	871	3
	Zn	67	0.324	ug/L	0.037	11	33	142	9
	Zn	68	0.279	ug/L	0.016	5	616	1014	1
	As	75	-0.012	ug/L	0.013	103	1496	1479	2
	As-1	75	-0.058	ug/L	0.097	166	8213	8139	0
	Se	82	0.007	ug/L	0.071	1080	-25	-24	58
	Se	78	-0.235	ug/L	0.382	162	8312	8228	0
	Mo	98	0.009	ug/L	0.000	0	32	73	2
	Y	89		ug/L			357323	361200	1
	Kr	83		ug/L			2130	2091	3
>	In	115		ug/L			968294	961262	1
	Ag	107	0.000	ug/L	0.000	73	18	22	13
	Cd	111	0.000	ug/L	0.001	2781	91	90	7
	Cd	114	0.001	ug/L	0.002	375	34	41	69
	Sb	121	0.050	ug/L	0.008	15	276	1059	10
	Sb	123	0.051	ug/L	0.008	14	203	809	9
	Ba	135	0.004	ug/L	0.003	64	32	52	23
	Ba	137	0.004	ug/L	0.001	16	60	93	5
>	Tb	159		ug/L			1066450	1042016	1
	Tl	205	0.002	ug/L	0.001	29	58	131	16
	Pb	208	0.004	ug/L	0.001	17	178	347	8
	Bi	209		ug/L			2499497	2445161	0
	Th	232	0.095	ug/L	0.018	19	1052	5555	15
	U	238	0.001	ug/L	0.000	33	23	86	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 14:49:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1240584	1247419	1
	Be	9	U	0.002	ug/L	0.001	92	15	21	27
	C	13			ug/L			97520	106254	1
	Cl	37			ug/L			5649089	5687480	1
>	Sc	45			ug/L			1178780	1171068	0
	V	51		0.009	ug/L	0.003	28	6492	6661	1
	V-1	51		0.005	ug/L	0.001	19	377	478	4
	Cr	52	U	0.179	ug/L	0.006	3	19113	22275	0
	Cr	53		0.162	ug/L	0.008	4	204	539	2
	Mn	55		0.050	ug/L	0.002	3	416	1676	3
	Co	59		0.001	ug/L	0.002	124	65	90	35
>	Ge	72			ug/L			516864	526338	1
	Ni	60	U	0.013	ug/L	0.004	29	27	75	17
	Ni	62		-0.056	ug/L	0.059	106	330	308	7
	Cu	63	U	0.248	ug/L	0.006	2	294	2190	3
	Cu	65		0.244	ug/L	0.015	6	45	880	4
	Zn	66	U	0.874	ug/L	0.072	8	231	2047	5
	Zn	67		0.868	ug/L	0.036	4	33	329	1
	Zn	68		0.860	ug/L	0.076	8	616	1863	5
	As	75	U	0.040	ug/L	0.018	44	1496	1598	1
	As-1	75		-0.072	ug/L	0.079	110	8213	8228	0
	Se	82	U	0.151	ug/L	0.031	20	-25	4	142
	Se	78		-0.356	ug/L	0.275	77	8312	8282	0
	Mo	98		0.008	ug/L	0.005	64	32	70	33
	Y	89			ug/L			357323	368730	1
	Kr	83			ug/L			2130	2103	1
>	In	115			ug/L			968294	975721	0
	Ag	107	U	0.001	ug/L	0.001	75	18	30	29
	Cd	111		0.000	ug/L	0.002	745	91	93	9
	Cd	114	U	-0.000	ug/L	0.001	187	34	30	22
	Sb	121	U	0.006	ug/L	0.003	45	276	368	11
	Sb	123		0.007	ug/L	0.003	47	203	289	14
	Ba	135		0.016	ug/L	0.002	14	32	107	10
	Ba	137		0.014	ug/L	0.002	17	60	171	11
>	Tb	159			ug/L			1066450	1076942	0
	Tl	205	U	0.005	ug/L	0.002	47	58	226	34
	Pb	208	U	0.010	ug/L	0.000	3	178	664	2
	Bi	209			ug/L			2499497	2444624	1
	Th	232		0.078	ug/L	0.017	21	1052	4930	17
	U	238		0.000	ug/L	0.000	48	23	40	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 14:53:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

DEV

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			1240584	1222764	1
[	Be	9	U	0.002	ug/L	0.001	29	15	22	9
	C	13			ug/L			97520	109155	1
	Cl	37			ug/L			5649089	5676051	2
[>	Sc	45			ug/L			1178780	1188115	0
[	V	51		0.018	ug/L	0.003	17	6492	6958	1
[	V-1	51		0.003	ug/L	0.001	26	377	443	3
[	Cr	52	U	0.207	ug/L	0.009	4	19113	23126	0
[	Cr	53		0.154	ug/L	0.023	14	204	529	8
[	Mn	55		0.027	ug/L	0.001	2	416	1120	1
[	Co	59		0.000	ug/L	0.001	204	65	71	14
[>	Ge	72			ug/L			516864	523066	0
[	Ni	60		0.016	ug/L	0.002	14	27	84	9
[	Ni	62	U	-0.008	ug/L	0.063	808	330	330	9
[	Cu	63		0.528	ug/L	0.009	1	294	4304	0
[	Cu	65		0.533	ug/L	0.020	3	45	1861	2
[	Zn	66	U	0.764	ug/L	0.022	2	231	1809	1
[	Zn	67		0.782	ug/L	0.065	8	33	298	7
[	Zn	68		0.731	ug/L	0.039	5	616	1668	4
[	As	75	U	0.011	ug/L	0.009	81	1496	1535	1
[	As-1	75		-0.002	ug/L	0.035	1462	8213	8306	0
[	Se	82	U	0.056	ug/L	0.126	227	-25	-14	172
[	Se	78		-0.065	ug/L	0.111	170	8312	8379	0
[	Mo	98		0.002	ug/L	0.002	83	32	44	20
	Y	89			ug/L			357323	372503	0
	Kr	83			ug/L			2130	2109	3
[>	In	115			ug/L			968294	973924	0
[	Ag	107	U	-0.000	ug/L	0.000	426	18	17	17
[	Cd	111	U	-0.002	ug/L	0.002	90	91	80	13
[	Cd	114	U	-0.000	ug/L	0.001	589	34	32	35
[	Sb	121	U	-0.005	ug/L	0.001	33	276	205	12
[	Sb	123	U	-0.003	ug/L	0.001	45	203	170	9
[	Ba	135		0.015	ug/L	0.001	9	32	98	6
[	Ba	137		0.013	ug/L	0.000	2	60	161	1
[>	Tb	159			ug/L			1066450	1082154	0
[	Tl	205	U	0.001	ug/L	0.000	8	58	105	3
[	Pb	208	U	0.011	ug/L	0.001	7	178	698	5
[	Bi	209			ug/L			2499497	2477259	0
[	Th	232		0.026	ug/L	0.005	20	1052	2358	11
[	U	238		0.000	ug/L	0.000	234	23	25	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 14:57:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1259269	1
	Be	9	25.201	ug/L	0.547	2	15	104662	1
	C	13		ug/L			97520	113082	2
	Cl	37		ug/L			5649089	5608448	2
>	Sc	45		ug/L			1178780	1184492	1
	V	51	24.383	ug/L	0.755	3	6492	562117	1
	V-1	51	24.473	ug/L	0.678	2	377	557718	1
	Cr	52	25.186	ug/L	0.866	3	19113	488067	2
	Cr	53	25.502	ug/L	0.429	1	204	53744	0
	Mn	55	25.196	ug/L	0.816	3	416	643496	4
	Co	59	25.058	ug/L	0.669	2	65	442548	1
>	Ge	72		ug/L			516864	527521	1
	Ni	60	26.277	ug/L	0.468	1	27	93724	2
	Ni	62	25.514	ug/L	0.717	2	330	13339	2
	Cu	63	26.157	ug/L	0.621	2	294	200530	1
	Cu	65	26.142	ug/L	0.730	2	45	89874	2
	Zn	66	80.591	ug/L	0.840	1	231	167883	0
	Zn	67	74.939	ug/L	0.293	0	33	25593	1
	Zn	68	80.567	ug/L	1.764	2	616	116684	0
	As	75	26.560	ug/L	0.536	2	1496	51889	1
	As-1	75	25.131	ug/L	0.500	1	8213	55100	1
	Se	82	80.807	ug/L	1.224	1	-25	16565	0
	Se	78	75.490	ug/L	1.111	1	8312	46912	1
	Mo	98	25.954	ug/L	0.296	1	32	119105	0
	Y	89		ug/L			357323	366601	0
	Kr	83		ug/L			2130	2074	0
>	In	115		ug/L			968294	998983	1
	Ag	107	25.695	ug/L	0.275	1	18	243866	2
	Cd	111	24.705	ug/L	0.435	1	91	130003	2
	Cd	114	24.784	ug/L	0.367	1	34	320718	0
	Sb	121	25.111	ug/L	0.206	0	276	414292	1
	Sb	123	25.265	ug/L	0.507	2	203	313005	0
	Ba	135	24.531	ug/L	0.336	1	32	113630	0
	Ba	137	24.420	ug/L	0.691	2	60	194533	1
>	Tb	159		ug/L			1066450	1075347	0
	Tl	205	25.466	ug/L	0.360	1	58	922387	1
	Pb	208	25.294	ug/L	0.169	0	178	1220538	0
	Bi	209		ug/L			2499497	2506116	0
	Th	232	24.264	ug/L	0.134	0	1052	1198788	0
	U	238	25.013	ug/L	0.421	1	23	1246865	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:01:29
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1236799	1
	Be	9	25.706	ug/L	0.355	1	15	104860	1
	C	13		ug/L			97520	106621	0
	Cl	37		ug/L			5649089	5722482	1
>	Sc	45		ug/L			1178780	1184149	0
	V	51	24.110	ug/L	0.457	1	6492	555923	1
	V-1	51	24.139	ug/L	0.526	2	377	550099	2
	Cr	52	25.034	ug/L	0.309	1	19113	485221	0
	Cr	53	25.135	ug/L	0.206	0	204	52967	1
	Mn	55	24.500	ug/L	0.338	1	416	625447	1
	Co	59	24.802	ug/L	0.137	0	65	438027	0
>	Ge	72		ug/L			516864	535583	0
	Ni	60	25.603	ug/L	0.344	1	27	92720	1
	Ni	62	25.267	ug/L	0.026	0	330	13417	0
	Cu	63	25.917	ug/L	0.099	0	294	201769	0
	Cu	65	26.477	ug/L	0.858	3	45	92421	2
	Zn	66	78.853	ug/L	0.868	1	231	166784	0
	Zn	67	73.615	ug/L	1.430	1	33	25524	1
	Zn	68	78.097	ug/L	0.807	1	616	114873	0
	As	75	26.040	ug/L	0.370	1	1496	51685	0
	As-1	75	24.446	ug/L	0.539	2	8213	54649	1
	Se	82	79.146	ug/L	1.149	1	-25	16472	0
	Se	78	73.275	ug/L	1.785	2	8312	46482	1
	Mo	98	25.313	ug/L	0.044	0	32	117955	0
	Y	89		ug/L			357323	370864	1
	Kr	83		ug/L			2130	2138	4
>	In	115		ug/L			969294	982262	0
	Ag	107	26.310	ug/L	0.608	2	18	245491	1
	Cd	111	24.604	ug/L	0.261	1	91	127298	0
	Cd	114	24.607	ug/L	0.202	0	34	313127	0
	Sb	121	25.524	ug/L	0.436	1	276	414044	1
	Sb	123	25.685	ug/L	0.275	1	203	312930	0
	Ba	135	24.740	ug/L	0.341	1	32	112691	1
	Ba	137	24.597	ug/L	0.270	1	60	192703	0
>	Tb	159		ug/L			1066450	1067030	0
	Tl	205	25.259	ug/L	0.379	1	58	907786	1
	Pb	208	25.049	ug/L	0.280	1	178	1199316	0
	Bi	209		ug/L			2499497	2503077	0
	Th	232	24.288	ug/L	0.387	1	1052	1190620	1
	U	238	24.664	ug/L	0.529	2	23	1219941	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 15:05:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1212373	1
[	Be	9	U 0.002	ug/L	0.001	44	15	23	17
	C	13		ug/L			97520	96723	3
	Cl	37		ug/L			5649089	5744724	1
[>	Sc	45		ug/L			1178780	1170712	1
[	V	51	0.292	ug/L	0.004	1	6492	13015	0
[	V-1	51	0.286	ug/L	0.001	0	377	6812	1
[	Cr	52	U 0.360	ug/L	0.011	3	19113	25599	0
[	Cr	53	0.340	ug/L	0.006	1	204	909	2
[	Mn	55	2.369	ug/L	0.018	0	416	60168	0
[	Co	59	0.042	ug/L	0.002	4	65	799	4
[>	Ge	72		ug/L			516964	520993	0
[	Ni	60	2.145	ug/L	0.040	1	27	7582	1
[	Ni	62	1.815	ug/L	0.054	2	330	1246	1
[	Cu	63	U 0.492	ug/L	0.010	2	294	4014	2
[	Cu	65	0.431	ug/L	0.014	3	45	1506	3
[	Zn	66	0.857	ug/L	0.017	2	231	1993	1
[	Zn	67	U 1.107	ug/L	0.072	6	33	406	6
[	Zn	68	1.123	ug/L	0.038	3	616	2219	2
[	As	75	1.311	ug/L	0.012	0	1496	3963	0
[	As-1	75	1.199	ug/L	0.016	1	8213	10480	0
[	Se	82	U 0.137	ug/L	0.011	8	-25	1	136
[	Se	78	-0.482	ug/L	0.041	8	8312	8136	0
[	Mo	98	0.689	ug/L	0.015	2	32	3155	1
	Y	89		ug/L			357323	364033	1
	Kr	83		ug/L			2130	2071	1
[>	In	115		ug/L			968294	970110	1
[	Ag	107	U 0.003	ug/L	0.003	95	18	45	56
[	Cd	111	U 0.007	ug/L	0.003	42	91	126	11
[	Cd	114	-0.000	ug/L	0.003	1218	34	31	109
[	Sb	121	U 0.060	ug/L	0.001	1	1276	1239	2
[	Sb	123	0.058	ug/L	0.005	7	203	903	7
[	Ba	135	5.052	ug/L	0.098	1	32	22752	0
[	Ba	137	5.008	ug/L	0.059	1	60	38798	0
[>	Tb	159		ug/L			1066450	1073604	0
[	Tl	205	U 0.001	ug/L	0.001	160	58	82	44
[	Pb	208	U 0.011	ug/L	0.001	6	178	707	4
[	Bi	209	U	ug/L			2499497	2435647	1
[	Th	232	0.154	ug/L	0.064	41	1052	8648	36
[	U	238	0.287	ug/L	0.003	0	23	14282	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:09:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1207797	1
[	Be	9	U 0.003	ug/L	0.001	29	15	28	12
	C	13		ug/L			97520	110465	0
	Cl	37		ug/L			5649089	5837807	0
[>	Sc	45		ug/L			1178780	1190256	0
[	V	51	1.419	ug/L	0.019	1	6492	39062	1
[	V-1	51	1.406	ug/L	0.025	1	377	32561	1
[	Cr	52	0.549	ug/L	0.024	4	19113	29578	1
[	Cr	53	0.501	ug/L	0.019	3	204	1263	2
[	Mn	55	11.105	ug/L	0.235	2	416	285146	1
[	Co	59	0.200	ug/L	0.003	1	65	3609	1
[>	Ge	72		ug/L			516864	502494	1
[	Ni	60	10.317	ug/L	0.092	0	27	35064	1
[	Ni	62	9.217	ug/L	0.429	4	330	4795	3
[	Cu	63	2.211	ug/L	0.031	1	294	16410	1
[	Cu	65	1.954	ug/L	0.060	3	45	6439	1
[	Zn	66	U 1.522	ug/L	0.037	2	231	3240	0
[	Zn	67	2.622	ug/L	0.154	5	33	883	3
[	Zn	68	2.678	ug/L	0.048	1	616	4274	2
[	As	75	6.218	ug/L	0.108	1	1496	12685	0
[	As-1	75	6.302	ug/L	0.135	2	8213	19141	0
[	Se	82	U 0.195	ug/L	0.078	40	-25	12	118
[	Se	78	0.201	ug/L	0.239	118	8312	8177	1
[	Mo	98	3.513	ug/L	0.081	2	32	15381	0
	Y	89		ug/L			357323	362372	1
	Kr	83		ug/L			2130	2163	0
[>	In	115		ug/L			968294	948249	1
[	Ag	107	U 0.003	ug/L	0.001	23	18	47	13
[	Cd	111	U 0.019	ug/L	0.005	26	91	185	14
[	Cd	114	U 0.018	ug/L	0.003	16	34	252	15
[	Sb	121	0.254	ug/L	0.005	1	276	4247	0
[	Sb	123	0.252	ug/L	0.005	2	203	3165	2
[	Ba	135	25.150	ug/L	0.504	2	32	110581	1
[	Ba	137	25.081	ug/L	0.278	1	60	189689	1
[>	Tb	159		ug/L			1066450	1072747	0
[	Tl	205	U 0.002	ug/L	0.003	147	58	137	84
[	Pb	208	U 0.028	ug/L	0.001	3	178	1507	3
[	Bi	209	U	ug/L			2499497	2290840	0
[	Th	232	0.148	ug/L	0.050	33	1052	8332	29
[	U	238	1.374	ug/L	0.016	1	23	68347	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:13:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1208299	0
[	Be	9	U 0.002	ug/L	0.001	46	15	22	16
	C	13		ug/L			97520	108752	2
	Cl	37		ug/L			5649089	5760819	1
[>	Sc	45		ug/L			1178780	1212352	0
[	V	51	1.383	ug/L	0.014	1	6492	38929	0
[	V-1	51	1.373	ug/L	0.016	1	377	32396	0
[	Cr	52	0.515	ug/L	0.020	3	19113	29467	1
[	Cr	53	0.480	ug/L	0.001	0	204	1240	1
[	Mn	55	11.008	ug/L	0.026	0	416	287925	0
[	Co	59	0.164	ug/L	0.004	2	65	3028	1
[>	Ge	72		ug/L			516864	508064	2
[	Ni	60	3.573	ug/L	0.071	1	27	12300	4
[	Ni	62	2.456	ug/L	0.129	5	330	1529	2
[	Cu	63	2.272	ug/L	0.048	2	294	17036	0
[	Cu	65	1.971	ug/L	0.018	0	45	6566	1
[	Zn	66	U 1.401	ug/L	0.045	3	231	3032	1
[	Zn	67	2.633	ug/L	0.131	4	33	898	6
[	Zn	68	2.592	ug/L	0.064	2	616	4201	0
[	As	75	6.148	ug/L	0.226	3	1496	12693	1
[	As-1	75	6.181	ug/L	0.344	5	8213	19131	1
[	Se	82	U 0.325	ug/L	0.085	26	25	38	45
[	Se	78	0.040	ug/L	0.437	1088	8312	8187	0
[	Mo	98	3.448	ug/L	0.084	2	32	15262	0
	Y	89		ug/L			357323	368466	1
	Kr	83		ug/L			2130	2114	1
[>	In	115		ug/L			968294	942890	0
[	Ag	107	U 0.002	ug/L	0.000	10	18	32	4
[	Cd	111	U 0.020	ug/L	0.002	8	91	187	3
[	Cd	114	0.015	ug/L	0.001	7	34	213	7
[	Sb	121	0.246	ug/L	0.003	1	276	4103	1
[	Sb	123	0.253	ug/L	0.004	1	203	3149	1
[	Ba	135	25.028	ug/L	0.041	0	32	109435	0
[	Ba	137	24.867	ug/L	0.301	1	60	187018	1
[>	Tb	159		ug/L			1066450	1068534	1
[	Tl	205	U 0.000	ug/L	0.000	55	58	75	13
[	Pb	208	U 0.033	ug/L	0.000	0	178	1765	1
[	Bi	209		ug/L			2499497	2311351	0
[	Th	232	0.054	ug/L	0.012	23	1052	3702	17
[	U	238	1.362	ug/L	0.009	0	23	67493	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:17:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1202417	1
	Be	9	24.881	ug/L	0.523	2	15	98694	3
	C	13		ug/L			97520	105397	1
	Cl	37		ug/L			5649089	5772962	1
>	Sc	45		ug/L			1178780	1175122	1
	V	51	25.986	ug/L	0.524	2	6492	593962	0
	V-1	51	26.014	ug/L	0.426	1	377	588170	0
	Cr	52	24.721	ug/L	0.725	2	19113	475574	0
	Cr	53	24.815	ug/L	0.374	1	204	51887	0
	Mn	55	35.769	ug/L	0.644	1	416	905759	0
	Co	59	24.383	ug/L	0.374	1	65	427254	0
>	Ge	72		ug/L			516864	500562	1
	Ni	60	28.582	ug/L	0.810	2	27	96715	1
	Ni	62	27.119	ug/L	0.550	2	330	13435	2
	Cu	63	27.802	ug/L	0.511	1	294	202247	0
	Cu	65	27.039	ug/L	0.187	0	45	88211	0
	Zn	66	77.107	ug/L	1.331	1	231	152420	0
	Zn	67	73.695	ug/L	0.978	1	33	23880	0
	Zn	68	78.744	ug/L	1.145	1	616	108238	0
	As	75	33.535	ug/L	0.923	2	1496	61787	2
	As-1	75	32.343	ug/L	0.797	2	8213	65003	1
	Se	82	80.493	ug/L	1.764	2	-25	15657	1
	Se	78	75.808	ug/L	1.467	1	8312	44665	0
	Mo	98	30.805	ug/L	0.287	0	32	134142	0
	Y	89		ug/L			35923	363902	1
	Kr	83		ug/L			2130	2142	3
>	In	115		ug/L			968294	937655	1
	Ag	107	24.934	ug/L	0.355	1	18	222086	0
	Cd	111	23.973	ug/L	0.202	0	91	118404	0
	Cd	114	24.324	ug/L	0.118	0	34	295489	1
	Sb	121	25.868	ug/L	0.379	1	276	400535	0
	Sb	123	26.081	ug/L	0.199	0	203	303315	0
	Ba	135	50.782	ug/L	0.545	1	32	220763	0
	Ba	137	50.450	ug/L	0.210	0	60	377243	0
>	Tb	159		ug/L			1066450	1070624	0
	Tl	205	24.663	ug/L	0.207	0	58	889368	0
	Pb	208	24.253	ug/L	0.156	0	178	1165152	0
	Bi	209		ug/L			2499497	2312100	1
	Th	232	23.545	ug/L	0.302	1	1052	1158139	0
	U	238	25.956	ug/L	0.269	1	23	1288191	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 B REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 15:22:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1158655	0
[	Be	9	0.000	ug/L	0.001	711	15	14	16
	C	13		ug/L			97520	94089	1
	Cl	37		ug/L			5649089	5716088	1
[>	Sc	45		ug/L			1178780	1159697	2
[	V	51	0.349	ug/L	0.017	4	6492	14159	0
[	V-1	51	0.380	ug/L	0.008	2	377	8835	1
[	Cr	52	0.341	ug/L	0.038	11	19113	25004	0
[	Cr	53	0.449	ug/L	0.008	1	204	1123	2
[	Mn	55	87.652	ug/L	1.258	1	416	2189791	1
[	Co	59	0.024	ug/L	0.001	5	65	480	4
[>	Ge	72		ug/L			516864	521325	1
[	Ni	60	0.130	ug/L	0.008	6	27	484	4
[	Ni	62	-0.223	ug/L	0.044	19	330	221	9
[	Cu	63	0.306	ug/L	0.017	5	294	2610	4
[	Cu	65	0.225	ug/L	0.010	4	45	808	3
[	Zn	66	0.991	ug/L	0.021	2	231	2269	1
[	Zn	67	0.868	ug/L	0.054	6	33	326	5
[	Zn	68	1.266	ug/L	0.005	0	616	2424	0
[	As	75	77.464	ug/L	0.678	0	1496	146681	0
[	As-1	75	78.889	ug/L	0.676	0	8213	153220	0
[	Se	82	0.177	ug/L	0.171	96	-25	9	360
[	Se	78	-0.447	ug/L	0.096	21	8312	8159	0
[	Mo	98	0.014	ug/L	0.001	8	32	95	4
	Y	89		ug/L			357323	361018	2
	Kr	83		ug/L			2130	2045	2
[>	In	115		ug/L			968294	963480	1
[	Ag	107	0.001	ug/L	0.000	64	18	25	18
[	Cd	111	0.026	ug/L	0.003	11	91	223	7
[	Cd	114	0.023	ug/L	0.001	5	34	319	4
[	Sb	121	0.013	ug/L	0.003	22	276	487	10
[	Sb	123	0.012	ug/L	0.003	22	203	351	9
[	Ba	135	0.194	ug/L	0.005	2	32	900	1
[	Ba	137	0.198	ug/L	0.003	1	60	1585	1
[>	Tb	159		ug/L			1066450	1061224	0
[	Tl	205	0.002	ug/L	0.000	21	58	112	9
[	Pb	208	0.020	ug/L	0.001	4	178	1141	2
[	Bi	209		ug/L			2499497	2437762	0
[	Th	232	0.160	ug/L	0.061	38	1052	8833	32
[	U	238	0.002	ug/L	0.001	31	23	112	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 H REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 15:27:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1130948	3
	Be	9	0.001	ug/L	0.000	33	15	17	8
	C	13		ug/L			97520	95297	3
	Cl	37		ug/L			5649089	5627039	3
>	Sc	45		ug/L			1178780	1143609	1
	V	51	0.332	ug/L	0.006	1	6492	13603	0
	V-1	51	0.352	ug/L	0.001	0	377	8105	1
	Cr	52	0.385	ug/L	0.039	10	19113	25451	1
	Cr	53	0.454	ug/L	0.017	3	204	1117	1
	Mn	55	89.122	ug/L	1.024	1	416	2196015	1
	Co	59	0.047	ug/L	0.002	3	65	871	2
>	Ge	72		ug/L			516864	511032	1
	Ni	60	0.123	ug/L	0.004	3	27	452	2
	Ni	62	-0.243	ug/L	0.022	9	330	207	5
	Cu	63	0.188	ug/L	0.008	4	294	1683	2
	Cu	65	0.095	ug/L	0.005	5	45	361	5
	Zn	66	0.867	ug/L	0.005	0	231	1975	1
	Zn	67	0.791	ug/L	0.041	5	33	294	3
	Zn	68	1.089	ug/L	0.057	5	616	2128	3
	As	75	76.622	ug/L	1.665	2	1496	142218	0
	As-1	75	78.177	ug/L	1.788	2	8213	148891	0
	Se	82	0.126	ug/L	0.102	81	-25	0	2545
	Se	78	0.120	ug/L	0.429	357	8312	8276	1
	Mo	98	0.011	ug/L	0.001	8	32	79	3
	Y	89		ug/L			357323	366476	1
	Kr	83		ug/L			2130	2057	0
>	In	115		ug/L			968294	959130	2
	Ag	107	0.000	ug/L	0.001	152	18	22	28
	Cd	111	0.002	ug/L	0.003	167	91	98	13
	Cd	114	0.001	ug/L	0.001	62	34	49	20
	Sb	121	0.001	ug/L	0.001	105	276	293	7
	Sb	123	0.003	ug/L	0.001	17	203	238	2
	Ba	135	0.193	ug/L	0.016	8	832	890	7
	Ba	137	0.195	ug/L	0.009	4	60	1546	2
>	Tb	159		ug/L			1066450	1061537	0
	Tl	205	0.002	ug/L	0.002	93	58	134	52
	Pb	208	0.019	ug/L	0.002	12	178	1082	9
	Bi	209		ug/L			2499497	2396483	0
	Th	232	0.040	ug/L	0.003	8	1052	3000	5
	U	238	0.001	ug/L	0.001	148	23	70	99

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 15:34:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1188316	1
	Be	9	51.598	ug/L	1.357	2	15	202180	1
	C	13		ug/L			97520	92178	1
	Cl	37		ug/L			5649089	5807429	1
>	Sc	45		ug/L			1178780	1151133	2
	V	51	49.098	ug/L	1.071	2	6492	1093627	0
	V-1	51	48.824	ug/L	1.290	2	377	1080877	1
	Cr	52	49.636	ug/L	1.107	2	19113	916641	0
	Cr	53	48.687	ug/L	1.730	3	204	99503	1
	Mn	55	49.263	ug/L	1.304	2	416	1221729	1
	Co	59	48.826	ug/L	1.017	2	65	838076	2
>	Ge	72		ug/L			516864	510857	1
	Ni	60	51.808	ug/L	0.220	0	27	178929	1
	Ni	62	49.682	ug/L	1.700	3	330	24840	1
	Cu	63	51.906	ug/L	1.313	2	294	385063	1
	Cu	65	52.100	ug/L	0.699	1	45	173411	0
	Zn	66	53.195	ug/L	0.801	1	231	107381	0
	Zn	67	53.200	ug/L	1.084	2	33	17601	0
	Zn	68	53.488	ug/L	0.656	1	616	75238	2
	As	75	51.720	ug/L	0.784	1	1496	96450	0
	As-1	75	51.453	ug/L	0.985	1	8213	100737	0
	Se	82	55.155	ug/L	0.974	1	-25	10940	0
	Se	78	51.787	ug/L	1.694	3	8312	33738	1
	Mo	98	50.760	ug/L	0.739	1	32	225551	0
	Y	89		ug/L			357323	356656	0
	Kr	83		ug/L			2130	2123	1
>	In	115		ug/L			968294	954285	0
	Ag	107	50.771	ug/L	0.354	0	18	460257	0
	Cd	111	50.580	ug/L	0.747	1	91	254157	1
	Cd	114	51.120	ug/L	1.085	2	34	631976	2
	Sb	121	51.493	ug/L	0.747	1	276	811265	1
	Sb	123	51.499	ug/L	0.815	1	203	609390	1
	Ba	135	49.939	ug/L	0.307	0	32	220969	0
	Ba	137	50.042	ug/L	0.557	1	60	380836	1
>	Tb	159		ug/L			1066450	1066684	0
	Tl	205	48.848	ug/L	0.836	1	58	1754854	1
	Pb	208	48.506	ug/L	1.038	2	178	2321246	1
	Bi	209		ug/L			2499497	2391690	0
	Th	232	49.497	ug/L	0.753	1	1052	2424498	1
	U	238	49.616	ug/L	0.532	1	23	2453267	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 15:41:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1136744	0
	Be	9	-0.001	ug/L	0.002	205	15	10	60
	C	13		ug/L			97520	90251	1
	Cl	37		ug/L			5649089	5687878	1
>	Sc	45		ug/L			1178780	1123367	1
	V	51	0.009	ug/L	0.013	141	6492	6384	2
	V-1	51	-0.009	ug/L	0.000	1	377	171	1
	Cr	52	0.032	ug/L	0.048	149	19113	18772	2
	Cr	53	-0.030	ug/L	0.003	10	204	134	3
	Mn	55	0.004	ug/L	0.000	7	416	491	1
	Co	59	-0.000	ug/L	0.000	211	65	59	15
>	Ge	72		ug/L			516864	504788	1
	Ni	60	-0.002	ug/L	0.001	81	27	20	24
	Ni	62	-0.384	ug/L	0.015	3	330	135	4
	Cu	63	-0.001	ug/L	0.003	260	294	278	7
	Cu	65	0.016	ug/L	0.001	6	45	96	2
	Zn	66	0.486	ug/L	0.004	0	231	1192	1
	Zn	67	0.453	ug/L	0.046	10	33	180	7
	Zn	68	0.500	ug/L	0.034	6	616	1291	3
	As	75	0.053	ug/L	0.030	57	1496	1556	2
	As-1	75	0.020	ug/L	0.037	185	8213	8056	0
	Se	82	0.207	ug/L	0.252	121	-25	15	322
	Se	78	0.029	ug/L	0.131	452	8312	8131	0
	Mo	98	0.006	ug/L	0.003	53	32	57	25
	Y	89		ug/L			357323	353798	2
	Kr	83		ug/L			2130	2042	5
>	In	115		ug/L			968294	947447	0
	Ag	107	0.003	ug/L	0.004	138	18	43	82
	Cd	111	0.001	ug/L	0.001	171	91	93	7
	Cd	114	0.001	ug/L	0.002	363	34	40	59
	Sb	121	0.040	ug/L	0.003	7	276	891	4
	Sb	123	0.041	ug/L	0.006	13	203	680	9
	Ba	135	0.007	ug/L	0.003	51	32	61	25
	Ba	137	0.007	ug/L	0.003	37	60	114	18
>	Tb	159		ug/L			1066450	1020137	0
	Tl	205	0.001	ug/L	0.001	96	58	105	45
	Pb	208	0.002	ug/L	0.001	45	178	260	16
	Bi	209		ug/L			2499497	2380111	0
	Th	232	0.063	ug/L	0.016	24	1052	3973	17
	U	238	0.001	ug/L	0.001	43	23	79	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:00:38
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1135036	2
[	Be	9	U -0.000	ug/L	0.000	193	15	13	13
	C	13		ug/L			97520	100052	1
	Cl	37		ug/L			5649089	5597677	1
[>	Sc	45		ug/L			1178780	1109193	1
[	V	51	0.023	ug/L	0.008	33	6492	6594	2
[	V-1	51	-0.000	ug/L	0.001	484	377	352	5
[	Cr	52	U 0.148	ug/L	0.040	26	19113	20555	2
[	Cr	53	0.069	ug/L	0.025	36	204	326	13
[	Mn	55	0.025	ug/L	0.004	13	416	999	7
[	Co	59	-0.000	ug/L	0.001	1019	65	60	19
[>	Ge	72		ug/L			516864	507329	0
[	Ni	60	U 0.018	ug/L	0.003	18	27	88	13
[	Ni	62	-0.446	ug/L	0.039	8	330	106	17
[	Cu	63	U 0.219	ug/L	0.014	6	294	1904	5
[	Cu	65	U 0.242	ug/L	0.009	3	45	843	4
[	Zn	66	U 2.766	ug/L	0.170	6	231	5760	5
[	Zn	67	U 2.515	ug/L	0.174	6	33	858	7
[	Zn	68	2.715	ug/L	0.121	4	616	4367	3
[	As	75	U 0.055	ug/L	0.010	18	1496	1568	0
[	As-1	75	0.033	ug/L	0.003	9	8213	8120	0
[	Se	82	U 0.196	ug/L	0.126	64	-25	13	186
[	Se	78	0.069	ug/L	0.061	88	8312	8193	1
[	Mo	98	0.002	ug/L	0.002	96	32	40	19
	Y	89		ug/L			355623	355712	1
	Kr	83		ug/L			2130	2061	2
[>	In	115		ug/L			968294	950185	0
[	Ag	107	U 0.000	ug/L	0.001	493	18	19	26
[	Cd	111	U -0.002	ug/L	0.003	131	91	79	15
[	Cd	114	U -0.001	ug/L	0.000	51	34	25	14
[	Sb	121	U -0.001	ug/L	0.003	409	276	260	18
[	Sb	123	U 0.000	ug/L	0.003	1454	203	202	17
[	Ba	135	0.027	ug/L	0.001	3	32	150	3
[	Ba	137	0.029	ug/L	0.005	18	60	278	14
[>	Tb	159		ug/L			1066450	1023710	1
[	Tl	205	U 0.001	ug/L	0.001	85	58	84	29
[	Pb	208	U 0.023	ug/L	0.001	3	178	1245	1
[	Bi	209		ug/L			2499497	2363023	1
[	Th	232	0.027	ug/L	0.003	12	1052	2286	8
[	U	238	-0.000	ug/L	0.000	101	23	17	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 G-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 16:04:45
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni, Ge

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1169548	1
[	Be	9	-0.001	ug/L	0.001	105	15	11	26
	C	13		ug/L			97520	97004	1
	Cl	37		ug/L			5649089	5621812	1
[>	Sc	45		ug/L			1178780	1157434	1
[	V	51	0.286	ug/L	0.008	2	6492	12735	0
[	V-1	51	0.268	ug/L	0.008	2	377	6338	1
[	Cr	52	0.363	ug/L	0.019	5	19113	25364	1
[	Cr	53	0.302	ug/L	0.019	6	204	820	4
[	Mn	55	2.281	ug/L	0.013	0	416	57282	1
[	Co	59	0.031	ug/L	0.001	3	65	606	1
[>	Ge	72		ug/L			516864	511115	1
[	Ni	60	0.325	ug/L	0.011	3	27	1150	3
[	Ni	62	-0.253	ug/L	0.008	3	330	202	1
[	Cu	63	0.395	ug/L	0.022	5	294	3220	3
[	Cu	65	0.334	ug/L	0.016	4	45	1156	3
[	Zn	66	0.926	ug/L	0.020	2	231	2093	1
[	Zn	67	1.124	ug/L	0.060	5	33	404	4
[	Zn	68	1.111	ug/L	0.008	0	616	2160	1
[	As	75	1.272	ug/L	0.007	0	1496	3816	1
[	As-1	75	1.180	ug/L	0.054	4	8213	10245	1
[	Se	82	0.155	ug/L	0.013	8	-25	5	49
[	Se	78	-0.323	ug/L	0.243	75	8312	8060	1
[	Mo	98	0.677	ug/L	0.010	1	32	3041	0
	Y	89		ug/L			357323	359194	2
	Kr	83		ug/L			2130	2072	0
[>	In	115		ug/L			968294	942753	1
[	Ag	107	-0.000	ug/L	0.001	427	18	16	35
[	Cd	111	-0.001	ug/L	0.002	182	91	83	13
[	Cd	114	0.000	ug/L	0.000	4334	34	33	8
[	Sb	121	0.051	ug/L	0.001	2	276	1069	0
[	Sb	123	0.051	ug/L	0.002	4	203	790	2
[	Ba	135	4.953	ug/L	0.137	2	32	21673	1
[	Ba	137	4.974	ug/L	0.093	1	60	37443	0
[>	Tb	159		ug/L			1066450	1049039	1
[	Tl	205	-0.000	ug/L	0.000	68	58	43	24
[	Pb	208	0.008	ug/L	0.000	3	178	567	3
[	Bi	209		ug/L			2499497	2373461	1
[	Th	232	-0.000	ug/L	0.003	6041	1052	1033	13
[	U	238	0.277	ug/L	0.002	0	23	13475	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:08:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni, Co

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1191388	0
[	Be	9	0.000	ug/L	0.001	264	15	16	31
	C	13		ug/L			97520	113209	2
	Cl	37		ug/L			5649089	5669176	1
[>	Sc	45		ug/L			1178780	1190464	0
[	V	51	1.308	ug/L	0.020	1	6492	36513	1
[	V-1	51	1.300	ug/L	0.015	1	377	30153	1
[	Cr	52	0.463	ug/L	0.015	3	19113	27970	1
[	Cr	53	0.436	ug/L	0.004	0	204	1126	0
[	Mn	55	10.810	ug/L	0.240	2	416	277658	2
[	Co	59	0.148	ug/L	0.005	3	65	2698	3
[>	Ge	72		ug/L			516864	495779	2
[	Ni	60	1.434	ug/L	0.062	4	27	4831	4
[	Ni	62	0.208	ug/L	0.030	14	330	417	4
[	Cu	63	1.757	ug/L	0.061	3	294	12921	2
[	Cu	65	1.488	ug/L	0.034	2	45	4847	0
[	Zn	66	1.147	ug/L	0.078	6	231	2461	3
[	Zn	67	2.253	ug/L	0.186	8	33	754	9
[	Zn	68	2.300	ug/L	0.194	8	616	3701	4
[	As	75	5.928	ug/L	0.164	2	1496	11996	0
[	As-1	75	5.985	ug/L	0.264	4	8213	18327	0
[	Se	82	0.334	ug/L	0.096	28	-25	39	44
[	Se	78	0.284	ug/L	0.485	170	8312	8105	0
[	Mo	98	3.374	ug/L	0.099	2	32	14573	0
	Y	89		ug/L			357323	355663	1
	Kr	83		ug/L			2130	2144	2
[>	In	115		ug/L			968294	935354	0
[	Ag	107	0.001	ug/L	0.000	12	18	24	4
[	Cd	111	0.005	ug/L	0.001	16	91	113	4
[	Cd	114	0.003	ug/L	0.000	12	34	69	6
[	Sb	121	0.276	ug/L	0.006	2	276	4521	1
[	Sb	123	0.279	ug/L	0.008	2	203	3429	2
[	Ba	135	23.953	ug/L	0.140	0	32	103898	0
[	Ba	137	23.778	ug/L	0.059	0	60	177399	1
[>	Tb	159		ug/L			1066450	1058321	1
[	Tl	205	0.001	ug/L	0.000	22	58	80	7
[	Pb	208	0.013	ug/L	0.001	4	178	774	2
[	Bi	209		ug/L			2499497	2272931	0
[	Th	232	0.040	ug/L	0.011	28	1052	2970	19
[	U	238	1.320	ug/L	0.009	0	23	64772	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 GDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:13:00
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120514.cal

Ni, Ge

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1184946	1
	Be	9	0.001	ug/L	0.001	122	15	17	22
	C	13		ug/L			97520	115067	1
	Cl	37		ug/L			5649089	5684640	1
>	Sc	45		ug/L			1178780	1176029	2
	V	51	1.372	ug/L	0.017	1	6492	37530	1
	V-1	51	1.360	ug/L	0.008	0	377	31128	1
	Cr	52	0.492	ug/L	0.026	5	19113	28168	2
	Cr	53	0.447	ug/L	0.017	3	204	1135	5
	Mn	55	10.861	ug/L	0.200	1	416	275512	1
	Co	59	0.146	ug/L	0.002	1	65	2628	4
>	Ge	72		ug/L			516864	492820	1
	Ni	60	1.433	ug/L	0.004	0	27	4800	1
	Ni	62	U 0.233	ug/L	0.070	30	330	426	6
	Cu	63	1.759	ug/L	0.104	5	294	12857	4
	Cu	65	1.521	ug/L	0.006	0	45	4927	1
	Zn	66	8.021	ug/L	0.126	1	231	15807	1
	Zn	67	8.590	ug/L	0.288	3	33	2767	1
	Zn	68	9.139	ug/L	0.021	0	616	12888	1
	As	75	5.964	ug/L	0.108	1	1496	11991	0
	As-1	75	6.019	ug/L	0.164	2	8213	18281	0
	Se	82	U 0.279	ug/L	0.089	31	-25	28	58
	Se	78	0.205	ug/L	0.266	129	8312	8022	0
	Mo	98	3.496	ug/L	0.082	2	32	15013	1
	Y	89		ug/L			357323	359353	2
	Kr	83		ug/L			2130	2125	2
>	In	115		ug/L			968294	930104	1
	Ag	107	0.001	ug/L	0.000	15	18	26	5
	Cd	111	0.005	ug/L	0.002	43	91	110	7
	Cd	114	0.003	ug/L	0.000	9	34	65	3
	Sb	121	0.287	ug/L	0.008	2	276	4671	1
	Sb	123	0.284	ug/L	0.009	3	203	3468	4
	Ba	135	24.594	ug/L	0.342	1	32	106065	0
	Ba	137	24.423	ug/L	0.360	1	60	181161	0
>	Tb	159		ug/L			1066450	1052817	0
	Tl	205	-0.000	ug/L	0.000	141	58	52	14
	Pb	208	0.015	ug/L	0.000	2	178	872	1
	Bi	209		ug/L			2499297	2271732	1
	Th	232	0.021	ug/L	0.006	29	1052	2053	14
	U	238	1.355	ug/L	0.020	1	23	66133	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 GSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:17:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni 62

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1191918	1
[	Be	9	24.408	ug/L	0.293	1	15	95953	0
	C	13		ug/L			97520	111742	1
	Cl	37		ug/L			5649089	5722071	0
[>	Sc	45		ug/L			1178780	1159700	2
[	V	51	25.346	ug/L	0.574	2	6492	571811	0
[	V-1	51	25.261	ug/L	0.654	2	377	563529	0
[	Cr	52	24.606	ug/L	0.823	3	19113	467162	0
[	Cr	53	24.309	ug/L	1.129	4	204	50140	2
[	Mn	55	34.890	ug/L	1.178	3	416	871685	1
[	Co	59	23.805	ug/L	0.891	3	65	411505	1
[>	Ge	72		ug/L			516864	491074	2
[	Ni	60	27.362	ug/L	0.872	3	27	90803	0
[	Ni	62	25.052	ug/L	0.948	3	330	12192	1
[	Cu	63	27.414	ug/L	0.377	1	294	195631	1
[	Cu	65	26.623	ug/L	0.693	2	45	85177	0
[	Zn	66	74.551	ug/L	2.894	3	231	144508	1
[	Zn	67	70.882	ug/L	1.940	2	33	22530	2
[	Zn	68	75.113	ug/L	1.843	2	616	101289	1
[	As	75	32.672	ug/L	1.149	3	1496	59070	1
[	As-1	75	31.429	ug/L	1.315	4	8213	62163	1
[	Se	82	78.709	ug/L	1.435	1	-25	15016	0
[	Se	78	73.927	ug/L	2.119	2	8312	42915	0
[	Mo	98	30.605	ug/L	0.884	2	32	130703	1
	Y	89		ug/L			357323	353386	1
	Kr	83		ug/L			2130	2141	3
[>	In	115		ug/L			968294	928957	1
[	Ag	107	24.615	ug/L	0.296	1	18	217251	2
[	Cd	111	24.014	ug/L	0.160	0	91	117505	1
[	Cd	114	23.878	ug/L	0.372	1	34	287336	0
[	Sb	121	25.840	ug/L	0.482	1	276	396375	0
[	Sb	123	25.961	ug/L	0.404	1	203	299087	0
[	Ba	135	50.036	ug/L	0.324	0	32	215524	1
[	Ba	137	49.926	ug/L	0.453	0	60	369843	0
[>	Tb	159		ug/L			1066450	1054005	1
[	Tl	205	24.503	ug/L	0.306	1	58	869869	0
[	Pb	208	24.081	ug/L	0.263	1	178	1138859	0
[	Bi	209		ug/L			2499497	2256938	1
[	Th	232	23.904	ug/L	0.447	1	1052	1157444	1
[	U	238	25.633	ug/L	0.136	0	23	1252418	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:21:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1102175	0
[	Be	9	204.819	ug/L	2.467	1	15	744540	1
	C	13		ug/L			97520	96525	1
	Cl	37		ug/L			5649089	5740210	3
[>	Sc	45		ug/L			1178780	1074457	0
[	V	51	205.041	ug/L	2.440	1	6492	4245161	0
[	V-1	51	203.613	ug/L	2.614	1	377	4207430	0
[	Cr	52	203.635	ug/L	2.184	1	19113	3457169	1
[	Cr	53	198.676	ug/L	1.257	0	204	378593	0
[	Mn	55	202.707	ug/L	3.381	1	416	4692150	0
[	Co	59	200.587	ug/L	6.559	3	65	3213471	2
[>	Ge	72		ug/L			516864	483844	1
[	Ni	60	199.395	ug/L	1.821	0	27	652155	1
[	Ni	62	196.336	ug/L	3.263	1	330	92091	2
[	Cu	63	196.586	ug/L	5.574	2	294	1380455	1
[	Cu	65	196.479	ug/L	3.437	1	45	619252	0
[	Zn	66	190.732	ug/L	3.539	1	231	364101	0
[	Zn	67	198.503	ug/L	1.171	0	33	62130	1
[	Zn	68	195.024	ug/L	1.024	0	616	258280	0
[	As	75	200.206	ug/L	2.851	1	1496	349640	1
[	As-1	75	200.360	ug/L	3.053	1	8213	349340	1
[	Se	82	204.493	ug/L	1.834	0	-25	38487	0
[	Se	78	195.908	ug/L	2.737	1	8312	99245	0
[	Mo	98	201.462	ug/L	2.250	1	32	847773	0
	Y	89		ug/L			357323	343495	2
	Kr	83		ug/L			2130	2268	3
[>	In	115		ug/L			96794	897618	1
[	Ag	107	192.434	ug/L	1.568	0	18	1640809	1
[	Cd	111	195.479	ug/L	0.296	0	91	923675	0
[	Cd	114	203.968	ug/L	1.792	0	34	2371758	1
[	Sb	121	210.046	ug/L	2.223	1	276	3111847	0
[	Sb	123	209.561	ug/L	1.944	0	203	2331735	0
[	Ba	135	202.209	ug/L	1.939	0	32	841462	0
[	Ba	137	204.846	ug/L	1.593	0	60	1466147	0
[>	Tb	159		ug/L			1066450	1024827	0
[	Tl	205	192.943	ug/L	1.327	0	58	6659802	0
[	Pb	208	194.029	ug/L	0.873	0	178	8921534	0
[	Bi	209		ug/L			2499497	2224370	0
[	Th	232	196.845	ug/L	2.537	1	1052	9261255	1
[	U	238	195.556	ug/L	2.364	1	23	9290582	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:28:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1098358	0
[	Be	9	0.001	ug/L	0.003	216	15	18	62
	C	13		ug/L			97520	86513	1
	Cl	37		ug/L			5649089	5604098	1
[>	Sc	45		ug/L			1178780	1077738	1
[	V	51	0.014	ug/L	0.007	46	6492	6233	3
[	V-1	51	-0.000	ug/L	0.001	3127	377	344	8
[	Cr	52	0.343	ug/L	0.017	5	19113	23287	2
[	Cr	53	0.294	ug/L	0.009	3	204	748	2
[	Mn	55	0.038	ug/L	0.001	3	416	1264	1
[	Co	59	0.001	ug/L	0.002	146	65	78	33
[>	Ge	72		ug/L			516264	497471	0
[	Ni	60	0.066	ug/L	0.006	8	27	249	7
[	Ni	62	-0.312	ug/L	0.079	25	330	168	22
[	Cu	63	0.140	ug/L	0.013	8	294	1293	6
[	Cu	65	0.162	ug/L	0.008	4	45	568	4
[	Zn	66	2.227	ug/L	0.026	1	231	4590	0
[	Zn	67	2.105	ug/L	0.064	3	33	709	2
[	Zn	68	2.208	ug/L	0.023	1	616	3592	0
[	As	75	0.065	ug/L	0.013	19	1496	1556	1
[	As-1	75	0.084	ug/L	0.023	27	8213	8051	0
[	Se	82	0.082	ug/L	0.099	120	-25	-9	209
[	Se	78	0.296	ug/L	0.073	24	8312	8142	0
[	Mo	98	0.031	ug/L	0.011	34	32	164	27
	Y	89		ug/L			357323	342824	2
	Kr	83		ug/L			2130	2140	3
[>	In	115		ug/L			968294	917788	0
[	Ag	107	0.010	ug/L	0.007	71	18	103	58
[	Cd	111	0.006	ug/L	0.005	83	91	113	19
[	Cd	114	0.006	ug/L	0.005	96	34	98	64
[	Sb	121	0.168	ug/L	0.015	8	276	2806	8
[	Sb	123	0.170	ug/L	0.018	10	203	2122	9
[	Ba	135	0.037	ug/L	0.004	10	32	188	8
[	Ba	137	0.038	ug/L	0.000	0	60	335	1
[>	Tb	159		ug/L			1066450	1001731	0
[	Tl	205	0.011	ug/L	0.003	28	58	438	24
[	Pb	208	0.044	ug/L	0.002	4	178	2162	4
[	Bi	209		ug/L			2499497	2304213	0
[	Th	232	0.116	ug/L	0.027	23	1052	6337	19
[	U	238	0.004	ug/L	0.002	45	23	222	41

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:36:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1099254	1
	Be	9	-0.001	ug/L	0.000	14	15	9	6
	C	13		ug/L			97520	86161	0
	Cl	37		ug/L			5649089	5523364	1
>	Sc	45		ug/L			1178780	1084685	0
	V	51	0.002	ug/L	0.010	445	6492	6017	2
	V-1	51	-0.008	ug/L	0.000	1	377	190	1
	Cr	52	0.328	ug/L	0.041	12	19113	23176	2
	Cr	53	0.295	ug/L	0.016	5	204	755	4
	Mn	55	0.012	ug/L	0.000	1	416	666	0
	Co	59	0.000	ug/L	0.000	2869	65	60	12
>	Ge	72		ug/L			516864	482216	0
	Ni	60	0.026	ug/L	0.001	5	27	109	3
	Ni	62	-0.427	ug/L	0.027	6	330	109	10
	Cu	63	0.032	ug/L	0.002	5	294	500	3
	Cu	65	0.052	ug/L	0.003	5	45	205	4
	Zn	66	1.094	ug/L	0.013	1	231	2295	1
	Zn	67	0.957	ug/L	0.047	4	33	329	4
	Zn	68	1.072	ug/L	0.031	2	616	1987	2
	As	75	0.085	ug/L	0.019	22	1496	1542	1
	As-1	75	0.140	ug/L	0.038	26	8213	7900	1
	Se	82	0.108	ug/L	0.151	140	-25	-3	718
	Se	78	0.501	ug/L	0.123	24	8312	7988	1
	Mo	98	0.003	ug/L	0.002	46	32	45	15
	Y	89		ug/L			357323	339255	2
	Kr	83		ug/L			2130	2102	4
>	In	115		ug/L			968294	923182	1
	Ag	107	0.001	ug/L	0.001	77	18	23	19
	Cd	111	-0.002	ug/L	0.001	36	91	77	3
	Cd	114	-0.000	ug/L	0.001	231	34	29	28
	Sb	121	0.026	ug/L	0.007	27	276	661	15
	Sb	123	0.029	ug/L	0.008	26	203	519	15
	Ba	135	0.012	ug/L	0.001	12	32	81	6
	Ba	137	0.011	ug/L	0.002	18	60	142	11
>	Tb	159		ug/L			1066450	987853	2
	Tl	205	0.002	ug/L	0.000	21	58	131	14
	Pb	208	0.011	ug/L	0.000	3	178	668	0
	Bi	209		ug/L			2499497	2339311	0
	Th	232	0.012	ug/L	0.003	27	1052	1513	10
	U	238	0.000	ug/L	0.000	30	23	37	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:40:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1118955	2
	Be	9	51.060	ug/L	0.636	1	15	188447	2
	C	13		ug/L			97520	85521	1
	Cl	37		ug/L			5649089	5677821	1
>	Sc	45		ug/L			1178780	1100773	3
	V	51	49.250	ug/L	1.815	3	6492	1048544	1
	V-1	51	48.942	ug/L	1.884	3	377	1035622	1
	Cr	52	50.490	ug/L	1.446	2	19113	891162	2
	Cr	53	49.423	ug/L	1.635	3	204	96569	1
	Mn	55	50.152	ug/L	1.245	2	416	1189072	1
	Co	59	49.416	ug/L	1.418	2	65	810912	2
>	Ge	72		ug/L			516864	497925	1
	Ni	60	50.558	ug/L	0.960	1	27	170210	3
	Ni	62	49.441	ug/L	1.286	2	330	24108	3
	Cu	63	51.810	ug/L	0.906	1	294	374690	1
	Cu	65	50.179	ug/L	0.708	1	45	162797	0
	Zn	66	52.357	ug/L	1.086	2	231	103019	1
	Zn	67	52.700	ug/L	0.646	1	33	16996	0
	Zn	68	53.402	ug/L	0.718	1	616	73211	1
	As	75	51.039	ug/L	0.858	1	796	92790	0
	As-1	75	50.847	ug/L	0.911	1	8213	97128	0
	Se	82	54.399	ug/L	0.383	0	-25	10518	1
	Se	78	51.368	ug/L	0.311	0	8312	32689	0
	Mo	98	50.087	ug/L	0.829	1	32	216930	1
	Y	89		ug/L			357323	349909	1
	Kr	83		ug/L			2130	2089	1
>	In	115		ug/L			968294	923348	0
	Ag	107	47.866	ug/L	1.359	2	18	419790	2
	Cd	111	50.474	ug/L	0.614	1	91	245387	0
	Cd	114	50.682	ug/L	0.680	1	34	606203	0
	Sb	121	50.963	ug/L	0.216	0	276	776879	0
	Sb	123	50.929	ug/L	0.819	1	203	583044	0
	Ba	135	50.000	ug/L	0.589	1	32	214052	0
	Ba	137	49.535	ug/L	0.327	0	60	364741	0
>	Tb	159		ug/L			1066450	1024767	0
	Tl	205	48.679	ug/L	0.214	0	58	1680179	0
	Pb	208	48.234	ug/L	0.128	0	178	2217833	0
	Bi	209		ug/L			2499197	2314183	0
	Th	232	49.893	ug/L	0.900	1	52	2347976	1
	U	238	50.705	ug/L	0.436	0	23	2408693	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:47:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1107038	0
[	Be	9	-0.001	ug/L	0.001	134	15	10	45
	C	13		ug/L			97520	87968	1
	Cl	37		ug/L			5649089	5488609	1
[>	Sc	45		ug/L			1178780	1064287	2
[	V	51	0.012	ug/L	0.007	55	6192	6114	3
[	V-1	51	-0.011	ug/L	0.000	3	377	123	5
[	Cr	52	0.063	ug/L	0.027	43	19113	18311	4
[	Cr	53	-0.017	ug/L	0.003	19	204	153	6
[	Mn	55	0.008	ug/L	0.000	3	416	547	3
[	Co	59	0.000	ug/L	0.000	480	65	60	5
[>	Ge	72		ug/L			516864	481980	2
[	Ni	60	-0.000	ug/L	0.001	295	27	24	18
[	Ni	62	-0.457	ug/L	0.007	1	330	95	1
[	Cu	63	-0.002	ug/L	0.002	147	294	263	8
[	Cu	65	0.020	ug/L	0.007	36	45	105	22
[	Zn	66	0.821	ug/L	0.024	2	231	1774	2
[	Zn	67	0.820	ug/L	0.051	6	33	287	8
[	Zn	68	0.831	ug/L	0.048	5	616	1670	6
[	As	75	0.097	ug/L	0.051	53	1496	1561	3
[	As-1	75	0.150	ug/L	0.034	22	8213	7913	1
[	Se	82	0.182	ug/L	0.036	19	-25	9	68
[	Se	78	0.543	ug/L	0.095	17	8312	8003	2
[	Mo	98	0.005	ug/L	0.000	1	32	50	3
	Y	89		ug/L			357323	338887	2
	Kr	83		ug/L			2130	2083	3
[>	In	115		ug/L			968294	904260	0
[	Ag	107	0.002	ug/L	0.003	118	18	36	62
[	Cd	111	0.000	ug/L	0.001	294	91	87	6
[	Cd	114	0.001	ug/L	0.001	131	34	39	24
[	Sb	121	0.052	ug/L	0.008	14	276	1039	10
[	Sb	123	0.050	ug/L	0.009	18	203	752	13
[	Ba	135	0.010	ug/L	0.001	6	32	71	3
[	Ba	137	0.009	ug/L	0.001	8	60	119	4
[>	Tb	159		ug/L			1066450	976868	0
[	Tl	205	0.002	ug/L	0.000	6	58	112	3
[	Pb	208	0.008	ug/L	0.000	2	178	521	2
[	Bi	209		ug/L			2499497	2325987	0
[	Th	232	0.064	ug/L	0.013	20	1052	3824	15
[	U	238	0.001	ug/L	0.000	19	23	71	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:51:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1240584	1146134	1
	Be	9	U	0.001	ug/L	0.001	144	15	17	26
	C	13			ug/L			97520	97918	3
	Cl	37			ug/L			5649089	5525203	1
>	Sc	45			ug/L			1178780	1098430	1
	V	51		0.399	ug/L	0.005	1	6492	14474	1
	V-1	51		0.372	ug/L	0.003	0	377	8202	1
	Cr	52	U	0.250	ug/L	0.030	12	19113	22132	2
	Cr	53	U	0.156	ug/L	0.005	3	204	495	0
	Mn	55		1.905	ug/L	0.011	0	416	45478	1
	Co	59		0.011	ug/L	0.001	7	65	245	4
>	Ge	72			ug/L			516864	509667	1
	Ni	60	U	0.138	ug/L	0.010	7	27	503	7
	Ni	62		-0.334	ug/L	0.016	4	330	161	4
	Cu	63		1.092	ug/L	0.023	2	294	8369	2
	Cu	65		1.071	ug/L	0.010	0	45	3600	1
	Zn	66		4.331	ug/L	0.174	4	231	8929	2
	Zn	67		3.929	ug/L	0.105	2	33	1327	2
	Zn	68		4.263	ug/L	0.115	2	616	6540	1
	As	75	U	0.091	ug/L	0.031	33	1496	1641	1
	As-1	75		0.003	ug/L	0.081	2359	8213	8103	0
	Se	82	U	0.255	ug/L	0.058	22	-25	24	45
	Se	78		-0.081	ug/L	0.295	362	8312	8155	0
	Mo	98		0.028	ug/L	0.003	11	32	157	8
	Y	89			ug/L			357323	358910	0
	Kr	83			ug/L			2130	2088	2
>	In	115			ug/L			968294	940698	1
	Ag	107	U	0.001	ug/L	0.000	51	18	25	14
	Cd	111	U	0.002	ug/L	0.002	141	91	97	11
	Cd	114		0.001	ug/L	0.001	45	34	49	13
	Sb	121	U	0.022	ug/L	0.002	8	276	608	5
	Sb	123		0.023	ug/L	0.004	18	203	461	11
	Ba	135		0.166	ug/L	0.012	7	32	756	5
	Ba	137		0.163	ug/L	0.001	0	60	1283	1
>	Tb	159			ug/L			1066450	1020806	0
	Tl	205	U	0.013	ug/L	0.009	72	58	494	64
	Pb	208	U	0.027	ug/L	0.001	2	178	1422	2
	Bi	209			ug/L			2499497	2346430	0
	Th	232		0.087	ug/L	0.022	25	1052	5098	20
	U	238		0.003	ug/L	0.000	4	23	143	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:56:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1121826	0
	Be	9	U 0.000	ug/L	0.001	2693	15	13	21
	C	13		ug/L			97520	94760	2
	Cl	37		ug/L			5649089	5462498	1
>	Sc	45		ug/L			1178780	1106418	1
	V	51	0.024	ug/L	0.007	30	6492	6608	1
	V-1	51	-0.001	ug/L	0.001	88	377	326	7
	Cr	52	U 0.146	ug/L	0.032	22	19113	20471	1
	Cr	53	0.057	ug/L	0.010	18	204	304	5
	Mn	55	0.054	ug/L	0.001	2	416	1682	1
	Co	59	0.001	ug/L	0.000	27	65	78	7
>	Ge	72		ug/L			516864	503753	1
	Ni	60	U 0.008	ug/L	0.003	33	27	53	16
	Ni	62	-0.471	ug/L	0.025	5	330	93	14
	Cu	63	U 0.404	ug/L	0.014	3	294	3236	1
	Cu	65	0.432	ug/L	0.017	3	45	1463	3
	Zn	66	U 2.392	ug/L	0.066	2	231	4977	3
	Zn	67	2.357	ug/L	0.030	1	33	800	2
	Zn	68	2.391	ug/L	0.076	3	616	3889	1
	As	75	U 0.069	ug/L	0.021	29	1496	1583	1
	As-1	75	0.057	ug/L	0.050	87	8213	8105	1
	Se	82	U 0.107	ug/L	0.130	121	-25	-4	583
	Se	78	0.175	ug/L	0.178	101	8312	8186	1
	Mo	98	0.002	ug/L	0.001	45	32	39	7
	Y	89		ug/L			357323	350608	0
	Kr	83		ug/L			2130	2146	2
>	In	115		ug/L			968294	937445	0
	Ag	107	U -0.000	ug/L	0.000	381	18	17	15
	Cd	111	U 0.001	ug/L	0.001	151	91	92	8
	Cd	114	0.000	ug/L	0.001	162	34	37	17
	Sb	121	U 0.001	ug/L	0.002	273	276	278	10
	Sb	123	U 0.001	ug/L	0.003	533	203	203	15
	Ba	135	0.009	ug/L	0.003	32	32	70	17
	Ba	137	0.008	ug/L	0.001	12	60	120	6
>	Tb	159		ug/L			1066450	1009121	1
	Tl	205	U 0.001	ug/L	0.000	3	58	76	1
	Pb	208	U 0.014	ug/L	0.001	10	178	791	7
	Bi	209		ug/L			2499497	2337196	0
	Th	232	0.035	ug/L	0.007	20	1052	2611	14
	U	238	0.000	ug/L	0.000	19	23	29	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:00:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1109039	0
	Be	9	24.985	ug/L	0.049	0	15	91398	0
	C	13		ug/L			97520	95327	0
	Cl	37		ug/L			5649089	5456694	1
>	Sc	45		ug/L			1178780	1107955	1
	V	51	24.756	ug/L	0.274	1	6492	533902	1
	V-1	51	24.722	ug/L	0.223	0	377	527143	1
	Cr	52	24.845	ug/L	0.527	2	19113	450664	1
	Cr	53	24.730	ug/L	0.128	0	204	48763	0
	Mn	55	24.910	ug/L	0.520	2	416	594918	1
	Co	59	25.137	ug/L	0.814	3	65	415279	2
>	Ge	72		ug/L			516864	497416	2
	Ni	60	26.133	ug/L	0.451	1	27	87865	0
	Ni	62	25.165	ug/L	0.822	3	330	12405	0
	Cu	63	26.195	ug/L	0.553	2	294	189329	0
	Cu	65	26.208	ug/L	1.021	3	45	84918	2
	Zn	66	80.134	ug/L	0.590	0	231	157398	2
	Zn	67	75.020	ug/L	2.621	3	33	24143	0
	Zn	68	79.861	ug/L	1.637	2	816	109046	0
	As	75	26.487	ug/L	0.502	1	1496	48788	0
	As-1	75	25.272	ug/L	1.000	3	8213	52176	0
	Se	82	80.342	ug/L	1.271	1	-25	15527	1
	Se	78	76.007	ug/L	3.285	4	8312	44457	1
	Mo	98	25.626	ug/L	0.630	2	32	110860	1
	Y	89		ug/L			357323	355106	0
	Kr	83		ug/L			2130	2080	2
>	In	115		ug/L			968294	929225	0
	Ag	107	25.307	ug/L	0.577	2	18	223385	1
	Cd	111	24.837	ug/L	0.191	0	91	121564	0
	Cd	114	24.781	ug/L	0.589	2	34	298303	1
	Sb	121	25.407	ug/L	0.081	0	276	389912	0
	Sb	123	25.841	ug/L	0.316	1	203	297822	0
	Ba	135	24.741	ug/L	0.276	1	32	106614	1
	Ba	137	24.524	ug/L	0.274	1	60	181755	0
>	Tb	159		ug/L			1066450	1006244	0
	Tl	205	24.775	ug/L	0.317	1	58	839646	0
	Pb	208	24.705	ug/L	0.303	1	178	1115429	0
	Bi	209		ug/L			2499497	2352170	0
	Th	232	24.282	ug/L	0.551	2	1052	1122495	2
	U	238	24.808	ug/L	0.433	1	23	1157086	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:04:18
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1098093	1
	Be	9	25.589	ug/L	0.547	2	15	92662	1
	C	13		ug/L			97520	98709	2
	Cl	37		ug/L			5649089	5509369	2
>	Sc	45		ug/L			1178730	1094803	1
	V	51	25.522	ug/L	0.602	2	6492	543649	1
	V-1	51	25.386	ug/L	0.529	2	377	534793	1
	Cr	52	25.433	ug/L	0.283	1	19113	455457	0
	Cr	53	24.961	ug/L	0.157	0	204	48634	1
	Mn	55	24.797	ug/L	0.558	2	416	585153	1
	Co	59	25.268	ug/L	0.592	2	65	412523	1
>	Ge	72		ug/L			516864	499437	1
	Ni	60	25.960	ug/L	0.281	1	27	87657	0
	Ni	62	24.964	ug/L	0.125	0	330	12365	1
	Cu	63	26.195	ug/L	0.748	2	294	190132	1
	Cu	65	26.220	ug/L	0.122	0	45	85352	0
	Zn	66	80.078	ug/L	0.994	1	231	157939	1
	Zn	67	73.995	ug/L	0.133	0	33	23925	1
	Zn	68	79.428	ug/L	1.305	1	616	108926	0
	As	75	27.337	ug/L	0.516	1	1496	50522	0
	As-1	75	26.179	ug/L	0.612	2	8213	54007	0
	Se	82	79.898	ug/L	1.255	1	-25	15506	1
	Se	78	75.738	ug/L	1.317	1	1012	44531	0
	Mo	98	25.385	ug/L	0.256	1	32	110297	0
	Y	89		ug/L			357323	349057	1
	Kr	83		ug/L			2130	2117	1
>	In	115		ug/L			968294	927918	2
	Ag	107	24.879	ug/L	0.840	3	18	219224	1
	Cd	111	24.672	ug/L	0.529	2	91	120562	1
	Cd	114	24.587	ug/L	0.544	2	34	295487	0
	Sb	121	25.866	ug/L	0.583	2	276	396302	1
	Sb	123	25.766	ug/L	0.377	1	203	296499	0
	Ba	135	24.750	ug/L	0.465	1	32	106472	0
	Ba	137	24.667	ug/L	0.473	1	60	182520	0
>	Tb	159		ug/L			1066450	998254	1
	Tl	205	24.954	ug/L	0.145	0	58	839006	0
	Pb	208	24.961	ug/L	0.145	0	178	1118075	0
	Bi	209		ug/L			2499497	2344532	0
	Th	232	25.083	ug/L	0.551	2	1052	1150174	0
	U	238	25.347	ug/L	0.371	1	23	1172816	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 17:08:26
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

rrCr Hy
rrAs 500x

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1240584	1097851	1
	Be	**9**	**-0.000**	ug/L	0.001	294	15	11	42
	C	**13**		ug/L			97520	90941	0
	Cl	**37**		ug/L			5649089	5539788	0
>	**Sc**	**45**		ug/L			1178780	1119672	0
	V	**51**	**0.486**	ug/L	0.003	0	6492	16628	0
	V-1	**51**	**0.492**	ug/L	0.009	1	377	10960	1
	Cr	**52**	**1.036**	ug/L	0.015	1	19113	36387	1
	Cr	**53**	**1.061**	ug/L	0.027	2	204	2299	1
	Mn	**55**	**71.341**	ug/L	0.766	1	416	1721204	0
	Co	**59**	**0.109**	ug/L	0.004	3	65	1889	3
>	**Ge**	**72**		ug/L			516864	497577	1
	Ni	**60**	**0.468**	ug/L	0.024	5	27	1599	3
	Ni	**62**	**0.435**	ug/L	0.127	29	330	527	12
	Cu	**63**	**5.888**	ug/L	0.073	1	294	42805	1
	Cu	**65**	**5.312**	ug/L	0.131	2	45	17261	2
	Zn	**66**	**12.541**	ug/L	0.294	2	231	24828	1
	Zn	**67**	**11.630**	ug/L	0.294	2	33	3772	1
	Zn	**68**	**12.692**	ug/L	0.341	2	616	17837	1
	As	**75**	**1421.669**	ug/L	17.178	1	1496	2544298	0
	As-1	**75**	**1450.190**	ug/L	17.605	1	8213	2550784	0
	Se	**82**	**0.253**	ug/L	0.136	53	-25	23	109
	Se	**78**	**0.359**	ug/L	0.373	103	8312	8173	1
	Mo	**98**	**0.918**	ug/L	0.018	1	32	4004	1
	Y	**89**		ug/L			357323	352320	1
	Kr	**83**		ug/L			2130	2084	2
>	**In**	**115**		ug/L			968294	936991	0
	Ag	**107**	**U 0.003**	ug/L	0.000	8	18	46	6
	Cd	**111**	**0.013**	ug/L	0.001	10	91	152	3
	Cd	**114**	**0.016**	ug/L	0.002	12	34	231	10
	Sb	**121**	**0.061**	ug/L	0.003	4	276	1211	4
	Sb	**123**	**0.064**	ug/L	0.006	8	203	941	7
	Ba	**135**	**0.268**	ug/L	0.006	2	32	1193	1
	Ba	**137**	**0.250**	ug/L	0.003	1	60	1923	0
>	**Tb**	**159**		ug/L			1066450	1017204	0
	Tl	**205**	**0.004**	ug/L	0.001	31	58	191	22
	Pb	**208**	**0.032**	ug/L	0.001	2	178	1649	2
	Bi	**209**		ug/L			2499497	2294425	0
	Th	**232**	**0.221**	ug/L	0.077	35	1052	11312	32
	U	**238**	**0.007**	ug/L	0.001	11	23	363	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:12:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

11 to 100

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1111103	1
	Be	9	0.004	ug/L	0.001	36	15	27	16
	C	13		ug/L			97520	104054	1
	Cl	37		ug/L			5649089	5843968	1
>	Sc	45		ug/L			1178780	1236694	0
	V	51	2.168	ug/L	0.075	3	6492	58393	2
	V-1	51	2.255	ug/L	0.059	2	377	54023	1
	Cr	52	0.679	ug/L	0.037	5	19113	33254	1
	Cr	53	0.979	ug/L	0.024	2	204	2360	3
	Mn	55	320.092	ug/L	4.899	1	416	8527815	0
	Co	59	0.446	ug/L	0.007	1	65	8290	2
>	Ge	72		ug/L			516864	485382	1
	Ni	60	1.035	ug/L	0.042	4	27	3421	2
	Ni	62	19.497	ug/L	5.334	27	330	9466	26
	Cu	63	28.491	ug/L	0.620	2	294	201011	3
	Cu	65	24.188	ug/L	0.381	1	45	76516	0
	Zn	66	34.756	ug/L	0.710	2	231	66741	1
	Zn	67	31.120	ug/L	0.125	0	33	9797	1
	Zn	68	35.855	ug/L	0.041	0	616	48110	1
	As	75	6673.435	ug/L	78.344	1	1496	11645070	0
	As-1	75	6807.362	ug/L	79.914	1	8213	11651551	0
	Se	82	0.383	ug/L	0.120	31	-25	47	46
	Se	78	0.945	ug/L	0.169	17	8312	8248	1
	Mo	98	4.684	ug/L	0.094	2	32	19801	0
	Y	89		ug/L			357323	350753	0
	Kr	83		ug/L			2130	2110	1
>	In	115		ug/L			968294	906078	1
	Ag	107	< 0.006	ug/L	0.001	26	18	65	18
	Cd	111	0.059	ug/L	0.006	10	91	366	7
	Cd	114	0.074	ug/L	0.003	3	34	897	4
	Sb	121	0.244	ug/L	0.009	3	276	3901	3
	Sb	123	0.242	ug/L	0.010	4	203	2903	3
	Ba	135	0.674	ug/L	0.013	1	32	2859	2
	Ba	137	0.670	ug/L	0.018	2	60	4898	2
>	Tb	159		ug/L			1066450	1031121	1
	Tl	205	0.004	ug/L	0.000	11	58	190	8
	Pb	208	0.061	ug/L	0.002	3	178	2973	2
	Bi	209		ug/L			2499497	2160412	0
	Th	232	0.225	ug/L	0.091	40	1052	11686	37
	U	238	0.027	ug/L	0.001	2	23	1327	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:16:40
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

11 As 100X

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1121451	0
	Be	9	0.004	ug/L	0.001	21	15	28	11
	C	13		ug/L			97520	102248	1
	Cl	37		ug/L			5649089	5827983	1
>	Sc	45		ug/L			1178780	1248699	0
	V	51	2.167	ug/L	0.024	1	6492	58940	0
	V-1	51	2.257	ug/L	0.029	1	377	54602	1
	Cr	52	0.660	ug/L	0.007	1	19113	33207	0
	Cr	53	0.971	ug/L	0.011	1	204	2365	0
	Mn	55	319.577	ug/L	9.437	2	416	8596512	2
	Co	59	0.452	ug/L	0.007	1	65	8482	2
>	Ge	72		ug/L			516864	485011	1
	Ni	60	1.007	ug/L	0.040	3	27	3326	2
	Ni	62	23.494	ug/L	3.659	15	330	11308	14
	Cu	63	29.238	ug/L	0.570	1	294	206052	0
	Cu	65	25.148	ug/L	0.654	2	45	79480	1
	Zn	66	37.065	ug/L	0.362	0	231	71106	0
	Zn	67	33.848	ug/L	0.914	2	33	10643	1
	Zn	68	38.723	ug/L	0.404	1	616	51868	0
	As	75	6685.969	ug/L	62.637	0	1496	11658094	0
	As-1	75	6820.210	ug/L	63.964	0	8213	11664677	0
	Se	82	0.215	ug/L	0.041	19	-25	16	46
	Se	78	1.159	ug/L	0.290	25	8312	8341	0
	Mo	98	4.656	ug/L	0.128	2	32	19666	1
	Y	89		ug/L			357323	353609	0
	Kr	83		ug/L			2130	2200	1
>	In	115		ug/L			968294	923382	0
	Ag	107	0.007	ug/L	0.001	19	18	78	14
	Cd	111	0.057	ug/L	0.005	8	91	363	6
	Cd	114	0.081	ug/L	0.002	2	34	999	2
	Sb	121	0.254	ug/L	0.011	4	276	4126	3
	Sb	123	0.249	ug/L	0.005	2	203	3042	1
	Ba	135	0.769	ug/L	0.019	2	32	3320	1
	Ba	137	0.775	ug/L	0.007	0	60	5762	0
>	Tb	159		ug/L			1066450	1052528	0
	Tl	205	0.004	ug/L	0.000	11	58	201	8
	Pb	208	0.155	ug/L	0.001	0	178	7497	0
	Bi	209		ug/L			249097	2179665	0
	Th	232	0.079	ug/L	0.017	21	1052	4842	17
	U	238	0.027	ug/L	0.001	1	23	1346	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:20:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

IVAs 100X

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1136903	2
[	Be	9	23.547	ug/L	0.348	1	15	88286	1
	C	13		ug/L			97520	105020	4
	Cl	37		ug/L			5649089	5933991	3
[>	Sc	45		ug/L			1178780	1249021	0
[	V	51	23.938	ug/L	0.080	0	6492	582241	0
[	V-1	51	24.022	ug/L	0.173	0	377	577440	0
[	Cr	52	22.178	ug/L	0.144	0	19113	455732	0
[	Cr	53	22.467	ug/L	0.346	1	204	49962	1
[	Mn	55	344.299	ug/L	4.997	1	416	9264677	1
[	Co	59	21.660	ug/L	0.275	1	65	403516	1
[>	Ge	72		ug/L			516864	484483	1
[	Ni	60	25.694	ug/L	0.649	2	27	84157	2
[	Ni	62	50.917	ug/L	4.902	9	330	24119	8
[	Cu	63	54.907	ug/L	1.910	3	294	386239	2
[	Cu	65	48.725	ug/L	0.913	1	45	153802	1
[	Zn	66	128.664	ug/L	0.771	0	231	246038	1
[	Zn	67	115.605	ug/L	1.057	0	33	36242	1
[	Zn	68	126.703	ug/L	2.091	1	616	168227	2
[	As	75	6692.676	ug/L	126.072	1	1496	11656446	1
[	As-1	75	6825.581	ug/L	128.530	1	8213	11660514	1
[	Se	82	74.347	ug/L	1.433	1	-25	13994	0
[	Se	78	71.681	ug/L	1.049	1	8312	41300	0
[	Mo	98	4.824	ug/L	0.111	2	32	20356	1
	Y	89		ug/L			357323	348443	0
	Kr	83		ug/L			2130	2156	0
[>	In	115		ug/L			968294	925669	0
[	Ag	107	21.918	ug/L	0.185	0	18	192745	0
[	Cd	111	22.876	ug/L	0.126	0	91	111550	0
[	Cd	114	22.860	ug/L	0.061	0	34	274153	0
[	Sb	121	0.249	ug/L	0.010	3	276	4074	3
[	Sb	123	0.251	ug/L	0.001	0	203	3071	0
[	Ba	135	25.897	ug/L	0.181	0	32	111166	0
[	Ba	137	25.602	ug/L	0.321	1	60	189027	1
[>	Tb	159		ug/L			1066450	1045068	1
[	Tl	205	23.309	ug/L	0.266	1	58	820447	1
[	Pb	208	23.213	ug/L	0.241	1	178	1088499	0
[	Bi	209		ug/L			2499497	2191036	1
[	Th	232	23.230	ug/L	0.294	1	1052	1115336	0
[	U	238	23.763	ug/L	0.639	2	23	1151004	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US52 APOST REN~~ 222222
Sample Dil Factor: 2
Comments: 5.15.12 VIB
Sample Date/Time: Monday, May 14, 2012 17:24:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1112212	1
[	Be	9	25.813	ug/L	0.270	1	15	94693	0
	C	13		ug/L			97520	107171	0
	Cl	37		ug/L			5649089	5858731	1
[>	Sc	45		ug/L			1178780	1233735	0
[	V	51	25.739	ug/L	0.480	1	6492	617837	1
[	V-1	51	25.869	ug/L	0.527	2	377	614147	1
[	Cr	52	23.429	ug/L	0.164	0	19113	474408	0
[	Cr	53	23.875	ug/L	0.422	1	204	52428	1
[	Mn	55	337.997	ug/L	3.371	0	416	8983949	0
[	Co	59	23.003	ug/L	0.411	1	65	423254	1
[>	Ge	72		ug/L			516864	486214	1
[	Ni	60	26.877	ug/L	0.346	1	27	88345	0
[	Ni	62	55.227	ug/L	3.514	6	330	26264	7
[	Cu	63	53.552	ug/L	0.104	0	294	378179	1
[	Cu	65	49.228	ug/L	1.530	3	45	155967	3
[	Zn	66	112.441	ug/L	2.556	2	231	215782	1
[	Zn	67	104.073	ug/L	3.895	3	33	32733	2
[	Zn	68	113.538	ug/L	2.482	2	616	151344	2
[	As	75	6580.823	ug/L	43.044	0	1496	11503529	1
[	As-1	75	6711.337	ug/L	43.958	0	8213	11507353	1
[	Se	82	77.479	ug/L	1.513	1	-25	14636	0
[	Se	78	74.416	ug/L	1.738	2	8312	42726	0
[	Mo	98	31.257	ug/L	0.715	2	32	132181	0
	Y	89		ug/L			357323	345841	0
	Kr	83		ug/L			2130	2202	3
[>	In	115		ug/L			968294	914198	0
[	Ag	107	24.732	ug/L	0.384	1	18	214793	1
[	Cd	111	24.282	ug/L	0.198	0	91	116927	0
[	Cd	114	24.363	ug/L	0.303	1	34	288536	0
[	Sb	121	26.448	ug/L	0.162	0	276	399322	1
[	Sb	123	26.589	ug/L	0.361	1	203	301472	0
[	Ba	135	27.201	ug/L	0.128	0	32	115314	0
[	Ba	137	27.427	ug/L	0.247	0	60	199978	0
[>	Tb	159		ug/L			1066450	1049607	0
[	Tl	205	24.925	ug/L	0.145	0	58	881193	0
[	Pb	208	24.503	ug/L	0.190	0	178	1154051	0
[	Bi	209		ug/L			2499497	2204419	0
[	Th	232	25.154	ug/L	0.168	0	1052	1212920	0
[	U	238	25.038	ug/L	0.198	0	23	1218235	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 17:31:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1094113	1
	Be	9	-0.002	ug/L	0.000	0	15	5	0
	C	13		ug/L			97520	89346	1
	Cl	37		ug/L			5649089	5391177	0
>	Sc	45		ug/L			1178780	1070695	2
	V	51	0.016	ug/L	0.005	35	6492	6218	3
	V-1	51	-0.004	ug/L	0.000	9	377	258	1
	Cr	52	0.192	ug/L	0.013	7	19113	20587	2
	Cr	53	0.124	ug/L	0.010	8	204	420	2
	Mn	55	0.023	ug/L	0.002	7	416	912	5
	Co	59	-0.000	ug/L	0.001	427	65	57	16
>	Ge	72		ug/L			516864	481701	3
	Ni	60	0.033	ug/L	0.003	7	27	133	6
	Ni	62	1.602	ug/L	0.411	25	330	1048	13
	Cu	63	0.138	ug/L	0.014	10	294	1234	3
	Cu	65	0.079	ug/L	0.006	7	45	291	6
	Zn	66	2.956	ug/L	0.140	4	231	5824	1
	Zn	67	2.586	ug/L	0.097	3	33	835	2
	Zn	68	2.863	ug/L	0.193	6	616	4335	2
	As	75	0.142	ug/L	0.036	25	1496	1639	2
	As-1	75	0.270	ug/L	0.218	80	8213	8103	1
	Se	82	0.182	ug/L	0.086	47	-25	9	162
	Se	78	0.766	ug/L	0.816	106	8312	8093	1
	Mo	98	0.003	ug/L	0.001	41	32	41	9
	Y	89		ug/L			357323	338725	0
	Kr	83		ug/L			2130	2057	2
>	In	115		ug/L			968294	911163	0
	Ag	107	0.001	ug/L	0.001	95	18	23	25
	Cd	111	-0.003	ug/L	0.001	29	91	71	5
	Cd	114	-0.000	ug/L	0.001	307	34	28	37
	Sb	121	0.013	ug/L	0.003	22	276	448	9
	Sb	123	0.013	ug/L	0.003	23	203	337	10
	Ba	135	0.021	ug/L	0.001	4	32	118	2
	Ba	137	0.021	ug/L	0.004	17	60	213	12
>	Tb	159		ug/L			1066450	990193	1
	Tl	205	-0.000	ug/L	0.000	1207	58	54	8
	Pb	208	0.026	ug/L	0.001	4	178	1337	1
	Bi	209		ug/L			2499497	2322961	2
	Th	232	0.008	ug/L	0.004	44	1052	1347	13
	U	238	0.000	ug/L	0.000	54	23	42	25

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 17:35:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1120587	2
	Be	9	52.561	ug/L	1.866	3	15	194161	1
	C	13		ug/L			97520	88425	1
	Cl	37		ug/L			5649089	5557721	2
>	Sc	45		ug/L			1178780	1088520	1
	V	51	50.142	ug/L	1.053	2	6492	1056076	0
	V-1	51	50.087	ug/L	1.088	2	377	1048642	0
	Cr	52	50.720	ug/L	0.948	1	19113	885459	1
	Cr	53	50.533	ug/L	1.110	2	204	97679	1
	Mn	55	49.919	ug/L	1.449	2	416	1170652	1
	Co	59	50.275	ug/L	0.946	1	65	815975	0
>	Ge	72		ug/L			516864	497020	2
	Ni	60	51.356	ug/L	1.002	1	27	172506	0
	Ni	62	50.318	ug/L	1.389	2	330	24471	1
	Cu	63	50.525	ug/L	1.865	3	294	364535	1
	Cu	65	50.810	ug/L	0.934	1	45	164517	1
	Zn	66	52.500	ug/L	1.815	3	231	103075	1
	Zn	67	53.879	ug/L	1.915	3	33	17335	1
	Zn	68	53.618	ug/L	1.688	3	616	73341	1
	As	75	52.041	ug/L	1.172	2	1496	94392	0
	As-1	75	51.687	ug/L	1.238	2	8213	98402	0
	Se	82	55.187	ug/L (10-4%)	0.672	1	25	10650	1
	Se	78	51.565	ug/L	0.982	1	8312	32718	1
	Mo	98	50.848	ug/L	1.155	2	32	219781	1
	Y	89		ug/L			357323	345084	2
	Kr	83		ug/L			2130	2117	2
>	In	115		ug/L			968294	938441	1
	Ag	107	48.250	ug/L	0.459	0	18	430093	0
	Cd	111	50.581	ug/L	1.519	3	91	249851	1
	Cd	114	50.589	ug/L	1.493	2	34	614826	1
	Sb	121	50.568	ug/L	0.943	1	276	783315	0
	Sb	123	50.839	ug/L	1.060	2	203	591452	0
	Ba	135	49.467	ug/L	1.222	2	32	215182	0
	Ba	137	48.939	ug/L	0.846	1	60	366186	0
>	Tb	159		ug/L			1066450	1008436	1
	Tl	205	49.156	ug/L	0.923	1	58	1669368	1
	Pb	208	49.233	ug/L	0.989	2	178	2227205	0
	Bi	209		ug/L			2499497	2295345	0
	Th	232	51.458	ug/L	0.300	0	1052	2382991	1
	U	238	51.770	ug/L	0.763	1	23	2419809	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 17:42:47
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1082189	1
	Be	9	-0.001	ug/L	0.001	153	15	10	39
	C	13		ug/L			97520	87109	1
	Cl	37		ug/L			5649089	5380872	1
>	Sc	45		ug/L			1178780	1056212	1
	V	51	0.018	ug/L	0.001	7	6492	6188	1
	V-1	51	-0.009	ug/L	0.001	5	377	151	7
	Cr	52	0.087	ug/L	0.005	6	18813	18567	1
	Cr	53	-0.008	ug/L	0.007	91	204	167	6
	Mn	55	0.010	ug/L	0.001	8	416	593	4
	Co	59	0.000	ug/L	0.001	258	65	62	12
>	Ge	72		ug/L			516864	482657	1
	Ni	60	-0.001	ug/L	0.001	214	27	23	21
	Ni	62	0.453	ug/L	0.108	23	330	519	8
	Cu	63	0.038	ug/L	0.003	8	294	543	2
	Cu	65	0.023	ug/L	0.003	14	45	114	7
	Zn	66	0.830	ug/L	0.005	0	231	1795	1
	Zn	67	0.762	ug/L	0.033	4	33	268	2
	Zn	68	0.859	ug/L	0.039	4	616	1707	1
	As	75	0.105	ug/L	0.010	9	1496	1579	0
	As-1	75	0.151	ug/L	0.040	26	8213	7926	0
	Se	82	0.161	ug/L	0.066	40	-25	5	205
	Se	78	0.469	ug/L	0.151	32	3312	7980	0
	Mo	98	0.004	ug/L	0.002	49	32	46	15
	Y	89		ug/L			357323	336167	1
	Kr	83		ug/L			2130	2074	2
>	In	115		ug/L			90894	900351	1
	Ag	107	0.001	ug/L	0.001	64	18	29	26
	Cd	111	-0.001	ug/L	0.002	153	91	77	12
	Cd	114	0.001	ug/L	0.003	359	34	40	78
	Sb	121	0.041	ug/L	0.004	9	276	860	7
	Sb	123	0.042	ug/L	0.010	24	203	654	18
	Ba	135	0.010	ug/L	0.002	19	32	73	10
	Ba	137	0.009	ug/L	0.002	22	60	117	10
>	Tb	159		ug/L			1066450	969386	0
	Tl	205	0.001	ug/L	0.001	131	58	77	40
	Pb	208	0.007	ug/L	0.001	15	178	469	9
	Bi	209		ug/L			2499497	2281935	0
	Th	232	0.056	ug/L	0.014	24	1052	3426	17
	U	238	0.001	ug/L	0.001	54	23	74	38

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 G-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 17:46:56
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1101746	0
	Be	9	0.003	ug/L	0.001	40	15	23	17
	C	13		ug/L			97520	89134	2
	Cl	37		ug/L			5649089	5665664	1
>	Sc	45		ug/L			1178780	1121291	0
	V	51	0.171	ug/L	0.011	6	6492	9857	2
	V-1	51	0.196	ug/L	0.008	4	377	4591	3
	Cr	52	0.147	ug/L	0.014	9	19113	20763	0
	Cr	53	0.235	ug/L	0.009	3	204	662	2
	Mn	55	70.916	ug/L	2.335	3	416	1713329	2
	Co	59	0.159	ug/L	0.002	0	65	2725	1
>	Ge	72		ug/L			516864	509704	1
	Ni	60	0.843	ug/L	0.049	5	27	2928	3
	Ni	62	0.867	ug/L	0.065	7	30	753	5
	Cu	63	0.183	ug/L	0.011	6	294	1640	4
	Cu	65	0.104	ug/L	0.007	7	45	388	7
	Zn	66	2.395	ug/L	0.006	0	231	5041	1
	Zn	67	2.220	ug/L	0.166	7	33	764	6
	Zn	68	2.555	ug/L	0.135	5	616	4163	3
	As	75	2.952	ug/L	0.053	1	1496	6884	0
	As-1	75	2.909	ug/L	0.104	3	8213	13321	0
	Se	82	0.190	ug/L	0.077	40	-25	11	128
	Se	78	-0.148	ug/L	0.307	207	8312	8122	0
	Mo	98	0.653	ug/L	0.011	1	32	2927	2
	Y	89		ug/L			357323	350719	2
	Kr	83		ug/L			2130	2119	3
>	In	115		ug/L			968294	930983	1
	Ag	107	0.001	ug/L	0.000	65	18	23	15
	Cd	111	0.003	ug/L	0.001	37	91	103	4
	Cd	114	0.003	ug/L	0.001	22	34	72	13
	Sb	121	0.009	ug/L	0.004	47	276	405	16
	Sb	123	0.010	ug/L	0.003	34	203	309	12
	Ba	135	1.403	ug/L	0.028	1	32	6088	1
	Ba	137	1.413	ug/L	0.032	2	60	10546	1
>	Tb	159		ug/L			1066450	1012322	0
	Tl	205	0.005	ug/L	0.001	17	58	231	13
	Pb	208	0.015	ug/L	0.000	1	178	836	0
	Bi	209		ug/L			2499497	2343445	0
	Th	232	0.075	ug/L	0.017	22	1052	4483	17
	U	238	0.022	ug/L	0.001	4	23	1033	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:51:03
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1142254	4
	Be	9	U 0.019	ug/L	0.002	9	15	83	7
	C	13		ug/L			97520	101917	2
	Cl	37		ug/L			5649089	6735541	2
>	Sc	45		ug/L			1178780	1173226	1
	V	51	0.835	ug/L	0.021	2	6492	25313	3
	V-1	51	0.913	ug/L	0.021	2	377	20969	3
	Cr	52	U 0.265	ug/L	0.024	9	19113	23917	3
	Cr	53	0.534	ug/L	0.025	4	204	1313	5
	Mn	55	337.844	ug/L	4.394	1	416	8538671	0
	Co	59	0.728	ug/L	0.021	2	65	12804	2
>	Ge	72		ug/L			516864	485569	0
	Ni	60	4.029	ug/L	0.112	2	27	13250	3
	Ni	62	4.570	ug/L	0.314	6	330	2455	6
	Cu	63	0.824	ug/L	0.027	3	294	6085	4
	Cu	65	0.398	ug/L	0.020	5	45	1301	5
	Zn	66	101.781	ug/L	1.856	1	231	195141	2
	Zn	67	95.369	ug/L	2.320	2	33	29970	2
	Zn	68	103.905	ug/L	0.871	0	616	138374	1
	As	75	14.023	ug/L	0.216	1	1496	25885	1
	As-1	75	14.388	ug/L	0.220	1	8213	32339	1
	Se	82	U 0.130	ug/L	0.201	155	-25	0	81181
	Se	78	0.785	ug/L	0.172	21	8312	8176	0
	Mo	98	3.528	ug/L	0.072	2	32	14929	1
	Y	89		ug/L			357323	351587	0
	Kr	83		ug/L			2130	2206	4
>	In	115		ug/L			968294	935910	1
	Ag	107	U 0.004	ug/L	0.001	31	18	53	20
	Cd	111	U 0.018	ug/L	0.004	24	91	174	11
	Cd	114	0.015	ug/L	0.000	0	34	216	1
	Sb	121	U 0.030	ug/L	0.002	7	276	728	4
	Sb	123	0.030	ug/L	0.002	8	203	544	4
	Ba	135	6.972	ug/L	0.097	1	32	30280	0
	Ba	137	6.936	ug/L	0.087	1	60	51816	0
>	Tb	159		ug/L			1066450	1036647	2
	Tl	205	U 0.012	ug/L	0.001	5	58	479	5
	Pb	208	U 0.034	ug/L	0.001	1	178	1773	3
	Bi	209		ug/L			2499497	2278098	2
	Th	232	0.144	ug/L	0.054	37	1052	7886	34
	U	238	0.100	ug/L	0.004	3	23	4826	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 GDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:55:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1142379	1
[	Be	9	0.019	ug/L	0.002	8	15	85	7
	C	13		ug/L			97520	102359	1
	Cl	37		ug/L			5649089	6829927	2
[>	Sc	45		ug/L			1178780	1193083	0
[	V	51	0.861	ug/L	0.015	1	6492	26335	1
[	V-1	51	0.935	ug/L	0.012	1	377	21830	1
[	Cr	52	0.255	ug/L	0.018	7	19113	24117	1
[	Cr	53	0.510	ug/L	0.009	1	204	1284	1
[	Mn	55	346.946	ug/L	3.129	0	416	8917993	0
[	Co	59	0.729	ug/L	0.009	1	65	13033	1
[>	Ge	72		ug/L			516864	492242	1
[	Ni	60	3.988	ug/L	0.141	3	27	13292	2
[	Ni	62	4.573	ug/L	0.166	3	330	2490	4
[	Cu	63	0.914	ug/L	0.040	4	294	6806	3
[	Cu	65	0.487	ug/L	0.013	2	45	1603	1
[	Zn	66	3.183	ug/L	0.084	2	231	6397	2
[	Zn	67	3.144	ug/L	0.125	3	33	1032	3
[	Zn	68	4.468	ug/L	0.163	3	616	6591	1
[	As	75	13.962	ug/L	0.239	1	1496	26128	0
[	As-1	75	14.293	ug/L	0.276	1	8213	32613	0
[	Se	82	0.154	ug/L	0.117	76	-25	4	493
[	Se	78	0.667	ug/L	0.221	33	8312	8232	1
[	Mo	98	3.539	ug/L	0.029	0	32	15180	0
	Y	89		ug/L			357123	354843	2
	Kr	83		ug/L			2130	2223	1
[>	In	115		ug/L			968294	932444	0
[	Ag	107	0.001	ug/L	0.001	70	18	29	26
[	Cd	111	0.012	ug/L	0.002	16	91	147	6
[	Cd	114	0.014	ug/L	0.001	10	34	203	7
[	Sb	121	0.027	ug/L	0.002	7	276	682	4
[	Sb	123	0.026	ug/L	0.001	5	203	491	2
[	Ba	135	7.153	ug/L	0.161	2	32	30947	1
[	Ba	137	7.134	ug/L	0.145	2	60	53095	1
[>	Tb	159		ug/L			1066450	1031830	0
[	Tl	205	0.011	ug/L	0.000	1	58	436	1
[	Pb	208	0.025	ug/L	0.001	2	178	1339	2
[	Bi	209		ug/L			2499497	2249733	0
[	Th	232	0.055	ug/L	0.014	24	1052	3627	17
[	U	238	0.106	ug/L	0.003	2	23	5077	2

US52 : 00897

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 GSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 17:59:17
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1128989	1
	Be	9	23.706	ug/L	0.224	0	15	88274	0
	C	13		ug/L			97520	103149	1
	Cl	37		ug/L			5649089	6963788	1
>	Sc	45		ug/L			1178780	1196049	1
	V	51	23.597	ug/L	0.691	2	6492	549566	1
	V-1	51	23.676	ug/L	0.703	2	377	544854	1
	Cr	52	23.054	ug/L	0.341	1	19113	452892	2
	Cr	53	23.329	ug/L	0.153	0	204	49669	1
	Mn	55	350.456	ug/L	8.531	2	416	9029069	1
	Co	59	22.988	ug/L	0.506	2	65	410001	1
>	Ge	72		ug/L			5[illegible]364	495711	0
	Ni	60	28.405	ug/L	0.269	0	[illegible]27	95200	0
	Ni	62	29.357	ug/L	1.005	3	330	14375	2
	Cu	63	24.945	ug/L	0.381	1	294	179746	1
	Cu	65	24.508	ug/L	0.390	1	45	79183	0
	Zn	66	75.508	ug/L	1.130	1	231	147831	1
	Zn	67	70.212	ug/L	1.582	2	33	22532	1
	Zn	68	75.854	ug/L	2.595	3	616	103273	2
	As	75	39.150	ug/L	0.548	1	1496	71201	1
	As-1	75	38.113	ug/L	0.557	1	8213	74462	1
	Se	82	75.209	ug/L	1.484	1	-25	14486	1
	Se	78	70.609	ug/L	0.648	0	8312	41748	0
	Mo	98	29.151	ug/L	0.703	2	32	125705	1
	Y	89		ug/L			357323	355305	0
	Kr	83		ug/L			2130	2157	2
>	In	115		ug/L			968294	932686	0
	Ag	107	21.728	ug/L	0.181	0	18	192522	1
	Cd	111	23.161	ug/L	0.305	1	91	113797	1
	Cd	114	23.351	ug/L	0.255	1	34	282172	1
	Sb	121	24.673	ug/L	0.349	1	[illegible]76	380038	0
	Sb	123	24.742	ug/L	0.135	0	203	286240	0
	Ba	135	31.627	ug/L	0.324	1	32	136783	1
	Ba	137	31.436	ug/L	0.088	0	60	233846	0
>	Tb	159		ug/L			1066450	1043296	0
	Tl	205	23.812	ug/L	0.271	1	58	836738	0
	Pb	208	23.416	ug/L	0.268	1	178	1096187	0
	Bi	209		ug/L			2499497	2266515	0
	Th	232	24.043	ug/L	0.499	2	1052	1152331	1
	U	238	24.257	ug/L	0.162	0	23	1173142	0

US52 : 00898

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US52 GPOST REN~~ 222222
Sample Dil Factor: 2 5/15/12 JW
Comments:
Sample Date/Time: Monday, May 14, 2012 18:03:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1124813	0
[	Be	9	25.504	ug/L	0.458	1	15	94616	1
	C	13		ug/L			97520	105794	1
	Cl	37		ug/L			5649089	6958520	1
[>	Sc	45		ug/L			1178780	1194618	1
[	V	51	24.583	ug/L	0.260	1	6492	571665	0
[	V-1	51	24.817	ug/L	0.337	1	377	570491	0
[	Cr	52	24.241	ug/L	0.271	1	19113	474592	0
[	Cr	53	25.053	ug/L	0.520	2	204	53253	0
[	Mn	55	354.565	ug/L	6.112	1	416	9124547	0
[	Co	59	24.512	ug/L	0.755	3	65	436637	2
[>	Ge	72		ug/L			516864	494664	1
[	Ni	60	30.120	ug/L	0.329	1	27	100724	1
[	Ni	62	29.954	ug/L	0.914	3	330	14628	2
[	Cu	63	26.237	ug/L	0.705	2	294	188590	0
[	Cu	65	26.204	ug/L	0.672	2	45	84468	2
[	Zn	66	80.211	ug/L	2.405	2	231	156636	1
[	Zn	67	75.303	ug/L	1.366	1	33	24114	2
[	Zn	68	80.424	ug/L	0.552	0	616	109234	1
[	As	75	40.992	ug/L	1.250	3	1496	74305	1
[	As-1	75	40.155	ug/L	1.354	3	8213	77840	1
[	Se	82	79.748	ug/L	1.639	2	-25	15327	0
[	Se	78	75.858	ug/L	1.639	2	8312	44157	0
[	Mo	98	29.721	ug/L	0.765	2	32	127866	0
	Y	89		ug/L			357323	358664	0
	Kr	83		ug/L			2130	2158	3
[>	In	115		ug/L			968294	927228	1
[	Ag	107	24.434	ug/L	0.446	1	18	215216	2
[	Cd	111	24.638	ug/L	0.672	2	91	120298	1
[	Cd	114	25.288	ug/L	0.338	1	34	303724	0
[	Sb	121	25.798	ug/L	0.303	1	276	395009	0
[	Sb	123	25.947	ug/L	0.509	1	203	298354	0
[	Ba	135	33.493	ug/L	0.449	1	32	143987	0
[	Ba	137	33.266	ug/L	0.369	1	60	245981	0
[>	Tb	159		ug/L			1066450	1045716	0
[	Tl	205	25.163	ug/L	0.300	1	58	886278	0
[	Pb	208	24.604	ug/L	0.093	0	178	1154534	0
[	Bi	209		ug/L			2499497	2281994	0
[	Th	232	25.354	ug/L	0.210	0	1052	1218067	0
[	U	238	25.519	ug/L	0.023	0	23	1237080	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:07:32
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1151033	1
	Be	9	0.021	ug/L	0.002	11	15	92	11
	C	13		ug/L			97520	116333	1
	Cl	37		ug/L			5649089	6133877	1
>	Sc	45		ug/L			1178780	1208614	2
	V	51	4.580	ug/L	0.146	3	6492	113133	0
	V-1	51	4.617	ug/L	0.136	2	377	107644	0
	Cr	52	1.198	ug/L	0.076	6	19113	42340	1
	Cr	53	1.317	ug/L	0.042	3	204	3029	1
	Mn	55	598.851	ug/L	7.796	1	416	15591248	1
	Co	59	0.310	ug/L	0.011	3	65	5651	1
>	Ge	72		ug/L			516864	486506	1
	Ni	60	3.328	ug/L	0.134	4	27	10965	2
	Ni	62	3.051	ug/L	0.154	5	330	1744	2
	Cu	63	17.429	ug/L	0.650	3	294	123314	3
	Cu	65	17.356	ug/L	0.412	2	45	55036	1
	Zn	66	5.253	ug/L	0.032	0	231	10295	1
	Zn	67	7.144	ug/L	0.331	4	33	2277	3
	Zn	68	7.816	ug/L	0.258	3	616	10961	1
	As	75	22.601	ug/L	0.147	0	1496	40934	1
	As-1	75	22.915	ug/L	0.281	1	8213	47015	0
	Se	82	0.613	ug/L	0.041	6	-25	91	6
	Se	78	0.734	ug/L	0.432	58	8312	8166	0
	Mo	98	464.546	ug/L	5.815	1	32	1965499	0
	Y	89		ug/L			357323	363115	0
	Kr	83		ug/L			2130	2369	4
>	In	115		ug/L			968294	934063	1
	Ag	107	0.236	ug/L	0.005	2	18	2109	1
	Cd	111	0.447	ug/L	0.023	5	91	2285	4
	Cd	114	0.512	ug/L	0.015	2	34	6230	2
	Sb	121	2.126	ug/L	0.012	0	276	33038	0
	Sb	123	2.127	ug/L	0.054	2	203	24816	1
	Ba	135	46.915	ug/L	0.708	1	32	203173	0
	Ba	137	47.031	ug/L	0.331	0	60	350323	0
>	Tb	159		ug/L			1066450	1055400	0
	Tl	205	0.009	ug/L	0.001	7	58	367	6
	Pb	208	1.115	ug/L	0.004	0	178	52976	0
	Bi	209		ug/L			2499497	2285862	0
	Th	232	0.151	ug/L	0.077	50	1052	8341	44
	U	238	0.268	ug/L	0.002	0	23	13123	1

US52 : 00900

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:11:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1135351	1
	Be	9	0.006	ug/L	0.003	48	15	34	27
	C	13		ug/L			97520	103100	1
	Cl	37		ug/L			5649089	5505294	2
>	Sc	45		ug/L			1178780	1148383	1
	V	51	1.898	ug/L	0.040	2	6492	48267	1
	V-1	51	1.920	ug/L	0.047	2	377	42772	1
	Cr	52	0.387	ug/L	0.022	5	19113	25601	1
	Cr	53	0.460	ug/L	0.030	6	204	1135	3
	Mn	55	9.324	ug/L	0.074	0	416	231074	1
	Co	59	0.238	ug/L	0.004	1	65	4146	0
>	Ge	72		ug/L			516964	501973	0
	Ni	60	3.619	ug/L	0.039	1	27	12305	0
	Ni	62	3.530	ug/L	0.108	3	330	2032	2
	Cu	63	13.340	ug/L	0.155	1	294	97476	1
	Cu	65	13.060	ug/L	0.398	3	45	42746	2
	Zn	66	12.156	ug/L	0.162	1	231	24289	1
	Zn	67	11.346	ug/L	0.392	3	33	3714	2
	Zn	68	12.796	ug/L	0.116	0	616	18141	1
	As	75	8.699	ug/L	0.143	1	1496	17149	0
	As-1	75	8.811	ug/L	0.201	2	8213	23562	0
	Se	82	0.028	ug/L	0.056	196	-25	-19	55
	Se	78	0.391	ug/L	0.226	57	8312	8262	0
	Mo	98	34.085	ug/L	0.434	1	32	148838	0
	Y	89		ug/L			357323	357276	1
	Kr	83		ug/L			2130	2429	1
>	In	115		ug/L			968294	954062	0
	Ag	107	0.105	ug/L	0.002	2	18	965	2
	Cd	111	0.099	ug/L	0.004	4	91	586	2
	Cd	114	0.110	ug/L	0.003	2	34	1396	3
	Sb	121	1.047	ug/L	0.021	1	276	16755	1
	Sb	123	1.066	ug/L	0.012	1	203	12813	1
	Ba	135	3.195	ug/L	0.022	0	32	14164	0
	Ba	137	3.199	ug/L	0.008	0	60	24393	0
>	Tb	159		ug/L			1066450	1036572	1
	Tl	205	0.006	ug/L	0.001	13	58	282	10
	Pb	208	0.035	ug/L	0.000	1	178	1804	1
	Bi	209		ug/L			2499497	2345028	0
	Th	232	0.015	ug/L	0.006	39	1052	1727	15
	U	238	0.046	ug/L	0.001	1	23	2237	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:15:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

DEL
PRAS 10X

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1147923	0
	Be	9	-0.000	ug/L	0.001	397	15	12	38
	C	13		ug/L			97520	103757	1
	Cl	37		ug/L			5649089	5621181	0
>	Sc	45		ug/L			1178780	1201718	1
	V	51	0.926	ug/L	0.025	2	6492	28032	0
	V-1	51	0.984	ug/L	0.020	2	377	23111	0
	Cr	52	0.433	ug/L	0.021	4	19113	27662	1
	Cr	53	0.631	ug/L	0.009	1	204	1552	2
	Mn	55	37.109	ug/L	0.832	2	416	960977	1
	Co	59	0.264	ug/L	0.009	3	65	4795	3
>	Ge	72		ug/L			516864	491240	1
	Ni	60	0.916	ug/L	0.032	3	27	3066	2
	Ni	62	0.501	ug/L	0.097	19	330	552	9
	Cu	63	3.559	ug/L	0.030	0	294	25653	0
	Cu	65	2.869	ug/L	0.023	0	45	9225	0
	Zn	66	11.443	ug/L	0.218	1	231	22386	1
	Zn	67	10.990	ug/L	0.251	2	33	3522	2
	Zn	68	12.764	ug/L	0.393	3	616	17709	2
	As	75	447.120	ug/L	9.168	2	1496	790904	0
	As-1	75	455.969	ug/L	9.406	2	8213	797084	0
	Se	82	0.307	ug/L	0.208	67	-25	34	117
	Se	78	0.431	ug/L	0.276	63	8312	8104	1
	Mo	98	16.687	ug/L	0.514	3	32	71309	1
	Y	89		ug/L			357323	349250	0
	Kr	83		ug/L			2130	2348	3
>	In	115		ug/L			968294	924500	1
	Ag	107	0.052	ug/L	0.002	3	18	478	4
	Cd	111	0.266	ug/L	0.008	2	91	1380	3
	Cd	114	0.264	ug/L	0.005	1	34	3190	2
	Sb	121	0.623	ug/L	0.008	1	276	9770	0
	Sb	123	0.623	ug/L	0.011	1	203	7329	1
	Ba	135	6.002	ug/L	0.092	1	32	25755	2
	Ba	137	5.932	ug/L	0.016	0	60	43788	0
>	Tb	159		ug/L			1066450	1044122	0
	Tl	205	0.005	ug/L	0.000	2	58	246	1
	Pb	208	0.033	ug/L	0.001	2	178	1733	1
	Bi	209		ug/L			2499497	2272534	1
	Th	232	0.005	ug/L	0.002	37	1052	1275	7
	U	238	0.098	ug/L	0.002	2	23	4765	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:19:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1176798	2
	Be	9	0.002	ug/L	0.002	117	15	21	41
	C	13		ug/L			97520	102417	0
	Cl	37		ug/L			5649089	5730495	2
>	Sc	45		ug/L			1178780	1228948	1
	V	51	2.868	ug/L	0.027	0	6492	74583	1
	V-1	51	2.967	ug/L	0.022	0	377	70518	0
	Cr	52	0.254	ug/L	0.045	17	19113	24838	2
	Cr	53	0.594	ug/L	0.039	6	204	1506	4
	Mn	55	28.761	ug/L	0.356	1	416	761842	0
	Co	59	0.283	ug/L	0.005	1	65	5263	2
>	Ge	72		ug/L			516864	491164	1
	Ni	60	0.683	ug/L	0.027	3	27	2293	4
	Ni	62	0.367	ug/L	0.107	29	330	487	8
	Cu	63	15.276	ug/L	0.340	2	294	109148	0
	Cu	65	14.405	ug/L	0.379	2	45	46119	0
	Zn	66	9.514	ug/L	0.198	2	231	18644	0
	Zn	67	9.011	ug/L	0.156	1	33	2893	3
	Zn	68	10.918	ug/L	0.232	2	616	15229	1
	As	75	159.068	ug/L	3.333	2	1496	282223	0
	As-1	75	162.181	ug/L	3.443	2	8213	288472	0
	Se	82	0.292	ug/L	0.137	46	-25	31	85
	Se	78	0.596	ug/L	0.174	29	8312	8180	0
	Mo	98	76.994	ug/L	2.362	3	32	328843	1
	Y	89		ug/L			357323	347157	0
	Kr	83		ug/L			2130	2368	1
>	In	115		ug/L			968294	934842	0
	Ag	107	0.008	ug/L	0.002	19	18	89	15
	Cd	111	0.041	ug/L	0.006	13	91	290	9
	Cd	114	0.063	ug/L	0.002	2	34	795	2
	Sb	121	4.743	ug/L	0.021	0	276	73451	0
	Sb	123	4.793	ug/L	0.057	1	203	55742	1
	Ba	135	6.232	ug/L	0.033	0	32	27040	0
	Ba	137	6.213	ug/L	0.013	0	60	46368	0
>	Tb	159		ug/L			1066450	1041009	0
	Tl	205	0.006	ug/L	0.001	9	58	262	7
	Pb	208	0.042	ug/L	0.000	0	178	2113	0
	Bi	209		ug/L			2499497	2304962	0
	Th	232	0.005	ug/L	0.002	41	1052	1281	8
	U	238	0.042	ug/L	0.001	1	23	2039	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:26:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

DEL
FF Am 104

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1141023	2
	Be	9	0.007	ug/L	0.001	21	15	39	11
	C	13		ug/L			97520	102993	4
	Cl	37		ug/L			5649089	5816539	2
>	Sc	45		ug/L			1178780	1183416	1
	V	51	1.029	ug/L	0.006	0	6492	29940	0
	V-1	51	1.156	ug/L	0.018	1	377	26687	0
	Cr	52	0.322	ug/L	0.021	6	19113	25173	0
	Cr	53	0.763	ug/L	0.072	9	204	1804	7
	Mn	55	359.308	ug/L	6.439	1	416	9159988	1
	Co	59	0.217	ug/L	0.007	3	65	3890	2
>	Ge	72		ug/L			516864	489232	0
	Ni	60	0.453	ug/L	0.013	2	27	1524	2
	Ni	62	0.147	ug/L	0.092	62	330	382	11
	Cu	63	1.720	ug/L	0.030	1	294	12489	1
	Cu	65	1.151	ug/L	0.004	0	45	3712	0
	Zn	66	52.182	ug/L	0.705	1	231	100900	1
	Zn	67	48.682	ug/L	0.456	0	33	15429	0
	Zn	68	53.794	ug/L	1.572	2	616	72464	3
	As	75	233.648	ug/L	2.010	0	1496	412354	0
	As-1	75	238.347	ug/L	2.018	0	8213	418736	0
	Se	82	0.168	ug/L	0.043	25	-25	7	110
	Se	78	0.531	ug/L	0.109	20	8312	8119	0
	Mo	98	0.273	ug/L	0.007	2	32	1194	2
	Y	89		ug/L			357323	342579	1
	Kr	83		ug/L			2130	2199	1
>	In	115		ug/L			968294	914810	0
	Ag	107	0.001	ug/L	0.000	15	18	30	6
	Cd	111	0.034	ug/L	0.001	4	91	252	2
	Cd	114	0.034	ug/L	0.002	6	34	433	6
	Sb	121	0.032	ug/L	0.001	2	276	739	1
	Sb	123	0.033	ug/L	0.003	10	203	561	6
	Ba	135	1.730	ug/L	0.022	1	32	7369	1
	Ba	137	1.725	ug/L	0.003	0	60	12637	0
>	Tb	159		ug/L			1066450	1031718	0
	Tl	205	0.002	ug/L	0.000	7	58	115	3
	Pb	208	0.142	ug/L	0.001	0	178	6724	0
	Bi	209		ug/L			2499497	2261925	0
	Th	232	0.019	ug/L	0.005	29	1052	1902	13
	U	238	0.002	ug/L	0.000	6	23	103	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 18:32:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1118359	0
	Be	9	51.379	ug/L	0.809	1	15	189507	0
	C	13		ug/L			97520	87188	1
	Cl	37		ug/L			5649089	5528811	2
>	Sc	45		ug/L			1178780	1078542	1
	V	51	49.220	ug/L	0.861	1	6492	1027334	0
	V-1	51	49.408	ug/L	0.924	1	377	1025004	0
	Cr	52	49.576	ug/L	0.964	1	19113	858024	1
	Cr	53	50.230	ug/L	0.615	1	204	96211	0
	Mn	55	50.169	ug/L	0.625	1	416	1165977	0
	Co	59	49.443	ug/L	0.541	1	65	795215	0
>	Ge	72		ug/L			516864	494525	0
	Ni	60	50.125	ug/L	0.948	1	27	167569	1
	Ni	62	49.223	ug/L	0.138	0	330	23834	0
	Cu	63	49.799	ug/L	0.504	1	294	357733	1
	Cu	65	50.051	ug/L	0.748	1	45	161280	1
	Zn	66	52.412	ug/L	0.809	1	231	102433	1
	Zn	67	51.791	ug/L	0.621	1	33	16590	0
	Zn	68	53.507	ug/L	0.809	1	516	72853	0
	As	75	50.534	ug/L	0.523	1	1496	91268	0
	As-1	75	50.404	ug/L	0.661	1	8213	95701	0
	Se	82	53.546	ug/L	0.299	0	-25	10283	1
	Se	78	50.875	ug/L	0.720	1	8312	32231	0
	Mo	98	49.527	ug/L	1.244	2	32	213054	2
	Y	89		ug/L			357323	343429	2
	Kr	83		ug/L			2130	2145	1
>	In	115		ug/L			968294	915009	0
	Ag	107	49.213	ug/L	0.164	0	18	427768	0
	Cd	111	50.231	ug/L	0.739	1	91	242011	1
	Cd	114	50.791	ug/L	0.462	0	34	602062	1
	Sb	121	50.817	ug/L	0.155	0	276	767667	0
	Sb	123	50.912	ug/L	0.614	1	203	577621	0
	Ba	135	49.912	ug/L	0.618	1	32	211762	1
	Ba	137	50.057	ug/L	1.000	1	60	365297	2
>	Tb	159		ug/L			1066450	1009242	1
	Tl	205	49.282	ug/L	0.489	0	58	1675108	0
	Pb	208	49.070	ug/L	0.763	1	178	2221791	0
	Bi	209		ug/L			2499497	2318858	1
	Th	232	51.016	ug/L	1.664	3	1052	2363795	2
	U	238	51.373	ug/L	1.442	2	23	2402972	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 18:39:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1055437	1
	Be	9	-0.002	ug/L	0.001	38	15	5	60
	C	13		ug/L			97520	85774	2
	Cl	37		ug/L			5649089	5476795	1
>	Sc	45		ug/L			1178780	1038897	1
	V	51	0.020	ug/L	0.001	5	6492	6121	1
	V-1	51	-0.003	ug/L	0.000	10	377	273	3
	Cr	52	0.085	ug/L	0.008	8	19113	18235	1
	Cr	53	0.006	ug/L	0.011	203	204	190	10
	Mn	55	0.010	ug/L	0.001	14	416	585	4
	Co	59	-0.000	ug/L	0.001	436	65	54	28
>	Ge	72		ug/L			516864	467871	1
	Ni	60	-0.001	ug/L	0.001	60	27	21	9
	Ni	62	-0.174	ug/L	0.033	18	330	220	8
	Cu	63	0.012	ug/L	0.002	19	294	348	5
	Cu	65	0.018	ug/L	0.004	20	45	97	13
	Zn	66	0.844	ug/L	0.019	2	231	1765	2
	Zn	67	0.730	ug/L	0.077	10	33	251	9
	Zn	68	0.864	ug/L	0.045	5	616	1662	1
	As	75	0.125	ug/L	0.038	30	1496	1564	3
	As-1	75	0.258	ug/L	0.106	40	8213	7857	0
	Se	82	0.009	ug/L	0.136	1522	-25	-21	114
	Se	78	0.919	ug/L	0.367	39	8312	7937	0
	Mo	98	0.005	ug/L	0.001	16	32	50	5
	Y	89		ug/L			357123	325635	0
	Kr	83		ug/L			2130	2176	1
>	In	115		ug/L			968294	887675	1
	Ag	107	0.001	ug/L	0.000	35	18	22	9
	Cd	111	-0.002	ug/L	0.002	89	91	74	12
	Cd	114	-0.001	ug/L	0.001	114	34	22	42
	Sb	121	0.038	ug/L	0.004	11	276	815	7
	Sb	123	0.042	ug/L	0.006	14	203	651	9
	Ba	135	0.009	ug/L	0.001	15	32	66	8
	Ba	137	0.008	ug/L	0.001	6	60	112	3
>	Tb	159		ug/L			1066450	944826	1
	Tl	205	-0.000	ug/L	0.000	133	58	49	4
	Pb	208	0.007	ug/L	0.000	4	178	469	3
	Bi	209		ug/L			2499497	2271759	0
	Th	232	0.051	ug/L	0.008	15	1052	3157	12
	U	238	0.001	ug/L	0.000	11	23	53	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US62 J L REN~~ 222222
Sample Dil Factor: 10
Comments: 5/15/12 JLR
Sample Date/Time: Monday, May 14, 2012 18:43:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

1 (All) RAS 500X RZA 10X

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1071560	0
	Be	9	-0.001	ug/L	0.001	44	15	9	19
	C	13		ug/L			97520	89161	2
	Cl	37		ug/L			5649089	5335305	1
>	Sc	45		ug/L			1178780	1101739	1
	V	51	0.430	ug/L	0.015	3	6492	15178	1
	V-1	51	0.445	ug/L	0.007	1	377	9776	1
	Cr	52	U 0.320	ug/L	0.025	7	19113	23399	1
	Cr	53	0.371	ug/L	0.016	4	204	916	4
	Mn	55	67.345	ug/L	1.932	2	416	1598503	1
	Co	59	0.106	ug/L	0.002	2	65	1800	2
>	Ge	72		ug/L			516964	494329	1
	Ni	60	0.243	ug/L	0.004	1	27	837	2
	Ni	62	-0.054	ug/L	0.019	35	330	290	4
	Cu	63	1.248	ug/L	0.058	4	294	9230	3
	Cu	65	0.813	ug/L	0.011	1	45	2661	2
	Zn	66	17.456	ug/L	0.511	2	231	34240	1
	Zn	67	16.068	ug/L	0.277	1	33	5166	1
	Zn	68	17.023	ug/L	0.482	2	616	23565	1
	As	75	1286.845	ug/L	17.281	1	1496	2288098	1
	As-1	75	1312.664	ug/L	17.650	1	8213	2294545	1
	Se	82	0.201	ug/L	0.038	19	-25	13	54
	Se	78	0.443	ug/L	0.281	63	8312	8160	0
	Mo	98	0.862	ug/L	0.011	1	32	3739	0
	Y	89		ug/L			357323	344500	1
	Kr	83		ug/L			2130	2149	3
>	In	115		ug/L			968294	917920	0
	Ag	107	U 0.000	ug/L	0.000	120	18	19	10
	Cd	111	-0.003	ug/L	0.002	59	91	73	10
	Cd	114	0.002	ug/L	0.001	36	34	53	15
	Sb	121	0.046	ug/L	0.001	1	876	952	0
	Sb	123	0.049	ug/L	0.005	10	203	748	7
	Ba	135	0.161	ug/L	0.009	5	32	716	4
	Ba	137	0.161	ug/L	0.004	2	60	1234	1
>	Tb	159		ug/L			1066450	1003034	2
	Tl	205	0.003	ug/L	0.002	44	58	169	32
	Pb	208	0.268	ug/L	0.009	3	178	12218	0
	Bi	209		ug/L			2499497	2303920	1
	Th	232	0.061	ug/L	0.014	23	1052	3791	19
	U	238	0.005	ug/L	0.000	3	23	247	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:48:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

RPA3 100X

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1092033	1
	Be	9	0.002	ug/L	0.002	81	15	21	31
	C	13		ug/L			97520	99264	0
	Cl	37		ug/L			5649089	5896244	0
>	Sc	45		ug/L			1178780	1222212	3
	V	51	1.915	ug/L	0.061	3	6492	51733	0
	V-1	51	2.018	ug/L	0.063	3	377	47790	0
	Cr	52	0.672	ug/L	0.066	9	19113	32716	2
	Cr	53	1.028	ug/L	0.061	5	204	2436	2
	Mn	55	317.028	ug/L	8.970	2	416	8343532	1
	Co	59	0.484	ug/L	0.014	2	65	8882	0
>	Ge	72		ug/L			516864	479682	1
	Ni	60	0.968	ug/L	0.034	3	27	3164	2
	Ni	62	9.899	ug/L	5.213	52	330	4893	48
	Cu	63	5.334	ug/L	0.366	6	294	37412	7
	Cu	65	2.325	ug/L	0.017	0	45	7307	1
	Zn	66	34.654	ug/L	0.300	0	231	65769	1
	Zn	67	32.023	ug/L	0.774	2	133	9960	1
	Zn	68	35.862	ug/L	1.096	3	616	47552	3
	As	75	6282.371	ug/L	124.780	1	1496	10833076	0
	As-1	75	6408.440	ug/L	127.330	1	8213	10839453	0
	Se	82	0.371	ug/L	0.063	16	-25	45	24
	Se	78	1.044	ug/L	0.284	27	8312	8196	0
	Mo	98	4.362	ug/L	0.125	2	32	18225	1
	Y	89		ug/L			357323	340991	3
	Kr	83		ug/L			2130	2182	0
>	In	115		ug/L			968294	891796	0
	Ag	107	U 0.002	ug/L	0.001	37	18	34	19
	Cd	111	-0.005	ug/L	0.005	93	91	60	36
	Cd	114	0.015	ug/L	0.002	15	34	203	13
	Sb	121	0.216	ug/L	0.003	1	276	3439	1
	Sb	123	0.218	ug/L	0.004	2	203	2602	1
	Ba	135	0.669	ug/L	0.016	2	32	2797	1
	Ba	137	0.639	ug/L	0.008	1	60	4599	0
>	Tb	159		ug/L			1066450	1030016	0
	Tl	205	0.002	ug/L	0.000	26	58	112	12
	Pb	208	0.130	ug/L	0.000	0	178	6186	0
	Bi	209		ug/L			2499497	2176703	1
	Th	232	0.111	ug/L	0.050	45	1052	6265	37
	U	238	0.023	ug/L	0.001	4	23	1112	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 JDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:52:12
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1095388	1
	Be	9	0.003	ug/L	0.002	45	15	25	20
	C	13		ug/L			97520	102859	0
	Cl	37		ug/L			5649089	5766801	1
>	Sc	45		ug/L			1178780	1228753	1
	V	51	2.002	ug/L	0.062	3	6492	54091	1
	V-1	51	2.084	ug/L	0.061	2	377	49622	1
	Cr	52	0.675	ug/L	0.042	6	19113	32959	0
	Cr	53	0.956	ug/L	0.021	2	204	2295	0
	Mn	55	322.498	ug/L	4.770	1	416	8535853	0
	Co	59	0.514	ug/L	0.006	1	65	9487	2
>	Ge	72		ug/L			516864	480670	0
	Ni	60	0.977	ug/L	0.029	2	27	3198	3
	Ni	62	15.267	ug/L	3.825	25	330	7395	23
	Cu	63	6.458	ug/L	0.285	4	294	45322	4
	Cu	65	2.970	ug/L	0.082	2	45	9342	2
	Zn	66	36.240	ug/L	0.267	0	231	68910	0
	Zn	67	33.474	ug/L	0.130	0	33	10433	0
	Zn	68	37.200	ug/L	0.494	1	616	49409	1
	As	75	6376.595	ug/L	49.697	0	1496	11020035	0
	As-1	75	6504.606	ug/L	50.734	0	8213	11026514	0
	Se	82	0.190	ug/L	0.099	52	-25	11	161
	Se	78	1.053	ug/L	0.164	15	8312	8218	0
	Mo	98	4.443	ug/L	0.033	0	32	18607	0
	Y	89		ug/L			357323	345086	2
	Kr	83		ug/L			2130	2189	0
>	In	115		ug/L			968294	914823	0
	Ag	107	0.002	ug/L	0.000	19	18	37	9
	Cd	111	-0.004	ug/L	0.006	129	91	65	40
	Cd	114	0.011	ug/L	0.001	11	34	166	8
	Sb	121	0.212	ug/L	0.003	1	276	3461	0
	Sb	123	0.211	ug/L	0.015	6	203	2582	5
	Ba	135	0.651	ug/L	0.010	1	32	2790	0
	Ba	137	0.646	ug/L	0.006	0	60	4768	0
>	Tb	159		ug/L			1066450	1045095	1
	Tl	205	0.002	ug/L	0.001	23	58	140	14
	Pb	208	0.174	ug/L	0.004	2	178	8309	1
	Bi	209		ug/L			2499497	2197069	0
	Th	232	0.036	ug/L	0.011	31	1052	2765	18
	U	238	0.024	ug/L	0.000	1	23	1169	1

US52 : 00909

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 JSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 18:56:20
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

11 45 1004

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1107709	0
	Be	9	24.754	ug/L	0.242	0	15	90443	0
	C	13		ug/L			97520	103730	2
	Cl	37		ug/L			5649089	5912078	1
>	Sc	45		ug/L			1178780	1210018	0
	V	51	24.503	ug/L	0.083	0	6492	577196	0
	V-1	51	24.583	ug/L	0.115	0	377	572455	1
	Cr	52	22.873	ug/L	0.389	1	19113	454700	1
	Cr	53	23.149	ug/L	0.138	0	204	49865	1
	Mn	55	354.220	ug/L	1.889	0	416	9234000	0
	Co	59	22.475	ug/L	0.374	1	65	405586	1
>	Ge	72		ug/L			516864	471746	2
	Ni	60	26.540	ug/L	0.525	1	27	84630	1
	Ni	62	44.571	ug/L	4.721	10	330	20599	9
	Cu	63	31.318	ug/L	1.062	3	294	214587	1
	Cu	65	27.178	ug/L	0.290	1	45	83555	1
	Zn	66	107.732	ug/L	2.694	2	231	200561	0
	Zn	67	102.753	ug/L	2.564	2	33	31363	2
	Zn	68	108.975	ug/L	2.147	1	616	140923	0
	As	75	6431.210	ug/L	111.055	1	1496	10905366	0
	As-1	75	6558.742	ug/L	113.386	1	8213	10909107	0
	Se	82	76.490	ug/L	1.907	2	-25	14017	0
	Se	78	73.593	ug/L	2.121	2	8312	41074	0
	Mo	98	4.566	ug/L	0.107	2	32	18757	0
	Y	89		ug/L			357323	339872	1
	Kr	83		ug/L			2130	2208	1
>	In	115		ug/L			968294	919225	0
	Ag	107	23.455	ug/L	0.467	1	18	204801	1
	Cd	111	23.569	ug/L	0.365	1	91	114114	0
	Cd	114	23.636	ug/L	0.222	0	34	281478	0
	Sb	121	0.212	ug/L	0.007	3	276	3481	2
	Sb	123	0.217	ug/L	0.003	1	203	2669	1
	Ba	135	26.332	ug/L	0.302	1	32	112246	1
	Ba	137	26.327	ug/L	0.123	0	60	193020	0
>	Tb	159		ug/L			1066450	1042589	1
	Tl	205	24.136	ug/L	0.234	0	58	847534	0
	Pb	208	23.882	ug/L	0.229	0	178	1117218	0
	Bi	209		ug/L			2499497	2186690	0
	Th	232	24.514	ug/L	0.040	0	1052	1174188	1
	U	238	24.298	ug/L	0.303	1	23	1174257	0

US52 : 00910

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US52 JPOST REN~~ 22222

Sample Dil Factor: 2

Comments: 5/15/12 JW

Sample Date/Time: Monday, May 14, 2012 19:00:27

Number of Replicates: 3

Method File: C:\NexION Data\Method\200.8nomin.mth

Tuning File: C:\NexION Data\MassCal\default.tun

Optimization File: C:\NexION Data\Conditions\default.dac

Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1118286	0
	Be	9	25.654	ug/L	0.650	2	15	94625	2
	C	13		ug/L			97520	107208	3
	Cl	37		ug/L			5649089	5967456	2
>	Sc	45		ug/L			1178780	1213717	2
	V	51	25.495	ug/L	0.837	3	6492	602002	3
	V-1	51	25.695	ug/L	0.822	3	377	599972	2
	Cr	52	23.945	ug/L	0.424	1	19113	476506	2
	Cr	53	24.638	ug/L	0.645	2	204	53196	0
	Mn	55	338.645	ug/L	12.790	3	416	8851559	2
	Co	59	23.779	ug/L	0.804	3	65	430178	0
>	Ge	72		ug/L			516864	472916	0
	Ni	60	27.273	ug/L	0.451	1	27	87199	1
	Ni	62	49.065	ug/L	4.718	9	330	22711	8
	Cu	63	31.900	ug/L	1.179	3	294	219198	3
	Cu	65	28.850	ug/L	0.321	1	45	88919	0
	Zn	66	114.577	ug/L	1.872	1	231	213886	1
	Zn	67	106.103	ug/L	1.180	1	33	32472	1
	Zn	68	115.598	ug/L	3.099	2	616	149856	2
	As	75	6283.163	ug/L	20.928	0	1496	10683622	0
	As-1	75	6407.600	ug/L	21.402	0	8213	10687162	0
	Se	82	79.828	ug/L	0.614	0	-25	14672	1
	Se	78	76.557	ug/L	0.954	1	8312	42543	0
	Mo	98	31.593	ug/L	0.611	1	32	129971	1
	Y	89		ug/L			357323	332377	1
	Kr	83		ug/L			2130	2215	3
>	In	115		ug/L			968294	911731	0
	Ag	107	24.992	ug/L	0.261	1	18	216464	0
	Cd	111	24.749	ug/L	0.336	1	91	118853	0
	Cd	114	25.001	ug/L	0.240	0	34	295296	0
	Sb	121	26.642	ug/L	0.222	0	276	401151	0
	Sb	123	26.701	ug/L	0.091	0	203	301949	0
	Ba	135	28.143	ug/L	0.298	1	32	118979	0
	Ba	137	27.899	ug/L	0.496	1	60	202863	1
>	Tb	159		ug/L			1066450	1057426	0
	Tl	205	25.181	ug/L	0.071	0	58	896879	0
	Pb	208	24.906	ug/L	0.153	0	178	1181794	0
	Bi	209		ug/L			2499497	2219045	0
	Th	232	25.417	ug/L	0.159	0	1052	1234760	0
	U	238	25.256	ug/L	0.465	1	23	1238050	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:04:34
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1163058	1
[	Be	9	0.022	ug/L	0.001	5	15	98	4
	C	13		ug/L			97520	106123	2
	Cl	37		ug/L			5649089	6034154	1
[>	Sc	45		ug/L			1178780	1201920	2
[	V	51	3.269	ug/L	0.112	3	6492	82190	0
[	V-1	51	3.324	ug/L	0.124	3	377	77171	1
[	Cr	52	0.773	ug/L	0.025	3	19113	34095	1
[	Cr	53	0.958	ug/L	0.058	6	204	2247	3
[	Mn	55	636.000	ug/L	13.061	2	416	16464746	1
[	Co	59	0.508	ug/L	0.024	4	65	9172	4
[>	Ge	72		ug/L			516864	473657	1
[	Ni	60	0.833	ug/L	0.005	0	27	2693	1
[	Ni	62	4.086	ug/L	0.296	7	330	2172	5
[	Cu	63	1.777	ug/L	0.011	0	294	12485	0
[	Cu	65	0.498	ug/L	0.010	1	45	1579	2
[	Zn	66	5.258	ug/L	0.052	0	231	10034	1
[	Zn	67	5.033	ug/L	0.194	3	33	1571	2
[	Zn	68	6.505	ug/L	0.222	3	616	8980	3
[	As	75	8.480	ug/L	0.058	0	196	15810	1
[	As-1	75	8.682	ug/L	0.051	0	8213	22018	0
[	Se	82	0.287	ug/L	0.202	70	-25	29	127
[	Se	78	0.817	ug/L	0.162	19	8312	7990	0
[	Mo	98	5.702	ug/L	0.068	1	32	23520	1
	Y	89		ug/L			357323	345578	0
	Kr	83		ug/L			2130	2186	1
[>	In	115		ug/L			968294	919855	1
[	Ag	107	0.006	ug/L	0.003	43	18	71	32
[	Cd	111	0.012	ug/L	0.004	32	91	145	12
[	Cd	114	0.012	ug/L	0.002	16	34	180	14
[	Sb	121	0.090	ug/L	0.002	1	276	1630	2
[	Sb	123	0.091	ug/L	0.001	1	203	1229	0
[	Ba	135	11.873	ug/L	0.146	1	32	50658	0
[	Ba	137	11.825	ug/L	0.223	1	60	86770	0
[>	Tb	159		ug/L			1066450	1061217	0
[	Tl	205	0.008	ug/L	0.000	2	58	358	1
[	Pb	208	0.150	ug/L	0.001	0	178	7312	0
[	Bi	209		ug/L			2490497	2259422	0
[	Th	232	0.166	ug/L	0.095	57	1052	9147	50
[	U	238	0.083	ug/L	0.001	1	23	4096	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:08:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1088518	0
	Be	9	0.204	ug/L	0.014	7	15	746	7
	C	13		ug/L			97520	117930	1
	Cl	37		ug/L			5649089	8559932	2
>	Sc	45		ug/L			1178780	1196046	1
	V	51	65.107	ug/L	1.477	2	6492	1504724	0
	V-1	51	65.419	ug/L	1.579	2	377	1504742	0
	Cr	52	12.941	ug/L	0.101	0	19113	262695	1
	Cr	53	13.910	ug/L	0.457	3	204	29690	1
	Mn	55	310.467	ug/L	1.757	0	416	7999893	1
	Co	59	0.606	ug/L	0.018	2	65	10871	1
>	Ge	72		ug/L			516864	452365	0
	Ni	60	1.107	ug/L	0.013	1	27	3408	1
	Ni	62	33.932	ug/L	16.453	48	330	15125	47
	Cu	63	15.954	ug/L	1.165	7	294	105008	7
	Cu	65	6.481	ug/L	0.078	1	45	19139	1
	Zn	66	7.902	ug/L	0.083	1	231	14298	1
	Zn	67	10.201	ug/L	0.155	1	33	3012	2
	Zn	68	9.762	ug/L	0.180	1	616	12600	1
	As	75	1.680	ug/L	0.319	18	1496	4042	12
	As-1	75	1.878	ug/L	0.235	12	8213	10183	3
	Se	82	0.570	ug/L	0.053	9	-25	77	11
	Se	78	1.790	ug/L	0.306	17	8312	8056	1
	Mo	98	3.827	ug/L	0.039	1	32	15086	1
	Y	89		ug/L			35[illegible]93	455249	1
	Kr	83		ug/L			2130	2200	0
>	In	115		ug/L			968294	861788	0
	Ag	107	U 0.028	ug/L	0.002	5	18	244	4
	Cd	111	0.077	ug/L	0.010	12	91	432	9
	Cd	114	0.082	ug/L	0.006	7	34	940	6
	Sb	121	0.086	ug/L	0.000	0	276	1468	1
	Sb	123	0.088	ug/L	0.002	2	203	1122	2
	Ba	135	24.525	ug/L	0.119	0	32	98011	0
	Ba	137	24.509	ug/L	0.190	0	60	168471	1
>	Tb	159		ug/L			1066450	999373	1
	Tl	205	0.004	ug/L	0.000	11	58	193	7
	Pb	208	0.905	ug/L	0.009	0	178	40763	0
	Bi	209		ug/L			2499497	1964765	1
	Th	232	0.494	ug/L	0.007	1	1052	23629	0
	U	238	0.361	ug/L	0.003	0	23	16758	1

US52 : 00913

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 K REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:12:48
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1091252	1
	Be	9	0.023	ug/L	0.003	13	15	95	11
	C	13		ug/L			97520	107119	1
	Cl	37		ug/L			5649089	5878435	2
>	Sc	45		ug/L			1178780	1114926	1
	V	51	3.961	ug/L	0.104	2	6492	91107	0
	V-1	51	4.026	ug/L	0.132	3	377	86650	1
	Cr	52	1.228	ug/L	0.035	2	19113	39602	3
	Cr	53	1.446	ug/L	0.065	4	204	3049	2
	Mn	55	610.194	ug/L	15.940	2	416	14659251	3
	Co	59	0.300	ug/L	0.013	4	65	5044	2
>	Ge	72		ug/L			516364	474355	0
	Ni	60	2.677	ug/L	0.146	5	27	8611	5
	Ni	62	11.148	ug/L	1.804	16	330	5408	14
	Cu	63	2.772	ug/L	0.099	3	294	19354	2
	Cu	65	2.122	ug/L	0.064	3	45	6601	3
	Zn	66	7.453	ug/L	0.244	3	231	14155	3
	Zn	67	9.192	ug/L	0.234	2	33	2849	2
	Zn	68	9.693	ug/L	0.168	1	616	13123	2
	As	75	16.939	ug/L	0.171	1	1496	30257	0
	As-1	75	17.249	ug/L	0.186	1	8213	36372	0
	Se	82	0.712	ug/L	0.106	14	-25	107	17
	Se	78	0.928	ug/L	0.117	12	8312	8053	0
	Mo	98	398.712	ug/L	2.894	0	32	1644999	0
	Y	89		ug/L			357323	347064	2
	Kr	83		ug/L			2130	2132	1
>	In	115		ug/L			968294	908123	1
	Ag	107	0.029	ug/L	0.002	6	18	270	6
	Cd	111	0.161	ug/L	0.007	4	91	856	4
	Cd	114	0.224	ug/L	0.005	2	34	2665	3
	Sb	121	1.378	ug/L	0.022	1	276	20914	1
	Sb	123	1.382	ug/L	0.015	1	203	15743	2
	Ba	135	46.811	ug/L	0.160	0	32	197106	1
	Ba	137	46.579	ug/L	0.722	1	60	337304	0
>	Tb	159		ug/L			1066450	1023353	0
	Tl	205	0.013	ug/L	0.000	3	58	504	3
	Pb	208	0.318	ug/L	0.008	2	178	14767	1
	Bi	209		ug/L			2499497	2261523	0
	Th	232	0.026	ug/L	0.005	19	1052	2211	10
	U	238	0.245	ug/L	0.004	1	23	11662	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 L REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:18:39
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1106730	2
[	Be	9	0.005	ug/L	0.003	50	15	32	27
	C	13		ug/L			97520	103453	1
	Cl	37		ug/L			5649089	5450684	0
[>	Sc	45		ug/L			1178780	1113391	2
[	V	51	1.889	ug/L	0.063	3	6492	46581	2
[	V-1	51	1.898	ug/L	0.044	2	377	40989	2
[	Cr	52	0.372	ug/L	0.066	17	19113	24543	2
[	Cr	53	0.401	ug/L	0.016	3	204	985	4
[	Mn	55	10.607	ug/L	0.377	3	416	254655	1
[	Co	59	0.246	ug/L	0.007	2	65	4145	0
[>	Ge	72		ug/L			516864	494665	0
[	Ni	60	2.429	ug/L	0.066	2	27	8146	2
[	Ni	62	6.631	ug/L	0.466	7	330	3486	7
[	Cu	63	3.826	ug/L	0.045	1	294	27748	0
[	Cu	65	3.445	ug/L	0.075	2	45	11145	1
[	Zn	66	15.562	ug/L	0.513	3	231	30573	2
[	Zn	67	14.557	ug/L	0.286	1	33	4687	1
[	Zn	68	15.953	ug/L	0.087	0	616	22142	1
[	As	75	8.088	ug/L	0.066	0	1496	15814	0
[	As-1	75	8.216	ug/L	0.076	0	8213	22182	0
[	Se	82	0.332	ug/L	0.249	75	-25	38	123
[	Se	78	0.381	ug/L	0.195	51	8312	8137	0
[	Mo	98	33.771	ug/L	0.205	0	32	145334	1
	Y	89		ug/L			357323	349867	1
	Kr	83		ug/L			2130	2138	3
[>	In	115		ug/L			968294	949454	1
[	Ag	107	0.019	ug/L	0.003	14	18	186	12
[	Cd	111	0.059	ug/L	0.008	13	91	384	8
[	Cd	114	0.066	ug/L	0.001	0	34	843	0
[	Sb	121	1.036	ug/L	0.018	1	276	16502	0
[	Sb	123	1.047	ug/L	0.015	1	203	12524	1
[	Ba	135	3.292	ug/L	0.069	2	32	14518	0
[	Ba	137	3.298	ug/L	0.051	1	60	25028	1
[>	Tb	159		ug/L			1066450	1042402	0
[	Tl	205	0.006	ug/L	0.000	4	58	275	3
[	Pb	208	0.144	ug/L	0.001	0	178	6911	0
[	Bi	209		ug/L			2499497	2379606	0
[	Th	232	-0.007	ug/L	0.001	16	1052	700	7
[	U	238	0.039	ug/L	0.001	1	23	1886	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 19:25:32
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1088282	2
	Be	9	51.517	ug/L	1.176	2	15	184853	0
	C	13		ug/L			97520	89045	2
	Cl	37		ug/L			5649089	5636617	1
>	Sc	45		ug/L			1178780	1088978	2
	V	51	49.467	ug/L	2.665	5	6492	1041839	3
	V-1	51	49.452	ug/L	2.325	4	377	1035334	2
	Cr	52	49.040	ug/L	2.322	4	19113	856648	2
	Cr	53	48.986	ug/L	1.258	2	204	94720	0
	Mn	55	47.977	ug/L	2.322	4	416	1125166	2
	Co	59	48.233	ug/L	1.968	4	65	782875	2
>	Ge	72		ug/L			516864	486773	1
	Ni	60	50.705	ug/L	0.606	1	27	166842	0
	Ni	62	51.384	ug/L	0.502	0	330	24475	0
	Cu	63	50.414	ug/L	0.425	0	294	356470	2
	Cu	65	49.757	ug/L	1.519	3	45	157813	2
	Zn	66	52.184	ug/L	1.580	3	231	100377	2
	Zn	67	54.008	ug/L	1.449	2	33	17031	3
	Zn	68	53.162	ug/L	0.551	1	316	71250	0
	As	75	50.669	ug/L	0.825	1	1496	90068	1
	As-1	75	50.320	ug/L	0.926	1	8213	94050	1
	Se	82	53.933	ug/L	0.551	1	-25	10194	1
	Se	78	50.584	ug/L	0.948	1	8312	31586	0
	Mo	98	49.638	ug/L	1.034	2	32	210166	1
	Y	89		ug/L			357323	332822	1
	Kr	83		ug/L			2130	2183	0
>	In	115		ug/L			968294	929635	2
	Ag	107	47.366	ug/L	0.415	0	18	418256	1
	Cd	111	49.787	ug/L	1.146	2	91	243638	1
	Cd	114	50.251	ug/L	1.767	3	34	604880	1
	Sb	121	49.933	ug/L	1.272	2	276	766107	0
	Sb	123	50.730	ug/L	0.916	1	203	584624	0
	Ba	135	49.122	ug/L	1.293	2	32	211664	1
	Ba	137	49.179	ug/L	1.535	3	60	364439	1
>	Tb	159		ug/L			1066450	1021133	0
	Tl	205	49.573	ug/L	0.422	0	58	1704956	0
	Pb	208	49.238	ug/L	0.448	0	178	2255893	0
	Bi	209		ug/L			249097	2340271	1
	Th	232	51.065	ug/L	0.916	1	1052	2394597	1
	U	238	52.072	ug/L	0.546	1	23	2464921	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 19:32:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1045125	2
	Be	9	-0.003	ug/L	0.001	21	15	2	78
	C	13		ug/L			97520	88009	4
	Cl	37		ug/L			5649089	5454485	1
>	Sc	45		ug/L			1178780	1035367	2
	V	51	0.012	ug/L	0.011	92	492	5951	5
	V-1	51	-0.006	ug/L	0.001	12	377	204	10
	Cr	52	0.064	ug/L	0.035	54	19113	17826	4
	Cr	53	-0.002	ug/L	0.006	384	204	176	4
	Mn	55	0.014	ug/L	0.001	4	416	681	4
	Co	59	-0.000	ug/L	0.000	63	65	50	8
>	Ge	72		ug/L			516864	472079	0
	Ni	60	-0.001	ug/L	0.002	111	27	20	24
	Ni	62	2.088	ug/L	0.074	3	330	1254	2
	Cu	63	0.105	ug/L	0.003	2	294	988	1
	Cu	65	0.025	ug/L	0.006	24	45	118	15
	Zn	66	0.846	ug/L	0.013	1	231	1785	0
	Zn	67	0.766	ug/L	0.058	7	33	264	7
	Zn	68	0.864	ug/L	0.033	3	616	1676	1
	As	75	0.173	ug/L	0.015	8	1496	1660	1
	As-1	75	0.137	ug/L	0.066	47	8213	7729	1
	Se	82	0.272	ug/L	0.137	50	-25	26	95
	Se	78	0.436	ug/L	0.230	52	8312	7790	1
	Mo	98	0.006	ug/L	0.001	17	32	54	8
	Y	89		ug/L			357323	326940	0
	Kr	83		ug/L			2130	2119	1
>	In	115		ug/L			968294	884404	0
	Ag	107	0.000	ug/L	0.000	82	18	20	13
	Cd	111	-0.002	ug/L	0.001	40	91	75	4
	Cd	114	-0.000	ug/L	0.001	300	34	28	29
	Sb	121	0.043	ug/L	0.005	11	276	882	8
	Sb	123	0.042	ug/L	0.005	12	203	640	8
	Ba	135	0.007	ug/L	0.001	19	32	59	9
	Ba	137	0.007	ug/L	0.001	18	60	107	8
>	Tb	159		ug/L			1066450	956636	0
	Tl	205	0.000	ug/L	0.000	216	58	57	16
	Pb	208	0.007	ug/L	0.000	2	178	471	1
	Bi	209		ug/L			2499497	2316667	1
	Th	232	0.059	ug/L	0.013	22	1052	3513	16
	U	238	0.001	ug/L	0.000	58	23	43	30

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 P-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 19:36:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1061025	1
	Be	9	U 0.003	ug/L	0.001	43	15	24	19
	C	13		ug/L			97520	90680	2
	Cl	37		ug/L			5649089	5809199	1
>	Sc	45		ug/L			1178780	1076081	1
	V	51	0.166	ug/L	0.014	8	6492	9355	2
	V-1	51	0.187	ug/L	0.009	4	377	4220	3
	Cr	52	U 0.061	ug/L	0.022	35	19113	18479	1
	Cr	53	0.136	ug/L	0.004	3	204	446	1
	Mn	55	69.335	ug/L	0.467	0	416	1607700	0
	Co	59	0.155	ug/L	0.004	2	65	2549	1
>	Ge	72		ug/L			516864	500087	0
	Ni	60	U 0.181	ug/L	0.001	0	27	639	1
	Ni	62	1.693	ug/L	0.064	3	330	1138	2
	Cu	63	0.237	ug/L	0.008	3	294	2007	3
	Cu	65	U 0.115	ug/L	0.008	7	45	417	6
	Zn	66	4.060	ug/L	0.107	2	231	8230	2
	Zn	67	U 3.886	ug/L	0.045	1	33	1288	1
	Zn	68	4.163	ug/L	0.011	0	616	6282	0
	As	75	2.832	ug/L	0.037	1	1496	6538	1
	As-1	75	2.800	ug/L	0.089	3	8213	12881	0
	Se	82	0.149	ug/L	0.046	30	-25	3	233
	Se	78	U -0.091	ug/L	0.209	228	8312	7998	0
	Mo	98	0.641	ug/L	0.027	4	32	2820	3
	Y	89		ug/L			357323	343982	2
	Kr	83		ug/L			2130	2107	0
>	In	115		ug/L			968294	915827	1
	Ag	107	U 0.001	ug/L	0.000	45	18	25	13
	Cd	111	U 0.004	ug/L	0.002	61	91	103	9
	Cd	114	U 0.004	ug/L	0.001	22	34	73	11
	Sb	121	U 0.013	ug/L	0.002	16	276	452	8
	Sb	123	0.012	ug/L	0.004	35	203	323	14
	Ba	135	1.393	ug/L	0.034	2	32	5943	1
	Ba	137	1.404	ug/L	0.003	0	60	10313	1
>	Tb	159		ug/L			1066450	991486	0
	Tl	205	U 0.005	ug/L	0.001	11	58	234	8
	Pb	208	U 0.099	ug/L	0.003	2	178	4584	1
	Bi	209		ug/L			2499497	2354447	1
	Th	232	0.075	ug/L	0.015	20	1052	4389	15
	U	238	0.023	ug/L	0.001	3	23	1085	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 P REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:40:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1085375	0
	Be	9	0.019	ug/L	0.003	13	15	80	12
	C	13		ug/L			97520	100529	0
	Cl	37		ug/L			5649089	6721778	0
>	Sc	45		ug/L			1178780	1168866	2
	V	51	0.809	ug/L	0.020	2	6492	24631	1
	V-1	51	0.892	ug/L	0.016	1	377	20412	2
	Cr	52	0.175	ug/L	0.031	17	19113	22150	0
	Cr	53	0.459	ug/L	0.023	5	204	1153	2
	Mn	55	330.792	ug/L	9.333	2	416	8326924	0
	Co	59	0.725	ug/L	0.016	2	65	12700	1
>	Ge	72		ug/L			516864	489366	1
	Ni	60	0.882	ug/L	0.021	2	27	2943	2
	Ni	62	2.790	ug/L	0.418	14	330	1630	10
	Cu	63	0.745	ug/L	0.057	7	294	5564	6
	Cu	65	0.270	ug/L	0.005	1	45	904	1
	Zn	66	3.257	ug/L	0.018	0	231	6504	0
	Zn	67	3.247	ug/L	0.202	6	33	1058	6
	Zn	68	4.390	ug/L	0.020	0	616	6451	1
	As	75	13.827	ug/L	0.179	1	1496	25740	0
	As-1	75	14.031	ug/L	0.252	1	8213	31973	0
	Se	82	0.240	ug/L	0.141	58	-25	21	126
	Se	78	0.256	ug/L	0.255	99	8312	7990	0
	Mo	98	3.432	ug/L	0.056	1	32	14639	0
	Y	89		ug/L			357323	351831	1
	Kr	83		ug/L			2130	2180	3
>	In	115		ug/L			968294	909006	3
	Ag	107	0.004	ug/L	0.000	11	18	50	4
	Cd	111	0.017	ug/L	0.007	40	91	167	17
	Cd	114	0.015	ug/L	0.002	10	34	209	6
	Sb	121	0.028	ug/L	0.002	6	276	686	6
	Sb	123	0.029	ug/L	0.002	6	203	518	1
	Ba	135	7.087	ug/L	0.217	3	32	29876	0
	Ba	137	7.101	ug/L	0.189	2	60	51501	1
>	Tb	159		ug/L			1069150	1022209	0
	Tl	205	0.016	ug/L	0.001	6	58	600	6
	Pb	208	0.064	ug/L	0.001	1	178	3114	2
	Bi	209		ug/L			2499497	2286300	1
	Th	232	0.123	ug/L	0.055	44	1052	6781	37
	U	238	0.112	ug/L	0.004	3	23	5331	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 PDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:44:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1240584	1091696	1
	Be	9	U	0.017	ug/L	0.004	20	15	75	15
	C	13			ug/L			97520	100742	2
	Cl	37			ug/L			5649089	6705766	3
>	Sc	45			ug/L			1178780	1175065	2
	V	51		0.815	ug/L	0.033	3	6492	24886	1
	V-1	51		0.894	ug/L	0.031	3	377	20566	1
	Cr	52	U	0.179	ug/L	0.036	20	19113	22355	2
	Cr	53		0.452	ug/L	0.014	3	204	1144	0
	Mn	55		338.813	ug/L	11.673	3	416	8575343	2
	Co	59		0.727	ug/L	0.033	4	65	12795	2
>	Ge	72			ug/L			516864	482208	0
	Ni	60		0.901	ug/L	0.027	2	27	2963	3
	Ni	62		2.714	ug/L	0.275	10	330	1573	8
	Cu	63		1.126	ug/L	0.017	1	294	8154	2
	Cu	65		0.660	ug/L	0.020	3	45	2116	3
	Zn	66		3.320	ug/L	0.015	0	231	6528	0
	Zn	67	U	3.288	ug/L	0.199	6	33	1056	5
	Zn	68		4.387	ug/L	0.122	2	616	6352	1
	As	75		14.183	ug/L	0.186	1	1496	25983	1
	As-1	75		14.534	ug/L	0.114	0	8213	32363	1
	Se	82	U	0.225	ug/L	0.129	57	25	18	133
	Se	78		0.827	ug/L	0.215	25	8312	8139	0
	Mo	98		3.532	ug/L	0.153	4	32	14842	4
	Y	89			ug/L			357323	355296	0
	Kr	83			ug/L			2130	2193	1
>	In	115			ug/L			968294	916430	0
	Ag	107	U	0.003	ug/L	0.001	21	18	47	13
	Cd	111	U	0.015	ug/L	0.006	38	91	161	18
	Cd	114		0.015	ug/L	0.001	9	34	210	7
	Sb	121	U	0.024	ug/L	0.001	4	276	631	2
	Sb	123		0.025	ug/L	0.003	12	203	474	7
	Ba	135		7.219	ug/L	0.059	0	32	30701	0
	Ba	137		7.143	ug/L	0.117	1	60	52249	1
>	Tb	159			ug/L			1066450	1028711	0
	Tl	205	U	0.015	ug/L	0.000	1	58	582	1
	Pb	208	U	0.062	ug/L	0.001	2	178	3013	1
	Bi	209			ug/L			2499497	2278121	0
	Th	232		0.041	ug/L	0.009	22	1052	2973	14
	U	238		0.112	ug/L	0.001	1	23	5365	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 PSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:48:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1105226	1
	Be	9	23.666	ug/L	0.454	1	15	86264	0
	C	13		ug/L			97520	102785	2
	Cl	37		ug/L			5649089	6715247	1
>	Sc	45		ug/L			1178780	1178440	1
	V	51	23.867	ug/L	0.601	3	6492	547596	2
	V-1	51	23.967	ug/L	0.934	3	377	543397	2
	Cr	52	22.905	ug/L	0.162	0	19113	443440	0
	Cr	53	23.250	ug/L	0.613	2	204	48765	1
	Mn	55	360.620	ug/L	3.787	1	416	9155130	0
	Co	59	23.327	ug/L	0.555	2	65	409958	2
>	Ge	72		ug/L			516864	487391	0
	Ni	60	25.902	ug/L	0.931	3	27	85358	3
	Ni	62	27.253	ug/L	1.253	4	330	13145	4
	Cu	63	25.520	ug/L	0.368	1	294	180801	1
	Cu	65	25.011	ug/L	0.524	2	45	79452	1
	Zn	66	77.485	ug/L	0.381	0	231	149153	0
	Zn	67	72.328	ug/L	0.413	0	33	22823	0
	Zn	68	76.854	ug/L	0.446	0	616	102884	0
	As	75	39.366	ug/L	0.279	0	1496	70386	0
	As-1	75	38.567	ug/L	0.138	0	8213	73992	0
	Se	82	76.159	ug/L	1.522	1	-25	14424	1
	Se	78	72.622	ug/L	0.730	1	8312	41996	0
	Mo	98	29.340	ug/L	0.499	1	32	124409	1
	Y	89		ug/L			357323	350365	1
	Kr	83		ug/L			2130	2235	1
>	In	115		ug/L			968294	926427	0
	Ag	107	19.504	ug/L	0.307	1	18	171652	1
	Cd	111	23.442	ug/L	0.209	0	91	114403	1
	Cd	114	23.774	ug/L	0.228	0	34	285328	0
	Sb	121	24.791	ug/L	0.235	0	276	379332	1
	Sb	123	24.786	ug/L	0.223	0	203	284818	0
	Ba	135	32.499	ug/L	0.087	0	32	139614	0
	Ba	137	32.248	ug/L	0.231	0	60	238269	0
>	Tb	159		ug/L			1066450	1040899	1
	Tl	205	24.341	ug/L	0.203	0	58	853352	1
	Pb	208	24.198	ug/L	0.367	1	178	1130038	0
	Bi	209		ug/L			2499497	2285299	0
	Th	232	24.999	ug/L	0.381	1	1052	1195306	0
	U	238	25.107	ug/L	0.483	1	23	1211274	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US52 PPOST REN~~ 222222
Sample Dil Factor: 2 5/15/12 JH
Comments:
Sample Date/Time: Monday, May 14, 2012 19:53:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1092262	0
[	Be	9	25.760	ug/L	0.180	0	15	92807	0
	C	13		ug/L			97520	106884	1
	Cl	37		ug/L			5649089	6775702	1
[>	Sc	45		ug/L			1178780	1161579	0
[	V	51	25.224	ug/L	0.119	0	6492	570218	0
[	V-1	51	25.362	ug/L	0.143	0	377	566939	0
[	Cr	52	24.655	ug/L	0.397	1	19113	469059	1
[	Cr	53	25.134	ug/L	0.054	0	204	51955	0
[	Mn	55	359.666	ug/L	6.750	1	416	9000829	1
[	Co	59	24.406	ug/L	0.234	0	65	422812	1
[>	Ge	72		ug/L			516864	487113	1
[	Ni	60	26.982	ug/L	0.513	1	27	88849	1
[	Ni	62	28.693	ug/L	1.266	4	30	13809	2
[	Cu	63	26.586	ug/L	1.003	3	294	188188	3
[	Cu	65	25.401	ug/L	0.478	1	45	80631	1
[	Zn	66	81.723	ug/L	2.936	3	231	157139	1
[	Zn	67	76.640	ug/L	1.321	1	33	24164	1
[	Zn	68	84.171	ug/L	2.455	2	616	112521	1
[	As	75	41.064	ug/L	0.715	1	1496	73304	0
[	As-1	75	39.960	ug/L	0.972	2	8213	76323	1
[	Se	82	80.143	ug/L	1.576	1	-25	15168	0
[	Se	78	75.403	ug/L	2.365	3	8312	43267	1
[	Mo	98	29.251	ug/L	0.189	0	32	123953	1
	Y	89		ug/L			357323	350784	1
	Kr	83		ug/L			2130	2194	0
[>	In	115		ug/L			968294	932608	0
[	Ag	107	23.779	ug/L	0.177	0	18	210681	1
[	Cd	111	24.412	ug/L	0.198	0	91	119922	0
[	Cd	114	24.681	ug/L	0.438	1	34	298174	0
[	Sb	121	25.061	ug/L	0.120	0	276	385994	0
[	Sb	123	25.232	ug/L	0.351	1	203	291860	0
[	Ba	135	33.335	ug/L	0.493	1	32	144151	0
[	Ba	137	33.102	ug/L	0.326	0	60	246202	0
[>	Tb	159		ug/L			1066450	1045546	0
[	Tl	205	25.600	ug/L	0.064	0	58	901566	0
[	Pb	208	25.053	ug/L	0.056	0	178	1175372	0
[	Bi	209		ug/L			2499497	2316180	0
[	Th	232	26.001	ug/L	0.170	0	1052	1248919	0
[	U	238	26.058	ug/L	0.177	0	23	1263053	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 M REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 19:57:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

DCL
As 104
11

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			1240584	1123444	1
[	**Be**	**9**	**0.000**	ug/L	0.000	392	15	14	12
	C	**13**		ug/L			97520	111180	0
	Cl	**37**		ug/L			5649089	5660958	2
[>	**Sc**	**45**		ug/L			1178780	1189530	1
[	**V**	**51**	**0.896**	ug/L	0.013	1	6492	27071	2
[	**V-1**	**51**	**0.966**	ug/L	0.025	2	377	22485	3
[	**Cr**	**52**	**0.347**	ug/L	0.011	3	19113	25779	0
[	**Cr**	**53**	**0.588**	ug/L	0.032	5	204	1446	5
[	**Mn**	**55**	**39.699**	ug/L	0.585	1	416	1017742	1
[	**Co**	**59**	**0.275**	ug/L	0.005	1	65	4951	2
[>	**Ge**	**72**		ug/L			516864	491825	1
[	**Ni**	**60**	**0.776**	ug/L	0.016	2	27	2605	2
[	**Ni**	**62**	**1.860**	ug/L	0.141	7	330	1198	6
[	**Cu**	**63**	**2.861**	ug/L	0.076	2	294	20696	1
[	**Cu**	**65**	**2.063**	ug/L	0.024	1	45	6651	0
[	**Zn**	**66**	**12.443**	ug/L	0.240	1	231	24352	1
[	**Zn**	**67**	**11.354**	ug/L	0.081	0	33	3642	0
[	**Zn**	**68**	**13.570**	ug/L	0.349	2	516	18812	1
[	**As**	**75**	**448.655**	ug/L	6.786	1	1496	794597	0
[	**As-1**	**75**	**457.643**	ug/L	6.977	1	8213	800971	0
[	**Se**	**82**	**0.226**	ug/L	0.067	29	-25	18	67
[	**Se**	**78**	**0.547**	ug/L	0.245	44	8312	8168	1
[	**Mo**	**98**	**17.440**	ug/L	0.283	1	32	74632	1
	Y	**89**		ug/L			357323	348672	0
	Kr	**83**		ug/L			2130	2236	3
[>	**In**	**115**		ug/L			968294	938805	1
[	**Ag**	**107**	**0.014**	ug/L	0.002	14	18	143	11
[	**Cd**	**111**	**0.251**	ug/L	0.008	3	91	1329	4
[	**Cd**	**114**	**0.252**	ug/L	0.004	1	34	3101	0
[	**Sb**	**121**	**0.643**	ug/L	0.013	1	276	10224	1
[	**Sb**	**123**	**0.641**	ug/L	0.021	3	203	7659	2
[	**Ba**	**135**	**6.163**	ug/L	0.095	1	32	26850	0
[	**Ba**	**137**	**6.131**	ug/L	0.124	2	60	45946	1
[>	**Tb**	**159**		ug/L			1066450	1048881	0
[	**Tl**	**205**	**0.008**	ug/L	0.001	12	58	343	9
[	**Pb**	**208**	**0.058**	ug/L	0.001	1	178	2923	0
[	**Bi**	**209**		ug/L			2490497	2320612	1
[	**Th**	**232**	**0.112**	ug/L	0.062	55	1052	6405	46
[	**U**	**238**	**0.096**	ug/L	0.002	2	23	4712	1

US52 : 00923

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 N REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 20:01:16
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1166746	2
[	Be	9	0.003	ug/L	0.003	92	15	25	40
	C	13		ug/L			97520	106607	2
	Cl	37		ug/L			5649089	5655428	2
[>	Sc	45		ug/L			1178780	1220306	0
[	V	51	2.762	ug/L	0.042	1	6192	71576	1
[	V-1	51	2.859	ug/L	0.042	1	377	67482	1
[	Cr	52	0.183	ug/L	0.038	20	19113	23304	2
[	Cr	53	0.514	ug/L	0.011	2	204	1324	1
[	Mn	55	29.952	ug/L	0.414	1	416	787833	1
[	Co	59	0.278	ug/L	0.004	1	65	5132	1
[>	Ge	72		ug/L			516864	498899	1
[	Ni	60	0.614	ug/L	0.021	3	27	2096	1
[	Ni	62	1.502	ug/L	0.168	11	330	1042	6
[	Cu	63	13.633	ug/L	0.302	2	294	98976	0
[	Cu	65	12.616	ug/L	0.167	1	45	41043	1
[	Zn	66	3.989	ug/L	0.101	2	231	8069	1
[	Zn	67	3.996	ug/L	0.143	3	33	1321	4
[	Zn	68	5.583	ug/L	0.169	3	616	8199	1
[	As	75	148.998	ug/L	1.580	1	1496	268679	2
[	As-1	75	151.846	ug/L	1.556	1	8213	274915	2
[	Se	82	0.288	ug/L	0.142	49	-25	30	89
[	Se	78	0.028	ug/L	0.419	1494	8312	8034	0
[	Mo	98	73.415	ug/L	1.068	1	32	318554	1
	Y	89		ug/L			357323	350914	0
	Kr	83		ug/L			2130	2202	2
[>	In	115		ug/L			968294	933558	0
[	Ag	107	0.002	ug/L	0.001	47	18	34	23
[	Cd	111	0.036	ug/L	0.004	10	91	266	7
[	Cd	114	0.055	ug/L	0.005	8	34	692	7
[	Sb	121	4.612	ug/L	0.047	1	276	71331	1
[	Sb	123	4.647	ug/L	0.024	0	203	53967	0
[	Ba	135	5.686	ug/L	0.057	0	32	24639	1
[	Ba	137	5.707	ug/L	0.048	0	60	42535	0
[>	Tb	159		ug/L			1066450	1046444	0
[	Tl	205	0.007	ug/L	0.001	12	58	305	10
[	Pb	208	0.057	ug/L	0.000	0	178	2863	0
[	Bi	209		ug/L			2499497	2328246	1
[	Th	232	0.031	ug/L	0.010	34	1052	2501	19
[	U	238	0.042	ug/L	0.002	4	23	2075	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 O REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 20:05:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

DEL
MASIOX

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1134647	0
[	Be	9	0.008	ug/L	0.002	27	15	43	18
	C	13		ug/L			97520	109660	1
	Cl	37		ug/L			5649089	5945557	0
[>	Sc	45		ug/L			1178780	1200675	2
[	V	51	0.959	ug/L	0.031	3	6492	28759	0
[	V-1	51	1.102	ug/L	0.033	3	377	25816	0
[	Cr	52	0.207	ug/L	0.009	4	19113	23375	1
[	Cr	53	0.701	ug/L	0.057	8	204	1700	6
[	Mn	55	363.934	ug/L	13.516	3	416	9409916	2
[	Co	59	0.213	ug/L	0.002	1	65	3875	1
[>	Ge	72		ug/L			516864	496854	1
[	Ni	60	0.397	ug/L	0.013	3	27	1358	2
[	Ni	62	1.266	ug/L	0.187	14	330	926	10
[	Cu	63	0.809	ug/L	0.026	3	294	6117	1
[	Cu	65	0.243	ug/L	0.013	5	45	828	5
[	Zn	66	43.362	ug/L	1.493	3	231	85160	2
[	Zn	67	40.206	ug/L	1.304	3	33	12944	2
[	Zn	68	43.727	ug/L	1.130	2	616	59915	1
[	As	75	233.622	ug/L	4.769	2	1496	418659	0
[	As-1	75	238.191	ug/L	4.917	2	8213	424913	0
[	Se	82	0.166	ug/L	0.047	28	-25	7	127
[	Se	78	0.001	ug/L	0.260	18210	8312	7990	0
[	Mo	98	0.255	ug/L	0.019	7	32	1130	6
	Y	89		ug/L			357323	348837	1
	Kr	83		ug/L			2130	2198	1
[>	In	115		ug/L			968294	931645	1
[	Ag	107	0.001	ug/L	0.001	92	18	30	38
[	Cd	111	0.000	ug/L	0.001	447	91	88	2
[	Cd	114	0.002	ug/L	0.002	98	34	53	36
[	Sb	121	0.026	ug/L	0.002	7	276	671	3
[	Sb	123	0.027	ug/L	0.001	3	203	507	0
[	Ba	135	1.700	ug/L	0.004	0	32	7373	1
[	Ba	137	1.719	ug/L	0.022	1	60	12830	0
[>	Tb	159		ug/L			1066450	1045885	1
[	Tl	205	0.003	ug/L	0.001	53	58	149	32
[	Pb	208	0.054	ug/L	0.001	1	178	2725	1
[	Bi	209		ug/L			2499497	2328701	0
[	Th	232	0.039	ug/L	0.015	37	1052	2884	23
[	U	238	0.002	ug/L	0.001	37	23	102	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 Q REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 20:09:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1240584	1113732	1
	Be	9	0.021		ug/L	0.002	10	15	91	7
	C	13			ug/L			97520	110124	1
	Cl	37			ug/L			5649089	5957261	3
>	Sc	45			ug/L			1178780	1196832	2
	V	51	3.197		ug/L	0.086	2	6492	80191	0
	V-1	51	3.288		ug/L	0.117	3	377	76020	0
	Cr	52	0.687	✓	ug/L	0.029	4	19113	32332	2
	Cr	53	0.998		ug/L	0.119	11	204	2319	8
	Mn	55	632.883		ug/L	12.793	2	416	16313292	1
	Co	59	0.486		ug/L	0.013	2	65	8733	1
>	Ge	72			ug/L			516864	481696	2
	Ni	60	0.608		ug/L	0.015	2	27	2005	1
	Ni	62	2.488		ug/L	0.708	28	330	1470	24
	Cu	63	1.520		ug/L	0.020	1	294	10904	3
	Cu	65	U 0.350		ug/L	0.005	1	45	1140	1
	Zn	66	3.344		ug/L	0.046	1	231	6566	1
	Zn	67	U 3.506		ug/L	0.129	3	33	1123	4
	Zn	68	4.736		ug/L	0.050	1	616	6806	3
	As	75	8.457	✓	ug/L	0.195	2	1496	16035	0
	As-1	75	8.595		ug/L	0.202	2	8213	22239	0
	Se	82	0.310		ug/L	0.127	40	-25	33	68
	Se	78	0.483		ug/L	0.168	34	8312	7970	1
	Mo	98	5.341		ug/L	0.023	0	32	22410	2
	Y	89			ug/L			357323	347839	1
	Kr	83			ug/L			2130	2152	2
>	In	115			ug/L			968294	919960	0
	Ag	107	U 0.001		ug/L	0.001	83	18	28	32
	Cd	111	0.006		ug/L	0.001	15	91	117	4
	Cd	114	0.011		ug/L	0.001	4	34	165	4
	Sb	121	0.045		ug/L	0.003	6	276	948	4
	Sb	123	0.047		ug/L	0.002	3	203	726	2
	Ba	135	12.840		ug/L	0.053	0	32	54792	0
	Ba	137	12.670		ug/L	0.141	1	60	92997	0
>	Tb	159			ug/L			1066450	1045687	1
	Tl	205	0.008		ug/L	0.001	7	58	326	5
	Pb	208	0.065		ug/L	0.002	2	178	3211	0
	Bi	209			ug/L			2499497	2246969	0
	Th	232	0.030		ug/L	0.009	28	1052	2457	15
	U	238	0.080		ug/L	0.001	1	23	3909	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 R REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 20:15:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1076721	2
	Be	9	0.180	ug/L	0.002	1	15	650	1
	C	13		ug/L			97520	119678	1
	Cl	37		ug/L			5649089	8918034	1
>	Sc	45		ug/L			1178780	1219651	1
	V	51	61.718	ug/L	0.761	1	6492	1455100	1
	V-1	51	62.181	ug/L	0.717	1	377	1458783	1
	Cr	52	13.106	ug/L	0.061	0	19113	271070	1
	Cr	53	14.611	ug/L	0.382	2	204	31808	4
	Mn	55	305.388	ug/L	3.298	1	416	8024478	1
	Co	59	0.570	ug/L	0.005	0	65	10440	2
>	Ge	72		ug/L			516864	455603	2
	Ni	60	0.881	ug/L	0.019	2	27	2735	1
	Ni	62	53.416	ug/L	25.627	47	330	23984	48
	Cu	63	16.238	ug/L	2.268	13	294	107886	16
	Cu	65	4.916	ug/L	0.068	1	45	14639	3
	Zn	66	4.201	ug/L	0.024	0	231	7751	2
	Zn	67	6.680	ug/L	0.171	2	33	1996	2
	Zn	68	6.215	ug/L	0.250	4	616	8275	3
	As	75	1.398	ug/L	0.013	0	1496	3607	2
	As-1	75	1.597	ug/L	0.067	4	8213	9803	2
	Se	82	0.552	ug/L	0.031	5	-25	75	6
	Se	78	1.796	ug/L	0.218	12	8312	8116	2
	Mo	98	3.975	ug/L	0.095	2	32	15773	0
	Y	89		ug/L			357323	450307	0
	Kr	83		ug/L			2130	2214	1
>	In	115		ug/L			968294	863677	2
	Ag	107	U 0.025	ug/L	0.003	10	18	224	7
	Cd	111	0.017	ug/L	0.016	98	91	157	48
	Cd	114	0.025	ug/L	0.003	13	34	311	11
	Sb	121	0.074	ug/L	0.002	3	276	1298	2
	Sb	123	0.077	ug/L	0.002	2	203	1002	1
	Ba	135	22.314	ug/L	0.503	2	32	89344	0
	Ba	137	22.208	ug/L	0.485	2	60	152944	0
>	Tb	159		ug/L			1066450	1005374	1
	Tl	205	0.002	ug/L	0.000	14	58	128	6
	Pb	208	0.588	ug/L	0.010	1	178	26684	0
	Bi	209		ug/L			2499497	1975148	0
	Th	232	0.463	ug/L	0.010	2	1552	22354	1
	U	238	0.345	ug/L	0.012	3	23	16094	2

US52 : 00927

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 20:22:35
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1096473	2
	Be	9	51.189	ug/L	1.762	3	15	185024	1
	C	13		ug/L			97520	90385	0
	Cl	37		ug/L			5649089	5425479	2
>	Sc	45		ug/L			1178780	1059252	2
	V	51	51.456	ug/L	1.449	2	6492	1054356	1
	V-1	51	50.997	ug/L	1.295	2	377	1038874	1
	Cr	52	52.574	ug/L	1.324	2	19113	892350	1
	Cr	53	50.982	ug/L	0.970	1	204	95884	0
	Mn	55	51.695	ug/L	0.863	1	416	1180045	2
	Co	59	50.806	ug/L	2.477	4	65	801963	2
>	Ge	72		ug/L			516864	492081	1
	Ni	60	51.513	ug/L	2.329	4	27	171269	2
	Ni	62	55.672	ug/L	1.936	3	330	26770	1
	Cu	63	50.492	ug/L	0.714	1	294	360834	0
	Cu	65	50.623	ug/L	1.664	3	45	162268	2
	Zn	66	52.725	ug/L	1.137	2	231	102514	1
	Zn	67	53.588	ug/L	1.228	2	33	17080	2
	Zn	68	53.959	ug/L	0.946	1	616	73091	1
	As	75	51.217	ug/L	1.560	3	1496	91999	1
	As-1	75	51.049	ug/L	1.907	3	8213	96313	1
	Se	82	54.489	ug/L	1.384	2	-25	10409	1
	Se	78	51.811	ug/L	2.697	5	8312	32501	2
	Mo	98	50.382	ug/L	1.026	2	32	215621	1
	Y	89		ug/L			357123	341386	1
	Kr	83		ug/L			2130	2230	2
>	In	115		ug/L			968294	929763	1
	Ag	107	47.182	ug/L	0.879	1	18	416794	3
	Cd	111	50.516	ug/L	0.611	1	91	247304	1
	Cd	114	50.682	ug/L	0.093	0	34	610445	1
	Sb	121	50.421	ug/L	0.360	0	276	773957	0
	Sb	123	51.075	ug/L	0.583	1	203	588791	0
	Ba	135	50.135	ug/L	0.607	1	32	216129	1
	Ba	137	49.764	ug/L	0.841	1	60	369000	2
>	Tb	159		ug/L			1066450	1019079	0
	Tl	205	50.310	ug/L	0.463	0	58	1726932	1
	Pb	208	50.172	ug/L	0.155	0	178	2294147	0
	Bi	209		ug/L			2499497	2390044	2
	Th	232	52.596	ug/L	1.287	2	1052	2461350	2
	U	238	53.219	ug/L	0.643	1	23	2514206	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 20:29:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1049007	1
	Be	9	-0.002	ug/L	0.000	6	15	4	13
	C	13		ug/L			97520	89297	2
	Cl	37		ug/L			5649089	5386374	2
>	Sc	45		ug/L			1178780	1031834	0
	V	51	0.019	ug/L	0.004	20	6492	6066	2
	V-1	51	-0.001	ug/L	0.002	202	377	315	10
	Cr	52	0.087	ug/L	0.009	10	19113	18141	1
	Cr	53	0.017	ug/L	0.012	66	204	210	9
	Mn	55	0.015	ug/L	0.001	4	416	708	2
	Co	59	-0.000	ug/L	0.000	159	65	53	11
>	Ge	72		ug/L			516864	479063	0
	Ni	60	-0.001	ug/L	0.001	117	27	22	14
	Ni	62	4.287	ug/L	0.184	4	330	2290	3
	Cu	63	0.182	ug/L	0.003	1	294	1540	1
	Cu	65	0.019	ug/L	0.001	4	45	102	2
	Zn	66	0.835	ug/L	0.007	0	231	1792	1
	Zn	67	0.761	ug/L	0.049	6	33	266	5
	Zn	68	0.869	ug/L	0.010	1	616	1708	0
	As	75	0.161	ug/L	0.040	25	1496	1664	3
	As-1	75	0.227	ug/L	0.037	16	8213	7995	1
	Se	82	0.229	ug/L	0.171	74	-25	18	172
	Se	78	0.793	ug/L	0.153	19	8312	8071	1
	Mo	98	0.003	ug/L	0.001	37	32	44	11
	Y	89		ug/L			357323	336542	2
	Kr	83		ug/L			2130	2168	2
>	In	115		ug/L			968294	897241	1
	Ag	107	-0.000	ug/L	0.001	11653	18	17	32
	Cd	111	-0.001	ug/L	0.003	325	91	80	17
	Cd	114	-0.001	ug/L	0.001	139	34	24	42
	Sb	121	0.041	ug/L	0.005	13	276	858	11
	Sb	123	0.042	ug/L	0.005	11	203	655	10
	Ba	135	0.011	ug/L	0.003	25	32	75	17
	Ba	137	0.010	ug/L	0.003	26	60	128	16
>	Tb	159		ug/L			1066450	964759	1
	Tl	205	0.001	ug/L	0.001	160	58	74	47
	Pb	208	0.007	ug/L	0.002	23	178	485	17
	Bi	209		ug/L			2499497	2340785	2
	Th	232	0.060	ug/L	0.009	15	1052	3626	9
	U	238	0.001	ug/L	0.001	82	23	69	59

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5·16·12 **Analyst:** JB **Page:** 1 of 2

All corrections made by analyst unless otherwise noted. 5·16·12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			7936-4
		1			7936-5
		2			7936-12
		3			-13
		4			-14
		5			-15
		Rinse Sample			r² 0.9996
		SC			
		ICV			✓ 7930-2
		ICB			✓
		CCV1			✓
		CCB1			✓
7		~~Low Check~~			✓ Ni low
		SD			
		CCV2			✓
		CCB2			✓
		Low Check			✓
		ICSA			
		ICSAB			62 Ni 1238
		LRZ00	✓		
		B1			
		B2			
		CCV3			
		CCB3			62 Ni low

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5/16/12 **Analyst:** JMB **Page:** 2 of 2

All corrections made by analyst unless otherwise noted. 5/16/12 JMB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US62-MB1	REN	2	~~High Abs~~ (Cu → Zn only 5.16.12 JMB
	✓	US27C		↓	Ag only
	✓	US15B		2	Se only) DEL ~~use 10X~~ use 10X 5.14.12 JMB
	✓	↓ H		↓	↓ ~~5/14/12~~
	✓	US52-G	↓	↓	Zn only rerun-LOW Conc
		B3			
		B4			
✓	~~B4~~ M →	CCV4 Blank			As high, Se high
		CCB4			Cr low
✓		A-1R			missed tube (wrong pos.)
	10 →	CCV5			Se 111%
		CCB5			✓
		US52 A-L	REN	10	Cr only rr.
		A-L		500	Ag only
		A		100	✓
		ADUP		↓	✓
		ASPK		↓	↓
		D		10	As
		F		↓	↓
		M			
		O	↓	↓	↓
		B5			Ag in CCV6
CCV		CCV6			A.N. run in wrong order
CCB		CCB6			

Rerun/DE 5/16/12 JMB

US52:00931

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5·16·12

MZ (5/16)	Analyst NB 5/17/12	Peer 5/21/12	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log A.N
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	—	—	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAE's	✓	✓	05/22 AN

US52 00932

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Metals Laboratory Analyst Notes

ARI Job No.: U952 Client ID: ERM

Parameter: CCV6, CCB6 Client Project:

List problems, concerns, corrective actions and any other pertinent information
CV, CB #6 run in wrong order — otherwise OK except Se was high in the CB and Ag was low. Samples will be reran for Se, Ag.
Analyst Initials: JH Date: 9.16.17

5048F

Revision 005
6/11/10

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/16/2012 10:10:49 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

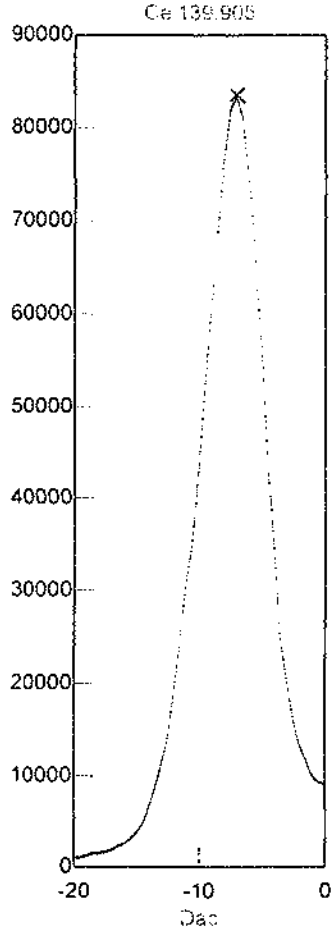
Obtained Intensity (Be 9.0122): 6235.40
Obtained Intensity (Mg 23.985): 41275.04
Obtained Intensity (In 114.904): 90012.13
Obtained Intensity (Pb 207.977): 35030.07
Obtained Intensity (U 238.05): 61162.09
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=1590.62 / 81654.97)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=990.86 / 81654.97)

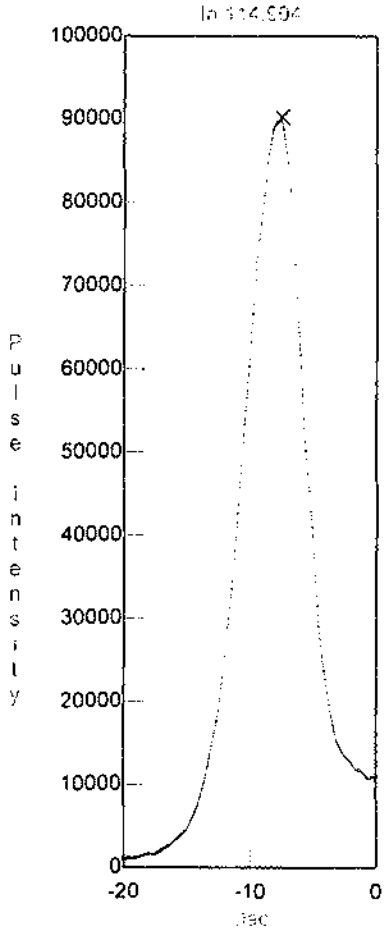
[Passed] Optimum value(s): N/A

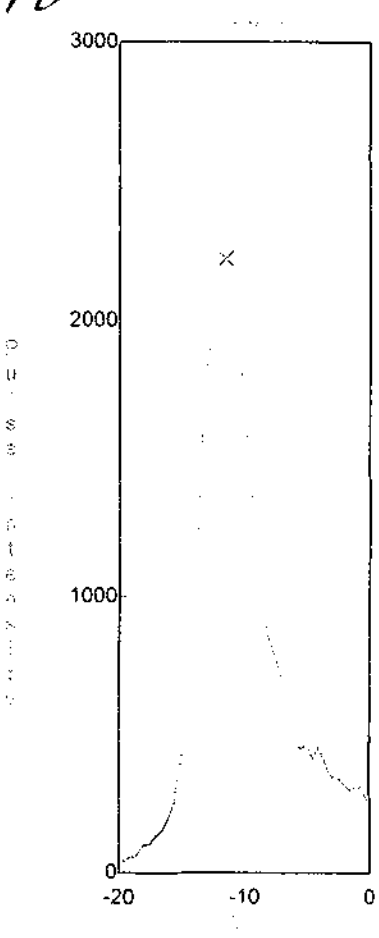
End Time: 5/16/2012 10:13:24 AM

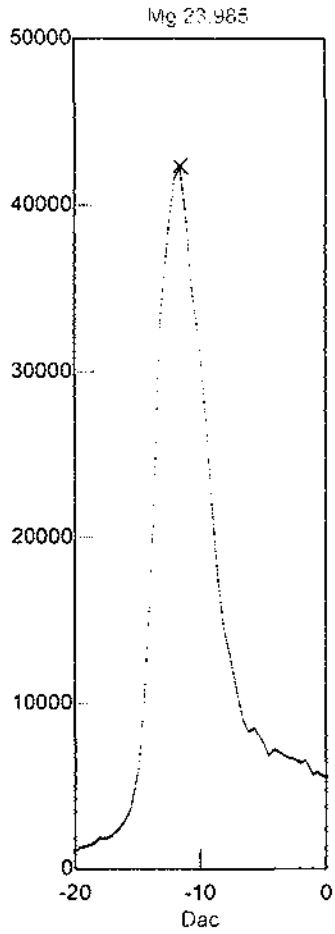
US52 : 00934

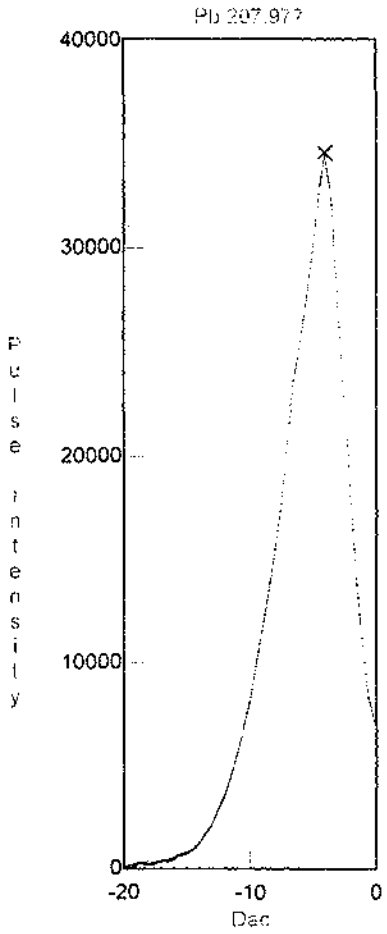
5/16/12

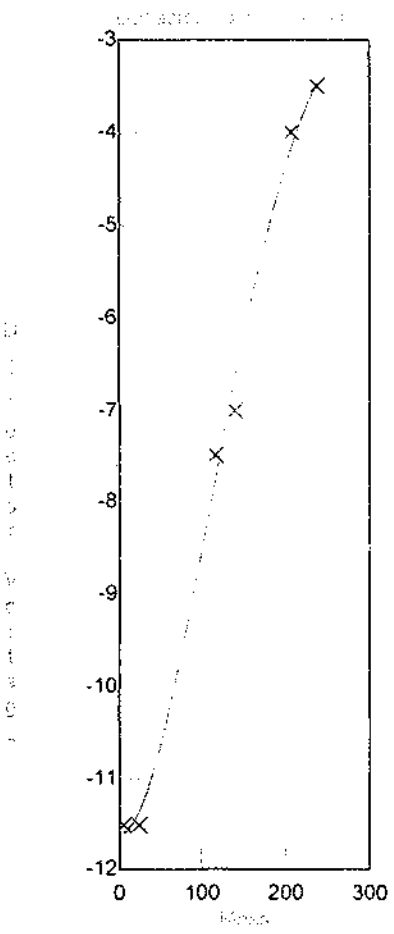

Ce 139.905
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Pulse intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse intensity


-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/16/2012 10:05:53 AM
End Time: 5/16/2012 10:10:04 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.996; Intercept = -11.59

US52 : 00936

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/16/2012 10:03:24 AM

Mass Calibration and Resolution
    Optimization Settings:
        Method: Tuning.mth.
        MassCal File: Default.tun
        Iterations: 6
        Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
        Peak height (%) for Res. Opt.: 10

    Optimization Results:
    Initial Try
        Target/Obtained mass (7.016/6.975), Target/Obtained resolution (0.7/0.705)
        Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.724)
        Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.712)
        Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.704)
[Passed] Optimum value(s): N/A

End Time: 5/16/2012 10:05:36 AM

US52 : 00937

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/16/2012 10:01:52 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.47 mm	-0.61 mm	88923.93

End Time: 5/16/2012 10:02:48 AM

US52 : 00938

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/16/2012 9:58:41 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

Obtained Intensity (Be 9.0122): 5019.64
Obtained Intensity (Mg 23.985): 35101.92
Obtained Intensity (In 114.904): 74197.52
Obtained Intensity (Pb 207.977): 28766.37
Obtained Intensity (U 238.05): 53093.16
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.017 (=1207.22 / 72282.80)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=735.43 / 72282.80)

[Passed] Optimum value(s): N/A

End Time: 5/16/2012 10:01:17 AM

US52 : 00939

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 10:48:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1336268	2
	Be	9		ug/L				6	56
	C	13		ug/L				88731	2
	Cl	37		ug/L				7354478	3
>	Sc	45		ug/L				1256476	1
	V	51		ug/L				9209	1
	V-1	51		ug/L				99	2
	Cr	52		ug/L				24201	1
	Cr	53		ug/L				141	6
	Mn	55		ug/L				429	8
	Co	59		ug/L				54	7
>	Ge	72		ug/L				603250	0
	Ni	60		ug/L				29	5
	Ni	62		ug/L				1154	2
	Cu	63		ug/L				944	6
	Cu	65		ug/L				53	6
	Zn	66		ug/L				413	3
	Zn	67		ug/L				64	11
	Zn	68		ug/L				725	1
	As	75		ug/L				1149	4
	As-1	75		ug/L				7396	1
	Se	82		ug/L				-6	137
	Se	78		ug/L				7566	1
	Mo	98		ug/L				12	24
	Y	89		ug/L				399298	1
	Kr	83		ug/L				1716	3
>	In	115		ug/L				1069037	1
	Ag	107		ug/L				21	8
	Cd	111		ug/L				130	10
	Cd	114		ug/L				23	10
	Sb	121		ug/L				27	25
	Sb	123		ug/L				23	11
	Ba	135		ug/L				52	7
	Ba	137		ug/L				91	12
>	Tb	159		ug/L				1167135	1
	Tl	205		ug/L				26	13
	Pb	208		ug/L				172	2
	Bi	209		ug/L				2652718	1
	Th	232		ug/L				28	11
	U	238		ug/L				5	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 10:52:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1336268	1331524	0
	Be	9	0.200	ug/L	0.007	3	6	941	3
	C	13		ug/L			88731	96276	1
	Cl	37		ug/L			7354478	7307621	1
>	Sc	45		ug/L			1256476	1251284	1
	V	51	0.200	ug/L	0.021	10	8209	12846	4
	V-1	51	0.200	ug/L	0.005	2	99	4762	3
	Cr	52	0.500	ug/L	0.041	8	24201	34046	2
	Cr	53	0.500	ug/L	0.014	2	141	1262	2
	Mn	55	0.500	ug/L	0.007	1	429	14016	0
	Co	59	0.200	ug/L	0.005	2	54	3967	3
>	Ge	72		ug/L			603250	605244	0
	Ni	60	0.500	ug/L	0.020	3	29	2138	4
	Ni	62	0.500	ug/L	0.117	23	1154	1407	4
	Cu	63	0.500	ug/L	0.009	1	944	5565	1
	Cu	65	0.500	ug/L	0.018	3	53	2083	3
	Zn	66	4.000	ug/L	0.087	2	413	10681	2
	Zn	67	4.000	ug/L	0.173	4	64	1583	4
	Zn	68	4.000	ug/L	0.032	0	725	7645	0
	As	75	0.200	ug/L	0.008	3	1149	1596	1
	As-1	75	0.200	ug/L	0.050	25	7396	7841	0
	Se	82	0.500	ug/L	0.103	20	-6	112	22
	Se	78	0.500	ug/L	0.152	30	7566	7922	0
	Mo	98	0.200	ug/L	0.006	2	12	975	3
	Y	89		ug/L			399298	405552	0
	Kr	83		ug/L			1716	1785	4
>	In	115		ug/L			1069037	1058499	0
	Ag	107	0.200	ug/L	0.005	2	21	2347	2
	Cd	111	0.100	ug/L	0.003	2	130	721	2
	Cd	114	0.100	ug/L	0.003	3	23	1515	2
	Sb	121	0.200	ug/L	0.003	1	27	3283	1
	Sb	123	0.200	ug/L	0.004	1	23	2462	1
	Ba	135	0.500	ug/L	0.006	1	52	2453	0
	Ba	137	0.500	ug/L	0.005	1	91	4220	1
>	Tb	159		ug/L			1167135	1159557	0
	Tl	205	0.200	ug/L	0.002	0	26	7340	0
	Pb	208	0.100	ug/L	0.001	0	172	5255	1
	Bi	209		ug/L			2652718	2642573	0
	Th	232	0.200	ug/L	0.007	3	28	7333	2
	U	238	0.200	ug/L	0.003	1	5	9213	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 10:56:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1336268	1358943	0
	Be	9	10.000	ug/L	0.151	1	6	43578	0
	C	13		ug/L			88731	91946	2
	Cl	37		ug/L			7354478	7587213	2
>	Sc	45		ug/L			1256476	1278944	2
	V	51	10.000	ug/L	0.339	3	8209	230317	1
	V-1	51	10.000	ug/L	0.262	2	99	224601	1
	Cr	52	9.998	ug/L	0.309	3	24201	209693	0
	Cr	53	9.999	ug/L	0.086	0	141	21867	2
	Mn	55	9.999	ug/L	0.256	2	429	264833	0
	Co	59	10.000	ug/L	0.280	2	54	190223	1
>	Ge	72		ug/L			603250	608678	2
	Ni	60	9.998	ug/L	0.119	1	29	39938	1
	Ni	62	10.002	ug/L	0.096	0	1154	6589	1
	Cu	63	9.998	ug/L	0.263	2	944	85946	0
	Cu	65	9.998	ug/L	0.185	1	53	37406	0
	Zn	66	9.929	ug/L	0.262	2	413	24940	1
	Zn	67	10.038	ug/L	0.154	1	64	3987	1
	Zn	68	10.002	ug/L	0.341	3	725	18141	1
	As	75	10.000	ug/L	0.232	2	1149	21728	0
	As-1	75	10.000	ug/L	0.126	1	7396	27470	1
	Se	82	10.002	ug/L	0.665	6	-6	2585	4
	Se	78	9.997	ug/L	0.344	3	7566	13663	1
	Mo	98	10.000	ug/L	0.621	6	12	47306	3
	Y	89		ug/L			399298	412255	1
	Kr	83		ug/L			1716	1737	2
>	In	115		ug/L			1069037	1062871	1
	Ag	107	10.000	ug/L	0.435	4	21	115792	4
	Cd	111	10.000	ug/L	0.162	1	130	54721	0
	Cd	114	10.000	ug/L	0.184	1	23	134197	3
	Sb	121	10.000	ug/L	0.146	1	27	155668	0
	Sb	123	10.000	ug/L	0.145	1	23	117043	0
	Ba	135	9.996	ug/L	0.219	2	52	42006	0
	Ba	137	9.996	ug/L	0.203	2	91	71840	0
>	Tb	159		ug/L			1167135	1189688	1
	Tl	205	10.000	ug/L	0.060	0	26	354282	0
	Pb	208	10.000	ug/L	0.071	0	172	465525	1
	Bi	209		ug/L			2652718	2657461	0
	Th	232	10.000	ug/L	0.367	3	28	409214	3
	U	238	10.000	ug/L	0.195	1	5	439154	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:01:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1336268	1302467	1
	Be	9	19.962	ug/L	0.558	2	6	82730	1
	C	13		ug/L			88731	91221	3
	Cl	37		ug/L			7354478	7667302	0
>	Sc	45		ug/L			1256476	1221449	3
	V	51	19.903	ug/L	0.268	1	8209	422001	2
	V-1	51	19.893	ug/L	0.275	1	99	417747	1
	Cr	52	19.919	ug/L	0.296	1	24201	370130	1
	Cr	53	19.886	ug/L	0.631	3	141	40464	1
	Mn	55	19.853	ug/L	0.664	3	429	487375	2
	Co	59	19.798	ug/L	0.353	1	54	345664	1
>	Ge	72		ug/L			603250	590116	0
	Ni	60	19.947	ug/L	0.476	2	29	76425	2
	Ni	62	20.014	ug/L	0.273	1	1154	11683	0
	Cu	63	19.959	ug/L	0.424	2	944	164189	2
	Cu	65	19.975	ug/L	0.065	0	53	72060	0
	Zn	66	20.365	ug/L	0.130	0	413	52465	1
	Zn	67	20.496	ug/L	0.143	0	64	8557	1
	Zn	68	20.338	ug/L	0.262	1	725	37172	1
	As	75	19.939	ug/L	0.085	0	1149	40415	0
	As-1	75	19.944	ug/L	0.096	0	7396	45494	0
	Se	82	19.949	ug/L	0.265	1	-6	4961	0
	Se	78	19.976	ug/L	0.415	2	7566	19029	0
	Mo	98	19.955	ug/L	0.247	1	12	90781	0
	Y	89		ug/L			399298	400900	0
	Kr	83		ug/L			1716	1728	2
>	In	115		ug/L			1069037	1049787	0
	Ag	107	19.952	ug/L	0.536	2	21	226020	2
	Cd	111	19.845	ug/L	0.189	0	130	103939	0
	Cd	114	19.885	ug/L	0.282	1	23	257579	1
	Sb	121	19.867	ug/L	0.054	0	27	297534	0
	Sb	123	19.903	ug/L	0.137	0	23	225698	0
	Ba	135	19.885	ug/L	0.110	0	52	80649	0
	Ba	137	19.922	ug/L	0.166	0	91	139194	0
>	Tb	159		ug/L			1167135	1163653	1
	Tl	205	19.940	ug/L	0.164	0	26	682847	0
	Pb	208	19.937	ug/L	0.234	1	172	896343	0
	Bi	209		ug/L			2652718	2587276	0
	Th	232	20.048	ug/L	0.350	1	28	810129	1
	U	238	19.982	ug/L	0.063	0	5	855371	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:05:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1336268	1284048	0
	Be	9	50.483	ug/L	0.243	0	6	216801	0
	C	13		ug/L			88731	86983	3
	Cl	37		ug/L			7354478	7768412	1
>	Sc	45		ug/L			1256476	1222725	1
	V	51	50.549	ug/L	1.422	2	8209	1121637	1
	V-1	51	50.446	ug/L	1.378	2	99	1109806	1
	Cr	52	50.626	ug/L	0.966	1	24201	964336	1
	Cr	53	50.280	ug/L	0.746	1	141	105186	0
	Mn	55	50.440	ug/L	0.874	1	429	1296334	0
	Co	59	50.232	ug/L	0.789	1	54	898880	0
>	Ge	72		ug/L			603250	587887	1
	Ni	60	50.290	ug/L	0.668	1	29	197598	0
	Ni	62	50.149	ug/L	0.589	1	1154	27871	1
	Cu	63	50.235	ug/L	0.243	0	944	420068	0
	Cu	65	50.061	ug/L	0.521	1	53	180933	1
	Zn	66	49.493	ug/L	1.059	2	413	120553	2
	Zn	67	49.397	ug/L	0.791	1	64	19329	0
	Zn	68	49.262	ug/L	0.349	0	725	82811	0
	As	75	50.278	ug/L	0.113	0	1149	102640	0
	As-1	75	50.345	ug/L	0.054	0	7396	106863	1
	Se	82	50.061	ug/L	0.737	1	-6	1488	0
	Se	78	50.272	ug/L	0.357	0	7566	37339	0
	Mo	98	50.180	ug/L	0.266	0	12	231596	1
	Y	89		ug/L			399298	394021	0
	Kr	83		ug/L			1716	1788	2
>	In	115		ug/L			1069037	1031878	1
	Ag	107	50.039	ug/L	0.739	1	21	559314	0
	Cd	111	50.309	ug/L	0.704	1	130	267045	0
	Cd	114	50.272	ug/L	0.591	1	23	657959	2
	Sb	121	50.477	ug/L	0.336	0	27	780270	0
	Sb	123	50.437	ug/L	0.450	0	23	587833	0
	Ba	135	50.400	ug/L	0.208	0	52	209204	0
	Ba	137	50.419	ug/L	0.251	0	91	361257	1
>	Tb	159		ug/L			1167135	1145302	0
	Tl	205	50.379	ug/L	0.594	1	26	1764724	0
	Pb	208	50.322	ug/L	0.325	0	172	2300693	0
	Bi	209		ug/L			2652718	2547273	0
	Th	232	50.977	ug/L	0.713	1	28	2247119	0
	U	238	50.781	ug/L	1.021	2	5	2320500	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:11:45
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1336268	1260296	1
	Be	9	99.383	ug/L	1.966	1	6	410375	1
	C	13		ug/L			88731	87308	1
	Cl	37		ug/L			7354478	7920234	1
>	Sc	45		ug/L			1256476	1200433	1
	V	51	101.163	ug/L	0.458	0	8209	2284640	1
	V-1	51	101.218	ug/L	0.504	0	99	2279048	1
	Cr	52	100.059	ug/L	2.102	2	2401	1852092	0
	Cr	53	100.252	ug/L	2.067	2	141	207497	0
	Mn	55	100.410	ug/L	1.179	1	429	2568298	0
	Co	59	100.365	ug/L	1.429	1	54	1785041	1
>	Ge	72		ug/L			603250	577101	1
	Ni	60	99.604	ug/L	1.693	1	29	379168	1
	Ni	62	100.446	ug/L	4.664	4	1154	54459	3
	Cu	63	99.107	ug/L	3.041	3	944	788996	1
	Cu	65	100.061	ug/L	3.580	3	53	355574	2
	Zn	66	99.302	ug/L	1.912	1	413	231629	0
	Zn	67	99.669	ug/L	2.562	2	64	37803	1
	Zn	68	98.980	ug/L	3.147	3	725	157299	1
	As	75	100.167	ug/L	0.765	0	1149	200746	0
	As-1	75	100.233	ug/L	0.875	0	7396	203348	0
	Se	82	99.709	ug/L	1.834	1	-6	24186	0
	Se	78	99.882	ug/L	2.345	2	7566	65444	0
	Mo	98	99.829	ug/L	1.260	1	12	449644	0
	Y	89		ug/L			399298	390079	1
	Kr	83		ug/L			1716	1801	3
>	In	115		ug/L			1069037	1008456	1
	Ag	107	99.781	ug/L	1.866	1	21	1082009	0
	Cd	111	99.838	ug/L	1.276	1	130	515018	0
	Cd	114	100.012	ug/L	1.076	1	23	1279566	0
	Sb	121	100.189	ug/L	1.039	1	27	1523012	0
	Sb	123	100.249	ug/L	1.642	1	23	1151288	0
	Ba	135	100.633	ug/L	0.935	0	52	416957	0
	Ba	137	100.472	ug/L	1.337	1	91	714648	0
>	Tb	159		ug/L			1167135	1138476	0
	Tl	205	100.439	ug/L	0.815	0	26	3549322	0
	Pb	208	100.131	ug/L	0.081	0	172	4570472	0
	Bi	209		ug/L			2652718	2460180	0
	Th	232	100.066	ug/L	1.214	1	28	4394372	0
	U	238	99.854	ug/L	0.726	0	5	4514091	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:18:38
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1336268	1255268	1
[	Be	9	0.006	ug/L	0.001	12	6	29	10
	C	13		ug/L			88731	83780	2
	Cl	37		ug/L			7354478	7573547	0
[>	Sc	45		ug/L			1256476	1220216	2
|	V	51	-0.003	ug/L	0.012	420	8209	7900	0
|	V-1	51	0.000	ug/L	0.001	145	99	105	12
|	Cr	52	-0.007	ug/L	0.044	591	24201	23350	0
|	Cr	53	0.004	ug/L	0.002	47	141	146	1
|	Mn	55	-0.000	ug/L	0.001	339	429	411	1
[	Co	59	0.000	ug/L	0.000	100	54	59	8
[>	Ge	72		ug/L			603250	585301	0
|	Ni	60	-0.001	ug/L	0.001	37	29	23	8
|	Ni	62	0.364	ug/L	0.048	13	1154	1316	1
|	Cu	63	0.009	ug/L	0.004	40	944	989	3
|	Cu	65	0.002	ug/L	0.002	126	53	57	12
|	Zn	66	0.004	ug/L	0.004	125	413	409	2
|	Zn	67	-0.002	ug/L	0.016	790	64	61	9
|	Zn	68	-0.025	ug/L	0.013	51	725	664	2
|	As	75	-0.002	ug/L	0.013	595	1149	1111	2
|	As-1	75	0.016	ug/L	0.037	230	7396	7208	0
|	Se	82	-0.046	ug/L	0.075	160	-6	-17	103
|	Se	78	0.029	ug/L	0.163	555	7566	7359	1
[	Mo	98	0.014	ug/L	0.002	10	12	78	9
	Y	89		ug/L			399298	386335	1
	Kr	83		ug/L			1716	1678	3
[>	In	115		ug/L			1069037	1029793	1
|	Ag	107	0.002	ug/L	0.001	37	21	44	22
|	Cd	111	0.007	ug/L	0.002	30	130	160	7
|	Cd	114	0.001	ug/L	0.002	182	23	34	61
|	Sb	121	0.115	ug/L	0.013	11	1727	1811	10
|	Sb	123	0.116	ug/L	0.014	11	23	1379	11
|	Ba	135	0.001	ug/L	0.003	241	52	55	19
[	Ba	137	0.002	ug/L	0.000	21	91	102	2
[>	Tb	159		ug/L			1167135	1123479	0
|	Tl	205	0.003	ug/L	0.001	28	26	126	23
|	Pb	208	0.000	ug/L	0.000	18	172	187	2
|	Bi	209		ug/L			2652718	2560629	2
|	Th	232	0.095	ug/L	0.027	28	28	4154	28
[	U	238	0.002	ug/L	0.000	19	5	100	18

Sample Information

Sample Date/Time: Wednesday, May 16, 2012 11:11:45
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9997**	0.019	0.20	10	20	50	100
V-1	51	**0.9997**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.015	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.021	0.50	10	20	50	100
Co	59	**1.0000**	0.015	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**0.9999**	0.014	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**0.9998**	0.004	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9997**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9996**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.011	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.013	0.10	10	20	50	100
Sb	121	**0.9999**	0.015	0.20	10	20	50	100
Sb	123	**0.9999**	0.011	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.031	0.20	10	20	50	100
Pb	208	**1.0000**	0.040	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.039	0.20	10	20	50	100
U	238	**0.9999**	0.040	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:26:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1243451	1
	Be	9		ug/L				20	22
	C	13		ug/L				82575	1
	Cl	37		ug/L				7444200	1
>	Sc	45		ug/L				1204136	2
	V	51		ug/L				7864	2
	V-1	51		ug/L				84	11
	Cr	52		ug/L				23186	1
	Cr	53		ug/L				132	8
	Mn	55		ug/L				394	3
	Co	59		ug/L				56	4
>	Ge	72		ug/L				574809	1
	Ni	60		ug/L				29	24
	Ni	62		ug/L				1173	2
	Cu	63		ug/L				984	2
	Cu	65		ug/L				56	38
	Zn	66		ug/L				400	1
	Zn	67		ug/L				66	22
	Zn	68		ug/L				698	5
	As	75		ug/L				1129	8
	As-1	75		ug/L				7242	0
	Se	82		ug/L				-4	1128
	Se	78		ug/L				7407	0
	Mo	98		ug/L				27	36
	Y	89		ug/L				385025	1
	Kr	83		ug/L				1677	3
>	In	115		ug/L				1008184	1
	Ag	107		ug/L				35	40
	Cd	111		ug/L				156	12
	Cd	114		ug/L				34	34
	Sb	121		ug/L				517	12
	Sb	123		ug/L				377	12
	Ba	135		ug/L				47	23
	Ba	137		ug/L				99	2
>	Tb	159		ug/L				1111517	0
	Tl	205		ug/L				78	29
	Pb	208		ug/L				175	12
	Bi	209		ug/L				2534427	0
	Th	232		ug/L				1231	5
	U	238		ug/L				35	33

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:30:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1243451	1259621	0
	Be	9	52.679	ug/L	0.678	1	20	217468	1
	C	13		ug/L			82575	102505	3
	Cl	37		ug/L			7444200	7692768	1
>	Sc	45		ug/L			1204136	1225824	1
	V	51	49.271	ug/L	0.412	0	7864	1140346	0
	V-1	51	49.250	ug/L	0.170	0	84	1132444	0
	Cr	52	50.561	ug/L	1.368	2	23186	967381	1
	Cr	53	50.487	ug/L	0.722	1	132	106786	1
	Mn	55	50.301	ug/L	0.310	0	394	1314138	0
	Co	59	50.630	ug/L	1.194	2	56	919521	1
>	Ge	72		ug/L			574809	585505	1
	Ni	60	50.771	ug/L	0.873	1	29	196083	1
	Ni	62	50.175	ug/L	0.850	1	1173	28244	1
	Cu	63	50.315	ug/L	1.133	2	984	406944	0
	Cu	65	50.962	ug/L	1.001	1	56	183792	0
	Zn	66	49.382	ug/L	1.578	3	400	117053	1
	Zn	67	51.524	ug/L	0.679	1	66	19864	0
	Zn	68	51.257	ug/L	2.020	3	698	82980	2
	As	75	49.748	ug/L	0.721	1	1129	101741	0
	As-1	75	49.239	ug/L	0.994	2	7242	105185	0
	Se	82	80.957	ug/L	0.364	0	-4	19137	1
	Se	78	77.650	ug/L	1.561	2	7407	53431	0
	Mo	98	52.089	ug/L	0.906	1	27	238098	2
	Y	89		ug/L			385025	389863	2
	Kr	83		ug/L			1677	1763	7
>	In	115		ug/L			1008184	1010655	0
	Ag	107	50.445	ug/L	1.077	2	35	548281	1
	Cd	111	50.436	ug/L	0.693	1	156	260845	1
	Cd	114	50.763	ug/L	0.256	0	34	650945	0
	Sb	121	51.217	ug/L	0.160	0	517	780834	0
	Sb	123	51.546	ug/L	0.359	0	377	593679	0
	Ba	135	50.714	ug/L	0.864	1	47	210621	2
	Ba	137	50.681	ug/L	0.771	1	99	361356	1
>	Tb	159		ug/L			1111517	1129818	0
	Tl	205	49.687	ug/L	0.317	0	78	1742603	0
	Pb	208	50.587	ug/L	0.367	0	175	2291584	0
	Bi	209		ug/L			2534427	2493771	1
	Th	232	51.972	ug/L	0.053	0	1231	2266324	0
	U	238	51.920	ug/L	0.149	0	35	2329396	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:36:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1243451	1225725	1
	Be	9	0.002	ug/L	0.002	61	20	30	21
	C	13		ug/L			82575	81676	2
	Cl	37		ug/L			7444200	7531396	1
>	Sc	45		ug/L			1204136	1160618	1
	V	51	0.015	ug/L	0.010	65	7864	7904	2
	V-1	51	0.001	ug/L	0.000	8	84	112	1
	Cr	52	0.052	ug/L	0.038	74	23186	23258	2
	Cr	53	0.005	ug/L	0.005	105	132	136	6
	Mn	55	0.002	ug/L	0.001	40	394	427	3
	Co	59	0.001	ug/L	0.001	109	56	72	27
>	Ge	72		ug/L			574809	579258	1
	Ni	60	0.000	ug/L	0.002	779	29	30	20
	Ni	62	-0.121	ug/L	0.031	25	1173	1118	1
	Cu	63	-0.008	ug/L	0.006	79	984	927	4
	Cu	65	-0.002	ug/L	0.002	91	56	48	14
	Zn	66	0.006	ug/L	0.012	198	400	418	6
	Zn	67	-0.019	ug/L	0.024	124	66	59	16
	Zn	68	-0.009	ug/L	0.018	199	698	689	3
	As	75	-0.000	ug/L	0.031	13116	1129	1137	4
	As-1	75	-0.065	ug/L	0.056	87	7242	7171	0
	Se	82	-0.020	ug/L	0.019	92	-4	-9	47
	Se	78	-0.245	ug/L	0.156	63	7407	7320	0
	Mo	98	0.007	ug/L	0.003	37	27	60	19
	Y	89		ug/L			385025	383513	1
	Kr	83		ug/L			1677	1683	1
>	In	115		ug/L			1008184	1006524	0
	Ag	107	0.004	ug/L	0.008	192	35	81	108
	Cd	111	0.004	ug/L	0.012	288	156	178	36
	Cd	114	0.004	ug/L	0.007	189	34	82	110
	Sb	121	-0.001	ug/L	0.001	58	517	495	2
	Sb	123	-0.002	ug/L	0.002	140	377	358	6
	Ba	135	0.005	ug/L	0.001	28	47	67	8
	Ba	137	0.001	ug/L	0.004	285	99	109	25
>	Tb	159		ug/L			1111517	1097954	0
	Tl	205	0.002	ug/L	0.003	134	78	162	69
	Pb	208	0.001	ug/L	0.002	139	175	232	34
	Bi	209		ug/L			2534427	2506288	0
	Th	232	0.035	ug/L	0.009	25	1231	2694	13
	U	238	0.002	ug/L	0.001	88	35	102	57

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:40:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1243451	1201750	1
	Be	9	52.246	ug/L	0.628	1	20	205764	1
	C	13		ug/L			82575	82972	1
	Cl	37		ug/L			7444200	7604104	0
>	Sc	45		ug/L			1204136	1158209	1
	V	51	49.547	ug/L	0.698	1	7864	1083419	1
	V-1	51	49.644	ug/L	1.021	2	84	1078360	1
	Cr	52	50.877	ug/L	0.248	0	23186	919761	1
	Cr	53	51.212	ug/L	1.555	3	132	102315	1
	Mn	55	50.775	ug/L	0.331	0	394	1253467	2
	Co	59	51.420	ug/L	0.874	1	56	882407	2
>	Ge	72		ug/L			574809	571564	0
	Ni	60	50.253	ug/L	1.710	3	29	189453	2
	Ni	62	50.919	ug/L	0.290	0	1173	27967	1
	Cu	63	50.436	ug/L	1.819	3	984	398241	2
	Cu	65	50.780	ug/L	0.194	0	56	178813	1
	Zn	66	49.973	ug/L	0.428	0	400	115663	0
	Zn	67	51.097	ug/L	0.896	1	66	19233	1
	Zn	68	52.167	ug/L	0.746	1	698	82459	0
	As	75	50.009	ug/L	0.672	1	1129	99842	0
	As-1	75	50.160	ug/L	0.776	1	7242	104481	0
	Se	82	52.115	ug/L	0.859	1	-4	12024	0
	Se	78	50.561	ug/L	1.539	3	7407	36534	1
	Mo	98	50.453	ug/L	0.703	1	27	225100	0
	Y	89		ug/L			385025	374727	1
	Kr	83		ug/L			1677	1735	1
>	In	115		ug/L			1008184	995381	1
	Ag	107	50.575	ug/L	0.955	1	35	541338	0
	Cd	111	50.712	ug/L	0.830	1	156	258301	1
	Cd	114	50.501	ug/L	0.997	1	34	637719	0
	Sb	121	50.308	ug/L	0.558	1	17	755354	0
	Sb	123	50.176	ug/L	0.670	1	377	569142	0
	Ba	135	49.446	ug/L	0.566	1	47	202240	0
	Ba	137	49.429	ug/L	1.183	2	99	347061	1
>	Tb	159		ug/L			1111517	1103048	0
	Tl	205	49.674	ug/L	0.102	0	78	1700875	0
	Pb	208	50.418	ug/L	0.365	0	175	2229822	0
	Bi	209		ug/L			2534427	2453453	0
	Th	232	51.464	ug/L	0.302	0	1231	2191010	0
	U	238	51.736	ug/L	0.529	1	35	2266126	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:46:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1243451	1214965	2
	Be	9	0.006	ug/L	0.006	97	20	43	54
	C	13		ug/L			82575	79961	2
	Cl	37		ug/L			7444200	7413437	2
>	Sc	45		ug/L			1204136	1178261	1
	V	51	0.000	ug/L	0.003	566	7864	7706	1
	V-1	51	0.003	ug/L	0.004	134	84	153	61
	Cr	52	-0.007	ug/L	0.002	21	23186	22560	1
	Cr	53	0.002	ug/L	0.012	484	132	134	17
	Mn	55	0.004	ug/L	0.007	163	394	489	34
	Co	59	0.003	ug/L	0.004	148	56	101	68
>	Ge	72		ug/L			574809	579023	2
	Ni	60	0.003	ug/L	0.003	122	29	39	32
	Ni	62	-0.211	ug/L	0.071	33	1173	1069	1
	Cu	63	-0.017	ug/L	0.004	25	984	859	1
	Cu	65	0.000	ug/L	0.003	5547	56	56	19
	Zn	66	0.016	ug/L	0.007	42	400	440	5
	Zn	67	0.009	ug/L	0.012	128	66	70	7
	Zn	68	0.011	ug/L	0.018	161	698	721	1
	As	75	-0.007	ug/L	0.019	275	1129	1123	1
	As-1	75	-0.086	ug/L	0.075	87	7242	7124	1
	Se	82	-0.046	ug/L	0.176	385	-4	-15	256
	Se	78	-0.315	ug/L	0.280	88	7407	7274	1
	Mo	98	0.008	ug/L	0.004	43	27	65	22
	Y	89		ug/L			385025	379717	0
	Kr	83		ug/L			1677	1687	5
>	In	115		ug/L			1008184	1008070	1
	Ag	107	0.001	ug/L	0.002	222	35	47	53
	Cd	111	0.004	ug/L	0.005	125	156	174	13
	Cd	114	0.001	ug/L	0.002	212	34	44	49
	Sb	121	0.039	ug/L	0.006	14	517	1102	6
	Sb	123	0.041	ug/L	0.007	18	377	843	9
	Ba	135	0.002	ug/L	0.002	116	47	56	17
	Ba	137	-0.001	ug/L	0.002	243	99	94	12
>	Tb	159		ug/L			1111517	1094145	0
	Tl	205	0.001	ug/L	0.001	59	78	121	21
	Pb	208	0.000	ug/L	0.001	260	175	191	25
	Bi	209		ug/L			2534427	2530559	0
	Th	232	0.082	ug/L	0.021	25	1231	4680	18
	U	238	0.001	ug/L	0.000	20	35	93	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~LOW CHECK~~ 222222
Sample Dil Factor: 5.4.12.10
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:51:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1243451	1198039	1
	Be	9	0.220	ug/L	0.002	0	20	885	0
	C	13		ug/L			82575	83070	1
	Cl	37		ug/L			7444200	7314427	0
>	Sc	45		ug/L			1204136	1199038	1
	V	51	0.194	ug/L	0.035	18	7864	12197	5
	V-1	51	0.194	ug/L	0.006	2	84	4445	1
	Cr	52	0.522	ug/L	0.099	19	23186	32601	4
	Cr	53	0.519	ug/L	0.015	2	132	1204	2
	Mn	55	0.504	ug/L	0.002	0	394	13257	1
	Co	59	0.208	ug/L	0.004	1	56	3755	2
>	Ge	72		ug/L			574809	574106	0
	Ni	60	0.523	ug/L	0.013	2	29	2008	1
	Ni	62	0.169	ug/L	0.076	44	1173	1261	2
	Cu	63	0.527	ug/L	0.021	3	984	5151	3
	Cu	65	0.528	ug/L	0.026	4	56	1923	4
	Zn	66	4.057	ug/L	0.073	1	400	9800	1
	Zn	67	3.715	ug/L	0.160	4	66	1465	3
	Zn	68	4.030	ug/L	0.098	2	698	7042	1
	As	75	0.191	ug/L	0.008	4	1129	1507	1
	As-1	75	0.184	ug/L	0.029	15	242	7592	0
	Se	82	0.471	ug/L	0.133	28	-4	104	30
	Se	78	0.429	ug/L	0.101	23	7407	7646	0
	Mo	98	0.193	ug/L	0.008	4	27	890	4
	Y	89		ug/L			385025	382775	0
	Kr	83		ug/L			1677	1663	4
>	In	115		ug/L			1008184	1001935	0
	Ag	107	0.205	ug/L	0.003	1	35	2240	1
	Cd	111	0.105	ug/L	0.007	6	156	690	5
	Cd	114	0.109	ug/L	0.003	2	34	1414	2
	Sb	121	0.205	ug/L	0.007	3	517	3611	2
	Sb	123	0.207	ug/L	0.013	6	377	2734	5
	Ba	135	0.513	ug/L	0.019	3	47	2157	4
	Ba	137	0.506	ug/L	0.026	5	99	3671	5
>	Tb	159		ug/L			1111517	1089616	0
	Tl	205	0.209	ug/L	0.008	3	78	7134	4
	Pb	208	0.113	ug/L	0.007	6	175	5099	6
	Bi	209		ug/L			2534427	2494461	1
	Th	232	0.187	ug/L	0.002	0	1231	9062	1
	U	238	0.203	ug/L	0.004	2	735	8839	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 11:58:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1185989	2
	Be	9		ug/L				26	9
	C	13		ug/L				78085	1
	Cl	37		ug/L				7252340	1
>	Sc	45		ug/L				1159312	0
	V	51		ug/L				7689	0
	V-1	51		ug/L				86	0
	Cr	52		ug/L				22698	0
	Cr	53		ug/L				133	7
	Mn	55		ug/L				384	4
	Co	59		ug/L				59	19
>	Ge	72		ug/L				576695	0
	Ni	60		ug/L				28	21
	Ni	62		ug/L				956	5
	Cu	63		ug/L				759	3
	Cu	65		ug/L				47	13
	Zn	66		ug/L				351	3
	Zn	67		ug/L				50	18
	Zn	68		ug/L				655	1
	As	75		ug/L				1129	1
	As-1	75		ug/L				7105	0
	Se	82		ug/L				-3	376
	Se	78		ug/L				7249	0
	Mo	98		ug/L				13	44
	Y	89		ug/L				380973	1
	Kr	83		ug/L				1648	2
>	In	115		ug/L				1005690	0
	Ag	107		ug/L				28	18
	Cd	111		ug/L				152	10
	Cd	114		ug/L				24	8
	Sb	121		ug/L				210	16
	Sb	123		ug/L				154	13
	Ba	135		ug/L				43	6
	Ba	137		ug/L				63	8
>	Tb	159		ug/L				1093764	0
	Tl	205		ug/L				54	18
	Pb	208		ug/L				138	5
	Bi	209		ug/L				2508420	0
	Th	232		ug/L				933	12
	U	238		ug/L				21	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:02:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1182152	0
	Be	9	51.384	ug/L	0.489	0	26	199091	1
	C	13		ug/L			78085	80372	1
	Cl	37		ug/L			7252340	7546201	1
>	Sc	45		ug/L			1159312	1158808	1
	V	51	49.291	ug/L	0.877	1	7689	1078568	2
	V-1	51	49.046	ug/L	0.624	1	86	1066101	1
	Cr	52	50.886	ug/L	1.389	2	22698	920663	2
	Cr	53	50.031	ug/L	0.498	0	133	100048	1
	Mn	55	50.449	ug/L	0.482	0	384	1246007	1
	Co	59	50.646	ug/L	1.274	2	59	869384	0
>	Ge	72		ug/L			576695	568985	1
	Ni	60	49.743	ug/L	1.456	2	28	186692	2
	Ni	62	49.713	ug/L	1.112	2	956	26986	1
	Cu	63	50.285	ug/L	1.710	3	759	395019	2
	Cu	65	50.071	ug/L	0.510	1	47	175496	0
	Zn	66	49.028	ug/L	0.623	1	351	112921	1
	Zn	67	50.329	ug/L	0.147	0	50	18844	1
	Zn	68	51.530	ug/L	1.347	2	655	81044	1
	As	75	50.009	ug/L	1.016	2	1129	99379	0
	As-1	75	50.015	ug/L	1.148	2	7105	103562	1
	Se	82	52.214	ug/L	0.901	1	-3	11992	0
	Se	78	50.185	ug/L	1.462	2	7249	35973	1
	Mo	98	49.498	ug/L	1.451	2	13	219800	1
	Y	89		ug/L			380973	375744	1
	Kr	83		ug/L			1648	1701	1
>	In	115		ug/L			1005690	982002	0
	Ag	107	49.886	ug/L	1.087	2	28	526843	2
	Cd	111	51.056	ug/L	0.211	0	152	256580	1
	Cd	114	50.445	ug/L	0.401	0	24	628528	0
	Sb	121	51.015	ug/L	0.581	1	10	755405	1
	Sb	123	50.777	ug/L	0.928	1	154	568040	1
	Ba	135	49.350	ug/L	0.308	0	43	199142	0
	Ba	137	49.627	ug/L	0.708	1	63	343773	1
>	Tb	159		ug/L			1093764	1086241	0
	Tl	205	49.908	ug/L	1.077	2	54	1682714	1
	Pb	208	50.862	ug/L	0.722	1	138	2215051	1
	Bi	209		ug/L			2508420	2438785	0
	Th	232	51.869	ug/L	0.208	0	933	2174330	0
	U	238	51.558	ug/L	0.501	0	21	2223865	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:08:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1189183	1
	Be	9	0.001	ug/L	0.000	42	26	29	5
	C	13		ug/L			78085	77769	0
	Cl	37		ug/L			7252340	7338658	0
>	Sc	45		ug/L			1159312	1159065	1
	V	51	-0.004	ug/L	0.006	129	7689	7591	0
	V-1	51	0.000	ug/L	0.001	784	86	89	26
	Cr	52	-0.014	ug/L	0.025	179	22698	22447	1
	Cr	53	0.002	ug/L	0.008	386	133	137	10
	Mn	55	-0.001	ug/L	0.001	205	384	370	6
	Co	59	0.000	ug/L	0.001	409	59	63	28
>	Ge	72		ug/L			576695	564480	2
	Ni	60	-0.001	ug/L	0.002	142	28	22	30
	Ni	62	-0.027	ug/L	0.029	109	956	922	1
	Cu	63	-0.002	ug/L	0.006	249	759	725	6
	Cu	65	-0.003	ug/L	0.003	99	47	38	25
	Zn	66	-0.007	ug/L	0.014	213	351	328	7
	Zn	67	0.009	ug/L	0.008	90	50	52	5
	Zn	68	-0.019	ug/L	0.008	42	655	612	1
	As	75	0.012	ug/L	0.020	170	1129	1128	3
	As-1	75	0.019	ug/L	0.091	472	7105	6989	0
	Se	82	-0.038	ug/L	0.056	145	-3	-12	101
	Se	78	0.065	ug/L	0.323	498	7249	7130	0
	Mo	98	0.008	ug/L	0.002	19	13	47	15
	Y	89		ug/L			380973	374496	1
	Kr	83		ug/L			1648	1670	1
>	In	115		ug/L			1005690	981889	0
	Ag	107	0.001	ug/L	0.000	77	28	33	13
	Cd	111	0.004	ug/L	0.003	73	152	170	9
	Cd	114	0.001	ug/L	0.002	167	24	41	69
	Sb	121	0.054	ug/L	0.009	15	210	1004	11
	Sb	123	0.057	ug/L	0.008	14	154	786	11
	Ba	135	-0.000	ug/L	0.004	6532	43	41	39
	Ba	137	0.001	ug/L	0.002	146	63	69	16
>	Tb	159		ug/L			1093764	1070634	0
	Tl	205	0.002	ug/L	0.001	69	54	119	38
	Pb	208	0.001	ug/L	0.001	99	138	173	21
	Bi	209		ug/L			2508420	2467101	0
	Th	232	0.060	ug/L	0.012	20	933	3405	15
	U	238	0.001	ug/L	0.000	31	21	81	22

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:13:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1171129	4
	Be	9	0.221	ug/L	0.008	3	26	874	2
	C	13		ug/L			78085	81125	4
	Cl	37		ug/L			7252340	7281291	1
>	Sc	45		ug/L			1159312	1146330	2
	V	51	0.197	ug/L	0.011	5	7689	11830	2
	V-1	51	0.200	ug/L	0.003	1	86	4385	1
	Cr	52	0.527	ug/L	0.011	2	22698	31651	2
	Cr	53	0.538	ug/L	0.023	4	133	1195	4
	Mn	55	0.506	ug/L	0.007	1	384	12734	2
	Co	59	0.210	ug/L	0.002	1	59	3617	2
>	Ge	72		ug/L			576695	571583	1
	Ni	60	0.511	ug/L	0.018	3	28	1953	1
	Ni	62	0.308	ug/L	0.086	28	956	1109	2
	Cu	63	0.516	ug/L	0.014	2	759	4819	1
	Cu	65	0.535	ug/L	0.014	2	47	1930	1
	Zn	66	3.990	ug/L	0.082	2	351	9552	3
	Zn	67	3.569	ug/L	0.101	2	50	1388	1
	Zn	68	3.989	ug/L	0.066	1	655	6903	3
	As	75	0.187	ug/L	0.043	23	129	1487	4
	As-1	75	0.195	ug/L	0.092	47	7105	7419	2
	Se	82	0.416	ug/L	0.107	25	-3	91	25
	Se	78	0.514	ug/L	0.254	49	7249	7481	2
	Mo	98	0.206	ug/L	0.005	2	13	932	4
	Y	89		ug/L			380973	375134	1
	Kr	83		ug/L			1648	1689	1
>	In	115		ug/L			1005690	979330	1
	Ag	107	0.210	ug/L	0.002	1	28	2234	1
	Cd	111	0.110	ug/L	0.003	2	152	701	0
	Cd	114	0.112	ug/L	0.001	0	24	1419	2
	Sb	121	0.213	ug/L	0.004	1	210	3342	2
	Sb	123	0.216	ug/L	0.001	0	154	2564	1
	Ba	135	0.498	ug/L	0.006	1	43	2045	0
	Ba	137	0.495	ug/L	0.005	1	63	3477	1
>	Tb	159		ug/L			1093764	1070327	2
	Tl	205	0.203	ug/L	0.001	0	54	6781	1
	Pb	208	0.109	ug/L	0.003	2	138	4794	2
	Bi	209		ug/L			2508420	2490966	1
	Th	232	0.180	ug/L	0.001	0	933	8355	1
	U	238	0.199	ug/L	0.001	0	21	8493	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:17:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1280030	3
	Be	9	0.000	ug/L	0.000	308	26	29	3
	C	13		ug/L			78085	188686	2
	Cl	37		ug/L			7252340	15852104	3
>	Sc	45		ug/L			1159312	1197600	3
	V	51	0.082	ug/L	0.018	22	7689	9780	3
	V-1	51	1.109	ug/L	0.003	0	86	25005	3
	Cr	52	0.824	ug/L	0.048	5	22698	38462	2
	Cr	53	4.398	ug/L	0.067	1	133	9215	4
	Mn	55	0.120	ug/L	0.004	3	384	3459	3
	Co	59	0.024	ug/L	0.002	7	59	481	9
>	Ge	72		ug/L			576695	563370	2
	Ni	60	0.496	ug/L	0.006	1	28	1869	3
	Ni	62	5.332	ug/L	0.632	11	956	3706	11
	Cu	63	1.115	ug/L	0.039	3	759	9401	5
	Cu	65	0.481	ug/L	0.010	1	47	1714	2
	Zn	66	0.785	ug/L	0.032	4	351	2128	6
	Zn	67	5.420	ug/L	0.114	2	50	2052	3
	Zn	68	0.154	ug/L	0.068	44	655	876	9
	As	75	0.031	ug/L	0.018	57	1129	1164	5
	As-1	75	0.290	ug/L	0.099	33	7105	7492	0
	Se	82	-0.394	ug/L	0.073	18	-3	-93	16
	Se	78	1.027	ug/L	0.389	37	7249	7662	0
	Mo	98	427.732	ug/L	10.918	2	13	1880114	1
	Y	89		ug/L			38073	379122	1
	Kr	83		ug/L			1648	2014	2
>	In	115		ug/L			1005690	1007572	0
	Ag	107	0.023	ug/L	0.001	3	28	280	2
	Cd	111	0.117	ug/L	0.008	6	152	755	5
	Cd	114	0.270	ug/L	0.010	3	24	3479	2
	Sb	121	0.049	ug/L	0.002	4	210	956	4
	Sb	123	0.048	ug/L	0.005	9	154	708	8
	Ba	135	0.038	ug/L	0.003	8	43	200	7
	Ba	137	0.035	ug/L	0.001	4	63	310	2
>	Tb	159		ug/L			1093764	1149960	0
	Tl	205	0.003	ug/L	0.001	46	54	150	28
	Pb	208	0.034	ug/L	0.001	1	138	1709	2
	Bi	209		ug/L			2508420	2384846	0
	Th	232	0.156	ug/L	0.065	41	933	7865	35
	U	238	0.002	ug/L	0.001	63	21	109	51

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:23:51
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1351995	0
	Be	9	-0.003	ug/L	0.001	49	26	18	31
	C	13		ug/L			78085	203619	1
	Cl	37		ug/L			7252340	16131695	2
>	Sc	45		ug/L			1159312	1261754	0
	V	51	0.097	ug/L	0.238	245	7689	10651	52
	V-1	51	1.133	ug/L	0.002	0	86	26903	0
	Cr	52	19.880	ug/L	0.268	1	22698	406728	1
	Cr	53	23.457	ug/L	0.564	2	133	51157	2
	Mn	55	19.086	ug/L	0.314	1	384	513552	2
	Co	59	18.837	ug/L	0.198	1	59	352228	1
>	Ge	72		ug/L			576695	567512	1
	Ni	60	19.537	ug/L	0.274	1	28	73155	0
	Ni	62	24.532	ug/L	0.786	3	956	13759	2
	Cu	63	20.980	ug/L	0.980	4	759	164805	3
	Cu	65	20.157	ug/L	0.256	1	47	70502	2
	Zn	66	19.500	ug/L	0.416	2	351	45005	2
	Zn	67	21.778	ug/L	0.336	1	50	8161	2
	Zn	68	19.110	ug/L	0.423	2	655	30383	1
	As	75	19.473	ug/L	0.374	1	1129	39276	0
	As-1	75	20.057	ug/L	0.460	2	7105	45611	0
	Se	82	-0.479	ug/L	0.085	17	-3	-113	16
	Se	78	1.022	ug/L	0.262	25	7249	7718	0
	Mo	98	437.427	ug/L	8.443	1	13	1937421	0
	Y	89		ug/L			380973	395059	1
	Kr	83		ug/L			1648	2139	2
>	In	115		ug/L			1005690	1044252	0
	Ag	107	19.459	ug/L	0.629	3	28	218560	3
	Cd	111	19.610	ug/L	0.077	0	52	104890	0
	Cd	114	19.807	ug/L	0.197	0	24	262445	0
	Sb	121	0.056	ug/L	0.002	3	210	1102	2
	Sb	123	0.059	ug/L	0.001	1	154	864	0
	Ba	135	0.036	ug/L	0.002	4	43	197	3
	Ba	137	0.035	ug/L	0.001	3	63	324	3
>	Tb	159		ug/L			1093764	1185851	0
	Tl	205	0.001	ug/L	0.000	10	54	113	5
	Pb	208	0.036	ug/L	0.001	1	138	1878	1
	Bi	209		ug/L			2508420	2459174	0
	Th	232	0.052	ug/L	0.014	27	933	3409	18
	U	238	0.001	ug/L	0.000	33	21	76	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:30:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1308195	0
	Be	9	200.589	ug/L	3.002	1	26	859859	0
	C	13		ug/L			78085	99158	3
	Cl	37		ug/L			7252340	8373999	0
>	Sc	45		ug/L			1159312	1205679	1
	V	51	203.040	ug/L	2.979	1	7689	4597690	1
	V-1	51	201.470	ug/L	3.220	1	86	4555980	1
	Cr	52	202.254	ug/L	3.258	1	22698	3737074	0
	Cr	53	196.791	ug/L	5.605	2	133	408950	1
	Mn	55	195.650	ug/L	2.780	1	384	5025868	0
	Co	59	202.312	ug/L	4.290	2	59	3613531	0
>	Ge	72		ug/L			576695	560682	1
	Ni	60	194.104	ug/L	1.303	0	28	717858	1
	Ni	62	203.096	ug/L	8.606	4	956	105735	2
	Cu	63	195.523	ug/L	4.587	2	759	1511267	0
	Cu	65	193.223	ug/L	0.867	0	47	667264	1
	Zn	66	188.135	ug/L	5.039	2	351	425939	1
	Zn	67	190.487	ug/L	1.601	0	50	70148	2
	Zn	68	194.499	ug/L	3.057	1	655	299649	0
	As	75	199.735	ug/L	1.986	0	1129	387859	1
	As-1	75	198.459	ug/L	2.407	1	7105	384451	1
	Se	82	206.630	ug/L	1.176	0	-3	46781	1
	Se	78	194.392	ug/L	2.321	1	7249	117060	0
	Mo	98	209.337	ug/L	1.289	0	13	916222	2
	Y	89		ug/L			380973	380384	0
	Kr	83		ug/L			1648	2080	3
>	In	115		ug/L			1005690	1020180	0
	Ag	107	209.834	ug/L	1.957	0	28	2302077	0
	Cd	111	198.022	ug/L	1.407	0	152	1033372	0
	Cd	114	206.043	ug/L	1.626	0	24	2666892	0
	Sb	121	211.154	ug/L	1.037	0	210	3247568	0
	Sb	123	211.506	ug/L	1.266	0	154	2457669	0
	Ba	135	203.337	ug/L	1.139	0	43	852282	0
	Ba	137	204.381	ug/L	1.284	0	63	1470682	1
>	Tb	159		ug/L			1093764	1158664	0
	Tl	205	196.568	ug/L	1.829	0	54	7069485	0
	Pb	208	199.676	ug/L	1.554	0	138	9275305	0
	Bi	209		ug/L			2508420	2420957	0
	Th	232	200.458	ug/L	0.291	0	933	8960531	0
	U	238	201.486	ug/L	1.213	0	21	9270174	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:39:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			1185989	1280171	2
[	**Be**	**9**	**0.011**	ug/L	0.016	143	26	75	90
	C	**13**		ug/L			78085	91199	1
	Cl	**37**		ug/L			7252340	7776891	1
[>	**Sc**	**45**		ug/L			1159312	1197681	2
[	**V**	**51**	**0.019**	ug/L	0.011	61	7689	8364	3
[	**V-1**	**51**	**0.040**	ug/L	0.008	20	86	985	20
[	**Cr**	**52**	**0.039**	ug/L	0.033	85	22698	24153	2
[	**Cr**	**53**	**0.112**	ug/L	0.013	11	133	369	8
[	**Mn**	**55**	**0.050**	ug/L	0.007	13	384	1665	11
[	**Co**	**59**	**0.004**	ug/L	0.007	170	59	131	92
[>	**Ge**	**72**		ug/L			576695	567080	0
[	**Ni**	**60**	**0.026**	ug/L	0.007	28	28	123	21
[	**Ni**	**62**	**-0.199**	ug/L	0.029	14	956	836	1
[	**Cu**	**63**	**1.128**	ug/L	0.009	0	759	9563	1
[	**Cu**	**65**	**1.126**	ug/L	0.043	3	47	3978	2
[	**Zn**	**66**	**13.874**	ug/L	0.380	2	351	32095	2
[	**Zn**	**67**	**12.538**	ug/L	0.205	1	50	4715	1
[	**Zn**	**68**	**13.922**	ug/L	0.242	1	255	22296	1
[	**As**	**75**	**0.028**	ug/L	0.034	120	1129	1165	4
[	**As-1**	**75**	**0.041**	ug/L	0.040	97	7105	7065	0
[	**Se**	**82**	**-0.057**	ug/L	0.154	271	-3	-16	208
[	**Se**	**78**	**0.150**	ug/L	0.131	87	7249	7213	0
[	**Mo**	**98**	**0.030**	ug/L	0.005	15	13	144	14
	Y	**89**		ug/L			380973	390339	2
	Kr	**83**		ug/L			1648	1741	3
[>	**In**	**115**		ug/L			1005690	1031076	2
[	**Ag**	**107**	**0.002**	ug/L	0.001	78	28	46	31
[	**Cd**	**111**	**0.007**	ug/L	0.003	40	152	195	8
[	**Cd**	**114**	**0.003**	ug/L	0.000	12	24	64	9
[	**Sb**	**121**	**0.144**	ug/L	0.031	21	210	2467	21
[	**Sb**	**123**	**0.145**	ug/L	0.029	19	154	1869	20
[	**Ba**	**135**	**0.085**	ug/L	0.006	7	43	404	5
[	**Ba**	**137**	**0.090**	ug/L	0.002	1	63	721	0
[>	**Tb**	**159**		ug/L			1093764	1125653	1
[	**Tl**	**205**	**0.006**	ug/L	0.001	12	54	266	11
[	**Pb**	**208**	**0.186**	ug/L	0.001	0	138	8535	2
[	**Bi**	**209**		ug/L			2508420	2574069	2
[	**Th**	**232**	**0.058**	ug/L	0.013	22	933	3478	17
[	**U**	**238**	**0.009**	ug/L	0.013	144	21	441	138

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:44:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1293928	0
	Be	9	0.002	ug/L	0.002	105	26	36	22
	C	13		ug/L			78085	91932	2
	Cl	37		ug/L			7252340	7773008	2
>	Sc	45		ug/L			1159312	1200024	0
	V	51	0.009	ug/L	0.003	35	7689	8169	1
	V-1	51	0.027	ug/L	0.003	11	86	691	9
	Cr	52	0.051	ug/L	0.007	13	22698	24420	0
	Cr	53	0.111	ug/L	0.016	14	133	368	8
	Mn	55	0.033	ug/L	0.002	7	384	1244	4
	Co	59	0.002	ug/L	0.002	86	59	92	29
>	Ge	72		ug/L			576695	568285	1
	Ni	60	0.020	ug/L	0.001	6	28	103	5
	Ni	62	-0.395	ug/L	0.048	12	956	736	3
	Cu	63	0.549	ug/L	0.009	1	759	5050	0
	Cu	65	0.584	ug/L	0.027	4	47	2090	3
	Zn	66	11.333	ug/L	0.260	2	351	26334	2
	Zn	67	10.734	ug/L	0.686	6	50	4049	4
	Zn	68	11.574	ug/L	0.173	1	655	18681	0
	As	75	0.009	ug/L	0.045	513	1129	1129	6
	As-1	75	0.064	ug/L	0.046	70	7105	7124	0
	Se	82	-0.166	ug/L	0.066	39	-3	-41	36
	Se	78	0.187	ug/L	0.117	62	7249	7250	1
	Mo	98	0.017	ug/L	0.002	9	13	87	7
	Y	89		ug/L			380973	387917	1
	Kr	83		ug/L			1648	1747	1
>	In	115		ug/L			1005690	1044450	0
	Ag	107	0.001	ug/L	0.001	130	28	38	32
	Cd	111	0.004	ug/L	0.002	62	152	177	6
	Cd	114	0.002	ug/L	0.001	48	24	46	21
	Sb	121	0.036	ug/L	0.004	11	210	782	8
	Sb	123	0.036	ug/L	0.004	10	154	593	7
	Ba	135	0.075	ug/L	0.001	1	43	367	1
	Ba	137	0.074	ug/L	0.003	4	63	609	3
>	Tb	159		ug/L			1093764	1126714	0
	Tl	205	0.003	ug/L	0.000	14	54	162	10
	Pb	208	0.179	ug/L	0.003	1	138	8248	0
	Bi	209		ug/L			2508420	2586924	0
	Th	232	0.008	ug/L	0.001	17	933	1304	4
	U	238	0.000	ug/L	0.000	62	21	37	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:50:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1287271	1
	Be	9	51.100	ug/L	1.082	2	26	215545	0
	C	13		ug/L			78085	89360	2
	Cl	37		ug/L			7252340	8040073	0
>	Sc	45		ug/L			1159312	1200822	1
	V	51	48.740	ug/L	0.588	1	7689	1105200	0
	V-1	51	48.674	ug/L	0.853	1	86	1096236	0
	Cr	52	49.374	ug/L	0.352	0	2698	926513	1
	Cr	53	49.143	ug/L	0.884	1	133	101829	1
	Mn	55	48.948	ug/L	0.851	1	384	1252614	1
	Co	59	48.988	ug/L	1.145	2	59	871488	1
>	Ge	72		ug/L			576695	574138	0
	Ni	60	49.478	ug/L	1.043	2	28	187395	1
	Ni	62	49.604	ug/L	0.527	1	956	27177	0
	Cu	63	49.493	ug/L	0.839	1	759	392393	1
	Cu	65	49.684	ug/L	0.695	1	47	175724	0
	Zn	66	49.893	ug/L	0.252	0	351	115953	0
	Zn	67	49.851	ug/L	0.593	1	50	18834	0
	Zn	68	51.224	ug/L	1.729	3	655	81303	3
	As	75	50.157	ug/L	0.697	1	1129	100584	1
	As-1	75	49.550	ug/L	0.697	1	7105	103606	0
	Se	82	54.135	ug/L	0.529	0	-3	12548	1
	Se	78	50.115	ug/L	0.027	0	7249	36263	0
	Mo	98	51.186	ug/L	0.463	0	13	229394	0
	Y	89		ug/L			380973	388796	1
	Kr	83		ug/L			1648	1747	1
>	In	115		ug/L			1002790	1032900	0
	Ag	107	51.556	ug/L	0.882	1	28	572774	2
	Cd	111	50.481	ug/L	0.372	0	152	266838	1
	Cd	114	50.683	ug/L	0.513	1	24	664208	0
	Sb	121	50.773	ug/L	0.154	0	210	790787	0
	Sb	123	50.636	ug/L	0.358	0	154	595820	0
	Ba	135	49.456	ug/L	0.306	0	43	209907	0
	Ba	137	49.138	ug/L	0.286	0	63	358043	1
>	Tb	159		ug/L			1093764	1153176	0
	Tl	205	48.505	ug/L	0.493	1	54	1736218	0
	Pb	208	49.339	ug/L	0.295	0	138	2281159	0
	Bi	209		ug/L			2508420	2526208	1
	Th	232	50.298	ug/L	0.679	1	933	2238305	0
	U	238	50.624	ug/L	0.484	0	21	2318125	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 12:57:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1271286	1
	Be	9	0.002	ug/L	0.002	103	26	34	18
	C	13		ug/L			78085	85243	5
	Cl	37		ug/L			7252340	7679459	0
>	Sc	45		ug/L			1159312	1199507	3
	V	51	-0.009	ug/L	0.013	141	7689	7750	4
	V-1	51	0.006	ug/L	0.000	4	86	232	1
	Cr	52	-0.037	ug/L	0.045	121	22698	22809	4
	Cr	53	0.017	ug/L	0.006	36	133	173	4
	Mn	55	0.001	ug/L	0.001	103	384	416	3
	Co	59	-0.000	ug/L	0.000	82	59	54	13
>	Ge	72		ug/L			576695	564650	1
	Ni	60	0.001	ug/L	0.001	176	28	30	16
	Ni	62	-0.534	ug/L	0.045	8	956	659	2
	Cu	63	-0.031	ug/L	0.001	4	759	505	2
	Cu	65	0.000	ug/L	0.003	696	47	48	23
	Zn	66	-0.001	ug/L	0.018	1574	351	341	11
	Zn	67	0.018	ug/L	0.004	24	50	55	2
	Zn	68	-0.003	ug/L	0.012	412	655	637	1
	As	75	0.002	ug/L	0.017	785	1129	1109	1
	As-1	75	0.017	ug/L	0.032	194	7105	6988	0
	Se	82	-0.108	ug/L	0.080	73	-3	-28	64
	Se	78	0.079	ug/L	0.101	127	7249	7142	0
	Mo	98	0.012	ug/L	0.001	9	13	64	8
	Y	89		ug/L			380973	388126	1
	Kr	83		ug/L			1648	1715	3
>	In	115		ug/L			1005690	1037765	1
	Ag	107	-0.000	ug/L	0.000	207	28	27	13
	Cd	111	0.004	ug/L	0.002	58	152	176	7
	Cd	114	0.000	ug/L	0.001	188	24	30	29
	Sb	121	0.055	ug/L	0.010	18	210	1074	14
	Sb	123	0.058	ug/L	0.008	14	154	848	11
	Ba	135	-0.000	ug/L	0.000	95	43	42	2
	Ba	137	0.001	ug/L	0.001	73	63	74	9
>	Tb	159		ug/L			1093764	1118041	0
	Tl	205	0.003	ug/L	0.000	15	54	143	10
	Pb	208	0.000	ug/L	0.001	134	138	163	18
	Bi	209		ug/L			2508420	2571292	0
	Th	232	0.053	ug/L	0.010	18	933	3236	12
	U	238	0.001	ug/L	0.001	56	21	61	36

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:01:11
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

Cu, Zn only 5/14/12 SM

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1279852	2
	Be	9	U 0.002	ug/L	0.003	143	26	37	33
	C	13		ug/L			78085	101099	2
	Cl	37		ug/L			7252340	7666204	0
>	Sc	45		ug/L			1159312	1177521	2
	V	51	0.364	ug/L	0.019	5	7689	15843	0
	V-1	51	0.383	ug/L	0.009	2	86	8542	1
	Cr	52	U 0.094	ug/L	0.048	51	22698	24724	1
	Cr	53	0.160	ug/L	0.015	9	133	459	5
	Mn	55	1.820	ug/L	0.056	3	384	46041	1
	Co	59	0.004	ug/L	0.001	29	59	134	15
>	Ge	72		ug/L			576695	575781	1
	Ni	60	U 0.017	ug/L	0.004	22	28	92	14
	Ni	62	-0.671	ug/L	0.033	4	956	599	1
	Cu	63	U 0.300	ug/L	0.008	2	759	3136	2
	Cu	65	0.307	ug/L	0.008	2	47	1134	1
	Zn	66	M 2.184	ug/L	0.036	1	351	5425	0
	Zn	67	2.048	ug/L	0.038	1	50	823	1
	Zn	68	2.266	ug/L	0.048	2	355	4232	1
	As	75	U 0.040	ug/L	0.011	27	1129	1206	1
	As-1	75	-0.025	ug/L	0.030	120	7105	7045	0
	Se	82	U -0.089	ug/L	0.052	58	-3	-24	50
	Se	78	-0.111	ug/L	0.119	107	7249	7173	0
	Mo	98	0.041	ug/L	0.004	9	13	199	7
	Y	89		ug/L			380973	389497	0
	Kr	83		ug/L			1648	1790	1
>	In	115		ug/L			1005690	1044773	1
	Ag	107	U 0.001	ug/L	0.001	59	28	40	16
	Cd	111	U 0.004	ug/L	0.002	55	152	178	4
	Cd	114	U 0.003	ug/L	0.001	24	24	59	15
	Sb	121	U 0.017	ug/L	0.003	18	210	493	11
	Sb	123	0.018	ug/L	0.002	8	154	376	5
	Ba	135	0.142	ug/L	0.004	2	43	653	1
	Ba	137	0.143	ug/L	0.004	2	63	1116	1
>	Tb	159		ug/L			1093764	1124022	0
	Tl	205	U 0.012	ug/L	0.009	71	54	484	62
	Pb	208	U 0.040	ug/L	0.001	1	138	1952	1
	Bi	209		ug/L			2508420	2587339	1
	Th	232	0.067	ug/L	0.029	42	933	3873	31
	U	238	0.002	ug/L	0.000	10	21	128	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:05:18
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1185989	1219560	1
[	Be	9	0.002	ug/L	0.002	72	26	36	16
	C	13		ug/L			78085	102522	2
	Cl	37		ug/L			7252340	8162971	2
[>	Sc	45		ug/L			1150312	1267226	1
[	V	51	1.515	ug/L	0.041	2	7689	44397	0
[	V-1	51	1.683	ug/L	0.020	1	86	40091	0
[	Cr	52	0.769	ug/L	0.043	5	22698	39646	2
[	Cr	53	1.354	ug/L	0.080	5	133	3103	6
[	Mn	55	27.049	ug/L	0.522	1	384	730743	2
[	Co	59	0.423	ug/L	0.013	3	59	8006	1
[>	Ge	72		ug/L			576695	525848	0
[	Ni	60	2.939	ug/L	0.085	2	28	10218	3
[	Ni	62	11.701	ug/L	5.316	45	956	6533	39
[	Cu	63	6.554	ug/L	0.470	7	759	48182	6
[	Cu	65	1.137	ug/L	0.044	3	47	3726	3
[	Zn	66	3.365	ug/L	0.066	1	351	7461	1
[	Zn	67	3.165	ug/L	0.086	2	50	1138	3
[	Zn	68	4.307	ug/L	0.057	1	655	6809	0
[	As	75	9.383	ug/L	0.043	0	1129	18071	1
[	As-1	75	9.777	ug/L	0.032	0	7105	23925	0
[	Se	82	0.129	ug/L	0.112	86	-3	23	99
[	Se	78	1.327	ug/L	0.157	11	7249	7314	0
[	Mo	98	5.076	ug/L	0.026	0	20813	20848	0
	Y	89		ug/L			380973	381292	1
	Kr	83		ug/L			1648	1794	1
[>	In	115		ug/L			1005690	942214	0
[	Ag	107	0.004	ug/L	0.000	9	28	68	5
[	Cd	111	0.022	ug/L	0.009	40	152	251	17
[	Cd	114	0.063	ug/L	0.001	0	24	778	0
[	Sb	121	0.167	ug/L	0.005	3	210	2561	3
[	Sb	123	0.169	ug/L	0.007	4	154	1958	4
[	Ba	135	12.060	ug/L	0.034	0	43	46724	0
[	Ba	137	12.166	ug/L	0.041	0	63	80907	0
[>	Tb	159		ug/L			1093764	1085673	0
[	Tl	205	0.006	ug/L	0.002	42	54	244	32
[	Pb	208	0.066	ug/L	0.001	2	138	3022	1
[	Bi	209		ug/L			2508420	2159799	0
[	Th	232	0.122	ug/L	0.042	34	933	6015	28
[	U	238	0.132	ug/L	0.003	2	21	5714	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:09:26
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1245750	0
	Be	9	0.006	ug/L	0.001	17	26	52	7
	C	13		ug/L			78085	102034	2
	Cl	37		ug/L			7252340	8006552	1
>	Sc	45		ug/L			1159312	1376141	0
	V	51	1.415	ug/L	0.014	1	7689	45639	0
	V-1	51	1.571	ug/L	0.006	0	86	40646	0
	Cr	52	0.220	ug/L	0.010	4	22698	31556	0
	Cr	53	0.763	ug/L	0.073	9	133	1969	9
	Mn	55	373.761	ug/L	4.778	1	384	10959847	1
	Co	59	0.109	ug/L	0.003	2	59	2288	2
>	Ge	72		ug/L			576695	561278	0
	Ni	60	0.825	ug/L	0.048	5	28	3080	5
	Ni	62	1.557	ug/L	0.293	18	956	1735	8
	Cu	63	1.546	ug/L	0.046	2	759	12695	2
	Cu	65	0.995	ug/L	0.036	3	47	3484	3
	Zn	66	3.096	ug/L	0.077	2	351	7355	2
	Zn	67	2.893	ug/L	0.143	4	50	1114	5
	Zn	68	4.519	ug/L	0.046	1	655	7594	1
	As	75	364.751	ug/L	3.653	1	1129	708192	0
	As-1	75	371.351	ug/L	3.773	1	7105	714179	0
	Se	82	U 0.074	ug/L	0.047	64	-3	12	83
	Se	78	0.526	ug/L	0.163	30	7249	7353	0
	Mo	98	0.086	ug/L	0.002	2	13	388	3
	Y	89		ug/L			380973	380334	0
	Kr	83		ug/L			1648	1711	2
>	In	115		ug/L			1005690	992142	0
	Ag	107	0.002	ug/L	0.001	54	28	50	25
	Cd	111	0.115	ug/L	0.002	1	52	732	1
	Cd	114	0.110	ug/L	0.002	1	24	1409	2
	Sb	121	0.063	ug/L	0.004	5	210	1142	5
	Sb	123	0.066	ug/L	0.003	5	154	896	3
	Ba	135	0.953	ug/L	0.021	2	43	3924	1
	Ba	137	0.974	ug/L	0.007	0	63	6878	0
>	Tb	159		ug/L			1093764	1121792	0
	Tl	205	0.003	ug/L	0.001	22	54	148	14
	Pb	208	0.096	ug/L	0.001	1	138	4447	1
	Bi	209		ug/L			2508420	2382605	0
	Th	232	0.082	ug/L	0.024	29	933	4516	23
	U	238	0.002	ug/L	0.000	12	21	124	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:16:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1185989	1246945	1
[	Be	9	0.006	ug/L	0.001	9	26	50	6
	C	13		ug/L			78085	99959	3
	Cl	37		ug/L			7252340	8027436	0
[>	Sc	45		ug/L			1159312	1378262	0
[	V	51	1.330	ug/L	0.019	1	7689	43519	1
[	V-1	51	1.449	ug/L	0.016	1	86	37574	1
[	Cr	52	0.220	ug/L	0.005	2	22698	31604	0
[	Cr	53	0.636	ug/L	0.007	1	133	1669	0
[	Mn	55	377.766	ug/L	4.351	1	384	11093655	0
[	Co	59	0.207	ug/L	0.005	2	59	4306	1
[>	Ge	72		ug/L			576695	555138	2
[	Ni	60	0.825	ug/L	0.019	2	28	3046	2
[	Ni	62	0.485	ug/L	0.082	16	956	1168	1
[	Cu	63	0.943	ug/L	0.019	2	759	7944	0
[	Cu	65	0.426	ug/L	0.002	0	47	1503	2
[	Zn	66	3.389	ug/L	0.071	2	351	7928	0
[	Zn	67	3.150	ug/L	0.053	1	50	1195	1
[	Zn	68	4.932	ug/L	0.175	3	655	8137	2
[	As	75	361.976	ug/L	9.074	2	1129	694890	0
[	As-1	75	368.501	ug/L	9.338	2	7105	700762	0
[	Se	82	U 0.003	ug/L	0.194	6327	-3	-2	1763
[	Se	78	0.469	ug/L	0.355	75	7249	7238	0
[	Mo	98	0.071	ug/L	0.002	2	13	321	1
	Y	89		ug/L			380973	374870	1
	Kr	83		ug/L			1648	1760	3
[>	In	115		ug/L			1005690	1003902	0
[	Ag	107	0.000	ug/L	0.000	83	28	29	5
[	Cd	111	0.013	ug/L	0.002	14	152	217	4
[	Cd	114	0.010	ug/L	0.001	6	24	158	5
[	Sb	121	0.051	ug/L	0.000	0	210	982	1
[	Sb	123	0.051	ug/L	0.001	2	154	739	2
[	Ba	135	0.968	ug/L	0.021	2	43	4033	1
[	Ba	137	0.970	ug/L	0.006	0	63	6929	1
[>	Tb	159		ug/L			1093764	1141234	0
[	Tl	205	0.001	ug/L	0.000	20	54	108	9
[	Pb	208	0.089	ug/L	0.001	0	138	4220	0
[	Bi	209		ug/L			2508420	2377514	0
[	Th	232	0.037	ug/L	0.009	25	933	2604	15
[	U	238	0.001	ug/L	0.000	3	21	61	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:23:08
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

DEL Zn IV 4/GDUP, G-L 5/17/12 JD

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1227308	1 ✓
	Be	9	0.018	ug/L	0.000	2	26	99	2
	C	13		ug/L			78085	102363	2
	Cl	37		ug/L			7252340	8996326	1
>	Sc	45		ug/L			1159312	1307405	2 ✓
	V	51	0.772	ug/L	0.043	5	7689	27588	1
	V-1	51	0.965	ug/L	0.048	5	86	23755	2
	Cr	52	0.076	ug/L	0.043	56	22698	27091	1
	Cr	53	0.749	ug/L	0.058	7	133	1835	5
	Mn	55	323.084	ug/L	7.226	2	384	8998418	1
	Co	59	0.737	ug/L	0.021	2	59	14345	2
>	Ge	72		ug/L			576695	548162	2 ✓
	Ni	60	4.425	ug/L	0.111	2	28	16021	2
	Ni	62	3.482	ug/L	0.301	8	956	2664	3
	Cu	63	0.740	ug/L	0.043	5	759	6307	2
	Cu	65	0.456	ug/L	0.020	4	47	1585	2
	Zn	66	4.086 ✓	ug/L	0.193	4	351	9364	1
	Zn	67	4.067	ug/L	0.252	6	50	1509	4
	Zn	68	5.264	ug/L	0.185	3	655	8530	0
	As	75	14.002	ug/L	0.581	4	1129	27562	1
	As-1	75	14.346	ug/L	0.652	4	7105	33414	0
	Se	82	-0.033	ug/L	0.010	28	-3	-11	21
	Se	78	0.576	ug/L	0.337	58	7249	7205	0
	Mo	98	3.612	ug/L	0.096	2	13	15459	1
	Y	89		ug/L			380973	389368	2
	Kr	83		ug/L			1648	1772	2
>	In	115		ug/L			1005690	1013066	1 ✓
	Ag	107	0.003	ug/L	0.002	58	28	57	29
	Cd	111	0.019	ug/L	0.001	3	152	251	0
	Cd	114	0.017	ug/L	0.000	1	24	247	0
	Sb	121	0.030	ug/L	0.000	1	210	676	1
	Sb	123	0.031	ug/L	0.001	3	154	516	3
	Ba	135	7.130	ug/L	0.050	0	43	29717	1
	Ba	137	7.117	ug/L	0.103	1	63	50909	0
>	Tb	159		ug/L			1093764	1147830	0 ✓
	Tl	205	0.012	ug/L	0.000	3	54	467	3
	Pb	208	0.051	ug/L	0.001	1	138	2497	1
	Bi	209		ug/L			2508420	2429979	0
	Th	232	0.016	ug/L	0.005	30	933	1699	13
	U	238	0.103	ug/L	0.001	1	21	4702	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:30:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1193834	1
	Be	9	-0.003	ug/L	0.001	24	26	16	14
	C	13		ug/L			78085	84046	2
	Cl	37		ug/L			7252340	7595638	0
>	Sc	45		ug/L			1159312	1165791	0
	V	51	0.002	ug/L	0.006	227	7689	7787	1
	V-1	51	0.019	ug/L	0.001	7	86	503	6
	Cr	52	0.009	ug/L	0.016	176	22698	22984	1
	Cr	53	0.067	ug/L	0.012	17	133	268	8
	Mn	55	0.085	ug/L	0.069	81	384	2498	68
	Co	59	-0.000	ug/L	0.000	40	59	54	3
>	Ge	72		ug/L			576695	564048	1
	Ni	60	0.012	ug/L	0.003	24	28	71	14
	Ni	62	-0.683	ug/L	0.085	12	956	580	7
	Cu	63	0.185	ug/L	0.005	2	759	2179	0
	Cu	65	0.217	ug/L	0.013	5	47	800	5
	Zn	66	5.987	ug/L	0.064	1	351	13971	0
	Zn	67	5.449	ug/L	0.067	1	50	2065	0
	Zn	68	6.085	ug/L	0.126	2	655	10052	0
	As	75	0.043	ug/L	0.053	121	1129	1189	9
	As-1	75	0.059	ug/L	0.048	82	7105	7061	0
	Se	82	-0.101	ug/L	0.164	162	-3	-26	138
	Se	78	0.164	ug/L	0.125	75	7249	7183	0
	Mo	98	0.005	ug/L	0.001	13	13	33	7
	Y	89		ug/L			380973	376006	1
	Kr	83		ug/L			1648	1769	1
>	In	115		ug/L			1005690	1019647	1
	Ag	107	-0.001	ug/L	0.000	70	28	22	18
	Cd	111	-0.000	ug/L	0.002	2677	152	154	6
	Cd	114	0.001	ug/L	0.000	45	24	36	12
	Sb	121	-0.004	ug/L	0.001	14	210	153	6
	Sb	123	-0.003	ug/L	0.001	28	154	119	8
	Ba	135	0.038	ug/L	0.005	13	43	203	10
	Ba	137	0.036	ug/L	0.002	6	63	324	6
>	Tb	159		ug/L			1093764	1110256	0
	Tl	205	0.000	ug/L	0.000	98	54	71	21
	Pb	208	0.064	ug/L	0.002	2	138	2997	2
	Bi	209		ug/L			2508420	2545826	0
	Th	232	-0.020	ug/L	0.000	0	933	74	9
	U	238	-0.000	ug/L	0.000	30	21	10	30

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:35:31
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1163814	2
	Be	9	-0.003	ug/L	0.001	20	26	14	14
	C	13		ug/L			78085	82271	3
	Cl	37		ug/L			7252340	7507398	1
>	Sc	45		ug/L			1159312	1122668	0
	V	51	0.005	ug/L	0.010	214	7689	7542	2
	V-1	51	0.015	ug/L	0.001	4	86	401	3
	Cr	52	0.027	ug/L	0.031	113	22698	22445	1
	Cr	53	0.064	ug/L	0.012	19	133	252	9
	Mn	55	0.020	ug/L	0.000	2	384	856	1
	Co	59	0.000	ug/L	0.000	166	59	60	7
>	Ge	72		ug/L			576695	552821	1
	Ni	60	0.013	ug/L	0.002	15	28	73	10
	Ni	62	-0.933	ug/L	0.075	8	956	442	8
	Cu	63	0.169	ug/L	0.004	2	759	2018	1
	Cu	65	0.218	ug/L	0.008	3	47	789	2
	Zn	66	5.371	ug/L	0.091	1	351	12318	1
	Zn	67	4.854	ug/L	0.214	4	50	1808	3
	Zn	68	5.417	ug/L	0.063	1	655	8840	0
	As	75	0.034	ug/L	0.019	56	1129	1147	2
	As-1	75	0.089	ug/L	0.053	59	7105	6978	0
	Se	82	-0.104	ug/L	0.145	140	-3	-26	120
	Se	78	0.288	ug/L	0.184	63	7249	7109	0
	Mo	98	0.004	ug/L	0.002	48	13	29	25
	Y	89		ug/L			380973	373939	1
	Kr	83		ug/L			1648	1728	3
>	In	115		ug/L			1005690	1006158	1
	Ag	107	-0.000	ug/L	0.000	301	28	26	19
	Cd	111	0.002	ug/L	0.001	65	152	160	1
	Cd	114	0.001	ug/L	0.000	11	24	40	3
	Sb	121	-0.005	ug/L	0.002	39	210	141	20
	Sb	123	-0.005	ug/L	0.002	36	154	98	20
	Ba	135	0.033	ug/L	0.003	8	43	178	6
	Ba	137	0.038	ug/L	0.004	11	63	332	10
>	Tb	159		ug/L			1093764	1080369	0
	Tl	205	-0.000	ug/L	0.000	19	54	37	8
	Pb	208	0.066	ug/L	0.001	2	138	2999	1
	Bi	209		ug/L			2508420	2513682	0
	Th	232	-0.020	ug/L	0.000	1	933	80	20
	U	238	-0.000	ug/L	0.000	10	21	11	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~CCV4~~ BLK
Sample Dil Factor:
Comments: 5/16/12 JG
Sample Date/Time: Wednesday, May 16, 2012 13:41:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1203190	1
	Be	9	-0.002	ug/L	0.001	30	26	17	15
	C	13		ug/L			78085	83717	3
	Cl	37		ug/L			7252340	7629391	0
>	Sc	45		ug/L			1159312	1140881	0
	V	51	-0.005	ug/L	0.006	125	7689	7464	1
	V-1	51	0.006	ug/L	0.001	19	86	203	11
	Cr	52	-0.023	ug/L	0.015	68	22698	21944	1
	Cr	53	0.013	ug/L	0.007	55	133	157	8
	Mn	55	0.001	ug/L	0.001	42	384	407	3
	Co	59	-0.000	ug/L	0.000	72	59	50	11
>	Ge	72		ug/L			576695	556537	0
	Ni	60	-0.000	ug/L	0.001	374	28	25	19
	Ni	62	-1.057	ug/L	0.027	2	956	381	3
	Cu	63	-0.057	ug/L	0.002	2	759	297	4
	Cu	65	-0.002	ug/L	0.001	39	47	40	5
	Zn	66	0.012	ug/L	0.010	84	351	365	6
	Zn	67	0.015	ug/L	0.034	231	50	53	23
	Zn	68	0.004	ug/L	0.019	498	655	638	4
	As	75	-0.001	ug/L	0.021	1585	1129	1087	4
	As-1	75	0.034	ug/L	0.016	47	7105	6921	0
	Se	82	-0.125	ug/L	0.073	58	-3	-31	51
	Se	78	0.165	ug/L	0.042	25	7249	7088	0
	Mo	98	0.001	ug/L	0.000	55	13	16	12
	Y	89		ug/L			380973	370049	1
	Kr	83		ug/L			1648	1714	0
>	In	115		ug/L			1005690	1003695	1
	Ag	107	-0.001	ug/L	0.000	42	28	19	18
	Cd	111	-0.000	ug/L	0.001	1733	152	152	3
	Cd	114	0.001	ug/L	0.000	27	24	34	6
	Sb	121	-0.009	ug/L	0.001	10	210	78	17
	Sb	123	-0.008	ug/L	0.001	6	154	58	10
	Ba	135	0.001	ug/L	0.001	172	43	46	12
	Ba	137	0.001	ug/L	0.000	77	63	67	5
>	Tb	159		ug/L			1093764	1093466	0
	Tl	205	-0.001	ug/L	0.000	6	54	30	4
	Pb	208	0.001	ug/L	0.000	45	138	161	6
	Bi	209		ug/L			2508420	2531465	0
	Th	232	-0.020	ug/L	0.000	0	933	80	9
	U	238	-0.000	ug/L	0.000	8	21	6	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:46:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1189668	2
	Be	9	51.980	ug/L	0.912	1	26	202632	1
	C	13		ug/L			78085	82555	2
	Cl	37		ug/L			7252340	7701563	0
>	Sc	45		ug/L			1159312	1104692	0
	V	51	48.806	ug/L	0.595	1	7689	1018217	1
	V-1	51	48.769	ug/L	0.625	1	86	1010599	1
	Cr	52	50.028	ug/L	0.545	1	22698	863353	1
	Cr	53	49.897	ug/L	0.528	1	133	95122	0
	Mn	55	49.093	ug/L	0.210	0	384	1155884	0
	Co	59	49.399	ug/L	0.581	1	59	808595	1
>	Ge	72		ug/L			576695	534445	0
	Ni	60	50.898	ug/L	0.560	1	28	179454	1
	Ni	62	48.732	ug/L	0.748	1	956	24869	1
	Cu	63	50.876	ug/L	1.104	2	759	375423	1
	Cu	65	50.509	ug/L	0.361	0	47	166297	0
	Zn	66	50.428	ug/L	0.082	0	351	109091	0
	Zn	67	51.669	ug/L	1.553	3	50	18167	2
	Zn	68	51.929	ug/L	0.212	0	655	76718	0
	As	75	51.823	ug/L	0.365	0	1129	96707	0
	As-1	75	50.721	ug/L	0.379	0	7105	98570	0
	Se	82	57.016	ug/L	0.674	1	-3	12301	0
	Se	78	51.500	ug/L	0.623	1	7249	34502	0
	Mo	98	53.585	ug/L	0.495	0	13	223537	0
	Y	89		ug/L			380973	377246	1
	Kr	83		ug/L			1648	1772	2
>	In	115		ug/L			1005690	975783	1
	Ag	107	56.285	ug/L	0.688	1	28	590732	2
	Cd	111	50.921	ug/L	0.618	1	152	254253	0
	Cd	114	50.575	ug/L	0.659	1	24	626087	0
	Sb	121	50.385	ug/L	0.939	1	210	741265	1
	Sb	123	50.378	ug/L	1.448	2	154	559894	1
	Ba	135	48.452	ug/L	0.957	1	43	194245	0
	Ba	137	48.755	ug/L	0.818	1	63	335552	0
>	Tb	159		ug/L			1093764	1085209	0
	Tl	205	50.651	ug/L	0.490	0	54	1706199	0
	Pb	208	50.965	ug/L	0.128	0	138	2217498	0
	Bi	209		ug/L			2508420	2466217	0
	Th	232	51.742	ug/L	1.183	2	933	2166794	1
	U	238	51.856	ug/L	0.244	0	21	2234669	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 13:53:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1185989	1159932	1
	Be	9	0.001	ug/L	0.004	813	26	27	57
	C	13		ug/L			78085	81574	1
	Cl	37		ug/L			7252340	7522930	1
>	Sc	45		ug/L			1159312	1112973	0
	V	51	-0.007	ug/L	0.010	141	7689	7235	2
	V-1	51	0.006	ug/L	0.004	54	86	217	33
	Cr	52	-0.031	ug/L	0.020	63	22698	21264	1
	Cr	53	0.016	ug/L	0.005	28	133	158	5
	Mn	55	0.006	ug/L	0.004	78	384	502	20
	Co	59	0.003	ug/L	0.002	82	59	101	36
>	Ge	72		ug/L			576695	542855	0
	Ni	60	0.003	ug/L	0.002	67	28	36	18
	Ni	62	-1.039	ug/L	0.063	6	956	381	8
	Cu	63	-0.053	ug/L	0.001	1	759	316	2
	Cu	65	0.001	ug/L	0.003	364	47	47	19
	Zn	66	0.021	ug/L	0.017	78	351	377	9
	Zn	67	0.031	ug/L	0.010	31	50	58	5
	Zn	68	0.014	ug/L	0.026	180	655	638	6
	As	75	0.052	ug/L	0.011	20	1129	1161	1
	As-1	75	0.067	ug/L	0.032	46	7105	6812	1
	Se	82	-0.054	ug/L	0.105	195	-3	-15	149
	Se	78	0.230	ug/L	0.068	29	7249	6950	1
	Mo	98	0.009	ug/L	0.003	31	13	50	23
	Y	89		ug/L			380973	364967	0
	Kr	83		ug/L			1648	1717	2
>	In	115		ug/L			1005690	981397	1
	Ag	107	-0.000	ug/L	0.001	675	28	26	34
	Cd	111	0.002	ug/L	0.002	95	152	160	5
	Cd	114	0.001	ug/L	0.000	63	24	32	17
	Sb	121	0.042	ug/L	0.004	10	210	826	8
	Sb	123	0.043	ug/L	0.011	24	154	626	18
	Ba	135	-0.000	ug/L	0.002	453	43	40	20
	Ba	137	0.002	ug/L	0.004	240	63	72	37
>	Tb	159		ug/L			1093764	1065011	0
	Tl	205	0.005	ug/L	0.007	150	54	213	113
	Pb	208	0.006	ug/L	0.009	157	138	381	101
	Bi	209		ug/L			2508420	2486602	1
	Th	232	0.056	ug/L	0.014	25	933	3212	18
	U	238	0.004	ug/L	0.007	151	21	204	136

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor: AMR 5/16/12 JLB
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:04:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
> Li	6		ug/L				1759828	4 ✓
Be	9		ug/L				9	22
C	13		ug/L				61861	14
Cl	37		ug/L				5098756	2
> Sc	45		ug/L				1641646	2 ✓
V	51		ug/L				3618	8
V-1	51		ug/L				148	8
Cr	52		ug/L				10710	8
Cr	53		ug/L				100	5
Mn	55		ug/L				617	48
Co	59		ug/L				48	11
> Ge	72		ug/L				781105	4 ✓
Ni	60		ug/L				26	22
Ni	62		ug/L				304	5
Cu	63		ug/L				236	1
Cu	65		ug/L				49	11
Zn	66		ug/L				250	16
Zn	67		ug/L				34	13
Zn	68		ug/L				537	6
As	75		ug/L				1264	28
As-1	75		ug/L				5571	7
Se	82		ug/L				-10	221
Se	78		ug/L				5605	6
Mo	98		ug/L				12	21
Y	89		ug/L				564868	9
Kr	83		ug/L				1694	28
> In	115		ug/L				1695193	5 ✓
Ag	107		ug/L				14	28
Cd	111		ug/L				158	9
Cd	114		ug/L				35	8
Sb	121		ug/L				198	78
Sb	123		ug/L				152	81
Ba	135		ug/L				32	18
Ba	137		ug/L				59	7
> Tb	159		ug/L				1953744	9 ✓
Tl	205		ug/L				80	21
Pb	208		ug/L				174	5
Bi	209		ug/L				4354258	5
Th	232		ug/L				11728	101
U	238		ug/L				21	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:11:12
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1180370	1
	Be	9		ug/L				15	19
	C	13		ug/L				81834	1
	Cl	37		ug/L				7475003	0
>	Sc	45		ug/L				1140206	0
	V	51		ug/L				7400	0
	V-1	51		ug/L				141	11
	Cr	52		ug/L				21781	0
	Cr	53		ug/L				139	3
	Mn	55		ug/L				374	2
	Co	59		ug/L				55	4
>	Ge	72		ug/L				554222	1
	Ni	60		ug/L				33	4
	Ni	62		ug/L				257	6
	Cu	63		ug/L				218	3
	Cu	65		ug/L				43	17
	Zn	66		ug/L				357	10
	Zn	67		ug/L				58	6
	Zn	68		ug/L				672	4
	As	75		ug/L				1162	3
	As-1	75		ug/L				6863	0
	Se	82		ug/L				-18	48
	Se	78		ug/L				7005	0
	Mo	98		ug/L				12	25
	Y	89		ug/L				368460	1
	Kr	83		ug/L				1734	1
>	In	115		ug/L				994767	0
	Ag	107		ug/L				18	25
	Cd	111		ug/L				151	5
	Cd	114		ug/L				29	38
	Sb	121		ug/L				112	19
	Sb	123		ug/L				86	14
	Ba	135		ug/L				24	9
	Ba	137		ug/L				45	17
>	Tb	159		ug/L				1071918	0
	Tl	205		ug/L				36	16
	Pb	208		ug/L				137	1
	Bi	209		ug/L				2499506	1
	Th	232		ug/L				291	12
	U	238		ug/L				11	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:15:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1164903	1
	Be	9	53.011	ug/L	0.489	0	15	202367	0
	C	13		ug/L			81834	83977	2
	Cl	37		ug/L			7475003	7778236	0
>	Sc	45		ug/L			1140206	1114868	0
	V	51	48.518	ug/L	0.907	1	7400	1021347	1
	V-1	51	48.746	ug/L	0.972	1	141	1019412	1
	Cr	52	49.703	ug/L	1.202	2	21781	865178	1
	Cr	53	50.493	ug/L	1.421	2	139	97146	2
	Mn	55	49.927	ug/L	0.399	0	374	1186323	0
	Co	59	50.457	ug/L	1.624	3	55	833439	2
>	Ge	72		ug/L			554222	539793	0
	Ni	60	50.620	ug/L	0.718	1	33	180280	2
	Ni	62	49.928	ug/L	0.415	0	257	25066	0
	Cu	63	51.086	ug/L	0.741	1	218	380318	2
	Cu	65	50.057	ug/L	0.504	1	43	166450	0
	Zn	66	49.945	ug/L	0.738	1	357	109159	2
	Zn	67	51.052	ug/L	0.831	1	58	18142	1
	Zn	68	51.974	ug/L	0.940	1	672	77591	1
	As	75	51.426	ug/L	0.272	0	1162	97014	1
	As-1	75	50.786	ug/L	0.569	1	6863	99709	1
	Se	82	55.502	ug/L	1.064	1	-18	12082	2
	Se	78	51.234	ug/L	0.654	1	7005	34741	1
	Mo	98	51.597	ug/L	1.219	2	12	217428	2
	Y	89		ug/L			368460	363530	2
	Kr	83		ug/L			1734	1732	2
>	In	115		ug/L			994767	974706	0
	Ag	107	53.446	ug/L	0.158	0	18	560256	1
	Cd	111	50.806	ug/L	0.517	1	151	253420	1
	Cd	114	49.831	ug/L	0.527	1	29	616238	0
	Sb	121	50.702	ug/L	0.608	1	112	745053	0
	Sb	123	50.579	ug/L	0.638	1	86	561535	0
	Ba	135	48.863	ug/L	0.606	1	24	195684	0
	Ba	137	48.822	ug/L	0.845	1	45	335649	1
>	Tb	159		ug/L			1071918	1072518	0
	Tl	205	49.985	ug/L	0.179	0	36	1664135	0
	Pb	208	50.678	ug/L	0.217	0	137	2179212	0
	Bi	209		ug/L			2499506	2410294	0
	Th	232	51.827	ug/L	0.651	1	291	2144354	0
	U	238	52.227	ug/L	0.446	0	11	2224221	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:21:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1152646	1
	Be	9	0.000	ug/L	0.001	142	15	16	12
	C	13		ug/L			81834	79674	1
	Cl	37		ug/L			7475003	7452172	2
>	Sc	45		ug/L			1140206	1096041	0
	V	51	0.001	ug/L	0.006	550	7400	7134	1
	V-1	51	-0.001	ug/L	0.000	45	141	123	4
	Cr	52	0.007	ug/L	0.023	320	21781	21054	1
	Cr	53	0.001	ug/L	0.005	310	139	137	5
	Mn	55	-0.000	ug/L	0.001	39431	374	359	8
	Co	59	0.000	ug/L	0.000	136	55	57	10
>	Ge	72		ug/L			554222	541856	2
	Ni	60	0.003	ug/L	0.002	90	33	42	19
	Ni	62	0.044	ug/L	0.044	99	257	273	6
	Cu	63	0.002	ug/L	0.003	149	218	229	10
	Cu	65	-0.000	ug/L	0.001	130	43	41	6
	Zn	66	0.009	ug/L	0.009	95	357	369	5
	Zn	67	0.003	ug/L	0.013	436	58	58	5
	Zn	68	-0.024	ug/L	0.008	31	672	622	0
	As	75	0.006	ug/L	0.026	416	1162	1147	2
	As-1	75	0.039	ug/L	0.077	196	6863	6780	0
	Se	82	0.018	ug/L	0.058	322	-18	-14	90
	Se	78	0.141	ug/L	0.250	176	7005	6924	0
	Mo	98	0.010	ug/L	0.003	27	12	54	23
	Y	89		ug/L			368460	364458	1
	Kr	83		ug/L			1734	1704	3
>	In	115		ug/L			994767	960453	0
	Ag	107	0.001	ug/L	0.000	29	18	29	10
	Cd	111	0.002	ug/L	0.001	43	151	158	3
	Cd	114	-0.000	ug/L	0.000	295	29	26	18
	Sb	121	0.062	ug/L	0.002	3	112	999	3
	Sb	123	0.061	ug/L	0.005	7	86	755	7
	Ba	135	0.000	ug/L	0.001	375	24	25	17
	Ba	137	0.000	ug/L	0.001	210	45	46	12
>	Tb	159		ug/L			1071918	1043297	0
	Tl	205	0.002	ug/L	0.001	38	36	90	23
	Pb	208	0.001	ug/L	0.000	56	137	158	8
	Bi	209		ug/L			2499506	2466452	1
	Th	232	0.074	ug/L	0.013	17	291	3274	15
	U	238	0.001	ug/L	0.000	12	11	64	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:28:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1115072	0
	Be	9	0.002	ug/L	0.001	29	15	23	11
	C	13		ug/L			81834	83304	2
	Cl	37		ug/L			7475003	7265210	0
>	Sc	45		ug/L			1140306	1132779	1
	V	51	0.476	ug/L	0.021	4	7400	17467	1
	V-1	51	0.507	ug/L	0.005	1	141	10915	1
	Cr	52	0.189	ug/L	0.046	24	21781	24898	1
	Cr	53	0.296	ug/L	0.026	8	139	718	8
	Mn	55	70.956	ug/L	0.604	0	374	1712963	1
	Co	59	0.105	ug/L	0.002	1	55	1811	3
>	Ge	72		ug/L			554222	544886	1
	Ni	60	0.294	ug/L	0.016	5	33	1090	3
	Ni	62	0.159	ug/L	0.010	6	257	332	2
	Cu	63	5.482	ug/L	0.107	1	218	41376	1
	Cu	65	5.044	ug/L	0.033	0	43	16971	2
	Zn	66	12.053	ug/L	0.333	2	357	26847	1
	Zn	67	11.009	ug/L	0.223	2	58	3994	2
	Zn	68	12.443	ug/L	0.201	1	672	19254	1
	As	75	1398.091	ug/L	14.983	1	1162	2632157	1
	As-1	75	1423.070	ug/L	15.281	1	6863	2637809	1
	Se	82	-0.063	ug/L	0.094	149	-18	-32	63
	Se	78	0.061	ug/L	0.179	293	7005	6919	0
	Mo	98	0.934	ug/L	0.027	2	12	3985	3
	Y	89		ug/L			368460	362029	2
	Kr	83		ug/L			1734	1730	4
>	In	115		ug/L			994767	953064	0
	Ag	107	0.002	ug/L	0.001	46	18	36	23
	Cd	111	0.015	ug/L	0.002	14	151	220	5
	Cd	114	0.018	ug/L	0.001	5	29	245	5
	Sb	121	0.065	ug/L	0.002	3	112	1042	2
	Sb	123	0.067	ug/L	0.005	8	86	806	7
	Ba	135	0.168	ug/L	0.001	0	24	681	0
	Ba	137	0.166	ug/L	0.003	1	45	1156	1
>	Tb	159		ug/L			1071918	1057622	1
	Tl	205	0.006	ug/L	0.003	48	36	221	39
	Pb	208	0.073	ug/L	0.002	2	137	3220	1
	Bi	209		ug/L			2499506	2361900	0
	Th	232	0.061	ug/L	0.009	15	291	2755	12
	U	238	0.006	ug/L	0.000	2	11	255	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 A-L REN
Sample Dil Factor: 500
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:34:45
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1114626	1
	Be	9	0.002	ug/L	0.001	74	15	20	19
	C	13		ug/L			81834	83965	1
	Cl	37		ug/L			7475003	7219766	0
>	Sc	45		ug/L			1140206	1098316	0
	V	51	0.029	ug/L	0.005	18	7400	7729	1
	V-1	51	0.018	ug/L	0.001	7	141	505	6
	Cr	52	0.083	ug/L	0.018	21	21781	22375	1
	Cr	53	0.044	ug/L	0.004	8	139	218	2
	Mn	55	1.537	ug/L	0.015	1	374	36330	1
	Co	59	0.003	ug/L	0.001	28	55	105	13
>	Ge	72		ug/L			554222	540292	1
	Ni	60	0.021	ug/L	0.004	17	33	106	10
	Ni	62	-0.002	ug/L	0.041	2534	257	249	7
	Cu	63	0.333	ug/L	0.019	5	218	2692	3
	Cu	65	0.330	ug/L	0.004	1	43	1140	2
	Zn	66	8.668	ug/L	0.162	1	357	19245	0
	Zn	67	8.295	ug/L	0.142	1	58	2998	1
	Zn	68	8.582	ug/L	0.170	1	672	13370	1
	As	75	24.973	ug/L	0.526	2	1162	47726	0
	As-1	75	25.479	ug/L	0.589	2	6863	53392	0
	Se	82	-0.056	ug/L	0.026	45	-18	-30	18
	Se	78	0.182	ug/L	0.241	132	7005	6927	0
	Mo	98	0.022	ug/L	0.003	12	12	105	9
	Y	89		ug/L			368460	363853	2
	Kr	83		ug/L			1734	1716	1
>	In	115		ug/L			994767	957027	0
	Ag	107	0.001	ug/L	0.000	20	18	25	6
	Cd	111	0.002	ug/L	0.000	15	151	156	0
	Cd	114	0.001	ug/L	0.000	40	29	43	14
	Sb	121	0.008	ug/L	0.001	9	112	221	5
	Sb	123	0.009	ug/L	0.001	6	86	175	3
	Ba	135	0.044	ug/L	0.004	8	24	197	7
	Ba	137	0.043	ug/L	0.003	6	45	335	5
>	Tb	159		ug/L			1071918	1050979	0
	Tl	205	0.000	ug/L	0.000	31	36	44	6
	Pb	208	0.073	ug/L	0.003	4	137	3216	3
	Bi	209		ug/L			2499506	2449449	0
	Th	232	0.004	ug/L	0.001	27	291	454	10
	U	238	0.000	ug/L	0.000	25	11	25	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 A REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:40:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1121234	0
	Be	9	0.001	ug/L	0.002	126	15	20	35
	C	13		ug/L			81834	82100	1
	Cl	37		ug/L			7475003	7149241	1
>	Sc	45		ug/L			1140206	1105092	1
	V	51	0.058	ug/L	0.010	17	7400	8379	2
	V-1	51	0.057	ug/L	0.002	3	141	1312	3
	Cr	52	0.065	ug/L	0.023	36	21781	22201	2
	Cr	53	0.060	ug/L	0.015	24	139	249	12
	Mn	55	7.100	ug/L	0.205	2	374	167501	1
	Co	59	0.013	ug/L	0.001	8	55	273	5
>	Ge	72		ug/L			554222	537912	1
	Ni	60	0.044	ug/L	0.002	4	33	187	2
	Ni	62	-0.074	ug/L	0.059	79	257	212	12
	Cu	63	0.767	ug/L	0.013	1	218	5894	0
	Cu	65	0.732	ug/L	0.018	2	43	2465	0
	Zn	66	21.655	ug/L	0.203	0	357	47353	1
	Zn	67	19.967	ug/L	0.282	1	58	7105	0
	Zn	68	22.130	ug/L	0.706	3	672	33289	1
	As	75	122.553	ug/L	1.954	1	1162	228803	1
	As-1	75	124.766	ug/L	2.036	1	6863	234383	1
	Se	82	0.022	ug/L	0.059	264	-18	-13	96
	Se	78	0.079	ug/L	0.161	204	7005	6841	0
	Mo	98	0.096	ug/L	0.004	4	12	416	3
	Y	89		ug/L			368460	362444	1
	Kr	83		ug/L			1734	1662	1
>	In	115		ug/L			994767	958146	0
	Ag	107	0.001	ug/L	0.000	37	18	28	12
	Cd	111	0.002	ug/L	0.001	58	151	157	3
	Cd	114	0.005	ug/L	0.001	29	29	84	18
	Sb	121	0.011	ug/L	0.001	10	112	262	5
	Sb	123	0.010	ug/L	0.002	22	86	187	12
	Ba	135	0.051	ug/L	0.004	7	24	224	6
	Ba	137	0.052	ug/L	0.003	6	45	393	4
>	Tb	159		ug/L			1071918	1045147	0
	Tl	205	0.002	ug/L	0.000	22	36	98	14
	Pb	208	0.100	ug/L	0.003	3	137	4330	2
	Bi	209		ug/L			2499506	2436260	0
	Th	232	0.005	ug/L	0.001	13	291	470	6
	U	238	0.001	ug/L	0.000	5	11	56	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 ADUP REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:45:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1180370	1100209	0
[	Be	9	0.000	ug/L	0.001	216	15	15	18
	C	13		ug/L			81834	79813	1
	Cl	37		ug/L			7475003	7149954	2
[>	Sc	45		ug/L			1140206	1080137	1
[	V	51	0.051	ug/L	0.011	20	7400	8054	3
[	V-1	51	0.057	ug/L	0.000	0	141	1292	1
[	Cr	52	0.018	ug/L	0.036	199	21781	20936	3
[	Cr	53	0.038	ug/L	0.005	12	139	203	5
[	Mn	55	7.572	ug/L	0.218	2	374	174560	1
[	Co	59	0.012	ug/L	0.000	2	55	246	2
[>	Ge	72		ug/L			554222	542806	1
[	Ni	60	0.036	ug/L	0.004	12	33	160	9
[	Ni	62	-0.093	ug/L	0.018	18	257	205	5
[	Cu	63	0.644	ug/L	0.005	0	218	5030	1
[	Cu	65	0.609	ug/L	0.011	1	43	2077	2
[	Zn	66	2.650	ug/L	0.009	0	357	6155	1
[	Zn	67	2.415	ug/L	0.074	3	58	917	2
[	Zn	68	2.691	ug/L	0.061	2	672	4663	0
[	As	75	128.442	ug/L	1.696	1	1162	241925	0
[	As-1	75	130.751	ug/L	1.735	1	6863	247537	0
[	Se	82	-0.008	ug/L	0.022	283	-18	-19	23
[	Se	78	0.069	ug/L	0.064	92	7005	6899	1
[	Mo	98	0.101	ug/L	0.002	2	12	438	1
	Y	89		ug/L			368460	368741	2
	Kr	83		ug/L			1734	1715	2
[>	In	115		ug/L			994767	943863	1
[	Ag	107	-0.000	ug/L	0.000	223	18	16	22
[	Cd	111	0.001	ug/L	0.003	328	151	147	8
[	Cd	114	0.002	ug/L	0.001	53	29	51	25
[	Sb	121	0.005	ug/L	0.000	9	112	177	4
[	Sb	123	0.003	ug/L	0.001	25	86	119	7
[	Ba	135	0.028	ug/L	0.003	11	24	133	10
[	Ba	137	0.027	ug/L	0.000	0	45	220	0
[>	Tb	159		ug/L			1071918	1024260	1
[	Tl	205	0.000	ug/L	0.000	1409	36	34	10
[	Pb	208	0.025	ug/L	0.001	5	137	1156	5
[	Bi	209		ug/L			2499306	2399211	0
[	Th	232	0.001	ug/L	0.002	159	291	318	19
[	U	238	0.000	ug/L	0.000	15	11	31	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 ASPK REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:49:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1180370	1112673	1
[	Be	9	0.561	ug/L	0.011	1	15	2060	0
	C	13		ug/L			81834	80451	0
	Cl	37		ug/L			747503	7276530	0
[>	Sc	45		ug/L			1140206	1091038	0
[	V	51	0.567	ug/L	0.001	0	7400	18689	0
[	V-1	51	0.562	ug/L	0.003	0	141	11629	0
[	Cr	52	0.567	ug/L	0.008	1	21781	30265	0
[	Cr	53	0.547	ug/L	0.009	1	139	1162	0
[	Mn	55	8.018	ug/L	0.173	2	374	186758	2
[	Co	59	0.533	ug/L	0.013	2	55	8669	2
[>	Ge	72		ug/L			554222	534078	1
[	Ni	60	0.550	ug/L	0.006	1	33	1971	1
[	Ni	62	0.424	ug/L	0.044	10	257	456	2
[	Cu	63	1.223	ug/L	0.021	1	218	9211	2
[	Cu	65	1.161	ug/L	0.030	2	43	3858	1
[	Zn	66	4.422	ug/L	0.136	3	357	9872	1
[	Zn	67	4.012	ug/L	0.144	3	58	1462	2
[	Zn	68	4.436	ug/L	0.150	3	672	7142	1
[	As	75	130.996	ug/L	3.319	2	1162	242686	0
[	As-1	75	133.364	ug/L	3.433	2	6863	248232	0
[	Se	82	1.865	ug/L	0.053	2	18	384	1
[	Se	78	2.038	ug/L	0.318	15	7005	7847	0
[	Mo	98	0.102	ug/L	0.006	5	12	437	6
	Y	89		ug/L			368460	360854	1
	Kr	83		ug/L			1734	1700	2
[>	In	115		ug/L			994767	963762	0
[	Ag	107	0.548	ug/L	0.015	2	18	5695	3
[	Cd	111	0.527	ug/L	0.009	1	151	2743	1
[	Cd	114	0.519	ug/L	0.010	1	29	6379	1
[	Sb	121	0.004	ug/L	0.001	31	112	164	9
[	Sb	123	0.003	ug/L	0.001	25	86	120	7
[	Ba	135	0.540	ug/L	0.009	1	24	2162	2
[	Ba	137	0.527	ug/L	0.009	1	45	3627	1
[>	Tb	159		ug/L			1071918	1038184	0
[	Tl	205	0.521	ug/L	0.010	1	36	16838	1
[	Pb	208	0.559	ug/L	0.009	1	137	23415	1
[	Bi	209		ug/L			2499506	2426814	0
[	Th	232	0.455	ug/L	0.007	1	291	18501	1
[	U	238	0.514	ug/L	0.002	0	11	21199	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 D REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:53:18
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1180370	1135607	0
[	Be	9	0.001	ug/L	0.001	228	15	17	30
	C	13		ug/L			81834	85461	2
	Cl	37		ug/L			7475003	7289331	2
[>	Sc	45		ug/L			1140206	1115015	1
[	V	51	0.199	ug/L	0.009	4	7400	11394	0
[	V-1	51	0.212	ug/L	0.003	1	141	4565	0
[	Cr	52	0.087	ug/L	0.028	32	21781	22763	0
[	Cr	53	0.131	ug/L	0.008	5	139	388	2
[	Mn	55	8.280	ug/L	0.282	3	374	197002	1
[	Co	59	0.061	ug/L	0.005	8	55	1055	6
[>	Ge	72		ug/L			554222	536001	1
[	Ni	60	0.250	ug/L	0.014	5	33	915	4
[	Ni	62	-0.075	ug/L	0.013	17	257	211	3
[	Cu	63	0.807	ug/L	0.039	4	218	6171	4
[	Cu	65	0.674	ug/L	0.011	1	43	2266	1
[	Zn	66	3.951	ug/L	0.043	1	357	8890	0
[	Zn	67	3.527	ug/L	0.039	1	58	1297	1
[	Zn	68	4.124	ug/L	0.102	2	672	6711	0
[	As	75	93.479	ug/L	1.861	1	1162	174149	0
[	As-1	75	95.181	ug/L	1.969	2	6863	179723	0
[	Se	82	0.021	ug/L	0.040	188	-18	-13	63
[	Se	78	0.218	ug/L	0.272	124	7005	6891	0
[	Mo	98	3.459	ug/L	0.039	1	12	14483	0
	Y	89		ug/L			368460	363493	0
	Kr	83		ug/L			1734	1733	1
[>	In	115		ug/L			994767	965832	1
[	Ag	107	0.013	ug/L	0.000	0	18	154	1
[	Cd	111	0.056	ug/L	0.007	12	151	425	6
[	Cd	114	0.056	ug/L	0.002	3	29	719	3
[	Sb	121	0.127	ug/L	0.006	5	112	1961	3
[	Sb	123	0.129	ug/L	0.008	6	86	1500	5
[	Ba	135	1.192	ug/L	0.049	4	24	4751	3
[	Ba	137	1.163	ug/L	0.017	1	45	7967	1
[>	Tb	159		ug/L			1071918	1045352	1
[	Tl	205	0.001	ug/L	0.000	23	36	81	12
[	Pb	208	0.024	ug/L	0.001	5	137	1151	3
[	Bi	209		ug/L			2499506	2404144	1
[	Th	232	0.012	ug/L	0.004	31	291	768	19
[	U	238	0.021	ug/L	0.001	3	11	873	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 F REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 16, 2012 14:58:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1180370	1128496	1
[	Be	9	0.002	ug/L	0.001	38	15	23	15
	C	13		ug/L			81834	83647	1
	Cl	37		ug/L			7475003	7326405	0
[>	Sc	45		ug/L			1140206	1106599	1
[	V	51	0.224	ug/L	0.013	5	7400	11821	1
[	V-1	51	0.252	ug/L	0.009	3	141	5364	2
[	Cr	52	0.058	ug/L	0.018	31	21781	22106	0
[	Cr	53	0.156	ug/L	0.006	3	139	433	3
[	Mn	55	77.652	ug/L	1.209	1	374	1831219	1
[	Co	59	0.052	ug/L	0.002	4	55	911	4
[>	Ge	72		ug/L			554022	539864	0
[	Ni	60	0.127	ug/L	0.008	6	33	485	5
[	Ni	62	-0.153	ug/L	0.043	28	257	174	11
[	Cu	63	0.344	ug/L	0.005	1	218	2773	1
[	Cu	65	0.259	ug/L	0.002	0	43	904	1
[	Zn	66	15.355	ug/L	0.469	3	357	33797	2
[	Zn	67	14.267	ug/L	0.361	2	58	5111	2
[	Zn	68	15.524	ug/L	0.534	3	672	23633	2
[	As	75	49.196	ug/L	0.862	1	1162	92858	1
[	As-1	75	50.100	ug/L	0.868	1	6863	98458	1
[	Se	82	-0.036	ug/L	0.069	190	-18	-26	57
[	Se	78	0.063	ug/L	0.092	146	7005	6857	0
[	Mo	98	0.060	ug/L	0.006	9	12	262	8
	Y	89		ug/L			368460	362845	2
	Kr	83		ug/L			1734	1698	1
[>	In	115		ug/L			994767	956752	1
[	Ag	107	0.000	ug/L	0.000	295	18	19	25
[	Cd	111	0.007	ug/L	0.003	43	151	181	7
[	Cd	114	0.007	ug/L	0.000	3	29	115	3
[	Sb	121	0.007	ug/L	0.002	27	112	209	12
[	Sb	123	0.007	ug/L	0.001	18	86	159	7
[	Ba	135	0.352	ug/L	0.019	5	24	1406	4
[	Ba	137	0.356	ug/L	0.006	1	45	2448	2
[>	Tb	159		ug/L			1071918	1048401	0
[	Tl	205	0.001	ug/L	0.000	26	36	81	14
[	Pb	208	0.035	ug/L	0.001	2	137	1604	1
[	Bi	209		ug/L			2499506	2417138	0
[	Th	232	0.010	ug/L	0.001	14	291	703	9
[	U	238	0.000	ug/L	0.000	40	11	26	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 M REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 16, 2012 15:03:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1107100	2
	Be	9	0.000	ug/L	0.002	1126	15	15	46
	C	13		ug/L			81834	82151	2
	Cl	37		ug/L			7475003	7198814	1
>	Sc	45		ug/L			1140206	1120427	0
	V	51	0.180	ug/L	0.006	3	7400	11060	0
	V-1	51	0.201	ug/L	0.003	1	141	4359	1
	Cr	52	0.056	ug/L	0.016	28	21781	22353	0
	Cr	53	0.127	ug/L	0.011	8	139	383	5
	Mn	55	8.525	ug/L	0.182	2	374	203890	2
	Co	59	0.063	ug/L	0.003	5	55	1103	4
>	Ge	72		ug/L			554222	543028	1
	Ni	60	0.215	ug/L	0.004	1	33	803	2
	Ni	62	-0.166	ug/L	0.040	24	257	168	12
	Cu	63	0.616	ug/L	0.007	1	218	4824	1
	Cu	65	0.505	ug/L	0.022	4	43	1729	4
	Zn	66	3.862	ug/L	0.040	1	357	8812	1
	Zn	67	3.616	ug/L	0.130	3	58	1346	3
	Zn	68	4.213	ug/L	0.009	0	672	6932	1
	As	75	94.227	ug/L	1.817	1	1162	177843	0
	As-1	75	95.854	ug/L	1.826	1	6863	183329	0
	Se	82	0.057	ug/L	0.132	229	-18	-5	484
	Se	78	-0.080	ug/L	0.052	64	7005	6819	0
	Mo	98	3.554	ug/L	0.099	2	12	15070	1
	Y	89		ug/L			368460	361063	1
	Kr	83		ug/L			1734	1728	2
>	In	115		ug/L			994767	938492	1
	Ag	107	0.003	ug/L	0.000	8	18	47	5
	Cd	111	0.057	ug/L	0.005	7	151	418	4
	Cd	114	0.055	ug/L	0.002	2	29	682	3
	Sb	121	0.122	ug/L	0.003	2	112	1835	1
	Sb	123	0.122	ug/L	0.003	2	86	1387	1
	Ba	135	1.250	ug/L	0.020	1	24	4842	0
	Ba	137	1.244	ug/L	0.006	0	45	8274	1
>	Tb	159		ug/L			1071918	1029803	1
	Tl	205	0.001	ug/L	0.000	2	36	79	2
	Pb	208	0.032	ug/L	0.001	4	137	1447	3
	Bi	209		ug/L			2499506	2353816	0
	Th	232	0.001	ug/L	0.001	67	291	329	9
	U	238	0.020	ug/L	0.001	4	11	820	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 O REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 16, 2012 15:08:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1129570	1
	Be	9	0.002	ug/L	0.001	53	15	21	17
	C	13		ug/L			81834	83430	1
	Cl	37		ug/L			7475003	7456274	0
>	Sc	45		ug/L			1140206	1118305	1
	V	51	0.194	ug/L	0.006	3	7400	11317	0
	V-1	51	0.231	ug/L	0.001	0	141	4984	1
	Cr	52	0.040	ug/L	0.011	27	21781	22039	1
	Cr	53	0.170	ug/L	0.007	4	139	465	4
	Mn	55	76.406	ug/L	1.254	1	374	1820580	0
	Co	59	0.050	ug/L	0.002	4	55	875	4
>	Ge	72		ug/L			554222	535017	1
	Ni	60	0.121	ug/L	0.002	1	33	458	0
	Ni	62	-0.175	ug/L	0.012	7	257	162	3
	Cu	63	0.206	ug/L	0.005	2	218	1726	1
	Cu	65	0.119	ug/L	0.002	1	43	434	2
	Zn	66	11.014	ug/L	0.441	4	357	24115	2
	Zn	67	9.940	ug/L	0.277	2	58	3546	1
	Zn	68	11.266	ug/L	0.319	2	672	17174	1
	As	75	49.798	ug/L	0.875	1	1162	93128	0
	As-1	75	50.705	ug/L	0.932	1	6863	98664	0
	Se	82	0.015	ug/L	0.017	110	-18	-14	24
	Se	78	0.103	ug/L	0.170	165	7005	6817	0
	Mo	98	0.054	ug/L	0.003	6	12	237	4
	Y	89		ug/L			368460	367741	0
	Kr	83		ug/L			1734	1690	1
>	In	115		ug/L			994767	950242	1
	Ag	107	0.000	ug/L	0.000	219	18	19	13
	Cd	111	0.006	ug/L	0.001	9	151	171	2
	Cd	114	0.000	ug/L	0.000	173	29	31	16
	Sb	121	0.004	ug/L	0.001	29	112	161	10
	Sb	123	0.003	ug/L	0.000	7	86	119	1
	Ba	135	0.348	ug/L	0.004	1	24	1382	2
	Ba	137	0.354	ug/L	0.002	0	45	2418	1
>	Tb	159		ug/L			1071918	1037833	0
	Tl	205	0.001	ug/L	0.000	37	36	73	19
	Pb	208	0.023	ug/L	0.001	2	137	1106	1
	Bi	209		ug/L			2499506	2390576	0
	Th	232	0.005	ug/L	0.001	17	291	470	7
	U	238	0.000	ug/L	0.000	47	11	19	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 15:14:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1124549	0
	Be	9	-0.000	ug/L	0.001	1490	15	14	28
	C	13		ug/L			81834	82014	0
	Cl	37		ug/L			7475003	7365606	1
>	Sc	45		ug/L			1140206	1071245	2
	V	51	0.019	ug/L	0.014	76	7400	7322	1
	V-1	51	0.008	ug/L	0.000	5	141	296	0
	Cr	52	0.077	ug/L	0.044	56	21781	21714	1
	Cr	53	0.041	ug/L	0.006	13	139	207	6
	Mn	55	0.028	ug/L	0.001	3	374	984	1
	Co	59	0.000	ug/L	0.001	1536	55	52	21
>	Ge	72		ug/L			554222	534378	1
	Ni	60	0.017	ug/L	0.002	12	33	91	7
	Ni	62	-0.227	ug/L	0.014	6	257	136	6
	Cu	63	0.247	ug/L	0.011	4	218	2031	5
	Cu	65	0.257	ug/L	0.007	2	43	886	2
	Zn	66	6.792	ug/L	0.155	2	357	14988	1
	Zn	67	6.293	ug/L	0.212	3	58	2262	2
	Zn	68	6.918	ug/L	0.047	0	672	10786	1
	As	75	0.043	ug/L	0.023	53	1162	1199	2
	As-1	75	0.062	ug/L	0.038	60	6863	6729	0
	Se	82	0.069	ug/L	0.138	199	-18	-3	890
	Se	78	0.203	ug/L	0.123	60	7005	6863	0
	Mo	98	0.003	ug/L	0.001	35	12	25	17
	Y	89		ug/L			368460	357840	1
	Kr	83		ug/L			1734	1720	4
>	In	115		ug/L			994767	950857	0
	Ag	107	0.000	ug/L	0.000	172	18	20	20
	Cd	111	0.003	ug/L	0.002	73	151	158	6
	Cd	114	0.001	ug/L	0.000	17	29	41	5
	Sb	121	-0.001	ug/L	0.001	233	112	100	16
	Sb	123	-0.001	ug/L	0.001	52	86	67	11
	Ba	135	0.047	ug/L	0.004	8	24	207	8
	Ba	137	0.041	ug/L	0.004	8	45	319	7
>	Tb	159		ug/L			1071918	1029724	1
	Tl	205	0.000	ug/L	0.000	365	36	36	20
	Pb	208	0.073	ug/L	0.003	3	137	3160	2
	Bi	209		ug/L			2499506	2410402	0
	Th	232	-0.004	ug/L	0.000	3	291	115	6
	U	238	-0.000	ug/L	0.000	37	11	8	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~GCV6~~ QCV6 5/16/12 JW
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 15:20:57
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1105327	0
	Be	9	-0.000	ug/L	0.000	71	15	13	7
	C	13		ug/L			81834	79238	2
	Cl	37		ug/L			7475003	7219766	0
>	Sc	45		ug/L			1140206	1053160	2
	V	51	-0.006	ug/L	0.005	85	7400	6719	1
	V-1	51	-0.001	ug/L	0.000	8	141	103	3
	Cr	52	-0.018	ug/L	0.016	85	21781	19817	1
	Cr	53	-0.003	ug/L	0.002	60	139	123	4
	Mn	55	0.001	ug/L	0.001	164	374	358	3
	Co	59	-0.000	ug/L	0.000	85	55	44	14
>	Ge	72		ug/L			554222	527619	1
	Ni	60	0.000	ug/L	0.001	576	33	32	11
	Ni	62	-0.279	ug/L	0.023	8	257	109	11
	Cu	63	-0.015	ug/L	0.001	8	218	102	7
	Cu	65	-0.003	ug/L	0.001	42	43	30	15
	Zn	66	0.048	ug/L	0.010	20	357	441	4
	Zn	67	0.033	ug/L	0.023	70	58	67	12
	Zn	68	0.010	ug/L	0.011	104	672	655	2
	As	75	0.023	ug/L	0.024	103	1162	1148	2
	As-1	75	0.030	ug/L	0.058	192	6863	6587	0
	Se	82	0.052	ug/L	0.042	80	-18	-6	135
	Se	78	0.109	ug/L	0.171	157	7005	6726	0
	Mo	98	0.001	ug/L	0.001	173	12	14	34
	Y	89		ug/L			368460	363099	1
	Kr	83		ug/L			1734	1672	1
>	In	115		ug/L			967	933189	0
	Ag	107	0.000	ug/L	0.000	140	18	19	13
	Cd	111	0.002	ug/L	0.001	33	151	153	2
	Cd	114	-0.000	ug/L	0.000	66	29	22	16
	Sb	121	-0.005	ug/L	0.000	8	112	37	14
	Sb	123	-0.004	ug/L	0.001	13	86	34	18
	Ba	135	0.002	ug/L	0.002	108	24	29	21
	Ba	137	0.000	ug/L	0.001	313	45	44	14
>	Tb	159		ug/L			1071918	1017284	0
	Tl	205	-0.000	ug/L	0.000	40	36	26	12
	Pb	208	0.000	ug/L	0.000	230	137	134	6
	Bi	209		ug/L			2499506	2391059	0
	Th	232	-0.005	ug/L	0.000	5	291	90	9
	U	238	-0.000	ug/L	0.000	7	11	3	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~CCB6~~ ccv6 5/16/2012
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 16, 2012 15:27:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120516.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1180370	1108560	0
	Be	9	53.547	ug/L	0.688	1	15	194531	1
	C	13		ug/L			81834	80077	1
	Cl	37		ug/L			7475003	7479833	0
>	Sc	45		ug/L			1140206	1080721	1
	V	51	48.505	ug/L	0.439	0	7400	989770	0
	V-1	51	48.630	ug/L	0.543	1	141	985802	0
	Cr	52	49.475	ug/L	0.450	0	21781	835049	2
	Cr	53	49.909	ug/L	0.636	1	139	93091	2
	Mn	55	49.180	ug/L	0.822	1	374	1132651	0
	Co	59	50.148	ug/L	0.072	0	55	803065	1
>	Ge	72		ug/L			554222	523043	1
	Ni	60	50.699	ug/L	1.147	2	33	174900	0
	Ni	62	49.593	ug/L	0.816	1	257	24133	3
	Cu	63	50.473	ug/L	1.285	2	218	363957	0
	Cu	65	50.582	ug/L	0.412	0	43	162967	0
	Zn	66	50.230	ug/L	0.360	0	357	106355	1
	Zn	67	50.288	ug/L	0.466	0	58	17319	2
	Zn	68	52.056	ug/L	1.650	3	672	75276	1
	As	75	51.504	ug/L	0.432	0	1162	94136	1
	As-1	75	50.599	ug/L	0.637	1	6863	96272	0
	Se	82	56.346	ug/L	0.301	0	-18	11884	1
	Se	78	51.231	ug/L	1.092	2	7005	33655	0
	Mo	98	52.902	ug/L	1.858	3	12	215913	2
	Y	89		ug/L			368460	355067	0
	Kr	83		ug/L			1734	1698	1
>	In	115		ug/L			994767	933677	0
	Ag	107	57.066	ug/L	1.222	2	18	573016	2
	Cd	111	50.788	ug/L	0.874	1	151	242668	1
	Cd	114	50.460	ug/L	0.353	0	29	597786	0
	Sb	121	50.846	ug/L	0.372	0	112	715768	0
	Sb	123	51.416	ug/L	0.403	0	86	546829	0
	Ba	135	49.414	ug/L	0.040	0	24	189570	0
	Ba	137	49.329	ug/L	0.309	0	45	324892	0
>	Tb	159		ug/L			1071918	1035384	0
	Tl	205	50.035	ug/L	0.505	1	36	1608081	1
	Pb	208	50.785	ug/L	0.492	0	137	2108219	0
	Bi	209		ug/L			2499506	2334004	0
	Th	232	51.598	ug/L	1.934	3	291	2060990	3
	U	238	52.304	ug/L	0.379	0	11	2150422	0

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.17.12 **Analyst:** JB **Page:** 1 of 2

All corrections made by analyst unless otherwise noted. 5.21.12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STDC			2930-4
		1			2933-5
		2			2935-12
		3			-13
		4			-14
		5			-15
		RinseSample			r = 0.9996
		ICV		✓	2930-2
		ICB		✓	
		CCV1		✓	
		CCB1		✓	
		LowCheck			
		ICSA			
		ICSAB			
		LR200		✓	
		B1			
		B2			
		CCV2		✓	
		CCB2			
		V527 C	REN	2	Agonly
		B2			
		New Blank SW			
		CCV4		✓	
		CCB4			62Ni high

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.17.12 **Analyst:** JB **Page:** 2 **of** 2

All corrections made by analyst unless otherwise noted. 5.17.12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US52 J-L	REN	10	Notes (Cr, Cu, Ag, Zn)
		J-L		500	Ag
		J		100	
		JDUP			
		JSPK			SIL Ag
		B3			
		CCV 4	5/21/12	JB	
		CCB 4			
		US52 G-L	REN	10	Zn
		G		2	
		GDUP			(4.65) 5.17.12 Jbs Err
		GSPK			
		GSPK			0.06SPK (1/10)
		B5			
		CCV 5			
		CCB 5	5/21/12	JB	
		Rinse/DI			

JB 6.17.12

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.17.12

1N2	Analyst JB 5.18.12	Peer BWS 5.18	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	see lab
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	—	—	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	—	—	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	—	—	

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/17/2012 9:29:38 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

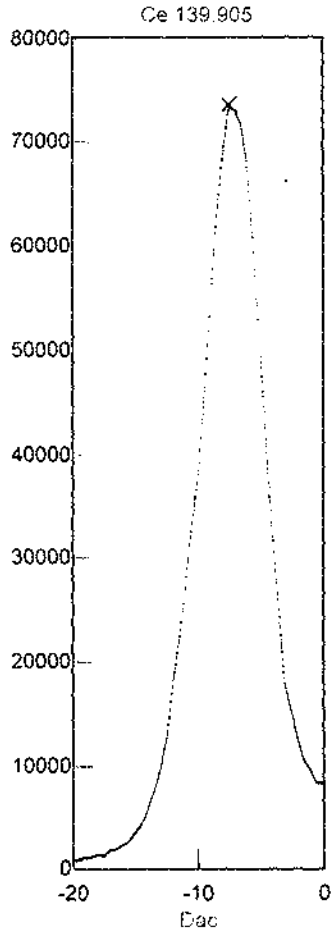
Obtained Intensity (Be 9.0122): 4631.42
Obtained Intensity (Mg 23.985): 35573.71
Obtained Intensity (In 114.904): 73710.59
Obtained Intensity (Pb 207.977): 32476.63
Obtained Intensity (U 238.05): 58885.05
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (CeO 155.9 / Ce 139.905): 0.012 (=869.25 / 74340.73)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.011 (=839.71 / 74340.73)

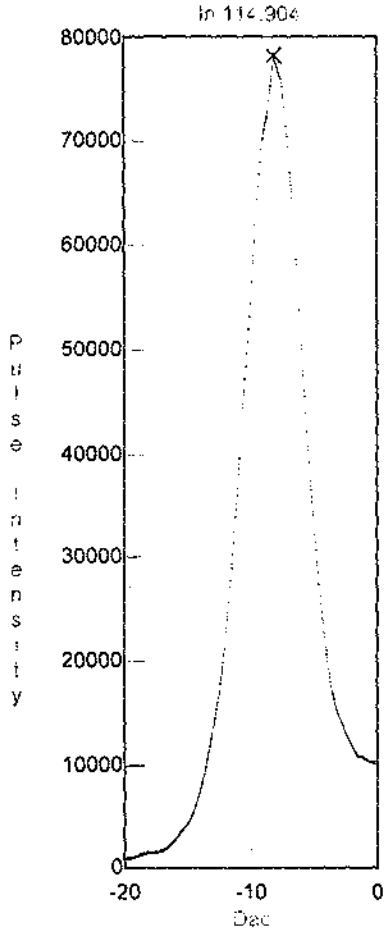
[Passed] Optimum value(s): N/A

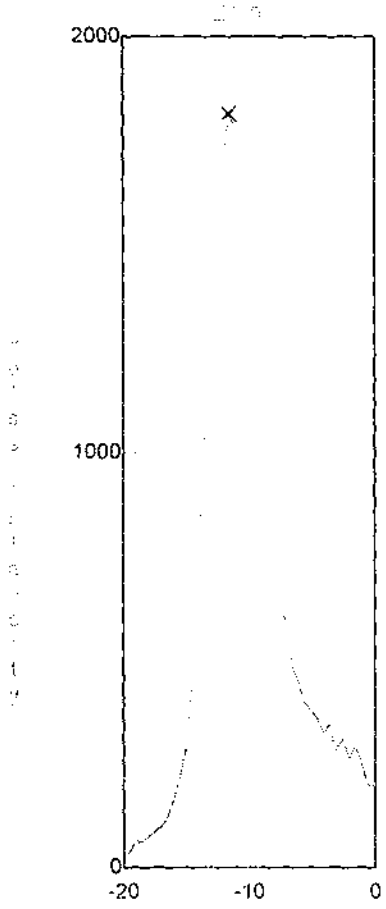
End Time: 5/17/2012 9:32:13 AM

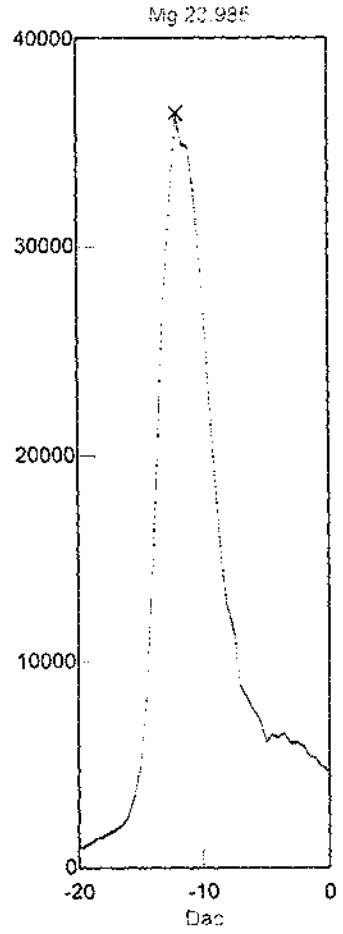
US52 : 00994

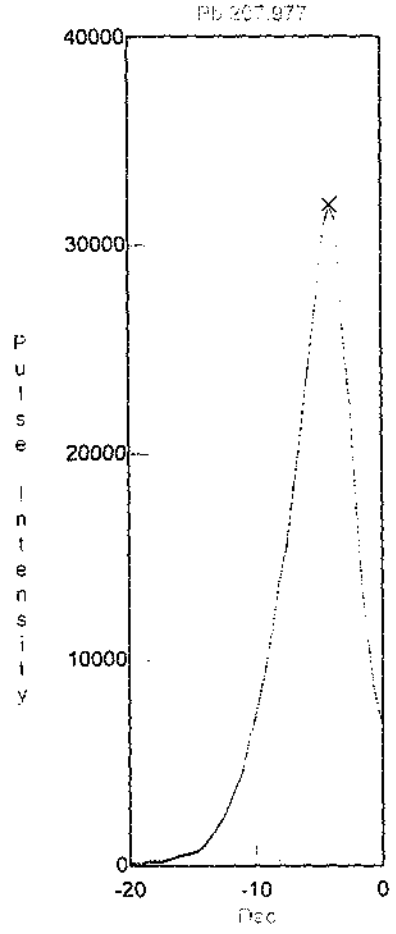
5/17/12

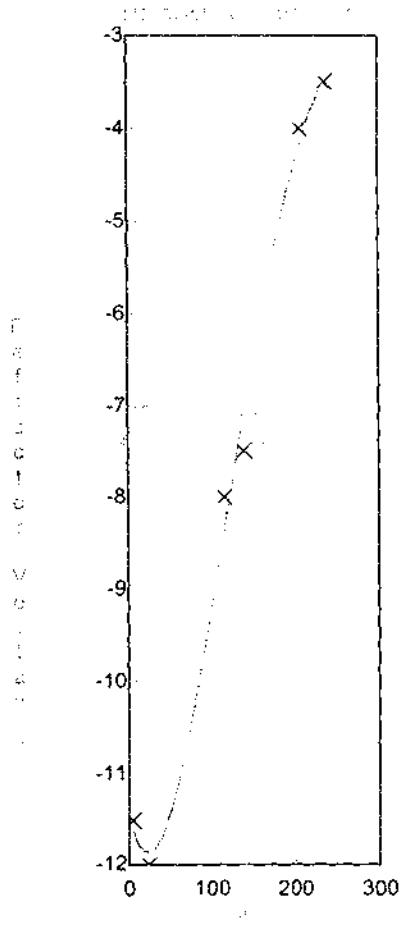

Ce 139.905
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


2000
1000
0
-20
-10
0


Mg 22.995
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/17/2012 9:24:52 AM
End Time: 5/17/2012 9:29:04 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.993; Intercept = -11.36

US52 : 00996

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/17/2012 9:22:19 AM
End Time: 5/17/2012 9:24:31 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.726)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.703)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.707)

US52 : 00997

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/17/2012 9:21:25 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.26 mm	-0.64 mm	73661.13

End Time: 5/17/2012 9:22:06 AM

US52 : 00998

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/17/2012 9:17:42 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 3378.55
        Obtained Intensity (Mg 23.985): 27050.77
        Obtained Intensity (In 114.904): 59552.17
        Obtained Intensity (Pb 207.977): 26008.93
        Obtained Intensity (U 238.05): 45723.10
        Obtained Intensity (Bkgd 220): 0.03
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.010 (=591.55 / 59869.83)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.009 (=533.28 / 59869.83)
[Passed] Optimum value(s): N/A

End Time: 5/17/2012 9:20:49 AM

US52 : 00999

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:03:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L				1076522	2
[	Be	9		ug/L				12	46
	C	13		ug/L				59558	2
	Cl	37		ug/L				4587445	1
[>	Sc	45		ug/L				952082	3
[	V	51		ug/L				4902	2
[	V-1	51		ug/L				71	5
[	Cr	52		ug/L				14444	2
[	Cr	53		ug/L				87	13
[	Mn	55		ug/L				432	3
[	Co	59		ug/L				47	13
[>	Ge	72		ug/L				478848	1
[	Ni	60		ug/L				79	1
[	Ni	62		ug/L				131	15
[	Cu	63		ug/L				237	8
[	Cu	65		ug/L				88	35
[	Zn	66		ug/L				584	8
[	Zn	67		ug/L				90	14
[	Zn	68		ug/L				887	5
[	As	75		ug/L				1089	5
[	As-1	75		ug/L				7286	1
[	Se	82		ug/L				7	47
[	Se	78		ug/L				7339	1
[	Mo	98		ug/L				26	23
	Y	89		ug/L				336847	2
	Kr	83		ug/L				1447	3
[>	In	115		ug/L				869512	1
[	Ag	107		ug/L				14	26
[	Cd	111		ug/L				78	8
[	Cd	114		ug/L				23	29
[	Sb	121		ug/L				404	14
[	Sb	123		ug/L				325	16
[	Ba	135		ug/L				140	7
[	Ba	137		ug/L				229	6
[>	Tb	159		ug/L				1016351	0
[	Tl	205		ug/L				70	8
[	Pb	208		ug/L				266	4
[	Bi	209		ug/L				2408229	0
[	Th	232		ug/L				1504	6
[	U	238		ug/L				27	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:07:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1098158	1
	Be	9	0.200	ug/L	0.003	1	12	695	2
	C	13		ug/L			59558	62434	2
	Cl	37		ug/L			4587445	4694455	1
>	Sc	45		ug/L			952082	998733	2
	V	51	0.200	ug/L	0.003	1	4902	8697	2
	V-1	51	0.200	ug/L	0.011	5	71	3773	4
	Cr	52	0.500	ug/L	0.017	3	14444	22623	1
	Cr	53	0.500	ug/L	0.033	6	87	981	3
	Mn	55	0.500	ug/L	0.004	0	432	11017	1
	Co	59	0.200	ug/L	0.008	3	47	2951	1
>	Ge	72		ug/L			478848	491975	0
	Ni	60	0.500	ug/L	0.011	2	79	1687	1
	Ni	62	0.500	ug/L	0.035	6	131	350	4
	Cu	63	0.500	ug/L	0.013	2	237	3708	2
	Cu	65	0.500	ug/L	0.011	2	88	1655	1
	Zn	66	4.000	ug/L	0.069	1	584	7957	1
	Zn	67	4.000	ug/L	0.071	1	90	1148	1
	Zn	68	4.000	ug/L	0.057	1	887	5952	1
	As	75	0.200	ug/L	0.014	7	1089	1453	1
	As-1	75	0.200	ug/L	0.045	22	7286	7913	1
	Se	82	0.500	ug/L	0.137	27	7	102	25
	Se	78	0.500	ug/L	0.119	23	7339	7874	0
	Mo	98	0.200	ug/L	0.008	4	26	808	4
	Y	89		ug/L			336847	356636	2
	Kr	83		ug/L			1447	1487	6
>	In	115		ug/L			869512	884615	1
	Ag	107	0.200	ug/L	0.007	3	14	1568	2
	Cd	111	0.100	ug/L	0.012	12	78	514	9
	Cd	114	0.100	ug/L	0.005	4	23	1144	4
	Sb	121	0.200	ug/L	0.009	4	404	2921	3
	Sb	123	0.200	ug/L	0.008	3	325	2169	2
	Ba	135	0.500	ug/L	0.011	2	140	2357	2
	Ba	137	0.500	ug/L	0.014	2	229	3917	1
>	Tb	159		ug/L			1016351	1025268	1
	Tl	205	0.200	ug/L	0.001	0	70	6756	1
	Pb	208	0.100	ug/L	0.004	3	266	4967	1
	Bi	209		ug/L			2408229	2453570	0
	Th	232	0.200	ug/L	0.002	1	1504	8118	2
	U	238	0.200	ug/L	0.002	0	27	8646	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:11:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1092958	2
[	Be	9	10.000	ug/L	0.333	3	12	30996	0
	C	13		ug/L			59558	63751	2
	Cl	37		ug/L			4587445	4780197	1
[>	Sc	45		ug/L			952082	1009394	2
[	V	51	10.000	ug/L	0.093	0	4902	180117	3
[	V-1	51	10.000	ug/L	0.073	0	71	175452	2
[	Cr	52	9.999	ug/L	0.169	1	14444	160093	1
[	Cr	53	9.998	ug/L	0.333	3	87	16598	2
[	Mn	55	9.998	ug/L	0.200	1	432	197463	0
[	Co	59	10.000	ug/L	0.172	1	47	136508	0
[>	Ge	72		ug/L			478848	493928	1
[	Ni	60	9.998	ug/L	0.176	1	79	30413	1
[	Ni	62	9.999	ug/L	0.047	0	131	4269	0
[	Cu	63	9.998	ug/L	0.146	1	237	65047	0
[	Cu	65	9.997	ug/L	0.179	1	88	28297	1
[	Zn	66	9.971	ug/L	0.154	1	584	18689	0
[	Zn	67	10.196	ug/L	0.099	0	90	3172	1
[	Zn	68	10.033	ug/L	0.156	1	887	13871	1
[	As	75	10.000	ug/L	0.156	1	1089	16828	1
[	As-1	75	9.998	ug/L	0.141	1	7286	22869	0
[	Se	82	9.999	ug/L	0.237	2	7	1838	2
[	Se	78	9.986	ug/L	0.324	3	7339	11889	0
[	Mo	98	10.000	ug/L	0.246	2	26	39644	2
	Y	89		ug/L			337147	355901	1
	Kr	83		ug/L			1447	1516	5
[>	In	115		ug/L			869512	883279	2
[	Ag	107	10.000	ug/L	0.421	4	14	72456	2
[	Cd	111	10.000	ug/L	0.158	1	78	40298	0
[	Cd	114	10.000	ug/L	0.238	2	23	102136	1
[	Sb	121	10.000	ug/L	0.189	1	404	129229	0
[	Sb	123	10.000	ug/L	0.254	2	325	97396	0
[	Ba	135	9.995	ug/L	0.162	1	140	36593	1
[	Ba	137	9.996	ug/L	0.288	2	229	62728	0
[>	Tb	159		ug/L			1016351	1035360	2
[	Tl	205	10.000	ug/L	0.194	1	70	316677	0
[	Pb	208	10.000	ug/L	0.249	2	266	413734	0
[	Bi	209		ug/L			2408229	2478756	0
[	Th	232	10.000	ug/L	0.501	5	1504	379444	2
[	U	238	10.000	ug/L	0.222	2	27	404552	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:16:16
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1054743	1
	Be	9	20.091	ug/L	0.356	1	12	61232	0
	C	13		ug/L			59558	62886	1
	Cl	37		ug/L			4587445	4771950	1
>	Sc	45		ug/L			952082	989488	1
	V	51	20.044	ug/L	0.387	1	4902	351791	1
	V-1	51	20.019	ug/L	0.466	2	71	345433	2
	Cr	52	19.974	ug/L	0.619	3	14444	297068	3
	Cr	53	19.882	ug/L	0.323	1	87	31535	1
	Mn	55	20.014	ug/L	0.405	2	432	388173	0
	Co	59	19.998	ug/L	0.609	3	47	267444	1
>	Ge	72		ug/L			478848	490568	1
	Ni	60	19.870	ug/L	0.501	2	79	58439	3
	Ni	62	19.920	ug/L	0.255	1	131	8183	0
	Cu	63	19.872	ug/L	0.358	1	237	124970	0
	Cu	65	19.987	ug/L	0.612	3	88	55936	1
	Zn	66	19.942	ug/L	0.645	3	584	36162	1
	Zn	67	19.908	ug/L	0.391	1	90	5969	1
	Zn	68	19.871	ug/L	0.960	4	887	25826	2
	As	75	19.881	ug/L	0.205	1	1089	31401	1
	As-1	75	19.868	ug/L	0.264	1	7286	36983	1
	Se	82	19.931	ug/L	0.361	1	7	3582	0
	Se	78	19.869	ug/L	0.741	3	7339	15834	0
	Mo	98	19.842	ug/L	0.506	2	26	75685	1
	Y	89		ug/L			336847	354985	0
	Kr	83		ug/L			1447	1482	4
>	In	115		ug/L			869512	866468	1
	Ag	107	19.929	ug/L	0.624	3	14	139694	1
	Cd	111	19.983	ug/L	0.381	1	78	78664	0
	Cd	114	19.885	ug/L	0.127	0	23	194772	1
	Sb	121	19.985	ug/L	0.169	0	404	252264	1
	Sb	123	19.973	ug/L	0.474	2	325	189506	0
	Ba	135	19.945	ug/L	0.341	1	140	70728	0
	Ba	137	19.941	ug/L	0.164	0	229	121164	1
>	Tb	159		ug/L			1016351	1029567	1
	Tl	205	19.845	ug/L	0.292	1	70	606225	1
	Pb	208	19.919	ug/L	0.233	1	266	806362	0
	Bi	209		ug/L			2408229	2438398	0
	Th	232	19.984	ug/L	0.411	2	1504	750500	0
	U	238	19.906	ug/L	0.335	1	27	786220	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:20:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1073354	1
	Be	9	50.176	ug/L	1.070	2	12	158393	2
	C	13		ug/L			59558	61897	2
	Cl	37		ug/L			4587445	4865815	0
>	Sc	45		ug/L			952082	988606	1
	V	51	50.324	ug/L	1.470	2	4902	903788	2
	V-1	51	50.362	ug/L	1.613	3	71	900700	2
	Cr	52	50.340	ug/L	1.200	2	14444	750259	2
	Cr	53	50.472	ug/L	0.531	1	87	83791	0
	Mn	55	50.189	ug/L	0.303	0	432	990814	1
	Co	59	50.480	ug/L	1.147	2	47	708604	1
>	Ge	72		ug/L			478848	486075	0
	Ni	60	50.037	ug/L	0.436	0	79	146228	0
	Ni	62	50.262	ug/L	0.429	0	131	20800	0
	Cu	63	50.337	ug/L	1.011	2	237	324285	2
	Cu	65	50.246	ug/L	0.808	1	88	142755	1
	Zn	66	49.947	ug/L	0.683	1	584	88435	1
	Zn	67	49.953	ug/L	1.305	2	90	14639	2
	Zn	68	49.817	ug/L	0.163	0	887	61757	0
	As	75	50.431	ug/L	0.787	1	1089	80652	1
	As-1	75	50.399	ug/L	0.461	0	7286	84680	0
	Se	82	50.375	ug/L	0.904	1	7	9311	1
	Se	78	50.255	ug/L	0.468	0	7339	28846	0
	Mo	98	50.447	ug/L	0.767	1	26	199604	1
	Y	89		ug/L			336847	352054	0
	Kr	83		ug/L			1447	1497	4
>	In	115		ug/L			869512	874206	1
	Ag	107	50.138	ug/L	0.813	1	14	359622	1
	Cd	111	50.247	ug/L	0.822	1	78	204496	0
	Cd	114	50.348	ug/L	0.701	1	23	515414	0
	Sb	121	50.311	ug/L	0.623	1	404	660584	0
	Sb	123	50.306	ug/L	0.538	1	325	496314	0
	Ba	135	50.339	ug/L	0.036	0	140	186217	1
	Ba	137	50.302	ug/L	0.782	1	229	317596	0
>	Tb	159		ug/L			1016351	1028719	0
	Tl	205	50.433	ug/L	0.219	0	70	1609036	0
	Pb	208	50.344	ug/L	0.399	0	266	2108737	0
	Bi	209		ug/L			2408229	2373429	0
	Th	232	51.005	ug/L	0.626	1	1504	2125455	0
	U	238	50.877	ug/L	0.111	0	27	2201037	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:27:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1064979	2
	Be	9	99.896	ug/L	2.923	2	12	311699	0
	C	13		ug/L			59558	61539	2
	Cl	37		ug/L			4587445	4716545	0
>	Sc	45		ug/L			952082	968439	1
	V	51	100.530	ug/L	2.276	2	4902	1795242	0
	V-1	51	100.528	ug/L	2.082	2	71	1792692	0
	Cr	52	99.951	ug/L	1.390	1	14444	1442404	0
	Cr	53	99.948	ug/L	0.679	0	87	162176	0
	Mn	55	100.217	ug/L	1.913	1	432	1951572	1
	Co	59	99.761	ug/L	1.652	1	47	1360905	0
>	Ge	72		ug/L			478848	468731	2
	Ni	60	100.215	ug/L	3.642	3	79	284326	3
	Ni	62	100.581	ug/L	2.567	2	131	40783	0
	Cu	63	99.902	ug/L	3.375	3	237	618077	1
	Cu	65	100.295	ug/L	3.884	3	88	277272	1
	Zn	66	99.507	ug/L	2.178	2	584	166568	1
	Zn	67	99.487	ug/L	0.457	0	90	27561	2
	Zn	68	100.207	ug/L	2.423	2	387	119689	1
	As	75	100.456	ug/L	2.744	2	1089	156172	0
	As-1	75	100.502	ug/L	3.057	3	7286	158212	0
	Se	82	99.981	ug/L	1.273	1	7	17800	0
	Se	78	100.125	ug/L	2.343	2	7339	48450	0
	Mo	98	100.576	ug/L	1.076	1	26	391184	1
	Y	89		ug/L			336847	346924	0
	Kr	83		ug/L			1447	1528	1
>	In	115		ug/L			869512	852128	0
	Ag	107	99.708	ug/L	2.170	2	14	690347	1
	Cd	111	99.585	ug/L	0.140	0	78	389644	1
	Cd	114	99.520	ug/L	0.804	0	23	977454	0
	Sb	121	100.044	ug/L	1.245	1	404	1281928	0
	Sb	123	100.322	ug/L	1.852	1	325	974881	0
	Ba	135	100.636	ug/L	0.213	0	140	370596	0
	Ba	137	100.596	ug/L	0.841	0	229	631519	1
>	Tb	159		ug/L			1016351	1021838	1
	Tl	205	100.796	ug/L	0.742	0	70	3281195	0
	Pb	208	100.310	ug/L	1.315	1	266	4216533	0
	Bi	209		ug/L			2408229	2315747	0
	Th	232	100.235	ug/L	1.533	1	1504	4180128	1
	U	238	100.068	ug/L	0.949	0	27	4310123	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:33:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1050628	1
	Be	9	0.003	ug/L	0.002	52	12	22	24
	C	13		ug/L			59558	60505	0
	Cl	37		ug/L			4587445	4667863	0
>	Sc	45		ug/L			952682	937810	0
	V	51	0.014	ug/L	0.007	50	4902	5069	2
	V-1	51	0.002	ug/L	0.001	49	71	104	16
	Cr	52	0.050	ug/L	0.020	39	14444	14923	1
	Cr	53	0.008	ug/L	0.011	133	87	98	16
	Mn	55	0.004	ug/L	0.002	46	432	497	6
	Co	59	0.003	ug/L	0.001	43	47	87	20
>	Ge	72		ug/L			478848	473062	1
	Ni	60	0.010	ug/L	0.003	36	79	105	10
	Ni	62	0.043	ug/L	0.037	87	131	147	11
	Cu	63	0.012	ug/L	0.014	110	237	312	28
	Cu	65	0.007	ug/L	0.006	87	88	106	16
	Zn	66	0.007	ug/L	0.013	170	584	590	3
	Zn	67	-0.003	ug/L	0.031	905	90	88	10
	Zn	68	0.048	ug/L	0.013	26	887	934	2
	As	75	0.012	ug/L	0.023	198	1089	1094	2
	As-1	75	0.216	ug/L	0.046	21	7286	7525	0
	Se	82	-0.009	ug/L	0.083	875	7	5	264
	Se	78	0.818	ug/L	0.178	21	7339	7590	0
	Mo	98	0.012	ug/L	0.001	12	26	71	8
	Y	89		ug/L			336847	347713	1
	Kr	83		ug/L			1447	1476	1
>	In	115		ug/L			869512	860921	0
	Ag	107	0.003	ug/L	0.003	97	14	37	60
	Cd	111	0.004	ug/L	0.002	62	78	92	9
	Cd	114	0.003	ug/L	0.003	109	23	49	58
	Sb	121	0.090	ug/L	0.018	19	404	1558	14
	Sb	123	0.086	ug/L	0.013	14	325	1167	10
	Ba	135	0.003	ug/L	0.005	161	140	149	11
	Ba	137	0.005	ug/L	0.005	97	229	261	12
>	Tb	159		ug/L			1016351	1003479	1
	Tl	205	0.006	ug/L	0.005	82	70	256	59
	Pb	208	0.004	ug/L	0.003	87	266	421	32
	Bi	209		ug/L			2408229	2377126	1
	Th	232	0.072	ug/L	0.005	7	1504	4421	5
	U	238	0.004	ug/L	0.002	65	27	180	55

Sample Information

Sample Date/Time: Thursday, May 17, 2012 12:27:01
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9999**	0.018	0.20	10	20	50	100
V-1	51	**0.9999**	0.018	0.20	10	20	50	100
Cr	52	**1.0000**	0.015	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**1.0000**	0.020	0.50	10	20	50	100
Co	59	**0.9999**	0.014	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.006	0.50	10	20	50	100
Ni	62	**0.9999**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.013	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**1.0000**	0.003	4.00	10	20	50	100
As	75	**0.9999**	0.003	0.20	10	20	50	100
As-1	75	**0.9999**	0.003	0.20	10	20	50	100
Se	82	**0.9996**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.008	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**0.9999**	0.012	0.10	10	20	50	100
Sb	121	**1.0000**	0.015	0.20	10	20	50	100
Sb	123	**1.0000**	0.011	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.032	0.20	10	20	50	100
Pb	208	**1.0000**	0.041	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.041	0.20	10	20	50	100
U	238	**0.9998**	0.042	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:40:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1049782	2
	Be	9	51.678	ug/L	0.374	0	12	159003	2
	C	13		ug/L			59558	62532	1
	Cl	37		ug/L			4587445	4729964	1
>	Sc	45		ug/L			952082	979561	1
	V	51	50.858	ug/L	0.344	0	4902	921369	2
	V-1	51	50.701	ug/L	0.173	0	71	914710	1
	Cr	52	51.802	ug/L	1.240	2	14444	763407	3
	Cr	53	51.243	ug/L	0.821	1	87	84135	0
	Mn	55	51.720	ug/L	0.765	1	432	1018860	0
	Co	59	51.249	ug/L	0.512	0	47	707249	1
>	Ge	72		ug/L			478848	485017	0
	Ni	60	51.317	ug/L	0.663	1	79	150722	1
	Ni	62	50.344	ug/L	0.662	1	131	21195	1
	Cu	63	50.870	ug/L	1.981	3	237	325891	3
	Cu	65	51.022	ug/L	0.092	0	88	146077	0
	Zn	66	50.044	ug/L	1.282	2	584	86990	2
	Zn	67	51.275	ug/L	1.305	2	90	14742	2
	Zn	68	49.107	ug/L	0.848	1	887	61165	1
	As	75	49.713	ug/L	0.207	0	1089	80558	0
	As-1	75	49.157	ug/L	0.496	1	7286	83874	0
	Se	82	81.078	ug/L	0.627	0	7	14256	1
	Se	78	78.075	ug/L	0.822	1	7339	40720	0
	Mo	98	50.746	ug/L	0.766	1	26	204268	1
	Y	89		ug/L			336847	345852	1
	Kr	83		ug/L			1447	1527	3
>	In	115		ug/L			869512	858373	0
	Ag	107	51.823	ug/L	1.906	3	14	361402	2
	Cd	111	51.051	ug/L	0.311	0	78	201242	0
	Cd	114	51.364	ug/L	0.731	1	23	508170	0
	Sb	121	51.099	ug/L	0.797	1	404	659750	0
	Sb	123	50.232	ug/L	0.715	1	325	491882	0
	Ba	135	50.316	ug/L	0.879	1	140	186699	0
	Ba	137	50.922	ug/L	0.411	0	229	322109	0
>	Tb	159		ug/L			1016351	1021666	0
	Tl	205	49.366	ug/L	0.550	1	70	1606792	0
	Pb	208	50.022	ug/L	0.183	0	266	2102637	0
	Bi	209		ug/L			2408229	2346646	0
	Th	232	52.001	ug/L	0.408	0	1504	2169115	0
	U	238	51.876	ug/L	0.689	1	27	2233962	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:47:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1036645	3
[	Be	9	0.002	ug/L	0.001	36	12	19	15
	C	13		ug/L			59558	59083	2
	Cl	37		ug/L			4587445	4594923	1
[>	Sc	45		ug/L			952082	961126	1
[	V	51	-0.000	ug/L	0.005	9500	4902	4948	2
[	V-1	51	0.000	ug/L	0.000	93	71	75	4
[	Cr	52	0.003	ug/L	0.014	520	14444	14620	2
[	Cr	53	0.003	ug/L	0.004	119	87	93	6
[	Mn	55	-0.001	ug/L	0.002	245	432	423	9
[	Co	59	-0.000	ug/L	0.000	2930	47	47	10
[>	Ge	72		ug/L			478848	477327	0
[	Ni	60	-0.001	ug/L	0.004	372	79	75	15
[	Ni	62	-0.026	ug/L	0.028	104	131	120	8
[	Cu	63	-0.002	ug/L	0.001	43	237	226	2
[	Cu	65	-0.006	ug/L	0.004	62	88	72	13
[	Zn	66	-0.061	ug/L	0.007	12	584	480	2
[	Zn	67	-0.058	ug/L	0.013	21	90	73	5
[	Zn	68	-0.024	ug/L	0.028	119	887	856	3
[	As	75	0.024	ug/L	0.055	229	1089	1123	7
[	As-1	75	0.127	ug/L	0.115	90	7286	7456	1
[	Se	82	-0.011	ug/L	0.126	1133	7	5	393
[	Se	78	0.446	ug/L	0.377	84	7339	7501	1
[	Mo	98	0.005	ug/L	0.001	14	26	46	6
	Y	89		ug/L			336847	348368	1
	Kr	83		ug/L			1447	1487	3
[>	In	115		ug/L			869512	851770	0
[	Ag	107	0.001	ug/L	0.001	73	14	19	18
[	Cd	111	-0.001	ug/L	0.002	212	78	72	11
[	Cd	114	0.000	ug/L	0.000	142	23	25	12
[	Sb	121	0.003	ug/L	0.007	241	404	434	21
[	Sb	123	0.001	ug/L	0.006	688	325	327	18
[	Ba	135	-0.008	ug/L	0.002	29	140	109	7
[	Ba	137	-0.005	ug/L	0.002	34	229	192	5
[>	Tb	159		ug/L			1016351	980523	1
[	Tl	205	0.001	ug/L	0.000	24	70	96	7
[	Pb	208	0.000	ug/L	0.000	96	266	265	3
[	Bi	209		ug/L			2408229	2389575	0
[	Th	232	0.036	ug/L	0.007	18	1504	2879	9
[	U	238	0.001	ug/L	0.000	8	27	60	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:51:18
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1043956	2
	Be	9	51.085	ug/L	1.311	2	12	156257	0
	C	13		ug/L			59558	59649	2
	Cl	37		ug/L			4587445	4769975	3
>	Sc	45		ug/L			952082	988285	0
	V	51	50.018	ug/L	0.613	1	4902	914256	1
	V-1	51	49.775	ug/L	0.630	1	71	905995	0
	Cr	52	50.644	ug/L	0.520	1	14444	753325	1
	Cr	53	49.785	ug/L	0.848	1	87	82484	1
	Mn	55	50.611	ug/L	0.629	1	432	1006038	0
	Co	59	49.949	ug/L	1.585	3	47	695423	2
>	Ge	72		ug/L			478848	479955	0
	Ni	60	50.764	ug/L	0.364	0	79	147544	0
	Ni	62	50.280	ug/L	0.507	1	131	20948	1
	Cu	63	50.445	ug/L	0.376	0	237	319840	1
	Cu	65	50.522	ug/L	0.382	0	88	143140	1
	Zn	66	51.369	ug/L	0.576	1	584	88353	1
	Zn	67	51.000	ug/L	0.670	1	90	14511	1
	Zn	68	50.445	ug/L	0.706	1	887	62157	1
	As	75	49.980	ug/L	0.289	0	1089	80140	0
	As-1	75	49.985	ug/L	0.210	0	7286	84276	0
	Se	82	53.211	ug/L	0.860	1	7	9261	1
	Se	78	50.843	ug/L	0.454	0	7339	28807	0
	Mo	98	50.543	ug/L	0.734	1	26	201333	1
	Y	89		ug/L			336847	353962	2
	Kr	83		ug/L			1447	1472	2
>	In	115		ug/L			869512	855143	1
	Ag	107	51.781	ug/L	0.791	1	14	359828	1
	Cd	111	50.510	ug/L	0.264	0	78	198371	1
	Cd	114	51.730	ug/L	0.941	1	23	509846	0
	Sb	121	51.211	ug/L	0.656	1	404	658718	0
	Sb	123	49.960	ug/L	0.445	0	325	487388	0
	Ba	135	49.841	ug/L	0.905	1	140	184240	1
	Ba	137	50.013	ug/L	0.582	1	229	315170	1
>	Tb	159		ug/L			1016351	1018213	0
	Tl	205	49.028	ug/L	0.495	1	70	1590470	1
	Pb	208	49.779	ug/L	0.118	0	266	2085373	0
	Bi	209		ug/L			2408229	2366066	0
	Th	232	51.235	ug/L	0.380	0	1504	2129978	0
	U	238	51.154	ug/L	0.209	0	27	2195446	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:57:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1012609	2
	Be	9	0.003	ug/L	0.003	98	12	20	39
	C	13		ug/L			59558	56807	1
	Cl	37		ug/L			4587445	4537858	0
>	Sc	45		ug/L			952082	939466	0
	V	51	-0.002	ug/L	0.010	631	4902	4808	3
	V-1	51	0.001	ug/L	0.000	83	71	79	8
	Cr	52	-0.001	ug/L	0.036	2640	14444	14232	3
	Cr	53	0.006	ug/L	0.001	13	87	96	1
	Mn	55	0.000	ug/L	0.001	1413	432	428	5
	Co	59	0.001	ug/L	0.001	75	47	63	19
>	Ge	72		ug/L			478848	466850	1
	Ni	60	-0.005	ug/L	0.001	25	79	62	4
	Ni	62	-0.009	ug/L	0.032	371	131	125	11
	Cu	63	-0.003	ug/L	0.003	106	237	213	10
	Cu	65	-0.005	ug/L	0.003	60	88	71	13
	Zn	66	-0.043	ug/L	0.014	32	584	499	4
	Zn	67	-0.008	ug/L	0.040	511	90	86	14
	Zn	68	0.012	ug/L	0.004	34	887	880	1
	As	75	0.029	ug/L	0.028	95	1089	1107	3
	As-1	75	0.246	ug/L	0.056	22	7286	7471	0
	Se	82	-0.009	ug/L	0.065	750	7	5	189
	Se	78	0.886	ug/L	0.206	23	7339	7517	0
	Mo	98	0.007	ug/L	0.003	47	26	52	22
	Y	89		ug/L			338447	343916	1
	Kr	83		ug/L			1447	1467	1
>	In	115		ug/L			869512	835158	1
	Ag	107	0.001	ug/L	0.002	180	14	20	58
	Cd	111	0.000	ug/L	0.004	5378	78	75	19
	Cd	114	0.001	ug/L	0.002	134	23	36	51
	Sb	121	0.036	ug/L	0.009	25	404	835	14
	Sb	123	0.034	ug/L	0.010	29	325	632	15
	Ba	135	-0.005	ug/L	0.004	78	140	117	9
	Ba	137	-0.003	ug/L	0.002	67	229	201	7
>	Tb	159		ug/L			1016351	974293	1
	Tl	205	0.002	ug/L	0.001	43	70	126	20
	Pb	208	0.000	ug/L	0.001	1011	266	258	11
	Bi	209		ug/L			2408229	2353658	0
	Th	232	0.058	ug/L	0.006	10	1504	3747	5
	U	238	0.001	ug/L	0.001	50	27	69	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:01:59
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1043837	0
	Be	9	0.221	ug/L	0.015	6	12	688	7
	C	13		ug/L			59558	61034	1
	Cl	37		ug/L			4587445	4545404	1
>	Sc	45		ug/L			952082	963550	0
	V	51	0.202	ug/L	0.008	4	4902	8543	1
	V-1	51	0.200	ug/L	0.002	0	71	3617	0
	Cr	52	0.527	ug/L	0.012	2	1444	22101	0
	Cr	53	0.517	ug/L	0.027	5	87	922	4
	Mn	55	0.522	ug/L	0.009	1	432	10550	1
	Co	59	0.210	ug/L	0.004	1	47	2902	1
>	Ge	72		ug/L			478848	475041	1
	Ni	60	0.521	ug/L	0.016	3	79	1577	1
	Ni	62	0.487	ug/L	0.030	6	131	330	2
	Cu	63	0.542	ug/L	0.014	2	237	3632	3
	Cu	65	0.543	ug/L	0.016	2	88	1607	2
	Zn	66	4.504	ug/L	0.165	3	584	8196	2
	Zn	67	4.182	ug/L	0.161	3	90	1259	2
	Zn	68	4.351	ug/L	0.209	4	887	6110	4
	As	75	0.278	ug/L	0.069	24	1089	1517	8
	As-1	75	0.362	ug/L	0.034	9	7286	7780	0
	Se	82	0.592	ug/L	0.100	16	7	109	14
	Se	78	1.135	ug/L	0.166	14	7339	7754	0
	Mo	98	0.196	ug/L	0.002	0	26	800	0
	Y	89		ug/L			336847	349713	2
	Kr	83		ug/L			1447	1562	12
>	In	115		ug/L			8612	848510	2
	Ag	107	0.214	ug/L	0.005	2	14	1492	0
	Cd	111	0.102	ug/L	0.005	5	78	473	6
	Cd	114	0.110	ug/L	0.010	8	23	1094	7
	Sb	121	0.196	ug/L	0.005	2	404	2891	1
	Sb	123	0.194	ug/L	0.005	2	325	2196	4
	Ba	135	0.483	ug/L	0.022	4	140	1904	2
	Ba	137	0.486	ug/L	0.021	4	229	3256	1
>	Tb	159		ug/L			1016351	988777	1
	Tl	205	0.202	ug/L	0.003	1	70	6442	1
	Pb	208	0.112	ug/L	0.001	1	266	4823	2
	Bi	209		ug/L			2408229	2394305	1
	Th	232	0.176	ug/L	0.001	0	1504	8575	0
	U	238	0.199	ug/L	0.003	1	27	8306	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:06:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1143391	0
	Be	9	0.004	ug/L	0.005	124	12	27	63
	C	13		ug/L			59558	147098	1
	Cl	37		ug/L			4587445	11552647	0
>	Sc	45		ug/L			952082	1050765	2
	V	51	0.121	ug/L	0.027	22	4902	7735	5
	V-1	51	0.865	ug/L	0.029	3	71	16817	5
	Cr	52	0.842	ug/L	0.070	8	14444	28966	1
	Cr	53	3.455	ug/L	0.040	1	87	6177	3
	Mn	55	0.108	ug/L	0.002	1	432	2762	4
	Co	59	0.018	ug/L	0.002	10	47	315	11
>	Ge	72		ug/L			478848	479943	4
	Ni	60	0.341	ug/L	0.009	2	79	1071	6
	Ni	62	3.993	ug/L	0.743	18	131	1793	21
	Cu	63	0.985	ug/L	0.037	3	237	6485	7
	Cu	65	0.332	ug/L	0.005	1	88	1027	3
	Zn	66	0.705	ug/L	0.037	5	584	1788	1
	Zn	67	5.165	ug/L	0.166	3	90	1550	3
	Zn	68	0.213	ug/L	0.054	25	887	1147	3
	As	75	0.131	ug/L	0.030	22	1089	1299	2
	As-1	75	0.406	ug/L	0.128	31	7286	7922	1
	Se	82	-0.217	ug/L	0.026	12	7	-30	16
	Se	78	1.661	ug/L	0.519	31	7339	8050	1
	Mo	98	425.256	ug/L	15.758	3	26	1691901	0
	Y	89		ug/L			336847	354389	2
	Kr	83		ug/L			1447	1929	1
>	In	115		ug/L			869512	894178	2
	Ag	107	0.024	ug/L	0.001	5	14	192	3
	Cd	111	0.177	ug/L	0.015	8	78	807	5
	Cd	114	0.225	ug/L	0.003	1	23	2338	1
	Sb	121	0.036	ug/L	0.002	6	404	895	4
	Sb	123	0.030	ug/L	0.001	2	325	640	3
	Ba	135	0.017	ug/L	0.003	18	140	209	5
	Ba	137	0.013	ug/L	0.001	8	229	320	1
>	Tb	159		ug/L			1016351	1080317	2
	Tl	205	0.004	ug/L	0.002	69	70	194	40
	Pb	208	0.044	ug/L	0.001	2	266	2222	3
	Bi	209		ug/L			2408229	2313141	1
	Th	232	0.190	ug/L	0.088	46	1504	9930	36
	U	238	0.003	ug/L	0.003	114	27	162	95

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:12:38
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1181649	2
	Be	9	0.000	ug/L	0.001	703	12	14	21
	C	13		ug/L			59558	156221	2
	Cl	37		ug/L			4587445	11861821	4
>	Sc	45		ug/L			952082	1086349	0
	V	51	0.151	ug/L	0.105	69	4902	8628	25
	V-1	51	0.907	ug/L	0.017	1	71	18237	2
	Cr	52	20.432	ug/L	0.226	1	14444	343929	1
	Cr	53	22.997	ug/L	0.164	0	87	41936	0
	Mn	55	19.330	ug/L	0.169	0	432	422711	1
	Co	59	18.843	ug/L	0.214	1	47	288423	1
>	Ge	72		ug/L			478848	491799	0
	Ni	60	19.812	ug/L	0.315	1	79	59053	1
	Ni	62	22.954	ug/L	1.037	4	131	9872	4
	Cu	63	20.698	ug/L	0.766	3	237	134605	3
	Cu	65	19.681	ug/L	0.210	1	88	57190	0
	Zn	66	19.178	ug/L	0.384	2	584	34176	2
	Zn	67	21.792	ug/L	0.415	1	90	6407	2
	Zn	68	18.230	ug/L	0.116	0	887	23598	0
	As	75	18.584	ug/L	0.291	1	1089	31236	1
	As-1	75	19.279	ug/L	0.350	1	7286	37903	1
	Se	82	-0.317	ug/L	0.053	16	7	-48	19
	Se	78	1.132	ug/L	0.137	12	7339	8026	0
	Mo	98	415.784	ug/L	3.940	0	26	1696847	0
	Y	89		ug/L			336847	370387	0
	Kr	83		ug/L			1447	1904	0
>	In	115		ug/L			869512	923118	0
	Ag	107	18.921	ug/L	0.312	1	14	141953	2
	Cd	111	19.606	ug/L	0.316	1	78	83162	0
	Cd	114	19.792	ug/L	0.292	1	23	210599	0
	Sb	121	0.042	ug/L	0.002	4	404	1018	1
	Sb	123	0.040	ug/L	0.005	12	325	765	6
	Ba	135	0.008	ug/L	0.001	15	140	182	3
	Ba	137	0.007	ug/L	0.003	40	229	293	7
>	Tb	159		ug/L			1016351	1108440	1
	Tl	205	0.001	ug/L	0.000	32	70	118	10
	Pb	208	0.036	ug/L	0.002	5	266	1909	3
	Bi	209		ug/L			2408229	2383439	0
	Th	232	0.059	ug/L	0.015	25	1504	4310	16
	U	238	0.001	ug/L	0.000	23	27	68	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:19:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1134013	0
	Be	9	198.094	ug/L	5.878	2	612	658293	2
	C	13		ug/L			59558	70724	2
	Cl	37		ug/L			4587445	5256217	2
>	Sc	45		ug/L			952082	1029776	3
	V	51	208.048	ug/L	4.732	2	4902	3943725	1
	V-1	51	205.019	ug/L	5.022	2	71	3886191	1
	Cr	52	208.006	ug/L	6.601	3	14444	3173407	1
	Cr	53	197.354	ug/L	6.578	3	87	340196	0
	Mn	55	203.176	ug/L	9.243	4	432	4202858	1
	Co	59	201.367	ug/L	4.884	2	47	2919840	1
>	Ge	72		ug/L			478848	481974	1
	Ni	60	198.542	ug/L	5.074	2	79	579259	3
	Ni	62	199.574	ug/L	5.018	2	131	83096	2
	Cu	63	198.318	ug/L	6.277	3	237	1261583	1
	Cu	65	193.608	ug/L	3.044	1	88	550506	1
	Zn	66	188.512	ug/L	3.469	1	584	323971	0
	Zn	67	194.698	ug/L	4.048	2	90	55365	1
	Zn	68	190.440	ug/L	2.254	1	887	233130	0
	As	75	196.556	ug/L	2.377	1	1089	313236	0
	As-1	75	195.236	ug/L	2.745	1	7286	309204	0
	Se	82	204.828	ug/L	1.553	0	7	35776	1
	Se	78	190.848	ug/L	1.965	1	7339	88239	1
	Mo	98	201.426	ug/L	3.688	1	26	805495	0
	Y	89		ug/L			336847	348759	2
	Kr	83		ug/L			1447	1764	1
>	In	115		ug/L			869512	889268	1
	Ag	107	194.603	ug/L	4.266	2	14	1406051	1
	Cd	111	198.233	ug/L	3.070	1	78	809269	0
	Cd	114	211.126	ug/L	1.346	0	23	2163969	0
	Sb	121	210.764	ug/L	1.672	0	404	2818247	1
	Sb	123	211.417	ug/L	4.513	2	325	2143574	1
	Ba	135	204.972	ug/L	1.542	0	140	787601	1
	Ba	137	203.978	ug/L	1.984	0	229	1335972	0
>	Tb	159		ug/L			1016351	1076654	1
	Tl	205	194.893	ug/L	4.272	2	70	6683721	1
	Pb	208	197.577	ug/L	1.641	0	266	8750672	0
	Bi	209		ug/L			2408229	2326014	0
	Th	232	197.431	ug/L	3.541	1	8504	8673067	0
	U	238	198.246	ug/L	2.521	1	27	8995592	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:26:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1120252	0
	Be	9	0.003	ug/L	0.001	33	12	22	13
	C	13		ug/L			59558	64921	0
	Cl	37		ug/L			4587445	5182289	1
>	Sc	45		ug/L			952082	1047782	2
	V	51	-0.012	ug/L	0.004	31	4602	5171	1
	V-1	51	0.032	ug/L	0.003	10	71	694	7
	Cr	52	-0.019	ug/L	0.016	83	14444	15603	1
	Cr	53	0.134	ug/L	0.020	14	87	331	8
	Mn	55	0.023	ug/L	0.011	48	432	956	23
	Co	59	0.006	ug/L	0.011	175	47	141	110
>	Ge	72		ug/L			478848	484063	1
	Ni	60	-0.006	ug/L	0.009	165	79	63	44
	Ni	62	0.157	ug/L	0.027	17	131	198	4
	Cu	63	0.099	ug/L	0.003	3	237	872	1
	Cu	65	0.086	ug/L	0.003	3	88	333	0
	Zn	66	5.402	ug/L	0.140	2	584	9897	0
	Zn	67	4.912	ug/L	0.236	4	90	1491	2
	Zn	68	5.363	ug/L	0.154	2	887	7464	0
	As	75	0.047	ug/L	0.010	22	1089	1176	0
	As-1	75	0.112	ug/L	0.113	100	7286	7537	0
	Se	82	-0.095	ug/L	0.055	58	7	-9	104
	Se	78	0.449	ug/L	0.432	96	7339	7607	0
	Mo	98	0.030	ug/L	0.003	9	126	147	7
	Y	89		ug/L			338147	354215	0
	Kr	83		ug/L			1447	1632	1
>	In	115		ug/L			869512	896035	1
	Ag	107	0.003	ug/L	0.002	64	14	36	37
	Cd	111	0.004	ug/L	0.003	74	78	94	9
	Cd	114	0.001	ug/L	0.002	236	23	31	55
	Sb	121	0.160	ug/L	0.012	7	404	2575	5
	Sb	123	0.160	ug/L	0.007	4	325	1968	3
	Ba	135	0.192	ug/L	0.007	3	140	885	2
	Ba	137	0.191	ug/L	0.003	1	229	1497	2
>	Tb	159		ug/L			1016351	1045002	1
	Tl	205	0.007	ug/L	0.001	15	70	311	11
	Pb	208	0.023	ug/L	0.001	2	266	1283	3
	Bi	209		ug/L			2408229	2466258	0
	Th	232	0.086	ug/L	0.026	30	1504	5236	22
	U	238	0.003	ug/L	0.000	16	27	141	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:31:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1109755	2
	Be	9	0.001	ug/L	0.001	61	12	16	12
	C	13		ug/L			59558	65224	0
	Cl	37		ug/L			4587445	5062505	1
>	Sc	45		ug/L			952082	1031760	1
	V	51	-0.008	ug/L	0.015	195	4902	5160	4
	V-1	51	0.025	ug/L	0.002	8	71	552	5
	Cr	52	0.004	ug/L	0.045	1052	1444	15712	3
	Cr	53	0.120	ug/L	0.004	3	87	301	3
	Mn	55	0.017	ug/L	0.000	2	432	828	2
	Co	59	0.001	ug/L	0.000	25	47	61	4
>	Ge	72		ug/L			478848	485254	0
	Ni	60	-0.007	ug/L	0.005	65	79	59	23
	Ni	62	0.081	ug/L	0.009	11	131	167	2
	Cu	63	0.104	ug/L	0.002	1	237	907	1
	Cu	65	0.105	ug/L	0.007	6	88	389	5
	Zn	66	5.925	ug/L	0.084	1	584	10828	1
	Zn	67	5.359	ug/L	0.075	1	90	1623	1
	Zn	68	5.816	ug/L	0.080	1	887	8040	1
	As	75	0.035	ug/L	0.038	108	1089	1161	5
	As-1	75	0.073	ug/L	0.053	72	7286	7497	1
	Se	82	-0.073	ug/L	0.137	188	7	-5	454
	Se	78	0.313	ug/L	0.161	51	7339	7570	1
	Mo	98	0.011	ug/L	0.001	10	26	72	6
	Y	89		ug/L			336847	351899	1
	Kr	83		ug/L			1447	1605	0
>	In	115		ug/L			8[illegible]12	894019	1
	Ag	107	0.000	ug/L	0.000	17	14	17	3
	Cd	111	-0.001	ug/L	0.003	298	78	76	14
	Cd	114	0.000	ug/L	0.000	291	23	25	14
	Sb	121	0.027	ug/L	0.007	26	404	778	11
	Sb	123	0.027	ug/L	0.006	20	325	611	8
	Ba	135	0.194	ug/L	0.009	4	140	892	2
	Ba	137	0.198	ug/L	0.009	4	229	1537	2
>	Tb	159		ug/L			1016351	1038327	0
	Tl	205	0.002	ug/L	0.000	19	70	153	10
	Pb	208	0.025	ug/L	0.000	1	266	1339	1
	Bi	209		ug/L			2408229	2477232	0
	Th	232	0.001	ug/L	0.005	426	1504	1586	13
	U	238	0.000	ug/L	0.000	42	27	42	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:36:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1134810	2
	Be	9	49.795	ug/L	1.532	3	12	165563	1
	C	13		ug/L			59558	67043	0
	Cl	37		ug/L			4587445	5182303	1
>	Sc	45		ug/L			952082	1040380	0
	V	51	48.332	ug/L	1.003	2	4902	930068	1
	V-1	51	48.600	ug/L	0.596	1	71	931207	0
	Cr	52	48.654	ug/L	0.537	1	14444	762422	0
	Cr	53	49.597	ug/L	0.927	1	87	86518	2
	Mn	55	49.318	ug/L	0.630	1	432	1032011	0
	Co	59	48.201	ug/L	0.183	0	47	706507	0
>	Ge	72		ug/L			478848	490076	1
	Ni	60	49.833	ug/L	0.869	1	79	147867	0
	Ni	62	49.460	ug/L	2.034	4	131	21038	3
	Cu	63	49.533	ug/L	0.597	1	237	320638	0
	Cu	65	50.220	ug/L	1.594	3	88	145237	1
	Zn	66	49.784	ug/L	0.993	1	584	87448	2
	Zn	67	50.283	ug/L	0.675	1	90	14610	2
	Zn	68	49.975	ug/L	1.131	2	887	62866	0
	As	75	49.305	ug/L	1.106	2	1089	80724	1
	As-1	75	48.824	ug/L	1.093	2	7286	84208	0
	Se	82	53.143	ug/L	1.050	1	7	9442	1
	Se	78	49.193	ug/L	1.168	2	7339	28697	0
	Mo	98	49.199	ug/L	1.096	2	26	200060	0
	Y	89		ug/L			336847	360133	2
	Kr	83		ug/L			1447	1570	0
>	In	115		ug/L			869512	905715	0
	Ag	107	50.615	ug/L	0.369	0	14	372542	1
	Cd	111	50.266	ug/L	0.607	1	78	209094	1
	Cd	114	50.155	ug/L	0.753	1	23	523584	0
	Sb	121	49.881	ug/L	0.395	0	404	679596	0
	Sb	123	48.649	ug/L	0.519	1	325	502724	1
	Ba	135	48.603	ug/L	0.410	0	140	190318	1
	Ba	137	49.381	ug/L	0.252	0	229	329602	0
>	Tb	159		ug/L			1016351	1053744	1
	Tl	205	48.596	ug/L	0.719	1	70	1631207	0
	Pb	208	49.224	ug/L	0.657	1	266	2133748	0
	Bi	209		ug/L			2408229	2443565	0
	Th	232	50.114	ug/L	0.995	1	1504	2155782	1
	U	238	50.073	ug/L	0.717	1	27	2223624	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:43:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1097891	0
	Be	9	0.002	ug/L	0.001	71	12	18	20
	C	13		ug/L			59558	65259	3
	Cl	37		ug/L			4587445	4907047	2
>	Sc	45		ug/L			952082	1016800	2
	V	51	-0.010	ug/L	0.007	71	4902	5056	2
	V-1	51	0.012	ug/L	0.002	15	71	300	10
	Cr	52	-0.028	ug/L	0.023	81	14444	15007	2
	Cr	53	0.048	ug/L	0.007	15	87	175	9
	Mn	55	-0.002	ug/L	0.000	28	432	427	1
	Co	59	0.000	ug/L	0.000	222	47	53	11
>	Ge	72		ug/L			478848	477200	0
	Ni	60	-0.005	ug/L	0.004	69	79	63	15
	Ni	62	0.034	ug/L	0.039	116	131	145	10
	Cu	63	-0.003	ug/L	0.001	35	237	220	2
	Cu	65	-0.008	ug/L	0.002	26	88	65	8
	Zn	66	-0.073	ug/L	0.017	23	584	459	6
	Zn	67	-0.059	ug/L	0.006	10	90	73	3
	Zn	68	-0.044	ug/L	0.028	64	887	831	3
	As	75	0.045	ug/L	0.009	20	1089	1156	2
	As-1	75	0.207	ug/L	0.012	5	7286	7579	0
	Se	82	-0.010	ug/L	0.063	627	7	5	190
	Se	78	0.788	ug/L	0.064	8	7339	7644	0
	Mo	98	0.006	ug/L	0.000	3	26	49	2
	Y	89		ug/L			336847	354966	0
	Kr	83		ug/L			1447	1554	2
>	In	115		ug/L			869512	888503	1
	Ag	107	0.001	ug/L	0.001	124	14	19	31
	Cd	111	-0.002	ug/L	0.002	94	78	72	10
	Cd	114	-0.000	ug/L	0.000	39471	23	24	19
	Sb	121	0.041	ug/L	0.010	24	404	953	13
	Sb	123	0.040	ug/L	0.009	23	325	736	11
	Ba	135	-0.013	ug/L	0.003	21	140	92	12
	Ba	137	-0.010	ug/L	0.001	9	229	165	3
>	Tb	159		ug/L			1016351	1029168	1
	Tl	205	0.003	ug/L	0.001	36	70	157	21
	Pb	208	-0.001	ug/L	0.001	149	266	243	17
	Bi	209		ug/L			2408229	2411042	0
	Th	232	0.052	ug/L	0.012	23	1504	3710	14
	U	238	0.001	ug/L	0.001	65	27	87	45

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:49:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

Ag only

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1099367	1
	Be	9	0.004	ug/L	0.002	36	12	26	17
	C	13		ug/L			59558	77697	0
	Cl	37		ug/L			4587445	5348820	0
>	Sc	45		ug/L			952082	1092356	1
	V	51	1.605	ug/L	0.010	0	4902	37867	1
	V-1	51	1.737	ug/L	0.022	1	71	35038	2
	Cr	52	0.786	ug/L	0.040	5	14444	29226	0
	Cr	53	1.255	ug/L	0.079	6	87	2398	7
	Mn	55	27.502	ug/L	0.509	1	432	604391	0
	Co	59	0.412	ug/L	0.005	1	47	6386	0
>	Ge	72		ug/L			478848	459207	0
	Ni	60	2.749	ug/L	0.091	3	79	7714	3
	Ni	62	13.268	ug/L	5.218	39	131	5370	37
	Cu	63	6.245	ug/L	0.473	7	237	38067	6
	Cu	65	0.973	ug/L	0.011	1	88	2720	0
	Zn	66	1.470	ug/L	0.020	1	584	2963	1
	Zn	67	1.427	ug/L	0.097	6	90	472	4
	Zn	68	2.403	ug/L	0.141	5	887	3644	5
	As	75	8.992	ug/L	0.109	1	089	14653	1
	As-1	75	9.639	ug/L	0.065	0	7286	21188	0
	Se	82	0.248	ug/L	0.067	26	7	48	23
	Se	78	2.049	ug/L	0.271	13	7339	7864	0
	Mo	98	4.839	ug/L	0.025	0	26	18466	0
	Y	89		ug/L			336847	356048	2
	Kr	83		ug/L			1447	1553	1
>	In	115		ug/L			869512	839596	1
	Ag	107	U 0.003	ug/L	0.001	24	14	33	13
	Cd	111	U 0.025	ug/L	0.006	23	78	170	12
	Cd	114	0.057	ug/L	0.003	5	23	570	5
	Sb	121	0.159	ug/L	0.007	4	404	2402	2
	Sb	123	0.154	ug/L	0.010	6	325	1784	3
	Ba	135	12.253	ug/L	0.265	2	140	44565	0
	Ba	137	12.240	ug/L	0.163	1	229	75888	0
>	Tb	159		ug/L			1016351	1038263	1
	Tl	205	0.007	ug/L	0.004	61	70	314	48
	Pb	208	0.032	ug/L	0.001	3	266	1641	2
	Bi	209		ug/L			2408229	2147891	0
	Th	232	0.179	ug/L	0.070	39	504	9137	33
	U	238	0.128	ug/L	0.001	0	27	5613	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:53:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1115542	1
	Be	9	-0.001	ug/L	0.001	77	12	8	45
	C	13		ug/L			59558	62124	2
	Cl	37		ug/L			4587445	4843697	2
>	Sc	45		ug/L			952082	1016902	2
	V	51	0.023	ug/L	0.008	36	4902	5659	0
	V-1	51	0.030	ug/L	0.004	13	71	635	14
	Cr	52	0.089	ug/L	0.032	36	14444	16748	0
	Cr	53	0.113	ug/L	0.011	9	87	285	8
	Mn	55	0.025	ug/L	0.002	6	432	962	3
	Co	59	0.001	ug/L	0.000	53	47	63	9
>	Ge	72		ug/L			478848	479818	3
	Ni	60	-0.002	ug/L	0.001	46	79	72	5
	Ni	62	1.253	ug/L	0.178	14	131	651	14
	Cu	63	0.267	ug/L	0.005	1	237	1931	1
	Cu	65	0.218	ug/L	0.014	6	88	705	4
	Zn	66	6.476	ug/L	0.233	3	584	11639	2
	Zn	67	5.706	ug/L	0.292	5	90	1702	4
	Zn	68	6.210	ug/L	0.104	1	887	8429	3
	As	75	0.055	ug/L	0.047	85	1089	1179	8
	As-1	75	0.219	ug/L	0.153	69	7286	7633	0
	Se	82	0.022	ug/L	0.207	946	7	11	311
	Se	78	0.829	ug/L	0.573	69	7339	7698	0
	Mo	98	0.004	ug/L	0.002	36	26	43	14
	Y	89		ug/L			336847	357548	2
	Kr	83		ug/L			1447	1563	0
>	In	115		ug/L			869512	866769	1
	Ag	107	-0.000	ug/L	0.001	285	14	13	27
	Cd	111	-0.002	ug/L	0.000	13	78	69	1
	Cd	114	0.000	ug/L	0.001	434	23	24	24
	Sb	121	-0.012	ug/L	0.001	8	404	241	3
	Sb	123	-0.014	ug/L	0.003	22	325	185	14
	Ba	135	0.018	ug/L	0.002	13	140	206	4
	Ba	137	0.021	ug/L	0.001	4	229	364	1
>	Tb	159		ug/L			1016351	1008423	1
	Tl	205	0.001	ug/L	0.001	75	70	99	23
	Pb	208	0.062	ug/L	0.002	3	266	2836	4
	Bi	209		ug/L			2408229	2437293	2
	Th	232	-0.027	ug/L	0.001	5	1504	392	17
	U	238	-0.000	ug/L	0.000	44	27	17	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: NEX. BLANKSOLN
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:57:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1120964	0
[	Be	9	-0.001	ug/L	0.000	31	12	8	18
	C	13		ug/L			59558	64203	2
	Cl	37		ug/L			4587445	4866625	2
[>	Sc	45		ug/L			952082	1005958	1
[	V	51	0.021	ug/L	0.007	35	4902	5569	2
[	V-1	51	0.016	ug/L	0.001	7	71	375	6
[	Cr	52	0.080	ug/L	0.028	35	14444	16451	1
[	Cr	53	0.063	ug/L	0.006	8	87	198	3
[	Mn	55	0.005	ug/L	0.003	55	432	562	11
[	Co	59	0.000	ug/L	0.000	103	47	55	8
[>	Ge	72		ug/L			478848	478928	2
[	Ni	60	-0.007	ug/L	0.000	3	79	57	3
[	Ni	62	0.859	ug/L	0.057	6	131	486	4
[	Cu	63	0.053	ug/L	0.001	2	237	571	3
[	Cu	65	0.023	ug/L	0.002	9	88	151	6
[	Zn	66	1.138	ug/L	0.049	4	584	2523	2
[	Zn	67	1.030	ug/L	0.049	4	90	381	6
[	Zn	68	1.152	ug/L	0.066	5	887	2283	3
[	As	75	0.028	ug/L	0.019	66	1089	1133	0
[	As-1	75	0.167	ug/L	0.113	67	7286	7542	0
[	Se	82	-0.062	ug/L	0.093	150	7	-3	510
[	Se	78	0.664	ug/L	0.429	64	7339	7616	0
[	Mo	98	-0.000	ug/L	0.001	1613	26	26	18
	Y	89		ug/L			336847	353881	1
	Kr	83		ug/L			1447	1565	4
[>	In	115		ug/L			860512	861142	2
[	Ag	107	0.000	ug/L	0.001	461	14	15	24
[	Cd	111	-0.002	ug/L	0.002	108	78	71	11
[	Cd	114	0.001	ug/L	0.001	92	23	29	18
[	Sb	121	-0.019	ug/L	0.002	12	404	153	17
[	Sb	123	-0.020	ug/L	0.002	11	325	125	16
[	Ba	135	-0.019	ug/L	0.002	9	140	66	8
[	Ba	137	-0.018	ug/L	0.001	6	229	114	4
[>	Tb	159		ug/L			1016351	1003278	0
[	Tl	205	-0.001	ug/L	0.000	17	70	45	10
[	Pb	208	0.009	ug/L	0.001	7	266	641	4
[	Bi	209		ug/L			2408229	2406831	1
[	Th	232	-0.028	ug/L	0.002	5	1504	321	21
[	U	238	-0.000	ug/L	0.000	33	27	18	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:02:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1084840	0
	Be	9	50.678	ug/L	0.265	0	12	161143	0
	C	13		ug/L			59558	62799	3
	Cl	37		ug/L			4587445	4998223	0
>	Sc	45		ug/L			952082	1001678	1
	V	51	49.693	ug/L	1.375	2	4902	920355	1
	V-1	51	49.610	ug/L	1.027	2	71	915026	0
	Cr	52	49.989	ug/L	1.825	3	14444	753503	1
	Cr	53	49.695	ug/L	1.143	2	87	83441	2
	Mn	55	50.362	ug/L	1.090	2	432	1014434	0
	Co	59	49.345	ug/L	0.840	1	47	696325	2
>	Ge	72		ug/L			4748	489091	1
	Ni	60	49.428	ug/L	0.341	0	79	146398	1
	Ni	62	48.998	ug/L	0.648	1	131	20808	2
	Cu	63	48.246	ug/L	0.053	0	237	311725	1
	Cu	65	49.557	ug/L	1.013	2	88	143054	1
	Zn	66	50.010	ug/L	1.140	2	584	87651	0
	Zn	67	49.850	ug/L	0.717	1	90	14458	2
	Zn	68	48.760	ug/L	1.347	2	887	61238	1
	As	75	49.317	ug/L	0.609	1	1089	80590	1
	As-1	75	48.784	ug/L	0.799	1	7286	83985	1
	Se	82	53.475	ug/L	0.782	1	7	9483	0
	Se	78	49.450	ug/L	1.567	3	7339	28750	1
	Mo	98	49.128	ug/L	0.508	1	26	199429	2
	Y	89		ug/L			336847	357230	0
	Kr	83		ug/L			1447	1621	2
>	In	115		ug/L			859512	860120	2
	Ag	107	50.923	ug/L	0.807	1	14	355857	0
	Cd	111	49.935	ug/L	0.376	0	78	197229	1
	Cd	114	51.638	ug/L	1.144	2	23	511815	0
	Sb	121	50.432	ug/L	0.558	1	404	652463	1
	Sb	123	49.082	ug/L	0.961	1	325	481524	0
	Ba	135	50.550	ug/L	1.280	2	140	187905	0
	Ba	137	50.094	ug/L	0.706	1	229	317478	0
>	Tb	159		ug/L			1016351	1024399	1
	Tl	205	48.975	ug/L	0.793	1	70	1598086	0
	Pb	208	49.601	ug/L	0.528	1	266	2090296	0
	Bi	209		ug/L			2408229	2386460	1
	Th	232	49.895	ug/L	2.391	4	1504	2086448	4
	U	238	50.963	ug/L	0.924	1	27	2200076	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:08:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1070479	2
	Be	9	0.001	ug/L	0.001	82	12	16	16
	C	13		ug/L			59558	62193	3
	Cl	37		ug/L			4587445	4655954	0
>	Sc	45		ug/L			952082	973838	0
	V	51	0.009	ug/L	0.003	29	4902	5174	1
	V-1	51	0.009	ug/L	0.001	14	71	235	9
	Cr	52	0.038	ug/L	0.010	26	14444	15315	1
	Cr	53	0.038	ug/L	0.004	10	87	151	4
	Mn	55	-0.001	ug/L	0.001	228	432	431	5
	Co	59	0.001	ug/L	0.002	200	47	59	35
>	Ge	72		ug/L			478848	472458	1
	Ni	60	-0.005	ug/L	0.002	36	79	64	8
	Ni	62	0.557	ug/L	0.031	5	131	357	4
	Cu	63	0.020	ug/L	0.004	19	237	360	7
	Cu	65	-0.006	ug/L	0.002	35	88	68	8
	Zn	66	-0.074	ug/L	0.005	6	584	452	2
	Zn	67	-0.121	ug/L	0.020	16	90	55	9
	Zn	68	-0.028	ug/L	0.015	54	887	843	2
	As	75	0.037	ug/L	0.043	116	1089	1133	5
	As-1	75	0.209	ug/L	0.038	18	7286	7506	0
	Se	82	-0.005	ug/L	0.096	1854	7	6	255
	Se	78	0.792	ug/L	0.135	17	7339	7569	0
	Mo	98	0.004	ug/L	0.002	50	26	42	20
	Y	89		ug/L			336847	347640	0
	Kr	83		ug/L			1447	1520	1
>	In	115		ug/L			869512	841368	0
	Ag	107	0.000	ug/L	0.000	313	14	14	17
	Cd	111	-0.003	ug/L	0.002	71	78	65	10
	Cd	114	-0.000	ug/L	0.000	182	23	20	15
	Sb	121	0.030	ug/L	0.006	20	404	776	10
	Sb	123	0.026	ug/L	0.011	40	325	568	18
	Ba	135	-0.010	ug/L	0.001	14	140	100	5
	Ba	137	-0.010	ug/L	0.002	22	229	160	7
>	Tb	159		ug/L			1016851	986254	0
	Tl	205	0.000	ug/L	0.000	46	70	83	7
	Pb	208	-0.001	ug/L	0.000	26	266	223	4
	Bi	209		ug/L			2408229	2357125	0
	Th	232	0.044	ug/L	0.010	23	1504	3217	12
	U	238	0.001	ug/L	0.000	1	27	50	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 J-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:25:30
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1078252	0
	Be	9	-0.000	ug/L	0.002	808	12	12	44
	C	13		ug/L			58	63890	1
	Cl	37		ug/L			4587445	4650424	1
>	Sc	45		ug/L			952082	1008857	2
	V	51	0.435	ug/L	0.012	2	4902	13262	1
	V-1	51	0.466	ug/L	0.013	2	71	8722	1
	Cr	52	U 0.163	ug/L	0.016	9	14444	17728	1
	Cr	53	0.272	ug/L	0.024	8	87	551	5
	Mn	55	71.068	ug/L	2.939	4	432	1441290	2
	Co	59	0.112	ug/L	0.008	7	47	1636	5
>	Ge	72		ug/L			478848	483750	1
	Ni	60	0.192	ug/L	0.009	4	79	641	5
	Ni	62	0.472	ug/L	0.094	19	131	330	13
	Cu	63	0.942	ug/L	0.016	1	237	6254	2
	Cu	65	0.518	ug/L	0.006	1	88	1567	1
	Zn	66	8.276	ug/L	0.179	2	584	14840	1
	Zn	67	7.450	ug/L	0.115	1	90	2214	1
	Zn	68	8.410	ug/L	0.188	2	887	11189	1
	As	75	1138.811	ug/L	14.821	1	1089	1816387	1
	As-1	75	1169.698	ug/L	15.227	1	86	1822747	1
	Se	82	0.037	ug/L	0.054	143	7	13	65
	Se	78	0.465	ug/L	0.106	22	7339	7611	0
	Mo	98	0.829	ug/L	0.022	2	26	3354	2
	Y	89		ug/L			336847	355371	1
	Kr	83		ug/L			1447	1565	2
>	In	115		ug/L			869512	872513	1
	Ag	107	U 0.000	ug/L	0.000	93	14	17	15
	Cd	111	-0.001	ug/L	0.001	117	78	73	7
	Cd	114	0.002	ug/L	0.000	3	23	38	1
	Sb	121	0.033	ug/L	0.003	9	404	840	4
	Sb	123	0.033	ug/L	0.004	11	325	650	5
	Ba	135	0.105	ug/L	0.011	10	140	536	7
	Ba	137	0.108	ug/L	0.001	1	229	926	2
>	Tb	159		ug/L			1016351	1034564	0
	Tl	205	0.003	ug/L	0.001	27	70	170	16
	Pb	208	0.019	ug/L	0.001	6	266	1087	4
	Bi	209		ug/L			2408229	2384674	0
	Th	232	0.029	ug/L	0.007	25	1504	2765	11
	U	238	0.004	ug/L	0.000	2	27	218	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US52 JPOST REN~~ 222222 5/16/12 JM
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:32:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1080946	0
[	Be	9	25.009	ug/L	0.383	1	12	79245	1
	C	13		ug/L			59558	73645	1
	Cl	37		ug/L			4587445	5194061	1
[>	Sc	45		ug/L			952082	1138982	1
[	V	51	25.422	ug/L	0.357	1	4902	538417	2
[	V-1	51	25.482	ug/L	0.363	1	4971	534581	1
[	Cr	52	23.778	ug/L	0.240	1	14444	416820	2
[	Cr	53	23.997	ug/L	0.186	0	87	45873	0
[	Mn	55	343.696	ug/L	8.279	2	432	7869640	1
[	Co	59	23.383	ug/L	0.109	0	47	375238	0
[>	Ge	72		ug/L			478848	476707	1
[	Ni	60	26.656	ug/L	0.190	0	79	76987	1
[	Ni	62	41.937	ug/L	7.405	17	131	17409	19
[	Cu	63	31.192	ug/L	0.617	1	237	196560	3
[	Cu	65	27.321	ug/L	0.539	1	88	76904	0
[	Zn	66	104.377	ug/L	2.506	2	584	177683	2
[	Zn	67	95.747	ug/L	0.591	0	90	26981	2
[	Zn	68	101.992	ug/L	2.203	2	887	123899	1
[	As	75	6075.737	ug/L	36.204	0	1089	9544788	1
[	As-1	75	6238.138	ug/L	37.120	0	7286	9547834	1
[	Se	82	77.779	ug/L	1.886	2	7	13438	1
[	Se	78	74.407	ug/L	1.645	2	7339	38479	0
[	Mo	98	30.275	ug/L	0.960	3	26	119765	2
	Y	89		ug/L			335847	352977	1
	Kr	83		ug/L			1447	1660	2
[>	In	115		ug/L			869512	865650	1
[	Ag	107	24.696	ug/L	0.412	1	14	173696	0
[	Cd	111	24.624	ug/L	0.068	0	78	97928	1
[	Cd	114	24.733	ug/L	0.457	1	23	246746	0
[	Sb	121	25.641	ug/L	0.505	1	404	334049	1
[	Sb	123	25.283	ug/L	0.475	1	325	249803	0
[	Ba	135	27.467	ug/L	0.554	2	140	102832	0
[	Ba	137	27.743	ug/L	0.685	2	229	177036	0
[>	Tb	159		ug/L			1016351	1070843	0
[	Tl	205	24.261	ug/L	0.401	1	70	827702	1
[	Pb	208	24.389	ug/L	0.201	0	266	1074697	0
[	Bi	209		ug/L			2408229	2254954	0
[	Th	232	24.753	ug/L	0.441	1	1504	1083016	1
[	U	238	24.736	ug/L	0.375	1	27	1116464	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 J-L REN
Sample Dil Factor: 500
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:39:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1073364	2
[	Be	9	-0.001	ug/L	0.001	65	12	8	34
	C	13		ug/L			59558	64848	0
	Cl	37		ug/L			4587445	4702536	2
[>	Sc	45		ug/L			952082	1001670	1
[	V	51	0.012	ug/L	0.002	17	4902	5373	1
[	V-1	51	0.023	ug/L	0.001	3	71	498	1
[	Cr	52	0.014	ug/L	0.009	62	14444	15404	1
[	Cr	53	0.054	ug/L	0.011	21	87	181	10
[	Mn	55	1.424	ug/L	0.030	2	432	29121	0
[	Co	59	0.002	ug/L	0.001	41	47	81	15
[>	Ge	72		ug/L			478848	478538	0
[	Ni	60	-0.003	ug/L	0.001	43	79	70	4
[	Ni	62	0.536	ug/L	0.062	11	131	353	7
[	Cu	63	0.323	ug/L	0.009	2	237	2278	2
[	Cu	65	0.280	ug/L	0.010	3	88	878	3
[	Zn	66	4.172	ug/L	0.031	0	584	7691	0
[	Zn	67	3.736	ug/L	0.100	2	90	1143	2
[	Zn	68	4.026	ug/L	0.161	4	887	5762	3
[	As	75	22.914	ug/L	0.239	1	1089	37223	0
[	As-1	75	23.677	ug/L	0.256	1	7286	43633	0
[	Se	82	-0.076	ug/L	0.167	220	7	-5	511
[	Se	78	0.761	ug/L	0.241	31	7339	7654	0
[	Mo	98	0.016	ug/L	0.001	7	26	88	4
	Y	89		ug/L			336847	351922	2
	Kr	83		ug/L			1447	1617	3
[>	In	115		ug/L			869512	866945	0
[	Ag	107	0.000	ug/L	0.000	5215	14	14	21
[	Cd	111	-0.003	ug/L	0.001	46	78	66	8
[	Cd	114	0.002	ug/L	0.001	50	23	42	21
[	Sb	121	0.000	ug/L	0.003	971	404	407	11
[	Sb	123	-0.000	ug/L	0.002	1850	325	323	6
[	Ba	135	0.005	ug/L	0.002	40	140	160	5
[	Ba	137	0.007	ug/L	0.001	12	229	276	1
[>	Tb	159		ug/L			1016351	1007895	1
[	Tl	205	-0.000	ug/L	0.000	110	70	60	16
[	Pb	208	0.039	ug/L	0.000	0	266	1889	1
[	Bi	209		ug/L			2408229	2417337	0
[	Th	232	-0.011	ug/L	0.003	29	1504	1038	11
[	U	238	0.000	ug/L	0.000	324	27	29	28

5/18/12 JLG approved

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 JREN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:43:21
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1065363	0
	Be	9	-0.001	ug/L	0.002	116	12	8	59
	C	13		ug/L			59558	62080	4
	Cl	37		ug/L			4587445	4693906	1
>	Sc	45		ug/L			952082	1008733	1
	V	51	0.037	ug/L	0.001	1	4902	5876	1
	V-1	51	0.055	ug/L	0.001	1	71	1092	1
	Cr	52	-0.006	ug/L	0.010	148	14444	15208	1
	Cr	53	0.057	ug/L	0.005	8	87	188	5
	Mn	55	7.277	ug/L	0.120	1	432	148056	2
	Co	59	0.011	ug/L	0.001	9	47	210	6
>	Ge	72		ug/L			478848	488092	1
	Ni	60	0.012	ug/L	0.001	6	79	116	2
	Ni	62	0.404	ug/L	0.015	3	131	304	1
	Cu	63	0.165	ug/L	0.003	1	237	1305	1
	Cu	65	0.117	ug/L	0.005	3	88	428	3
	Zn	66	4.937	ug/L	0.173	3	584	9171	2
	Zn	67	4.485	ug/L	0.100	2	90	1382	3
	Zn	68	4.665	ug/L	0.069	1	887	6666	1
	As	75	116.120	ug/L	2.206	1	1089	187851	0
	As-1	75	119.367	ug/L	2.326	1	7286	194330	0
	Se	82	-0.104	ug/L	0.173	166	7	-10	288
	Se	78	0.475	ug/L	0.186	39	7339	7684	0
	Mo	98	0.085	ug/L	0.005	5	26	371	6
	Y	89		ug/L			336847	351063	1
	Kr	83		ug/L			1447	1585	3
>	In	115		ug/L			869512	862278	1
	Ag	107	-0.000	ug/L	0.000	46	14	11	10
	Cd	111	-0.002	ug/L	0.001	49	78	67	6
	Cd	114	0.000	ug/L	0.000	94	23	26	11
	Sb	121	-0.013	ug/L	0.002	18	404	237	10
	Sb	123	-0.016	ug/L	0.002	13	325	166	10
	Ba	135	0.002	ug/L	0.005	227	140	146	10
	Ba	137	0.004	ug/L	0.002	38	229	255	2
>	Tb	159		ug/L			1016351	1014729	0
	Tl	205	-0.001	ug/L	0.000	8	70	47	3
	Pb	208	0.020	ug/L	0.001	5	266	1114	4
	Bi	209		ug/L			2408229	2455924	1
	Th	232	-0.018	ug/L	0.004	24	1504	769	22
	U	238	0.000	ug/L	0.000	107	27	34	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 JDUP REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:47:28
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1061210	0
	Be	9	-0.002	ug/L	0.001	52	12	7	32
	C	13		ug/L			59558	63779	2
	Cl	37		ug/L			4587445	4610332	2
>	Sc	45		ug/L			952082	986927	2
	V	51	0.044	ug/L	0.011	25	4902	5868	1
	V-1	51	0.058	ug/L	0.003	4	71	1135	1
	Cr	52	0.006	ug/L	0.033	593	14444	15046	1
	Cr	53	0.058	ug/L	0.004	6	87	186	3
	Mn	55	7.662	ug/L	0.130	1	432	152429	1
	Co	59	0.020	ug/L	0.000	2	47	324	3
>	Ge	72		ug/L			478848	478549	2
	Ni	60	0.014	ug/L	0.006	40	79	120	13
	Ni	62	0.350	ug/L	0.034	9	131	276	6
	Cu	63	0.185	ug/L	0.004	2	237	1408	0
	Cu	65	0.130	ug/L	0.008	5	88	453	3
	Zn	66	9.238	ug/L	0.251	2	584	16317	1
	Zn	67	8.196	ug/L	0.223	2	90	2400	0
	Zn	68	8.979	ug/L	0.041	0	887	11759	1
	As	75	121.130	ug/L	2.613	2	3089	192050	0
	As-1	75	124.591	ug/L	2.830	2	7286	198520	0
	Se	82	-0.115	ug/L	0.107	92	7	-12	149
	Se	78	0.807	ug/L	0.518	64	7339	7670	0
	Mo	98	0.089	ug/L	0.007	8	26	378	6
	Y	89		ug/L			336847	353630	1
	Kr	83		ug/L			1447	1586	3
>	In	115		ug/L			869512	871045	1
	Ag	107	-0.000	ug/L	0.000	93	14	12	12
	Cd	111	-0.002	ug/L	0.000	11	78	71	2
	Cd	114	-0.000	ug/L	0.000	204	23	21	16
	Sb	121	-0.016	ug/L	0.002	11	404	194	10
	Sb	123	-0.018	ug/L	0.002	11	325	147	12
	Ba	135	0.006	ug/L	0.005	85	140	161	9
	Ba	137	0.002	ug/L	0.001	67	229	242	4
>	Tb	159		ug/L			1016351	1014596	1
	Tl	205	-0.001	ug/L	0.000	16	70	43	12
	Pb	208	0.022	ug/L	0.001	5	266	1164	2
	Bi	209		ug/L			2408229	2441360	1
	Th	232	-0.024	ug/L	0.002	8	504	496	15
	U	238	0.000	ug/L	0.000	98	27	29	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 JSPK REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:51:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1058451	1
	Be	9	0.527	ug/L	0.011	2	12	1647	1
	C	13		ug/L			59558	63351	0
	Cl	37		ug/L			4587445	4658026	2
>	Sc	45		ug/L			952082	999854	0
	V	51	0.561	ug/L	0.008	1	02	15462	1
	V-1	51	0.565	ug/L	0.006	0	71	10473	1
	Cr	52	0.542	ug/L	0.039	7	14444	23162	2
	Cr	53	0.556	ug/L	0.002	0	87	1022	0
	Mn	55	7.968	ug/L	0.053	0	432	160627	0
	Co	59	0.524	ug/L	0.011	2	47	7437	1
>	Ge	72		ug/L			478848	480456	1
	Ni	60	0.541	ug/L	0.012	2	79	1653	3
	Ni	62	0.837	ug/L	0.041	4	131	478	2
	Cu	63	0.717	ug/L	0.034	4	237	4784	3
	Cu	65	0.645	ug/L	0.005	0	88	1916	2
	Zn	66	9.452	ug/L	0.148	1	584	16751	1
	Zn	67	8.300	ug/L	0.346	4	90	2439	2
	Zn	68	9.012	ug/L	0.145	1	887	11845	0
	As	75	120.022	ug/L	2.529	2	1089	191079	0
	As-1	75	123.333	ug/L	2.694	2	7286	197391	0
	Se	82	1.843	ug/L	0.138	7	7	328	6
	Se	78	2.309	ug/L	0.457	19	7339	8337	0
	Mo	98	0.084	ug/L	0.003	3	26	361	3
	Y	89		ug/L			33 47	352871	0
	Kr	83		ug/L			1447	1533	1
>	In	115		ug/L			869512	859456	1
	Ag	107	0.521	ug/L	0.017	3	14	3648	2
	Cd	111	0.543	ug/L	0.013	2	78	2219	1
	Cd	114	0.536	ug/L	0.012	2	23	5331	0
	Sb	121	-0.017	ug/L	0.001	4	404	184	4
	Sb	123	-0.019	ug/L	0.000	1	325	133	1
	Ba	135	0.530	ug/L	0.021	4	140	2104	3
	Ba	137	0.531	ug/L	0.002	0	229	3590	1
>	Tb	159		ug/L			1016351	997443	0
	Tl	205	0.521	ug/L	0.008	1	70	16638	1
	Pb	208	0.564	ug/L	0.006	1	266	23408	0
	Bi	209		ug/L			2408229	2438934	0
	Th	232	0.421	ug/L	0.006	1	1504	18608	0
	U	238	0.502	ug/L	0.007	1	27	21139	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:55:43
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1047018	3
[	Be	9	-0.000	ug/L	0.001	248	12	11	18
	C	13		ug/L			59558	63533	2
	Cl	37		ug/L			4587445	4650479	0
[>	Sc	45		ug/L			952082	951561	1
[	V	51	0.008	ug/L	0.006	76	4902	5034	0
[	V-1	51	0.006	ug/L	0.001	11	71	183	5
[	Cr	52	0.030	ug/L	0.015	48	14444	14853	0
[	Cr	53	0.025	ug/L	0.006	23	87	127	8
[	Mn	55	0.006	ug/L	0.001	10	532	552	3
[	Co	59	0.000	ug/L	0.000	56	47	53	6
[>	Ge	72		ug/L			478848	467515	0
[	Ni	60	-0.008	ug/L	0.002	25	79	55	10
[	Ni	62	0.175	ug/L	0.015	8	131	199	3
[	Cu	63	0.023	ug/L	0.005	23	237	372	8
[	Cu	65	0.022	ug/L	0.007	33	88	147	13
[	Zn	66	1.122	ug/L	0.036	3	584	2438	2
[	Zn	67	1.024	ug/L	0.080	7	90	370	6
[	Zn	68	1.125	ug/L	0.026	2	887	2197	0
[	As	75	0.099	ug/L	0.011	10	1089	1216	1
[	As-1	75	0.293	ug/L	0.012	4	7286	7554	0
[	Se	82	0.039	ug/L	0.025	64	7	13	31
[	Se	78	1.029	ug/L	0.043	4	7339	7588	0
[	Mo	98	-0.001	ug/L	0.001	44	26	20	10
	Y	89		ug/L			336847	339461	0
	Kr	83		ug/L			1447	1564	2
[>	In	115		ug/L			869512	836340	1
[	Ag	107	-0.000	ug/L	0.000	118	14	11	19
[	Cd	111	-0.001	ug/L	0.002	113	78	69	7
[	Cd	114	-0.000	ug/L	0.001	264	23	19	38
[	Sb	121	-0.025	ug/L	0.002	6	404	77	23
[	Sb	123	-0.026	ug/L	0.001	4	325	65	15
[	Ba	135	-0.020	ug/L	0.003	16	140	63	16
[	Ba	137	-0.019	ug/L	0.002	9	229	100	13
[>	Tb	159		ug/L			1016351	978653	0
[	Tl	205	-0.001	ug/L	0.000	13	70	29	18
[	Pb	208	0.009	ug/L	0.001	9	266	606	4
[	Bi	209		ug/L			2408229	2364425	1
[	Th	232	-0.021	ug/L	0.003	13	1504	591	20
[	U	238	-0.000	ug/L	0.000	29	27	12	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:02:37
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1068099	1
[	Be	9	50.558	ug/L	0.152	0	12	158279	1
	C	13		ug/L			59558	61410	3
	Cl	37		ug/L			4587445	4794906	2
[>	Sc	45		ug/L			952082	982100	0
[	V	51	49.299	ug/L	1.274	2	4902	895465	2
[	V-1	51	49.252	ug/L	1.040	2	71	890831	1
[	Cr	52	49.723	ug/L	0.995	2	14444	735217	1
[	Cr	53	49.558	ug/L	0.374	0	87	81597	0
[	Mn	55	48.951	ug/L	0.482	0	432	966972	0
[	Co	59	49.621	ug/L	0.600	1	47	686568	1
[>	Ge	72		ug/L			478848	481164	1
[	Ni	60	50.697	ug/L	0.178	0	79	147718	1
[	Ni	62	49.379	ug/L	0.786	1	131	20625	1
[	Cu	63	49.649	ug/L	0.818	1	237	315532	0
[	Cu	65	49.374	ug/L	0.313	0	88	140239	1
[	Zn	66	49.445	ug/L	0.991	2	584	85264	0
[	Zn	67	48.902	ug/L	0.534	1	90	13953	1
[	Zn	68	49.545	ug/L	1.452	2	887	61208	2
[	As	75	49.466	ug/L	0.726	1	1089	79518	0
[	As-1	75	49.158	ug/L	0.756	1	7286	83202	0
[	Se	82	52.998	ug/L	0.746	1	7	9246	1
[	Se	78	49.623	ug/L	0.961	1	7339	28361	1
[	Mo	98	49.568	ug/L	0.382	0	26	197952	1
	Y	89		ug/L			336847	352549	0
	Kr	83		ug/L			1447	1524	4
[>	In	115		ug/L			869512	863143	0
[	Ag	107	50.738	ug/L	1.349	2	14	355839	1
[	Cd	111	50.367	ug/L	0.316	0	78	199648	0
[	Cd	114	50.901	ug/L	1.036	2	23	506378	1
[	Sb	121	50.079	ug/L	0.506	1	404	650202	0
[	Sb	123	49.399	ug/L	0.563	1	325	486432	0
[	Ba	135	49.543	ug/L	0.020	0	40	184876	0
[	Ba	137	49.297	ug/L	0.482	0	229	313567	0
[>	Tb	159		ug/L			1016351	1017601	0
[	Tl	205	48.448	ug/L	0.090	0	70	1570703	0
[	Pb	208	49.417	ug/L	0.208	0	266	2068952	0
[	Bi	209		ug/L			2408229	2359835	1
[	Th	232	50.035	ug/L	2.207	4	1504	2078775	4
[	U	238	50.534	ug/L	0.874	1	27	2167427	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:09:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1036989	1
	Be	9	-0.001	ug/L	0.001	120	12	9	31
	C	13		ug/L			59558	62318	1
	Cl	37		ug/L			4587445	4724421	1
>	Sc	45		ug/L			952082	946021	1
	V	51	0.005	ug/L	0.014	304	4902	4948	4
	V-1	51	0.003	ug/L	0.001	35	71	121	13
	Cr	52	0.017	ug/L	0.044	265	14444	14581	3
	Cr	53	0.011	ug/L	0.003	24	87	104	4
	Mn	55	0.001	ug/L	0.002	368	432	441	8
	Co	59	0.001	ug/L	0.001	105	47	65	28
>	Ge	72		ug/L			478848	461487	2
	Ni	60	-0.007	ug/L	0.005	76	79	57	27
	Ni	62	0.092	ug/L	0.010	10	131	163	4
	Cu	63	0.000	ug/L	0.001	249	237	231	1
	Cu	65	-0.004	ug/L	0.004	117	88	75	12
	Zn	66	-0.062	ug/L	0.015	24	584	461	4
	Zn	67	-0.077	ug/L	0.019	25	90	66	8
	Zn	68	-0.030	ug/L	0.034	112	887	819	2
	As	75	0.073	ug/L	0.031	42	1089	1161	4
	As-1	75	0.330	ug/L	0.163	49	7286	7508	1
	Se	82	-0.018	ug/L	0.112	622	7	4	449
	Se	78	1.215	ug/L	0.578	47	7339	7562	0
	Mo	98	0.004	ug/L	0.003	76	26	41	30
	Y	89		ug/L			336847	334583	0
	Kr	83		ug/L			1447	1551	1
>	In	115		ug/L			869512	839514	1
	Ag	107	0.001	ug/L	0.001	79	14	20	25
	Cd	111	-0.003	ug/L	0.002	54	78	63	9
	Cd	114	0.001	ug/L	0.001	153	23	28	33
	Sb	121	0.025	ug/L	0.008	30	404	707	13
	Sb	123	0.022	ug/L	0.005	24	325	528	9
	Ba	135	-0.011	ug/L	0.003	30	140	94	13
	Ba	137	-0.011	ug/L	0.003	25	229	151	12
>	Tb	159		ug/L			1016351	967755	1
	Tl	205	0.000	ug/L	0.001	131	70	79	21
	Pb	208	0.000	ug/L	0.000	99	266	271	6
	Bi	209		ug/L			2409	2334707	1
	Th	232	0.033	ug/L	0.004	12	1504	2718	5
	U	238	0.001	ug/L	0.000	38	27	63	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 G-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:16:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1045183	1
	Be	9	0.003	ug/L	0.002	53	12	21	22
	C	13		ug/L			59558	65545	2
	Cl	37		ug/L			4587445	4924061	0
>	Sc	45		ug/L			952082	979290	0
	V	51	0.179	ug/L	0.019	10	4902	8270	3
	V-1	51	0.221	ug/L	0.004	1	71	4062	1
	Cr	52	0.024	ug/L	0.052	219	14444	15196	4
	Cr	53	0.172	ug/L	0.008	4	87	371	3
	Mn	55	72.519	ug/L	2.062	2	432	1428048	2
	Co	59	0.163	ug/L	0.005	3	47	2294	2
>	Ge	72		ug/L			478848	474372	1
	Ni	60	0.788	ug/L	0.022	2	79	2341	1
	Ni	62	0.740	ug/L	0.101	13	131	433	10
	Cu	63	0.124	ug/L	0.007	5	237	1011	4
	Cu	65	0.062	ug/L	0.009	13	88	261	9
	Zn	66	0.793	ug/L	0.017	2	584	1918	1
	Zn	67	0.755	ug/L	0.068	8	90	300	5
	Zn	68	1.023	ug/L	0.014	1	887	2106	0
	As	75	2.820	ug/L	0.110	3	1089	5486	1
	As-1	75	3.013	ug/L	0.159	5	7286	11802	0
	Se	82	-0.042	ug/L	0.037	88	7	0	6553
	Se	78	0.575	ug/L	0.277	48	7339	7509	0
	Mo	98	0.672	ug/L	0.007	1	2626	2670	1
	Y	89		ug/L			336847	349451	0
	Kr	83		ug/L			1447	1535	0
>	In	115		ug/L			869512	862666	0
	Ag	107	0.000	ug/L	0.001	144	14	17	28
	Cd	111	0.001	ug/L	0.001	125	78	80	4
	Cd	114	0.003	ug/L	0.000	10	23	55	6
	Sb	121	-0.005	ug/L	0.002	33	404	332	7
	Sb	123	-0.009	ug/L	0.002	18	325	234	7
	Ba	135	1.387	ug/L	0.027	1	140	5306	1
	Ba	137	1.406	ug/L	0.010	0	229	9163	1
>	Tb	159		ug/L			1016351	1008488	1
	Tl	205	0.005	ug/L	0.001	18	70	243	12
	Pb	208	0.008	ug/L	0.001	7	266	589	3
	Bi	209		ug/L			2408229	2387853	0
	Th	232	0.035	ug/L	0.009	27	1504	2918	12
	U	238	0.020	ug/L	0.001	5	27	897	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:20:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1084603	0
	Be	9	0.020	ug/L	0.003	14	12	75	11
	C	13		ug/L			59558	73990	1
	Cl	37		ug/L			4587445	5781867	1
>	Sc	45		ug/L			952082	1079340	2
	V	51	0.835	ug/L	0.049	5	4902	22123	1
	V-1	51	0.957	ug/L	0.034	3	71	19097	0
	Cr	52	0.175	ug/L	0.034	19	14444	19146	2
	Cr	53	0.606	ug/L	0.027	4	87	1196	6
	Mn	55	346.109	ug/L	8.382	2	432	7507876	0
	Co	59	0.727	ug/L	0.020	2	47	11099	1
>	Ge	72		ug/L			478848	482234	1
	Ni	60	3.852	ug/L	0.024	0	79	11323	1
	Ni	62	3.859	ug/L	0.413	10	131	1738	10
	Cu	63	0.716	ug/L	0.024	3	237	4795	4
	Cu	65	0.368	ug/L	0.022	5	88	1135	6
	Zn	66	1.758	ug/L	0.056	3	584	3606	2
	Zn	67	1.869	ug/L	0.006	0	90	622	0
	Zn	68	2.681	ug/L	0.070	2	887	4166	3
	As	75	13.245	ug/L	0.112	0	1089	22143	0
	As-1	75	13.692	ug/L	0.126	0	7286	28522	0
	Se	82	0.056	ug/L	0.089	160	7	17	89
	Se	78	0.649	ug/L	0.028	4	7339	7665	0
	Mo	98	3.282	ug/L	0.010	0	26	13161	1
	Y	89		ug/L			336847	353929	2
	Kr	83		ug/L			1447	1600	1
>	In	115		ug/L			869512	870761	0
	Ag	107	0.003	ug/L	0.001	19	14	36	12
	Cd	111	0.014	ug/L	0.001	9	78	133	4
	Cd	114	0.016	ug/L	0.001	4	23	186	3
	Sb	121	0.012	ug/L	0.003	24	404	563	7
	Sb	123	0.007	ug/L	0.001	12	325	398	2
	Ba	135	7.040	ug/L	0.107	1	140	26620	0
	Ba	137	7.192	ug/L	0.059	0	229	46348	1
>	Tb	159		ug/L			1016351	1044844	1
	Tl	205	0.011	ug/L	0.000	1	70	449	2
	Pb	208	0.021	ug/L	0.001	6	266	1194	3
	Bi	209		ug/L			2408229	2313813	1
	Th	232	0.111	ug/L	0.047	42	1504	6313	33
	U	238	0.100	ug/L	0.003	2	27	4445	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 GDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:24:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1102968	1
	Be	9	0.022	ug/L	0.003	11	12	85	10
	C	13		ug/L			59558	75768	3
	Cl	37		ug/L			4587445	6078568	1
>	Sc	45		ug/L			952082	1119101	0
	V	51	0.844	ug/L	0.035	4	4902	23124	2
	V-1	51	0.950	ug/L	0.031	3	71	19668	2
	Cr	52	0.149	ug/L	0.038	25	14444	19436	2
	Cr	53	0.527	ug/L	0.019	3	87	1091	2
	Mn	55	341.197	ug/L	3.005	0	432	7677283	0
	Co	59	0.721	ug/L	0.006	0	47	11416	0
>	Ge	72		ug/L			478848	480448	0
	Ni	60	4.224	ug/L	0.106	2	79	12361	2
	Ni	62	4.517	ug/L	0.186	4	131	2004	4
	Cu	63	1.065	ug/L	0.033	3	237	6995	3
	Cu	65	0.698	ug/L	0.014	1	88	2066	1
	Zn	66	4.651	ug/L	0.055	1	584	8540	1
	Zn	67	4.713	ug/L	0.266	5	90	1424	5
	Zn	68	5.662	ug/L	0.095	1	887	7774	1
	As	75	13.457	ug/L	0.085	0	1089	22398	0
	As-1	75	13.999	ug/L	0.135	0	7286	28889	0
	Se	82	0.054	ug/L	0.045	83	7	16	45
	Se	78	1.052	ug/L	0.233	22	7339	7807	0
	Mo	98	3.457	ug/L	0.035	1	26	13810	0
	Y	89		ug/L			336847	365505	1
	Kr	83		ug/L			1447	1638	1
>	In	115		ug/L			869512	889135	0
	Ag	107	0.002	ug/L	0.001	44	14	27	20
	Cd	111	0.019	ug/L	0.001	6	78	157	3
	Cd	114	0.019	ug/L	0.003	16	23	219	14
	Sb	121	0.014	ug/L	0.002	11	404	594	3
	Sb	123	0.010	ug/L	0.001	11	325	438	2
	Ba	135	7.199	ug/L	0.056	0	140	27795	0
	Ba	137	7.250	ug/L	0.070	0	229	47706	1
>	Tb	159		ug/L			1016351	1066129	0
	Tl	205	0.011	ug/L	0.001	6	70	453	5
	Pb	208	0.060	ug/L	0.002	3	266	2925	3
	Bi	209		ug/L			2408229	2347170	0
	Th	232	0.031	ug/L	0.012	37	1504	2939	18
	U	238	0.101	ug/L	0.003	2	27	4579	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 GSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:29:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

ZN

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1115500	2
	Be	9	23.728	ug/L	1.116	4	12	77520	1
	C	13		ug/L			59558	75078	2
	Cl	37		ug/L			4587445	6161552	2
>	Sc	45		ug/L			952082	1128830	1
	V	51	23.512	ug/L	0.269	1	4902	493920	0
	V-1	51	23.260	ug/L	0.164	0	71	483608	0
	Cr	52	23.339	ug/L	0.401	1	14444	405703	0
	Cr	53	22.452	ug/L	0.018	0	87	42546	1
	Mn	55	363.782	ug/L	3.863	1	432	8256770	1
	Co	59	22.505	ug/L	0.249	1	47	357925	1
>	Ge	72		ug/L			478848	483612	2
	Ni	60	28.681	ug/L	0.407	1	79	84014	1
	Ni	62	28.598	ug/L	1.805	6	131	12051	3
	Cu	63	24.801	ug/L	0.679	2	237	158500	1
	Cu	65	24.428	ug/L	0.667	2	88	69752	0
	Zn	66	71.657	ug/L	2.875	4	584	123875	1
	Zn	67	67.851	ug/L	0.630	0	90	19420	1
	Zn	68	72.557	ug/L	1.824	2	887	89654	0
	As	75	38.771	ug/L	0.807	2	1089	62868	0
	As-1	75	37.236	ug/L	1.127	3	7286	65108	0
	Se	82	75.519	ug/L	1.568	2	7	13237	1
	Se	78	69.951	ug/L	2.835	4	7339	37131	1
	Mo	98	28.912	ug/L	0.406	1	26	116032	1
	Y	89		ug/L			336847	364695	1
	Kr	83		ug/L			1447	1618	3
>	In	115		ug/L			869512	899719	0
	Ag	107	19.143	ug/L	0.316	1	14	139958	0
	Cd	111	23.667	ug/L	0.176	0	78	97829	0
	Cd	114	24.083	ug/L	0.415	1	23	249759	1
	Sb	121	24.330	ug/L	0.130	0	404	329504	0
	Sb	123	23.905	ug/L	0.271	1	325	245545	0
	Ba	135	31.881	ug/L	0.549	1	140	124048	0
	Ba	137	31.827	ug/L	0.127	0	229	211119	1
>	Tb	159		ug/L			1016351	1071211	0
	Tl	205	23.573	ug/L	0.154	0	70	804538	0
	Pb	208	23.812	ug/L	0.141	0	266	1049599	0
	Bi	209		ug/L			2408229	2352738	1
	Th	232	23.592	ug/L	0.195	0	1504	1032686	0
	U	238	23.746	ug/L	0.100	0	27	1072183	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US52 GPOST REN~~ 222222

Sample Dil Factor: 2

Comments: 5/10/12 JLK

Sample Date/Time: Thursday, May 17, 2012 15:33:10

Number of Replicates: 3

Method File: C:\NexION Data\Method\200.8nomin.mth

Tuning File: C:\NexION Data\MassCal\default.tun

Optimization File: C:\NexION Data\Conditions\default.dac

Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1089913	1
	Be	9	25.249	ug/L	0.103	0	12	80666	0
	C	13		ug/L			59558	75048	3
	Cl	37		ug/L			4587445	5950044	5
>	Sc	45		ug/L			952082	1088837	5
	V	51	25.101	ug/L	1.034	4	4902	507544	1
	V-1	51	25.058	ug/L	0.972	3	71	501863	1
	Cr	52	24.633	ug/L	1.044	4	14444	411575	1
	Cr	53	24.482	ug/L	0.788	3	87	44691	2
	Mn	55	366.936	ug/L	5.867	1	432	8028905	3
	Co	59	24.622	ug/L	0.647	2	47	377379	2
>	Ge	72		ug/L			478848	470364	1
	Ni	60	30.365	ug/L	0.215	0	79	86520	0
	Ni	62	30.226	ug/L	0.504	1	131	12395	2
	Cu	63	26.305	ug/L	0.077	0	237	163557	1
	Cu	65	25.728	ug/L	0.131	0	88	71475	1
	Zn	66	77.287	ug/L	0.548	0	584	129987	1
	Zn	67	71.815	ug/L	0.656	0	90	19988	0
	Zn	68	75.923	ug/L	1.819	2	887	91255	3
	As	75	41.004	ug/L	0.075	0	1089	64626	1
	As-1	75	39.694	ug/L	0.331	0	7286	67064	1
	Se	82	79.497	ug/L	0.480	0	7	13555	0
	Se	78	74.734	ug/L	0.981	1	7339	38110	1
	Mo	98	3.333	ug/L	0.017	0	26	13033	0
	Y	89		ug/L			336847	354287	1
	Kr	83		ug/L			1447	1584	1
>	In	115		ug/L			869512	885839	0
	Ag	107	24.872	ug/L	0.570	2	14	179043	1
	Cd	111	25.554	ug/L	0.322	1	78	103997	1
	Cd	114	25.562	ug/L	0.218	0	23	261013	0
	Sb	121	0.025	ug/L	0.004	15	404	741	6
	Sb	123	0.019	ug/L	0.003	14	325	521	4
	Ba	135	33.360	ug/L	0.392	1	140	127804	1
	Ba	137	33.688	ug/L	0.484	1	229	219995	1
>	Tb	159		ug/L			1016351	1054312	0
	Tl	205	25.388	ug/L	0.444	1	70	852749	1
	Pb	208	25.454	ug/L	0.232	0	266	1104221	0
	Bi	209		ug/L			2408229	2342422	0
	Th	232	25.481	ug/L	0.149	0	1504	1097679	1
	U	238	25.486	ug/L	0.322	1	27	1132524	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US52 GDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:42:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1076522	1087634	1
[	Be	9	0.020	ug/L	0.003	12	12	77	10
	C	13		ug/L			59558	76261	4
	Cl	37		ug/L			4587445	6092550	2
[>	Sc	45		ug/L			952082	1107727	0
[	V	51	0.818	ug/L	0.024	2	4902	22358	2
[	V-1	51	0.896	ug/L	0.019	2	71	18353	2
[	Cr	52	0.155	ug/L	0.019	12	1[illegible]4	19340	1
[	Cr	53	0.433	ug/L	0.015	3	87	904	3
[	Mn	55	345.185	ug/L	6.297	1	432	7688023	1
[	Co	59	0.713	ug/L	0.026	3	47	11188	3
[>	Ge	72		ug/L			478848	470556	0
[	Ni	60	4.052	ug/L	0.050	1	79	11618	1
[	Ni	62	3.878	ug/L	0.228	5	131	1703	5
[	Cu	63	0.776	ug/L	0.056	7	237	5051	6
[	Cu	65	0.426	ug/L	0.016	3	88	1270	3
[	Zn	66	1.603	ug/L	0.030	1	584	3259	1
[	Zn	67	1.831	ug/L	0.055	3	90	596	2
[	Zn	68	2.695	ug/L	0.120	4	887	4081	3
[	As	75	13.519	ug/L	0.359	2	1089	22034	2
[	As-1	75	14.115	ug/L	0.420	2	7286	28471	2
[	Se	82	0.087	ug/L	0.079	90	7	22	60
[	Se	78	1.259	ug/L	0.195	15	7339	7732	1
[	Mo	98	3.479	ug/L	0.049	1	26	13611	1
	Y	89		ug/L			336847	357675	1
	Kr	83		ug/L			1447	1595	2
[>	In	115		ug/L			86[illegible]12	872981	1
[	Ag	107	0.001	ug/L	0.001	165	14	19	43
[	Cd	111	0.015	ug/L	0.004	24	78	139	10
[	Cd	114	0.015	ug/L	0.002	13	23	178	10
[	Sb	121	0.009	ug/L	0.001	9	404	526	2
[	Sb	123	0.009	ug/L	0.001	6	325	415	2
[	Ba	135	7.215	ug/L	0.052	0	140	27348	0
[	Ba	137	7.256	ug/L	0.035	0	229	46874	1
[>	Tb	159		ug/L			1016351	1050070	2
[	Tl	205	0.010	ug/L	0.000	3	70	409	4
[	Pb	208	0.017	ug/L	0.000	0	266	1006	2
[	Bi	209		ug/L			2408229	2339861	0
[	Th	232	0.118	ug/L	0.062	52	1504	6617	40
[	U	238	0.101	ug/L	0.001	1	27	4485	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:49:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1048397	1
	Be	9	-0.001	ug/L	0.002	144	12	8	63
	C	13		ug/L			59558	63729	2
	Cl	37		ug/L			4587445	4944162	0
>	Sc	45		ug/L			952082	986584	1
	V	51	0.004	ug/L	0.003	71	4902	5160	0
	V-1	51	0.019	ug/L	0.001	4	71	423	4
	Cr	52	0.016	ug/L	0.009	55	14444	15192	0
	Cr	53	0.067	ug/L	0.006	8	87	201	5
	Mn	55	0.004	ug/L	0.001	31	432	532	5
	Co	59	-0.000	ug/L	0.000	406	47	48	7
>	Ge	72		ug/L			47[illegible]48	458090	0
	Ni	60	-0.011	ug/L	0.004	40	79	45	26
	Ni	62	-0.018	ug/L	0.013	74	131	119	4
	Cu	63	0.008	ug/L	0.003	35	237	278	6
	Cu	65	0.010	ug/L	0.004	45	88	110	10
	Zn	66	0.753	ug/L	0.044	5	584	1786	3
	Zn	67	0.690	ug/L	0.017	2	90	272	1
	Zn	68	0.764	ug/L	0.020	2	887	1734	1
	As	75	0.094	ug/L	0.043	45	1089	1184	5
	As-1	75	0.357	ug/L	0.070	19	7286	7494	0
	Se	82	0.111	ug/L	0.190	172	7	25	124
	Se	78	1.332	ug/L	0.249	18	7339	7557	0
	Mo	98	-0.002	ug/L	0.000	20	26	17	9
	Y	89		ug/L			336847	334321	2
	Kr	83		ug/L			1447	1523	1
>	In	115		ug/L			869512	852856	0
	Ag	107	-0.001	ug/L	0.001	152	14	10	60
	Cd	111	-0.000	ug/L	0.001	284	78	75	4
	Cd	114	-0.000	ug/L	0.000	70	23	21	5
	Sb	121	-0.026	ug/L	0.000	1	[illegible]04	63	7
	Sb	123	-0.028	ug/L	0.001	2	325	51	11
	Ba	135	-0.021	ug/L	0.003	12	140	60	16
	Ba	137	-0.021	ug/L	0.001	6	229	91	8
>	Tb	159		ug/L			1016351	997582	2
	Tl	205	-0.000	ug/L	0.000	45	70	55	13
	Pb	208	0.006	ug/L	0.001	9	266	516	5
	Bi	209		ug/L			2408229	2375305	1
	Th	232	-0.031	ug/L	0.000	1	1504	230	3
	U	238	-0.000	ug/L	0.000	38	27	11	50

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 15:53:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1083429	2
	Be	9	49.750	ug/L	1.316	2	12	157913	0
	C	13		ug/L			59558	64105	2
	Cl	37		ug/L			4587445	4981263	1
>	Sc	45		ug/L			952082	1013817	1
	V	51	47.867	ug/L	0.658	1	4902	897686	1
	V-1	51	47.813	ug/L	0.633	1	71	892663	0
	Cr	52	48.327	ug/L	0.677	1	14444	738167	2
	Cr	53	48.134	ug/L	1.027	2	87	81806	1
	Mn	55	48.523	ug/L	0.966	1	432	989607	2
	Co	59	48.042	ug/L	1.355	2	47	686015	1
>	Ge	72		ug/L			478848	471026	0
	Ni	60	50.296	ug/L	1.059	2	79	143458	1
	Ni	62	49.385	ug/L	0.849	1	131	20195	1
	Cu	63	50.139	ug/L	1.001	1	237	311964	1
	Cu	65	49.537	ug/L	1.110	2	88	137747	2
	Zn	66	49.721	ug/L	0.497	0	584	83946	0
	Zn	67	49.994	ug/L	0.871	1	90	13962	1
	Zn	68	49.889	ug/L	1.797	3	887	60332	3
	As	75	49.804	ug/L	0.438	0	1089	78377	0
	As-1	75	49.295	ug/L	0.166	0	7286	81666	0
	Se	82	53.851	ug/L	0.704	1	7	9198	1
	Se	78	49.943	ug/L	0.592	1	7339	27898	0
	Mo	98	49.825	ug/L	0.912	1	26	194773	1
	Y	89		ug/L			336847	351201	0
	Kr	83		ug/L			1447	1593	1
>	In	115		ug/L			869512	875291	1
	Ag	107	49.313	ug/L	0.327	0	14	350751	1
	Cd	111	50.155	ug/L	0.620	1	78	201613	1
	Cd	114	50.856	ug/L	0.834	1	23	513026	0
	Sb	121	49.524	ug/L	0.944	1	404	652075	2
	Sb	123	48.753	ug/L	0.721	1	325	486812	1
	Ba	135	49.382	ug/L	0.513	1	140	186881	2
	Ba	137	49.364	ug/L	0.180	0	229	318416	1
>	Tb	159		ug/L			1010751	1028536	1
	Tl	205	48.488	ug/L	0.271	0	70	1588827	0
	Pb	208	49.466	ug/L	0.185	0	266	2093241	1
	Bi	209		ug/L			2408229	2406935	1
	Th	232	51.021	ug/L	1.007	1	1504	2142290	0
	U	238	50.809	ug/L	0.546	1	27	2202549	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 16:00:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1019810	1
	Be	9	-0.000	ug/L	0.001	12848	12	12	36
	C	13		ug/L			59558	62683	2
	Cl	37		ug/L			4587445	4767450	1
>	Sc	45		ug/L			952082	963543	0
	V	51	-0.007	ug/L	0.005	75	4902	4844	1
	V-1	51	0.009	ug/L	0.001	12	71	228	7
	Cr	52	-0.019	ug/L	0.024	128	14444	14353	2
	Cr	53	0.035	ug/L	0.014	38	87	145	15
	Mn	55	-0.001	ug/L	0.001	116	432	418	4
	Co	59	0.001	ug/L	0.000	40	47	57	6
>	Ge	72		ug/L			478848	456855	1
	Ni	60	-0.008	ug/L	0.003	46	79	54	18
	Ni	62	-0.049	ug/L	0.041	82	131	106	13
	Cu	63	-0.008	ug/L	0.002	19	237	177	7
	Cu	65	-0.005	ug/L	0.002	43	88	71	5
	Zn	66	-0.018	ug/L	0.011	57	584	528	4
	Zn	67	-0.006	ug/L	0.005	87	90	84	3
	Zn	68	0.036	ug/L	0.025	67	887	889	3
	As	75	0.063	ug/L	0.049	78	1189	1135	8
	As-1	75	0.269	ug/L	0.037	13	7286	7345	1
	Se	82	0.050	ug/L	0.253	508	7	15	267
	Se	78	1.009	ug/L	0.144	14	7339	7406	1
	Mo	98	0.004	ug/L	0.004	87	26	41	34
	Y	89		ug/L			336847	340784	2
	Kr	83		ug/L			1447	1489	3
>	In	115		ug/L			869512	837725	0
	Ag	107	0.002	ug/L	0.003	129	14	27	64
	Cd	111	-0.000	ug/L	0.002	739	78	74	12
	Cd	114	0.001	ug/L	0.002	182	23	32	53
	Sb	121	0.022	ug/L	0.008	35	404	659	14
	Sb	123	0.023	ug/L	0.008	35	325	530	14
	Ba	135	-0.010	ug/L	0.001	6	140	97	2
	Ba	137	-0.008	ug/L	0.003	40	229	173	11
>	Tb	159		ug/L			1016351	982869	1
	Tl	205	0.001	ug/L	0.001	69	70	111	26
	Pb	208	0.001	ug/L	0.001	84	266	290	8
	Bi	209		ug/L			2408229	2356521	0
	Th	232	0.034	ug/L	0.011	32	2404	2816	16
	U	238	0.001	ug/L	0.001	58	27	65	34

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 5-08-12

Page: 2 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments	
STD 0.0	Twin	1x			
STD 0.1	Twin	1x			
STD 0.5	Twin	1x			
STD 1.0	Twin	1x			
STD 2.0	Twin	1x			
STD 5.0	Twin	1x			
STD 10.0	Twin	1x			
ICV	Twin	1x	7.98	Exp: 8 CLP %R=100	✓
ICB	Twin	1x	-0.04		✓
CCV1	Twin	1x	4.09	%R=102	✓
CCB1	Twin	1x	-0.02		✓
CRA	Twin	1x	0.10		✓
U515 MB1	Twin	1x	-0.00		✓
U515 MB1SPK	Twin	1x	2.12	%R=106	✓
U515 A	Twin	1x	-0.01		
U515 ADUP	Twin	1x	-0.00	ND RPD: Undetected	✓
U516 ASPK	Twin	1x	1.12	%R=112	✓
U516 B	Twin	1x			
U516 MB2	Twin	1x	0.00		✓
U515 MB2SPK	Twin	1x	2.06	%R=103	✓
U515 C	Twin	1x	-0.01		
CCV2	Twin	1x	4.21	%R=105	✓
CCB2	Twin	1x	-0.01		✓
U515 GDUP	Twin	1x	0.00	ND RPD: Undetected	✓
U515 GSPK	Twin	1x	1.08	%R=108	✓
U515 H	Twin	1x			
U552 MB1	Twin	1x	-0.00		✓
U552 MB1SPK	Twin	1x	2.08	%R=104	✓
U552 G	Twin	1x	-0.01		
U552 GDUP	Twin	1x	0.00	ND RPD: Undetected	✓

Chemical/Reagent ID:

10% $SnCl_2$: MP2092

14% NH_2OH/NaCl: MP2289

Standard ID:

Standard: 2933-13

ICV/CCV: 56-18

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 5-08-12

Page: 3 of 4

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
US52	GBPK	TWM	1X	1.10	%R=110	✓
US52	MB2	TWM	1X	-0.00		✓
US52	MB2SPK	TWM	1X	2.05	%R=103	✓
CCV3		TWM	1X	4.06	%R=102	✓
CCB3		TWM	1X	-0.01		✓
US52	P	TWM	1X	-0.00		
US52	PDUP	TWM	1X	-0.00	NO RPD: Undetected	✓
US52	PSPK	TWM	1X	1.06	%R=106	✓
US61	MB1	TWM	1X	-0.01		✓
US61	MB1SPK	TWM	1X	2.02	%R=101	✓
US61	A	TWM	1X			
US61	B	TWM	1X			
DM 5-8-12 US61	C	TWM	1X			
US61	D	TWM	1X	0.00		
US61	DDUP	TWM	1X	0.00	NO RPD: Undetected	✓
CCV4		TWM	1X	4.22	%R=106	✓
CCB4		TWM	1X	-0.01		✓
US61	DSPK	TWM	1X	1.03	%R=103	✓
US61	MB2	TWM	1X	-0.00		✓
US61	MB2SPK	TWM	1X	2.05	%R=103	✓
US61	G	TWM	1X	-0.00		
US61	GDUP	TWM	1X	-0.00	NO RPD: Undetected	✓
US61	GSPK	TWM	1X	1.07	%R=107	✓
US61	H	TWM	1X			
US61	I	TWM	1X			
US61	J	TWM	1X			
CCV5		TWM	1X	4.21	%R=105	✓
CCB5		TWM	1X	-0.01	ENDORP	✓
US74	MB	TWM	1X	-0.00		✓
US74	MBSPK	TWM	1X	2.10	%R=105	✓

Chemical/Reagent ID:

10% $SnCl_2$: MP2292

14% NH_2OH/NaCl: MP2289

Standard ID:

Standard: 2933-13

ICV/CCV: 56-16

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA (CVA) **Analysis Date:** 5-08-12

	Analyst SG 5.8	Peer BLD 5.8	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	—	—	
Carry-over	—	—	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	—	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	See Run Log
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Deliverables:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	See CAF

CETAC Hg Analysis Report - 12050800.DB - Tuesday, May 08, 2012, 12:55:57 PM

JBB 5/8/12

Analyst	
Date Started	Tuesday, May 08, 2012, 10:33:02
Worksheet	ARI 10ppb CALIB
Comment	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 10:33	3.94	0.31	4770.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 10:34	-0.01	6.93	-14.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US34 A SWM	08-May-2012, 10:36	10.00	1.13	12100.00	10.00	O - High

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 10:38	3.98	0.53	4820.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 10:39	-0.02	12.30	-18.40	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US34 A SWM	08-May-2012, 10:41	4.29	4.50	5200.00	20.00	

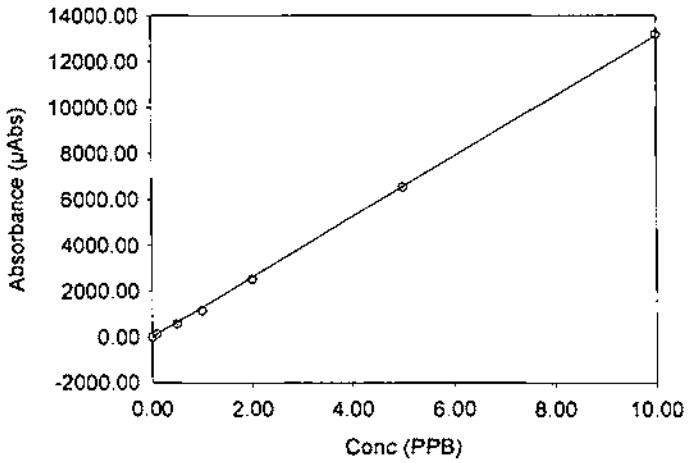
Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 10:43	3.93	0.46	4750.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 10:45	-0.01	7.88	-15.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	08-May-2012, 10:47	0.00	50.00	-7.83	1.00	
Standard #1	08-May-2012, 10:48	0.10	1.69	120.00	1.00	
Standard #2	08-May-2012, 10:50	0.50	0.64	564.00	1.00	
Standard #3	08-May-2012, 10:51	1.00	0.19	1170.00	1.00	
Standard #4	08-May-2012, 10:53	2.00	0.64	2530.00	1.00	
Standard #5	08-May-2012, 10:55	5.00	0.31	6550.00	1.00	
Standard #6	08-May-2012, 10:56	10.00	0.39	13200.00	1.00	

TWM

Calibration Data



Int.	0.000
Slope	1314.013
Correlation	0.99985

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	08-May-2012, 10:59	7.98	0.44	10500.00	1.00	
ICB	08-May-2012, 11:01	-0.04	4.88	-46.00	1.00	

Begin CLP

US52 : 01046

CETAC Hg Analysis Report - 12050800.DB - Tuesday, May 08, 2012, 12:55:57 PM

Analyst
Date Started Tuesday, May 08, 2012, 11:03:10
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 11:03	4.09	0.50	5380.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 11:04	-0.02	16.30	-31.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	08-May-2012, 11:06	0.10	2.14	127.00	1.00	
US15 MB1 TWM	08-May-2012, 11:08	-0.00	62.50	-3.73	1.00	
US15 MB1SPK TWM	08-May-2012, 11:09	2.12	0.29	2780.00	1.00	
US15 A TWM	08-May-2012, 11:11	-0.01	7.34	-10.30	1.00	
US15 ADUP TWM	08-May-2012, 11:12	-0.00	138.00	-2.68	1.00	
US15 ASPK TWM	08-May-2012, 11:14	1.12	0.37	1470.00	1.00	
US15 B TWM	08-May-2012, 11:16	-0.00	14.40	-4.57	1.00	
US15 MB2 TWM	08-May-2012, 11:17	0.00	101.00	5.12	1.00	
US15 MB2SPK TWM	08-May-2012, 11:19	2.06	0.49	2710.00	1.00	
US15 G TWM	08-May-2012, 11:20	-0.01	25.00	-7.47	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 11:22	4.21	0.28	5540.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 11:24	-0.01	18.60	-9.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US15 GDUP TWM	08-May-2012, 11:25	0.00	205.00	0.62	1.00	
US15 GSPK TWM	08-May-2012, 11:27	1.08	0.33	1420.00	1.00	
US15 H TWM	08-May-2012, 11:29	0.00	27.10	3.28	1.00	
US52 MB1 TWM	08-May-2012, 11:30	-0.00	58.90	-3.75	1.00	
US52 MB1SPK TWM	08-May-2012, 11:32	2.08	0.13	2740.00	1.00	
US52 G TWM	08-May-2012, 11:33	-0.01	43.90	-11.80	1.00	
US52 GDUP TWM	08-May-2012, 11:35	0.00	36.00	2.87	1.00	
US52 GSPK TWM	08-May-2012, 11:37	1.10	0.37	1440.00	1.00	
US52 MB2 TWM	08-May-2012, 11:38	-0.00	561.00	-0.82	1.00	
US52 MB2SPK TWM	08-May-2012, 11:40	2.05	0.21	2690.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 11:42	4.06	0.21	5330.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 11:43	-0.01	7.40	-18.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US52 P TWM	08-May-2012, 11:45	-0.00	71.00	-4.31	1.00	
US52 PDUP TWM	08-May-2012, 11:47	-0.00	293.00	-0.96	1.00	
US52 PSPK TWM	08-May-2012, 11:48	1.06	0.53	1390.00	1.00	
US61 MB1 TWM	08-May-2012, 11:50	-0.01	23.60	-10.30	1.00	
US61 MB1SPK TWM	08-May-2012, 11:51	2.02	0.26	2660.00	1.00	
US61 A TWM	08-May-2012, 11:53	-0.02	3.70	-29.40	1.00	
US61 B TWM	08-May-2012, 11:55	0.00	104.00	4.19	1.00	
US61 C TWM	08-May-2012, 11:56	-0.00	81.40	-3.28	1.00	
US61 D TWM	08-May-2012, 11:58	0.00	17.20	3.24	1.00	
US61 DDUP TWM	08-May-2012, 11:59	0.00	36.80	6.43	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 12:01	4.22	0.28	5550.00	1.00	

CETAC Hg Analysis Report - 12050800.DB - Tuesday, May 08, 2012, 12:55:57 PM

Analyst
Date Started Tuesday, May 08, 2012, 12:03:13
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 12:03	-0.01	13.30	-10.70	1.00	
US61 DSPK TWM	08-May-2012, 12:04	1.03	0.22	1350.00	1.00	
US61 MB2 TWM	08-May-2012, 12:06	-0.00	38.20	-2.93	1.00	
US61 MB2SPK TWM	08-May-2012, 12:08	2.05	0.17	2690.00	1.00	
US61 G TWM	08-May-2012, 12:09	-0.00	33.30	-5.21	1.00	
US61 GDUP TWM	08-May-2012, 12:11	-0.00	274.00	-1.09	1.00	
US61 GSPK TWM	08-May-2012, 12:13	1.07	0.25	1410.00	1.00	
US61 H TWM	08-May-2012, 12:14	-0.00	128.00	-2.80	1.00	
US61 I TWM	08-May-2012, 12:16	-0.00	40.30	-3.74	1.00	
US61 J TWM	08-May-2012, 12:17	-0.00	34.30	-5.78	1.00	
QC Standard	08-May-2012, 12:19	4.21	0.19	5540.00	1.00	
QC Blank	08-May-2012, 12:21	-0.01	38.00	-10.70	1.00	END CLP
US74 MB TWM	08-May-2012, 12:22	-0.00	49.40	-4.29	1.00	
US74 MBSPK TWM	08-May-2012, 12:24	2.10	0.32	2760.00	1.00	
US74 A TWM	08-May-2012, 12:26	-0.01	48.20	-7.58	1.00	
US74 B TWM	08-May-2012, 12:27	-0.00	53.30	-2.28	1.00	
QC Standard	08-May-2012, 12:29	4.23	0.13	5550.00	1.00	
QC Blank	08-May-2012, 12:31	-0.01	46.30	-8.62	1.00	
US72 MB LEM	08-May-2012, 12:32	-0.01	29.20	-7.89	1.00	
US72 A LEM	08-May-2012, 12:34	-0.00	59.30	-4.83	1.00	
US72 ADUP LEM	08-May-2012, 12:36	-0.01	25.20	-6.58	1.00	
US72 ASPK LEM	08-May-2012, 12:37	1.33	0.71	1740.00	1.00	- Hi %R
US34 MB LEM	08-May-2012, 12:39	-0.00	30.60	-5.65	1.00	
US34 F LEM	08-May-2012, 12:40	13.90	0.37	18200.00	1.00	O - High
QC Standard	08-May-2012, 12:42	4.24	0.40	5570.00	1.00	
QC Blank	08-May-2012, 12:44	-0.02	5.05	-19.80	1.00	
US72 A LEM	08-May-2012, 12:46	-0.02	13.50	-23.40	1.00	
US72 ADUP LEM	08-May-2012, 12:47	0.01	36.90	7.53	1.00	
US72 ASPK LEM	08-May-2012, 12:49	1.31	1.14	1720.00	1.00	- Hi %R
US34 F LEM	08-May-2012, 12:50	6.86	0.17	9020.00	2.00	
QC Standard	08-May-2012, 12:52	4.25	0.17	5590.00	1.00	

5/8/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: SMM Instrument: CETAC
Analyst: KM Date: 5/03/12
Bath Temp: 95°C Start Time: 1320 End Time: 1350

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	——	0.00	50.0	0.0	3
STD1	2933-12	0.01	50.0	0.1	2
STD2	2933-12	0.05	50.0	0.5	2
STD3	2933-12	0.10	50.0	1.0	2
STD4	2933-12	0.20	50.0	2.0	2
STD5	2933-12	0.50	50.0	5.0	2
STD6	2933-12	1.00	50.0	10.0	2
CRA	2933-12	0.01	50.0	0.1	1
ICB/CCB	——	0.00	50.0	0.0	3
ICV/LCS	56-18	0.08	50.0	8.0	2
CCV	56-18	0.04	50.0	4.0	3

Chemical/Reagent ID:
HNO_3: I7370 H_2SO_4: I7184 HCl: ——
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

Digested 20.0mL

Prep Code: TNM Instrument: CETAC
Analyst: DM Date: 5-04-12
Bath Temp: 95°C Start Time: 0940 End Time: 1140

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	1
STD1	2933-13	0.01	100.0	0.1	1
STD2	2933-13	0.05	100.0	0.5	1
STD3	2933-13	0.10	100.0	1.0	1
STD4	2933-13	0.20	100.0	2.0	1
STD5	2933-13	0.50	100.0	5.0	1
STD6	2933-13	1.00	100.0	10.0	1
CRA	2933-13	0.01	100.0	0.1	1
ICB/CCB	—	0.00	100.0	0.0	1
ICV/LCS	56-18	0.16	100.0	8.0	1
CCV	56-18	0.08	100.0	4.0	1

Chemical/Reagent ID:
HNO_3: I7466 H_2SO_4: I7184 HCl: —
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

US52:01049

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: THM
Analyst: MJ
Bath Temp: 92°C
Start Time: 1505
Matrix: water
Date: 05.04.12
End Time: 1705

ARI Sample ID	Sample Bottle #	pH<2	~~Initial Weight (g)~~ Initial Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US61 A	6	✓	20.0	20.0	05.13 1	Y	
US61 B	6	✓	20.0	20.0	1	Y	
US61 C	6	✓	20.0	20.0	1	Y	
US61 D	7	✓	20.0	20.0	1	Y	
US61 DDUP	7	✓	20.0	20.0	1	Y	
US61 DSPK	7	✓	20.0	20.0	1	Y	
US61 MB1	—	✓	20.0	20.0	1	Y	
US61 MB1SPK	—	✓	20.0	20.0	1	Y	
US61 G	1	✓	20.0	20.0	1	Y	
US61 GDUP	1	✓	20.0	20.0	1	Y	
US61 GSPK	1	✓	20.0	20.0	1	Y	
US61 H	1	✓	20.0	20.0	1	Y	
US61 I	1	✓	20.0	20.0	1	Y	
US61 J	1	✓	20.0	20.0	1	Y	
US61 MB2	—	✓	20.0	20.0	1	Y	
US61 MB2SPK	—	✓	20.0	20.0	1	Y	
US74 A	1	—	20.0	20.0	05.14 1	N	preserved in lab
US74 B	1	✓	20.0	20.0	1	N	
US74 MB	—	✓	20.0	20.0	1	N	
US74 MBSPK	—	✓	20.0	20.0	1	N	

05.04.12 MJ

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

US52 : 61059

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 90°C
Start Time: 1335
Matrix: water
Date: 05.07.12
End Time: 1535

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US15 A	1	✓	20.0	20.0	05.11 1	Y	
US15 ADUP	1	✓	20.0	20.0	1	Y	
US15 ASPK	1	✓	20.0	20.0	1	Y	
US15 B	1	✓	20.0	20.0	1	Y	
US15 MB1	—	✓	20.0	20.0	1	Y	
US15 MB1SPK	—	✓	20.0	20.0	1	Y	
US15 G	1	✓	20.0	20.0	1	Y	
US15 GDUP	1	✓	20.0	20.0	1	Y	
US15 GSPK	1	✓	20.0	20.0	1	Y	
US15 H	1	✓	20.0	20.0	1	Y	
US15 MB2	—	✓	20.0	20.0	1	Y	
US15 MB2SPK	—	✓	20.0	20.0	1	Y	
US52 G	7	✓	20.0	20.0	05.13 1	Y	
US52 GDUP	7	✓	20.0	20.0	1	Y	
US52 GSPK	7	✓	20.0	20.0	1	Y	
US52 MB1	—	✓	20.0	20.0	1	Y	
US52 MB1SPK	—	✓	20.0	20.0	1	Y	
US52 P	1	✓	20.0	20.0	1	Y	
US52 PDUP	1	✓	20.0	20.0	1	Y	
US52 PSPK	1	✓	20.0	20.0	1	Y	
US52 MB2	—	✓	20.0	20.0	1	Y	
US52 MB2SPK	—	✓	20.0	20.0	1	Y	
				05.07.12 MJ			

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 5.9.12 **Analyst:** BW **Page:** 1 of 4

All corrections made by analyst unless otherwise noted. BW 5.9.12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		std 0			
		1			
		2			
		3			
		4			
		rinse sample			
		~~ICV~~ std 0			
		~~ICB~~ ICV			
		ICB			
		CCV1			
		CCB1			
		low check			
		ICSA			
		ICSAB			
		LR200			
		LR300			
		CCV2			
		CCB2			
		UR75R odp	RW	5 ✓	Cr
		0			
		Osph		✓	
		J			
		K			
		P			

US52 : 01052

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 5.9.12 **Analyst:** BW **Page:** 2 of 4

All corrections made by analyst unless otherwise noted. BW 5.9.12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		UR75R R	REN	5	Cr
		US97 A		10	Zn
		↓ B		↓	↓
		UT31 B		2	
		CCV3			
		CCB3			
		UT31 MB1	REN	2	
		US50 MB		↓ ✓	no Cr
		↓ MBsplk		✓	↓
		UT31 MB1 splk		✓	
		A-L		10 ✓	
		A		2 ✓	
		Adup		✓	
		A-spk		✓	
		~~ZZZZZZ~~			
2		~~A post~~			0.06ml spk #2
		↓ C		↓	
		CCV4			
		CCB4			53Cr low end QP
		US74 MB	REN	2 ✓	
		MBspk			
		A			
		↓ B		↓	
		US29 D		10	Cu Ni
		↓ E	↓	5	↓

5/10/12

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP (ICP-MS) GFA CVA **Analysis Date:** 5.9.12

	Analyst	Peer	Comment
	AW 5.10	MW 5.10.12	
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	see log
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	US50 CAF
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	US50 CAF

Instrument Tuning Report

1st

File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.977	2019	2147	0.718	
Mg	23.985	23.929	5652	2262	0.707	
Co	58.933	58.879	14146	2530	0.686	
In	114.904	114.879	27789	2983	0.703	
Pb	207.977	207.974	50438	3738	0.692	

US52 : 01055

Instrument Tuning Report

2d

File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.076	2033	2147	0.705	
Mg	23.985	24.029	5662	2262	0.696	
Co	58.933	58.979	14156	2530	0.682	
In	114.904	114.878	27782	2983	0.680	
Pb	207.977	207.976	50437	3738	0.697	

US52 : 01056

Instrument Tuning Report

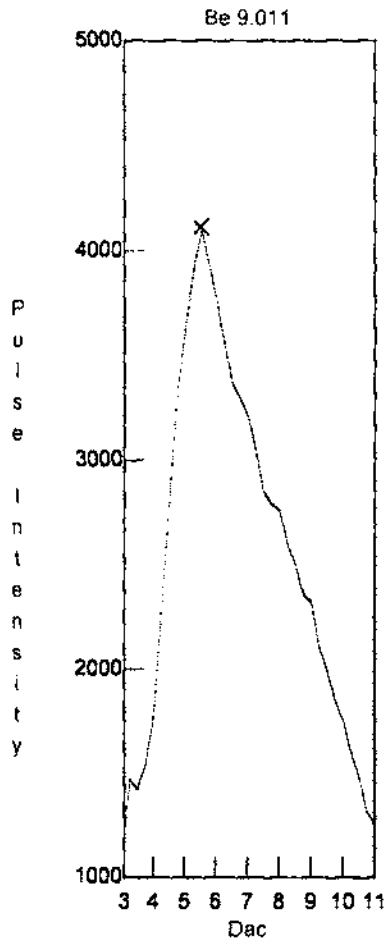
3rd

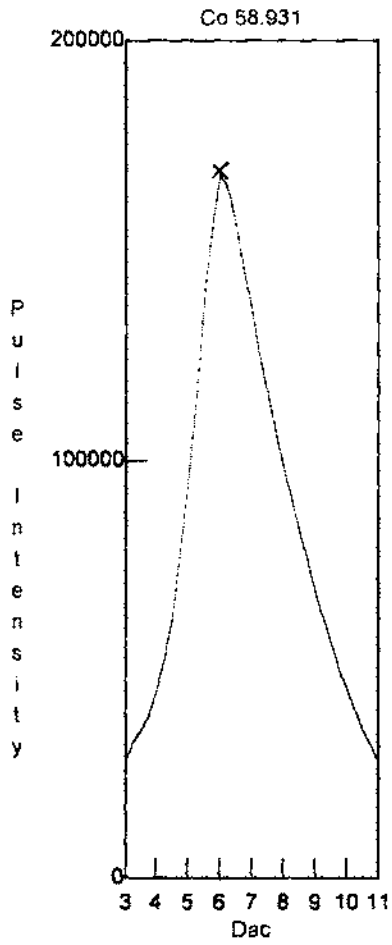
File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

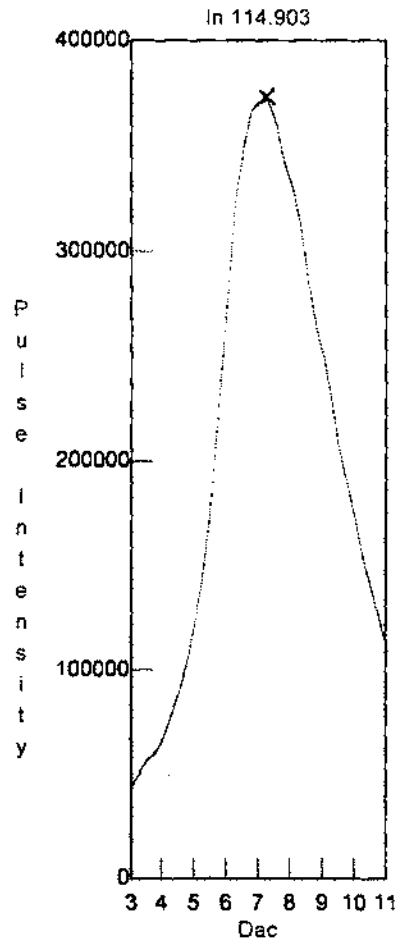
Analyte	Exact Mass	Meas. Mass		Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.976	✓	2024	2147	0.710	
Mg	23.985	23.979	✓	5660	2262	0.694	
Co	58.933	58.929	✓	14154	2530	0.682	✓
In	114.904	114.928	✓	27787	2983	0.679	
Pb	207.977	207.976	✓	50436	3738	0.698	

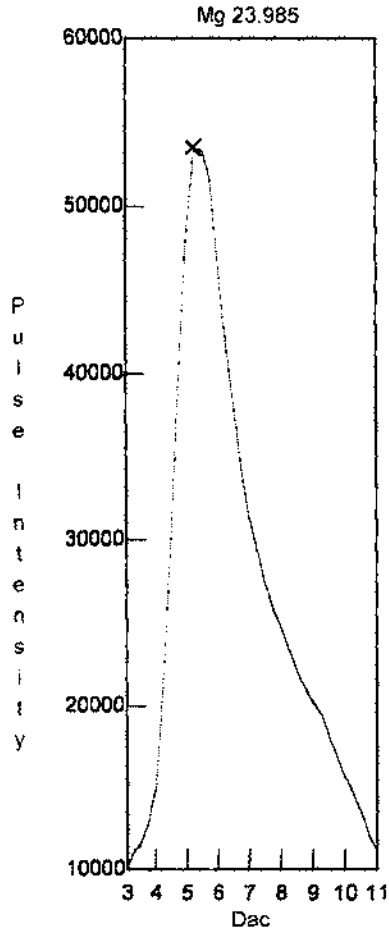
US52 : 01057

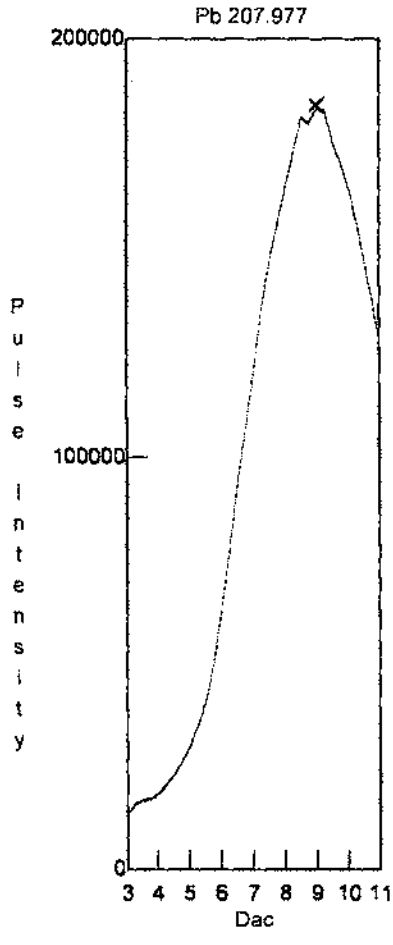
5.9.12

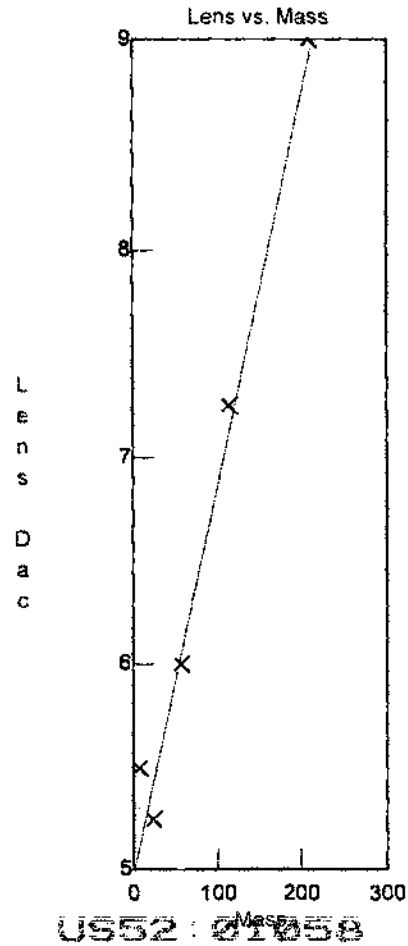












US52 : 01058

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, May 09, 2012 10:29:22
Sample Description:
Sample File: 1120.sam
Method File: C:\Elandata\Method\aridailyperf.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.714
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

neb
0.97

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	42844.724	181.624	0.424
	In	115	335622.813	3223.980	0.961
	Pb	208	193505.643	2700.382	1.396
⌈>	Ba	138	238960.503	2963.842	1.240
⌊	Ba++	69	0.014	0.001	3.688
⌈>	Ce	140	288239.451	2278.262	0.790
⌊	CeO	156	0.027	0.001	2.663
	Bkgd	220	5.751	2.092	36.377

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 10:50:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L				350652	0
⌊	Be	9		ug/L				2	65
	C	13		mg/L				5841	2
	Cl	37		mg/L				2291776	0
⌈>	Sc	45		ug/L				273194	0
|	V	51		ug/L				1850	7
|	V-1	51		ug/L				8430	4
|	Cr	52		ug/L				7350	1
|	Cr	53		ug/L				2934	5
|	Mn	55		ug/L				3187	88
⌊	Co	59		ug/L				84	12
⌈>	Ge	72		ug/L				292568	1
|	Ni	60		ug/L				103	62
|	Ni	62		ug/L				109	18
|	Cu	63		ug/L				223	24
|	Cu	65		ug/L				93	34
|	Zn	66		ug/L				442	47
|	Zn	67		ug/L				234	13
|	Zn	68		ug/L				7932	3
|	As	75		ug/L				955	3
|	As-1	75		ug/L				9423	0
|	Se	82		ug/L				-16	121
|	Se	78		ug/L				9583	0
⌊	Mo	98		ug/L				1311	25
	Y	89		ug/L				259237	0
	Kr	83		ug/L				468	1
⌈>	In	115		ug/L				308753	0
|	Ag	107		ug/L				17	16
|	Cd	111		ug/L				137	7
|	Cd	114		ug/L				14	3
|	Sb	121		ug/L				14	21
|	Sb	123		ug/L				10	8
|	Ba	135		ug/L				16	50
⌊	Ba	137		ug/L				27	27
⌈>	Tb	159		ug/L				323134	0
|	Tl	205		ug/L				45	22
|	Pb	208		ug/L				359	27
|	Bi	209		ug/L				265080	0
|	Th	232		ug/L				122	26
⌊	U	238		ug/L				22	49

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 10:56:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			350652	364438	2
[	Be	9	10.000	ug/L	0.173	1	2	4486	3
	C	13		mg/L			5841	4849	2
	Cl	37		mg/L			2291776	2295822	0
[>	Sc	45		ug/L			273194	273368	0
[	V	51	10.000	ug/L	0.044	0	1850	123663	0
[	V-1	51	10.000	ug/L	0.035	0	8430	131519	0
[	Cr	52	10.000	ug/L	0.075	0	7350	112635	0
[	Cr	53	10.000	ug/L	0.082	0	2934	15240	0
[	Mn	55	10.000	ug/L	0.044	0	3187	174708	0
[	Co	59	10.000	ug/L	0.032	0	84	130361	0
[>	Ge	72		ug/L			292568	293473	0
[	Ni	60	10.000	ug/L	0.126	1	103	27636	0
[	Ni	62	10.000	ug/L	0.043	0	109	4208	0
[	Cu	63	10.000	ug/L	0.085	0	223	60647	0
[	Cu	65	10.000	ug/L	0.025	0	93	28666	0
[	Zn	66	10.000	ug/L	0.042	0	442	17899	0
[	Zn	67	10.000	ug/L	0.279	2	234	3176	2
[	Zn	68	10.000	ug/L	0.275	2	7932	19649	1
[	As	75	10.000	ug/L	0.059	0	955	16997	0
[	As-1	75	10.000	ug/L	0.074	0	9423	25290	0
[	Se	82	10.000	ug/L	0.126	1	-16	1711	0
[	Se	78	10.000	ug/L	0.325	3	9583	13774	0
[	Mo	98	10.000	ug/L	0.036	0	1311	59219	0
	Y	89		ug/L			259237	262146	0
	Kr	83		ug/L			468	459	5
[>	In	115		ug/L			308753	303412	0
[	Ag	107	10.000	ug/L	0.108	1	17	102864	1
[	Cd	111	10.000	ug/L	0.047	0	137	25414	0
[	Cd	114	10.000	ug/L	0.066	0	14	59101	0
[	Sb	121	10.000	ug/L	0.067	0	14	83482	0
[	Sb	123	10.000	ug/L	0.153	1	10	63113	1
[	Ba	135	10.000	ug/L	0.122	1	16	19790	1
[	Ba	137	10.000	ug/L	0.069	0	27	33696	0
[>	Tb	159		ug/L			323134	325932	0
[	Tl	205	10.000	ug/L	0.096	0	45	229031	0
[	Pb	208	10.000	ug/L	0.031	0	359	319446	0
[	Bi	209		ug/L			265080	266995	0
[	Th	232	10.000	ug/L	0.069	0	122	383894	0
[	U	238	10.000	ug/L	0.139	1	22	432586	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:02:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			350652	370495	0
[	Be	9	19.839	ug/L	0.223	1	2	8762	0
	C	13		mg/L			5841	5350	1
	Cl	37		mg/L			2291776	2291451	0
[>	Sc	45		ug/L			273194	272089	0
|	V	51	19.982	ug/L	0.035	0	1850	243253	0
|	V-1	51	19.996	ug/L	0.066	0	8430	253181	0
|	Cr	52	19.949	ug/L	0.125	0	7350	214242	1
|	Cr	53	19.995	ug/L	0.097	0	2934	27384	0
|	Mn	55	19.996	ug/L	0.188	0	3187	344232	0
[	Co	59	19.943	ug/L	0.099	0	84	255794	0
[>	Ge	72		ug/L			292568	289243	0
|	Ni	60	20.032	ug/L	0.080	0	103	54813	0
|	Ni	62	19.972	ug/L	0.302	1	109	8130	1
|	Cu	63	19.996	ug/L	0.149	0	223	119193	0
|	Cu	65	19.955	ug/L	0.028	0	93	55784	0
|	Zn	66	19.997	ug/L	0.165	0	442	34821	0
|	Zn	67	19.876	ug/L	0.165	0	234	5854	0
|	Zn	68	20.094	ug/L	0.035	0	7932	31444	0
|	As	75	20.064	ug/L	0.172	0	955	33074	1
|	As-1	75	20.059	ug/L	0.081	0	9423	41001	1
|	Se	82	20.054	ug/L	0.578	2	-16	3437	3
|	Se	78	20.068	ug/L	0.300	1	9583	17820	1
[	Mo	98	20.069	ug/L	0.083	0	1311	117417	0
	Y	89		ug/L			259237	257597	0
	Kr	83		ug/L			468	470	4
[>	In	115		ug/L			308753	302766	0
|	Ag	107	19.894	ug/L	0.386	1	17	199940	1
|	Cd	111	19.980	ug/L	0.042	0	137	50337	0
|	Cd	114	19.953	ug/L	0.070	0	14	116570	0
|	Sb	121	19.980	ug/L	0.186	0	14	165782	0
|	Sb	123	19.975	ug/L	0.244	1	10	125154	1
|	Ba	135	19.945	ug/L	0.265	1	16	38941	1
[	Ba	137	19.955	ug/L	0.354	1	27	66467	1
[>	Tb	159		ug/L			323134	323366	2
|	Tl	205	19.989	ug/L	0.148	0	45	453175	1
|	Pb	208	19.986	ug/L	0.329	1	359	631105	0
|	Bi	209		ug/L			265080	265422	0
|	Th	232	19.977	ug/L	0.559	2	122	757079	0
[	U	238	19.977	ug/L	0.332	1	22	853298	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:08:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			350652	387454	2
[	Be	9	49.558	ug/L	1.451	2	2	21909	0
	C	13		mg/L			5841	3680	0
	Cl	37		mg/L			2291776	2279329	0
[>	Sc	45		ug/L			273194	279177	0
[	V	51	49.605	ug/L	0.253	0	1850	593416	1
[	V-1	51	49.622	ug/L	0.163	0	8430	609168	0
[	Cr	52	49.522	ug/L	0.816	1	7350	510460	1
[	Cr	53	49.580	ug/L	1.070	2	2934	62719	1
[	Mn	55	49.512	ug/L	0.256	0	3187	829461	0
[	Co	59	49.428	ug/L	0.896	1	84	615139	1
[>	Ge	72		ug/L			292568	296625	0
[	Ni	60	49.423	ug/L	0.105	0	103	130984	0
[	Ni	62	49.436	ug/L	0.344	0	109	19388	1
[	Cu	63	49.466	ug/L	0.249	0	223	286780	0
[	Cu	65	49.398	ug/L	0.315	0	93	133456	0
[	Zn	66	49.425	ug/L	0.382	0	442	82858	0
[	Zn	67	49.585	ug/L	0.293	0	234	14049	1
[	Zn	68	49.482	ug/L	0.433	0	7932	64707	0
[	As	75	49.586	ug/L	0.162	0	955	79152	0
[	As-1	75	49.577	ug/L	0.224	0	9423	86600	0
[	Se	82	49.505	ug/L	0.274	0	-16	8312	0
[	Se	78	49.439	ug/L	0.526	1	9583	29681	0
[	Mo	98	49.548	ug/L	0.516	1	1311	282603	0
	Y	89		ug/L			259237	265134	0
	Kr	83		ug/L			468	454	3
[>	In	115		ug/L			308753	309154	0
[	Ag	107	49.430	ug/L	0.498	1	17	479871	0
[	Cd	111	49.644	ug/L	0.408	0	137	123124	0
[	Cd	114	49.643	ug/L	0.614	1	14	285892	0
[	Sb	121	49.595	ug/L	0.475	0	14	403772	0
[	Sb	123	49.566	ug/L	0.496	1	10	303903	0
[	Ba	135	49.681	ug/L	0.514	1	16	95960	0
[	Ba	137	49.697	ug/L	0.306	0	27	164019	0
[>	Tb	159		ug/L			323134	333972	0
[	Tl	205	49.470	ug/L	0.594	1	45	1099971	0
[	Pb	208	49.511	ug/L	0.432	0	359	1539303	0
[	Bi	209		ug/L			265080	270132	0
[	Th	232	49.522	ug/L	0.785	1	122	1850297	0
[	U	238	49.661	ug/L	0.507	1	22	2119235	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:14:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			350652	363568	0
[	Be	9	101.367	ug/L	0.930	0	2	44072	0
	C	13		mg/L			5841	5102	0
	Cl	37		mg/L			2291776	2284245	1
[>	Sc	45		ug/L			273194	266967	0
[	V	51	100.762	ug/L	0.974	0	1850	1180714	0
[	V-1	51	100.836	ug/L	1.304	1	8430	1208645	1
[	Cr	52	100.701	ug/L	0.801	0	7350	1008650	0
[	Cr	53	100.941	ug/L	0.913	0	2934	122909	0
[	Mn	55	100.578	ug/L	0.762	0	3187	1639586	0
[	Co	59	100.408	ug/L	1.158	1	84	1211394	1
[>	Ge	72		ug/L			292568	282158	0
[	Ni	60	100.491	ug/L	0.654	0	103	257437	0
[	Ni	62	100.614	ug/L	0.704	0	109	38203	0
[	Cu	63	100.423	ug/L	0.602	0	223	561528	1
[	Cu	65	100.422	ug/L	0.338	0	93	261655	0
[	Zn	66	100.451	ug/L	0.249	0	442	162183	0
[	Zn	67	100.843	ug/L	1.444	1	234	27718	1
[	Zn	68	100.743	ug/L	0.918	0	7932	120181	1
[	As	75	100.849	ug/L	0.533	0	955	156591	1
[	As-1	75	100.931	ug/L	0.398	0	9423	163076	0
[	Se	82	100.781	ug/L	0.345	0	-16	16544	0
[	Se	78	101.167	ug/L	0.597	0	9583	49678	0
[	Mo	98	101.186	ug/L	1.101	1	1311	570175	0
	Y	89		ug/L			259237	251191	0
	Kr	83		ug/L			468	472	1
[>	In	115		ug/L			308753	292873	0
[	Ag	107	100.530	ug/L	0.919	0	17	941201	1
[	Cd	111	100.767	ug/L	1.188	1	137	242819	0
[	Cd	114	100.619	ug/L	0.451	0	14	560537	1
[	Sb	121	100.934	ug/L	0.847	0	14	803492	0
[	Sb	123	101.111	ug/L	1.714	1	10	609874	1
[	Ba	135	101.096	ug/L	1.801	1	16	191979	1
[	Ba	137	100.925	ug/L	1.492	1	27	325533	0
[>	Tb	159		ug/L			323134	316980	0
[	Tl	205	100.970	ug/L	1.764	1	45	2201910	0
[	Pb	208	100.683	ug/L	1.022	1	359	3039719	0
[	Bi	209		ug/L			265080	248353	1
[	Th	232	101.315	ug/L	2.105	2	122	3757387	1
[	U	238	101.003	ug/L	0.563	0	22	4232703	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:21:20
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			350652	368234	0
	Be	9	0.004	ug/L	0.003	63	2	5	25
	C	13		mg/L			5841	5519	2
	Cl	37		mg/L			2291776	2309348	0
>	Sc	45		ug/L			273194	268461	1
	V	51	0.022	ug/L	0.012	55	1850	2073	6
	V-1	51	-0.102	ug/L	0.007	7	8430	7067	0
	Cr	52	0.003	ug/L	0.016	549	7350	7251	1
	Cr	53	-0.391	ug/L	0.015	3	2934	2416	1
	Mn	55	-0.109	ug/L	0.003	3	3187	1355	3
	Co	59	0.003	ug/L	0.002	51	84	118	16
>	Ge	72		ug/L			292568	283745	0
	Ni	60	-0.012	ug/L	0.002	18	103	68	8
	Ni	62	-0.021	ug/L	0.070	333	109	98	27
	Cu	63	-0.003	ug/L	0.004	155	223	202	11
	Cu	65	0.001	ug/L	0.004	308	93	94	11
	Zn	66	-0.111	ug/L	0.004	3	442	250	2
	Zn	67	-0.195	ug/L	0.060	30	234	174	9
	Zn	68	-0.272	ug/L	0.208	76	7932	7388	3
	As	75	0.011	ug/L	0.048	446	955	944	8
	As-1	75	0.014	ug/L	0.042	288	9423	9161	0
	Se	82	0.071	ug/L	0.162	229	-16	-4	587
	Se	78	0.071	ug/L	0.197	279	9583	9322	0
	Mo	98	-0.177	ug/L	0.010	5	1311	269	20
	Y	89		ug/L			259237	254001	1
	Kr	83		ug/L			468	452	1
>	In	115		ug/L			308753	295824	0
	Ag	107	0.025	ug/L	0.006	22	17	255	20
	Cd	111	0.002	ug/L	0.003	191	137	136	6
	Cd	114	0.005	ug/L	0.001	24	14	39	15
	Sb	121	0.125	ug/L	0.033	26	14	1019	25
	Sb	123	0.124	ug/L	0.022	17	10	763	17
	Ba	135	0.009	ug/L	0.002	23	16	32	11
	Ba	137	0.008	ug/L	0.004	48	27	52	23
>	Tb	159		ug/L			323134	318630	0
	Tl	205	0.013	ug/L	0.004	29	45	331	25
	Pb	208	0.009	ug/L	0.004	39	359	640	17
	Bi	209		ug/L			265080	260798	0
	Th	232	0.051	ug/L	0.013	24	122	2026	23
	U	238	0.009	ug/L	0.003	33	22	410	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:29:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050812.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				379225	0
	Be	9		ug/L				1	43
	C	13		mg/L				5369	0
	Cl	37		mg/L				2292765	0
>	Sc	45		ug/L				266395	0
	V	51		ug/L				1871	9
	V-1	51		ug/L				6960	2
	Cr	52		ug/L				7102	1
	Cr	53		ug/L				2430	2
	Mn	55		ug/L				1181	5
	Co	59		ug/L				80	23
>	Ge	72		ug/L				284042	0
	Ni	60		ug/L				49	15
	Ni	62		ug/L				94	8
	Cu	63		ug/L				165	4
	Cu	65		ug/L				72	19
	Zn	66		ug/L				253	6
	Zn	67		ug/L				175	8
	Zn	68		ug/L				7445	1
	As	75		ug/L				900	2
	As-1	75		ug/L				9111	0
	Se	82		ug/L				-28	95
	Se	78		ug/L				9285	0
	Mo	98		ug/L				132	9
	Y	89		ug/L				253953	0
	Kr	83		ug/L				464	3
>	In	115		ug/L				295470	0
	Ag	107		ug/L				81	7
	Cd	111		ug/L				137	11
	Cd	114		ug/L				20	5
	Sb	121		ug/L				233	3
	Sb	123		ug/L				195	10
	Ba	135		ug/L				23	18
	Ba	137		ug/L				25	13
>	Tb	159		ug/L				317904	0
	Tl	205		ug/L				97	10
	Pb	208		ug/L				347	2
	Bi	209		ug/L				261623	0
	Th	232		ug/L				605	5
	U	238		ug/L				90	19

Quantitative Analysis - Calibration Report

Sample Date/Time: Wednesday, May 09, 2012 11:29:53
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	0.9996	0.0012	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V	51	0.9999	0.0438	10	20	50	100	
V-1	51	0.9999	0.0446	10	20	50	100	
Cr	52	0.9999	0.0373	10	20	50	100	
Cr	53	0.9998	0.0045	10	20	50	100	
Mn	55	0.9999	0.0609	10	20	50	100	
Co	59	0.9999	0.0452	10	20	50	100	
Ge	72							
Ni	60	0.9999	0.0091	10	20	50	100	
Ni	62	0.9999	0.0013	10	20	50	100	
Cu	63	0.9999	0.0198	10	20	50	100	
Cu	65	0.9999	0.0092	10	20	50	100	
Zn	66	0.9999	0.0057	10	20	50	100	
Zn	67	0.9998	0.0010	10	20	50	100	
Zn	68	0.9998	0.0040	10	20	50	100	
As	75	0.9998	0.0055	10	20	50	100	
As-1	75	0.9998	0.0054	10	20	50	100	
Se	82	0.9998	0.0006	10	20	50	100	
Se	78	0.9997	0.0014	10	20	50	100	
Mo	98	0.9997	0.0199	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	0.9999	0.0320	10	20	50	100	
Cd	111	0.9999	0.0082	10	20	50	100	
Cd	114	0.9999	0.0190	10	20	50	100	
Sb	121	0.9998	0.0272	10	20	50	100	
Sb	123	0.9998	0.0206	10	20	50	100	
Ba	135	0.9998	0.0065	10	20	50	100	
Ba	137	0.9998	0.0110	10	20	50	100	
Tb	159							
Tl	205	0.9998	0.0688	10	20	50	100	
Pb	208	0.9999	0.0952	10	20	50	100	
Bi	209							
Th	232	0.9997	0.1170	10	20	50	100	
U	238	0.9998	0.1322	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:36:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			379225	391435	1
	Be	9	47.501	ug/L	0.986	2	1	22231	0
	C	13		mg/L			5369	5878	1
	Cl	37		mg/L			2292765	2285181	0
>	Sc	45		ug/L			266395	273214	0
	V	51	48.988	ug/L	0.319	0	1871	588518	1
	V-1	51	49.083	ug/L	0.274	0	6960	605149	1
	Cr	52	49.173	ug/L	0.104	0	7102	507740	0
	Cr	53	49.466	ug/L	0.308	0	2430	62693	0
	Mn	55	49.434	ug/L	0.535	1	1181	824325	1
	Co	59	49.588	ug/L	0.339	0	80	612323	1
>	Ge	72		ug/L			284042	286387	0
	Ni	60	50.225	ug/L	0.674	1	49	130600	1
	Ni	62	49.258	ug/L	0.426	0	94	19026	0
	Cu	63	49.567	ug/L	0.299	0	165	281362	0
	Cu	65	49.873	ug/L	0.406	0	72	131925	1
	Zn	66	49.517	ug/L	0.411	0	253	81188	1
	Zn	67	49.095	ug/L	0.902	1	175	13761	1
	Zn	68	49.528	ug/L	0.171	0	7445	63658	0
	As	75	49.588	ug/L	0.251	0	900	78597	0
	As-1	75	49.302	ug/L	0.304	0	9111	85531	0
	Se	82	78.409	ug/L	0.585	0	-28	13048	0
	Se	78	78.382	ug/L	0.887	1	9285	41162	1
	Mo	98	50.152	ug/L	0.167	0	132	286347	0
	Y	89		ug/L			253953	256116	0
	Kr	83		ug/L			464	439	1
>	In	115		ug/L			295470	297522	1
	Ag	107	50.295	ug/L	0.506	1	81	478422	1
	Cd	111	48.982	ug/L	0.258	0	137	119984	0
	Cd	114	49.700	ug/L	0.422	0	20	281261	0
	Sb	121	49.621	ug/L	0.635	1	233	401483	0
	Sb	123	49.440	ug/L	0.510	1	195	303118	0
	Ba	135	49.050	ug/L	0.538	1	23	94639	0
	Ba	137	50.097	ug/L	0.564	1	25	164166	0
>	Tb	159		ug/L			317904	324623	1
	Tl	205	49.041	ug/L	0.436	0	97	1095453	1
	Pb	208	49.662	ug/L	0.355	0	347	1535706	0
	Bi	209		ug/L			261623	261509	1
	Th	232	48.766	ug/L	0.845	1	605	1852809	1
	U	238	49.119	ug/L	0.399	0	90	2108002	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:42:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			379225	376540	0
	Be	9	0.005	ug/L	0.005	118	1	3	66
	C	13		mg/L			5369	5508	0
	Cl	37		mg/L			2292765	2305096	1
>	Sc	45		ug/L			266395	266106	1
	V	51	0.020	ug/L	0.007	37	1871	2102	5
	V-1	51	-0.023	ug/L	0.010	44	6960	6681	3
	Cr	52	0.010	ug/L	0.017	172	7102	7188	1
	Cr	53	-0.127	ug/L	0.036	28	2430	2276	2
	Mn	55	-0.000	ug/L	0.001	357	1181	1174	2
	Co	59	0.001	ug/L	0.001	73	80	97	14
>	Ge	72		ug/L			284042	281212	0
	Ni	60	0.006	ug/L	0.004	77	49	63	17
	Ni	62	-0.006	ug/L	0.018	278	94	90	7
	Cu	63	0.004	ug/L	0.003	76	165	188	9
	Cu	65	0.005	ug/L	0.002	50	72	83	7
	Zn	66	-0.001	ug/L	0.019	1490	253	248	12
	Zn	67	-0.026	ug/L	0.035	135	175	166	5
	Zn	68	-0.043	ug/L	0.097	223	7445	7322	1
	As	75	0.004	ug/L	0.024	550	900	898	3
	As-1	75	0.045	ug/L	0.022	49	9111	9089	0
	Se	82	0.059	ug/L	0.126	211	-28	-18	109
	Se	78	0.158	ug/L	0.090	56	9285	9256	0
	Mo	98	0.004	ug/L	0.005	129	132	155	19
	Y	89		ug/L			253953	254594	0
	Kr	83		ug/L			464	450	2
>	In	115		ug/L			295470	292347	0
	Ag	107	0.008	ug/L	0.003	42	81	153	20
	Cd	111	0.007	ug/L	0.004	53	137	153	6
	Cd	114	0.000	ug/L	0.001	735	20	21	29
	Sb	121	0.009	ug/L	0.005	59	233	299	13
	Sb	123	0.007	ug/L	0.009	120	195	237	22
	Ba	135	-0.003	ug/L	0.002	60	23	17	23
	Ba	137	0.003	ug/L	0.003	87	25	34	24
>	Tb	159		ug/L			317904	320060	0
	Tl	205	0.003	ug/L	0.002	51	97	167	20
	Pb	208	0.004	ug/L	0.002	56	347	473	14
	Bi	209		ug/L			261623	259609	0
	Th	232	0.016	ug/L	0.005	30	605	1211	14
	U	238	0.003	ug/L	0.001	58	90	197	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:48:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	397910	0
[	Be	9	45.878	ug/L	0.113	0	1	21831	0
	C	13		mg/L			5369	3808	1
	Cl	37		mg/L			2292765	2274634	0
[>	Sc	45		ug/L			266395	275031	1
|	V	51	48.464	ug/L	0.982	2	1871	585997	0
|	V-1	51	48.357	ug/L	0.879	1	6960	600169	0
|	Cr	52	48.190	ug/L	0.490	1	7102	501028	0
|	Cr	53	47.864	ug/L	0.278	0	2430	61148	1
|	Mn	55	48.527	ug/L	0.536	1	1181	814571	0
[	Co	59	48.416	ug/L	0.387	0	80	601781	0
[>	Ge	72		ug/L			284042	288678	0
|	Ni	60	49.063	ug/L	0.239	0	49	128593	0
|	Ni	62	48.826	ug/L	0.348	0	94	19011	0
|	Cu	63	48.366	ug/L	0.211	0	165	276745	0
|	Cu	65	49.013	ug/L	0.437	0	72	130679	0
|	Zn	66	49.041	ug/L	0.247	0	253	81051	0
|	Zn	67	47.988	ug/L	0.545	1	175	13563	1
|	Zn	68	48.329	ug/L	0.138	0	7445	62798	0
|	As	75	48.351	ug/L	0.093	0	900	77272	0
|	As-1	75	48.089	ug/L	0.094	0	9111	84322	0
|	Se	82	49.055	ug/L	0.499	1	-28	8217	0
|	Se	78	47.945	ug/L	0.621	1	9285	29042	0
[	Mo	98	48.908	ug/L	0.360	0	132	281472	0
	Y	89		ug/L			253953	262021	0
	Kr	83		ug/L			464	453	2
[>	In	115		ug/L			295470	303121	0
|	Ag	107	49.209	ug/L	0.613	1	81	476885	0
|	Cd	111	48.290	ug/L	0.346	0	137	120516	0
|	Cd	114	48.248	ug/L	0.493	1	20	278189	0
|	Sb	121	47.776	ug/L	0.421	0	233	393904	1
|	Sb	123	47.324	ug/L	0.354	0	195	295639	0
|	Ba	135	47.614	ug/L	0.395	0	23	93603	0
[	Ba	137	48.282	ug/L	0.641	1	25	161206	1
[>	Tb	159		ug/L			317904	333506	0
|	Tl	205	47.348	ug/L	0.539	1	97	1086522	0
|	Pb	208	48.193	ug/L	0.158	0	347	1531082	0
|	Bi	209		ug/L			261623	267771	0
|	Th	232	46.937	ug/L	0.221	0	605	1832158	0
[	U	238	47.778	ug/L	0.564	1	90	2106606	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:55:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	382233	1
[	Be	9	0.008	ug/L	0.007	83	1	5	58
	C	13		mg/L			5369	5250	0
	Cl	37		mg/L			2292765	2320280	0
[>	Sc	45		ug/L			266395	268743	0
|	V	51	0.007	ug/L	0.019	267	1871	1972	11
|	V-1	51	-0.047	ug/L	0.014	29	6960	6459	2
|	Cr	52	-0.011	ug/L	0.010	91	7102	7056	1
|	Cr	53	-0.183	ug/L	0.020	10	2430	2232	1
|	Mn	55	-0.002	ug/L	0.003	159	1181	1159	4
[	Co	59	0.002	ug/L	0.001	91	80	100	17
[>	Ge	72		ug/L			284042	282081	0
|	Ni	60	0.003	ug/L	0.002	72	49	56	10
|	Ni	62	-0.023	ug/L	0.011	49	94	85	5
|	Cu	63	0.003	ug/L	0.002	76	165	179	6
|	Cu	65	0.005	ug/L	0.002	38	72	85	6
|	Zn	66	-0.001	ug/L	0.003	262	253	249	2
|	Zn	67	-0.032	ug/L	0.027	84	175	165	4
|	Zn	68	-0.196	ug/L	0.041	20	7445	7174	0
|	As	75	0.023	ug/L	0.054	235	900	929	8
|	As-1	75	-0.004	ug/L	0.029	786	9111	9042	0
|	Se	82	0.163	ug/L	0.073	44	-28	-1	650
|	Se	78	-0.065	ug/L	0.167	256	9285	9195	0
[	Mo	98	0.005	ug/L	0.003	74	132	157	11
	Y	89		ug/L			253953	252065	0
	Kr	83		ug/L			464	440	5
[>	In	115		ug/L			295470	289467	1
|	Ag	107	0.010	ug/L	0.003	31	81	168	17
|	Cd	111	0.003	ug/L	0.007	206	137	143	13
|	Cd	114	0.001	ug/L	0.002	274	20	23	40
|	Sb	121	0.078	ug/L	0.023	29	233	843	22
|	Sb	123	0.073	ug/L	0.026	35	195	627	25
|	Ba	135	0.002	ug/L	0.001	44	23	27	6
[	Ba	137	0.005	ug/L	0.002	51	25	40	20
[>	Tb	159		ug/L			317904	316305	0
|	Tl	205	0.004	ug/L	0.003	69	97	180	31
|	Pb	208	0.005	ug/L	0.002	31	347	500	9
|	Bi	209		ug/L			261623	260460	0
|	Th	232	0.019	ug/L	0.006	32	605	1305	17
[	U	238	0.003	ug/L	0.002	59	90	231	36

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:00:54
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	378314	0
[	Be	9	0.188	ug/L	0.040	21	1	86	21
	C	13		mg/L			5369	3977	1
	Cl	37		mg/L			2292765	2323206	0
[>	Sc	45		ug/L			266395	267008	1
[	V	51	0.201	ug/L	0.028	14	1871	4221	7
[	V-1	51	0.170	ug/L	0.030	17	6960	8997	2
[	Cr	52	0.482	ug/L	0.021	4	7102	11915	1
[	Cr	53	0.369	ug/L	0.110	29	2430	2873	3
[	Mn	55	0.487	ug/L	0.017	3	1181	9102	1
[	Co	59	0.211	ug/L	0.003	1	80	2620	1
[>	Ge	72		ug/L			284042	280498	0
[	Ni	60	0.548	ug/L	0.013	2	49	1442	2
[	Ni	62	0.524	ug/L	0.035	6	94	290	4
[	Cu	63	0.570	ug/L	0.010	1	165	3331	1
[	Cu	65	0.561	ug/L	0.014	2	72	1522	2
[	Zn	66	4.343	ug/L	0.079	1	253	7202	2
[	Zn	67	3.714	ug/L	0.081	2	175	1179	1
[	Zn	68	4.074	ug/L	0.122	2	7445	11876	1
[	As	75	0.225	ug/L	0.021	9	900	1235	2
[	As-1	75	0.280	ug/L	0.037	13	9111	9422	0
[	Se	82	0.556	ug/L	0.056	10	-28	62	14
[	Se	78	0.742	ug/L	0.175	23	9285	9464	0
[	Mo	98	0.200	ug/L	0.014	7	132	1247	6
	Y	89		ug/L			253953	252501	1
	Kr	83		ug/L			464	453	3
[>	In	115		ug/L			295470	291923	1
[	Ag	107	0.207	ug/L	0.007	3	81	2013	2
[	Cd	111	0.106	ug/L	0.006	5	137	389	4
[	Cd	114	0.111	ug/L	0.004	3	20	635	2
[	Sb	121	0.216	ug/L	0.010	4	233	1948	4
[	Sb	123	0.208	ug/L	0.008	3	195	1446	4
[	Ba	135	0.517	ug/L	0.034	6	23	1000	5
[	Ba	137	0.536	ug/L	0.006	1	25	1748	1
[>	Tb	159		ug/L			317904	314968	0
[	Tl	205	0.214	ug/L	0.007	3	97	4727	3
[	Pb	208	0.116	ug/L	0.002	1	347	3811	1
[	Bi	209		ug/L			261623	260066	0
[	Th	232	0.216	ug/L	0.003	1	605	8554	1
[	U	238	0.210	ug/L	0.002	0	90	8825	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:06:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	386265	0
[	Be	9	-0.000	ug/L	0.004	5912	1	1	114
	C	13		mg/L			5369	18354	0
	Cl	37		mg/L			2292765	3637775	1
[>	Sc	45		ug/L			266395	258563	0
[	V	51	0.002	ug/L	0.006	262	1871	1843	3
[	V-1	51	0.575	ug/L	0.004	0	6960	13385	0
[	Cr	52	0.753	ug/L	0.013	1	7102	14143	0
[	Cr	53	2.544	ug/L	0.025	0	2430	5289	1
[	Mn	55	0.017	ug/L	0.007	40	1181	1408	7
[	Co	59	0.016	ug/L	0.002	12	80	260	9
[>	Ge	72		ug/L			284042	269508	0
[	Ni	60	0.594	ug/L	0.017	2	49	1500	3
[	Ni	62	3.803	ug/L	0.035	0	94	1464	0
[	Cu	63	0.493	ug/L	0.009	1	165	2788	1
[	Cu	65	0.585	ug/L	0.020	3	72	1524	4
[	Zn	66	1.088	ug/L	0.028	2	253	1914	1
[	Zn	67	1.724	ug/L	0.111	6	175	615	5
[	Zn	68	0.060	ug/L	0.064	106	7445	7128	1
[	As	75	0.018	ug/L	0.034	183	900	881	6
[	As-1	75	0.003	ug/L	0.026	884	9111	8649	0
[	Se	82	0.060	ug/L	0.191	317	-28	-17	168
[	Se	78	0.066	ug/L	0.151	230	9285	8835	0
[	Mo	98	411.153	ug/L	2.729	0	132	2208184	0
	Y	89		ug/L			253953	244095	1
	Kr	83		ug/L			464	450	5
[>	In	115		ug/L			295470	279524	1
[	Ag	107	0.030	ug/L	0.003	9	81	345	8
[	Cd	111	0.002	ug/L	0.003	116	137	135	5
[	Cd	114	0.617	ug/L	0.010	1	20	3297	1
[	Sb	121	0.052	ug/L	0.002	4	233	613	3
[	Sb	123	0.050	ug/L	0.001	2	195	473	1
[	Ba	135	0.046	ug/L	0.002	3	23	105	2
[	Ba	137	0.038	ug/L	0.012	32	25	140	27
[>	Tb	159		ug/L			317904	313090	1
[	Tl	205	-0.000	ug/L	0.001	502	97	92	16
[	Pb	208	0.037	ug/L	0.003	6	347	1459	5
[	Bi	209		ug/L			261623	243822	0
[	Th	232	0.100	ug/L	0.013	12	605	4274	11
[	U	238	0.000	ug/L	0.001	431	90	94	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:12:59
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	389320	0
[	Be	9	0.004	ug/L	0.006	161	1	3	78
	C	13		mg/L			5369	18111	0
	Cl	37		mg/L			2292765	3506169	0
[>	Sc	45		ug/L			266395	254894	0
[	V	51	-0.352	ug/L	0.121	34	1871	-2137	62
[	V-1	51	0.579	ug/L	0.015	2	6960	13244	1
[	Cr	52	20.286	ug/L	0.405	1	7102	199402	1
[	Cr	53	22.131	ug/L	0.358	1	2430	27451	0
[	Mn	55	19.719	ug/L	0.196	0	1181	307445	0
[	Co	59	19.457	ug/L	0.199	1	80	224179	0
[>	Ge	72		ug/L			284042	267740	0
[	Ni	60	19.292	ug/L	0.166	0	49	46924	0
[	Ni	62	22.739	ug/L	0.325	1	94	8258	0
[	Cu	63	19.885	ug/L	0.269	1	165	105617	1
[	Cu	65	20.107	ug/L	0.119	0	72	49763	1
[	Zn	66	19.894	ug/L	0.255	1	253	30637	1
[	Zn	67	18.381	ug/L	0.274	1	175	4919	0
[	Zn	68	18.703	ug/L	0.165	0	7445	26842	1
[	As	75	19.690	ug/L	0.142	0	900	29686	0
[	As-1	75	19.913	ug/L	0.150	0	9111	37414	0
[	Se	82	0.037	ug/L	0.118	320	-28	-21	86
[	Se	78	0.175	ug/L	0.150	85	9285	8818	0
[	Mo	98	407.161	ug/L	3.396	0	132	2172411	1
	Y	89		ug/L			253953	239186	0
	Kr	83		ug/L			464	463	1
[>	In	115		ug/L			295470	272532	0
[	Ag	107	19.737	ug/L	0.186	0	81	172020	0
[	Cd	111	19.825	ug/L	0.123	0	137	44561	1
[	Cd	114	20.231	ug/L	0.216	1	20	104896	1
[	Sb	121	0.054	ug/L	0.003	5	233	615	3
[	Sb	123	0.047	ug/L	0.005	10	195	445	6
[	Ba	135	0.039	ug/L	0.005	13	23	90	10
[	Ba	137	0.038	ug/L	0.005	13	25	137	10
[>	Tb	159		ug/L			317904	311574	1
[	Tl	205	-0.000	ug/L	0.001	177	97	88	15
[	Pb	208	0.036	ug/L	0.002	5	347	1418	3
[	Bi	209		ug/L			261623	240087	0
[	Th	232	0.050	ug/L	0.004	8	605	2428	5
[	U	238	-0.000	ug/L	0.001	375	90	80	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:19:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	381331	0
[	Be	9	188.787	ug/L	1.470	0	1	86089	0
	C	13		mg/L			5369	5334	0
	Cl	37		mg/L			2292765	2139754	0
[>	Sc	45		ug/L			266395	256388	0
|	V	51	196.066	ug/L	0.688	0	1871	2204913	0
|	V-1	51	197.586	ug/L	0.286	0	6960	2265712	0
|	Cr	52	190.898	ug/L	0.667	0	7102	1830090	0
|	Cr	53	196.048	ug/L	0.866	0	2430	226243	0
|	Mn	55	195.427	ug/L	2.628	1	1181	3054824	1
[	Co	59	192.645	ug/L	2.296	1	80	2232129	1
[>	Ge	72		ug/L			284042	267644	0
|	Ni	60	193.582	ug/L	1.132	0	49	470281	0
|	Ni	62	193.758	ug/L	0.736	0	94	69684	0
|	Cu	63	189.720	ug/L	1.028	0	165	1006014	0
|	Cu	65	190.714	ug/L	1.719	0	72	471254	0
|	Zn	66	192.946	ug/L	1.200	0	253	294957	0
|	Zn	67	191.249	ug/L	1.320	0	175	49621	1
|	Zn	68	192.762	ug/L	1.091	0	7445	211251	0
|	As	75	197.767	ug/L	0.442	0	900	290411	0
|	As-1	75	197.890	ug/L	0.355	0	9111	294967	0
|	Se	82	197.840	ug/L	0.994	0	-28	30810	0
|	Se	78	198.386	ug/L	0.686	0	9285	83967	0
[	Mo	98	212.152	ug/L	0.303	0	132	1131615	0
	Y	89		ug/L			253953	239036	0
	Kr	83		ug/L			464	465	1
[>	In	115		ug/L			295470	274808	1
|	Ag	107	193.613	ug/L	2.282	1	81	1700792	0
|	Cd	111	197.419	ug/L	2.063	1	137	446264	0
|	Cd	114	196.783	ug/L	3.802	1	20	1028476	0
|	Sb	121	211.907	ug/L	1.415	0	233	1583038	0
|	Sb	123	212.763	ug/L	2.280	1	195	1204294	0
|	Ba	135	201.309	ug/L	3.533	1	23	358692	1
[	Ba	137	203.141	ug/L	4.158	2	25	614754	0
[>	Tb	159		ug/L			317904	308690	1
|	Tl	205	196.389	ug/L	1.663	0	97	4170934	0
|	Pb	208	197.477	ug/L	2.905	1	347	5805492	0
|	Bi	209		ug/L			261623	239089	1
|	Th	232	202.783	ug/L	3.276	1	605	7323841	0
[	U	238	201.859	ug/L	2.749	1	90	8237294	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:25:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	382858	1
[	Be	9	275.159	ug/L	6.112	2	1	125957	1
	C	13		mg/L			5369	5326	1
	Cl	37		mg/L			2292765	2163449	0
[>	Sc	45		ug/L			266395	257920	0
[	V	51	297.936	ug/L	5.541	1	1871	3369184	1
[	V-1	51	297.528	ug/L	5.870	1	6960	3428306	1
[	Cr	52	292.149	ug/L	2.527	0	7102	2813902	1
[	Cr	53	291.163	ug/L	0.325	0	2430	336878	0
[	Mn	55	292.981	ug/L	1.330	0	1181	4606446	0
[	Co	59	288.424	ug/L	1.473	0	80	3361653	0
[>	Ge	72		ug/L			284042	269540	1
[	Ni	60	284.667	ug/L	4.082	1	49	696396	1
[	Ni	62	287.827	ug/L	4.142	1	94	104196	0
[	Cu	63	275.870	ug/L	1.223	0	165	1473092	0
[	Cu	65	281.579	ug/L	2.941	1	72	700637	0
[	Zn	66	281.873	ug/L	3.531	1	253	433802	0
[	Zn	67	281.233	ug/L	3.748	1	175	73398	0
[	Zn	68	282.302	ug/L	1.771	0	7445	308282	0
[	As	75	293.268	ug/L	2.812	0	900	433257	0
[	As-1	75	293.744	ug/L	2.932	0	9111	436724	0
[	Se	82	289.334	ug/L	3.985	1	-28	45385	0
[	Se	78	291.092	ug/L	4.920	1	9285	119947	0
[	Mo	98	318.247	ug/L	1.889	0	132	1709453	1
	Y	89		ug/L			253953	239604	0
	Kr	83		ug/L			464	483	1
[>	In	115		ug/L			295470	274925	0
[	Ag	107	293.581	ug/L	1.220	0	81	2580211	0
[	Cd	111	292.356	ug/L	0.885	0	137	661135	0
[	Cd	114	291.408	ug/L	3.172	1	20	1523871	1
[	Sb	121	324.196	ug/L	3.415	1	233	2422848	0
[	Sb	123	316.455	ug/L	3.653	1	195	1791961	0
[	Ba	135	302.342	ug/L	1.868	0	23	538977	0
[	Ba	137	304.366	ug/L	3.667	1	25	921577	0
[>	Tb	159		ug/L			317904	308185	0
[	Tl	205	297.202	ug/L	2.551	0	97	6301851	0
[	Pb	208	297.187	ug/L	1.659	0	347	8723168	0
[	Bi	209		ug/L			261623	224972	0
[	Th	232	304.929	ug/L	3.187	1	605	10995727	0
[	U	238	305.754	ug/L	3.799	1	90	12457176	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:32:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	402862	1
[	Be	9	45.513	ug/L	0.599	1	1	21925	0
	C	13		mg/L			5369	3778	2
	Cl	37		mg/L			2292765	2242379	0
[>	Sc	45		ug/L			266395	268075	1
[	V	51	47.958	ug/L	0.327	0	1871	565284	0
[	V-1	51	47.846	ug/L	0.230	0	6960	578934	0
[	Cr	52	47.837	ug/L	0.395	0	7102	484824	0
[	Cr	53	47.485	ug/L	0.060	0	2430	59150	1
[	Mn	55	48.051	ug/L	0.484	1	1181	786214	1
[	Co	59	47.660	ug/L	0.578	1	80	577367	0
[>	Ge	72		ug/L			284042	281474	0
[	Ni	60	48.222	ug/L	0.285	0	49	123238	0
[	Ni	62	48.696	ug/L	0.762	1	94	18487	1
[	Cu	63	48.353	ug/L	0.136	0	165	269765	0
[	Cu	65	48.534	ug/L	0.258	0	72	126176	0
[	Zn	66	49.261	ug/L	0.384	0	253	79381	0
[	Zn	67	48.524	ug/L	0.564	1	175	13369	0
[	Zn	68	48.728	ug/L	0.738	1	7445	61673	1
[	As	75	48.533	ug/L	0.613	1	900	75622	1
[	As-1	75	48.433	ug/L	0.422	0	9111	82740	0
[	Se	82	48.725	ug/L	1.266	2	-28	7958	2
[	Se	78	48.194	ug/L	0.561	1	9285	28417	0
[	Mo	98	48.025	ug/L	0.449	0	132	269509	1
	Y	89		ug/L			253953	251583	1
	Kr	83		ug/L			464	439	2
[>	In	115		ug/L			295470	287950	0
[	Ag	107	49.282	ug/L	0.220	0	81	453714	0
[	Cd	111	48.856	ug/L	0.676	1	137	115822	0
[	Cd	114	48.238	ug/L	0.171	0	20	264218	0
[	Sb	121	48.492	ug/L	0.417	0	233	379755	0
[	Sb	123	48.592	ug/L	0.820	1	195	288341	0
[	Ba	135	48.017	ug/L	0.466	0	23	89669	0
[	Ba	137	48.461	ug/L	0.448	0	25	153702	0
[>	Tb	159		ug/L			317904	317383	0
[	Tl	205	48.022	ug/L	0.294	0	97	1048746	0
[	Pb	208	48.529	ug/L	0.410	0	347	1467274	0
[	Bi	209		ug/L			261623	256569	0
[	Th	232	47.450	ug/L	0.467	0	605	1762608	0
[	U	238	46.617	ug/L	0.122	0	90	1956116	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:39:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	390784	1
[	Be	9	0.006	ug/L	0.004	66	1	4	41
	C	13		mg/L			5369	5399	0
	Cl	37		mg/L			2292765	2300299	0
[>	Sc	45		ug/L			266395	264713	0
|	V	51	0.000	ug/L	0.023	5612	1871	1864	14
|	V-1	51	-0.045	ug/L	0.014	31	6960	6385	2
|	Cr	52	-0.020	ug/L	0.003	13	7102	6857	0
|	Cr	53	-0.164	ug/L	0.115	69	2430	2220	6
|	Mn	55	-0.026	ug/L	0.004	16	1181	755	8
[	Co	59	0.004	ug/L	0.002	43	80	132	17
[>	Ge	72		ug/L			284042	276715	0
|	Ni	60	-0.001	ug/L	0.005	803	49	46	30
|	Ni	62	-0.067	ug/L	0.025	36	94	66	13
|	Cu	63	0.006	ug/L	0.002	36	165	197	5
|	Cu	65	0.008	ug/L	0.004	50	72	90	11
|	Zn	66	-0.021	ug/L	0.003	14	253	213	2
|	Zn	67	-0.059	ug/L	0.083	140	175	155	13
|	Zn	68	-0.264	ug/L	0.155	58	7445	6963	1
|	As	75	0.024	ug/L	0.008	34	900	912	0
|	As-1	75	0.003	ug/L	0.048	1583	9111	8880	0
|	Se	82	0.126	ug/L	0.097	77	-28	-7	198
|	Se	78	-0.038	ug/L	0.227	590	9285	9030	0
[	Mo	98	0.016	ug/L	0.009	57	132	216	23
	Y	89		ug/L			253953	248533	0
	Kr	83		ug/L			464	438	2
[>	In	115		ug/L			295470	283246	0
|	Ag	107	0.028	ug/L	0.005	19	81	327	14
|	Cd	111	0.004	ug/L	0.008	200	137	141	14
|	Cd	114	0.005	ug/L	0.002	38	20	46	21
|	Sb	121	0.131	ug/L	0.040	30	233	1232	23
|	Sb	123	0.128	ug/L	0.030	23	195	931	17
|	Ba	135	0.003	ug/L	0.004	140	23	27	23
[	Ba	137	0.009	ug/L	0.005	52	25	51	27
[>	Tb	159		ug/L			317904	309705	1
|	Tl	205	0.013	ug/L	0.003	24	97	364	18
|	Pb	208	0.011	ug/L	0.002	21	347	663	11
|	Bi	209		ug/L			261623	253105	0
|	Th	232	0.042	ug/L	0.008	19	605	2120	14
[	U	238	0.007	ug/L	0.002	21	90	392	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R ODUP REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:44:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

CC

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	399842	0
[	Be	9	0.009	ug/L	0.003	28	1	6	20
	C	13		mg/L			5369	5126	1
	Cl	37		mg/L			2292765	2361329	0
[>	Sc	45		ug/L			266395	290692	0
[	V	51	0.122	ug/L	0.003	2	1871	3600	1
[	V-1	51	0.023	ug/L	0.013	57	6960	7896	1
[	Cr	52	0.015	ug/L	0.008	55	7102	7910	1
[	Cr	53	-0.296	ug/L	0.057	19	2430	2267	2
[	Mn	55	2793.495	ug/L	10.015	0	1181	49492630	0
[	Co	59	1.956	ug/L	0.030	1	80	25779	1
[>	Ge	72		ug/L			284042	287000	1
[	Ni	60	1.330	ug/L	0.037	2	49	3514	3
[	Ni	62	0.753	ug/L	0.049	6	94	385	6
[	Cu	63	0.321	ug/L	0.007	2	165	1990	1
[	Cu	65	0.307	ug/L	0.006	2	72	887	2
[	Zn	66	0.898	ug/L	0.027	3	253	1726	3
[	Zn	67	1.049	ug/L	0.017	1	175	467	0
[	Zn	68	0.757	ug/L	0.297	39	7445	8379	2
[	As	75	0.898	ug/L	0.044	4	900	2318	1
[	As-1	75	0.604	ug/L	0.032	5	9111	10142	0
[	Se	82	0.486	ug/L	0.065	13	-28	52	19
[	Se	78	-0.784	ug/L	0.109	13	9285	9063	1
[	Mo	98	0.106	ug/L	0.001	1	132	739	1
	Y	89		ug/L			253953	260378	0
	Kr	83		ug/L			464	448	1
[>	In	115		ug/L			295470	295249	0
[	Ag	107	0.013	ug/L	0.003	20	81	207	12
[	Cd	111	0.017	ug/L	0.004	23	137	179	5
[	Cd	114	0.005	ug/L	0.001	17	20	47	10
[	Sb	121	0.110	ug/L	0.010	9	233	1119	7
[	Sb	123	0.106	ug/L	0.007	7	195	837	5
[	Ba	135	9.438	ug/L	0.017	0	23	18091	0
[	Ba	137	9.482	ug/L	0.066	0	25	30859	1
[>	Tb	159		ug/L			317904	324494	1
[	Tl	205	0.009	ug/L	0.001	7	97	309	4
[	Pb	208	0.019	ug/L	0.002	8	347	945	5
[	Bi	209		ug/L			261623	260969	0
[	Th	232	0.078	ug/L	0.006	7	605	3567	5
[	U	238	0.033	ug/L	0.000	0	90	1524	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R O REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:51:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	406020	0
[	Be	9	0.003	ug/L	0.002	47	1	3	21
	C	13		mg/L			5369	5310	1
	Cl	37		mg/L			2292765	2403638	0
[>	Sc	45		ug/L			266395	299852	1
[	V	51	0.124	ug/L	0.009	7	1871	3740	4
[	V-1	51	0.006	ug/L	0.018	311	6960	7911	2
[	Cr	52	0.027	ug/L	0.009	32	7102	8292	1
[	Cr	53	-0.347	ug/L	0.085	24	2430	2270	3
[	Mn	55	2812.707	ug/L	64.884	2	1181	51392256	1
[	Co	59	1.953	ug/L	0.033	1	80	26553	1
[>	Ge	72		ug/L			284042	295276	0
[	Ni	60	1.300	ug/L	0.023	1	49	3535	1
[	Ni	62	0.708	ug/L	0.024	3	94	378	2
[	Cu	63	0.296	ug/L	0.009	2	165	1902	3
[	Cu	65	0.298	ug/L	0.010	3	72	887	3
[	Zn	66	0.606	ug/L	0.008	1	253	1284	1
[	Zn	67	0.745	ug/L	0.071	9	175	395	5
[	Zn	68	0.393	ug/L	0.093	23	7445	8198	1
[	As	75	0.862	ug/L	0.010	1	900	2328	0
[	As-1	75	0.553	ug/L	0.020	3	9111	10354	0
[	Se	82	0.406	ug/L	0.038	9	-28	39	15
[	Se	78	-0.999	ug/L	0.112	11	9285	9235	0
[	Mo	98	0.098	ug/L	0.002	2	132	715	1
	Y	89		ug/L			253953	268105	0
	Kr	83		ug/L			464	448	1
[>	In	115		ug/L			295470	299975	0
[	Ag	107	0.004	ug/L	0.003	66	81	119	20
[	Cd	111	0.019	ug/L	0.004	21	137	186	6
[	Cd	114	0.007	ug/L	0.002	25	20	58	16
[	Sb	121	0.071	ug/L	0.001	0	233	816	0
[	Sb	123	0.074	ug/L	0.006	7	195	658	4
[	Ba	135	9.568	ug/L	0.147	1	23	18633	0
[	Ba	137	9.602	ug/L	0.115	1	25	31745	0
[>	Tb	159		ug/L			317904	331896	1
[	Tl	205	0.005	ug/L	0.000	7	97	221	2
[	Pb	208	0.015	ug/L	0.001	7	347	834	4
[	Bi	209		ug/L			261623	266025	0
[	Th	232	0.042	ug/L	0.002	4	605	2263	1
[	U	238	0.032	ug/L	0.001	3	90	1478	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R OSPK REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:57:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	412015	0
[	Be	9	9.949	ug/L	0.124	1	1	4903	0
	C	13		mg/L			5369	5318	0
	Cl	37		mg/L			2292765	2393781	0
[>	Sc	45		ug/L			266395	298399	0
[	V	51	10.128	ug/L	0.093	0	1871	134538	0
[	V-1	51	10.025	ug/L	0.081	0	6960	141186	0
[	Cr	52	9.913	ug/L	0.172	1	7102	118148	1
[	Cr	53	9.596	ug/L	0.201	2	2430	15476	1
[	Mn	55	2839.656	ug/L	20.982	0	1181	51643618	0
[	Co	59	11.758	ug/L	0.117	0	80	158635	0
[>	Ge	72		ug/L			284042	292962	0
[	Ni	60	11.893	ug/L	0.093	0	49	31673	0
[	Ni	62	11.239	ug/L	0.097	0	94	4515	0
[	Cu	63	10.749	ug/L	0.106	0	165	62551	1
[	Cu	65	10.809	ug/L	0.072	0	72	29306	0
[	Zn	66	34.011	ug/L	0.226	0	253	57126	0
[	Zn	67	31.080	ug/L	0.498	1	175	8978	1
[	Zn	68	33.094	ug/L	0.101	0	7445	46061	0
[	As	75	11.813	ug/L	0.211	1	900	19861	1
[	As-1	75	11.280	ug/L	0.132	1	9111	27266	0
[	Se	82	34.090	ug/L	0.627	1	-28	5786	1
[	Se	78	32.915	ug/L	0.292	0	9285	23237	0
[	Mo	98	11.049	ug/L	0.162	1	132	64638	1
	Y	89		ug/L			253953	265336	0
	Kr	83		ug/L			464	459	1
[>	In	115		ug/L			295470	300655	1
[	Ag	107	4.414	ug/L	0.052	1	81	42504	0
[	Cd	111	10.513	ug/L	0.284	2	137	26128	1
[	Cd	114	10.546	ug/L	0.180	1	20	60322	0
[	Sb	121	10.875	ug/L	0.168	1	233	89100	0
[	Sb	123	10.826	ug/L	0.070	0	195	67233	0
[	Ba	135	19.941	ug/L	0.281	1	23	38894	0
[	Ba	137	20.158	ug/L	0.291	1	25	66767	0
[>	Tb	159		ug/L			317904	332617	0
[	Tl	205	10.659	ug/L	0.056	0	97	244033	0
[	Pb	208	10.705	ug/L	0.030	0	347	339465	0
[	Bi	209		ug/L			261623	266376	0
[	Th	232	10.720	ug/L	0.067	0	605	417825	0
[	U	238	10.683	ug/L	0.103	0	90	469848	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R J REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:03:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	415846	0
[	Be	9	0.003	ug/L	0.006	207	1	3	94
	C	13		mg/L			5369	6382	1
	Cl	37		mg/L			2292765	2274606	1
[>	Sc	45		ug/L			266395	295024	2
[	V	51	2.841	ug/L	0.051	1	1871	38802	1
[	V-1	51	2.626	ug/L	0.053	2	6960	42244	2
[	Cr	52	-0.002	ug/L	0.020	936	7102	7842	3
[	Cr	53	-0.536	ug/L	0.041	7	2430	1987	4
[	Mn	55	49.759	ug/L	0.447	0	1181	895920	2
[	Co	59	0.590	ug/L	0.019	3	80	7954	2
[>	Ge	72		ug/L			284042	279208	1
[	Ni	60	13.291	ug/L	0.119	0	49	33729	1
[	Ni	62	12.479	ug/L	0.201	1	94	4767	0
[	Cu	63	0.518	ug/L	0.004	0	165	3025	1
[	Cu	65	0.515	ug/L	0.015	2	72	1397	3
[	Zn	66	0.567	ug/L	0.025	4	253	1152	2
[	Zn	67	0.980	ug/L	0.084	8	175	437	6
[	Zn	68	0.388	ug/L	0.028	7	7445	7747	1
[	As	75	1.173	ug/L	0.013	1	900	2677	1
[	As-1	75	0.807	ug/L	0.061	7	9111	10175	2
[	Se	82	0.484	ug/L	0.062	12	-28	50	18
[	Se	78	-1.033	ug/L	0.238	23	9285	8720	2
[	Mo	98	0.144	ug/L	0.004	3	132	929	2
	Y	89		ug/L			253953	259558	1
	Kr	83		ug/L			464	442	3
[>	In	115		ug/L			295470	292587	1
[	Ag	107	0.004	ug/L	0.001	32	81	120	10
[	Cd	111	0.044	ug/L	0.016	35	137	241	14
[	Cd	114	0.023	ug/L	0.002	9	20	145	10
[	Sb	121	0.051	ug/L	0.006	11	233	634	8
[	Sb	123	0.047	ug/L	0.006	13	195	475	9
[	Ba	135	10.633	ug/L	0.129	1	23	20194	1
[	Ba	137	10.675	ug/L	0.100	0	25	34420	0
[>	Tb	159		ug/L			317904	325318	0
[	Tl	205	0.007	ug/L	0.002	20	97	265	13
[	Pb	208	0.018	ug/L	0.001	6	347	899	3
[	Bi	209		ug/L			261623	258757	1
[	Th	232	0.027	ug/L	0.003	10	605	1656	7
[	U	238	3.390	ug/L	0.037	1	90	145906	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R K REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:10:07
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	414435	1
[	Be	9	0.010	ug/L	0.004	41	1	6	28
	C	13		mg/L			5369	5861	1
	Cl	37		mg/L			2292765	2242995	0
[>	Sc	45		ug/L			266395	295953	1
[	V	51	0.039	ug/L	0.027	67	1871	2586	12
[	V-1	51	-0.135	ug/L	0.015	10	6960	5946	3
[	Cr	52	-0.044	ug/L	0.003	7	7102	7406	1
[	Cr	53	-0.598	ug/L	0.066	11	2430	1911	5
[	Mn	55	214.615	ug/L	1.288	0	1181	3872147	0
[	Co	59	0.045	ug/L	0.002	3	80	690	2
[>	Ge	72		ug/L			284042	269694	1
[	Ni	60	1.112	ug/L	0.026	2	49	2768	3
[	Ni	62	0.146	ug/L	0.033	22	94	142	7
[	Cu	63	0.157	ug/L	0.007	4	165	995	4
[	Cu	65	0.148	ug/L	0.008	5	72	437	4
[	Zn	66	0.321	ug/L	0.014	4	253	734	1
[	Zn	67	1.132	ug/L	0.126	11	175	461	7
[	Zn	68	0.601	ug/L	0.099	16	7445	7709	0
[	As	75	0.589	ug/L	0.053	9	900	1723	4
[	As-1	75	0.206	ug/L	0.026	12	9111	8951	0
[	Se	82	0.556	ug/L	0.074	13	-28	60	19
[	Se	78	-1.057	ug/L	0.115	10	9285	8412	1
[	Mo	98	0.062	ug/L	0.005	7	132	456	5
	Y	89		ug/L			253953	252200	1
	Kr	83		ug/L			464	417	0
[>	In	115		ug/L			295470	286819	1
[	Ag	107	0.001	ug/L	0.002	306	81	85	21
[	Cd	111	0.012	ug/L	0.004	31	137	160	6
[	Cd	114	-0.001	ug/L	0.000	24	20	13	12
[	Sb	121	0.005	ug/L	0.003	58	233	262	8
[	Sb	123	0.001	ug/L	0.002	154	195	197	6
[	Ba	135	34.772	ug/L	0.644	1	23	64679	0
[	Ba	137	35.222	ug/L	0.226	0	25	111280	0
[>	Tb	159		ug/L			317904	321151	0
[	Tl	205	-0.001	ug/L	0.001	106	97	87	13
[	Pb	208	0.008	ug/L	0.000	3	347	595	1
[	Bi	209		ug/L			261623	256584	0
[	Th	232	0.016	ug/L	0.000	1	605	1228	0
[	U	238	0.029	ug/L	0.001	3	90	1329	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R P REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:16:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

CC

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	422576	0
[	Be	9	0.003	ug/L	0.005	176	1	3	78
	C	13		mg/L			5369	5377	1
	Cl	37		mg/L			2292765	2344024	0
[>	Sc	45		ug/L			266395	293539	0
[	V	51	0.093	ug/L	0.012	13	1871	3260	5
[	V-1	51	-0.075	ug/L	0.004	5	6960	6691	0
[	Cr	52	-0.017	ug/L	0.004	23	7102	7637	0
[	Cr	53	-0.549	ug/L	0.030	5	2430	1960	1
[	Mn	55	2720.390	ug/L	27.792	1	1181	48668785	0
[	Co	59	1.890	ug/L	0.037	1	80	25161	1
[>	Ge	72		ug/L			284042	283324	0
[	Ni	60	1.286	ug/L	0.029	2	49	3355	2
[	Ni	62	0.700	ug/L	0.055	7	94	360	5
[	Cu	63	0.224	ug/L	0.014	6	165	1421	5
[	Cu	65	0.219	ug/L	0.015	6	72	645	6
[	Zn	66	0.540	ug/L	0.013	2	253	1126	1
[	Zn	67	0.652	ug/L	0.027	4	175	353	1
[	Zn	68	0.146	ug/L	0.121	82	7445	7590	1
[	As	75	0.856	ug/L	0.024	2	900	2225	1
[	As-1	75	0.407	ug/L	0.024	5	9111	9711	0
[	Se	82	0.478	ug/L	0.032	6	-28	50	10
[	Se	78	-1.443	ug/L	0.050	3	9285	8683	0
[	Mo	98	0.091	ug/L	0.002	1	132	646	1
	Y	89		ug/L			253953	260184	1
	Kr	83		ug/L			464	432	1
[>	In	115		ug/L			295470	300492	1
[	Ag	107	-0.001	ug/L	0.001	50	81	69	8
[	Cd	111	0.018	ug/L	0.005	25	137	184	7
[	Cd	114	0.003	ug/L	0.001	37	20	39	19
[	Sb	121	0.041	ug/L	0.006	14	233	570	6
[	Sb	123	0.041	ug/L	0.003	6	195	455	4
[	Ba	135	9.088	ug/L	0.146	1	23	17727	1
[	Ba	137	9.118	ug/L	0.214	2	25	30190	0
[>	Tb	159		ug/L			317904	333095	1
[	Tl	205	0.003	ug/L	0.000	2	97	176	2
[	Pb	208	0.007	ug/L	0.001	14	347	579	4
[	Bi	209		ug/L			261623	267412	0
[	Th	232	0.011	ug/L	0.002	15	605	1070	7
[	U	238	0.029	ug/L	0.001	2	90	1386	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR75R R REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:22:44
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	420603	0
[	Be	9	0.005	ug/L	0.004	69	1	4	41
	C	13		mg/L			5369	5571	1
	Cl	37		mg/L			2292765	2235932	1
[>	Sc	45		ug/L			266395	287943	1
[	V	51	0.420	ug/L	0.012	2	1871	7327	3
[	V-1	51	0.235	ug/L	0.021	9	6960	10537	3
[	Cr	52	0.071	ug/L	0.013	18	7102	8440	2
[	Cr	53	-0.504	ug/L	0.046	9	2430	1980	4
[	Mn	55	274.539	ug/L	0.795	0	1181	4819141	1
[	Co	59	0.160	ug/L	0.009	5	80	2170	4
[>	Ge	72		ug/L			284042	274482	1
[	Ni	60	4.344	ug/L	0.076	1	49	10871	3
[	Ni	62	3.772	ug/L	0.044	1	94	1480	2
[	Cu	63	0.415	ug/L	0.023	5	165	2415	5
[	Cu	65	0.437	ug/L	0.019	4	72	1178	5
[	Zn	66	0.708	ug/L	0.021	2	253	1353	3
[	Zn	67	0.634	ug/L	0.032	5	175	337	3
[	Zn	68	0.314	ug/L	0.065	20	7445	7535	1
[	As	75	0.393	ug/L	0.020	5	900	1460	1
[	As-1	75	0.047	ug/L	0.052	110	9111	8873	1
[	Se	82	0.264	ug/L	0.088	33	-28	14	99
[	Se	78	-1.179	ug/L	0.230	19	9285	8514	1
[	Mo	98	0.056	ug/L	0.004	7	132	432	3
	Y	89		ug/L			253953	254454	1
	Kr	83		ug/L			464	430	2
[>	In	115		ug/L			295470	291568	0
[	Ag	107	-0.002	ug/L	0.000	18	81	65	4
[	Cd	111	0.017	ug/L	0.003	19	137	177	4
[	Cd	114	0.008	ug/L	0.002	23	20	63	16
[	Sb	121	0.015	ug/L	0.003	17	233	352	5
[	Sb	123	0.009	ug/L	0.002	25	195	250	5
[	Ba	135	6.169	ug/L	0.023	0	23	11686	0
[	Ba	137	6.206	ug/L	0.087	1	25	19954	2
[>	Tb	159		ug/L			317904	322594	1
[	Tl	205	0.001	ug/L	0.001	49	97	126	9
[	Pb	208	0.009	ug/L	0.000	1	347	619	1
[	Bi	209		ug/L			261623	260025	1
[	Th	232	0.003	ug/L	0.002	59	605	740	11
[	U	238	0.380	ug/L	0.001	0	90	16301	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US97 A REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:29:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	427007	1
[	Be	9	0.006	ug/L	0.005	78	1	5	50
	C	13		mg/L			5369	4753	0
	Cl	37		mg/L			2292765	2357209	0
[>	Sc	45		ug/L			266395	273302	0
[	V	51	0.175	ug/L	0.007	3	1871	4018	1
[	V-1	51	-0.015	ug/L	0.011	72	6960	6953	1
[	Cr	52	0.147	ug/L	0.011	7	7102	8783	1
[	Cr	53	-0.461	ug/L	0.021	4	2430	1931	0
[	Mn	55	2.463	ug/L	0.038	1	1181	42234	1
[	Co	59	0.019	ug/L	0.001	3	80	312	3
[>	Ge	72		ug/L			284042	285757	0
[	Ni	60	0.156	ug/L	0.009	6	49	453	5
[	Ni	62	0.050	ug/L	0.030	61	94	113	10
[	Cu	63	0.826	ug/L	0.011	1	165	4841	1
[	Cu	65	0.821	ug/L	0.016	1	72	2239	1
[	Zn	66	86.516	ug/L	0.447	0	253	141347	0
[	Zn	67	75.410	ug/L	0.172	0	175	20996	0
[	Zn	68	84.273	ug/L	0.995	1	7445	102823	1
[	As	75	0.278	ug/L	0.022	7	900	1341	2
[	As-1	75	-0.182	ug/L	0.028	15	9111	8884	0
[	Se	82	0.173	ug/L	0.049	28	-28	0	2845
[	Se	78	-1.754	ug/L	0.071	4	9285	8631	0
[	Mo	98	0.059	ug/L	0.002	2	132	471	2
	Y	89		ug/L			253953	255644	0
	Kr	83		ug/L			464	440	0
[>	In	115		ug/L			295470	302029	0
[	Ag	107	-0.002	ug/L	0.001	44	81	67	10
[	Cd	111	0.262	ug/L	0.018	7	137	791	5
[	Cd	114	0.257	ug/L	0.003	1	20	1498	1
[	Sb	121	2.712	ug/L	0.032	1	233	22505	0
[	Sb	123	2.647	ug/L	0.038	1	195	16663	1
[	Ba	135	1.135	ug/L	0.022	1	23	2247	1
[	Ba	137	1.147	ug/L	0.022	1	25	3841	1
[>	Tb	159		ug/L			317904	326308	0
[	Tl	205	0.006	ug/L	0.000	8	97	232	4
[	Pb	208	0.239	ug/L	0.002	0	347	7796	1
[	Bi	209		ug/L			261623	269638	0
[	Th	232	-0.004	ug/L	0.001	20	605	452	6
[	U	238	0.003	ug/L	0.000	7	90	213	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US97 B REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:35:19
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	414387	1
[	Be	9	0.008	ug/L	0.010	119	1	5	81
	C	13		mg/L			5369	4929	0
	Cl	37		mg/L			2292765	2385147	1
[>	Sc	45		ug/L			266395	272310	0
[	V	51	0.140	ug/L	0.008	5	1871	3577	2
[	V-1	51	-0.048	ug/L	0.007	15	6960	6530	1
[	Cr	52	0.132	ug/L	0.015	11	7102	8598	1
[	Cr	53	-0.468	ug/L	0.010	2	2430	1915	0
[	Mn	55	2.045	ug/L	0.026	1	1181	35152	0
[	Co	59	0.014	ug/L	0.002	12	80	248	8
[>	Ge	72		ug/L			284042	286032	0
[	Ni	60	0.161	ug/L	0.002	1	49	468	1
[	Ni	62	0.073	ug/L	0.014	18	94	122	3
[	Cu	63	0.568	ug/L	0.010	1	165	3385	2
[	Cu	65	0.567	ug/L	0.037	6	72	1568	5
[	Zn	66	81.654	ug/L	0.678	0	253	133544	0
[	Zn	67	71.263	ug/L	0.461	0	175	19870	0
[	Zn	68	79.459	ug/L	0.581	0	7445	97470	0
[	As	75	0.244	ug/L	0.042	17	900	1289	5
[	As-1	75	-0.115	ug/L	0.040	34	9111	8996	0
[	Se	82	0.114	ug/L	0.123	107	-28	-10	203
[	Se	78	-1.399	ug/L	0.114	8	9285	8784	0
[	Mo	98	0.055	ug/L	0.002	2	132	446	2
	Y	89		ug/L			253953	254905	1
	Kr	83		ug/L			464	445	2
[>	In	115		ug/L			295470	297087	0
[	Ag	107	-0.002	ug/L	0.001	42	81	60	15
[	Cd	111	0.235	ug/L	0.014	5	137	712	4
[	Cd	114	0.235	ug/L	0.002	0	20	1349	0
[	Sb	121	2.560	ug/L	0.011	0	233	20905	0
[	Sb	123	2.537	ug/L	0.044	1	195	15719	1
[	Ba	135	1.097	ug/L	0.029	2	23	2137	2
[	Ba	137	1.088	ug/L	0.030	2	25	3584	2
[>	Tb	159		ug/L			317904	324839	1
[	Tl	205	0.003	ug/L	0.000	14	97	167	6
[	Pb	208	0.078	ug/L	0.001	1	347	2760	1
[	Bi	209		ug/L			261623	267683	0
[	Th	232	-0.007	ug/L	0.001	8	605	352	5
[	U	238	0.002	ug/L	0.001	25	90	177	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:41:37
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	409574	1
[	Be	9	0.015	ug/L	0.006	38	1	9	31
	C	13		mg/L			5369	6352	0
	Cl	37		mg/L			2292765	2669308	0
[>	Sc	45		ug/L			266395	325052	0
[	V	51	1.356	ug/L	0.042	3	1871	21599	2
[	V-1	51	1.242	ug/L	0.024	1	6960	26495	1
[	Cr	52	0.090	ug/L	0.009	9	7102	9758	1
[	Cr	53	-0.205	ug/L	0.048	23	2430	2668	2
[	Mn	55	275.332	ug/L	0.726	0	1181	5455869	0
[	Co	59	0.143	ug/L	0.010	6	80	2195	6
[>	Ge	72		ug/L			284042	281015	0
[	Ni	60	1.165	ug/L	0.028	2	49	3019	2
[	Ni	62	0.354	ug/L	0.019	5	94	226	2
[	Cu	63	0.679	ug/L	0.015	2	165	3945	1
[	Cu	65	0.416	ug/L	0.019	4	72	1150	4
[	Zn	66	0.542	ug/L	0.008	1	253	1119	1
[	Zn	67	0.721	ug/L	0.013	1	175	369	1
[	Zn	68	0.669	ug/L	0.064	9	7445	8110	0
[	As	75	3.946	ug/L	0.011	0	900	6957	0
[	As-1	75	3.805	ug/L	0.037	0	9111	14794	0
[	Se	82	0.153	ug/L	0.155	101	-28	-3	730
[	Se	78	-0.709	ug/L	0.049	6	9285	8904	0
[	Mo	98	2.479	ug/L	0.025	1	132	14011	1
	Y	89		ug/L			253953	259152	0
	Kr	83		ug/L			464	435	2
[>	In	115		ug/L			295470	291291	0
[	Ag	107	0.002	ug/L	0.001	49	81	97	7
[	Cd	111	0.020	ug/L	0.002	8	137	184	1
[	Cd	114	0.004	ug/L	0.001	21	20	41	12
[	Sb	121	0.258	ug/L	0.003	1	233	2276	0
[	Sb	123	0.251	ug/L	0.010	3	195	1698	4
[	Ba	135	8.166	ug/L	0.196	2	23	15444	1
[	Ba	137	8.196	ug/L	0.095	1	25	26316	0
[>	Tb	159		ug/L			317904	323608	1
[	Tl	205	-0.000	ug/L	0.000	52	97	91	4
[	Pb	208	0.041	ug/L	0.002	3	347	1621	3
[	Bi	209		ug/L			261623	258362	0
[	Th	232	0.046	ug/L	0.003	6	605	2359	6
[	U	238	0.097	ug/L	0.003	2	90	4240	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:47:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	393920	1
[	Be	9	46.153	ug/L	0.462	1	1	21739	0
	C	13		mg/L			5369	3932	1
	Cl	37		mg/L			2292765	2447622	0
[>	Sc	45		ug/L			266395	272795	0
[	V	51	48.011	ug/L	0.242	0	1871	575916	0
[	V-1	51	47.908	ug/L	0.276	0	6960	589914	0
[	Cr	52	48.102	ug/L	0.222	0	7102	496087	0
[	Cr	53	47.767	ug/L	0.220	0	2430	60534	0
[	Mn	55	48.079	ug/L	0.268	0	1181	800560	0
[	Co	59	48.212	ug/L	0.291	0	80	594402	0
[>	Ge	72		ug/L			284042	286581	0
[	Ni	60	48.215	ug/L	0.234	0	49	125453	0
[	Ni	62	48.304	ug/L	0.546	1	94	18671	0
[	Cu	63	48.377	ug/L	0.381	0	165	274795	0
[	Cu	65	48.553	ug/L	0.583	1	72	128512	0
[	Zn	66	49.176	ug/L	0.628	1	253	80679	0
[	Zn	67	48.925	ug/L	0.822	1	175	13723	1
[	Zn	68	48.741	ug/L	0.320	0	7445	62807	0
[	As	75	48.506	ug/L	0.520	1	900	76950	0
[	As-1	75	48.438	ug/L	0.607	1	9111	84246	0
[	Se	82	48.487	ug/L	0.385	0	-28	8063	0
[	Se	78	48.219	ug/L	0.686	1	9285	28942	0
[	Mo	98	48.188	ug/L	0.638	1	132	275302	0
	Y	89		ug/L			253953	254631	0
	Kr	83		ug/L			464	471	0
[>	In	115		ug/L			295470	293303	0
[	Ag	107	49.422	ug/L	0.387	0	81	463466	0
[	Cd	111	48.360	ug/L	0.890	1	137	116786	1
[	Cd	114	48.460	ug/L	0.523	1	20	270375	1
[	Sb	121	48.686	ug/L	0.193	0	233	388385	0
[	Sb	123	48.132	ug/L	0.419	0	195	290946	0
[	Ba	135	48.247	ug/L	0.638	1	23	91779	1
[	Ba	137	48.839	ug/L	0.248	0	25	157788	0
[>	Tb	159		ug/L			317904	321242	0
[	Tl	205	48.517	ug/L	0.635	1	97	1072472	1
[	Pb	208	48.913	ug/L	0.329	0	347	1496861	0
[	Bi	209		ug/L			261623	259106	0
[	Th	232	47.687	ug/L	0.283	0	605	1792981	0
[	U	238	48.054	ug/L	1.500	3	90	2040939	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:54:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			379225	378688	1
	Be	9	-0.000	ug/L	0.004	21252	1	1	114
	C	13		mg/L			5369	4979	2
	Cl	37		mg/L			2292765	2479262	0
>	Sc	45		ug/L			266395	266122	1
	V	51	0.024	ug/L	0.015	61	1871	2152	9
	V-1	51	-0.122	ug/L	0.008	6	6960	5508	2
	Cr	52	-0.000	ug/L	0.015	5997	7102	7092	1
	Cr	53	-0.466	ug/L	0.064	13	2430	1874	3
	Mn	55	-0.022	ug/L	0.003	11	1181	829	5
	Co	59	0.001	ug/L	0.001	79	80	93	12
>	Ge	72		ug/L			284042	277467	0
	Ni	60	-0.001	ug/L	0.002	154	49	45	8
	Ni	62	-0.066	ug/L	0.003	4	94	67	1
	Cu	63	0.001	ug/L	0.001	93	165	169	4
	Cu	65	0.004	ug/L	0.008	225	72	79	26
	Zn	66	-0.008	ug/L	0.017	200	253	234	11
	Zn	67	-0.050	ug/L	0.040	79	175	157	6
	Zn	68	-0.033	ug/L	0.025	77	7445	7237	0
	As	75	0.040	ug/L	0.014	34	900	941	2
	As-1	75	0.182	ug/L	0.009	5	9111	9174	0
	Se	82	0.052	ug/L	0.136	261	-28	-19	110
	Se	78	0.653	ug/L	0.039	6	9285	9327	0
	Mo	98	-0.006	ug/L	0.003	48	132	94	18
	Y	89		ug/L			253953	247820	0
	Kr	83		ug/L			464	463	2
>	In	115		ug/L			295470	286861	0
	Ag	107	0.007	ug/L	0.003	44	81	141	20
	Cd	111	0.006	ug/L	0.004	57	137	148	5
	Cd	114	0.000	ug/L	0.002	544	20	21	42
	Sb	121	0.068	ug/L	0.022	32	233	760	23
	Sb	123	0.069	ug/L	0.023	33	195	597	23
	Ba	135	0.001	ug/L	0.002	163	23	25	18
	Ba	137	0.005	ug/L	0.004	74	25	40	30
>	Tb	159		ug/L			317904	311077	1
	Tl	205	0.004	ug/L	0.002	57	97	177	27
	Pb	208	0.004	ug/L	0.002	51	347	462	14
	Bi	209		ug/L			261623	255594	1
	Th	232	0.014	ug/L	0.005	33	605	1099	16
	U	238	0.003	ug/L	0.001	35	90	229	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:03:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			379225	403698	0
	Be	9	0.005	ug/L	0.006	120	1	4	69
	C	13		mg/L			5369	5197	1
	Cl	37		mg/L			2292765	2512149	0
>	Sc	45		ug/L			266395	278351	0
	V	51	0.023	ug/L	0.022	95	1871	2230	12
	V-1	51	-0.128	ug/L	0.014	11	6960	5678	2
	Cr	52	0.032	ug/L	0.011	33	7102	7754	2
	Cr	53	-0.452	ug/L	0.064	14	2430	1978	3
	Mn	55	0.006	ug/L	0.003	44	1181	1334	3
	Co	59	-0.001	ug/L	0.000	43	80	69	9
>	Ge	72		ug/L			284042	293575	0
	Ni	60	0.007	ug/L	0.001	20	49	69	5
	Ni	62	-0.060	ug/L	0.037	62	94	73	19
	Cu	63	0.124	ug/L	0.002	1	165	893	1
	Cu	65	0.121	ug/L	0.007	5	72	402	4
	Zn	66	0.346	ug/L	0.015	4	253	841	2
	Zn	67	0.231	ug/L	0.124	53	175	247	14
	Zn	68	0.061	ug/L	0.151	247	7445	7765	1
	As	75	0.039	ug/L	0.027	69	900	993	4
	As-1	75	-0.125	ug/L	0.064	50	9111	9218	0
	Se	82	0.143	ug/L	0.051	35	-28	-5	165
	Se	78	-0.569	ug/L	0.279	48	9285	9360	1
	Mo	98	-0.009	ug/L	0.003	28	132	85	17
	Y	89		ug/L			253953	266226	0
	Kr	83		ug/L			464	464	3
>	In	115		ug/L			295470	302755	0
	Ag	107	0.000	ug/L	0.001	119	81	87	5
	Cd	111	0.013	ug/L	0.002	13	137	172	2
	Cd	114	0.000	ug/L	0.001	545	20	21	20
	Sb	121	-0.001	ug/L	0.003	482	233	234	9
	Sb	123	-0.002	ug/L	0.005	271	195	189	16
	Ba	135	0.007	ug/L	0.004	49	23	38	17
	Ba	137	0.012	ug/L	0.003	23	25	66	14
>	Tb	159		ug/L			317904	327922	1
	Tl	205	-0.000	ug/L	0.001	265	97	95	15
	Pb	208	0.006	ug/L	0.001	8	347	532	4
	Bi	209		ug/L			261623	268606	1
	Th	232	0.007	ug/L	0.003	40	605	894	13
	U	238	0.000	ug/L	0.000	94	90	114	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US50 MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:08:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	404471	0
[	Be	9	0.002	ug/L	0.005	345	1	2	100
	C	13		mg/L			5369	5865	1
	Cl	37		mg/L			2292765	2493465	1
[>	Sc	45		ug/L			266395	282878	0
|	V	51	0.037	ug/L	0.020	52	1871	2451	10
|	V-1	51	-0.146	ug/L	0.013	9	6960	5548	3
|	Cr	52	0.050	ug/L	0.027	54	7102	8068	3
|	Cr	53	-0.538	ug/L	0.012	2	2430	1902	0
|	Mn	55	-0.023	ug/L	0.003	12	1181	855	4
[	Co	59	-0.003	ug/L	0.000	7	80	47	5
[>	Ge	72		ug/L			284042	295344	0
|	Ni	60	0.003	ug/L	0.003	102	49	57	11
|	Ni	62	-0.056	ug/L	0.021	37	94	75	10
|	Cu	63	0.165	ug/L	0.002	1	165	1138	1
|	Cu	65	0.165	ug/L	0.013	7	72	524	6
|	Zn	66	0.252	ug/L	0.013	5	253	688	3
|	Zn	67	0.143	ug/L	0.029	19	175	223	3
|	Zn	68	-0.113	ug/L	0.041	35	7445	7609	0
|	As	75	0.003	ug/L	0.033	975	900	941	5
|	As-1	75	-0.173	ug/L	0.074	42	9111	9196	1
|	Se	82	0.047	ug/L	0.071	150	-28	-21	55
|	Se	78	-0.724	ug/L	0.262	36	9285	9352	1
[	Mo	98	-0.012	ug/L	0.003	25	132	66	27
	Y	89		ug/L			253953	266024	0
	Kr	83		ug/L			464	466	0
[>	In	115		ug/L			295470	307054	0
|	Ag	107	-0.002	ug/L	0.001	31	81	63	9
|	Cd	111	0.017	ug/L	0.010	59	137	185	13
|	Cd	114	-0.001	ug/L	0.000	47	20	15	19
|	Sb	121	-0.009	ug/L	0.003	33	233	168	14
|	Sb	123	-0.013	ug/L	0.004	26	195	120	19
|	Ba	135	0.009	ug/L	0.003	36	23	42	14
[	Ba	137	0.008	ug/L	0.002	29	25	51	13
[>	Tb	159		ug/L			317904	327746	1
|	Tl	205	-0.001	ug/L	0.001	41	97	72	15
|	Pb	208	0.005	ug/L	0.000	3	347	520	0
|	Bi	209		ug/L			261623	269756	0
|	Th	232	-0.000	ug/L	0.001	454	605	619	4
[	U	238	0.000	ug/L	0.000	62	90	96	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US50 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:14:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	399862	1
[	Be	9	23.354	ug/L	0.464	1	1	11166	0
	C	13		mg/L			5369	6114	0
	Cl	37		mg/L			2292765	2503580	0
[>	Sc	45		ug/L			266395	276506	0
[	V	51	24.829	ug/L	0.117	0	1871	302819	0
[	V-1	51	24.720	ug/L	0.168	0	6960	312021	0
[	Cr	52	24.920	ug/L	0.111	0	7102	264059	0
[	Cr	53	24.567	ug/L	0.379	1	2430	32781	1
[	Mn	55	25.407	ug/L	0.053	0	1181	429378	0
[	Co	59	25.545	ug/L	0.252	0	80	319267	1
[>	Ge	72		ug/L			284042	291538	0
[	Ni	60	25.755	ug/L	0.291	1	49	68197	1
[	Ni	62	25.043	ug/L	0.295	1	94	9894	0
[	Cu	63	26.453	ug/L	0.134	0	165	152935	0
[	Cu	65	26.606	ug/L	0.379	1	72	71675	1
[	Zn	66	79.716	ug/L	0.956	1	253	132895	1
[	Zn	67	72.085	ug/L	0.950	1	175	20484	1
[	Zn	68	77.909	ug/L	0.655	0	7445	97561	1
[	As	75	25.657	ug/L	0.080	0	900	41845	0
[	As-1	75	24.752	ug/L	0.250	1	9111	48370	1
[	Se	82	77.515	ug/L	0.463	0	-28	13131	0
[	Se	78	76.235	ug/L	0.732	0	9285	41015	1
[	Mo	98	-0.011	ug/L	0.002	20	132	75	16
	Y	89		ug/L			253953	262988	1
	Kr	83		ug/L			464	459	1
[>	In	115		ug/L			295470	303764	0
[	Ag	107	25.488	ug/L	0.222	0	81	247579	0
[	Cd	111	24.472	ug/L	0.359	1	137	61273	1
[	Cd	114	24.418	ug/L	0.134	0	20	141104	1
[	Sb	121	-0.011	ug/L	0.002	15	233	145	9
[	Sb	123	-0.016	ug/L	0.000	2	195	100	2
[	Ba	135	24.673	ug/L	0.458	1	23	48617	1
[	Ba	137	24.810	ug/L	0.211	0	25	83024	0
[>	Tb	159		ug/L			317904	323219	1
[	Tl	205	25.601	ug/L	0.164	0	97	569418	1
[	Pb	208	25.923	ug/L	0.355	1	347	798248	1
[	Bi	209		ug/L			261623	269383	1
[	Th	232	25.001	ug/L	0.429	1	605	945897	0
[	U	238	24.892	ug/L	0.607	2	90	1063536	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:20:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	404463	0
[	Be	9	0.013	ug/L	0.003	23	1	7	18
	C	13		mg/L			5369	5479	4
	Cl	37		mg/L			2292765	2477202	0
[>	Sc	45		ug/L			266395	277573	0
|	V	51	0.041	ug/L	0.007	17	1871	2448	3
|	V-1	51	-0.147	ug/L	0.008	5	6960	5430	1
|	Cr	52	0.075	ug/L	0.009	12	7102	8178	1
|	Cr	53	-0.529	ug/L	0.030	5	2430	1877	1
|	Mn	55	0.005	ug/L	0.001	21	1181	1320	1
[	Co	59	0.004	ug/L	0.001	38	80	127	13
[>	Ge	72		ug/L			284042	291508	0
|	Ni	60	0.009	ug/L	0.007	80	49	74	25
|	Ni	62	-0.015	ug/L	0.026	174	94	90	11
|	Cu	63	0.163	ug/L	0.007	4	165	1108	3
|	Cu	65	0.153	ug/L	0.003	2	72	484	1
|	Zn	66	0.368	ug/L	0.000	0	253	873	0
|	Zn	67	0.238	ug/L	0.017	7	175	247	1
|	Zn	68	-0.060	ug/L	0.133	221	7445	7571	2
|	As	75	0.026	ug/L	0.036	138	900	965	6
|	As-1	75	-0.177	ug/L	0.048	27	9111	9070	0
|	Se	82	0.165	ug/L	0.129	78	-28	-1	1332
|	Se	78	-0.750	ug/L	0.182	24	9285	9219	0
[	Mo	98	23.744	ug/L	0.313	1	132	138057	0
	Y	89		ug/L			253953	261707	0
	Kr	83		ug/L			464	453	2
[>	In	115		ug/L			295470	303424	1
|	Ag	107	0.007	ug/L	0.003	40	81	150	16
|	Cd	111	0.032	ug/L	0.011	33	137	222	13
|	Cd	114	0.046	ug/L	0.003	5	20	287	5
|	Sb	121	23.637	ug/L	0.215	0	233	195176	0
|	Sb	123	23.429	ug/L	0.305	1	195	146594	0
|	Ba	135	0.017	ug/L	0.003	19	23	58	10
[	Ba	137	0.039	ug/L	0.002	5	25	155	5
[>	Tb	159		ug/L			317904	327237	1
|	Tl	205	0.006	ug/L	0.001	24	97	236	14
|	Pb	208	0.019	ug/L	0.002	12	347	943	8
|	Bi	209		ug/L			261623	269503	0
|	Th	232	0.029	ug/L	0.007	24	605	1734	16
[	U	238	0.008	ug/L	0.002	24	90	422	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:27:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	392192	0
[	Be	9	0.010	ug/L	0.005	54	1	6	40
	C	13		mg/L			5369	4906	0
	Cl	37		mg/L			2292765	2377970	0
[>	Sc	45		ug/L			266395	280800	0
[	V	51	0.212	ug/L	0.018	8	1871	4581	4
[	V-1	51	0.043	ug/L	0.014	32	6960	7876	2
[	Cr	52	0.011	ug/L	0.010	87	7102	7605	1
[	Cr	53	-0.518	ug/L	0.109	21	2430	1913	7
[	Mn	55	65.150	ug/L	0.537	0	1181	1116196	0
[	Co	59	0.041	ug/L	0.004	8	80	603	7
[>	Ge	72		ug/L			284042	282406	0
[	Ni	60	0.727	ug/L	0.006	0	49	1913	1
[	Ni	62	0.506	ug/L	0.019	3	94	285	3
[	Cu	63	0.401	ug/L	0.015	3	165	2408	3
[	Cu	65	0.376	ug/L	0.029	7	72	1051	7
[	Zn	66	0.326	ug/L	0.017	5	253	777	3
[	Zn	67	0.201	ug/L	0.019	9	175	229	1
[	Zn	68	0.046	ug/L	0.121	259	7445	7454	2
[	As	75	1.919	ug/L	0.032	1	900	3859	1
[	As-1	75	1.715	ug/L	0.030	1	9111	11677	0
[	Se	82	0.079	ug/L	0.006	7	-28	-15	5
[	Se	78	-0.849	ug/L	0.049	5	9285	8892	0
[	Mo	98	1.428	ug/L	0.008	0	132	8170	1
	Y	89		ug/L			253953	252411	1
	Kr	83		ug/L			464	450	1
[>	In	115		ug/L			295470	294017	0
[	Ag	107	-0.001	ug/L	0.000	47	81	72	6
[	Cd	111	0.010	ug/L	0.006	64	137	160	9
[	Cd	114	0.002	ug/L	0.002	63	20	33	25
[	Sb	121	0.002	ug/L	0.005	291	233	245	15
[	Sb	123	0.000	ug/L	0.005	8974	195	195	15
[	Ba	135	0.552	ug/L	0.021	3	23	1075	4
[	Ba	137	0.556	ug/L	0.007	1	25	1826	1
[>	Tb	159		ug/L			317904	317786	1
[	Tl	205	-0.001	ug/L	0.001	79	97	84	13
[	Pb	208	0.069	ug/L	0.000	0	347	2432	0
[	Bi	209		ug/L			261623	262301	0
[	Th	232	0.006	ug/L	0.000	1	605	820	1
[	U	238	0.002	ug/L	0.000	23	90	161	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:33:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	395964	0
[	Be	9	0.015	ug/L	0.011	72	1	8	57
	C	13		mg/L			5369	7073	1
	Cl	37		mg/L			2292765	2414657	0
[>	Sc	45		ug/L			266395	334651	1
[	V	51	0.909	ug/L	0.024	2	1871	15678	0
[	V-1	51	0.682	ug/L	0.041	5	6960	18917	1
[	Cr	52	0.238	ug/L	0.010	4	7102	11888	0
[	Cr	53	-0.451	ug/L	0.071	15	2430	2379	3
[	Mn	55	272.876	ug/L	4.125	1	1181	5566159	0
[	Co	59	0.167	ug/L	0.006	3	80	2621	3
[>	Ge	72		ug/L			284042	284800	0
[	Ni	60	3.508	ug/L	0.102	2	49	9116	2
[	Ni	62	2.624	ug/L	0.143	5	94	1097	4
[	Cu	63	1.797	ug/L	0.021	1	165	10303	1
[	Cu	65	1.717	ug/L	0.035	2	72	4587	2
[	Zn	66	0.562	ug/L	0.010	1	253	1168	1
[	Zn	67	0.448	ug/L	0.074	16	175	299	6
[	Zn	68	0.758	ug/L	0.118	15	7445	8320	1
[	As	75	9.463	ug/L	0.038	0	900	15646	0
[	As-1	75	9.314	ug/L	0.049	0	9111	23477	0
[	Se	82	0.337	ug/L	0.025	7	-28	27	15
[	Se	78	-0.756	ug/L	0.087	11	9285	9005	0
[	Mo	98	7.280	ug/L	0.050	0	132	41446	0
	Y	89		ug/L			253953	260670	0
	Kr	83		ug/L			464	447	1
[>	In	115		ug/L			295470	294258	0
[	Ag	107	0.001	ug/L	0.002	203	81	89	18
[	Cd	111	0.022	ug/L	0.003	15	137	191	4
[	Cd	114	0.014	ug/L	0.003	19	20	96	16
[	Sb	121	0.024	ug/L	0.003	13	233	422	6
[	Sb	123	0.027	ug/L	0.006	22	195	359	9
[	Ba	135	2.707	ug/L	0.018	0	23	5187	0
[	Ba	137	2.721	ug/L	0.011	0	25	8843	0
[>	Tb	159		ug/L			317904	319390	0
[	Tl	205	-0.001	ug/L	0.000	16	97	79	3
[	Pb	208	0.024	ug/L	0.002	8	347	1074	4
[	Bi	209		ug/L			261623	258392	0
[	Th	232	0.046	ug/L	0.001	1	605	2321	2
[	U	238	0.008	ug/L	0.000	2	90	412	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:39:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**			ug/L			379225	398885	1
[	**Be**	**9**	**0.016**		ug/L	0.002	11	1	9	7
	C	**13**			mg/L			5369	7090	1
	Cl	**37**			mg/L			2292765	2415215	1
[>	**Sc**	**45**			ug/L			266395	334624	0
|	**V**	**51**	**0.896**		ug/L	0.031	3	1871	15491	2
|	**V-1**	**51**	**0.679**		ug/L	0.012	1	6960	18874	1
|	**Cr**	**52**	**0.224**		ug/L	0.009	4	7102	11712	0
|	**Cr**	**53**	**-0.434**		ug/L	0.080	18	2430	2405	5
|	**Mn**	**55**	**274.733**		ug/L	2.615	0	1181	5604191	0
[	**Co**	**59**	**0.167**		ug/L	0.007	4	80	2620	4
[>	**Ge**	**72**			ug/L			284042	287348	1
|	**Ni**	**60**	**1.378**		ug/L	0.041	2	49	3643	2
|	**Ni**	**62**	**0.592**		ug/L	0.029	4	94	323	4
|	**Cu**	**63**	**0.549**		ug/L	0.020	3	165	3292	3
|	**Cu**	**65**	**0.508**		ug/L	0.005	0	72	1421	1
|	**Zn**	**66**	**0.539**		ug/L	0.022	4	253	1139	2
|	**Zn**	**67**	**0.483**		ug/L	0.084	17	175	311	6
|	**Zn**	**68**	**0.735**		ug/L	0.151	20	7445	8368	2
|	**As**	**75**	**9.442**		ug/L	0.058	0	900	15752	0
|	**As-1**	**75**	**9.338**		ug/L	0.100	1	9111	23725	0
|	**Se**	**82**	**0.247**		ug/L	0.054	22	-28	12	74
|	**Se**	**78**	**-0.657**		ug/L	0.229	34	9285	9125	0
[	**Mo**	**98**	**7.355**		ug/L	0.131	1	132	42243	0
	Y	**89**			ug/L			253953	263769	0
	Kr	**83**			ug/L			464	454	0
[>	**In**	**115**			ug/L			295470	294186	1
|	**Ag**	**107**	**-0.001**		ug/L	0.001	50	81	71	5
|	**Cd**	**111**	**0.024**		ug/L	0.008	33	137	196	10
|	**Cd**	**114**	**0.014**		ug/L	0.003	22	20	100	17
|	**Sb**	**121**		U	**0.017**	ug/L	0.004	24	233	370	7
|	**Sb**	**123**	**0.015**		ug/L	0.002	12	195	288	2
|	**Ba**	**135**	**2.745**		ug/L	0.053	1	23	5259	0
[	**Ba**	**137**	**2.788**		ug/L	0.034	1	25	9056	0
[>	**Tb**	**159**			ug/L			317904	320292	0
|	**Tl**	**205**	**-0.001**		ug/L	0.001	105	97	84	17
|	**Pb**	**208**	**0.024**		ug/L	0.000	1	347	1071	1
|	**Bi**	**209**			ug/L			261623	258355	0
|	**Th**	**232**	**0.034**		ug/L	0.002	4	605	1873	3
[	**U**	**238**	**0.007**		ug/L	0.001	7	90	391	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:46:04
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			379225	391582	0
⌊	Be	9	0.021	ug/L	0.004	19	1	11	16
	C	13		mg/L			5369	7036	1
	Cl	37		mg/L			2292765	2431195	0
⌈>	Sc	45		ug/L			266395	332048	0
|	V	51	0.931	ug/L	0.004	0	1871	15882	1
|	V-1	51	0.705	ug/L	0.011	1	6960	19113	1
|	Cr	52	0.239	ug/L	0.020	8	7102	11806	2
|	Cr	53	-0.448	ug/L	0.027	6	2430	2367	2
|	Mn	55	279.278	ug/L	3.044	1	1181	5652894	0
⌊	Co	59	0.173	ug/L	0.007	4	80	2696	4
⌈>	Ge	72		ug/L			284042	287785	0
|	Ni	60	2.949	ug/L	0.053	1	49	7751	1
|	Ni	62	2.182	ug/L	0.143	6	94	938	5
|	Cu	63	1.459	ug/L	0.016	1	165	8485	1
|	Cu	65	1.435	ug/L	0.043	2	72	3885	2
|	Zn	66	0.619	ug/L	0.022	3	253	1273	2
|	Zn	67	0.603	ug/L	0.115	19	175	345	9
|	Zn	68	0.922	ug/L	0.099	10	7445	8594	1
|	As	75	9.790	ug/L	0.103	1	900	16325	0
|	As-1	75	9.675	ug/L	0.137	1	9111	24285	0
|	Se	82	0.272	ug/L	0.101	37	-28	16	103
|	Se	78	-0.657	ug/L	0.088	13	9285	9140	0
⌊	Mo	98	31.674	ug/L	0.214	0	132	181778	0
	Y	89		ug/L			253953	261780	0
	Kr	83		ug/L			464	460	1
⌈>	In	115		ug/L			295470	290004	0
|	Ag	107	0.002	ug/L	0.002	91	81	102	19
|	Cd	111	0.027	ug/L	0.008	29	137	198	9
|	Cd	114	0.059	ug/L	0.004	6	20	343	6
|	Sb	121	24.286	ug/L	0.232	0	233	191675	1
|	Sb	123	24.033	ug/L	0.206	0	195	143730	0
|	Ba	135	2.776	ug/L	0.043	1	23	5242	1
⌊	Ba	137	2.787	ug/L	0.045	1	25	8926	1
⌈>	Tb	159		ug/L			317904	316215	0
|	Tl	205	0.004	ug/L	0.000	10	97	190	5
|	Pb	208	0.031	ug/L	0.001	2	347	1268	2
|	Bi	209		ug/L			261623	255733	0
|	Th	232	0.033	ug/L	0.001	1	605	1829	0
⌊	U	238	0.012	ug/L	0.000	2	90	574	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 APOST REN zzzzzz
Sample Dil Factor: 2
Comments: BW 5.9
Sample Date/Time: Wednesday, May 09, 2012 14:52:22
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	394502	0
[	Be	9	0.013	ug/L	0.004	29	1	7	24
	C	13		mg/L			5369	7142	0
	Cl	37		mg/L			2292765	2418654	0
[>	Sc	45		ug/L			266395	335230	0
|	V	51	0.892	ug/L	0.012	1	1871	15464	1
|	V-1	51	0.656	ug/L	0.008	1	6960	18571	1
|	Cr	52	0.225	ug/L	0.015	6	7102	11747	2
|	Cr	53	-0.494	ug/L	0.053	10	2430	2320	3
|	Mn	55	271.814	ug/L	2.524	0	1181	5554737	1
[	Co	59	0.165	ug/L	0.005	2	80	2605	2
[>	Ge	72		ug/L			284042	285843	0
|	Ni	60	3.517	ug/L	0.092	2	49	9172	1
|	Ni	62	2.605	ug/L	0.079	3	94	1093	2
|	Cu	63	1.779	ug/L	0.029	1	165	10241	0
|	Cu	65	1.777	ug/L	0.037	2	72	4760	1
|	Zn	66	0.561	ug/L	0.015	2	253	1171	2
|	Zn	67	0.478	ug/L	0.134	28	175	308	11
|	Zn	68	1.003	ug/L	0.208	20	7445	8627	3
|	As	75	9.348	ug/L	0.127	1	900	15522	0
|	As-1	75	9.365	ug/L	0.177	1	9111	23642	0
|	Se	82	0.091	ug/L	0.102	112	-28	-13	122
|	Se	78	-0.231	ug/L	0.231	99	9285	9250	0
[	Mo	98	32.658	ug/L	0.419	1	132	186144	1
	Y	89		ug/L			253953	260162	0
	Kr	83		ug/L			464	471	3
[>	In	115		ug/L			295470	291826	0
|	Ag	107	-0.003	ug/L	0.002	50	81	52	27
|	Cd	111	0.012	ug/L	0.009	79	137	164	13
|	Cd	114	0.053	ug/L	0.003	6	20	316	5
|	Sb	121	25.458	ug/L	0.145	0	233	202171	0
|	Sb	123	25.420	ug/L	0.239	0	195	152974	0
|	Ba	135	2.695	ug/L	0.051	1	23	5122	2
[	Ba	137	2.712	ug/L	0.039	1	25	8742	1
[>	Tb	159		ug/L			317904	320716	0
|	Tl	205	-0.000	ug/L	0.000	204	97	95	7
|	Pb	208	0.022	ug/L	0.000	2	347	1015	1
|	Bi	209		ug/L			261623	255828	0
|	Th	232	0.018	ug/L	0.002	11	605	1290	6
[	U	238	0.007	ug/L	0.000	6	90	369	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UT31 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:58:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	395769	1
[	Be	9	0.023	ug/L	0.004	18	1	12	17
	C	13		mg/L			5369	7005	0
	Cl	37		mg/L			2292765	2371043	1
[>	Sc	45		ug/L			266395	323615	0
[	V	51	0.340	ug/L	0.008	2	1871	7089	0
[	V-1	51	0.111	ug/L	0.010	8	6960	10061	0
[	Cr	52	0.252	ug/L	0.012	4	7102	11664	0
[	Cr	53	-0.474	ug/L	0.028	5	2430	2268	1
[	Mn	55	148.186	ug/L	1.866	1	1181	2923950	0
[	Co	59	0.222	ug/L	0.004	2	80	3350	2
[>	Ge	72		ug/L			284042	286532	0
[	Ni	60	1.862	ug/L	0.042	2	49	4891	1
[	Ni	62	0.701	ug/L	0.030	4	94	364	2
[	Cu	63	0.555	ug/L	0.017	3	165	3317	2
[	Cu	65	0.558	ug/L	0.002	0	72	1547	0
[	Zn	66	0.524	ug/L	0.017	3	253	1112	2
[	Zn	67	0.414	ug/L	0.074	17	175	291	7
[	Zn	68	0.961	ug/L	0.021	2	7445	8600	0
[	As	75	1.228	ug/L	0.016	1	900	2833	1
[	As-1	75	1.095	ug/L	0.030	2	9111	10887	0
[	Se	82	0.119	ug/L	0.032	26	-28	-9	57
[	Se	78	-0.516	ug/L	0.118	22	9285	9157	0
[	Mo	98	10.208	ug/L	0.060	0	132	58418	0
	Y	89		ug/L			253953	259905	0
	Kr	83		ug/L			464	456	1
[>	In	115		ug/L			295470	289908	0
[	Ag	107	-0.003	ug/L	0.001	17	81	48	11
[	Cd	111	0.020	ug/L	0.013	66	137	181	17
[	Cd	114	0.022	ug/L	0.002	9	20	139	7
[	Sb	121	0.255	ug/L	0.012	4	233	2237	4
[	Sb	123	0.245	ug/L	0.013	5	195	1652	4
[	Ba	135	4.265	ug/L	0.075	1	23	8039	1
[	Ba	137	4.205	ug/L	0.075	1	25	13449	1
[>	Tb	159		ug/L			317904	316451	1
[	Tl	205	-0.001	ug/L	0.001	46	97	73	13
[	Pb	208	0.016	ug/L	0.001	4	347	822	3
[	Bi	209		ug/L			261623	254049	1
[	Th	232	0.019	ug/L	0.002	8	605	1288	3
[	U	238	0.348	ug/L	0.003	0	90	14663	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 15:05:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	389671	1
[	Be	9	46.955	ug/L	0.218	0	1	21882	1
	C	13		mg/L			5369	4166	2
	Cl	37		mg/L			2292765	2495225	0
[>	Sc	45		ug/L			266395	274068	0
[	V	51	48.295	ug/L	0.281	0	1871	582011	0
[	V-1	51	48.183	ug/L	0.261	0	6960	596021	0
[	Cr	52	48.509	ug/L	0.170	0	7102	502556	0
[	Cr	53	48.137	ug/L	0.162	0	2430	61269	0
[	Mn	55	48.386	ug/L	0.481	0	1181	809423	0
[	Co	59	48.881	ug/L	0.298	0	80	605466	0
[>	Ge	72		ug/L			284042	292243	0
[	Ni	60	48.529	ug/L	0.397	0	49	128765	0
[	Ni	62	48.315	ug/L	0.403	0	94	19045	0
[	Cu	63	48.570	ug/L	0.597	1	165	281342	1
[	Cu	65	49.268	ug/L	0.536	1	72	132983	0
[	Zn	66	49.299	ug/L	0.748	1	253	82482	1
[	Zn	67	48.980	ug/L	0.607	1	175	14010	1
[	Zn	68	49.563	ug/L	0.433	0	7445	64998	0
[	As	75	48.892	ug/L	0.004	0	900	79091	0
[	As-1	75	49.056	ug/L	0.161	0	9111	86891	0
[	Se	82	48.393	ug/L	0.477	0	-28	8206	0
[	Se	78	48.964	ug/L	0.770	1	9285	29823	0
[	Mo	98	48.353	ug/L	0.593	1	132	281715	0
	Y	89		ug/L			253953	256580	1
	Kr	83		ug/L			464	477	3
[>	In	115		ug/L			295470	290938	0
[	Ag	107	50.301	ug/L	0.154	0	81	467906	0
[	Cd	111	49.268	ug/L	0.266	0	137	118017	0
[	Cd	114	49.213	ug/L	0.097	0	20	272364	0
[	Sb	121	49.233	ug/L	0.700	1	233	389554	0
[	Sb	123	48.829	ug/L	1.026	2	195	292764	1
[	Ba	135	48.494	ug/L	0.779	1	23	91502	1
[	Ba	137	48.926	ug/L	0.215	0	25	156792	0
[>	Tb	159		ug/L			317904	317088	0
[	Tl	205	49.053	ug/L	0.241	0	97	1070262	0
[	Pb	208	49.599	ug/L	0.264	0	347	1498185	0
[	Bi	209		ug/L			261623	255490	0
[	Th	232	47.914	ug/L	0.712	1	605	1778184	1
[	U	238	47.148	ug/L	0.322	0	90	1976508	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 15:11:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\050912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			379225	378580	0
[	Be	9	0.006	ug/L	0.004	64	1	4	41
	C	13		mg/L			5369	5213	2
	Cl	37		mg/L			2292765	2595167	0
[>	Sc	45		ug/L			266395	271285	0
[	V	51	0.013	ug/L	0.020	156	1871	2059	11
[	V-1	51	-0.175	ug/L	0.009	4	6960	4974	2
[	Cr	52	0.017	ug/L	0.009	51	7102	7404	1
[	Cr	53	-0.585	ug/L	0.080	13	2430	1768	6
[	Mn	55	-0.029	ug/L	0.005	16	1181	715	11
[	Co	59	0.002	ug/L	0.001	36	80	112	10
[>	Ge	72		ug/L			284042	288911	0
[	Ni	60	0.000	ug/L	0.002	1245	49	50	10
[	Ni	62	-0.076	ug/L	0.012	15	94	66	6
[	Cu	63	-0.001	ug/L	0.004	517	165	164	13
[	Cu	65	0.001	ug/L	0.004	335	72	76	13
[	Zn	66	0.028	ug/L	0.013	45	253	303	6
[	Zn	67	-0.130	ug/L	0.002	1	175	142	0
[	Zn	68	0.033	ug/L	0.088	268	7445	7610	1
[	As	75	0.069	ug/L	0.035	51	900	1025	5
[	As-1	75	0.252	ug/L	0.037	14	9111	9661	0
[	Se	82	0.112	ug/L	0.192	171	-28	-10	307
[	Se	78	0.899	ug/L	0.126	14	9285	9812	0
[	Mo	98	-0.006	ug/L	0.004	64	132	98	24
	Y	89		ug/L			253953	254635	0
	Kr	83		ug/L			464	486	2
[>	In	115		ug/L			295470	290090	0
[	Ag	107	0.008	ug/L	0.006	69	81	154	33
[	Cd	111	0.015	ug/L	0.003	18	137	170	3
[	Cd	114	0.002	ug/L	0.002	75	20	32	30
[	Sb	121	0.073	ug/L	0.028	38	233	803	27
[	Sb	123	0.067	ug/L	0.021	31	195	595	21
[	Ba	135	-0.001	ug/L	0.001	194	23	22	11
[	Ba	137	0.006	ug/L	0.001	15	25	43	6
[>	Tb	159		ug/L			317904	307411	0
[	Tl	205	0.004	ug/L	0.002	55	97	181	26
[	Pb	208	0.005	ug/L	0.002	37	347	475	10
[	Bi	209		ug/L			261623	252691	1
[	Th	232	0.012	ug/L	0.004	34	605	1002	14
[	U	238	0.004	ug/L	0.002	43	90	236	27

end CLP

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: US52, US61, UT31

SAMPLE RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/01/12
Date Received: 05/01/12

Client ID: MW-28S-050112
ARI ID: 12-7821 US52G

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/03/12 050312#1	SM 2320	mg/L CaCO3	1.0	166
Carbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	166
Hydroxide	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Total Suspended Solids	05/04/12 050412#1	SM2540D	mg/L	1.0	12.7
Chloride	05/03/12 050312#1	EPA 300.0	mg/L	1.0	35.8
N-Nitrate	05/02/12 050212#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
N-Ammonia	05/03/12 050312#1	EPA 350.1M	mg-N/L	0.010	0.344
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.008	0.391
Sulfate	05/03/12 050312#1	EPA 300.0	mg/L	0.5	21.0
Total Organic Carbon	05/17/12 051712#1	EPA 9060M	mg/L	1.50	3.73

RL Analytical reporting limit
U Undetected at reported detection limit

US52:0110U

SAMPLE RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/01/12
Date Received: 05/01/12

Client ID: MW-32S-050112
ARI ID: 12-7822 US52H

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/03/12 050312#1	SM 2320	mg/L CaCO3	1.0	289
Carbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	289
Hydroxide	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Total Suspended Solids	05/04/12 050412#1	SM2540D	mg/L	2.0	51.0
Chloride	05/03/12 050312#1	EPA 300.0	mg/L	0.2	7.9
N-Nitrate	05/02/12 050212#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.016	1.73
Sulfate	05/02/12 050212#1	EPA 300.0	mg/L	0.1	4.8
Total Organic Carbon	05/17/12 051712#1	EPA 9060M	mg/L	1.50	8.81

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/01/12
Date Received: 05/01/12

Client ID: MW-32DR-050112
ARI ID: 12-7823 US52I

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/03/12 050312#1	SM 2320	mg/L CaCO3	1.0	434
Carbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	434
Hydroxide	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Total Suspended Solids	05/04/12 050412#1	SM2540D	mg/L	1.0	2.4
Chloride	05/03/12 050312#1	EPA 300.0	mg/L	2.0	97.1
N-Nitrate	05/02/12 050212#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.016	1.28
Sulfate	05/02/12 050212#1	EPA 300.0	mg/L	0.1	0.7
Total Organic Carbon	05/17/12 051712#1	EPA 9060M	mg/L	1.50	24.6

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/01/12
Date Received: 05/01/12

Analyte	Method	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: US52G Client ID: MW-28S-050112							
Chloride	EPA 300.0	05/03/12	mg/L	35.8	77.8	40.0	105.0%
N-Nitrate	EPA 300.0	05/02/12	mg-N/L	< 0.1	2.0	2.0	100.0%
Sulfate	EPA 300.0	05/03/12	mg/L	21.0	37.6	20.0	83.0%

REPLICATE RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/01/12
Date Received: 05/01/12

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: US52G Client ID: MW-28S-050112						
Alkalinity	SM 2320	05/03/12	mg/L CaCO3	166	164	1.2%
Carbonate	SM 2320	05/03/12	mg/L CaCO3	< 1.0	< 1.0	NA
Bicarbonate	SM 2320	05/03/12	mg/L CaCO3	166	164	1.2%
Hydroxide	SM 2320	05/03/12	mg/L CaCO3	< 1.0	< 1.0	NA
Chloride	EPA 300.0	05/03/12	mg/L	35.8	36.1	0.8%
N-Nitrate	EPA 300.0	05/02/12	mg-N/L	< 0.1	< 0.1	NA
Sulfate	EPA 300.0	05/03/12	mg/L	21.0	21.0	0.0%

LAB CONTROL RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Suspended Solids SM2540D	ICVL	05/04/12	mg/L	50.1	50.0	100.2%

METHOD BLANK RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Total Suspended Solids	SM2540D	05/04/12	mg/L	< 1.0 U	
Chloride	EPA 300.0	05/03/12	mg/L	< 0.1 U	
N-Nitrate	EPA 300.0	05/02/12	mg-N/L	< 0.1 U	
N-Ammonia	EPA 350.1M	05/03/12	mg-N/L	< 0.010 U	FB
Total Phosphorus	SM4500-PE	05/08/12	mg-P/L	< 0.008 U	
Sulfate	EPA 300.0	05/02/12 05/03/12	mg/L	< 0.1 U < 0.1 U	
Total Organic Carbon	EPA 9060M	05/17/12	mg/L	< 1.50 U	

FB Filtration Blank

US52:01110

STANDARD REFERENCE RESULTS-CONVENTIONALS
US52-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Method	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P114506	SM 2320	05/03/12	mg/L CaCO3	31.5	31.1	101.3%
Chloride ERA #411010	EPA 300.0	05/03/12	mg/L	2.9	3.0	96.7%
N-Nitrate ERA #230511	EPA 300.0	05/02/12	mg-N/L	3.1	3.0	103.3%
N-Ammonia ERA #15125	EPA 350.1M	05/03/12	mg-N/L	0.489	0.500	97.8%
Total Phosphorus ERA #3303093	SM4500-PE	05/08/12	mg-P/L	0.098	0.100	98.0%
Sulfate ERA #160111	EPA 300.0	05/02/12 05/03/12	mg/L	3.0 2.9	3.0 3.0	100.0% 96.7%
Total Organic Carbon ERA 0523-11-05	EPA 9060M	05/17/12	mg/L	21.8	20.0	109.0%

SAMPLE RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/02/12
Date Received: 05/02/12

Client ID: MW-30S-050212
ARI ID: 12-7884 US61A

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/03/12 050312#1	SM 2320	mg/L CaCO3	1.0	169
Carbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	169
Hydroxide	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Total Suspended Solids	05/07/12 050712#1	SM2540D	mg/L	5.9	6.5
Chloride	05/03/12 050312#1	EPA 300.0	mg/L	0.2	8.9
N-Nitrate	05/02/12 050212#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
N-Ammonia	05/03/12 050312#1	EPA 350.1M	mg-N/L	0.050	1.98
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.016	1.26
Sulfate	05/02/12 050212#1	EPA 300.0	mg/L	0.1	< 0.1 U
Total Organic Carbon	05/17/12 051712#1	EPA 9060M	mg/L	1.50	4.08

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/02/12
Date Received: 05/02/12

Client ID: MW-29S-050212
ARI ID: 12-7885 US61B

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/03/12 050312#1	SM 2320	mg/L CaCO3	1.0	169
Carbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	169
Hydroxide	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Total Suspended Solids	05/07/12 050712#1	SM2540D	mg/L	1.7	15.2
Chloride	05/03/12 050312#1	EPA 300.0	mg/L	2.0	55.7
N-Nitrate	05/02/12 050212#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
N-Ammonia	05/03/12 050312#1	EPA 350.1M	mg-N/L	0.020	1.47
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.016	1.07
Sulfate	05/02/12 050212#1	EPA 300.0	mg/L	0.1	2.5
Total Organic Carbon	05/17/12 051712#1	EPA 9060M	mg/L	1.50	4.17

RL Analytical reporting limit
U Undetected at reported detection limit

US52:01113

SAMPLE RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/02/12
Date Received: 05/02/12

Client ID: MW-31S-050212
ARI ID: 12-7886 US61C

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/03/12 050312#1	SM 2320	mg/L CaCO3	1.0	191
Carbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/03/12	SM 2320	mg/L CaCO3	1.0	191
Hydroxide	05/03/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Hexavalent Chromium	05/02/12 050212#1	SW7196A	mg/L	0.010	< 0.010 U
Total Suspended Solids	05/07/12 050712#1	SM2540D	mg/L	1.1	10.4
Chloride	05/02/12 050212#1	EPA 300.0	mg/L	0.1	3.4
N-Nitrate	05/02/12 050212#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
N-Ammonia	05/03/12 050312#1	EPA 350.1M	mg-N/L	0.010	0.682
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.008	0.390
Sulfate	05/03/12 050312#1	EPA 300.0	mg/L	0.5	11.8
Total Organic Carbon	05/17/12 051712#1	EPA 9060M	mg/L	1.50	3.14

RL Analytical reporting limit
U Undetected at reported detection limit

US52:01114

SAMPLE RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/02/12
Date Received: 05/02/12

Client ID: DUP-050212-1
ARI ID: 12-7887 US61D

Analyte	Date Batch	Method	Units	RL	Sample
Hexavalent Chromium	05/02/12 050212#1	SW7196A	mg/L	0.010	< 0.010 U
N-Ammonia	05/03/12 050312#1	EPA 350.1M	mg-N/L	0.010	0.674

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/02/12
Date Received: 05/02/12

Analyte	Method	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: US61A Client ID: MW-30S-050212							
Total Phosphorus	SM4500-PE	05/08/12	mg-P/L	1.26	1.30	0.040	100.0%
ARI ID: US61B Client ID: MW-29S-050212							
N-Ammonia	EPA 350.1M	05/03/12	mg-N/L	1.47	4.11	2.50	105.6%

REPLICATE RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 05/02/12
Date Received: 05/02/12

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: US61A Client ID: MW-30S-050212						
Total Phosphorus	SM4500-PE	05/08/12	mg-P/L	1.26	1.28	1.6%
ARI ID: US61B Client ID: MW-29S-050212						
N-Ammonia	EPA 350.1M	05/03/12	mg-N/L	1.47	1.47	0.0%

LAB CONTROL RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Suspended Solids SM2540D	ICVL	05/07/12	mg/L	49.5	50.0	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Hexavalent Chromium	SW7196A	05/02/12	mg/L	< 0.010 U	
Total Suspended Solids	SM2540D	05/07/12	mg/L	< 1.0 U	
Chloride	EPA 300.0	05/02/12	mg/L	< 0.1 U	
		05/03/12		< 0.1 U	
N-Nitrate	EPA 300.0	05/02/12	mg-N/L	< 0.1 U	
N-Ammonia	EPA 350.1M	05/03/12	mg-N/L	< 0.010 U	FB
Total Phosphorus	SM4500-PE	05/08/12	mg-P/L	< 0.008 U	
Sulfate	EPA 300.0	05/02/12	mg/L	< 0.1 U	
		05/03/12		< 0.1 U	
Total Organic Carbon	EPA 9060M	05/17/12	mg/L	< 1.50 U	

FB Filtration Blank

US52:01119

STANDARD REFERENCE RESULTS-CONVENTIONALS
US61-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/23/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Method	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P114506	SM 2320	05/03/12	mg/L CaCO3	31.5	31.1	101.3%
Hexavalent Chromium ERA #41065	SW7196A	05/02/12	mg/L	0.603	0.630	95.7%
Chloride ERA #411010	EPA 300.0	05/02/12 05/03/12	mg/L	3.0 2.9	3.0 3.0	100.0% 96.7%
N-Nitrate ERA #230511	EPA 300.0	05/02/12	mg-N/L	3.1	3.0	103.3%
N-Ammonia ERA #15125	EPA 350.1M	05/03/12	mg-N/L	0.489	0.500	97.8%
Total Phosphorus ERA #3303093	SM4500-PE	05/08/12	mg-P/L	0.098	0.100	98.0%
Sulfate ERA #160111	EPA 300.0	05/02/12 05/03/12	mg/L	3.0 2.9	3.0 3.0	100.0% 96.7%
Total Organic Carbon ERA 0523-11-05	EPA 9060M	05/17/12	mg/L	21.8	20.0	109.0%

Subcontracted Results
Total Organic Halides Analyzed by Columbia Analytical Services Inc.

ARI Job ID: US52, US61, UT31

May 29, 2012 Analytical Report for Service Request No: K1204390

Sue Dunnihoo
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: RG Spring GW Sampling/US52

Dear Sue:

Enclosed are the results of the samples submitted to our laboratory on May 08, 2012. For your reference, these analyses have been assigned our service request number K1204390.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3363. You may also contact me via Email at Lisa.Domenighini@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Lisa Domenighini
Project Chemist

LD/jw

Columbia Analytical Services™
ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 FAX +1 360 636 1068
Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company
www.caslab.com • www.alsglobal.com

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

US52:01123

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

US52 : 01124

Columbia Analytical Services, Inc. - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/chllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	-
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

US52 : 01125

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K1204390
Project:	RG Spring GW Sampling/US52	**Date Received:**	05/08/12
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 05/08/12. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 5/30/12

US52 : 01127

Chain of Custody

US52:01128

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 05/02/12

ANALYTICAL RESOURCES INCORPORATED

ARI Project: US52

71204390

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: ERM-West
Project ID: RG Spring GW Sampling
ARI PM: Sue Dunniboo
Phone: 206-695-6207
Fax: 206-695-6201
Email: subdata@arilabs.com

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around:
Email Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
12-7821-US52G	MW-28S-050112	05/01/12 10:27	Water	1	Total Organic Halides
Special Instructions: Lv3, Method 9020, 2 EDD's					
12-7822-US52H	MW-32S-050112	05/01/12 12:13	Water	1	Total Organic Halides
Special Instructions: Lv3, Method 9020, 2 EDD's					
12-7823-US52I	MW-32DR-050112	05/01/12 13:57	Water	1	Total Organic Halides
Special Instructions: Lv3, Method 9020, 2 EDD's					

Carrier: UPS		Airbill: 12 882 0503 5108 6955	Date: 5-7-12
Relinquished by:	Company: ARI	Date: 5-7-12	Time: 1020
Received by:	Company: ALS	Date: 5/8/12	Time: 1020

US52:01129

PC Lisa

Cooler Receipt and Preservation Form

Client / Project: ARI Service Request K12 4390

Received: 5/8/12 Opened: 5/8/12 By: AJ Unloaded: 5/8/12 By: AJ

1. Samples were received via? *Mail* *Fed Ex* (*UPS*) *DHL* *FDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where?_____

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filed
2.8	~	257		1Z8826950354081955		

7. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Dry Ice* *Sleeves* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
15. Was Cl2/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

*Notes, Discrepancies, & Resolutions:*_____

General Chemistry Parameters

US52 01131

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K1204390
Project:	RG Spring GW Sampling/US52	**Date Collected:**	5/1/2012
Sample Matrix:	Water	**Date Received:**	5/8/2012

Halides, Total Organic (TOX)

Prep Method:	NONE	Units:	ug/L (ppb)
Analysis Method:	9020B	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-28S-050112	K1204390-001	10	4	1	NA	5/23/2012	6	J
MW-32S-050112	K1204390-002	10	4	1	NA	5/23/2012	5	J
MW-32DR-050112	K1204390-003	10	4	1	NA	5/23/2012	14	
Method Blank	K1204390-MB	10	4	1	NA	5/23/2012	6	J

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K1204390
Project:	RG Spring GW Sampling/US52	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	5/23/2012

Matrix Spike/Duplicate Matrix Spike Summary
Halides, Total Organic (TOX)

Sample Name:	Batch QC	Units:	ug/L (ppb)
Lab Code:	K1204849-004MS, K1204849-004DMS	Basis:	NA
Test Notes:			

									Percent Recovery				
	Prep	Analysis		Spike Level		Sample	Spike Result				CAS Acceptance	Relative Percent	Result
Analyte	**Method**	**Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Notes**
Halides, Total Organic (TOX)	NONE	9020B	1000	10000	10000	1870	11600	11400	97	95	82-121	2	

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Analytical Resources, Incorporated
Project: RG Spring GW Sampling/US52
Sample Matrix: Water

Service Request: K1204390
Date Collected: NA
Date Received: NA
Date Analyzed: 5/23/2012

Calibration and Method Blank Summary
Halides, Total Organic (TOX)
EPA Method 9020

	Halide Check Standard (µg)	Instrument Calibration Standard (µg)	Adsorption Standard (µg/L)	Method Blank (µg/L)
True Value	3.64	10.0	100	ND
Run A	3.99	9.7	96	6 J
Percent Recovery	110	97	96	
Run B	3.46	9.7		
Percent Recovery	95	97		

292805

Work Request # (Original) K4373 K4390 K4578 K4849

Tier: IV IV I (#5) II

Date Analyzed: 5/23/12

Analyst: EM

Analysis: TOX 9020B KTOX03

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	yes/(no)
6.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/(NA)
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
9.	Are results for methods blanks all ND?	(yes)/no/NA
10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/(no)/NA
11.	Are all exceptions explained?	(yes)/no/NA
12.	Have all applicable service requests been reviewed?	(yes)/no/NA
13.	Are all samples labeled correctly?	(yes)/no/NA
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	(yes)/no/NA
15.	Are detection limits and units reported correctly?	(yes)/no/NA
16.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/(no)/NA

COMMENTS:

See bench sheet for QC Failure comments.

K4373 due 5/25
K4390 due 5/25
K4578 due 5/28
~~K4849~~ EM 5/25/12

Final Approved by: _____ Date: 5/28/12

DQREPORT

US52:01135

AOX/TOX Benchsheet

Service Request #: K1204373, K1204390, K1204578, K1204849 Method # : TOX-9020B

Analysis For : Total Organic Halides Instrument: Crackers

Calibration Date: 7/5/2001 IPR Date: 5/9/2000

Instrument:	Volume	Concentration	Result	Reported Value	% Rec.
Halide Check	Run A = 10 µL	3.64	3.9900	3.9900	109.6
	Run B = 10 µL	3.64	3.4570	3.4570	95
NO_3 Wash Blank	2 mL	1) 0.2760	2) 0.1360	Average =	0.2060
Inst. Cal. Std.	Run A = 10 µL	10.0	9.8720	9.6660	97
	Run B = 10 µL	10.0	9.9440	9.7380	97

Lab Code	Initial Volume (mls)	Final Volume (mls)	OBS A µg	OBS B µg	Conc. (ppb)	Reported Value (ppb)	% Break-through	% RPD	Head-space	pH	% Recovery
MB	100	100	0.4610	0.1570	6	< 10					
PAR STD	100	100	9.6700	0.3900	96	96	1.9				96
K4373-1	25	100	0.4130	0.3060	12	NR	32.6		y	2	
K4390-1	100	100	0.4960	0.3050	4		25.4		y	2	
K4390-2	50	100	0.3390	NA	3	NR	282.2		y	2	
K4390-3	25	100	0.4320	0.3890	16	NR	44.7		y	2	
K4578-5	25	100	5.8790	3.7500	369	NR	38.5		n	5	
K4578-6	25	100	6.5370	2.5640	348	NR	27.1		n	7	
NO_3 Wash Blank	2 mL		1) 0.2100		2) 0.2110		Average =				0.2105
ICS	10 µl				10.228	10.0175					100

Comments: High break through is disregarded if sample concentration is at or near MRL.

NA signifies B column is equal to or less than the nitrate wash blank and should be disregarded as per method.

K4578-6 moved to K-TOX-02.

sulfuric acid: EMD 51299 nitric acid: JTB K23022

Halide Check = 3.64 µg/L **Inst. Cal Std. =** 10.0 µg/L

TOX-9020B (ppb) = [(OBS.A - NO_3 Blank) + (OBS.B - NO_3 Blank)] x (DF)

AOX-506 (ppb) Volume Analyzed (L)

AOX-1650C (ppb) = ((OBS.A + OBS.B) - (MB OBS.A + MB OBS.B)) / Initial Volume Analyzed (L)

% Breakthrough = (OBS.B - MB OBS.B) x 100 / (OBS.A - MB OBS.A) + (OBS.B - MB OBS.B)

Matrix Spike = 10 µl x 1 µg x 100 ml / 1 µl x 1ml x 0.1 L = 10000 µg/L

NO_3 Wash ID #: TOX/3-27-P

Electrolyte ID #: TOX/3-60-AA

Carbon Lot #: 1111136

0.0103 NaCl ID #: TOX/3-70-N

1000 ppm TCP (PAR) ID #: TOX/3-72-G

1000 ppm TCP (ICS) ID #: TOX/3-72-F

NO3 = < 1.0

ICS = 90%-110%

PAR = 87-113%

MS =82-121%

Analyzed By:	EM	Date:	5/23/12 0959
Reviewed By:	K	Date:	5/25/12

AOX/TOX Benchsheet

Service Request #: K1204373, K1204390, K1204578, K1204849 Method # : TOX-9020B

Analysis For : Total Organic Halides Instrument: Crackers

Lab Code	Initial Volume (mls)	Final Volume (mls)	OBS A µg	OBS B µg	Conc. (ppb)	Reported Value (ppb)	% Break-through	% RPD	Head-space	pH	% Recovery
K4849-4	1	100	1.5640	0.7160	1859		27.2		y	7	
K4373-1D	100	100	1.2040	0.7220	15		34.0				
K4390-1D	100	100	0.8000	0.4640	8	6J	30.1	67*			1+1d
K4390-2D	100	100	0.4990	0.4490	5		45.3				
K4390-2T	100	100	0.5650	0.3520	5	5J	28.5	<1			2d+2t
K4390-3D	100	100	1.1560	0.6220	14		30.3				
K4578-5D	5	100	2.1230	0.2730	395		3.2				
K4578-5T	10	100	3.5210	0.6410	374	390	11.5	5			5d+5t
NO3 Wash Blank	2 mL		1)	0.2610	2)	0.2090	Average =				0.2350
ICS	10 µl				10.174	9.9390					99
K4373-1T	100	100	1.2160	0.7480	15	15	34.3	<1			1d+1t
K4849-4MS	1	100	11.0330	0.9990	11562	11600	6.6				97
K4849-4MSD	1	100	10.8660	1.0160	11412	11400	6.8	2			95
K4849-4D	2	100	2.7620	1.4490	1871	1870	32.5	<1			4+4d
LOD	100	100	0.9300	0.2360	7	7	<1				
LOQ	100	100	1.1770	0.1610	9	9	<1				
K4390-3T	100	100	0.9360	0.9290	14	14	49.7	<1			3d+3t
ICS	10 µl				10.127	9.8920					99

Comments: K4390-1/1d high RPD due to sample concentration less than five times MRL.

K4578-5t break through greater than 10%. See chloride titration bench sheet.

K4849-4/4d break through greater than 10%. See chloride titration bench sheet.

Analyzed By: EM	Date: 5/23/12
Reviewed By:	Date: 5/25/12

Blank Report

Blank Results

Data ID : AOX205232012.001

Reps.	Mode	Counts(µg)	Total Counts	$\bar{X}$	SD	RSD(%)	ABC No.	Date
1-1	AOX-2	0.276					1	05/23/12 09:59
1-2	AOX-2	0.136	0.412	0.412	***.**	***.**	1	05/23/12 10:04

BM 5/23/12

US52:01138

Sample Report

Sample All Data

Data ID : AOX205232012.001
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	ICS	10.00 µl	1.0000	9.872			1
1-2	ICS	10.00 µl	1.0000	9.944	19.816	0.19 %	1
n = 1	$\bar{X}$ = 0.19 %			SD = ****.**		RSD(%) = ***.**	

EM 5/23/12

US52:01139

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	MB	100.00 ml	1.0000	0.461			1
1-2	MB	100.00 ml	1.0000	0.157	0.618	2.06 ppb	1
n = 1	$\bar{X}$ = 2.06 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	PAR	100.00 ml	1.0000	9.670			1
1-2	PAR	100.00 ml	1.0000	0.390	10.060	96.48 ppb	1
n = 1	$\bar{X}$ = 96.48 ppb		SD = ****.**		RSD(%) = ***.**		
NR 1-1	K4373-1 over dilute	100.00 ml	0.2500	0.413			1
1-2	K4373-1	100.00 ml	0.2500	0.306	0.719	12.28 ppb	1
n = 1	$\bar{X}$ = 12.28 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4390-1	100.00 ml	1.0000	0.496 A			1
(1) 1-2	~~K4390-1~~ K4390-2	100.00 ml	(1) ~~1.0000~~ 0.5000	0.339 A	NR 0.835 over dilute	4.23 ppb	1
n = 1	$\bar{X}$ = 4.23 ppb		SD = ****.**		RSD(%) = ***.**		
(1) 1-1	K4390-2	100.00 ml	0.5000	0.162 B	NR over dilute		1
(1) 1-2	~~K4390-2~~ K4390-3	100.00 ml	(1) ~~0.5000~~ 0.2500	0.432 A	NR 0.594 over dilute	3.64 ppb	1
n = 1	$\bar{X}$ = 3.64 ppb		SD = ****.**		RSD(%) = ***.**		
(1) 1-1	K4390-3	100.00 ml	0.2500	0.389 B	NR over dilute		1
(1) 1-2	~~K4390-3~~ K4390-1	100.00 ml	(1) ~~0.2500~~ 1.0000	0.305 B	0.694	11.28 ppb	1
n = 1	$\bar{X}$ = 11.28 ppb		SD = ****.**		RSD(%) = ***.**		
NR 1-1	K4578-5	100.00 ml	0.2500	5.879			1
1-2	K4578-5	100.00 ml	0.2500	3.750	9.629	368.68 ppb	1
n = 1	$\bar{X}$ = 368.68 ppb		SD = ****.**		RSD(%) = ***.**		
NR 1-1	K4578-6	100.00 ml	0.2500	6.537			1
1-2	K4578-6	100.00 ml	0.2500	2.564	9.101	347.56 ppb	1
n = 1	$\bar{X}$ = 347.56 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	NITRATE WASH BLANK	100.00 ml	1.0000	0.210			1
1-2	NITRATE WASH BLANK	100.00 ml	1.0000	0.211	0.421	0.09 ppb	1
n = 1	$\bar{X}$ = 0.09 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	ICS	10.00 µl	1.0000	10.228	10.228	981.60 ppm	1
n = 1	$\bar{X}$ = 981.60 ppm		SD = ****.**		RSD(%) = ***.**		

(1) Analyst inadvertently skipped over K4390-1 column B, then went back after K4390-3 column B was analyzed and injected it causing columns to be rearranged for sequencing

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	K4849-4	100.00 ml	0.0100	1.564			1
1-2	K4849-4	100.00 ml	0.0100	0.716	2.280	1.87 ppm	1
	n = 1	$\bar{X}$ = 1.87 ppm		SD = ****.**		RSD(%) = ***.**	
1-1	K4373-1D	100.00 ml	1.0000	1.204			1
1-2	K4373-1D	100.00 ml	1.0000	0.722	1.926	15.14 ppb	1
	n = 1	$\bar{X}$ = 15.14 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4390-1D	100.00 ml	1.0000	0.800			1
1-2	K4390-1D	100.00 ml	1.0000	0.464	1.264	8.52 ppb	1
	n = 1	$\bar{X}$ = 8.52 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4390-2D	100.00 ml	1.0000	0.499			1
1-2	K4390-2D	100.00 ml	1.0000	0.449	0.948	5.36 ppb	1
	n = 1	$\bar{X}$ = 5.36 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4390-2T	100.00 ml	1.0000	0.565			1
1-2	K4390-2T	100.00 ml	1.0000	0.352	0.917	5.05 ppb	1
	n = 1	$\bar{X}$ = 5.05 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4390-3D	100.00 ml	1.0000	1.156			1
1-2	K4390-3D	100.00 ml	1.0000	0.622	1.778	13.66 ppb	1
	n = 1	$\bar{X}$ = 13.66 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4578-5D	100.00 ml	0.0500	2.123			1
1-2	K4578-5D	100.00 ml	0.0500	0.273	2.396	396.80 ppb	1
	n = 1	$\bar{X}$ = 396.80 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4578-5T	100.00 ml	0.1000	3.521			1
1-2	K4578-5T	100.00 ml	0.1000	0.641	4.162	375.00 ppb	1
	n = 1	$\bar{X}$ = 375.00 ppb		SD = ****.**		RSD(%) = ***.**	
2-1	NITRATE WASH BLANK	100.00 ml	1.0000	0.261			1
2-2	NITRATE WASH BLANK	100.00 ml	1.0000	0.209	0.470	0.58 ppb	1
	n = 1	$\bar{X}$ = 0.58 ppb		SD = ****.**		RSD(%) = ***.**	
2-1	ICS	10.00 µl	1.0000	10.174	10.174	976.20 ppm	1
	n = 1	$\bar{X}$ = 976.20 ppm		SD = ****.**		RSD(%) = ***.**	

EM 5/23/12

US52:011H1

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	K4373-1T	100.00 ml	0.0200	1.216			1
1-2	K4373-1T	100.00 ml	0.0200	0.748	1.964	776.00 ppb	1
	n = 1 $\bar{X}$ = 776.00 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4849-4MS	100.00 ml	0.0100	11.033			1
1-2	K4849-4MS	100.00 ml	0.0100	0.999	12.032	11.62 ppm	1
	n = 1 $\bar{X}$ = 11.62 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	K4849-4MSD	100.00 ml	0.0100	10.866			1
1-2	K4849-4MSD	100.00 ml	0.0100	1.016	11.882	11.47 ppm	1
	n = 1 $\bar{X}$ = 11.47 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	K4849-4D	100.00 ml	0.0200	2.762			1
1-2	K4849-4D	100.00 ml	0.0200	1.449	4.211	1.90 ppm	1
	n = 1 $\bar{X}$ = 1.90 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	LOD	100.00 ml	1.0000	0.930			1
1-2	LOD	100.00 ml	1.0000	0.236	1.166	7.54 ppb	1
	n = 1 $\bar{X}$ = 7.54 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	LOQ	100.00 ml	1.0000	1.177			1
1-2	LOQ	100.00 ml	1.0000	0.161	1.338	9.26 ppb	1
	n = 1 $\bar{X}$ = 9.26 ppb			SD = ****.**		RSD(%) = ***.**	
2-1	K4390-3D	100.00 ml	1.0000	0.936			1
2-2	K4390-3D	100.00 ml	1.0000	0.929	1.865	14.53 ppb	1
	n = 1 $\bar{X}$ = 14.53 ppb			SD = ****.**		RSD(%) = ***.**	
3-1	ICS	10.00 µl	1.0000	10.127	10.127	971.50 ppm	1
	n = 1 $\bar{X}$ = 971.50 ppm			SD = ****.**		RSD(%) = ***.**	

DM 5/23/12

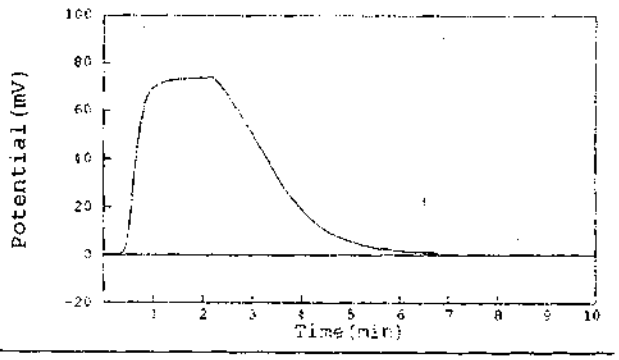
US52:01142

Sample Report

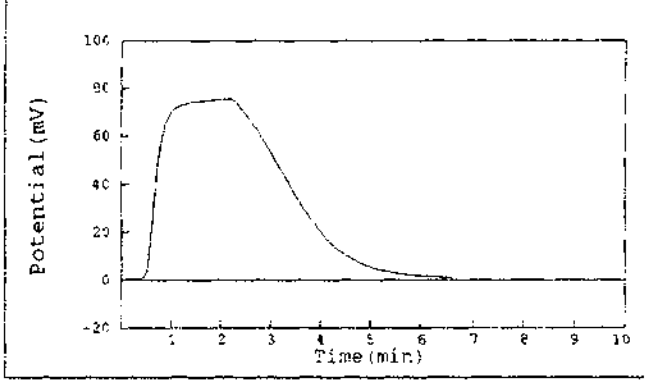
Sample Charts

Data ID : AOX205232012.001

Reps. : 1-1 05/23/12 10:12
Sample ID : ICS
Counts(µg): 9.872



Reps. : 1-2 05/23/12 10:20
Sample ID : ICS
Counts(µg): 9.944



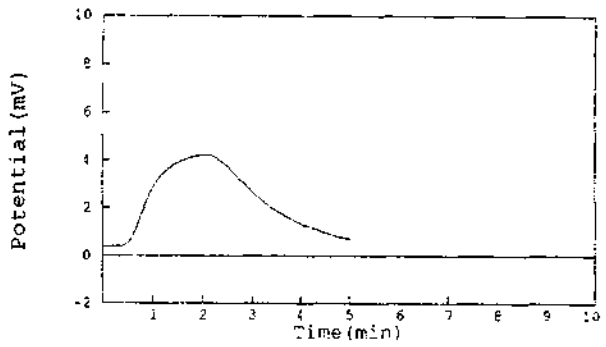
US52 : 01143

Sample Report

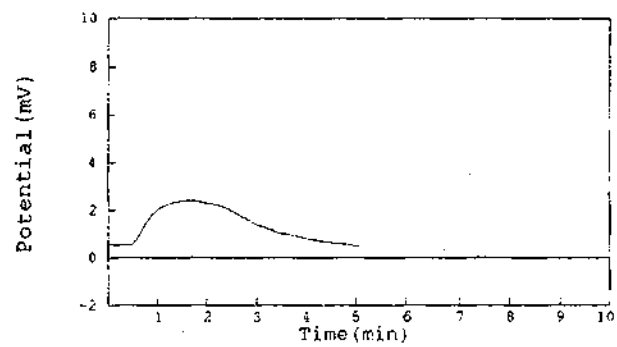
Sample Charts

Data ID : AOX205232012.002

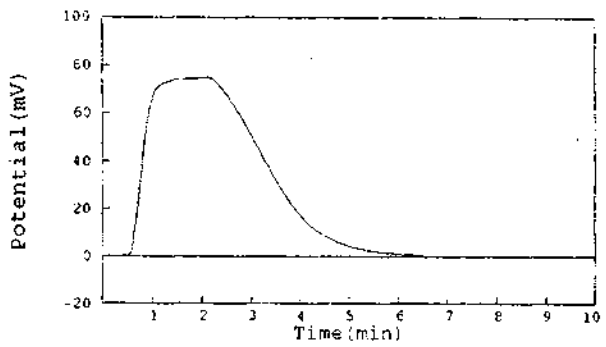
Reps. : 1-1 05/23/12 10:34
Sample ID : MB
Counts(µg): 0.461



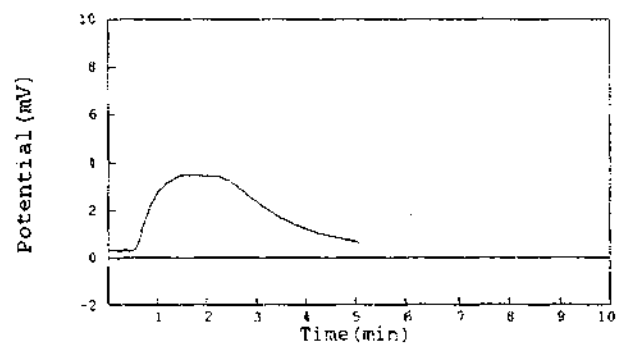
Reps. : 1-2 05/23/12 10:39
Sample ID : MB
Counts(µg): 0.157



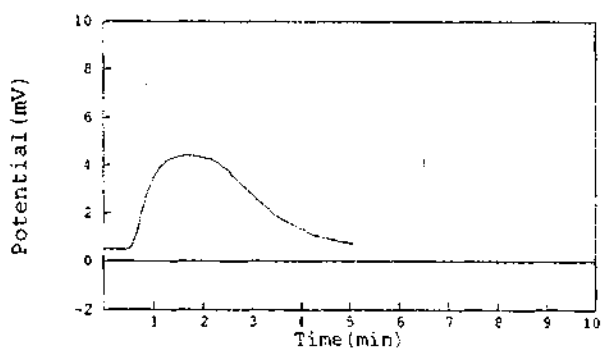
Reps. : 1-1 05/23/12 10:47
Sample ID : PAR
Counts(µg): 9.670



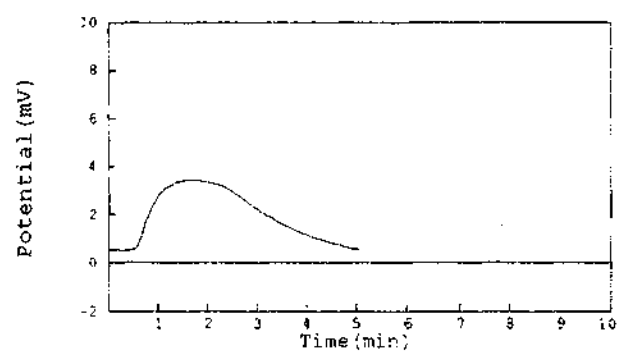
Reps. : 1-2 05/23/12 10:53
Sample ID : PAR
Counts(µg): 0.390



Reps. : 1-1 05/23/12 10:59
Sample ID : K4373-1
Counts(µg): 0.413



Reps. : 1-2 05/23/12 11:05
Sample ID : K4373-1
Counts(µg): 0.306



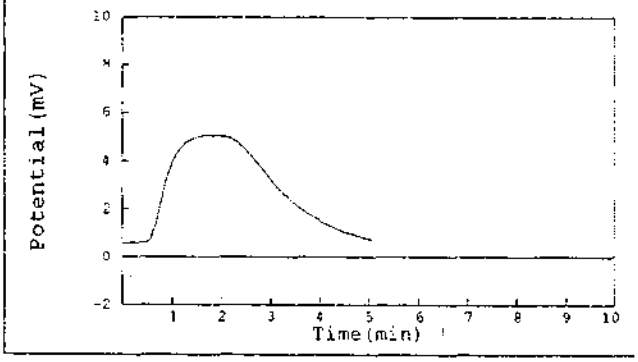
US52:01144

Sample Report

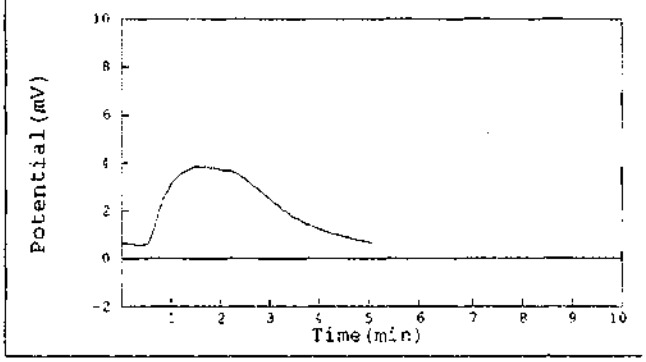
Sample Charts

Data ID : AOX205232012.002

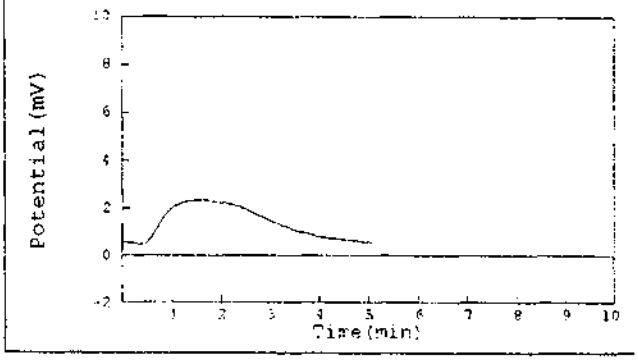
Reps. : 1-1 05/23/12 11:10
Sample ID : K4390-1
Counts(µg): 0.496



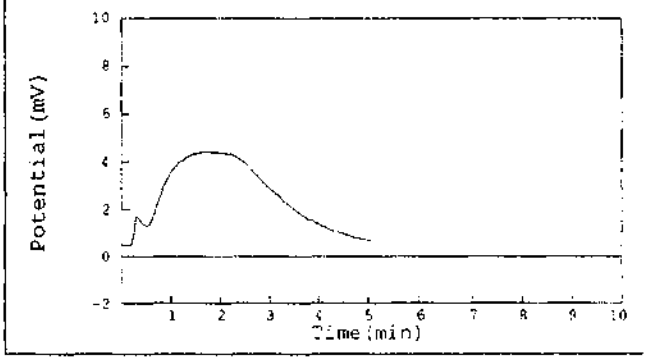
Reps. : 1-2 05/23/12 11:16
Sample ID : K4390-1
Counts(µg): 0.339



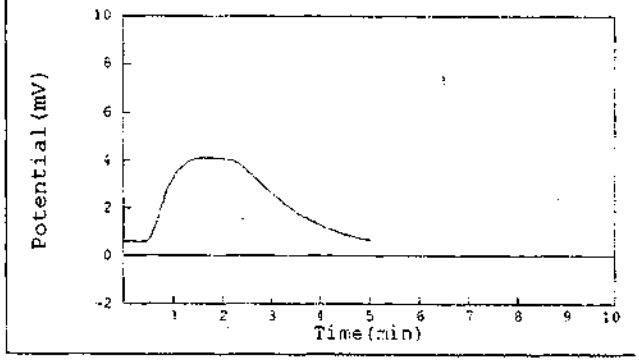
Reps. : 1-1 05/23/12 11:21
Sample ID : K4390-2
Counts(µg): 0.162



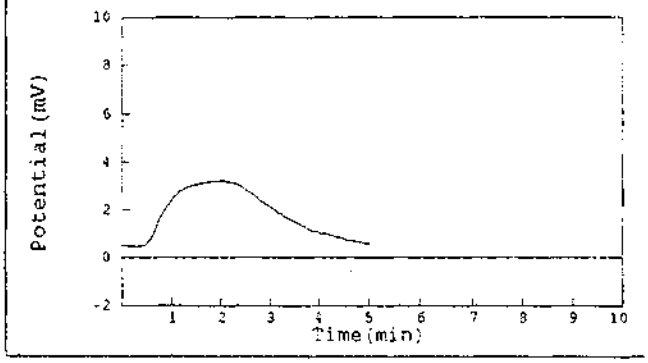
Reps. : 1-2 05/23/12 11:27
Sample ID : K4390-2
Counts(µg): 0.432



Reps. : 1-1 05/23/12 11:33
Sample ID : K4390-3
Counts(µg): 0.389



Reps. : 1-2 05/23/12 11:40
Sample ID : K4390-3
Counts(µg): 0.305

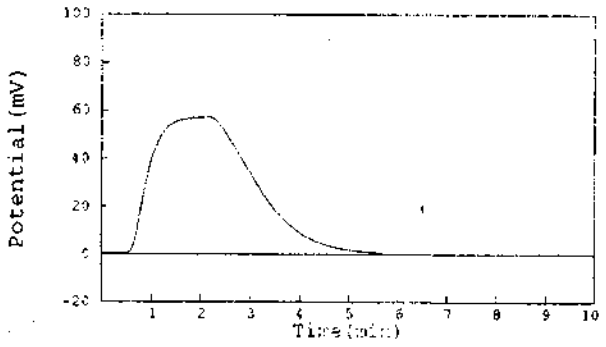


Sample Report

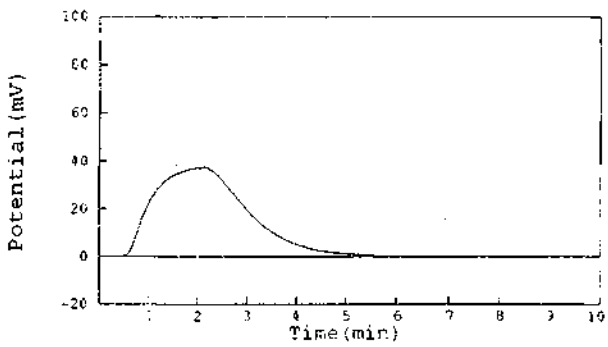
Sample Charts

Data ID : AOX205232012.002

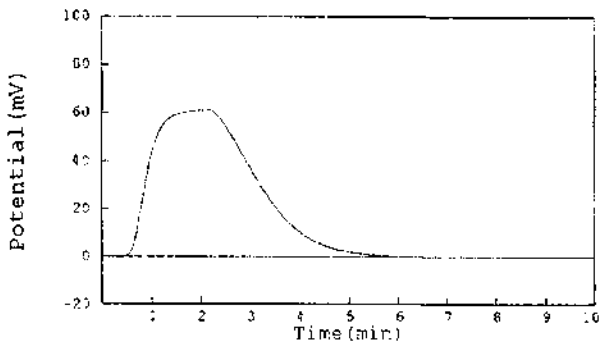
Reps. : 1-1 05/23/12 11:48
Sample ID : K4578-5
Counts(µg): 5.879



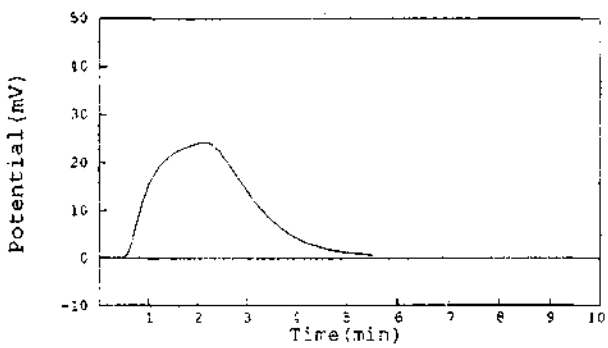
Reps. : 1-2 05/23/12 11:55
Sample ID : K4578-5
Counts(µg): 3.750



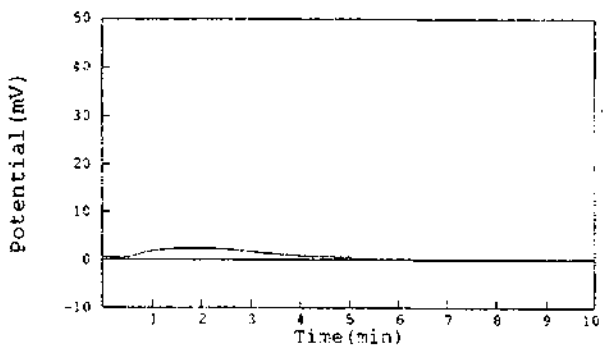
Reps. : 1-1 05/23/12 12:02
Sample ID : K4578-6
Counts(µg): 6.537



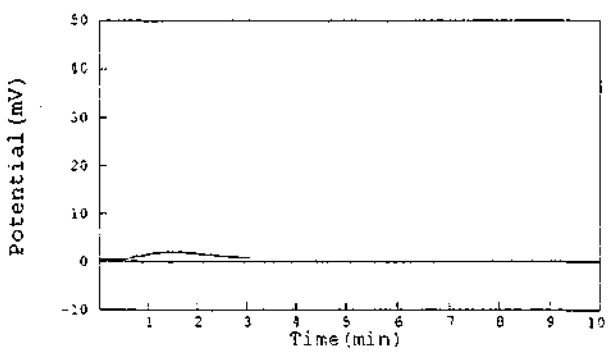
Reps. : 1-2 05/23/12 12:08
Sample ID : K4578-6
Counts(µg): 2.564



Reps. : 1-1 05/23/12 12:18
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.210



Reps. : 1-2 05/23/12 12:28
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.211

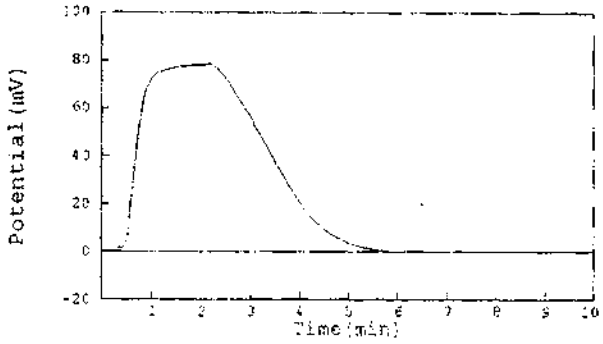


Sample Report

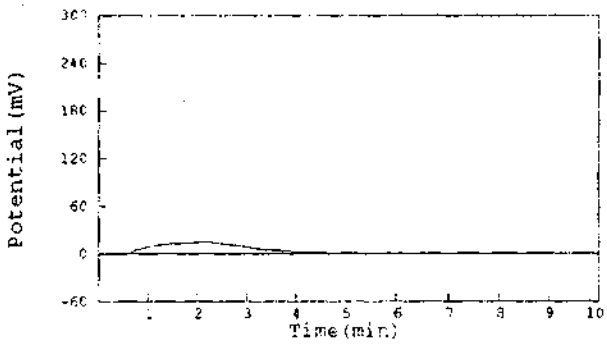
Sample Charts

Data ID : AOX205232012.002

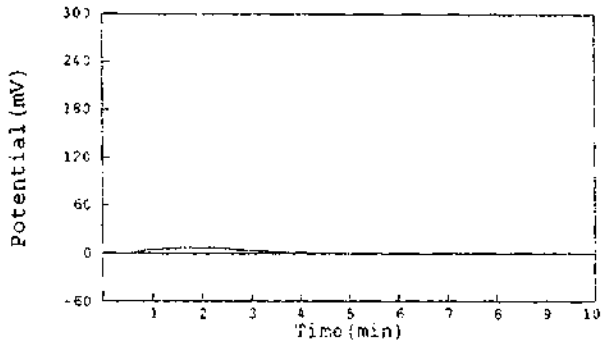
Reps. : 1-1 05/23/12 12:37
Sample ID : ICS
Counts(µg): 10.228



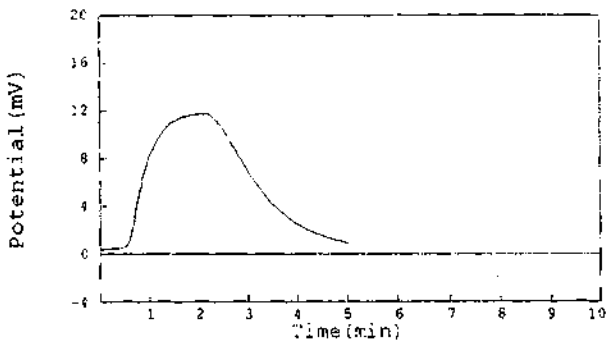
Reps. : 1-1 05/23/12 12:50
Sample ID : K4849-4
Counts(µg): 1.564



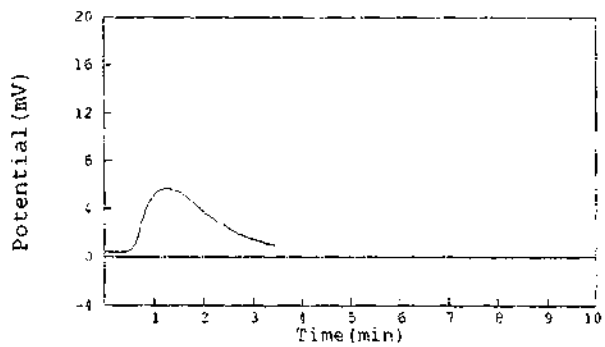
Reps. : 1-2 05/23/12 12:57
Sample ID : K4849-4
Counts(µg): 0.716



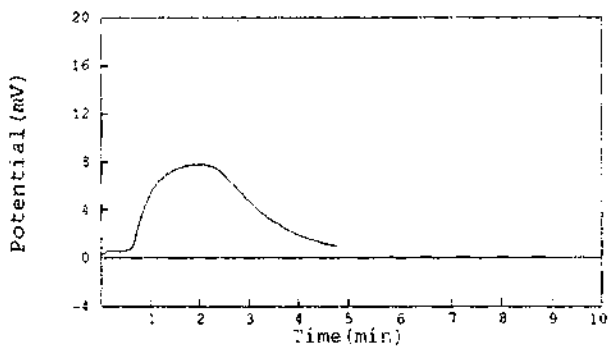
Reps. : 1-1 05/23/12 13:05
Sample ID : K4373-1D
Counts(µg): 1.204



Reps. : 1-2 05/23/12 13:10
Sample ID : K4373-1D
Counts(µg): 0.722



Reps. : 1-1 05/23/12 13:18
Sample ID : K4390-1D
Counts(µg): 0.800



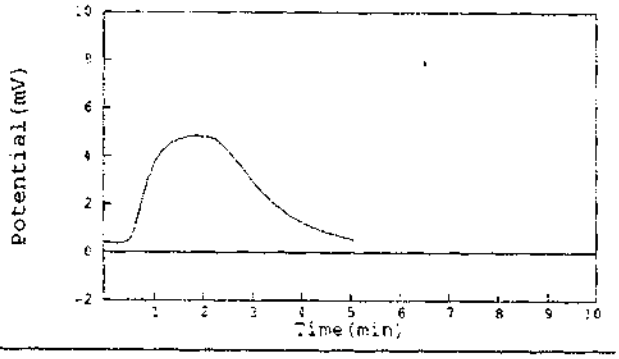
US52:01147

Sample Report

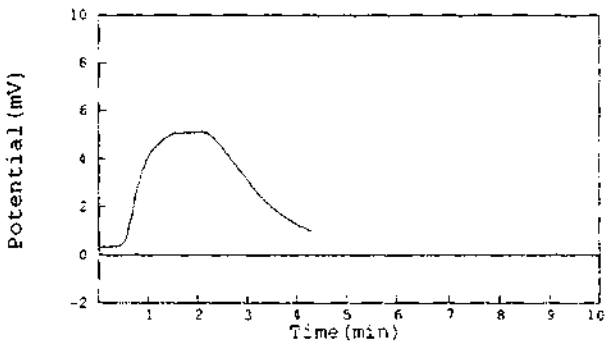
Sample Charts

Data ID : AOX205232012.002

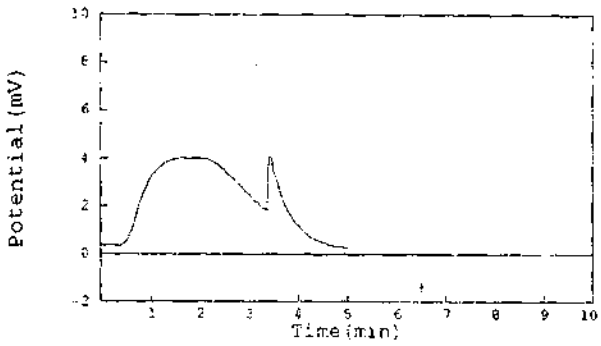
Reps. : 1-2 05/23/12 13:24
Sample ID : K4390-1D
Counts(µg): 0.464



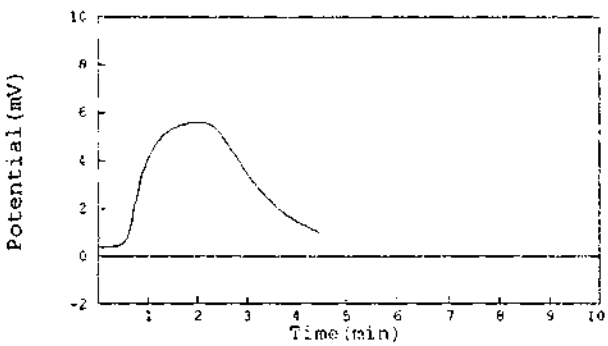
Reps. : 1-1 05/23/12 13:29
Sample ID : K4390-2D
Counts(µg): 0.499



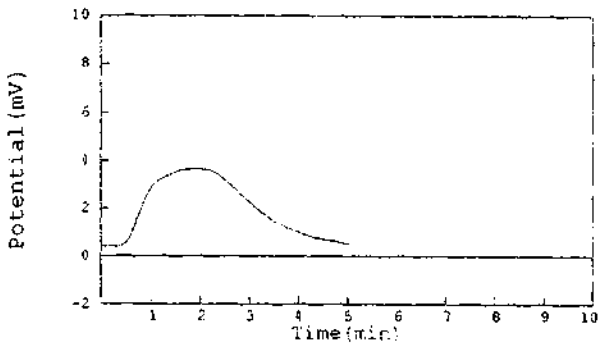
Reps. : 1-2 05/23/12 13:38
Sample ID : K4390-2D
Counts(µg): 0.449



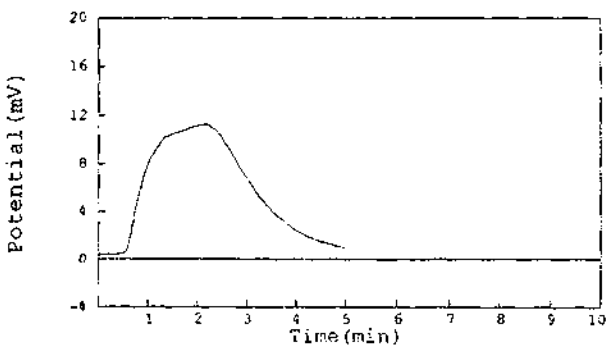
Reps. : 1-1 05/23/12 13:54
Sample ID : K4390-2T
Counts(µg): 0.565



Reps. : 1-2 05/23/12 14:01
Sample ID : K4390-2T
Counts(µg): 0.352



Reps. : 1-1 05/23/12 14:08
Sample ID : K4390-3D
Counts(µg): 1.156



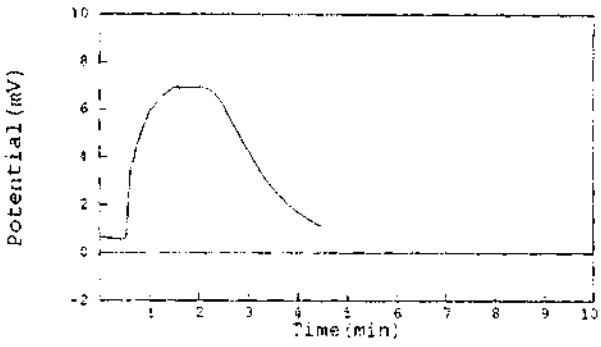
US52:01148

Sample Report

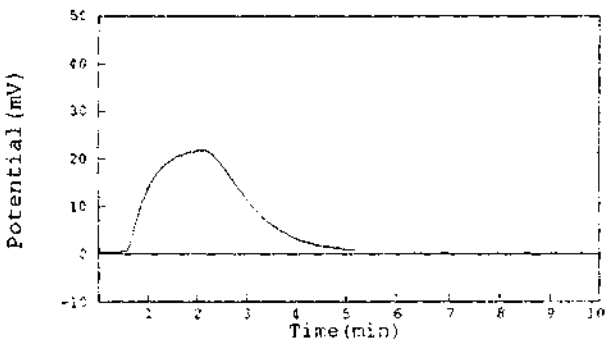
Sample Charts

Data ID : AOX205232012.002

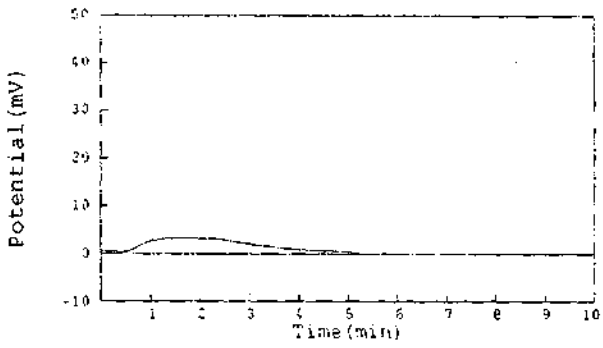
Reps. : 1-2 05/23/12 14:13
Sample ID : K4390-3D
Counts(µg): 0.622



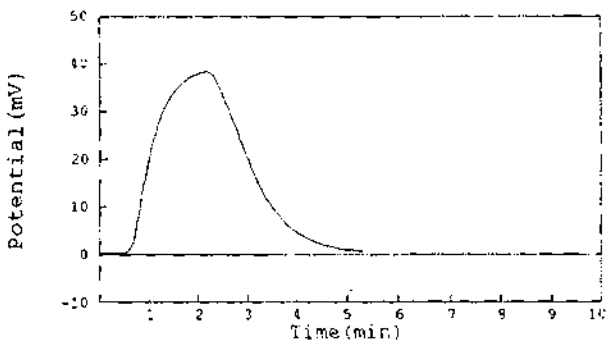
Reps. : 1-1 05/23/12 14:20
Sample ID : K4578-5D
Counts(µg): 2.123



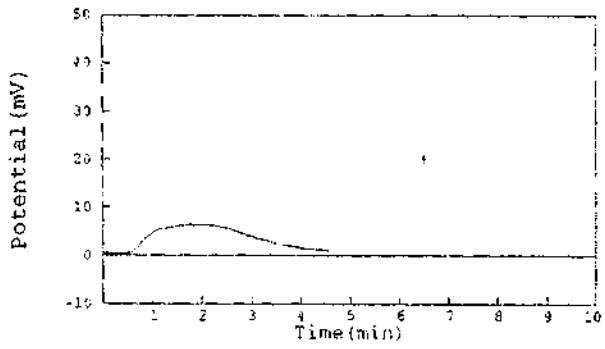
Reps. : 1-2 05/23/12 14:26
Sample ID : K4578-5D
Counts(µg): 0.273



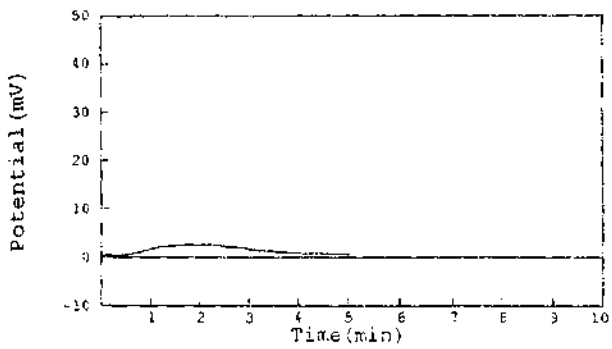
Reps. : 1-1 05/23/12 14:37
Sample ID : K4578-5T
Counts(µg): 3.521



Reps. : 1-2 05/23/12 14:42
Sample ID : K4578-5T
Counts(µg): 0.641



Reps. : 2-1 05/23/12 14:50
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.261



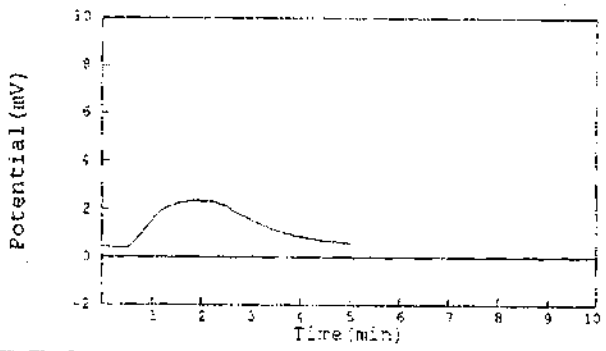
US52 01149

Sample Report

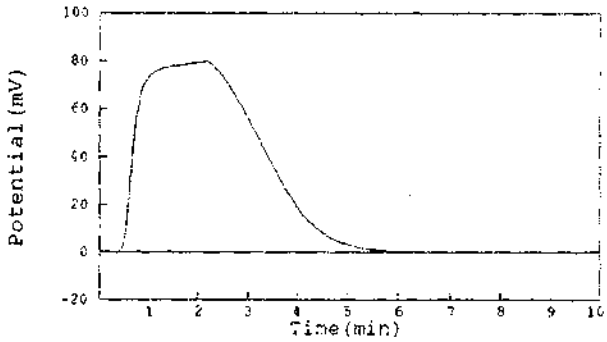
Sample Charts

Data ID : AOX205232012.002

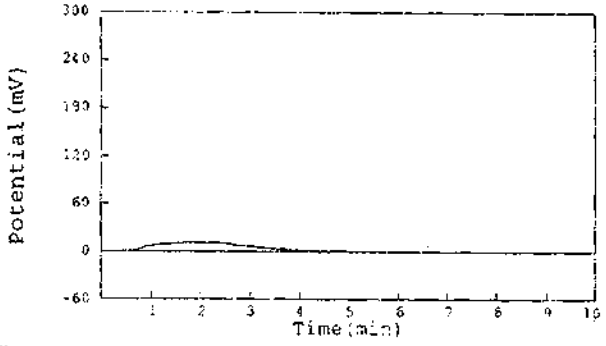
Reps. : 2-2 05/23/12 14:58
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.209



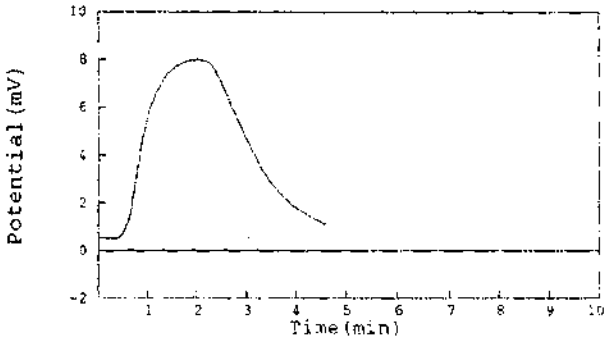
Reps. : 2-1 05/23/12 15:08
Sample ID : ICS
Counts(µg): 10.174



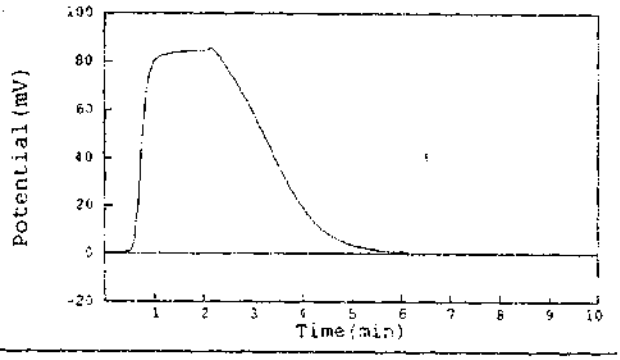
Reps. : 1-1 05/23/12 15:21
Sample ID : K4373-1T
Counts(µg): 1.216



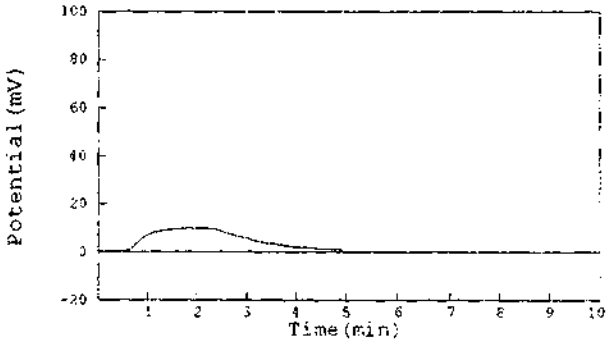
Reps. : 1-2 05/23/12 15:27
Sample ID : K4373-1T
Counts(µg): 0.748



Reps. : 1-1 05/23/12 15:36
Sample ID : K4849-4MS
Counts(µg): 11.033



Reps. : 1-2 05/23/12 15:41
Sample ID : K4849-4MS
Counts(µg): 0.999



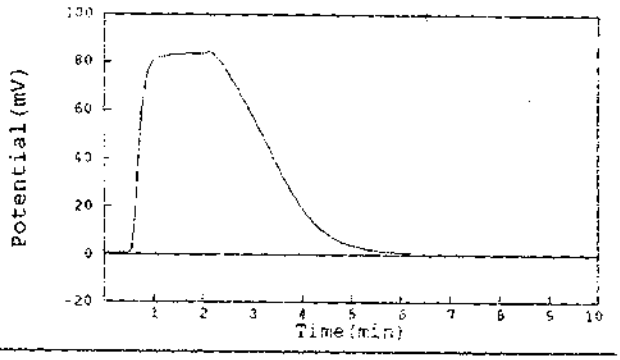
US52:01150

Sample Report

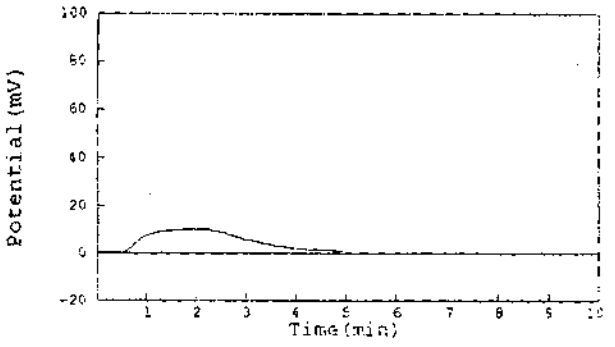
Sample Charts

Data ID : AOX205232012.002

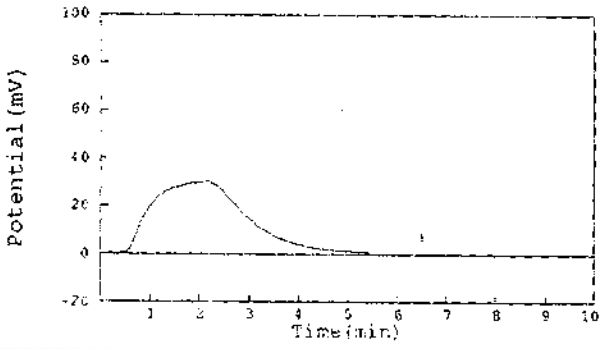
Reps. : 1-1 05/23/12 15:48
Sample ID : K4849-4MSD
Counts(µg): 10.866



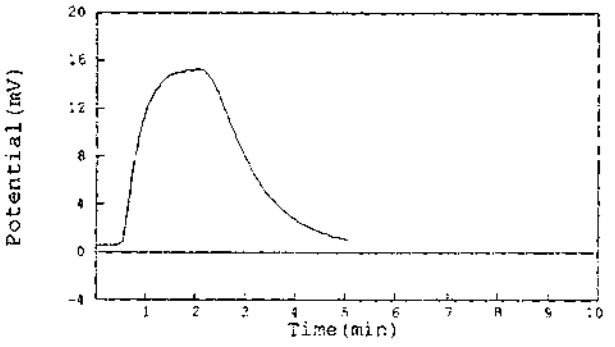
Reps. : 1-2 05/23/12 15:54
Sample ID : K4849-4MSD
Counts(µg): 1.016



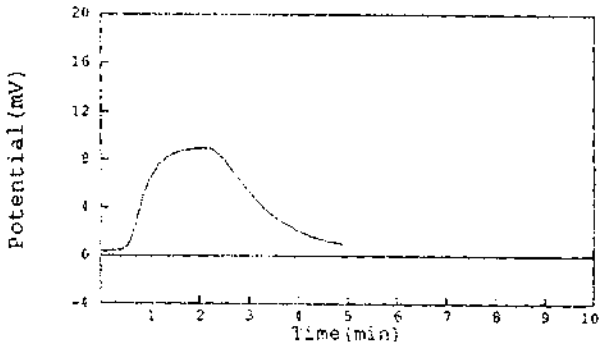
Reps. : 1-1 05/23/12 16:14
Sample ID : K4849-4D
Counts(µg): 2.762



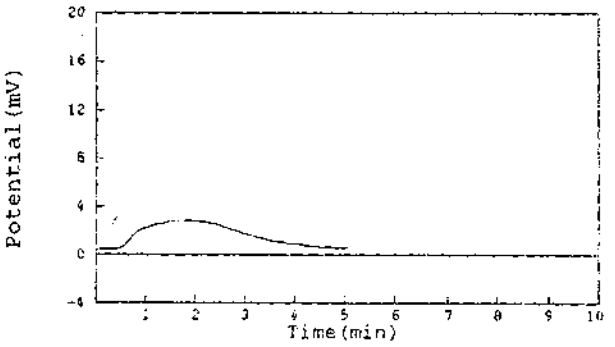
Reps. : 1-2 05/23/12 16:20
Sample ID : K4849-4D
Counts(µg): 1.449



Reps. : 1-1 05/23/12 16:29
Sample ID : LOD
Counts(µg): 0.930



Reps. : 1-2 05/23/12 16:36
Sample ID : LOD
Counts(µg): 0.236

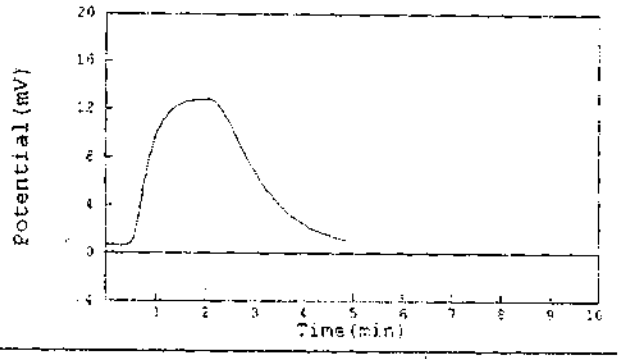


Sample Report

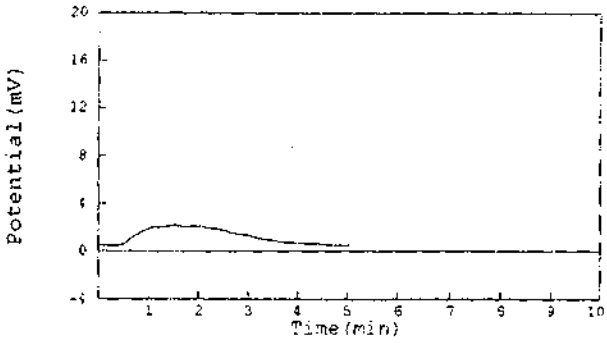
Sample Charts

Data ID : AOX205232012.002

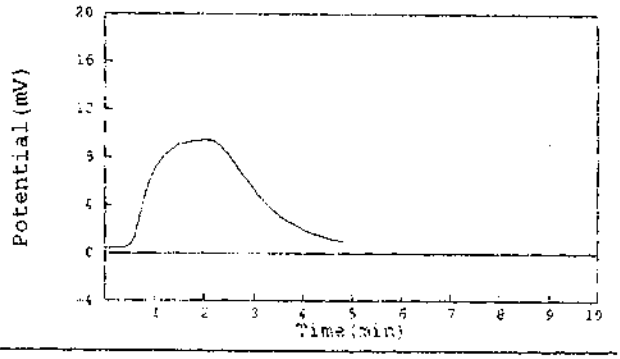
Reps. : 1-1 05/23/12 16:42
Sample ID : LOQ
Counts(µg): 1.177



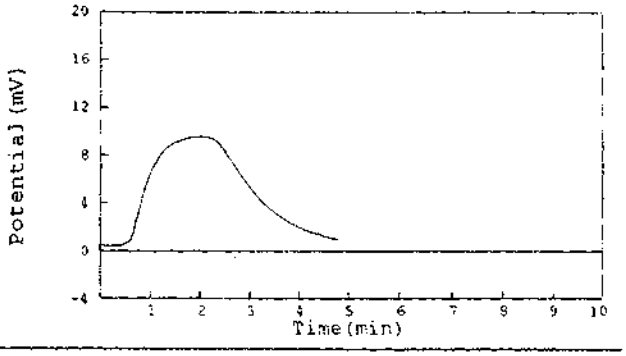
Reps. : 1-2 05/23/12 16:50
Sample ID : LOQ
Counts(µg): 0.161



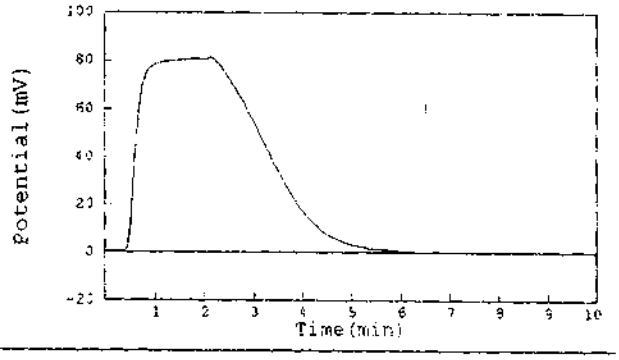
Reps. : 2-1 05/23/12 16:56
Sample ID : K4390-3D
Counts(µg): 0.936



Reps. : 2-2 05/23/12 17:03
Sample ID : K4390-3D
Counts(µg): 0.929



Reps. : 3-1 05/23/12 17:11
Sample ID : ICS
Counts(µg): 10.127



COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: (K4578) K4849 Method: 9252 / SM 4500 Cl-C

Analysis: Chloride

Standardization Data	Trial 1	Trial 2	Trial 3
$Hg(NO_3)_2$ Titrated			
Blank Correction			
Amount of Titrant			
Chloride mg/L			
Percent Recovery			

Sample Number	Blank Corr.	CCV-1	CCB-1	MBlank	APG	K4578-5	K4849-4
Sample Aliquot (mL)		50	50			25	0.5
NaOH Added? (Y or N)						N	N
Titrant Used						1.38	2.10
Blank Correction						0.10	0.10
Final Amount of Titrant						1.28	2.00
Chloride mg/L						26	2000

Sample Number							
Sample Aliquot (mL)							
NaOH Added? (Y or N)							
Titrant Used							
Blank Correction							
Final Amount of Titrant							
Chloride mg/L							

Sample Number							
Sample Aliquot (mL)							
NaOH Added? (Y or N)							
Titrant Used							
Blank Correction							
Final Amount of Titrant							
Chloride mg/L							

APG 4053 Lot # : ID#: T.V.= %Recovery =

Titrant ID: CCV ID:

NA EM 5/25/12

Chloride (mg/l) = [(Titrant Used - Blank Correction)/Aliquot] X 35,453 X (0.0141 Low Range) or (0.141 High Range)

Analyzed By:	EM	Date:	5/25/12
Reviewed By:		Date:	

Method Detection Limit - LOD Verification

Columbia Analytical Services - Kelso

Analytical Method:	EPA 9020B	Instrument:	Crackers - TOX-03
Extr./Dig. Method:	NA	Analyst(s):	EM
Matrix:	Water		
Units:	ug/L		

		Sample ID:	K1203990							
		Date Analyzed:	5/23/2012							
Analyte	MDL	Spike Level	Result 1	s/n >3	Result 2	s/n >3	Result 3	s/n >3	Result 4	s/n >3
Total Organic Halides	4	5	7	y						
Supervisor Approval:			✓							
QA Approval:										

US52-911-154

Limit of Quantitation - LOQ Verification

Columbia Analytical Services - Kelso

Analytical Method:	EPA 9020B				
Extr./Dig. Method:	NA	Instrument:	Crackers - TOX-03		
Matrix:	water	Analyst(s):	EM		
Units:	ug/L				
Quarter:					
Service Request:	K1203990				
Date Analyzed:	5/23/2012				

Analyte	Spike Level	Result	Result	Result	Result	Percent Recovery	Percent RSD	Acceptance Limits	% RSD Limits
Total Organic Halides	10.000	9.000				90	#DIV/0!	75-125%	30
						#DIV/0!	#DIV/0!		
						#DIV/0!	#DIV/0!		

Supervisor Approval: [signature]

QA Approval:

USS2:01155

May 29, 2012 Analytical Report for Service Request No: K1204389

Sue Dunnihoo
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: RG Spring GW Sampling/US61

Dear Sue:

Enclosed are the results of the samples submitted to our laboratory on May 08, 2012. For your reference, these analyses have been assigned our service request number K1204389.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3363. You may also contact me via Email at Lisa.Domenighini@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Lisa Domenighini
Project Chemist

LD/jw

Columbia Analytical Services

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 FAX+1 360 636 1068
Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

Environmental www.caslab.com • www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

US52:01157

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

US52 : 01158

Columbia Analytical Services, Inc. - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	-
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon - DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

US52 : 01159

Case Narrative

US52:01160

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K1204389
Project:	RG Spring GW Sampling/US27	**Date Received:**	05/08/12
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 05/08/12. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Sample MW-29S-050212 was ND, but the sample duplicate had a hit of 6J. Sample MW-31S-050212 had a hit of 7J, but the sample duplicate was ND. The average of the results was reported as ND.

Per the method reported TOX results were averaged and reported as ND.

No other anomalies associated with the analysis of these samples were observed.

Approved by Lynda D'Amenghaus **Date** 5/30/12

US52 : 01161

Chain of Custody

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 05/02/12

ANALYTICAL RESOURCES INCORPORATED

ARI Project: US61

K1204389

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: ERM-West
Project ID: RG Spring GW Sampling
ARI PM: Sue Dunnihoo
Phone: 206-695-6207
Fax: 206-695-6201
Email: subdata@arilabs.com

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around:
Email Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
12-7884-US61A	MW-30S-050212	05/02/12 07:57	Water	1	Total Organic Halides
Special Instructions: Lv3, Method 9020, 2 EDD's					
12-7885-US61B	MW-29S-050212	05/02/12 09:59	Water	1	Total Organic Halides
Special Instructions: Lv3, Method 9020, 2 EDD's					
12-7886-US61C	MW-31S-050212	05/02/12 12:15	Water	1	Total Organic Halides
Special Instructions: Lv3, Method 9020, 2 EDD's					

Carrier UPS	Airbill 12 832 695 03 5205 6955		Date 5-7-12
Relinquished by	Company ARI	Date 5-7-12	Time 1020
Received by	Company ALS	Date 5/8/12	Time 1020

US52:01163

PO 8102

Cooler Receipt and Preservation Form

Client / Project: ARI Service Request K12 4889

Received: 5/8/12 Opened: 5/8/12 By: AJ Unloaded: 5/8/12 By: AJ

1. Samples were received via? *Mail* *Fed Ex* (*UPS*) *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filed
2.8	—	257		128826950351081 0955		

7. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Dry Ice* *Sleeves* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
15. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

General Chemistry Parameters

US52:01165

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K1204389
Project:	RG Spring GW Sampling/US61	**Date Collected:**	5/2/2012
Sample Matrix:	Water	**Date Received:**	5/8/2012

Halides, Total Organic (TOX)

Prep Method:	NONE	Units:	ug/L (ppb)
Analysis Method:	9020B	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-30S-050212	K1204389-001	10	4	1	NA	5/23/2012	ND	
MW-29S-050212	K1204389-002	10	4	1	NA	5/23/2012	ND	*
MW-31S-050212	K1204389-003	10	4	1	NA	5/23/2012	ND	*
Method Blank	K1204389-MB	10	4	1	NA	5/23/2012	5	J

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K1204389
Project:	RG Spring GW Sampling/US61	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	5/23/2012

Matrix Spike/Duplicate Matrix Spike Summary
Halides, Total Organic (TOX)

Sample Name:	Batch QC	Units:	ug/L (ppb)
Lab Code:	K1204387-001MS, K1204387-001DMS	Basis:	NA
Test Notes:			

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Acceptance	Relative Percent	
Analyte	**Prep Method**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Result Notes**
Halides, Total Organic (TOX)	NONE	9020B	10	100	100	ND	98	100	98	100	82-121	2	

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Analytical Resources, Incorporated
Project: RG Spring GW Sampling/US61
Sample Matrix: Water

Service Request: K1204389
Date Collected: NA
Date Received: NA
Date Analyzed: 5/23/2012

Calibration and Method Blank Summary
Halides, Total Organic (TOX)
EPA Method 9020

	Halide Check Standard (µg)	Instrument Calibration Standard (µg)	Adsorption Standard (µg/L)	Method Blank (µg/L)
True Value	3.64	10.0	100	ND
Run A	3.65	10.0	98	5 J
Percent Recovery	100	100	98	
Run B	3.56	10.2		
Percent Recovery	98	102		

Work Request # Original (K4387 K4389 K4578 292804

Tier: IV IV I (#6)

Date Analyzed: 5/23/12

Analyst: EM

Analysis: TOX 9020B KTOX02

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no
6.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
9.	Are results for methods blanks all ND?	yes/no/NA
10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
11.	Are all exceptions explained?	yes/no/NA
12.	Have all applicable service requests been reviewed?	yes/no/NA
13.	Are all samples labeled correctly?	yes/no/NA
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	yes/no/NA
15.	Are detection limits and units reported correctly?	yes/no/NA
16.	Is the unused space on the benchsheet crossed out?	yes/no/NA
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

K4387 due 5/25
K4389 due 5/25
K4578 due 5/28

See bench sheet for QC failure comments.

Final Approved by: _____ Date: 5/25/12

DQREPORT

US52:01169

AOX/TOX Benchsheet

Service Request #: K1204387, K1204389, K1204578 Method # : TOX-9020B

Analysis For : Total Organic Halides Instrument: Whine

Calibration Date: 7/5/2001 IPR Date: 5/9/2000

Instrument:	Volume	Concentration	Result	Reported Value	% Rec.
Halide Check	Run A = 10 µL	3.64	3.6470	3.6470	100
	Run B = 10 µL	3.64	3.5600	3.5600	98
NO_3 Wash Blank	2 mL	1) 0.3640	2) 0.1960	Average =	0.2800
Inst. Cal. Std.	Run A = 10 µL	10.0	10.2440	9.9640	100
	Run B = 10 µL	10.0	10.5080	10.2280	102

Lab Code	Initial Volume (mls)	Final Volume (mls)	OBS A µg	OBS B µg	Conc. (ppb)	Reported Value (ppb)	% Break-through	% RPD	Head-space	pH	% Recovery
MB	100	100	0.2830	0.2370	5	< 10					
PAR STD	100	100	9.8870	0.4490	98	98	1.7				98
K4387-1	100	100	0.5470	NA	3		2153.8		n	2	
K4387-2	100	100	0.5400	NA	3		1400.0		y	2	
K4387-3	100	100	0.5090	NA	2		549.0		n	2	
K4387-4	25	100	0.3790	NA	4	NR	154.7		y	2	
K4389-1	100	100	0.5230	0.3770	3		28.5		y	2	
K4389-2	100	100	0.5650	0.3170	3		11.5		y	2	
NO_3 Wash Blank	2 mL		1) 0.1450		2) 0.2810		Average =				0.2130
ICS	10 µl			10.3810	10.381	10.1680					102

Comments: High break through is disregarded if sample concentration is at or near MRL.

NA signifies B column is equal to or less than the nitrate wash blank and should be disregarded as per method.

sulfuric acid: EMD 51299 nitric acid: JTB K23022

Halide Check = 3.64 µg/L **Inst. Cal Std. =** 10.0 µg/L

TOX-9020B (ppb) = [(OBS.A - NO_3 Blank) + (OBS.B - NO_3 Blank)] x (DF)

AOX-506 (ppb) Volume Analyzed (L)

AOX-1650C (ppb) = ((OBS.A + OBS.B) - (MB OBS.A + MB OBS.B)) / Initial Volume Analyzed (L)

% Breakthrough = (OBS.B - MB OBS.B) x 100 / (OBS.A - MB OBS.A) + (OBS.B - MB OBS.B)

Matrix Spike = 10 µl x 1 µg x 100 ml / 1 µl x 100ml x 0.1 L = 100 µg/L

NO_3 Wash ID #: TOX/3-27-P

Electrolyte ID #: TOX/3-60-AA

Carbon Lot #: 1111136

0.0103 NaCl ID #: TOX/3-70-N

1000 ppm TCP (PAR) ID #: TOX/3-72-G

1000 ppm TCP (ICS) ID #: TOX/3-72-F

NO3 = < 1.0

ICS = 90%-110%

PAR = 87-113%

MS =82-121%

Analyzed By:	BM	Date:	5/23/12 0857
Reviewed By:	✓	Date:	5/25/12

AOX/TOX Benchsheet

Service Request #: K1204387, K1204389, K1204578 Method # : TOX-9020B

Analysis For : Total Organic Halides Instrument: Whine

Lab Code	Initial Volume (mls)	Final Volume (mls)	OBS A µg	OBS B µg	Conc. (ppb)	Reported Value (ppb)	% Break-through	% RPD	Head-space	pH	% Recovery
[redacted]	100	100	0.9330	NA	[redacted]		<1			2	
K4387-1D	100	100	0.5920	0.2260	3.9	<4	3.3	-			1+1d
K4387-2D	100	100	0.4560	NA	2	<4	<1	-			2+2d
K4387-1MS	100	100	10.0480	0.2140	98	98	<1				98
K4387-1MSD	100	100	10.0530	0.4680	101	100	2.5	3			100
K4387-3D	100	100	0.4270	NA	2	<4	<1	-			3+3d
K4387-4D	100	100	0.7250	0.3790	7J		24.5				
K4387-4T	100	100	0.6140	0.2540	4J	6J	9.3	50*			4d+4t
NO3 Wash Blank	2 mL		1)	0.2810	2)	0.3140	Average =				0.2975
ICS	10 µl				10.055	9.7575					98
K4389-1D	100	100	0.4270	NA	1	<4	177.1	-			1+1d
K4389-2D	100	100	0.5650	0.5900	6J	NC	52.2	NC			2+2d
K4389-3D	100	100	0.4260	NA	1	NC	176.0	NC			3+3d
K4578-6	5	100	1.9500	0.3050	332		<1				
K4578-6D	10	100	3.4800	0.6470	353	340	9.9	6			6+6d
LOD	100	100	0.9220	NA	6	6	<1				
LOQ	100	100	1.1300	NA	8	8	<1				
ICS	10 µl				10.251	9.9535					100

Comments: K4387-4d/4t high RPD due to sample concentration less than five times MRL.

Analyzed By: BM	Date: 5/23/12
Reviewed By:	Date: 5/29/12

Blank Report

Blank Results

Data ID : AOX205232012.001

Reps.	Mode	Counts(µg)	Total Counts	$\bar{X}$	SD	RSD(%)	ABC No.	Date
1-1	AOX-2	0.364						08.57
1-2	AOX-2	0.196	0.560	0.560	***.**	***.**	1	05/23/12 ~~20.37~~ ①
							1	05/23/12 ~~21.03~~ ①
								0903

EM 5/23/12
24
EM 5/24/12

①Incorrect time,
P.M. changed to A.M
EM 5/24/12

US52 01172

Sample Report

Sample All Data

Data ID : AOX205232012.001
Blank : 0.560 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	ICS	10.00 µl	1.0000	10.244			1
1-2	ICS	10.00 µl	1.0000	10.508	20.752	0.20 %	1
n = 1	$\bar{X}$ = 0.20 %			SD = ****.**		RSD(%) = ***.**	

BMS 5/24/12

US52:01173

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.560 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	MB	100.00 ml	1.0000	0.283			1
1-2	MB	100.00 ml	1.0000	0.237 NA	0.520	0.00 ppm	1
n = 1	$\bar{X}$ = 0.00 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	PAR	100.00 ml	1.0000	9.887			1
1-2	PAR	100.00 ml	1.0000	0.449	10.336	97.76 ppb	1
n = 1	$\bar{X}$ = 97.76 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-1	100.00 ml	1.0000	0.547	0.547	0.00 ppm	1
n = 1	$\bar{X}$ = 0.00 ppm			SD = ****.**		RSD(%) = ***.**	

EM 5/24/12

US52:01174

Sample Report

Sample All Data

Data ID : AOX205232012.003
Blank : 0.560 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-2	K4387-1	100.00 ml	1.0000	0.177 NA	0.177	0.00 ppm	1
	n = 1 $\bar{X}$ = 0.00 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-2	100.00 ml	1.0000	0.540			1
1-2	K4387-2	100.00 ml	1.0000	0.209 NA	0.749	1.89 ppb	1
	n = 1 $\bar{X}$ = 1.89 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-3	100.00 ml	1.0000	0.509			1
1-2	K4387-3	100.00 ml	1.0000	0.276 NA	0.785	2.25 ppb	1
	n = 1 $\bar{X}$ = 2.25 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-4	100.00 ml	0.2500	0.379			1
1-2	K4387-4	100.00 ml	0.2500	0.137 NA	0.516	0.00 ppm	1
	n = 1 $\bar{X}$ = 0.00 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	K4389-1	100.00 ml	1.0000	0.523			1
1-2	K4389-1	100.00 ml	1.0000	0.377	0.900	3.40 ppb	1
	n = 1 $\bar{X}$ = 3.40 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4389-2	100.00 ml	1.0000	0.565			1
1-2	K4389-2	100.00 ml	1.0000	0.317	0.882	3.22 ppb	1
	n = 1 $\bar{X}$ = 3.22 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	NITRATE WASH BLANK	100.00 ml	1.0000	0.145			1
1-2	NITRATE WASH BLANK	100.00 ml	1.0000	0.281	0.426	0.00 ppm	1
	n = 1 $\bar{X}$ = 0.00 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	ICS	10.00 µl	1.0000	10.381	10.381	982.10 ppm	1
	n = 1 $\bar{X}$ = 982.10 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	K4389-3	100.00 ml	1.0000	0.933			1
1-2	K4389-3	100.00 ml	1.0000	0.141 NA	1.074	5.14 ppb	1
	n = 1 $\bar{X}$ = 5.14 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-1D	100.00 ml	1.0000	0.592			1
1-2	K4387-1D	100.00 ml	1.0000	0.226	0.818	2.58 ppb	1
	n = 1 $\bar{X}$ = 2.58 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-2D	100.00 ml	1.0000	0.456			1

BMS 5/24/12

US52:01175

Sample Report

Sample All Data

Data ID : AOX205232012.003
Blank : 0.560 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-2	K4387-2D	100.00 ml	1.0000	0.109 NA	0.565	0.05 ppb	1
	n = 1 $\bar{X}$ = 0.05 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-1MS	100.00 ml	1.0000	10.048			1
1-2	K4387-1MS	100.00 ml	1.0000	0.214	10.262	97.02 ppb	1
	n = 1 $\bar{X}$ = 97.02 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-1MSD	100.00 ml	1.0000	10.053			1
1-2	K4387-1MSD	100.00 ml	1.0000	0.468	10.521	99.61 ppb	1
	n = 1 $\bar{X}$ = 99.61 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-3D	100.00 ml	1.0000	0.427			1
1-2	K4387-3D	100.00 ml	1.0000	0.184 NA	0.611	0.51 ppb	1
	n = 1 $\bar{X}$ = 0.51 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-4D	100.00 ml	1.0000	0.725			1
1-2	K4387-4D	100.00 ml	1.0000	0.379	1.104	5.44 ppb	1
	n = 1 $\bar{X}$ = 5.44 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4387-4T	100.00 ml	1.0000	0.614			1
1-2	K4387-4T	100.00 ml	1.0000	0.254	0.868	3.08 ppb	1
	n = 1 $\bar{X}$ = 3.08 ppb			SD = ****.**		RSD(%) = ***.**	
2-1	NITRATE WASH BLANK	100.00 ml	1.0000	0.281			1
2-2	NITRATE WASH BLANK	100.00 ml	1.0000	0.314	0.595	0.35 ppb	1
	n = 1 $\bar{X}$ = 0.35 ppb			SD = ****.**		RSD(%) = ***.**	
2-1	ICS	10.00 µl	1.0000	10.055	10.055	949.50 ppm	1
	n = 1 $\bar{X}$ = 949.50 ppm			SD = ****.**		RSD(%) = ***.**	
1-1	K4389-1D	100.00 ml	1.0000	0.427			1
1-2	K4389-1D	100.00 ml	1.0000	0.193 NA	0.620	0.60 ppb	1
	n = 1 $\bar{X}$ = 0.60 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4389-2D	100.00 ml	1.0000	0.565			1
1-2	K4389-2D	100.00 ml	1.0000	0.590	1.155	5.95 ppb	1
	n = 1 $\bar{X}$ = 5.95 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4389-3D	100.00 ml	1.0000	0.426			1

BM 5/24/12

US52:01176

Sample Report

Sample All Data

Data ID : AOX205232012.003
Blank : 0.560 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-2	K4389-3D	100.00 ml	1.0000	0.182 NA	0.608	0.48 ppb	1
	n = 1 $\bar{X}$ = 0.48 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4578-6	100.00 ml	0.0500	1.950			1
1-2	K4578-6	100.00 ml	0.0500	0.305	2.255	339.00 ppb	1
	n = 1 $\bar{X}$ = 339.00 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4578-6D	100.00 ml	0.1000	3.480			1
1-2	K4578-6D	100.00 ml	0.1000	0.647	4.127	356.70 ppb	1
	n = 1 $\bar{X}$ = 356.70 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	LOD	100.00 ml	1.0000	0.922			1
1-2	LOD	100.00 ml	1.0000	0.026 NA	0.948	3.88 ppb	1
	n = 1 $\bar{X}$ = 3.88 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	LOQ	100.00 ml	1.0000	1.130			1
1-2	LOQ	100.00 ml	1.0000	0.203 NA	1.333	7.73 ppb	1
	n = 1 $\bar{X}$ = 7.73 ppb			SD = ****.**		RSD(%) = ***.**	
3-1	ICS	10.00 µl	1.0000	10.251	10.251	969.10 ppm	1
	n = 1 $\bar{X}$ = 969.10 ppm			SD = ****.**		RSD(%) = ***.**	

EM 5/24/12

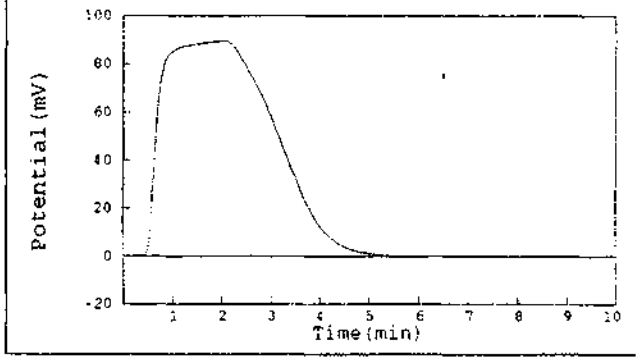
US52:01177

Sample Report

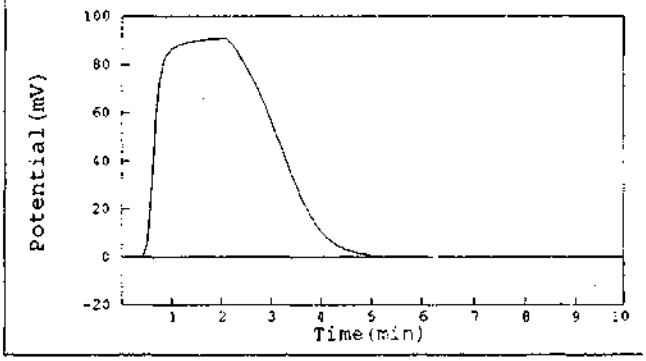
Sample Charts

Data ID : AOX205232012.001

Reps. : 1-1 05/23/12 21:10
Sample ID : ICS
Counts(µg): 10.244



Reps. : 1-2 05/23/12 21:16
Sample ID : ICS
Counts(µg): 10.508



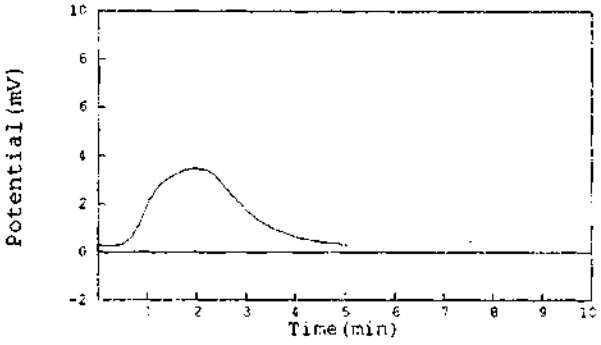
US52:01178

Sample Report

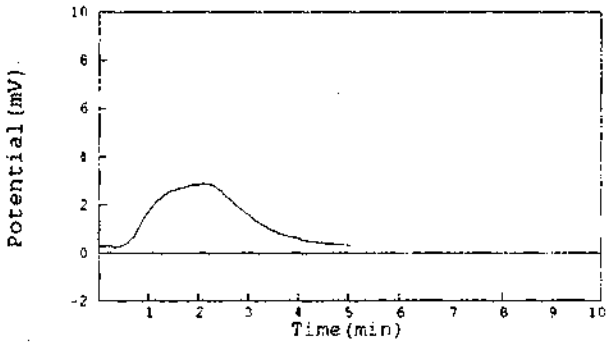
Sample Charts

Data ID : AOX205232012.002

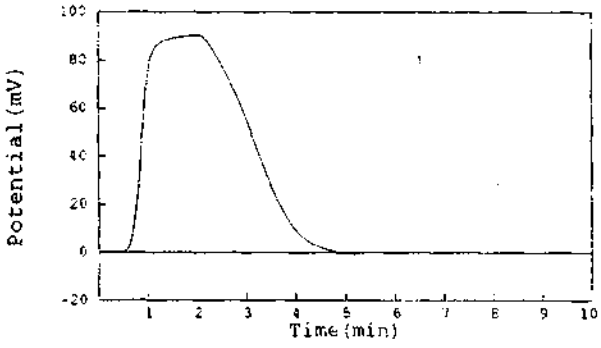
Reps. : 1-1 05/23/12 21:27
Sample ID : MB
Counts(µg): 0.283



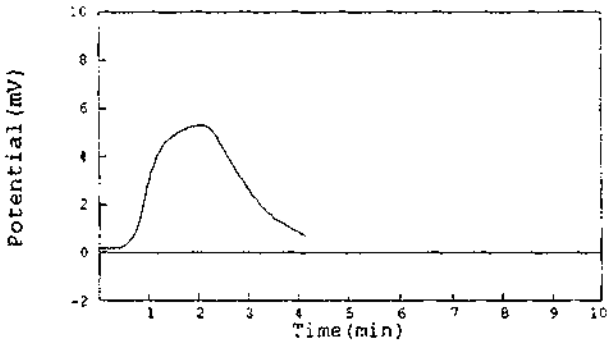
Reps. : 1-2 05/23/12 21:38
Sample ID : MB
Counts(µg): 0.237



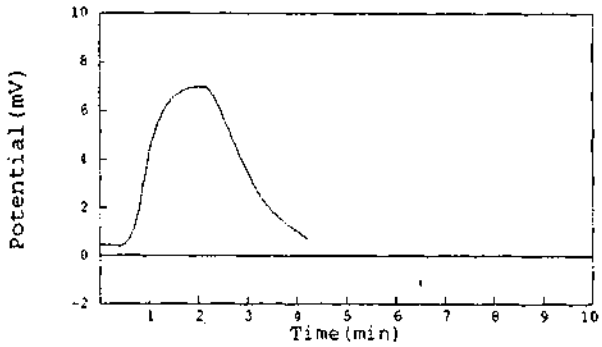
Reps. : 1-1 05/23/12 21:44
Sample ID : PAR
Counts(µg): 9.887



Reps. : 1-2 05/23/12 21:52
Sample ID : PAR
Counts(µg): 0.449



Reps. : 1-1 05/23/12 21:57
Sample ID : K4387-1
Counts(µg): 0.547



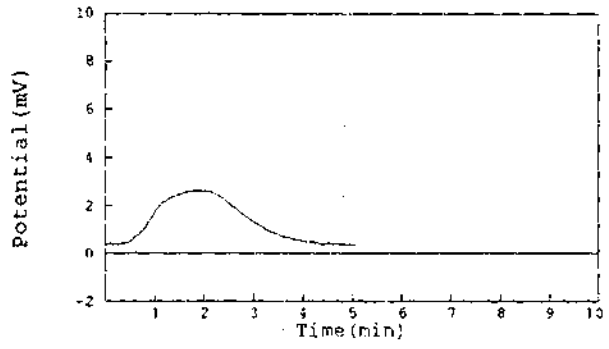
US52:01179

Sample Report

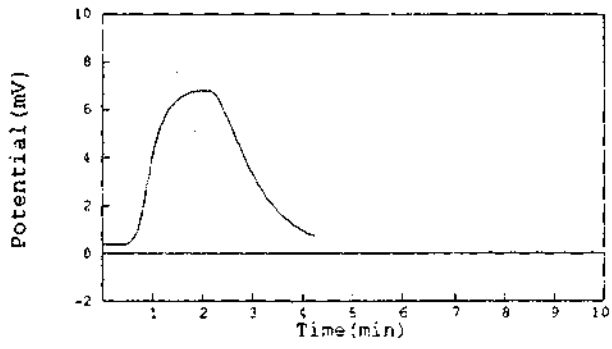
Sample Charts

Data ID : AOX205232012.003

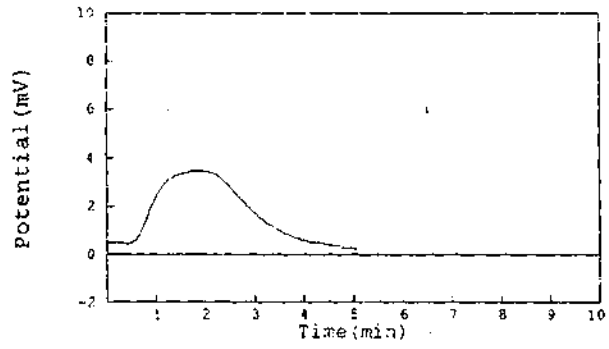
Reps. : 1-2 05/23/12 22:10
Sample ID : K4387-1
Counts(µg): 0.177



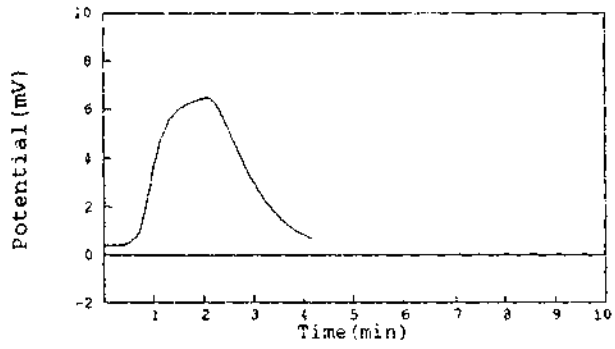
Reps. : 1-1 05/23/12 22:14
Sample ID : K4387-2
Counts(µg): 0.540



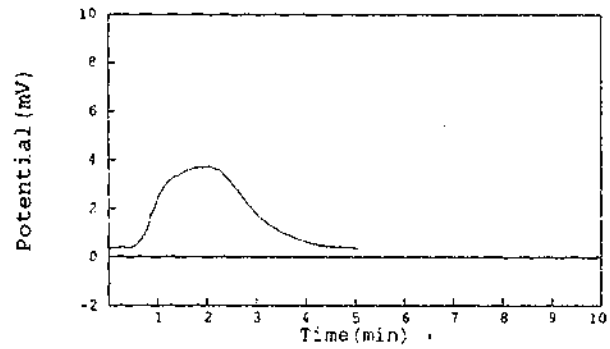
Reps. : 1-2 05/23/12 22:20
Sample ID : K4387-2
Counts(µg): 0.209



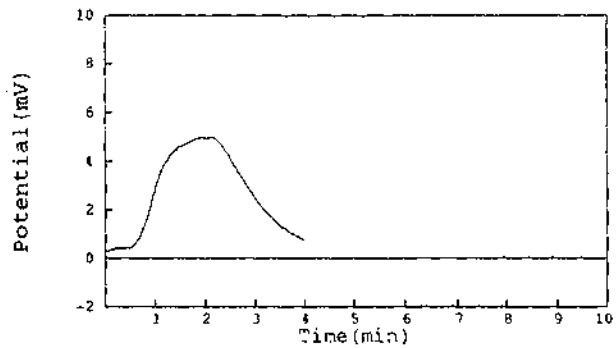
Reps. : 1-1 05/23/12 22:28
Sample ID : K4387-3
Counts(µg): 0.509



Reps. : 1-2 05/23/12 22:36
Sample ID : K4387-3
Counts(µg): 0.276



Reps. : 1-1 05/23/12 22:41
Sample ID : K4387-4
Counts(µg): 0.379



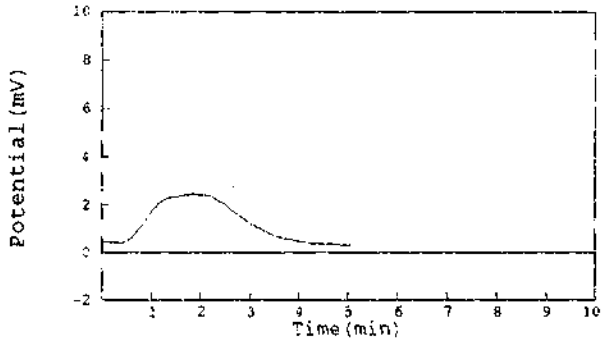
US52:01180

Sample Report

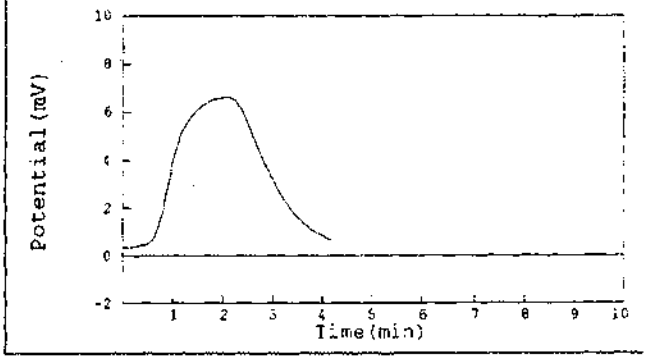
Sample Charts

Data ID : AOX205232012.003

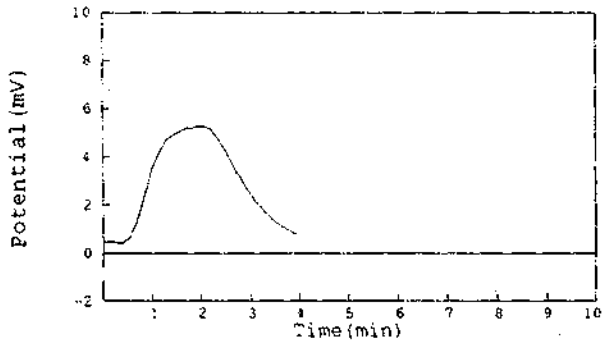
Reps. : 1-2 05/23/12 22:46
Sample ID : K4387-4
Counts(µg): 0.137



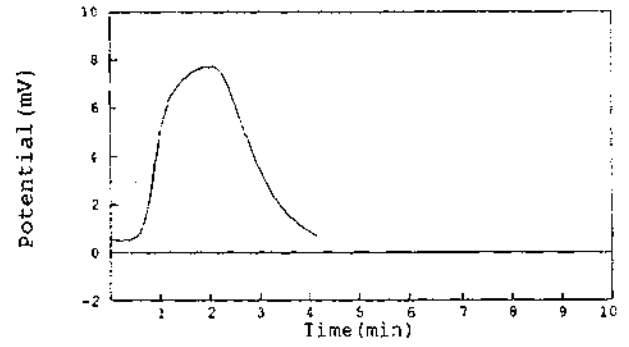
Reps. : 1-1 05/23/12 22:53
Sample ID : K4389-1
Counts(µg): 0.523



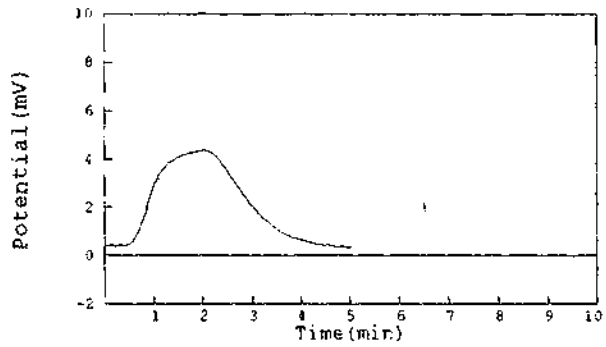
Reps. : 1-2 05/23/12 23:01
Sample ID : K4389-1
Counts(µg): 0.377



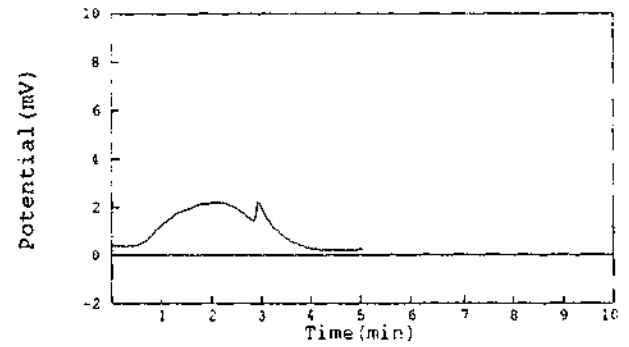
Reps. : 1-1 05/23/12 23:06
Sample ID : K4389-2
Counts(µg): 0.565



Reps. : 1-2 05/23/12 23:12
Sample ID : K4389-2
Counts(µg): 0.317



Reps. : 1-1 05/23/12 23:23
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.145



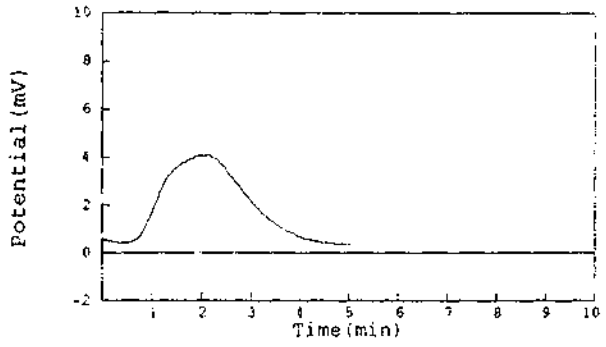
US52:01181

Sample Report

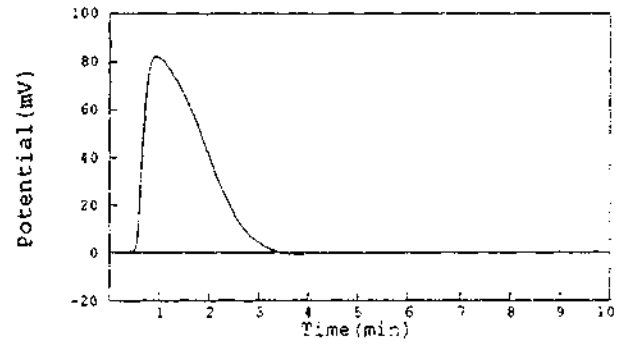
Sample Charts

Data ID : AOX205232012.003

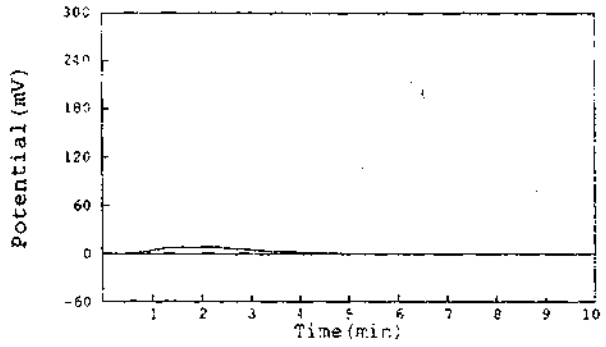
Reps. : 1-2 05/23/12 23:32
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.281



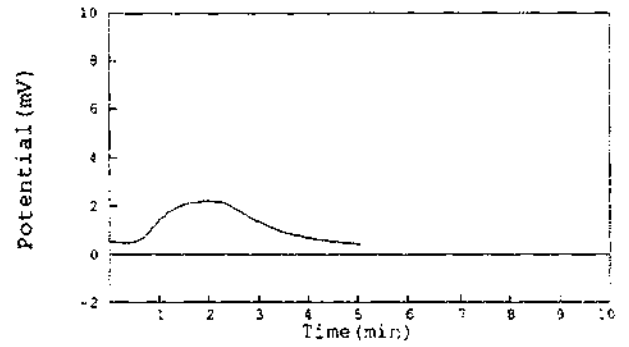
Reps. : 1-1 05/23/12 23:37
Sample ID : ICS
Counts(µg): 10.381



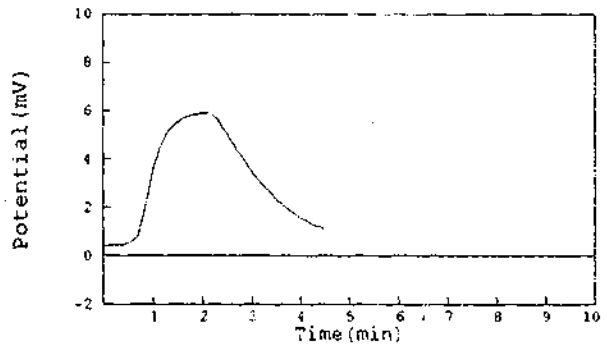
Reps. : 1-1 05/23/12 23:50
Sample ID : K4389-3
Counts(µg): 0.933



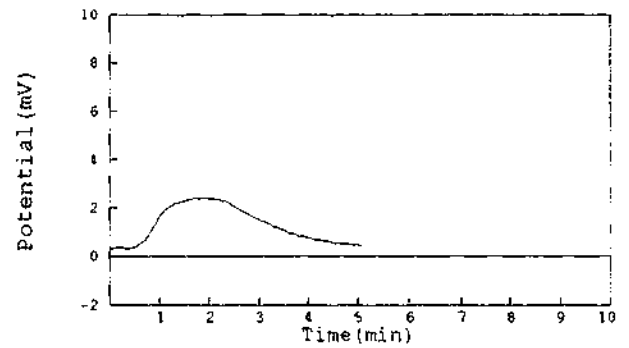
Reps. : 1-2 05/23/12 23:57
Sample ID : K4389-3
Counts(µg): 0.141



Reps. : 1-1 05/24/12 00:03
Sample ID : K4387-1D
Counts(µg): 0.592



Reps. : 1-2 05/24/12 00:11
Sample ID : K4387-1D
Counts(µg): 0.226



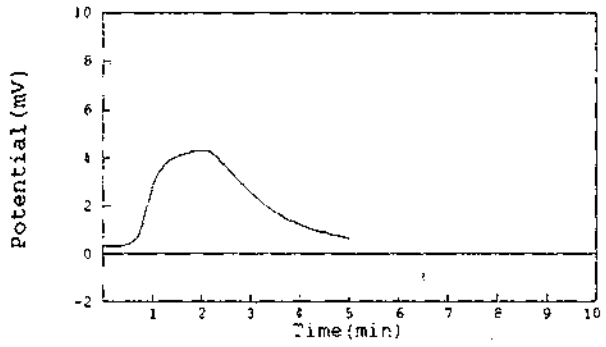
US52:01182

Sample Report

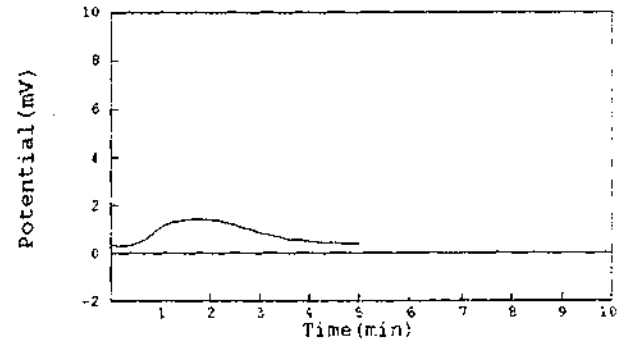
Sample Charts

Data ID : AOX205232012.003

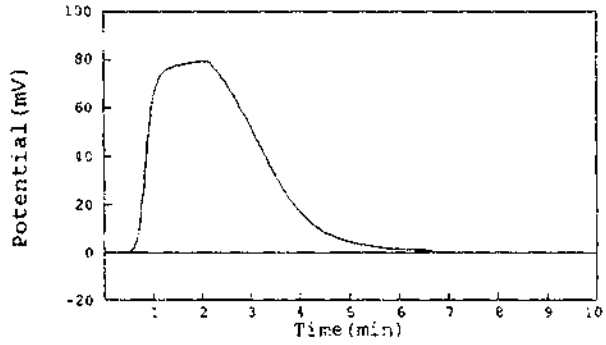
Reps. : 1-1 05/24/12 00:18
Sample ID : K4387-2D
Counts(µg): 0.456



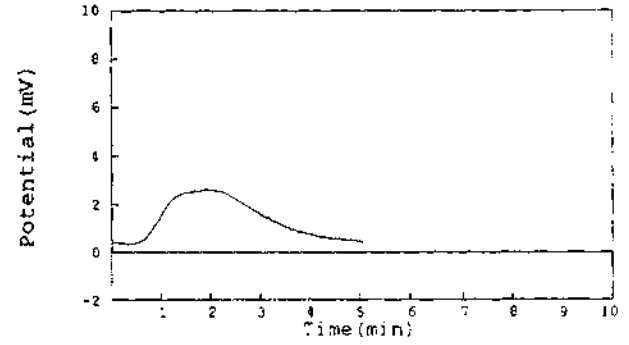
Reps. : 1-2 05/24/12 00:37
Sample ID : K4387-2D
Counts(µg): 0.109



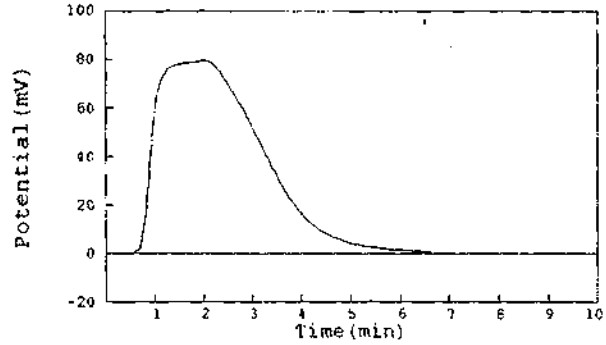
Reps. : 1-1 05/24/12 00:50
Sample ID : K4387-1MS
Counts(µg): 10.048



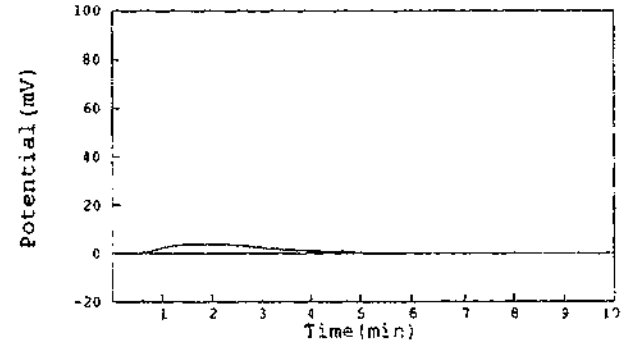
Reps. : 1-2 05/24/12 00:56
Sample ID : K4387-1MS
Counts(µg): 0.214



Reps. : 1-1 05/24/12 01:05
Sample ID : K4387-1MSD
Counts(µg): 10.053



Reps. : 1-2 05/24/12 01:14
Sample ID : K4387-1MSD
Counts(µg): 0.468



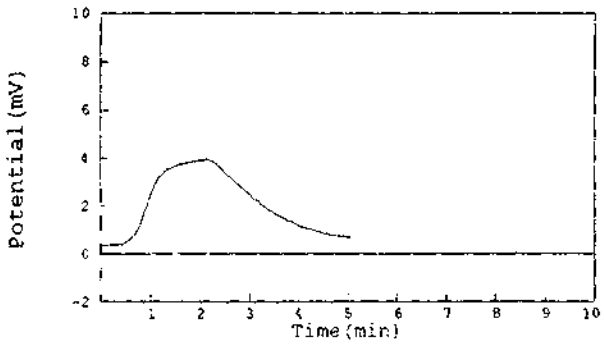
US52:01183

Sample Report

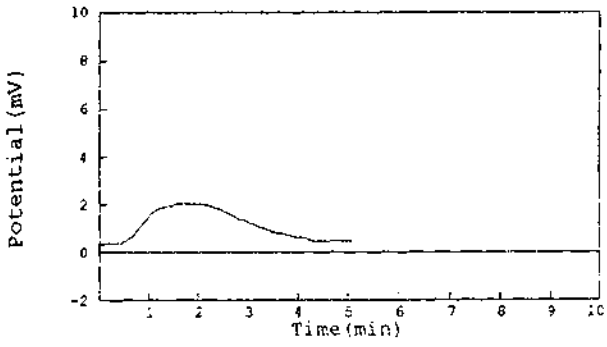
Sample Charts

Data ID : AOX205232012.003

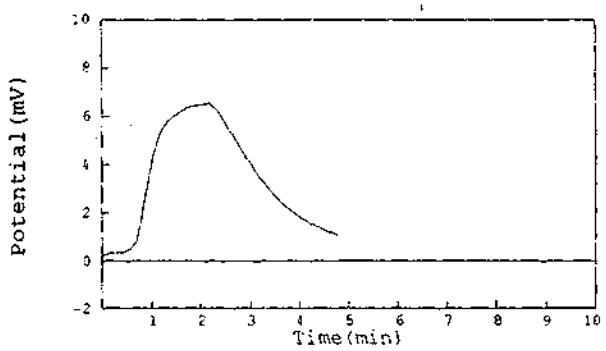
Reps. : 1-1 05/24/12 01:21
Sample ID : K4387-3D
Counts(µg): 0.427



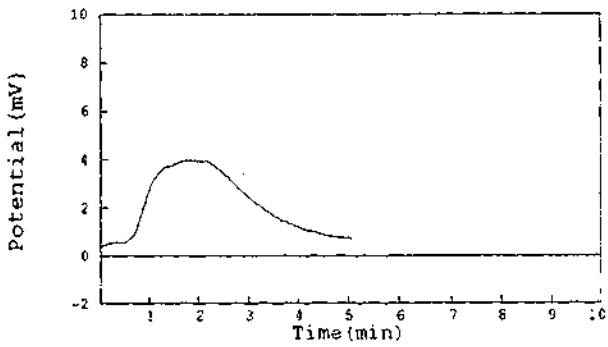
Reps. : 1-2 05/24/12 01:29
Sample ID : K4387-3D
Counts(µg): 0.184



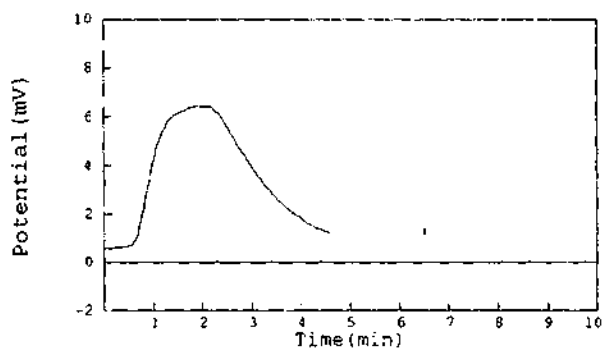
Reps. : 1-1 05/24/12 01:37
Sample ID : K4387-4D
Counts(µg): 0.725



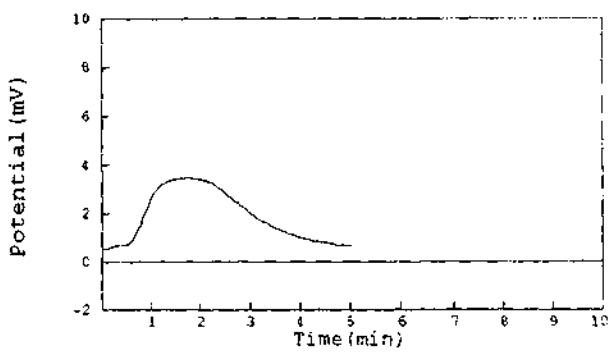
Reps. : 1-2 05/24/12 01:43
Sample ID : K4387-4D
Counts(µg): 0.379



Reps. : 1-1 05/24/12 01:48
Sample ID : K4387-4T
Counts(µg): 0.614



Reps. : 1-2 05/24/12 01:54
Sample ID : K4387-4T
Counts(µg): 0.254



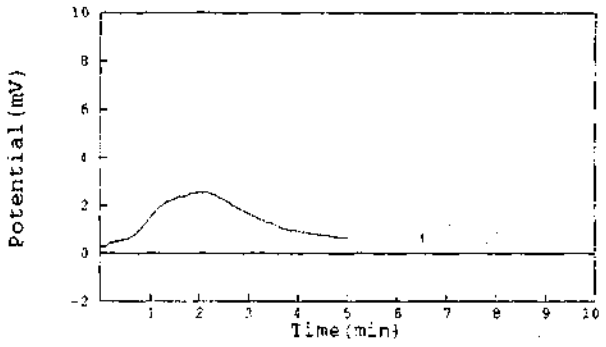
US52:01184

Sample Report

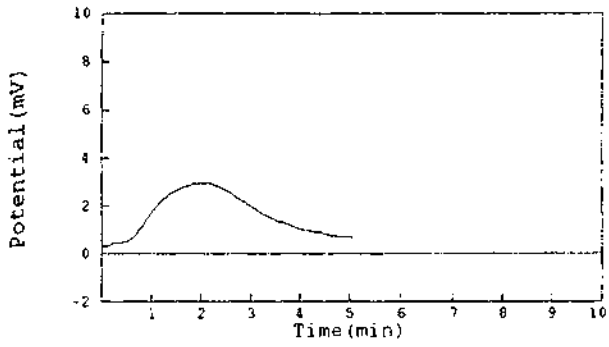
Sample Charts

Data ID : AOX205232012.003

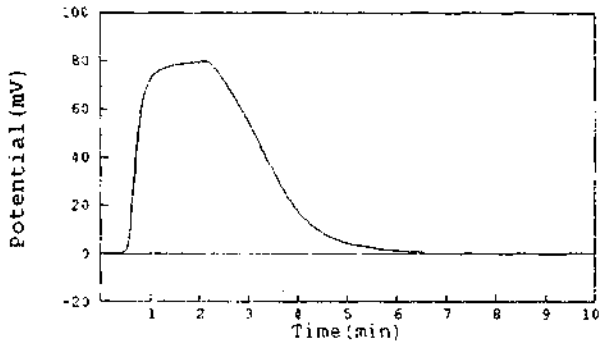
Reps. : 2-1 05/24/12 02:00
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.281



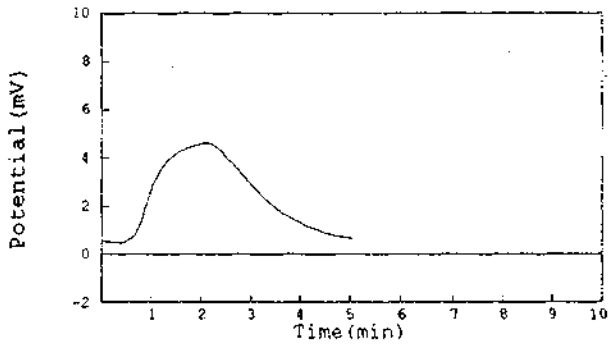
Reps. : 2-2 05/24/12 02:07
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.314



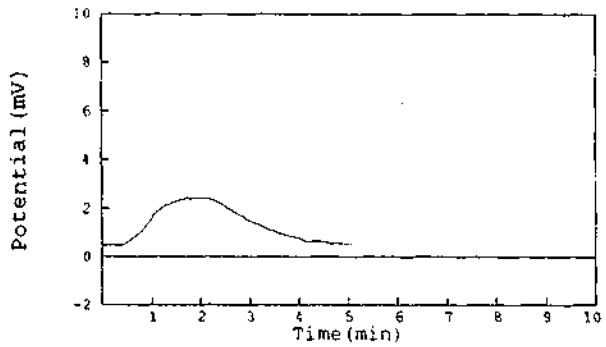
Reps. : 2-1 05/24/12 02:15
Sample ID : ICS
Counts(µg): 10.055



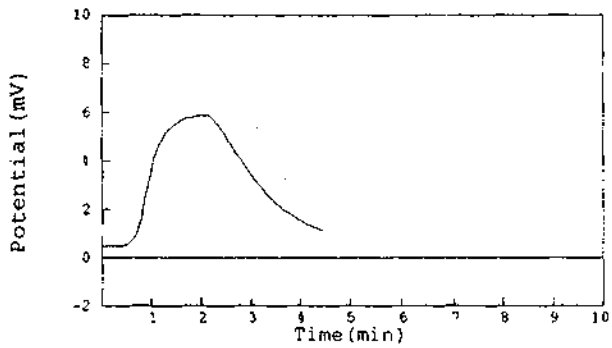
Reps. : 1-1 05/24/12 02:30
Sample ID : K4389-1D
Counts(µg): 0.427



Reps. : 1-2 05/24/12 02:36
Sample ID : K4389-1D
Counts(µg): 0.193



Reps. : 1-1 05/24/12 02:41
Sample ID : K4389-2D
Counts(µg): 0.565



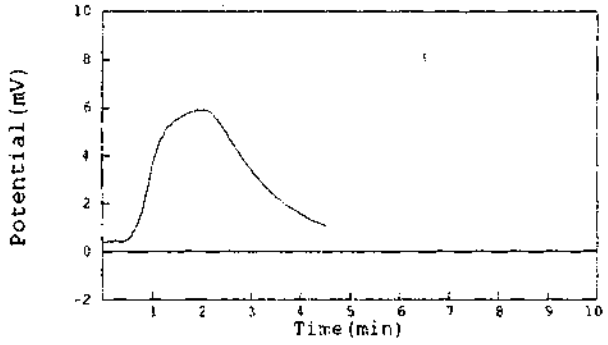
US52:01185

Sample Report

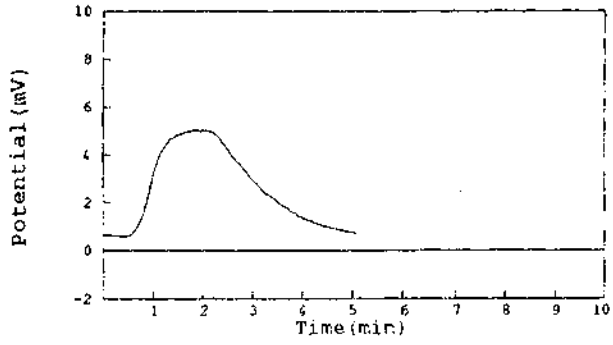
Sample Charts

Data ID : AOX205232012.003

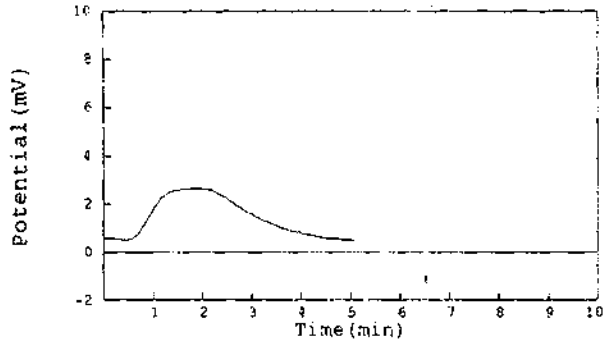
Reps. : 1-2 05/24/12 02:48
Sample ID : K4389-2D
Counts(µg): 0.590



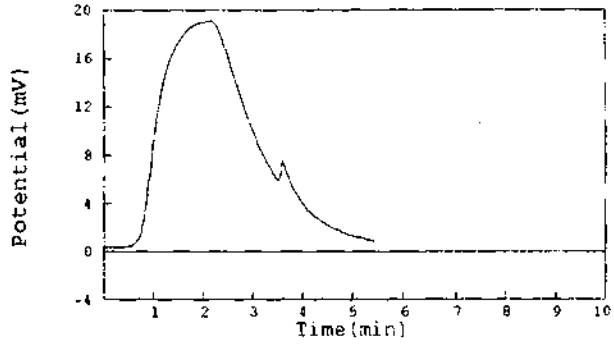
Reps. : 1-1 05/24/12 02:55
Sample ID : K4389-3D
Counts(µg): 0.426



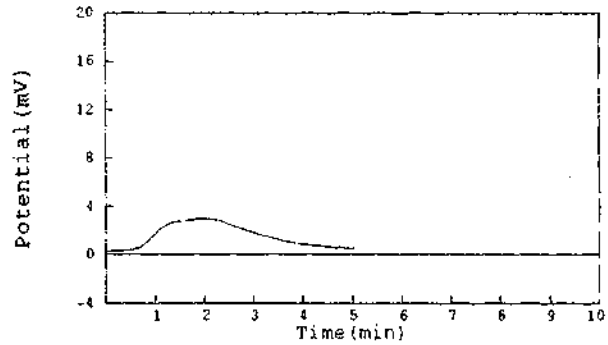
Reps. : 1-2 05/24/12 03:04
Sample ID : K4389-3D
Counts(µg): 0.182



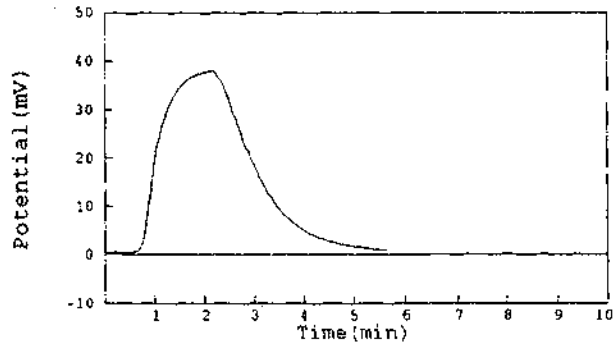
Reps. : 1-1 05/24/12 03:27
Sample ID : K4578-6
Counts(µg): 1.950



Reps. : 1-2 05/24/12 03:35
Sample ID : K4578-6
Counts(µg): 0.305



Reps. : 1-1 05/24/12 03:42
Sample ID : K4578-6D
Counts(µg): 3.480

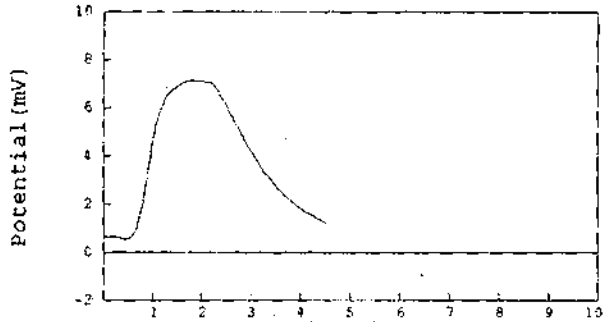


Sample Report

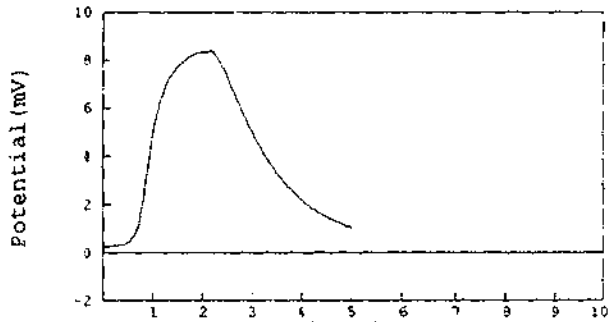
Sample Charts

Data ID : AOX205232012.003

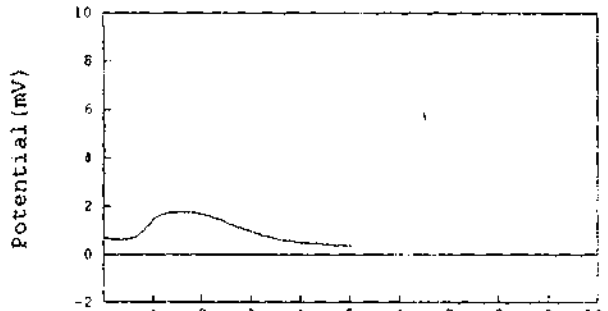
Reps. : 1-2 05/24/12 03:47
Sample ID : K4578-6D
Counts(µg): 0.647



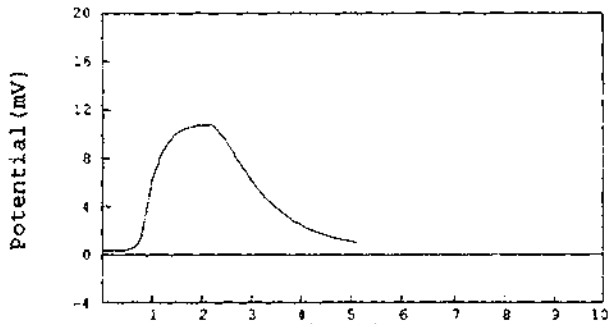
Reps. : 1-1 05/24/12 04:25
Sample ID : LOD
Counts(µg): 0.922



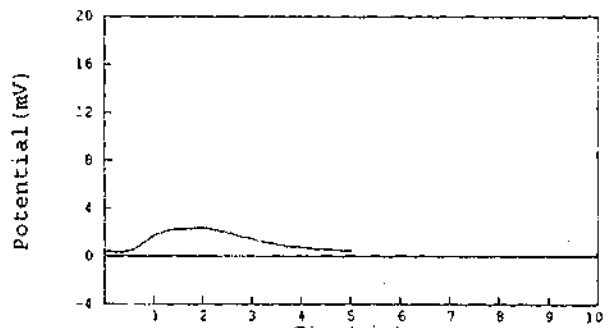
Reps. : 1-2 05/24/12 04:31
Sample ID : LOD
Counts(µg): 0.026



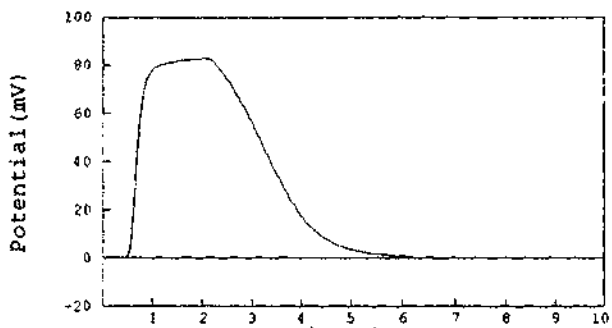
Reps. : 1-1 05/24/12 04:37
Sample ID : LOQ
Counts(µg): 1.130



Reps. : 1-2 05/24/12 04:45
Sample ID : LOQ
Counts(µg): 0.203



Reps. : 3-1 05/24/12 04:53
Sample ID : ICS
Counts(µg): 10.251



US52:01187

Method Detection Limit - LOD Verification

Columbia Analytical Services - Kelso

Analytical Method:	EPA 9020B	Instrument:	K-TOX-02 (Whine)
Extr./Dig. Method:	NA	Analyst(s):	EM
Matrix:	Water		
Units:	ug/L		

		Sample ID:	K1203990							
		Date Analyzed:	5/23/2012							
Analyte	MDL	Spike Level	Result 1	s/n >3	Result 2	s/n >3	Result 3	s/n >3	Result 4	s/n >3
Total Organic Halide	4	5	6	y						
Supervisor Approval:										
QA Approval:										

USS2-01199

Limit of Quantitation - LOQ Verification

Columbia Analytical Services - Kelso

Analytical Method:	EPA 9020B			
Extr./Dig. Method:	NA	Instrument:	K-TOX-02 (Whine)	
Matrix:	water	Analyst(s):	EM	
Units:	ug/L			

	Date Analyzed	5/23/2012						
		K1203990				Percent	Percent	Acceptance
Analyte	Spike Level	Result	Result	Result	Result	Recovery	RSD	Limits
Total Organic Halides	10.000	8.000				80	#DIV/0!	75-125%
						#DIV/0!	#DIV/0!	
						#DIV/0!	#DIV/0!	
						#DIV/0!	#DIV/0!

General Chemistry Raw Data
Analyst Notes and Raw Data

ARI Job ID: US52, US61, UT31

Original Run Filename: OM_5-3-2012_01-02-18PM.OMN Created: 5/3/2012 1:02:18 PM
Original Run Author's Signature: [Carol Hawkins]
Current Run Filename: 05032012NH3B.omn Last Modified: 5/3/2012 2:49:56 PM
Current Run Author's Signature: [Carol Hawkins]
Description: LACHAT 1
ARI In-House Standards:ARI# 122-3

Sample	Cup No.	Channel 1 NH3 Conc. (mg N/L)	Channel 1 NH3 Area (V.s)	Detection Time	MANUAL DILUTION FACTOR	
STD 1.0	S1	1	40.7796	5/3/2012@1:03:22 PM		
STD 0.8	S2	0.8	32.817	5/3/2012@1:04:33 PM		
STD 0.5	S3	0.5	20.5022	5/3/2012@1:05:43 PM		
STD 0.2	S4	0.2	8.2337	5/3/2012@1:06:53 PM		
STD 0.05	S5	0.05	1.9565	5/3/2012@1:08:03 PM		
STD 0.02	S6	0.02	0.9161	5/3/2012@1:09:13 PM		
STD 0.01	S7	0.01	0.4802	5/3/2012@1:10:24 PM		
BLANK	S8	0	0.0196	5/3/2012@1:11:35 PM		
ICV ERA 130611	9	0.4887	20.0019	5/3/2012@1:12:45 PM		%R= 97.74
Known Conc:		0.5				
ICB	10	-0.0047	-0.1506	5/3/2012@1:18:41 PM		
Known Conc:		0				
LOW	11	0.0106	0.4745	5/3/2012@1:24:38 PM		%R= 106.00
Known Conc:		0.01				
FILTER BLK	12	-0.0076	-0.2696	5/3/2012@1:30:34 PM		
US42A1	13	0.0357	1.4984	5/3/2012@1:31:45 PM		
US42A1 DUP	14	0.0322	1.3552	5/3/2012@1:32:56 PM		%RPD= 10.31
US42A1 MS	15	0.5513	22.5587	5/3/2012@1:34:06 PM		%R= 103.12
Spiking Conc:		0.5			SPK=0.25ML@20PPM/10ML=0.5PPM	
US42B1	16	0.055	2.2902	5/3/2012@1:35:17 PM		

US42E1	19	0.0608	2.5248	5/3/2012@1:36:28 PM		
US42F1	20	0.0404	1.693	5/3/2012@1:37:38 PM		
US42G1	21	0.0303	1.2815	5/3/2012@1:38:50 PM		
US42H1	22	0.0368	1.544	5/3/2012@1:40:01 PM		
CCV	17	0.4385	17.9522	5/3/2012@1:41:11 PM		
Known Conc:		0.5				
CCB	18	0.0019	0.1189	5/3/2012@1:47:12 PM		
Known Conc:		0				
CCV	17	0.4979	20.3774	5/3/2012@1:53:09 PM		%R= 99.58
Known Conc:		0.5				
US54A1	23	0.4109	16.8254	5/3/2012@1:59:06 PM		
US54A1 DUP	24	0.4204	17.2133	5/3/2012@2:00:17 PM		%RPD= 2.29
US54A1 MS	25	0.8688	35.5252	5/3/2012@2:01:27 PM		%R= 91.58
Spiking Conc:		0.5			SPK=0.25ML@20PPM/10ML=0.5PPM	
US52A3	26	0.0346	1.4564	5/3/2012@2:02:40 PM		
US53G15	27	0.3438	14.0834	5/3/2012@2:03:50 PM		
~~US61A9~~	~~28~~	~~1.8786~~	~~76.7663~~	~~5/3/2012@2:05:02 PM~~		
~~US61B9~~	~~29~~	~~1.4656~~	~~59.8977~~	~~5/3/2012@2:06:13 PM~~		
~~US61B9 DUP~~	~~30~~	~~1.4666~~	~~59.9374~~	~~5/3/2012@2:07:23 PM~~		
~~US61B9 MS~~	~~31~~	~~1.9486~~	~~79.6213~~	~~5/3/2012@2:08:36 PM~~		
~~Spiking Conc:~~		~~0.5~~				
CCV	17	0.4866	19.9134	5/3/2012@2:09:46 PM		%R= 97.32
Known Conc:		0.5				
CCB	18	-0.0032	-0.0905	5/3/2012@2:15:43 PM		
Known Conc:		0				
US61C9	32	0.6824	27.9097	5/3/2012@2:21:41 PM		

US61D9	33	0.6735	27.5467	5/3/2012@2:22:52 PM		
US61A9	34	1.9837	16.2453	5/3/2012@2:24:12 PM	5	
US61B9	35	1.4692	30.0434	5/3/2012@2:25:22 PM	2	
US61B9 DUP	36	1.4657	29.9725	5/3/2012@2:26:34 PM	2	%RPD= 0.24
US61B9 MS	37	4.1065	33.5845	5/3/2012@2:27:46 PM	5	%R= 105.49
Spiking Conc:		2.5			SPK=0.025ML@1000PPM/10ML=2.5PPM	
DI	38	-0.0086	-0.3072	5/3/2012@2:28:58 PM		
CCV	17	0.483	19.7684	5/3/2012@2:34:55 PM		%R= 96.60
Known Conc:		0.5				
CCB	18	0.0022	0.1335	5/3/2012@2:40:52 PM		
Known Conc:		0				

Author: Carol Hawkins

Date : 5/3/2012

Original Run Filename: OM_5-3-2012_01-02-18PM.OMN Created: 5/3/2012 1:02:18 PM
Original Run Author's Signature: [Carol Hawkins]
Current Run Filename: 05032012NH3B.omn Last Modified: 5/3/2012 2:49:56 PM
Current Run Author's Signature: [Carol Hawkins]
Description: Default New Run

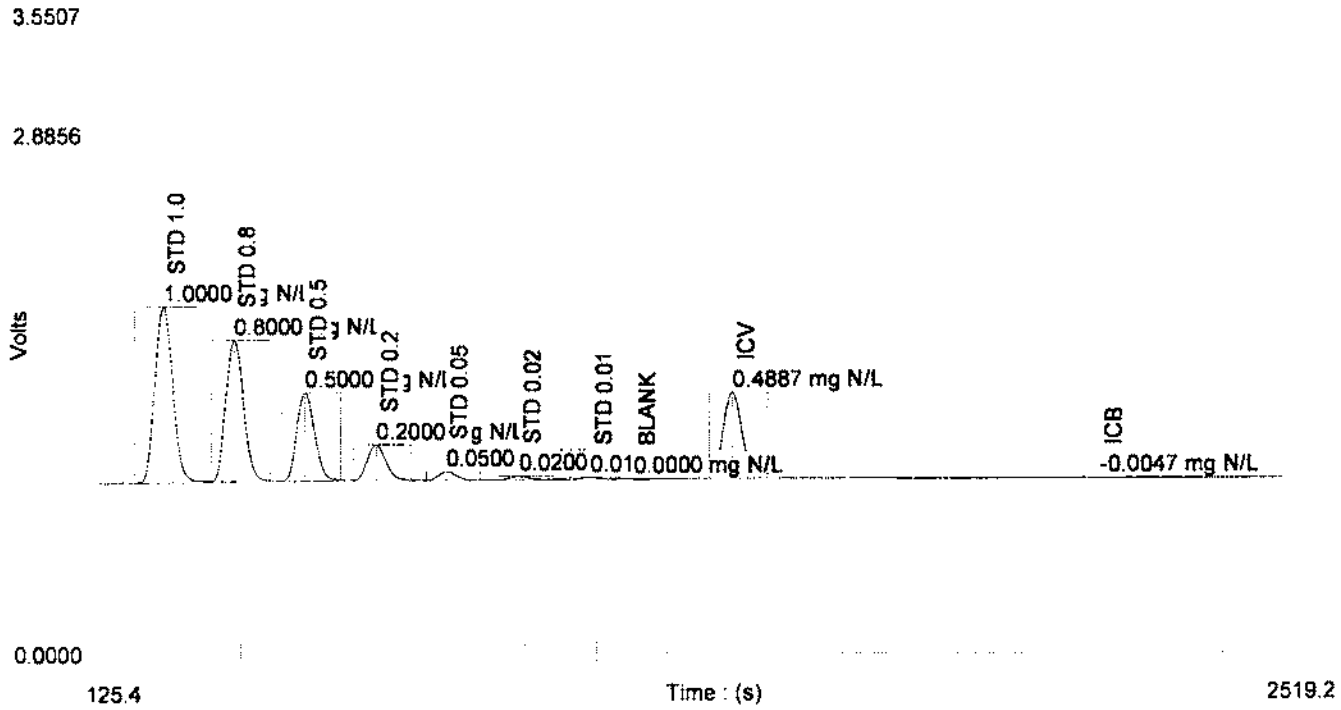
Sample	Cup No.	Channel 1 NH3 Conc. (mg N/L)	Area (V.s)	Detection Time	MDF
STD 1.0	S1	1.0000	40.7796	5/3/2012@1:03:22 PM	
STD 0.8	S2	0.8000	32.8170	5/3/2012@1:04:33 PM	
STD 0.5	S3	0.5000	20.5022	5/3/2012@1:05:43 PM	
STD 0.2	S4	0.2000	8.2337	5/3/2012@1:06:53 PM	
STD 0.05	S5	0.0500	1.9565	5/3/2012@1:08:03 PM	
STD 0.02	S6	0.0200	0.9161	5/3/2012@1:09:13 PM	
STD 0.01	S7	0.0100	0.4802	5/3/2012@1:10:24 PM	
BLANK	S8	0.0000	0.0196	5/3/2012@1:11:35 PM	
ICV	9	0.4887	20.0019	5/3/2012@1:12:45 PM	
Known Conc:		0.5000			
Calibration:		Table/Fig. : 1			
ICB	10	-0.0047	-0.1506	5/3/2012@1:18:41 PM	
Known Conc:		0.0000			
LOW	11	0.0106	0.4745	5/3/2012@1:24:38 PM	
Known Conc:		0.0100			
FILTER BLK	12	-0.0076	-0.2696	5/3/2012@1:30:34 PM	
US42A1	13	0.0357	1.4984	5/3/2012@1:31:45 PM	
US42A1 DUP	14	0.0322	1.3552	5/3/2012@1:32:56 PM	
US42A1 MS	15	0.5513	22.5587	5/3/2012@1:34:06 PM	
Spiking Conc:		0.5000			
US42B1	16	0.0550	2.2902	5/3/2012@1:35:17 PM	
US42E1	19	0.0608	2.5248	5/3/2012@1:36:28 PM	
US42F1	20	0.0404	1.6930	5/3/2012@1:37:38 PM	
US42G1	21	0.0303	1.2815	5/3/2012@1:38:50 PM	
US42H1	22	0.0368	1.5440	5/3/2012@1:40:01 PM	
CCV	17	0.4385	17.9522	5/3/2012@1:41:11 PM	
Known Conc:		0.5000			
CCB	18	0.0019	0.1189	5/3/2012@1:47:12 PM	
Known Conc:		0.0000			
CCV	17	0.4979	20.3774	5/3/2012@1:53:09 PM	
Known Conc:		0.5000			
US54A1	23	0.4109	16.8254	5/3/2012@1:59:06 PM	
US54A1 DUP	24	0.4204	17.2133	5/3/2012@2:00:17 PM	
US54A1 MS	25	0.8688	35.5252	5/3/2012@2:01:27 PM	
Spiking Conc:		0.5000			
US52A3	26	0.0346	1.4564	5/3/2012@2:02:40 PM	
US53G15	27	0.3438	14.0834	5/3/2012@2:03:50 PM	
US61A9	28	1.8786	76.7653	5/3/2012@2:05:02 PM	
US61B9	29	1.4656	59.8977	5/3/2012@2:06:13 PM	
US61B9 DUP	30	1.4666	59.9371	5/3/2012@2:07:23 PM	
US61B9 MS	31	1.9485	79.6213	5/3/2012@2:08:36 PM	
Spiking Conc:		0.5000			
CCV	17	0.4866	19.9134	5/3/2012@2:09:46 PM	
Known Conc:		0.5000			
CCB	18	-0.0032	-0.0905	5/3/2012@2:15:43 PM	
Known Conc:		0.0000			
US61C9	32	0.6824	27.9097	5/3/2012@2:21:41 PM	
US61D9	33	0.6735	27.5467	5/3/2012@2:22:52 PM	
US61A9	34	1.9837	16.2453	5/3/2012@2:24:12 PM	5.00
US61B9	35	1.4692	30.0434	5/3/2012@2:25:22 PM	2.00
US61B9 DUP	36	1.4657	29.9725	5/3/2012@2:26:34 PM	2.00
US61B9 MS	37	4.1065	33.5845	5/3/2012@2:27:46 PM	5.00
Spiking Conc:		2.5000			
DI	38	-0.0086	-0.3072	5/3/2012@2:28:58 PM	
CCV	17	0.4830	19.7684	5/3/2012@2:34:55 PM	
Known Conc:		0.5000			
CCB	18	0.0022	0.1335	5/3/2012@2:40:52 PM	
Known Conc:		0.0000			

5-3-12

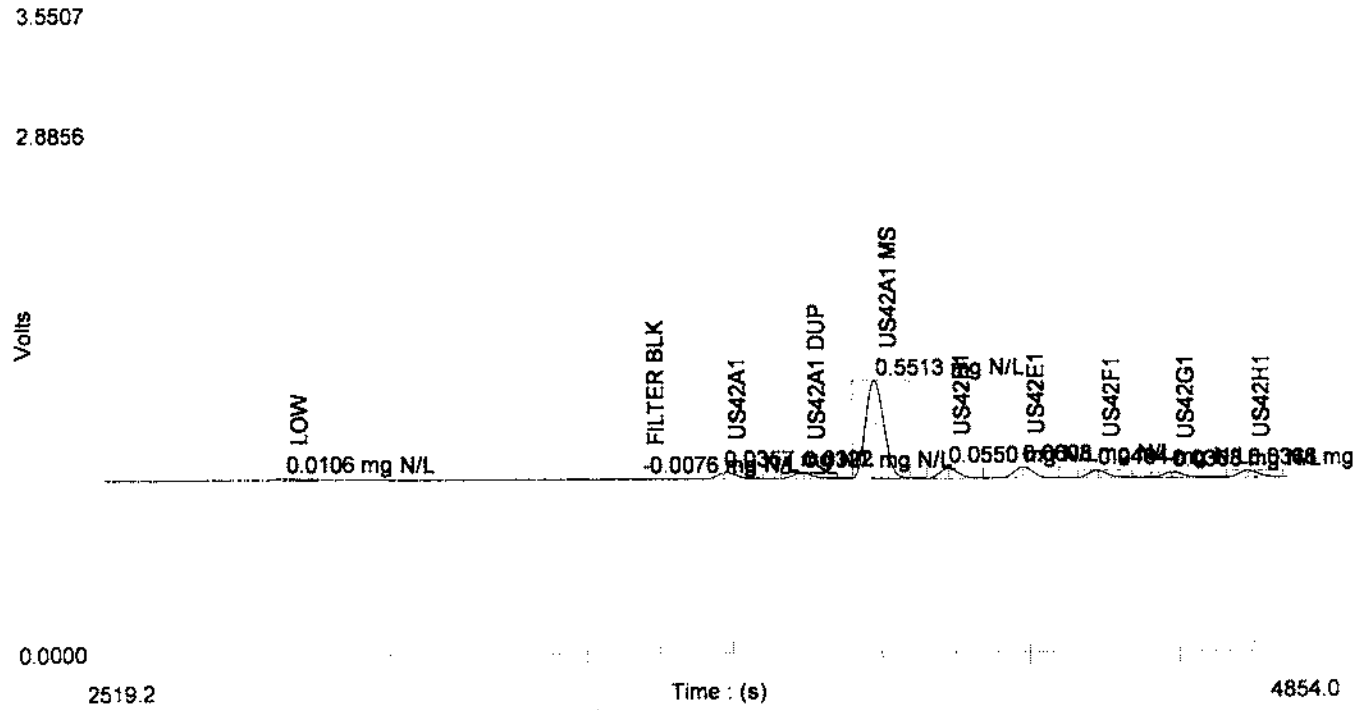
Author: Carol Hawkins

Date : 5/3/2012

Channel 1 - Set: 1 / 5



Channel 1 - Set: 2 / 5



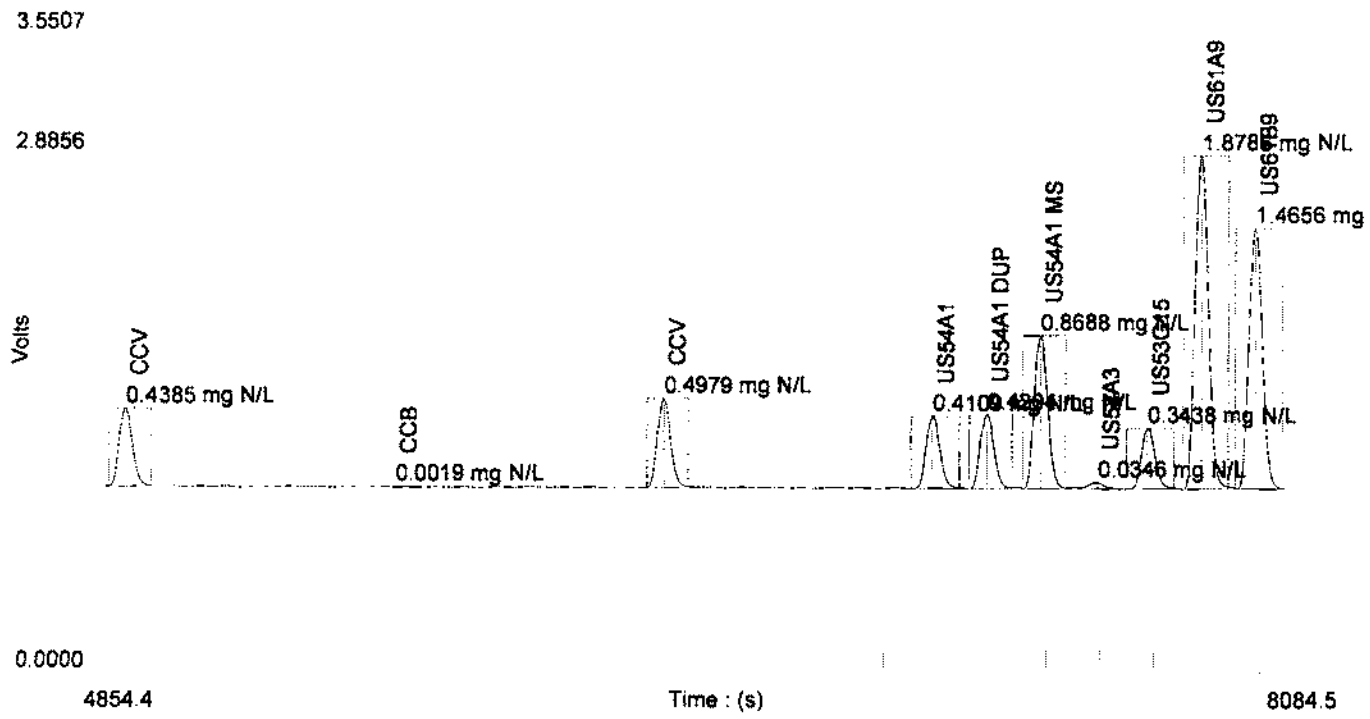
05032012NH3B LACHAT 1

US52 : 01195

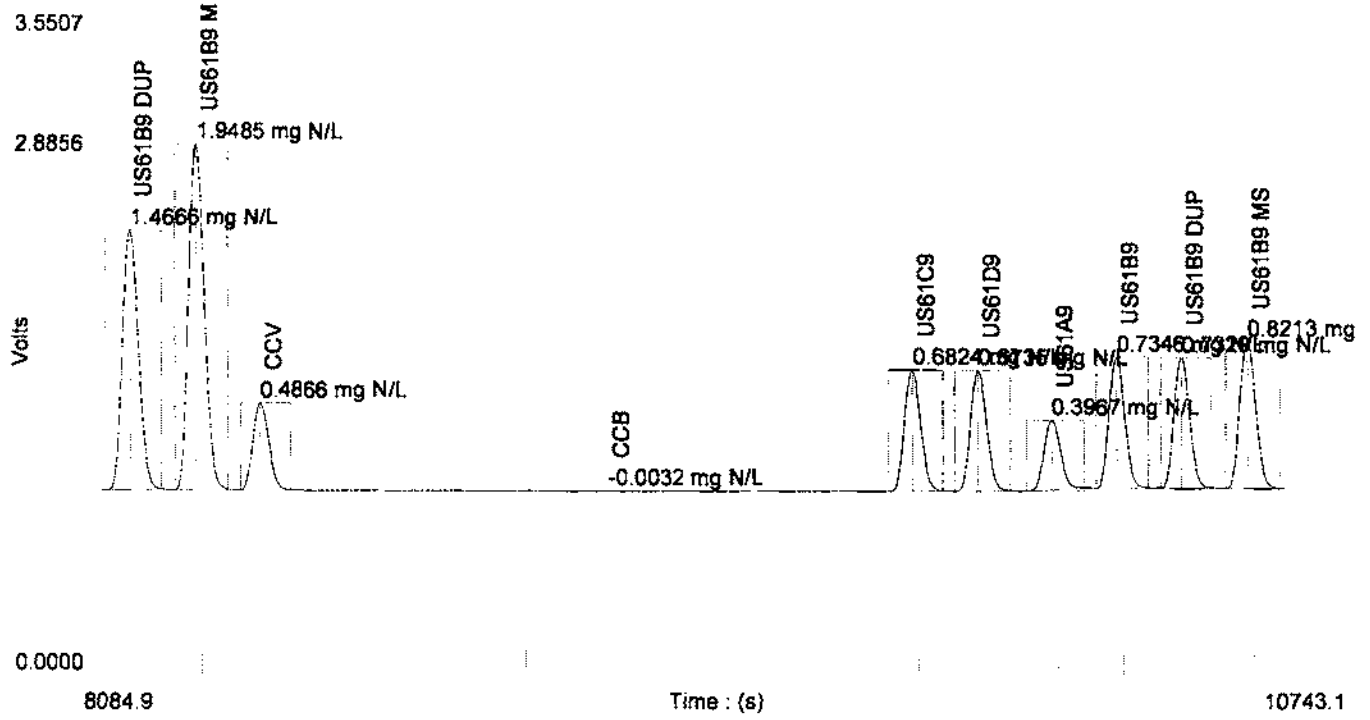
Author: Carol Hawkins

Date : 5/3/2012

Channel 1 - Set: 3 / 5



Channel 1 - Set: 4 / 5



US52 : 01196

Author: Carol Hawkins

Date : 5/3/2012

Channel 1 - Set: 5 / 5

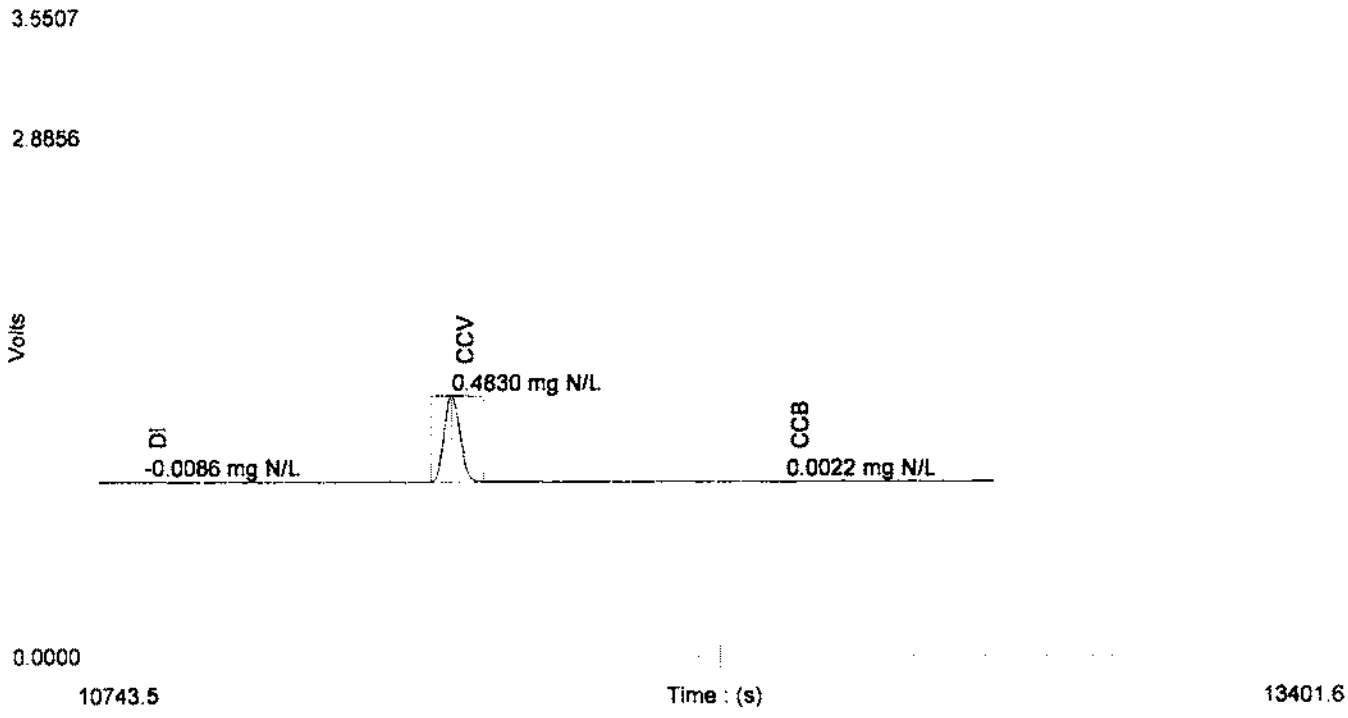
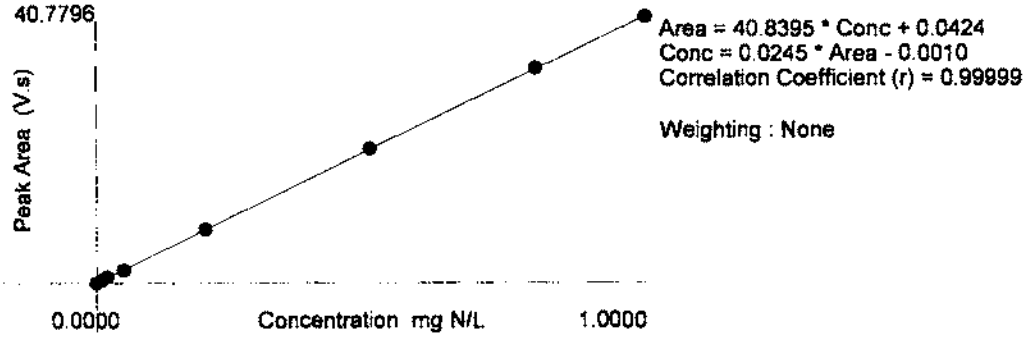


Table : 1 (NH3)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	1.0000	1	40.7796	0.9766	0.0	0.3	0.9975	5/3/2012	1:03:22 PM
2	0.8000	1	32.8170	0.7863	0.0	-0.3	0.8025	5/3/2012	1:04:33 PM
3	0.5000	1	20.5022	0.4907	0.0	-0.2	0.5010	5/3/2012	1:05:43 PM
4	0.2000	1	8.2337	0.1982	0.0	-0.3	0.2006	5/3/2012	1:06:53 PM
5	0.0500	1	1.9565	0.0492	0.0	6.1	0.0469	5/3/2012	1:08:03 PM
6	0.0200	1	0.9161	0.0235	0.0	-6.6	0.0214	5/3/2012	1:09:13 PM
7	0.0100	1	0.4802	0.0135	0.0	-6.5	0.0107	5/3/2012	1:10:24 PM
8	0.0000	1	0.0196	0.0043			-0.0006	5/3/2012	1:11:35 PM

Figure : 1 (NH3)



US52 : 01197

ALKALINITY BENCHSHEET methods: **SM 2320 B-97** Date/Time: 5/3/12 10:48

pH meter verification **pH meter ID:** **ACCUMET AR60** **Buret ID:** **01G30627** Analyst: KE

Buffer pH **7.00** **pH Probe ID :** **AR60**

Measured pH 7.02 *Calibration OK* **HIGH CURVE**

Standardization of acid titrant ***(titration to pH 4.5)***

ARI ID: ***00126 - 11***

grams Na2CO3 =	**0.6251**	*to*	**250** *ml DI*
Normality Na2CO3 =	0.0472		
Assumed Acid Normality =	**0.1**		
Standardized Acid Normality=	0.1015	***OK!***	

BLANK		STANDARD TITRATION		
BLANK	ml ACID	ml Na2CO3	ml ACID	N H2SO4
1	0.02	5	2.34	0.102
2	0.01	5	2.36	0.101
3	0.02	5	2.32	0.102
AVERAGE	0.02			0.102

Partitioning Calculations T=Total, P=Phenolphthalein			
Obs	*HCO3*	*CO3*	*OH*
P =0	T	0	0
P< 0.5T	T - 2P	2P	0
P= 0.5T	0	2P	0
P> 0.5T	0	2(T - P)	2P - T
P =T	0	0	T

Calibration Verification Standard (second source sodium carbonate solution)

ARI ID: ***00126 - 10***

grams Na2CO3 =	**0.6252**	*grams in*	**250**	*mL =*	*mg/L CaCO3* **2360**
dilution:	**5.0**	*mL to*	**95**	*CVS =*	**124.2**
DQL Std (2ppm)	*dilute*	**0.085**	*mL stock to 100 mL DI =*		**2.0**

Laboratory Control Standard (LCS)

Source: ***P197 - 506*** *mg/L CaCO3* **31.10**

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample *(shaded cells are calculated, make no entries)*

low level = {((2 X mL4.5)-mL4.2] X Nacid) X 50,000} / mL sample

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4 pH=8.3	ml H2SO4 pH =4.5	ml H2SO4 pH=4.2	ALK (mg CaCO3/l) Phenolph	ALK (mg CaCO3/l) TOT HIGH	ALK (mg CaCO3/l) TOT LOW	Partitioning (mg/l CaCO3) HCO3	Partitioning (mg/l CaCO3) CO3	Partitioning (mg/l CaCO3) OH	(mg/l) FREE CO2
ICV		10.44	100	21.7	1.02	2.35	0.00	51.8	118.5		*95.4%*	*OK!*		
ICB		5.36	100	21.7	0.00	0.02	0.04	0.0		0.0	0.0	0.0	0.0	0.0
LCS		8.79	50	20.0	0.12	0.31	0.34	12.2	31.5		*101.2%*	*OK!*		
US52 G14		6.46	100	21.4	0.00	3.26	0.00	0.0	165.5		165.5	0.0	0.0	114.8
US52 G14 dup		6.48	100	21.5	0.00	3.23	0.00	0.0	164.0		164.0	0.0	0.0	108.6
RPD =									*0.9%*		*0.9%*			*5.5%*
US52 H2		6.60	100	21.5	0.00	5.69	0.00	0.0	288.9		288.9	0.0	0.0	145.1
US52 I 6		6.84	100	21.6	0.00	8.54	0.00	0.0	433.6		433.6	0.0	0.0	125.3
US61 A10		6.44	100	21.7	0.00	3.32	0.00	0.0	168.6		168.6	0.0	0.0	122.4
US61 B10		6.71	100	21.8	0.00	3.32	0.00	0.0	168.6		168.6	0.0	0.0	65.7
US61 C10		6.58	100	21.8	0.00	3.77	0.00	0.0	191.4		191.4	0.0	0.0	100.7
US60 F4		10.00	100	21.2	15.10	32.62	0.00	766.7	1656.2		122.9	1533.3	0.0	0.0
CCV		10.42	100	22.0	1.00	2.34	0.00	50.8	118.0		*95.0%*	*OK!*		0.0

USGS-2550.8159

ALKALINITY BENCHSHEET methods: **SM 2320 B-97**

Date/Time: ② 5-3-12 10:48

Analyst: ②

pH meter verification **pH meter ID:** **ACCUMET AR60** **Buret ID:** **01G30627**

Buffer pH **7.00** **pH Probe ID :** **AR60**

Measured pH 7.02 *must agree within 0.1 pH unit* **HIGH CURVE**

Standardization of acid titrant ***(titration to pH 4.5)***

ARI ID: ***00126 - 11***

grams Na2CO3 =	0.6250	*to*	250 *ml DI*
Normality Na2CO3 =	0.1227		
Assumed Acid Normality =	0.1		
Standardized Acid Normality=			

BLANK		STANDARD TITRATION		
BLANK	ml ACID	ml Na2CO3	ml ACID	N H2SO4
1	0.02	5	234	
2	0.01	5	236	
3	0.02	5	232	
AVERAGE				

Partitioning Calculations

T=Total, P=Phenolphthalein

Obs	*HCO3*	*CO3*	*OH*
P =0	T	0	0
P< 0.5T	T - 2P	2P	0
P= 0.5T	0	2P	0
P> 0.5T	0	2(T - P)	2P - T
P =T	0	0	T

Calibration Verification Standard (second source sodium carbonate solution)

ARI ID: ***00126 - 10*** *mg/L CaCO3*

grams Na2CO3 =	0.6252	*grams in*	250	*mL =*	2360
dilution:	5.0	*mL to*	95	*CVS =*	124.2
DQL Std (2ppm)	*dilute*	0.085	*mL stock to 100 mL DI =*		2.0

Laboratory Control Standard (LCS)

Source: ***P197 - 506*** *mg/L CaCO3* **31.10**

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample *(shaded cells are calculated, make no entries)*

low level = {((2 X mL4.5)-mL4.2] X Nacid) X 50,000} / mL sample

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4 pH=8.3	ml H2SO4 pH =4.5	ml H2SO4 pH=4.2	ALK (mg CaCO3/l) Phenolph	ALK (mg CaCO3/l) TOT HIGH	ALK (mg CaCO3/l) TOT LOW	Partitioning (mg/l CaCO3) HCO3	Partitioning (mg/l CaCO3) CO3	Partitioning (mg/l CaCO3) OH	(mg/l) FREE CO2
ICV		10.44	100	21.7	1.02	2.35	0.00							
ICB		5.36	100	21.7	0.00	0.02	0.04							
LCS		8.79	50	20.0	0.12	0.31	0.34							
US52 G4		6.46	100	21.4	0.00	3.26	0.00							
↓ no G4		6.48	100	21.5	0.00	3.23	0.00							
H3		6.60	100	21.5	0.00	5.69	0.00							
↓ I6		6.84	100	21.6	0.00	8.54	0.00							
US61 A10		6.44	100	21.7	0.00	3.32	0.00							
B10		6.71	100	21.8	0.00	3.32	0.00							
↓ C10		6.58	100	21.8	0.00	3.17	0.00							
US60 F4		10.02	100	21.2	15.00	32.62	0.00							
CCV		10.42	100	22.0	1.00	2.34	0.00							
CCV														
CCV														

5-3-12 ②

US52 : 91199

ARI 6003 Alkalinity
Revised: 2/16/01

② 15.10 5-3-12 (W)

6003Alkwater1
Date Printed: 5/3/2012

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 5/4/2012

Methods : SM 2540 D-97, 2540 E-97

ANALYST: CDE / KE 13:51

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: N / A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# 6399J* 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time				5/4/1215:26 KE	5/4/12 17:22KE										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1100	0.1100	0.1100	STOP		0.0	< 1						
LCS # 00595-1		1000	0.1203	0.1705	0.1704	STOP		50.1	50.1	100.2% % Recovery					
US50 A6		940	0.1178	0.1199	0.1198	STOP		2.0	2.1						
US50 B5		925	0.1186	0.1241	0.1241	STOP		5.5	5.9						
US50 C6		960	0.1162	0.1173	0.1173	STOP		1.1	1.1						
US50 D6		940	0.1154	0.1163	0.1163	STOP		0.9	< 1.1						
US50 E5		150	0.1199	0.1725	0.1725	STOP		52.6	350.7						
US50 E5 dup		150	0.1208	0.1754	0.1751	STOP		54.3	362.0						
								RPD =	*3.2%*					*RPD =*	*NA*
US50 G5		950	0.1158	0.1165	0.1164	STOP		0.6	< 1.1						
US50 H5		940	0.1095	0.1103	0.1101	STOP		0.6	< 1.1						
US50 J 5		950	0.1180	0.1183	0.1184	STOP		0.3	< 1.1						
US60 A10		945	0.1150	0.1176	0.1174	STOP		2.4	2.5						
US60 B10		285	0.1141	0.1464	0.1460	STOP		31.9	111.9						
US60 C10		950	0.1215	0.1220	0.1220	STOP		0.5	< 1.1						
US60 D10		930	0.1151	0.1170	0.1169	STOP		1.8	1.9						
US52 G13		960	0.1184	0.1306	0.1306	STOP		12.2	12.7						
US52 H4		500	0.1141	0.1399	0.1396	STOP		25.5	51.0						
US52 I 7		955	0.1142	0.1165	0.1166	STOP		2.3	2.4						
US59 A1		225	0.1096	0.1309	0.1308	STOP		21.2	94.2						
US59 A1 dup		225	0.1071	0.1307	0.1306	STOP		23.5	104.4						

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS) DATE: 5/4/2012

Methods : SM 2540 D-97, 2540 E-97 ANALYST: CDE / KE 13:51

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: N / A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# **6399J*** 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
								RPD =	*10.3%*					*RPD =*	*NA*
US73 A1		700	0.1180	0.1270	0.1269	STOP		8.9	**12.7**						
US73 B1		1000	0.1154	0.1181	0.1180	STOP		2.6	**2.6**						
US85 A3		125	0.1234	0.1499	0.1498	STOP		26.4	**211.2**						
US85 A3 dup		125	0.1151	0.1406	0.1405	STOP		25.4	**203.2**						
								RPD =	*3.9%*					*RPD =*	*NA*
US85 B3		100	0.1192	0.1556	0.1556	STOP		36.4	**364.0**						

US52 : 01291

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TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Page 1 of 1 5-4-12 (1)

Analyst:	Date/Time: 5-4-12 1351	Oven #: 12	Muffle Furnance: VA	Balance: 1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

LCS (Cellulose from MP Biochemicals) Lott #	6398J	0.0500 Gram to 1000 mL = **50 mg / L TSS**							
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02		
Date & Time:			5-4-12 15:26	5-4-12 17:22							
Cal Weight (10.0000g):			10.0000 (2)	10.0000 (1)							

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams)			Dry Wt mg	TSS	Ash Weight 550°C		LOI - mg	TVSS mg/L
				1	2	3			1	2		
BLANK	P8395	1000	0.1100	0.1106	0.1100							
LCS#6398J	96	↓	0.1203	0.1705	0.1704							
US50 A6	98	940	0.1178	0.1199	0.1198							
B5	99	925	0.1186	0.1241	~~0.1230~~ (1)	0.1241						
C6	P9400	960	0.1162	0.1173	0.1173							
D6	02	940	0.1154	0.1163	0.1163							
E5	03	150	0.1199	0.1725	0.1725							
E5 dup	04	↓	0.1208	0.1754	0.1751							
G5	P8397	950	0.1158	0.1165	0.1164							
H5	409	940	0.1095	0.1103	0.1101							
J5	10	950	0.1180	0.1183	0.1184							
US60 L10	11	945	0.1150	0.1176	0.1174							
B10	14	285	0.1141	0.1464	0.1460							
C10	16	950	0.1215	0.1220	0.1220							
D10	17	930	0.1151	0.1170	0.1169							
US52 G13	18	960	0.1184	0.1306	0.1306							
H14	19	500	0.1141	0.1399	0.1396							
I7	P7769	955	0.1142	0.1165	0.1166							
US59 A'	20	225	0.1096	0.1309	0.1308							
A'*	71	↓	0.1071	0.1307	0.1306							
US73 A'*	73	700	0.1180	0.1270	0.1269							

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Analyst:	KJ	Date/Time:	5-4-12 13:51	Oven #:	12	Muffle Furnance:	N/A	Balance:	1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

LCS (Cellulose from MP Biochemicals) Lot #	6399J	0.0500 Gram to 1000 mL = **50 mg / L TSS**							
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02
Date & Time:									
Cal Weight (10.0000g):									

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams) 1	2	3	Dry Wt mg	TSS	Ash Weight 550°C 1	2	LOI - mg	TVSS mg/L
~~BLANK~~					5-4-12							
U573 B1	P7774	1000	0.1154	0.1181	0.1180							
U585 A3	86	125	0.1234	0.1499	0.1498							
↓ A3 dup	87	↓	0.1151	0.1406	0.1405							
↓ B3	88	100	0.1192	0.1556	0.1556							

5-4-12

USSC : 01209

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.4957
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9995

No.	Injection Name	Calibration Level	X Value Fluoride	Y Value Fluoride	Amount mg/l Fluoride	Area µS*min Fluoride	Height µS Fluoride
1	STD1	01	0.1000	0.0727	0.1467	0.073	0.387
2	STD2	02	0.5000	0.2635	0.5317	0.264	1.911
3	STD3	03	1.0000	0.5176	1.0440	0.518	3.889
4	STD4	04	2.5000	1.2612	2.5444	1.261	10.077
5	STD5	05	5.0000	2.4810	5.0048	2.461	20.142

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	n.a.	*Slope (C1)*	0.3076
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9998

No.	Injection Name	Calibration Level	X Value Chloride	Y Value Chloride	Amount mg/l Chloride	Area µS*min Chloride	Height µS Chloride
1	STD1	01	0.1000	0.0341	0.1110	0.034	0.254
2	STD2	02	0.5000	0.1437	0.4671	0.144	1.094
3	STD3	03	1.0000	0.3072	0.9986	0.307	2.316
4	STD4	04	2.5000	0.7556	2.4552	0.756	5.867
5	STD5	05	5.0000	1.5458	5.0252	1.546	12.099

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.7051
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9994

No.	Injection Name	Calibration Level	X Value Nitrite	Y Value Nitrite	Amount mg/l Nitrite	Area µS*min Nitrite	Height µS Nitrite
1	STD1	01	0.1000	0.0264	0.0374	0.026	0.192
2	STD2	02	0.5000	0.1463	0.4912	0.146	2.214
3	STD3	03	1.0000	0.7252	1.0342	0.729	4.512
4	STD4	04	2.5000	1.8017	2.5553	1.802	10.784
5	STD5	05	5.0000	3.5026	4.9676	3.503	20.045

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.1313
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9997

No.	Injection Name	Calibration Level	X Value Bromide	Y Value Bromide	Amount mg/l Bromide	Area µS*min Bromide	Height µS Bromide
1	STD1	01	0.1000	0.0119	0.0903	0.012	0.058
2	STD2	02	0.5000	0.0620	0.4723	0.062	0.296
3	STD3	03	1.0000	0.1260	0.9596	0.126	0.604
4	STD4	04	2.5000	0.3427	2.4569	0.323	1.562
5	STD5	05	5.0000	0.6610	5.0326	0.661	3.227

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.2252
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9998

No.	Injection Name	Calibration Level	X Value Sulfate	Y Value Sulfate	Amount mg/l Sulfate	Area µS*min Sulfate	Height µS Sulfate
1	STD1	01	0.1000	0.0286	0.1270	0.029	0.109
2	STD2	02	0.5000	0.1169	0.5190	0.117	0.438
3	STD3	03	1.0000	0.2258	0.9980	0.225	0.874
4	STD4	04	2.5000	0.5550	2.4651	0.555	2.236
5	STD5	05	5.0000	1.1292	5.0153	1.129	4.617

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.7470
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9984

No.	Injection Name	Calibration Level	X Value Nitrate	Y Value Nitrate	Amount mg/l Nitrate	Area µS*min Nitrate	Height µS Nitrate
1	STD1	01	0.1000	0.0525	0.0703	0.053	0.257
2	STD2	02	0.5000	0.3086	0.4131	0.309	1.361
3	STD3	03	1.0000	0.6754	0.9041	0.675	2.851
4	STD4	04	2.5000	1.8167	2.4320	1.817	7.179
5	STD5	05	5.0000	3.7817	5.0625	3.782	13.644

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.3123
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9989

No.	Injection Name	Calibration Level	X Value Phosphate	Y Value Phosphate	Amount mg/l Phosphate	Area µS*min Phosphate	Height µS Phosphate
1	STD1	01	0.1000	0.0161	0.0515	0.016	0.111
2	STD2	02	0.5000	0.1314	0.4206	0.131	0.835
3	STD3	03	1.0000	0.2926	0.9369	0.293	1.790
4	STD4	04	2.5000	0.7638	2.4465	0.764	4.385
5	STD5	05	5.0000	1.5769	5.0488	1.577	8.176

Amount Summary

Name:	**MAY0212RR**	*Calibration:*	**APRIL2112RR** **ARI # 593-01**
Directory:	**Instrument Data\MAY 2012**	*Calibration exp:*	~~5/8/2011~~ 5/22/12
Data Vault:	**ChromeleonLocal**	*Queue Start:*	**5/2/2012 16:56**
No. of Injections:	**28.000**	*User:*	**RR**

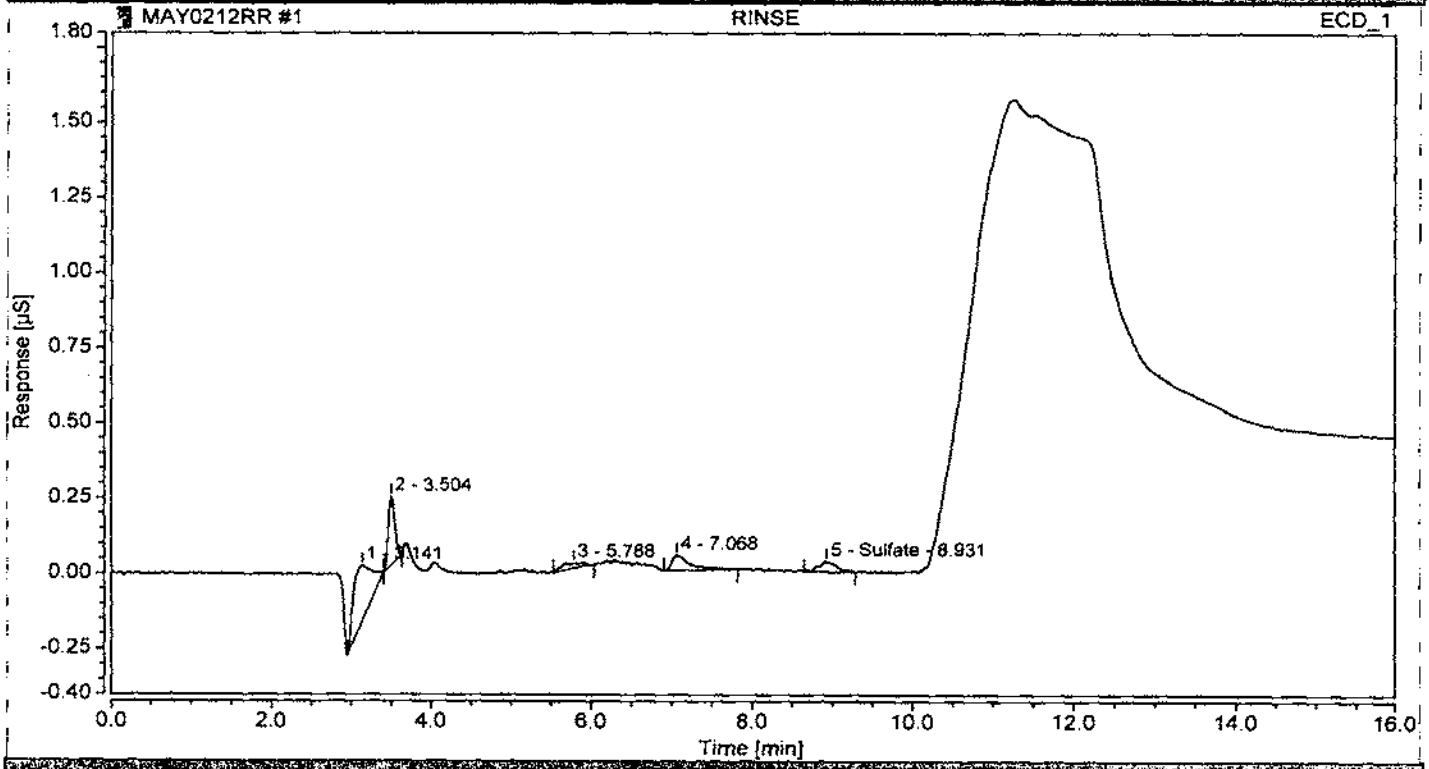
		ERA 161110	ERA 411010	ERA 401010	ERA 111109	ERA 160111	ERA 230511	ERA 200610
Name	Dilution	Amount n.a. Fluoride	Amount n.a. Chloride	Amount n.a. Nitrite	Amount n.a. Bromide	Amount n.a. Sulfate	Amount n.a. Nitrate	Amount n.a. Phosphate
RINSE	1.0	n.a.	n.a.	n.a.	n.a.	0.040	n.a.	n.a.
ICV	1.0	3.018	2.976	2.987	2.917	2.975	3.122	2.973
%R=		**100.5%**	**99.2%**	**99.6%**	**97.2%**	**99.2%**	**104.1%**	**99.1%**
ICB	1.0	n.a.	n.a.	n.a.	n.a.	0.042	n.a.	n.a.
			5.185			n.a.		0.374
			5.182			n.a.		0.326
%RPD=			**0.08%**	**9.22%**			**0.53%**	**13.56%**
			7.052			n.a.		1.822
%R=		**3.8%**	**93.3%**	**102.2%**	**66.1%**		**102.7%**	**91.1%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
			27.928			13.078	n.a.	n.a.
		0.300	37.889	n.a.	n.a.	22.435		n.a.
		0.320	37.933	n.a.	n.a.	22.414		n.a.
%RPD=		**6.30%**	**0.12%**			**0.09%**	**11.29%**	
		2.354	39.034	1.965	1.662	23.469		1.866
%R=		**102.7%**	**57.3%**	**98.3%**	**83.1%**	**51.7%**	**101.3%**	**93.3%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
		0.569	7.973	n.a.	n.a.			n.a.
		0.543	98.055	n.a.	0.295			1.097
US56 A2	1.0	18.676	6.060	n.a.	n.a.	n.a.	0.978	n.a.
CCV	1.0	2.945	3.018	3.013	2.918	2.972	3.116	2.959
%R=		**98.2%**	**100.6%**	**100.4%**	**97.3%**	**99.1%**	**103.9%**	**98.6%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.056	n.a.	n.a.
		0.394	9.603	n.a.	4.684		8.897	n.a.
		0.110		n.a.	n.a.	1.099	n.a.	1.090
		0.116		n.a.	n.a.	1.031	n.a.	1.112
%RPD=		**5.30%**	**0.23%**			**6.47%**		**1.97%**
		n.a.		n.a.	n.a.	1.502	n.a.	0.861
%R=			**102.7%**					
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
		n.a.		n.a.	n.a.		n.a.	n.a.
		n.a.		n.a.	n.a.		n.a.	n.a.
%RPD=			**1.76%**			**2.40%**		
		n.a.		n.a.	n.a.		n.a.	n.a.
%R=			**100.3%**			**98.5%**		
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
		0.237	8.677	n.a.	n.a.			n.a.
		0.503	57.605	n.a.	n.a.			n.a.
		0.370		n.a.	n.a.	12.475		n.a.
CCV	1.0	2.969	2.997	3.010	2.902	2.925	3.110	2.987
%R=		**99.0%**	**99.9%**	**100.3%**	**96.7%**	**97.5%**	**103.7%**	**99.6%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.053	n.a.	n.a.
STOP	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Name:	**MAY0212RR**	*Queue Start:*	**2012-05-02T16:56:16-**
Directory:	**Instrument Data\MAY 2012**	*Created By:*	**pat**
Data Vault:	**ChromeleonLocal**		
No. of Injections:	**28**		

No.	Injection Name	Position	Type	Level	Dilution	Inject Time
1	RINSE	1	Unknown		1.0	02/May/12 16:56:16
2	ICV	2	Check Standard	08	1.0	02/May/12 17:15:10
3	ICB	3	Blank		1.0	02/May/12 17:34:21
4	US45 A1	4	Unknown		1.0	02/May/12 17:53:38
5	US45 A1 DUP	5	Unknown		1.0	02/May/12 18:13:00
6	US45 A1 MS	6	Unknown		1.0	02/May/12 18:32:28
7	US45 B1	7	Unknown		1.0	02/May/12 18:52:02
8	US52 B1	8	Unknown		1.0	02/May/12 19:11:41
9	US52 G1 DUP	9	Unknown		1.0	02/May/12 19:31:26
10	US52 G1 MS	10	Unknown		1.0	02/May/12 19:51:16
11	US52 H1	11	Unknown		1.0	02/May/12 20:11:12
12	US52 I1	12	Unknown		1.0	02/May/12 20:31:13
13	US56 A2	13	Unknown		1.0	02/May/12 20:51:19
14	CCV	2	Check Standard	08	1.0	02/May/12 21:11:30
15	CCB	3	Blank		1.0	02/May/12 21:32:05
16	US26 B1	14	Unknown		10.0	02/May/12 21:52:47
17	US27 E1	15	Unknown		10.0	02/May/12 22:13:18
18	US27 E1 DUP	16	Unknown		10.0	02/May/12 22:33:49
19	US27 E1 MS	17	Unknown		20.0	02/May/12 22:54:27
20	US47 A2	18	Unknown		10.0	02/May/12 23:15:10
21	US47 A2 DUP	19	Unknown		10.0	02/May/12 23:35:59
22	US47 A2 MS	20	Unknown		20.0	02/May/12 23:55:18
23	US61 A12	21	Unknown		1.0	03/May/12 00:14:41
24	US61 B12	22	Unknown		1.0	03/May/12 00:35:12
25	US61 C12	23	Unknown		1.0	03/May/12 00:55:32
26	CCV	2	Check Standard	08	1.0	03/May/12 01:15:41
27	CCB	3	Blank		1.0	03/May/12 01:36:59
28	STOP	1	Unknown		1.0	03/May/12 01:58:19

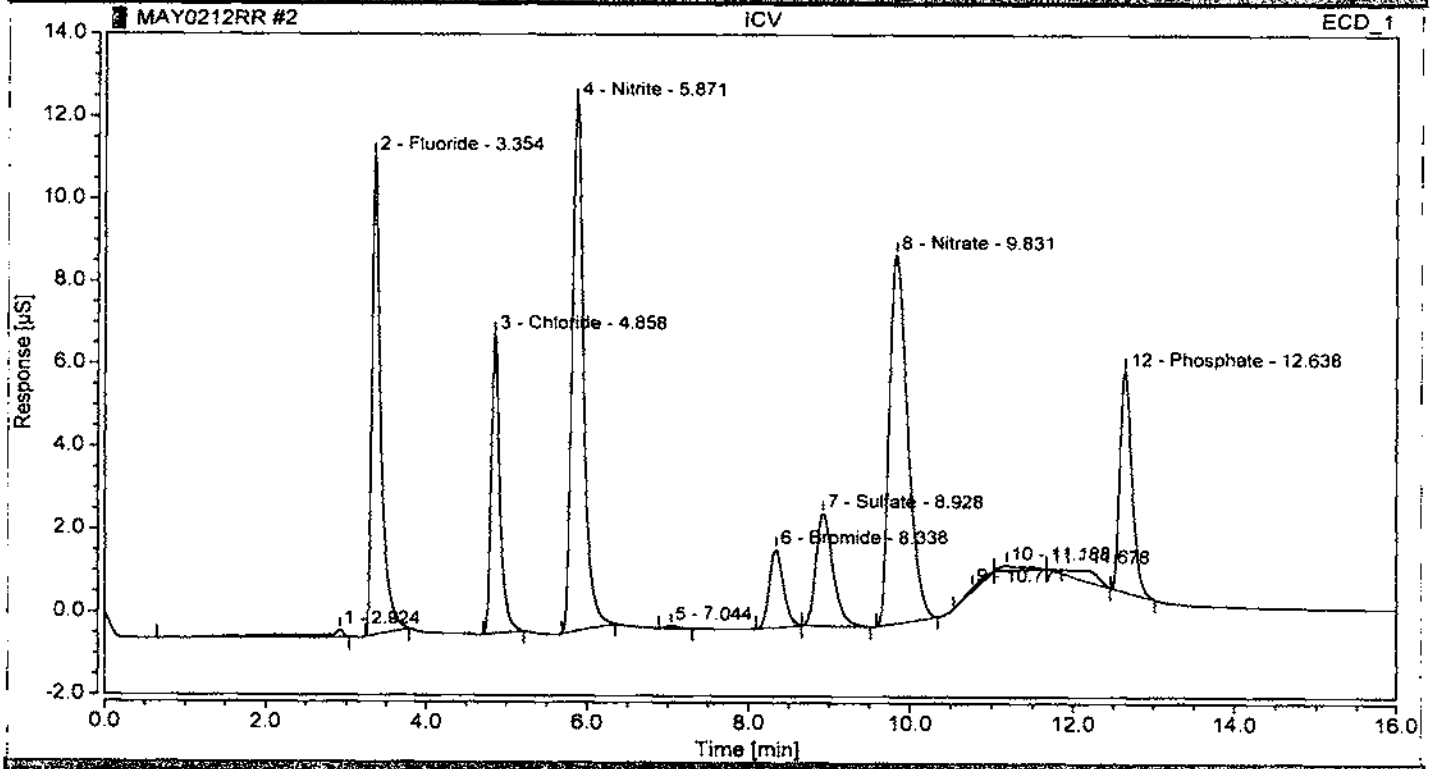
US52 : 01207

Injection Name:	*RINSE*	Inject Number:	1
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 16:56*		



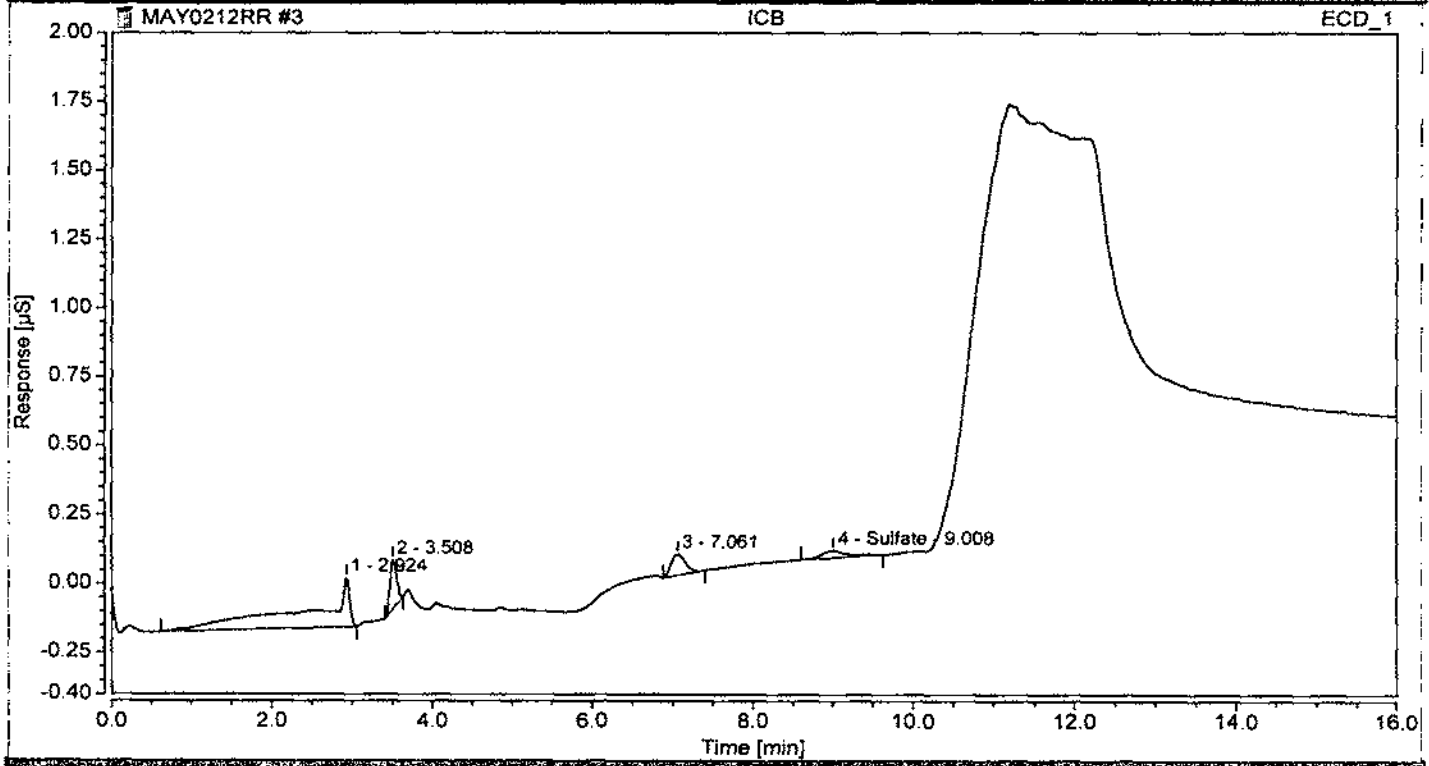
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1								
n.a.	Fluoride							
2								
n.a.	Chloride							
3								
n.a.	Nitrite							
4								
n.a.	Bromide							
5	Sulfate							
n.a.	Nitrate							
n.a.	Phosphate							

Injection Name:	*ICV*	Inject Number:	2
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 17:15*		



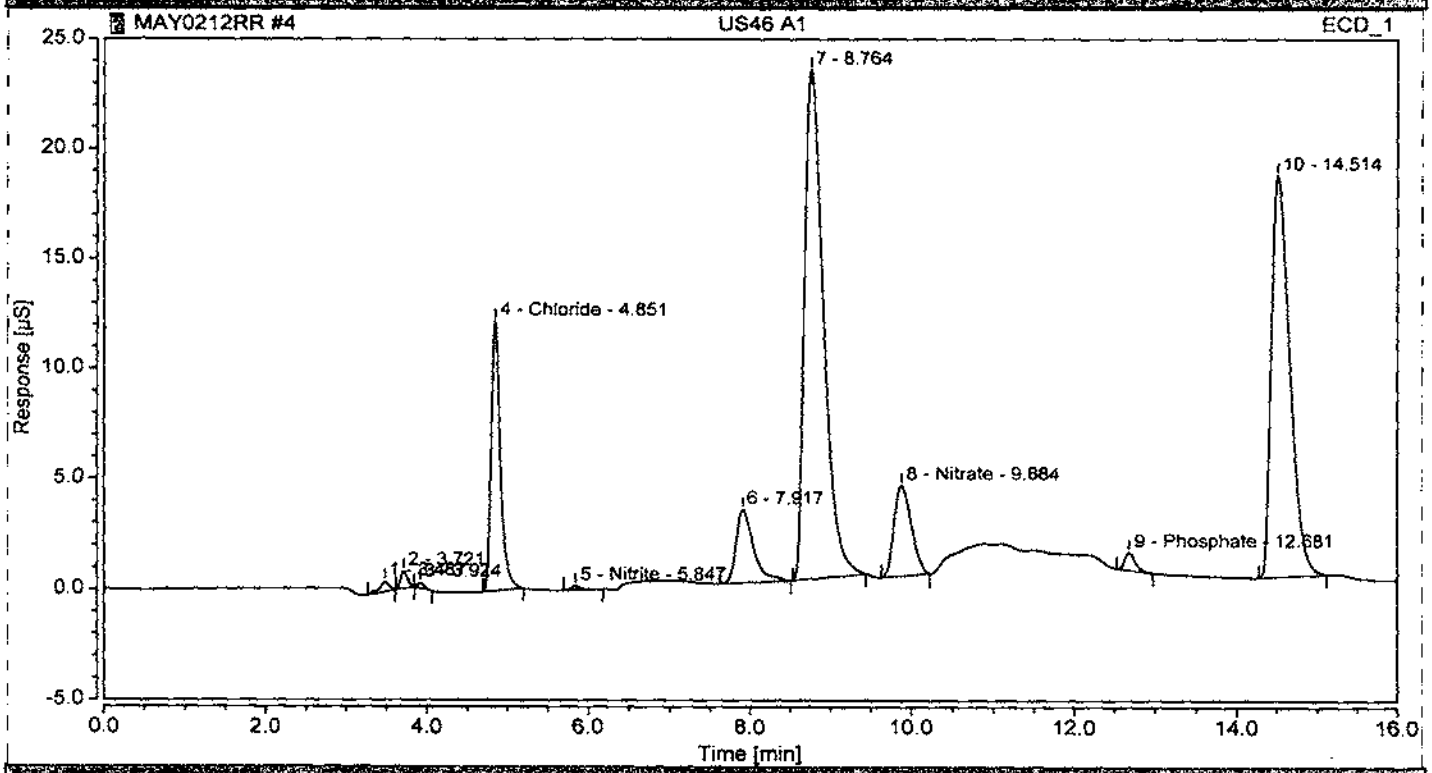
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.924	0.0096	0.180	FALSE	n.a.
2	Fluoride	1.0	3.064	3.354	0.1385	1.7596	FALSE	0.64
3	Chloride	1.0	2.970	4.858	0.2211	2.2917	FALSE	-0.79
4	Nitrite	1.0	2.987	5.871	0.2708	2.9421	FALSE	-0.42
5		1.0	n.a.	7.044	0.0124	0.0888	FALSE	n.a.
6	Bromide	1.0	2.926	8.338	0.0943	0.8983	FALSE	-2.76
7	Sulfate	1.0	2.994	8.928	0.2750	2.7101	FALSE	-0.82
8	Nitrate	1.0	3.021	9.831	0.2886	2.5916	FALSE	1.07
9		1.0	n.a.	10.777	0.0094	0.0983	FALSE	n.a.
10		1.0	n.a.	11.188	0.0412	0.3415	FALSE	n.a.
11		1.0	n.a.	11.678	0.001	0.001	FALSE	n.a.
12	Phosphate	1.0	2.975	12.638	0.629	5.812	FALSE	-0.89

Injection Name:	*ICB*	Inject Number:	3
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 17:34*		



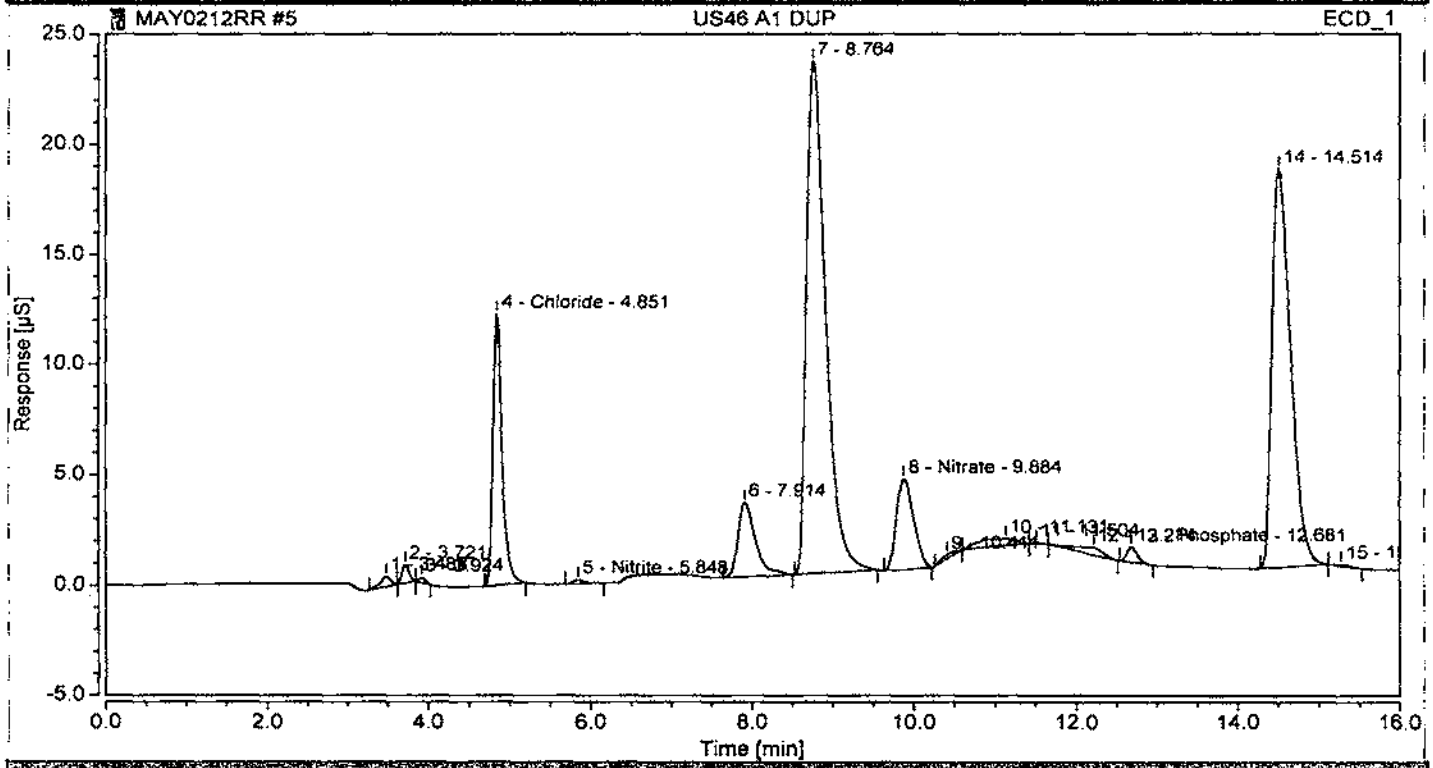
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.0171	0.179	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.0217	0.177	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.06	0.0076	0.076	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.0042	9.00	0.0097	0.087	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US46 A1*	Inject Number:	4
Vial Number:	*4*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 17:53*		



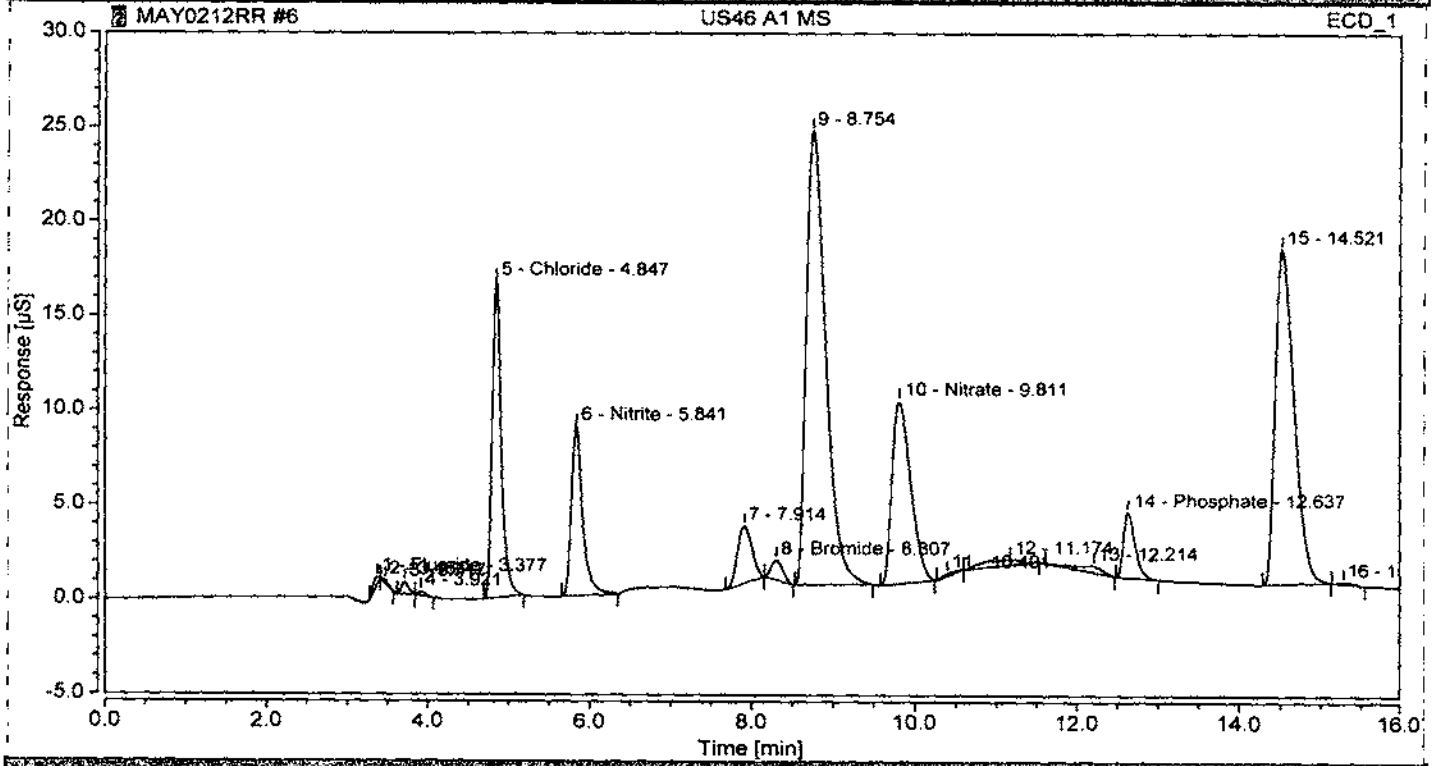
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.0	n.a.	3.721	0.0241	0.624	FALSE	n.a.
2		1.0	n.a.	3.978	0.0078	0.224	FALSE	n.a.
3		1.0	n.a.	4.352	0.0227	0.241	FALSE	n.a.
4	Chloride	1.0	5.10	4.851	1.565	12.218	FALSE	n.a.
5	Nitrite	1.0	0.0154	5.847	0.0264	0.178	FALSE	n.a.
6		1.0	n.a.	7.917	0.834	8.277	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	2.24	8.764	0.2296	23.860	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	1.30	9.884	0.355	2.4078	FALSE	n.a.
9	Phosphate	1.0	0.374	12.681	0.117	0.774	FALSE	n.a.
10		1.0	n.a.	14.51	4.823	18.184	FALSE	n.a.

Injection Name:	*US46 A1 DUP*	Inject Number:	5
Vial Number:	*5*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 18:13*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.0	n.a.	3.349	0.001	0.492	FALSE	n.a.
2		1.0	n.a.	3.721	0.000	0.017	FALSE	n.a.
3		1.0	n.a.	4.290	0.000	0.078	FALSE	n.a.
4	Chloride	1.0	0.510	4.851	0.042	2.270	FALSE	n.a.
5	Nitrite	1.0	n.a.	5.848	0.000	0.166	FALSE	n.a.
6		1.0	n.a.	7.914	0.000	0.290	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	8.764	0.000	23.490	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	n.a.	9.884	0.000	0.088	FALSE	n.a.
9		1.0	n.a.	10.444	0.000	0.078	FALSE	n.a.
10		1.0	n.a.	11.131	0.000	0.029	FALSE	n.a.
11		1.0	n.a.	11.504	0.000	0.050	FALSE	n.a.
12		1.0	n.a.	12.217	0.000	0.044	FALSE	n.a.
13	Phosphate	1.0	0.236	12.681	0.102	0.085	FALSE	n.a.
14		1.0	n.a.	14.514	4.790	148.068	FALSE	n.a.
15		1.0	n.a.	15.277	0.017	0.076	FALSE	n.a.

Injection Name:	*US46 A1 MS*	Inject Number:	6
Vial Number:	6	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 18:32*		



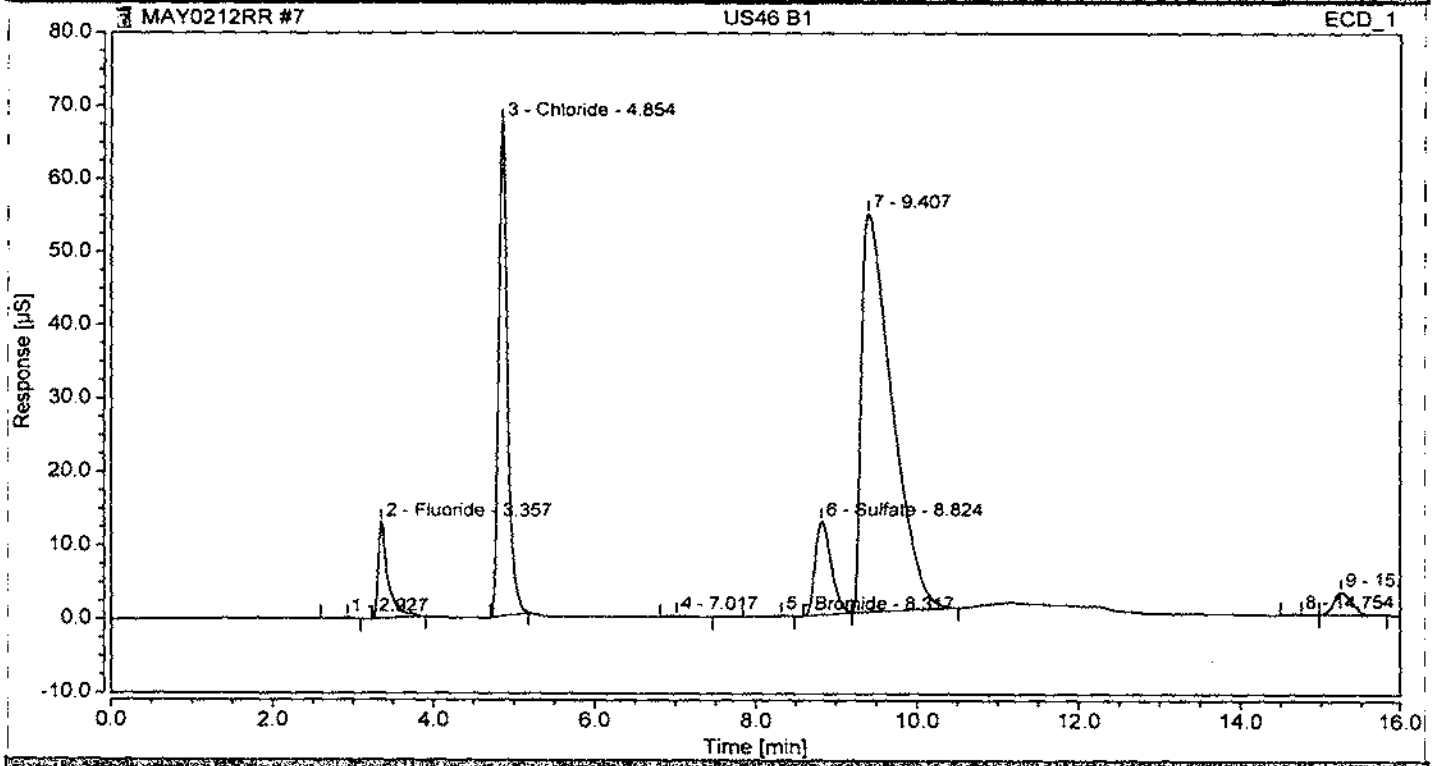
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	1.0	0.077	3.377	0.036	0.366	FALSE	n.a.
2		1.0	n.a.	3.921	0.010	0.168	FALSE	n.a.
3		1.0	n.a.	5.172	0.023	0.334	FALSE	n.a.
4		1.0	n.a.	5.475	0.021	0.225	FALSE	n.a.
5	Chloride	1.0	0.464	4.847	0.168	1.741	FALSE	n.a.
6	Nitrite	1.0	0.328	5.841	0.124	0.978	FALSE	n.a.
7		1.0	n.a.	7.914	0.020	0.207	FALSE	n.a.
8	Bromide	1.0	n.a.	8.807	0.013	0.150	FALSE	n.a.
9		1.0	n.a.	8.754	0.168	2.000	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	9.811	0.168	1.000	FALSE	n.a.
10	Nitrate	1.0	0.330	10.40	0.120	0.677	FALSE	n.a.
11		1.0	n.a.	11.174	0.023	0.117	FALSE	n.a.
12		1.0	n.a.	12.214	0.076	0.562	FALSE	n.a.
13		1.0	n.a.	12.637	0.019	0.090	FALSE	n.a.
14	Phosphate	1.0	1.522	14.521	0.569	3.438	FALSE	n.a.
15		1.0	n.a.	14.752	0.662	17.897	FALSE	n.a.
16		1.0	n.a.	15.281	0.019	0.086	FALSE	n.a.

Chromatogram and Results

Injection Details

Injection Name:	*US46 B1*	Inject Number:	7
Vial Number:	*7*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodai*		
Injection Date/Time:	*02/05/12 18:52*		

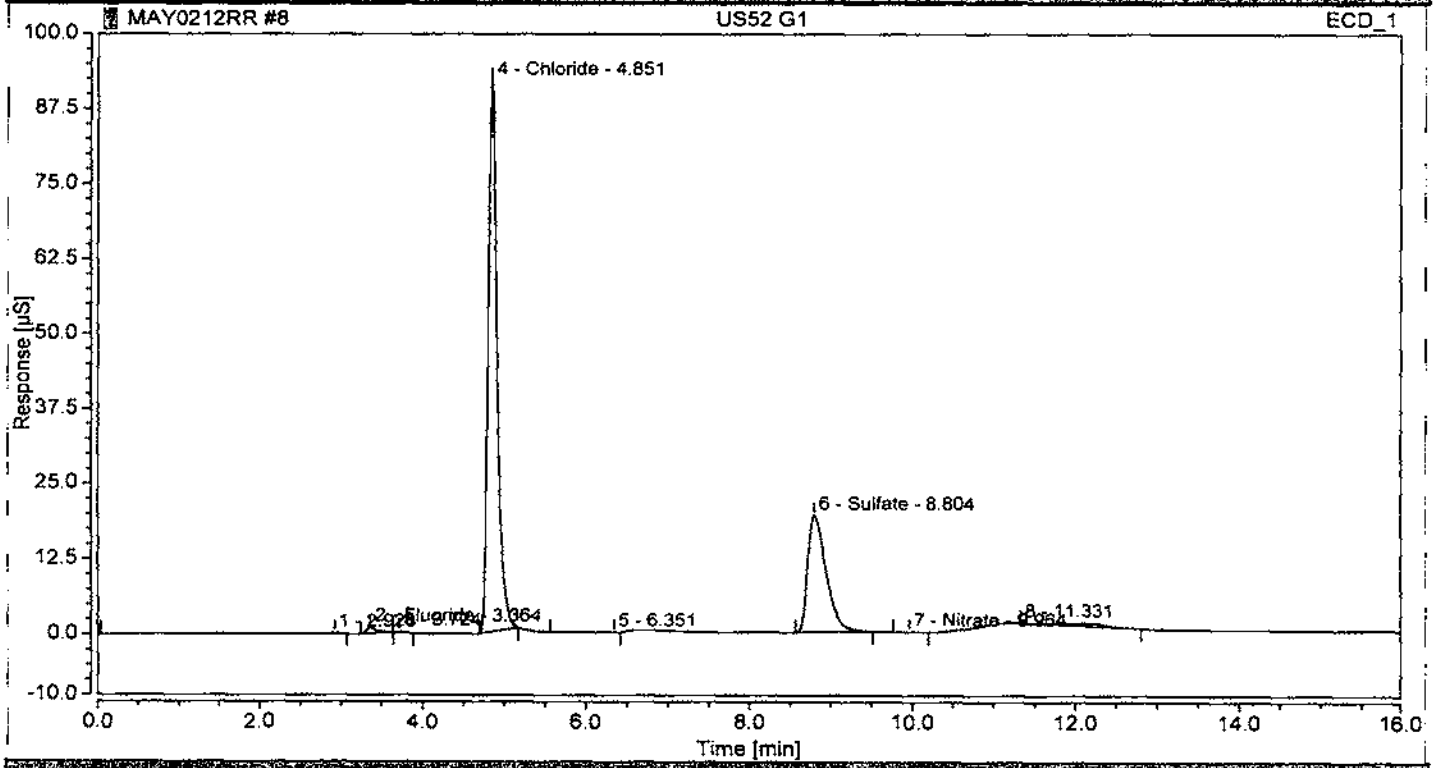
Chromatogram



Integration Results

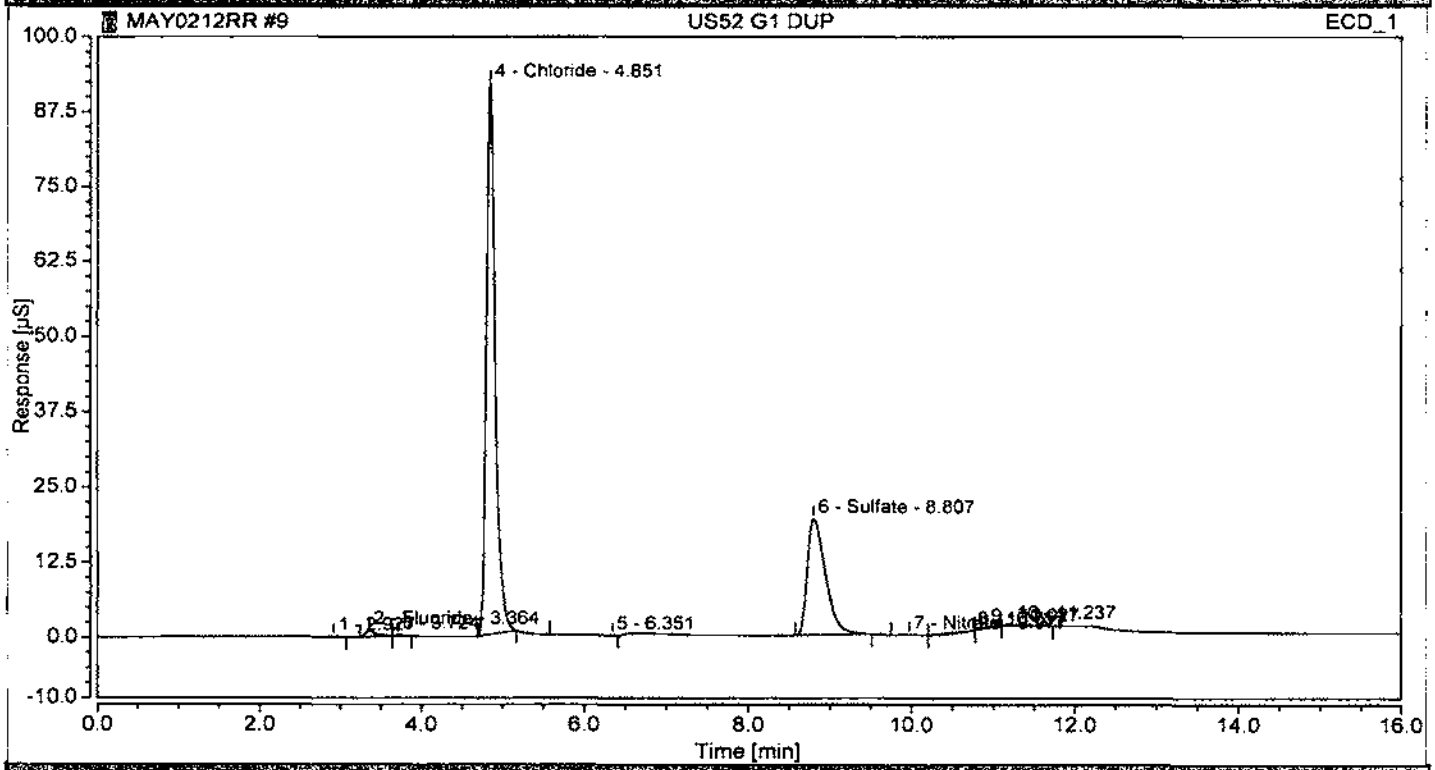
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.017	0.144	FALSE	n.a.
2	Fluoride	1.0	3.756	3.36	1.862	13.062	FALSE	n.a.
3	Chloride	1.0	27.928	4.85	8.591	67.400	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.02	0.053	0.184	FALSE	n.a.
5	Bromide	1.0	0.209	8.32	0.027	0.129	FALSE	n.a.
6	Sulfate	1.0	13.078	8.82	2.945	12.558	FALSE	n.a.
7		1.0	n.a.	9.41	23.528	54.178	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		1.0	n.a.	14.75	0.023	0.101	FALSE	n.a.
9		1.0	n.a.	15.25	0.796	3.112	FALSE	n.a.

Injection Name:	*US52 G1*	Inject Number:	8
Vial Number:	*8*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 19:11*		



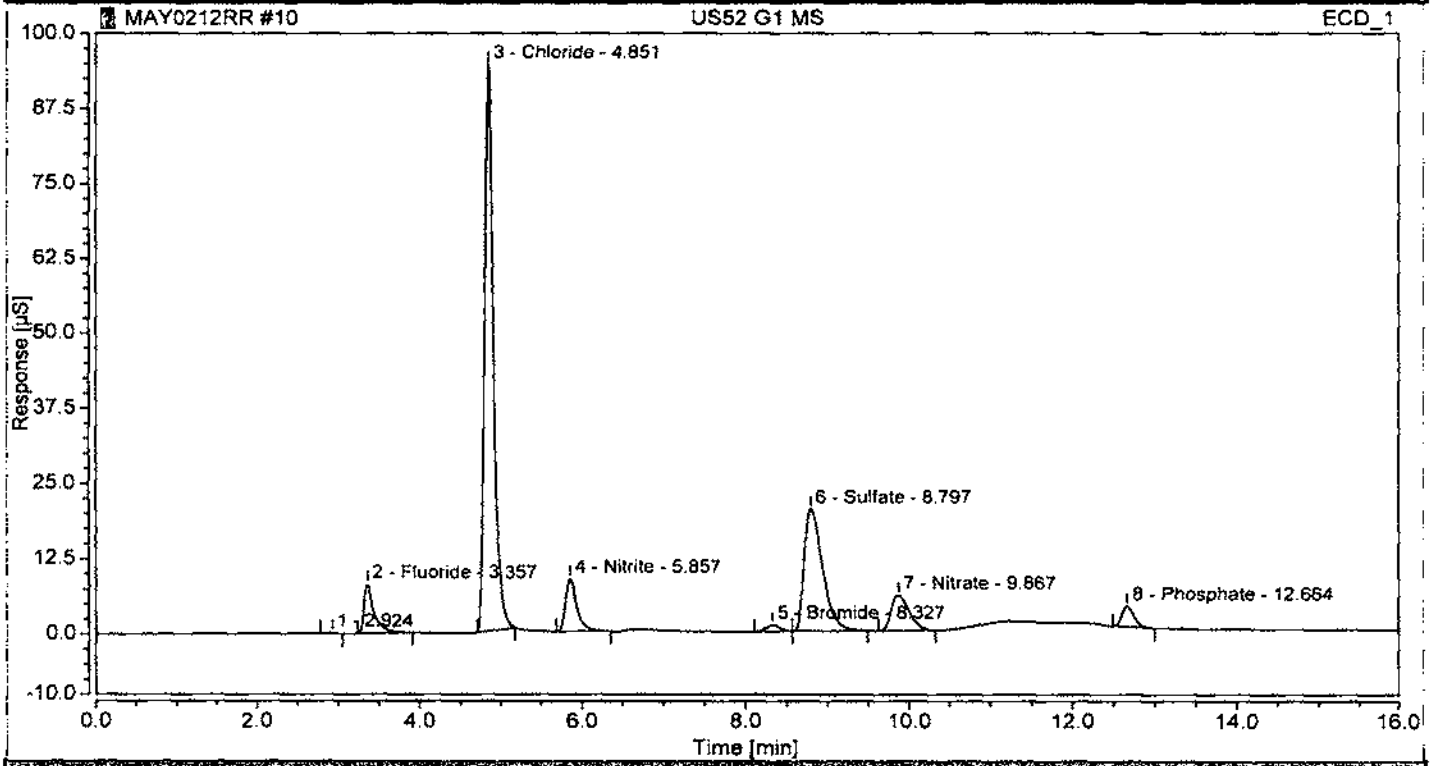
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.953	0.136	0.139	FALSE	n.a.
2	Fluoride	1.0	0.000	3.364	0.149	1.039	FALSE	n.a.
3		1.0	n.a.	4.272	0.017	0.180	FALSE	n.a.
4	Chloride	1.0	7.989	4.851	1.869	31.677	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.351	0.028	0.071	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	2.435	8.804	1.041	19.350	FALSE	n.a.
7	Nitrate	1.0	n.a.	9.331	0.030	0.041	FALSE	n.a.
8		1.0	n.a.	11.331	0.286	0.000	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 DUP*	Inject Number:	9
Vial Number:	*9*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 19:31*		



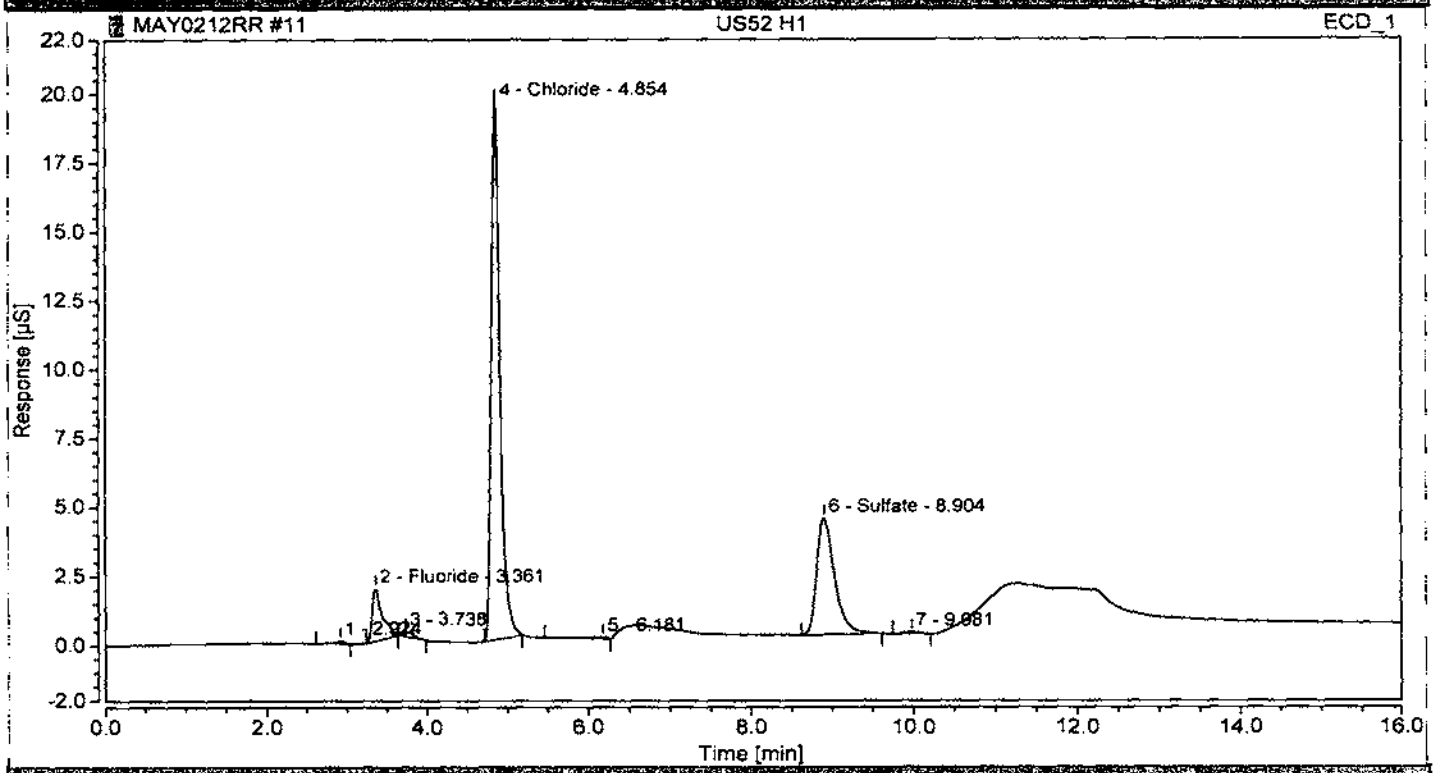
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.				FALSE	n.a.
2	Fluoride	1.0					FALSE	n.a.
3		1.0					FALSE	n.a.
4	Chloride	1.0					FALSE	n.a.
n.a.	Nitrite	1.0	n.a.			n.a.	n.a.	n.a.
5		1.0					FALSE	n.a.
n.a.	Bromide	1.0	n.a.			n.a.	n.a.	n.a.
6	Sulfate	1.0					FALSE	n.a.
7	Nitrate	1.0					FALSE	n.a.
8		1.0					FALSE	n.a.
9		1.0					FALSE	n.a.
10		1.0					FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	10
Vial Number:	*10*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 19:51*		



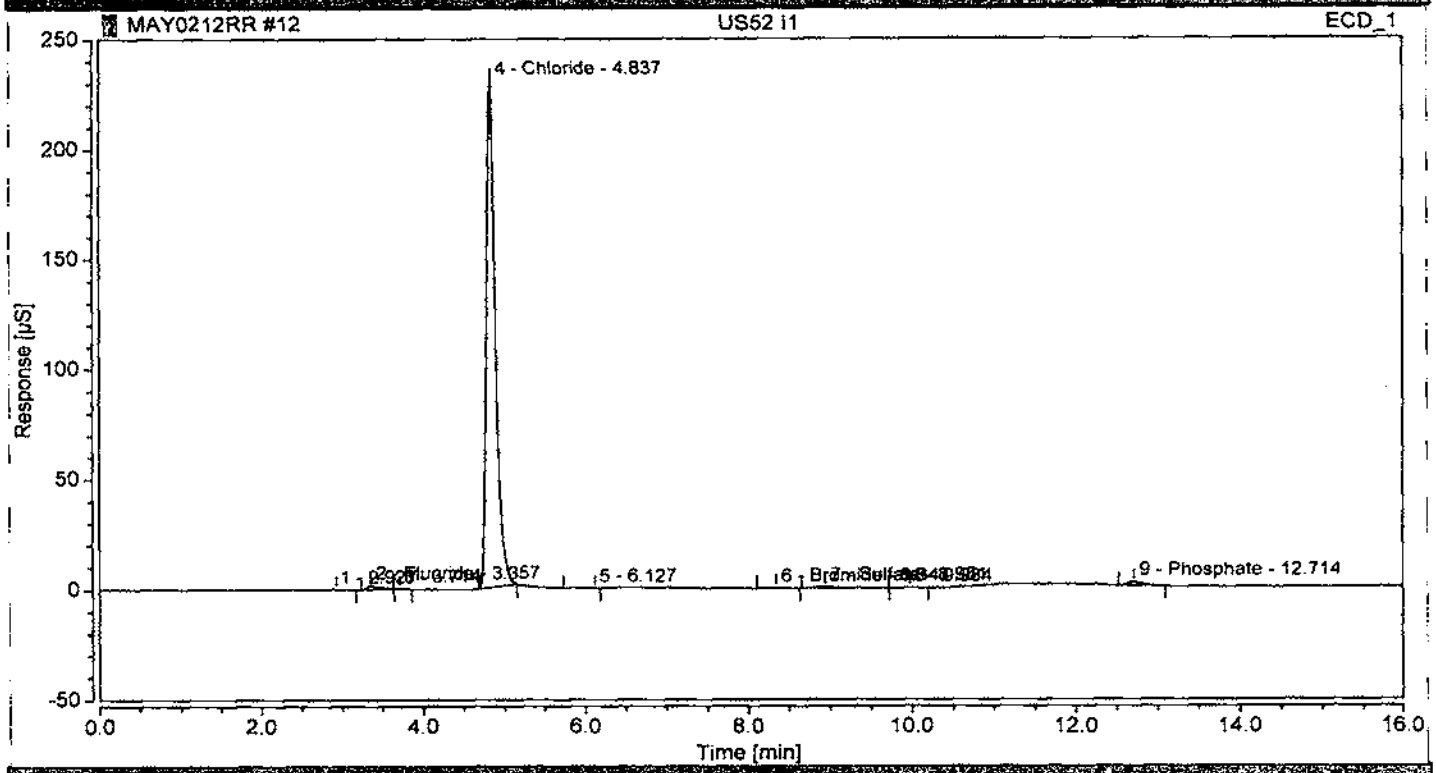
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0		2.924	0.610	0.112	FALSE	n.a.
2	Fluoride	1.0	0.238	3.357	1.167	0.160	FALSE	n.a.
3	Chloride	1.0	0.910	4.851	12.067	1.324	FALSE	n.a.
4	Nitrite	1.0	0.276	5.857	1.286	0.423	FALSE	n.a.
5	Bromide	1.0	0.127	8.327	0.748	0.139	FALSE	n.a.
6	Sulfate	1.0	0.360	8.797	1.268	0.228	FALSE	n.a.
7	Nitrate	1.0	0.067	9.867	0.510	0.064	FALSE	n.a.
8	Phosphate	1.0	1.866	12.654	0.569	3.487	FALSE	n.a.

Injection Name:	*US52 H1*	Inject Number:	11
Vial Number:	*11*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 20:11*		



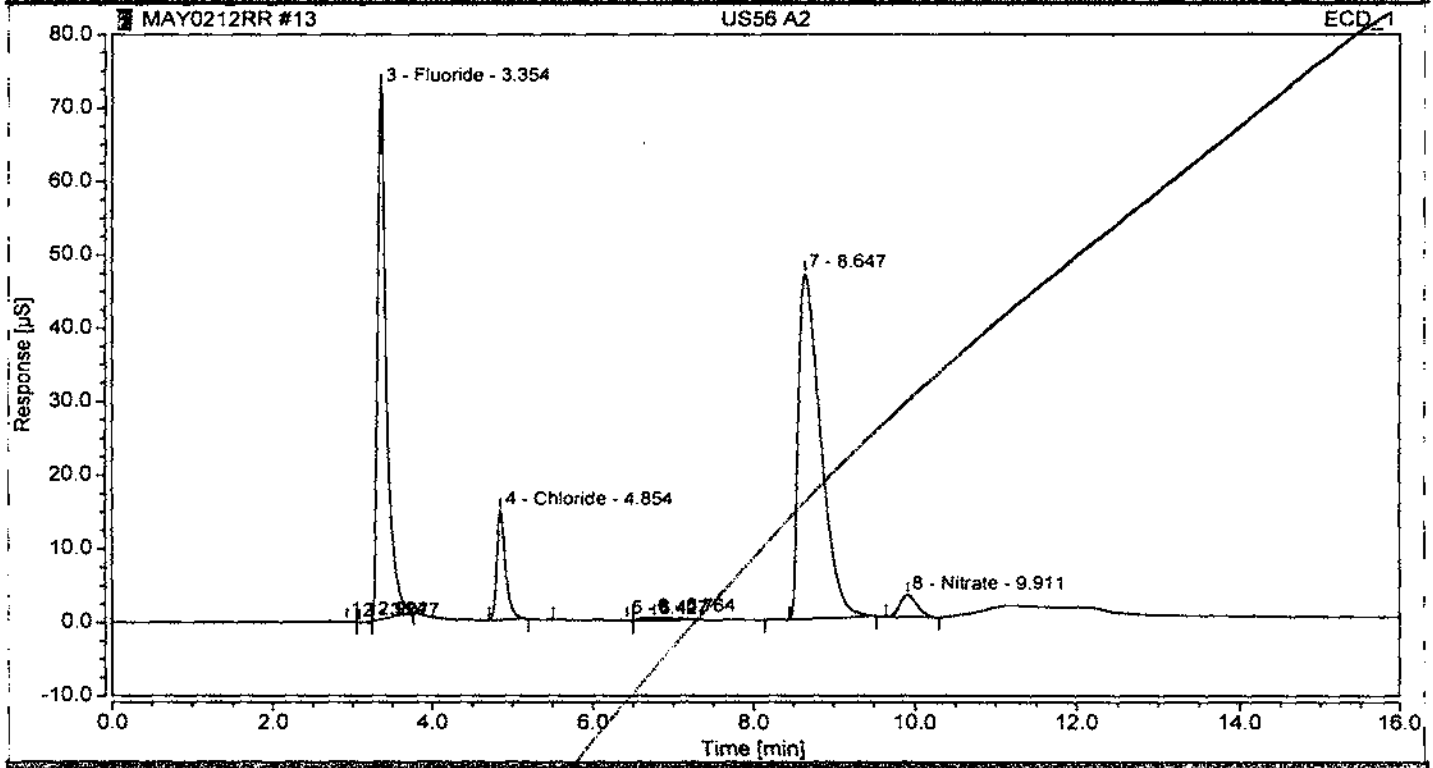
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.0134	0.717	FALSE	n.a.
2	Fluoride	1.0	0.0905	3.36	0.262	1.854	FALSE	n.a.
3		1.0	n.a.	3.74	0.0139	0.775	FALSE	n.a.
4	Chloride	1.0	2.507	4.85	7.485	39.507	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.18	0.025	0.165	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	4.794	8.90	1.078	4.263	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	9.68	0.0184	0.0964	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 I1*	Inject Number:	12
Vial Number:	*12*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 20:31*		



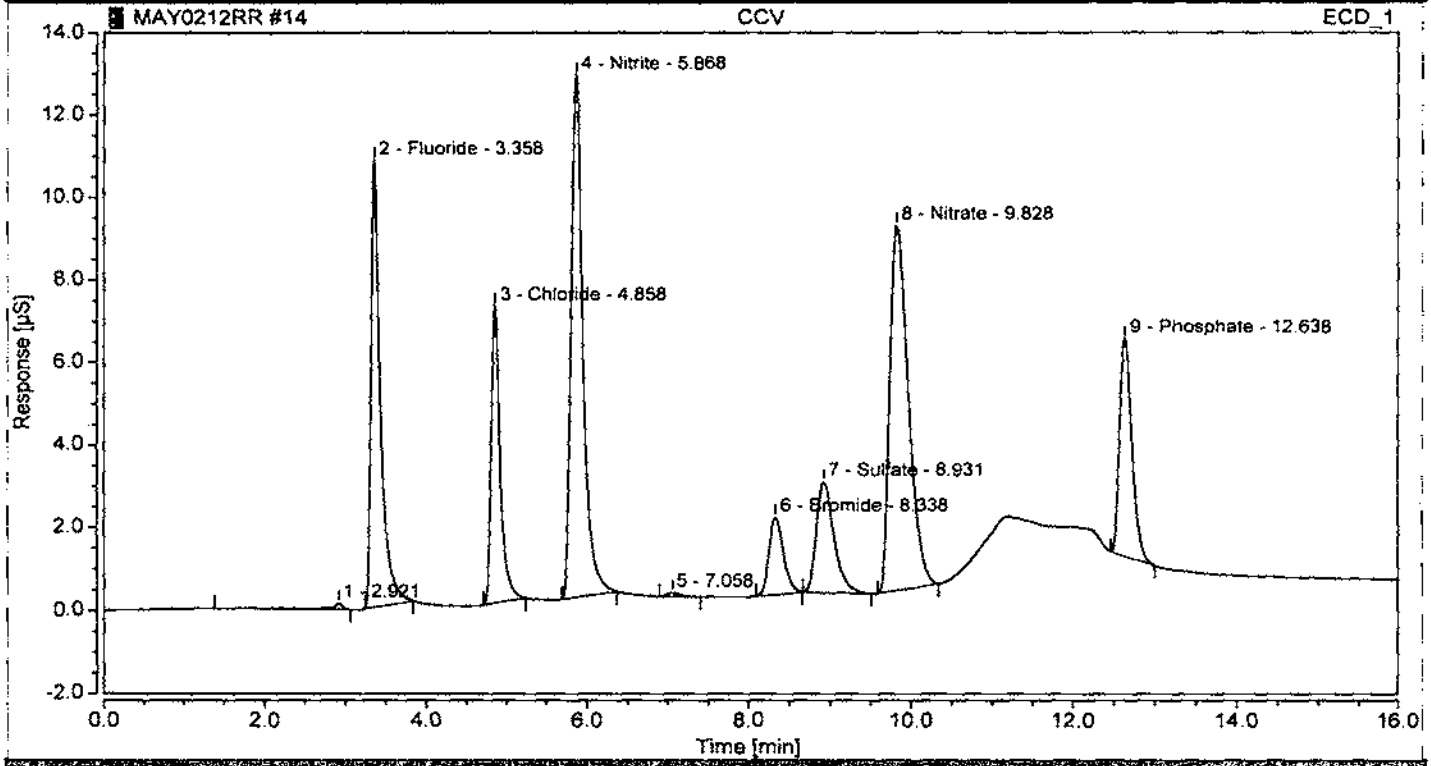
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0			0.138	0.099	FALSE	n.a.
2	Fluoride	1.0	0.021	3.357	0.269	0.751	FALSE	n.a.
3		1.0			0.014	0.023	FALSE	n.a.
4	Chloride	1.0	0.291	4.837	0.139	1.206	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0			0.013	0.026	FALSE	n.a.
6	Bromide	1.0	0.000	8.239	0.000	0.000	FALSE	n.a.
7	Sulfate	1.0	n.d.	8.961	0.102	0.572	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		1.0	n.a.	9.938	0.008	0.036	FALSE	n.a.
9	Phosphate	1.0	1.097	12.71	0.345	1.794	FALSE	n.a.

Injection Name:	*US56 A2*	Inject Number:	13
Vial Number:	*13*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 20:51*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1						0.138	FALSE	n.a.
2						0.022	FALSE	n.a.
3	Fluoride						FALSE	n.a.
4	Chloride						FALSE	n.a.
n.a.	Nitrite					n.a.	n.a.	n.a.
5						0.079	FALSE	n.a.
6							FALSE	n.a.
n.a.	Bromide					n.a.	n.a.	n.a.
7							FALSE	n.a.
n.a.	Sulfate					n.a.	n.a.	n.a.
8	Nitrate						FALSE	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

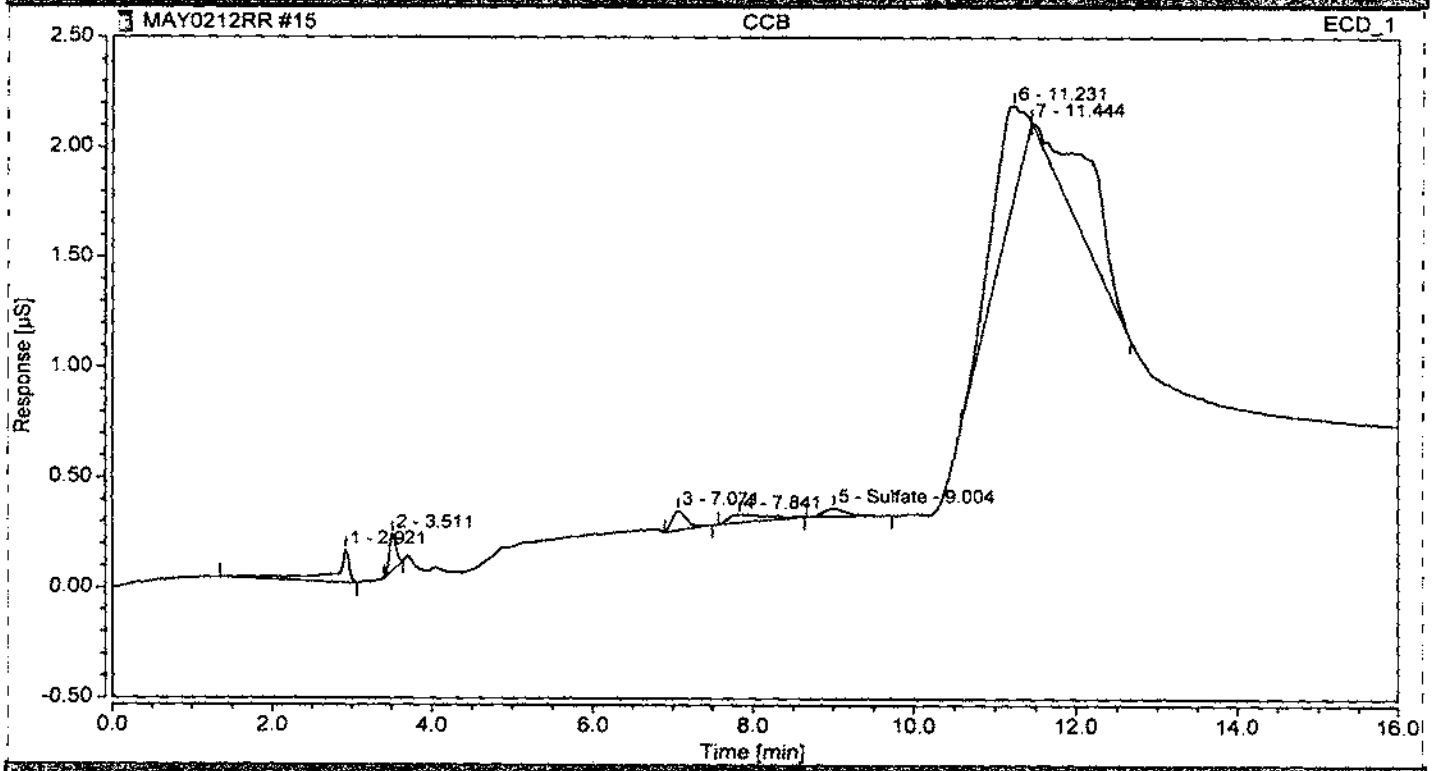
Injection Name:	*CCV*	Inject Number:	14
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 21:11*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	uS		mg/l
1		1.0	n.a.	2.92	0.033	0.140	FALSE	n.a.
2	Fluoride	1.0	2.048	3.36	0.350	1.716	FALSE	-1.84
3	Chloride	1.0	3.018	4.86	0.536	2.180	FALSE	0.69
4	Nitrite	1.0	5.031	5.87	2.252	12.540	FALSE	0.43
5		1.0	n.a.	7.06	0.031	0.083	FALSE	n.a.
6	Bromide	1.0	2.011	8.34	0.218	0.662	FALSE	-2.72
7	Sulfate	1.0	3.012	8.93	0.358	2.029	FALSE	0.94
8	Nitrate	1.0	5.116	9.83	0.755	5.630	FALSE	3.88
9	Phosphate	1.0	2.959	12.64	0.624	5.279	FALSE	-1.36

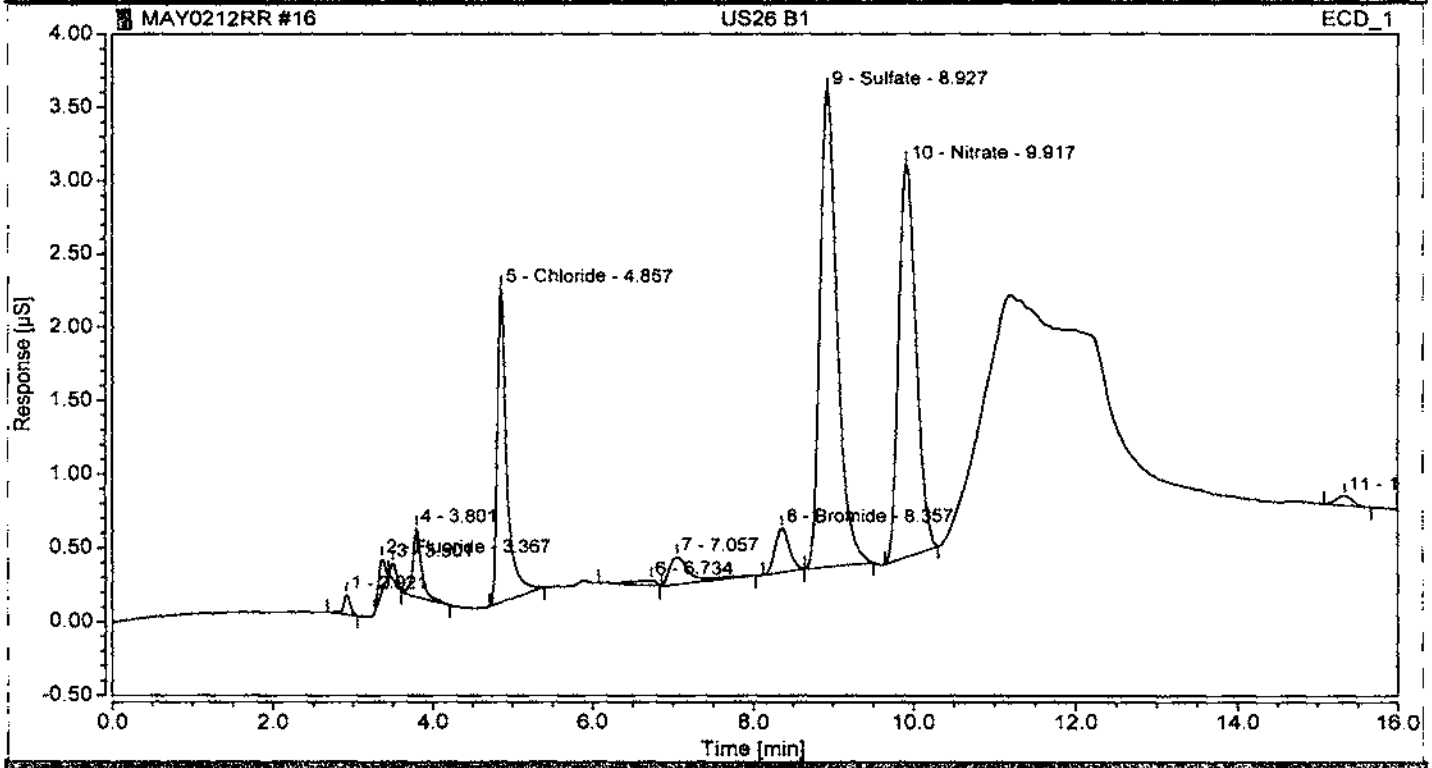
US52 : 01221

Injection Name:	*CCB*	Inject Number:	15
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 21:32*		



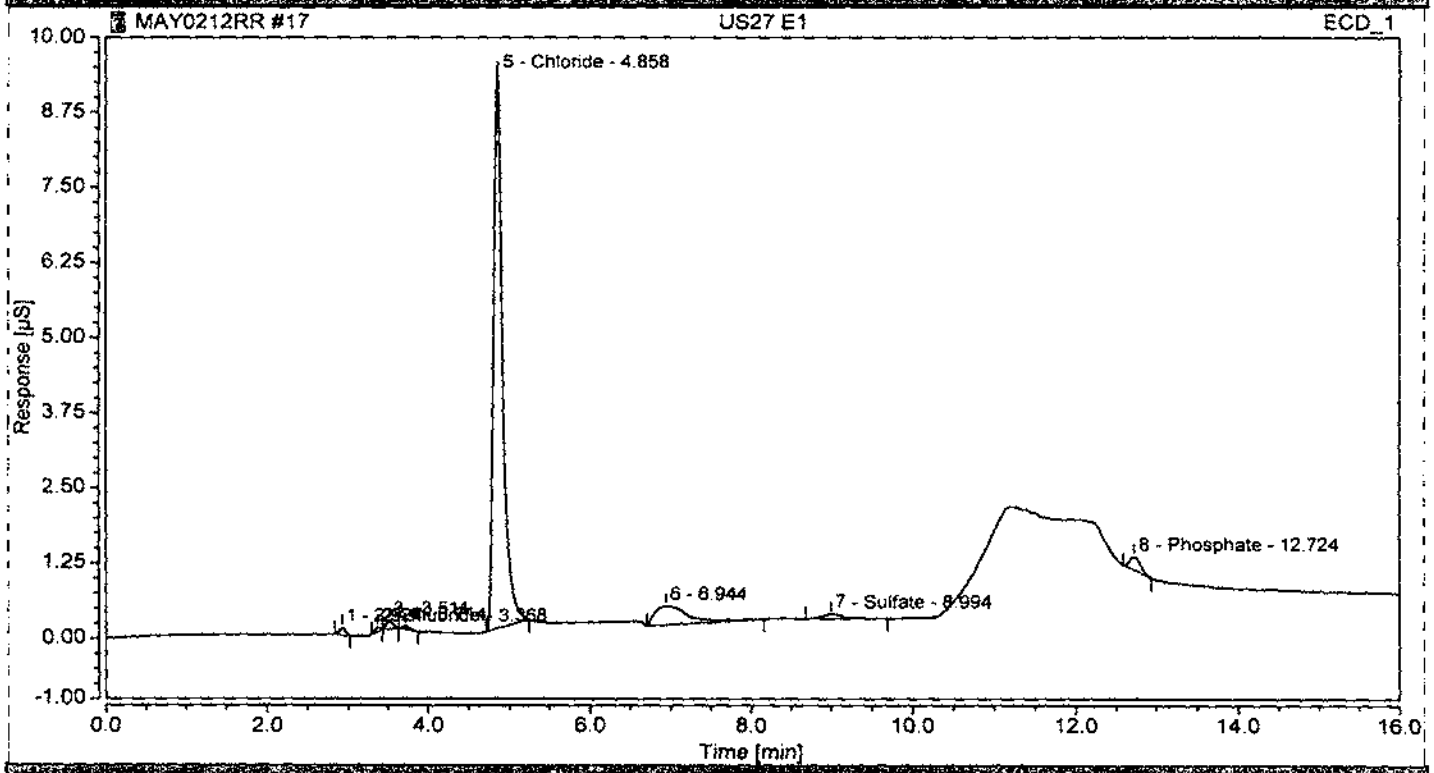
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
n.a.	Fluoride						n.a.	n.a.
2							FALSE	n.a.
n.a.	Chloride						n.a.	n.a.
n.a.	Nitrite						n.a.	n.a.
3							FALSE	n.a.
4							FALSE	n.a.
n.a.	Bromide						n.a.	n.a.
5	Sulfate						FALSE	n.a.
n.a.	Nitrate						n.a.	n.a.
6							FALSE	n.a.
7							FALSE	n.a.
n.a.	Phosphate						n.a.	n.a.

Injection Name:	*US26 B1*	Inject Number:	16
Vial Number:	*14*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 21:52*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
2	Fluoride						FALSE	n.a.
3							FALSE	n.a.
4							FALSE	n.a.
5	Chloride						FALSE	n.a.
n.a.	Nitrite						n.a.	n.a.
6							FALSE	n.a.
7							FALSE	n.a.
8	Bromide						FALSE	n.a.
9	Sulfate						FALSE	n.a.
10	Nitrate						FALSE	n.a.
n.a.	Phosphate						n.a.	n.a.
11		10.0	n.a.	15.33	0.015	0.065	FALSE	n.a.

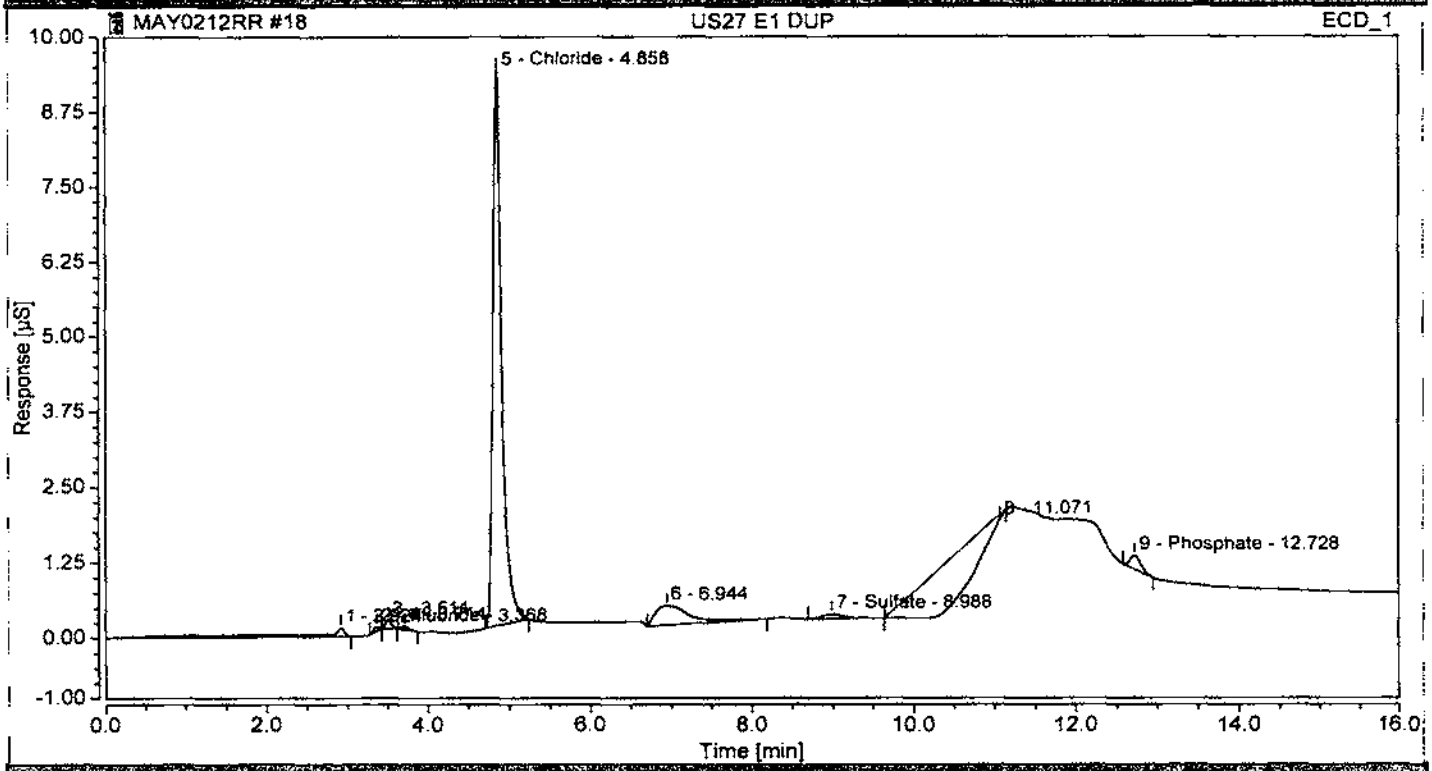
Injection Name:	*US27 E1*	Inject Number:	17
Vial Number:	*15*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:13*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.				FALSE	n.a.
2	Fluoride	10.0					FALSE	n.a.
3		10.0					FALSE	n.a.
4		10.0					FALSE	n.a.
5	Chloride	10.0					FALSE	n.a.
n.a.	Bromide	10.0	n.a.				n.a.	n.a.
6		10.0					FALSE	n.a.
n.a.	Bromide	10.0	n.a.				n.a.	n.a.
7	Sulfate	10.0					FALSE	n.a.
n.a.	Nitrate	10.0	n.a.				n.a.	n.a.
8	Phosphate	10.0					FALSE	n.a.

US52 : 01224

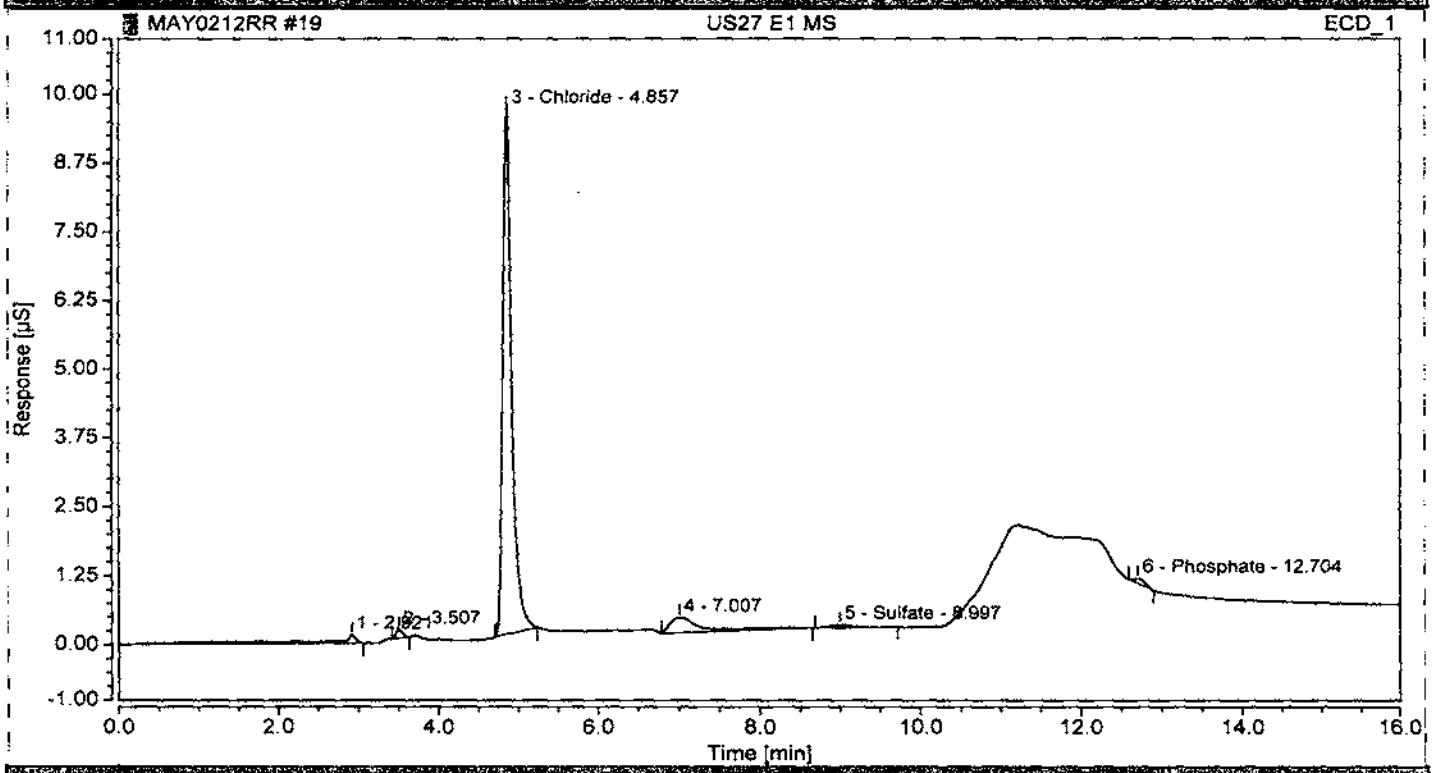
Injection Name:	*US27 E1 DUP*	Inject Number:	18
Vial Number:	*16*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:33*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.32	0.109	0.110	FALSE	n.a.
2	Fluoride	10.0	0.10	3.37	0.024	0.020	FALSE	n.a.
3		10.0	n.a.	3.61	0.009	0.009	FALSE	n.a.
4		10.0	n.a.	3.97	0.007	0.007	FALSE	n.a.
5	Chloride	10.0	3.07	4.86	1.196	0.235	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	n.a.	6.94	0.030	0.010	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	1.51	8.99	0.615	0.075	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		10.0	n.a.	11.07	0.680	0.085	FALSE	n.a.
9	Phosphate	10.0	1.12	12.73	0.036	0.225	FALSE	n.a.

US52 : 01225

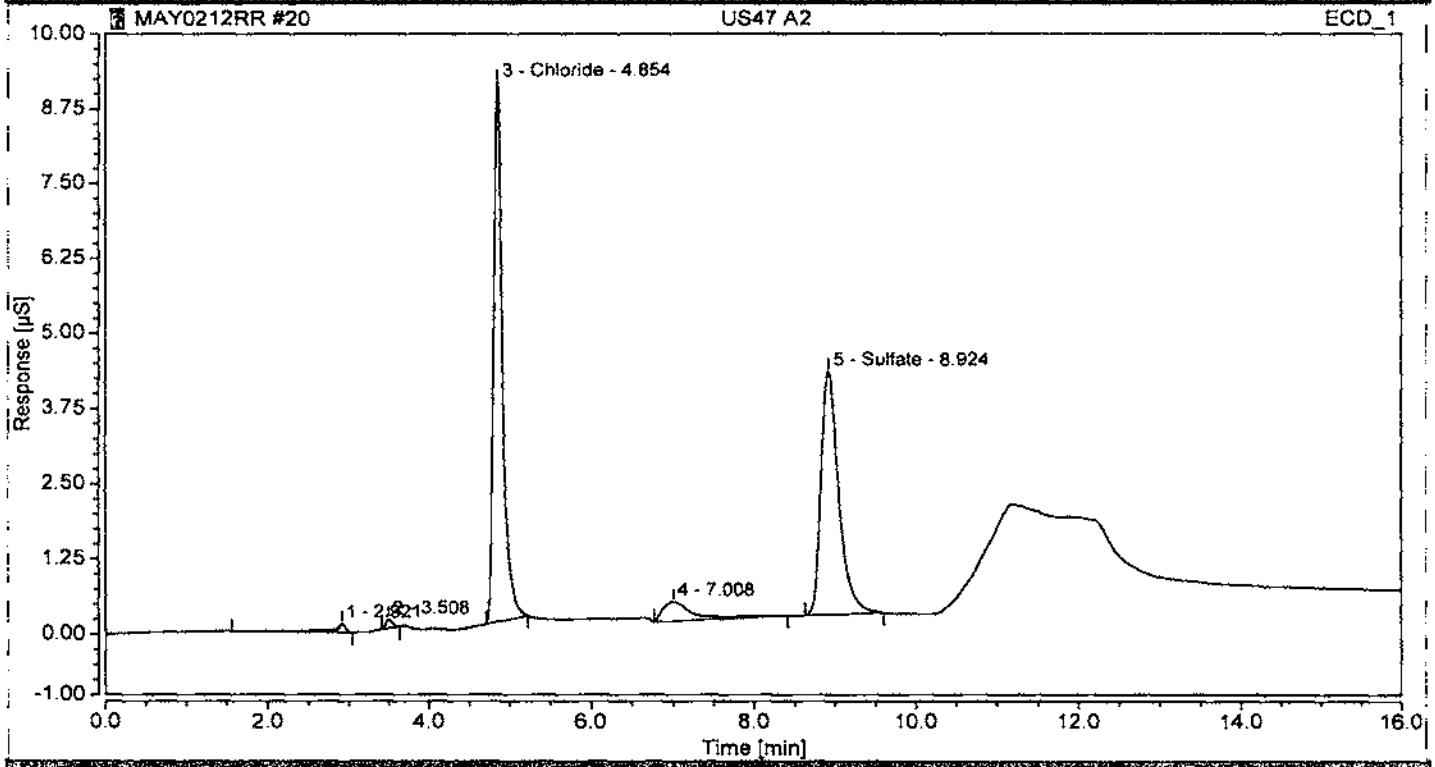
Injection Name:	*US27 E1 MS*	Inject Number:	19
Vial Number:	*17*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:54*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
n.a.	Fluoride						n.a.	n.a.
2							FALSE	n.a.
3	Chloride						FALSE	n.a.
n.a.	Nitrite						n.a.	n.a.
4							FALSE	n.a.
n.a.	Bromide						n.a.	n.a.
5	Sulfate						FALSE	n.a.
n.a.	Nitrate						n.a.	n.a.
6	Phosphate	20.0	0.861	12.70	0.013	0.086	FALSE	n.a.

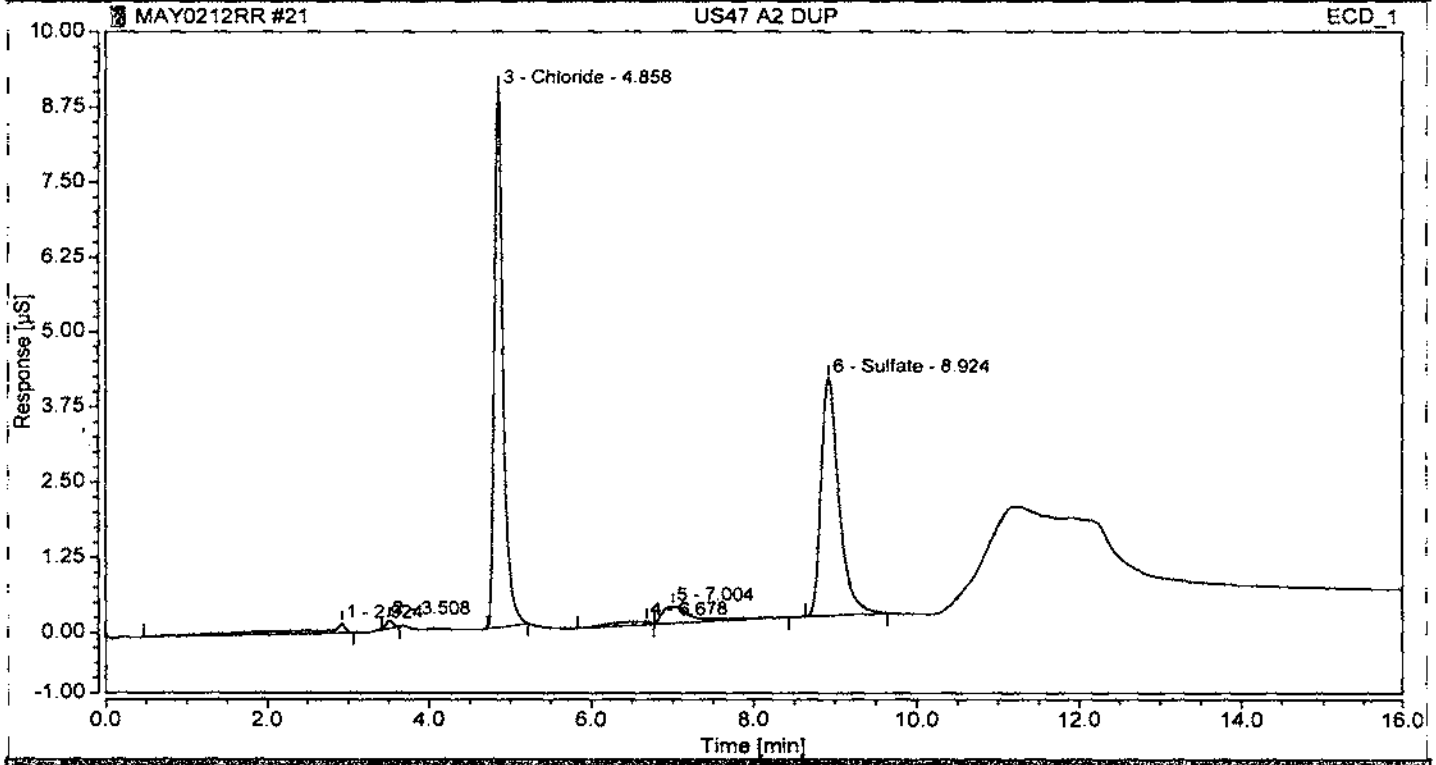
US52 : 01225

Injection Name:	*US47 A2*	Inject Number:	20
Vial Number:	*18*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodaf*		
Injection Date/Time:	*02/05/12 23:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.034	0.147	FALSE	n.a.
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.508	0.046	0.146	FALSE	n.a.
3	Chloride	10.0	37.008	4.854	6.154	6.784	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.008	0.430	0.920	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	58.500	8.92	11.924	4.043	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

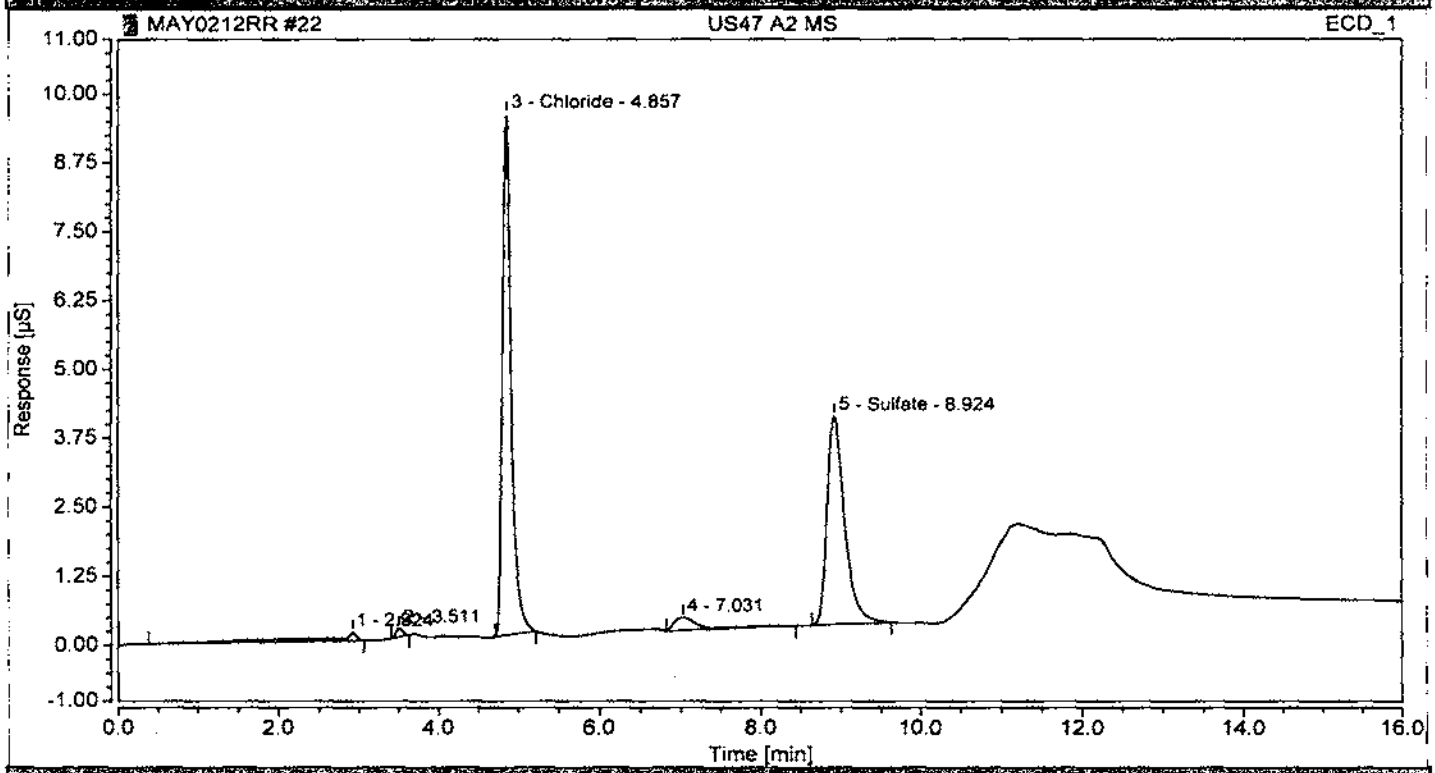
Injection Name:	*US47 A2 DUP*	Inject Number:	21
Vial Number:	*19*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodaf*		
Injection Date/Time:	*02/05/12 23:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.055	0.158	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.51	0.014	0.144	FALSE	n.a.
3	Chloride	10.0	30.365	4.858	1.451	0.504	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	5.861	0.037	0.057	FALSE	n.a.
5		10.0	n.a.	7.004	0.049	0.074	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	10.0	53.421	8.924	1.000	0.558	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

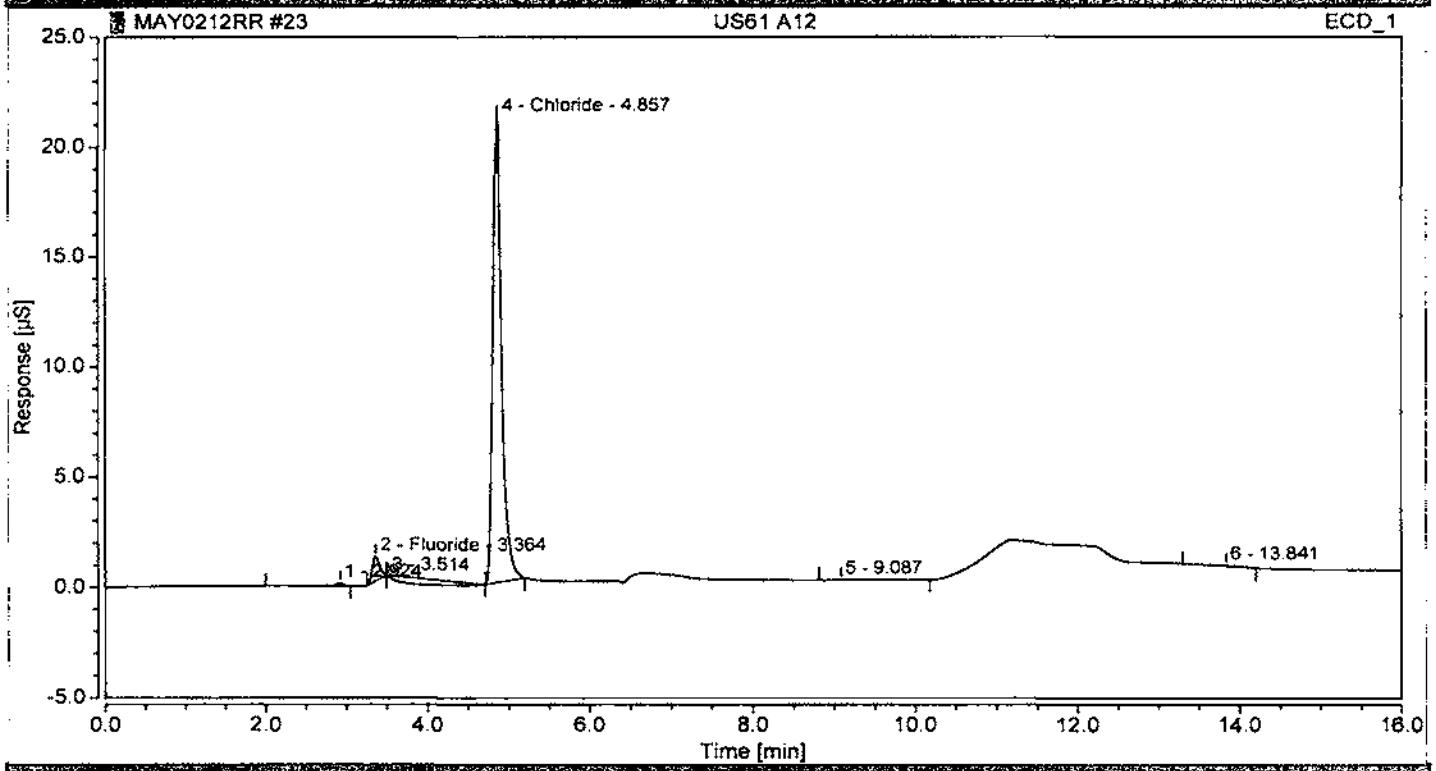
US52 : 01228

Injection Name:	*US47 A2 MS*	Inject Number:	22
Vial Number:	*20*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:55*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.92	0.190	0.154	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.58	0.045	0.044	FALSE	n.a.
3	Chloride	20.0	37.654	4.86	1.186	0.450	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	n.a.	7.03	0.080	0.032	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	84.897	8.92	2.966	0.760	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

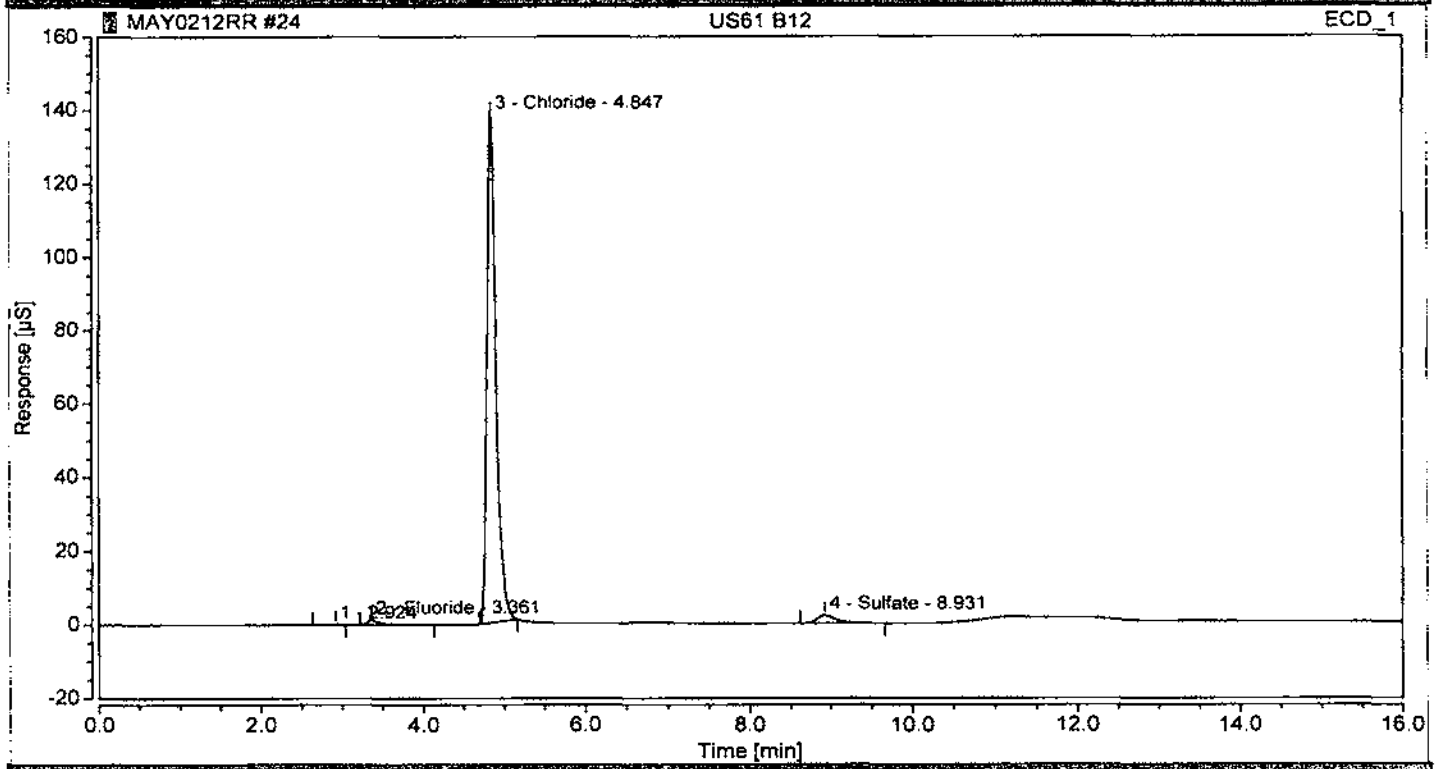
Injection Name:	*US61 A12*	Inject Number:	23
Vial Number:	*21*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:14*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.022	0.137	FALSE	n.a.
2	Fluoride	1.0	0.257	3.36	0.136	0.749	FALSE	n.a.
3		1.0	n.a.	3.51	0.021	0.035	FALSE	n.a.
4	Chloride	1.0	39.677	4.86	4.869	24.144	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	9.09	0.014	0.024	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	13.84	0.020	0.042	FALSE	n.a.

US52 : 01250

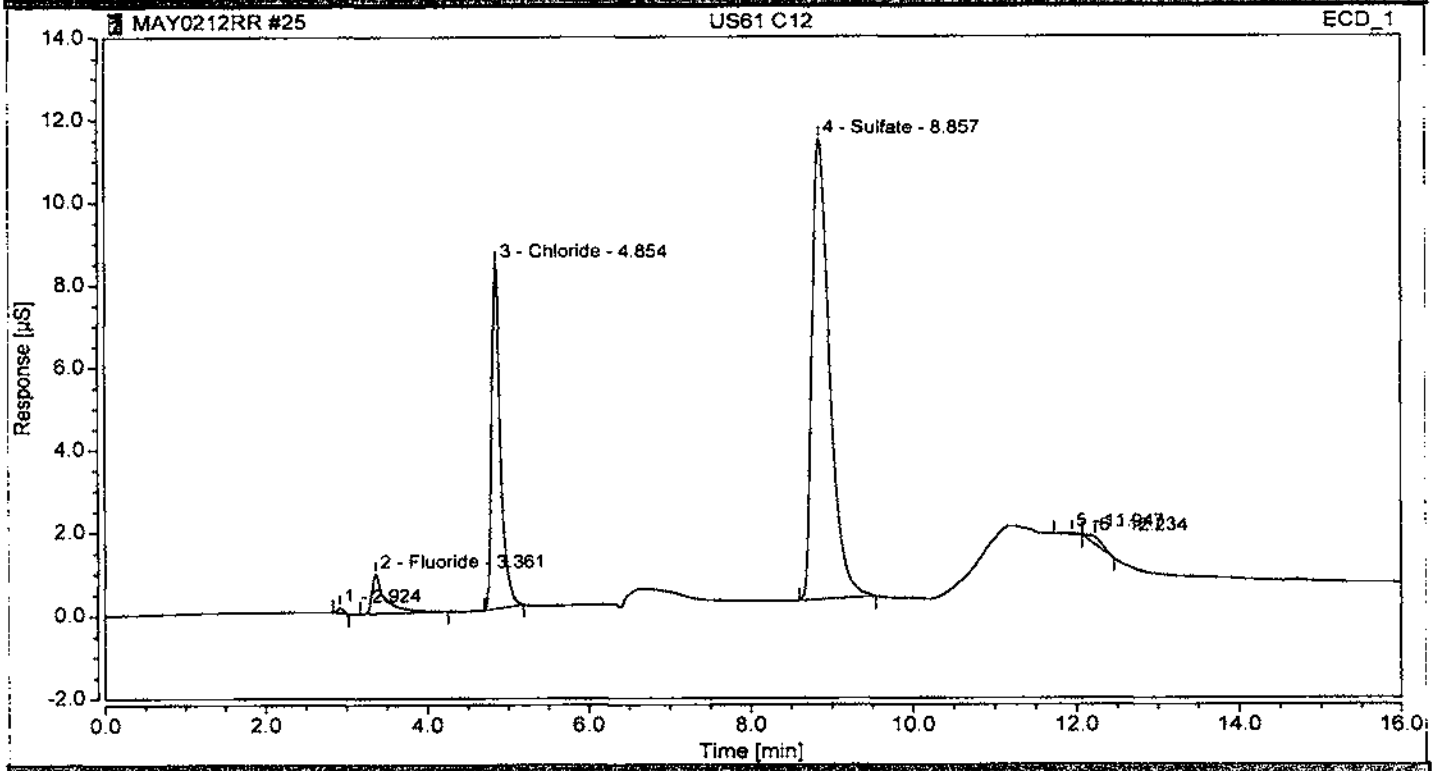
Injection Name:	*US61 B12*	Inject Number:	24
Vial Number:	*22*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.224	0.012	0.127	FALSE	n.a.
2	Fluoride	1.0	0.603	3.361	0.249	1.392	FALSE	n.a.
3	Chloride	1.0	57.900	4.847	17.729	109.239	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	2.506	8.931	0.564	2.148	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

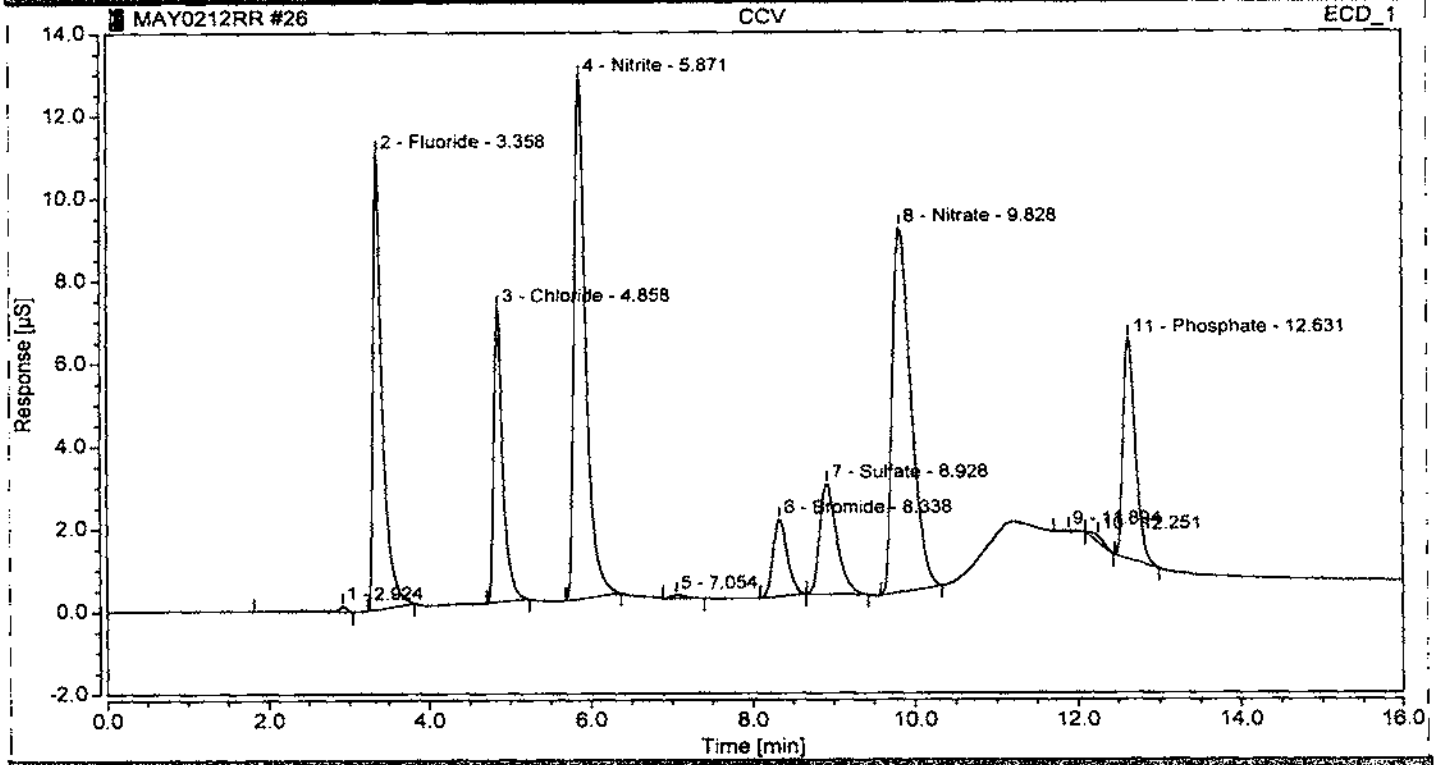
US52 : 01231

Injection Name:	*US61 C12*	Inject Number:	25
Vial Number:	*23*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:55*		



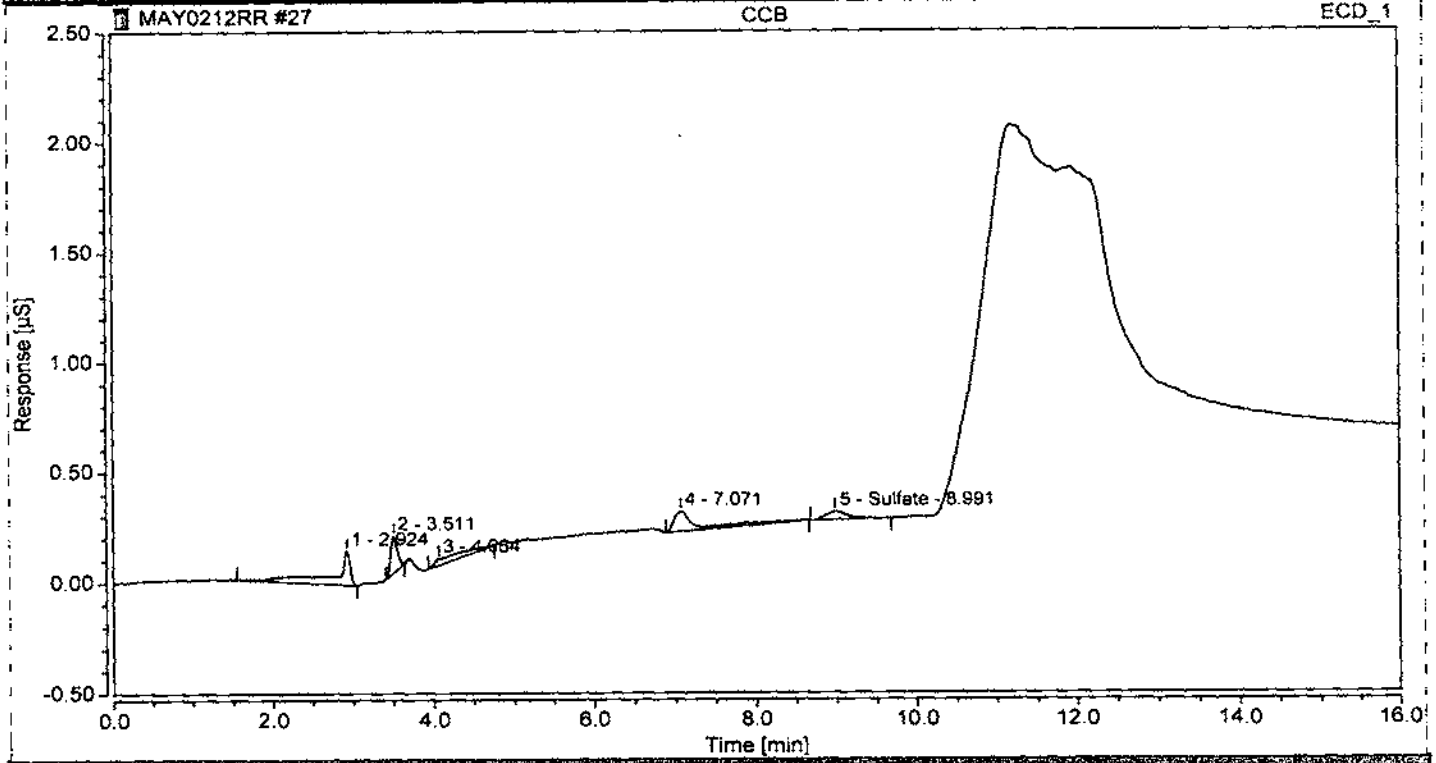
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.924	0.0410	0.122	FALSE	n.a.
2	Fluoride	1.0	0.270	3.361	0.185	0.841	FALSE	n.a.
3	Chloride	1.0	3.016	4.854	3.046	8.362	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	2.409	8.857	2.806	6.041	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	11.947	0.0360	0.0360	FALSE	n.a.
6		1.0	n.a.	12.234	0.0936	0.162	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*CCV*	Inject Number:	26
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 01:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.036	0.147	FALSE	n.a.
2	Fluoride	1.0	2.068	3.36	1.436	11.028	FALSE	1.03
3	Chloride	1.0	2.911	4.86	0.922	7.103	FALSE	-0.09
4	Nitrite	1.0	2.910	5.87	2.422	12.605	FALSE	0.34
5		1.0	n.a.	7.05	0.017	0.087	FALSE	n.a.
6	Bromide	1.0	2.902	8.34	0.851	4.875	FALSE	3.28
7	Sulfate	1.0	2.925	8.93	1.858	9.666	FALSE	2.50
8	Nitrate	1.0	3.110	9.83	2.798	8.856	FALSE	3.65
9		1.0	n.a.	10.89	0.037	0.094	FALSE	n.a.
10		1.0	n.a.	12.25	0.039	0.166	FALSE	n.a.
11	Phosphate	1.0	2.857	12.63	0.933	5.320	FALSE	0.42

Injection Name:	*CCB*	Inject Number:	27
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 01:36*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1			n.a.	2.92	0.041	0.151	FALSE	n.a.
n.a.	Fluoride		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2			n.a.	3.51	0.116	0.164	FALSE	n.a.
3			n.a.	4.98	0.017	0.036	FALSE	n.a.
n.a.	Chloride		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4			n.a.	7.07	0.020	0.009	FALSE	n.a.
n.a.	Bromide		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate		0.055	8.99	0.013	0.0064	FALSE	n.a.
n.a.	Nitrate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*STOP*	Inject Number:	28
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*SHUTDOWN*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 01:58*		

Can't read channel ECD_1 from injection #28 - STOP.
Channel is not available.

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			n.a.	min	matogram in con	matogram in		n.a.

US52 : 01235

Amount Summary

Sequence Details

Name:	**MAY0312RR**	*Calibration:*	**APRIL2112RR** **ARI # 593-01**
Directory:	**Instrument Data\MAY 2012**	*Calibration exp:*	~~**3/6/2011**~~ 4/21/12
Data Vault:	**ChromeleonLocal**	*Queue Start:*	**5/3/2012 10:01**
No. of Injections:	**35.000**	*User:*	**RR**

Results

		ERA 161110	ERA 411010	ERA 401010	ERA 111109	ERA 160111	ERA 230511	ERA 200610
Name	Dilution	Amount n.a. Fluoride	Amount n.a. Chloride	Amount n.a. Nitrite	Amount n.a. Bromide	Amount n.a. Sulfate	Amount n.a. Nitrate	Amount n.a. Phosphate
RINSE	1.0	n.a.	0.058	n.a.	n.a.	0.033	n.a.	n.a.
ICV	1.0	2.914	2.868	2.950	2.837	2.864	3.068	2.893
%R=		**97.1%**	**95.6%**	**98.3%**	**94.6%**	**95.5%**	**102.3%**	**96.4%**
ICB	1.0	n.a.	n.a.	n.a.	n.a.	0.043	n.a.	n.a.
		4.996	26.504	n.a.	n.a.	12.953		n.a.
		0.053		0.041	n.a.	28.108	1.299	0.527
		n.a.		0.031	n.a.	28.105	1.300	0.433
%RPD=			**1.95%**			**0.01%**	**0.06%**	
		1.767		3.947	2.805	31.643	5.471	3.817
%R=		**44.2%**	**98.4%**	**97.7%**	**70.1%**	**88.4%**	**104.3%**	**82.2%**
SPK=	**0.1mL*200ppm/5mL**		**=4ppm**					
		n.a.	4.935	n.a.	n.a.		1.158	0.410
		n.a.	4.767	n.a.	n.a.		1.185	0.458
%RPD=			**3.46%**				**2.32%**	**11.07%**
		20.687	24.144	19.748	16.754		22.037	19.646
%R=		**103.4%**	**96.0%**	**98.7%**	**83.8%**	**80.7%**	**104.4%**	**98.2%**
SPK=	**0.5mL*200ppm/5mL**		**=20ppm**					
		4.236	27.158	n.a.	0.251		30.814	n.a.
		0.082	36.170	n.a.	n.a.		n.a.	n.a.
		0.084	36.027	n.a.	n.a.		n.a.	n.a.
%RPD=			**0.40%**			**0.23%**		
CCV	1.0	2.947	2.952	3.012	2.866	2.914	3.117	2.942
%R=		**98.2%**	**98.4%**	**100.4%**	**95.5%**	**97.1%**	**103.9%**	**98.1%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.032	n.a.	n.a.
		20.657	52.865	19.598	17.966	37.577	20.444	19.100
%R=		**102.9%**	**83.5%**	**98.0%**	**89.8%**	**82.6%**	**102.2%**	**95.5%**
SPK=	**0.5mL*200ppm/5mL**		**=20ppm**					
		n.a.		n.a.	n.a.	20.762	n.a.	n.a.
		n.a.		n.a.	n.a.	20.870	n.a.	n.a.
%RPD=			**1.00%**					
		n.a.		n.a.	n.a.	20.508	n.a.	n.a.
%R=			**105.0%**					
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
		0.248		n.a.	n.a.	4.745	n.a.	n.a.
		n.a.		n.a.	n.a.	1.194	n.a.	0.610
			5.865	n.a.	n.a.	64.298	0.826	n.a.
UR25 A5	1.0	n.a.	0.668	n.a.	n.a.	0.865	n.a.	n.a.
		0.530		n.a.	n.a.	n.a.	n.a.	n.a.
		n.a.		n.a.	n.a.	3.011	n.a.	n.a.
CCV	1.0	2.981	2.960	3.005	2.869	2.902	3.112	2.978
%R=		**99.4%**	**98.7%**	**100.2%**	**95.6%**	**96.7%**	**103.7%**	**99.3%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.038	n.a.	n.a.
		0.072	3.174	n.a.	n.a.		n.a.	n.a.
		0.010	3.476	0.010	n.a.	5.697		n.a.
		0.010	3.483	n.a.	n.a.	5.703		n.a.
%RPD=			**0.18%**			**0.10%**	**0.14%**	
		1.989	5.455	1.953	1.733	7.520		1.728
%R=		**99.4%**	**98.9%**	**97.7%**	**86.7%**	**91.1%**	**105.7%**	**86.4%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
		0.095	2.287	n.a.	n.a.	3.105		0.032

US52 : 01235

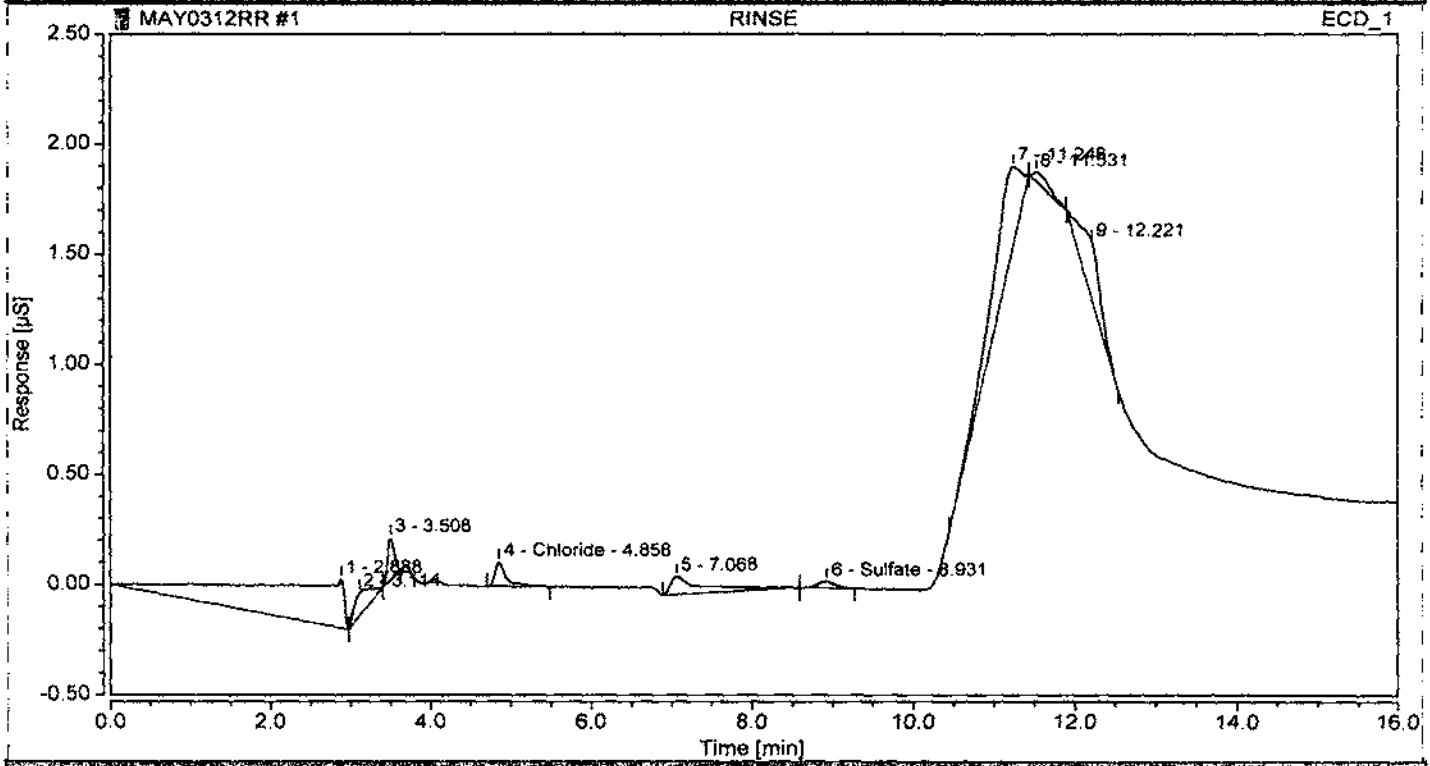
CCV	1.0	2.981	2.993	3.004	2.857	2.873	3.111	2.997
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.039	n.a.	n.a.
STOP	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US52 : 01297

Name:	**MAY0312RR**	*Queue Start:*	**2012-05-03T10:01:26-**
Directory:	**Instrument Data\MAY 2012**	*Created By:*	**pat**
Data Vault:	**ChromeleonLocal**		
No. of Injections:	**35**		

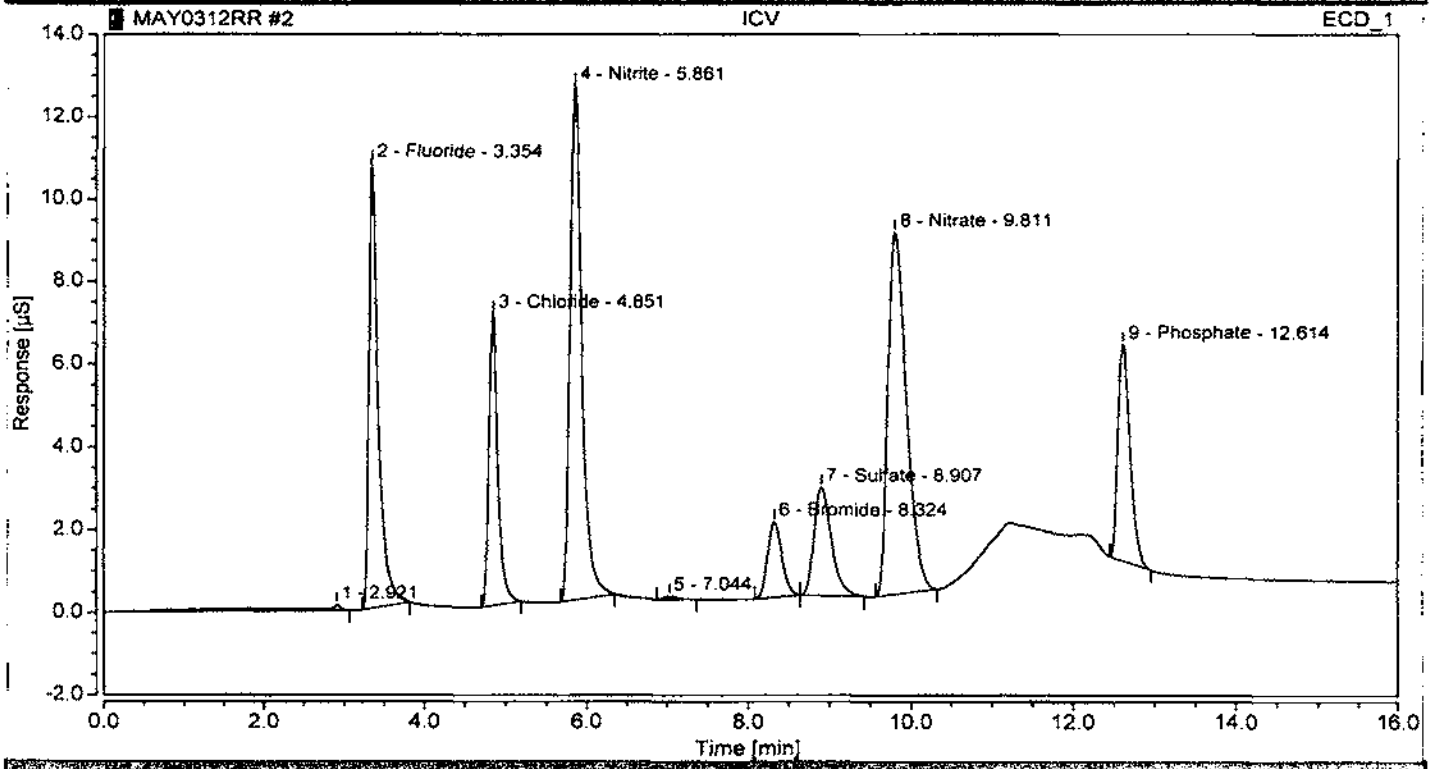
No.	Injection Name	Position	Type	Level	Dilution	Inject Time
1	BINJE	1	Unknown		1.0	03/May/12 10:01:26
2	ICV	2	Check Standard	05	1.0	03/May/12 10:21:11
3	ICB	3	Blank		1.0	03/May/12 10:41:21
4	US46 B1	4	Unknown		10.0	03/May/12 11:01:38
5	US46 A1	5	Unknown		10.0	03/May/12 16:44:00
6	US46 A1 DUP	6	Unknown		2.0	03/May/12 16:02:54
7	US46 A1 MS	7	Unknown		2.0	03/May/12 16:22:09
8	US46 A1	8	Unknown		10.0	03/May/12 16:41:50
9	US46 A1 DUP	9	Unknown		10.0	03/May/12 17:00:56
10	US46 A1 MS	10	Unknown		10.0	03/May/12 17:20:27
11	US46 B1	11	Unknown		5.0	03/May/12 17:40:03
12	US52 G1	12	Unknown		5.0	03/May/12 17:59:46
13	US52 G1 DUP	13	Unknown		5.0	03/May/12 18:19:34
14	CCV	2	Check Standard	05	1.0	03/May/12 18:39:28
15	CCB	3	Blank		1.0	03/May/12 18:59:23
16	US52 G1 MS	14	Unknown		10.0	03/May/12 19:19:18
17	US52 G1	15	Unknown		10.0	03/May/12 19:39:22
18	US52 G1 DUP	16	Unknown		10.0	03/May/12 19:59:38
19	US52 G1 MS	17	Unknown		10.0	03/May/12 20:19:56
20	US67 B1	18	Unknown		2.0	03/May/12 20:40:21
21	US67 D1	19	Unknown		20.0	03/May/12 21:00:52
22	US68 A2	20	Unknown		5.0	03/May/12 21:21:29
23	US76 A3	21	Unknown		1.0	03/May/12 21:42:10
24	US81 A12	22	Unknown		2.0	03/May/12 22:02:57
25	US81 B12	23	Unknown		20.0	03/May/12 22:23:51
26	CCV	2	Check Standard	05	1.0	03/May/12 22:43:15
27	CCB	3	Blank		1.0	03/May/12 23:03:09
28	US81 C12	24	Unknown		5.0	03/May/12 23:22:44
29	US74 A2	25	Unknown		1.0	03/May/12 23:42:20
30	US74 A2 DUP	26	Unknown		1.0	04/May/12 00:02:02
31	US74 A2 MS	27	Unknown		1.0	04/May/12 00:21:48
32	US74 B2	28	Unknown		1.0	04/May/12 00:41:37
33	CCV	2	Check Standard	05	1.0	04/May/12 01:01:31
34	CCB	3	Blank		1.0	04/May/12 01:22:09
35	STOP	4	Unknown		1.0	04/May/12 01:42:56

Injection Name:	*RINSE*	Inject Number:	1
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 10:01*		



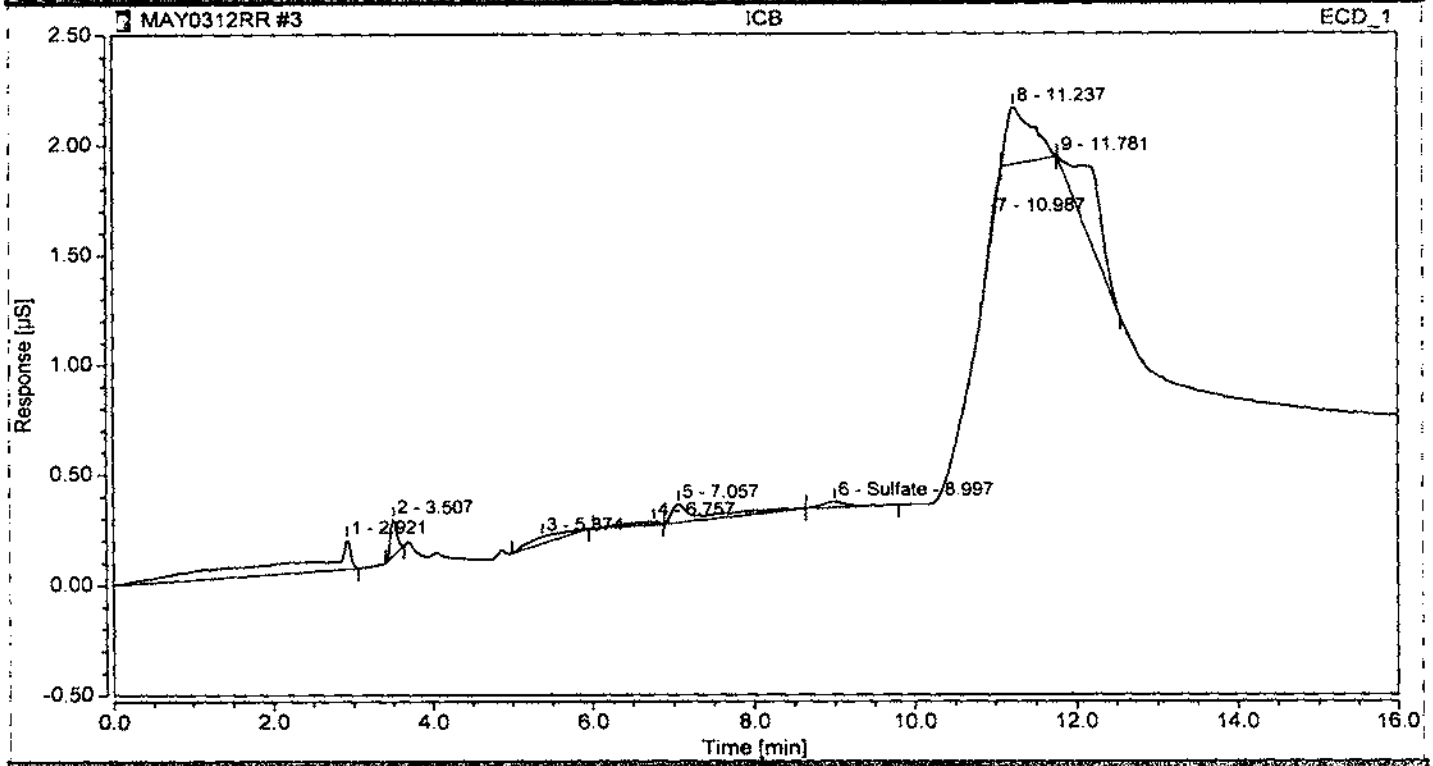
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.88	0.291	0.223	FALSE	n.a.
2		1.0	n.a.	3.114	0.025	0.106	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	3.508	0.179	0.109	FALSE	n.a.
4	Chloride	1.0	0.098	4.858	0.018	0.109	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	7.068	0.016	0.079	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	0.030	8.931	0.007	0.029	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	11.248	0.158	0.236	FALSE	n.a.
8		1.0	n.a.	11.531	0.012	0.014	FALSE	n.a.
9		1.0	n.a.	12.221	0.078	0.263	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*ICV*	*Inject Number:*	2
Vial Number:	2	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 10:21*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
2	Fluoride						FALSE	-2.87
3	Chloride						FALSE	-4.41
4	Nitrite						FALSE	-1.65
5							FALSE	n.a.
6	Bromide						FALSE	-5.43
7	Sulfate						FALSE	-4.53
8	Nitrate						FALSE	2.25
9	Phosphate						FALSE	-3.56

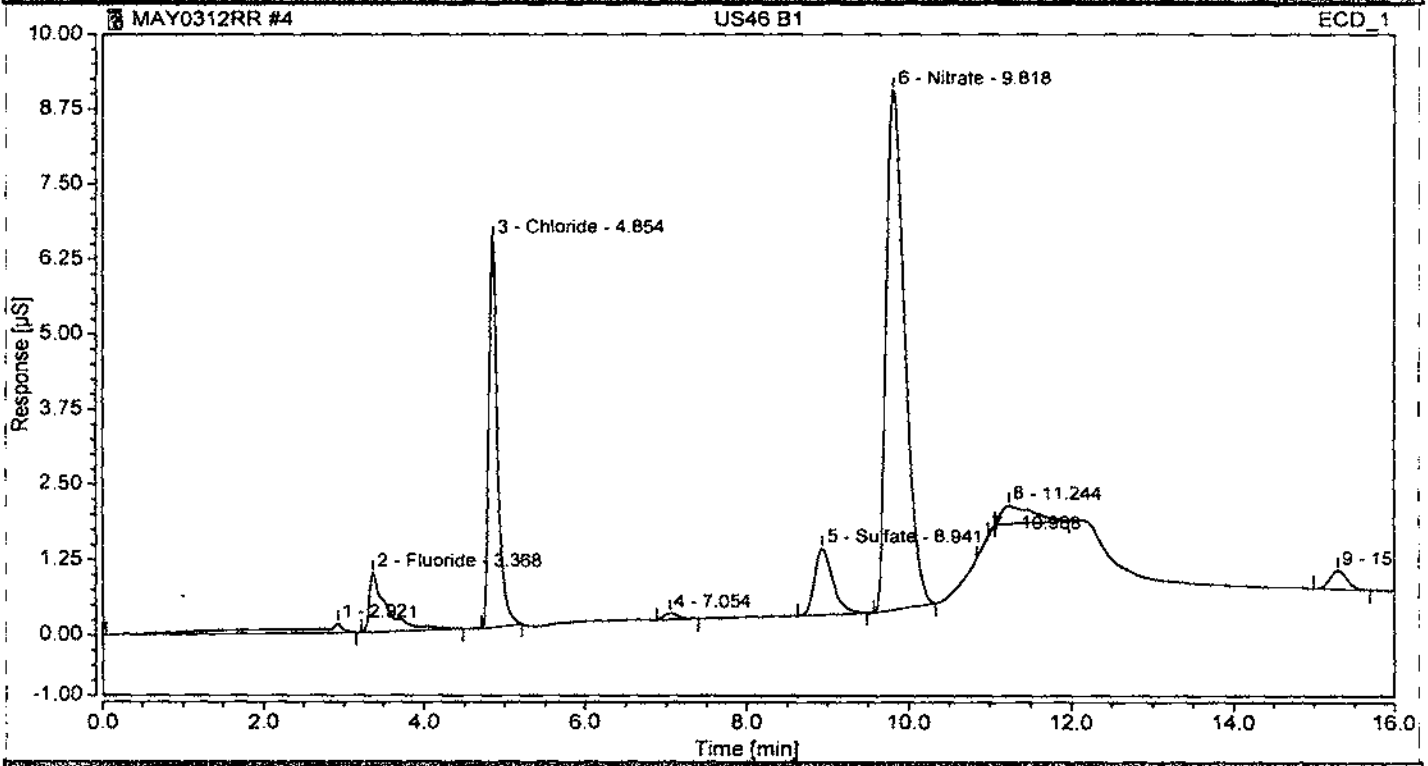
Injection Name:	*ICB*	*Inject Number:*	3
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 10:41*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1						0.133	FALSE	n.a.
n.a.	Fluoride					n.a.	n.a.	n.a.
2						0.184	FALSE	n.a.
n.a.	Chloride					n.a.	n.a.	n.a.
3						0.091	FALSE	n.a.
n.a.	Nitrite					n.a.	n.a.	n.a.
4						0.014	FALSE	n.a.
5						0.006	FALSE	n.a.
n.a.	Bromide					n.a.	n.a.	n.a.
6	Sulfate					0.026	FALSE	n.a.
n.a.	Nitrate					n.a.	n.a.	n.a.
7						0.044	FALSE	n.a.
8						0.258	FALSE	n.a.
9						0.001	FALSE	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

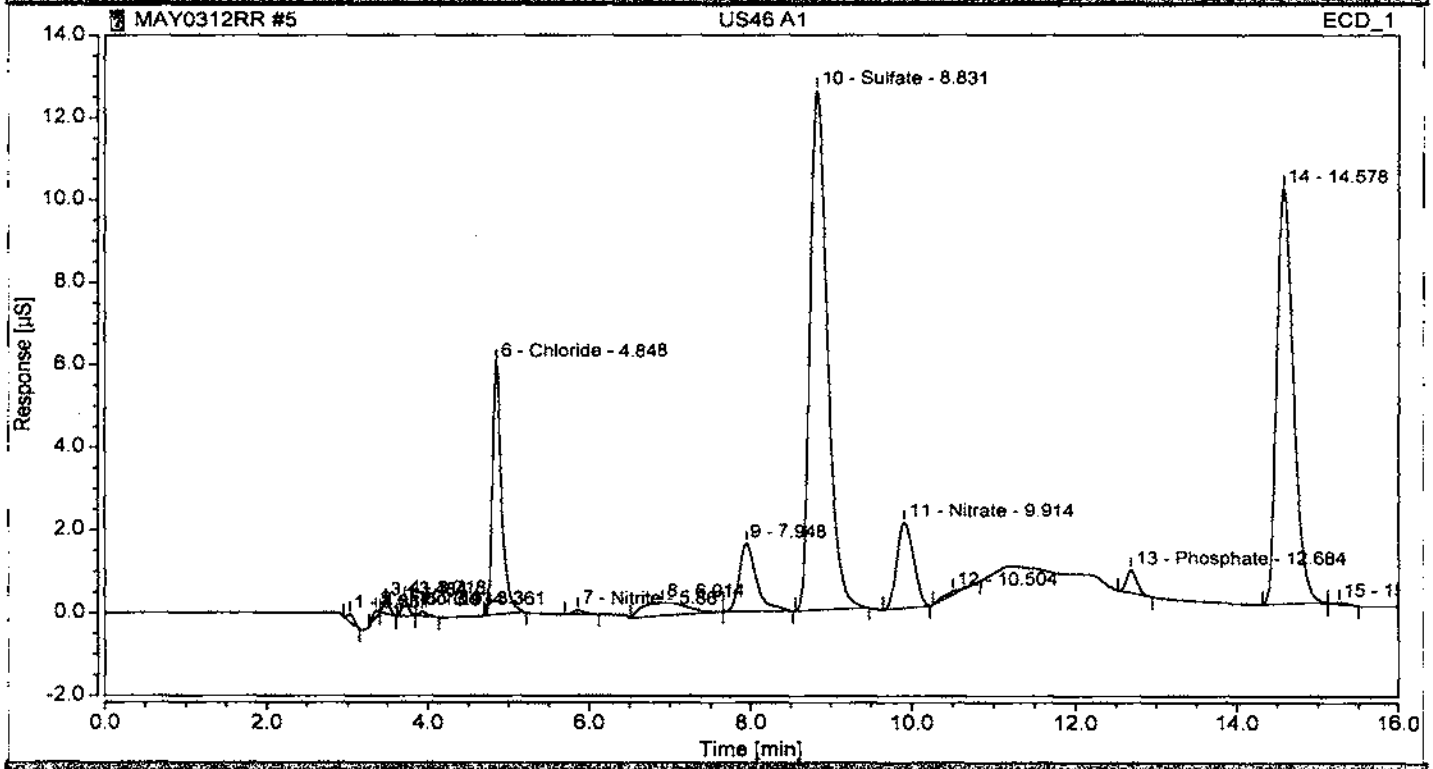
US52 : 01241

Injection Name:	*US46 B1*	Inject Number:	4
Vial Number:	*4*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 11:01*		



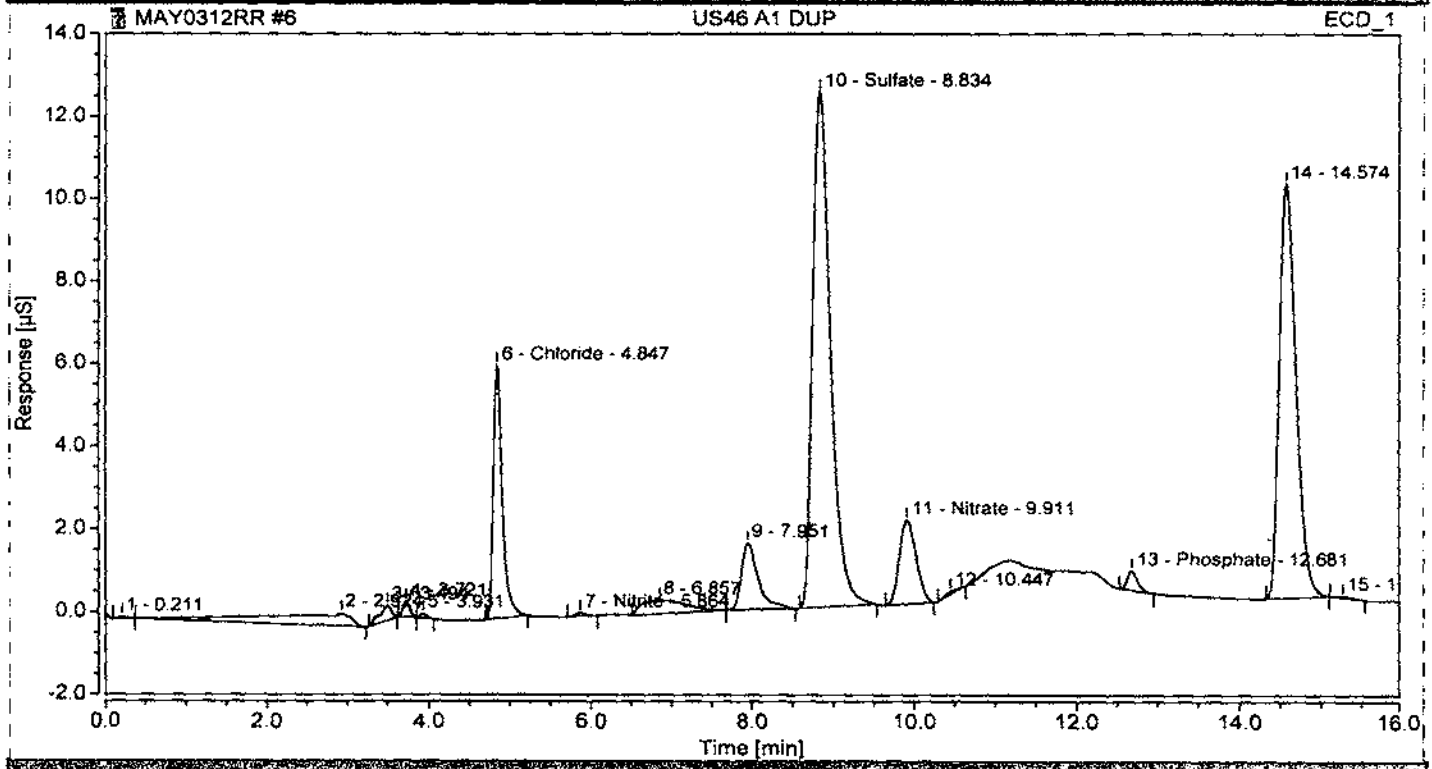
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.94	0.186	0.153	FALSE	n.a.
2	Fluoride	10.0	0.065	3.38	0.248	0.349	FALSE	n.a.
3	Chloride	10.0	0.071	4.86	0.616	0.499	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.05	0.092	0.106	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	0.098	8.94	0.992	0.506	FALSE	n.a.
6	Nitrate	10.0	0.080	9.82	0.966	0.541	FALSE	n.a.
7		10.0	n.a.	10.96	0.076	0.057	FALSE	n.a.
8		10.0	n.a.	11.24	0.190	0.090	FALSE	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9		10.0	n.a.	15.30	0.075	0.306	FALSE	n.a.

Injection Name:	*US46 A1*	Inject Number:	5
Vial Number:	*5*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 15:44*		



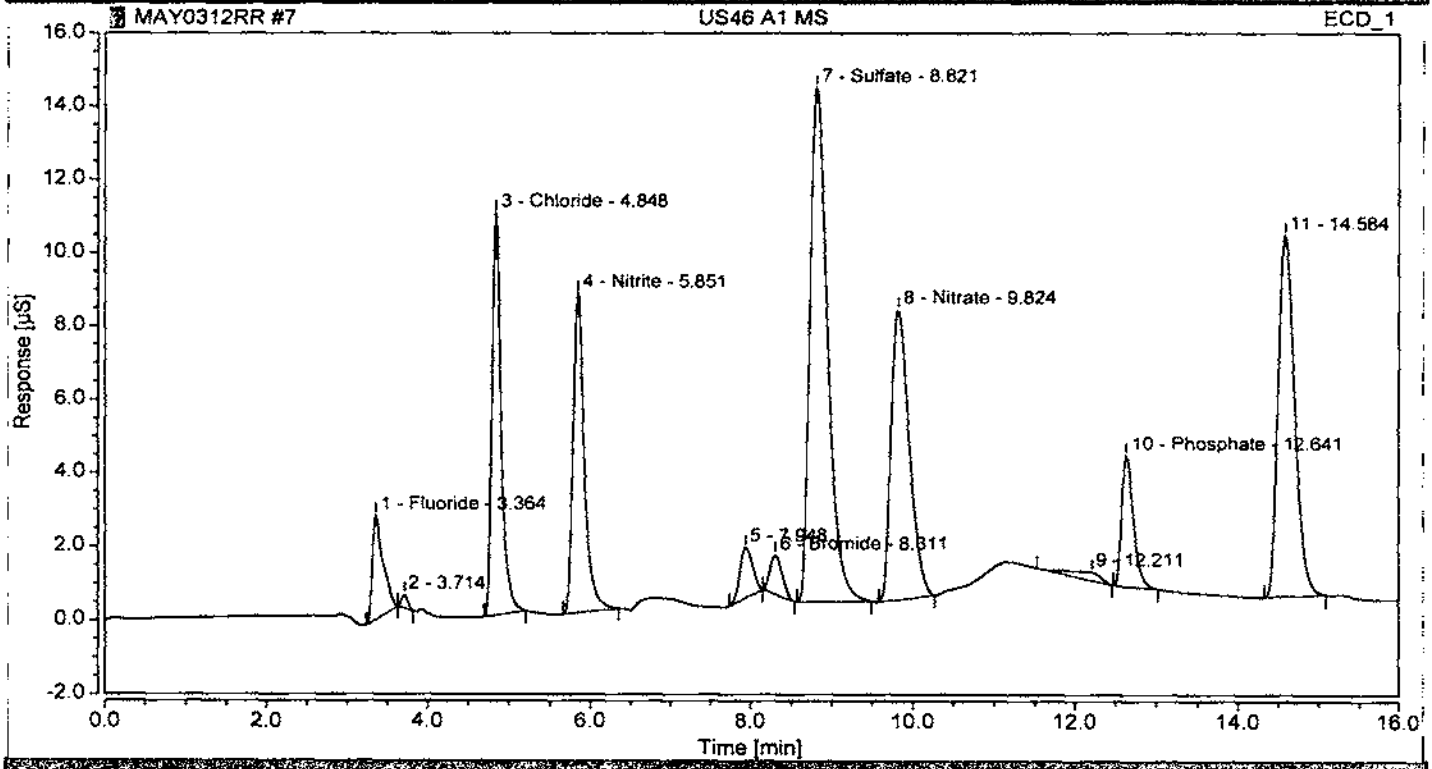
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0				0.194	FALSE	n.a.
2	Fluoride	2.0					FALSE	n.a.
3		2.0					FALSE	n.a.
4		2.0					FALSE	n.a.
5		2.0					FALSE	n.a.
6	Chloride	2.0					FALSE	n.a.
7	Nitrite	2.0					FALSE	n.a.
8		2.0					FALSE	n.a.
9		2.0					FALSE	n.a.
n.a.	Bromide	2.0					n.a.	n.a.
10	Sulfate	2.0					FALSE	n.a.
11	Nitrate	2.0					FALSE	n.a.
12		2.0	n.a.			n.a.	FALSE	n.a.
13	Phosphate	2.0					FALSE	n.a.
14		2.0					FALSE	n.a.
15		2.0	n.a.	15.26	0.007	0.033	FALSE	n.a.

Injection Name:	*US46 A1 DUP*	Inject Number:	6
Vial Number:	*6*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 16:02*		



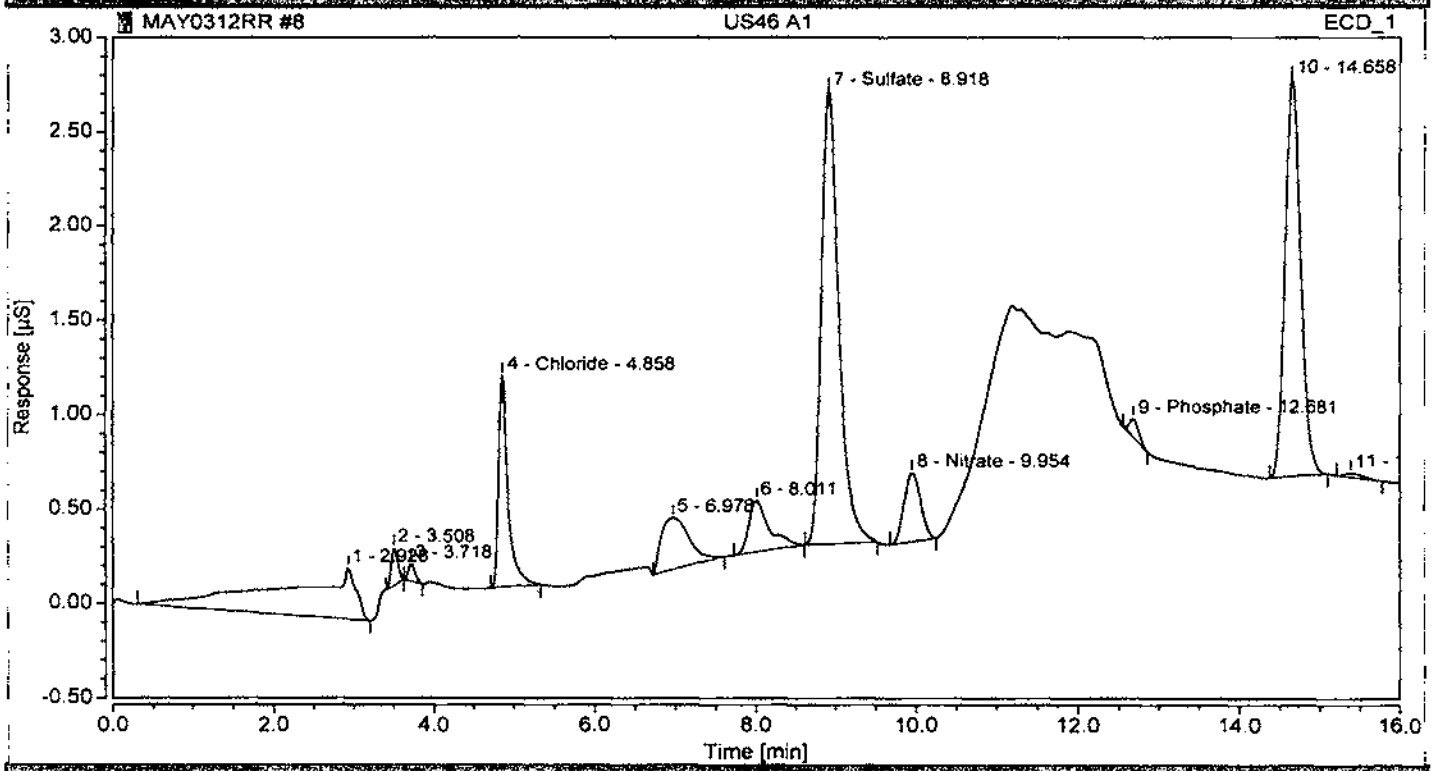
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	0.211	0.205	0.036	FALSE	n.a.
2		2.0	n.a.	3.721	0.392	0.306	FALSE	n.a.
n.a.	Fluoride	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.0	n.a.	5.857	0.305	0.048	FALSE	n.a.
4		2.0	n.a.	6.864	0.936	0.370	FALSE	n.a.
5		2.0	n.a.	7.951	1.408	0.602	FALSE	n.a.
6	Chloride	2.0	n.a.	4.847	1.000	0.000	FALSE	n.a.
7	Nitrite	2.0	n.a.	5.864	0.000	0.000	FALSE	n.a.
8		2.0	n.a.	6.857	0.000	0.000	FALSE	n.a.
9		2.0	n.a.	7.951	1.408	0.602	FALSE	n.a.
n.a.	Bromide	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Sulfate	2.0	n.a.	8.834	1.000	0.000	FALSE	n.a.
11	Nitrate	2.0	n.a.	9.911	0.000	0.000	FALSE	n.a.
12		2.0	n.a.	10.447	0.000	0.000	FALSE	n.a.
13	Phosphate	2.0	n.a.	12.681	0.000	0.000	FALSE	n.a.
14		2.0	n.a.	14.574	1.000	0.000	FALSE	n.a.
15		2.0	n.a.	15.277	0.000	0.000	FALSE	n.a.

Injection Name:	*US46 A1 MS*	Inject Number:	7
Vial Number:	*7*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 16:22*		



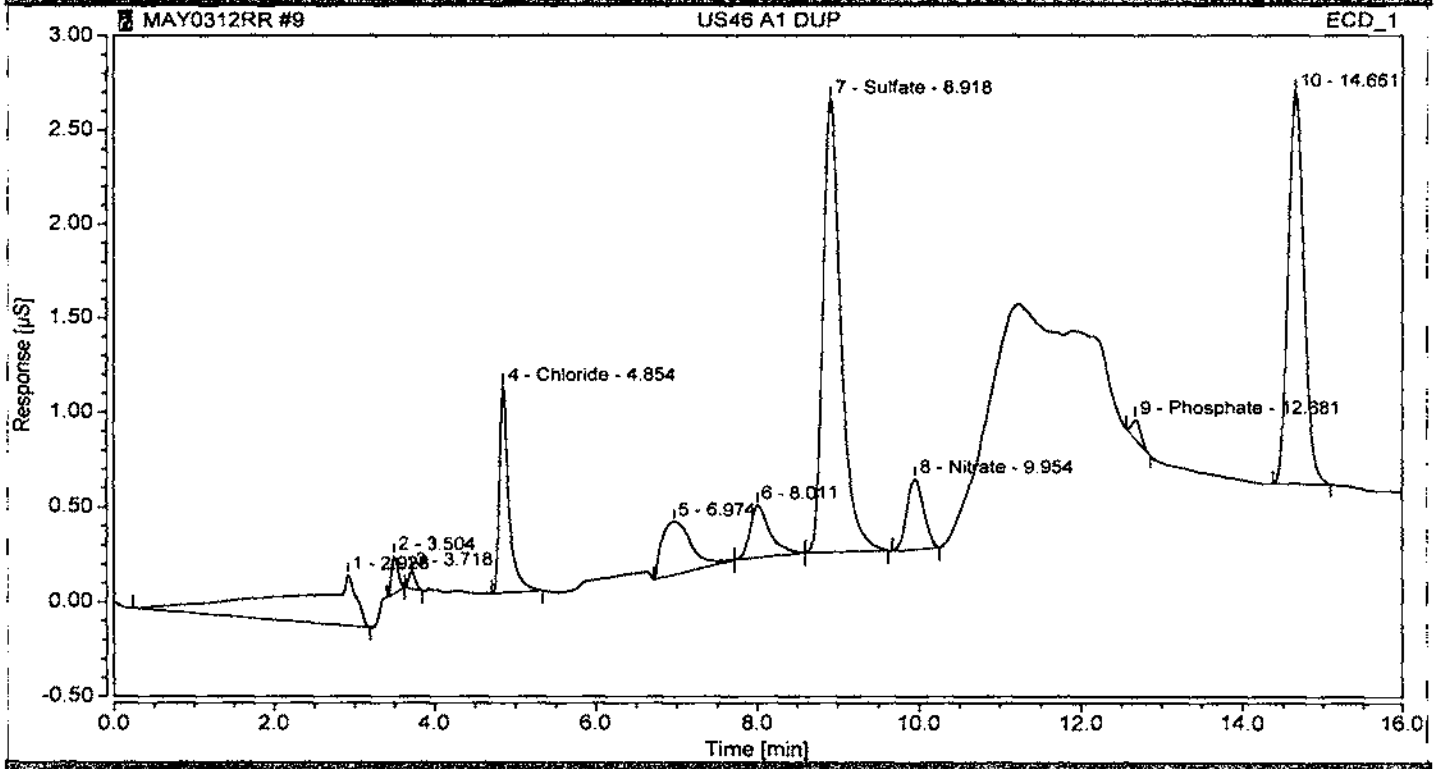
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	2.0	[illegible]	[illegible]	[illegible]	2.818	FALSE	n.a.
2		2.0	[illegible]	[illegible]	[illegible]	0.057	FALSE	n.a.
3	Chloride	2.0	[illegible]	[illegible]	[illegible]	10.051	FALSE	n.a.
4	Nitrite	2.0	[illegible]	[illegible]	[illegible]	5.873	FALSE	n.a.
5		2.0	[illegible]	[illegible]	[illegible]	0.353	FALSE	n.a.
6	Bromide	2.0	[illegible]	[illegible]	[illegible]	0.818	FALSE	n.a.
7	Sulfate	2.0	[illegible]	[illegible]	[illegible]	14.569	FALSE	n.a.
8	Nitrate	2.0	[illegible]	[illegible]	[illegible]	7.937	FALSE	n.a.
9		2.0	[illegible]	[illegible]	[illegible]	0.265	FALSE	n.a.
10	Phosphate	2.0	[illegible]	[illegible]	[illegible]	3.565	FALSE	n.a.
11		2.0	n.a.	14.58	2.351	9.825	FALSE	n.a.

Injection Name:	*US46 A1*	Inject Number:	8
Vial Number:	*8*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 16:41*		



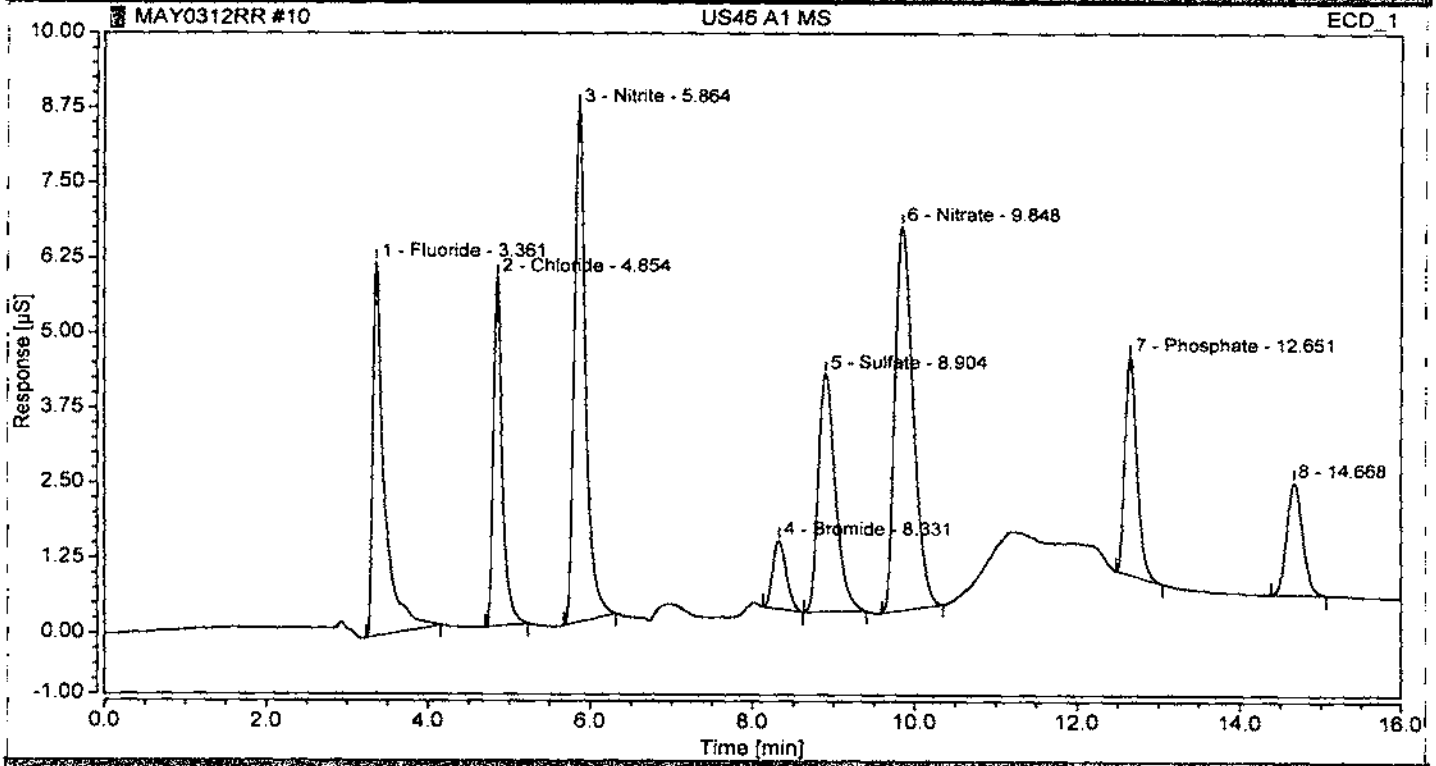
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.928	0.0021	0.272	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.508	0.0018	0.198	FALSE	n.a.
3		10.0	n.a.	3.718	0.0008	0.092	FALSE	n.a.
4	Chloride	10.0	1.055	4.858	0.0752	1.16	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		10.0	n.a.	6.978	0.0411	0.602	FALSE	n.a.
6		10.0	n.a.	8.011	0.0268	0.371	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	2.556	8.918	0.1822	2.155	FALSE	n.a.
8	Nitrate	10.0	0.558	9.954	0.0397	0.563	FALSE	n.a.
9	Phosphate	10.0	0.430	12.681	0.0306	0.349	FALSE	n.a.
10		10.0	n.a.	14.658	0.1436	2.102	FALSE	n.a.
11		10.0	n.a.	15.38	0.0106	0.023	FALSE	n.a.

Injection Name:	*US46 A1 DUP*	Inject Number:	9
Vial Number:	*9*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 17:00*		



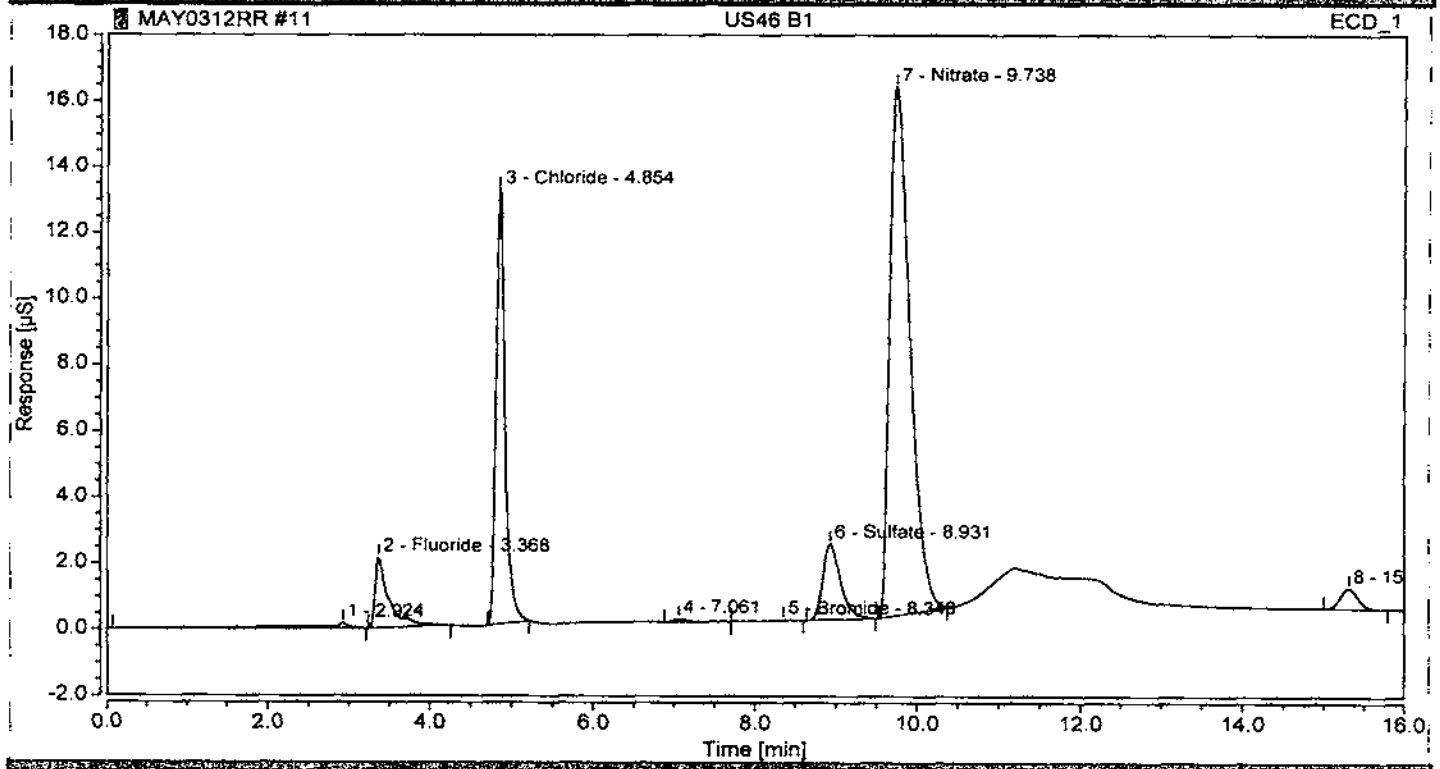
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.93	0.075	0.296	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.50	0.0913	0.0195	FALSE	n.a.
3		10.0	n.a.	3.71	0.0084	0.0181	FALSE	n.a.
4	Chloride	10.0	0.476	4.85	0.1747	0.985	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		10.0	n.a.	6.97	0.0736	0.0228	FALSE	n.a.
6		10.0	n.a.	8.00	0.0075	0.0076	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	0.438	8.92	0.1124	0.337	FALSE	n.a.
8	Nitrate	10.0	0.0155	9.95	0.0031	0.0138	FALSE	n.a.
9	Phosphate	10.0	0.138	12.68	0.0341	0.101	FALSE	n.a.
10		10.0	n.a.	14.66	0.469	2.074	FALSE	n.a.

Injection Name:	*US46 A1 MS*	Inject Number:	10
Vial Number:	*10*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 17:20*		



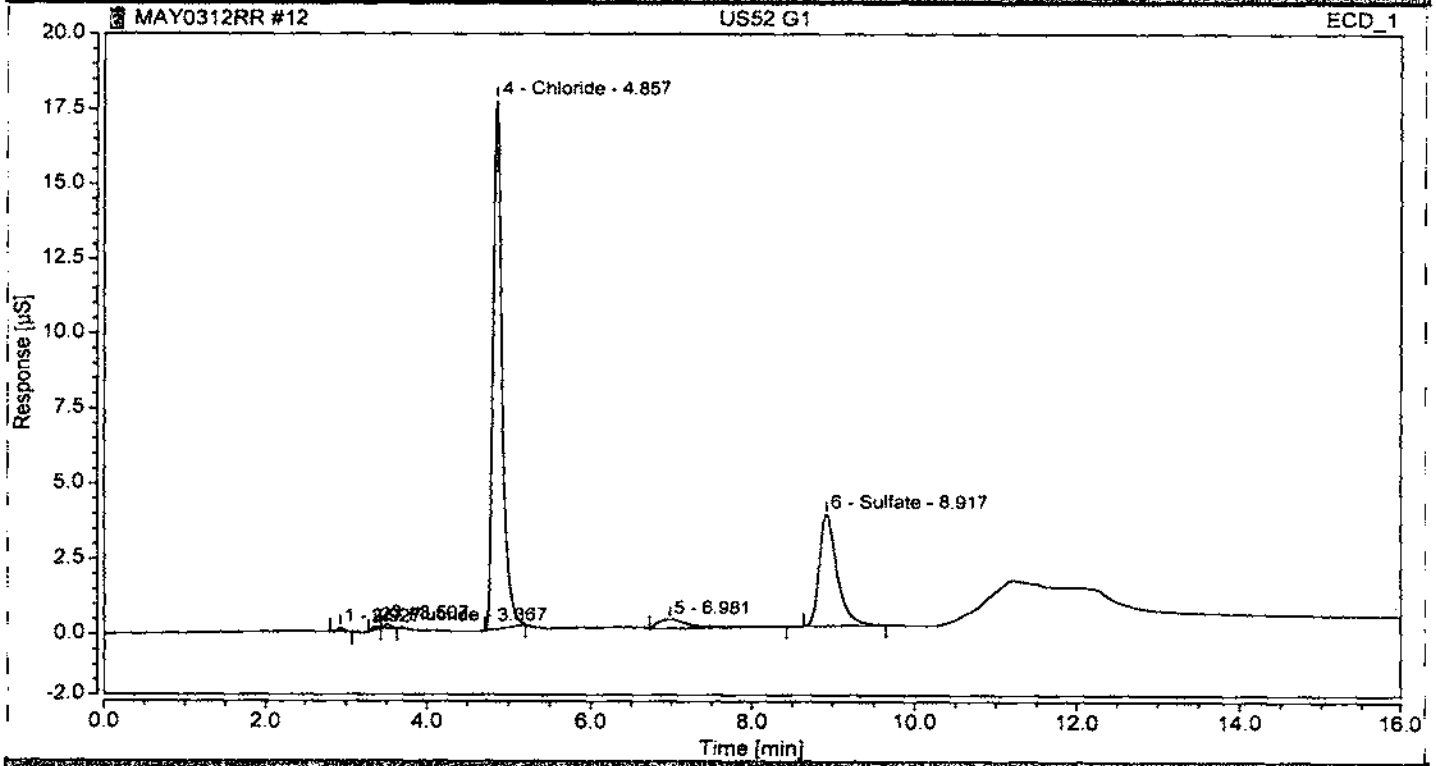
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	10.0	[illegible]	[illegible]	[illegible]	6.217	FALSE	n.a.
2	Chloride	10.0	[illegible]	[illegible]	[illegible]	5.865	FALSE	n.a.
3	Nitrite	10.0	[illegible]	[illegible]	[illegible]	8.549	FALSE	n.a.
4	Bromide	10.0	[illegible]	[illegible]	[illegible]	1.129	FALSE	n.a.
5	Sulfate	10.0	[illegible]	[illegible]	[illegible]	3.966	FALSE	n.a.
6	Nitrate	10.0	[illegible]	[illegible]	[illegible]	6.367	FALSE	n.a.
7	Phosphate	10.0	[illegible]	[illegible]	[illegible]	3.827	FALSE	n.a.
8		10.0	n.a.	14.67	0.418	1.860	FALSE	n.a.

Injection Name:	*US46 B1*	Inject Number:	11
Vial Number:	*11*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 17:40*		



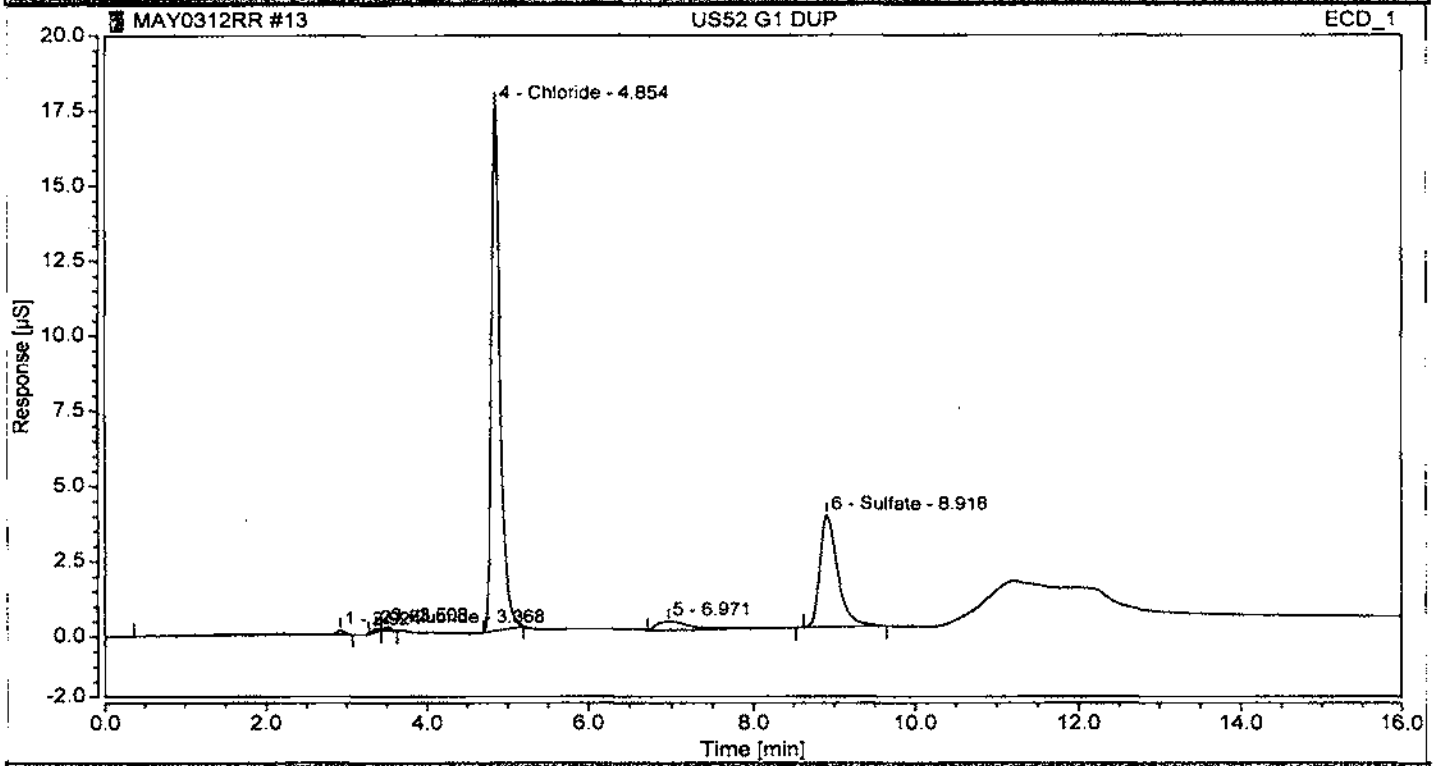
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.92	0.126	0.161	FALSE	n.a.
2	Fluoride	5.0	0.319	3.37	0.428	2.139	FALSE	n.a.
3	Chloride	5.0	5.159	4.85	1.671	13.143	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		5.0	n.a.	7.06	0.032	0.032	FALSE	n.a.
5	Bromide	5.0	0.063	8.35	0.026	0.026	FALSE	n.a.
6	Sulfate	5.0	0.298	8.93	0.564	2.342	FALSE	n.a.
7	Nitrate	5.0	3.064	9.74	1.609	15.988	FALSE	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		5.0	n.a.	15.31	0.155	0.627	FALSE	n.a.

Injection Name:	*US52 G1*	Inject Number:	12
Vial Number:	*12*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 17:59*		



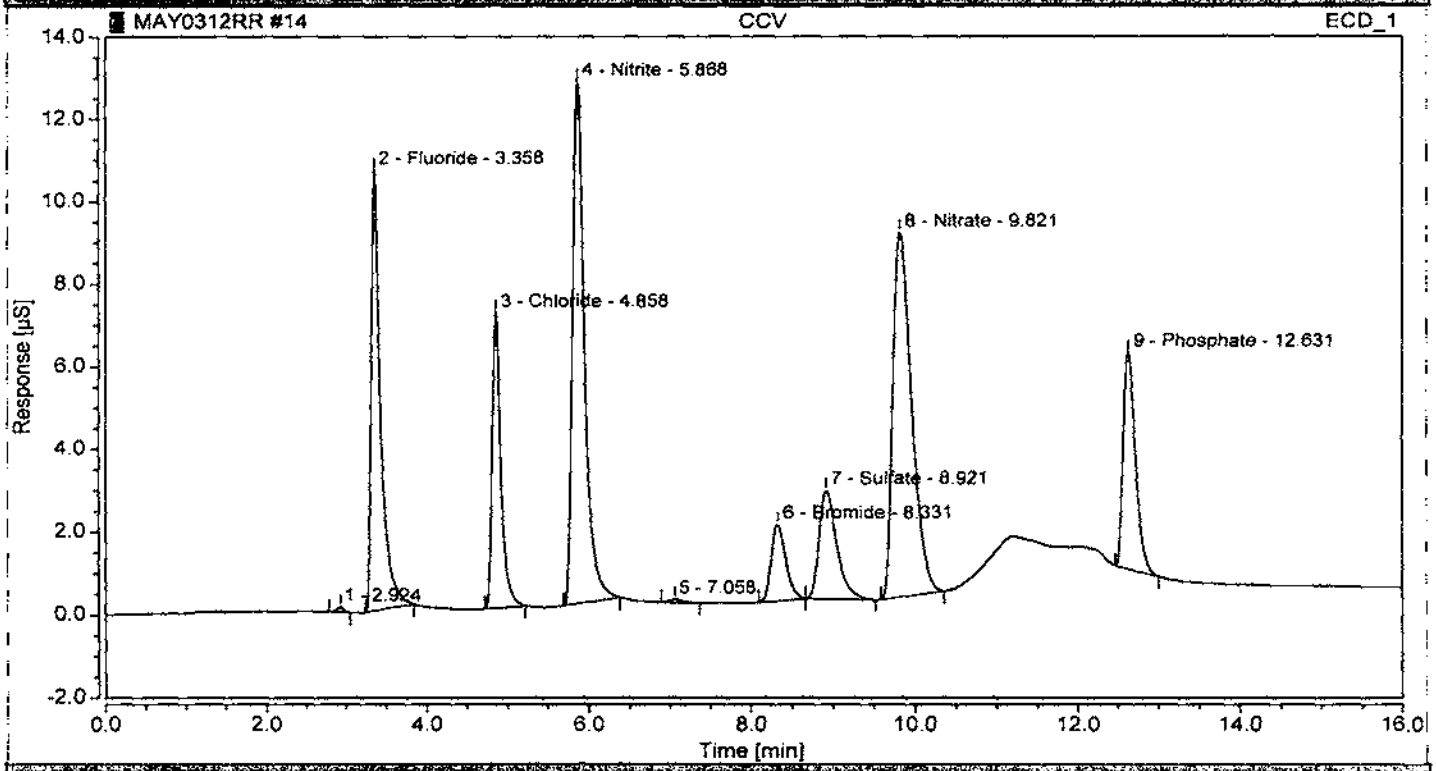
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.93	0.0014	0.119	FALSE	n.a.
2	Fluoride	5.0	0.082	3.37	0.0008	0.098	FALSE	n.a.
3		5.0	n.a.	3.867	0.0012	0.119	FALSE	n.a.
4	Chloride	5.0	36.170	4.857	0.2078	14.806	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		5.0	n.a.	6.98	0.0023	0.088	FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	5.0	0.000	8.92	0.0000	0.708	FALSE	n.a.
n.a.	Nitrate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 DUP*	Inject Number:	13
Vial Number:	*13*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 18:19*		



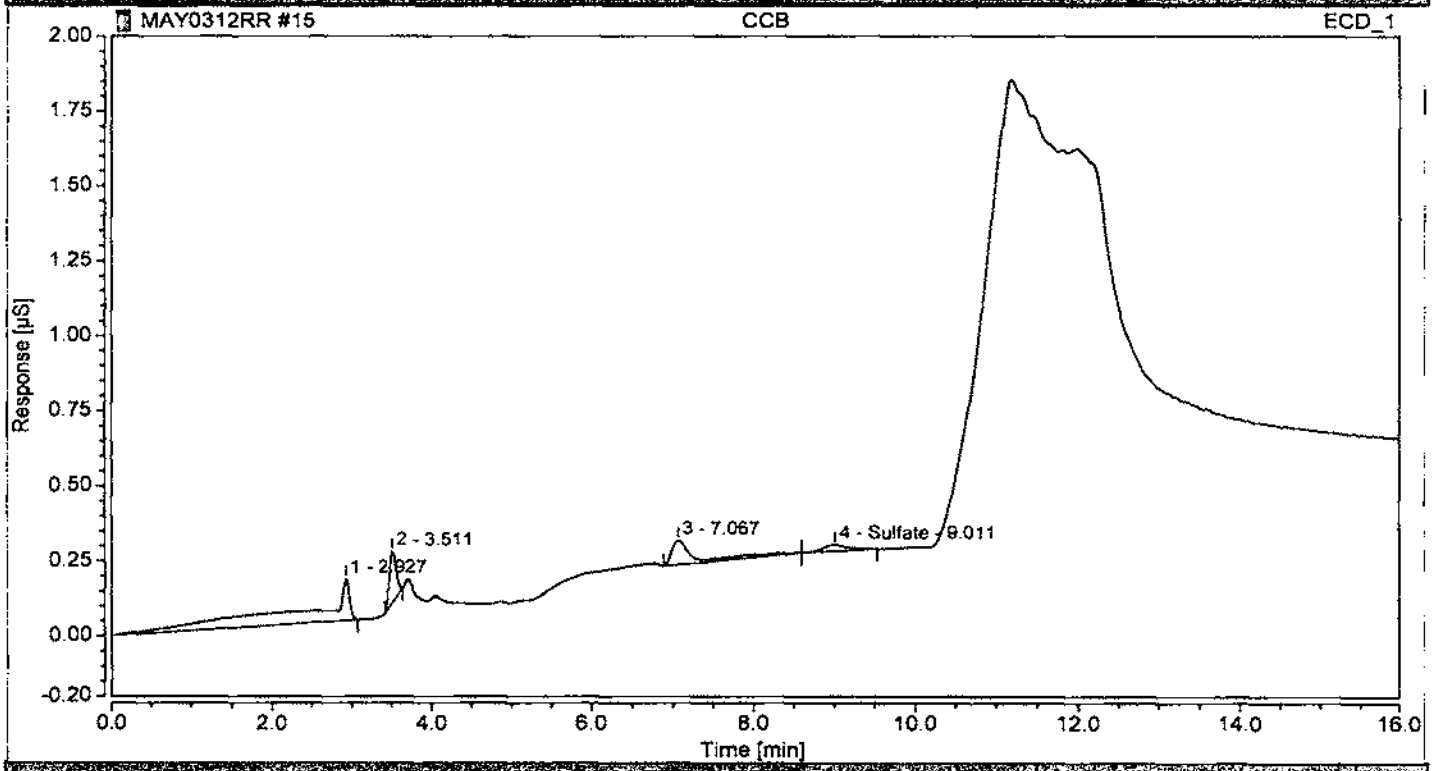
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	12.92	0.087	0.132	FALSE	n.a.
2	Fluoride	5.0	0.054	3.87	0.008	0.099	FALSE	n.a.
3		5.0	n.a.	4.68	0.011	0.120	FALSE	n.a.
4	Chloride	5.0	3.027	4.85	2.218	17.508	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		5.0	n.a.	6.97	0.015	0.269	FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	5.0	0.001	8.92	0.008	0.109	FALSE	n.a.
n.a.	Nitrate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*CCV*	Inject Number:	14
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 18:39*		



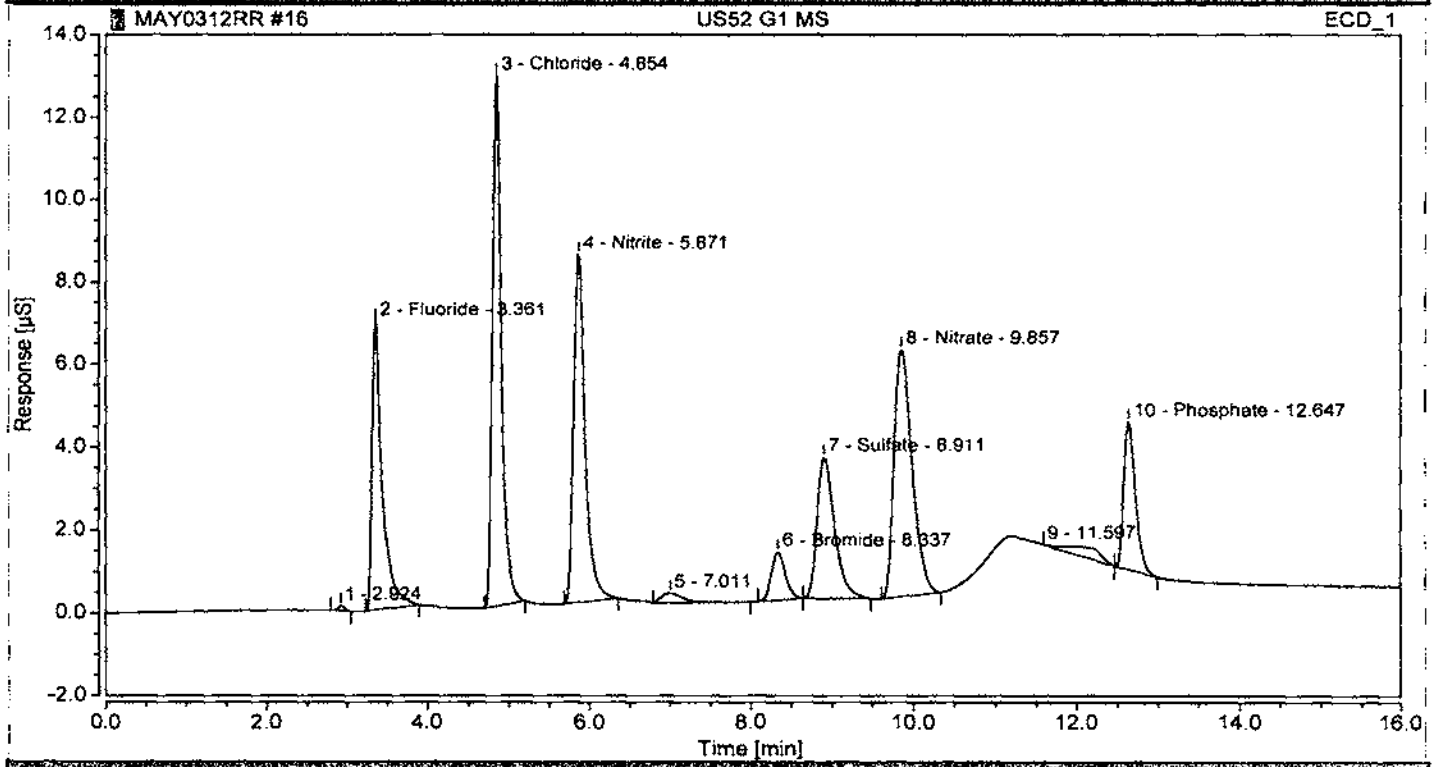
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	[illegible]	2.92	0.011	0.017	FALSE	n.a.
2	Fluoride	1.0	2.967	3.36	0.461	10.561	FALSE	-1.78
3	Chloride	1.0	2.952	4.66	0.[illegible]	7.141	FALSE	-1.59
4	Nitrite	1.0	3.013	5.87	2.124	12.548	FALSE	0.41
5		1.0	[illegible]	7.06	0.015	0.074	FALSE	n.a.
6	Bromide	1.0	2.956	8.33	0.376	1.808	FALSE	-4.45
7	Sulfate	1.0	2.914	8.92	0.[illegible]	2.619	FALSE	-2.86
8	Nitrate	1.0	3.117	9.82	2.[illegible]	8.809	FALSE	3.89
9	Phosphate	1.0	2.942	12.63	0.919	5.236	FALSE	-1.94

Injection Name:	*CCB*	*Inject Number:*	15
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 18:59*		



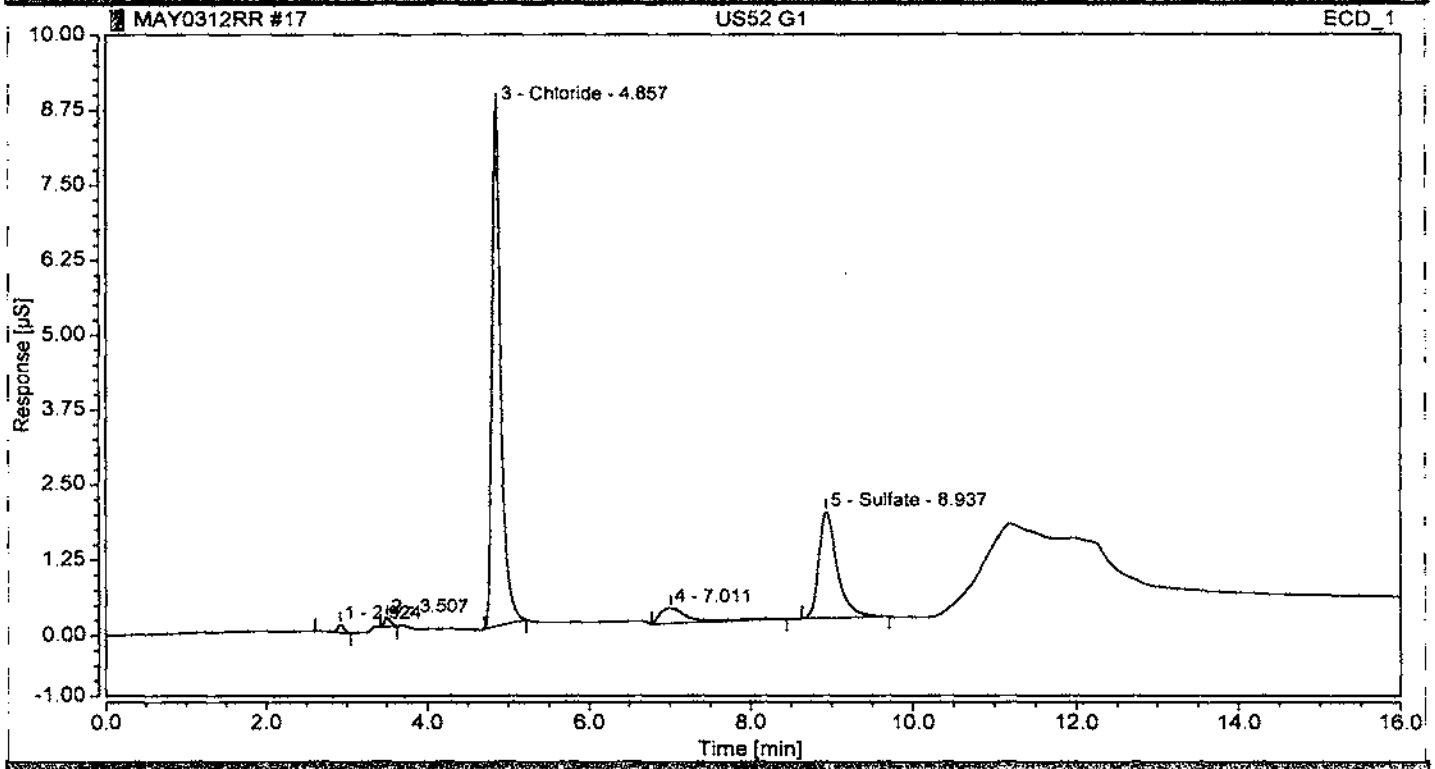
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.0617	0.139	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.0017	0.0073	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.07	0.0122	0.0801	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.0305	9.01	0.0007	0.0021	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	16
Vial Number:	*14*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 19:19*		



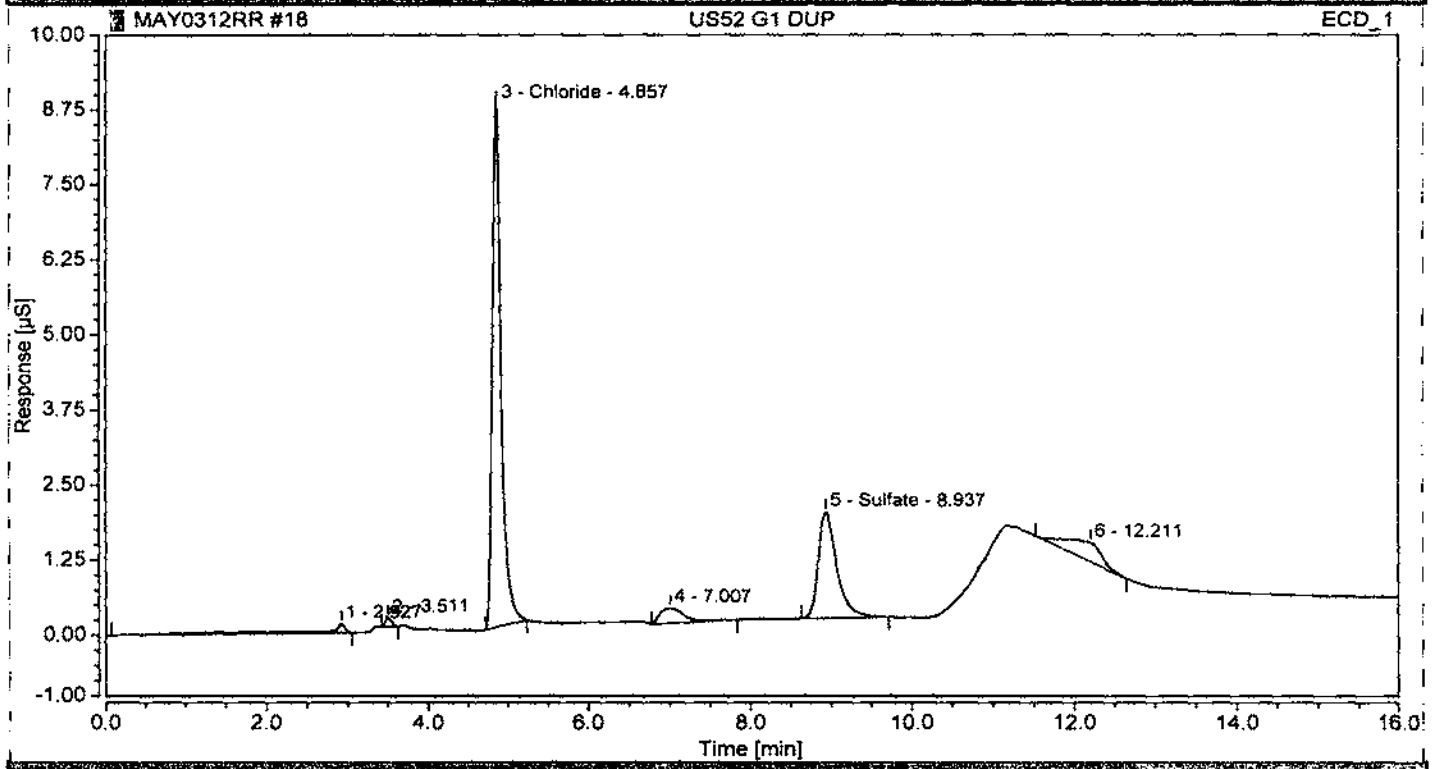
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.010	0.116	FALSE	n.a.
2	Fluoride	10.0	2.0	3.36	1.024	8.893	FALSE	n.a.
3	Chloride	10.0	3.62	4.65	1.826	12.854	FALSE	n.a.
4	Nitrite	10.0	10.58	5.67	3.82	8.401	FALSE	n.a.
5		10.0	n.a.	7.01	0.074	0.261	FALSE	n.a.
6	Bromide	10.0	n.a.	8.34	0.356	1.167	FALSE	n.a.
7	Sulfate	10.0	20.67	8.91	5.46	9.403	FALSE	n.a.
8	Nitrate	10.0	31.15	9.86	7.241	5.948	FALSE	n.a.
9		10.0	n.a.	11.60	0.180	0.000	FALSE	n.a.
10	Phosphate	10.0	19.00	12.65	0.687	3.569	FALSE	n.a.

Injection Name:	*US52 G1*	Inject Number:	17
Vial Number:	*15*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 19:39*		



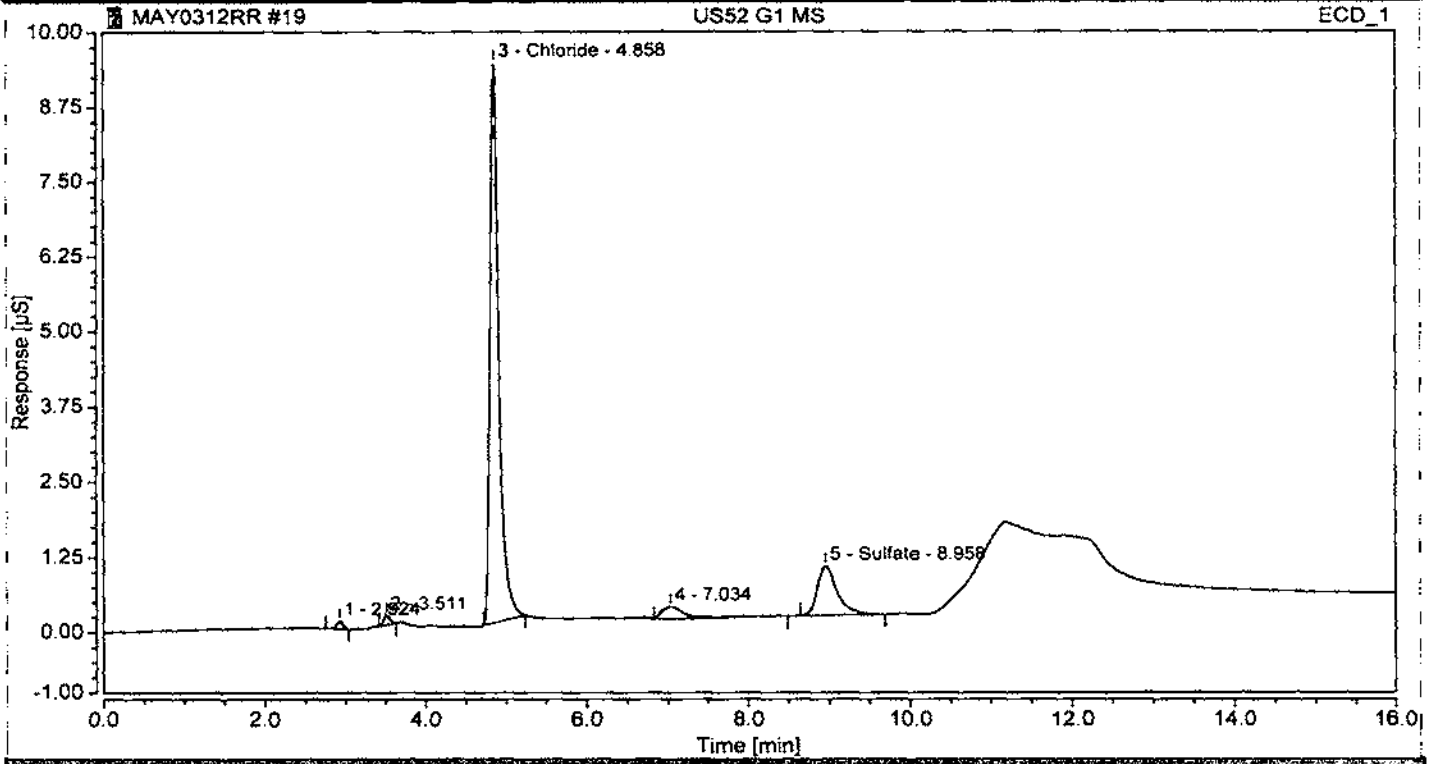
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.921	0.013	0.128	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.507	0.014	0.143	FALSE	n.a.
3	Chloride	10.0	3.842	4.857	0.780	6.068	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.011	0.303	0.256	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	20.162	8.937	0.467	3.759	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 DUP*	Inject Number:	18
Vial Number:	*16*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 19:59*		



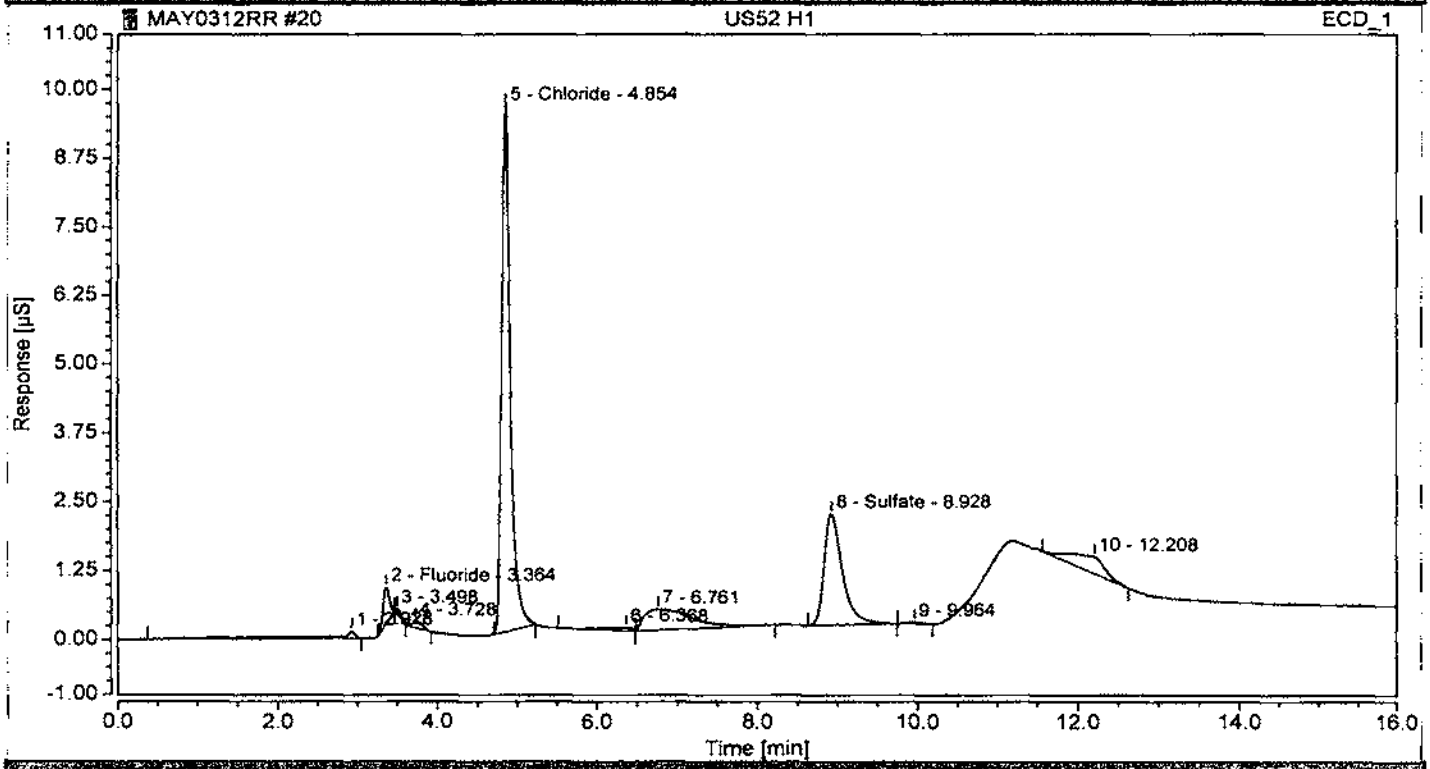
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.98	0.074	0.143	FALSE	n.a.
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.511	0.013	0.042	FALSE	n.a.
3	Chloride	10.0	3.610	4.857	0.111	0.212	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.007	0.034	0.047	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	2.978	8.937	0.170	0.169	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	n.a.	12.211	0.101	0.017	FALSE	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	19
Vial Number:	*17*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 20:19*		



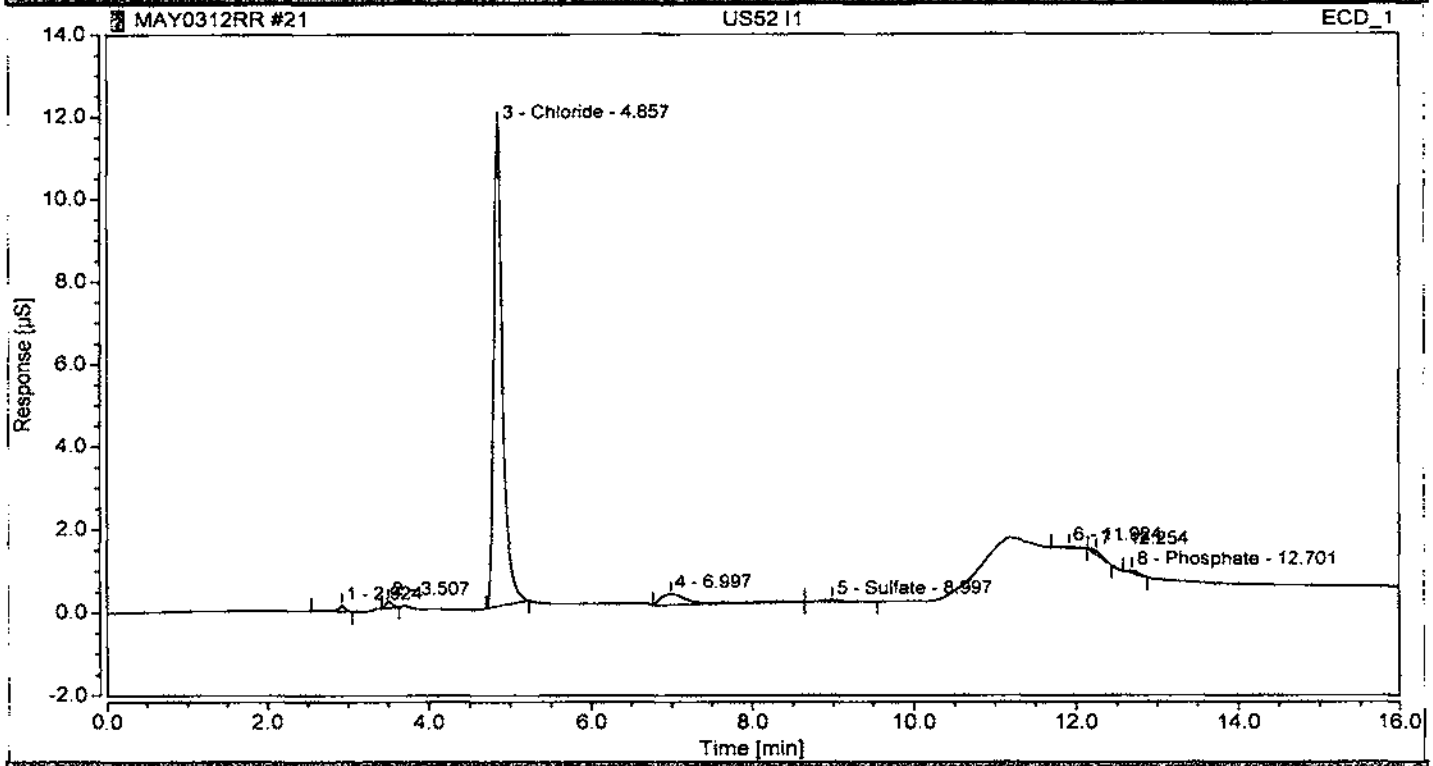
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.d.	2.92	0.0011	0.127	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.d.	3.511	0.0018	0.134	FALSE	n.a.
3	Chloride	20.0	2.780	4.858	0.1196	0.927	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	n.d.	7.034	0.0021	0.0126	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	20.508	8.958	0.8291	0.5254	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 H1*	Inject Number:	20
Vial Number:	*18*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 20:40*		



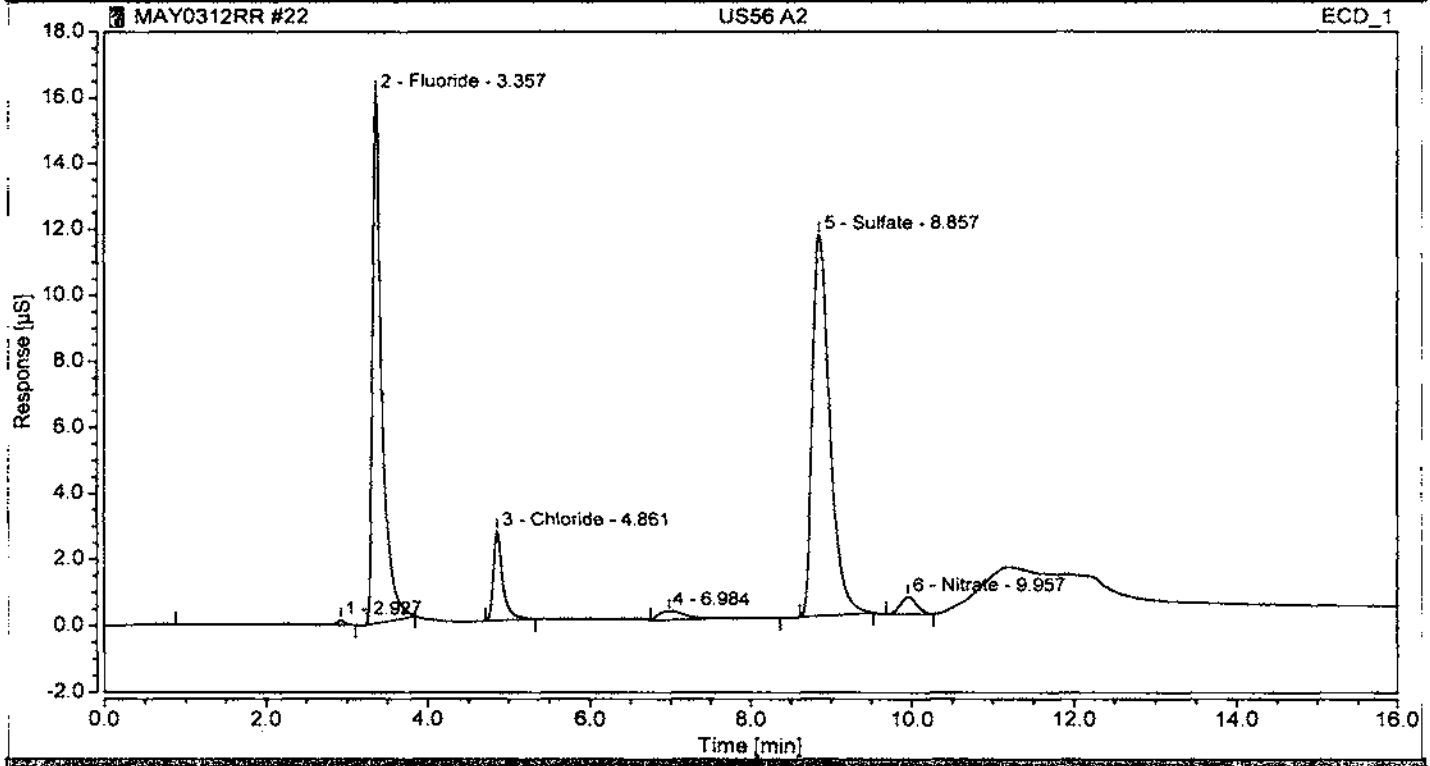
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	2.9	0.0869	0.131	FALSE	n.a.
2	Fluoride	2.0	0.249	3.4	0.539	0.859	FALSE	n.a.
3		2.0	n.a.	3.5	0.0877	0.0981	FALSE	n.a.
4		2.0	n.a.	3.7	0.0745	0.0715	FALSE	n.a.
5	Chloride	2.0	2.08	4.9	3.65	3.65	FALSE	n.a.
n.a.	Nitrite	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		2.0	n.a.	6.4	0.0878	0.0878	FALSE	n.a.
7		2.0	n.a.	6.8	0.0747	0.0747	FALSE	n.a.
n.a.	Bromide	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Sulfate	2.0	1.25	8.9	2.19	2.19	FALSE	n.a.
n.a.	Nitrate-N	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9		2.0	n.a.	9.9	0.0871	0.0871	FALSE	n.a.
10		2.0	n.a.	12.2	0.748	0.503	FALSE	n.a.
n.a.	Phosphate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 I1*	Inject Number:	21
Vial Number:	*19*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 21:00*		



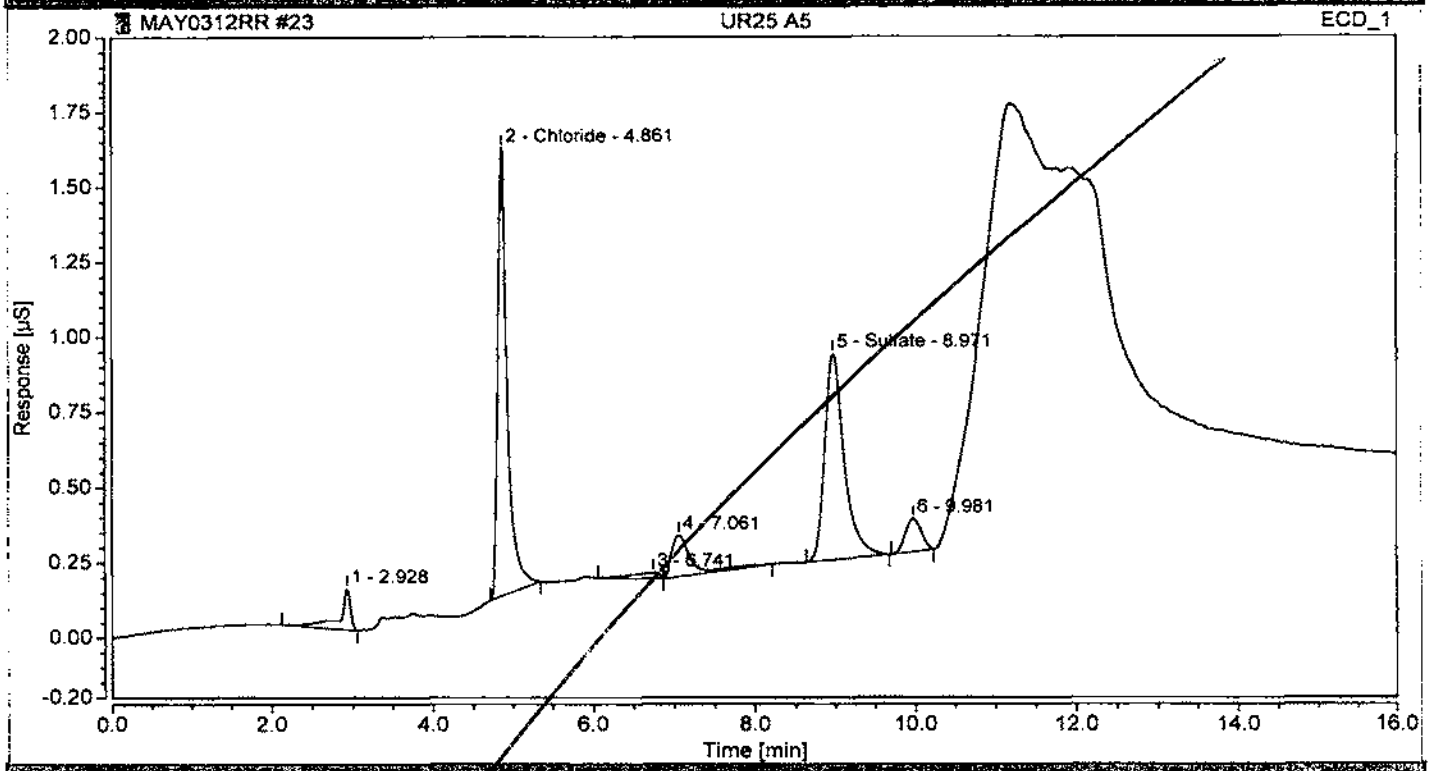
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	0.0	2.92	0.016	0.136	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.51	0.013	0.085	FALSE	n.a.
3	Chloride	20.0	0.000	4.86	0.000	0.092	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	0.000	6.99	0.000	0.282	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	0.000	8.99	0.000	0.241	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		20.0	0.000	11.92	0.000	0.061	FALSE	n.a.
7		20.0	n.a.	12.25	0.000	0.092	FALSE	n.a.
8	Phosphate	20.0	0.010	12.70	0.010	0.065	FALSE	n.a.

Injection Name:	*US56 A2*	Inject Number:	22
Vial Number:	*20*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 21:21*		



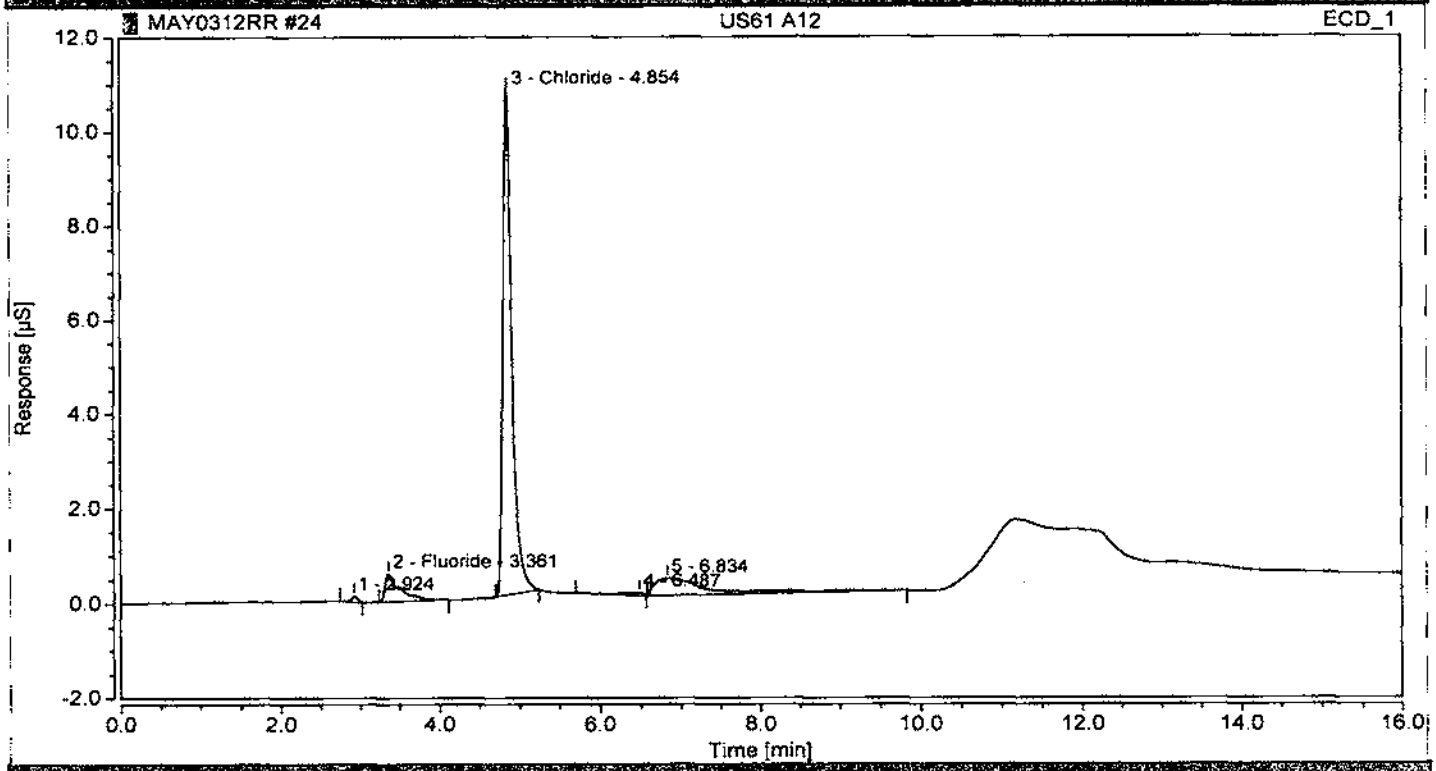
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0					FALSE	n.a.
2	Fluoride	5.0					FALSE	n.a.
3	Chloride	5.0					FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		5.0					FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	5.0					FALSE	n.a.
6	Nitrate	5.0					FALSE	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*UR25 A5*	Inject Number:	23
Vial Number:	*21*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 21:42*		



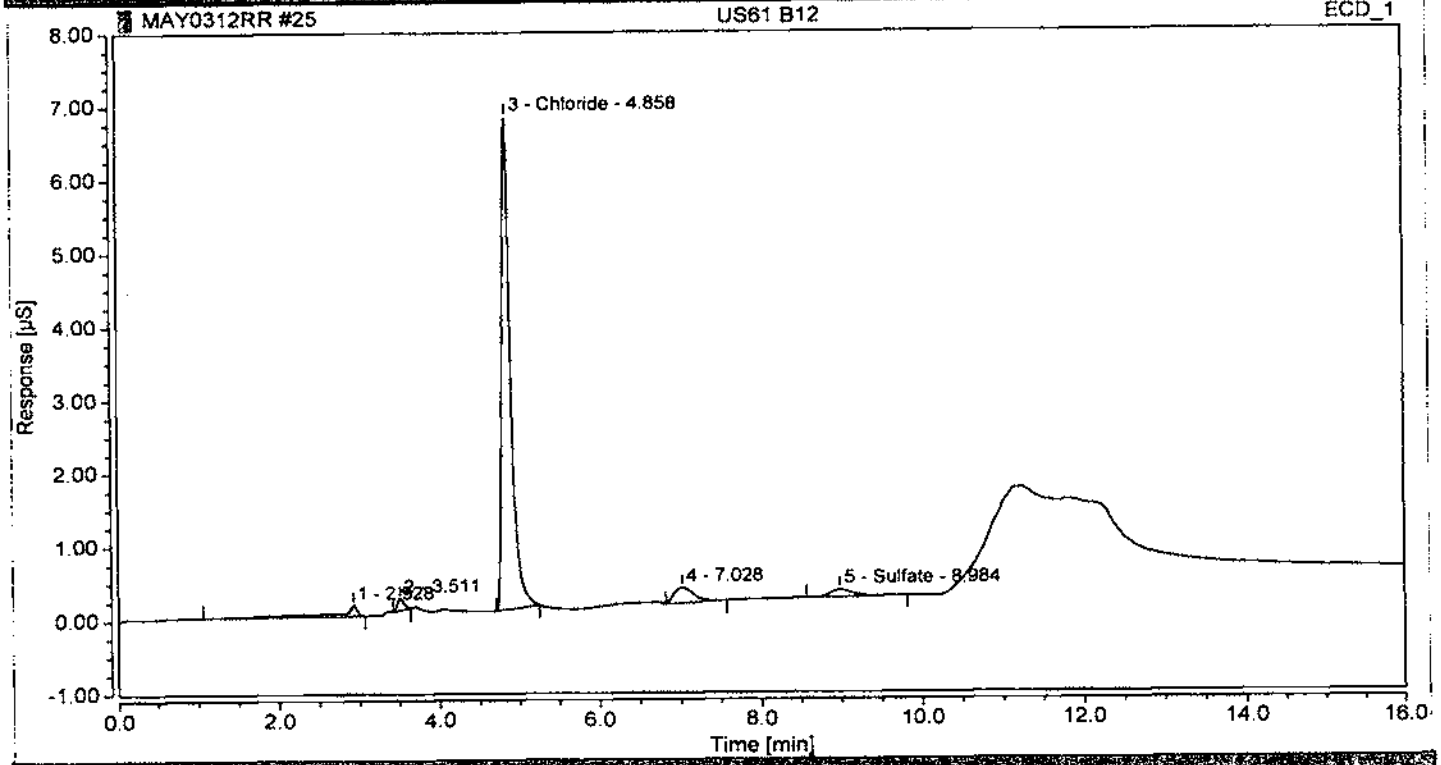
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.053	0.138	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Chloride	1.0	0.0855	4.86	0.350	1.499	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	6.74	0.011	0.020	FALSE	n.a.
4		1.0	n.a.	7.06	0.028	0.067	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.0652	8.97	0.261	0.655	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	9.98	0.026	0.110	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US61 A12*	Inject Number:	24
Vial Number:	*22*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 22:02*		



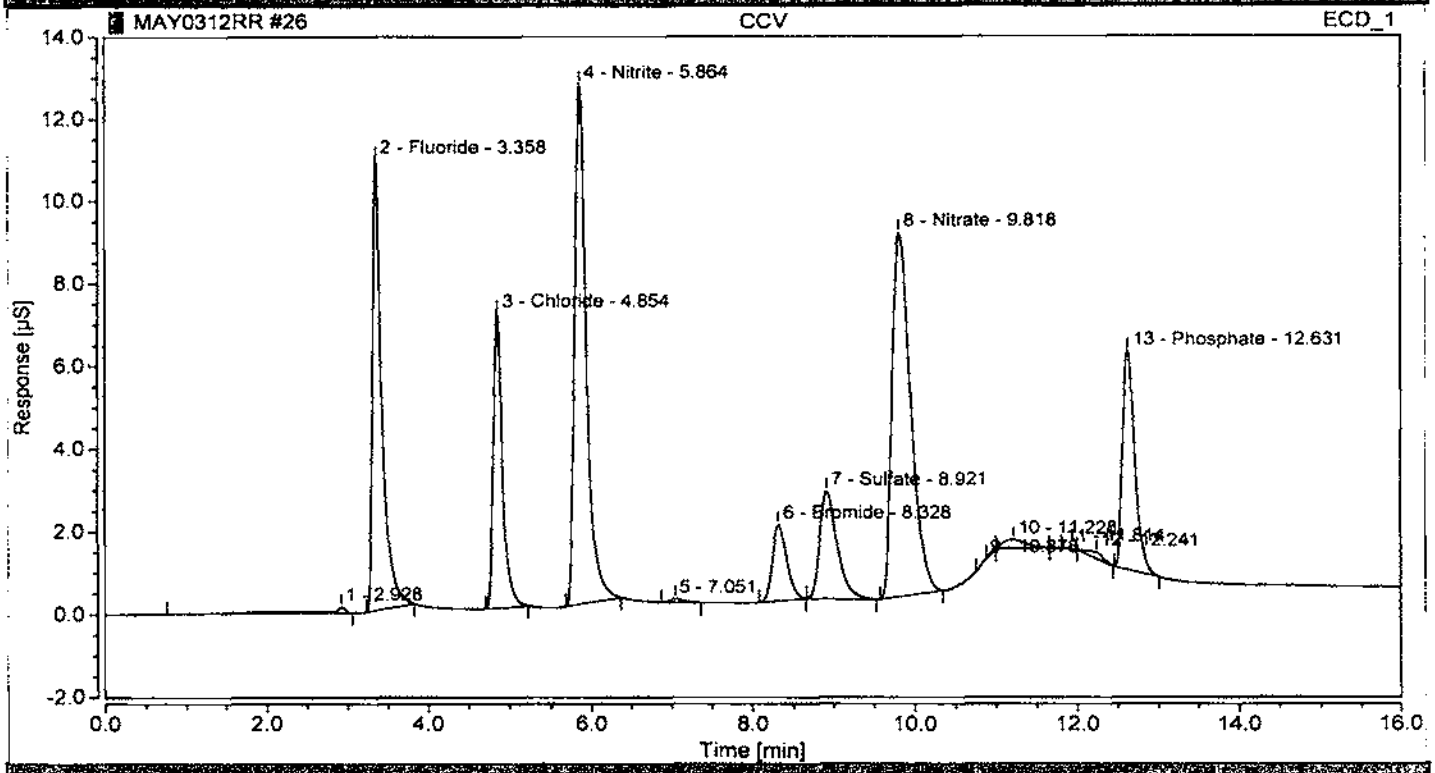
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
2	Fluoride	2.0	0.510	[illegible]	[illegible]	[illegible]	FALSE	n.a.
3	Chloride	2.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Nitrite	2.0	n.a.	[illegible]	[illegible]	n.a.	n.a.	n.a.
4		2.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
5		2.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Bromide	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US61 B12*	Inject Number:	25
Vial Number:	*23*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 22:23*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	3.93	0.052	0.144	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	4.1	0.015	0.166	FALSE	n.a.
3	Chloride	20.0	5.23	4.86	0.567	6.700	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	n.a.	7.03	0.060	0.207	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	3.01	8.98	0.034	0.089	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

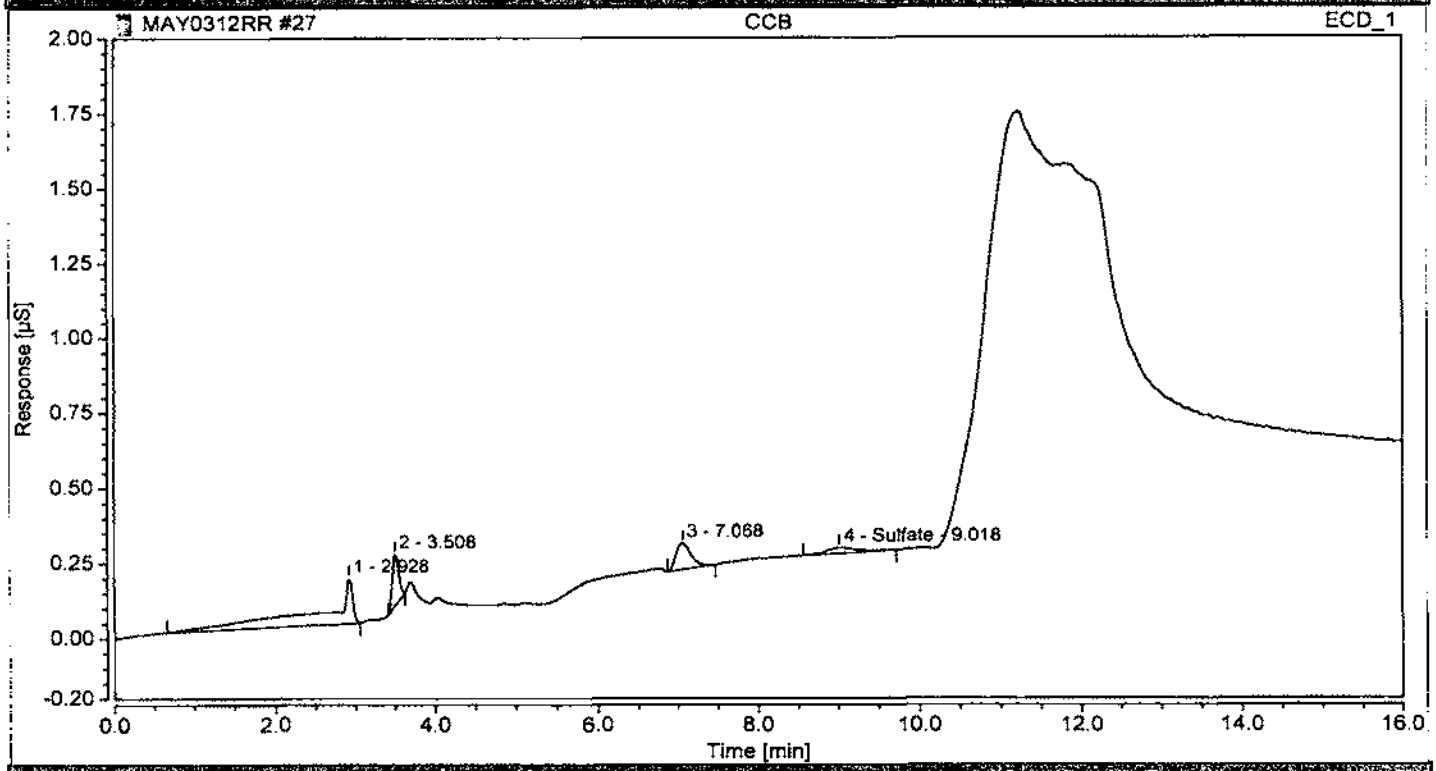
Injection Name:	*CCV*	Inject Number:	26
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 22:43*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.008	0.144	FALSE	n.a.
2	Fluoride	1.0	2.65	3.36	1.477	19.523	FALSE	-0.85
3	Chloride	1.0	5.66	4.86	3.010	34.128	FALSE	-1.34
4	Nitrite	1.0	3.04	5.86	2.015	12.661	FALSE	-0.15
5		1.0	n.a.	7.05	0.018	0.081	FALSE	n.a.
6	Bromide	1.0	2.68	8.33	0.972	7.541	FALSE	-4.36
7	Sulfate	1.0	4.06	8.92	1.403	9.502	FALSE	-3.26
8	Nitrate	1.0	3.93	9.82	2.744	16.985	FALSE	-3.72
9		1.0	n.a.	10.18	0.055	0.258	FALSE	n.a.
10		1.0	n.a.	11.23	0.070	0.219	FALSE	n.a.
11		1.0	n.a.	12.14	0.025	0.128	FALSE	n.a.
12		1.0	n.a.	12.24	0.032	0.180	FALSE	n.a.
13	Phosphate	1.0	2.978	12.63	0.940	5.290	FALSE	-0.72

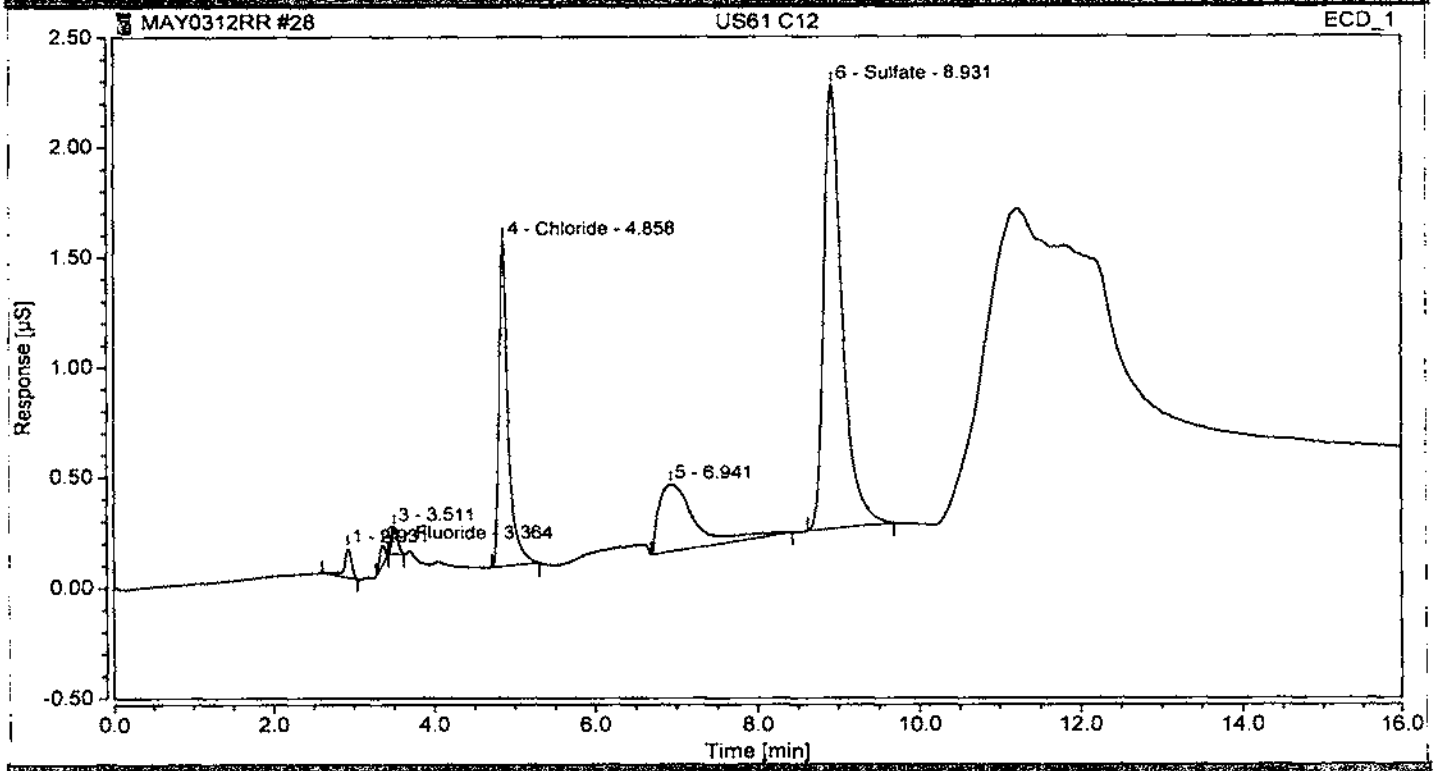
US52 : 01264

Injection Name:	*CCB*	Inject Number:	27
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 23:02*		



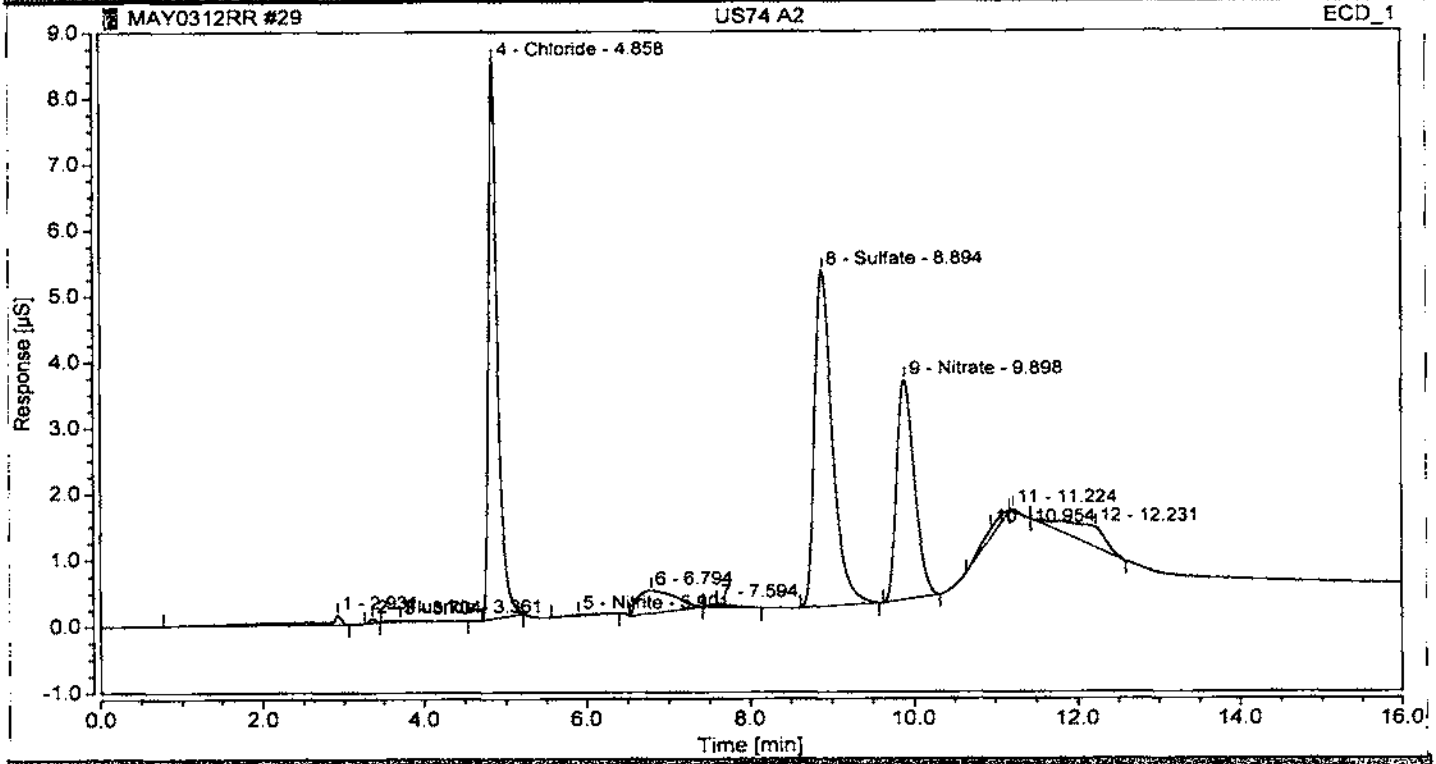
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.0270	0.158	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.016	0.171	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.07	0.013	0.087	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.309	9.02	0.909	0.940	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US61 C12*	Inject Number:	28
Vial Number:	*24*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 23:22*		



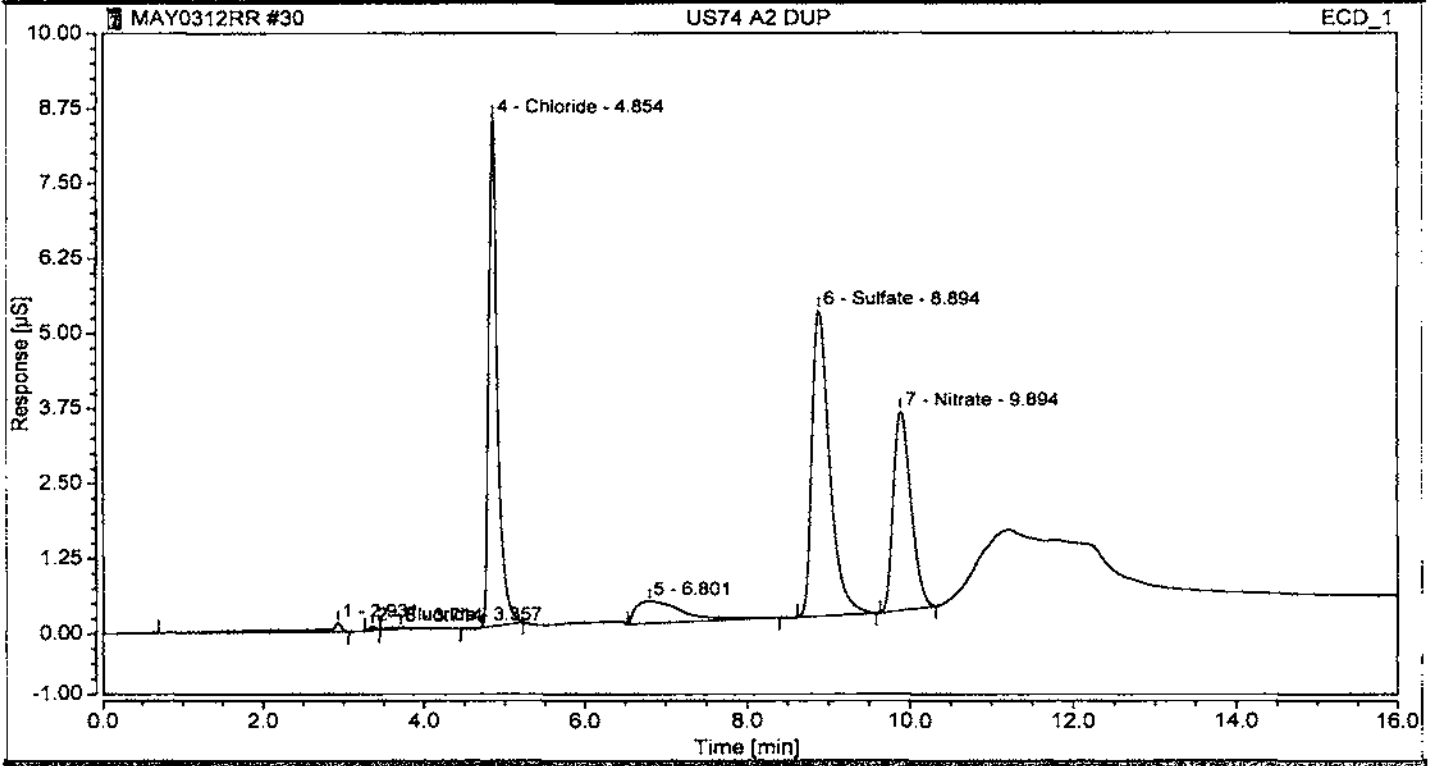
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.801	0.014	0.133	FALSE	n.a.
2	Fluoride	5.0	0.072	3.364	0.011	0.086	FALSE	n.a.
3		5.0	n.a.	3.511	0.021	0.124	FALSE	n.a.
4	Chloride	5.0	0.174	4.856	0.045	0.278	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		5.0	n.a.	6.941	0.124	0.802	FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	5.0	0.414	8.931	0.231	2.018	FALSE	n.a.
n.a.	Nitrate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US74 A2*	Inject Number:	29
Vial Number:	*25*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 23:42*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.092	0.146	FALSE	n.a.
2	Fluoride	1.0	0.018	3.36	0.006	0.559	FALSE	n.a.
3		1.0	n.a.	3.71	0.012	0.023	FALSE	n.a.
4	Chloride	1.0	2.76	4.86	1.645	3.436	FALSE	n.a.
5	Nitrite	1.0	0.010	5.90	0.00	0.016	FALSE	n.a.
6		1.0	n.a.	6.79	0.019	0.030	FALSE	n.a.
7		1.0	n.a.	7.59	0.010	0.018	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Sulfate	1.0	2.41	8.89	1.283	5.777	FALSE	n.a.
9	Nitrate	1.0	1.08	9.90	0.573	3.208	FALSE	n.a.
10		1.0	n.a.	10.95	0.201	0.737	FALSE	n.a.
11		1.0	n.a.	11.22	0.105	0.048	FALSE	n.a.
12		1.0	n.a.	12.23	0.167	0.061	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

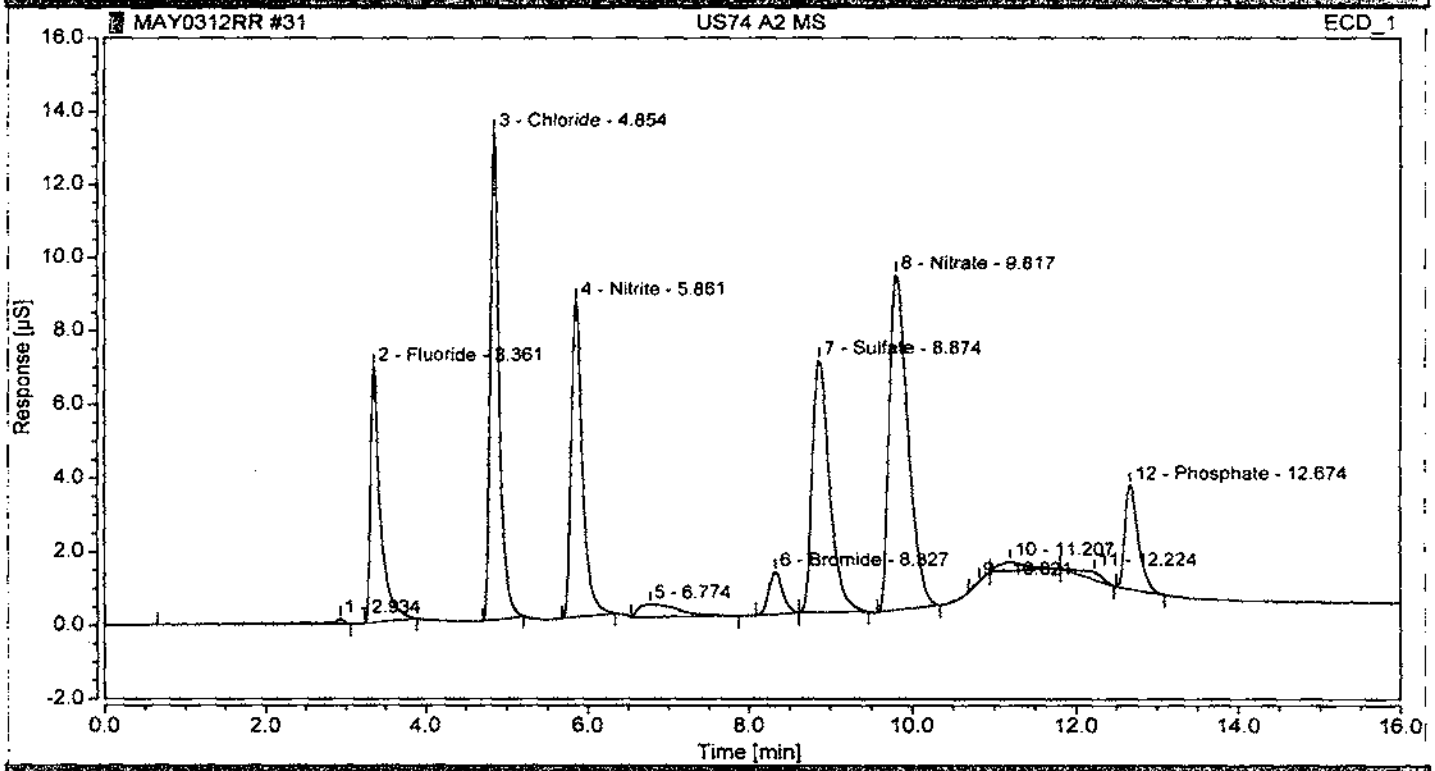
Injection Name:	*US74 A2 DUP*	Inject Number:	30
Vial Number:	*26*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 00:02*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.064	0.143	FALSE	n.a.
2	Fluoride	1.0	0.0101	3.36	0.045	0.0952	FALSE	n.a.
3		1.0	n.a.	3.357	0.013	0.028	FALSE	n.a.
4	Chloride	1.0	0.983	4.86	1.971	6.456	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.801	0.242	0.566	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	3.100	8.89	1.264	3.088	FALSE	n.a.
7	Nitrate	1.0	2.107	9.89	0.827	2.017	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US52 : 01268

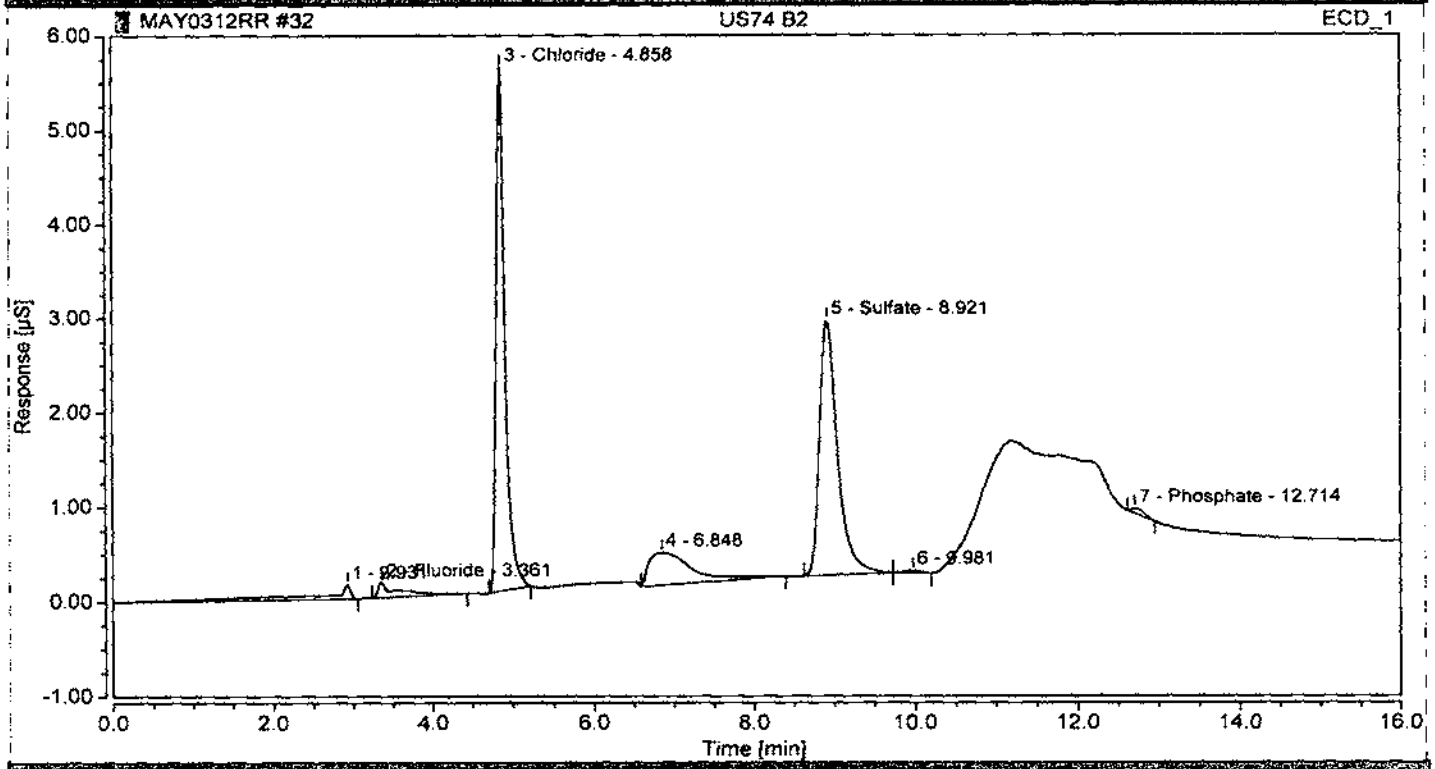
Injection Name:	*US74 A2 MS*	Inject Number:	31
Vial Number:	*27*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 00:21*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.048	0.743	FALSE	n.a.
2	Fluoride	1.0	1.918	3.36	0.085	0.938	FALSE	n.a.
3	Chloride	1.0	4.158	4.85	0.184	1.974	FALSE	n.a.
4	Nitrite	1.0	2.899	5.86	0.127	1.378	FALSE	n.a.
5		1.0	n.a.	6.77	0.017	0.344	FALSE	n.a.
6	Bromide	1.0	1.213	8.83	0.060	1.185	FALSE	n.a.
7	Sulfate	1.0	4.720	8.87	0.203	3.243	FALSE	n.a.
8	Nitrate	1.0	3.226	9.82	0.138	3.082	FALSE	n.a.
9		1.0	n.a.	10.82	0.008	0.363	FALSE	n.a.
10		1.0	n.a.	11.21	0.022	0.447	FALSE	n.a.
11		1.0	n.a.	12.23	0.007	0.218	FALSE	n.a.
12	Phosphate	1.0	1.728	12.67	0.040	2.817	FALSE	n.a.

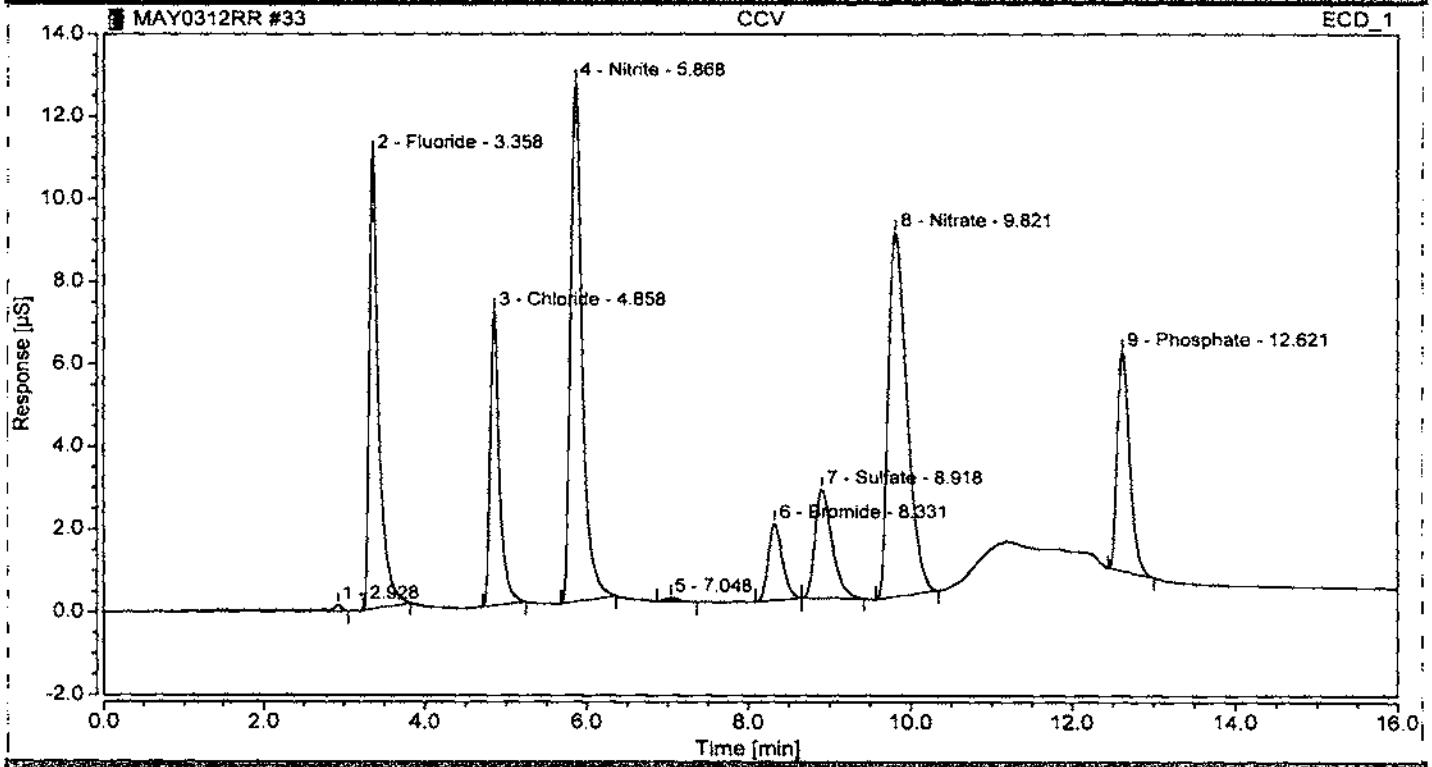
US52 : 01265

Injection Name:	*US74 B2*	Inject Number:	32
Vial Number:	*28*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*04/05/12 00:41*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.006	0.148	FALSE	n.a.
2	Fluoride	1.0	0.006	3.36	0.047	0.134	FALSE	n.a.
3	Chloride	1.0	0.281	4.86	0.764	5.549	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	5.71	0.000	0.000	n.a.	n.a.
4		1.0	0.014	6.85	0.209	0.340	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.105	8.92	0.886	2.697	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	9.98	0.005	0.027	FALSE	n.a.
7	Phosphate	1.0	0.032	12.71	0.010	0.051	FALSE	n.a.

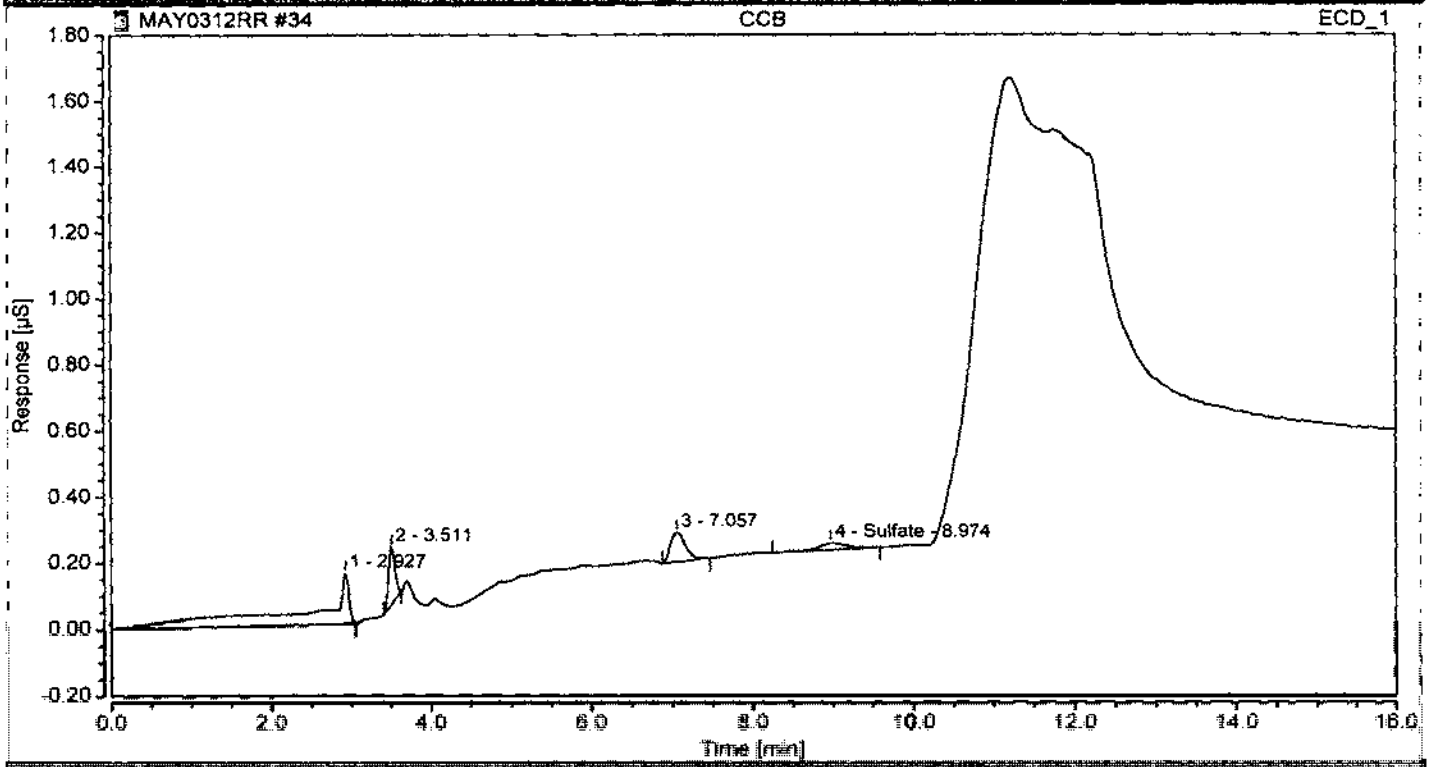
Injection Name:	*CCV*	Inject Number:	33
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 01:01*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.088	0.180	FALSE	n.a.
2	Fluoride	1.0	2.05	3.36	1.478	11.005	FALSE	-0.53
3	Chloride	1.0	2.03	4.86	0.931	4.121	FALSE	-0.24
4	Nitrite	1.0	3.04	5.87	2.118	12.574	FALSE	0.12
5		1.0	n.a.	7.05	0.011	0.083	FALSE	n.a.
6	Bromide	1.0	2.12	8.33	0.375	1.299	FALSE	-4.78
7	Sulfate	1.0	2.09	8.92	0.647	2.616	FALSE	-4.24
8	Nitrate	1.0	3.11	9.82	2.224	8.603	FALSE	3.69
9	Phosphate	1.0	2.997	12.62	0.936	2.305	FALSE	-0.11

US52 : 01271

Injection Name:	*CCB*	Inject Number:	34
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 01:22*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.081	0.152	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.016	0.173	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.06	0.019	0.086	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.039	8.97	0.009	0.021	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US52 : 01272

Injection Name:	*STOP*	Inject Number:	35
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*SHUTDOWN*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 01:42*		

Can't read channel ECD_1 from injection #35 - STOP.
Channel is not available.

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			n.a.	min	matogram in con	matogram in		n.a.

US52 : 01273

PHOSPHORUS BENCHSHEET, Aqueous			Digested:	Analyzed:
Soluble Reactive P (SRP) by EPA 365.2, SM 4500-P		Date	5/8/12 12:00	5/8/12 19:37
Indicate "Total" or "SRP"	Total	Analyst	CDE	CDE

Total P by digestion (Indicate procedure used) — ***SM 4500-P B5-99, Acid persulfate*** / ~~***SM 4500-P B4-99, Sulfuric-Nitric Acid***~~

NOTE: *curve standards must be digested !* — ***make no entries to shaded cells, they are calculated !!***

Curve Standards

Stock Standard

Stock #: 123-9 *Prep date:* 2/9/2012 Conc = **50.00** *mg/L P*

Intermediate Standard

5 *mL stk to* 50 *mL DI =* ***5.00*** *mg P/L*

Calibration Curvefor Digested Curve

std make-up volume (mL) = **25** Digest Final Vol (mL) = **50**

mL intermediate Std		CONC	UNITS	AVG		REGRESSION DATA
SRP	Total P	(mg/L)	(ABS 880 nm 5cm cell)		mg/L	CONC = (ABS-intercept)/ slope
0.00	0.00	0.000	0.000	0.000	0.001	intercept = -0.0022
0.08	0.08	0.008	0.022	0.022	0.008	Slope = 3.1742
0.25	0.25	0.025	0.075	0.075	0.024	r = 0.9999
0.75	0.75	0.075	0.230	0.230	0.073	
2.50	2.50	0.250	0.803	0.803	0.254	Comment: Calibration OK!
5.00	5.00	0.500	1.580	1.580	0.498	
						maxabs = 1.580

Verification Standards *Source:* ERA# 3303093 *Conc (mg/L)* 1000

Intermediate 0.50 *mL to* 50 *mL DI =* ***10.0*** *mg/L*

SRP ICV *dilution =* 0.75 *mL Int to* 50 *mL DI =* ***0.150*** *mg/L* *CVS*

Tot P LCS *dilution =* 0.25 *mL Int to* 25 *mL DI =* ***0.100*** *mg/L* *LCS*

DQL Standard (low level) *Source:* ***Curve Int.*** *Conc (mg/L)* 5.0

SRP 0.080 *ml to* 50 *ml DI =* ***0.008*** *mg/L*

Total P 0.080 *ml to* 25 *ml DI =* ***0.016*** *mg/L*

Sample Data

Spike with 5 mg/L Intermediate Standard — *enter dilution as final vol / sample vol*

SAMPLE ID	Tot P Digest		Analysis Data			TOT P	SRP	
	mL sample	mL digest	Abs	Dilution	(mg/L)	(mg/L)	(mg/L)	Notes
MB Total	25	50	0.000	1.0	0.0007	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%
DQL Total	25	50	0.023	1.0	0.0080	0.0159		99.40%
UR75 A3	25	50	0.070	1.0	0.0228	0.0456		
UR75 B3	25	50	0.159	1.0	0.0508	0.1016		
UR75 C3	25	50	0.005	1.0	0.0023	<0.008		
UR75 D3	25	50	0.034	1.0	0.0114	0.0228		
UR75 E3	25	50	0.018	1.0	0.0064	0.0128		
UR75 F3	25	50	0.022	1.0	0.0079	0.0163		
UR75 F3 dup	25	50	0.022	1.0	0.0076	0.0153		RPD na
UR75 F3 ms	25	50	0.077	1.0	0.0250	0.0499		124.8% Rec
Spike =	0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.040	
UR75 G3	25	50	0.019	1.0	0.0067	0.0134		
UR75 H3	25	50	0.027	1.0	0.0092	0.0184		
MB total	25	50	0.000	1.0	0.0007	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%
UR75 I 3	25	50	0.021	1.0	0.0073	0.0146		
US27 E5	25	50	1.409	2.0	0.4426	1.7704		
US52 G16	25	50	0.619	1.0	0.1967	0.3934		
US52 H6	25	50	1.371	2.0	0.4326	1.7305		
US52 I 5	25	50	1.012	2.0	0.3195	1.2781		
US61 A11	25	50	1.001	2.0	0.3161	1.2643		
US61 A11 dup	25	50	1.014	2.0	0.3202	1.2808		RPD = 1.29
US61 A11 ms	25	50	1.033	2.0	0.3261	1.3046		100.8% Rec
Spike =	0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.040	
US61 B11	25	50	0.846	2.0	0.2672	1.0689		
US61 C11	25	50	0.616	1.0	0.1948	0.3895		
MB total	25	50	0.000	1.0	0.0007	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%
US82 A8	25	50	0.022	1.0	0.0076	0.0153		
US82 B9	25	50	0.214	1.0	0.0681	0.1363		

US82 C4	25	50	0.197	1.0	0.0628	0.1255		
~~US82 E4~~	25	50	~~1.731~~	~~1.0~~	0.6469	~~1.0921~~		~~offscale~~
US82 E4	25	50	0.852	2.0	0.2691	1.0765		
MB total	25	50	0.001	1.0	0.0010	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%

US52-01275

PHOSPHORUS BENCHSHEET, Aqueous			Digested:	Analyzed:
Soluble Reactive P (SRP) by EPA 365.2, SM 4500-P		Date	5-8-12 12:00	5-8-12 19:37
Indicate "Total" or "SRP"	**Total**	Analyst	CNL	CNL

Total P by digestion (indicate procedure used) — ***SM 4500-P B5-99, Acid persulfate*** / ~~***SM 4500-P B4-99, Sulfuric-Nitric Acid***~~

NOTE: *curve standards must be digested !*

Curve Standards — ***make no entries to shaded cells, they are calculated !!***

Stock Standard

Stock #: 123-9 *Prep date:* 2/9/2012 Conc = **50.00** *mg/L P*

Intermediate Standard

5 *mL stk to* 50 *mL DI =* **5.00** *mg P/L*

Calibration Curve for Digested Curve

std make-up volume (mL) = **25** Digest Final Vol (mL) = **50**

mL intermediate Std		CONC	UNITS	AVG		REGRESSION DATA
SRP	Total P	(mg/L)	(ABS 880 nm 5cm cell)		mg/L	CONC = (ABS-intercept)/ slope
0.00	0.00	0.000	0.000			*intercept =*
0.08	0.08	0.008	0.022			*Slope =*
0.25	0.25	0.025	0.075			*r =*
0.75	0.75	0.075	0.230			*Comment:*
2.50	2.50	0.250	0.803			
5.00	5.00	0.500	1.580			*maxabs =* 0.000

Verification Standards *Source:* ERA# 3303093 *Conc (mg/L)* 1000

Intermediate		0.50	*mL to*	50	*mL DI =*	***10.0***	*mg/L*	
SRP ICV	*dilution =*	0.75	*mL Int to*	50	*mL DI =*	***0.150***	*mg/L*	*CVS*
Tot P LCS	*dilution =*	0.25	*mL Int to*	25	*mL DI =*	***0.100***	*mg/L*	*LCS*

DQL Standard (low level) *Source:* ***Curve Int.*** *Conc (mg/L)* 5.0

SRP	0.080	*ml to*	50	*ml DI =*	***0.008***	*mg/L*
Total P	0.080	*ml to*	25	*ml DI =*	***0.016***	*mg/L*

Sample Data

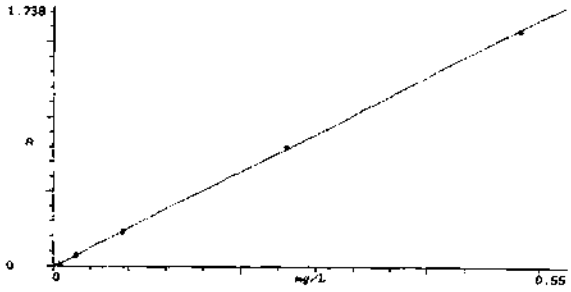
Spike with 5 mg/L Intermediate Standard — *enter dilution as final vol / sample vol*

SAMPLE ID	Tot P Digest		Analysis Data			TOT P	SRP	Notes
	mL sample	mL digest	Abs	Dilution	(mg/L)	(mg/L)	(mg/L)	
MB Total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
DQL Total	25	50	0.023	1.0				
UR75 A3	25	50	0.070	1.0				
UR75 B3	25	50	0.159	1.0				
UR75 C3	25	50	0.005	1.0				
UR75 D3	25	50	0.034	1.0				
UR75 E3	25	50	0.018	1.0				
UR75 F3	25	50	0.032	1.0				
UR75 F3 dup	25	50	0.022	1.0				
UR75 F3 ms	25	50	0.077	1.0				0% Rec
Spike =	~~0.1~~ 0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.020	
UR75 G3	25	50	0.019	1.0				
UR75 H3	25	50	0.027	1.0				
MB total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
UR75 I3	25	50	0.021	1.0				
US27 E5	25	50	1.409	~~1.0~~ 2X				
US52 G16	25	50	0.619	1.0				
US52 H6	25	50	1.371	~~1.0~~ 2X				
US52 I5	25	50	1.012	~~1.0~~ 2X				
US61 A11	25	50	1.001	~~1.0~~ 2X				
US61 A11 dup	25	50	1.014	~~1.0~~ 2X				
US61 A11 ms	25	50	1.033	~~1.0~~ 2X				0% Rec
Spike =	~~0.1~~ 0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.020	
US61 B11	25	50	0.946	~~1.0~~ 2X				
US61 C11	25	50	0.616	1.0				
MB total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
US82 A8	25	50	0.022	1.0				
US82 B9	25	50	0.214	1.0				

US82 C4	25	50	0.197	1.0				
US82 E4	25	50	1.731	1.0				
US82E4	25	50	0.852	1.0				
CCB	25	50	0.001	1.0				
CCV	25	50	0.153	1.0				
	25	50		1.0				
	25	50		1.0				
	25	50		1.0				
MB total	25	50		1.0				
LCS 1	25	50		1.0				

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Standard Curve	8:03pm 8May12
Test Name	TPHOS
Date Standards Measured	8May12
Wavelength	880nm
Ref. Wavelength Correction	Off
Curve Fit	Linear
Number of Standards	6
Units	mg/L
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On



Curve Fit	Linear
Slope	3.17
Intercept	-0.00224
Std Dev	0.007
Corr Coeff	1.000

Std #	Conc. mg/L	Abs 880nm

1	0.000	0.000
2	0.008	0.022
3	0.025	0.075
4	0.075	0.230
5	0.250	0.803
6	0.500	1.580

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Advanced A-%T-C	8:04pm 8May12
Test Name	TPHOSI[Saved]
Measurement Mode	Absorbance
Wavelength	880nm
Ref. Wavelength Correction	Off
Delay Time (min:sec)	0:00
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On

ID#	Abs 880nm
1	0.000
2	0.153
3	0.023
4	0.070
5	0.159
6	0.005
7	0.036

7	0.034
8	0.018
9	0.022
10	0.022
11	0.077
12	0.019
13	0.027
14	0.000
15	0.153
16	0.021
17	1.409
18	0.619
19	1.371
20	1.012
21	1.001

22	1.014
23	1.033
24	0.846
25	0.616
26	0.000
27	0.153
28	0.022
29	0.214
30	0.197
31	1.731
32	0.852
33	0.001
34	0.153

TOC, Aqueous Data Summary (Apollo 9000) DATE: 5/17/2012
EPA 9060 A, SM 5310 B-00 ANALYST: CDE 11:50
Analysis Mode: **NPOC** *Instrument:* ***Apollo 9000***

Detection Limits (mgC/L)
MRL = 1.5 **upper blank =** 1.5 **lower blank =** -1.5

Calibration Data

Stock ID:	ARI 00125-4	factor (m):	1.478E+05	r^2:	0.99947
Curve Date:	4/24/2012	intercept (b_{cal}):	46951	sys blk (b_{sys})	21111

Curve ID: 042412X 0-50ppm

LCS, Verification Standard and Inorganic Sparge Check

	Organic Carbon			Inorganic carbon		
Source:	ERA 0523-11-05			ARI # 0104-9		
Conc:	5,000	*mg/L*		1,000	*mg/L*	
dilution:	1.00	*mL to*	mg C/ L	5.00	*mL to*	mg C/ L
Volume:	250	*mL =*	**20.0**	250	*mL =*	**20**

Sample Data

SAMPLE ID	Dilution Factor	Carbon (mg C/L) *enter Form as TC, TIC, NPOC* Form	# reps	mean	stdev	Measured	Report as	Notes: *will flag if RSD >5%*
ICV	1	NPOC	3	21.8364	0.59	21.84	21.8	*109.00%*
ICB	1	NPOC	3	-0.1672	0.12	-0.17	<1.5	*OK !*
1.5 ppm	1	NPOC	3	1.2966	0.20	1.30	<1.5	86.44%
IC Sparge Check	1	NPOC	3	19.3551	0.21	19.36	19.4	*97.00%*
US52 G17	1	NPOC	3	3.7262	0.08	3.73	3.73	
US52 H7	1	NPOC	3	8.8113	0.16	8.81	8.81	
US52 I 4	1	NPOC	3	24.5683	0.55	24.57	24.6	
US61 A13	1	NPOC	3	4.0784	0.18	4.08	4.08	
US61 B13	1	NPOC	3	4.1693	0.24	4.17	4.17	RSD > 5% chk value *
US61 C13	1	NPOC	3	3.1370	0.10	3.14	3.14	
US82 A10	1	NPOC	3	1.9778	0.18	1.98	1.98	RSD > 5% chk value *
CCV	1	NPOC	3	20.7517	0.21	20.75	20.8	*104.00%*
CCB	1	NPOC	3	-0.0902	0.15	-0.09	<1.5	*OK !*
US82 B11	1	NPOC	3	2.2066	0.14	2.21	2.21	
US82 C6	1	NPOC	3	2.6955	0.16	2.70	2.7	
US82 E6	1	NPOC	3	7.5939	0.13	7.59	7.59	
UT92 A3	1	NPOC	3	1.6575	0.16	1.66	1.66	RSD > 5% chk value *
UT92 A3dup	1	NPOC	3	1.5510	0.23	1.55	1.55	*RPD =6.9%*
UT92 A3ms	1	NPOC	3	22.6661	0.21	22.67	22.7	*105.04%*
Spike at	0.200	*mL of*	2,000	*ppm Std to*	20.00	*mL =*	20.0	*mg/L*
CCV	1	NPOC	3	20.0902	0.73	20.09	20.1	*100.50%*
CCB	1	NPOC	3	-0.2468	0.11	-0.25	<1.5	*OK !*

* = Sample is < 5x the MRL (7.5) and RSD >5% is expected due to low concentration in sample.

Calibration Report Print Date/Time: 2012/04/24 13:21:09

Cal. Curve ID: 042412X 0-50ppm
Created: 2012/04/24 13:21
Calibration Factor (m): 1.478e+05
Y Intercept (b): 46951
r-squared: 0.99947

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
BLK	33238	0.000	-0.093	Low Sample De	2012/04/24 11:24
1.5	145425	0.750	0.666		2012/04/24 11:46
5.0	406211	2.500	2.430		2012/04/24 12:08
10.0	790461	5.000	5.029		2012/04/24 12:30
25.0	1957990	12.500	12.927		2012/04/24 12:53
50.0	3711768	25.000	24.790		2012/04/24 13:18

US52 : 01283

Detailed Analysis Report Print Date/Time: 2012/05/21 12:40:12

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 11:50
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.4532	11.2266	1706622	14.407	15.403	183
2	21.2673	10.6337	1618963	14.486	15.486	176
3	21.7887	10.8943	1657500	14.511	15.507	175

<<<Statistics>>> Mean: 21.8364 Std Dev: 0.5944 RSD: 2.72

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 12:12
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.3095	-0.1548	24073	14.877	14.890	120
2	-0.1162	-0.0581	38363	14.730	14.997	120
3	-0.0759	-0.0379	41342	14.663	14.834	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.1672 Std Dev: 0.1249 RSD: -74.68

Sample ID: 1.5 ppm
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 12:33
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.0831	0.5415	127008	15.493	16.485	116
2	1.3385	0.6692	145888	15.244	16.233	118
3	1.4681	0.7340	155465	15.230	16.228	119

<<<Statistics>>> Mean: 1.2966 Std Dev: 0.1959 RSD: 15.11

Sample ID: CHECK
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 12:57
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19.5855	9.7928	1494651	16.458	17.449	147
2	19.3055	9.6528	1473954	16.247	17.243	148
3	19.1743	9.5872	1464256	16.367	17.365	146

<<<Statistics>>> Mean: 19.3551 Std Dev: 0.2100 RSD: 1.09

Sample ID: US52 G17
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 13:19
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.8153	1.9077	282018	16.393	17.391	124
2	3.6889	1.8445	272673	16.304	17.295	125
3	3.6745	1.8373	271610	16.228	17.220	124

<<<Statistics>>> Mean: 3.7262 Std Dev: 0.0775 RSD: 2.08

Sample ID: US52 H7
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 13:41
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.7819	4.3910	649133	16.950	17.948	132
2	8.9810	4.4905	663848	16.794	17.793	134
3	8.6709	4.3355	640926	16.773	17.767	132

<<<Statistics>>> Mean: 8.8113 Std Dev: 0.1571 RSD: 1.78

Sample ID: US52 I4
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 14:04
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	25.2049	12.6024	1863064	17.307	18.305	150
2	24.2857	12.1429	1795124	17.286	18.284	147
3	24.2142	12.1071	1789834	17.239	18.236	147

<<<Statistics>>> Mean: 24.5683 Std Dev: 0.5525 RSD: 2.25

Sample ID: US61 A13
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 14:27
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.1065	2.0532	303539	17.559	18.541	124
2	3.8841	1.9421	287101	17.346	18.339	123
3	4.2447	2.1223	313753	17.242	18.234	125

<<<Statistics>>> Mean: 4.0784 Std Dev: 0.1819 RSD: 4.46

Sample ID: US61 B13
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 14:49
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.4387	2.2194	328095	17.973	18.973	127
2	4.0029	2.0014	295880	17.837	18.826	125
3	4.0663	2.0332	300569	17.683	18.675	125

<<<Statistics>>> Mean: 4.1693 Std Dev: 0.2355 RSD: 5.65

Sample ID: US61 C13
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 15:11
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.0482	1.5241	225315	18.378	19.360	121
2	3.1203	1.5602	230646	18.073	19.057	124
3	3.2425	1.6213	239677	17.964	18.951	124

<<<Statistics>>> Mean: 3.1370 Std Dev: 0.0982 RSD: 3.13

Sample ID: US82 A10
Method: TOC 0 to 50 ppm

Mode: TOC
Filename: 05171126

Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Timestamp: 2012/05/17 15:33
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.7753	0.8877	131227	18.497	19.497	118
2	2.1189	1.0595	156624	18.110	19.096	118
3	2.0391	1.0196	150727	17.968	18.959	118

<<<Statistics>>> Mean: 1.9778 Std Dev: 0.1798 RSD: 9.09

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 15:57
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20.5452	10.2726	1565586	19.023	20.020	160
2	20.9630	10.4815	1596471	18.772	19.770	167
3	20.7468	10.3734	1580487	18.730	19.726	165

<<<Statistics>>> Mean: 20.7517 Std Dev: 0.2089 RSD: 1.01

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 16:18
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.2595	-0.1298	27766	18.958	19.944	111
2	0.0365	0.0182	49646	18.408	18.448	120
3	-0.0475	-0.0237	43442	18.290	18.357	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.0902 Std Dev: 0.1525 RSD: -169.18

Sample ID: US82 B11
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 16:40
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.1627	1.0814	159860	18.856	19.849	116
2	2.0968	1.0484	154986	18.506	19.484	116
3	2.3604	1.1802	174470	18.231	19.216	118

<<<Statistics>>> Mean: 2.2066 Std Dev: 0.1372 RSD: 6.22

Sample ID: US82 C6
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 17:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.5964	1.2982	191917	18.903	19.884	120
2	2.6150	1.3075	193289	18.578	19.562	118
3	2.8750	1.4375	212507	18.354	19.343	122

<<<Statistics>>> Mean: 2.6955 Std Dev: 0.1558 RSD: 5.78

Sample ID: US82 E6
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 17:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.7279	3.8640	571225	18.940	19.939	129
2	7.5810	3.7905	560367	18.747	19.746	130
3	7.4727	3.7363	552358	18.545	19.544	128

<<<Statistics>>> Mean: 7.5939 Std Dev: 0.1281 RSD: 1.69

Sample ID: UT92 A3
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 17:46
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.4728	0.7364	108862	18.996	19.983	115
2	1.7659	0.8829	130529	18.546	19.545	116
3	1.7337	0.8669	128150	18.341	19.339	117

<<<Statistics>>> Mean: 1.6575 Std Dev: 0.1607 RSD: 9.70

Sample ID: UT92 A3 DUP
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 18:08
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.2863	0.6432	95080	19.070	20.048	113
2	1.6837	0.8419	124456	18.606	19.604	114
3	1.6831	0.8415	124408	18.475	19.466	115

<<<Statistics>>> Mean: 1.5510 Std Dev: 0.2293 RSD: 14.78

Sample ID: UT92 A3 MS
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 18:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.4829	11.2415	1661867	19.683	20.664	132
2	22.8949	11.4474	1692314	19.024	20.020	135
3	22.6204	11.3102	1672029	19.102	20.100	133

<<<Statistics>>> Mean: 22.6661 Std Dev: 0.2098 RSD: 0.93

Sample ID: Filter Blank
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 18:52
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1993	0.0996	14731	18.933	18.627	120
2	0.5128	0.2564	37904	18.508	18.461	120
3	0.5400	0.2700	39912	18.260	18.250	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.4174 Std Dev: 0.1893 RSD: 45.37

5-21-12

Sample ID: US29 A2 DOC
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 19:14
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning	Ending	Integration

				Baseline	Baseline	Time
1	2.7783	1.3891	205363	18.932	19.926	117
2	2.6882	1.3441	198705	18.628	19.628	118
3	3.2391	1.6195	239422	18.415	19.414	122

<<<Statistics>>> Mean: 2.9019 Std Dev: 0.2955 RSD: 10.18

Sample ID: US29 A2 DUP DOC
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 19:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.7544	1.3772	203594	18.989	19.972	119
2	2.7563	1.3782	203739	18.591	19.579	119
3	2.7093	1.3546	200261	18.360	19.352	120

<<<Statistics>>> Mean: 2.7400 Std Dev: 0.0266 RSD: 0.97

Sample ID: US29 A2 MS DOC
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 19:58
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.8219	1.4110	208588	18.816	19.814	119
2	2.8450	1.4725	217682	18.566	19.557	121
3	2.9144	1.4572	215425	18.438	19.426	122

<<<Statistics>>> Mean: 2.8938 Std Dev: 0.0641 RSD: 2.21

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 20:23
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20.0273	10.0137	1527307	19.447	20.446	187
2	19.3983	9.6992	1480814	19.445	20.443	182
3	20.8451	10.4226	1587756	19.351	20.351	187

<<<Statistics>>> Mean: 20.0902 Std Dev: 0.7255 RSD: 3.61

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 20:45
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.3773	-0.1887	19060	19.429	19.238	120
2	-0.1850	-0.0925	33280	19.039	19.025	120
3	-0.1782	-0.0891	33778	18.857	18.896	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.2468 Std Dev: 0.1130 RSD: -45.80

5-21-12
CDE

US52 : 01288

HEXAVALENT CHROMIUM BENCHSHEET

Diphenyl carbazide colorimetric (SW-846 7196A)

Date / Time: 5/2/12 0:00
Analyst: CDE 16:08

REAGENTS

	ID
Sulfuric Acid:	9242c
Acetone:	
Diphenylcarbazide:	9253c

pH METER

Meter ID: ACCUMET XL60
Electrode ID: 9154015P 18

CALIBRATION

Cr+6 Curve Standard

		ARI ID:	124-04		*Date Prepared:*	2/9/2012
Stock	0.0709	*g K2Cr2O7 to*	500	*mL =*	50.1	*mg/L Cr+6*
Intermediate	5	*mL Stock to*	50	*mL =*	5.01	*mg/L Cr+6*

Standard Curve Data *final volume of prepared standards =* **50** *mL*

TIME: *Instrument Used:* SPEC 2

ml Intermediate	Conc (mg/l)	Absorbance @ 540 nm 1	2	Avg Blk Corr Abs	
0.0	0.00	0.000		0.000	= *blank abs*
0.1	0.01	0.008		0.008	*0.01*
0.5	0.05	0.041		0.041	*0.05*
1.0	0.10	0.083		0.083	*0.10*
5.0	0.50	0.407		0.407	*0.50*
10.0	1.00	0.814		0.814	*1.00*

Regression Data
Conc = (abs-intercept)/slope

intercept =	0.0005
slope =	0.8114
r =	1.000
Comment:	Calibration OK!
maxabs =	0.814

Calibration Verification Standard

Source	*ERA # 0504093*			*Stock Conc*	1,000	*mg/L Cr+6*
DQL Int.=	0.10	*ml stock to*	10	*mL pH2 =*	10.00	*mg/L Cr+6*
DQL =	0.40	*ml DQL Int. to*	100	*mL pH2 =*	0.04	*mg/L Cr+6*
CVS =	0.05	*ml stock to*	200	*mL pH2 =*	**0.25**	***mg/L Cr+6***

Prep Check Standard

Dilution	0.50	*ml stock to*	40.00	*mL DI =*	**0.63**	***mg/L Cr+6***

SAMPLE DATA ***Sample pre-dilution assumes 40 mL of sample are pH adjusted then diluted to 50 mL***

mg/L = ((Abs - Blkabs -Bkgabs) - intercept) / slope *NOTE: enter dilution factor as mLfinal/mLsample (e.g. 1mL diluted to 5mL = 5/1 = 2.0)*

SAMPLE ID	Time of Analysis	Sample pre-dilution	Spectrophotometric Data: dilution	Background	ABS @ 540nm	(mg/L)	Corrected (mg/L)	NOTES
ICB		1.000	1		-0.003	-0.004	**< 0.01**	*Blk OK*
ICV		1.000	1		0.209	0.257	**0.257**	*102.77%*
Prep Blk		1.250	1		-0.002	-0.004	**< 0.01**	*Blk OK*
Prep Chk		1.250	1		0.392	0.603	**0.603**	*96.25%*
DQL		1.250	1		0.023	0.035	**0.035**	
US60 A1		1.250	1		-0.002	-0.004	**< 0.01**	*bkg, dilute*
US60 A1 dup		1.250	1		-0.002	-0.004	**< 0.01**	*RPD NA*
US60 A1 ms		1.250	1		0.038	0.058	**0.058**	*% Rec= 92.1*
Spike at	0.050	*mL stock to*		40	*mLsample=*	0.063	*mg/L*	*Validated*
US60 B1		1.250	1		-0.003	-0.005	**< 0.01**	*bkg, dilute*
US60 C1		1.250	1		-0.003	-0.005	**< 0.01**	*bkg, dilute*
US60 D1		1.250	1		-0.001	-0.002	**< 0.01**	*bkg, dilute*
US60 E1		1.250	1		-0.001	-0.002	**< 0.01**	*bkg, dilute*
CCB		1.000	1		-0.004	-0.006	**< 0.01**	*Blk OK*
CCV		1.000	1		0.207	0.254	**0.254**	*101.78%*
US60 F1		1.250	1	0.385	0.389	0.005	**< 0.01**	
US61 C1		1.250	1		-0.004	-0.007	**< 0.01**	*bkg, dilute*
US61 D1		1.250	1		-0.004	-0.007	**< 0.01**	*bkg, dilute*
CCB		1.000	1		-0.005	-0.007	**< 0.01**	*Blk OK*
CCV		1.000	1		0.207	0.254	**0.264**	*101.78%*

US52 : 01289

HEXAVALENT CHROMIUM BENCHSHEET

Diphenyl carbazide colorimetric (SW-846 7196A)

Date / Time: 5-2-12 16:08

Analyst: CK

REAGENTS ID

Sulfuric Acid: 9242C

Acetone:

Diphenylcarbazide: 9253C

pH METER

Meter ID: ACCUMET XC60

Electrode ID: 915401SP 18

CALIBRATION

Cr+6 Curve Standard		ARI ID:	~~123-59~~ 124-04		Date Prepared: 2-9-12	
Stock	0.0709	*g K2Cr2O7 to*	500	*mL =*	50.1	*mg/L Cr+6*
Intermediate	5	*mL Stock to*	50	*mL =*	5.01	*mg/L Cr+6*

Standard Curve Data *final volume of prepared standards =* 50 *mL*

TIME: *Instrument Used:* SPEC 2

ml Intermediate	Conc (mg/l)	Absorbance @ 540 nm 1	2	Avg Blk Corr Abs	
0.0	0.00	0.000			= blank abs
0.1	0.01	0.008			
0.5	0.05	0.041			
1.0	0.10	0.093			
5.0	0.50	0.407			
10.0	1.00	0.814			

Regression Data

Conc = (abs-intercept)/slope

intercept =

slope =

r =

Comment:

maxabs =

Calibration Verification Standard

Source	*ERA # 0504093*			*Stock Conc*	1,000	*mg/L Cr+6*
DQL Int.=	0.10	*ml stock to*	10	*mL pH2 =*	10.00	*mg/L Cr+6*
DQL =	0.40	*ml DQL Int. to*	100	*mL pH2 =*	0.04	*mg/L Cr+6*
CVS =	0.05	*ml stock to*	200	*mL pH2 =*	0.25	***mg/L Cr+6***

Prep Check Standard

Dilution	0.50	*ml stock to*	40.00	*mL DI =*	0.63	***mg/L Cr+6***

SAMPLE DATA ***Sample pre-dilution assumes 40 mL of sample are pH adjusted then diluted to 50 mL***

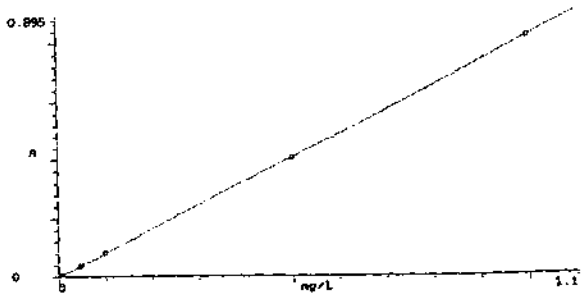
mg/L = ((Abs - Blkabs -Bkgabs) - intercept) / slope NOTE: *enter dilution factor as mL final/mL sample (e.g. 1mL diluted to 5mL = 5/1 = 2.0)*

SAMPLE ID	Time of Analysis	Sample pre-dilution	Spectrophotometric Data: dilution	Background	ABS @ 540nm	(mg/L)	Corrected (mg/L)	NOTES
ICB		1.000	1		-0.003			
ICV		1.000	1		0.209			
Prep Blk		1.250	1		-0.002			
Prep Chk		1.250	1		0.392			
DQL		1.250	1		0.023			
US60 A'		1.250	1		-0.002			
A' dp		1.250	1		-0.002			
A' ms		1.250	1		0.038			0.05mL stk to 10mL Sample
B'		1.250	1		-0.003			
C'		1.250	1		-0.003			
D'		1.250	1		-0.001			
E'		1.250	1		-0.001			
CCB		1.000	1		-0.004			
CCV		1.000	1		0.207			
US60 F'		1.250	1	0.385	0.389			
US60 C'		1.250	1		~~0.385~~ -0.004			
D'		1.250	1		-0.004			
CCB		1.250	1		-0.0045			
CCV		1.250	1		0.207			
		~~1.250~~	~~1~~					
		1.250	1					
		1.250	1					
		~~1.250~~	1					
		1.250	1					
CCB		~~1.000~~	~~1~~					
CCV		1.000	1					

5-2-12 2 CHK

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Standard Curve	5:38pm 2May12
Test Name	CHROME 6
Date Standards Measured	2May12
Wavelength	540nm
Ref. Wavelength Correction	Off
Curve Fit	Linear
Number of Standards	6
Units	mg/L
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On



Curve Fit	Linear
Slope	0.814
Intercept	0.000401
Std Dev	0.001
Corr Coeff	1.000

Std #	Conc. mg/L	Abs 540nm
1	0.000	0.000
2	0.010	0.008
3	0.050	0.041
4	0.100	0.083
5	0.500	0.407
6	1.000	0.814

5-2-12
MPL

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Advanced A-%T-C	5:40pm 2May12
Test Name	CHROME 6[Saved]
Measurement Mode	Absorbance
Wavelength	540nm
Ref. Wavelength Correction	Off
Delay Time (min:sec)	0:00
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On

ID#	Abs 540nm
1	-0.003
2	0.209
3	-0.002
4	0.392
5	0.023
6	-0.002
7	-0.002
8	0.038
9	-0.003
10	-0.003
11	-0.001
12	-0.001
13	-0.004
14	0.207
15	0.389
16	0.385
17	-0.004
18	-0.004
19	-0.005
20	0.207

ALKALINITY BENCHSHEET methods: **SM 2320 B-97** Date/Time: 5/3/12 10:48

pH meter verification **pH meter ID:** **ACCUMET AR60** **Buret ID:** 01G30627 Analyst: KE

Buffer pH 7.00 **pH Probe ID :** AR60

Measured pH 7.02 *Calibration OK* **HIGH CURVE**

Standardization of acid titrant ***(titration to pH 4.5)***

ARI ID: ***00126 - 11***

grams Na2CO3 =	0.6251	*to*	250	*ml DI*
Normality Na2CO3 =	0.0472			
Assumed Acid Normality =	0.1			
Standardized Acid Normality=	0.1015	***OK!***		

BLANK		STANDARD TITRATION			*Partitioning Calculations* T=Total, P=Phenolphthalein			
BLANK	ml ACID	ml Na2CO3	ml ACID	N H2SO4	*Obs*	*HCO3*	*CO3*	*OH*
1	0.02	5	2.34	0.102	*P =0*	T	0	0
2	0.01	5	2.36	0.101	*P< 0.5T*	T - 2P	2P	0
3	0.02	5	2.32	0.102	*P= 0.5T*	0	2P	0
AVERAGE	0.02			0.102	*P> 0.5T*	0	2(T - P)	2P - T
					P =T	0	0	T

Calibration Verification Standard (second source sodium carbonate solution)

ARI ID: ***00126 - 10*** *mg/L CaCO3*

grams Na2CO3 =	0.6252	*grams in*	250	*mL =*	2360
dilution:	5.0	*mL to*	95	*CVS =*	124.2
DQL Std (2ppm)	*dilute*	0.085	*mL stock to 100 mL DI =*		2.0

Laboratory Control Standard (LCS)

Source: ***P197 - 506*** *mg/L CaCO3* 31.10

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample *(shaded cells are calculated, make no entries)*

low level = ((((2 X mL4.5)-mL4.2] X Nacid) X 50,000) / mL sample

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4 pH=8.3	ml H2SO4 pH =4.5	ml H2SO4 pH=4.2	ALK (mg CaCO3/l) Phenolph	ALK (mg CaCO3/l) TOT HIGH	ALK (mg CaCO3/l) TOT LOW	Partitioning (mg/l CaCO3) HCO3	Partitioning (mg/l CaCO3) CO3	Partitioning (mg/l CaCO3) OH	(mg/l) FREE CO2
ICV		10.44	100	21.7	1.02	2.35	0.00	51.8	118.5		*95.4%*	*OK!*		
ICB		5.36	100	21.7	0.00	0.02	0.04	0.0		0.0	0.0	0.0	0.0	0.0
LCS		8.79	50	20.0	0.12	0.31	0.34	12.2	31.5		*101.2%*	*OK!*		
US52 G14		6.46	100	21.4	0.00	3.26	0.00	0.0	165.5		165.5	0.0	0.0	114.8
US52 G14 dup		6.48	100	21.5	0.00	3.23	0.00	0.0	164.0		164.0	0.0	0.0	108.6
RPD =									*0.9%*		*0.9%*			*5.5%*
US52 H2		6.60	100	21.5	0.00	5.69	0.00	0.0	288.9		288.9	0.0	0.0	145.1
US52 I 6		6.84	100	21.6	0.00	8.54	0.00	0.0	433.6		433.6	0.0	0.0	125.3
US61 A10		6.44	100	21.7	0.00	3.32	0.00	0.0	168.6		168.6	0.0	0.0	122.4
US61 B10		6.71	100	21.8	0.00	3.32	0.00	0.0	168.6		168.6	0.0	0.0	65.7
US61 C10		6.58	100	21.8	0.00	3.77	0.00	0.0	191.4		191.4	0.0	0.0	100.7
US60 F4		10.00	100	21.2	15.10	32.62	0.00	766.7	1656.2		122.9	1533.3	0.0	0.0
CCV		10.42	100	22.0	1.00	2.34	0.00	50.8	118.0		*95.0%*	*OK!*		0.0

25215 - 2551

ALKALINITY BENCHSHEET methods: **SM 2320 B-97**

Date/Time: ② 5-3-12 10:48

Analyst: ②

pH meter verification **pH meter ID:** **ACCUMET AR60** **Buret ID:** **01G30627**

Buffer pH 7.00 **pH Probe ID :** AR60

Measured pH 7.02 *must agree within 0.1 pH unit* **HIGH CURVE**

Standardization of acid titrant ***(titration to pH 4.5)***

ARI ID: ***00126 - 11***

grams Na2CO3 =	0.6250	*to*	250	*ml DI*
Normality Na2CO3 =	0.1227			
Assumed Acid Normality =	0.1			
Standardized Acid Normality=				

BLANK		STANDARD TITRATION		
BLANK	ml ACID	ml Na2CO3	ml ACID	N H2SO4
1	0.02	5	2.34	
2	0.01	5	2.36	
3	0.02	5	2.32	
AVERAGE				

Partitioning Calculations

T=Total, P=Phenolphthalein

Obs	*HCO3*	*CO3*	*OH*
P =0	T	0	0
P< 0.5T	T - 2P	2P	0
P= 0.5T	0	2P	0
P> 0.5T	0	2(T - P)	2P - T
P =T	0	0	T

Calibration Verification Standard (second source sodium carbonate solution)

ARI ID: ***00126 - 10*** *mg/L CaCO3*

grams Na2CO3 =	0.6252	*grams in*	250	*mL =*	2360
dilution:	5.0	*mL to*	95	*CVS =*	124.2
DQL Std (2ppm)	*dilute*	0.085	*mL stock to 100 mL DI =*		2.0

Laboratory Control Standard (LCS)

Source: ***P197 - 506*** *mg/L CaCO3* 31.10

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample *(shaded cells are calculated, make no entries)*

low level = ((((2 X mL4.5)-mL4.2] X Nacid) X 50,000) / mL sample

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4 pH=8.3	ml H2SO4 pH =4.5	ml H2SO4 pH=4.2	ALK (mg CaCO3/l) Phenolph	ALK (mg CaCO3/l) TOT HIGH	ALK (mg CaCO3/l) TOT LOW	Partitioning (mg/l CaCO3) HCO3	Partitioning (mg/l CaCO3) CO3	Partitioning (mg/l CaCO3) OH	(mg/l) FREE CO2
ICV		10.44	100	21.7	1.02	2.35	0.00							
ICB		5.36	100	21.7	0.00	0.02	0.04							
LCS		8.71	50	20.0	0.12	0.31	0.34							
US52 G4		6.46	100	21.4	0.00	3.26	0.00							
↓ no G4		6.48	100	21.5	0.00	3.23	0.00							
H3		6.60	100	21.5	0.00	5.69	0.00							
↓ I6		6.84	100	21.6	0.00	8.54	0.00							
US41 A10		6.44	100	21.7	0.00	3.32	0.00							
↓ B10		6.71	100	21.8	0.00	3.32	0.00							
↓ C10		6.58	100	21.8	0.00	3.17	0.00							
US60 F4		10.00	100	21.2	~~1.00~~ 0.00 ②	3.24	0.00							
CCV		10.42	100	22.0	1.00	2.34	0.00							
CCV														

5-3-12 ②

US52 - 9120

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS) DATE: 5/7/2012

Methods : SM 2540 D-97, 2540 E-97 ANALYST: KE 14:40 (B)

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: N / A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# **6399J*** 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	DRY WT 104C (grams) 2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time				5/7/12 16:44 KE	5/7/12 18:32 KE										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				Cal OK!	Cal OK!										
BLANK		1000	0.1160	0.1160	0.1160	STOP		0.0	< 1						
LCS # 00595-2		1000	0.1082	0.1578	0.1577	STOP		49.5	49.5	99.0%	% Recovery				
US61 A8		170	0.1088	0.1099	0.1099	STOP		1.1	6.5						
US61 B8		600	0.1081	0.1172	0.1172	STOP		9.1	15.2						
US61 C8		930	0.1198	0.1297	0.1295	STOP		9.7	10.4						
US82 A6		940	0.1219	0.1220	0.1220	STOP		0.1	< 1.1						
US82 B6		810	0.1104	0.1133	0.1133	STOP		2.9	3.6						
US82 C6		950	0.1091	0.1180	0.1179	STOP		8.8	9.3						
US82 E6		470	0.1189	0.1361	0.1360	STOP		17.1	36.4						
US82 E6 dup		470	0.1186	0.1364	0.1363	STOP		17.7	37.7						
								RPD =	3.5%					*RPD =*	*NA*
US79 A3		50	0.1161	0.1274	0.1274	STOP		11.3	226.0						
~~US79 B3~~		~~110~~	~~0.1184~~	~~0.2432~~	~~0.2431~~	STOP		~~124.7~~	1133.6						
~~US79 B3 dup~~		~~110~~	~~0.1220~~	~~0.1455~~	~~0.1455~~	STOP		23.5	213.6						
								~~RPD =~~	*136.6%*					*~~RPD =~~*	*~~NA~~*
US79 C3		250	0.1214	0.1513	0.1512	STOP		29.8	119.2						
US79 D3		250	0.1204	0.1446	0.1445	STOP		24.1	96.4						
US79 E3		50	0.1089	0.1800	0.1798	STOP		70.9	1418.0						
UT00 A1		940	0.1225	0.1493	0.1493	STOP		26.8	28.5						
UT12 A1		30	0.1207	0.1431	0.1429	STOP		22.2	740.0						
UT12 A1 dup		30	0.1210	0.1447	0.1445	STOP		23.5	783.3						

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS) DATE: 5/7/2012

Methods : SM 2540 D-97, 2540 E-97 ANALYST: KE 14:40 (B)

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: N / A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# 6399J* 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
								RPD =	*5.7%*					*RPD =*	*NA*
UT12 B1		15	0.1082	0.1305	0.1303	STOP		22.1	**1473.3**						
UT22 A3		300	0.1222	0.1520	0.1519	STOP		29.7	**99.0**						
UT22 A3 dup		300	0.1225	0.1528	0.1528	STOP		30.3	**101.0**						
								RPD =	*2.0%*					*RPD =*	*NA*
UT22 B3		880	0.1092	0.1238	0.1239	STOP		14.6	**16.6**						
UT22 C3		450	0.1208	0.1735	0.1735	STOP		52.7	**117.1**						
UT26 A3		460	0.1194	0.1272	0.1272	STOP		7.8	**17.0**						
UT26 A3 dup		460	0.1092	0.1169	0.1170	STOP		7.7	**16.7**						
								RPD =	*1.8%*					*RPD =*	*NA*

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TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Page 1 of 2

Analyst: (N)	Date/Time: 5-7-12 / 14:40	Oven #: 12	Muffle Furnance: N/A	Balance: 1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

(B)

LCS (Cellulose from MP Biochemicals) Lott #	8399J	0.0500 Gram to 1000 mL = **50 mg / L TSS**							
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02		CV-02	CV-02	
Date & Time:			5-7-12 16:44	5-7-12 18:32					
Cal Weight (10.0000g):			10.0000 (W)	10.0000 (W)					

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams) 1	2	3	Dry Wt mg	TSS	Ash Weight 550°C 1	2	LOI - mg	TVSS mg/L
BLANK	P8090	1020	0.1160	0.1160	0.1160							
LCS 00595-3	P8888	1000	0.1082	0.1578	0.1577							
US61 A8	P8889	170	0.1088	0.1099	0.1099							
↓ B8	P8911	600	0.1081	0.1172	0.1172							
↓ C8	P8913	930	0.1198	0.1297	0.1295							
US82 A6	P8914	940	0.1219	0.1220	0.1220							
B5	P8091	810	0.1104	0.1133	0.1133							
C3	P8092	950	0.1091	0.1180	0.1179							
E3	P8093	470	0.1189	0.1361	0.1360							
↓ DUP E3	P4227	470	0.1186	0.1364	0.1363							
US79 A3	P2172	500	0.1161	0.1274	0.1274							
B3	P2791	110	0.1184	0.2432	0.2431							> Rerun
↓ DUP B3	P2792	110	0.1220	0.1455	0.1455							> Rerun
C3	P2793	250	0.1214	0.1513	0.1512							
↓ D3	P8915	250	0.1204	0.1446	0.1445							
↓ E3	P8916	50	0.1089	0.1800	0.1798							
UT00 A1	P8892	940	0.1225	0.1493	~~0.1514~~	0.1493						
UT12 A1	P8890	30	0.1207	0.1431	0.1429							
↓ DUP A1	P8881	30	0.1210	0.1447	0.1445							
↓ B1	P8893	15	0.1082	0.1305	0.1303							
MT22 A3	P8873	300	0.1222	0.1520	0.1519							
6054F DUP A3	P8871	300	0.1225	0.1528	0.1528							

Revision 002
12/28/09

9827B-2551

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TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Analyst: (W)	Date/Time: 5-7-12	Oven #: 12	Muffle Furnance: N/A	Balance: 1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

(3)

LCS (Cellulose from MP Biochemicals) Lott #	6399J	0.0500 Gram to 1000 mL = **50 mg / L TSS**							
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02
Date & Time:			5-7-12 16:44	5-7-12 18:32					
Cal Weight (10.0000g):			10.0002 (W)	10.0000 (W)					

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams)			Dry Wt mg	TSS	Ash Weight 550°C		LOI - mg	TVSS mg/L
				1	2	3			1	2		
UT22												
~~BLANK~~ B5	P8894	880	0.1092	0.1238	0.1239							
C3	P8895	480	0.1208	0.1735	0.1735							
UT26 A3	P8884	1460	0.1194	0.1272	0.1272							
~~BLANK~~ A3	P8885	1460	0.1092	0.1169	0.1170							

5-7-12 (W)

1521G - 2SSN

Name:	**MAY0312RR**	*Calibration:*	**APRIL2112RR** **ARI # 593-01**
Directory:	**Instrument Data\MAY 2012**	*Calibration exp:*	~~5/8/2011~~ 5/21/12
Data Vault:	**ChromeleonLocal**	*Queue Start:*	**5/3/2012 10:01**
No. of Injections:	**35.000**	*User:*	**RR**

		ERA 161110	ERA 411010	ERA 401010	ERA 111109	ERA 160111	ERA 230511	ERA 200610
Name	Dilution	Amount n.a. Fluoride	Amount n.a. Chloride	Amount n.a. Nitrite	Amount n.a. Bromide	Amount n.a. Sulfate	Amount n.a. Nitrate	Amount n.a. Phosphate
RINSE	1.0	n.a.	0.058	n.a.	n.a.	0.033	n.a.	n.a.
ICV	1.0	2.914	2.868	2.950	2.837	2.864	3.068	2.893
%R=		**97.1%**	**95.6%**	**98.3%**	**94.6%**	**95.5%**	**102.3%**	**96.4%**
ICB	1.0	n.a.	n.a.	n.a.	n.a.	0.043	n.a.	n.a.
		4.996	26.504	n.a.	n.a.	12.953		n.a.
		0.053		0.041	n.a.	28.108	1.299	0.527
		n.a.		0.031	n.a.	28.105	1.300	0.433
%RPD=			**1.95%**			**0.01%**	**0.08%**	
		1.767		3.947	2.805	31.643	5.471	3.817
%R=		**44.2%**	**99.4%**	**97.7%**	**70.1%**	**88.4%**	**104.3%**	**82.2%**
SPK=	**0.1mL*200ppm/5mL**		**=4ppm**					
		n.a.	4.935	n.a.	n.a.		1.158	0.410
		n.a.	4.767	n.a.	n.a.		1.185	0.458
%RPD=			**3.45%**				**2.32%**	**11.07%**
		20.687	24.144	19.748	16.754		22.037	19.646
%R=		**103.4%**	**96.0%**	**98.7%**	**83.8%**	**80.7%**	**104.4%**	**96.2%**
SPK=	**0.5mL*200ppm/5mL**		**=20ppm**					
		4.236	27.158	n.a.	0.251		30.814	n.a.
		0.082	36.170	n.a.	n.a.		n.a.	n.a.
		0.084	36.027	n.a.	n.a.		n.a.	n.a.
%RPD=			**0.40%**			**0.23%**		
CCV	1.0	2.947	2.952	3.012	2.866	2.914	3.117	2.942
%R=		**98.2%**	**98.4%**	**100.4%**	**95.5%**	**97.1%**	**103.9%**	**98.1%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.032	n.a.	n.a.
		20.657	52.865	19.598	17.966	37.577	20.444	19.100
%R=		**102.9%**	**83.5%**	**98.0%**	**89.8%**	**82.6%**	**102.2%**	**95.5%**
SPK=	**0.5mL*200ppm/5mL**		**=20ppm**					
		n.a.		n.a.	n.a.	20.762	n.a.	n.a.
		n.a.		n.a.	n.a.	20.870	n.a.	n.a.
%RPD=			**1.00%**					
		n.a.		n.a.	n.a.	20.508	n.a.	n.a.
%R=			**105.0%**					
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
		0.248		n.a.	n.a.	4.745	n.a.	n.a.
		n.a.		n.a.	n.a.	1.194	n.a.	0.610
			5.865	n.a.	n.a.	64.298	0.826	n.a.
UR25 A5	1.0	n.a.	0.668	n.a.	n.a.	0.865	n.a.	n.a.
		0.530		n.a.	n.a.	n.a.	n.a.	n.a.
		n.a.		n.a.	n.a.	3.011	n.a.	n.a.
CCV	1.0	2.981	2.960	3.005	2.869	2.902	3.112	2.978
%R=		**99.4%**	**98.7%**	**100.2%**	**95.6%**	**96.7%**	**103.7%**	**99.3%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.038	n.a.	n.a.
		0.072	3.174	n.a.	n.a.		n.a.	n.a.
		0.010	3.476	0.010	n.a.	5.697		n.a.
		0.010	3.483	n.a.	n.a.	5.703		n.a.
%RPD=			**0.19%**			**0.10%**	**0.14%**	
		1.989	5.455	1.953	1.733	7.520		1.728
%R=		**99.4%**	**98.9%**	**97.7%**	**86.7%**	**91.1%**	**105.7%**	**86.4%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
		0.095	2.287	n.a.	n.a.	3.105		0.032

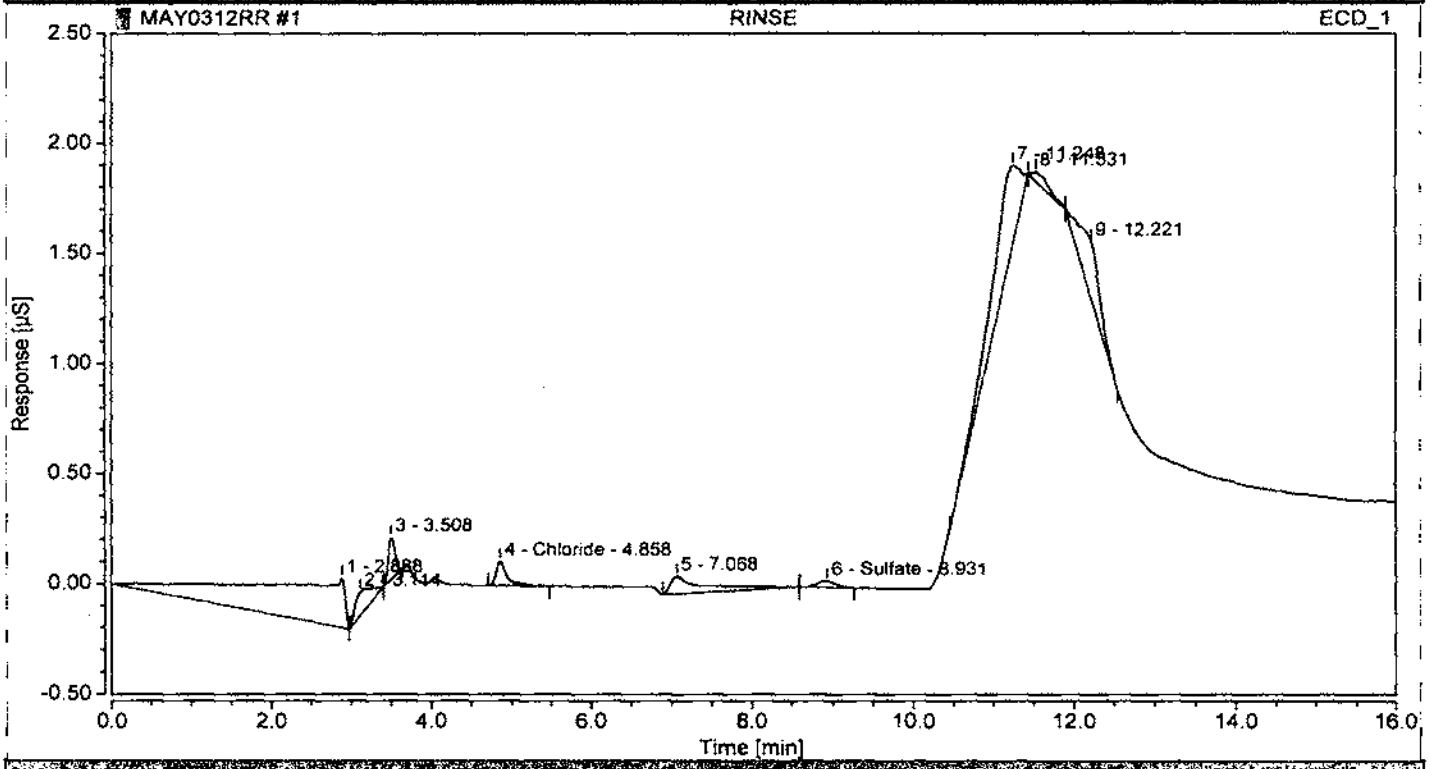
CCV	1.0	2.981	2.993	3.004	2.857	2.873	3.111	2.997
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.039	n.a.	n.a.
STOP	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Name:	**MAY0312RR**	*Queue Start:*	**2012-05-03T10:01:26-**
Directory:	**Instrument Data\MAY 2012**	*Created By:*	**pat**
Data Vault:	**ChromeleonLocal**		
No. of Injections:	**35**		

No.	Injection Name	Position	Type	Level	Dilution	Inject Time
1	RINSE	1	Unknown		1.0	03/May/12 10:01:26
2	ICV	2	Check Standard	06	1.0	03/May/12 10:21:11
3	ICB	3	Blank		1.0	03/May/12 10:41:21
4	US48 B1	4	Unknown		10.0	03/May/12 11:01:36
5	US48 A1	5	Unknown		5.0	03/May/12 15:44:00
6	US48 A1 DUP	6	Unknown		5.0	03/May/12 16:02:54
7	US48 A1 MS	7	Unknown		5.0	03/May/12 16:22:09
8	US48 A1	8	Unknown		10.0	03/May/12 16:41:30
9	US48 A1 DUP	9	Unknown		10.0	03/May/12 17:00:56
10	US48 A1 MS	10	Unknown		10.0	03/May/12 17:20:27
11	US48 B1	11	Unknown		5.0	03/May/12 17:40:09
12	US52 G1	12	Unknown		5.0	03/May/12 17:59:48
13	US52 G1 DUP	13	Unknown		5.0	03/May/12 18:19:34
14	CCV	2	Check Standard	06	1.0	03/May/12 18:39:28
15	CCB	3	Blank		1.0	03/May/12 18:59:23
16	US52 G1 MS	14	Unknown		10.0	03/May/12 19:19:18
17	US52 G1	15	Unknown		10.0	03/May/12 19:39:22
18	US52 G1 DUP	16	Unknown		10.0	03/May/12 19:59:36
19	US52 G1 MS	17	Unknown		10.0	03/May/12 20:19:56
20	US52 H1	18	Unknown		2.0	03/May/12 20:40:21
21	US52 I1	19	Unknown		20.0	03/May/12 21:00:52
22	US58 A2	20	Unknown		5.0	03/May/12 21:21:29
23	US75 A5	21	Unknown		1.0	03/May/12 21:42:10
24	US81 A12	22	Unknown		2.0	03/May/12 22:02:57
25	US81 B12	23	Unknown		20.0	03/May/12 22:23:51
26	CCV	2	Check Standard	06	1.0	03/May/12 22:43:15
27	CCB	3	Blank		1.0	03/May/12 23:03:09
28	US81 D12	24	Unknown		5.0	03/May/12 23:22:44
29	US74 A2	25	Unknown		1.0	03/May/12 23:42:20
30	US74 A2 DUP	26	Unknown		1.0	04/May/12 00:02:02
31	US74 A2 MS	27	Unknown		1.0	04/May/12 00:21:48
32	US74 B2	28	Unknown		1.0	04/May/12 00:41:37
33	CCV	2	Check Standard	06	1.0	04/May/12 01:01:31
34	CCB	3	Blank		1.0	04/May/12 01:22:09
35	STOP	1	Unknown		1.0	04/May/12 01:42:58

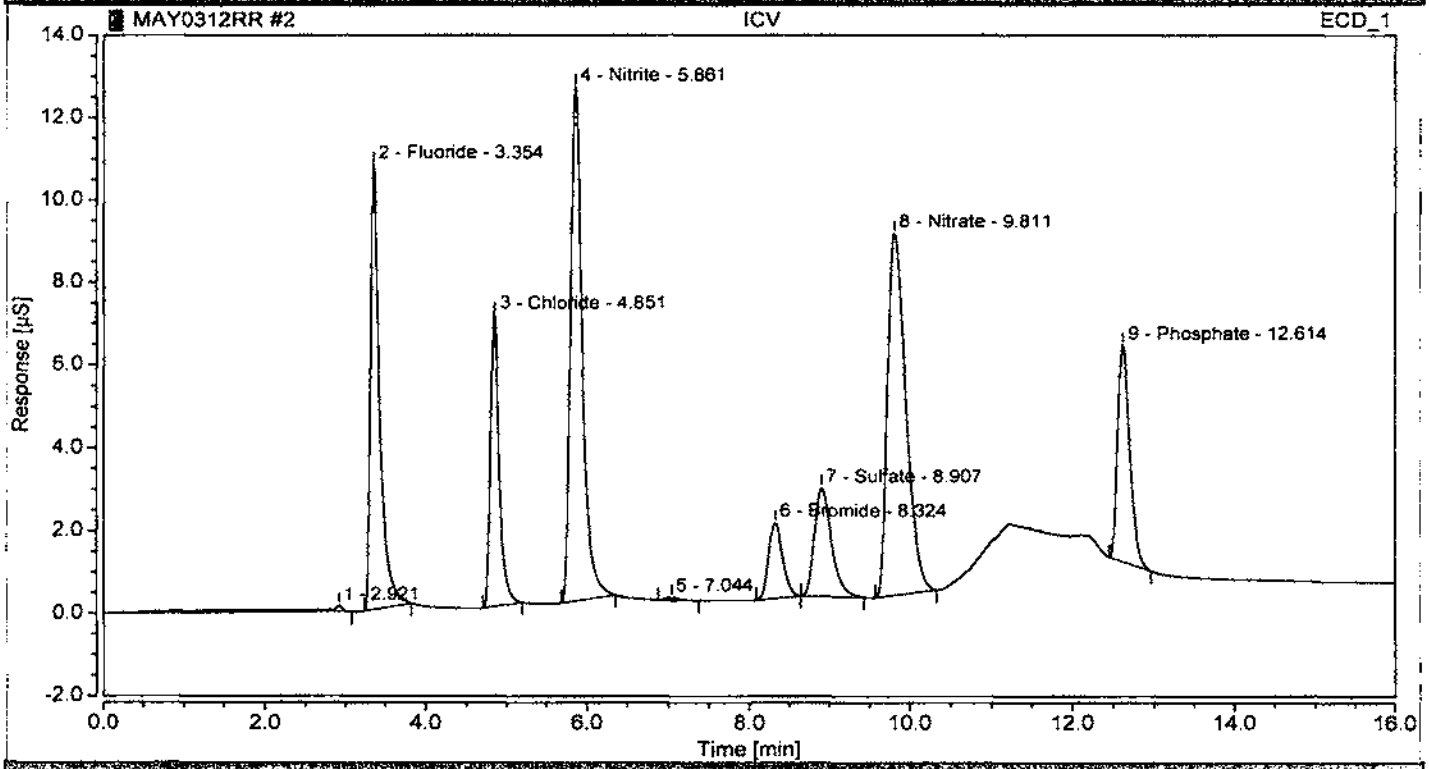
US52 : 01505

Injection Name:	*RINSE*	Inject Number:	1
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 10:01*		



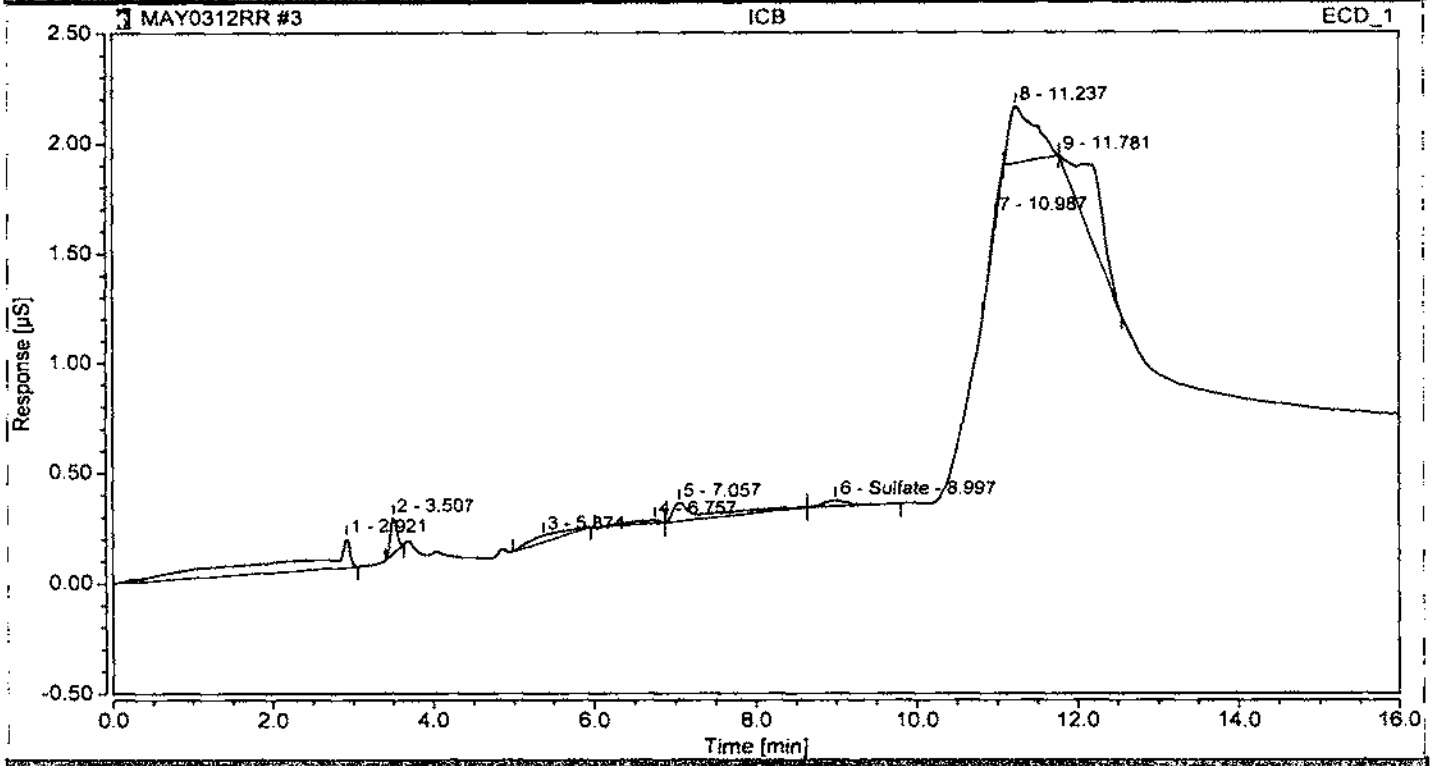
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.69	0.251	0.253	FALSE	n.a.
2		1.0	n.a.	2.91	0.026	0.186	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	3.51	0.080	0.180	FALSE	n.a.
4	Chloride	1.0	0.026	4.86	0.038	0.109	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	7.07	0.029	0.075	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	0.0	8.93	0.026	0.058	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	11.25	0.251	0.253	FALSE	n.a.
8		1.0	n.a.	11.53	0.026	0.186	FALSE	n.a.
9		1.0	n.a.	12.22	0.078	0.263	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*ICV*	Inject Number:	2
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 10:21*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0					FALSE	n.a.
2	Fluoride						FALSE	-2.87
3	Chloride						FALSE	-4.41
4	Nitrite						FALSE	-1.65
5		1.0					FALSE	n.a.
6	Bromide						FALSE	-5.43
7	Sulfate						FALSE	-4.53
8	Nitrate						FALSE	2.25
9	Phosphate	1.0					FALSE	-3.56

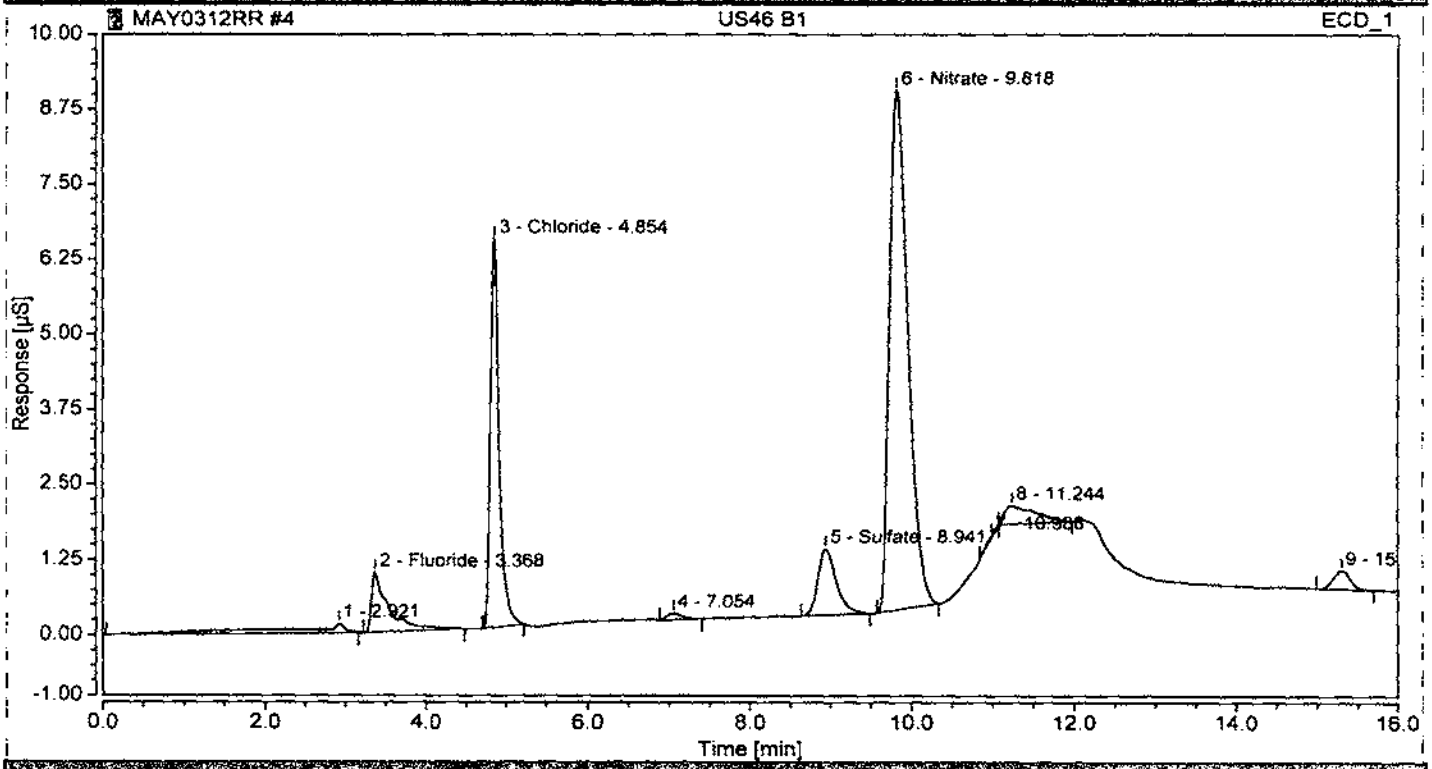
Injection Name:	*ICB*	Inject Number:	3
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 10:41*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.013	0.133	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.016	0.164	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	5.87	0.010	0.091	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	6.76	0.004	0.041	FALSE	n.a.
5		1.0	n.a.	7.06	0.004	0.034	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	n.a.	9.00	0.013	0.086	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	10.99	0.006	0.038	FALSE	n.a.
8		1.0	n.a.	11.24	0.053	0.256	FALSE	n.a.
9		1.0	n.a.	11.78	0.124	0.001	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

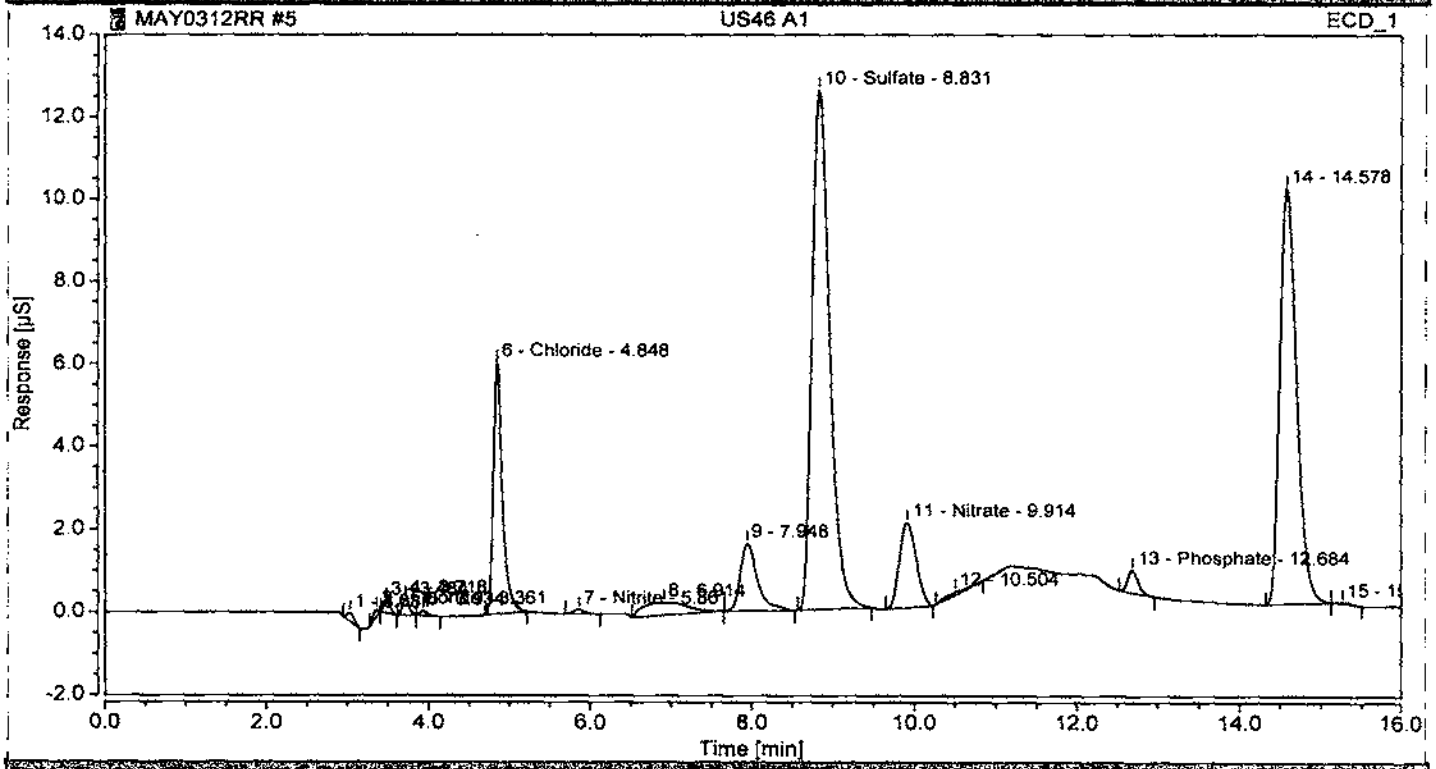
US52 : 01303

Injection Name:	*US46 B1*	Inject Number:	4
Vial Number:	*4*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 11:01*		



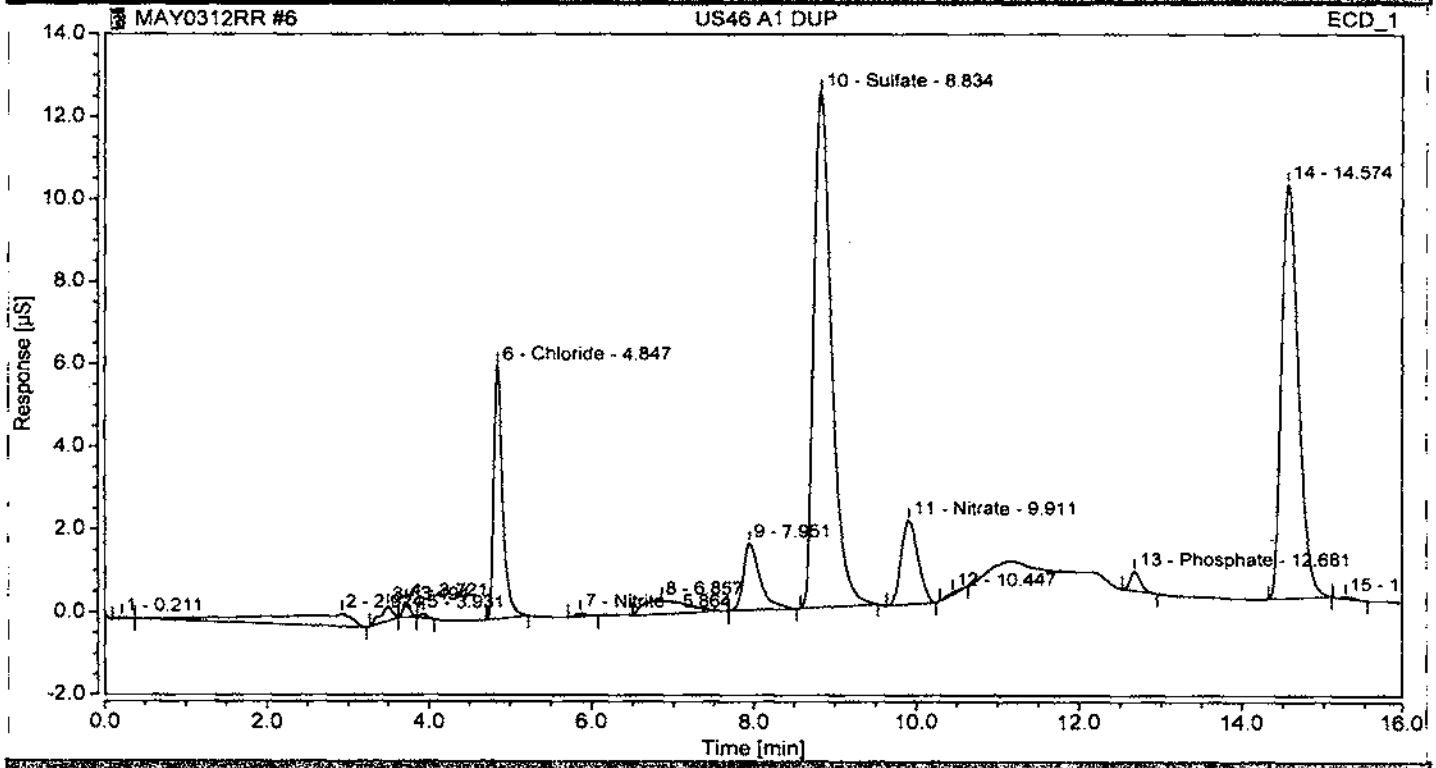
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.139	0.153	FALSE	n.a.
2	Fluoride	10.0	0.956	3.37	0.248	0.989	FALSE	n.a.
3	Chloride	10.0	2.630	4.86	0.601	0.998	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.06	0.072	0.105	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	15.95	8.94	0.283	0.406	FALSE	n.a.
6	Nitrate	10.0	4.503	9.82	0.206	0.343	FALSE	n.a.
7		10.0	n.a.	10.62	0.008	0.037	FALSE	n.a.
8		10.0	n.a.	11.24	0.132	0.300	FALSE	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9		10.0	n.a.	15.30	0.075	0.306	FALSE	n.a.

Injection Name:	*US46 A1*	Inject Number:	5
Vial Number:	*5*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 15:44*		



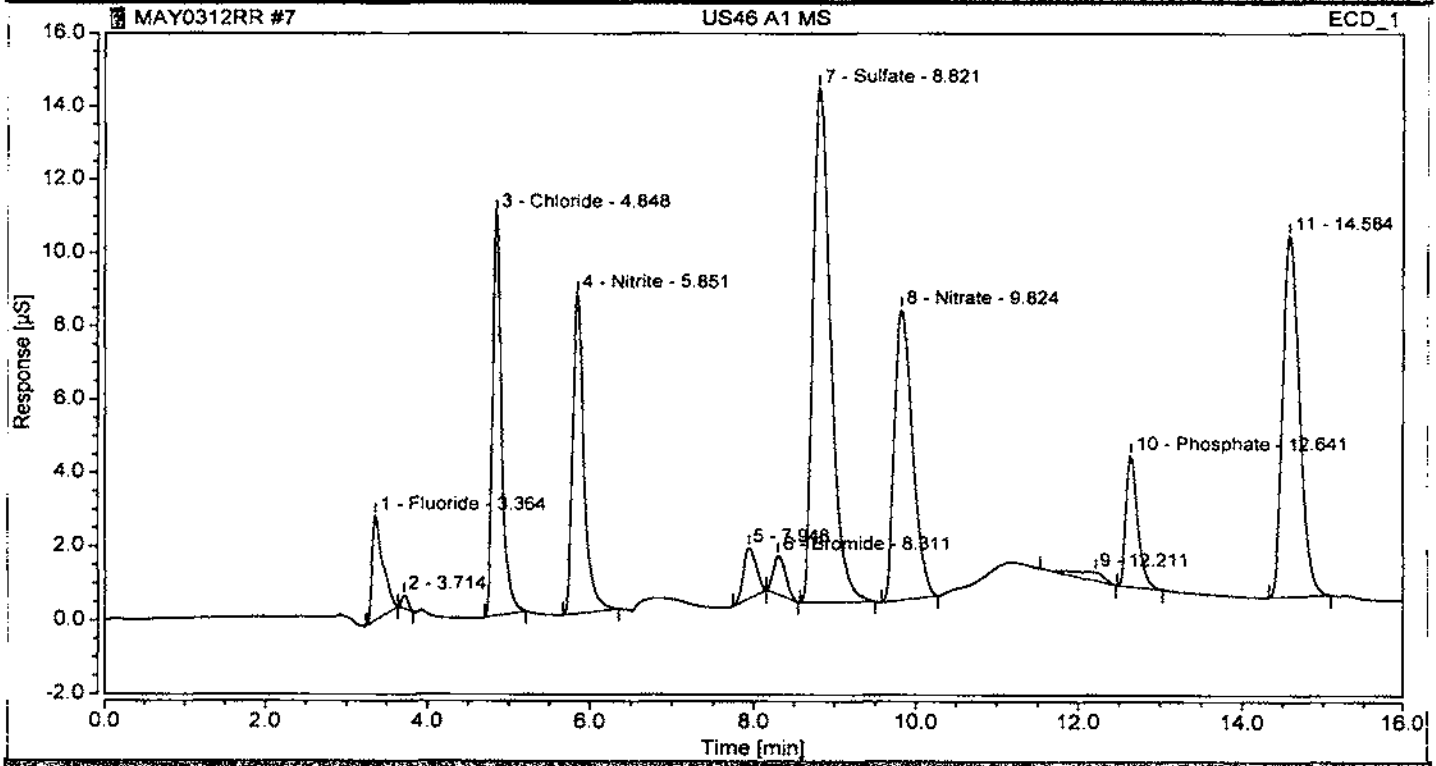
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	3.43	0.020	0.194	FALSE	n.a.
2	Fluoride	2.0	0.163	3.86	0.013	0.163	FALSE	n.a.
3		2.0	n.a.	4.18	0.024	0.250	FALSE	n.a.
4		2.0	0.1	4.75	0.018	0.200	FALSE	n.a.
5		2.0	n.a.	5.36	0.012	0.111	FALSE	n.a.
6	Chloride	2.0	3.0	4.85	0.252	2.000	FALSE	n.a.
7	Nitrite	2.0	n.a.	5.86	0.015	0.125	FALSE	n.a.
8		2.0	n.a.	6.91	0.001	0.011	FALSE	n.a.
9		2.0	n.a.	7.95	0.108	0.818	FALSE	n.a.
n.a.	Bromide	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Sulfate	2.0	28.106	8.83	0.764	4.553	FALSE	n.a.
11	Nitrate	2.0	2.298	9.91	0.085	0.653	FALSE	n.a.
12		2.0	n.a.	10.50	0.021	0.078	FALSE	n.a.
13	Phosphate	2.0	0.923	12.68	0.082	0.945	FALSE	n.a.
14		2.0	0.3	14.58	2.403	10.046	FALSE	n.a.
15		2.0	n.a.	15.26	0.007	0.033	FALSE	n.a.

Injection Name:	*US46 A1 DUP*	Inject Number:	6
Vial Number:	*6*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 16:02*		



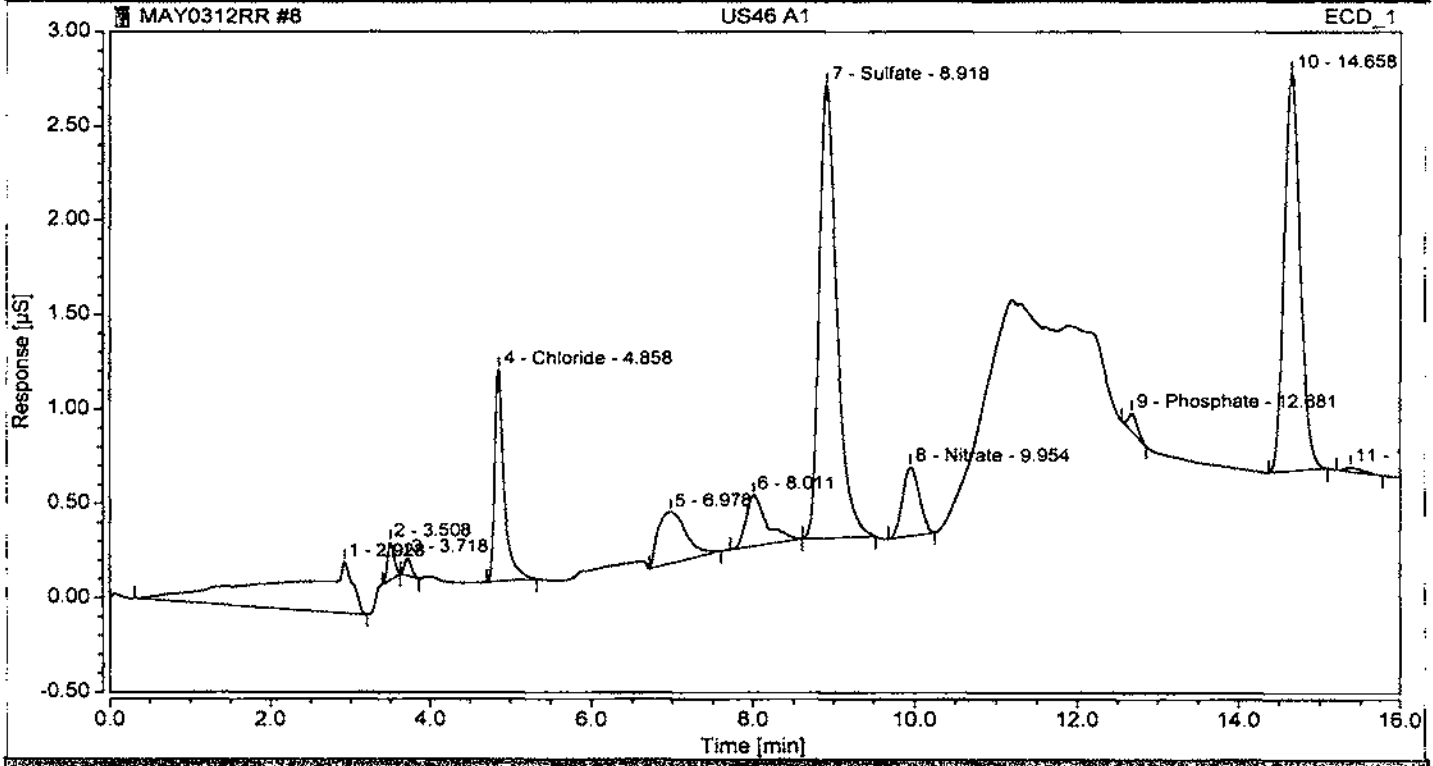
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	0.21	0.005	0.038	FALSE	n.a.
2		2.0	n.a.	2.68	0.012	0.306	FALSE	n.a.
n.a.	Fluoride	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.0	n.a.	3.93	0.000	0.058	FALSE	n.a.
4		2.0	n.a.	4.37	0.015	0.370	FALSE	n.a.
5		2.0	n.a.	4.85	0.001	0.009	FALSE	n.a.
6	Chloride	2.0	n.a.	4.85	0.017	0.406	FALSE	n.a.
7	Nitrite *	2.0	n.a.	5.86	0.011	0.280	FALSE	n.a.
8		2.0	n.a.	6.86	0.029	0.629	FALSE	n.a.
9		2.0	n.a.	7.95	0.000	0.000	FALSE	n.a.
n.a.	Bromide *	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Sulfate	2.0	25.00	8.83	1.501	12.452	FALSE	n.a.
11	Nitrate	2.0	n.a.	9.91	0.106	2.621	FALSE	n.a.
12		2.0	n.a.	10.45	0.004	0.068	FALSE	n.a.
13	Phosphate	2.0	0.433	12.68	0.015	0.456	FALSE	n.a.
14		2.0	n.a.	14.57	2.387	10.006	FALSE	n.a.
15		2.0	n.a.	15.27	0.008	0.040	FALSE	n.a.

Injection Name:	*US46 A1 MS*	Inject Number:	7
Vial Number:	*7*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 16:22*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	2.0	0.357	3.36	0.436	2.818	FALSE	n.a.
2		2.0	n.a.	3.71	0.062	0.357	FALSE	n.a.
3	Chloride	2.0	2.512	4.65	3.902	10.951	FALSE	n.a.
4	Nitrite	2.0	0.847	5.85	1.494	3.993	FALSE	n.a.
5		2.0	n.a.	7.96	0.251	1.551	FALSE	n.a.
6	Bromide	2.0	0.000	8.31	0.000	1.048	FALSE	n.a.
7	Sulfate	2.0	1.845	8.82	3.361	20.985	FALSE	n.a.
8	Nitrate	2.0	1.537	9.82	2.437	7.897	FALSE	n.a.
9		2.0	n.a.	12.21	0.000	0.228	FALSE	n.a.
10	Phosphate	2.0	0.817	12.63	0.828	3.558	FALSE	n.a.
11		2.0	n.a.	14.58	2.351	9.823	FALSE	n.a.

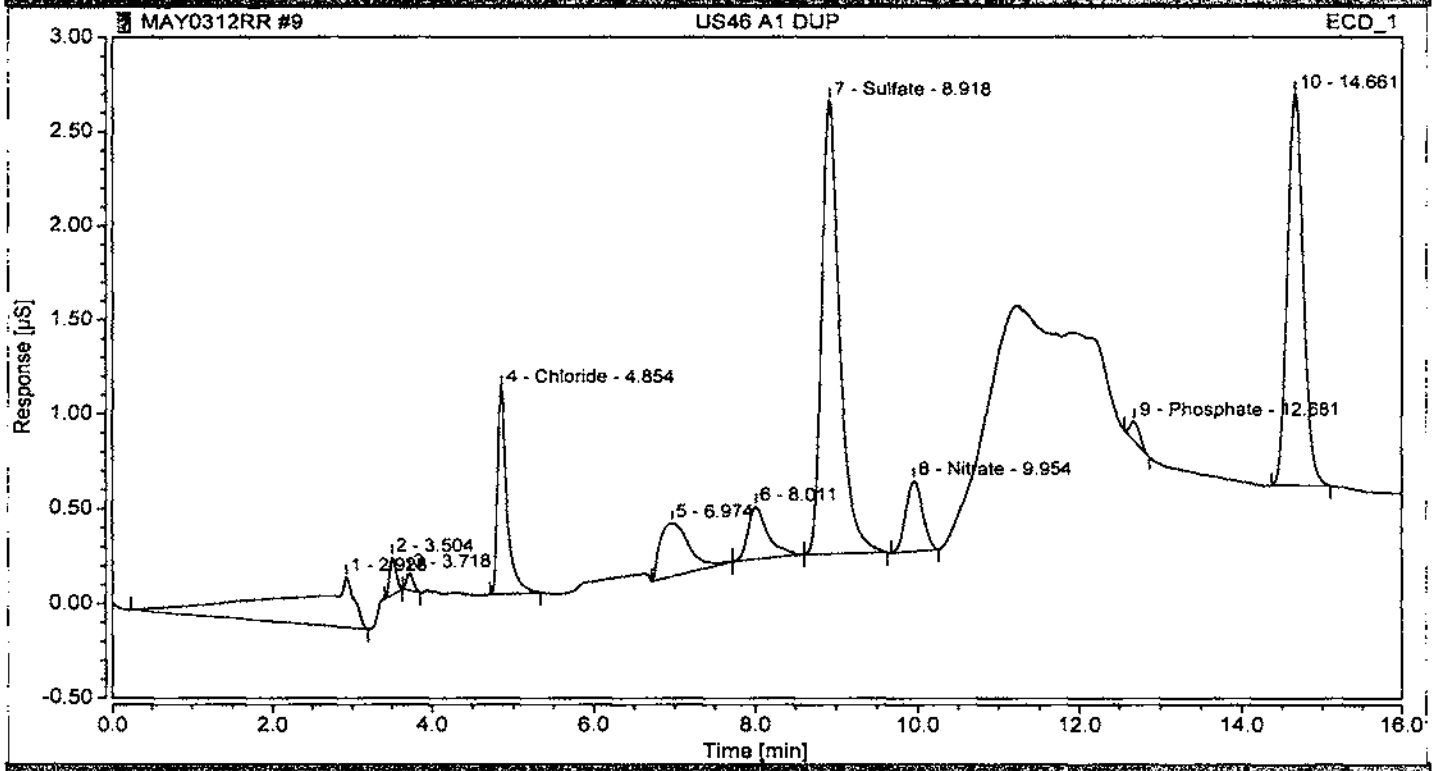
Injection Name:	*US46 A1*	Inject Number:	8
Vial Number:	*8*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 16:41*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.928	0.284	0.272	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.508	0.079	0.198	FALSE	n.a.
3		10.0	n.a.	3.718	0.009	0.029	FALSE	n.a.
4	Chloride	10.0	4.858	4.858	0.352	1.18	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		10.0	n.a.	6.978	0.106	0.202	FALSE	n.a.
6		10.0	n.a.	8.011	0.099	0.267	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	7.698	8.918	0.600	2.363	FALSE	n.a.
8	Nitrate	10.0	1.251	9.954	0.094	0.263	FALSE	n.a.
9	Phosphate	10.0	0.470	12.881	0.0128	0.054	FALSE	n.a.
10		10.0	n.a.	14.658	0.426	2.192	FALSE	n.a.
11		10.0	n.a.	15.36	0.006	0.023	FALSE	n.a.

US52 : 01308

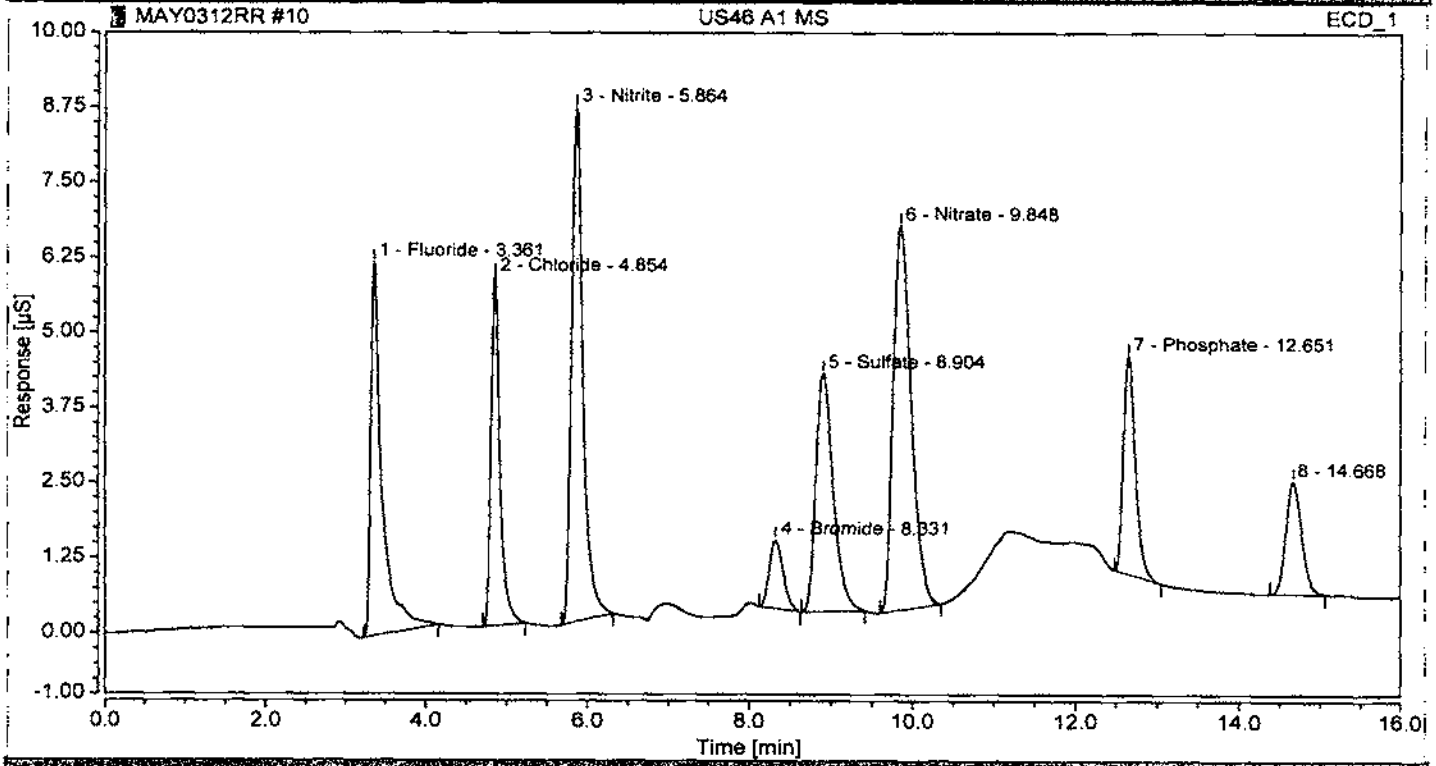
Injection Name:	*US46 A1 DUP*	Inject Number:	9
Vial Number:	*9*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 17:00*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.93	0.273	0.266	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.50	0.0618	0.0165	FALSE	n.a.
3		10.0	n.a.	3.72	0.360	0.097	FALSE	n.a.
4	Chloride	10.0	3.767	4.85	0.947	0.285	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		10.0	n.a.	6.97	0.745	0.278	FALSE	n.a.
6		10.0	n.a.	8.01	0.274	0.276	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	2.980	8.92	5.618	2.387	FALSE	n.a.
8	Nitrate	10.0	0.195	9.95	0.359	0.170	FALSE	n.a.
9	Phosphate	10.0	0.458	12.68	0.914	0.261	FALSE	n.a.
10		10.0	n.a.	14.66	6.459	2.674	FALSE	n.a.

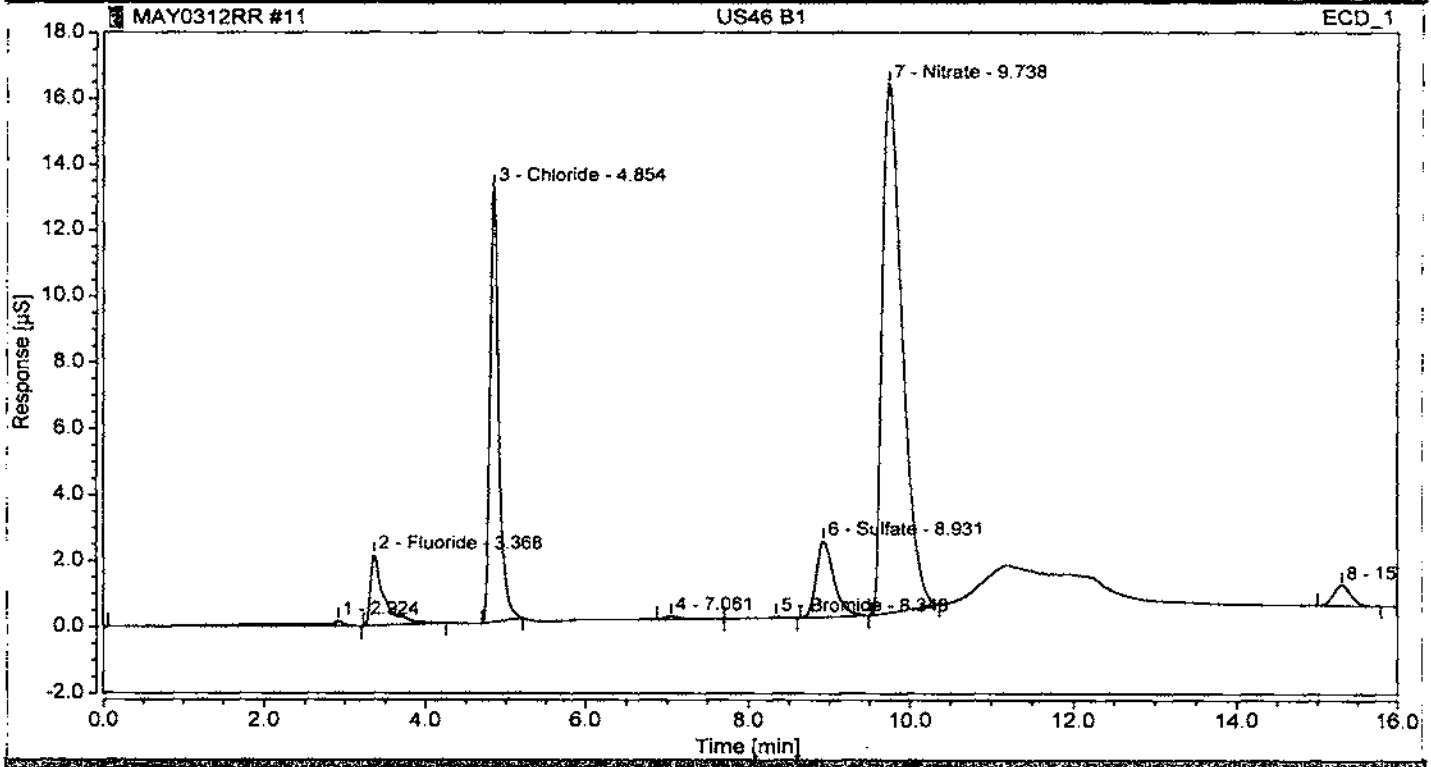
US52 : 01309

Injection Name:	*US46 A1 MS*	Inject Number:	10
Vial Number:	*10*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 17:20*		



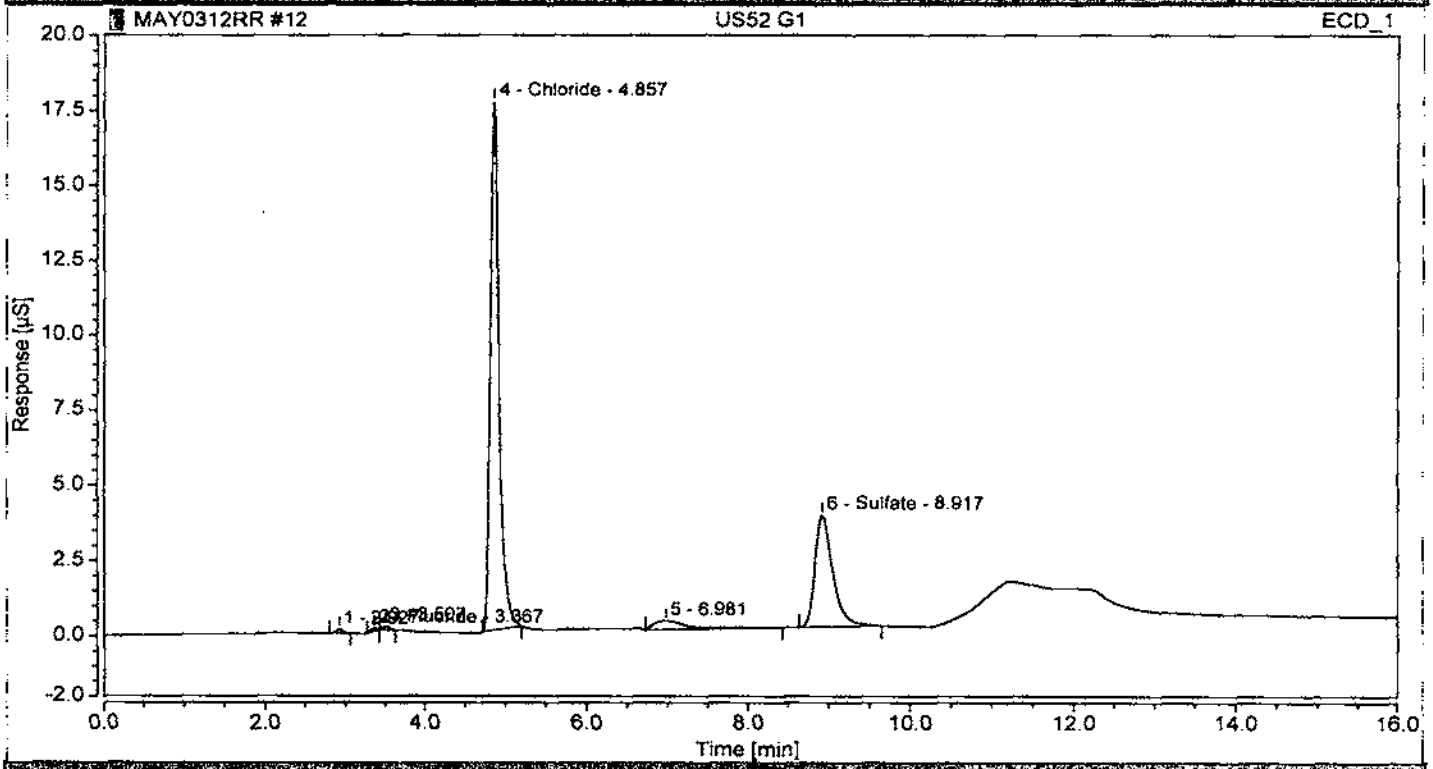
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	10.0	2.0587	3.361	0.026	0.217	FALSE	n.a.
2	Chloride	10.0	25.1478	4.854	0.744	5.885	FALSE	n.a.
3	Nitrite	10.0	19.2418	5.864	1.382	16.549	FALSE	n.a.
4	Bromide	10.0	3.6678	8.331	0.220	1.129	FALSE	n.a.
5	Sulfate	10.0	35.1860	8.904	0.971	3.969	FALSE	n.a.
6	Nitrate	10.0	28.0092	9.848	1.648	6.397	FALSE	n.a.
7	Phosphate	10.0	10.6486	12.651	0.811	3.937	FALSE	n.a.
8		10.0	n.a.	14.667	0.418	1.860	FALSE	n.a.

Injection Name:	*US46 B1*	Inject Number:	11
Vial Number:	*11*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 17:40*		



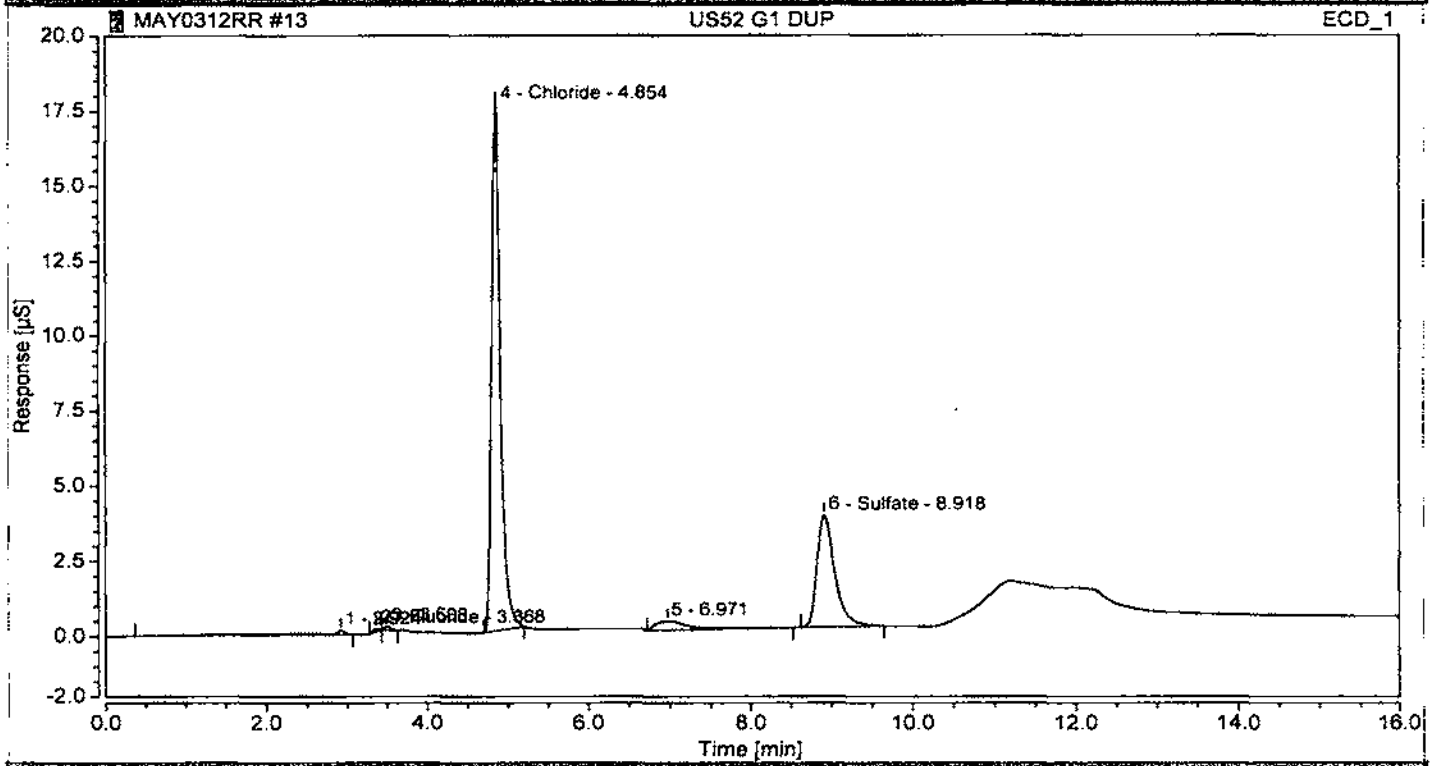
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1				2.82	0.126	0.161	FALSE	n.a.
2	Fluoride			3.37	0.428	2.139	FALSE	n.a.
3	Chloride			4.85	7.163	13.145	FALSE	n.a.
n.a.	Nitrite					n.a.	n.a.	n.a.
4				7.06	0.007	0.092	FALSE	n.a.
5	Bromide			8.34	0.005	0.026	FALSE	n.a.
6	Sulfate			8.93	0.564	2.902	FALSE	n.a.
7	Nitrate			9.74	2.607	15.996	FALSE	n.a.
n.a.	Phosphate					n.a.	n.a.	n.a.
8				15.33	0.155	0.627	FALSE	n.a.

Injection Name:	*US52 G1*	Inject Number:	12
Vial Number:	*12*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 17:59*		



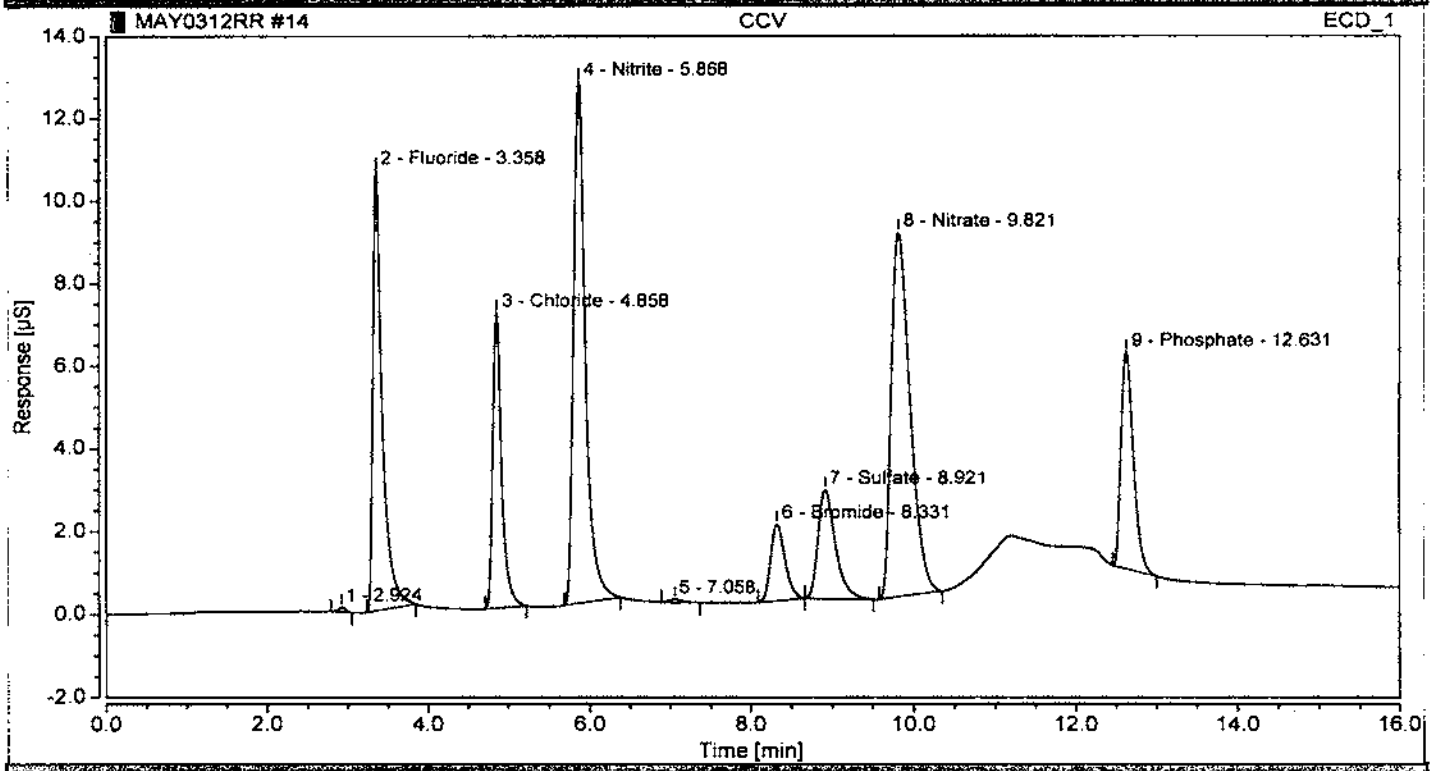
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.93	0.004	0.119	FALSE	n.a.
2	Fluoride	5.0	0.002	3.37	0.0001	0.008	FALSE	n.a.
3		5.0	n.a.	3.87	0.004	0.119	FALSE	n.a.
4	Chloride	5.0	0.040	4.857	0.835	17.695	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		5.0	n.a.	6.981	0.018	0.238	FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	5.0	0.026	8.917	0.018	0.708	FALSE	n.a.
n.a.	Nitrate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 DUP*	Inject Number:	13
Vial Number:	*13*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 18:19*		



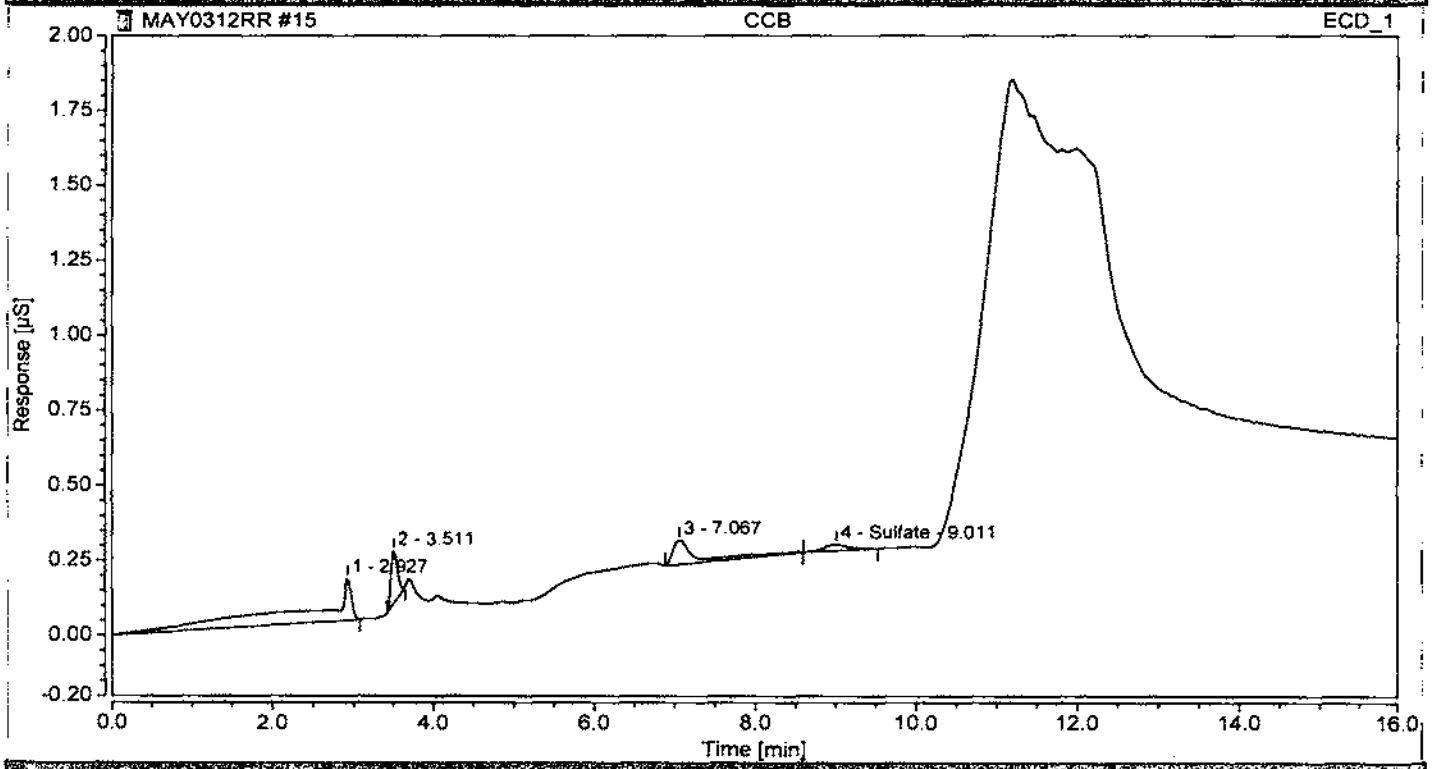
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.92	0.087	0.192	FALSE	n.a.
2	Fluoride	5.0	0.030	3.87	0.008	0.029	FALSE	n.a.
3		5.0	n.a.	3.93	0.051	0.125	FALSE	n.a.
4	Chloride	5.0	2.502	4.85	2.916	4.606	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		5.0	0.08	6.97	0.105	0.236	FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	5.0	3.902	8.92	6.938	5.703	FALSE	n.a.
n.a.	Nitrate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*CCV*	Inject Number:	14
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 18:39*		



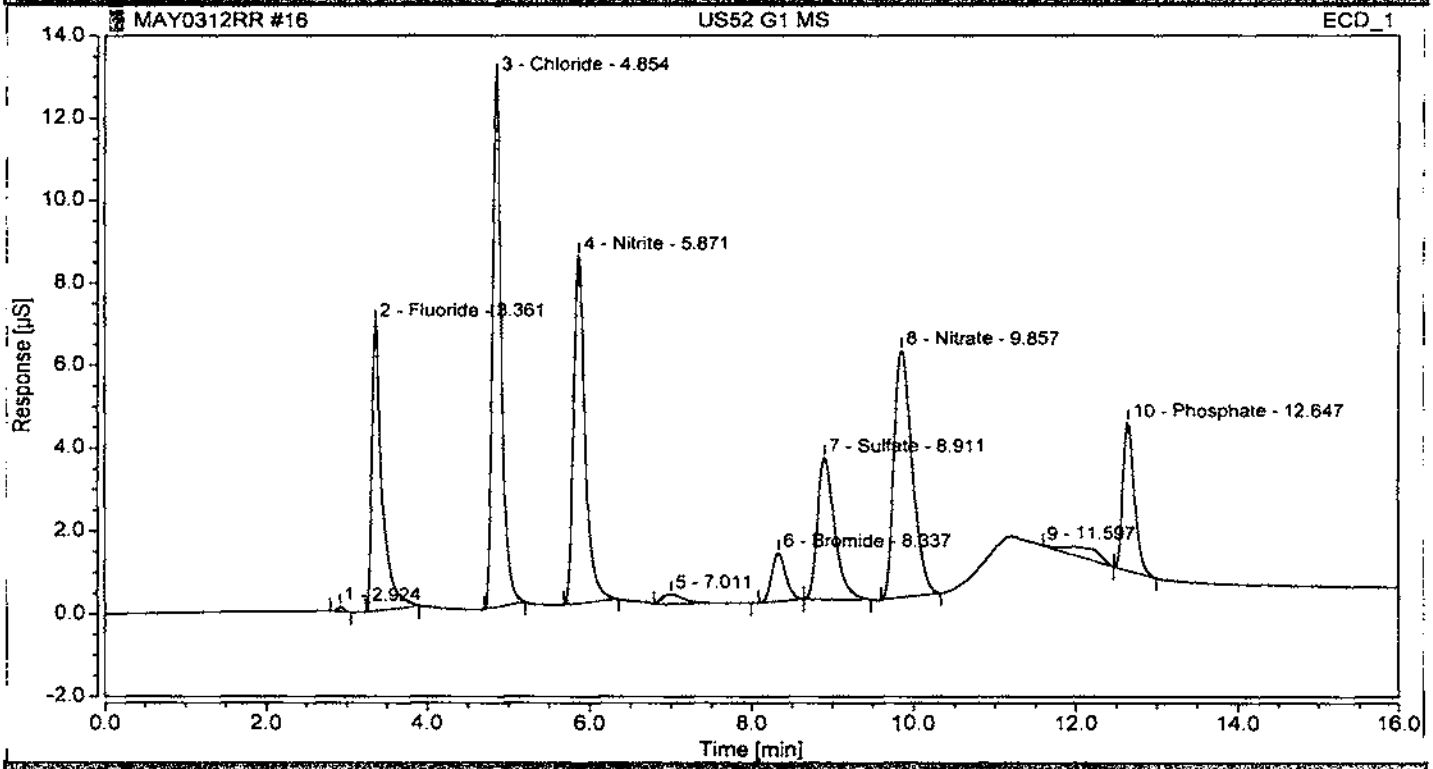
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.924	0.101	0.117	FALSE	n.a.
2	Fluoride	1.0	2.067	3.358	1.384	10.661	FALSE	-1.78
3	Chloride	1.0	2.918	4.858	0.908	7.781	FALSE	-1.59
4	Nitrite	1.0	3.012	5.868	2.184	12.425	FALSE	0.41
5		1.0	n.a.	7.058	0.015	0.074	FALSE	n.a.
6	Bromide	1.0	2.559	8.331	0.769	4.838	FALSE	-4.45
7	Sulfate	1.0	2.911	8.921	1.088	5.616	FALSE	-2.86
8	Nitrate	1.0	3.117	9.821	2.516	8.809	FALSE	3.89
9	Phosphate	1.0	2.942	12.631	0.918	5.236	FALSE	-1.94

Injection Name:	*CCB*	Inject Number:	15
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 18:59*		



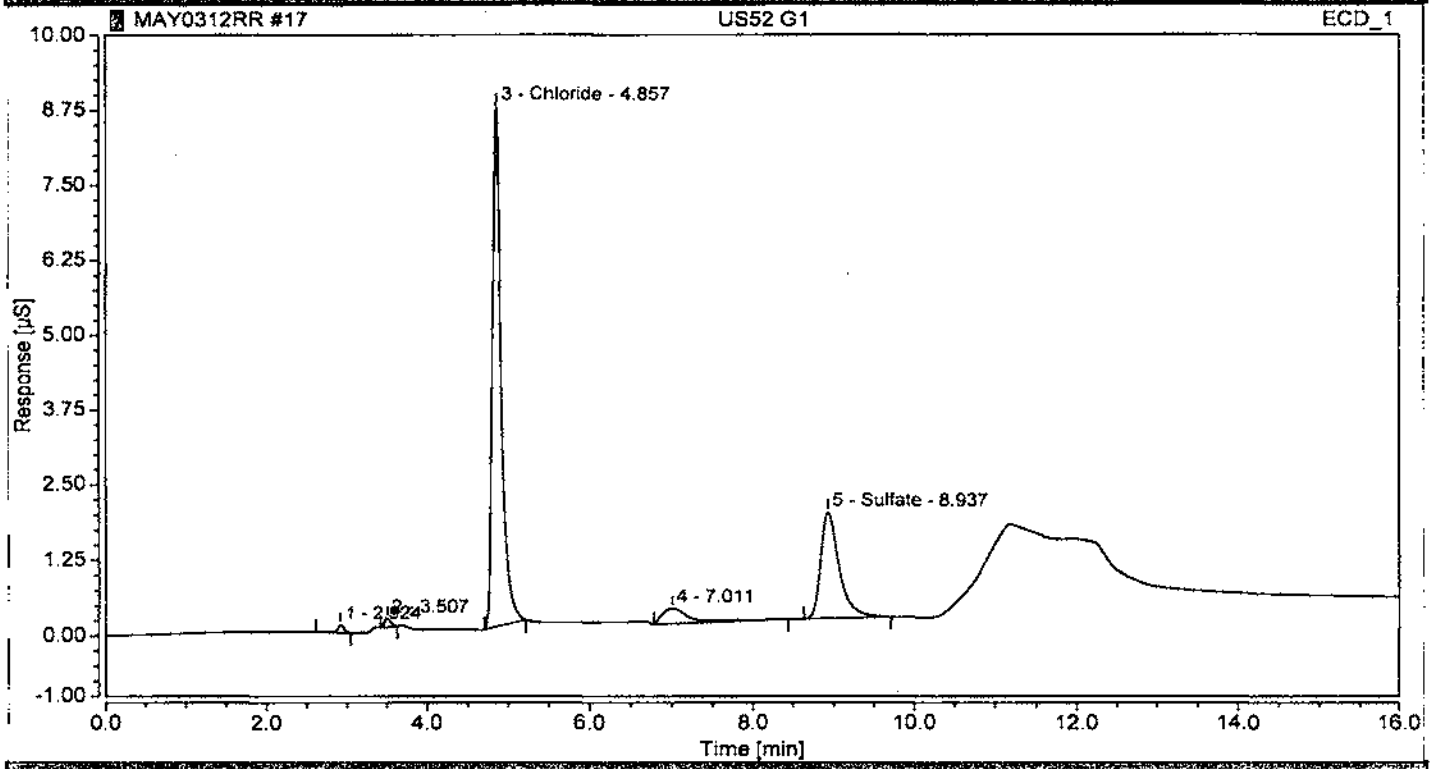
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.091	0.139	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.077	0.173	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.07	0.013	0.008	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.29	9.00	0.007	0.021	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	16
Vial Number:	*14*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 19:19*		



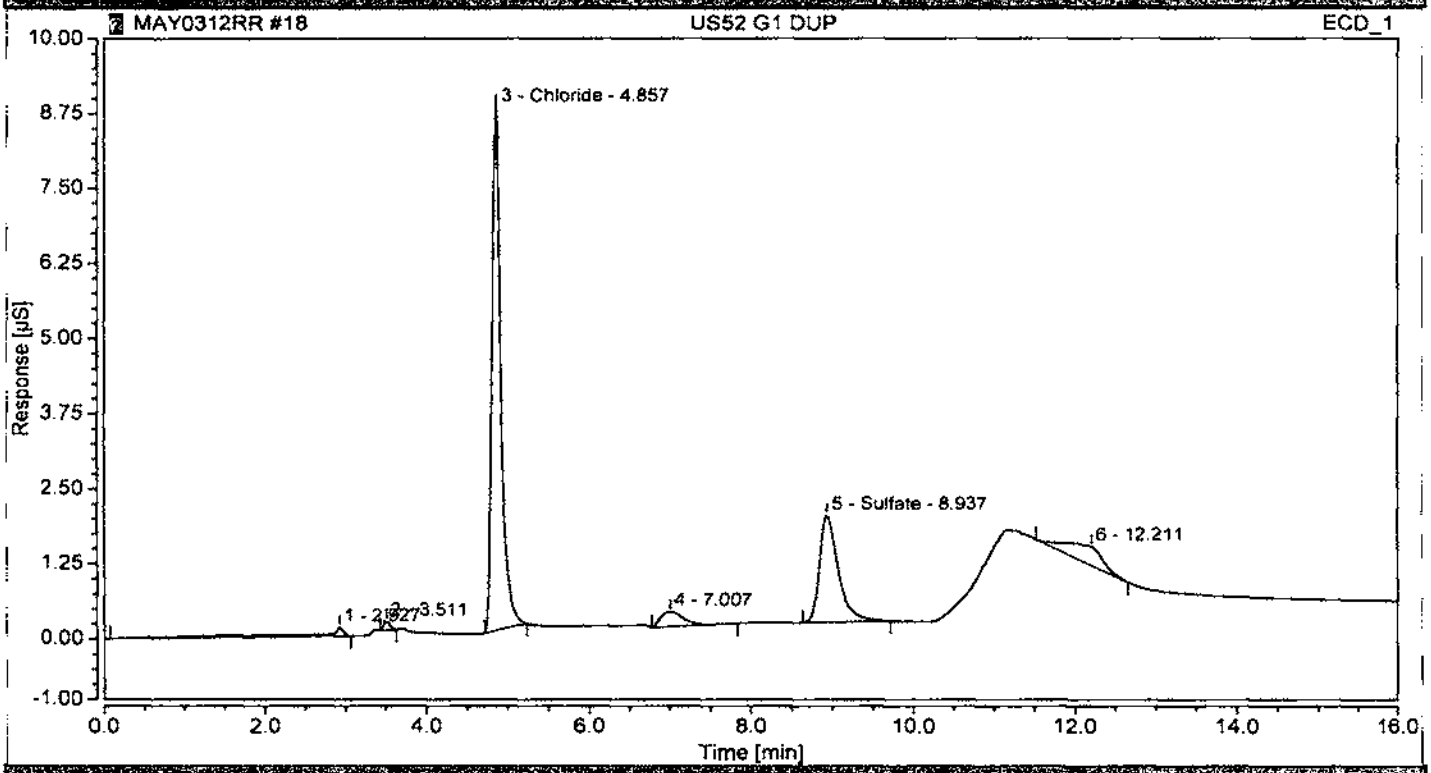
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.010	0.118	FALSE	n.a.
2	Fluoride	10.0	2.000	3.36	0.035	0.459	FALSE	n.a.
3	Chloride	10.0	3.000	4.85	0.116	1.284	FALSE	n.a.
4	Nitrite	10.0	10.00	5.87	0.295	3.401	FALSE	n.a.
5		10.0	n.a.	7.01	0.004	0.051	FALSE	n.a.
6	Bromide	10.0	10.00	8.34	0.096	1.157	FALSE	n.a.
7	Sulfate	10.0	10.00	8.91	0.340	3.405	FALSE	n.a.
8	Nitrate	10.0	10.00	9.86	0.411	3.918	FALSE	n.a.
9		10.0	n.a.	11.60	0.000	0.000	FALSE	n.a.
10	Phosphate	10.0	10.00	12.65	0.597	3.659	FALSE	n.a.

Injection Name:	*US52 G1*	Inject Number:	17
Vial Number:	*15*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 19:39*		



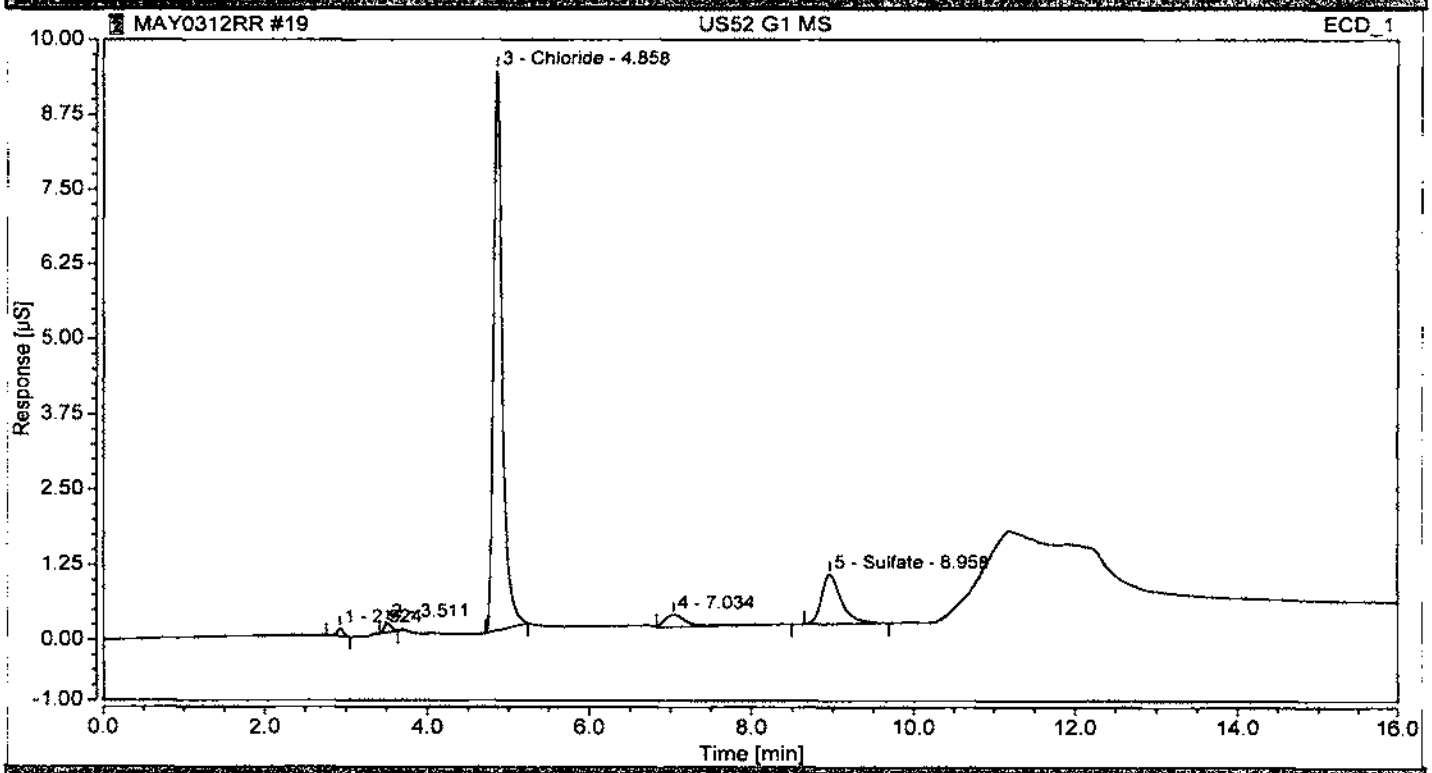
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.62	0.013	0.426	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.51	0.013	0.403	FALSE	n.a.
3	Chloride	10.0	10.782	4.857	1.000	15.666	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.011	0.010	0.352	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	20.782	8.937	0.707	4.758	FALSE	n.a.
n.a.	Nitrate-N	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 DUP*	Inject Number:	18
Vial Number:	*16*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 19:59*		



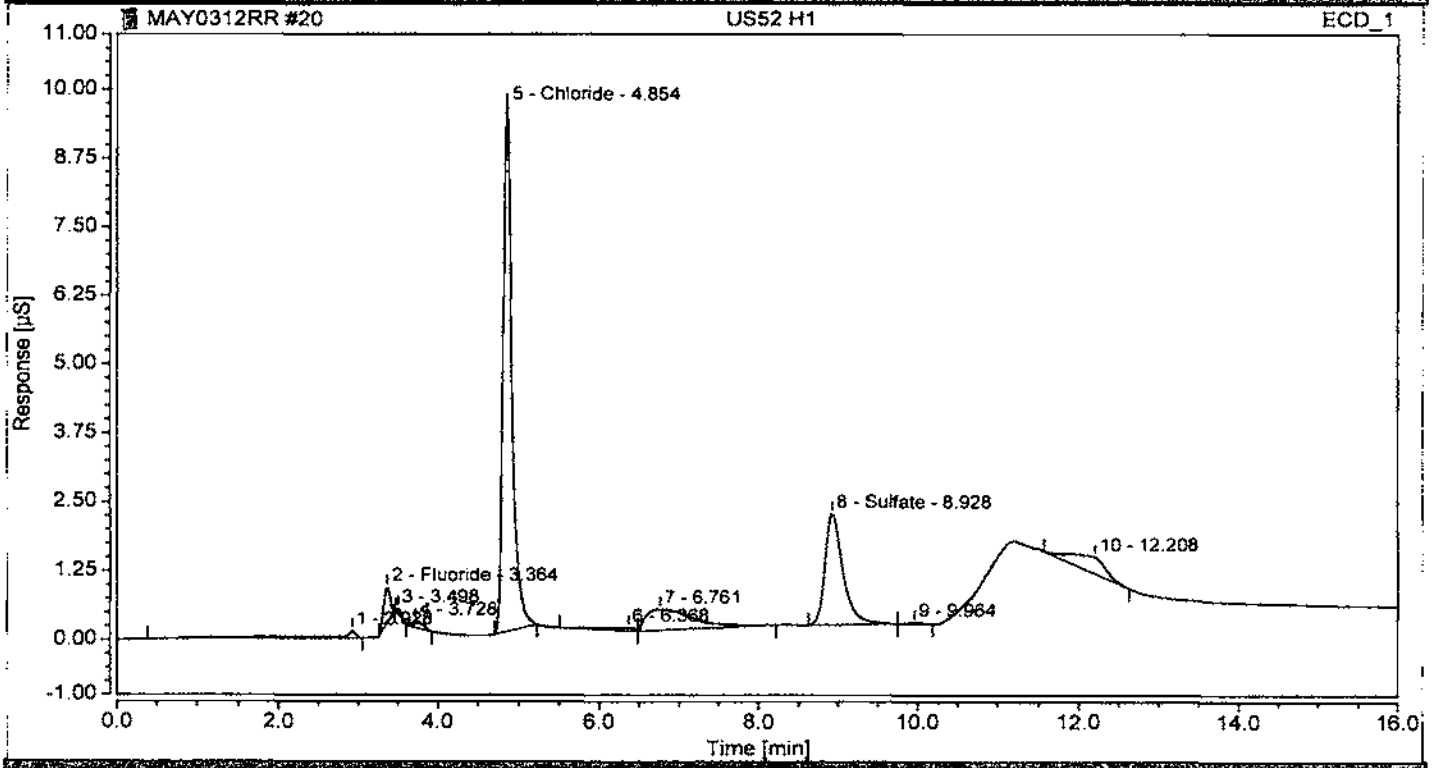
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.93	0.024	0.143	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.52	0.013	0.102	FALSE	n.a.
3	Chloride	10.0	2.41	4.86	0.277	2.272	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	0.41	7.01	0.053	0.237	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	2.60	8.94	0.378	1.756	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	n.a.	12.21	0.181	0.817	FALSE	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	19
Vial Number:	*17*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 20:19*		



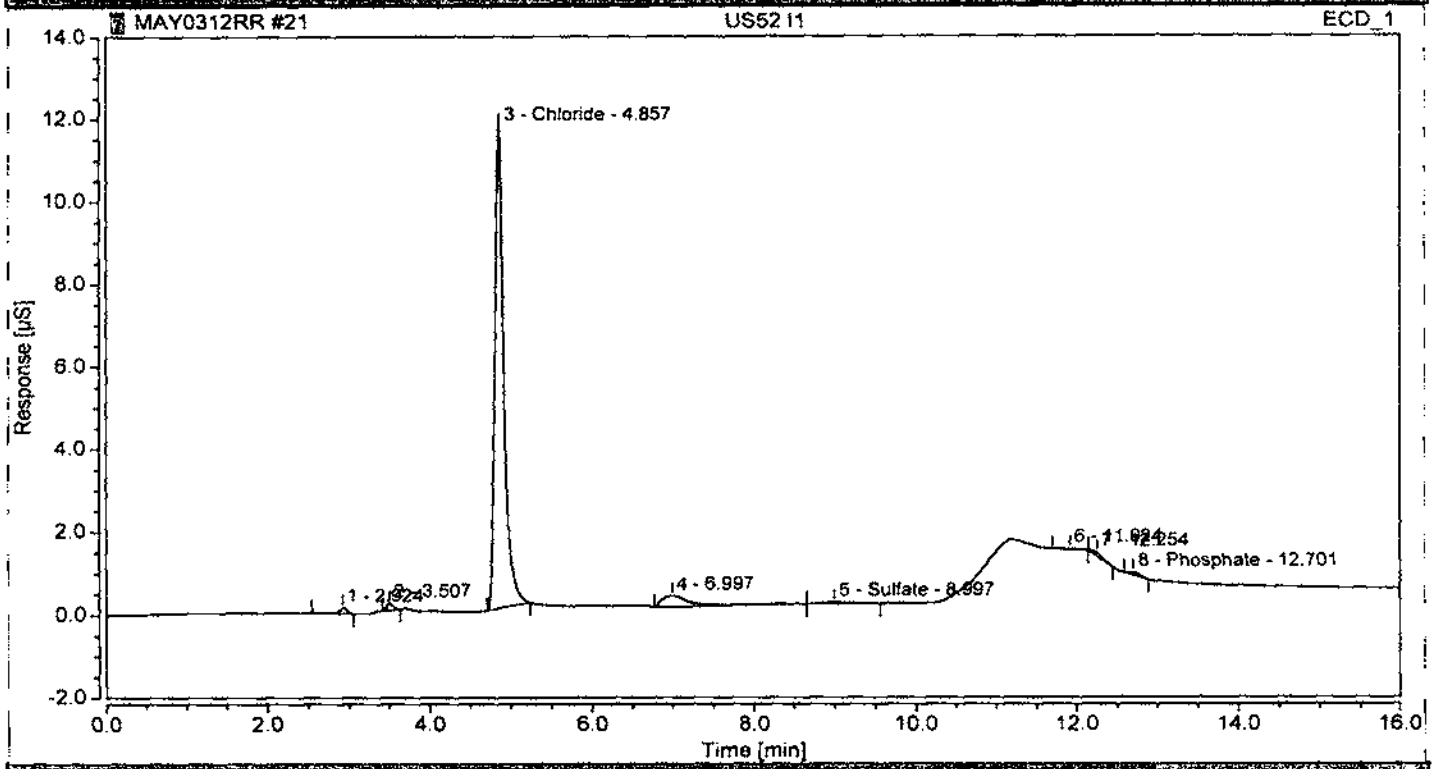
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.92	0.011	0.127	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.51	0.015	0.134	FALSE	n.a.
3	Chloride	20.0	2.166	4.86	1.165	0.337	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	n.a.	7.03	0.024	0.206	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	2.0898	8.96	0.231	0.823	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 H1*	Inject Number:	20
Vial Number:	*18*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 20:40*		



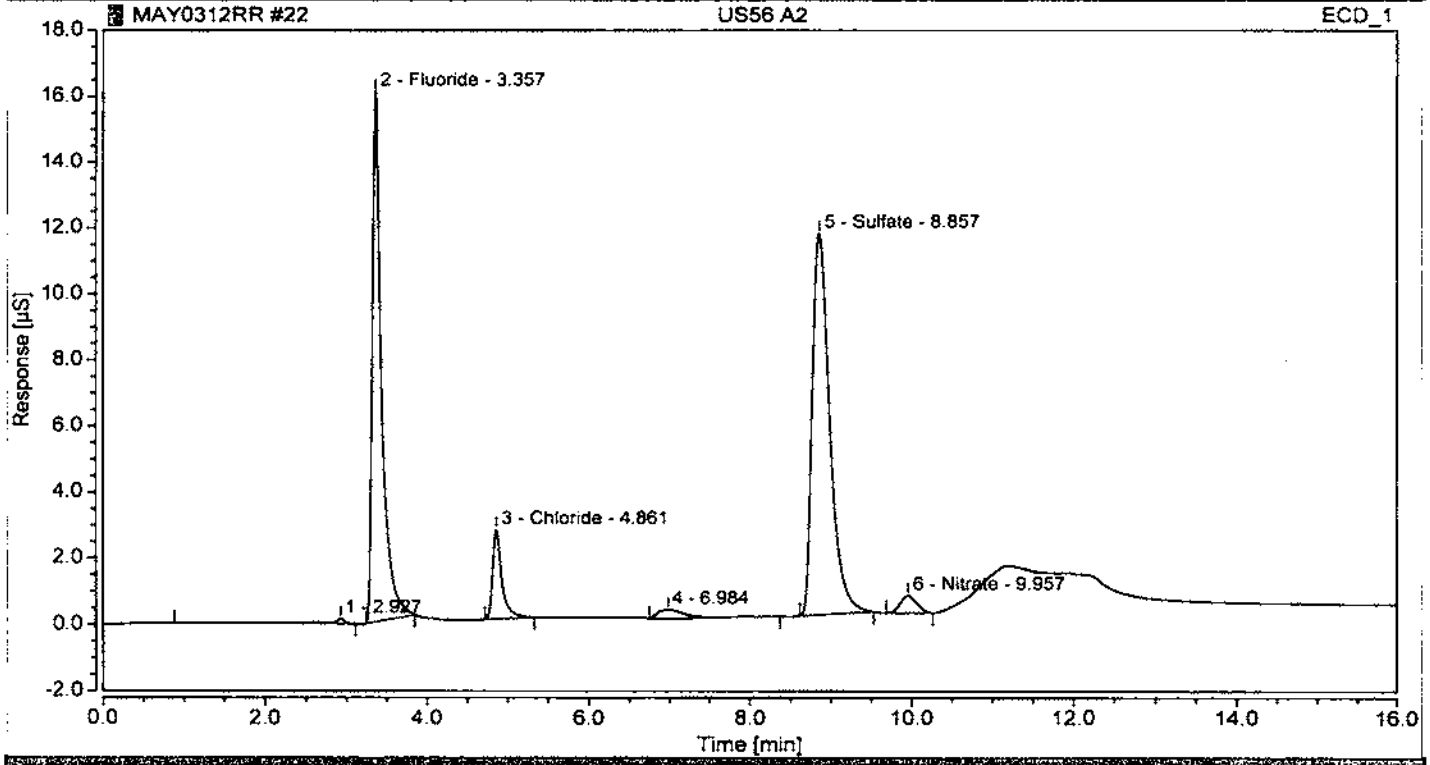
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	3.228	0.0069	0.131	FALSE	n.a.
2	Fluoride	2.0	0.264	3.364	0.0647	0.859	FALSE	n.a.
3		2.0	n.a.	3.498	0.0057	0.065	FALSE	n.a.
4		2.0	n.a.	3.728	0.0107	n.a.	FALSE	n.a.
5	Chloride	2.0	2.010	4.854	0.3547	3.567	FALSE	n.a.
n.a.	Nitrite	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		2.0	n.a.	6.368	0.0108	0.092	FALSE	n.a.
7		2.0	n.a.	6.761	0.0261	0.079	FALSE	n.a.
n.a.	Bromide	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Sulfate	2.0	n.a.	8.928	0.2436	2.015	FALSE	n.a.
n.a.	Nitrate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9		2.0	n.a.	9.964	0.0037	0.037	FALSE	n.a.
10		2.0	n.a.	12.208	0.0308	0.303	FALSE	n.a.
n.a.	Phosphate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 I1*	Inject Number:	21
Vial Number:	*19*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 21:00*		



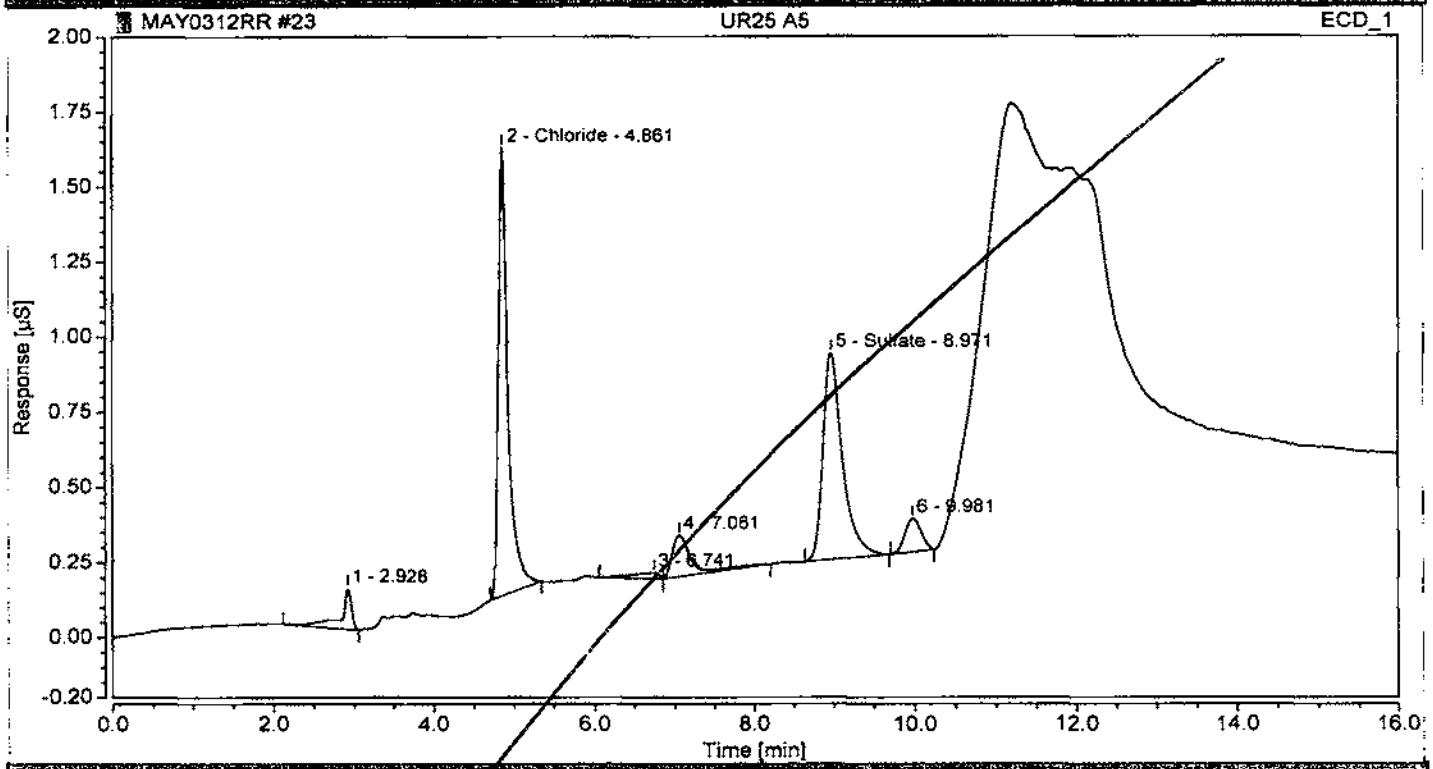
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.82	0.015	0.136	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	3.51	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.85	0.015	0.135	FALSE	n.a.
3	Chloride	20.0	0.10	4.86	0.102	0.902	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	5.66	n.a.	n.a.	n.a.	n.a.
4		20.0	n.a.	7.00	0.030	0.262	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	7.43	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	0.50	9.00	0.048	0.041	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		20.0	n.a.	11.92	0.008	0.039	FALSE	n.a.
7		20.0	n.a.	12.25	0.014	0.092	FALSE	n.a.
8	Phosphate	20.0	0.510	12.70	0.010	0.066	FALSE	n.a.

Injection Name:	*US56 A2*	Inject Number:	22
Vial Number:	*20*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 21:21*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0					FALSE	n.a.
2	Fluoride	5.0					FALSE	n.a.
3	Chloride	5.0					FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		5.0					FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	5.0					FALSE	n.a.
6	Nitrate	5.0					FALSE	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

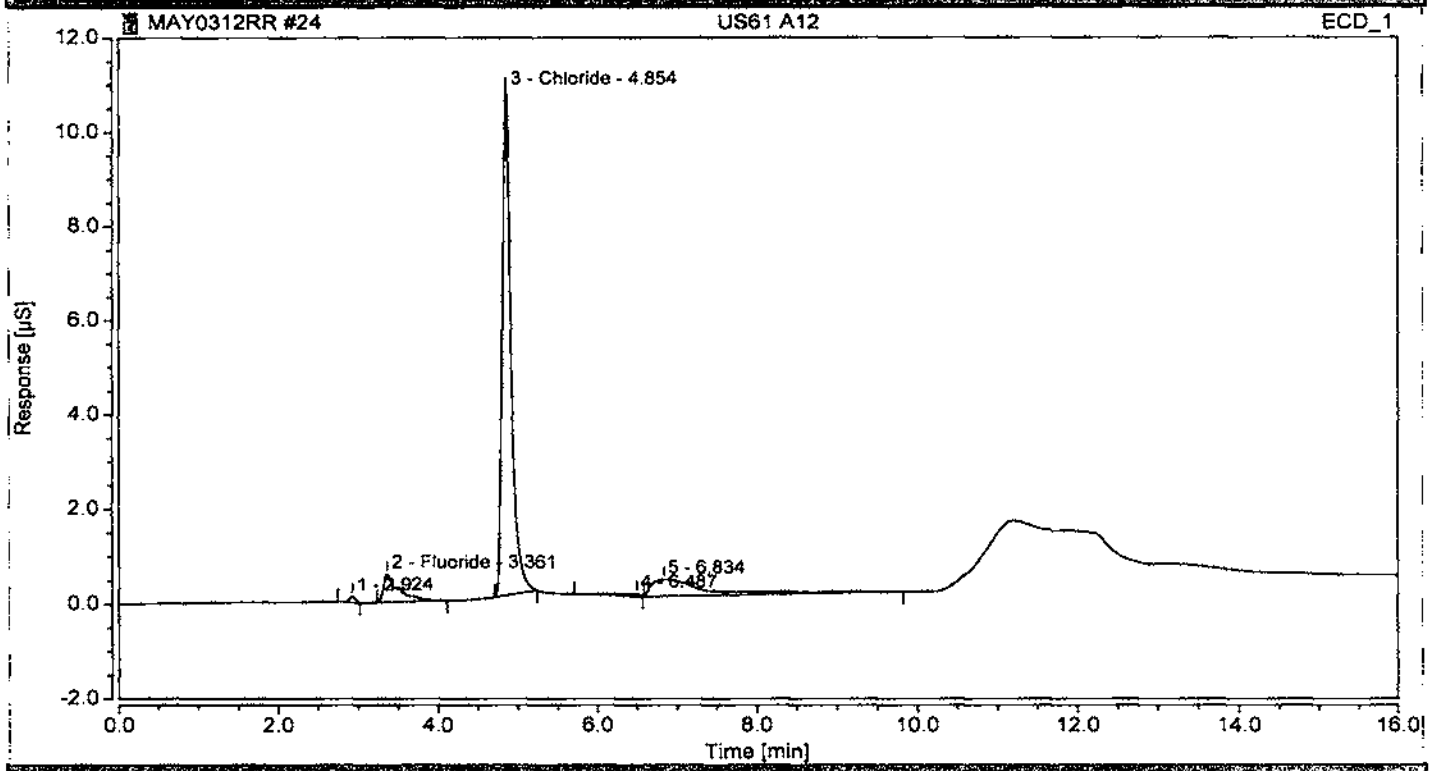
Injection Name:	*UR25 A5*	Inject Number:	23
Vial Number:	*21*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 21:42*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1						0.138	FALSE	n.a.
n.a.	Fluoride						n.a.	n.a.
2	Chloride						FALSE	n.a.
n.a.	Nitrite						n.a.	n.a.
3							FALSE	n.a.
4							FALSE	n.a.
n.a.	Bromide						n.a.	n.a.
5	Sulfate						FALSE	n.a.
n.a.	Nitrate						n.a.	n.a.
6							FALSE	n.a.
n.a.	Phosphate						n.a.	n.a.

US52 : 01329

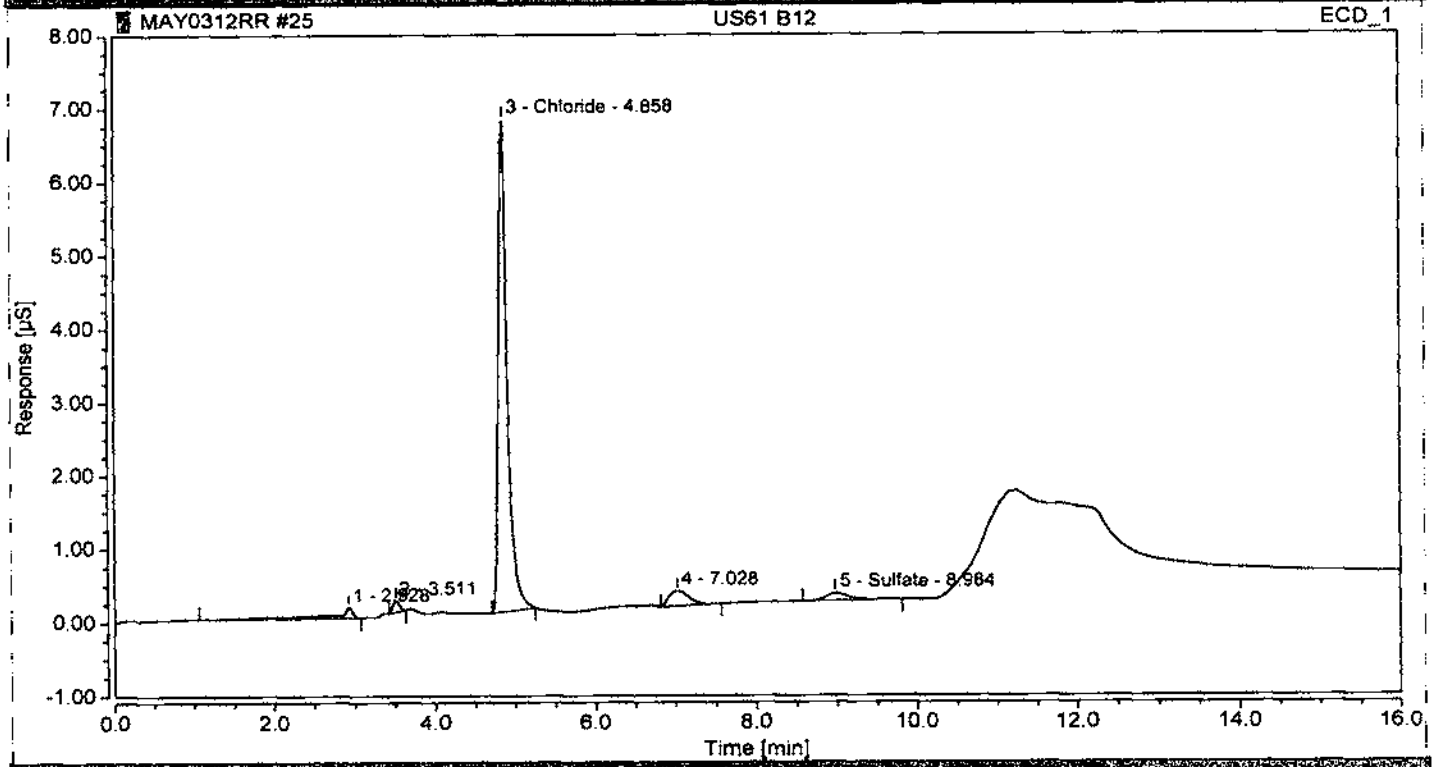
Injection Name:	*US61 A12*	Inject Number:	24
Vial Number:	*22*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 22:02*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
2	Fluoride						FALSE	n.a.
3	Chloride						FALSE	n.a.
n.a.	Nitrite						n.a.	n.a.
4							FALSE	n.a.
5							FALSE	n.a.
n.a.	Bromide						n.a.	n.a.
n.a.	Sulfate						n.a.	n.a.
n.a.	Nitrate						n.a.	n.a.
n.a.	Phosphate						n.a.	n.a.

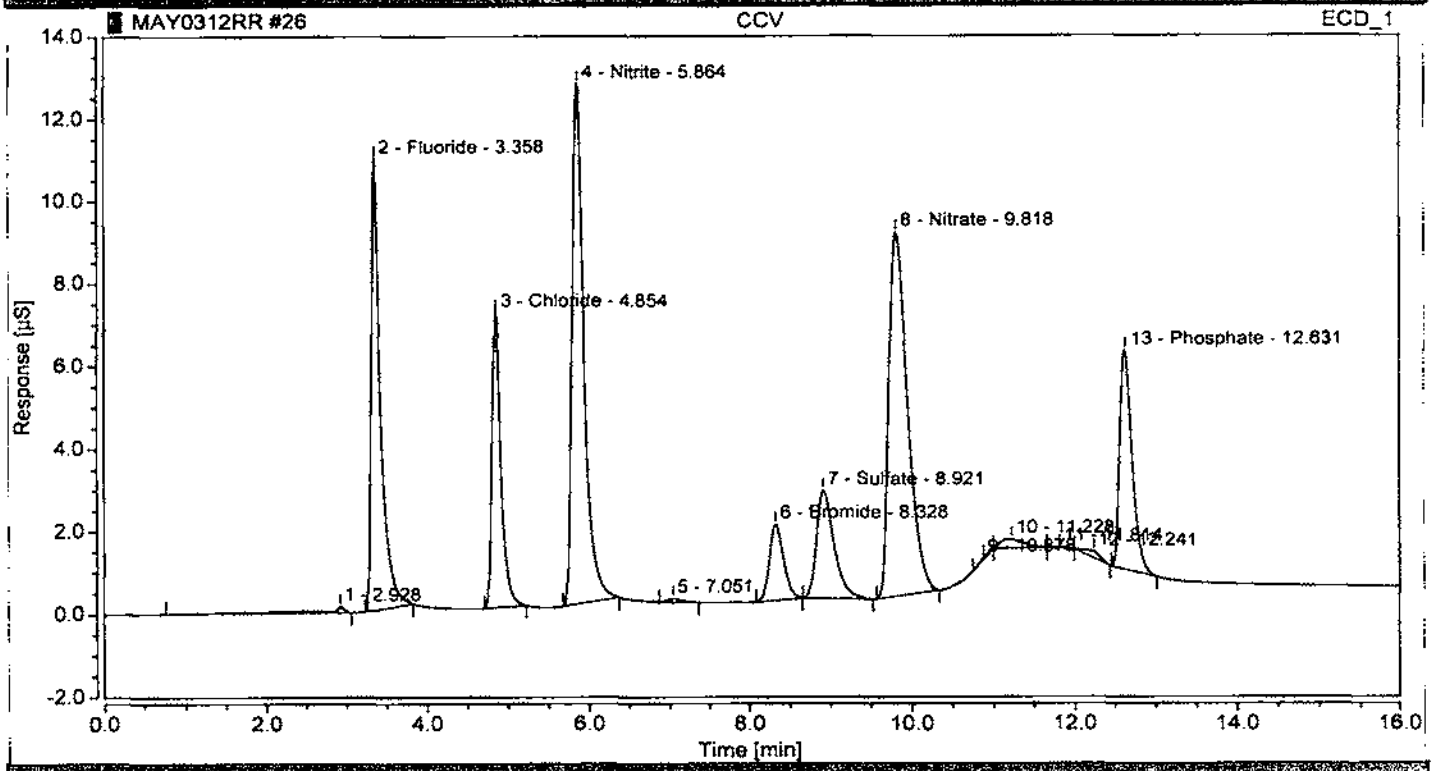
US52 - 01324

Injection Name:	*US61 B12*	Inject Number:	25
Vial Number:	*23*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 22:23*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.93	0.052	0.144	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.51	0.015	0.158	FALSE	n.a.
3	Chloride	20.0	7.0	4.86	0.952	8.750	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	0.7	7.03	0.090	0.297	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	9.0	8.96	0.334	0.989	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

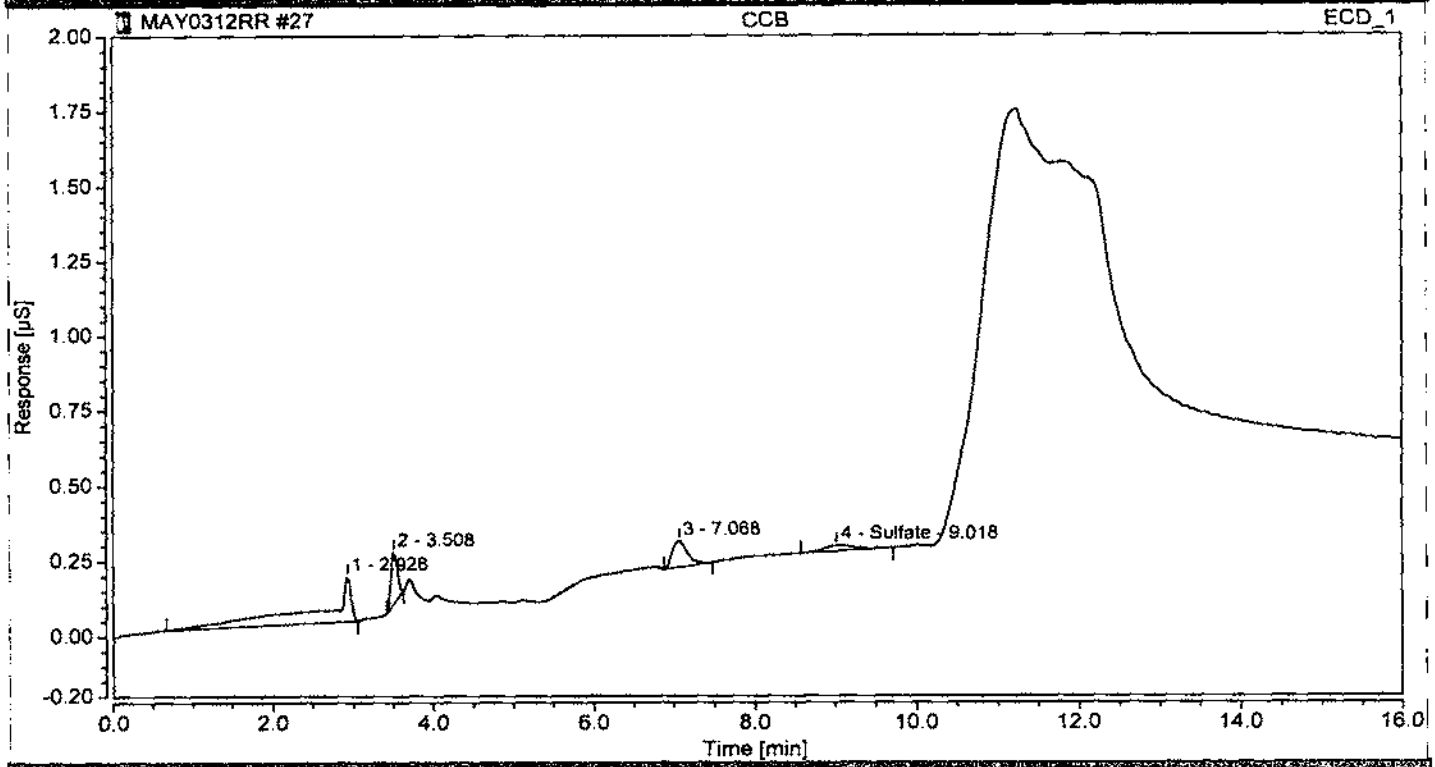
Injection Name:	*CCV*	Inject Number:	26
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 22:43*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1					0.935	0.144	FALSE	n.a.
2	Fluoride					10.923	FALSE	0.65
3	Chloride					7.139	FALSE	-1.34
4	Nitrite						FALSE	-0.15
5						0.081	FALSE	n.a.
6	Bromide						FALSE	-4.36
7	Sulfate						FALSE	-3.26
8	Nitrate						FALSE	3.72
9						0.048	FALSE	n.a.
10						0.269	FALSE	n.a.
11						0.048	FALSE	n.a.
12					0.307	0.160	FALSE	n.a.
13	Phosphate				0.930	5.290	FALSE	-0.72

US52 : 01326

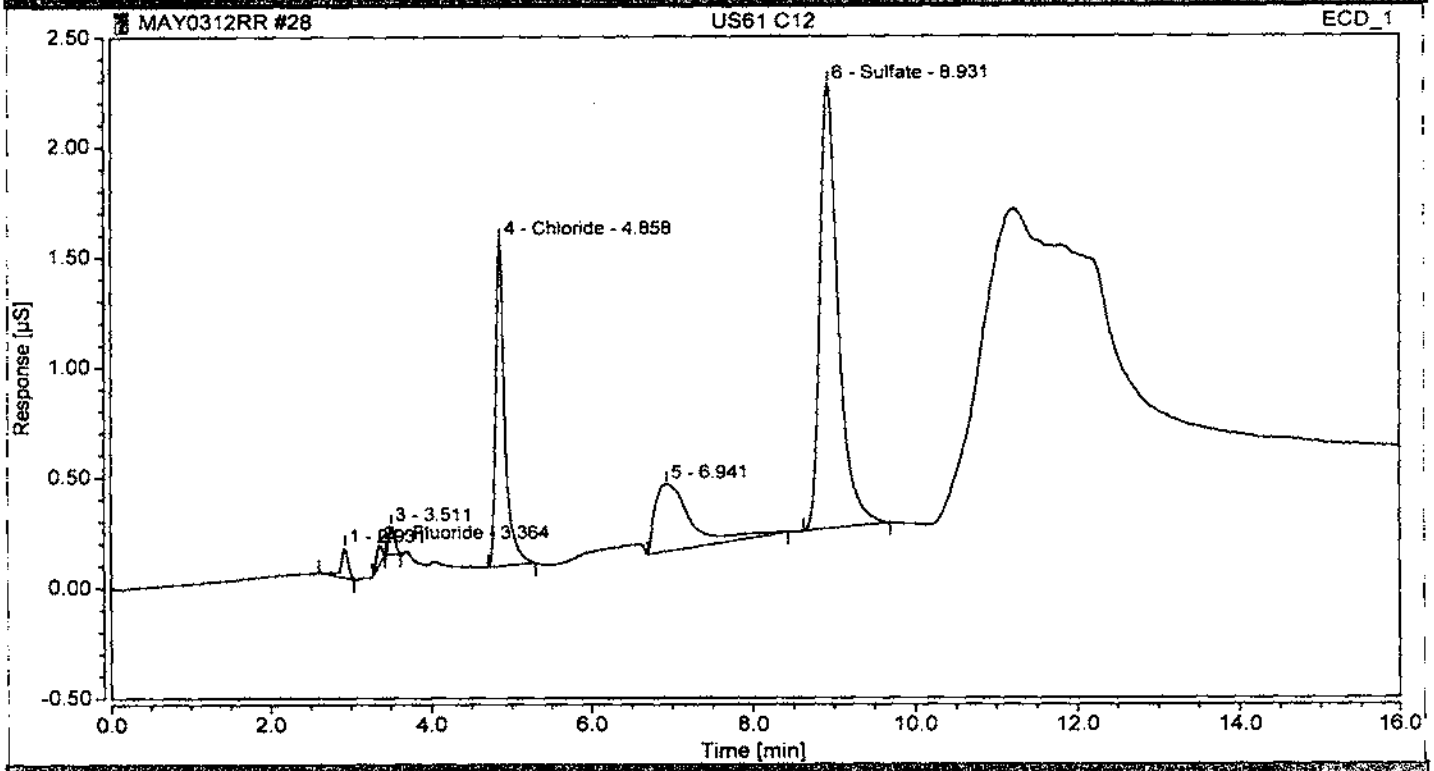
Injection Name:	*CCB*	Inject Number:	27
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 23:02*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.070	0.150	FALSE	n.a.
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.016	0.171	FALSE	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.07	0.057	0.087	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	n.a.	9.02	0.000	0.000	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

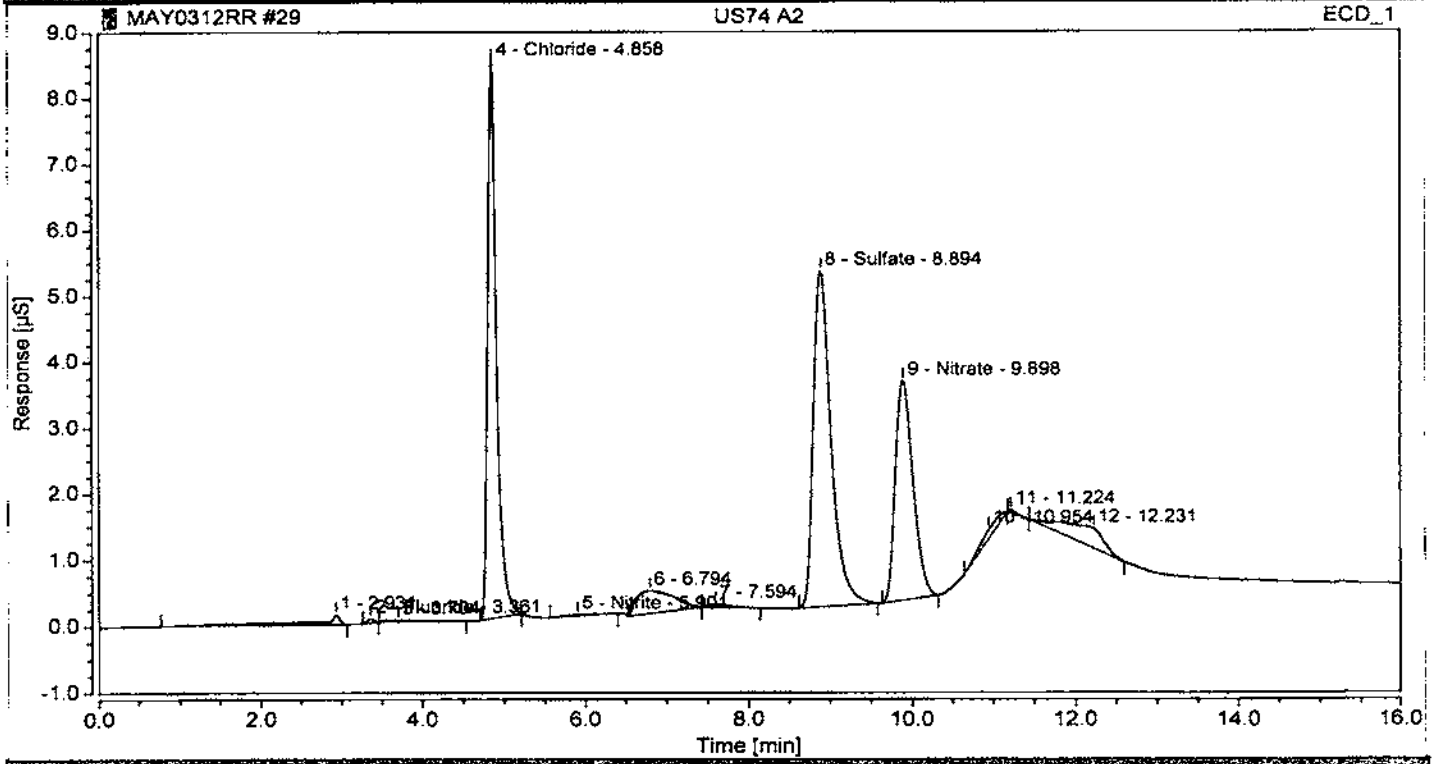
US52 : 01327

Injection Name:	*US61 C12*	Inject Number:	28
Vial Number:	*24*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodai*		
Injection Date/Time:	*03/05/12 23:22*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.90	0.014	0.103	FALSE	n.a.
2	Fluoride	5.0	0.074	3.36	0.006	0.065	FALSE	n.a.
3		5.0	n.a.	3.51	0.061	0.124	FALSE	n.a.
4	Chloride	5.0	3.670	4.86	0.435	1.475	FALSE	n.a.
n.a.	Nitrite	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		5.0	n.a.	6.94	0.164	0.302	FALSE	n.a.
n.a.	Bromide	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	5.0	6.857	8.93	0.541	2.015	FALSE	n.a.
n.a.	Nitrate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

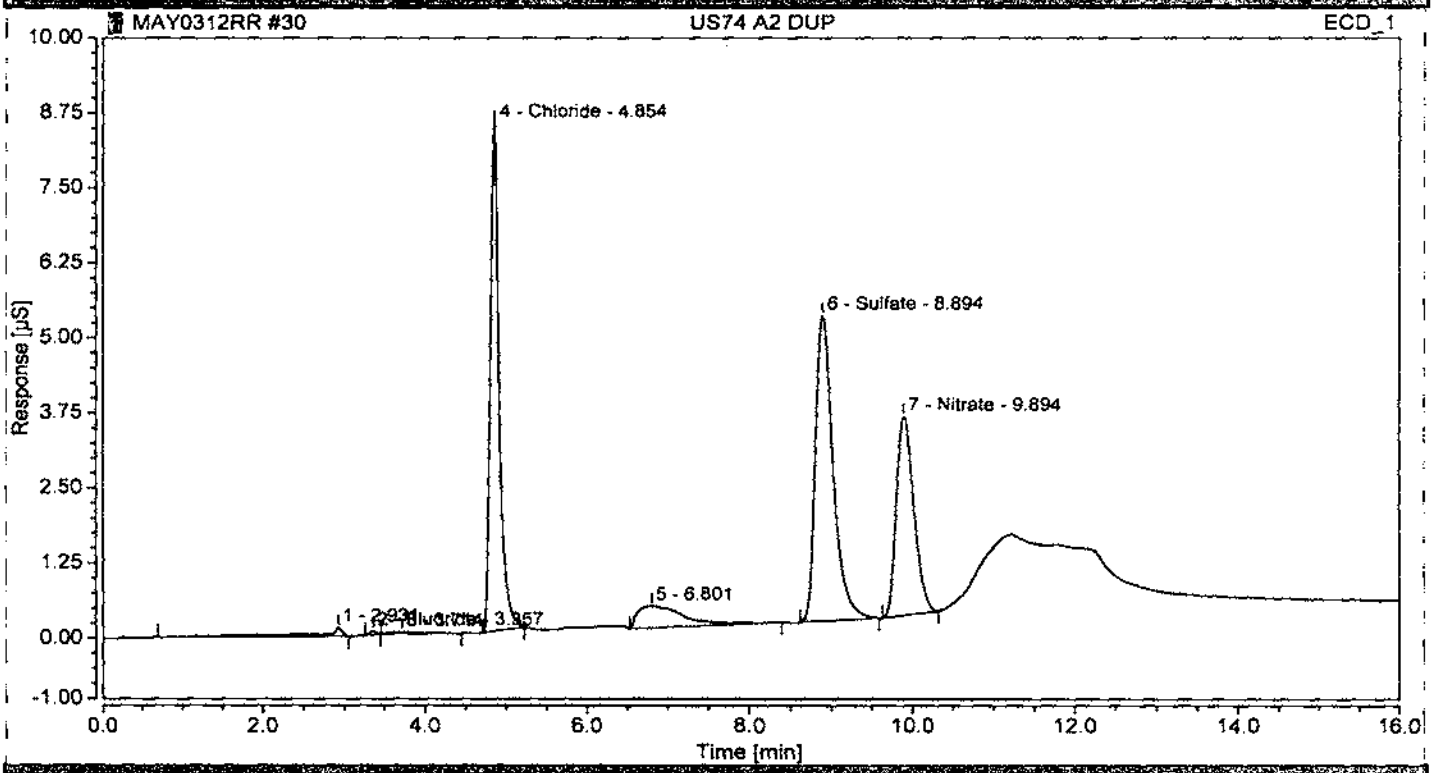
Injection Name:	*US74 A2*	Inject Number:	29
Vial Number:	*25*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 23:42*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
2	Fluoride						FALSE	n.a.
3							FALSE	n.a.
4	Chloride						FALSE	n.a.
5	Nitrite						FALSE	n.a.
6							FALSE	n.a.
7							FALSE	n.a.
n.a.	Bromide					n.a.	n.a.	n.a.
8	Sulfate						FALSE	n.a.
9	Nitrate						FALSE	n.a.
10							FALSE	n.a.
11							FALSE	n.a.
12			n.a.				FALSE	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

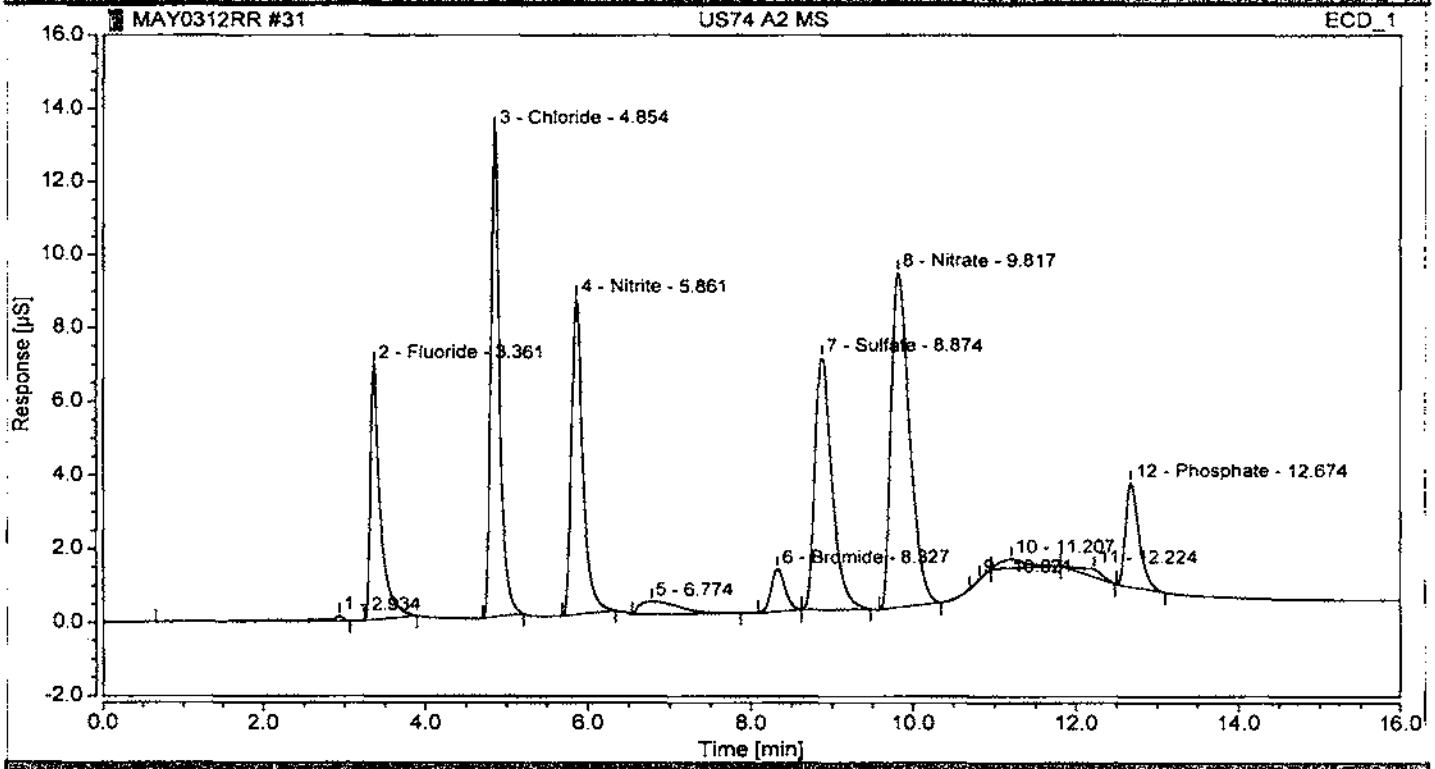
US52 - 01329

Injection Name:	*US74 A2 DUP*	Inject Number:	30
Vial Number:	*26*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*04/05/12 00:02*		



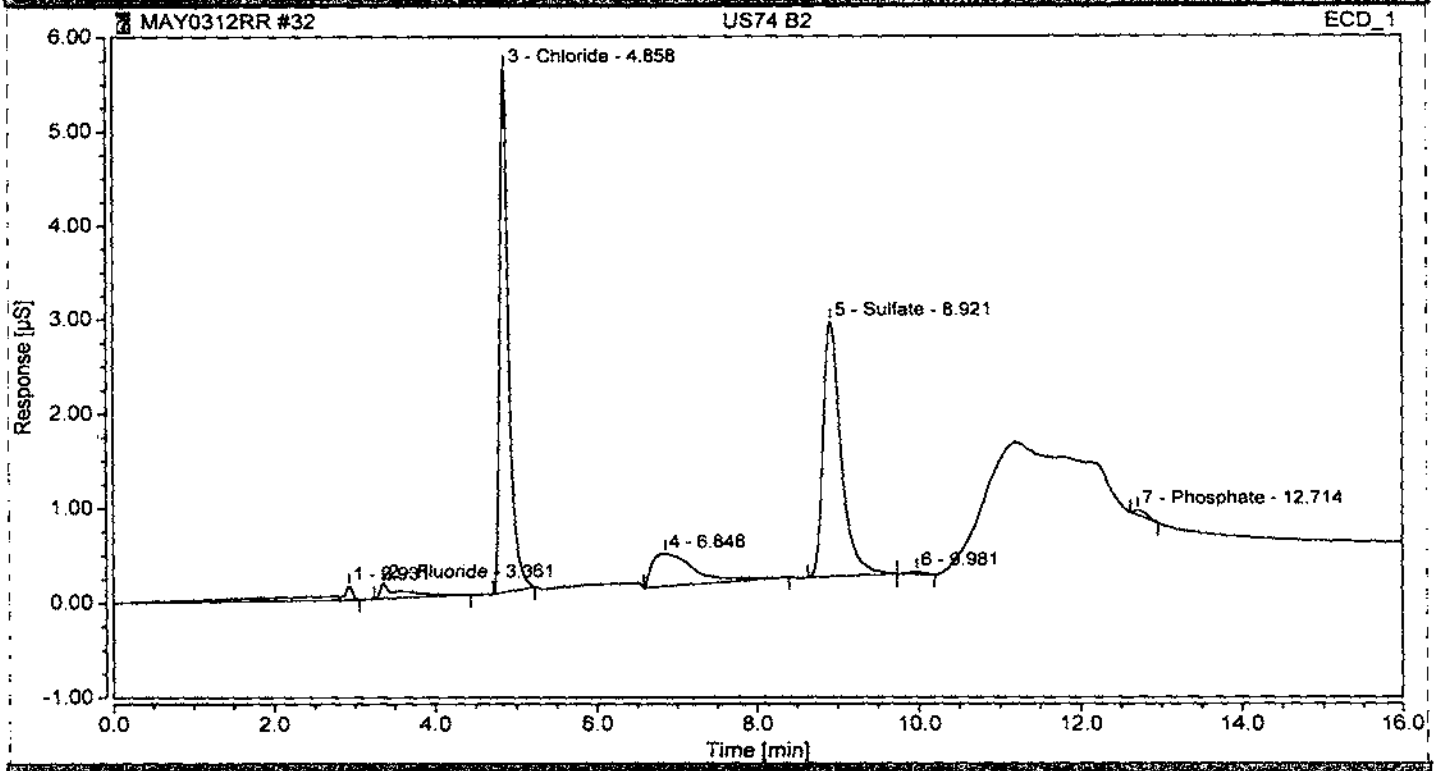
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	0.0	2.93	0.064	0.143	FALSE	n.a.
2	Fluoride	1.0	0.010	3.36	0.055	0.059	FALSE	n.a.
3		1.0	0.0	3.96	0.013	0.028	FALSE	n.a.
4	Chloride	1.0	0.0	4.85	1.71	6.56	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	0.0	6.80	0.249	0.484	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	0.0	8.89	1.04	3.88	FALSE	n.a.
7	Nitrate	1.0	0.0	9.89	0.427	1.11	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US74 A2 MS*	Inject Number:	31
Vial Number:	*27*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*04/05/12 00:21*		



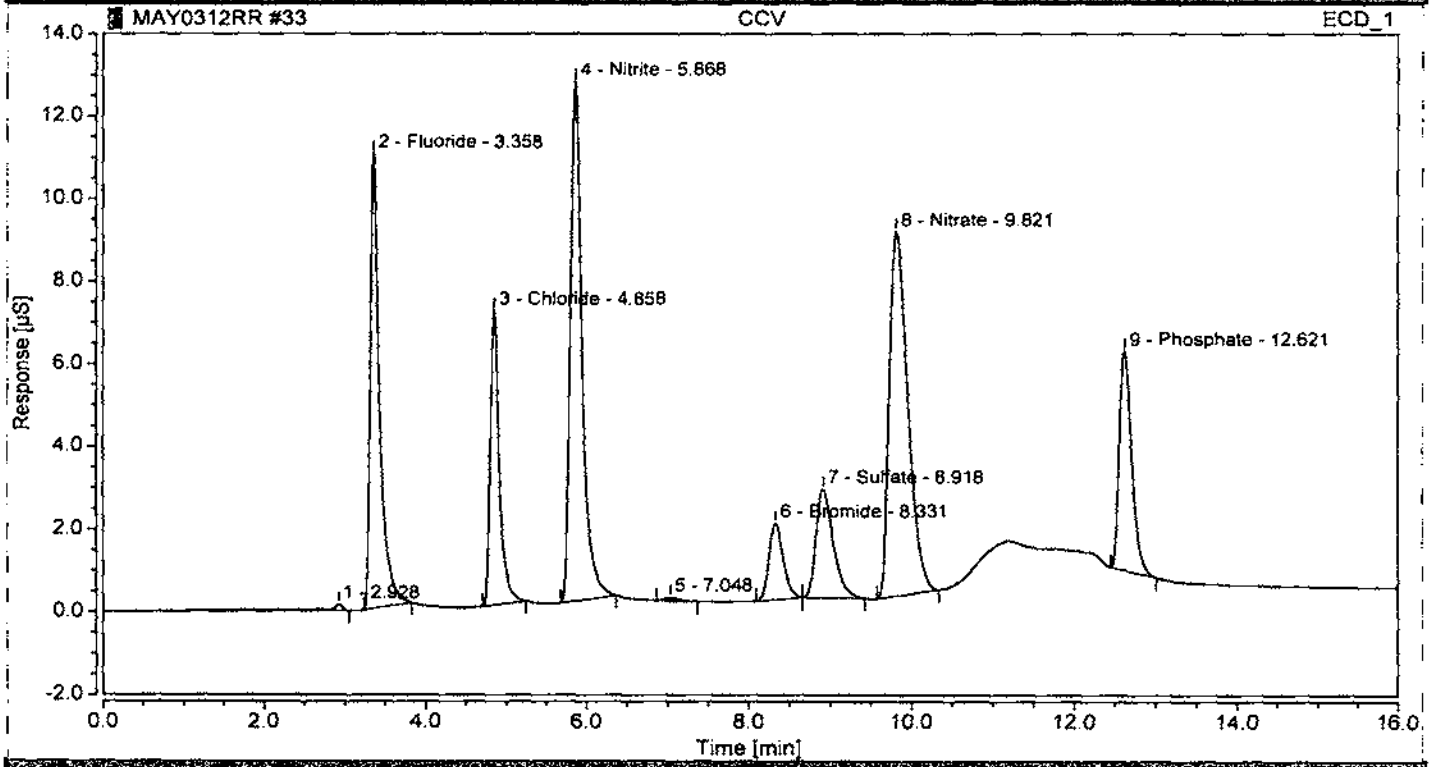
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.063	0.143	FALSE	n.a.
2	Fluoride	1.0	0.39	3.36	0.080	0.638	FALSE	n.a.
3	Chloride	1.0	1.45	4.85	1.274	13.274	FALSE	n.a.
4	Nitrite	1.0	0.93	5.86	1.379	9.679	FALSE	n.a.
5		1.0	n.a.	6.77	0.039	0.344	FALSE	n.a.
6	Bromide	1.0	1.38	8.33	0.208	1.185	FALSE	n.a.
7	Sulfate	1.0	1.78	8.87	0.393	2.826	FALSE	n.a.
8	Nitrate	1.0	2.03	9.82	0.308	3.002	FALSE	n.a.
9		1.0	n.a.	10.82	0.005	0.033	FALSE	n.a.
10		1.0	n.a.	11.21	0.002	0.047	FALSE	n.a.
11		1.0	n.a.	12.22	0.001	0.012	FALSE	n.a.
12	Phosphate	1.0	1.28	12.67	0.540	2.617	FALSE	n.a.

Injection Name:	*US74 B2*	Inject Number:	32
Vial Number:	*28*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 00:41*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.29	0.086	0.148	FALSE	n.a.
2	Fluoride	1.0	0.0	3.36	0.047	0.134	FALSE	n.a.
3	Chloride	1.0	2.87	4.86	0.702	5.519	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	0.4	6.85	0.169	0.330	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	3.01	8.92	0.535	2.951	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	0.0	9.98	0.006	0.027	FALSE	n.a.
7	Phosphate	1.0	0.002	12.71	0.010	0.051	FALSE	n.a.

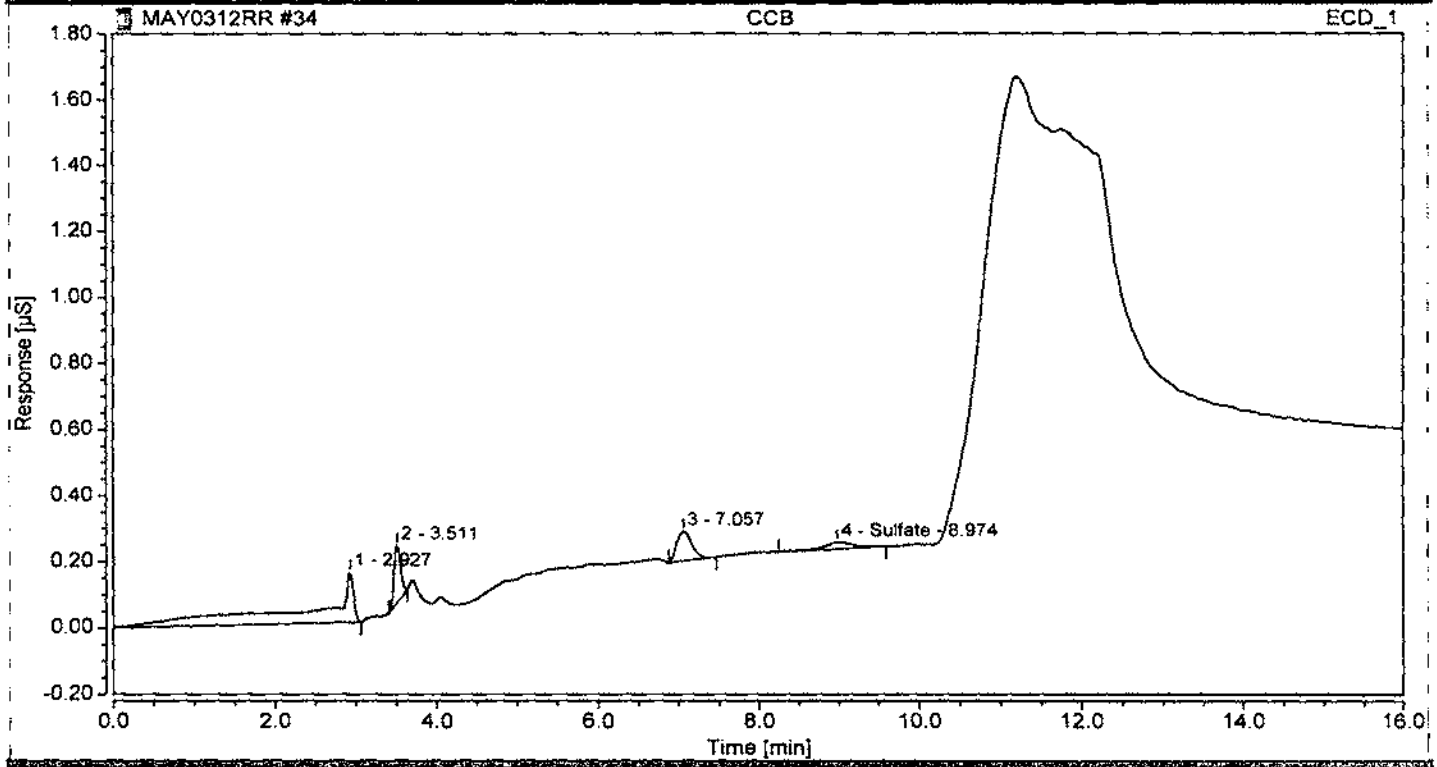
Injection Name:	*CCV*	Inject Number:	33
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 01:01*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.038	0.150	FALSE	n.a.
2	Fluoride	1.0	2.051	3.36	0.078	0.306	FALSE	-0.63
3	Chloride	1.0	2.052	4.66	0.082	0.321	FALSE	-0.24
4	Nitrite	1.0	2.041	5.87	0.081	0.314	FALSE	0.12
5		1.0	n.a.	7.05	0.017	0.067	FALSE	n.a.
6	Bromide	1.0	1.952	8.33	0.075	0.289	FALSE	-4.78
7	Sulfate	1.0	1.958	8.92	0.077	0.301	FALSE	-4.24
8	Nitrate	1.0	2.111	9.82	0.084	0.328	FALSE	3.69
9	Phosphate	1.0	2.007	12.62	0.036	0.306	FALSE	-0.11

US52 : 01333

Injection Name:	*CCB*	Inject Number:	34
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 01:22*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.067	0.152	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.018	0.173	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.06	0.016	0.089	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.135	8.97	0.069	0.021	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*STOP*	Inject Number:	35
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0312RR
Dilution Factor:	*1.0*		
Instrument Method:	*SHUTDOWN*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*04/05/12 01:42*		

Can't read channel ECD_1 from injection #35 - STOP.
Channel is not available.

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			n.a.	min	matogram in con	matogram in		n.a.

Amount Summary

Sequence Details

Name:	**MAY0212RR**	*Calibration:*	**APRIL2112RR ARI # 593-01**
Directory:	**Instrument Data\MAY 2012**	*Calibration exp:*	~~5/8/2011~~ Re 6/21/12
Data Vault:	**ChromeleonLocal**	*Queue Start:*	**5/2/2012 16:56**
No. of Injections:	**28.000**	*User:*	**RR**

By Component

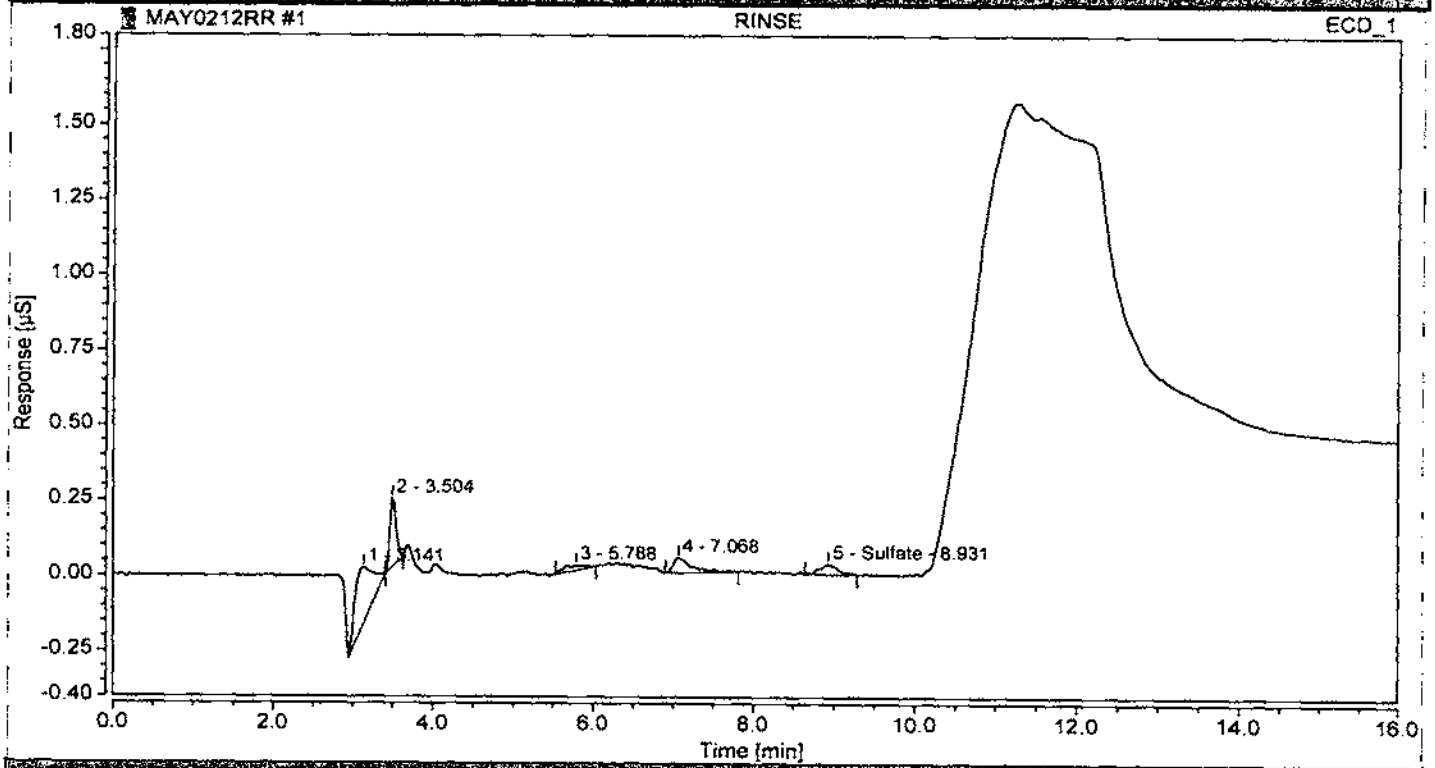
		ERA 161110	ERA 411010	ERA 401010	ERA 111109	ERA 160111	ERA 230511	ERA 200610
Name	Dilution	Amount n.a. Fluoride	Amount n.a. Chloride	Amount n.a. Nitrite	Amount n.a. Bromide	Amount n.a. Sulfate	Amount n.a. Nitrate	Amount n.a. Phosphate
RINSE	1.0	n.a.	n.a.	n.a.	n.a.	0.040	n.a.	n.a.
ICV	1.0	3.016	2.976	2.987	2.917	2.975	3.122	2.973
%R=		**100.5%**	**99.2%**	**99.6%**	**97.2%**	**99.2%**	**104.1%**	**99.1%**
ICB	1.0	n.a.	n.a.	n.a.	n.a.	0.042	n.a.	n.a.
[redacted]			5.185			n.a.		0.374
[redacted]			5.182			n.a.		0.326
%RPD=			**0.08%**	**9.22%**			**0.53%**	**13.56%**
[redacted]			7.052			n.a.		1.822
%R=		**3.8%**	**93.3%**	**102.2%**	**66.1%**		**102.7%**	**91.1%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
[redacted]			27.928			13.078	n.a.	n.a.
[redacted]		0.300	37.889	n.a.	n.a.	22.435		n.a.
[redacted]		0.320	37.933	n.a.	n.a.	22.414		n.a.
%RPD=		**6.30%**	**0.12%**			**0.09%**	**11.29%**	
[redacted]		2.354	39.034	1.965	1.662	23.469	[redacted]	1.866
%R=		**102.7%**	**57.3%**	**98.3%**	**83.1%**	**51.7%**	**101.3%**	**93.3%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
[redacted]		0.569	7.973	n.a.	n.a.	[redacted]	[redacted]	n.a.
[redacted]		0.543	98.055	n.a.	0.295	[redacted]	[redacted]	1.097
US56 A2	1.0	18.676	6.060	n.a.	n.a.	n.a.	0.978	n.a.
CCV	1.0	2.945	3.018	3.013	2.918	2.972	3.116	2.959
%R=		**98.2%**	**100.6%**	**100.4%**	**97.3%**	**99.1%**	**103.9%**	**98.6%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.056	n.a.	n.a.
[redacted]		0.394	9.603	n.a.	4.684	[redacted]	8.897	n.a.
[redacted]		0.110	[redacted]	n.a.	n.a.	1.099	n.a.	1.090
[redacted]		0.116	[redacted]	n.a.	n.a.	1.031	n.a.	1.112
%RPD=		**5.30%**	**0.23%**			**6.47%**		**1.97%**
[redacted]		n.a.	[redacted]	n.a.	n.a.	1.502	n.a.	0.861
%R=			**102.7%**					
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
[redacted]		n.a.	[redacted]	n.a.	n.a.	[redacted]	n.a.	n.a.
[redacted]		n.a.	[redacted]	n.a.	n.a.	[redacted]	n.a.	n.a.
%RPD=			**1.76%**			**2.40%**		
[redacted]		n.a.	[redacted]	n.a.	n.a.	[redacted]	n.a.	n.a.
%R=			**100.3%**			**98.5%**		
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
[redacted]		0.237	8.677	n.a.	n.a.	[redacted]	[redacted]	n.a.
[redacted]		0.503	57.605	n.a.	n.a.	[redacted]	[redacted]	n.a.
[redacted]		0.370	[redacted]	n.a.	n.a.	12.475	[redacted]	n.a.
CCV	1.0	2.969	2.997	3.010	2.902	2.925	3.110	2.987
%R=		**99.0%**	**99.9%**	**100.3%**	**96.7%**	**97.5%**	**103.7%**	**99.6%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.053	n.a.	n.a.
STOP	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Name:	**MAY0212RR**	*Queue Start:*	**2012-05-02T16:56:16-**
Directory:	**Instrument Data\MAY 2012**	*Created By:*	**pat**
Data Vault:	**ChromeleonLocal**		
No. of Injections:	**28**		

No.	Injection Name	Position	Type	Level	Dilution	Inject Time
1	RINSE	4	Unknown		1.0	02/May/12 16:58:18
2	ICV	2	Check Standard	06	1.0	02/May/12 17:15:10
3	ICB	3	Blank		1.0	02/May/12 17:34:21
4	US46 A1	4	Unknown		1.81	02/May/12 17:53:38
5	US46 A1 DUP	5	Unknown		1.0	02/May/12 18:12:00
6	US46 A1 MS	6	Unknown		1.0	02/May/12 18:32:28
7	US46 B1	7	Unknown		1.0	02/May/12 18:52:08
8	US50 C1	8	Unknown		1.0	02/May/12 19:11:41
9	US52 E1 DUP	9	Unknown		1.0	02/May/12 19:31:26
10	US52 E1 MS	10	Unknown		1.0	02/May/12 19:51:18
11	US52 H1	11	Unknown		1.0	02/May/12 20:11:12
12	US52 I1	12	Unknown		1.0	02/May/12 20:31:13
13	US55 A2	13	Unknown		1.0	02/May/12 20:51:19
14	CCV	2	Check Standard	06	1.0	02/May/12 21:11:30
15	CCB	3	Blank		1.0	02/May/12 21:32:05
16	US26 B1	14	Unknown		10.0	02/May/12 21:52:47
17	US27 E1	15	Unknown		10.0	02/May/12 22:13:16
18	US27 E1 DUP	16	Unknown		10.0	02/May/12 22:33:49
19	US27 E1 MS	17	Unknown		20.0	02/May/12 22:54:27
20	US47 A2	18	Unknown		10.0	02/May/12 23:15:10
21	US47 A2 DUP	19	Unknown		10.0	02/May/12 23:35:59
22	US47 A2 MS	20	Unknown		20.0	02/May/12 23:55:18
23	US61 B12	21	Unknown		1.0	03/May/12 00:14:41
24	US64 B12	22	Unknown		1.0	03/May/12 00:35:12
25	US61 C12	23	Unknown		1.0	03/May/12 00:55:32
26	CCV	2	Check Standard	06	1.0	03/May/12 01:15:41
27	CCB	3	Blank		1.0	03/May/12 01:36:59
28	STOP	1	Unknown		1.0	03/May/12 01:56:19

US52 : 01337

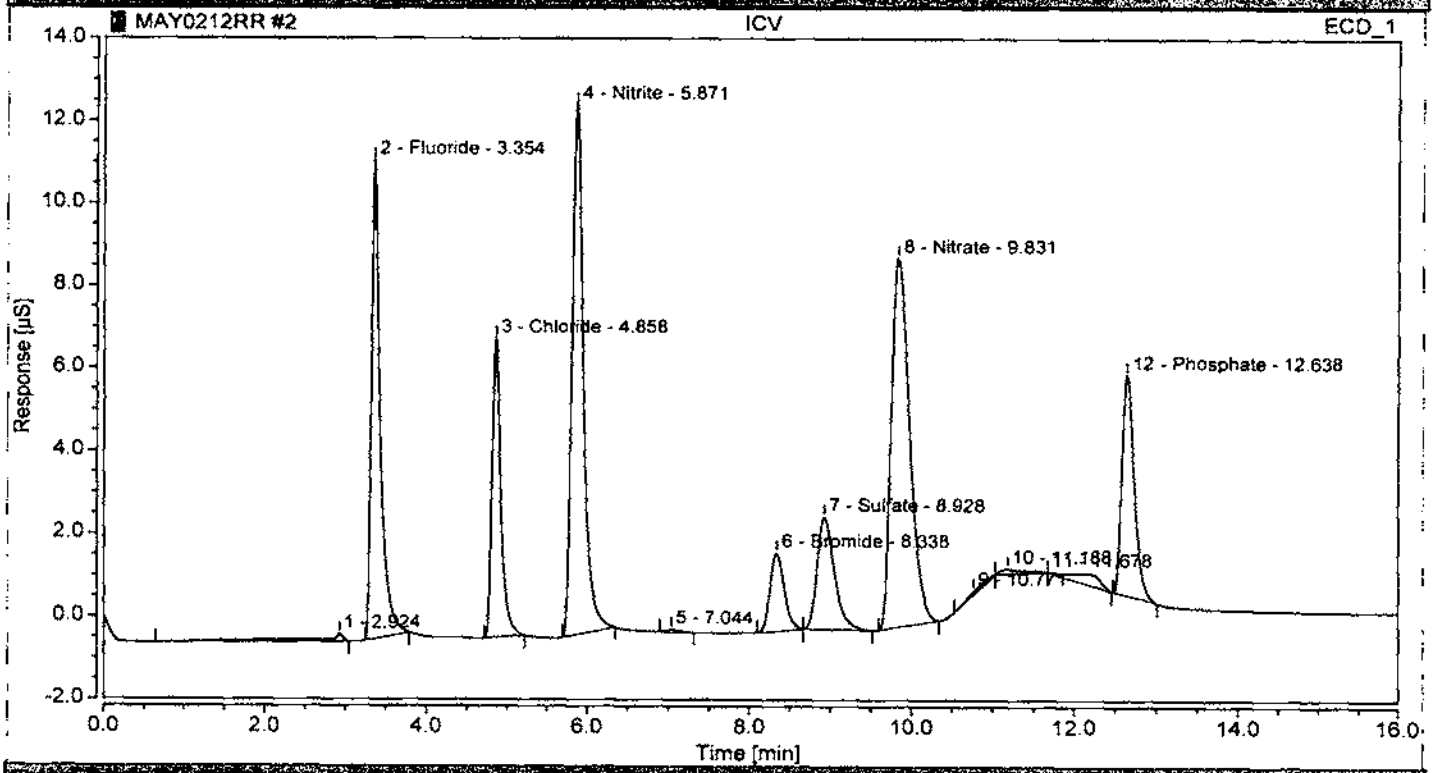
Injection Name:	*RINSE*	Inject Number:	1
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodai*		
Injection Date/Time:	*02/05/12 16:56*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	0.2	3.14	0.049	0.183	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	0.5	3.50	0.094	0.275	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	0.2	5.79	0.005	0.017	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.07	0.030	0.049	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.4	8.93	0.093	0.033	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

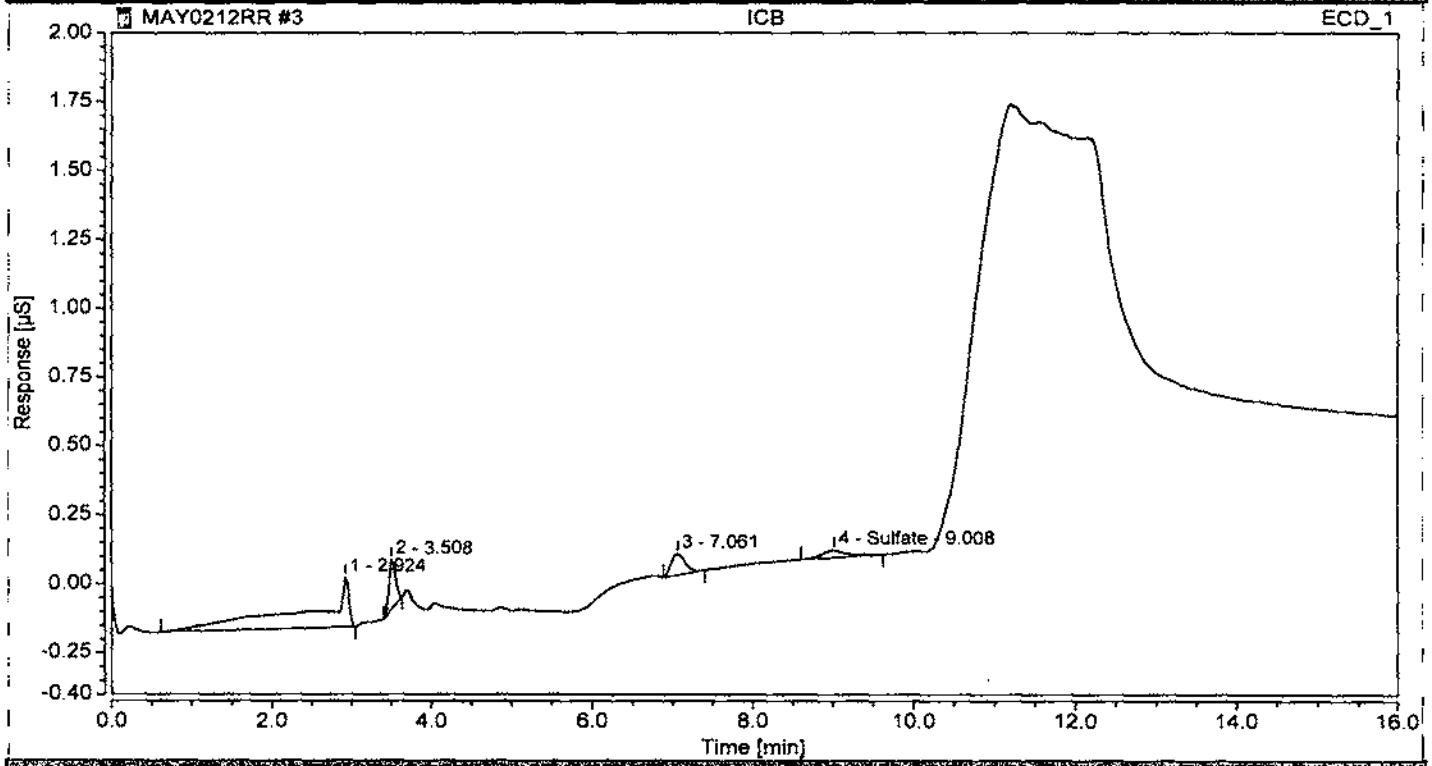
US52 : 01338

Injection Name:	*ICV*	Inject Number:	2
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 17:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	0.3	2.92	0.036	0.160	FALSE	n.a.
2	Fluoride	1.0	0.016	3.354	0.495	1.696	FALSE	0.54
3	Chloride	1.0	0.979	4.858	0.616	2.414	FALSE	-0.79
4	Nitrite	1.0	2.04	5.871	1.158	4.852	FALSE	-0.42
5		1.0	0.0	7.044	0.012	0.066	FALSE	n.a.
6	Bromide	1.0	0.0	8.338	0.083	0.393	FALSE	2.75
7	Sulfate	1.0	0.0	8.928	0.020	0.091	FALSE	-0.82
8	Nitrate	1.0	2.02	9.831	1.286	5.316	FALSE	1.07
9		1.0	0.0	10.771	0.024	0.105	FALSE	n.a.
10		1.0	0.0	11.188	0.009	0.035	FALSE	n.a.
11		1.0	0.0	12.389	0.000	0.001	FALSE	n.a.
12	Phosphate	1.0	2.979	12.64	0.920	5.312	FALSE	-0.89

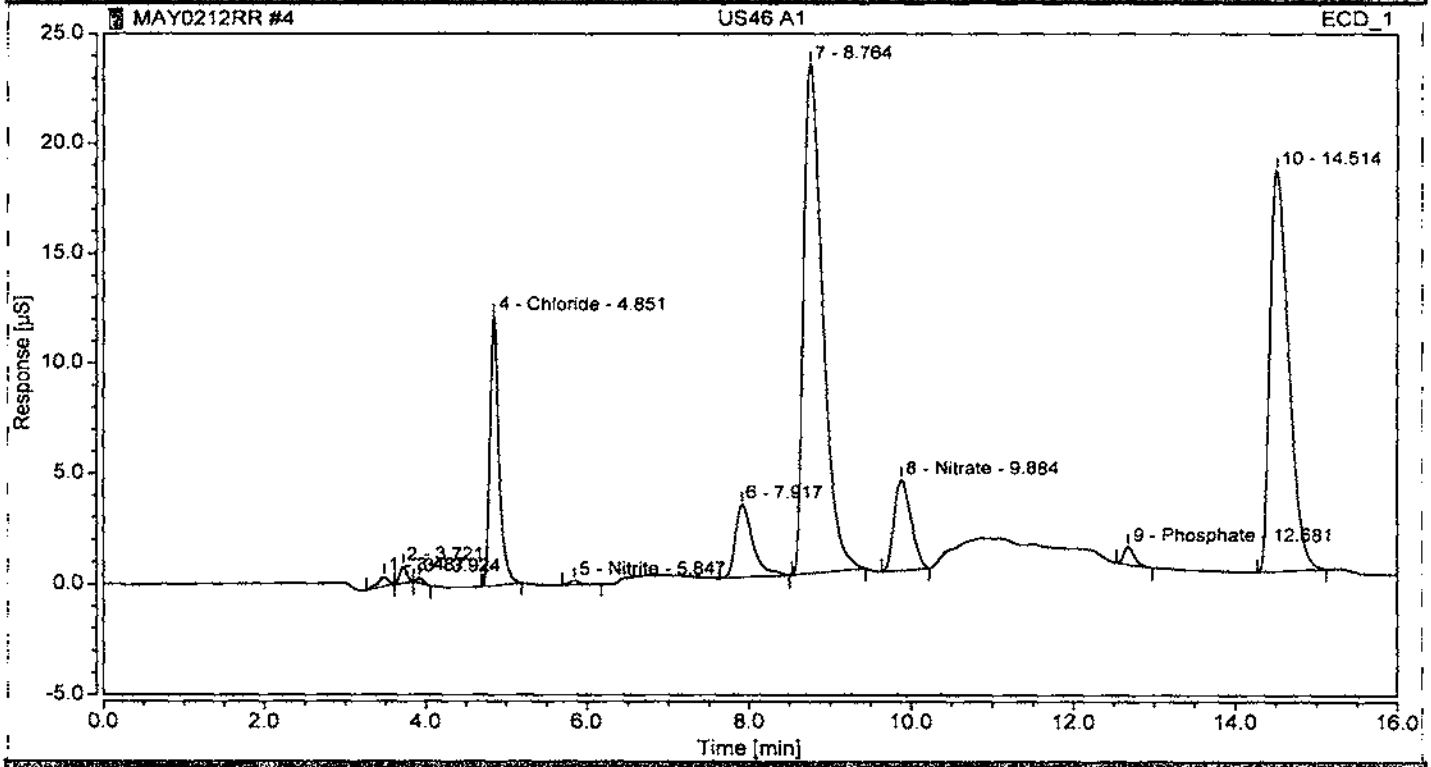
Injection Name:	*ICB*	Inject Number:	3
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 17:34*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.		0.104	0.179	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.		n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.		0.077	0.177	FALSE	n.a.
n.a.	Chloride	1.0	n.a.		n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.		n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.		0.076	0.076	FALSE	n.a.
n.a.	Bromide	1.0	n.a.		n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	n.a.		0.092	0.027	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.		n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.		n.a.	n.a.	n.a.	n.a.

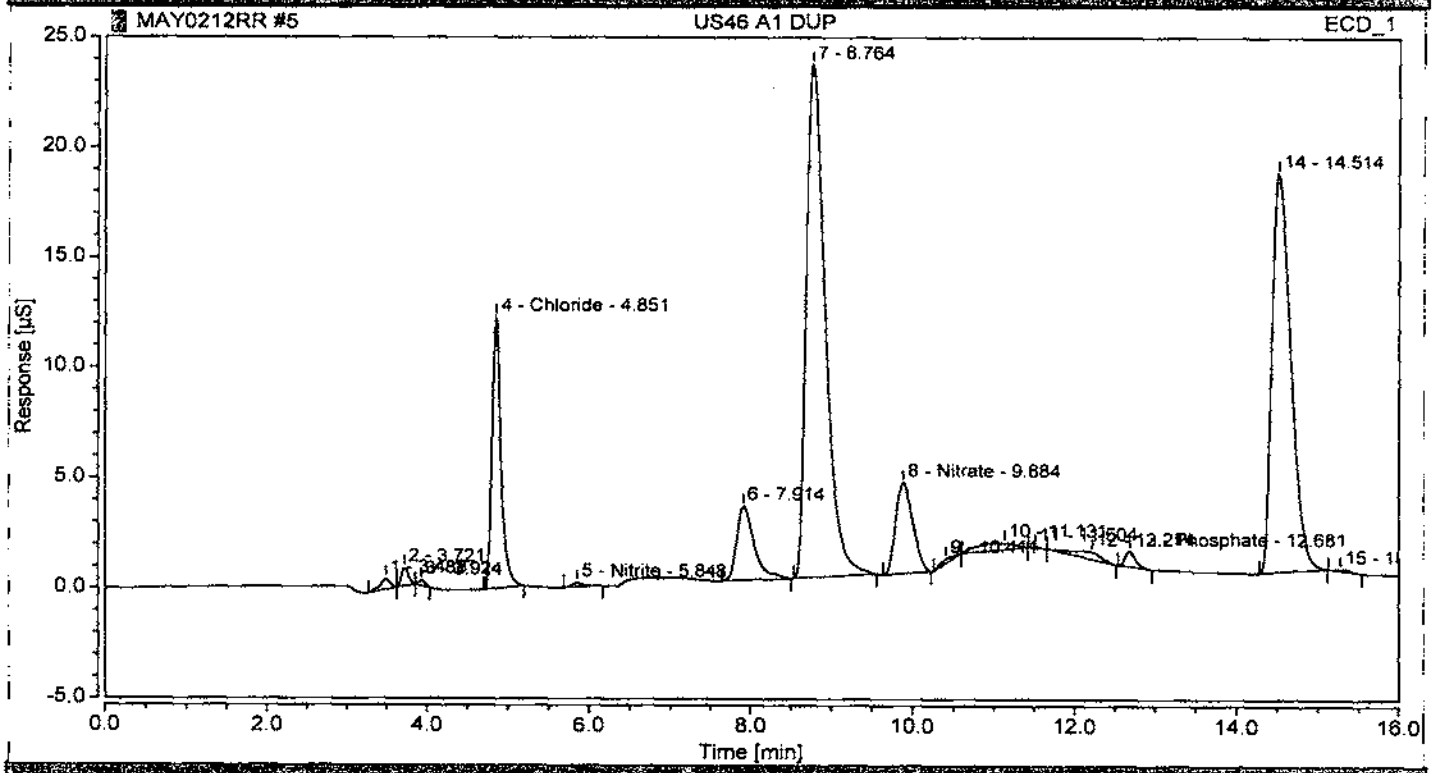
US52 : 01340

Injection Name:	*US46 A1*	Inject Number:	4
Vial Number:	*4*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 17:53*		



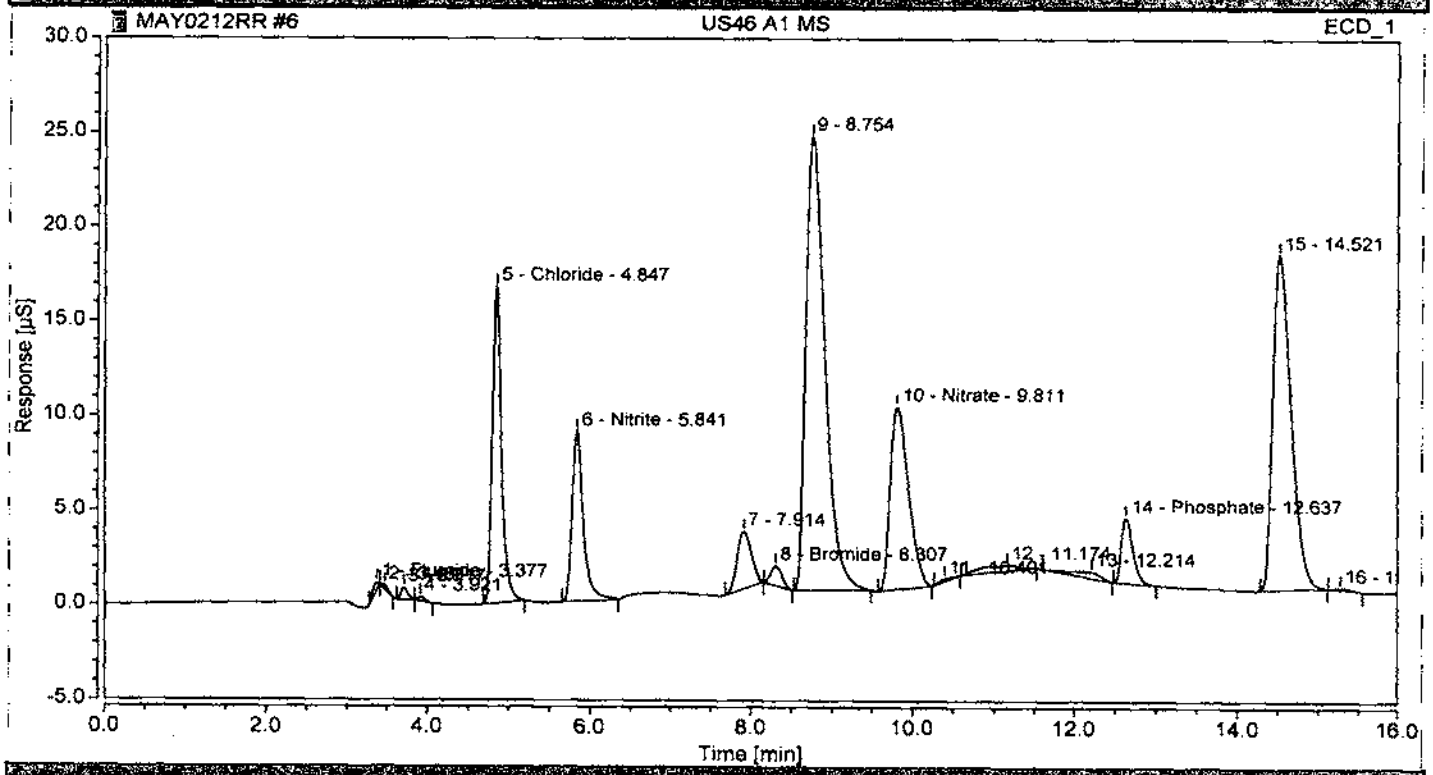
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.0	n.a.	3.721	0.0483	0.438	FALSE	n.a.
2		1.0	n.a.	3.924	0.0745	0.754	FALSE	n.a.
3		1.0	n.a.	4.851	0.0825	0.824	FALSE	n.a.
4	Chloride	1.0	n.a.	5.847	0.0825	0.716	FALSE	n.a.
5	Nitrite	1.0	n.a.	7.917	0.0825	0.728	FALSE	n.a.
6		1.0	n.a.	8.764	0.0825	0.778	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	9.884	0.0825	23.080	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	0.692	10.681	0.0825	0.778	FALSE	n.a.
9	Phosphate	1.0	2.0574	12.681	0.1172	0.774	FALSE	n.a.
10		1.0	n.a.	14.514	0.823	18.184	FALSE	n.a.

Injection Name:	*US46 A1 DUP*	Inject Number:	5
Vial Number:	*5*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 18:13*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.0	n.a.	3.721	0.001	0.282	FALSE	n.a.
2		1.0	n.a.	3.924	0.001	0.317	FALSE	n.a.
3		1.0	n.a.	4.502	0.001	0.258	FALSE	n.a.
4	Chloride	1.0	5.481	4.851	0.183	12.470	FALSE	n.a.
5	Nitrite	1.0	n.a.	5.848	0.005	0.186	FALSE	n.a.
6		1.0	n.a.	7.914	0.042	3.580	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	8.764	0.080	23.250	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	n.a.	9.884	0.048	14.758	FALSE	n.a.
9		1.0	n.a.	10.444	0.002	0.178	FALSE	n.a.
10		1.0	n.a.	11.131	0.004	0.294	FALSE	n.a.
11		1.0	n.a.	11.604	0.004	0.360	FALSE	n.a.
12		1.0	n.a.	12.227	0.002	0.224	FALSE	n.a.
13	Phosphate	1.0	0.429	12.681	0.104	3.685	FALSE	n.a.
14		1.0	n.a.	14.514	4.781	18.065	FALSE	n.a.
15		1.0	n.a.	15.27	0.017	0.076	FALSE	n.a.

Injection Name:	*US46 A1 MS*	Inject Number:	6
Vial Number:	*6*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 18:32*		



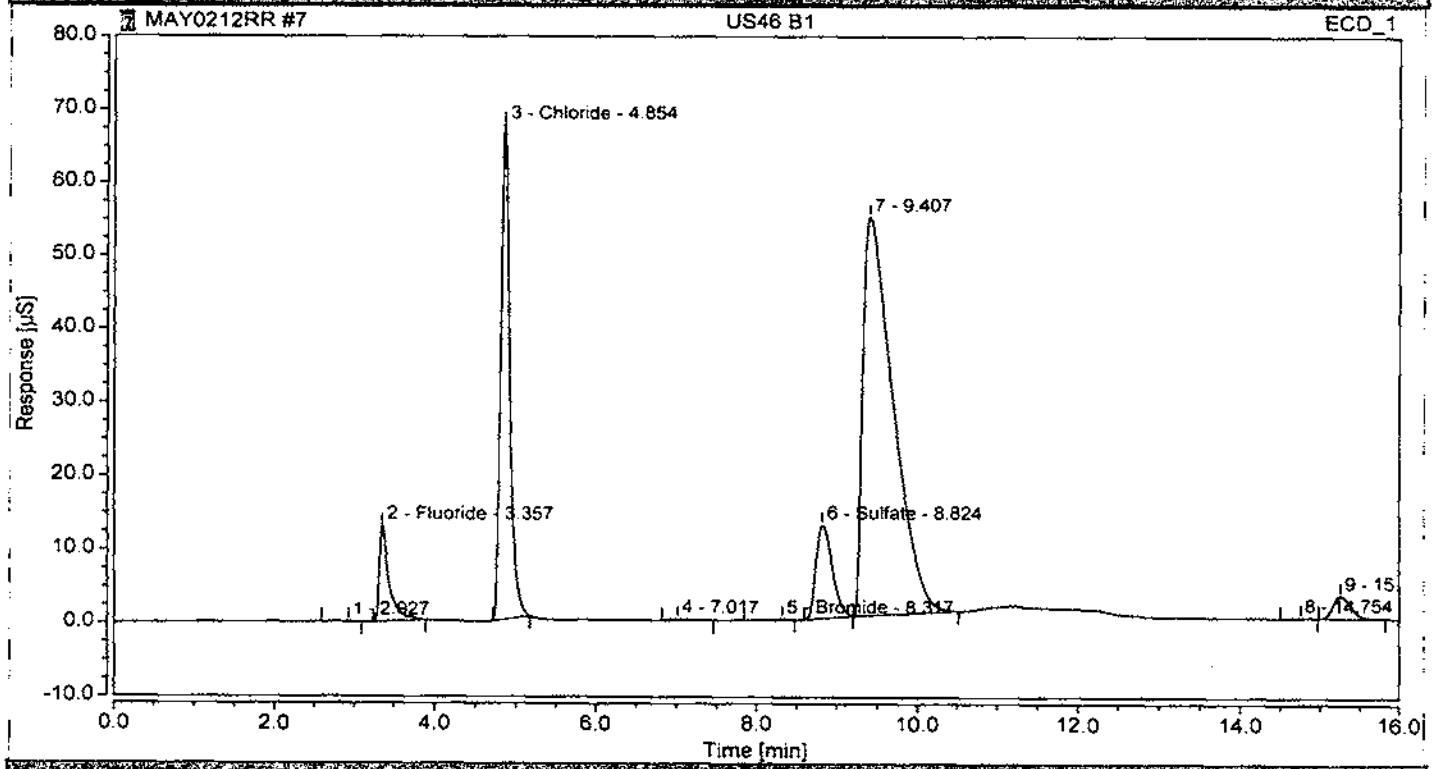
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	1.0	0.179	3.377	0.038	0.036	FALSE	n.a.
2		1.0	n.a.	3.971	0.000	0.000	FALSE	n.a.
3		1.0	n.a.	4.772	0.012	0.021	FALSE	n.a.
4		1.0	n.a.	5.241	0.000	0.000	FALSE	n.a.
5	Chloride	1.0	1.177	4.847	0.169	0.247	FALSE	n.a.
6	Nitrite	1.0	0.736	5.841	0.106	0.075	FALSE	n.a.
7		1.0	n.a.	7.914	0.011	0.014	FALSE	n.a.
8	Bromide	1.0	n.a.	8.307	0.000	0.000	FALSE	n.a.
9		1.0	2.176	8.754	0.283	0.276	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	9.000	0.000	0.000	n.a.	n.a.
10	Nitrate	1.0	1.218	9.811	0.178	0.142	FALSE	n.a.
11		1.0	n.a.	10.401	0.000	0.000	FALSE	n.a.
12		1.0	n.a.	11.174	0.176	0.262	FALSE	n.a.
13		1.0	n.a.	12.214	0.000	0.000	FALSE	n.a.
14	Phosphate	1.0	1.122	12.637	0.369	0.438	FALSE	n.a.
15		1.0	n.a.	14.521	4.882	17.697	FALSE	n.a.
16		1.0	n.a.	15.281	0.019	0.086	FALSE	n.a.

Chromatogram and Results

Injection Details

Injection Name:	*US46 B1*	Inject Number:	7
Vial Number:	*7*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 18:52*		

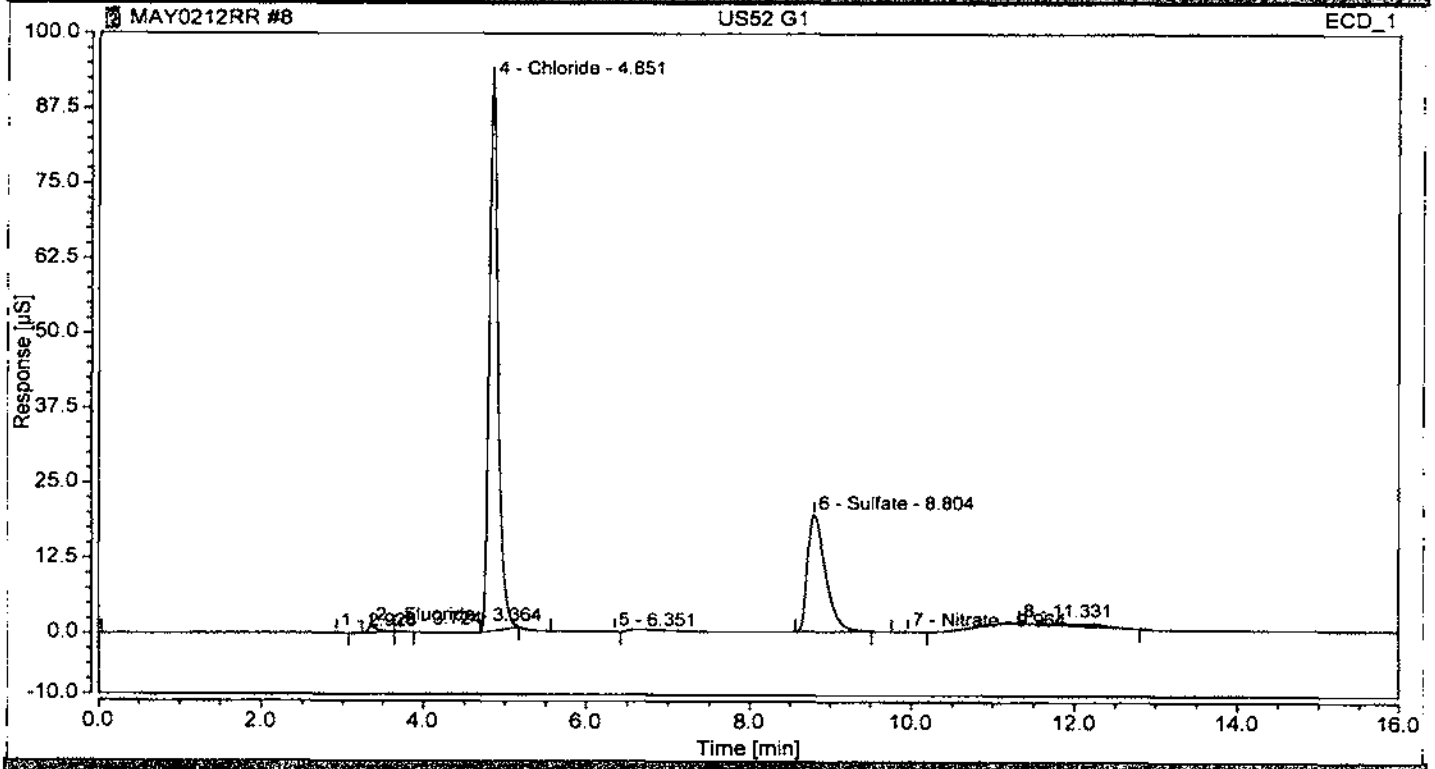
Chromatogram



Integration Results

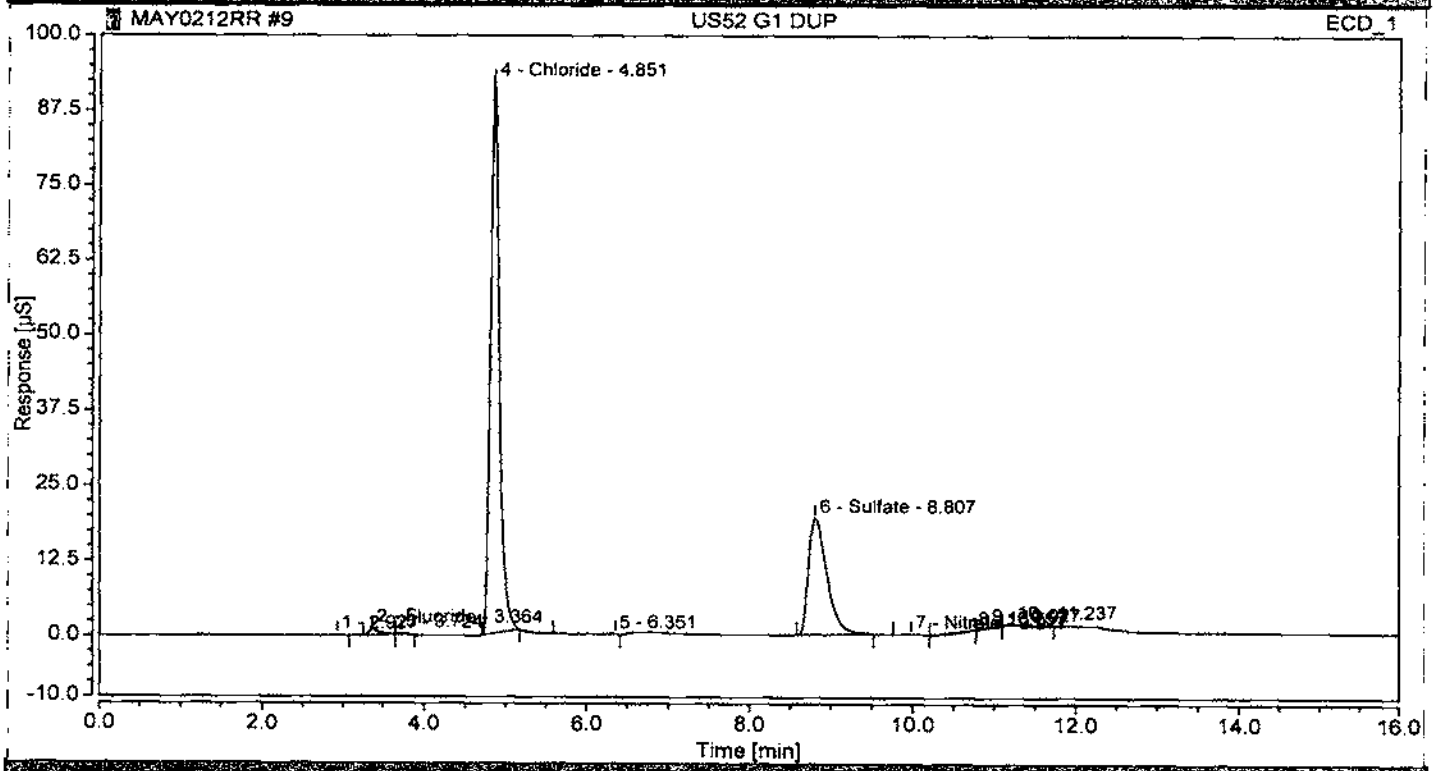
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.017	0.144	FALSE	n.a.
2	Fluoride	1.0	3.756	3.36	1.662	13.062	FALSE	n.a.
3	Chloride	1.0	27.928	4.85	8.591	67.400	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.02	0.053	0.184	FALSE	n.a.
5	Bromide	1.0	0.209	8.32	0.027	0.129	FALSE	n.a.
6	Sulfate	1.0	13.078	8.82	2.995	12.663	FALSE	n.a.
7		1.0	n.a.	9.41	23.538	54.178	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		1.0	n.a.	14.75	0.023	0.101	FALSE	n.a.
9		1.0	n.a.	15.25	0.798	3.112	FALSE	n.a.

Injection Name:	*US52 G1*	Inject Number:	8
Vial Number:	*8*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 19:11*		



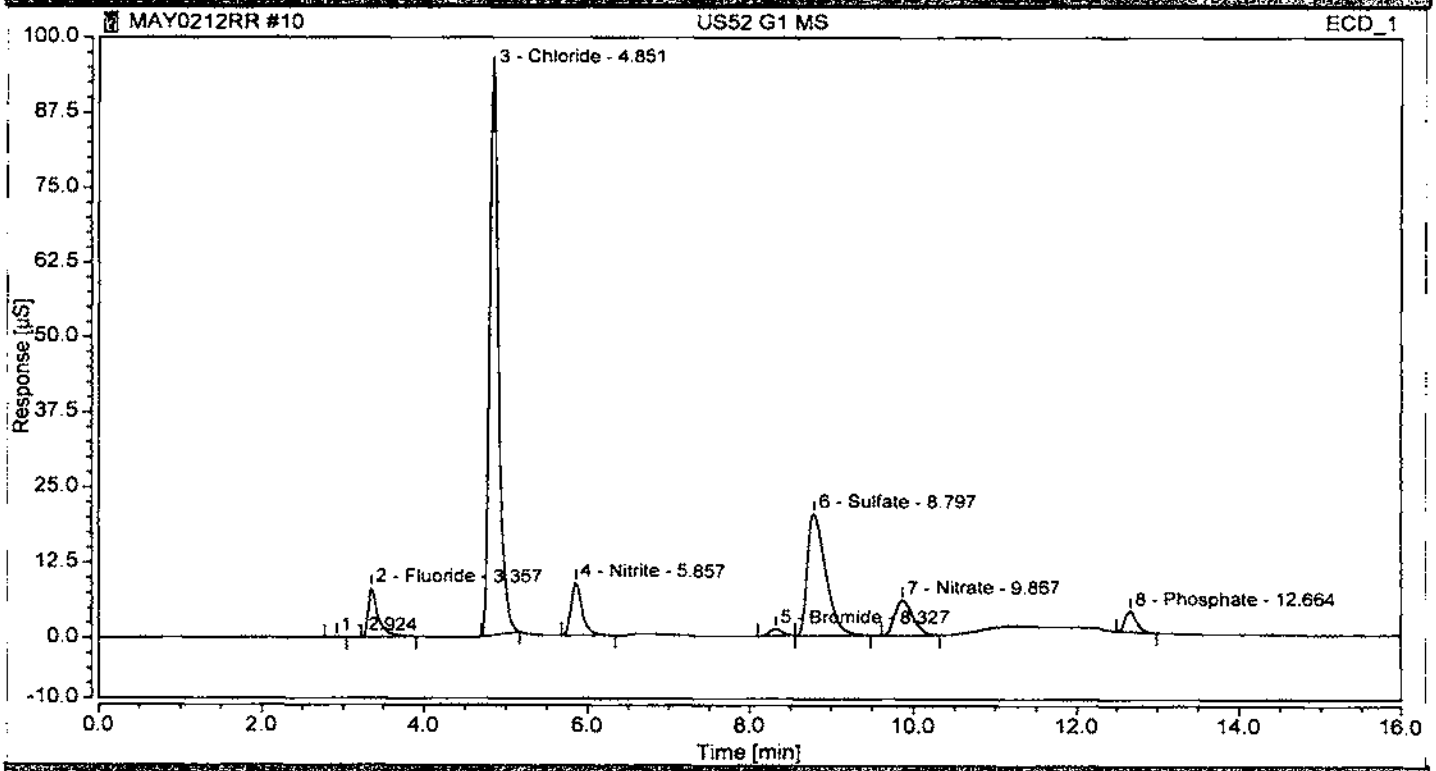
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.88	0.136	0.139	FALSE	n.a.
2	Fluoride	1.0	0.000	3.36	0.124	0.035	FALSE	n.a.
3		1.0	n.a.	3.86	0.060	0.060	FALSE	n.a.
4	Chloride	1.0	2.989	4.85	1.055	0.547	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.35	0.092	0.024	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	2.995	8.80	1.253	0.350	FALSE	n.a.
7	Nitrate	1.0	0.042	9.83	0.008	0.041	FALSE	n.a.
8		1.0	n.a.	11.33	0.286	0.090	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 DUP*	Inject Number:	9
Vial Number:	*9*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 19:31*		



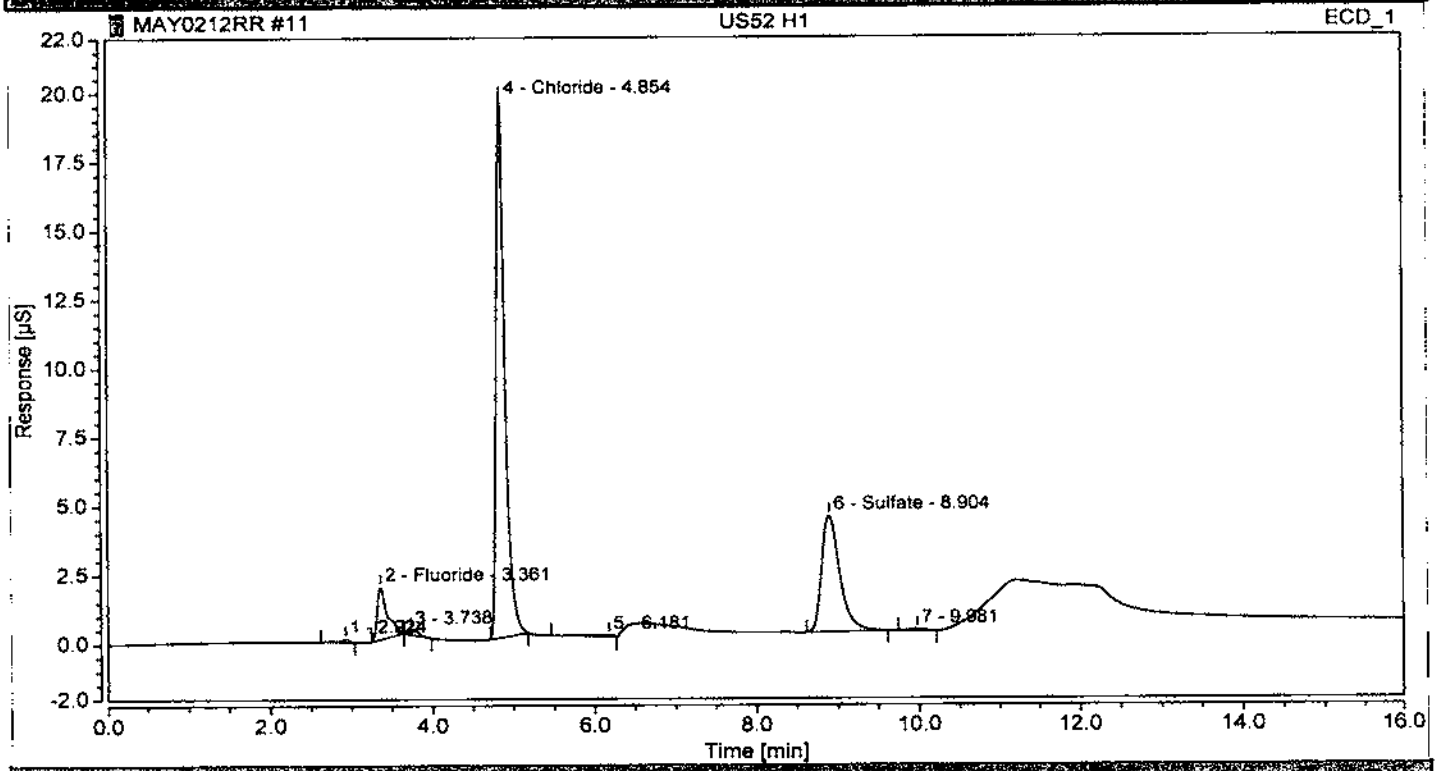
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	[illegible]	2.98	[illegible]	0.138	FALSE	n.a.
2	Fluoride	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
3		1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
4	Chloride	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Nitrite	1.0	[illegible]	[illegible]	[illegible]	[illegible]	n.a.	n.a.
5		1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Bromide	1.0	[illegible]	[illegible]	[illegible]	[illegible]	n.a.	n.a.
6	Sulfate	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
7	Nitrate	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
8		1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
9		1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
10		1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	10
Vial Number:	*10*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 19:51*		



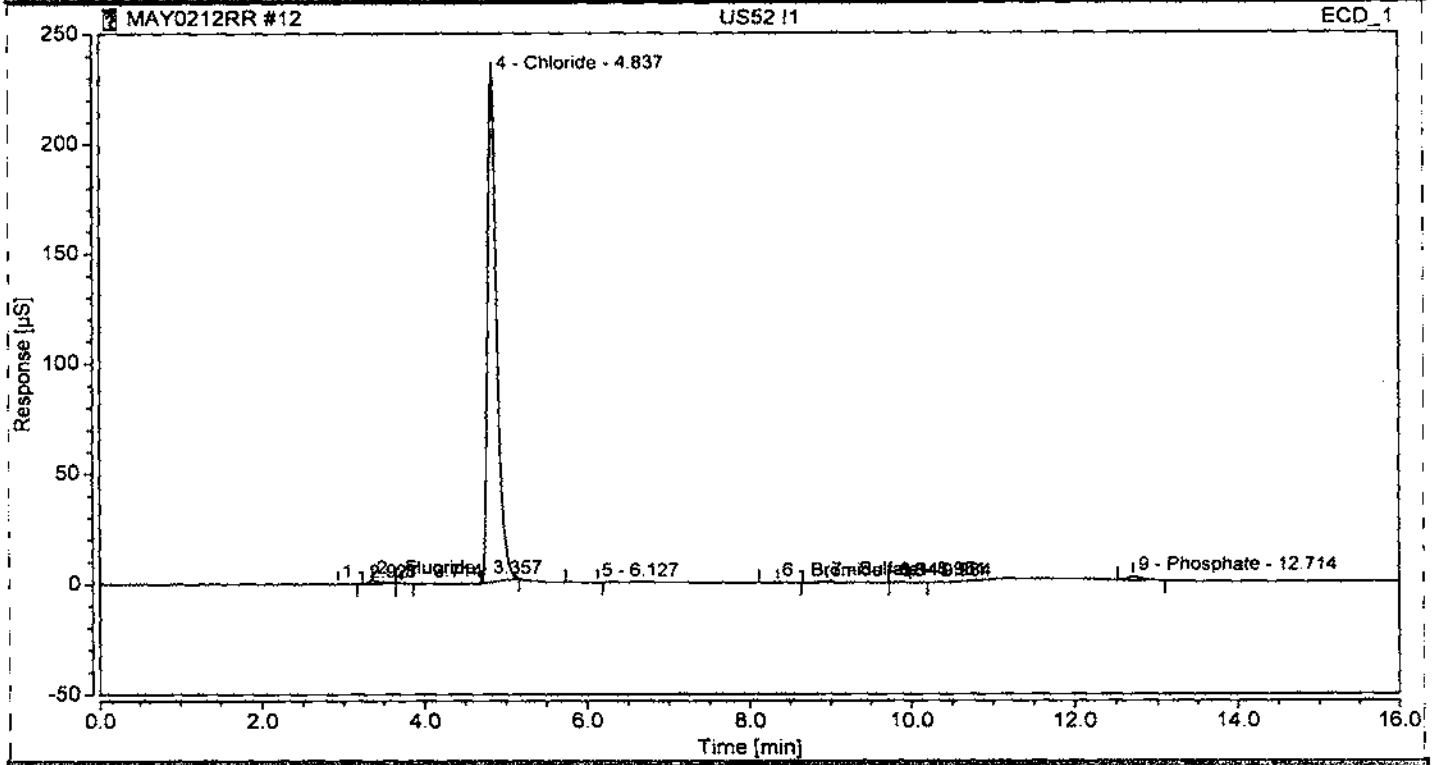
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	0.0	2.92	0.0010	0.112	FALSE	n.a.
2	Fluoride	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
3	Chloride	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
4	Nitrite	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
5	Bromide	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
6	Sulfate	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
7	Nitrate	1.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
8	Phosphate	1.0	1.866	12.66	0.606	3.467	FALSE	n.a.

Injection Name:	*US52 H1*	Inject Number:	11
Vial Number:	*11*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 20:11*		



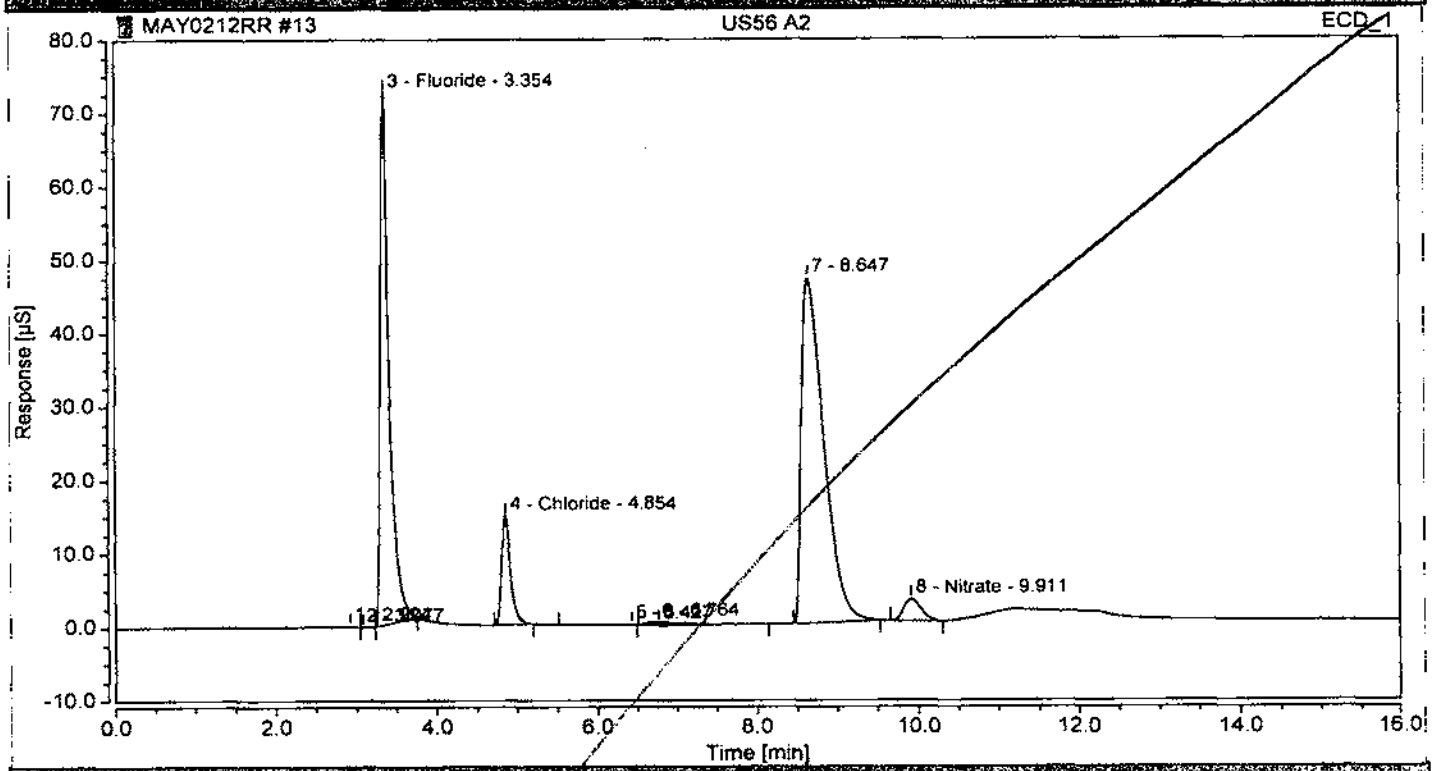
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.994	0.001	0.117	FALSE	n.a.
2	Fluoride	1.0	n.a.	3.361	0.262	1.894	FALSE	n.a.
3		1.0	n.a.	3.738	0.029	0.473	FALSE	n.a.
4	Chloride	1.0	n.a.	4.854	1.468	10.607	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.481	0.025	0.056	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	n.a.	8.904	1.079	4.208	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	9.981	0.004	0.084	FALSE	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 I1*	Inject Number:	12
Vial Number:	*12*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 20:31*		



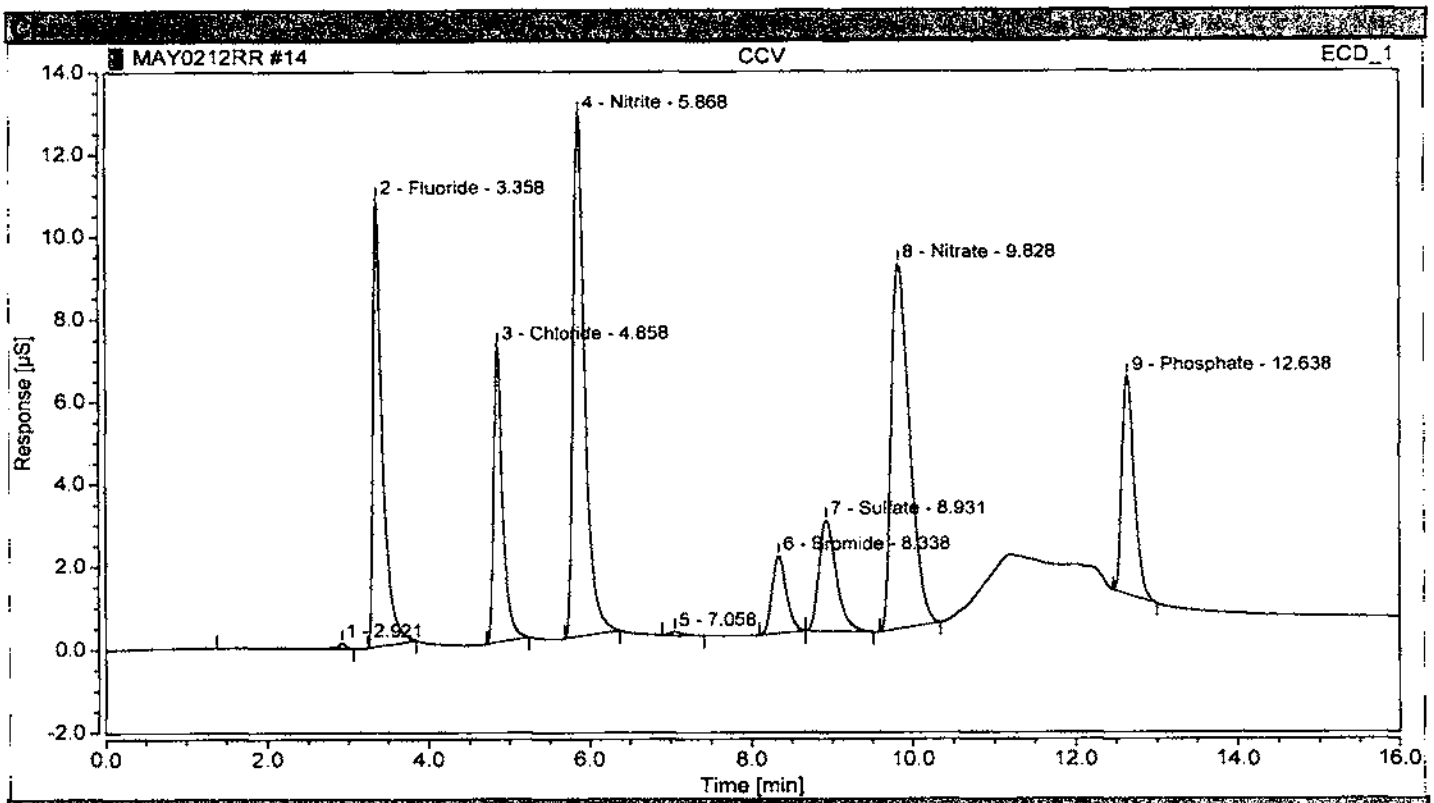
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.96	0.135	0.005	FALSE	n.a.
2	Fluoride	1.0	0.048	3.36	0.048	0.761	FALSE	n.a.
3		1.0	n.a.	n.a.	0.012	0.125	FALSE	n.a.
4	Chloride	1.0	2.842	4.84	1.000	29.610	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.13	0.013	0.000	FALSE	n.a.
6	Bromide	1.0	0.000	7.35	0.000	0.000	FALSE	n.a.
7	Sulfate	1.0	0.000	8.83	0.000	0.000	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		1.0	0.000	9.95	0.000	0.000	FALSE	n.a.
9	Phosphate	1.0	0.097	12.71	0.048	1.734	FALSE	n.a.

Injection Name:	*US56 A2*	Inject Number:	13
Vial Number:	*13*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 20:51*		



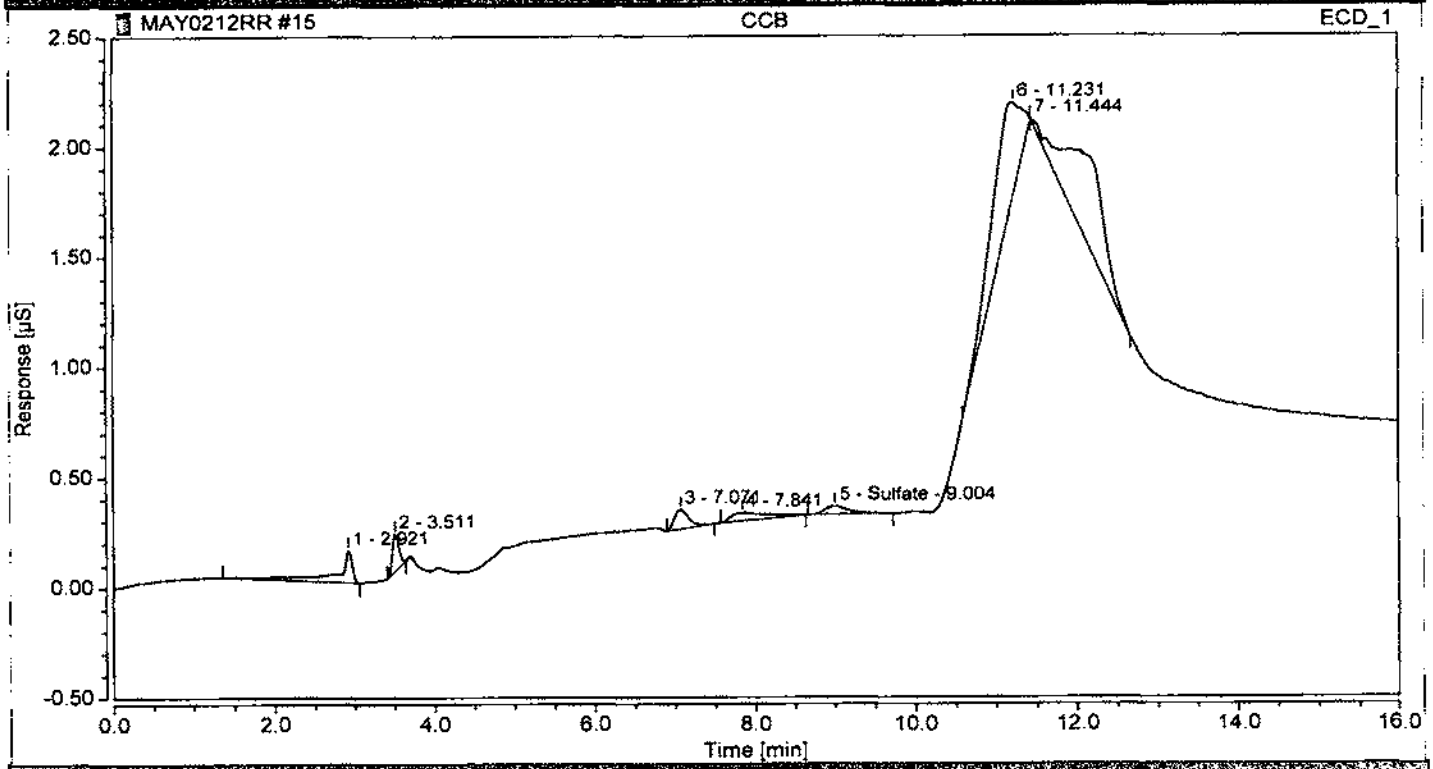
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1						0.138	FALSE	n.a.
2						0.022	FALSE	n.a.
3	Fluoride						FALSE	n.a.
4	Chloride						FALSE	n.a.
n.a.	Nitrite					n.a.	n.a.	n.a.
5						0.074	FALSE	n.a.
6						0.079	FALSE	n.a.
n.a.	Bromide					n.a.	n.a.	n.a.
7							FALSE	n.a.
n.a.	Sulfate					n.a.	n.a.	n.a.
8	Nitrate						FALSE	n.a.
n.a.	Phosphate					n.a.	n.a.	n.a.

Injection Name:	*CCV*	Inject Number:	14
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 21:11*		



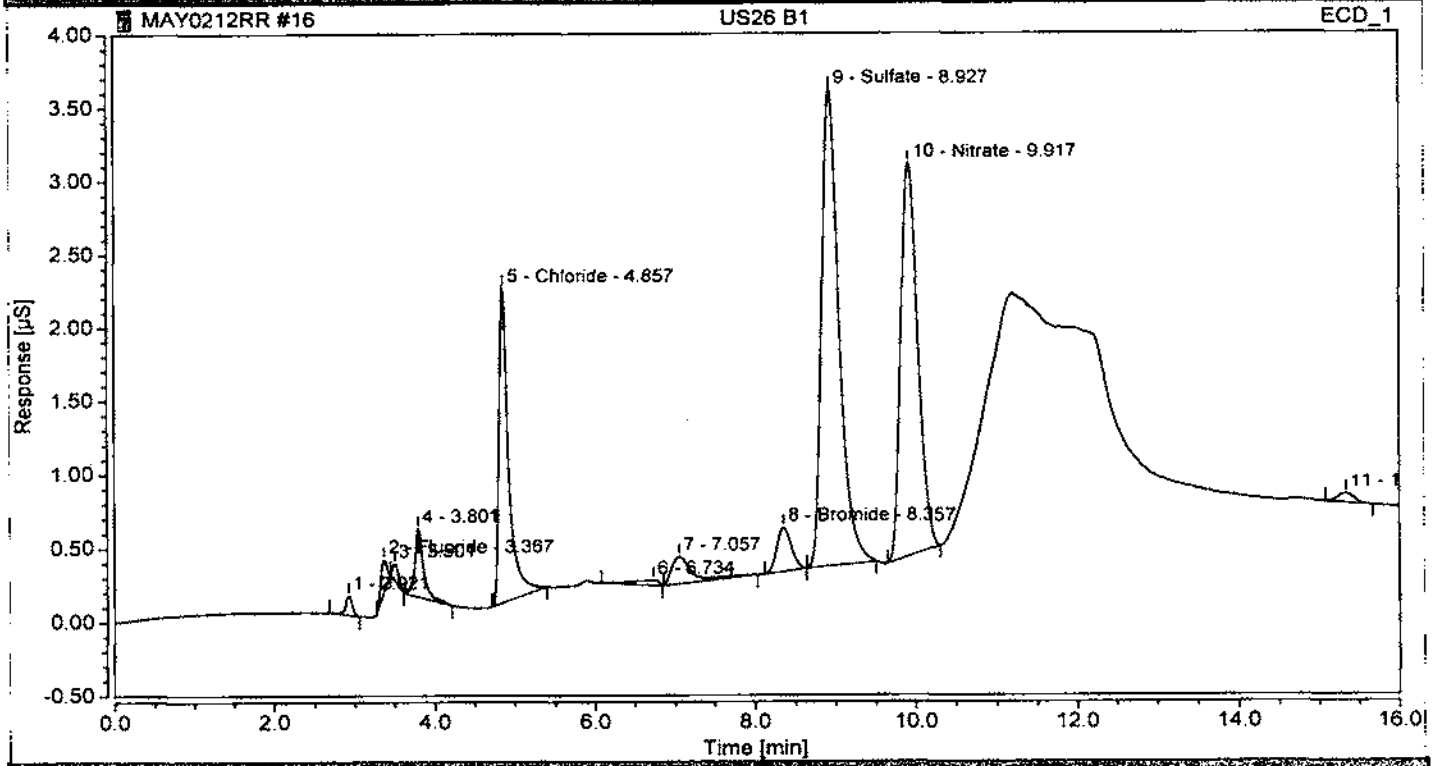
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.0035	0.140	FALSE	n.a.
2	Fluoride	1.0	2.015	3.36	1.4861	10.816	FALSE	-1.84
3	Chloride	1.0	3.016	4.86	0.4225	7.150	FALSE	0.59
4	Nitrite	1.0	3.015	5.87	0.7125	12.836	FALSE	0.43
5				7.06	0.0613	0.0651	FALSE	n.a.
6	Bromide		10.15	8.34	0.1810	1.1858	FALSE	2.72
7	Sulfate	1.0	2.970	8.93	0.1880	2.476	FALSE	-0.94
8	Nitrate	1.0	3.015	9.83	0.3539	3.560	FALSE	3.88
9	Phosphate	1.0	2.959	12.64	0.924	5.279	FALSE	-1.36

Injection Name:	*CCB*	Inject Number:	15
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 21:32*		



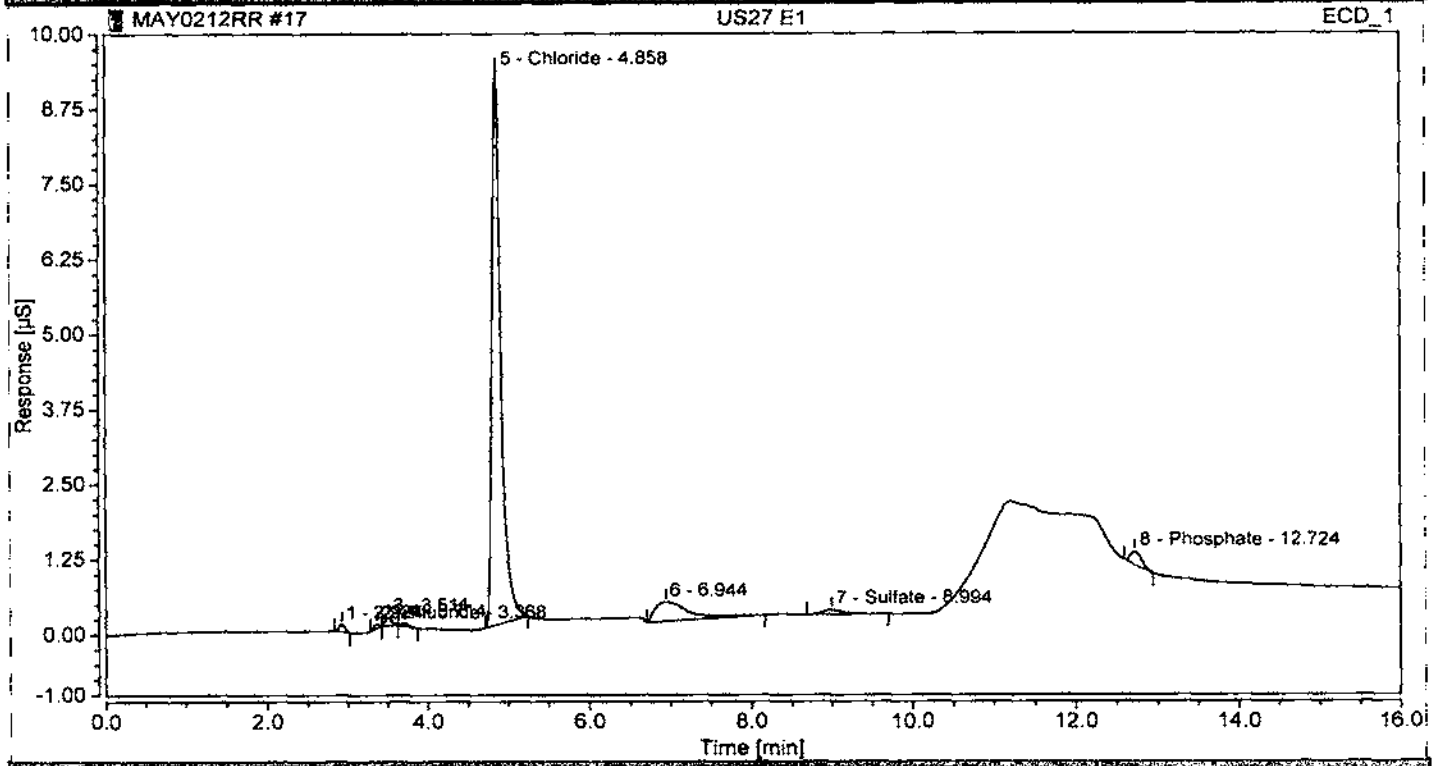
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
n.a.	Fluoride						n.a.	n.a.
2							FALSE	n.a.
n.a.	Chloride						n.a.	n.a.
n.a.	Nitrite						n.a.	n.a.
3							FALSE	n.a.
4							FALSE	n.a.
n.a.	Bromide						n.a.	n.a.
5	Sulfate						FALSE	n.a.
n.a.	Nitrate						n.a.	n.a.
6							FALSE	n.a.
7							FALSE	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US26 B1*	Inject Number:	16
Vial Number:	*14*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 21:52*		



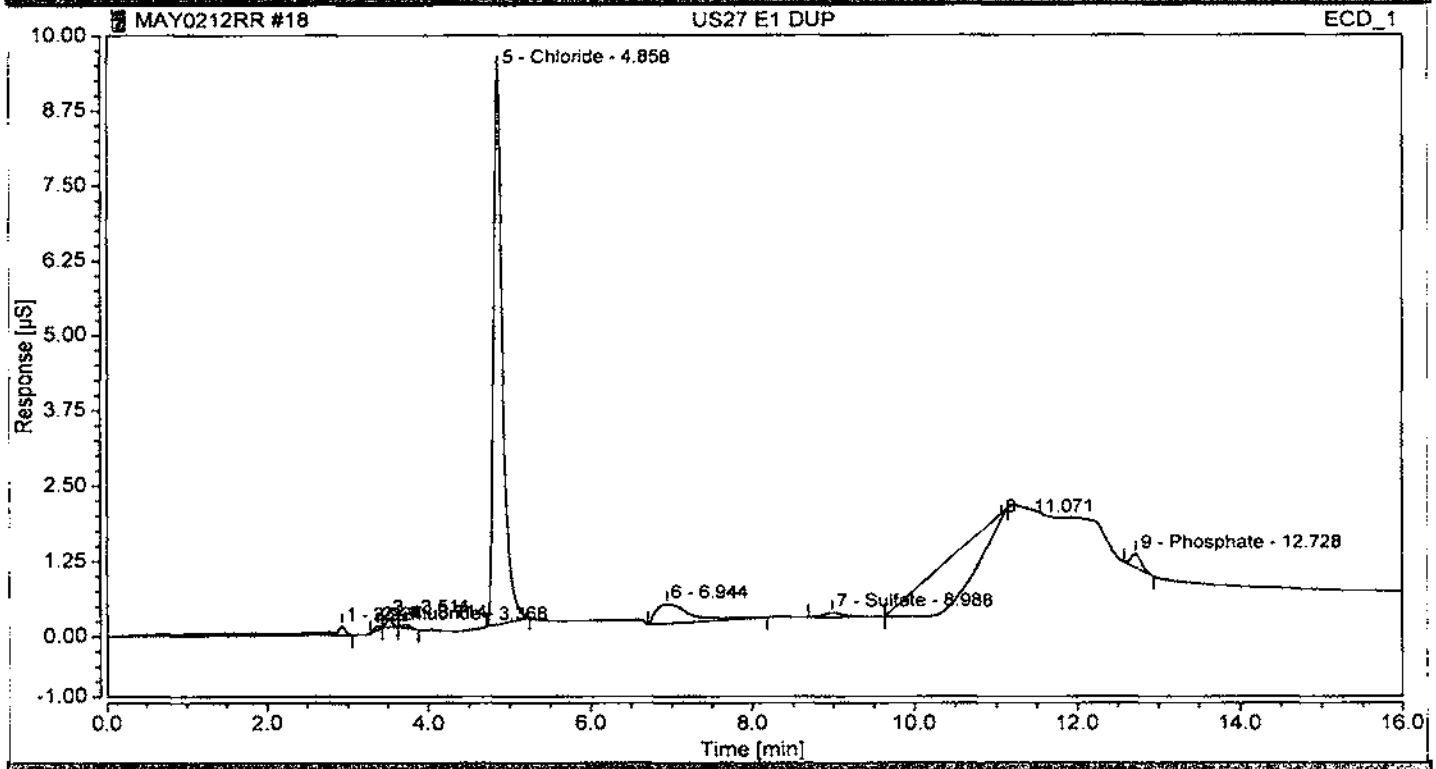
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	0.013	2.92	0.0134	0.134	FALSE	n.a.
2	Fluoride	10.0	0.068	3.367	0.0270	0.220	FALSE	n.a.
3		10.0	0.000	3.801	0.0000	0.000	FALSE	n.a.
4		10.0	0.000	4.057	0.0000	0.000	FALSE	n.a.
5	Chloride	10.0	0.000	4.857	0.0000	0.000	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	0.000	6.734	0.0000	0.000	FALSE	n.a.
7		10.0	0.000	7.057	0.0000	0.000	FALSE	n.a.
8	Bromide	10.0	0.000	8.357	0.0000	0.000	FALSE	n.a.
9	Sulfate	10.0	0.000	8.927	0.0000	0.000	FALSE	n.a.
10	Nitrate	10.0	0.000	9.917	0.0000	0.000	FALSE	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11		10.0	0.000	15.93	0.0015	0.005	FALSE	n.a.

Injection Name:	*US27 E1*	Inject Number:	17
Vial Number:	*15*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:13*		



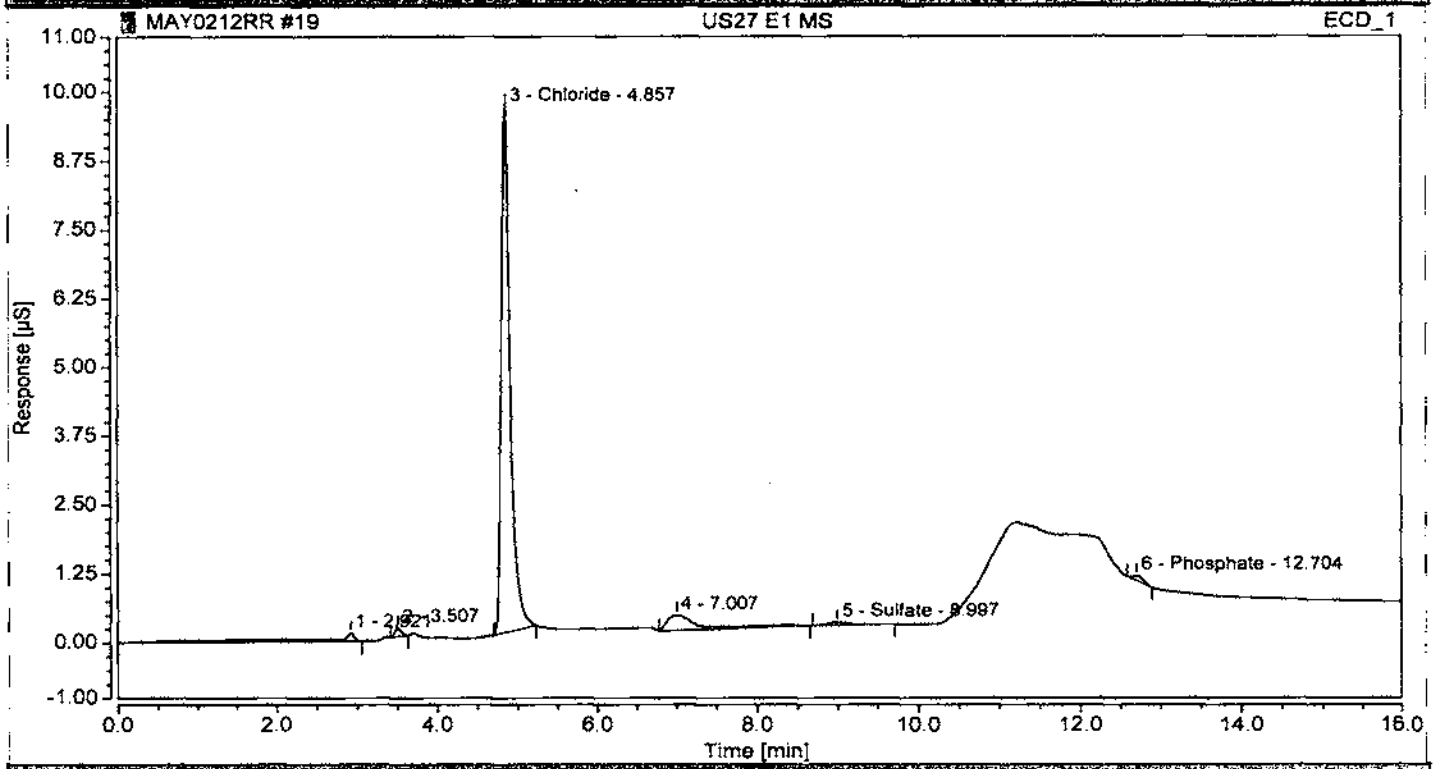
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.010	0.124	FALSE	n.a.
2	Fluoride	10.0	0.010	3.51	0.005	0.067	FALSE	n.a.
3		10.0	n.a.	3.97	0.013	0.159	FALSE	n.a.
4		10.0	n.a.	4.36	0.006	0.080	FALSE	n.a.
5	Chloride	10.0	0.090	4.86	0.164	2.227	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	n.a.	6.94	0.016	0.214	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	0.050	8.99	0.025	0.329	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Phosphate	10.0	0.090	12.72	0.034	0.216	FALSE	n.a.

Injection Name:	*US27 E1 DUP*	Inject Number:	18
Vial Number:	*16*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 22:33*		



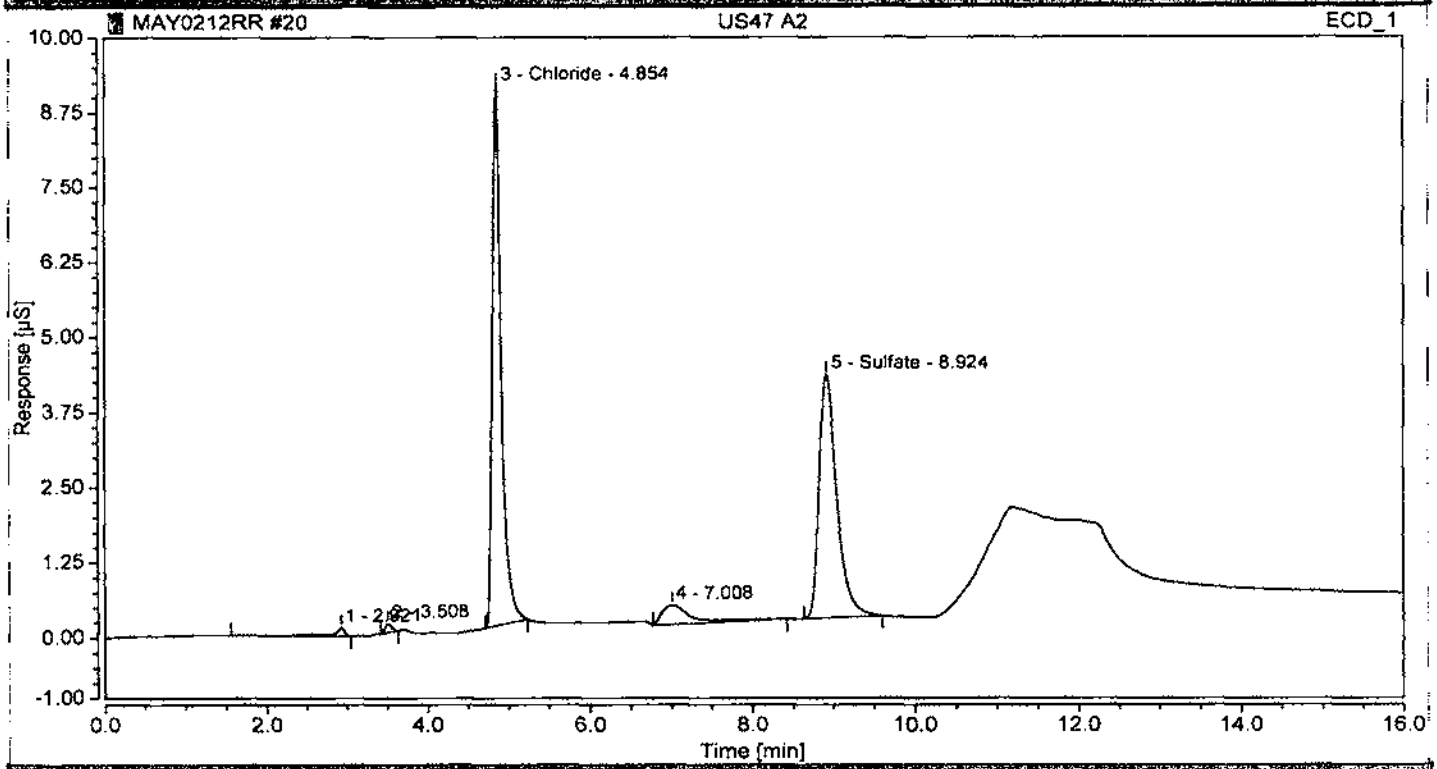
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
2	Fluoride						FALSE	n.a.
3							FALSE	n.a.
4							FALSE	n.a.
5	Chloride						FALSE	n.a.
n.a.	Nitrite						n.a.	n.a.
6							FALSE	n.a.
n.a.	Bromide						n.a.	n.a.
7	Sulfate						FALSE	n.a.
n.a.	Nitrate						n.a.	n.a.
8							FALSE	n.a.
9	Phosphate						FALSE	n.a.

Injection Name:	*US27 E1 MS*	Inject Number:	19
Vial Number:	*17*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodaf*		
Injection Date/Time:	*02/05/12 22:54*		



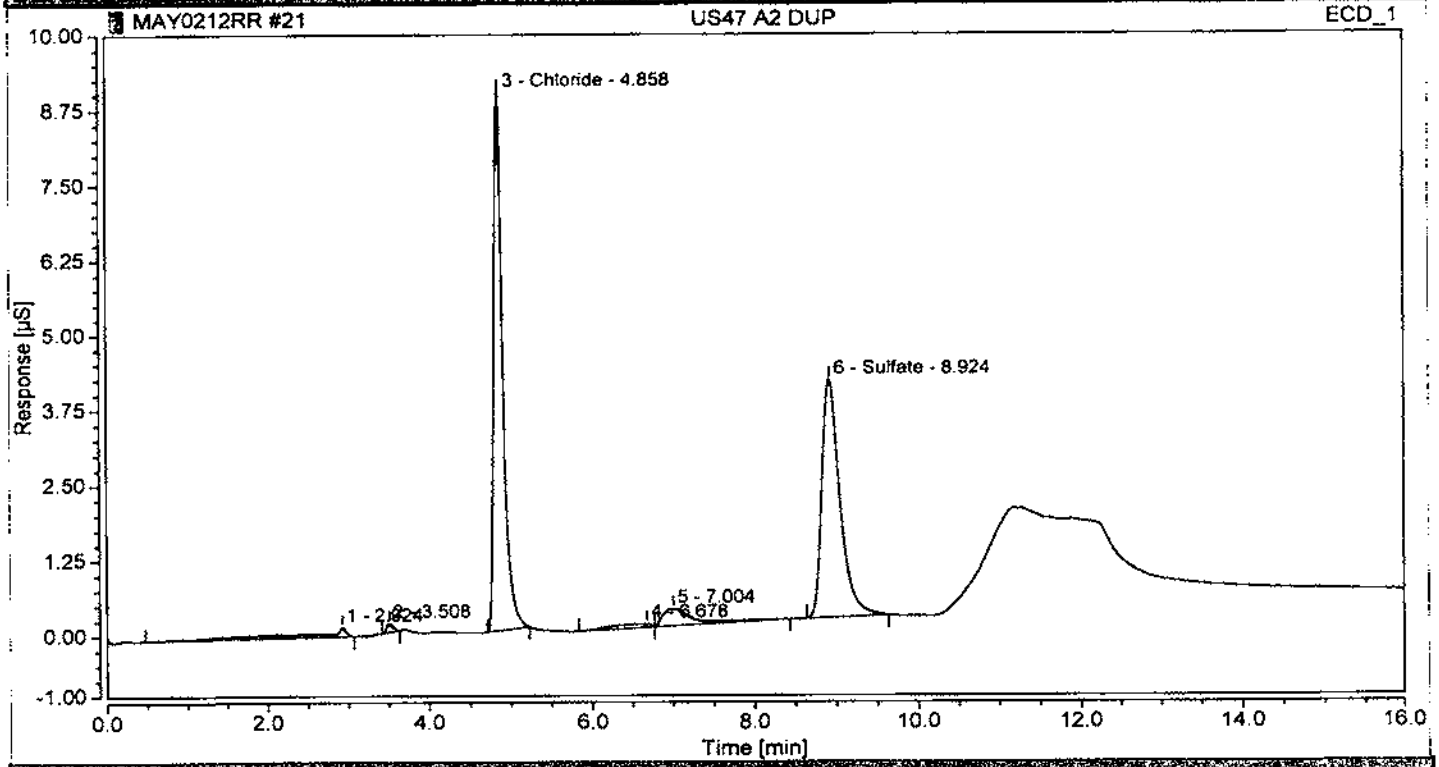
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0		3.92	0.197	0.150	FALSE	n.a.
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0		3.51	0.075	0.154	FALSE	n.a.
3	Chloride	20.0		4.86	1.236	0.539	FALSE	n.a.
n.a.	Nitrite	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0		7.01	0.190	0.075	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0		8.99	0.917	0.051	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Phosphate	20.0		12.70	0.013	0.086	FALSE	n.a.

Injection Name:	*US47 A2*	Inject Number:	20
Vial Number:	*18*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:15*		



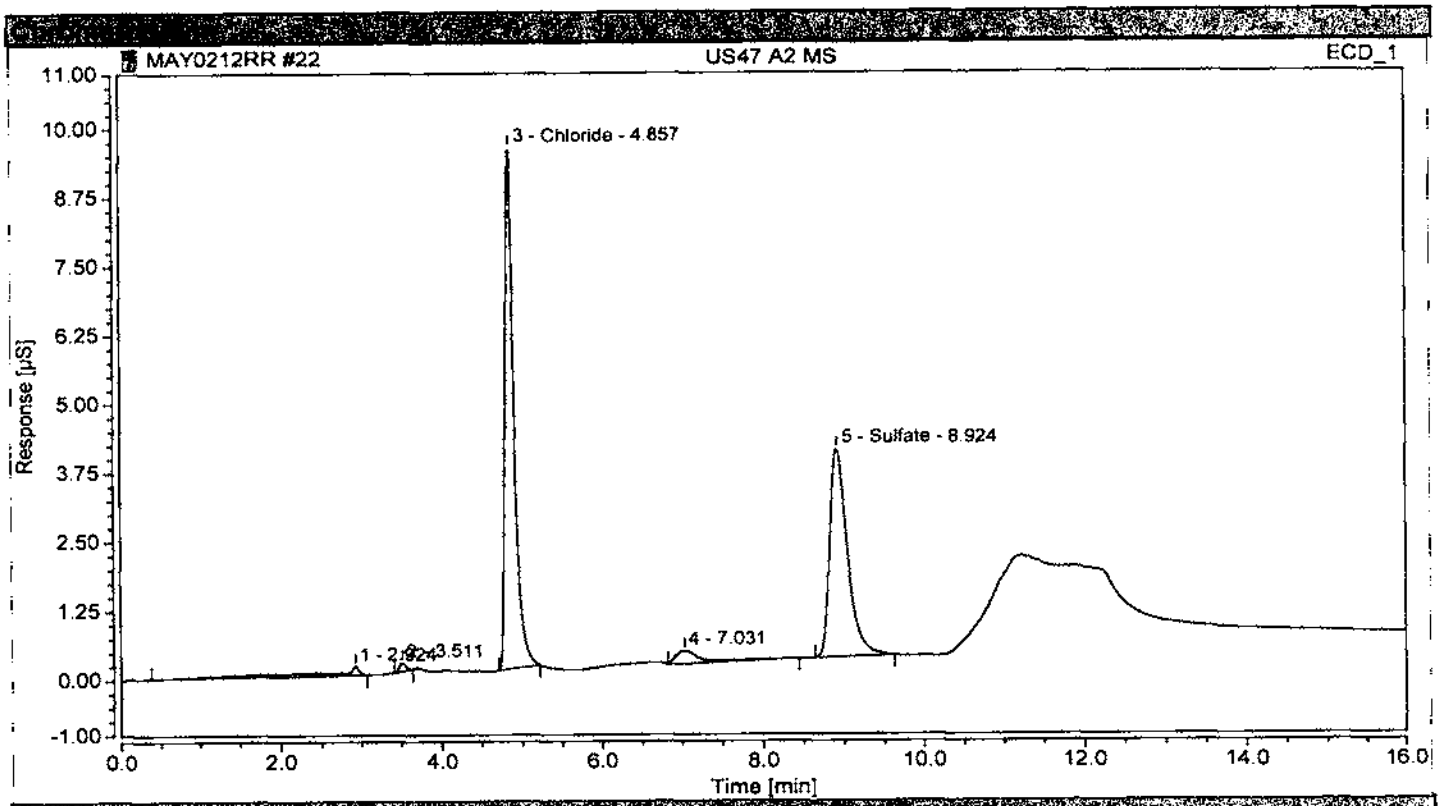
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.82	0.024	0.147	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.51	0.035	0.146	FALSE	n.a.
3	Chloride	10.0	32.505	4.85	1.168	8.984	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.01	0.139	0.320	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	40.053	8.92	1.924	4.043	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US47 A2 DUP*	Inject Number:	21
Vial Number:	*19*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:35*		



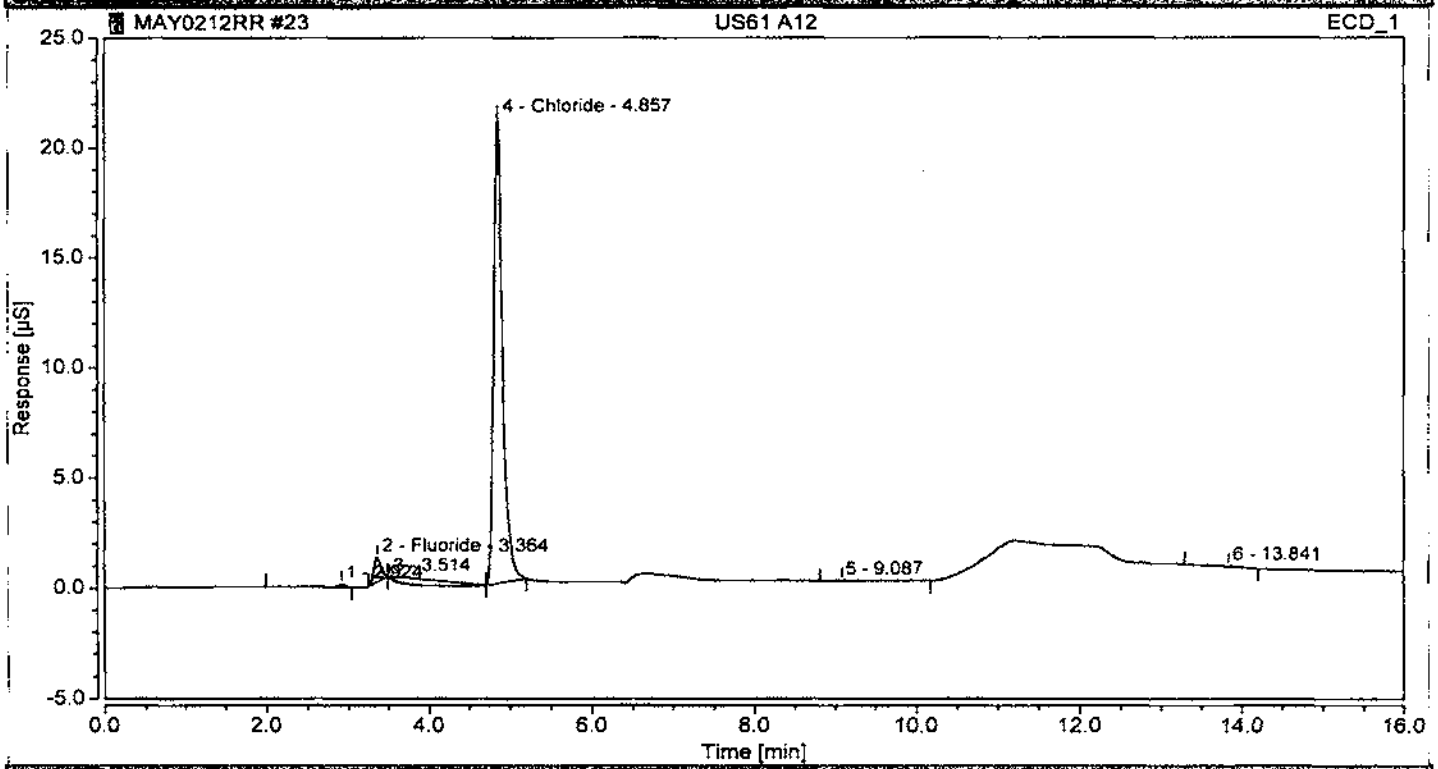
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.82	0.085	0.153	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.51	0.014	0.044	FALSE	n.a.
3	Chloride	10.0	9.993	4.86	1.109	3.594	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	5.66	0.027	0.057	FALSE	n.a.
5		10.0	n.a.	7.00	0.110	0.324	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	10.0	9.992	8.92	1.000	3.936	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US47 A2 MS*	Inject Number:	22
Vial Number:	*20*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:55*		



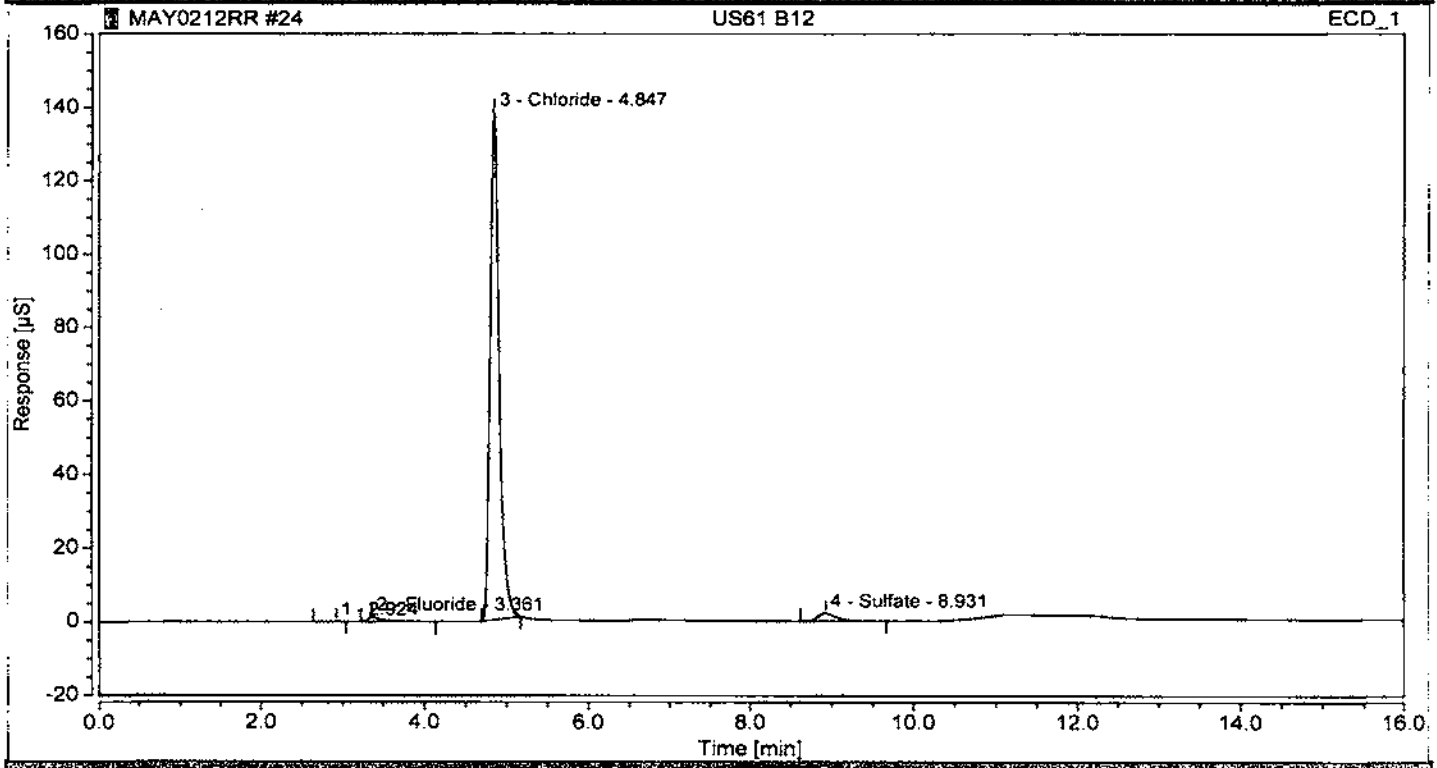
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.82	0.100	0.154	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.51	0.073	0.154	FALSE	n.a.
3	Chloride	20.0	2.464	4.86	0.184	0.460	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	n.a.	7.03	0.065	0.202	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	2.857	8.92	0.308	3.760	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US61 A12*	Inject Number:	23
Vial Number:	*21*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:14*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	1.282	0.022	0.137	FALSE	n.a.
2	Fluoride	1.0	0.227	3.364	0.013	0.109	FALSE	n.a.
3		1.0	n.a.	3.514	0.021	0.036	FALSE	n.a.
4	Chloride	1.0	5.477	4.857	1.269	21.144	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	9.087	0.014	0.004	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	13.824	0.020	0.042	FALSE	n.a.

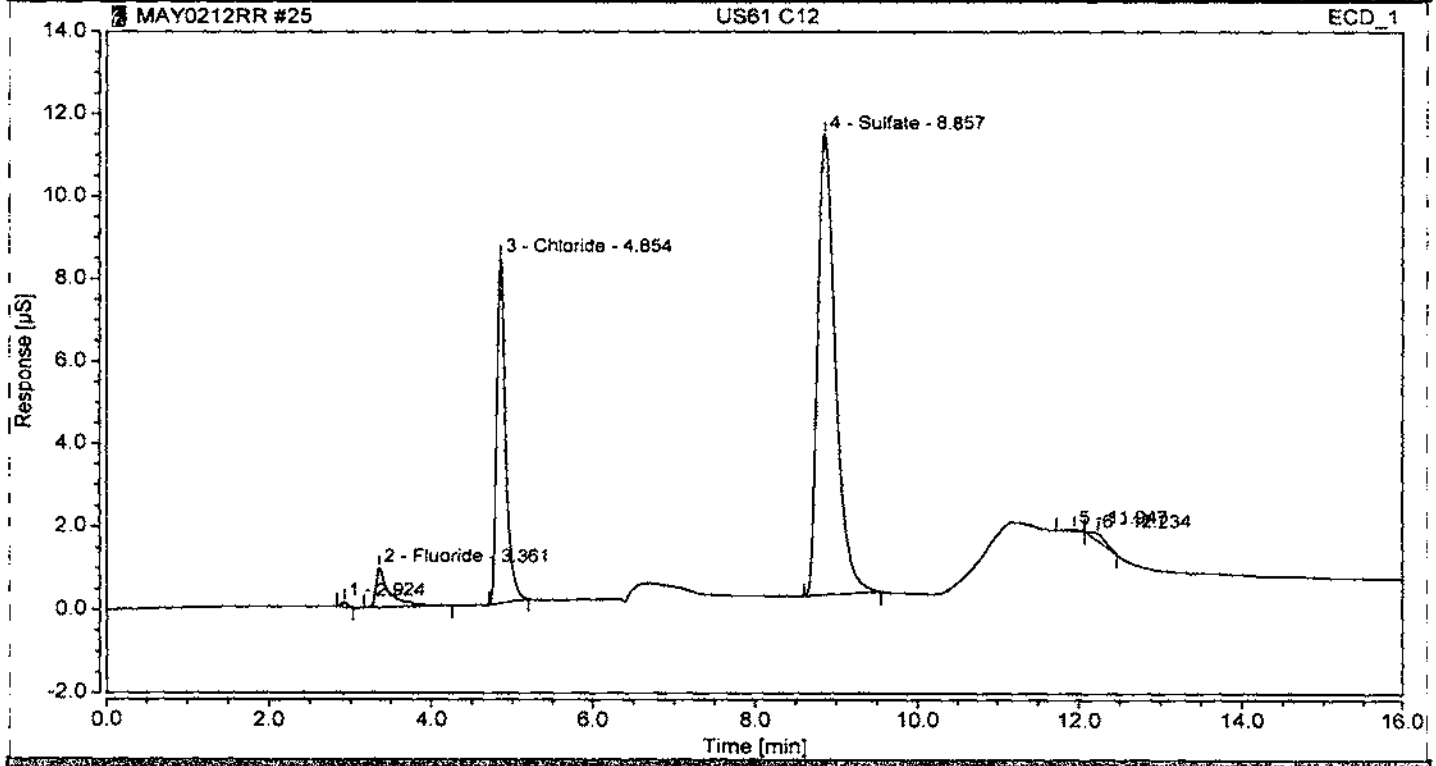
Injection Name:	*US61 B12*	Inject Number:	24
Vial Number:	*22*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 00:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.012	0.127	FALSE	n.a.
2	Fluoride	1.0	0.08	3.36	0.46	1.402	FALSE	n.a.
3	Chloride	1.0	2.005	4.85	17.78	138.229	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.366	8.93	0.564	2.148	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

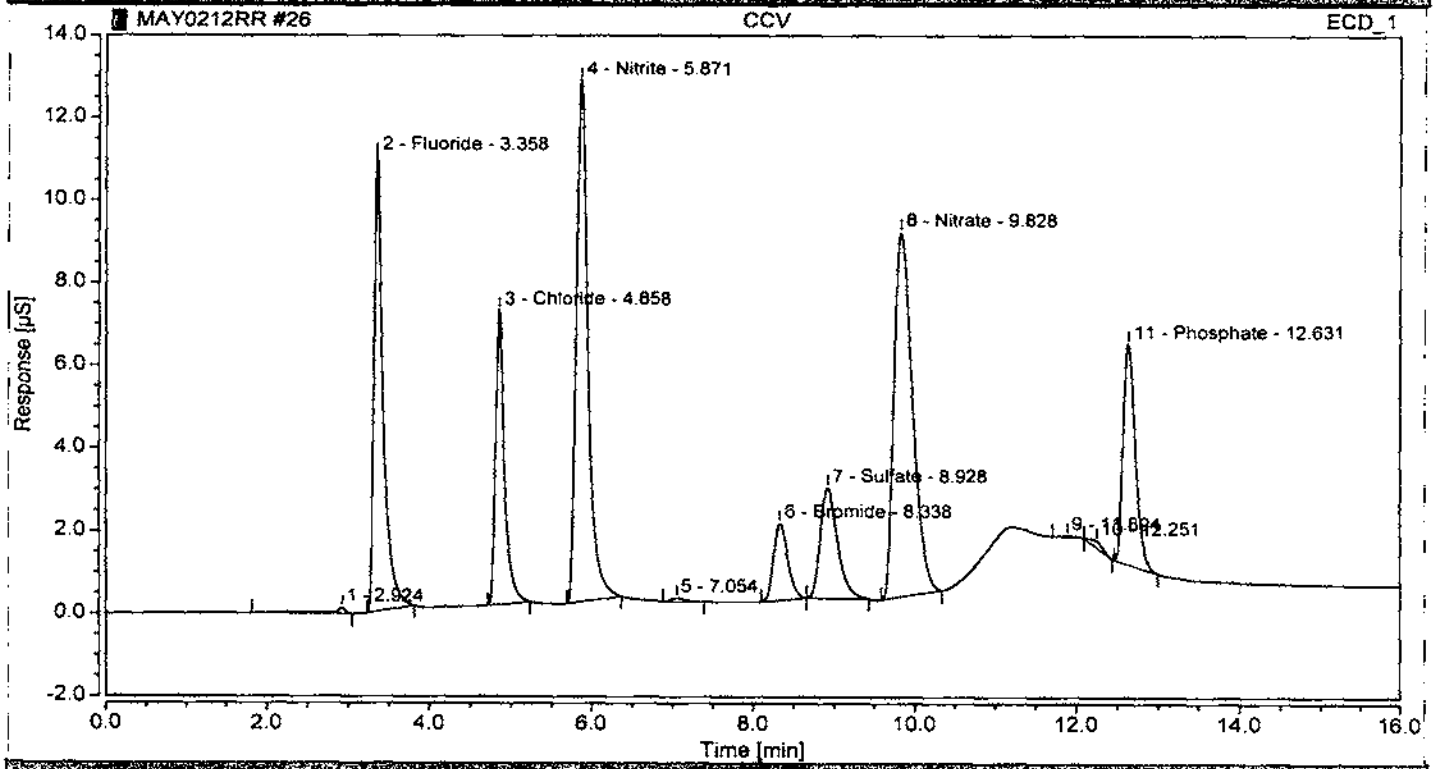
US52 : 01361

Injection Name:	*US61 C12*	Inject Number:	25
Vial Number:	*23*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:55*		



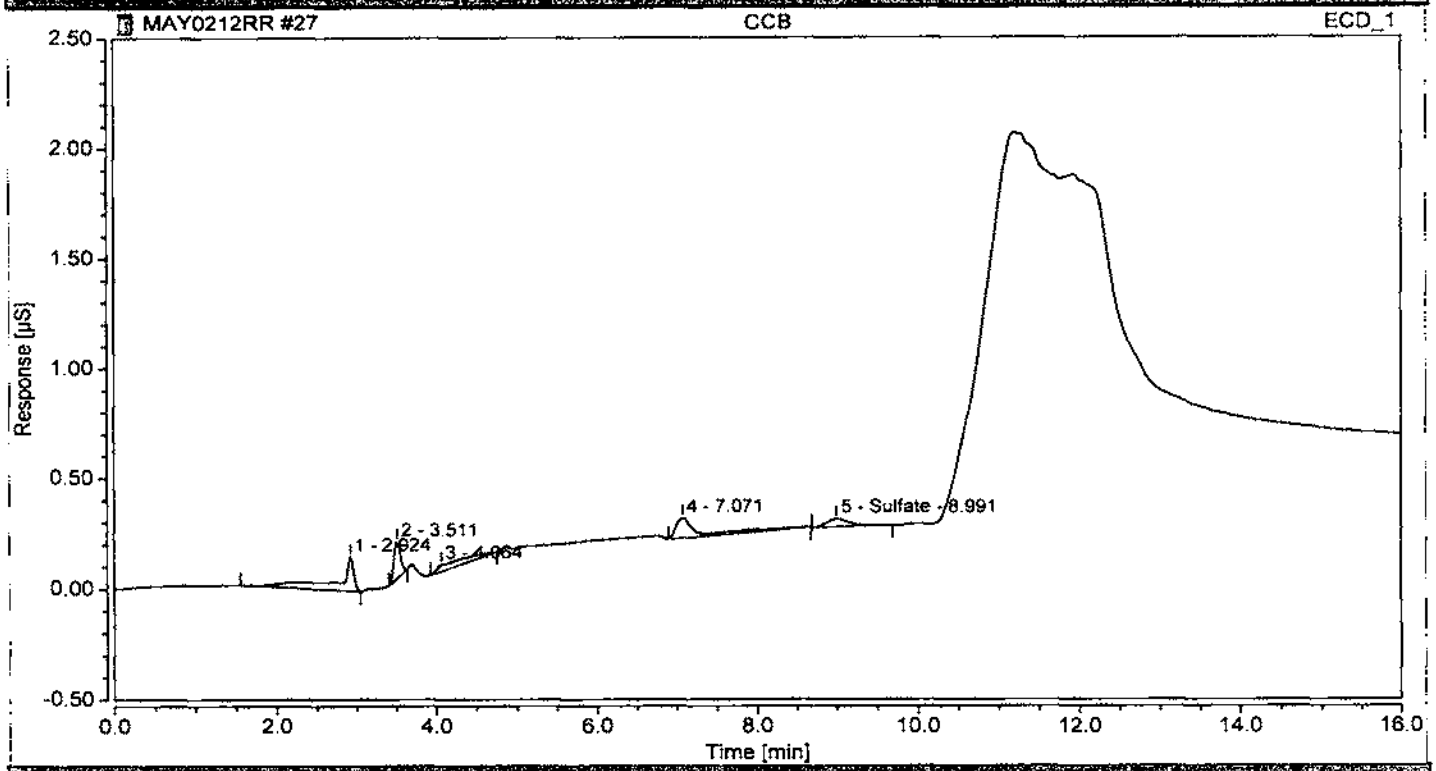
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n/a	2.702	0.0170	0.122	FALSE	n.a.
2	Fluoride	1.0	0.170	3.361	0.0238	0.184	FALSE	n.a.
3	Chloride	1.0	3.527	4.854	1.0035	6.854	FALSE	n.a.
n.a.	Nitrite	1.0	n/a	n/a	n/a	n/a	n.a.	n.a.
n.a.	Bromide	1.0	n/a	n/a	n/a	n/a	n.a.	n.a.
4	Sulfate	1.0	12.476	8.857	2.8806	11.421	FALSE	n.a.
n.a.	Nitrate	1.0	n/a	n/a	n/a	n/a	n.a.	n.a.
5		1.0	n/a	11.95	0.0366	0.366	FALSE	n.a.
6		1.0	n/a	12.23	0.0136	0.162	FALSE	n.a.
n.a.	Phosphate	1.0	n/a	n/a	n/a	n.a.	n.a.	n.a.

Injection Name:	*CCV*	Inject Number:	26
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 01:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1								
2	Fluoride						FALSE	
3	Chloride						FALSE	
4	Nitrite						FALSE	
5							FALSE	
6	Bromide						FALSE	
7	Sulfate						FALSE	
8	Nitrate						FALSE	
9							FALSE	
10							FALSE	
11	Phosphate						FALSE	

Injection Name:	*CCB*	Inject Number:	27
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 01:36*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
n.a.	Fluoride				n.a.	n.a.	n.a.	n.a.
2							FALSE	n.a.
3							FALSE	n.a.
n.a.	Chloride				n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite				n.a.	n.a.	n.a.	n.a.
4							FALSE	n.a.
n.a.	Bromide				n.a.	n.a.	n.a.	n.a.
5	Sulfate						FALSE	n.a.
n.a.	Nitrate				n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US52 : 91.364

Injection Name:	*STOP*	Inject Number:	28
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*SHUTDOWN*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 01:58*		

Can't read channel ECD_1 *from injection #28 - STOP.*
Channel is not available.

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			n.a.	min	natogram in con	matogram in		n.a.

PHOSPHORUS BENCHSHEET, Aqueous				Digested:	Analyzed:
Soluble Reactive P (SRP) by EPA 365.2, SM 4500-P			Date	5/8/12 12:00	5/8/12 19:37
Indicate "Total" or "SRP"	**Total**		Analyst	CDE	CDE

Total P by digestion (indicate procedure used) — ***SM 4500-P B5-99, Acid persulfate***

NOTE: *curve standards must be digested !* — ***~~SM 4500-P B4-99, Sulfuric-Nitric Acid~~***

Curve Standards — ***make no entries to shaded cells, they are calculated !!***

Stock Standard

Stock #: 123-9 *Prep date:* 2/9/2012 Conc = **50.00** *mg/L P*

Intermediate Standard

5 *mL stk to* 50 *mL DI =* ***5.00*** *mg P/L*

Calibration Curve for Digested Curve

std make-up volume (mL) = **25** Digest Final Vol (mL) = **50**

mL intermediate Std		CONC	UNITS	AVG	
SRP	Total P	(mg/L)	(ABS 880 nm 5cm cell)		*mg/L*
	0.00	0.000	0.000	0.000	*0.001*
	0.08	0.008	0.022	0.022	*0.008*
	0.25	0.025	0.075	0.075	*0.024*
	0.75	0.075	0.230	0.230	*0.073*
	2.50	0.250	0.803	0.803	*0.254*
	5.00	0.500	1.580	1.580	*0.498*

REGRESSION DATA

CONC = (ABS-intercept)/ slope

intercept = -0.0022
Slope = 3.1742
r = 0.9999

Comment: Calibration OK!

maxabs = 1.580

Verification Standards *Source:* ERA# 3303093 *Conc (mg/L)* 1000

Intermediate		0.50	*mL to*	50	*mL DI =*	***10.0***	*mg/L*	
SRP ICV	*dilution =*	0.75	*mL Int to*	50	*mL DI =*	***0.150***	*mg/L*	*CVS*
Tot P LCS	*dilution =*	0.25	*mL Int to*	25	*mL DI =*	***0.100***	*mg/L*	*LCS*

DQL Standard (low level) *Source:* ***Curve Int.*** *Conc (mg/L)* 5.0

SRP	0.080	*ml to*	50	*ml DI =*	***0.008***	*mg/L*
Total P	0.080	*ml to*	25	*ml DI =*	***0.016***	*mg/L*

Sample Data

Spike with 5 mg/L Intermediate Standard — *enter dilution as final vol / sample vol*

SAMPLE ID	Tot P Digest		Analysis Data			TOT P	SRP	
	mL sample	mL digest	Abs	Dilution	(mg/L)	(mg/L)	(mg/L)	*Notes*
MB Total	25	50	0.000	1.0	0.0007	<0.008		*OK*
LCS 1	25	50	0.153	1.0	0.0489	0.0978		*97.82%*
DQL Total	25	50	0.023	1.0	0.0080	0.0159		*99.40%*
UR75 A3	25	50	0.070	1.0	0.0228	0.0456		
UR75 B3	25	50	0.159	1.0	0.0508	0.1016		
UR75 C3	25	50	0.005	1.0	0.0023	<0.008		
UR75 D3	25	50	0.034	1.0	0.0114	0.0228		
UR75 E3	25	50	0.018	1.0	0.0064	0.0128		
UR75 F3	25	50	0.022	1.0	0.0076	0.0153		
UR75 F3 dup	25	50	0.022	1.0	0.0076	0.0153		*RPD na*
UR75 F3 ms	25	50	0.077	1.0	0.0250	0.0499		*124.8% Rec*
Spike =	0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.040	
UR75 G3	25	50	0.019	1.0	0.0067	0.0134		
UR75 H3	25	50	0.027	1.0	0.0092	0.0184		
MB total	25	50	0.000	1.0	0.0007	<0.008		*OK*
LCS 1	25	50	0.153	1.0	0.0489	0.0978		*97.82%*
UR75 I 3	25	50	0.021	1.0	0.0073	0.0146		
US27 E5	25	50	1.409	2.0	0.4446	1.7784		
US52 G16	25	50	0.619	1.0	0.1957	0.3913		
US52 H6	25	50	1.371	2.0	0.4326	1.7304		
US52 I 5	25	50	1.012	2.0	0.3196	1.2784		
US61 A11	25	50	1.001	2.0	0.3161	1.2644		
US61 A11 dup	25	50	1.014	2.0	0.3202	1.2808		*RPD = 1.29*
US61 A11 ms	25	50	1.033	2.0	0.3261	1.3044		*100.8% Rec*
Spike =	0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.040	
US61 B11	25	50	0.846	2.0	0.2672	1.0689		
US61 C11	25	50	0.616	1.0	0.1948	0.3896		
MB total	25	50	0.000	1.0	0.0007	<0.008		*OK*
LCS 1	25	50	0.153	1.0	0.0489	0.0978		*97.82%*
US82 A8	25	50	0.022	1.0	0.0076	0.0153		
US82 B9	25	50	0.214	1.0	0.0681	0.1363		

8L 63

10L 81

US82 C4	25	50	0.197	1.0	0.0628	**0.1255**		
~~US82 E4~~	25	50	~~1.731~~	~~1.0~~	0.5460	~~1.0921~~		~~offscale~~
US82 E4	25	50	0.852	2.0	0.2691	**1.0765**		
MB total	25	50	0.001	1.0	0.0010	**<0.008**		*OK*
LCS 1	25	50	0.153	1.0	0.0489	**0.0978**		*97.82%*

PHOSPHORUS BENCHSHEET, Aqueous

	Digested:	Analyzed:
Soluble Reactive P (SRP) by EPA 365.2, SM 4500-P Date	5-8-12 12:00	5-8-12 19:37
Indicate "Total" or "SRP" **Total** Analyst	CNL	CNL

Total P by digestion (indicate procedure used) — ***SM 4500-P B5-99, Acid persulfate*** / ~~***SM 4500-P B4-99, Sulfuric-Nitric Acid***~~

NOTE: *curve standards must be digested !*

Curve Standards — ***make no entries to shaded cells, they are calculated !!***

Stock Standard

Stock #: 123-9 *Prep date:* 2/9/2012 Conc = **50.00** *mg/L P*

Intermediate Standard

5 *mL stk to* 50 *mL DI =* ***5.00*** *mg P/L*

Calibration Curve for Digested Curve

std make-up volume (mL) = 25 Digest Final Vol (mL) = 50

mL intermediate Std		CONC	UNITS		AVG
SRP	Total P	(mg/L)	(ABS 880 nm 5cm cell)		mg/L
	0.00	0.000	0.000		
	0.08	0.008	0.022		
	0.25	0.025	0.075		
	0.75	0.075	0.230		
	2.50	0.250	0.803		
	5.00	0.500	1.580		

REGRESSION DATA

CONC = (ABS-intercept)/ slope

intercept =
Slope =
r =

Comment:

maxabs = 0.000

Verification Standards *Source:* ERA# 3303093 *Conc (mg/L)* 1000

Intermediate		0.50	*mL to*	50	*mL DI =*	***10.0***	*mg/L*	
SRP ICV	*dilution =*	0.75	*mL Int to*	50	*mL DI =*	***0.150***	*mg/L*	*CVS*
Tot P LCS	*dilution =*	0.25	*mL Int to*	25	*mL DI =*	***0.100***	*mg/L*	*LCS*

DQL Standard (low level) *Source:* ***Curve Int.*** *Conc (mg/L)* 5.0

SRP	0.080	*ml to*	50	*ml DI =*	***0.008***	*mg/L*
Total P	0.080	*ml to*	25	*ml DI =*	***0.016***	*mg/L*

Sample Data

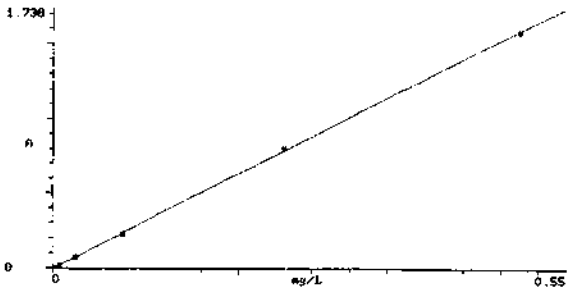
Spike with 5 mg/L Intermediate Standard — *enter dilution as final vol / sample vol*

SAMPLE ID	Tot P Digest		Analysis Data			TOT P	SRP	
	mL sample	mL digest	Abs	Dilution	(mg/L)	(mg/L)	(mg/L)	*Notes*
MB Total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
DQL Total	25	50	0.023	1.0				
UR75 A3	25	50	0.070	1.0				
UR75 B3	25	50	0.159	1.0				
UR75 C3	25	50	0.005	1.0				
UR75 D3	25	50	0.034	1.0				
UR75 E3	25	50	0.018	1.0				
UR75 F3	25	50	0.022	1.0				
UR75 F3 dup	25	50	0.022	1.0				
UR75 F3 ms	25	50	0.077	1.0				*0% Rec*
Spike =	~~0.1~~ 0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.020	
UR75 G3	25	50	0.019	1.0				
UR75 H3	25	50	0.027	1.0				
MB total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
UR75 I 3	25	50	0.021	1.0				
US27 E5	25	50	1.409	~~1.0~~ 2X				
US52 G16	25	50	0.619	1.0				
US52 H6	25	50	1.371	~~1.0~~ 2X				
US52 I 5	25	50	1.012	~~1.0~~ 2X				
US61 A11	25	50	1.001	~~1.0~~ 2X				
US61 A11 dup	25	50	1.014	~~1.0~~ 2X				
US61 A11 ms	25	50	1.033	~~1.0~~ 2X				*0% Rec*
Spike =	~~0.1~~ 0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.020	
US61 B11	25	50	0.946	~~1.0~~ 2X				
US61 C11	25	50	0.616	1.0				
MB total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
US82 A8	25	50	0.022	1.0				
US82 B9	25	50	0.214	1.0				

US82 C4	25	50	0.197	1.0				
US82 E4	25	50	1.731	1.0				
US82E4	25	50	0.852	1.0 2K				
CCB	25	50	0.001	1.0				
CCV	25	50	0.153	1.0				
	25	50		1.0				
	25	50		1.0				
	25	50		1.0 5-8 12 CCC				
MB total	25	50		1.0				
LCS	25	50		1.0				

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Standard Curve	8:03pm 8May12
Test Name	TPHOS
Date Standards Measured	8May12
Wavelength	880nm
Ref. Wavelength Correction	Off
Curve Fit	Linear
Number of Standards	6
Units	mg/L
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On



Curve Fit	Linear
Slope	3.17
Intercept	-0.00224
Std Dev	0.007
Corr Coeff	1.000

Std #	Conc. mg/L	Abs 880nm

1	0.000	0.000
2	0.008	0.022
3	0.025	0.075
4	0.075	0.230
5	0.250	0.803
6	0.500	1.580

5-8-12

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Advanced A-%T-C	8:04pm 8May12
Test Name	TPHOS[Saved]
Measurement Mode	Absorbance
Wavelength	880nm
Ref. Wavelength Correction	Off
Delay Time (min:sec)	0:00
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On

ID#	Abs 880nm
1	0.000
2	0.153
3	0.023
4	0.070
5	0.159
6	0.005
7	0.034

7	0.034
8	0.018
9	0.022
10	0.022
11	0.077
12	0.019
13	0.027
14	0.000
15	0.153
16	0.021
17	1.409
18	0.619
19	1.371
20	1.012
21	1.001

22	1.014
23	1.033
24	0.846
25	0.616
26	0.000
27	0.153
28	0.022
29	0.214
30	0.197
31	1.731
32	0.852
33	0.001
34	0.153

TOC, Aqueous Data Summary (Apollo 9000) DATE: 5/17/2012
EPA 9060 A, SM 5310 B-00 ANALYST: CDE 11:50
Analysis Mode: **NPOC** *Instrument:* ***Apollo 9000***

Detection Limits (mgC/L)
MRL = 1.5 **upper blank =** 1.5 **lower blank =** -1.5

Calibration Data

Stock ID:	ARI 00125-4	factor (m):	1.478E+05	r^2:	0.99947
Curve Date:	4/24/2012	intercept (b_{cal}):	46951	sys blk (b_{sys})	21111

Curve ID: 042412X 0-50ppm

LCS, Verification Standard and Inorganic Sparge Check

	Organic Carbon			Inorganic carbon		
Source:	**ERA 0523-11-05**			**ARI # 0104-9**		
Conc:	5,000	*mg/L*		1,000	*mg/L*	
dilution:	1.00	*mL to*	mg C/ L	5.00	*mL to*	mg C/ L
Volume:	250	*mL =*	**20.0**	250	*mL =*	**20**

Sample Data

SAMPLE ID	Dilution Factor	Carbon (mg C/L) *enter Form as TC, TIC, NPOC* Form	# reps	mean	stdev	Measured	Report as	Notes: *will flag if RSD >5%*
ICV	1	NPOC	3	21.8364	0.59	21.84	21.8	*109.00%*
ICB	1	NPOC	3	-0.1672	0.12	-0.17	<1.5	*OK !*
1.5 ppm	1	NPOC	3	1.2966	0.20	1.30	<1.5	86.44%
IC Sparge Check	1	NPOC	3	19.3551	0.21	19.36	19.4	*97.00%*
US52 G17	1	NPOC	3	3.7262	0.08	3.73	3.73	
US52 H7	1	NPOC	3	8.8113	0.16	8.81	8.81	
US52 I 4	1	NPOC	3	24.5683	0.55	24.57	24.6	
US61 A13	1	NPOC	3	4.0784	0.18	4.08	4.08	
US61 B13	1	NPOC	3	4.1693	0.24	4.17	4.17	RSD > 5% chk value *
US61 C13	1	NPOC	3	3.1370	0.10	3.14	3.14	
US82 A10	1	NPOC	3	1.9778	0.18	1.98	1.98	RSD > 5% chk value *
CCV	1	NPOC	3	20.7517	0.21	20.75	20.8	*104.00%*
CCB	1	NPOC	3	-0.0902	0.15	-0.09	<1.5	*OK !*
US82 B11	1	NPOC	3	2.2066	0.14	2.21	2.21	
US82 C6	1	NPOC	3	2.6955	0.16	2.70	2.7	
US82 E6	1	NPOC	3	7.5939	0.13	7.59	7.59	
UT92 A3	1	NPOC	3	1.6575	0.16	1.66	1.66	RSD > 5% chk value *
UT92 A3dup	1	NPOC	3	1.5510	0.23	1.55	1.55	*RPD =6.9%*
UT92 A3ms	1	NPOC	3	22.6661	0.21	22.67	22.7	*105.04%*
Spike at	0.200	*mL of*	2,000	*ppm Std to*	20.00	*mL =*	20.0	*mg/L*
CCV	1	NPOC	3	20.0902	0.73	20.09	20.1	*100.50%*
CCB	1	NPOC	3	-0.2468	0.11	-0.25	<1.5	*OK !*

* = Sample is < 5x the MRL (7.5) and RSD >5% is expected due to low concentration in sample.

Calibration Report Print Date/Time: 2012/04/24 13:21:09

Cal. Curve ID: 042412X 0-50ppm
Created: 2012/04/24 13:21
Calibration Factor (m): 1.478e+05
Y Intercept (b): 46951
r-squared: 0.99947

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
BLK	33238	0.000	-0.093	Low Sample De	2012/04/24 11:24
1.5	145425	0.750	0.666		2012/04/24 11:46
5.0	406211	2.500	2.430		2012/04/24 12:08
10.0	790461	5.000	5.029		2012/04/24 12:30
25.0	1957990	12.500	12.927		2012/04/24 12:53
50.0	3711768	25.000	24.790		2012/04/24 13:18

Detailed Analysis Report Print Date/Time: 2012/05/21 12:40:12

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 11:50
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.4532	11.2266	1706622	14.407	15.403	183
2	21.2673	10.6337	1618963	14.486	15.486	176
3	21.7887	10.8943	1657500	14.511	15.507	175

<<<Statistics>>> Mean: 21.8364 Std Dev: 0.5944 RSD: 2.72

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 12:12
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.3095	-0.1548	24073	14.877	14.890	120
2	-0.1162	-0.0581	38363	14.730	14.997	120
3	-0.0759	-0.0379	41342	14.663	14.834	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.1672 Std Dev: 0.1249 RSD: -74.68

Sample ID: 1.5 ppm
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 12:33
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.0831	0.5415	127008	15.493	16.485	116
2	1.3385	0.6692	145888	15.244	16.233	118
3	1.4681	0.7340	155465	15.230	16.228	119

<<<Statistics>>> Mean: 1.2966 Std Dev: 0.1959 RSD: 15.11

Sample ID: CHECK
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 12:57
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19.5855	9.7928	1494651	16.458	17.449	147
2	19.3055	9.6528	1473954	16.247	17.243	148
3	19.1743	9.5872	1464256	16.367	17.365	146

<<<Statistics>>> Mean: 19.3551 Std Dev: 0.2100 RSD: 1.09

Sample ID: US52 G17
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 13:19
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.8153	1.9077	282018	16.393	17.391	124
2	3.6889	1.8445	272673	16.304	17.295	125
3	3.6745	1.8373	271610	16.228	17.220	124

<<<Statistics>>> Mean: 3.7262 Std Dev: 0.0775 RSD: 2.08

Sample ID: US52 H7
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 13:41
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.7819	4.3910	649133	16.950	17.948	132
2	8.9810	4.4905	663848	16.794	17.793	134
3	8.6709	4.3355	640926	16.773	17.767	132

<<<Statistics>>> Mean: 8.8113 Std Dev: 0.1571 RSD: 1.78

Sample ID: US52 I4
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 14:04
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	25.2049	12.6024	1863064	17.307	18.305	150
2	24.2857	12.1429	1795124	17.286	18.284	147
3	24.2142	12.1071	1789834	17.239	18.236	147

<<<Statistics>>> Mean: 24.5683 Std Dev: 0.5525 RSD: 2.25

Sample ID: US61 A13
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 14:27
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.1065	2.0532	303539	17.559	18.541	124
2	3.8841	1.9421	287101	17.346	18.339	123
3	4.2447	2.1223	313753	17.242	18.234	125

<<<Statistics>>> Mean: 4.0784 Std Dev: 0.1819 RSD: 4.46

Sample ID: US61 B13
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 14:49
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.4387	2.2194	328095	17.973	18.973	127
2	4.0029	2.0014	295880	17.837	18.826	125
3	4.0663	2.0332	300569	17.683	18.675	125

<<<Statistics>>> Mean: 4.1693 Std Dev: 0.2355 RSD: 5.65

Sample ID: US61 C13
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 15:11
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.0482	1.5241	225315	18.378	19.360	121
2	3.1203	1.5602	230646	18.073	19.057	124
3	3.2425	1.6213	239677	17.964	18.951	124

<<<Statistics>>> Mean: 3.1370 Std Dev: 0.0982 RSD: 3.13

Sample ID: US82 A10
Method: TOC 0 to 50 ppm

Mode: TOC
Filename: 05171126

Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Timestamp: 2012/05/17 15:33
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.7753	0.8877	131227	18.497	19.497	118
2	2.1189	1.0595	156624	18.110	19.096	118
3	2.0391	1.0196	150727	17.968	18.959	118

<<<Statistics>>> Mean: 1.9778 Std Dev: 0.1798 RSD: 9.09

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 15:57
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20.5452	10.2726	1565586	19.023	20.020	160
2	20.9630	10.4815	1596471	18.772	19.770	167
3	20.7468	10.3734	1580487	18.730	19.726	165

<<<Statistics>>> Mean: 20.7517 Std Dev: 0.2089 RSD: 1.01

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 16:18
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.2595	-0.1298	27766	18.958	19.944	111
2	0.0365	0.0182	49646	18.408	18.448	120
3	-0.0475	-0.0237	43442	18.290	18.357	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.0902 Std Dev: 0.1525 RSD: -169.18

Sample ID: US82 B11
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 16:40
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.1627	1.0814	159860	18.856	19.849	116
2	2.0968	1.0484	154986	18.506	19.484	116
3	2.3604	1.1802	174470	18.231	19.216	118

<<<Statistics>>> Mean: 2.2066 Std Dev: 0.1372 RSD: 6.22

Sample ID: US82 C6
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 17:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.5964	1.2982	191917	18.903	19.884	120
2	2.6150	1.3075	193289	18.578	19.562	118
3	2.8750	1.4375	212507	18.354	19.343	122

<<<Statistics>>> Mean: 2.6955 Std Dev: 0.1558 RSD: 5.78

Sample ID: US82 E6
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 17:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.7279	3.8640	571225	18.940	19.939	129
2	7.5810	3.7905	560367	18.747	19.746	130
3	7.4727	3.7363	552358	18.545	19.544	128

<<<Statistics>>> Mean: 7.5939 Std Dev: 0.1281 RSD: 1.69

Sample ID: UT92 A3
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 17:46
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.4728	0.7364	108862	18.996	19.983	115
2	1.7659	0.8829	130529	18.546	19.545	116
3	1.7337	0.8669	128150	18.341	19.339	117

<<<Statistics>>> Mean: 1.6575 Std Dev: 0.1607 RSD: 9.70

Sample ID: UT92 A3 DUP
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 18:08
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.2863	0.6432	95080	19.070	20.048	113
2	1.6837	0.8419	124456	18.606	19.604	114
3	1.6831	0.8415	124408	18.475	19.466	115

<<<Statistics>>> Mean: 1.5510 Std Dev: 0.2293 RSD: 14.78

Sample ID: UT92 A3 MS
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 18:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.4829	11.2415	1661867	19.683	20.664	132
2	22.8949	11.4474	1692314	19.024	20.020	135
3	22.6204	11.3102	1672029	19.102	20.100	133

<<<Statistics>>> Mean: 22.6661 Std Dev: 0.2098 RSD: 0.93

Sample ID: Filter Blank
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 18:52
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1993	0.0996	14731	18.933	18.627	120
2	0.5128	0.2564	37904	18.508	18.461	120
3	0.5400	0.2700	39912	18.260	18.250	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 0.4174 Std Dev: 0.1893 RSD: 45.37

5-21-12 ur

Sample ID: US29 A2 DOC
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 19:14
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning	Ending	Integration

				Baseline	Baseline	Time
1	2.7783	1.3891	205363	18.932	19.926	117
2	2.6882	1.3441	198705	18.628	19.628	118
3	3.2391	1.6195	239422	18.415	19.414	122

<<<Statistics>>> Mean: 2.9019 Std Dev: 0.2955 RSD: 10.18

Sample ID: US29 A2 DUP DOC
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 19:36
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.7544	1.3772	203594	18.989	19.972	119
2	2.7563	1.3782	203739	18.591	19.579	119
3	2.7093	1.3546	200261	18.360	19.352	120

<<<Statistics>>> Mean: 2.7400 Std Dev: 0.0266 RSD: 0.97

Sample ID: US29 A2 MS DOC
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 19:58
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.8219	1.4110	208588	18.816	19.814	119
2	2.9430	1.4725	217682	18.566	19.557	121
3	2.9144	1.4572	215425	18.438	19.426	122

<<<Statistics>>> Mean: 2.8938 Std Dev: 0.0641 RSD: 2.21

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 20:23
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20.0273	10.0137	1527307	19.447	20.446	187
2	19.3983	9.6992	1480814	19.445	20.443	182
3	20.8451	10.4226	1587756	19.351	20.351	187

<<<Statistics>>> Mean: 20.0902 Std Dev: 0.7255 RSD: 3.61

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05171126
Timestamp: 2012/05/17 20:45
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.3773	-0.1887	19060	19.429	19.238	120
2	-0.1850	-0.0925	33280	19.039	19.025	120
3	-0.1782	-0.0891	33778	18.857	18.896	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.2468 Std Dev: 0.1130 RSD: -45.80

5-21-12 CDE

Table of Contents: ARI Job US15, US27

Client: ERM-West

Project: 155129.09 RG Spring GW Sampling

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AV

Signature

May-16-2012

Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

May 31, 2012

Michael F. Mendes
ERM-West, Inc.
1218 3rd Avenue, Suite 1412
Seattle, WA 98101

RE: RG Spring GW Sampling, 155129.09
ARI Job Nos.: US15 & US27

Dear Mr. Mendes:

Please find enclosed Chain-of-Custody (COC) records, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and details of these analyses are discussed in the Case Narrative.

Please note that current ARI control limits are available at www.arilabs.com.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
-For-
Susan D. Dunnihoo
Director, Client Services
206-695-6207
sue@arilabs.com

Enclosures

cc: eFile US15_US27

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: US15, US27

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 935	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: ERM	Phone: 425 214 0458	Date: 4/27/12	Ice Present? YES
Client Contact: Mike Mendes		No. of Coolers: 2	Cooler Temps: 2.2 5.2
Client Project Name: RG Spring GW sampling			
Client Project #: 155129.09	Samplers: Cyrus / Matt		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: Phenol / Chlorinated Phenols	Total As	*Dissolved As	Total (A) Metals	Dissolved* As (A)	Total (B) Metals	Dissolved* Metals (B)	TSS	Notes/Comments
MW-18-042612	4/26/12	1518	water	4	X	X	X	X	X	X	X		
MW-3S-042712	4/27/12	0810	water	4	X	X	X	X	X	X	X		
MW-3D-042712	4/27/12	0942	water	4	X	X	X	X	X				
MW-7S-042712	4/27/12	1254	water	5	X	X	X					X	
DUPLICATE													
MW-10-042712	4/27/12	1453	water	7	X	X	X					X	

Comments/Special Instructions: *Dissolved metals Samples filtered in the field	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Cyrus Gorman	Printed Name: Chris Atwell	Printed Name:	Printed Name:
	Company: ERM	Company: ARI	Company:	Company:
	Date & Time: 4/27/12 1600	Date & Time: 4/27/12 1600	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

(A) metals = Cr, Cu, Ag, Zn

SSGA-GTSM

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: ERM

Project Name: RG Spring GW Sampling

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: US15

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	2.2 8.2	

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 70941619

Cooler Accepted by: CA Date: 4/27/12 Time: 1600

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	Bubble Wrap (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	(NO)
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV Date: 4/27/12 Time: 1730

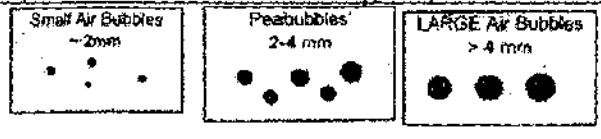
*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

DUP-042712-1 4/27/12 @ 800 not on COC (2-500ml Ambers)

By: AV Date: 4/27/12



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

US15 : 00004

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

Cooler#: 1	Temperature(°C): 8.2	
Sample ID	Bottle Count	Bottle Type
MW-10-042712	7	4 500ml Ag, 2 500ml HDPE, 1 4g OJ

Cooler#:	Temperature(°C):	
Sample ID	Bottle Count	Bottle Type

Cooler#:	Temperature(°C):	
Sample ID	Bottle Count	Bottle Type

Cooler#:	Temperature(°C):	
Sample ID	Bottle Count	Bottle Type

Completed by: AV Date: 4/27/12 Time: 1710

PRESERVATION VERIFICATION 04/27/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **US15**

PC: Sue D.
VTSR: 04/27/12

Inquiry Number: NONE
Analysis Requested: 04/30/12
Contact: Mendes, Michael F.
Client: ERM-West
Logged by: AV
Sample Set Used: Yes-481
Validatable Package: Lv3
Deliverables:

Project #: 155129.09
Project: RG Spring GW Sampling
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-7624 **US15A**	MW-18-042612						TOT															
12-7625 **US15B**	MW-3S-042712						TOT															
12-7626 **US15C**	MW-3D-042712						TOT															
12-7627 **US15D**	MW-7S-042712						TOT															
12-7628 **US15E**	MW-10-042712						TOT															
12-7630 **US15G**	MW-18-042612						DIS									Y						
12-7631 **US15H**	MW-3S-042712						DIS									Y						
12-7632 **US15I**	MW-3D-042712						DIS									Y						
12-7633 **US15J**	MW-7S-042712						DIS									Y						
12-7634 **US15K**	MW-10-042712						DIS									Y						

Checked By AV Date 4/29/12

US15 SDG 155129

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: US27	Turn-around Requested: Standard	Page: 1 of 2	
ARI Client Company: ERM	Phone: 425 214 0458	Date: 4/30/12	Ice Present? Yes
Client Contact: Mike Mendes		No. of Coolers: 2	Cooler Temps: 2.1 7.7
Client Project Name: RG Spring GW Sampling			
Client Project #: 155129.09	Samplers: Cyrus / Matt		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: VOCs 8260	Phenol / Chlorinated phenols	TSS	Total As	Dissolved As *	Total metals (A)	Dissolved metals (A)		Notes/Comments
MW-13-043012	4/30/12	854	water	10	X	X	X	X	X				
DUP-043012-1	4/30/12	0700	water	4		X							
TB-043012-1	4/30/12	854	water	2	X								
MW-27-043012	4/30/12	1046	water	6		X		X	X	X	X		
MW-26-043012	4/30/12	1150	water	6		X		X	X	X	X		
[illegible]													

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
* Dissolved metals samples filtered in field	Printed Name: Cyrus Gorman	Printed Name: Chris Atwell	Printed Name:	Printed Name:
	Company: ERM	Company: ARI	Company:	Company:
	Date & Time: 4/30/12 1452	Date & Time: 4/30/12 1452	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Metals (A) = Cr, Cu, Ni, Pb, Zn

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: Standard	Page: 2 of 2	
ARI Client Company: ERM	Phone: 425 214 0458	Date: 4/30/12	Ice Present? Y
Client Contact: Mike Mendes		No. of Coolers: 1	Cooler Temps: 0.C
Client Project Name: RG Spring GW Sampling			
Client Project #: 155129.09	Samplers: Cyrus / Matt		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	TOC	SVOC/cPAH	Alkalinity	TOX	TSS	Anions Cl, SO4 NO3	Total Phosphate	Total (1) metals	*Dissolved Metals (2)	Hardness	Notes/Comments
MW-14D-043012	4/30/12	1301	water	14	X	X	X	X	X	X	X	X	X	X	

Comments/Special Instructions
* Dissolved metals Samples filtered in the Field

Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
Printed Name: Cyrus Gorman	Printed Name: Chris Atwell	Printed Name:	Printed Name:
Company: ERM	Company: ARI	Company:	Company:
Date & Time: 4/30/12 1452	Date & Time: 4/30/12 1452	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

(2) Dissolved metals As, Cr, Cu, Ag, Zn, Al, Fe, Mn

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

(1) Total Metals As, Cr, Cu, Ag, Zn, Ca, K, Mg, Na, Al, Fe, Mn

SL 5/5/2009

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: ERM

Project Name: PG Spring GW Sampling

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: US27

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	7.7 2.1 0.6	

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 90414619

Cooler Accepted by: CA Date: 4/30/12 Time: 1452

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	Bubble Wrap (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	(NO)
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	4/24/12	

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

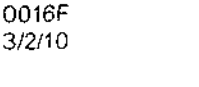
Samples Logged by: AV Date: 4/30/12 Time: 1637

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles >4 mm
		

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

US15 : 00065

Analytical Resources, Incorporated
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Cooler Temperature Compliance Form

US27

Cooler#: 1 Temperature(°C): 1.7

Sample ID	Bottle Count	Bottle Type
MW-14D-043012	14	7-500ml Ag, 1-250ml Ag, 3-SMO, 1-1LHDPE, 1-500ml HDPE, 1-4g OJ

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Cooler#: Temperature(°C):

Sample ID	Bottle Count	Bottle Type

Completed by: AV Date: 4/30/12 Time: 1610

PRESERVATION VERIFICATION 04/30/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: US27

Inquiry Number: NONE
Analysis Requested: 04/30/12
Contact: Mendes, Michael F.
Client: ERM-West
Logged by: AV
Sample Set Used: Yes-481
Validatable Package: Lv3
Deliverables:

PC: Sue D.
VTSR: 04/30/12

Project #: 155129.09
Project: RG Spring GW Sampling
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-7676 **US27A**	MW-13-043012						TOT Pass															
12-7678 **US27C**	MW-27-043012						TOT Pass															
12-7679 **US27D**	MW-26-043012						TOT Pass															
12-7680 **US27E**	MW-14D-043012						TOT Pass		Pass			Pass										
12-7682 **US27G**	MW-13-043012						DIS Pass									Y						
12-7683 **US27H**	MW-27-043012						DIS Pass									Y						
12-7684 **US27I**	MW-26-043012						DIS Pass									Y						
12-7685 **US27J**	MW-14D-043012						DIS Pass									Y						

155129.SS1

Checked By AV Date 4/30/12

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: US15, US27

Narrative

Client: ERM-West, Inc.
Project: RG Spring GW Sampling, 155129.09
ARI Job Nos.: US15 & US27

Sample Receipt

Five water samples were received on April 27, 2012 under ARI job US15. The cooler temperatures measured by IR thermometer following ARI SOP were 2.2 and 8.2°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Five water samples and a trip blank were received on April 30, 2012 under ARI job US27. The cooler temperatures measured by IR thermometer following ARI SOP were 0.6, 2.1, and 7.7°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

The TOX analysis was subcontracted to ALS Environmental in Kelso, WA. All data have been included in this data package.

Volatiles by SW8260

The samples were analyzed within recommended holding times.

The initial calibrations were within method requirements.

The continuing calibration was outside the 20% control limit high for Bromoform. All detected results for this compound have been flagged with a "Q" qualifier. No further corrective action was taken.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

Tetrachloroethene, Hexachlorobutadiene, 1,2,4-Trichlorobenzene, and 1,2,3-Trichlorobenzene were present in **MB-050112A** at low levels. All detected results for these compounds have been flagged with a "B" qualifier. No further corrective action was taken.

The LCS and LCSD percent recoveries were within control limits.

Semivolatiles by SW8270

The samples were extracted and analyzed within recommended holding times.

US15:00013

The initial and continuing calibrations were within method requirements for requested compounds. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

SIM PAHs by SW8270

The sample was extracted and analyzed within recommended holding times.

The initial and continuing calibrations were within method requirements for requested compounds. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

Pentachlorophenol by SW8041

The samples were extracted and analyzed within recommended holding times.

The initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS and LCSD percent recoveries were within control limits.

Total and Dissolved Metals by SW6010/6020/7470

The samples and associated laboratory QC were digested and analyzed within recommended holding times.

Initial calibrations were within limits.

The fifth ICP-MS continuing calibration verification (CCV) on 5/7/12 was outside the control limits high for chromium and lead. No sample results were associated with this CCV. No corrective action was taken.

The method blanks were clean at the detection limits. The LCS percent recoveries were within control limits.

The matrix spike percent recovery of total nickel fell outside the control limits low for sample **MW-18-042612**. A post digestion spike was performed and the recovery was within control limits. All relevant data have been flagged with an "N" qualifier on the appropriate Form V. No further corrective action was taken.

The matrix spike percent recoveries of total and dissolved silver fell outside the control limits low for sample **MW-14D-043012**. A post digestion spike was performed and recoveries were within control limits. All relevant data have been flagged with an "N" qualifier on the appropriate Form V. No further corrective action was taken.

The duplicate RPD of total nickel was outside the control limit for sample **MW-18-042612**. All relevant data have been flagged with a "*" qualifier on the appropriate Form VI. No further corrective action was taken.

General Chemistry Parameters

The samples and associated laboratory QC were prepared and analyzed within recommended holding times.

The method blanks were clean at the detection limits. The LCS percent recoveries were within control limits.

The SRM percent recoveries were within limits.

The matrix spike percent recoveries and replicate RPDs were within control limits.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: US15
Client: ERM-West
Project Event: 155129.09
Project Name: RG Spring GW Sampling

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW-18-042612	US15A	12-7624	Water	04/26/12 15:18	04/27/12 16:00
2.	MW-3S-042712	US15B	12-7625	Water	04/27/12 08:10	04/27/12 16:00
3.	MW-3D-042712	US15C	12-7626	Water	04/27/12 09:42	04/27/12 16:00
4.	MW-7S-042712	US15D	12-7627	Water	04/27/12 12:54	04/27/12 16:00
5.	MW-10-042712	US15E	12-7628	Water	04/27/12 14:53	04/27/12 16:00
6.	DUP-042712-1	US15F	12-7629	Water	04/27/12 08:00	04/27/12 16:00
7.	MW-18-042612	US15G	12-7630	Water	04/26/12 15:18	04/27/12 16:00
8.	MW-3S-042712	US15H	12-7631	Water	04/27/12 08:10	04/27/12 16:00
9.	MW-3D-042712	US15I	12-7632	Water	04/27/12 09:42	04/27/12 16:00
10.	MW-7S-042712	US15J	12-7633	Water	04/27/12 12:54	04/27/12 16:00
11.	MW-10-042712	US15K	12-7634	Water	04/27/12 14:53	04/27/12 16:00

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: US27
Client: ERM-West
Project Event: 155129.09
Project Name: RG Spring GW Sampling

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW-13-043012	US27A	12-7676	Water	04/30/12 08:54	04/30/12 14:52
2.	DUP-043012-1	US27B	12-7677	Water	04/30/12 07:00	04/30/12 14:52
3.	MW-27-043012	US27C	12-7678	Water	04/30/12 10:46	04/30/12 14:52
4.	MW-26-043012	US27D	12-7679	Water	04/30/12 11:50	04/30/12 14:52
5.	MW-14D-043012	US27E	12-7680	Water	04/30/12 13:01	04/30/12 14:52
6.	TB-043012-1	US27F	12-7681	Water	04/30/12	04/30/12 14:52
7.	MW-13-043012	US27G	12-7682	Water	04/30/12 08:54	04/30/12 14:52
8.	MW-27-043012	US27H	12-7683	Water	04/30/12 10:46	04/30/12 14:52
9.	MW-26-043012	US27I	12-7684	Water	04/30/12 11:50	04/30/12 14:52
10.	MW-14D-043012	US27J	12-7685	Water	04/30/12 13:01	04/30/12 14:52

US15:00017

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Duplicate RPD is not within established control limits

B — Reported value is less than the CRDL but ≥ the Reporting Limit

N — Matrix Spike recovery not within established control limits

NA — Not Applicable, analyte not spiked

H — The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L — Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Flagged value is not within established control limits

B — Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J — Estimated concentration when the value is less than ARI's established reporting limits

D — The spiked compound was not detected due to sample extract dilution

E — Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q — Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

US15 : 00018

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

US15 : 00019

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

US15 : 00029

3/14/12

SURR SOLUTIONS

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1953-4	ABN	100/150	MEOH	07/05/12
B	1917-2	SIM PNA	15/75	ACETONE	05/30/12
C	NA	SIM ABN	25/37.5	MEOH	NA
D	1925-5	LOW PCB	0.2	ACETONE	05/28/12
E	1900-2	HERB	62.5	MEOH	10/06/12
F	1919-5	PCP	12.5	ACETONE	12/09/12
G	1906-3	d8-DIOXANE	100	MEOH	04/30/12
H	1847-2	OP-PEST	25	ACETONE	03/23/12
I	1896-3	LOW S. PNA	1.5	ACETONE	09/22/12
J	1915-4	TBT-PORE	0.125	MECL2	11/23/12
K	1925-4	MED PCB	20	ACETONE	05/28/12
L	1915-3	TBT	2.5	MECL2	11/23/12
M	1888-4	EPH	1500	MECL2	04/04/12
N	1914-2	PCB	2	ACETONE	05/28/12
O	1947-2	TPH	450	MECL2	09/28/12
P	1948-3	HCID	2250	MECL2	09/28/12
Q	NA	EDB	1	MEOH	NA
R	NA	RESIN ACID	250	ACETONE	NA
S	1864-1	PBDE	.5	MEOH	05/21/12
T	1884-2	ALKYL PNA	10	MEOH	07/15/12
U	NA	CONGENER	2.5	ACETONE	NA
V	1925-2	LOW PCP	1.25	ACETONE	12/09/12

US15 00021

3/14/12

LCS SOLUTIONS

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1907-1	PCB 1660	20	ACETONE	11/01/12
2#		BCOC PEST	10	ACETONE	NA
3	1922-2	PEST	01/02/10	ACETONE	12/13/12
4	1922-3	LOW PEST	.1/.2/1	ACETONE	12/13/12
5	1902-4	EPH	1500	MECL2	10/04/12
6	1919-2	PCP	12.5/125	ACETONE	10/15/12
7	1926-2	ABN	100	MEOH	05/31/12
8	1916-2	TBT	2.5	MECL2	11/23/12
9	1918-2	PORE TBT	.125/.25	MECL2	11/23/12
10					
11	1860-4	TPHD	15000	ACETONE	05/12/12
12					
13	1948-1	LOW PCB	2	ACETONE	11/01/12
14					
15	1929-1	SIM PNA	15/75	MEOH	06/21/12
16	1906-4	1,4-DIOXANE	100	MEOH	04/30/12
17	1869-4	1248 PCB	10	ACETONE	06/14/12
18	1927-2	LOW SIM PNA	1.5	ACETONE	06/20/12
19	1931-1	AK103	7500	ACETONE	05/17/12
20	1930-1	PNA	100	ACETONE	06/23/12
21	1943-2	SKY/BHT	100	MEOH	07/27/12
22	1957-1	HERB	04 to 5000	MEOH	04/22/12
23	1887-2	EXTRA PNA	15	ACETONE	08/25/12
24					
25#		DIPHENYL	100	MEOH	NA
26	1951-2	OP-PEST	25	MEOH	03/31/12
27		STEROLS	200	MEOH	NA
28#		ADD. PEST	2	ACETONE	NA
29#		DECANES	100	MEOH	NA

US15-66622

LCS SOLUTIONS

3/14/12

30		EDB/DBCP	0.2	MEOH	NA
31	1944-1	TERPINEOL	100	MEOH	07/27/12
32	NA	GUAIACOL	50-200	ACETONE	NA
33		RETENE	100	MEOH	NA
34	NA	CONGENERS	0.5	ACETONE	NA
35	1875-3	ALKYL PNA A	10	MEOH	07/18/12
36		ALKYL PNA B	10	MEOH	NA
37		CAR/PERY	100	ACETONE	NA
38	1926-3	ABN ACID	200-450	MEOH	06/19/12
39	1853-4	BENZIDINE	500	MEOH	04/30/12
40	1851-3	PBDE	0.5	MEOH	04/22/12
50	1900-1	FULL RESIN	250	ACETONE	08/12/12
51		DDTS	0.01	ACETONE	NA
52		1232 PCB	20	ACETONE	NA
53	1919-1	DALAPON	50	MEOH	08/22/12
54		T-CHLORDANE	10	ACETONE	NA
55		TOXAPHENE	50	ACETONE	NA
56	1952-3	ABN BASE	50-200	MEOH	08/14/12
#=PROJECT SPECIFIC SOLUTION					

US15-66023

DL[1], LOD[2], LOQ[3] and Control Limits Summary
Analysis of Water Samples for PNA
EPA Method 8270 – SIM
ARI Analyses: PNSWLL & PNSWSL

Separatory Funnel (EPA Method 3510C) or Liq-Liq (EPA Method 3520C) Extraction using 500 mL sample with extract concentrated to 0.5 mL final volume. ARI Bench Sheet 3053F or 3054F

LOD Spike level = LOQ = 0.1ppb

Analyte	DL[1] µg/L	LOD[2] µg/L	LOQ[3] µg/L	LCS Control Limit[4,5]	Replicate RPD[6]
Naphthalene	0.020	**0.050**	**0.1**	37 – 100	≤ 40
2-Methylnaphthalene	0.020	**0.050**	**0.1**	34 – 107	≤ 40
Acenaphthylene	0.024	**0.050**	**0.1**	32 – 104	≤ 40
Acenaphthene	0.015	**0.050**	**0.1**	40 – 102	≤ 40
Dibenzofuran	0.016	**0.050**	**0.1**	44 – 104	≤ 40
Fluorene	0.019	**0.050**	**0.1**	43 – 114	≤ 40
Phenanthrene	0.026	**0.050**	**0.1**	43 – 116	≤ 40
Anthracene	0.025	**0.050**	**0.1**	30 – 121	≤ 40
Fluoranthene	0.021	**0.050**	**0.1**	46 – 138	≤ 40
Pyrene	0.028	**0.050**	**0.1**	47 – 124	≤ 40
Benzo(a)anthracene	0.023	**0.050**	**0.1**	38 – 134	≤ 40
Chrysene	0.026	**0.050**	**0.1**	52 – 112	≤ 40
Benzo(b)fluoranthene	0.027	**0.050**	**0.1**	49 – 123	≤ 40
Benzo(k)fluoranthene	0.027	**0.050**	**0.1**	50 – 127	≤ 40
Benzo(a)pyrene	0.059	**0.075**	**0.1**	24 – 118	≤ 40
Indeno(1,2,3-cd)pyrene	0.029	**0.050**	**0.1**	32 – 123	≤ 40
Dibenz(a,h)anthracene	0.042	**0.050**	**0.1**	30 – 127	≤ 40
Benzo(g,h,i)perylene	0.030	**0.050**	**0.1**	26 – 124	≤ 40
1-Methylnaphthalene	0.016	**0.050**	**0.1**	30 – 160[7]	≤ 40
Perylene	0.061	**0.075**	**0.1**	30 – 160[7]	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
2-Methylnapthalene-d_{10}			40 – 110	33 – 107	≤ 40
Dibenzo(a,h)anthracene-d_{14}			33 – 140	**10** – 142	≤ 40

(1) Detection Limit (DL) as defined in ARI SOP 1018S
(2) Limit of Detection (LOD) as defined in ARI SOP 1018S
(3) Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(4) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(5) Control limits calculated using all data from 6/1/10 through 5/31/11.
(6) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(7) Default limits pending generation of historic limits for total benzofluoranthenes and 1-Methylnaphthalene.

US15 : 00024

Chlorinated Phenols
DL, LOD, LOQ and Control Limit Summary [1]
EPA Method 8041A

Analyte	Aqueous Samples [2,3]				Solid Samples [2,4]				RPD [5]
	DL µg/L	LOD µg/L	LOQ µg/L	LCS Recovery [6]	DL µg/kg	LOD µg/kg	LOQ µg/kg	LCS Recovery [6]	
Pentachlorophenol (PCP)	0.085	**0.13**	**0.25**	48 – 116%	0.83	**3.13**	**6.25**	56 – 111%	≤ 40
2,4,6-Trichlorophenol	0.106	**0.13**	**0.25**	30 – 160%	1.21	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,6-Trichlorophenol	0.066	**0.13**	**0.25**	30 – 160%	2.96	**3.13**	**6.25**	30 – 160%	≤ 40
2,4,5-Trichlorophenol	0.077	**0.13**	**0.25**	30 – 160%	2.24	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,4-Trichlorophenol	0.126	**0.13**	**0.25**	30 – 160%	1.67	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,5,6-Tetrachlorophenol	0.091	**0.13**	**0.25**	30 – 160%	1.61	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,4,5-Tetrachlorophenol	0.077	**0.13**	**0.25**	30 – 160%	1.26	**3.13**	**6.25**	30 – 160%	≤ 40
2,4-Dichlorophenol	1.510	**3.0**	**6.0**	30 – 160%	16.6	**31.3**	**62.5**	30 – 160%	≤ 40
Pentachlorophenol (PCP)(low level prep)	0.014 [7]	**0.013**	**0.025**	36 – 159%					≤ 40
Surrogate % Recovery	**MB / LCS**	**Sample**			**MB / LCS**	**Sample**			
2,4,6-Tribromophenol	41 – 98	26 – 113			39 – 99	**10** – 129 [8]			≤ 40
2,4,6-Tribromophenol (low level preparation)	33 – 151	**10** – 181 [8]							≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation as defined in ARI SOP 1018S
(2) Control limits calculated using all data from 1/1/10 through 8/1/11.
(3) Separatory funnel extraction (EPA Method 3510C) 500 mL sample to 50 mL final volume (5 mL for low level Prep)
(4) Microwave assisted extraction (EPA Method 3546) 10 g sample to 25 mL final volume
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(6) 30 – 160 are default values used when there is insufficient data to calculate historic control limits.
(7) MDL study QS97 (4/30/10)
(8) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.

US15 : 00025

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C, Bench Sheet 3006F) or Separatory Funnel (EPA method 3510C, Bench Sheet 3010F) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
Phenol	0.445	0.5	1	26 – 112	≤ 40
Bis(2-Chloroethyl)ether	0.257	0.5	1	51 – 100	≤ 40
2-Chlorophenol	0.246	0.5	1	50 – 100	≤ 40
1,3-Dichlorobenzene	0.499	0.5	1	27 – 100	≤ 40
1,4-Dichlorobenzene	0.470	0.5	1	29 – 100	≤ 40
1,2-Dichlorobenzene	0.436	0.5	1	32 – 100	≤ 40
Benzyl alcohol	0.409	1.0	2	10 - 128	≤ 40
2,2'-oxybis(1-Chloropropane)	0.221	0.5	1	39 - 101	≤ 40
2-Methylphenol	0.329	0.5	1	47 – 100	≤ 40
Hexachloroethane	0.610	1.0	2	19 – 100	≤ 40
N-Nitroso-di-n-propylamine	0.365	0.5	1	46 – 100	≤ 40
4-Methylphenol	0.536	1.0	2	46 – 100	≤ 40
Nitrobenzene	0.490	0.5	1	46 – 103	≤ 40
Isophorone	0.258	0.5	1	62 – 105	≤ 40
2-Nitrophenol	0.979	1.5	3	32 – 116	≤ 40
2,4-Dimethylphenol	0.627	1.5	3	15 – 100	≤ 40
Bis(2-Chloroethoxy)methane	0.252	0.5	1	44 – 100	≤ 40
2,4-Dichlorophenol	1.109	1.5	3	35 – 114	≤ 40
1,2,4-Trichlorobenzene	0.495	0.5	1	34 – 100	≤ 40
Naphthalene	0.326	0.5	1	48 – 100	≤ 40
Benzoic acid	8.647	10	20	10 - 172	≤ 40
4-Chloroaniline	1.733	2.5	5	10 - 153	≤ 40
2,6-Dinitrotoluene	1.300	1.5	3	32 – 129	≤ 40
Hexachlorobutadiene	0.604	1.5	3	22 – 100	≤ 40
4-Chloro-3-methylphenol	0.919	1.5	3	33 – 123	≤ 40
Hexachlorocyclopentadiene	1.862	2.5	5	10 – 100	≤ 40
2,4,6-Trichlorophenol	1.235	1.5	3	37 – 120	≤ 40
2,4,5-Trichlorophenol	1.706	2.5	5	37 – 124	≤ 40
2-Chloronaphthalene	0.340	0.5	1	49 – 100	≤ 40
2-Nitroaniline	0.784	1.5	3	18 – 140	≤ 40
Acenaphthylene	0.274	0.5	1	47 – 110	≤ 40
Dimethylphthalate	0.264	0.5	1	60 – 106	≤ 40
Acenaphthene	0.347	0.5	1	55 – 101	≤ 40

US15 00026

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C, Bench Sheet 3006F) or Separatory Funnel (EPA method 3510C, Bench Sheet 3010F) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
3-Nitroaniline	1.140	1.5	3	10 – 208	≤ 40
2-Methylnaphthalene	0.241	0.5	1	38 – 100	≤ 40
2,4-Dinitrophenol	5.474	10	20	10 – 224	≤ 40
Dibenzofuran	0.198	0.5	1	46 – 108	≤ 40
4-Nitrophenol	2.895	5.0	10	10 – 103	≤ 40
2,4-Dinitrotoluene	1.277	1.5	3	33 – 134	≤ 40
Fluorene	0.266	0.5	1	59 – 108	≤ 40
4-Chlorophenyl-phenylether	0.342	0.5	1	54 – 104	≤ 40
Diethylphthalate	0.407	0.5	1	60 - 108	≤ 40
4-Nitroaniline	1.366	1.5	3	13 – 144	≤ 40
4,6-Dinitro-2-methylphenol	4.928	5.0	10	10 – 190	≤ 40
N-Nitrosodiphenylamine	0.392	0.5	1	39 – 100	≤ 40
4-Bromophenyl-phenylether	0.262	0.5	1	56 – 105	≤ 40
Hexachlorobenzene	0.335	0.5	1	54 – 108	≤ 40
Pentachlorophenol	2.746	5.0	10	25 – 144	≤ 40
Phenanthrene	0.283	0.5	1	64 – 115	≤ 40
Anthrcene	0.303	0.5	1	59 – 107	≤ 40
Carbazole	0.251	0.5	1	36 – 123	≤ 40
Di-n-butylphthalate	0.304	0.5	1	62 – 110	≤ 40
Fluoranthene	0.290	0.5	1	63 – 119	≤ 40
Pyrene	0.379	0.5	1	57 – 117	≤ 40
Butylbenzylphthalate	0.402	0.5	1	49 – 118	≤ 40
Benzo(a)anthracene	0.373	0.5	1	61 – 113	≤ 40
3,3'-Dichlorobenzidine	1.553	2.5	5	10 – 151	≤ 40
Chrysene	0.397	0.5	1	62 – 115	≤ 40
bis(2-Ethylhexyl)phthalate	1.050	1.5	3	47 – 127	≤ 40
Di-n-octylphthalate	0.331	0.5	1	60 – 106	≤ 40
Benzo(b)fluoranthene	0.298	0.5	1	61 – 120	≤ 40
Benzo(k)fluoranthene	0.487	0.5	1	59 – 120	≤ 40
Benzo(a)pyrene	0.425	0.5	1	46 – 105	≤ 40
Indeno(1,2,3-cd)pyrene	0.435	0.5	1	42 – 134	≤ 40
Dibenzo(a,h)anthracene	0.437	0.5	1	46 – 132	≤ 40
Benzo(g,h,i)perylene	0.464	0.5	1	33 – 135	≤ 40
N-Nitrosodimethylamine	1.209	1.5	3	17 - 106	≤ 40

US15 : 00027

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C, Bench Sheet 3006F) or Separatory Funnel (EPA method 3510C, Bench Sheet 3010F) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
Aniline	**0.470**	**0.5**	**1**	**10** – 113	≤ 40
1-methylnaphthalene	**0.199**	**0.5**	**1**	43 – **100**	≤ 40
Azobenzene (1,2-DP-Hydrazine)	**0.214**	**0.5**	**1**	52 - 111	≤ 40
Benzofluoranthenes, Total	**2.317**	**2.5**	**5**		≤ 40
1,4-Dioxane[5]				13 – 114	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
2-Fluorophenol			33 – 100	23 – **100**	≤ 40
Phenol-d_5			15 - 121	16 – 106	≤ 40
2-Chlorophenol-d_4			46 – 102	33 – 100	≤ 40
1,2-Dichlorobenzene-d_4			40 – **100**	27 – **100**	≤ 40
Nitrobenzene-d_5			50 – **100**	34 – 101	≤ 40
2-Fluorobiphenyl			51 – **100**	38 – **100**	≤ 40
2,4,6-Tribromophenol			46 – 125	31 – 128	≤ 40
p-Terphenyl-d_{14}			54 – 117	27 – 122	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Control limits calculated using all data from 8/1/10 through 7/31/11.
(3) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(5) Sample extracts for 1,4-Dioxane analysis are concentrated to 1 mL.

US15 : 00028

Quality Control Parameters for Metals Analysis using ICP-MS

Analyte	Mass	Aqueous Samples[2]			Spike Recovery		RPD[4]	Solids[3]
		DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ[1] mg/kg
Aluminum	27	1.601	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Antimony	121	0.010	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
	123	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #1	75	0.048	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #2	75	0.092	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Barium	135	0.020	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	137	0.019	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Beryllium	9	0.021	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Cadmium	111	0.010	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
	114	0.005	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Calcium	43	3.983	25	**50.0**	75 – 125	80 – 120	≤ 20	**50.0**
Chromium	52	0.045	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	53	0.118	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Cobalt	59	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Copper	63	0.158	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	65	0.236	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Iron	54	5.753	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
	57	3.876	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Lead	208	0.046	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Magnesium	24	0.297	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Manganese	55	0.022	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Molybdenum	98	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Nickel	60	0.079	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	62	0.089	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Potassium	39	2.944	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Selenium	82	0.127	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	78	0.324	0.25	**2.0**	75 – 125	80 – 120	≤ 20	**2.0**
Silver	107	0.008	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Sodium	23	2.833	50	**100.0**	75 – 125	80 – 120	≤ 20	**100.0**
Thorium[5]	232	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Thallium	205	0.004	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Uranium[5]	238	0.003	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Vanadium	51	0.043	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Zinc	66	0.497	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	67	0.531	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	68	0.524	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(5) ARI has no accreditation for these elements.

US15 00025

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Quality Control Parameters for Metals Analysis using ICP-OES

	Aqueous Samples[2]			Spike Recovery		RPD[5]	Solids[3]	Tissue[4]
Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ mg/kg	LOQ mg/kg
Aluminum	7.57	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Antimony	6.28	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Arsenic	3.33	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Barium	1.33	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Beryllium	0.16	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Boron	7.39	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Cadmium	0.18	0.5	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Calcium	11.27	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Chromium	1.24	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Cobalt	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Copper	0.92	1.0	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Iron	7.50	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Lead	1.55	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Magnesium	9.61	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Manganese	0.28	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Molybdenum	0.79	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Nickel	3.86	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Potassium	65.70	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Selenium	4.99	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Silicon	8.17	30	**60**	75 – 125	80 – 120	≤ 20	**(6)**	**(6)**
Silver	0.43	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Sodium	11.35	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Strontium	0.09	1.0	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Thallium	3.10	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Tin	1.41	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Titanium	2.11	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.01**
Vanadium	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Zinc	1.45	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Tissue is reported on an "as received" (wet weight) basis using 2.5 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(6) ARI does not analyze for Silicon in solids or tissue samples

US15 : 00030

Quality Control Parameters for Mercury Analysis using CVAA

	Aqueous Samples[2]			Spike Recovery		RPD[5]
	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS	
Mercury	0.0069	0.05	**0.10**[2]	75 – 125	80 – 120	≤ 20
Mercury (low level)	0.0026	0.01	**0.02**[3]	75 – 125	80 – 120	≤ 20
	Soil / Sediment / Tissue[4] Samples			**Spike Recovery**		**RPD[5]**
	DL[1] mg/kg	**LOD[1] mg/kg**	**LOQ[1] mg/kg**	**Matrix Spike**	**LCS**	
Mercury	0.0021	0.0125	**0.025**[3,4]	75 – 125	80 – 120	≤ 20

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 20 mL sample with 20 mL final volume
(3) 0.2 g sample with 50 mL final volume assuming 100% dry weight. Soil and sediment are reported on a dry weight basis.
(4) Tissue LOQ is 0.005 mg/kg as received (wet weight) based on 1 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

US15 : 00031

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Conventional Wet Chemistry

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

US15 00032

Volatile Analysis
Report and Summary QC Forms

ARI Job ID: US15, US27

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW-13-043012**
Page 1 of 2 **SAMPLE**

Lab Sample ID: US27A
LIMS ID: 12-7676
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/01/12 18:17

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.6**	
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW-13-043012**
Page 2 of 2 **SAMPLE**

Lab Sample ID: US27A
LIMS ID: 12-7676
Matrix: Water
Date Analyzed: 05/01/12 18:17

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U
1634-04-4	Methyl tert-Butyl Ether	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	105%
Bromofluorobenzene	99.0%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TB-043012-1**
Page 1 of 2 **Trip Blanks**

Lab Sample ID: US27F
LIMS ID: 12-7681
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling 155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/01/12 18:44

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	**Methylene Chloride**	**1.0**	**0.6**	**J**
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TB-043012-1**
 Trip Blanks

Lab Sample ID: US27F
LIMS ID: 12-7681
Matrix: Water
Date Analyzed: 05/01/12 18:44

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U
1634-04-4	Methyl tert-Butyl Ether	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	102%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-050112A	Method Blank	10	112%	104%	99.9%	100%	0
LCS-050112A	Lab Control	10	110%	107%	98.4%	101%	0
LCSD-050112A	Lab Control Dup	10	106%	108%	99.7%	101%	0
US27A	MW-13-043012	10	116%	105%	99.0%	102%	0
US27F	TB-043012-1	10	116%	102%	96.5%	103%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	80-120	80-120
(TOL) = d8-Toluene	80-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120

Prep Method: SW5030B
Log Number Range: 12-7676 to 12-7681

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-050112A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-050112A
LIMS ID: 12-7676
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/01/12 11:02
LCSD: 05/01/12 11:28

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.8	10.0	98.0%	9.8	10.0	98.0%	0.0%
Bromomethane	8.7	10.0	87.0%	9.0	10.0	90.0%	3.4%
Vinyl Chloride	9.4	10.0	94.0%	9.4	10.0	94.0%	0.0%
Chloroethane	8.5	10.0	85.0%	8.6	10.0	86.0%	1.2%
Methylene Chloride	10.1	10.0	101%	10.1	10.0	101%	0.0%
Acetone	52.0	50.0	104%	52.7	50.0	105%	1.3%
Carbon Disulfide	10.0	10.0	100%	10.1	10.0	101%	1.0%
1,1-Dichloroethene	9.3	10.0	93.0%	9.5	10.0	95.0%	2.1%
1,1-Dichloroethane	9.8	10.0	98.0%	9.6	10.0	96.0%	2.1%
trans-1,2-Dichloroethene	9.1	10.0	91.0%	9.0	10.0	90.0%	1.1%
cis-1,2-Dichloroethene	9.3	10.0	93.0%	9.2	10.0	92.0%	1.1%
Chloroform	9.8	10.0	98.0%	9.6	10.0	96.0%	2.1%
1,2-Dichloroethane	10.8	10.0	108%	10.8	10.0	108%	0.0%
2-Butanone	49.6	50.0	99.2%	48.7	50.0	97.4%	1.8%
1,1,1-Trichloroethane	10.2	10.0	102%	10.1	10.0	101%	1.0%
Carbon Tetrachloride	10.7	10.0	107%	11.0	10.0	110%	2.8%
Vinyl Acetate	10.0	10.0	100%	9.6	10.0	96.0%	4.1%
Bromodichloromethane	10.7	10.0	107%	10.8	10.0	108%	0.9%
1,2-Dichloropropane	9.9	10.0	99.0%	10.0	10.0	100%	1.0%
cis-1,3-Dichloropropene	11.1	10.0	111%	11.2	10.0	112%	0.9%
Trichloroethene	9.5	10.0	95.0%	9.7	10.0	97.0%	2.1%
Dibromochloromethane	10.2	10.0	102%	10.2	10.0	102%	0.0%
1,1,2-Trichloroethane	10.4	10.0	104%	10.5	10.0	105%	1.0%
Benzene	9.4	10.0	94.0%	9.5	10.0	95.0%	1.1%
trans-1,3-Dichloropropene	11.4	10.0	114%	11.4	10.0	114%	0.0%
2-Chloroethylvinylether	9.9	10.0	99.0%	10.4	10.0	104%	4.9%
Bromoform	11.4 Q	10.0	114%	11.3 Q	10.0	113%	0.9%
4-Methyl-2-Pentanone (MIBK)	55.7	50.0	111%	58.2	50.0	116%	4.4%
2-Hexanone	54.2	50.0	108%	55.6	50.0	111%	2.6%
Tetrachloroethene	9.4 B	10.0	94.0%	9.7 B	10.0	97.0%	3.1%
1,1,2,2-Tetrachloroethane	9.3	10.0	93.0%	9.4	10.0	94.0%	1.1%
Toluene	9.8	10.0	98.0%	10.3	10.0	103%	5.0%
Chlorobenzene	9.0	10.0	90.0%	9.3	10.0	93.0%	3.3%
Ethylbenzene	9.3	10.0	93.0%	9.5	10.0	95.0%	2.1%
Styrene	9.2	10.0	92.0%	9.7	10.0	97.0%	5.3%
Trichlorofluoromethane	10.4	10.0	104%	10.8	10.0	108%	3.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.9	10.0	99.0%	10.0	10.0	100%	1.0%
m,p-Xylene	18.5	20.0	92.5%	19.2	20.0	96.0%	3.7%
o-Xylene	9.1	10.0	91.0%	9.5	10.0	95.0%	4.3%
1,2-Dichlorobenzene	8.5	10.0	85.0%	8.9	10.0	89.0%	4.6%
1,3-Dichlorobenzene	8.6	10.0	86.0%	8.9	10.0	89.0%	3.4%
1,4-Dichlorobenzene	8.5	10.0	85.0%	8.8	10.0	88.0%	3.5%
Acrolein	45.5	50.0	91.0%	43.3	50.0	86.6%	5.0%
Methyl Iodide	9.7	10.0	97.0%	9.6	10.0	96.0%	1.0%
Bromoethane	9.4	10.0	94.0%	9.5	10.0	95.0%	1.1%
Acrylonitrile	10.3	10.0	103%	10.0	10.0	100%	3.0%
1,1-Dichloropropene	9.9	10.0	99.0%	10.2	10.0	102%	3.0%
Dibromomethane	10.5	10.0	105%	10.3	10.0	103%	1.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-050112A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-050112A QC Report No: US27-ERM-West
LIMS ID: 12-7676 Project: RG Spring GW Sampling
Matrix: Water 155129.09

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	9.5	10.0	95.0%	9.7	10.0	97.0%	2.1%
1,2-Dibromo-3-chloropropane	9.6	10.0	96.0%	10.0	10.0	100%	4.1%
1,2,3-Trichloropropane	9.5	10.0	95.0%	9.8	10.0	98.0%	3.1%
trans-1,4-Dichloro-2-butene	9.6	10.0	96.0%	9.0	10.0	90.0%	6.5%
1,3,5-Trimethylbenzene	9.5	10.0	95.0%	9.8	10.0	98.0%	3.1%
1,2,4-Trimethylbenzene	9.5	10.0	95.0%	9.8	10.0	98.0%	3.1%
Hexachlorobutadiene	10.2 B	10.0	102%	9.9 B	10.0	99.0%	3.0%
Ethylene Dibromide	10.4	10.0	104%	10.4	10.0	104%	0.0%
Bromochloromethane	9.8	10.0	98.0%	9.6	10.0	96.0%	2.1%
2,2-Dichloropropane	10.2	10.0	102%	10.3	10.0	103%	1.0%
1,3-Dichloropropane	9.8	10.0	98.0%	9.8	10.0	98.0%	0.0%
Isopropylbenzene	9.8	10.0	98.0%	9.9	10.0	99.0%	1.0%
n-Propylbenzene	9.3	10.0	93.0%	9.6	10.0	96.0%	3.2%
Bromobenzene	9.1	10.0	91.0%	9.1	10.0	91.0%	0.0%
2-Chlorotoluene	9.1	10.0	91.0%	9.4	10.0	94.0%	3.2%
4-Chlorotoluene	9.2	10.0	92.0%	9.4	10.0	94.0%	2.2%
tert-Butylbenzene	9.8	10.0	98.0%	10.1	10.0	101%	3.0%
sec-Butylbenzene	9.6	10.0	96.0%	9.9	10.0	99.0%	3.1%
4-Isopropyltoluene	9.9	10.0	99.0%	10.1	10.0	101%	2.0%
n-Butylbenzene	9.6	10.0	96.0%	9.8	10.0	98.0%	2.1%
1,2,4-Trichlorobenzene	8.5 B	10.0	85.0%	8.8 B	10.0	88.0%	3.5%
Naphthalene	8.2	10.0	82.0%	8.8	10.0	88.0%	7.1%
1,2,3-Trichlorobenzene	8.5 B	10.0	85.0%	8.9 B	10.0	89.0%	4.6%
Methyl tert-Butyl Ether	9.7	10.0	97.0%	9.7	10.0	97.0%	0.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	110%	106%
d8-Toluene	107%	108%
Bromofluorobenzene	98.4%	99.7%
d4-1,2-Dichlorobenzene	101%	101%

US15:00040

4A
VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0501

Lab Name: ANALYTICAL RESOURCES INC
Client: ERM-WEST

ARI Job No: US27
Project: RG SPRING GW SAMPLING

Lab File ID: MB0501
Lab Sample ID: MB0501

Date Analyzed: 05/01/12
Time Analyzed: 1155

Instrument ID: NT2
Heated Purge: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0501	LCS0501	LCS0501	1102
02	LCS0501	LCS0501	LCS0501A	1128
03	MW-13-043012	US27A	US27A	1817
04	TB-043012-1	US27F	US27F	1844
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-050112A**
Page 1 of 2 **METHOD BLANK**

Lab Sample ID: MB-050112A
LIMS ID: 12-7676
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling 155129.09
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/01/12 11:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.2**	**0.1**	**J**
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-050112A**
 METHOD BLANK

Lab Sample ID: MB-050112A
LIMS ID: 12-7676
Matrix: Water
Date Analyzed: 05/01/12 11:55

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	**Hexachlorobutadiene**	**0.5**	**0.2**	**J**
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	**1,2,4-Trichlorobenzene**	**0.5**	**0.1**	**J**
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	**1,2,3-Trichlorobenzene**	**0.5**	**0.2**	**J**
1634-04-4	Methyl tert-Butyl Ether	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	104%
Bromofluorobenzene	99.9%
d4-1,2-Dichlorobenzene	100%

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES INC Contract: ERM-WEST

Lab Code: ARI Case No.: RG SPRING GW SAMPLING SDG No.: US27

Lab File ID: BFB0416A BFB Injection Date: 04/16/12

Instrument ID: NT2 BFB Injection Time: 1107

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	19.9	
75	30.0 - 60.0% of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0)1
174	50.0 - 100.0% of mass 95	72.9	
175	5.0 - 9.0% of mass 174	5.5	(7.5)1
176	95.0 - 101.0% of mass 174	70.6	(96.8)1
177	5.0 - 9.0% of mass 176	4.3	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.2	VSTD0.2	0020416	04/16/12	1228
02	VSTD0.5	VSTD0.5	0050416	04/16/12	1254
03	VSTD01	VSTD01	0100416	04/16/12	1321
04	VSTD10	VSTD10	1000416	04/16/12	1414
05	VSTD20	VSTD20	2000416	04/16/12	1441
06	VSTD40	VSTD40	4000416	04/16/12	1507
07	VSTD60	VSTD60	6000416	04/16/12	1533
08	VSTD02	VSTD02	0200416A	04/16/12	1627
09	ICV10	ICV10	ICV0416	04/16/12	1653
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES INC Contract: ERM-WEST

Lab Code: ARI Case No.: RG SPRING GW SAMPLING SDG No.: US27

Lab File ID: BFB0501 BFB Injection Date: 05/01/12

Instrument ID: NT2 BFB Injection Time: 0957

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	52.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.1 (0.1)1
174	50.0 - 100.0% of mass 95	72.6
175	5.0 - 9.0% of mass 174	4.3 (5.9)1
176	95.0 - 101.0% of mass 174	69.1 (95.2)1
177	5.0 - 9.0% of mass 176	4.5 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0501	CC0501	CC0501	05/01/12	1035
02	LCS0501	LCS0501	LCS0501	05/01/12	1102
03	LCS0501	LCS0501	LCS0501A	05/01/12	1128
04	MB0501	MB0501	MB0501	05/01/12	1155
05	MW-13-043012	US27A	US27A	05/01/12	1817
06	TB-043012-1	US27F	US27F	05/01/12	1844
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US15:00645

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF0.2: 0020416 RF0.5: 0050416 RF1: 0100416
RF2: 0200416A RF10: 1000416

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF10
Chloromethane		1.227	1.222	1.198	1.067
Vinyl Chloride	1.142	1.128	1.091	1.091	1.014
Bromomethane		0.542	0.521	0.553	0.483
Chloroethane	0.807	0.728	0.557	0.635	0.568
Trichlorofluoromethane	0.888	0.911	0.858	0.898	0.840
Acrolein		0.100	0.100	0.103	0.094
112Trichloro122Trifluoroetha	0.693	0.755	0.742	0.730	0.655
Acetone			0.185	0.148	0.117
1,1-Dichloroethene	0.761	0.706	0.792	0.762	0.672
Bromoethane	0.484	0.580	0.585	0.570	0.514
Iodomethane	1.108	1.095	1.117	1.088	1.006
Methylene Chloride		1.528	1.230	1.019	0.784
Acrylonitrile		0.178	0.166	0.182	0.165
Carbon Disulfide	2.738	2.568	2.872	2.818	2.622
Trans-1,2-Dichloroethene	0.805	0.844	0.848	0.816	0.724
Vinyl Acetate		0.620	0.682	0.735	0.691
1,1-Dichloroethane	1.463	1.519	1.540	1.553	1.392
2-Butanone		0.167	0.176	0.183	0.170
2,2-Dichloropropane	0.858	0.886	0.842	0.911	0.834
Cis-1,2-Dichloroethene	0.704	0.816	0.769	0.802	0.748
Chloroform	1.253	1.278	1.277	1.316	1.231
Bromochloromethane	0.271	0.297	0.306	0.302	0.287
1,1,1-Trichloroethane	0.996	1.090	0.996	1.069	1.026
1,1-Dichloropropene	0.565	0.611	0.592	0.647	0.627
Carbon Tetrachloride	0.497	0.515	0.435	0.514	0.488
1,2-Dichloroethane	0.416	0.476	0.450	0.484	0.451
Benzene	1.882	1.855	1.660	1.918	1.764
Trichloroethene	0.363	0.395	0.351	0.389	0.364
1,2-Dichloropropane	0.418	0.386	0.406	0.409	0.394
Bromodichloromethane	0.360	0.430	0.430	0.452	0.448
Dibromomethane	0.178	0.177	0.163	0.183	0.177
2-Chloroethyl Vinyl Ether			0.105	0.121	0.121
4-Methyl-2-Pentanone		0.086	0.076	0.103	0.101
Cis 1,3-dichloropropene	0.406	0.408	0.411	0.490	0.499
Toluene	0.887	0.862	0.818	0.963	0.901
Trans 1,3-Dichloropropene	0.354	0.319	0.340	0.388	0.385
2-Hexanone		0.132	0.145	0.165	0.160

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF0.2: 0020416 RF0.5: 0050416 RF1: 0100416
RF2: 0200416A RF10: 1000416

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF10
1,1,2-Trichloroethane	0.185	0.209	0.206	0.216	0.206
1,3-Dichloropropane	0.433	0.432	0.460	0.489	0.486
Tetrachloroethene	0.358	0.433	0.387	0.414	0.416
Chlorodibromomethane	0.223	0.230	0.240	0.253	0.284
1,2-Dibromoethane	0.199	0.173	0.185	0.203	0.194
Chlorobenzene	0.976	1.073	1.045	1.093	1.061
Ethyl Benzene	0.483	0.542	0.559	0.592	0.623
1,1,1,2-Tetrachloroethane	0.313	0.381	0.360	0.396	0.406
m,p-xylene	0.592	0.664	0.689	0.753	0.781
o-Xylene	0.554	0.711	0.674	0.803	0.824
Styrene	0.806	0.943	0.976	1.133	1.238
Bromoform	0.162	0.193	0.207	0.230	0.248
1,1,2,2-Tetrachloroethane	0.528	0.580	0.618	0.604	0.617
1,2,3-Trichloropropane		0.151	0.167	0.166	0.169
Trans-1,4-Dichloro 2-Butene			0.168	0.160	0.166
N-Propyl Benzene	3.104	3.414	3.801	3.865	3.931
Bromobenzene	0.634	0.683	0.699	0.711	0.699
Isopropyl Benzene	2.336	2.635	2.765	3.279	3.447
2-Chloro Toluene	2.122	2.469	2.714	2.816	2.841
4-Chloro Toluene	1.938	2.088	2.413	2.536	2.476
T-Butyl Benzene	1.503	1.768	2.110	2.279	2.448
1,3,5-Trimethyl Benzene	2.001	2.332	2.634	2.814	2.971
1,2,4-Trimethylbenzene	1.854	2.290	2.601	2.888	2.946
S-Butyl Benzene	2.471	2.983	3.264	3.599	3.690
4-Isopropyl Toluene	1.732	2.324	2.491	2.820	2.971
1,3-Dichlorobenzene	1.311	1.498	1.486	1.568	1.502
1,4-Dichlorobenzene	1.443	1.544	1.549	1.634	1.530
N-Butyl Benzene	2.195	2.348	2.401	2.778	2.857
1,2-Dichlorobenzene	1.353	1.503	1.376	1.518	1.442
1,2-Dibromo 3-Chloropropane		0.095	0.081	0.101	0.099
1,2,4-Trichlorobenzene	0.852	0.848	0.770	0.977	0.946
Hexachloro 1,3-Butadiene		0.441	0.391	0.464	0.426
Naphthalene		1.070	1.186	1.487	1.531
1,2,3-Trichlorobenzene		0.653	0.639	0.799	0.729
Dichlorodifluoromethane	0.705	0.741	0.773	0.773	0.711
Methyl tert butyl ether	1.754	1.942	1.969	2.044	1.892

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF0.2: 0020416 RF0.5: 0050416 RF1: 0100416
RF2: 0200416A RF10: 1000416

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF10
d4-1,2-Dichloroethane	0.631	0.615	0.640	0.629	0.610
d8-Toluene	1.184	1.173	1.119	1.204	1.201
4-Bromofluorobenzene	0.589	0.587	0.563	0.577	0.620
d4-1,2-Dichlorobenzene	0.936	0.928	0.884	0.924	0.915
Dibromofluoromethane	0.592	0.588	0.580	0.579	0.565

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF20: 2000416 RF40: 4000416 RF60: 6000416

COMPOUND	RF20	RF40	RF60
Chloromethane	1.056	0.983	0.913
Vinyl Chloride	0.984	0.964	0.898
Bromomethane	0.446	0.418	0.380
Chloroethane	0.509	0.404	
Trichlorofluoromethane	0.807	0.795	0.721
Acrolein	0.094	0.094	0.090
112Trichloro122Trifluoroetha	0.626	0.610	0.566
Acetone	0.121	0.121	0.116
1,1-Dichloroethene	0.622	0.582	0.577
Bromoethane	0.503	0.487	0.455
Iodomethane	0.989	0.952	0.866
Methylene Chloride	0.791	0.761	0.706
Acrylonitrile	0.174	0.177	0.172
Carbon Disulfide	2.439	2.208	2.176
Trans-1,2-Dichloroethene	0.745	0.723	0.677
Vinyl Acetate	0.764	0.815	0.851
1,1-Dichloroethane	1.390	1.368	1.298
2-Butanone	0.171	0.174	0.179
2,2-Dichloropropane	0.801	0.759	0.699
Cis-1,2-Dichloroethene	0.731	0.719	0.685
Chloroform	1.194	1.162	1.116
Bromochloromethane	0.278	0.270	0.263
1,1,1-Trichloroethane	0.989	0.961	0.913
1,1-Dichloropropene	0.600	0.587	0.552
Carbon Tetrachloride	0.466	0.450	0.411
1,2-Dichloroethane	0.430	0.425	0.410
Benzene	1.662	1.611	1.511
Trichloroethene	0.346	0.342	0.334
1,2-Dichloropropane	0.378	0.381	0.385
Bromodichloromethane	0.439	0.442	0.448
Dibromomethane	0.166	0.165	0.166
2-Chloroethyl Vinyl Ether	0.126	0.139	0.158
4-Methyl-2-Pentanone	0.098	0.096	0.096
Cis 1,3-dichloropropene	0.492	0.517	0.545
Toluene	0.849	0.868	0.869
Trans 1,3-Dichloropropene	0.389	0.402	0.423
2-Hexanone	0.158	0.159	0.166

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF20: 2000416 RF40: 4000416 RF60: 6000416

COMPOUND	RF20	RF40	RF60
1,1,2-Trichloroethane	0.198	0.208	0.220
1,3-Dichloropropane	0.478	0.480	0.500
Tetrachloroethene	0.395	0.368	0.354
Chlorodibromomethane	0.277	0.288	0.289
1,2-Dibromoethane	0.185	0.198	0.212
Chlorobenzene	1.002	0.982	0.959
Ethyl Benzene	0.566	0.561	0.537
1,1,1,2-Tetrachloroethane	0.400	0.379	0.348
m,p-xylene	0.721	0.665	0.628
o-Xylene	0.777	0.726	0.690
Styrene	1.165	1.153	1.132
Bromoform	0.278	0.285	
1,1,2,2-Tetrachloroethane	0.599	0.622	0.638
1,2,3-Trichloropropane	0.164	0.162	0.165
Trans-1,4-Dichloro 2-Butene	0.166	0.177	0.185
N-Propyl Benzene	3.803	3.740	3.690
Bromobenzene	0.686	0.669	0.706
Isopropyl Benzene	3.374	3.205	3.249
2-Chloro Toluene	2.757	2.765	2.743
4-Chloro Toluene	2.353	2.467	2.502
T-Butyl Benzene	2.403	2.318	2.341
1,3,5-Trimethyl Benzene	2.867	2.801	2.698
1,2,4-Trimethylbenzene	2.796	2.726	2.749
S-Butyl Benzene	3.594	3.373	3.363
4-Isopropyl Toluene	2.860	2.809	2.724
1,3-Dichlorobenzene	1.474	1.437	1.412
1,4-Dichlorobenzene	1.459	1.439	1.420
N-Butyl Benzene	2.775	2.645	2.585
1,2-Dichlorobenzene	1.364	1.307	1.301
1,2-Dibromo 3-Chloropropane	0.096	0.093	0.097
1,2,4-Trichlorobenzene	0.965	0.864	0.828
Hexachloro 1,3-Butadiene	0.410	0.382	0.359
Naphthalene	1.519	1.392	1.413
1,2,3-Trichlorobenzene	0.703	0.620	0.610
Dichlorodifluoromethane	0.700	0.648	0.621
Methyl tert butyl ether	1.842	1.838	1.748

US15:00050

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF20: 2000416 RF40: 4000416 RF60: 6000416

COMPOUND	RF20	RF40	RF60
d4-1,2-Dichloroethane	0.600	0.596	0.605
d8-Toluene	1.179	1.212	1.261
4-Bromofluorobenzene	0.576	0.579	0.563
d4-1,2-Dichlorobenzene	0.903	0.873	0.866
Dibromofluoromethane	0.564	0.557	0.542

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
Chloromethane	AVRG	1.095	11.3
Vinyl Chloride	AVRG	1.039	8.4
Bromomethane	AVRG	0.478	13.8
Chloroethane	2ORDR		0.9996
Trichlorofluoromethane	AVRG	0.840	7.6
Acrolein	AVRG	0.096	4.8
112Trichloro122Trifluoroetha	AVRG	0.672	10.3
Acetone	LINR		0.9987
1,1-Dichloroethene	AVRG	0.684	12.4
Bromoethane	AVRG	0.522	9.5
Iodomethane	AVRG	1.028	8.7
Methylene Chloride	LINR		0.9963
Acrylonitrile	AVRG	0.173	3.6
Carbon Disulfide	AVRG	2.555	10.3
Trans-1,2-Dichloroethene	AVRG	0.773	8.2
Vinyl Acetate	AVRG	0.737	10.9
1,1-Dichloroethane	AVRG	1.440	6.4
2-Butanone	AVRG	0.174	3.2
2,2-Dichloropropane	AVRG	0.824	8.4
Cis-1,2-Dichloroethene	AVRG	0.747	6.2
Chloroform	AVRG	1.228	5.4
Bromochloromethane	AVRG	0.284	5.6
1,1,1-Trichloroethane	AVRG	1.005	5.6
1,1-Dichloropropene	AVRG	0.598	5.2
Carbon Tetrachloride	AVRG	0.472	8.0
1,2-Dichloroethane	AVRG	0.443	6.2
Benzene	AVRG	1.733	8.4
Trichloroethene	AVRG	0.361	6.1
1,2-Dichloropropane	AVRG	0.395	3.7
Bromodichloromethane	AVRG	0.431	6.9
Dibromomethane	AVRG	0.172	4.3
2-Chloroethyl Vinyl Ether	AVRG	0.128	14.2
4-Methyl-2-Pentanone	AVRG	0.094	10.0
Cis 1,3-dichloropropene	AVRG	0.471	11.6
Toluene	AVRG	0.877	4.8
Trans 1,3-Dichloropropene	AVRG	0.375	9.2
2-Hexanone	AVRG	0.155	8.0

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
1,1,2-Trichloroethane	AVRG	0.206	5.2
1,3-Dichloropropane	AVRG	0.470	5.4
Tetrachloroethene	AVRG	0.390	7.5
Chlorodibromomethane	AVRG	0.260	10.4
1,2-Dibromoethane	AVRG	0.194	6.3
Chlorobenzene	AVRG	1.024	4.9
Ethyl Benzene	AVRG	0.558	7.3
1,1,1,2-Tetrachloroethane	AVRG	0.373	8.4
m,p-xylene	AVRG	0.687	9.2
o-Xylene	AVRG	0.720	11.9
Styrene	AVRG	1.068	13.6
Bromoform	AVRG	0.229	19.7
1,1,2,2-Tetrachloroethane	AVRG	0.601	5.7
1,2,3-Trichloropropane	AVRG	0.164	3.6
Trans-1,4-Dichloro 2-Butene	AVRG	0.170	5.4
N-Propyl Benzene	AVRG	3.668	7.5
Bromobenzene	AVRG	0.686	3.6
Isopropyl Benzene	AVRG	3.036	13.3
2-Chloro Toluene	AVRG	2.654	9.2
4-Chloro Toluene	AVRG	2.347	9.2
T-Butyl Benzene	AVRG	2.146	15.8
1,3,5-Trimethyl Benzene	AVRG	2.640	12.2
1,2,4-Trimethylbenzene	AVRG	2.606	14.0
S-Butyl Benzene	AVRG	3.292	12.2
4-Isopropyl Toluene	AVRG	2.592	15.7
1,3-Dichlorobenzene	AVRG	1.461	5.2
1,4-Dichlorobenzene	AVRG	1.502	4.9
N-Butyl Benzene	AVRG	2.573	9.2
1,2-Dichlorobenzene	AVRG	1.396	6.0
1,2-Dibromo 3-Chloropropane	AVRG	0.095	7.1
1,2,4-Trichlorobenzene	AVRG	0.881	8.3
Hexachloro 1,3-Butadiene	AVRG	0.411	8.9
Naphthalene	AVRG	1.371	12.9
1,2,3-Trichlorobenzene	AVRG	0.679	10.0
Dichlorodifluoromethane	AVRG	0.709	7.7
Methyl tert butyl ether	AVRG	1.878	5.5

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
d4-1,2-Dichloroethane	AVRG	0.616	2.6
d8-Toluene	AVRG	1.192	3.4
4-Bromofluorobenzene	AVRG	0.582	3.1
d4-1,2-Dichlorobenzene	AVRG	0.904	2.9
Dibromofluoromethane	AVRG	0.571	3.0

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC — Client: ERM-WEST

ARI Job No: US27 — Project: RG SPRING GW SAMPLING

Instrument ID: NT2 — Cont. Calib. Date: 05/01/12

Init. Calib. Date: 04/16/12 — Cont. Calib. Time: 1035

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Chloromethane	1.095	1.0801	0.100	AVRG	-1.4
Vinyl Chloride	1.039	0.9537	0.010	AVRG	-8.2
Bromomethane	0.478	0.4039	0.010	AVRG	-15.5
Chloroethane	10.000	8.708	0.010	2ORDR	-12.9
Trichlorofluoromethane	0.840	0.8934	0.010	AVRG	6.4
Acrolein	0.096	0.0878	0.010	AVRG	-8.5
112Trichloro122Trifluoroetha	0.672	0.6652	0.010	AVRG	-1.0
Acetone	50.000	52.209	0.010	LINR	4.4
1,1-Dichloroethene	0.684	0.6402	0.010	AVRG	-6.4
Bromoethane	0.522	0.4965	0.010	AVRG	-4.9
Iodomethane	1.028	0.9858	0.010	AVRG	-4.1
Methylene Chloride	10.000	10.363	0.010	LINR	3.6
Acrylonitrile	0.173	0.1780	0.010	AVRG	2.9
Carbon Disulfide	2.555	2.5904	0.010	AVRG	1.4
Trans-1,2-Dichloroethene	0.773	0.7021	0.010	AVRG	-9.2
Vinyl Acetate	0.737	0.7491	0.010	AVRG	1.6
1,1-Dichloroethane	1.440	1.4230	0.100	AVRG	-1.2
2-Butanone	0.174	0.1750	0.010	AVRG	0.6
2,2-Dichloropropane	0.824	0.8262	0.010	AVRG	0.3
Cis-1,2-Dichloroethene	0.747	0.7064	0.010	AVRG	-5.4
Chloroform	1.228	1.2114	0.010	AVRG	-1.4
Bromochloromethane	0.284	0.2787	0.010	AVRG	-1.9
1,1,1-Trichloroethane	1.005	1.0075	0.010	AVRG	0.2
1,1-Dichloropropene	0.598	0.6105	0.010	AVRG	2.1
Carbon Tetrachloride	0.472	0.5135	0.010	AVRG	8.8
1,2-Dichloroethane	0.443	0.4864	0.010	AVRG	9.8
Benzene	1.733	1.6934	0.010	AVRG	-2.3
Trichloroethene	0.360	0.3580	0.010	AVRG	-0.6
1,2-Dichloropropane	0.395	0.3991	0.010	AVRG	1.0
Bromodichloromethane	0.431	0.4752	0.010	AVRG	10.2
Dibromomethane	0.172	0.1792	0.010	AVRG	4.2
2-Chloroethyl Vinyl Ether	0.128	0.1363	0.010	AVRG	6.5
4-Methyl-2-Pentanone	0.094	0.1053	0.010	AVRG	12.0
Cis 1,3-dichloropropene	0.471	0.5438	0.010	AVRG	15.4
Toluene	0.877	0.9245	0.010	AVRG	5.4
Trans 1,3-Dichloropropene	0.375	0.4493	0.010	AVRG	19.8
2-Hexanone	0.155	0.1764	0.010	AVRG	13.8

<- Exceeds QC limit of 20% D

* RF less than minimum RF

US15:00055

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Cont. Calib. Date: 05/01/12

Init. Calib. Date: 04/16/12 Cont. Calib. Time: 1035

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
1,1,2-Trichloroethane	0.206	0.2235	0.010	AVRG	8.5	
1,3-Dichloropropane	0.470	0.4870	0.010	AVRG	3.6	
Tetrachloroethene	0.391	0.4025	0.010	AVRG	2.9	
Chlorodibromomethane	0.260	0.2757	0.010	AVRG	6.0	
1,2-Dibromoethane	0.194	0.2108	0.010	AVRG	8.6	
Chlorobenzene	1.024	0.9947	0.300	AVRG	-2.9	
Ethyl Benzene	0.558	0.5688	0.010	AVRG	1.9	
1,1,1,2-Tetrachloroethane	0.373	0.3689	0.010	AVRG	-1.1	
m,p-xylene	0.687	0.6969	0.010	AVRG	1.4	
o-Xylene	0.720	0.7066	0.010	AVRG	-1.9	
Styrene	1.068	1.0890	0.010	AVRG	2.0	
Bromoform	0.229	0.2778	0.100	AVRG	21.3	<-
1,1,2,2-Tetrachloroethane	0.601	0.5968	0.300	AVRG	-0.7	
1,2,3-Trichloropropane	0.163	0.1674	0.010	AVRG	2.7	
Trans-1,4-Dichloro 2-Butene	0.170	0.1763	0.010	AVRG	3.7	
N-Propyl Benzene	3.668	3.8801	0.010	AVRG	5.8	
Bromobenzene	0.686	0.6651	0.010	AVRG	-3.0	
Isopropyl Benzene	3.036	3.2855	0.010	AVRG	8.2	
2-Chloro Toluene	2.653	2.6890	0.010	AVRG	1.4	
4-Chloro Toluene	2.347	2.4234	0.010	AVRG	3.2	
T-Butyl Benzene	2.146	2.3712	0.010	AVRG	10.5	
1,3,5-Trimethyl Benzene	2.640	2.8470	0.010	AVRG	7.8	
1,2,4-Trimethylbenzene	2.606	2.8400	0.010	AVRG	9.0	
S-Butyl Benzene	3.292	3.6172	0.010	AVRG	9.9	
4-Isopropyl Toluene	2.591	2.9355	0.010	AVRG	13.3	
1,3-Dichlorobenzene	1.461	1.4096	0.010	AVRG	-3.5	
1,4-Dichlorobenzene	1.502	1.4240	0.010	AVRG	-5.2	
N-Butyl Benzene	2.573	2.8856	0.010	AVRG	12.1	
1,2-Dichlorobenzene	1.396	1.3047	0.010	AVRG	-6.5	
1,2-Dibromo 3-Chloropropane	0.094	0.0971	0.010	AVRG	3.3	
1,2,4-Trichlorobenzene	0.881	0.8471	0.010	AVRG	-3.8	
Hexachloro 1,3-Butadiene	0.410	0.4848	0.010	AVRG	18.2	
Naphthalene	1.371	1.2773	0.010	AVRG	-6.8	
1,2,3-Trichlorobenzene	0.679	0.6503	0.010	AVRG	-4.2	
Dichlorodifluoromethane	0.709	0.7476	0.010	AVRG	5.4	
Methyl tert butyl ether	1.879	1.8289	0.010	AVRG	-2.7	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII VOA

US15:00056

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Cont. Calib. Date: 05/01/12

Init. Calib. Date: 04/16/12 Cont. Calib. Time: 1035

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
d4-1,2-Dichloroethane	0.616	0.6694	0.010	AVRG	8.7
d8-Toluene	1.192	1.2726	0.010	AVRG	6.8
4-Bromofluorobenzene	0.582	0.5706	0.010	AVRG	-2.0
d4-1,2-Dichlorobenzene	0.904	0.9006	0.010	AVRG	-0.4
Dibromofluoromethane	0.571	0.5715	0.010	AVRG	0.1

<- Exceeds QC limit of 20% D
* RF less than minimum RF

US15 00057

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC | Client: ERM-WEST

ARI Job No: US27 | Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 | Ical Date: 04/16/12

Instrument ID: NT2 | Project Run Date: 04/16/12

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CLB) AREA #	RT #
	ICAL MIDPT	208250	5.45	328641	5.85	264744	7.92
	UPPER LIMIT	416500	5.95	657282	6.35	529488	8.42
	LOWER LIMIT	104125	4.95	164320	5.35	132372	7.42
	Sample ID						
01	ICV10	212095	5.45	340138	5.85	291069	7.92
02							
03							
04							
05							
06							
07							
08							
09							
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17							
18							
19							
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = d5-Chlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC | Client: ERM-WEST

ARI Job No: US27 | Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 | Ical Date: 04/16/12

Instrument ID: NT2 | Project Run Date: 04/16/12

	Sample ID	IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	182729	9.62				
	UPPER LIMIT	365458	10.12				
	LOWER LIMIT	91364	9.12				
01	ICV10	184224	9.62				
02							
03							
04							
05							
06							
07							
08							
09							
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11							
12							
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18							
19							
20							
21							
22							

IS4 (DCB) = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 Ical Date: 04/16/12

Instrument ID: NT2 Project Run Date: 05/01/12

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CLB) AREA #	RT #
	ICAL MIDPT	208250	5.45	328641	5.85	264744	7.92
	UPPER LIMIT	416500	5.95	657282	6.35	529488	8.42
	LOWER LIMIT	104125	4.95	164320	5.35	132372	7.42
	Sample ID						
01	LCS0501	163986	5.45	264743	5.84	240468	7.92
02	LCS0501	167761	5.45	261563	5.84	241172	7.92
03	MB0501	163203	5.45	265689	5.85	238689	7.92
04	MW-13-043012	152124	5.45	248672	5.84	234111	7.92
05	TB-043012-1	155488	5.45	256840	5.84	225639	7.92
06							
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22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = d5-Chlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC | Client: ERM-WEST

ARI Job No: US27 | Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 | Ical Date: 04/16/12

Instrument ID: NT2 | Project Run Date: 05/01/12

		IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	182729	9.62				
	UPPER LIMIT	365458	10.12				
	LOWER LIMIT	91364	9.12				
	Sample ID						
01	LCS0501	148336	9.62				
02	LCS0501	151390	9.62				
03	MB0501	150186	9.62				
04	MW-13-043012	146665	9.62				
05	TB-043012-1	141384	9.62				
06							
07							
08							
09							
10							
11							
12							
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14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (DCB) = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

Semivolatile Analysis
Report and Summary QC Forms

ARI Job ID: US15, US27

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-18-042612
SAMPLE

Lab Sample ID: US15A
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 13:30
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.0%	2-Fluorobiphenyl	72.8%
d14-p-Terphenyl	86.0%	d4-1,2-Dichlorobenzene	53.6%
d5-Phenol	76.3%	2-Fluorophenol	78.7%
2,4,6-Tribromophenol	88.3%	d4-2-Chlorophenol	75.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-3S-042712
SAMPLE

Lab Sample ID: US15B
LIMS ID: 12-7625
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 14:04
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.8%	2-Fluorobiphenyl	73.2%
d14-p-Terphenyl	85.6%	d4-1,2-Dichlorobenzene	59.2%
d5-Phenol	76.5%	2-Fluorophenol	79.7%
2,4,6-Tribromophenol	88.8%	d4-2-Chlorophenol	76.5%

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Sample ID: MW-3D-042712
SAMPLE

Lab Sample ID: US15C
LIMS ID: 12-7626
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 17:31
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.4%	2-Fluorobiphenyl	71.2%
d14-p-Terphenyl	85.6%	d4-1,2-Dichlorobenzene	51.6%
d5-Phenol	71.2%	2-Fluorophenol	70.7%
2,4,6-Tribromophenol	91.7%	d4-2-Chlorophenol	72.3%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-7S-042712
SAMPLE

Lab Sample ID: US15D
LIMS ID: 12-7627
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 18:05
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	**2,3,4,6-Tetrachlorophenol**	**1.0**	**4.0**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.8%	2-Fluorobiphenyl	74.4%
d14-p-Terphenyl	88.8%	d4-1,2-Dichlorobenzene	59.6%
d5-Phenol	78.7%	2-Fluorophenol	81.9%
2,4,6-Tribromophenol	94.7%	d4-2-Chlorophenol	78.1%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-10-042712
SAMPLE

Lab Sample ID: US15E
LIMS ID: 12-7628
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 18:40
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.6%	2-Fluorobiphenyl	69.6%
d14-p-Terphenyl	86.0%	d4-1,2-Dichlorobenzene	54.8%
d5-Phenol	72.0%	2-Fluorophenol	72.0%
2,4,6-Tribromophenol	85.3%	d4-2-Chlorophenol	70.9%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: DUP-042712-1
SAMPLE

Lab Sample ID: US15F
LIMS ID: 12-7629
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 19:14
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	**2,3,4,6-Tetrachlorophenol**	**1.0**	**4.1**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.8%	2-Fluorobiphenyl	74.8%
d14-p-Terphenyl	90.8%	d4-1,2-Dichlorobenzene	60.0%
d5-Phenol	76.8%	2-Fluorophenol	77.3%
2,4,6-Tribromophenol	91.7%	d4-2-Chlorophenol	75.5%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-050212	78.8%	74.8%	93.2%	59.6%	82.1%	83.2%	85.3%	81.6%	0
LCS-050212	73.2%	74.8%	85.2%	52.8%	75.2%	73.6%	92.0%	72.5%	0
LCSD-050212	68.4%	70.4%	83.6%	49.6%	69.1%	66.4%	88.5%	67.2%	0
MW-18-042612	74.0%	72.8%	86.0%	53.6%	76.3%	78.7%	88.3%	75.2%	0
MW-3S-042712	74.8%	73.2%	85.6%	59.2%	76.5%	79.7%	88.8%	76.5%	0
MW-3D-042712	70.4%	71.2%	85.6%	51.6%	71.2%	70.7%	91.7%	72.3%	0
MW-7S-042712	76.8%	74.4%	88.8%	59.6%	78.7%	81.9%	94.7%	78.1%	0
MW-10-042712	69.6%	69.6%	86.0%	54.8%	72.0%	72.0%	85.3%	70.9%	0
DUP-042712-1	74.8%	74.8%	90.8%	60.0%	76.8%	77.3%	91.7%	75.5%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-100)	(39-100)
(FBP) = 2-Fluorobiphenyl	(49-100)	(42-100)
(TPH) = d14-p-Terphenyl	(53-119)	(26-114)
(DCB) = d4-1,2-Dichlorobenzene	(38-100)	(32-100)
(PHL) = d5-Phenol	(50-100)	(41-100)
(2FP) = 2-Fluorophenol	(46-100)	(38-100)
(TBP) = 2,4,6-Tribromophenol	(52-123)	(48-118)
(2CP) = d4-2-Chlorophenol	(53-100)	(44-100)

Prep Method: SW3520C
Log Number Range: 12-7624 to 12-7629

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-13-043012
SAMPLE

Lab Sample ID: US27A
LIMS ID: 12-7676
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 19:48
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	**2,3,4,6-Tetrachlorophenol**	**1.0**	**4.1**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.6%	2-Fluorobiphenyl	75.6%
d14-p-Terphenyl	80.4%	d4-1,2-Dichlorobenzene	56.8%
d5-Phenol	77.3%	2-Fluorophenol	77.6%
2,4,6-Tribromophenol	95.2%	d4-2-Chlorophenol	74.4%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: DUP-043012-1
SAMPLE

Lab Sample ID: US27B
LIMS ID: 12-7677
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 20:23
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	**2,3,4,6-Tetrachlorophenol**	**1.0**	**4.6**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	80.8%	2-Fluorobiphenyl	82.4%
d14-p-Terphenyl	83.6%	d4-1,2-Dichlorobenzene	66.0%
d5-Phenol	85.1%	2-Fluorophenol	84.5%
2,4,6-Tribromophenol	103%	d4-2-Chlorophenol	82.9%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-27-043012
SAMPLE

Lab Sample ID: US27C
LIMS ID: 12-7678
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 20:57
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.6%	2-Fluorobiphenyl	73.2%
d14-p-Terphenyl	86.0%	d4-1,2-Dichlorobenzene	63.2%
d5-Phenol	76.0%	2-Fluorophenol	78.4%
2,4,6-Tribromophenol	88.5%	d4-2-Chlorophenol	76.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
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Sample ID: MW-26-043012
SAMPLE

Lab Sample ID: US27D
LIMS ID: 12-7679
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 21:31
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	**2,4-Dichlorophenol**	**5.0**	**20**
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	**2,3,4,6-Tetrachlorophenol**	**1.0**	**6.4**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.0%	2-Fluorobiphenyl	69.2%
d14-p-Terphenyl	80.4%	d4-1,2-Dichlorobenzene	55.2%
d5-Phenol	72.0%	2-Fluorophenol	73.6%
2,4,6-Tribromophenol	88.8%	d4-2-Chlorophenol	71.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MW-14D-043012
SAMPLE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 22:06
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MW-14D-043012
SAMPLE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Date Analyzed: 05/08/12 22:06

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.8%	2-Fluorobiphenyl	70.0%
d14-p-Terphenyl	66.8%	d4-1,2-Dichlorobenzene	58.0%
d5-Phenol	74.1%	2-Fluorophenol	76.3%
2,4,6-Tribromophenol	87.2%	d4-2-Chlorophenol	74.4%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MW-13-043012	73.6%	75.6%	80.4%	56.8%	77.3%	77.6%	95.2%	74.4%	0
DUP-043012-1	80.8%	82.4%	83.6%	66.0%	85.1%	84.5%	103%	82.9%	0
MW-27-043012	73.6%	73.2%	86.0%	63.2%	76.0%	78.4%	88.5%	76.0%	0
MW-26-043012	70.0%	69.2%	80.4%	55.2%	72.0%	73.6%	88.8%	71.7%	0
MB-050212	78.8%	74.8%	93.2%	59.6%	82.1%	83.2%	85.3%	81.6%	0
LCS-050212	73.2%	74.8%	85.2%	52.8%	75.2%	73.6%	92.0%	72.5%	0
LCSD-050212	68.4%	70.4%	83.6%	49.6%	69.1%	66.4%	88.5%	67.2%	0
MW-14D-043012	72.8%	70.0%	66.8%	58.0%	74.1%	76.3%	87.2%	74.4%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-100)	(39-100)
(FBP) = 2-Fluorobiphenyl	(49-100)	(42-100)
(TPH) = d14-p-Terphenyl	(53-119)	(26-114)
(DCB) = d4-1,2-Dichlorobenzene	(38-100)	(32-100)
(PHL) = d5-Phenol	(50-100)	(41-100)
(2FP) = 2-Fluorophenol	(46-100)	(38-100)
(TBP) = 2,4,6-Tribromophenol	(52-123)	(48-118)
(2CP) = d4-2-Chlorophenol	(53-100)	(44-100)

Prep Method: SW3520C
Log Number Range: 12-7676 to 12-7680

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: LCS-050212
LCS/LCSD

Lab Sample ID: LCS-050212
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted LCS/LCSD: 05/02/12

Date Analyzed LCS: 05/08/12 12:21
LCSD: 05/08/12 12:56
Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

GPC Cleanup: NO

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	17.9	25.0	71.6%	16.8	25.0	67.2%	6.3%
Bis-(2-Chloroethyl) Ether	18.1	25.0	72.4%	17.4	25.0	69.6%	3.9%
2-Chlorophenol	17.0	25.0	68.0%	16.1	25.0	64.4%	5.4%
1,3-Dichlorobenzene	9.2	25.0	36.8%	8.7	25.0	34.8%	6.0%
1,4-Dichlorobenzene	9.7	25.0	38.8%	9.3	25.0	37.2%	4.2%
Benzyl Alcohol	16.1	25.0	64.4%	15.7	25.0	62.8%	2.5%
1,2-Dichlorobenzene	10.6	25.0	42.4%	10.0	25.0	40.0%	6.3%
2-Methylphenol	16.3	25.0	65.2%	15.5	25.0	62.0%	5.0%
2,2'-Oxybis(1-Chloropropane)	17.3	25.0	69.2%	16.6	25.0	66.4%	4.1%
4-Methylphenol	33.9	50.0	67.8%	32.3	50.0	64.6%	4.8%
N-Nitroso-Di-N-Propylamine	18.0	25.0	72.0%	17.6	25.0	70.4%	2.2%
Hexachloroethane	7.8	25.0	31.2%	7.2	25.0	28.8%	8.1%
Nitrobenzene	18.0	25.0	72.0%	17.0	25.0	68.0%	5.7%
Isophorone	21.1	25.0	84.4%	21.5	25.0	86.0%	1.9%
2-Nitrophenol	18.0	25.0	72.0%	17.0	25.0	68.0%	5.7%
2,4-Dimethylphenol	40.9	75.0	54.5%	39.7	75.0	52.9%	3.0%
Benzoic Acid	105	138	76.1%	69.4	138	50.3%	40.8%
bis(2-Chloroethoxy) Methane	18.8	25.0	75.2%	18.3	25.0	73.2%	2.7%
2,4-Dichlorophenol	53.4	75.0	71.2%	50.6	75.0	67.5%	5.4%
1,2,4-Trichlorobenzene	11.1	25.0	44.4%	10.5	25.0	42.0%	5.6%
Naphthalene	13.8	25.0	55.2%	13.2	25.0	52.8%	4.4%
4-Chloroaniline	48.8	75.0	65.1%	46.4	75.0	61.9%	5.0%
Hexachlorobutadiene	8.3	25.0	33.2%	7.8	25.0	31.2%	6.1%
4-Chloro-3-methylphenol	57.6	75.0	76.8%	56.0	75.0	74.7%	2.8%
2-Methylnaphthalene	13.6	25.0	54.4%	13.1	25.0	52.4%	3.7%
Hexachlorocyclopentadiene	21.0	75.0	28.0%	21.4	75.0	28.5%	1.9%
2,4,6-Trichlorophenol	59.6	75.0	79.5%	57.0	75.0	76.0%	4.5%
2,4,5-Trichlorophenol	59.9	75.0	79.9%	57.3	75.0	76.4%	4.4%
2-Chloronaphthalene	17.6	25.0	70.4%	16.7	25.0	66.8%	5.2%
2-Nitroaniline	55.2	75.0	73.6%	54.6	75.0	72.8%	1.1%
Dimethylphthalate	22.2	25.0	88.8%	22.8	25.0	91.2%	2.7%
Acenaphthylene	18.2	25.0	72.8%	17.6	25.0	70.4%	3.4%
3-Nitroaniline	62.2	75.0	82.9%	62.9	75.0	83.9%	1.1%
Acenaphthene	18.1	25.0	72.4%	17.5	25.0	70.0%	3.4%
2,4-Dinitrophenol	112	138	81.2%	111	138	80.4%	0.9%
4-Nitrophenol	65.2	75.0	86.9%	68.7	75.0	91.6%	5.2%
Dibenzofuran	18.2	25.0	72.8%	17.7	25.0	70.8%	2.8%
2,6-Dinitrotoluene	65.3	75.0	87.1%	65.8	75.0	87.7%	0.8%
2,4-Dinitrotoluene	67.1	75.0	89.5%	67.5	75.0	90.0%	0.6%
Diethylphthalate	22.6	25.0	90.4%	22.9	25.0	91.6%	1.3%
4-Chlorophenyl-phenylether	20.5	25.0	82.0%	20.1	25.0	80.4%	2.0%
Fluorene	19.2	25.0	76.8%	18.8	25.0	75.2%	2.1%
4-Nitroaniline	59.8	75.0	79.7%	60.2	75.0	80.3%	0.7%
4,6-Dinitro-2-Methylphenol	132	138	95.7%	130	138	94.2%	1.5%
N-Nitrosodiphenylamine	19.4	25.0	77.6%	19.0	25.0	76.0%	2.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCS-050212**
Page 2 of 2 **LCS/LCSD**

Lab Sample ID: LCS-050212 QC Report No: US27-ERM-West
LIMS ID: 12-7680 Project: RG Spring GW Sampling
Matrix: Water 155129.09
Date Analyzed LCS: 05/08/12 12:21
LCSD: 05/08/12 12:56

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	21.4	25.0	85.6%	20.8	25.0	83.2%	2.8%
Hexachlorobenzene	21.8	25.0	87.2%	20.8	25.0	83.2%	4.7%
Pentachlorophenol	73.7	75.0	98.3%	70.9	75.0	94.5%	3.9%
Phenanthrene	20.7	25.0	82.8%	20.3	25.0	81.2%	2.0%
Carbazole	22.6	25.0	90.4%	22.6	25.0	90.4%	0.0%
Anthracene	19.9	25.0	79.6%	19.5	25.0	78.0%	2.0%
Di-n-Butylphthalate	23.6	25.0	94.4%	23.6	25.0	94.4%	0.0%
Fluoranthene	21.9	25.0	87.6%	21.5	25.0	86.0%	1.8%
Pyrene	19.6	25.0	78.4%	19.4	25.0	77.6%	1.0%
Butylbenzylphthalate	21.9	25.0	87.6%	21.8	25.0	87.2%	0.5%
3,3'-Dichlorobenzidine	53.4	75.0	71.2%	54.0	75.0	72.0%	1.1%
Benzo(a)anthracene	19.6	25.0	78.4%	19.6	25.0	78.4%	0.0%
bis(2-Ethylhexyl)phthalate	22.4	25.0	89.6%	22.1	25.0	88.4%	1.3%
Chrysene	20.2	25.0	80.8%	20.0	25.0	80.0%	1.0%
Di-n-Octyl phthalate	22.5	25.0	90.0%	22.3	25.0	89.2%	0.9%
Benzo(a)pyrene	18.9	25.0	75.6%	19.3	25.0	77.2%	2.1%
Indeno(1,2,3-cd)pyrene	18.7	25.0	74.8%	18.6	25.0	74.4%	0.5%
Dibenz(a,h)anthracene	18.2	25.0	72.8%	18.2	25.0	72.8%	0.0%
Benzo(g,h,i)perylene	19.2	25.0	76.8%	19.1	25.0	76.4%	0.5%
2,3,4,6-Tetrachlorophenol	22.4	25.0	89.6%	21.6	25.0	86.4%	3.6%
1-Methylnaphthalene	19.0	25.0	76.0%	18.1	25.0	72.4%	4.9%
Total Benzofluoranthenes	41.7	50.0	83.4%	41.6	50.0	83.2%	0.2%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	73.2%	68.4%
2-Fluorobiphenyl	74.8%	70.4%
d14-p-Terphenyl	85.2%	83.6%
d4-1,2-Dichlorobenzene	52.8%	49.6%
d5-Phenol	75.2%	69.1%
2-Fluorophenol	73.6%	66.4%
2,4,6-Tribromophenol	92.0%	88.5%
d4-2-Chlorophenol	72.5%	67.2%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

US15:00078

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

US15MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: ERM-WEST

ARI Job No: US15

Project: RG SPRING GW SAMPLIN

Lab File ID: 05081202

Date Extracted: 05/02/12

Instrument ID: NT6

Date Analyzed: 05/08/12

Matrix: LIQUID

Time Analyzed: 1147

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	US15LCSW1	US15LCSW1	05081203	05/08/12
02	US15LCSDW1	US15LCSDW1	05081204	05/08/12
03	MW-18-042612	US15A	05081205	05/08/12
04	MW-3S-042712	US15B	05081206	05/08/12
05	MW-3D-042712	US15C	05081210	05/08/12
06	MW-7S-042712	US15D	05081211	05/08/12
07	MW-10-042712	US15E	05081212	05/08/12
08	DUP-042712-1	US15F	05081213	05/08/12
09	MW-13-043012	US27A	05081214	05/08/12
10	DUP-043012-1	US27B	05081215	05/08/12
11	MW-27-043012	US27C	05081216	05/08/12
12	MW-26-043012	US27D	05081217	05/08/12
13	MW-14D-043012	US27E	05081218	05/08/12
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-050212
METHOD BLANK

Lab Sample ID: MB-050212
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling 155129.09
Date Sampled: NA
Date Received: NA

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 11:47
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-050212
METHOD BLANK

Lab Sample ID: MB-050212
LIMS ID: 12-7680
Matrix: Water
Date Analyzed: 05/08/12 11:47

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	78.8%	2-Fluorobiphenyl	74.8%
d14-p-Terphenyl	93.2%	d4-1,2-Dichlorobenzene	59.6%
d5-Phenol	82.1%	2-Fluorophenol	83.2%
2,4,6-Tribromophenol	85.3%	d4-2-Chlorophenol	81.6%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

Instrument ID: NT6 Project: RG SPRING GW SAMPLING

DFTPP Injection Date: 05/07/12 DFTPP Injection Time: 1847

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	28.0
68	Less than 2.0% of mass 69	0.3 (1.0)1
69	Mass 69 relative abundance	32.5
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	10.0 - 80.0% of mass 198	44.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	30.0
365	Greater than 1.0% of mass 198	3.64
441	0.0 - 24.0% of mass 442	26.0 (14.3)2
442	50.0 - 200.0% of mass 198	181.8
443	15.0 - 24.0% of mass 442	35.4 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC250507	IC250507	05071201	05/07/12	1847
02	IC10507	IC10507	05071202	05/07/12	1922
03	IC50507	IC50507	05071203	05/07/12	1956
04	IC100507	IC100507	05071204	05/07/12	2030
05	IC400507	IC400507	05071205	05/07/12	2105
06	IC600507	IC600507	05071206	05/07/12	2139
07	IC800507	IC800507	05071207	05/07/12	2213
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US15 00082

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

Instrument ID: NT6 Project: RG SPRING GW SAMPLING

DFTPP Injection Date: 05/08/12 DFTPP Injection Time: 1111

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	26.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	31.6
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	10.0 - 80.0% of mass 198	44.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	30.4
365	Greater than 1.0% of mass 198	3.80
441	0.0 - 24.0% of mass 442	27.5 (14.3)2
442	50.0 - 200.0% of mass 198	192.7
443	15.0 - 24.0% of mass 442	37.1 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0508	CC0508	05081201	05/08/12	1111
02	US15MBW1	US15MBW1	05081202	05/08/12	1147
03	US15LCSW1	US15LCSW1	05081203	05/08/12	1221
04	US15LCSDW1	US15LCSDW1	05081204	05/08/12	1256
05	MW-18-042612	US15A	05081205	05/08/12	1330
06	MW-3S-042712	US15B	05081206	05/08/12	1404
07	MW-3D-042712	US15C	05081210	05/08/12	1731
08	MW-7S-042712	US15D	05081211	05/08/12	1805
09	MW-10-042712	US15E	05081212	05/08/12	1840
10	DUP-042712-1	US15F	05081213	05/08/12	1914
11	MW-13-043012	US27A	05081214	05/08/12	1948
12	DUP-043012-1	US27B	05081215	05/08/12	2023
13	MW-27-043012	US27C	05081216	05/08/12	2057
14	MW-26-043012	US27D	05081217	05/08/12	2131
15	MW-14D-043012	US27E	05081218	05/08/12	2206
16					
17					
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21					
22					

FORM V SV

US15:00083

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Calibration Date: 05/07/12

LAB FILE ID: RRF1 =05071202 RRF5 =05071203 RRF10 =05071204
RRF25 =05071201 RRF40 =05071205 RRF60 =05071206
RRF80 =05071207

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Phenol	1.700	1.674	1.608	1.620	1.704	1.558	1.440	1.615	5.8
Bis(2-Chloroethyl)ether	1.164	1.171	1.145	1.258	1.265	1.173	1.094	1.181	5.2
2-Chlorophenol	1.468	1.505	1.442	1.446	1.556	1.446	1.340	1.458	4.6
1,3-Dichlorobenzene	1.578	1.596	1.579	1.649	1.661	1.558	1.428	1.578	4.8
1,4-Dichlorobenzene	1.588	1.601	1.579	1.665	1.660	1.548	1.420	1.580	5.2
1,2-Dichlorobenzene	1.533	1.537	1.519	1.600	1.600	1.471	1.358	1.517	5.5
Benzyl alcohol	0.949	1.007	0.950	1.018	1.057	0.967	0.920	0.981	4.9
2,2'-oxybis(1-Chloropropane)	1.322	1.307	1.277	1.349	1.345	1.229	1.136	1.281	6.0
2-Methylphenol	1.240	1.267	1.205	1.246	1.333	1.235	1.151	1.240	4.5
Hexachloroethane	0.532	0.540	0.537	0.587	0.598	0.571	0.535	0.557	4.9
N-Nitroso-di-n-propylamine	0.759	0.766	0.768	0.822	0.827	0.758	0.712	0.773	5.2
4-Methylphenol	1.311	1.315	1.270	1.299	1.385	1.275	1.197	1.293	4.4
Nitrobenzene	0.329	0.339	0.331	0.347	0.344	0.326	0.302	0.331	4.5
Isophorone	0.489	0.492	0.488	0.514	0.504	0.474	0.441	0.486	4.8
2-Nitrophenol	0.199	0.216	0.214	0.226	0.241	0.232	0.219	0.221	6.3
2,4-Dimethylphenol	0.344	0.351	0.335	0.339	0.352	0.336	0.309	0.338	4.3
Bis(2-Chloroethoxy)methane	0.394	0.374	0.370	0.393	0.387	0.363	0.336	0.374	5.4
2,4-Dichlorophenol	0.346	0.353	0.339	0.346	0.366	0.348	0.318	0.345	4.2
1,2,4-Trichlorobenzene	0.374	0.381	0.369	0.391	0.390	0.373	0.345	0.375	4.1
Naphthalene	1.197	1.166	1.134	1.119	1.045	0.924		1.098	9.0
Benzoic acid		0.173	0.190	0.226	0.250	0.248	0.239	0.221	14.6
4-Chloroaniline	0.534	0.529	0.493	0.484	0.478	0.438	0.388	0.478	10.7
Hexachlorobutadiene	0.222	0.224	0.223	0.233	0.235	0.230	0.213	0.226	3.3
4-Chloro-3-methylphenol	0.274	0.279	0.274	0.284	0.297	0.279	0.256	0.278	4.4
2-Methylnaphthalene	0.711	0.703	0.659	0.662	0.656	0.598	0.534	0.646	9.5
Hexachlorocyclopentadiene		0.264	0.294	0.390	0.404	0.389	0.384	0.354	16.8
2,4,6-Trichlorophenol	0.384	0.407	0.397	0.409	0.433	0.425	0.399	0.408	4.1
2,4,5-Trichlorophenol	0.408	0.430	0.420	0.440	0.469	0.446	0.419	0.433	4.7
2-Chloronaphthalene	1.163	1.126	1.113	1.147	1.095	1.026	0.921	1.084	7.8
2-Nitroaniline	0.262	0.288	0.277	0.286	0.287	0.271	0.258	0.276	4.5
Acenaphthylene	1.927	1.897	1.850	1.825	1.701	1.509	1.321	1.718	13.1
Dimethylphthalate	1.196	1.138	1.136	1.150	1.122	1.045	0.956	1.106	7.2
2,6-Dinitrotoluene	0.254	0.263	0.273	0.290	0.291	0.280	0.265	0.274	5.2
Acenaphthene	1.232	1.197	1.166	1.176	1.135	1.057	0.951	1.130	8.5
3-Nitroaniline	0.342	0.366	0.345	0.318	0.297	0.259	0.223	0.307	16.6
2,4-Dinitrophenol		0.080	0.114	0.153	0.188	0.193	0.191	0.153	0.995
Dibenzofuran	1.938	1.863	1.729	1.667	1.609	1.452	1.301	1.651	13.5

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-1

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Calibration Date: 05/07/12

LAB FILE ID: RRF1 =05071202 RRF5 =05071203 RRF10 =05071204
RRF25 =05071201 RRF40 =05071205 RRF60 =05071206
RRF80 =05071207

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
4-Nitrophenol	0.069	0.100	0.105	0.119	0.128	0.126	0.119	0.109	18.7
2,4-Dinitrotoluene	0.311	0.344	0.349	0.372	0.372	0.358	0.337	0.349	6.2
Fluorene	1.459	1.405	1.371	1.380	1.331	1.216	1.084	1.321	9.7
4-Chlorophenyl-phenylether	0.669	0.655	0.641	0.664	0.664	0.627	0.580	0.643	4.8
Diethylphthalate	1.132	1.065	1.062	1.083	1.066	0.977	0.895	1.040	7.6
4-Nitroaniline	0.286	0.314	0.311	0.305	0.305	0.286	0.271	0.297	5.4
4,6-Dinitro-2-methylphenol		0.113	0.129	0.148	0.168	0.166	0.158	0.147	14.9
N-Nitrosodiphenylamine (1)	0.562	0.552	0.542	0.579	0.578	0.534	0.490	0.548	5.6
4-Bromophenyl-phenylether	0.269	0.264	0.262	0.286	0.284	0.266	0.246	0.268	5.2
Hexachlorobenzene	0.349	0.331	0.326	0.347	0.345	0.328	0.301	0.332	5.0
Pentachlorophenol		0.116	0.134	0.172	0.191	0.192	0.182	0.164	19.5
Phenanthrene	1.249	1.208	1.170	1.183	1.110	1.003	0.878	1.114	11.7
Anthracene	1.254	1.239	1.215	1.202	1.129	1.006	0.878	1.132	12.4
Carbazole	0.951	0.926	0.898	0.893	0.850	0.802	0.719	0.863	9.3
Di-n-butylphthalate	1.051	1.034	1.041	1.048	1.011	0.922	0.795	0.986	9.7
Fluoranthene	1.258	1.221	1.203	1.181	1.128	1.033	0.892	1.131	11.3
Pyrene	1.343	1.306	1.248	1.281	1.193	1.009	0.881	1.180	14.5
Butylbenzylphthalate	0.380	0.397	0.396	0.438	0.430	0.401	0.369	0.402	6.3
Benzo(a)anthracene	1.162	1.132	1.095	1.147	1.088	1.000	0.894	1.074	8.9
3,3'-Dichlorobenzidine	0.397	0.412	0.379	0.375	0.370	0.346	0.316	0.371	8.6
Chrysene	1.137	1.111	1.070	1.085	1.050	0.932	0.829	1.030	10.7
bis(2-Ethylhexyl)phthalate	0.616	0.597	0.589	0.640	0.634	0.583	0.540	0.600	5.7
Di-n-octylphthalate	1.106	1.044	1.026	1.055	1.028	0.940	0.838	1.005	8.8
Benzo(b)fluoranthene	1.167	1.187	1.136	1.228	1.161	1.028	0.930	1.120	9.3
Benzo(k)fluoranthene	1.229	1.176	1.208	1.225	1.200	0.986	0.836	1.123	13.6
Benzo(a)pyrene	1.003	1.005	1.005	1.067	1.045	0.933	0.832	0.984	8.1
Indeno(1,2,3-cd)pyrene	1.496	1.533	1.502	1.571	1.551	1.479	1.342	1.496	5.0
Dibenzo(a,h)anthracene	1.213	1.246	1.227	1.312	1.284	1.146	1.005	1.205	8.5
Benzo(g,h,i)perylene	1.322	1.319	1.296	1.375	1.350	1.269	1.147	1.297	5.7
N-Nitrosodimethylamine	0.730	0.713	0.718	0.772	0.776	0.731	0.698	0.734	4.0
Aniline	2.020	2.057	1.941	1.955	1.989	1.804	1.681	1.921	6.9
Benzidine	0.279	0.232	0.224	0.190	0.237	0.223	0.207	0.227	12.2
Pyridine	1.024	1.258	1.287	1.357	1.367	1.285	1.216	1.256	9.2
1-methylnaphthalene	0.541	0.521	0.490	0.499	0.503	0.466	0.426	0.492	7.6
Azobenzene (1,2-DP-Hydrazine	1.031	0.960	0.958	0.977	1.014	0.934	0.851	0.961	6.1
2,3,4,6-Tetrachlorophenol	0.275	0.317	0.322	0.343	0.368	0.353	0.338	0.331	9.1
1,2,4,5-Tetrachlorobenzene	0.589	0.572	0.551	0.580	0.571	0.550	0.517	0.561	4.3

(1) Cannot be seperated from Diphenylamine

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-2

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Calibration Date: 05/07/12

LAB FILE ID: RRF1 =05071202 RRF5 =05071203 RRF10 =05071204
RRF25 =05071201 RRF40 =05071205 RRF60 =05071206
RRF80 =05071207

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Total Benzofluoranthenes	1.132	1.101	1.105	1.156	1.110	0.945	0.828	1.054	11.5
2-Fluorophenol	1.188	1.247	1.202	1.233	1.301	1.167		1.223	3.9
Phenol-d5	1.458	1.480	1.458	1.461	1.532	1.353		1.457	4.0
2-Chlorophenol-d4	1.405	1.392	1.360	1.375	1.444	1.293		1.378	3.7
1,2-Dichlorobenzene-d4	1.017	1.003	0.979	0.976	1.044	0.942		0.994	3.6
Nitrobenzene-d5	0.329	0.331	0.326	0.327	0.338	0.312		0.327	2.6
2-Fluorobiphenyl	1.379	1.338	1.286	1.220	1.216	1.099		1.256	8.0
2,4,6-Tribromophenol	0.273	0.271	0.277	0.278	0.300	0.275		0.279	3.8
Terphenyl-d14	0.820	0.775	0.760	0.762	0.768	0.654		0.756	7.2

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-3

US15 00085

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Cont. Calib. Date: 05/08/12

Init. Calib. Date: 05/07/12 Cont. Calib. Time: 1111

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Phenol	1.615	1.562	0.800	AVRG	-3.3
Bis(2-Chloroethyl)ether	1.181	1.204	0.700	AVRG	1.9
2-Chlorophenol	1.458	1.435	0.800	AVRG	-1.6
1,3-Dichlorobenzene	1.578	1.661	0.010	AVRG	5.2
1,4-Dichlorobenzene	1.580	1.663	0.010	AVRG	5.2
1,2-Dichlorobenzene	1.517	1.591	0.010	AVRG	4.9
Benzyl alcohol	0.981	0.973	0.010	AVRG	-0.8
2,2'-oxybis(1-Chloropropane)	1.281	1.299	0.010	AVRG	1.4
2-Methylphenol	1.240	1.206	0.700	AVRG	-2.7
Hexachloroethane	0.557	0.580	0.300	AVRG	4.1
N-Nitroso-di-n-propylamine	0.773	0.795	0.500	AVRG	2.8
4-Methylphenol	1.293	1.250	0.600	AVRG	-3.3
Nitrobenzene	0.331	0.348	0.200	AVRG	5.1
Isophorone	0.486	0.504	0.400	AVRG	3.7
2-Nitrophenol	0.221	0.225	0.100	AVRG	1.8
2,4-Dimethylphenol	0.338	0.336	0.200	AVRG	-0.6
Bis(2-Chloroethoxy)methane	0.374	0.385	0.300	AVRG	2.9
2,4-Dichlorophenol	0.345	0.346	0.200	AVRG	0.3
1,2,4-Trichlorobenzene	0.375	0.396	0.010	AVRG	5.6
Naphthalene	1.098	1.143	0.700	AVRG	4.1
Benzoic acid	0.221	0.207	0.010	AVRG	-6.3
4-Chloroaniline	0.478	0.496	0.010	AVRG	3.8
Hexachlorobutadiene	0.226	0.238	0.010	AVRG	5.3
4-Chloro-3-methylphenol	0.278	0.279	0.200	AVRG	0.4
2-Methylnaphthalene	0.646	0.663	0.400	AVRG	2.6
Hexachlorocyclopentadiene	0.354	0.361	0.050	AVRG	2.0
2,4,6-Trichlorophenol	0.408	0.406	0.200	AVRG	-0.5
2,4,5-Trichlorophenol	0.433	0.437	0.200	AVRG	0.9
2-Chloronaphthalene	1.084	1.152	0.800	AVRG	6.3
2-Nitroaniline	0.276	0.283	0.010	AVRG	2.5
Acenaphthylene	1.718	1.883	0.900	AVRG	9.6
Dimethylphthalate	1.106	1.168	0.010	AVRG	5.6
2,6-Dinitrotoluene	0.274	0.288	0.200	AVRG	5.1
Acenaphthene	1.130	1.197	0.900	AVRG	5.9
3-Nitroaniline	0.307	0.330	0.010	AVRG	7.5
2,4-Dinitrophenol	50.00	47.03	0.010	2ORDR	-5.9
Dibenzofuran	1.651	1.718	0.800	AVRG	4.0

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Cont. Calib. Date: 05/08/12

Init. Calib. Date: 05/07/12 Cont. Calib. Time: 1111

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
4-Nitrophenol	0.109	0.117	0.010	AVRG	7.3
2,4-Dinitrotoluene	0.349	0.377	0.200	AVRG	8.0
Fluorene	1.321	1.417	0.900	AVRG	7.3
4-Chlorophenyl-phenylether	0.643	0.672	0.400	AVRG	4.5
Diethylphthalate	1.040	1.085	0.010	AVRG	4.3
4-Nitroaniline	0.297	0.316	0.010	AVRG	6.4
4,6-Dinitro-2-methylphenol	0.147	0.154	0.010	AVRG	4.8
N-Nitrosodiphenylamine(1)	0.548	0.582	0.010	AVRG	6.2
4-Bromophenyl-phenylether	0.268	0.280	0.100	AVRG	4.5
Hexachlorobenzene	0.332	0.347	0.100	AVRG	4.5
Pentachlorophenol	0.164	0.161	0.050	AVRG	-1.8
Phenanthrene	1.114	1.197	0.700	AVRG	7.4
Anthracene	1.132	1.240	0.700	AVRG	9.5
Carbazole	0.863	0.907	0.010	AVRG	5.1
Di-n-butylphthalate	0.986	1.072	0.010	AVRG	8.7
Fluoranthene	1.131	1.259	0.600	AVRG	11.3
Pyrene	1.180	1.216	0.600	AVRG	3.0
Butylbenzylphthalate	0.402	0.418	0.010	AVRG	4.0
Benzo(a)anthracene	1.074	1.133	0.800	AVRG	5.5
3,3'-Dichlorobenzidine	0.371	0.389	0.010	AVRG	4.8
Chrysene	1.030	1.108	0.700	AVRG	7.6
bis(2-Ethylhexyl)phthalate	0.600	0.623	0.010	AVRG	3.8
Di-n-octylphthalate	1.005	1.061	0.010	AVRG	5.6
Benzo(b)fluoranthene	1.120	1.216	0.700	AVRG	8.6
Benzo(k)fluoranthene	1.123	1.231	0.700	AVRG	9.6
Benzo(a)pyrene	0.984	1.066	0.700	AVRG	8.3
Indeno(1,2,3-cd)pyrene	1.496	1.583	0.500	AVRG	5.8
Dibenzo(a,h)anthracene	1.205	1.316	0.400	AVRG	9.2
Benzo(g,h,i)perylene	1.297	1.354	0.500	AVRG	4.4
N-Nitrosodimethylamine	0.734	0.756	0.010	AVRG	3.0
Aniline	1.921	1.908	0.010	AVRG	-0.7
Benzidine	0.227		0.010	AVRG	
Pyridine	1.256	1.334	0.010	AVRG	6.2
1-methylnaphthalene	0.492	0.496	0.010	AVRG	0.8
Azobenzene (1,2-DP-Hydrazine	0.961	1.004	0.010	AVRG	4.5
2,3,4,6-Tetrachlorophenol	0.331	0.336	0.010	AVRG	1.5

(1) Cannot be separated from Diphenylamine

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-2

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Cont. Calib. Date: 05/08/12

Init. Calib. Date: 05/07/12 Cont. Calib. Time: 1111

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
1,2,4,5-Tetrachlorobenzene	0.561		0.010	AVRG	
Total Benzofluoranthenes	1.054	1.153	0.010	AVRG	9.4
2-Fluorophenol	1.223	1.221	0.010	AVRG	-0.2
Phenol-d5	1.457	1.428	0.010	AVRG	-2.0
2-Chlorophenol-d4	1.378	1.349	0.010	AVRG	-2.1
1,2-Dichlorobenzene-d4	0.994	0.976	0.010	AVRG	-1.8
Nitrobenzene-d5	0.327	0.325	0.010	AVRG	-0.6
2-Fluorobiphenyl	1.256	1.238	0.010	AVRG	-1.4
2,4,6-Tribromophenol	0.279	0.284	0.010	AVRG	1.8
Terphenyl-d14	0.756	0.721	0.010	AVRG	-4.6

<- Exceeds QC limit of 20% D

* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 05071201 Ical Date: 05/07/12

Instrument ID: NT6 Cont. Cal Date: 05/08/12

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	809103	7.38	2911787	9.45	1818894	12.30
	UPPER LIMIT	1618206		5823574		3637788	
	LOWER LIMIT	404552		1455894		909447	
	CCAL	657047	7.38	2305210	9.45	1417746	12.30
	UPPER LIMIT		7.88		9.95		12.80
	LOWER LIMIT		6.88		8.95		11.80
01	US15MBW1	629747	7.38	2263966	9.44	1363265	12.29
02	US15LCSW1	645137	7.38	2297146	9.44	1397155	12.30
03	US15LCSDW1	657893	7.38	2330115	9.44	1411302	12.30
04	MW-18-042612	644101	7.38	2272492	9.44	1354097	12.29
05	MW-3S-042712	646504	7.38	2287019	9.44	1378164	12.29
06	MW-3D-042712	610969	7.38	2174644	9.44	1297189	12.29
07	MW-7S-042712	657086	7.38	2331260	9.44	1414071	12.30
08	MW-10-042712	679631	7.38	2431902	9.44	1477806	12.29
09	DUP-042712-1	689636	7.38	2466930	9.44	1494784	12.29
10	MW-13-043012	679369	7.38	2415478	9.44	1461792	12.30
11	DUP-043012-1	626547	7.38	2256433	9.44	1378298	12.29
12	MW-27-043012	688991	7.38	2470633	9.44	1503419	12.30
13	MW-26-043012	661327	7.38	2369523	9.44	1454015	12.29
14	MW-14D-04301	685593	7.38	2427010	9.44	1472923	12.30
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 05071201 Ical Date: 05/07/12

Instrument ID: NT6 Cont. Cal Date: 05/08/12

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	2718644	14.66	2549674	18.95	2525537	21.09
	UPPER LIMIT	5437288		5099348		5051074	
	LOWER LIMIT	1359322		1274837		1262768	
	CCAL	2175348	14.66	2325625	18.95	2401245	21.09
	UPPER LIMIT		15.16		19.45		21.59
	LOWER LIMIT		14.16		18.45		20.59
01	US15MBW1	2129387	14.66	2167526	18.94	2306526	21.09
02	US15LCSW1	2106104	14.66	2265338	18.94	2278762	21.09
03	US15LCSDW1	2186413	14.66	2331451	18.95	2323653	21.09
04	MW-18-042612	2107823	14.65	2188074	18.94	2272905	21.09
05	MW-3S-042712	2155676	14.65	2289964	18.94	2399636	21.09
06	MW-3D-042712	1963956	14.65	2005585	18.94	2152918	21.09
07	MW-7S-042712	2210500	14.65	2258165	18.95	2335449	21.09
08	MW-10-042712	2251139	14.65	2201645	18.94	2275193	21.09
09	DUP-042712-1	2306175	14.65	2188075	18.94	2237479	21.09
10	MW-13-043012	2247204	14.66	2209414	18.95	2506989	21.09
11	DUP-043012-1	2107684	14.65	1989714	18.95	2310725	21.09
12	MW-27-043012	2321539	14.65	2278597	18.94	2414875	21.09
13	MW-26-043012	2248497	14.66	2219170	18.94	2392626	21.09
14	MW-14D-04301	2268449	14.65	2227444	18.94	2362487	21.09
15							
16							
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25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US15 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 05071201 Ical Date: 05/07/12

Instrument ID: NT6 Cont. Cal Date: 05/08/12

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	2275861	20.16				
	UPPER LIMIT	4551722					
	LOWER LIMIT	1137930					
	CCAL	2105573	20.17				
	UPPER LIMIT		20.67				
	LOWER LIMIT		19.67				
01	US15MBW1	1860577	20.16				
02	US15LCSW1	2006523	20.16				
03	US15LCSDW1	2083544	20.16				
04	MW-18-042612	1996364	20.16				
05	MW-3S-042712	2156418	20.16				
06	MW-3D-042712	1882922	20.16				
07	MW-7S-042712	2119963	20.16				
08	MW-10-042712	1971087	20.16				
09	DUP-042712-1	2006079	20.16				
10	MW-13-043012	2130745	20.17				
11	DUP-043012-1	1956480	20.17				
12	MW-27-043012	2145992	20.16				
13	MW-26-043012	2113098	20.16				
14	MW-14D-04301	2084887	20.16				
15							
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25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

SIM PAH Analysis
Report and Summary QC Forms

ARI Job ID: US15, US27

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MW-14D-043012
SAMPLE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 18:11
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	56.7%
d14-Dibenzo(a,h)anthracene	43.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	MNP	DBA	TOT OUT
MB-050212	54.7%	59.7%	0
LCS-050212	52.0%	50.3%	0
LCSD-050212	58.0%	47.3%	0
MW-14D-043012	56.7%	43.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-7680 to 12-7680

US15 00095

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-050212
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050212
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/02/12

Date Analyzed LCS: 05/08/12 16:39
LCSD: 05/08/12 17:14
Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	1.26	3.00	42.0%	1.53	3.00	51.0%	19.4%
2-Methylnaphthalene	1.23	3.00	41.0%	1.43	3.00	47.7%	15.0%
1-Methylnaphthalene	1.39	3.00	46.3%	1.58	3.00	52.7%	12.8%
Acenaphthylene	1.28	3.00	42.7%	1.56	3.00	52.0%	19.7%
Acenaphthene	1.43	3.00	47.7%	1.72	3.00	57.3%	18.4%
Fluorene	1.52	3.00	50.7%	1.80	3.00	60.0%	16.9%
Phenanthrene	1.85	3.00	61.7%	2.12	3.00	70.7%	13.6%
Anthracene	1.88	3.00	62.7%	1.82	3.00	60.7%	3.2%
Fluoranthene	1.89	3.00	63.0%	2.08	3.00	69.3%	9.6%
Pyrene	2.00	3.00	66.7%	2.02	3.00	67.3%	1.0%
Benzo(a)anthracene	1.65	3.00	55.0%	1.63	3.00	54.3%	1.2%
Chrysene	2.10	3.00	70.0%	2.22	3.00	74.0%	5.6%
Benzo(a)pyrene	1.52	3.00	50.7%	1.61	3.00	53.7%	5.8%
Indeno(1,2,3-cd)pyrene	1.87	3.00	62.3%	1.89	3.00	63.0%	1.1%
Dibenz(a,h)anthracene	1.26	3.00	42.0%	1.31	3.00	43.7%	3.9%
Benzo(g,h,i)perylene	1.90	3.00	63.3%	1.97	3.00	65.7%	3.6%
Dibenzofuran	1.50	3.00	50.0%	1.79	3.00	59.7%	17.6%
Total Benzofluoranthenes	4.71	6.00	78.5%	4.79	6.00	79.8%	1.7%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	52.0%	58.0%
d14-Dibenzo(a,h)anthracene	50.3%	47.3%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

US27MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: ERM-WEST

ARI Job No: US27

Project: RG SPRING GW SAMPLIN

Lab File ID: 05081203

Date Extracted: 05/02/12

Instrument ID: NT4

Date Analyzed: 05/08/12

Matrix: LIQUID

Time Analyzed: 1605

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	US27LCSW1	US27LCSW1	05081204	05/08/12
02	US27LCSDW1	US27LCSDW1	05081205	05/08/12
03	MW-14D-043012	US27E	05081207	05/08/12
04				
05				
06				
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US15 00097

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MB-050212
METHOD BLANK

Lab Sample ID: MB-050212
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 16:05
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	54.7%
d14-Dibenzo(a,h)anthracene	59.7%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

Instrument ID: NT4 Project: RG SPRING GW SAMPLING

DFTPP Injection Date: 03/16/12 DFTPP Injection Time: 1132

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	41.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	48.8
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	28.9
365	Greater than 1.0% of mass 198	3.31
441	0.0 - 24.0% of mass 442	14.6 (17.2)2
442	50.0 - 200.0% of mass 198	84.4
443	15.0 - 24.0% of mass 442	17.0 (20.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC010316	IC010316	03161202	03/16/12	1311
02	IC050316	IC050316	03161203	03/16/12	1340
03	IC100316	IC100316	03161204	03/16/12	1409
04	IC250316	IC250316	03161205	03/16/12	1438
05	IC50316	IC50316	03161206	03/16/12	1507
06	IC100316	IC100316	03161207	03/16/12	1536
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US15:00099

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

Instrument ID: NT4 Project: RG SPRING GW SAMPLING

DFTPP Injection Date: 05/08/12 DFTPP Injection Time: 1155

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.0
68	Less than 2.0% of mass 69	0.3 (0.6)1
69	Mass 69 relative abundance	40.4
70	Less than 2.0% of mass 69	0.3 (0.7)1
127	10.0 - 80.0% of mass 198	46.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	29.8
365	Greater than 1.0% of mass 198	3.26
441	0.0 - 24.0% of mass 442	16.1 (15.9)2
442	50.0 - 200.0% of mass 198	101.7
443	15.0 - 24.0% of mass 442	21.0 (20.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0508	CC0508	05081202	05/08/12	1212
02	US27MBW1	US27MBW1	05081203	05/08/12	1605
03	US27LCSW1	US27LCSW1	05081204	05/08/12	1639
04	US27LCSDW1	US27LCSDW1	05081205	05/08/12	1714
05	MW-14D-043012	US27E	05081207	05/08/12	1811
06					
07					
08					
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FORM V SV

US15:00100

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT4 Calibration Date: 03/16/12

LAB FILE ID: RRF0.1=03161202 RRF0.5=03161203 RRF1 =03161204
RRF2.5=03161205 RRF5 =03161206 RRF10 =03161207

COMPOUND	RRF 0.1	RRF 0.5	RRF 1	RRF 2.5	RRF 5	RRF 10	___ RRF	%RSD /R^2
Naphthalene	1.249	1.109	1.164	1.063	0.928	0.856	1.062	13.8
2-Methylnaphthalene	0.811	0.660	0.675	0.641	0.552	0.542	0.647	15.1
Acenaphthylene	1.608	1.650	1.669	1.658	1.466	1.543	1.599	5.0
Acenaphthene	1.263	1.194	1.228	1.155	1.025	1.070	1.156	8.0
Dibenzofuran	1.856	1.755	1.741	1.656	1.442	1.474	1.654	10.0
Fluorene	1.420	1.291	1.346	1.280	1.127	1.180	1.274	8.4
Phenanthrene	1.285	1.172	1.220	1.146	0.996	1.004	1.137	10.2
Anthracene	1.304	1.068	1.187	1.119	0.986	1.020	1.114	10.5
Fluoranthene	1.538	1.209	1.324	1.265	1.099	1.143	1.263	12.5
Pyrene	1.262	1.140	1.202	1.123	1.005	1.048	1.130	8.4
Benzo(a)anthracene	1.224	1.012	1.088	1.039	0.949	1.019	1.055	8.9
Chrysene	1.313	1.071	1.094	1.076	0.964	1.012	1.088	11.0
Benzo(b)fluoranthene	1.112	1.194	1.256	1.148	1.030	1.103	1.140	6.9
Benzo(k)fluoranthene	1.235	1.205	1.336	1.233	1.040	1.138	1.198	8.4
Benzo(j)fluoranthene	0.914	1.094	1.218	1.078	0.959	1.091	1.059	10.3
Benzo(a)pyrene		1.002	1.117	1.099	1.006	1.141	1.073	6.0
Indeno(1,2,3-cd)pyrene	1.256	1.245	1.363	1.322	1.209	1.364	1.293	5.1
Dibenzo(a,h)anthracene	1.176	1.014	1.110	1.079	1.017	1.147	1.090	6.1
Benzo(g,h,i)perylene	1.274	1.067	1.226	1.156	1.069	1.165	1.160	7.1
1-methylnaphthalene	0.742	0.607	0.639	0.602	0.525	0.516	0.605	13.7
Perylene	0.725	1.122	1.185	1.130	1.027	1.138	1.054	16.1
2-Methylnaphthalene-d10	0.803	0.619	0.705	0.649	0.553	0.546	0.646	15.1
Dibenzo(a,h)anthracene-d14	0.854	0.755	0.845	0.883	0.808	0.930	0.846	7.2

<- Outside QC limits: %RSD <20% or R^2 > 0.990

US15:00101

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Instrument ID: NT4 Cont. Calib. Date: 05/08/12

Init. Calib. Date: 03/16/12 Cont. Calib. Time: 1212

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	1.062	1.020	0.700	AVRG	-4.0
2-Methylnaphthalene	0.647	0.629	0.400	AVRG	-2.8
Acenaphthylene	1.599	1.611	0.900	AVRG	0.8
Acenaphthene	1.156	1.171	0.900	AVRG	1.3
Dibenzofuran	1.654	1.671	0.800	AVRG	1.0
Fluorene	1.274	1.237	0.900	AVRG	-2.9
Phenanthrene	1.137	1.119	0.700	AVRG	-1.6
Anthracene	1.114	1.049	0.700	AVRG	-5.8
Fluoranthene	1.263	1.153	0.600	AVRG	-8.7
Pyrene	1.130	1.088	0.600	AVRG	-3.7
Benzo(a)anthracene	1.055	0.929	0.800	AVRG	-11.9
Chrysene	1.088	1.045	0.700	AVRG	-4.0
Benzo(b)fluoranthene	1.140	1.166	0.700	AVRG	2.3
Benzo(k)fluoranthene	1.198	1.221	0.700	AVRG	1.9
Benzo(j)fluoranthene	1.059	1.032	0.010	AVRG	-2.5
Benzo(a)pyrene	1.073	1.040	0.700	AVRG	-3.1
Indeno(1,2,3-cd)pyrene	1.293	1.226	0.500	AVRG	-5.2
Dibenzo(a,h)anthracene	1.090	0.956	0.400	AVRG	-12.3
Benzo(g,h,i)perylene	1.160	1.110	0.500	AVRG	-4.3
1-methylnaphthalene	0.605	0.564	0.010	AVRG	-6.8
Perylene	1.054	1.074	0.010	AVRG	1.9
2-Methylnaphthalene-d10	0.646	0.619	0.010	AVRG	-4.2
Dibenzo(a,h)anthracene-d14	0.846	0.679	0.010	AVRG	-19.7

<- Exceeds QC limit of 20% D

* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 03161205 Ical Date: 03/16/12

Instrument ID: NT4 Cont. Cal Date: 05/08/12

		IS1(NPT) AREA #	RT #	IS2(ANT) AREA #	RT #	IS3(PHN) AREA #	RT #
	ICAL MIDPT	364113	5.43	210739	7.72	347113	9.69
	UPPER LIMIT	728226		421478		694226	
	LOWER LIMIT	182056		105370		173556	
	CCAL	352534	4.54	205329	6.77	360233	8.70
	UPPER LIMIT		5.04		7.27		9.20
	LOWER LIMIT		4.04		6.27		8.20
01	US27MBW1	338321	4.52	189577	6.76	333863	8.69
02	US27LCSW1	387603	4.53	227183	6.77	391789	8.70
03	US27LCSDW1	401580	4.53	236402	6.77	393938	8.70
04	MW-14D-04301	406182	4.52	231448	6.76	419415	8.69
05							
06							
07							
08							
09							
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16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

US15:00103

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: US27 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 03161205 Ical Date: 03/16/12

Instrument ID: NT4 Cont. Cal Date: 05/08/12

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	412003	14.89	386633	18.72		
	UPPER LIMIT	824006		773266			
	LOWER LIMIT	206002		193316			
	CCAL	403507	13.15	359773	16.70		
	UPPER LIMIT		13.65		17.20		
	LOWER LIMIT		12.65		16.20		
01	US27MBW1	342803	13.14	230322	16.68		
02	US27LCSW1	429378	13.15	314740	16.70		
03	US27LCSDW1	447723	13.15	325550	16.69		
04	MW-14D-04301	448746	13.14	321414	16.68		
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

US15:00104

PCP/Chlorophenols Analysis
Report and Summary QC Forms

ARI Job ID: US15, US27

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-18-042612
SAMPLE

Lab Sample ID: US15A
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 12:45
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	51.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-3S-042712
SAMPLE

Lab Sample ID: US15B
LIMS ID: 12-7625
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 13:21
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	55.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: MW-3D-042712
SAMPLE

Lab Sample ID: US15C
LIMS ID: 12-7626
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 13:57
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	49.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-7S-042712
SAMPLE

Lab Sample ID: US15D
LIMS ID: 12-7627
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 16:15
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 20.0

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	5.0	53

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	D

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-10-042712
SAMPLE

Lab Sample ID: US15E
LIMS ID: 12-7628
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 15:08
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	1.4

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	62.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: DUP-042712-1
SAMPLE

Lab Sample ID: US15F
LIMS ID: 12-7629
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 16:51
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 20.0

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	5.0	58

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	D

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	TBP	TOT OUT
MB-050212	78.4%	0
LCS-050212	76.0%	0
LCSD-050212	74.2%	0
MW-18-042612	51.2%	0
MW-3S-042712	55.6%	0
MW-3D-042712	49.6%	0
MW-7S-042712	D	0
MW-10-042712	62.0%	0
DUP-042712-1	D	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(41-98)	(26-113)

Prep Method: SW3510C
Log Number Range: 12-7624 to 12-7629

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-13-043012
SAMPLE

Lab Sample ID: US27A
LIMS ID: 12-7676
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 17:26
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 20.0

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	5.0	58

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	D

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: DUP-043012-1
SAMPLE

Lab Sample ID: US27B
LIMS ID: 12-7677
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/08/12 18:02
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 50.0

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	12	72

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	D

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-27-043012
SAMPLE

Lab Sample ID: US27C
LIMS ID: 12-7678
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 18:44
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	61.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-26-043012
SAMPLE

Lab Sample ID: US27D
LIMS ID: 12-7679
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 19:20
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	8.2

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	64.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-14D-043012
SAMPLE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 19:56
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	61.2%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	TBP	TOT OUT
MB-050212	78.4%	0
LCS-050212	76.0%	0
LCSD-050212	74.2%	0
MW-13-043012	D	0
DUP-043012-1	D	0
MW-27-043012	61.2%	0
MW-26-043012	64.4%	0
MW-14D-043012	61.2%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(41-98)	(26-113)

Prep Method: SW3510C
Log Number Range: 12-7676 to 12-7680

US15:00118

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-050212
LCS/LCSD

Lab Sample ID: LCS-050212
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

Date Extracted LCS/LCSD: 05/02/12

Date Analyzed LCS: 05/07/12 11:33
LCSD: 05/07/12 12:09
Instrument/Analyst LCS: ECD1/AAR
LCSD: ECD1/AAR

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 50 mL
LCSD: 50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Pentachlorophenol	1.81	2.50	72.4%	1.88	2.50	75.2%	3.8%

Chlorophenols Surrogate Recovery

	LCS	LCSD
2,4,6-Tribromophenol	76.0%	74.2%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

US15MBW1

Lab Name: ANALYTICAL RESOURCES INC — Client: ERM-WEST

ARI Job No.: US15 — Project: RG SPRING GW SAMPLING

Lab Sample ID: US15MBW1 — Lab File ID: 05070006

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 05/02/12

Date Analyzed (1): 05/07/12 — Date Analyzed (2): 05/07/12

Time Analyzed (1): 1056 — Time Analyzed (2): 1056

Instrument ID (1): ECD1 — Instrument ID (2): ECD1

GC Column (1): STX CLP1 ID: 0.53(mm) — GC Column (2): STX CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	US15LCSW1	US15LCSW1	05/07/12	05/07/12
02	US15LCSDW1	US15LCSDW1	05/07/12	05/07/12
03	MW-18-042612	US15A	05/07/12	05/07/12
04	MW-3S-042712	US15B	05/07/12	05/07/12
05	MW-3D-042712	US15C	05/07/12	05/07/12
06	MW-10-042712	US15E	05/07/12	05/07/12
07	MW-27-043012	US27C	05/07/12	05/07/12
08	MW-26-043012	US27D	05/07/12	05/07/12
09	MW-14D-04301	US27E	05/07/12	05/07/12
10	MW-7S-042712	US15D	05/08/12	05/08/12
11	DUP-042712-1	US15F	05/08/12	05/08/12
12	MW-13-043012	US27A	05/08/12	05/08/12
13	DUP-043012-1	US27B	05/08/12	05/08/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-050212
METHOD BLANK

Lab Sample ID: MB-050212
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized: MW
Reported: 05/09/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Date Extracted: 05/02/12
Date Analyzed: 05/07/12 10:56
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	78.4%

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol	21.11	21.11	21.11	21.10	21.10	21.10	21.10	21.04	21.18
2,4,6-Trichloropheno	13.21	13.20	13.20	13.20	13.20	13.20	13.20	13.13	13.28
2,3,6-Trichloropheno	14.20	14.20	14.20	14.20	14.20	14.20	14.20	14.13	14.27
2,4,5-Trichloropheno	15.97	15.96	15.96	15.95	15.95	15.95	15.96	15.90	16.04
2,3,4-Trichloropheno	17.48	17.47	17.46	17.46	17.46	17.45	17.47	17.41	17.55
2,3,5,6-Tetrachlorop	17.27	17.26	17.26	17.26	17.26	17.25	17.26	17.20	17.34
2,3,4,5-Tetrachlorop	20.28	20.27	20.27	20.26	20.26	20.26	20.27	20.21	20.35
2,4-Dichlorophenol	12.66	12.66	12.66	12.66	12.65	12.65	12.66	12.59	12.73
2,4,6-Tribromophenol	18.72	18.71	18.71	18.71	18.70	18.70	18.71	18.65	18.79

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol	22.85	22.84	22.84	22.84	22.83	22.83	22.84	22.77	22.91
2,4,6-Trichlorophenol	14.22	14.21	14.21	14.21	14.21	14.21	14.21	14.14	14.28
2,3,6-Trichlorophenol	15.46	15.46	15.46	15.45	15.45	15.45	15.46	15.38	15.53
2,4,5-Trichlorophenol	17.38	17.38	17.37	17.37	17.37	17.36	17.37	17.30	17.44
2,3,4-Trichlorophenol	18.93	18.92	18.92	18.91	18.91	18.91	18.92	18.84	18.98
2,3,5,6-Tetrachlorop	18.71	18.70	18.70	18.70	18.70	18.69	18.70	18.63	18.77
2,3,4,5-Tetrachlorop	21.97	21.97	21.96	21.96	21.96	21.95	21.96	21.89	22.03
2,4-Dichlorophenol	13.73	13.73	13.73	13.73	13.72	13.72	13.73	13.66	13.80
2,4,6-Tribromophenol	20.82	20.82	20.82	20.81	20.81	20.81	20.82	20.75	20.89

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	71748	66396	59963	53589	48840	40802	0.9998	Q
2,4,6-Trichlorophenol	36826	37371	34059	30102	26170	22270	19.5	A
2,3,6-Trichlorophenol	35698	33430	35377	29468	25822	21477	18.9	A
2,4,5-Trichlorophenol	20232	21532	22437	19278	15518	12168	0.9998	Q
2,3,4-Trichlorophenol	30789	28670	26135	22318	19586	15750	0.9998	Q
2,3,5,6-Tetrachloroph	53340	50922	48164	43544	39008	33581	16.8	A
2,3,4,5-Tetrachloroph	46968	41050	38658	33500	31676	24932	0.9986	Q
2,4-Dichlorophenol	2598	2225	1924	1689	1428	1202	0.9997	Q
2,4,6-Tribromophenol	54635	51354	49292	43188	39839	33195	17.7	A

AVE RSD | 20.8

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A007.d
LVL 2: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A008.d
LVL 3: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A009.d
LVL 4: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A006.d
LVL 5: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A010.d
LVL 6: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A011.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	42831	39424	36711	32522	29273	25788	18.6	A
2,4,6-Trichlorophenol	30382	25103	23028	23892	19998	16464	0.9995	Q
2,3,6-Trichlorophenol	26568	24380	23061	20113	17782	14386	0.9998	Q
2,4,5-Trichlorophenol	14270	12029	12379	12236	10871	7648	19.1	A
2,3,4-Trichlorophenol	22416	19090	16404	15938	12846	9204	0.9966	Q
2,3,5,6-Tetrachloroph	33860	31358	29200	27814	25374	21354	15.7	A
2,3,4,5-Tetrachloroph	27646	25163	22972	20080	18218	15133	0.9998	Q
2,4-Dichlorophenol	1384	1147	1030	1060	879	691	0.9992	Q
2,4,6-Tribromophenol	35777	33525	30723	28406	27585	22686	15.6	A

AVE RSD	20.5

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A007.d
LVL 2: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A008.d
LVL 3: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A009.d
LVL 4: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A006.d
LVL 5: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A010.d
LVL 6: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A011.d

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/07/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1020

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	20.3	25.0	-18.8
2,4,6-Trichlorophenol	13.22	13.13	13.28	20.0	25.0	-20.0
2,3,6-Trichlorophenol	14.22	14.13	14.27	22.3	25.0	-10.8
2,4,5-Trichlorophenol	15.97	15.90	16.04	19.6	25.0	-21.6
2,3,4-Trichlorophenol	17.48	17.41	17.55	21.3	25.0	-14.8
2,3,5,6-Tetrachlorophenol	17.28	17.20	17.34	20.9	25.0	-16.4
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	19.6	25.0	-21.6
2,4-Dichlorophenol	12.68	12.59	12.73	214	250	-14.4
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	20.3	25.0	-18.8

AVERAGE %D = 17.5

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/07/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1020

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	21.8	25.0	-12.8	
2,4,6-Trichlorophenol	14.23	14.14	14.28	20.7	25.0	-17.2	
2,3,6-Trichlorophenol	15.47	15.38	15.53	18.0	25.0	-28.0	<-
2,4,5-Trichlorophenol	17.39	17.30	17.44	21.3	25.0	-14.8	
2,3,4-Trichlorophenol	18.93	18.84	18.98	17.9	25.0	-28.4	<-
2,3,5,6-Tetrachlorophenol	18.72	18.63	18.77	20.2	25.0	-19.2	
2,3,4,5-Tetrachlorophenol	21.98	21.89	22.03	20.9	25.0	-16.4	
2,4-Dichlorophenol	13.74	13.66	13.80	196	250	-21.6	
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	20.2	25.0	-19.2	

AVERAGE %D = 19.7

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/07/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2108

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	21.9	25.0	-12.4
2,4,6-Trichlorophenol	13.22	13.13	13.28	21.5	25.0	-14.0
2,3,6-Trichlorophenol	14.21	14.13	14.27	23.5	25.0	-6.0
2,4,5-Trichlorophenol	15.97	15.90	16.04	20.8	25.0	-16.8
2,3,4-Trichlorophenol	17.48	17.41	17.55	22.9	25.0	-8.4
2,3,5,6-Tetrachlorophenol	17.28	17.20	17.34	22.3	25.0	-10.8
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	20.9	25.0	-16.4
2,4-Dichlorophenol	12.68	12.59	12.73	222	250	-11.2
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	21.8	25.0	-12.8

AVERAGE %D = 12.1

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/07/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :2108

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	21.5	25.0	-14.0	
2,4,6-Trichlorophenol	14.23	14.14	14.28	23.2	25.0	-7.2	
2,3,6-Trichlorophenol	15.47	15.38	15.53	19.8	25.0	-20.8	
2,4,5-Trichlorophenol	17.38	17.30	17.44	22.2	25.0	-11.2	
2,3,4-Trichlorophenol	18.93	18.84	18.98	18.5	25.0	-26.0	<-
2,3,5,6-Tetrachlorophenol	18.71	18.63	18.77	21.4	25.0	-14.4	
2,3,4,5-Tetrachlorophenol	21.98	21.89	22.03	20.6	25.0	-17.6	
2,4-Dichlorophenol	13.74	13.66	13.80	210	250	-16.0	
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	20.7	25.0	-17.2	

AVERAGE %D = 16.0

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/07/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1656

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	21.4	25.0	-14.4
2,4,6-Trichlorophenol	13.22	13.13	13.28	20.8	25.0	-16.8
2,3,6-Trichlorophenol	14.22	14.13	14.27	23.0	25.0	-8.0
2,4,5-Trichlorophenol	15.97	15.90	16.04	20.4	25.0	-18.4
2,3,4-Trichlorophenol	17.48	17.41	17.55	22.2	25.0	-11.2
2,3,5,6-Tetrachlorophenol	17.28	17.20	17.34	21.8	25.0	-12.8
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	20.5	25.0	-18.0
2,4-Dichlorophenol	12.68	12.59	12.73	218	250	-12.8
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	21.0	25.0	-16.0

AVERAGE %D = 14.3

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/07/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1656

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	20.9	25.0	-16.4	
2,4,6-Trichlorophenol	14.23	14.14	14.28	22.2	25.0	-11.2	
2,3,6-Trichlorophenol	15.47	15.38	15.53	19.2	25.0	-23.2	
2,4,5-Trichlorophenol	17.38	17.30	17.44	20.9	25.0	-16.4	
2,3,4-Trichlorophenol	18.93	18.84	18.98	18.0	25.0	-28.0	<-
2,3,5,6-Tetrachlorophenol	18.71	18.63	18.77	20.9	25.0	-16.4	
2,3,4,5-Tetrachlorophenol	21.97	21.89	22.03	20.2	25.0	-19.2	
2,4-Dichlorophenol	13.74	13.66	13.80	204	250	-18.4	
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	20.1	25.0	-19.6	

AVERAGE %D = 18.8

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/08/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1503

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	21.4	25.0	-14.4
2,4,6-Trichlorophenol	13.22	13.13	13.28	20.5	25.0	-18.0
2,3,6-Trichlorophenol	14.22	14.13	14.27	22.6	25.0	-9.6
2,4,5-Trichlorophenol	15.97	15.90	16.04	22.3	25.0	-10.8
2,3,4-Trichlorophenol	17.48	17.41	17.55	23.9	25.0	-4.4
2,3,5,6-Tetrachlorophenol	17.28	17.20	17.34	20.6	25.0	-17.6
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	25.8	25.0	3.2
2,4-Dichlorophenol	12.68	12.59	12.73	242	250	-3.2
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	22.6	25.0	-9.6

AVERAGE %D = 10.1

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/08/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1503

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	20.0	25.0	-20.0	
2,4,6-Trichlorophenol	14.23	14.14	14.28	19.1	25.0	-23.6	
2,3,6-Trichlorophenol	15.47	15.38	15.53	16.5	25.0	-34.0	<-
2,4,5-Trichlorophenol	17.39	17.30	17.44	20.9	25.0	-16.4	
2,3,4-Trichlorophenol	18.93	18.84	18.98	16.7	25.0	-33.2	<-
2,3,5,6-Tetrachlorophenol	18.71	18.63	18.77	18.1	25.0	-27.6	<-
2,3,4,5-Tetrachlorophenol	21.98	21.89	22.03	18.8	25.0	-24.8	
2,4-Dichlorophenol	13.74	13.66	13.80	177	250	-29.2	<-
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	18.4	25.0	-26.4	<-

AVERAGE %D = 26.1

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/08/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1914

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	22.2	25.0	-11.2
2,4,6-Trichlorophenol	13.22	13.13	13.28	20.8	25.0	-16.8
2,3,6-Trichlorophenol	14.22	14.13	14.27	22.9	25.0	-8.4
2,4,5-Trichlorophenol	15.97	15.90	16.04	23.2	25.0	-7.2
2,3,4-Trichlorophenol	17.48	17.41	17.55	24.6	25.0	-1.6
2,3,5,6-Tetrachlorophenol	17.28	17.20	17.34	21.0	25.0	-16.0
2,3,4,5-Tetrachlorophenol	20.29	20.21	20.35	26.0	25.0	4.0
2,4-Dichlorophenol	12.68	12.59	12.73	245	250	-2.0
2,4,6-Tribromophenol (surr	18.73	18.65	18.79	22.7	25.0	-9.2

AVERAGE %D = 8.5

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/08/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1914

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	20.5	25.0	-18.0	
2,4,6-Trichlorophenol	14.23	14.14	14.28	19.3	25.0	-22.8	
2,3,6-Trichlorophenol	15.47	15.38	15.53	16.8	25.0	-32.8	<-
2,4,5-Trichlorophenol	17.39	17.30	17.44	20.9	25.0	-16.4	
2,3,4-Trichlorophenol	18.93	18.84	18.98	17.0	25.0	-32.0	<-
2,3,5,6-Tetrachlorophenol	18.72	18.63	18.77	18.5	25.0	-26.0	<-
2,3,4,5-Tetrachlorophenol	21.98	21.89	22.03	19.2	25.0	-23.2	
2,4-Dichlorophenol	13.74	13.66	13.80	179	250	-28.4	<-
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	18.8	25.0	-24.8	

AVERAGE %D = 24.9

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	03/23/12	1336	18.71
02		PCP A	03/23/12	1412	18.72
03		PCP B	03/23/12	1448	18.71
04		PCP C	03/23/12	1524	18.71
05		PCP E	03/23/12	1600	18.70
06		PCP F	03/23/12	1636	18.70
07	ZZZZZ	ZZZZZ	03/23/12	1712	18.71
08	ZZZZZ	ZZZZZ	05/07/12	0757	----
09	ZZZZZ	ZZZZZ	05/07/12	0833	18.73
10	ZZZZZ	ZZZZZ	05/07/12	0909	18.73
11	ZZZZZ	ZZZZZ	05/07/12	0945	18.73
12		PCP CCAL	05/07/12	1020	18.72
13	US15MBW1	US15MBW1	05/07/12	1056	18.74
14	US15LCSW1	US15LCSW1	05/07/12	1133	18.74
15	US15LCSDW1	US15LCSDW1	05/07/12	1209	18.73
16	MW-18-042612	US15A	05/07/12	1245	18.74
17	MW-3S-042712	US15B	05/07/12	1321	18.73
18	MW-3D-042712	US15C	05/07/12	1357	18.73
19	MW-10-042712	US15E	05/07/12	1508	18.73
20	ZZZZZ	ZZZZZ	05/07/12	1620	18.72
21		PCP CCAL	05/07/12	1656	18.72
22	MW-27-043012	US27C	05/07/12	1844	18.74
23	MW-26-043012	US27D	05/07/12	1920	18.73
24	MW-14D-04301	US27E	05/07/12	1956	18.74
25	ZZZZZ	ZZZZZ	05/07/12	2032	18.72
26		PCP CCAL	05/07/12	2108	18.72
27		PCP CCAL	05/08/12	1503	18.72
28	MW-7S-042712	US15D	05/08/12	1615	18.75
29	DUP-042712-1	US15F	05/08/12	1651	18.75
30	MW-13-043012	US27A	05/08/12	1726	18.75
31	DUP-043012-1	US27B	05/08/12	1802	18.75
32	ZZZZZ	ZZZZZ	05/08/12	1838	18.73

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

US15:00136

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP CCAL	05/08/12	1914	18.73

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.82

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	03/23/12	1336	20.81
02		PCP A	03/23/12	1412	20.82
03		PCP B	03/23/12	1448	20.82
04		PCP C	03/23/12	1524	20.82
05		PCP E	03/23/12	1600	20.81
06		PCP F	03/23/12	1636	20.81
07	ZZZZZ	ZZZZZ	03/23/12	1712	20.82
08	ZZZZZ	ZZZZZ	05/07/12	0757	----
09	ZZZZZ	ZZZZZ	05/07/12	0833	20.84
10	ZZZZZ	ZZZZZ	05/07/12	0909	20.84
11	ZZZZZ	ZZZZZ	05/07/12	0945	20.83
12		PCP CCAL	05/07/12	1020	20.83
13	US15MBW1	US15MBW1	05/07/12	1056	20.84
14	US15LCSW1	US15LCSW1	05/07/12	1133	20.84
15	US15LCSDW1	US15LCSDW1	05/07/12	1209	20.84
16	MW-18-042612	US15A	05/07/12	1245	20.84
17	MW-3S-042712	US15B	05/07/12	1321	20.84
18	MW-3D-042712	US15C	05/07/12	1357	20.84
19	MW-10-042712	US15E	05/07/12	1508	20.84
20	ZZZZZ	ZZZZZ	05/07/12	1620	20.83
21		PCP CCAL	05/07/12	1656	20.83
22	MW-27-043012	US27C	05/07/12	1844	20.84
23	MW-26-043012	US27D	05/07/12	1920	20.83
24	MW-14D-04301	US27E	05/07/12	1956	20.84
25	ZZZZZ	ZZZZZ	05/07/12	2032	20.83
26		PCP CCAL	05/07/12	2108	20.83
27		PCP CCAL	05/08/12	1503	20.83
28	MW-7S-042712	US15D	05/08/12	1615	20.85
29	DUP-042712-1	US15F	05/08/12	1651	20.85
30	MW-13-043012	US27A	05/08/12	1726	20.85
31	DUP-043012-1	US27B	05/08/12	1802	20.85
32	ZZZZZ	ZZZZZ	05/08/12	1838	20.83

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: US15 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.82

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP CCAL	05/08/12	1914	20.83

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

Metals Analysis
Report and Summary QC Forms

ARI Job ID: US15, US27

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-18-042612	US15A	12-7624	
MW-18-042612D	US15ADUP	12-7624	
MW-18-042612S	US15ASPK	12-7624	
MW-3S-042712	US15B	12-7625	
PBW	US15MB1	12-7625	
LCSW	US15MB1SPK	12-7625	
MW-3D-042712	US15C	12-7626	
MW-7S-042712	US15D	12-7627	
MW-10-042712	US15E	12-7628	
MW-18-042612	US15G	12-7630	
MW-18-042612D	US15GDUP	12-7630	
MW-18-042612S	US15GSPK	12-7630	
MW-3S-042712	US15H	12-7631	
PBW	US15MB2	12-7631	
LCSW	US15MB2SPK	12-7631	
MW-3D-042712	US15I	12-7632	
MW-7S-042712	US15J	12-7633	
MW-10-042712	US15K	12-7634	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 5/17/12 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-18-042612
SAMPLE

Lab Sample ID: US15A
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/11/12	**7440-36-0**	**Antimony**	0.2	**0.2**	
200.8	05/08/12	6020A	05/11/12	**7440-38-2**	**Arsenic**	0.2	**6.2**	
200.8	05/08/12	6020A	05/11/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/08/12	6020A	05/11/12	**7440-47-3**	**Chromium**	0.5	**0.6**	
200.8	05/08/12	6020A	05/11/12	**7440-50-8**	**Copper**	0.5	**1.9**	
200.8	05/08/12	6020A	05/11/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/07/12	7470A	05/08/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/08/12	6020A	05/14/12	**7440-02-0**	**Nickel**	0.5	**9.2**	
200.8	05/08/12	6020A	05/14/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/08/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-3S-042712
SAMPLE

Lab Sample ID: US15B
LIMS ID: 12-7625
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/11/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	**7440-38-2**	**Arsenic**	1	**387**	
200.8	05/08/12	6020A	05/11/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	**7440-43-9**	**Cadmium**	0.1	**0.1**	
200.8	05/08/12	6020A	05/11/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/08/12	6020A	05/11/12	**7440-50-8**	**Copper**	0.5	**0.9**	
200.8	05/08/12	6020A	05/11/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/07/12	7470A	05/08/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/08/12	6020A	05/11/12	**7440-02-0**	**Nickel**	0.5	**0.5**	
200.8	05/08/12	6020A	05/14/12	7782-49-2	Selenium	2	2	U
200.8	05/08/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-3D-042712
SAMPLE

Lab Sample ID: US15C
LIMS ID: 12-7626
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/11/12	**7440-38-2**	**Arsenic**	0.2	**27.7**	
200.8	05/08/12	6020A	05/11/12	**7440-47-3**	**Chromium**	0.5	**3.9**	
200.8	05/08/12	6020A	05/11/12	**7440-50-8**	**Copper**	0.5	**0.9**	
200.8	05/08/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-7S-042712
SAMPLE

Lab Sample ID: US15D
LIMS ID: 12-7627
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/09/12	**7440-38-2**	**Arsenic**	0.2	**24.4**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-10-042712
SAMPLE

Lab Sample ID: US15E
LIMS ID: 12-7628
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/09/12	**7440-38-2**	**Arsenic**	0.2	**10.0**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-18-042612
MATRIX SPIKE

Lab Sample ID: US15A
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6020A	0.250	24.2	25.0	95.8%	
Arsenic	6020A	6.23	33.2	25.0	108%	
Beryllium	6020A	0.200 U	23.6	25.0	94.4%	
Cadmium	6020A	0.100 U	23.7	25.0	94.8%	
Chromium	6020A	0.550	24.1	25.0	94.2%	
Copper	6020A	1.92	26.9	25.0	99.9%	
Lead	6020A	0.100 U	24.4	25.0	97.6%	
Mercury	7470A	0.100 U	1.12	1.00	112%	
Nickel	6020A	9.22	27.1	25.0	71.5%	N
Selenium	6020A	0.500 U	80.5	80.0	101%	
Silver	6020A	0.200 U	25.1	25.0	100%	
Thallium	6020A	0.200 U	24.4	25.0	97.6%	
Zinc	6020A	4.00 U	72.7	80.0	90.9%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-18-042612
DUPLICATE

Lab Sample ID: US15A
LIMS ID: 12-7624
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6020A	0.2	0.2	0.0%	+/- 0.2	L
Arsenic	6020A	6.2	6.1	1.6%	+/- 20%	
Beryllium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	6020A	0.6	0.5	18.2%	+/- 0.5	L
Copper	6020A	1.9	1.9	0.0%	+/- 0.5	L
Lead	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6020A	9.2	2.5	115%	+/- 0.5	L*
Selenium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: US15LCS
LIMS ID: 12-7625
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling 155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6020A	25.5	25.0	102%	
Arsenic	6020A	26.0	25.0	104%	
Beryllium	6020A	25.7	25.0	103%	
Cadmium	6020A	24.6	25.0	98.4%	
Chromium	6020A	25.0	25.0	100%	
Copper	6020A	25.9	25.0	104%	
Lead	6020A	25.0	25.0	100%	
Mercury	7470A	2.12	2.00	106%	
Nickel	6020A	25.6	25.0	102%	
Selenium	6020A	79.2	80.0	99.0%	
Silver	6020A	26.3	25.0	105%	
Thallium	6020A	25.3	25.0	101%	
Zinc	6020A	78.8	80.0	98.5%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: US15MB
LIMS ID: 12-7625
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/14/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/08/12	6020A	05/14/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/07/12	7470A	05/08/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/08/12	6020A	05/14/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-18-042612
SAMPLE

Lab Sample ID: US15G
LIMS ID: 12-7630
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/11/12	**7440-36-0**	**Antimony**	0.2	**0.3**	
200.8	05/08/12	6020A	05/11/12	**7440-38-2**	**Arsenic**	0.2	**5.9**	
200.8	05/08/12	6020A	05/11/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/08/12	6020A	05/11/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/08/12	6020A	05/11/12	**7440-50-8**	**Copper**	0.5	**1.7**	
200.8	05/08/12	6020A	05/11/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/07/12	7470A	05/08/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/08/12	6020A	05/14/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/08/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-3S-042712
SAMPLE

Lab Sample ID: US15H
LIMS ID: 12-7631
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/11/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	**7440-38-2**	**Arsenic**	1	**383**	
200.8	05/08/12	6020A	05/11/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/08/12	6020A	05/11/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/08/12	6020A	05/11/12	**7440-50-8**	**Copper**	0.5	**0.9**	
200.8	05/08/12	6020A	05/11/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/07/12	7470A	05/08/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/08/12	6020A	05/11/12	**7440-02-0**	**Nickel**	0.5	**0.6**	
200.8	05/08/12	6020A	05/14/12	7782-49-2	Selenium	2	2	U
200.8	05/08/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-3D-042712
SAMPLE

Lab Sample ID: US15I
LIMS ID: 12-7632
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/11/12	**7440-38-2**	**Arsenic**	0.2	**28.1**	
200.8	05/08/12	6020A	05/11/12	**7440-47-3**	**Chromium**	0.5	**3.9**	
200.8	05/08/12	6020A	05/11/12	**7440-50-8**	**Copper**	0.5	**0.6**	
200.8	05/08/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/11/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-7S-042712
SAMPLE

Lab Sample ID: US15J
LIMS ID: 12-7633
Matrix: Water
Data Release Authorized:
Reported: 06/19/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/09/12	**7440-38-2**	**Arsenic**	0.2	**23.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

US15:00154 AV 6/19/12

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
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Sample ID: MW-10-042712
SAMPLE

Lab Sample ID: US15K
LIMS ID: 12-7634
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/27/12
Date Received: 04/27/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/09/12	**7440-38-2**	**Arsenic**	0.2	**10.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

US15 : 001155

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-18-042612
MATRIX SPIKE

Lab Sample ID: US15G
LIMS ID: 12-7630
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6020A	0.280	24.2	25.0	95.7%	
Arsenic	6020A	5.86	33.0	25.0	109%	
Beryllium	6020A	0.200 U	23.4	25.0	93.6%	
Cadmium	6020A	0.100 U	23.7	25.0	94.8%	
Chromium	6020A	0.500 U	23.6	25.0	94.4%	
Copper	6020A	1.74	26.4	25.0	98.6%	
Lead	6020A	0.100 U	24.4	25.0	97.6%	
Mercury	7470A	0.100 U	1.08	1.00	108%	
Nickel	6020A	0.500 U	25.0	25.0	100%	
Selenium	6020A	0.500 U	78.7	80.0	98.4%	
Silver	6020A	0.200 U	25.5	25.0	102%	
Thallium	6020A	0.200 U	24.6	25.0	98.4%	
Zinc	6020A	4.00 U	71.0	80.0	88.8%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-18-042612
DUPLICATE

Lab Sample ID: US15G
LIMS ID: 12-7630
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/27/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6020A	0.3	0.3	0.0%	+/- 0.2	L
Arsenic	6020A	5.9	6.0	1.7%	+/- 20%	
Beryllium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	6020A	0.5 U	0.9	57.1%	+/- 0.5	L
Copper	6020A	1.7	1.8	5.7%	+/- 0.5	L
Lead	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Selenium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: US15LCS
LIMS ID: 12-7631
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6020A	25.1	25.0	100%	
Arsenic	6020A	26.6	25.0	106%	
Beryllium	6020A	25.2	25.0	101%	
Cadmium	6020A	24.7	25.0	98.8%	
Chromium	6020A	25.2	25.0	101%	
Copper	6020A	26.2	25.0	105%	
Lead	6020A	25.3	25.0	101%	
Mercury	7470A	2.1	2.0	105%	
Nickel	6020A	26.3	25.0	105%	
Selenium	6020A	80.8	80.0	101%	
Silver	6020A	25.7	25.0	103%	
Thallium	6020A	25.5	25.0	102%	
Zinc	6020A	81	80	101%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**

Lab Sample ID: US15MB
LIMS ID: 12-7631
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/14/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/08/12	6020A	05/14/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/07/12	7470A	05/08/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/08/12	6020A	05/14/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/08/12	6020A	05/14/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/08/12	6020A	05/14/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US15

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050911	50.0	51.06	102.1	50.0	50.96	101.9	51.16	102.3	51.19	102.4	50.35	100.7	50.19	100.4
Mercury	HG	CVA	HG050802	8.0	7.98	99.8	4.0	4.09	102.3	4.21	105.3	4.06	101.5				

US15-SS155

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Antimony	SB	PMS	MS051111	50.0	47.70	95.4	50.0	48.30	96.6	48.63	97.3	48.44	96.9	49.35	98.7	48.98	98.0
Arsenic	AS	PMS	MS051111	50.0	49.27	98.5	50.0	49.91	99.8	52.13	104.3	50.93	101.9	50.65	101.3	50.59	101.2
Beryllium	BE	PMS	MS051111	50.0	51.66	103.3	50.0	49.80	99.6	50.73	101.5	50.46	100.9	49.21	98.4	51.37	102.7
Cadmium	CD	PMS	MS051111	50.0	49.66	99.3	50.0	49.58	99.2	50.08	100.2	49.86	99.7	50.09	100.2	50.05	100.1
Chromium	CR	PMS	MS051111	50.0	50.21	100.4	50.0	47.53	95.1	48.26	96.5	48.36	96.7	48.51	97.0	49.24	98.5
Copper	CU	PMS	MS051111	50.0	50.14	100.3	50.0	49.89	99.8	50.56	101.1	51.36	102.7	49.63	99.3	50.22	100.4
Lead	PB	PMS	MS051111	50.0	49.74	99.5	50.0	49.67	99.3	49.16	98.3	49.62	99.2	51.05	102.1	50.90	101.8
Nickel	NI	PMS	MS051111	50.0	48.95	97.9	50.0	49.19	98.4	49.31	98.6	49.36	98.7	48.78	97.6	48.49	97.0
Silver	AG	PMS	MS051111	50.0	50.16	100.3	50.0	49.13	98.3	54.17	108.3	51.33	102.7	50.38	100.8	50.65	101.3
Thallium	TL	PMS	MS051111	50.0	51.12	102.2	50.0	50.62	101.2	50.57	101.1	51.03	102.1	52.54	105.1	52.21	104.4
Zinc	ZN	PMS	MS051111	50.0	47.95	95.9	50.0	49.61	99.2	50.53	101.1	49.85	99.7	50.19	100.4	49.01	98.0

Control Limits: Mercury 80-120; Other Metals 90-110

US15 · 9599

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Antimony	SB	PMS	MS051411	50.0	51.00	102.0	50.0	50.81	101.6	51.64	103.3	51.84	103.7	51.49	103.0	50.96	101.9
Arsenic	AS	PMS	MS051411	50.0	51.58	103.2	50.0	50.06	100.1	51.78	103.6	51.81	103.6	51.72	103.4	51.04	102.1
Beryllium	BE	PMS	MS051411	50.0	51.81	103.6	50.0	51.23	102.5	52.51	105.0	52.53	105.1	51.60	103.2	51.06	102.1
Cadmium	CD	PMS	MS051411	50.0	49.74	99.5	50.0	51.32	102.6	50.64	101.3	50.96	101.9	50.58	101.2	50.47	100.9
Chromium	CR	PMS	MS051411	50.0	50.64	101.3	50.0	50.26	100.5	49.66	99.3	48.94	97.9	49.64	99.3	50.49	101.0
Copper	CU	PMS	MS051411	50.0	51.42	102.8	50.0	50.56	101.1	51.98	104.0	51.33	102.7	51.91	103.8	51.81	103.6
Lead	PB	PMS	MS051411	50.0	50.60	101.2	50.0	50.45	100.9	49.63	99.3	49.77	99.5	48.51	97.0	48.23	96.5
Nickel	NI	PMS	MS051411	50.0	51.52	103.0	50.0	50.25	100.5	51.50	103.0	51.25	102.5	51.81	103.6	50.56	101.1
Selenium	SE	PMS	MS051411	80.0	83.51	104.4	50.0	53.21	106.4	54.94	109.9	54.78	109.6	55.16	110.3	54.40	108.8
Silver	AG	PMS	MS051411	50.0	49.85	99.7	50.0	50.60	101.2	53.27	106.5	53.16	106.3	50.77	101.5	47.87	95.7
Thallium	TL	PMS	MS051411	50.0	51.28	102.6	50.0	50.70	101.4	50.13	100.3	50.30	100.6	48.85	97.7	48.68	97.4
Zinc	ZN	PMS	MS051411	50.0	50.90	101.8	50.0	51.27	102.5	52.86	105.7	52.44	104.9	53.20	106.4	52.36	104.7

Control Limits: Mercury 80-120; Other Metals 90-110

29195-5151

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US15

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Antimony	SB	PMS	MS051111	50.0	48.51	97.0										
Arsenic	AS	PMS	MS051111	50.0	50.52	101.0										
Beryllium	BE	PMS	MS051111	50.0	49.07	98.1										
Cadmium	CD	PMS	MS051111	50.0	50.21	100.4										
Chromium	CR	PMS	MS051111	50.0	49.15	98.3										
Copper	CU	PMS	MS051111	50.0	51.30	102.6										
Lead	PB	PMS	MS051111	50.0	51.45	102.9										
Nickel	NI	PMS	MS051111	50.0	48.99	98.0										
Silver	AG	PMS	MS051111	50.0	48.55	97.1										
Thallium	TL	PMS	MS051111	50.0	53.43	106.9										
Zinc	ZN	PMS	MS051111	50.0	50.06	100.1										

Control Limits: Mercury 80-120; Other Metals 90-110

US15-0053

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US15

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	PMS	MS050911	0.2	0.25	125.0										
Mercury	HG	CVA	HG050802	0.1	0.10	100.0										
Antimony	SB	PMS	MS051111	0.2	0.21	105.0										
Arsenic	AS	PMS	MS051111	0.2	0.20	100.0										
Beryllium	BE	PMS	MS051111	0.2	0.22	110.0										
Cadmium	CD	PMS	MS051111	0.1	0.11	110.0										
Chromium	CR	PMS	MS051111	0.5	0.53	106.0										
Copper	CU	PMS	MS051111	0.5	0.53	106.0										
Lead	PB	PMS	MS051111	0.1	0.11	110.0										
Nickel	NI	PMS	MS051111	0.5	0.48	96.0										
Silver	AG	PMS	MS051111	0.2	0.20	100.0										
Thallium	TL	PMS	MS051111	0.2	0.21	105.0										
Zinc	ZN	PMS	MS051111	4.0	4.07	101.8										

Control Limits: no control limits have been established by the EPA at this time.

US15 : 5154

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Antimony	SB	PMS	MS051411	0.2	0.19	95.0										
Arsenic	AS	PMS	MS051411	0.2	0.29	145.0										
Beryllium	BE	PMS	MS051411	0.2	0.22	110.0										
Cadmium	CD	PMS	MS051411	0.1	0.12	120.0										
Chromium	CR	PMS	MS051411	0.5	0.54	108.0										
Copper	CU	PMS	MS051411	0.5	0.56	112.0										
Lead	PB	PMS	MS051411	0.1	0.11	110.0										
Nickel	NI	PMS	MS051411	0.5	0.54	108.0										
Selenium	SE	PMS	MS051411	0.5	0.71	142.0										
Silver	AG	PMS	MS051411	0.2	0.21	105.0										
Thallium	TL	PMS	MS051411	0.2	0.21	105.0										
Zinc	ZN	PMS	MS051411	4.0	4.36	109.0										

Control Limits: no control limits have been established by the EPA at this time.

SS1505-S151

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050911	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Mercury	HG	CVA	HG050802	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U				

US15.00155

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Antimony	SB	PMS	MS051111	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS051111	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Beryllium	BE	PMS	MS051111	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	CD	PMS	MS051111	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Chromium	CR	PMS	MS051111	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS051111	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	PB	PMS	MS051111	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nickel	NI	PMS	MS051111	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS051111	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Thallium	TL	PMS	MS051111	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS051111	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

US15.551

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US15

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Antimony	SB	PMS	MS051111	60.0	0.2	0.2	U										
Arsenic	AS	PMS	MS051111	10.0	0.2	0.2	U										
Beryllium	BE	PMS	MS051111	5.0	0.2	0.2	U										
Cadmium	CD	PMS	MS051111	5.0	0.1	0.1	U										
Chromium	CR	PMS	MS051111	10.0	0.5	0.5	U										
Copper	CU	PMS	MS051111	25.0	0.5	0.5	U										
Lead	PB	PMS	MS051111	3.0	0.1	0.1	U										
Nickel	NI	PMS	MS051111	40.0	0.5	0.5	U										
Silver	AG	PMS	MS051111	10.0	0.2	0.2	U										
Thallium	TL	PMS	MS051111	10.0	0.2	0.2	U										
Zinc	ZN	PMS	MS051111	20.0	4.0	4.0	U										

US15-SDG-0551

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Antimony	SB	PMS	MS051411	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS051411	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Beryllium	BE	PMS	MS051411	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	CD	PMS	MS051411	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Chromium	CR	PMS	MS051411	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS051411	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	PB	PMS	MS051411	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nickel	NI	PMS	MS051411	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Selenium	SE	PMS	MS051411	5.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS051411	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Thallium	TL	PMS	MS051411	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS051411	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

US15-SDG-0155

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050911

SDG: US15

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Cadmium		20	0.1	19.0	95.0						
Chromium		20	0.9	20.3	101.5						
Cobalt		20	0.0	19.2	96.0						
Copper		20	1.0	19.8	99.0						
Manganese		20	0.1	18.8	94.0						
Molybdenum	400	400	404.6	417.6	104.4						
Nickel		20	0.4	19.1	95.5						
Selenium			-0.3	-0.5							
Silver		20	0.0	19.7	98.5						
Thorium			0.2	0.1							
Vanadium			0.1	0.1							
Zinc		20	0.7	18.4	92.0						

SAS 55155

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS051111

SDG: US15

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Cadmium		20	0.1	19.1	**95.5**						
Chromium		20	0.9	19.6	**98.0**						
Cobalt		20	0.0	18.5	**92.5**						
Copper		20	1.2	20.6	**103.0**						
Manganese		20	0.1	19.0	**95.0**						
Molybdenum	400	400	416.6	435.2	**108.8**						
Nickel		20	0.4	18.9	**94.5**						
Selenium			-0.2	-0.3							
Silver		20	0.0	20.5	**102.5**						
Thorium			0.3	0.1							
Zinc		20	0.7	18.7	**93.5**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS051411

SDG: US15

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Cadmium		20	0.1	19.4	97.0						
Chromium		20	0.8	20.9	104.5						
Cobalt		20	0.0	18.9	94.5						
Copper		20	1.0	21.4	107.0						
Manganese		20	0.1	19.6	98.0						
Molybdenum	400	400	421.5	431.9	108.0						
Nickel		20	0.4	20.0	100.0						
Selenium			-0.3	-0.2							
Silver		20	0.0	20.1	100.5						
Thorium			0.2	0.1							
Vanadium			0.1	0.3							
Zinc		20	0.7	19.8	99.0						

US15-5514

Post Digest Spike Sample Recovery

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US15

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	RUNID	SPIKED SAMPLE RESULT	C	SAMPLE RESULT	C	SPIKE ADDED	MATRIX	%R
Nickel	MW-18-042612A	US15APOST	MS051111	69.92	B	18.44	B	50	Water	103.0

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US15

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Antimony	MW-18-042612L	US15G-L	Water	MS051111	0.28	B	0.35	B	25.0	
Arsenic	MW-18-042612L	US15G-L	Water	MS051111	5.86	B	6.75	B	15.2	
Beryllium	MW-18-042612L	US15G-L	Water	MS051111	0.00	U	0.00	B		
Cadmium	MW-18-042612L	US15G-L	Water	MS051111	0.01	U	0.00	B		
Chromium	MW-18-042612L	US15G-L	Water	MS051111	0.42	U	1.10	B		
Copper	MW-18-042612L	US15G-L	Water	MS051111	1.74	B	1.85	B	6.3	
Lead	MW-18-042612L	US15G-L	Water	MS051111	0.01	U	0.05	B		
Silver	MW-18-042612L	US15G-L	Water	MS051111	0.00	U	0.00	B		
Thallium	MW-18-042612L	US15G-L	Water	MS051111	0.00	U	0.00	B		
Zinc	MW-18-042612L	US15G-L	Water	MS051111	1.09	U	4.95	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US15

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Antimony	MW-18-042612L	US15A-L	Water	MS051411	0.25	B	0.30	B	20.0	
Arsenic	MW-18-042612L	US15A-L	Water	MS051411	6.23	B	6.55	B	5.1	
Beryllium	MW-18-042612L	US15A-L	Water	MS051411	0.00	U	0.00	B		
Cadmium	MW-18-042612L	US15A-L	Water	MS051411	0.02	U	0.05	B		
Chromium	MW-18-042612L	US15A-L	Water	MS051411	0.55	B	1.80	B	227.3	
Copper	MW-18-042612L	US15A-L	Water	MS051411	1.92	B	2.45	B	27.6	
Lead	MW-18-042612L	US15A-L	Water	MS051411	0.03	U	0.05	B		
Nickel	MW-18-042612L	US15A-L	Water	MS051411	9.22	B	10.75	B	16.6	
Selenium	MW-18-042612L	US15A-L	Water	MS051411	0.20	U	0.70	B		
Silver	MW-18-042612L	US15A-L	Water	MS051411	0.00	U	0.00	B		
Thallium	MW-18-042612L	US15A-L	Water	MS051411	0.01	U	0.00	B		
Zinc	MW-18-042612L	US15A-L	Water	MS051411	1.57	U	4.30	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US15

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Nickel	MW-18-042612L	US15G-L	Water	MS051411	0.21	U	1.65	B		
Selenium	MW-18-042612L	US15G-L	Water	MS051411	0.33	U	0.80	B		

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Antimony	SB	PMS	NEXION 300D MS	0.00		60	0.2	4/1/2011		
Arsenic	AS	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Beryllium	BE	PMS	NEXION 300D MS	0.00		5	0.2	4/1/2011		
Cadmium	CD	PMS	NEXION 300D MS	0.00		5	0.1	4/1/2011		
Chromium	CR	PMS	NEXION 300D MS	0.00		10	0.5	4/1/2011		
Copper	CU	PMS	NEXION 300D MS	0.00		25	0.5	4/1/2011		
Lead	PB	PMS	NEXION 300D MS	0.00		3	0.1	4/1/2011		
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2011		
Nickel	NI	PMS	NEXION 300D MS	0.00		40	0.5	4/1/2011		
Selenium	SE	PMS	NEXION 300D MS	0.00		5	0.5	4/1/2011		
Silver	AG	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Thallium	TL	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Zinc	ZN	PMS	NEXION 300D MS	0.00		20	4.0	4/1/2011		

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/8/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-18-042612	US15A	0.000	50.0	25.0
MW-18-042612D	US15ADUP	0.000	50.0	25.0
MW-18-042612S	US15ASPK	0.000	50.0	25.0
MW-3S-042712	US15B	0.000	50.0	25.0
MW-3D-042712	US15C	0.000	50.0	25.0
MW-7S-042712	US15D	0.000	50.0	25.0
MW-10-042712	US15E	0.000	50.0	25.0
MW-18-042612	US15G	0.000	50.0	25.0
MW-18-042612D	US15GDUP	0.000	50.0	25.0
MW-18-042612S	US15GSPK	0.000	50.0	25.0
MW-3S-042712	US15H	0.000	50.0	25.0
MW-3D-042712	US15I	0.000	50.0	25.0
MW-7S-042712	US15J	0.000	50.0	25.0
MW-10-042712	US15K	0.000	50.0	25.0
PBW	US15MB1	0.000	50.0	25.0
LCSW	US15MB1SPK	0.000	50.0	25.0
PBW	US15MB2	0.000	50.0	25.0
LCSW	US15MB2SPK	0.000	50.0	25.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US15

ANALYSIS METHOD: CVA

ARI PREP CODE: TWM

PREPDATE: 5/7/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-18-042612	US15A	0.000	20.0	20.0
MW-18-042612D	US15ADUP	0.000	20.0	20.0
MW-18-042612S	US15ASPK	0.000	20.0	20.0
MW-3S-042712	US15B	0.000	20.0	20.0
MW-18-042612	US15G	0.000	20.0	20.0
MW-18-042612D	US15GDUP	0.000	20.0	20.0
MW-18-042612S	US15GSPK	0.000	20.0	20.0
MW-3S-042712	US15H	0.000	20.0	20.0
PBW	US15MB1	0.000	20.0	20.0
LCSW	US15MB1SPK	0.000	20.0	20.0
PBW	US15MB2	0.000	20.0	20.0
LCSW	US15MB2SPK	0.000	20.0	20.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/9/2012

SDG: US15 | RUNID: MS050911 METHOD: PMS | END DATE: 5/9/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10580				X																										
S1	S1	1.00	11020				X																										
S2	S2	1.00	11060				X																										
S3	S3	1.00	11100				X																										
S4	S4	1.00	11150				X																										
S5	S5	1.00	11200																														
ZZZZZZ	Rinse sampl	1.00	11270																														
S0	S0	1.00	11370				X																										
ICV	MICV	1.00	11410				X																										
ICB	ICB	1.00	11460				X																										
CCV	MCCV1	1.00	11510				X																										
CCB	CCB1	1.00	11560				X																										
CRI	MCRI	1.00	12000				X																										
ICSA	ICSAI	1.00	12040				X																										
ICSAB	ICSABI	1.00	12090				X																										
ZZZZZZ	B1	1.00	12150																														
ZZZZZZ	B2	1.00	12200																														
CCV	MCCV2	1.00	12250				X																										
CCB	CCB2	1.00	12310				X																										
CCV	MCCV3	1.00	12370				X																										
CCB	CCB3	1.00	12430				X																										
ZZZZZZ	US61MB1	2.00	12490																														
ZZZZZZ	US61MB2	2.00	12530																														
ZZZZZZ	US02R	2.00	12570																														
ZZZZZZ	US02RMB2	2.00	13010																														
ZZZZZZ	US02RMB2SPK	2.00	13060																														
ZZZZZZ	US02RMB1SPK	2.00	13100																														
ZZZZZZ	US02RA-L	10.00	13140																														
ZZZZZZ	US02RA	2.00	13180																														
ZZZZZZ	US02RADUP	2.00	13220																														
ZZZZZZ	US02RASPK	2.00	13260																														
CCV	MCCV4	1.00	13320				X																										
CCB	CCB4	1.00	13380				X																										
ZZZZZZ	US02RI-L	2.00	13460																														
ZZZZZZ	US02RI	2.00	13500																														

FORM XIV

US15 - 5509

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/9/2012

SDG: US15 | RUNID: MS050911 METHOD: PMS | END DATE: 5/9/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	US02RIDUP	2.00	13540																														
ZZZZZZ	US02RISPK	2.00	13580																														
MW-7S-042712	US15D	2.00	14020				X																										
MW-10-042712	US15E	2.00	14060				X																										
MW-7S-042712	US15J	10.00	14100				X																										
MW-10-042712	US15K	2.00	14150				X																										
ZZZZZZ	LR200	1.00	14190																														
ZZZZZZ	B3	1.00	14260																														
CCV	MCCV5	1.00	14320				X																										
CCB	CCB5	1.00	14380				X																										

US15_0518

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/11/2012

SDG: US15 | RUNID: MS051111 METHOD: PMS | END DATE: 5/11/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11410		X		X			X		X		X	X								X	X	X					X			X
S1	S1	1.00	11450		X		X			X		X		X	X								X	X	X					X			X
S2	S2	1.00	11490		X		X			X		X		X	X								X	X	X					X			X
S3	S3	1.00	11530		X		X			X		X		X	X								X	X	X					X			X
S4	S4	1.00	11580		X		X			X		X		X	X								X	X	X					X			X
S5	S5	1.00	12040																														
ZZZZZZ	Rinse sampl	1.00	12100																														
ICV	MICV	1.00	12250		X		X			X		X		X	X								X	X	X					X			X
ICB	ICB	1.00	12300		X		X			X		X		X	X								X	X	X					X			X
CCV	MCCV1	1.00	12340		X		X			X		X		X	X								X	X	X					X			X
CCB	CCB1	1.00	12390		X		X			X		X		X	X								X	X	X					X			X
CRI	MCRI	1.00	12430		X		X			X		X		X	X								X	X	X					X			X
ICSA	ICSAI	1.00	12480		X		X			X		X		X	X								X	X	X					X			X
ICSAB	ICSABI	1.00	12530		X		X			X		X		X	X								X	X	X					X			X
ZZZZZZ	B1	1.00	12580																														
ZZZZZZ	B2	1.00	13040																														
CCV	MCCV2	1.00	13120		X		X			X		X		X	X								X	X	X					X			X
CCB	CCB2	1.00	13160		X		X			X		X		X	X								X	X	X					X			X
ZZZZZZ	US61MB1SPK	2.00	13200																														
ZZZZZZ	US61MB2SPK	2.00	13240																														
ZZZZZZ	US27J	2.00	13280																														
ZZZZZZ	US27JPOST	2.00	13320																														
ZZZZZZ	US61A	2.00	13380																														
ZZZZZZ	US61B	2.00	13420																														
ZZZZZZ	US61C	2.00	13460																														
ZZZZZZ	US61H	2.00	13500																														
ZZZZZZ	US61I	2.00	13540																														
ZZZZZZ	US61J	2.00	13580																														
CCV	MCCV3	1.00	14040		X		X			X		X		X	X								X	X	X					X			X
CCB	CCB3	1.00	14100		X		X			X		X		X	X								X	X	X					X			X
PBW	US15MB1	2.00	14180																														
PBW	US15MB2	2.00	14220																														
LCSW	US15MB2SPK	2.00	14260																														
LCSW	US15MB1SPK	2.00	14300																														
ZZZZZZ	ZZZZZZ	10.00	14360																														

FORM XIV

US15.0852

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/11/2012

SDG: US15 | RUNID: MS051111 METHOD: PMS | END DATE: 5/11/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
MW-18-042612	US15A	2.00	14400																														
MW-18-042612D	US15ADUP	2.00	14440																														
ZZZZZZ	AIR	2.00	14480																														
ZZZZZZ	AIR	2.00	14520																														
ZZZZZZ	AIR	2.00	14560																														
ZZZZZZ	AIR	1.00	15020																														
CCV	MCCV4	1.00	15140		X		X			X		X		X	X								X	X	X					X			X
CCB	CCB4	1.00	15200		X		X			X		X		X	X								X	X	X					X			X
MW-18-042612S	US15ASPK	2.00	15300		X		X			X		X		X	X									X	X					X			X
MW-18-042612A	US15APOST	2.00	15350																				X										
MW-3S-042712	US15B	2.00	15390		X					X		X		X	X								X	X	X					X			X
CCV	MCCV5	1.00	15450		X		X			X		X		X	X								X	X	X					X			X
CCB	CCB5	1.00	15510		X		X			X		X		X	X								X	X	X					X			X
MW-3S-042712	US15H	2.00	15560		X					X		X		X	X								X	X	X					X			X
MW-18-042612L	US15G-L	10.00	16000		X		X			X		X		X	X									X	X					X			X
MW-18-042612	US15G	2.00	16040		X		X			X		X		X	X									X	X					X			X
MW-18-042612D	US15GDUP	2.00	16080		X		X			X		X		X	X									X	X					X			X
MW-18-042612S	US15GSPK	2.00	16120		X		X			X		X		X	X									X	X					X			X
ZZZZZZ	ZZZZZZ	2.00	16160																														
MW-3D-042712	US15I	2.00	16200		X		X							X	X																		X
MW-3D-042712	US15C	2.00	16240		X		X							X	X																		X
MW-18-042612	US15A	2.00	16290		X		X			X		X		X	X									X	X					X			X
MW-18-042612D	US15ADUP	2.00	16330		X		X			X		X		X	X									X	X					X			X
CCV	MCCV6	1.00	16390		X		X			X		X		X	X								X	X	X					X			X
CCB	CCB6	1.00	16450		X		X			X		X		X	X								X	X	X					X			X

SDG: US15

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/14/2012

SDG: US15 | RUNID: MS051411 METHOD: PMS | END DATE: 5/14/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	12370		X		X			X		X		X	X								X	X	X	X				X			X
S1	S1	1.00	12410		X		X			X		X		X	X								X	X	X	X				X			X
S2	S2	1.00	12450		X		X			X		X		X	X								X	X	X	X				X			X
S3	S3	1.00	12490		X		X			X		X		X	X								X	X	X	X				X			X
S4	S4	1.00	12540		X		X			X		X		X	X								X	X	X	X				X			X
S5	S5	1.00	12590																														
ZZZZZZ	Rinse sampl	1.00	13060																														
S0	S0	1.00	13150		X		X			X		X		X	X								X	X	X	X				X			X
ICV	MICV	1.00	13190		X		X			X		X		X	X								X	X	X	X				X			X
ICB	ICB	1.00	13260		X		X			X		X		X	X								X	X	X	X				X			X
CCV	MCCV1	1.00	13300		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB1	1.00	13360		X		X			X		X		X	X								X	X	X	X				X			X
ZZZZZZ	DI	1.00	13400																														
CRI	MCRI	1.00	13440		X		X			X		X		X	X								X	X	X	X				X			X
ICSA	ICSAI	1.00	13490		X		X			X		X		X	X								X	X	X	X				X			X
ICSAB	ICSABI	1.00	13550		X		X			X		X		X	X								X	X	X	X				X			X
ZZZZZZ	B1	1.00	14000																														
ZZZZZZ	B2	1.00	14050																														
ZZZZZZ	ERAP197-500	10.00	14110																														
CCV	MCCV2	1.00	14180		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB2	1.00	14240		X		X			X		X		X	X								X	X	X	X				X			X
S0	S0	1.00	14340		X		X			X		X		X	X								X	X	X	X				X			X
CCV	MCCV3	1.00	14380		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB3	1.00	14440		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US15MB1	2.00	14490		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US15MB2	2.00	14530																														
LCSW	US15MB2SPK	2.00	14570		X		X			X		X		X	X								X	X	X	X				X			X
LCSW	US15MB1SPK	2.00	15010		X		X			X		X		X	X								X	X	X	X				X			X
MW-18-042612L	US15A-L	10.00	15050		X		X			X		X		X	X								X	X	X	X				X			X
MW-18-042612	US15A	2.00	15090																				X			X							
MW-18-042612D	US15ADUP	2.00	15130																				X			X							
MW-18-042612S	US15ASPK	2.00	15170																				X			X							
MW-3S-042712	US15B	10.00	15220				X																			X							
MW-3S-042712	US15H	10.00	15270				X																			X							
CCV	MCCV4	1.00	15340		X		X			X		X		X	X								X	X	X	X				X			X

FORM XIV

15-1505-0518

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/14/2012

SDG: US15 | RUNID: MS051411 METHOD: PMS | END DATE: 5/14/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB4	1.00	15410		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US15MB2	2.00	16000		X		X			X		X		X	X								X	X	X	X				X			X
MW-18-042612L	US15G-L	10.00	16040																				X			X							
MW-18-042612	US15G	2.00	16080																				X			X							
MW-18-042612D	US15GDUP	2.00	16130																				X			X							
MW-18-042612S	US15GSPK	2.00	16170																				X			X							
ZZZZZZ	LR200	1.00	16210																														
ZZZZZZ	B3	1.00	16280																														
ZZZZZZ	B4	1.00	16360																														
CCV	MCCV5	1.00	16400		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB5	1.00	16470		X		X			X		X		X	X								X	X	X	X				X			X

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/8/2012

SDG: US15 | RUNID: HG050802 METHOD: CVA | END DATE: 5/8/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10470														X																
S0.1	S0.1	1.00	10484														X																
S0.5	S0.5	1.00	10501														X																
S1	S1	1.00	10515														X																
S2	S2	1.00	10533														X																
S5	S5	1.00	10551														X																
S10	S10	1.00	10564														X																
ICV	AICV	1.00	10595														X																
ICB	ICB	1.00	11013														X																
CCV	ACCV1	1.00	11031														X																
CCB	CCB1	1.00	11045														X																
CRA	CRA	1.00	11062														X																
PBW	US15MB1	1.00	11080														X																
LCSW	US15MB1SPK	1.00	11093														X																
MW-18-042612	US15A	1.00	11111														X																
MW-18-042612D	US15ADUP	1.00	11125														X																
MW-18-042612S	US15ASPK	1.00	11142														X																
MW-3S-042712	US15B	1.00	11160														X																
PBW	US15MB2	1.00	11174														X																
LCSW	US15MB2SPK	1.00	11192														X																
MW-18-042612	US15G	1.00	11205														X																
CCV	ACCV2	1.00	11223														X																
CCB	CCB2	1.00	11241														X																
MW-18-042612D	US15GDUP	1.00	11255														X																
MW-18-042612S	US15GSPK	1.00	11273														X																
MW-3S-042712	US15H	1.00	11290														X																
ZZZZZZ	US52MB1	1.00	11304																														
ZZZZZZ	US52MB1SPK	1.00	11321																														
ZZZZZZ	US52G	1.00	11335																														
ZZZZZZ	US52GDUP	1.00	11353																														
ZZZZZZ	US52GSPK	1.00	11370																														
ZZZZZZ	US52MB2	1.00	11384																														
ZZZZZZ	US52MB2SPK	1.00	11402																														
CCV	ACCV3	1.00	11420														X																
CCB	CCB3	1.00	11434														X																

FORM XIV

US15_050802

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-13-043012	US27A	12-7676	
MW-27-043012	US27C	12-7678	
MW-27-043012D	US27CDUP	12-7678	
MW-27-043012S	US27CSPK	12-7678	
MW-26-043012	US27D	12-7679	
PBW	US27MB1	12-7679	
LCSW	US27MB1SPK	12-7679	
MW-14D-043012	US27E	12-7680	
MW-14D-043012D	US27EDUP	12-7680	
MW-14D-043012S	US27ESPK	12-7680	
MW-13-043012	US27G	12-7682	
MW-27-043012	US27H	12-7683	
MW-27-043012D	US27HDUP	12-7683	
MW-27-043012S	US27HSPK	12-7683	
MW-26-043012	US27I	12-7684	
PBW	US27MB2	12-7684	
LCSW	US27MB2SPK	12-7684	
MW-14D-043012	US27J	12-7685	
MW-14D-043012D	US27JDUP	12-7685	
MW-14D-043012S	US27JSPK	12-7685	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 5/24/12 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-13-043012
SAMPLE

Lab Sample ID: US27A
LIMS ID: 12-7676
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/08/12	**7440-38-2**	**Arsenic**	4	**1,130**	

U-Analyte undetected at given RL
RL-Reporting Limit

US15 00188

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-27-043012
SAMPLE

Lab Sample ID: US27C
LIMS ID: 12-7678
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/07/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	**7440-38-2**	**Arsenic**	0.2	**9.1**	
200.8	05/03/12	6020A	05/07/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	**7440-47-3**	**Chromium**	0.5	**0.7**	
200.8	05/03/12	6020A	05/07/12	**7440-50-8**	**Copper**	0.5	**1.0**	
200.8	05/03/12	6020A	05/07/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/02/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	**7440-02-0**	**Nickel**	0.5	**2.8**	
200.8	05/03/12	6020A	05/07/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/03/12	6020A	05/17/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

US15 00189

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-26-043012
SAMPLE

Lab Sample ID: US27D
LIMS ID: 12-7679
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/07/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/03/12	6020A	05/08/12	**7440-38-2**	**Arsenic**	2	**780**	
200.8	05/03/12	6020A	05/07/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	**7440-43-9**	**Cadmium**	0.1	**0.2**	
200.8	05/03/12	6020A	05/07/12	**7440-47-3**	**Chromium**	0.5	**1.1**	
200.8	05/03/12	6020A	05/07/12	**7440-50-8**	**Copper**	0.5	**2.1**	
200.8	05/03/12	6020A	05/07/12	**7439-92-1**	**Lead**	0.1	**0.1**	
7470A	05/02/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	**7440-02-0**	**Nickel**	0.5	**0.9**	
200.8	05/03/12	6020A	05/07/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-14D-043012
SAMPLE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
3010A	05/02/12	6010C	05/04/12	**7429-90-5**	**Aluminum**	50	**460**	
200.8	05/03/12	6020A	05/08/12	**7440-38-2**	**Arsenic**	2	**361**	
3010A	05/02/12	6010C	05/04/12	**7440-70-2**	**Calcium**	50	**18,100**	
200.8	05/03/12	6020A	05/07/12	**7440-47-3**	**Chromium**	0.5	**11.5**	
200.8	05/03/12	6020A	05/07/12	**7440-50-8**	**Copper**	0.5	**3.1**	
3010A	05/02/12	6010C	05/04/12	**7439-89-6**	**Iron**	50	**10,100**	
3010A	05/02/12	6010C	05/04/12	**7439-95-4**	**Magnesium**	50	**12,600**	
3010A	05/02/12	6010C	05/04/12	**7439-96-5**	**Manganese**	1	**318**	
3010A	05/02/12	6010C	05/04/12	**7440-09-7**	**Potassium**	500	**14,800**	
200.8	05/03/12	6020A	05/07/12	7440-22-4	Silver	0.2	0.2	U
3010A	05/02/12	6010C	05/04/12	**7440-23-5**	**Sodium**	500	**170,000**	
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

Calculated Hardness (mg-CaCO3/L): 97

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-27-043012
MATRIX SPIKE

Lab Sample ID: US27C
LIMS ID: 12-7678
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6020A	0.200 U	25.2	25.0	101%	
Arsenic	6020A	9.12	35.6	25.0	106%	
Beryllium	6020A	0.200 U	22.6	25.0	90.4%	
Cadmium	6020A	0.100 U	23.2	25.0	92.8%	
Chromium	6020A	0.730	23.2	25.0	89.9%	
Copper	6020A	0.980	25.3	25.0	97.3%	
Lead	6020A	0.100 U	24.6	25.0	98.4%	
Mercury	7470A	0.100 U	1.08	1.00	108%	
Nickel	6020A	2.82	27.4	25.0	98.3%	
Selenium	6020A	0.500 U	72.8	80.0	91.0%	
Silver	6020A	0.200 U	22.0	25.0	88.0%	
Thallium	6020A	0.200 U	23.8	25.0	95.2%	
Zinc	6020A	4.00 U	72.0	80.0	90.0%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-27-043012
DUPLICATE

Lab Sample ID: US27C
LIMS ID: 12-7678
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Arsenic	6020A	9.1	9.0	1.1%	+/- 20%	
Beryllium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	6020A	0.7	0.7	0.0%	+/- 0.5	L
Copper	6020A	1.0	0.9	10.5%	+/- 0.5	L
Lead	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6020A	2.8	2.8	0.0%	+/- 20%	
Selenium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

US15:06193

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-14D-043012
MATRIX SPIKE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Aluminum	6010C	462	2,400	2,000	96.9%	
Arsenic	6020A	361	393	25.0	128%	H
Calcium	6010C	18,100	27,600	10,000	95.0%	
Chromium	6020A	11.5	33.7	25.0	88.8%	
Copper	6020A	3.11	27.7	25.0	98.4%	
Iron	6010C	10,100	11,700	2,000	80.0%	H
Magnesium	6010C	12,600	21,400	10,000	88.0%	
Manganese	6010C	318	769	500	90.2%	
Potassium	6010C	14,800	23,900	10,000	91.0%	
Silver	6020A	0.200 U	17.1	25.0	68.4%	N
Sodium	6010C	170,000	175,000	10,000	50.0%	H
Zinc	6020A	4.00 U	70.1	80.0	87.6%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-14D-043012
DUPLICATE

Lab Sample ID: US27E
LIMS ID: 12-7680
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Aluminum	6010C	460	460	0.0%	+/- 20%	
Arsenic	6020A	361	368	1.9%	+/- 20%	
Calcium	6010C	18,100	17,900	1.1%	+/- 20%	
Chromium	6020A	11.5	11.6	0.9%	+/- 20%	
Copper	6020A	3.1	3.2	3.2%	+/- 20%	
Iron	6010C	10,100	10,000	1.0%	+/- 20%	
Magnesium	6010C	12,600	12,500	0.8%	+/- 20%	
Manganese	6010C	318	313	1.6%	+/- 20%	
Potassium	6010C	14,800	14,700	0.7%	+/- 20%	
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Sodium	6010C	170,000	168,000	1.2%	+/- 20%	
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: US27LCS
LIMS ID: 12-7679
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6020A	25.0	25.0	100%	
Arsenic	6020A	27.1	25.0	108%	
Beryllium	6020A	24.4	25.0	97.6%	
Cadmium	6020A	25.0	25.0	100%	
Chromium	6020A	24.7	25.0	98.8%	
Copper	6020A	26.0	25.0	104%	
Lead	6020A	25.9	25.0	104%	
Mercury	7470A	2.16	2.00	108%	
Nickel	6020A	25.8	25.0	103%	
Selenium	6020A	77.6	80.0	97.0%	
Silver	6020A	25.1	25.0	100%	
Thallium	6020A	24.7	25.0	98.8%	
Zinc	6020A	79.8	80.0	99.8%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: US27MB
LIMS ID: 12-7679
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/07/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/02/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-13-043012
SAMPLE

Lab Sample ID: US27G
LIMS ID: 12-7682
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/08/12	**7440-38-2**	**Arsenic**	4	1,150	

U-Analyte undetected at given RL
RL-Reporting Limit

US15 00138

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
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Sample ID: MW-27-043012
SAMPLE

Lab Sample ID: US27H
LIMS ID: 12-7683
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/07/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	**7440-38-2**	**Arsenic**	0.2	**9.3**	
200.8	05/03/12	6020A	05/08/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/03/12	6020A	05/08/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	**7440-50-8**	**Copper**	0.5	**0.6**	
200.8	05/03/12	6020A	05/08/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/02/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	**7440-02-0**	**Nickel**	0.5	**2.2**	
200.8	05/03/12	6020A	05/07/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

US15:00199

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-26-043012
SAMPLE

Lab Sample ID: US27I
LIMS ID: 12-7684
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/07/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/03/12	6020A	05/08/12	**7440-38-2**	**Arsenic**	2	**770**	
200.8	05/03/12	6020A	05/07/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	**7440-47-3**	**Chromium**	0.5	**1.0**	
200.8	05/03/12	6020A	05/07/12	**7440-50-8**	**Copper**	0.5	**0.9**	
200.8	05/03/12	6020A	05/07/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/02/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	**7440-02-0**	**Nickel**	0.5	**0.9**	
200.8	05/03/12	6020A	05/07/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

US15 00200

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-14D-043012
SAMPLE

Lab Sample ID: US27J
LIMS ID: 12-7685
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
6010C	05/02/12	6010C	05/04/12	**7429-90-5**	**Aluminum**	50	**250**	
200.8	05/03/12	6020A	05/08/12	**7440-38-2**	**Arsenic**	2	**361**	
200.8	05/03/12	6020A	05/08/12	**7440-47-3**	**Chromium**	0.5	**9.4**	
200.8	05/03/12	6020A	05/08/12	**7440-50-8**	**Copper**	0.5	**1.1**	
6010C	05/02/12	6010C	05/04/12	**7439-89-6**	**Iron**	50	**9,840**	
6010C	05/02/12	6010C	05/04/12	**7439-96-5**	**Manganese**	1	**316**	
200.8	05/03/12	6020A	05/11/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/08/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: MW-27-043012**
Page 11

Lab Sample ID: US27H
LIMS ID: 12-7683
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6020A	0.200 U	24.8	25.0	99.2%	
Arsenic	6020A	9.33	35.3	25.0	104%	
Beryllium	6020A	0.200 U	22.3	25.0	89.2%	
Cadmium	6020A	0.100 U	22.9	25.0	91.6%	
Chromium	6020A	0.500 U	22.6	25.0	90.4%	
Copper	6020A	0.600	24.9	25.0	97.2%	
Lead	6020A	0.100 U	23.3	25.0	93.2%	
Mercury	7470A	0.100 U	1.08	1.00	108%	
Nickel	6020A	2.24	26.7	25.0	97.8%	
Selenium	6020A	0.500 U	71.4	80.0	89.2%	
Silver	6020A	0.200 U	21.7	25.0	86.8%	
Thallium	6020A	0.200 U	23.9	25.0	95.6%	
Zinc	6020A	4.00 U	69.6	80.0	87.0%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: MW-27-043012**
Page 11

Lab Sample ID: US27H
LIMS ID: 12-7683
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Arsenic	6020A	9.3	9.0	3.3%	+/- 20%	
Beryllium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Copper	6020A	0.6	0.6	0.0%	+/- 0.5	L
Lead	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6020A	2.2	2.2	0.0%	+/- 0.5	L
Selenium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 11

Sample ID: MW-14D-043012

Lab Sample ID: US27J
LIMS ID: 12-7685
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Aluminum	6010C	248	2,290	2,000	102%	
Arsenic	6020A	361	373	25.0	48.0%	H
Chromium	6020A	9.39	29.2	25.0	79.2%	
Copper	6020A	1.06	24.2	25.0	92.6%	
Iron	6010C	9,840	11,600	2,000	88.0%	H
Manganese	6010C	316	796	500	96.0%	
Silver	6020A	0.200 U	13.0	25.0	52.0%	N
Zinc	6020A	4.00 U	66.5	80.0	83.1%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

US15 : 00204

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: MW-14D-043012**
Page 11

Lab Sample ID: US27J
LIMS ID: 12-7685
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Aluminum	6010C	250	260	3.9%	+/- 50	L
Arsenic	6020A	361	355	1.7%	+/- 20%	
Chromium	6020A	9.4	9.2	2.2%	+/- 20%	
Copper	6020A	1.1	1.2	8.7%	+/- 0.5	L
Iron	6010C	9,840	9,860	0.2%	+/- 20%	
Manganese	6010C	316	316	0.0%	+/- 20%	
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: US27LCS
LIMS ID: 12-7684
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6020A	24.6	25.0	98.4%	
Arsenic	6020A	26.3	25.0	105%	
Beryllium	6020A	24.3	25.0	97.2%	
Cadmium	6020A	24.7	25.0	98.8%	
Chromium	6020A	24.0	25.0	96.0%	
Copper	6020A	25.4	25.0	102%	
Lead	6020A	25.5	25.0	102%	
Mercury	7470A	2.1	2.0	105%	
Nickel	6020A	25.3	25.0	101%	
Selenium	6020A	76.0	80.0	95.0%	
Silver	6020A	24.6	25.0	98.4%	
Thallium	6020A	24.5	25.0	98.0%	
Zinc	6020A	77	80	96.2%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

US15:00206

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Sample ID: METHOD BLANK

Lab Sample ID: US27MB
LIMS ID: 12-7684
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: US27-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/03/12	6020A	05/07/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/02/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/03/12	6020A	05/07/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/03/12	6020A	05/07/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/03/12	6020A	05/07/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Aluminum	AL	ICP	IP050471	2000.0	1960.89	**98.0**	2000.0	1961.63	**98.1**	1957.21	**97.9**	2003.31	**100.2**	2021.51	**101.1**	2021.36	**101.1**
Antimony	SB	PMS	MS050711	50.0	48.86	**97.7**	50.0	48.88	**97.8**	48.23	**96.5**	49.76	**99.5**	49.41	**98.8**	53.75	**107.5**
Arsenic	AS	PMS	MS050711	50.0	50.13	**100.3**	50.0	49.85	**99.7**	49.90	**99.8**	49.50	**99.0**	49.81	**99.6**	48.82	**97.6**
Beryllium	BE	PMS	MS050711	50.0	50.19	**100.4**	50.0	49.51	**99.0**	49.96	**99.9**	50.05	**100.1**	47.44	**94.9**	44.28	**88.6**
Cadmium	CD	PMS	MS050711	50.0	48.81	**97.6**	50.0	49.83	**99.7**	49.44	**98.9**	50.46	**100.9**	50.71	**101.4**	47.44	**94.9**
Calcium	CA	ICP	IP050471	2000.0	2011.40	**100.6**	2000.0	2001.55	**100.1**	1998.51	**99.9**	2053.67	**102.7**	2078.92	**103.9**	1962.03	**98.1**
Chromium	CR	PMS	MS050711	50.0	50.98	**102.0**	50.0	49.15	**98.3**	48.90	**97.8**	49.68	**99.4**	51.04	**102.1**	62.92	**125.8**
Copper	CU	PMS	MS050711	50.0	49.56	**99.1**	50.0	50.58	**101.2**	50.48	**101.0**	50.20	**100.4**	51.56	**103.1**	48.03	**96.1**
Iron	FE	ICP	IP050471	2000.0	1992.44	**99.6**	2000.0	1968.44	**98.4**	1959.67	**98.0**	1990.19	**99.5**	2021.68	**101.1**	2028.13	**101.4**
Lead	PB	PMS	MS050711	50.0	50.08	**100.2**	50.0	50.31	**100.6**	49.74	**99.5**	51.14	**102.3**	52.75	**105.5**	56.71	**113.4**
Magnesium	MG	ICP	IP050471	2000.0	1977.01	**98.9**	2000.0	1966.58	**98.3**	1959.60	**98.0**	2010.69	**100.5**	2037.06	**101.9**	2031.10	**101.6**
Manganese	MN	ICP	IP050471	1000.0	925.76	**92.6**	1000.0	911.90	**91.2**	955.26	**95.5**	971.47	**97.1**	978.98	**97.9**	980.78	**98.1**
Mercury	HG	CVA	HG050302	8.0	8.63	**107.9**	4.0	4.18	**104.5**	4.10	**102.5**	4.11	**102.8**	4.07	**101.8**		
Nickel	NI	PMS	MS050711	50.0	49.70	**99.4**	50.0	51.01	**102.0**	50.34	**100.7**	50.25	**100.5**	49.99	**100.0**	45.54	**91.1**
Potassium	K	ICP	IP050471	20000.0	19985.19	**99.9**	20000.0	19962.00	**99.8**	19755.16	**98.8**	20064.80	**100.3**	20296.46	**101.5**	20271.16	**101.4**
Selenium	SE	PMS	MS050711	80.0	79.54	**99.4**	50.0	51.12	**102.2**	51.97	**103.9**	51.52	**103.0**	50.38	**100.8**	46.31	**92.6**
Silver	AG	PMS	MS050711	50.0	50.86	**101.7**	50.0	51.20	**102.4**	48.51	**97.0**	48.90	**97.8**	48.63	**97.3**	46.11	**92.2**
Sodium	NA	ICP	IP050471	50000.0	48088.83	**96.2**	50000.0	47171.39	**94.3**	49682.81	**99.4**	52469.32	**104.9**	52872.95	**105.7**	52498.25	**105.0**
Thallium	TL	PMS	MS050711	50.0	48.58	**97.2**	50.0	48.56	**97.1**	47.73	**95.5**	49.04	**98.1**	50.08	**100.2**	53.70	**107.4**
Zinc	ZN	PMS	MS050711	50.0	47.81	**95.6**	50.0	49.90	**99.8**	50.21	**100.4**	49.63	**99.3**	49.09	**98.2**	46.72	**93.4**

Control Limits: Mercury 80-120; Other Metals 90-110

US15 00266

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Aluminum	AL	ICP	IP050471	2000.0	2030.10	101.5										
Antimony	SB	PMS	MS050711	50.0												
Arsenic	AS	PMS	MS050711	50.0												
Beryllium	BE	PMS	MS050711	50.0												
Cadmium	CD	PMS	MS050711	50.0												
Calcium	CA	ICP	IP050471	2000.0	2069.40	103.5										
Chromium	CR	PMS	MS050711	50.0												
Copper	CU	PMS	MS050711	50.0												
Iron	FE	ICP	IP050471	2000.0	2024.48	101.2										
Lead	PB	PMS	MS050711	50.0												
Magnesium	MG	ICP	IP050471	2000.0	2029.70	101.5										
Manganese	MN	ICP	IP050471	1000.0	981.41	98.1										
Mercury	HG	CVA	HG050302	4.0												
Nickel	NI	PMS	MS050711	50.0												
Potassium	K	ICP	IP050471	20000.0	20359.80	101.8										
Selenium	SE	PMS	MS050711	50.0												
Silver	AG	PMS	MS050711	50.0												
Sodium	NA	ICP	IP050471	50000.0	52754.26	105.5										
Thallium	TL	PMS	MS050711	50.0												
Zinc	ZN	PMS	MS050711	50.0												

Control Limits: Mercury 80-120; Other Metals 90-110

US1505

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050811	50.0	48.82	97.6	50.0	48.65	97.3	47.69	95.4	48.28	96.6	48.36	96.7		
Beryllium	BE	PMS	MS050811	50.0	50.27	100.5	50.0	50.45	100.9	49.71	99.4	50.53	101.1	49.51	99.0		
Chromium	CR	PMS	MS050811	50.0	49.51	99.0	50.0	49.22	98.4	48.15	96.3	47.96	95.9	48.14	96.3		
Copper	CU	PMS	MS050811	50.0	50.35	100.7	50.0	50.28	100.6	49.38	98.8	48.60	97.2	53.06	106.1		
Lead	PB	PMS	MS050811	50.0	49.52	99.0	50.0	49.49	99.0	48.95	97.9	49.40	98.8	49.29	98.6		
Silver	AG	PMS	MS050811	50.0	50.05	100.1	50.0	49.38	98.8	47.97	95.9	48.44	96.9	46.82	93.6		
Zinc	ZN	PMS	MS050811	50.0	48.73	97.5	50.0	49.87	99.7	49.33	98.7	48.55	97.1	48.87	97.7		

Control Limits: Mercury 80-120; Other Metals 90-110

US27 SDG 01265

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Silver	AG	PMS	MS051111	50.0	50.16	100.3	50.0	49.13	98.3	54.17	108.3	51.33	102.7				

Control Limits: Mercury 80-120; Other Metals 90-110

US 5 1250

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Silver	AG	PMS	MS051711	50.0	51.82	103.6	50.0	51.78	103.6	50.62	101.2	50.92	101.8				

Control Limits: Mercury 80-120; Other Metals 90-110

US1559215

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Aluminum	AL	ICP	IP050471	50.0	51.17	102.3	58.79	117.6								
Antimony	SB	PMS	MS050711	0.2	0.20	100.0										
Arsenic	AS	PMS	MS050711	0.2	0.26	130.0										
Beryllium	BE	PMS	MS050711	0.2	0.20	100.0										
Cadmium	CD	PMS	MS050711	0.1	0.11	110.0										
Calcium	CA	ICP	IP050471	50.0	47.15	94.3	51.24	102.5								
Chromium	CR	PMS	MS050711	0.5	0.47	94.0										
Copper	CU	PMS	MS050711	0.5	0.54	108.0										
Iron	FE	ICP	IP050471	50.0	49.51	99.0	51.65	103.3								
Lead	PB	PMS	MS050711	0.1	0.11	110.0										
Magnesium	MG	ICP	IP050471	50.0	57.00	114.0	61.49	123.0								
Manganese	MN	ICP	IP050471	1.0	1.07	107.0	1.12	112.0								
Mercury	HG	CVA	HG050302	0.1	0.11	110.0										
Nickel	NI	PMS	MS050711	0.5	0.54	108.0										
Potassium	K	ICP	IP050471	500.0	493.26	98.7	512.36	102.5								
Selenium	SE	PMS	MS050711	0.5	0.58	116.0										
Silver	AG	PMS	MS050711	0.2	0.21	105.0										
Sodium	NA	ICP	IP050471	500.0	456.36	91.3	655.80	131.2								
Thallium	TL	PMS	MS050711	0.2	0.20	100.0										
Zinc	ZN	PMS	MS050711	4.0	4.06	101.5										

Control Limits: no control limits have been established by the EPA at this time.

US27-5525

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

UNITS: ug/L

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	PMS	MS050811	0.2	0.23	115.0										
Beryllium	BE	PMS	MS050811	0.2	0.20	100.0										
Chromium	CR	PMS	MS050811	0.5	0.50	100.0										
Copper	CU	PMS	MS050811	0.5	0.51	102.0										
Lead	PB	PMS	MS050811	0.1	0.11	110.0										
Silver	AG	PMS	MS050811	0.2	0.20	100.0										
Zinc	ZN	PMS	MS050811	4.0	3.98	99.5										

Control Limits: no control limits have been established by the EPA at this time.

US1S-01259

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	M	RUN	CRA/I	TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Silver	AG	PMS	MS051111		0.2	0.20	100.0										
Silver	AG	PMS	MS051711		0.2	0.21	105.0										

Control Limits: no control limits have been established by the EPA at this time.

SDG US27

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Aluminum	AL	ICP	IP050471	200.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Antimony	SB	PMS	MS050711	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS050711	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Beryllium	BE	PMS	MS050711	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	CD	PMS	MS050711	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Calcium	CA	ICP	IP050471	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Chromium	CR	PMS	MS050711	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS050711	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	1.0	B	1.4	B
Iron	FE	ICP	IP050471	100.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Lead	PB	PMS	MS050711	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Magnesium	MG	ICP	IP050471	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Manganese	MN	ICP	IP050471	15.0	1.0	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Mercury	HG	CVA	HG050302	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Nickel	NI	PMS	MS050711	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Potassium	K	ICP	IP050471	5000.0	500.0	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U
Selenium	SE	PMS	MS050711	5.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS050711	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Sodium	NA	ICP	IP050471	5000.0	500.0	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U
Thallium	TL	PMS	MS050711	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS050711	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

US15-0921

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US27

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Aluminum	AL	ICP	IP050471	200.0	50.0	50.0	U										
Antimony	SB	PMS	MS050711	60.0	0.2												
Arsenic	AS	PMS	MS050711	10.0	0.2												
Beryllium	BE	PMS	MS050711	5.0	0.2												
Cadmium	CD	PMS	MS050711	5.0	0.1												
Calcium	CA	ICP	IP050471	5000.0	50.0	50.0	U										
Chromium	CR	PMS	MS050711	10.0	0.5												
Copper	CU	PMS	MS050711	25.0	0.5												
Iron	FE	ICP	IP050471	100.0	50.0	50.0	U										
Lead	PB	PMS	MS050711	3.0	0.1												
Magnesium	MG	ICP	IP050471	5000.0	50.0	50.0	U										
Manganese	MN	ICP	IP050471	15.0	1.0	1.0	U										
Mercury	HG	CVA	HG050302	0.2	0.1												
Nickel	NI	PMS	MS050711	40.0	0.5												
Potassium	K	ICP	IP050471	5000.0	500.0	500.0	U										
Selenium	SE	PMS	MS050711	5.0	0.5												
Silver	AG	PMS	MS050711	10.0	0.2												
Sodium	NA	ICP	IP050471	5000.0	500.0	500.0	U										
Thallium	TL	PMS	MS050711	10.0	0.2												
Zinc	ZN	PMS	MS050711	20.0	4.0												

J1359-5151

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050811	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Beryllium	BE	PMS	MS050811	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chromium	CR	PMS	MS050811	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS050811	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	2.2	B	0.9	B
Lead	PB	PMS	MS050811	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Silver	AG	PMS	MS050811	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS050811	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

US15-000218

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Silver	AG	PMS	MS051111	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U				

S2396 - 0151

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Silver	AG	PMS	MS051711	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U				

627509-1SD

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: IP050471

SDG: US27

INSTRUMENT ID: OPTIMA ICP 2

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	200000	200000	198639.1	198655.6	**99.3**	203110.4	202807.4	**101.4**			
Antimony		1000	17.2	975.4	**97.5**	15.1	991.2	**99.1**			
Arsenic		1000	-14.0	973.3	**97.3**	-13.6	1015.8	**101.6**			
Barium		1000	2.4	974.1	**97.4**	3.0	1021.0	**102.1**			
Beryllium		1000	0.1	960.0	**96.0**	0.1	1012.2	**101.2**			
Boron			5.7	2.9		4.2	3.9				
Cadmium		1000	0.6	1027.5	**102.8**	0.7	1056.5	**105.7**			
Calcium	100000	100000	98618.4	98784.4	**98.8**	100673.2	99569.6	**99.6**			
Chromium		1000	-0.1	1004.0	**100.4**	-1.2	1036.0	**103.6**			
Cobalt		1000	2.5	937.4	**93.7**	2.3	973.6	**97.4**			
Copper		1000	-1.9	1061.0	**106.1**	-1.2	1064.4	**106.4**			
Iron	200000	200000	194143.2	194472.0	**97.2**	197537.4	196948.1	**98.5**			
Lead		1000	-6.6	963.8	**96.4**	-8.5	1017.6	**101.8**			
Magnesium	100000	100000	96477.1	96388.0	**96.4**	98747.6	98245.7	**98.2**			
Manganese		1000	0.2	925.4	**92.5**	0.1	973.6	**97.4**			
Molybdenum			4.2	4.5		4.6	4.8				
Nickel		1000	-0.9	924.4	**92.4**	-0.4	967.8	**96.8**			
Potassium			26.0	10.5		54.5	22.7				
Selenium		1000	8.2	995.9	**99.6**	8.4	1038.2	**103.8**			
Silicon			-17.0	-19.9		-13.5	-17.8				
Silver		1000	-1.3	1061.5	**106.2**	-1.1	1074.7	**107.5**			
Sodium			28.6	13.2		190.4	151.4				
Strontium			10.1	9.9		10.4	10.3				
Thallium		1000	9.7	934.5	**93.5**	10.5	979.5	**98.0**			
Tin			-11.9	-12.7		-12.9	-12.8				
Titanium			-0.3	-0.4		-0.2	-0.4				
Vanadium		1000	6.1	995.9	**99.6**	5.6	1013.5	**101.4**			
Zinc		1000	-4.3	910.9	**91.1**	-5.2	957.4	**95.7**			

12306.5150

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050711

SDG: US27

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Arsenic		20	0.0	18.5	92.5						
Cadmium		20	0.3	19.4	97.0						
Chromium		20	0.8	20.4	102.0						
Cobalt		20	0.0	18.8	94.0						
Copper		20	0.8	20.7	103.5						
Manganese		20	0.1	19.1	95.5						
Molybdenum	400	400	397.0	406.6	101.7						
Nickel		20	0.4	19.6	98.0						
Selenium			-0.3	-0.4							
Silver		20	0.0	19.1	95.5						
Thorium			0.2	0.1							
Vanadium			0.1	0.2							
Zinc		20	0.8	19.6	98.0						

US1S_052252

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050811

SDG: US27

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Arsenic		20	0.1	18.2	**91.0**						
Cadmium		20	0.2	19.0	**95.0**						
Chromium		20	0.8	20.5	**102.5**						
Cobalt		20	0.0	19.0	**95.0**						
Copper		20	1.3	20.8	**104.0**						
Manganese		20	0.1	19.0	**95.0**						
Molybdenum	400	400	391.3	399.9	**100.0**						
Nickel		20	0.4	19.0	**95.0**						
Selenium			-0.3	-0.3							
Silver		20	0.0	18.9	**94.5**						
Thorium			0.2	0.1							
Vanadium			0.1	0.2							
Zinc		20	0.8	18.9	**94.5**						

52290-5151

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS051111

SDG: US27

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.0	18.6	93.0						
Cadmium		20	0.1	19.1	95.5						
Chromium		20	0.9	19.6	98.0						
Cobalt		20	0.0	18.5	92.5						
Copper		20	1.2	20.6	103.0						
Manganese		20	0.1	19.0	95.0						
Molybdenum	400	400	416.6	435.2	108.8						
Nickel		20	0.4	18.9	94.5						
Selenium			-0.2	-0.3							
Silver		20	0.0	20.5	102.5						
Thorium			0.3	0.1							
Zinc		20	0.7	18.7	93.5						

US15-59214

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS051711

SDG: US27

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Arsenic		20	0.1	18.6	93.0						
Cadmium		20	0.2	19.6	98.0						
Chromium		20	0.8	20.4	102.0						
Cobalt		20	0.0	18.8	94.0						
Copper		20	1.0	20.7	103.5						
Manganese		20	0.1	19.3	96.5						
Molybdenum	400	400	425.3	415.8	104.0						
Nickel		20	0.3	19.8	99.0						
Selenium			-0.2	-0.3							
Silver		20	0.0	18.9	94.5						
Thorium			0.2	0.1							
Vanadium			0.1	0.2							
Zinc		20	0.7	19.2	96.0						

S2259 - 3 of 5

Post Digest Spike Sample Recovery

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	RUNID	SPIKED SAMPLE RESULT	C	SAMPLE RESULT	C	SPIKE ADDED	MATRIX	%R
Silver	MW-14D-043012A	US27JPOST	MS051111	48.64		0.40	U	50	Water	97.3
Silver	MW-14D-043012A	US27EPOST	MS050711	46.50		0.40	U	50	Water	93.0

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: ICP

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Aluminum	MW-14D-043012L	US27E-L	Water	IP050471	462.28		476.80	B	3.1	
Calcium	MW-14D-043012L	US27E-L	Water	IP050471	18138.21		18663.30	B	2.9	
Iron	MW-14D-043012L	US27E-L	Water	IP050471	10112.69		9954.50		1.6	
Magnesium	MW-14D-043012L	US27E-L	Water	IP050471	12639.62		12564.65	B	0.6	
Manganese	MW-14D-043012L	US27E-L	Water	IP050471	318.04		315.65		0.8	
Potassium	MW-14D-043012L	US27E-L	Water	IP050471	14795.19		14624.25	B	1.2	
Sodium	MW-14D-043012L	US27E-L	Water	IP050471	169634.77		165652.40		2.3	

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: ICP

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Aluminum	MW-14D-043012L	US27J-L	Water	IP050471	248.29		255.70	B	3.0	
Iron	MW-14D-043012L	US27J-L	Water	IP050471	9839.39		9723.10		1.2	
Manganese	MW-14D-043012L	US27J-L	Water	IP050471	316.08		311.60		1.4	

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Antimony	MW-27-043012L	US27C-L	Water	MS050711	0.15	U	0.20	B		
Arsenic	MW-27-043012L	US27C-L	Water	MS050711	9.12	B	10.05	B	10.2	
Beryllium	MW-27-043012L	US27C-L	Water	MS050711	0.00	U	0.05	B		
Cadmium	MW-27-043012L	US27C-L	Water	MS050711	0.05	U	0.05	B		
Chromium	MW-27-043012L	US27C-L	Water	MS050711	0.73	B	0.75	B	2.7	
Copper	MW-27-043012L	US27C-L	Water	MS050711	0.98	B	1.21	U	2.4	
Lead	MW-27-043012L	US27C-L	Water	MS050711	0.05	U	0.10	B		
Nickel	MW-27-043012L	US27C-L	Water	MS050711	2.82	B	2.95	B	4.6	
Selenium	MW-27-043012L	US27C-L	Water	MS050711	0.15	U	-0.15	B		
Silver	MW-27-043012L	US27C-L	Water	MS050711	0.00	U	0.00	B		
Thallium	MW-27-043012L	US27C-L	Water	MS050711	0.00	U	0.05	B		
Zinc	MW-27-043012L	US27C-L	Water	MS050711	2.56	U	7.20	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFER-ENCE	Q
Chromium	MW-14D-043012L	US27E-L	Water	MS050711	11.51		12.75	B	10.8	
Copper	MW-14D-043012L	US27E-L	Water	MS050711	3.11	B	1.21	U	-2.3	
Silver	MW-14D-043012L	US27E-L	Water	MS050711	0.02	U	0.00	B		
Zinc	MW-14D-043012L	US27E-L	Water	MS050711	2.30	U	7.40	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Antimony	MW-27-043012L	US27H-L	Water	MS050711	0.13	U	0.15	B		
Arsenic	MW-27-043012L	US27H-L	Water	MS050711	9.33	B	10.20	B	9.3	
Cadmium	MW-27-043012L	US27H-L	Water	MS050711	0.00	U	0.00	B		
Copper	MW-27-043012L	US27H-L	Water	MS050711	0.60	B	1.16	U	-87.1	
Nickel	MW-27-043012L	US27H-L	Water	MS050711	2.24	B	2.45	B	9.4	
Selenium	MW-27-043012L	US27H-L	Water	MS050711	0.16	U	-0.20	B		
Silver	MW-27-043012L	US27H-L	Water	MS050711	0.00	U	0.05	B		
Thallium	MW-27-043012L	US27H-L	Water	MS050711	0.00	U	0.05	B		
Zinc	MW-27-043012L	US27H-L	Water	MS050711	1.47	U	8.65	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US27

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Arsenic	MW-14D-043012L	US27E-L	Water	MS050811	36.11		35.38	B	2.0	
Chromium	MW-14D-043012L	US27E-L	Water	MS050811	11.51		1.15	B	90.0	
Beryllium	MW-27-043012L	US27H-L	Water	MS050811	0.00	U	0.00	B		
Chromium	MW-27-043012L	US27H-L	Water	MS050811	0.11	U	1.05	B		
Lead	MW-27-043012L	US27H-L	Water	MS050811	0.03	U	0.15	B		
Arsenic	MW-14D-043012L	US27J-L	Water	MS050811	36.14		36.37	B	0.6	
Chromium	MW-14D-043012L	US27J-L	Water	MS050811	9.39	B	10.35	B	10.2	

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27 UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Aluminum	AL	ICP	OPTIMA ICP 2	308.22		200	50.0	4/1/2011	250000.0	3/19/2012
Antimony	SB	PMS	NEXION 300D MS	0.00		60	0.2	4/1/2011		
Arsenic	AS	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Beryllium	BE	PMS	NEXION 300D MS	0.00		5	0.2	4/1/2011		
Cadmium	CD	PMS	NEXION 300D MS	0.00		5	0.1	4/1/2011		
Calcium	CA	ICP	OPTIMA ICP 2	317.93		5000	50.0	4/1/2011	500000.0	3/19/2012
Chromium	CR	PMS	NEXION 300D MS	0.00		10	0.5	4/1/2011		
Copper	CU	PMS	NEXION 300D MS	0.00		25	0.5	4/1/2011		
Iron	FE	ICP	OPTIMA ICP 2	259.94		100	50.0	4/1/2011	250000.0	3/19/2012
Lead	PB	PMS	NEXION 300D MS	0.00		3	0.1	4/1/2011		
Magnesium	MG	ICP	OPTIMA ICP 2	279.08		5000	50.0	4/1/2011	500000.0	3/19/2012
Manganese	MN	ICP	OPTIMA ICP 2	257.61		15	1.0	4/1/2011	30000.0	3/19/2012
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2011		
Nickel	NI	PMS	NEXION 300D MS	0.00		40	0.5	4/1/2011		
Potassium	K	ICP	OPTIMA ICP 2	766.49		5000	500.0	4/1/2011	500000.0	3/19/2012
Selenium	SE	PMS	NEXION 300D MS	0.00		5	0.5	4/1/2011		
Silver	AG	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Sodium	NA	ICP	OPTIMA ICP 2	589.00		5000	500.0	4/1/2011	5000000.0	3/19/2012
Thallium	TL	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Zinc	ZN	PMS	NEXION 300D MS	0.00		20	4.0	4/1/2011		

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

IEC DATE: 3/19/2012

SDG: US27

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	AL	AS	BA	BE	CA	CD	CO	CR	CU	FE
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.3219720	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	10.2020000	0.0000000	0.1202730
Arsenic	188.98	0.0676681	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.9907570	1.0929900	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1617070	0.0000000	0.0000000	0.0509863
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	3.4090200	0.0000000	0.0000000	0.0000000	0.0000000	0.1642300	0.0000000	0.0000000	0.0094737
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0229989	0.0000000	-0.0409619	0.0000000	0.0000000	-0.0447283
Cobalt	228.62	0.0000000	0.0000000	0.2151410	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.2203550	-0.0248240	0.0000000	-0.0717630
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.7214060	0.0000000	0.0000000
Lead	220.35	-0.1395300	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-2.0199800	1.2549900	0.0665058
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-1.7927700	-1.2197100	0.0000000	0.5858900
Manganese	257.61	0.0071452	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.0059831
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0169987	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1147630
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-3.7375200	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0067168	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	6.5303700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	2.5520300	0.3828500	0.0000000	-0.1317480
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.0292008	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0348510	0.0000000	0.0000000	0.2207060	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-4.2513600	0.0000000	0.1207740
Zinc	206.20	-0.0433063	0.0000000	0.0000000	0.0000000	0.0131448	0.0000000	0.0000000	-0.4942180	0.0000000	0.0000000

1234569 US15

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

IEC DATE: 3/19/2012

SDG: US27

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	MG	MN	MO	NI	PB	SB	TI	TL	V	ZN
Aluminum	308.22	0.0000000	0.0000000	8.7251100	0.0000000	0.0000000	0.0000000	1.2350800	0.0000000	19.6337000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-1.6262000	0.0000000	-2.0479800	0.0000000
Arsenic	188.98	0.0231456	0.0000000	1.4466600	0.0000000	0.0000000	0.0000000	-6.9568100	0.0000000	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0777109	0.0000000	0.0000000	0.0000000	0.0000000	0.4101220	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0114175	0.0000000	0.6735850	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0576937	-0.6515750	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0373272	0.0000000	0.1461890	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.2854520	0.0267072
Cobalt	228.62	0.0000000	0.0000000	-0.2518640	0.1618730	0.0000000	0.0000000	1.6854600	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0046107	0.0000000	0.1890580	0.0000000	0.0000000	0.0000000	0.2839350	0.0000000	0.0000000	0.0000000
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	5.2682800	0.0000000
Lead	220.35	0.0000000	0.0000000	-0.3516970	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	-3.2487800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0062324	0.0000000	0.0000000	0.0000000	-0.3367650	0.0000000	0.0000000	0.0000000	-0.0331334	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.9494270	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.9119740	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.2105810	0.1262930	0.0000000	0.0000000	0.0000000	-0.0406459	0.0000000	-0.2398130	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	271.7310000	0.0000000	0.0000000	373.0000000
Thallium	190.80	0.0000000	0.0000000	-3.8706100	0.0000000	0.0917790	0.0000000	0.5514110	0.0000000	1.6549500	0.0000000
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.0344764	-0.7123520	-0.4958940	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	1.3260700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	-0.1562030	-0.7955440	0.0000000	0.0000000	0.0000000	0.6246810	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.2669400	0.0000000	-0.1628880	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

SDG - US27

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

ANALYSIS METHOD: ICP

ARI PREP CODE: TWC

PREPDATE: 5/2/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-14D-043012	US27E	0.000	50.0	50.0
MW-14D-043012D	US27EDUP	0.000	50.0	50.0
MW-14D-043012S	US27ESPK	0.000	50.0	50.0
PBW	US27MB1	0.000	50.0	50.0
LCSW	US27MB1SPK	0.000	50.0	50.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

ANALYSIS METHOD: ICP

ARI PREP CODE: WMN

PREPDATE: 5/2/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-14D-043012	US27J	0.000	50.0	50.0
MW-14D-043012D	US27JDUP	0.000	50.0	50.0
MW-14D-043012S	US27JSPK	0.000	50.0	50.0
PBW	US27MB2	0.000	50.0	50.0
LCSW	US27MB2SPK	0.000	50.0	50.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

ANALYSIS METHOD: CVA

ARI PREP CODE: TWM

PREPDATE: 5/2/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-27-043012	US27C	0.000	20.0	20.0
MW-27-043012D	US27CDUP	0.000	20.0	20.0
MW-27-043012S	US27CSPK	0.000	20.0	20.0
MW-26-043012	US27D	0.000	20.0	20.0
MW-27-043012	US27H	0.000	20.0	20.0
MW-27-043012D	US27HDUP	0.000	20.0	20.0
MW-27-043012S	US27HSPK	0.000	20.0	20.0
MW-26-043012	US27I	0.000	20.0	20.0
PBW	US27MB1	0.000	20.0	20.0
LCSW	US27MB1SPK	0.000	20.0	20.0
PBW	US27MB2	0.000	20.0	20.0
LCSW	US27MB2SPK	0.000	20.0	20.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US27

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/3/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-13-043012	US27A	0.000	50.0	25.0
MW-27-043012	US27C	0.000	50.0	25.0
MW-27-043012D	US27CDUP	0.000	50.0	25.0
MW-27-043012S	US27CSPK	0.000	50.0	25.0
MW-26-043012	US27D	0.000	50.0	25.0
MW-14D-043012	US27E	0.000	50.0	25.0
MW-14D-043012D	US27EDUP	0.000	50.0	25.0
MW-14D-043012S	US27ESPK	0.000	50.0	25.0
MW-13-043012	US27G	0.000	50.0	25.0
MW-27-043012	US27H	0.000	50.0	25.0
MW-27-043012D	US27HDUP	0.000	50.0	25.0
MW-27-043012S	US27HSPK	0.000	50.0	25.0
MW-26-043012	US27I	0.000	50.0	25.0
MW-14D-043012	US27J	0.000	50.0	25.0
MW-14D-043012D	US27JDUP	0.000	50.0	25.0
MW-14D-043012S	US27JSPK	0.000	50.0	25.0
PBW	US27MB1	0.000	50.0	25.0
LCSW	US27MB1SPK	0.000	50.0	25.0
PBW	US27MB2	0.000	50.0	25.0
LCSW	US27MB2SPK	0.000	50.0	25.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 5/4/2012

SDG: US27 | RUNID: IP050471 | METHOD: ICP | END DATE: 5/4/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10215			X					X					X		X	X	X		X											
S2	S2	1.00	10260																	X													
S3	S3	1.00	10275																														
S4	S4	1.00	10300																														
S5	S5	1.00	10322			X					X					X		X	X			X											
ICV	ICV	1.00	10371			X					X					X		X	X	X		X											
ICB	ICB	1.00	10411			X					X					X		X	X	X		X											
CRI	CRII	1.00	10453			X					X					X		X	X	X		X											
ICSA	ICSAI	1.00	10494			X					X					X		X	X	X		X											
ICSAB	ICSABI	1.00	10535			X					X					X		X	X	X		X											
CCV	CCV1	1.00	10575			X					X					X		X	X	X		X											
CCB	CCB1	1.00	11020			X					X					X		X	X	X		X											
S2	S2	1.00	11064																	X													
S3	S3	1.00	11082																														
CCV	CCV2	1.00	11102			X					X					X		X	X	X		X											
CCB	CCB2	1.00	11142			X					X					X		X	X	X		X											
ZZZZZZ	US51MB	1.00	11184																														
PBW	US27MB1	1.00	11225			X					X					X		X	X	X		X											
MW-14D-043012L	US27E-L	5.00	11270			X					X					X		X	X	X		X											
MW-14D-043012	US27E	1.00	11311			X					X					X		X	X	X		X											
MW-14D-043012D	US27EDUP	1.00	11353			X					X					X		X	X	X		X											
MW-14D-043012S	US27ESPK	1.00	11394			X					X					X		X	X	X		X											
ZZZZZZ	ZZZZZZ	1.00	11440																														
ZZZZZZ	US51A	1.00	11481																														
ZZZZZZ	US51MBSPK	1.00	11522																														
LCSW	US27MB1SPK	1.00	11562			X					X					X		X	X	X		X											
CCV	CCV3	1.00	12002			X					X					X		X	X	X		X											
CCB	CCB3	1.00	12042			X					X					X		X	X	X		X											
PBW	US27MB2	1.00	12083			X										X				X													
MW-14D-043012L	US27J-L	5.00	12125			X										X				X													
MW-14D-043012	US27J	1.00	12170			X										X				X													
MW-14D-043012D	US27JDUP	1.00	12211			X										X				X													
MW-14D-043012S	US27JSPK	1.00	12252			X										X				X													
ZZZZZZ	US29ADUP	1.00	12294																														
ZZZZZZ	US29A	1.00	12335																														

FORM XIV

US15 0h7SS

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 5/4/2012

SDG: US27 | RUNID: IP050471 | METHOD: ICP | END DATE: 5/4/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	US29ASPK	1.00	12380																														
ZZZZZZ	US29MBSPK	1.00	12415																														
LCSW	US27MB2SPK	1.00	12454			X										X				X													
CCV	CCV4	1.00	12494			X					X					X		X	X	X		X											
CCB	CCB4	1.00	12534			X					X					X		X	X	X		X											
ZZZZZZ	ZZZZZZ	1.00	12580																														
ZZZZZZ	ZZZZZZ	1.00	13021																														
CCV	CCV5	1.00	13063			X					X					X		X	X	X		X											
CCB	CCB5	1.00	13103			X					X					X		X	X	X		X											
CRI	CRIF	1.00	13144			X					X					X		X	X	X		X											
ICSA	ICSAF	1.00	13191			X					X					X		X	X	X		X											
ICSAB	ICSABF	1.00	13231			X					X					X		X	X	X		X											
CCV	CCV6	1.00	13265			X					X					X		X	X	X		X											
CCB	CCB6	1.00	13304			X					X					X		X	X	X		X											

US15-00214

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/7/2012

SDG: US27 | RUNID: MS050711 | METHOD: PMS | END DATE: 5/7/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	12190		X		X			X		X		X	X								X	X	X	X				X			X
S1	S1	1.00	12230		X		X			X		X		X	X								X	X	X	X				X			X
S2	S2	1.00	12270		X		X			X		X		X	X								X	X	X	X				X			X
S3	S3	1.00	12310		X		X			X		X		X	X								X	X	X	X				X			X
S4	S4	1.00	12360		X		X			X		X		X	X								X	X	X	X				X			X
S5	S5	1.00	12410																														
ZZZZZZ	Rinse sampl	1.00	12480																														
S0	S0	1.00	12540		X		X			X		X		X	X								X	X	X	X				X			X
ICV	MICV	1.00	12590		X		X			X		X		X	X								X	X	X	X				X			X
ICB	ICB	1.00	13040		X		X			X		X		X	X								X	X	X	X				X			X
CCV	MCCV1	1.00	13080		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB1	1.00	13130		X		X			X		X		X	X								X	X	X	X				X			X
CRI	MCRI	1.00	13170		X		X			X		X		X	X								X	X	X	X				X			X
ICSA	ICSAI	1.00	13210		X		X			X		X		X	X								X	X	X	X				X			X
ICSAB	ICSABI	1.00	13270		X		X			X		X		X	X								X	X	X	X				X			X
ZZZZZZ	B1	1.00	13320																														
ZZZZZZ	B2	1.00	13380																														
CCV	MCCV2	1.00	13430		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB2	1.00	13470		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US27MB1	2.00	14040		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US27MB2	2.00	14080		X		X			X		X		X	X								X	X	X	X				X			X
LCSW	US27MB2SPK	2.00	14130		X		X			X		X		X	X								X	X	X	X				X			X
LCSW	US27MB1SPK	2.00	14170		X		X			X		X		X	X								X	X	X	X				X			X
MW-13-043012	US27A	2.00	14210																														
MW-26-043012	US27D	2.00	14250		X					X		X		X	X								X	X	X	X				X			X
MW-13-043012	US27G	2.00	14290																														
MW-26-043012	US27I	2.00	14330		X					X		X		X	X								X	X	X	X				X			X
ZZZZZZ	LR200	1.00	14370																														
ZZZZZZ	B3	1.00	14430																														
CCV	MCCV3	1.00	14500		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB3	1.00	14560		X		X			X		X		X	X								X	X	X	X				X			X
MW-27-043012L	US27C-L	10.00	15010		X		X			X		X		X	X								X	X	X	X				X			X
MW-27-043012	US27C	2.00	15050				X			X		X		X	X								X	X	X	X				X			X
MW-27-043012D	US27CDUP	2.00	15090		X		X			X		X		X	X								X	X	X	X				X			X
MW-27-043012S	US27CSPK	2.00	15130		X		X			X		X		X	X								X	X	X	X				X			X

FORM XIV

US1S 090242

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/7/2012

SDG: US27 | RUNID: MS050711 | METHOD: PMS | END DATE: 5/7/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	ZZZZZZ	2.00	15170																														
MW-14D-043012L	US27E-L	10.00	15210		X		X							X	X																		X
MW-14D-043012	US27E	2.00	15250		X									X	X																		X
MW-14D-043012D	US27EDUP	2.00	15290		X									X	X																		X
MW-14D-043012S	US27ESPK	2.00	15340		X									X	X																		X
MW-14D-043012A	US27EPOST	2.00	15380		X																												
CCV	MCCV4	1.00	15450		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB4	1.00	15510		X		X			X		X		X	X								X	X	X	X				X			X
MW-27-043012L	US27H-L	10.00	15550		X		X			X		X		X	X								X	X	X	X				X			X
MW-27-043012	US27H	2.00	15590		X		X					X			X								X		X	X				X			X
MW-27-043012D	US27HDUP	2.00	16030		X		X					X			X								X		X	X				X			X
MW-27-043012S	US27HSPK	2.00	16070		X		X					X			X								X		X	X				X			X
ZZZZZZ	ZZZZZZ	2.00	16110																														
ZZZZZZ	ZZZZZZ	10.00	16160																														
MW-14D-043012	US27J	2.00	16200																														
MW-14D-043012D	US27JDUP	2.00	16240																														
ZZZZZZ	ZZZZZZ	2.00	16280																														
ZZZZZZ	ZZZZZZ	2.00	16320																														
CCV	MCCV5	1.00	16390		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB5	1.00	16450		X		X			X		X		X	X								X	X	X	X				X			X

US15-000243

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/8/2012

SDG: US27 | RUNID: MS050811 | METHOD: PMS | END DATE: 5/8/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	12070		X		X			X				X	X									X									X
S1	S1	1.00	12110		X		X			X				X	X									X									X
S2	S2	1.00	12150		X		X			X				X	X									X									X
S3	S3	1.00	12190		X		X			X				X	X									X									X
S4	S4	1.00	12240		X		X			X				X	X									X									X
S5	S5	1.00	12290																														
ZZZZZZ	Rinse sampl	1.00	12360																														
S0	S0	1.00	12440		X		X			X				X	X									X									X
ICV	MICV	1.00	12490		X		X			X				X	X									X									X
ICB	ICB	1.00	12540		X		X			X				X	X									X									X
CCV	MCCV1	1.00	12580		X		X			X				X	X									X									X
CCB	CCB1	1.00	13040		X		X			X				X	X									X									X
CRI	MCRI	1.00	13080		X		X			X				X	X									X									X
ICSA	ICSAI	1.00	13130		X		X			X				X	X									X									X
ICSAB	ICSABI	1.00	13180		X		X			X				X	X									X									X
ZZZZZZ	B1	1.00	13230																														
ZZZZZZ	B2	1.00	13290																														
CCV	MCCV2	1.00	13340		X		X			X				X	X									X									X
CCB	CCB2	1.00	13400		X		X			X				X	X									X									X
MW-14D-043012L	US27E-L	100.00	13550		X		X							X	X																		X
MW-14D-043012	US27E	20.00	13590				X																										
MW-14D-043012D	US27EDUP	20.00	14030				X																										
MW-14D-043012S	US27ESPK	20.00	14070				X																										
MW-13-043012	US27A	40.00	14110				X																										
MW-26-043012	US27D	20.00	14160				X																										
MW-13-043012	US27G	40.00	14200				X																										
MW-26-043012	US27I	20.00	14240				X																										
ZZZZZZ	LR200	1.00	14290																														
ZZZZZZ	B3	1.00	14350																														
CCV	MCCV3	1.00	14400		X		X			X				X	X									X									X
CCB	CCB3	1.00	14470		X		X			X				X	X									X									X
MW-27-043012L	US27H-L	10.00	15020		X		X			X		X		X	X								X	X	X	X				X			X
MW-27-043012	US27H	2.00	15060							X				X										X									
MW-27-043012D	US27HDUP	2.00	15110							X				X										X									
MW-27-043012S	US27HSPK	2.00	15150																														

FORM XIV

ARI-2269 - 3157

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/8/2012

SDG: US27 | RUNID: MS050811 | METHOD: PMS | END DATE: 5/8/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
MW-14D-043012L	US27J-L	10.00	15190		X		X							X	X																		X
MW-14D-043012	US27J	2.00	15230											X	X																		X
MW-14D-043012D	US27JDUP	2.00	15270		X									X	X																		X
MW-14D-043012S	US27JSPK	2.00	15310		X									X	X																		X
CCV	MCCV4	1.00	15390		X		X			X				X	X									X									X
CCB	CCB4	1.00	15460		X		X			X				X	X									X									X
MW-14D-043012L	US27J-L	100.00	15500		X		X							X	X																		X
MW-14D-043012	US27J	20.00	15550				X																										
MW-14D-043012D	US27JDUP	20.00	15590				X																										
MW-14D-043012S	US27JSPK	20.00	16030				X																										
ZZZZZZ	LR300	1.00	16090																														
ZZZZZZ	B4	1.00	16160																														
ZZZZZZ	B5	1.00	16230																														
MW-27-043012S	US27HSPK	2.00	16290							X				X										X									
CCB	CCB5	1.00	16360		X		X			X				X	X									X									X

US15-00294

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/11/2012

SDG: US27 | RUNID: MS051111 | METHOD: PMS | END DATE: 5/11/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11410		X																												
S1	S1	1.00	11450		X																												
S2	S2	1.00	11490		X																												
S3	S3	1.00	11530		X																												
S4	S4	1.00	11580		X																												
S5	S5	1.00	12040																														
ZZZZZZ	Rinse sampl	1.00	12100																														
ICV	MICV	1.00	12250		X																												
ICB	ICB	1.00	12300		X																												
CCV	MCCV1	1.00	12340		X																												
CCB	CCB1	1.00	12390		X																												
CRI	MCRI	1.00	12430		X																												
ICSA	ICSAI	1.00	12480		X																												
ICSAB	ICSABI	1.00	12530		X																												
ZZZZZZ	B1	1.00	12580																														
ZZZZZZ	B2	1.00	13040																														
CCV	MCCV2	1.00	13120		X																												
CCB	CCB2	1.00	13160		X																												
ZZZZZZ	US61MB1SPK	2.00	13200																														
ZZZZZZ	US61MB2SPK	2.00	13240																														
MW-14D-043012	US27J	2.00	13280		X																												
MW-14D-043012A	US27JPOST	2.00	13320		X																												
ZZZZZZ	US61A	2.00	13380																														
ZZZZZZ	US61B	2.00	13420																														
ZZZZZZ	US61C	2.00	13460																														
ZZZZZZ	US61H	2.00	13500																														
ZZZZZZ	US61I	2.00	13540																														
ZZZZZZ	US61J	2.00	13580																														
CCV	MCCV3	1.00	14040		X																												
CCB	CCB3	1.00	14100		X																												

9128S-9150

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/17/2012

SDG: US27 | RUNID: MS051711 | METHOD: PMS | END DATE: 5/17/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	12030		X																												
S1	S1	1.00	12070		X																												
S2	S2	1.00	12110		X																												
S3	S3	1.00	12160		X																												
S4	S4	1.00	12200		X																												
S5	S5	1.00	12270																														
ZZZZZZ	Rinse sampl	1.00	12330																														
ICV	MICV	1.00	12400		X																												
ICB	ICB	1.00	12470		X																												
CCV	MCCV1	1.00	12510		X																												
CCB	CCB1	1.00	12570		X																												
CRI	MCRI	1.00	13010		X																												
ICSA	ICSAI	1.00	13060		X																												
ICSAB	ICSABI	1.00	13120		X																												
ZZZZZZ	LR200	1.00	13190																														
ZZZZZZ	B1	1.00	13260																														
ZZZZZZ	B2	1.00	13310																														
CCV	MCCV2	1.00	13360		X																												
CCB	CCB2	1.00	13430		X																												
MW-27-043012	US27C	2.00	13490		X																												
ZZZZZZ	B2	1.00	13530																														
ZZZZZZ	NEX.BLANK	1.00	13570																														
CCV	MCCV3	1.00	14020		X																												
CCB	CCB3	1.00	14080		X																												

US15-682147

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/3/2012

SDG: US27 | RUNID: HG050302 | METHOD: CVA | END DATE: 5/3/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11161														X																
S0.1	S0.1	1.00	11174														X																
S0.5	S0.5	1.00	11192														X																
S1	S1	1.00	11210														X																
S2	S2	1.00	11223														X																
S5	S5	1.00	11241														X																
S10	S10	1.00	11255														X																
ICV	AICV	1.00	11285														X																
ICB	ICB	1.00	11303														X																
CCV	ACCV1	1.00	11320														X																
CCB	CCB1	1.00	11334														X																
CRA	CRA	1.00	11352														X																
ZZZZZZ	UR87MB2	1.00	11370																														
ZZZZZZ	UR87MB2SPK	1.00	11383																														
ZZZZZZ	UR87D	1.00	11401																														
ZZZZZZ	UR87DDUP	1.00	11414																														
ZZZZZZ	UR87DSPK	1.00	11432																														
ZZZZZZ	US02MB1	1.00	11450																														
ZZZZZZ	US02MB1SPK	1.00	11464																														
ZZZZZZ	US02A	1.00	11481																														
ZZZZZZ	US02ADUP	1.00	11495																														
CCV	ACCV2	1.00	11513														X																
CCB	CCB2	1.00	11531														X																
ZZZZZZ	US02ASPK	1.00	11545																														
ZZZZZZ	US02F	1.00	11562																														
ZZZZZZ	US02MB2	1.00	11580																														
ZZZZZZ	US02MB2SPK	1.00	11594																														
ZZZZZZ	US02I	1.00	12011																														
ZZZZZZ	US02IDUP	1.00	12025																														
ZZZZZZ	US02ISPK	1.00	12042																														
ZZZZZZ	US02N	1.00	12060																														
PBW	US27MB1	1.00	12074														X																
LCSW	US27MB1SPK	1.00	12092														X																
CCV	ACCV3	1.00	12110														X																
CCB	CCB3	1.00	12124														X																

FORM XIV

US15-US27B

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/3/2012

SDG: US27 | RUNID: HG050302 | METHOD: CVA | END DATE: 5/3/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
MW-27-043012	US27C	1.00	12142														X																
MW-27-043012D	US27CDUP	1.00	12155														X																
MW-27-043012S	US27CSPK	1.00	12173														X																
MW-26-043012	US27D	1.00	12191														X																
PBW	US27MB2	1.00	12204														X																
LCSW	US27MB2SPK	1.00	12222														X																
MW-27-043012	US27H	1.00	12240														X																
MW-27-043012D	US27HDUP	1.00	12253														X																
MW-27-043012S	US27HSPK	1.00	12271														X																
MW-26-043012	US27I	1.00	12285														X																
CCV	ACCV4	1.00	12303														X																
CCB	CCB4	1.00	12321														X																

64296 : 6757

Analytical Resources,Incorporated
Analytical Chemists and Consultants

SPIKING LOG

US52 PSPK, MB2SPK

Analyst: MJ

Date: 05.07.12

Final Volume _____

Final Volume (Hg): 20

Sample ID US15 ASPK, MB1SPK, GSPK, MB2SPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
	Ag	50		2.0
S	Al	200	200	
T	As	200		10
O	Ba	200	200	
C	Be	50	50	
K	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
C	Cr	50	50	
O	Cu	50	50	
N	Fe	200	200	
C	K	1000	1000	
E	Mg	1000	1000	
N	Mn	50	50	
T	Na	1000	1000	
R	Ni	50	50	
A	Pb	200		10
T	Se	200		10
I	Sr	50	50	
O	Tl	200		10
N	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	TWM	CVA	1.0	0.02	2908-7
Hg MBSPK	TWM	CVA	1.0	0.04	2908-7
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

SS2505 : 5151

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 90°C
Start Time: 1335
Matrix: water
Date: 05.07.12
End Time: 1535

ARI Sample ID	Sample Bottle #	pH<2	~~Initial Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US15 A	1	✓	20.0	20.0	05.11 1	Y	
US15 ADUP	1	✓	20.0	20.0	1	Y	
US15 ASPK	1	✓	20.0	20.0	1	Y	
US15 B	1	✓	20.0	20.0	1	Y	
US15 MB1	—	✓	20.0	20.0	1	Y	
US15 MB1SPK	—	✓	20.0	20.0	1	Y	
US15 G	1	✓	20.0	20.0	1	Y	
US15 GDUP	1	✓	20.0	20.0	1	Y	
US15 GSPK	1	✓	20.0	20.0	1	Y	
US15 H	1	✓	20.0	20.0	1	Y	
US15 MB2	—	✓	20.0	20.0	1	Y	
US15 MB2SPK	—	✓	20.0	20.0	1	Y	
US52 G	7	✓	20.0	20.0	05.13 1	Y	
US52 GDUP	7	✓	20.0	20.0	1	Y	
US52 GSPK	7	✓	20.0	20.0	1	Y	
US52 MB1	—	✓	20.0	20.0	1	Y	
US52 MB1SPK	—	✓	20.0	20.0	1	Y	
US52 P	1	✓	20.0	20.0	1	Y	
US52 PDUP	1	✓	20.0	20.0	1	Y	
US52 PSPK	1	✓	20.0	20.0	1	Y	
US52 MB2	—	✓	20.0	20.0	1	Y	
US52 MB2SPK	—	✓	20.0	20.0	1	Y	
				05.07.12 MJ			

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

US15 00251

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 05.08.12

Final Volume 25

Final Volume (Hg):

Sample ID US15 ASPK, MB1SPK, G1SPK, MB2SPK
US52 G1SPK, MB1SPK, PSPK, MB2SPK

		Prepcode:			
		Spike Solution:	ICP Routine	ICP No GFA	GFA
		Standard No.:			
		Vol Added (mL):			
	Ag		50		2.0
S	Al		200	200	
T	As		200		10
O	Ba		200	200	
C	Be		50	50	
K	Ca		1000	1000	
	Cd		50		2.0
	Co		50	50	
C	Cr		50	50	
O	Cu		50	50	
N	Fe		200	200	
C	K		1000	1000	
E	Mg		1000	1000	
N	Mn		50	50	
T	Na		1000	1000	
R	Ni		50	50	
A	Pb		200		10
T	Se		200		10
I	Sr		50	50	
O	Tl		200		10
N	V		50	50	
	Zn		50	50	

	REN	REN	
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	29127-9	25931b	
	0.05	0.05	
Ag	25 ✓		
Al			500
As	25 ✓		
Ba	25		
Be	25 ✓		
Ca			500
Cd	25 ✓		
Co	25		
Cr	25 ✓		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25 ✓		
Pb	25 ✓		
Sb		25 ✓	
Se	80 ✓		
Tl	25 ✓		
U	25		
V	25		
Zn	80 ✓		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

25206, 5151

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 05.05.12 Time: 0905

Matrix: Water Block ID: #13 Block Temp: 94°C Thermometer: MP29

ARI Sample ID	Btl #	pH<2	Prep Code: PEN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: PEN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US15 A	1	✓	50.0	25.0			
US15 ADUP	1	✓	50.0	25.0			
US15 ASPK	1	✓	50.0	25.0			
US15 B	1	✓	50.0	25.0			
US15 C	1	✓	50.0	25.0			
US15 D	1	✓	50.0	25.0			
US15 E	1	✓	50.0	25.0			
US15 MB1	—	✓	50.0	25.0			
US15 MB1SPK	—	✓	50.0	25.0			
US15 G	1	✓	50.0	25.0			
US15 GDUP	1	✓	50.0	25.0			
US15 GSPK	1	✓	50.0	25.0			
US15 H	1	✓	50.0	25.0			
US15 I	1	✓	50.0	25.0			
US15 J	1	✓	50.0	25.0			
US15 K	1	✓	50.0	25.0			
US15 MB2	—	✓	50.0	25.0			
US15 MB1SPK	—	✓	50.0	25.0			

05.06.12 MJ

Chemical/Reagent ID:

HNO_3: MI2257 HCl: — H_2O_2: I7403 Tube Lot #: 111173

US15 00253

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:

ARI Job No.: UG15

Unacceptable Blank: ☐

Date of Event: 5.11.12

Unacceptable Duplicate: ☑

Client ID: ERM

Unacceptable Spike: ☑

Method/Element: MS

Unacceptable Reference: ☐

Prep Code: REN

Details of Problem/Recommended Corrective Action:

A Ni DUP 99.2% RPD (reran confirms)
Ni Sp - 109.5% REC
A Post Ni - 98.7%

See attached

Samples Affected:

Corrective Action Taken: A Post Ni

Analyst Initials: [signature]

Date: 5/14/12

Supervisor: [signature]

Date: 5/17/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:

ARI Job No.: KS15

Unacceptable Blank: ☐

Date of Event: 5/14/12

Unacceptable Duplicate: ☑

Client ID: ERM

Unacceptable Spike: ☑

Method/Element: MS

Unacceptable Reference: ☐

Prep Code: LEN

Details of Problem/Recommended Corrective Action:

Ni A, ADUP 12% RPD (9.217, 2.456)

Ni Ack 91.6%

Confirms 5.11.12 Run

See APost Ni 5.11.12

Samples Affected:

Corrective Action Taken: APost Ni 5.11.12 Run

Analyst Initials: JB

Date: 5/15/12

Supervisor: AC

Date: 5/17/12

5049F

Revision 007
6/11/10

US15 : 00255

MATRIX DUPLICATE AND MATRIX SPIKE WORKSHEET (FOR SAMPLES >5 IDL)

DUPLICATION:

	DUP	BKGD
VOLUME	100	100
SAMP WT	100	100

ELEMENT	DUP mg/L	BKGD	% RPD
Ag	0	0	#DIV/0!
Al			#DIV/0!
As	6.088	6.228	2.27
B			#DIV/0!
Ba			#DIV/0!
Be	0	0	#DIV/0!
Ca			#DIV/0!
Cd	0	0	#DIV/0!
Co			#DIV/0!
Cr	0.51	0.546	6.82
Cu	1.921	1.92	0.05
Fe			#DIV/0!
K			#DIV/0!
Mg			#DIV/0!
Mn			#DIV/0!
Mo			#DIV/0!
Na			#DIV/0!
Ni	3.462	10.28	99.23
Pb		0	#DIV/0!
Sb	0.237	0.248	4.54
Se	0	0	#DIV/0!
Tl	0	0	#DIV/0!
V			#DIV/0!
Zn	0	0	#DIV/0!

SPIKE RECOVERY:

	SPIKE	BKGD
VOLUME	100	100
SAMP WT	100	100

ELEMENT	SPIKE mg/L	BKGD mg/L	SPK'D CONC mg/L	% RECOV #VALUE!
Ag	25.101	0	0.25	100.404
Al			5	0
As	33.241	6.228	0.25	108.052
B			0.25	0
Ba			0.25	0
Be	23.56	0	0.25	94.24
Ca			5	0
Cd	23.679	0	0.25	94.716
Co			0.25	0
Cr	24.108	0.546	0.25	94.248
Cu	26.806	1.92	0.25	99.544
Fe			5	0
K			5	0
Mg			5	0
Mn			0.25	0
Mo			0.25	0
Na			5	0
Ni	27.648	10.28	0.25	69.472
Pb	24.39	0	0.25	97.56
Sb	24.23	0.248	0.25	95.928
Se	78	0	0.8	97.5
Tl	413	0	0.25	1652
V			0.25	0
Zn	72.665	0	0.8	90.83125

US15-59259

TABLE 6

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.9.12 Analyst: JB Page: 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		TDO			2934-5
		1			2933-5
		2			2931-4
		3			↓ -5
		4			2934-9
		↓ 5			2931-7
		Rinse Sample			r = 0.99980
		SO			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		Low Check		✓	
		ICSA			
		ICSAB			
		B1			
		B2			
		CCV2			Ge high
		CCB2			
		CCV3			Ge high
		CCB3			
		US61 MB1	REN	2 ✓	Cu only
		↓ MB2	↓	↓ ✓	↓ ↓
		US02R MB1	↓	↓ ✓	As only

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.9.12 Analyst: JW Page: 2 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		U502R MB2	REN	2 ✓	Acuous
		MB2spk		✓	
		MB1spk		✓	
		A-L		10 ✓	
		A		2	
		ADUP		✓	
		Aspk		✓	
		CCV4			Aglow 82Se high
		CCB4			
		U502RI-L	REN	10 ✓	Acuous
		I		2	
		IDUP		✓	
		Ispk		✓	
		U515 D			
		E			
		J			
		K			
		LR200			Aglow
		BZ			
		CCV5			Aglow
		CCB5			
		LR300			Aglow
		BK			
		CCV6			Aglow

US15 : 00258

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.9.12

MZ	Analyst	Peer	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	see log
Internal Standards	✓	✓	↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysis Notes and CAF's	—	—	

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/9/2012 10:25:58 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.

Intensity Criterion: Be 9.0122 > 3000

Intensity Criterion: Mg 23.985 > 20000

Intensity Criterion: In 114.904 > 50000

Intensity Criterion: Pb 207.977 > 20000

Intensity Criterion: U 238.05 > 40000

Intensity Criterion: Bkgd 220 <= 5

Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025

Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

Obtained Intensity (Be 9.0122): 7366.92

Obtained Intensity (Mg 23.985): 44969.22

Obtained Intensity (In 114.904): 74663.93

Obtained Intensity (Pb 207.977): 27940.63

Obtained Intensity (U 238.05): 52902.72

Obtained Intensity (Bkgd 220): 0.00

Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=1019.53 / 69357.97)

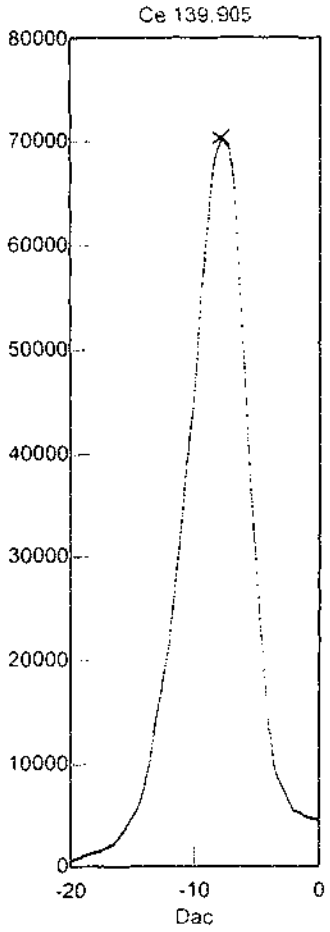
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=814.51 / 69357.97)

[Passed] Optimum value(s): N/A

End Time: 5/9/2012 10:28:34 AM

US15:00260

5/9/12


Ce 139.905
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60000
50000
40000
30000
20000
10000
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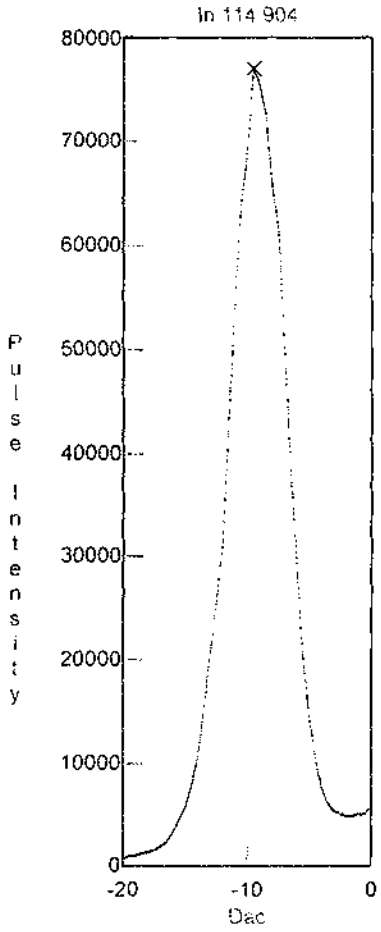
-10
0
Dac


In 114.904
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20000
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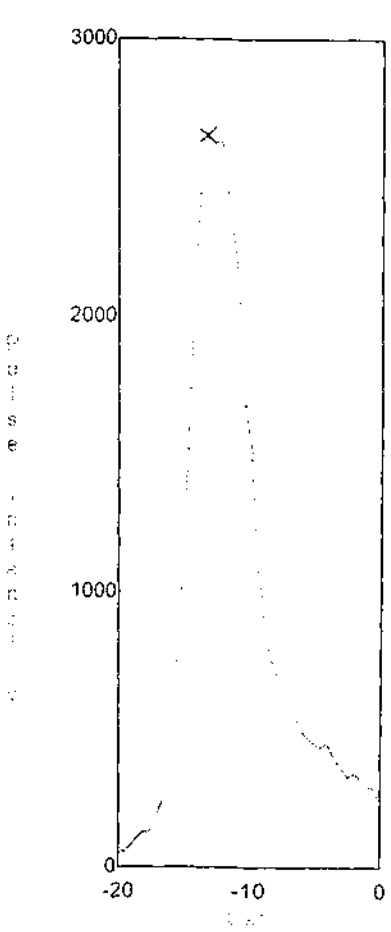
-10
0
Dac
Pulse Intensity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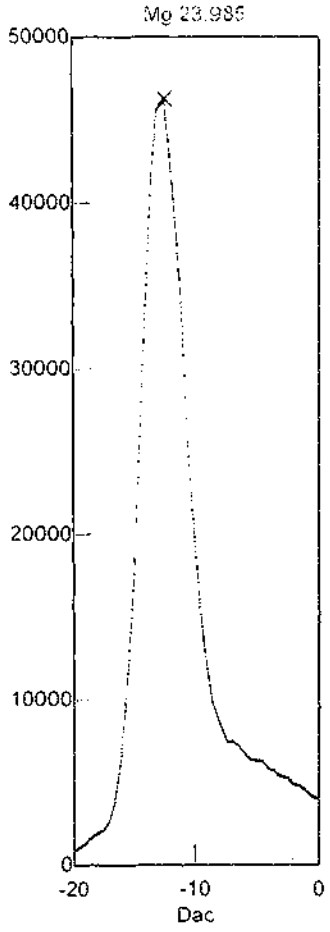
0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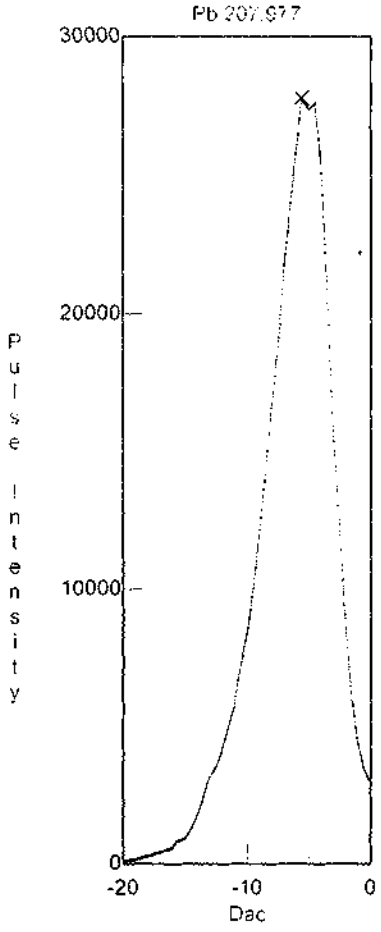
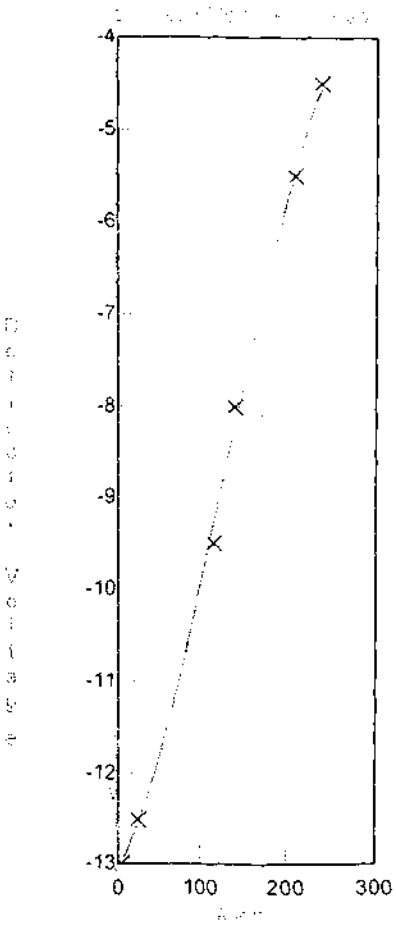
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


-4
-5
-6
-7
-8
-9
-10
-11
-12
-13
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/9/2012 10:21:22 AM
End Time: 5/9/2012 10:25:33 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.998; Intercept = -13.08

US15 : 00262

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/9/2012 10:14:39 AM
End Time: 5/9/2012 10:21:14 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.708)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.710)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.711)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.700)

US15 : 00253

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/9/2012 10:13:39 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.51 mm	-0.74 mm	75710.37

End Time: 5/9/2012 10:14:29 AM

US15 : 00264

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/9/2012 10:10:25 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 5945.39
        Obtained Intensity (Mg 23.985): 30179.96
        Obtained Intensity (In 114.904): 59244.40
        Obtained Intensity (Pb 207.977): 22988.40
        Obtained Intensity (U 238.05): 41742.82
        Obtained Intensity (Bkgd 220): 0.03
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.011 (=645.03 / 57446.20)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=578.42 / 57446.20)
[Passed] Optimum value(s): N/A

End Time: 5/9/2012 10:13:29 AM

US15 : 00265

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 10:58:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1543122	0
	Be	9		ug/L				6	24
	C	13		ug/L				127129	1
	Cl	37		ug/L				5050176	1
>	Sc	45		ug/L				1120759	1
	V	51		ug/L				6334	2
	V-1	51		ug/L				56	10
!	Cr	52		ug/L				18698	1
	Cr	53		ug/L				105	21
	Mn	55		ug/L				526	4
	Co	59		ug/L				70	9
>	Ge	72		ug/L				431510	1
	Ni	60		ug/L				551	83
	Ni	62		ug/L				118	45
	Cu	63		ug/L				111	11
	Cu	65		ug/L				40	27
	Zn	66		ug/L				238	4
	Zn	67		ug/L				33	29
	Zn	68		ug/L				573	4
	As	75		ug/L				1303	3
	As-1	75		ug/L				6451	0
	Se	82		ug/L				2	1210
	Se	78		ug/L				6569	0
	Mo	98		ug/L				12	40
	Y	89		ug/L				329245	1
	Kr	83		ug/L				1812	2
>	In	115		ug/L				907813	0
	Ag	107		ug/L				14	21
	Cd	111		ug/L				73	11
!	Cd	114		ug/L				29	7
	Sb	121		ug/L				48	21
	Sb	123		ug/L				36	43
	Ba	135		ug/L				27	11
	Ba	137		ug/L				35	23
>	Tb	159		ug/L				916474	0
	Tl	205		ug/L				18	15
	Pb	208		ug/L				126	4
	Bi	209		ug/L				2081983	4
	Th	232		ug/L				13	22
	U	238		ug/L				4	44

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:02:15
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1532677	1
	Be	9	0.200	ug/L	0.001	0	6	1189	1
	C	13		ug/L			127129	126738	2
	Cl	37		ug/L			5050176	4925808	3
>	Sc	45		ug/L			1120759	1137813	3
	V	51	0.200	ug/L	0.013	6	6334	10378	0
	V-1	51	0.200	ug/L	0.008	4	56	4224	1
	Cr	52	0.500	ug/L	0.017	3	18698	26857	2
	Cr	53	0.500	ug/L	0.004	0	105	1067	3
	Mn	55	0.500	ug/L	0.022	4	526	11545	1
	Co	59	0.200	ug/L	0.005	2	70	3116	0
>	Ge	72		ug/L			431510	442114	1
	Ni	60	0.500	ug/L	0.037	7	551	1746	3
	Ni	62	0.500	ug/L	0.041	8	118	294	3
	Cu	63	0.500	ug/L	0.027	5	111	3729	4
	Cu	65	0.500	ug/L	0.005	1	40	1629	2
	Zn	66	4.000	ug/L	0.015	0	238	9323	1
	Zn	67	4.000	ug/L	0.053	1	33	1372	2
	Zn	68	4.000	ug/L	0.128	3	573	6746	1
	As	75	0.200	ug/L	0.033	16	1303	1633	1
	As-1	75	0.200	ug/L	0.154	77	6451	6816	1
	Se	82	0.500	ug/L	0.019	3	2	81	4
	Se	78	0.500	ug/L	0.804	160	6569	6815	1
	Mo	98	0.200	ug/L	0.011	5	12	805	4
	Y	89		ug/L			329245	325901	2
	Kr	83		ug/L			1812	1823	0
>	In	115		ug/L			907813	912104	1
	Ag	107	0.200	ug/L	0.003	1	14	1943	1
	Cd	111	0.100	ug/L	0.003	2	73	559	3
	Cd	114	0.100	ug/L	0.006	5	29	1211	4
	Sb	121	0.200	ug/L	0.001	0	48	2919	1
	Sb	123	0.200	ug/L	0.004	1	36	2239	1
	Ba	135	0.500	ug/L	0.009	1	27	2360	1
	Ba	137	0.500	ug/L	0.005	1	35	4160	1
>	Tb	159		ug/L			916474	922203	1
	Tl	205	0.200	ug/L	0.006	3	18	6070	1
	Pb	208	0.100	ug/L	0.001	1	126	5036	0
	Bi	209		ug/L			2081983	2102555	4
	Th	232	0.200	ug/L	0.003	1	13	6515	1
	U	238	0.200	ug/L	0.004	1	4	8365	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:06:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1550487	1
	Be	9	10.000	ug/L	0.185	1	6	55933	1
	C	13		ug/L			127129	130307	1
	Cl	37		ug/L			5050176	5044707	1
>	Sc	45		ug/L			1120759	1135590	0
	V	51	10.000	ug/L	0.016	0	6334	207726	0
	V-1	51	10.000	ug/L	0.064	0	56	200761	1
	Cr	52	10.001	ug/L	0.169	1	18698	182752	0
	Cr	53	9.999	ug/L	0.105	1	105	18423	1
	Mn	55	10.000	ug/L	0.193	1	526	216815	2
	Co	59	10.000	ug/L	0.242	2	70	149447	2
>	Ge	72		ug/L			431510	445703	0
	Ni	60	10.005	ug/L	0.100	1	551	31070	0
	Ni	62	10.005	ug/L	0.065	0	118	4408	1
	Cu	63	9.998	ug/L	0.251	2	111	66667	1
	Cu	65	9.998	ug/L	0.159	1	40	29398	0
	Zn	66	9.607	ug/L	0.397	4	238	17895	3
	Zn	67	9.759	ug/L	0.101	1	33	2892	0
	Zn	68	9.678	ug/L	0.347	3	573	13097	3
	As	75	10.000	ug/L	0.101	1	1303	16687	0
	As-1	75	10.001	ug/L	0.059	0	6451	21278	0
	Se	82	10.003	ug/L	0.102	1	2	1857	0
	Se	78	10.014	ug/L	0.070	0	6569	10763	1
	Mo	98	10.000	ug/L	0.122	1	12	41150	0
	Y	89		ug/L			329245	332725	0
	Kr	83		ug/L			1812	1858	0
>	In	115		ug/L			907813	930188	1
	Ag	107	10.000	ug/L	0.274	2	14	92971	0
	Cd	111	10.000	ug/L	0.215	2	73	45893	1
	Cd	114	10.000	ug/L	0.306	3	29	114963	1
	Sb	121	10.000	ug/L	0.222	2	48	149521	0
	Sb	123	10.000	ug/L	0.251	2	36	113151	0
	Ba	135	9.995	ug/L	0.146	1	27	39281	0
	Ba	137	9.994	ug/L	0.156	1	35	67609	1
>	Tb	159		ug/L			916474	944025	0
	Tl	205	10.000	ug/L	0.022	0	18	306087	0
	Pb	208	10.000	ug/L	0.034	0	126	409870	0
	Bi	209		ug/L			2081983	2163198	0
	Th	232	10.000	ug/L	0.179	1	13	380118	1
	U	238	10.000	ug/L	0.106	1	4	417191	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:10:47
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1517339	0
	Be	9	20.077	ug/L	0.281	1	6	111632	1
	C	13		ug/L			127129	125038	2
	Cl	37		ug/L			5050176	5195283	2
>	Sc	45		ug/L			1120759	1132476	2
	V	51	20.080	ug/L	0.983	4	6334	415724	2
	V-1	51	20.101	ug/L	1.103	5	56	410276	2
	Cr	52	19.907	ug/L	0.362	1	18698	338115	1
	Cr	53	19.983	ug/L	0.829	4	105	36464	2
	Mn	55	20.069	ug/L	0.621	3	526	439205	1
	Co	59	19.947	ug/L	0.465	2	70	293984	1
>	Ge	72		ug/L			431510	439549	1
	Ni	60	20.126	ug/L	0.664	3	551	62611	1
	Ni	62	20.061	ug/L	0.499	2	118	8698	1
	Cu	63	19.986	ug/L	0.636	3	111	130936	1
	Cu	65	19.956	ug/L	0.102	0	40	57335	1
	Zn	66	19.944	ug/L	0.494	2	238	36031	1
	Zn	67	20.254	ug/L	0.318	1	33	6152	0
	Zn	68	19.896	ug/L	0.371	1	573	25484	0
	As	75	20.040	ug/L	0.485	2	1303	31887	0
	As-1	75	20.074	ug/L	0.630	3	6451	35927	1
	Se	82	20.084	ug/L	0.460	2	2	3737	0
	Se	78	20.225	ug/L	0.901	4	6569	14983	1
	Mo	98	20.112	ug/L	0.726	3	12	83458	2
	Y	89		ug/L			329245	336112	2
	Kr	83		ug/L			1812	1854	1
>	In	115		ug/L			907813	938384	0
	Ag	107	19.892	ug/L	0.538	2	14	182665	1
	Cd	111	20.067	ug/L	0.222	1	73	94094	0
	Cd	114	20.042	ug/L	0.257	1	29	234456	0
	Sb	121	20.014	ug/L	0.226	1	48	302777	0
	Sb	123	20.016	ug/L	0.241	1	36	229222	0
	Ba	135	20.014	ug/L	0.480	2	27	79550	1
	Ba	137	20.007	ug/L	0.357	1	35	136712	0
>	Tb	159		ug/L			916474	949863	0
	Tl	205	20.007	ug/L	0.167	0	18	617011	0
	Pb	208	20.010	ug/L	0.160	0	126	826669	0
	Bi	209		ug/L			2081983	2185025	0
	Th	232	20.121	ug/L	0.184	0	13	788641	1
	U	238	20.015	ug/L	0.209	1	4	842687	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:15:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1543122	1496537	2
[	Be	9	49.655	ug/L	1.230	2	6	263099	1
	C	13		ug/L			127129	116379	3
	Cl	37		ug/L			5050176	5146433	0
[>	Sc	45		ug/L			1120759	1135441	2
[	V	51	49.712	ug/L	2.316	4	6334	994095	2
[	V-1	51	49.695	ug/L	2.036	4	56	987063	1
[	Cr	52	49.864	ug/L	1.422	2	18698	809668	0
[	Cr	53	49.802	ug/L	0.554	1	105	89243	1
[	Mn	55	49.741	ug/L	1.309	2	526	1063248	0
[	Co	59	49.679	ug/L	2.076	4	70	710970	2
[>	Ge	72		ug/L			431510	429263	0
[	Ni	60	49.601	ug/L	1.442	2	551	144245	3
[	Ni	62	49.878	ug/L	0.581	1	118	20699	0
[	Cu	63	49.738	ug/L	1.096	2	111	310007	1
[	Cu	65	49.808	ug/L	1.535	3	40	137034	2
[	Zn	66	49.437	ug/L	0.811	1	238	82406	0
[	Zn	67	49.548	ug/L	1.185	2	33	14037	2
[	Zn	68	49.512	ug/L	1.321	2	573	58356	1
[	As	75	49.996	ug/L	0.819	1	1303	75733	0
[	As-1	75	50.078	ug/L	0.697	1	6451	78518	0
[	Se	82	49.792	ug/L	1.213	2	2	8861	1
[	Se	78	50.069	ug/L	0.237	0	6569	26728	0
[	Mo	98	49.788	ug/L	1.153	2	12	197615	1
	Y	89		ug/L			329245	324860	2
	Kr	83		ug/L			1812	1828	1
[>	In	115		ug/L			907813	932393	0
[	Ag	107	49.750	ug/L	0.796	1	14	442845	0
[	Cd	111	49.702	ug/L	0.687	1	73	224761	0
[	Cd	114	49.694	ug/L	1.031	2	29	560453	1
[	Sb	121	49.615	ug/L	0.666	1	48	718100	0
[	Sb	123	49.536	ug/L	0.823	1	36	538647	1
[	Ba	135	49.782	ug/L	0.260	0	27	192400	0
[	Ba	137	49.866	ug/L	0.492	0	35	334055	1
[>	Tb	159		ug/L			916474	958889	1
[	Tl	205	49.761	ug/L	0.117	0	18	1513048	0
[	Pb	208	49.730	ug/L	0.454	0	126	2019387	0
[	Bi	209		ug/L			2081983	2149841	0
[	Th	232	49.978	ug/L	0.665	1	13	1972836	0
[	U	238	50.161	ug/L	0.269	0	4	2166744	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:20:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1473506	1
	Be	9	99.271	ug/L	2.103	2	6	505881	3
	C	13		ug/L			127129	120656	3
	Cl	37		ug/L			5050176	5171433	2
>	Sc	45		ug/L			1120759	1137935	0
	V	51	100.154	ug/L	3.628	3	6334	2012372	3
	V-1	51	100.119	ug/L	4.312	4	56	2002146	4
	Cr	52	99.529	ug/L	1.230	1	18698	1576933	1
	Cr	53	99.398	ug/L	1.608	1	105	174923	2
	Mn	55	100.738	ug/L	1.194	1	526	2212621	0
	Co	59	99.882	ug/L	2.561	2	70	1427580	1
>	Ge	72		ug/L			431510	422649	1
	Ni	60	100.417	ug/L	1.466	1	551	290911	0
	Ni	62	99.781	ug/L	2.526	2	118	40355	1
	Cu	63	100.220	ug/L	1.111	1	111	619536	1
	Cu	65	100.151	ug/L	3.494	3	40	272595	2
	Zn	66	99.722	ug/L	1.614	1	238	161923	0
	Zn	67	99.195	ug/L	2.863	2	33	26914	1
	Zn	68	99.453	ug/L	1.062	1	573	112828	1
	As	75	99.671	ug/L	1.626	1	1303	145793	0
	As-1	75	99.739	ug/L	1.305	1	6451	146476	0
	Se	82	99.450	ug/L	1.920	1	2	17110	1
	Se	78	99.693	ug/L	0.870	0	6569	45619	1
	Mo	98	100.895	ug/L	0.614	0	12	406457	1
	Y	89		ug/L			329245	316562	1
	Kr	83		ug/L			1812	1874	1
>	In	115		ug/L			907813	924165	0
	Ag	107	98.769	ug/L	3.667	3	14	837072	3
	Cd	111	99.695	ug/L	1.383	1	73	442317	1
	Cd	114	100.244	ug/L	0.627	0	29	1129802	0
	Sb	121	100.783	ug/L	0.646	0	48	1484600	0
	Sb	123	100.965	ug/L	1.198	1	36	1124384	1
	Ba	135	100.809	ug/L	0.810	0	27	396855	0
	Ba	137	100.358	ug/L	1.499	1	35	674410	1
>	Tb	159		ug/L			916474	962214	0
	Tl	205	101.088	ug/L	0.423	0	18	3200385	0
	Pb	208	100.586	ug/L	0.350	0	126	4180370	0
	Bi	209		ug/L			2081983	2086589	4
	Th	232	101.362	ug/L	1.077	1	13	4206350	1
	U	238	100.142	ug/L	1.064	1	4	4361518	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:27:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1494322	0
	Be	9	0.003	ug/L	0.000	4	6	22	2
	C	13		ug/L			127129	120252	3
	Cl	37		ug/L			5050176	5289492	1
>	Sc	45		ug/L			1120759	1166767	0
	V	51	-0.000	ug/L	0.007	4768	6334	6592	2
	V-1	51	0.001	ug/L	0.000	14	56	77	3
	Cr	52	0.002	ug/L	0.022	1378	18698	19492	2
	Cr	53	0.006	ug/L	0.005	92	105	119	7
	Mn	55	-0.001	ug/L	0.001	62	526	516	4
	Co	59	0.000	ug/L	0.001	2266	70	74	12
>	Ge	72		ug/L			431510	434429	1
	Ni	60	-0.161	ug/L	0.003	2	551	77	13
	Ni	62	-0.136	ug/L	0.010	7	118	62	5
	Cu	63	-0.002	ug/L	0.002	112	111	100	12
	Cu	65	0.000	ug/L	0.002	451	40	41	10
	Zn	66	-0.015	ug/L	0.013	83	238	215	9
	Zn	67	0.026	ug/L	0.029	112	33	41	18
	Zn	68	0.040	ug/L	0.028	70	573	623	4
	As	75	-0.026	ug/L	0.031	118	1303	1273	2
	As-1	75	0.051	ug/L	0.051	101	6451	6567	0
	Se	82	-0.091	ug/L	0.063	69	2	-13	81
	Se	78	0.157	ug/L	0.143	91	6569	6676	0
	Mo	98	0.019	ug/L	0.002	9	12	92	8
	Y	89		ug/L			329245	330907	1
	Kr	83		ug/L			1812	1815	1
>	In	115		ug/L			907813	950666	1
	Ag	107	0.003	ug/L	0.000	13	14	42	8
	Cd	111	0.002	ug/L	0.002	69	73	87	7
	Cd	114	0.001	ug/L	0.001	111	29	40	26
	Sb	121	0.087	ug/L	0.012	13	48	1360	12
	Sb	123	0.088	ug/L	0.015	17	36	1043	15
	Ba	135	-0.001	ug/L	0.001	256	27	26	21
	Ba	137	0.001	ug/L	0.001	130	35	44	20
>	Tb	159		ug/L			916474	921825	2
	Tl	205	0.007	ug/L	0.000	7	18	223	5
	Pb	208	0.001	ug/L	0.000	45	126	164	10
	Bi	209		ug/L			2081983	2205575	0
	Th	232	0.131	ug/L	0.020	15	13	5221	17
	U	238	0.003	ug/L	0.001	19	4	143	20

Sample Information

Sample Date/Time: Wednesday, May 09, 2012 11:20:52
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**1.0000**	0.018	0.20	10	20	50	100
V-1	51	**1.0000**	0.018	0.20	10	20	50	100
Cr	52	**1.0000**	0.014	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.019	0.50	10	20	50	100
Co	59	**1.0000**	0.013	0.20	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.015	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**0.9999**	0.004	4.00	10	20	50	100
Zn	67	**0.9998**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9990**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.010	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**0.9997**	0.009	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**0.9999**	0.016	0.20	10	20	50	100
Sb	123	**0.9998**	0.012	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**1.0000**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.033	0.20	10	20	50	100
Pb	208	**0.9999**	0.043	0.10	10	20	50	100
Bi	209							
Th	232	**0.9997**	0.043	0.20	10	20	50	100
U	238	**1.0000**	0.045	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:37:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1469308	0
	Be	9		ug/L				18	14
	C	13		ug/L				115227	0
	Cl	37		ug/L				5056971	0
>	Sc	45		ug/L				1150108	1
	V	51		ug/L				6633	2
	V-1	51		ug/L				59	21
	Cr	52		ug/L				19531	1
	Cr	53		ug/L				104	7
	Mn	55		ug/L				477	3
	Co	59		ug/L				69	17
>	Ge	72		ug/L				432270	1
	Ni	60		ug/L				81	20
	Ni	62		ug/L				65	9
	Cu	63		ug/L				73	14
	Cu	65		ug/L				32	23
	Zn	66		ug/L				220	8
	Zn	67		ug/L				39	20
	Zn	68		ug/L				626	6
	As	75		ug/L				1266	2
	As-1	75		ug/L				6603	0
	Se	82		ug/L				-10	201
	Se	78		ug/L				6721	0
	Mo	98		ug/L				26	4
	Y	89		ug/L				327238	1
	Kr	83		ug/L				1809	3
>	In	115		ug/L				929401	0
	Ag	107		ug/L				20	21
	Cd	111		ug/L				75	18
	Cd	114		ug/L				31	22
	Sb	121		ug/L				417	15
	Sb	123		ug/L				326	25
	Ba	135		ug/L				23	24
	Ba	137		ug/L				45	18
>	Tb	159		ug/L				920152	1
	Tl	205		ug/L				78	12
	Pb	208		ug/L				146	2
	Bi	209		ug/L				2152313	0
	Th	232		ug/L				1253	0
	U	238		ug/L				35	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:41:40
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1480678	1
	Be	9	51.349	ug/L	1.520	2	18	262869	2
	C	13		ug/L			115227	123955	3
	Cl	37		ug/L			5056971	5345079	2
>	Sc	45		ug/L			1150108	1159769	0
	V	51	50.364	ug/L	0.946	1	6633	1034823	2
	V-1	51	50.377	ug/L	0.772	1	59	1026807	1
	Cr	52	51.034	ug/L	0.825	1	19531	833866	1
	Cr	53	51.084	ug/L	1.125	2	104	91663	1
	Mn	55	48.226	ug/L	0.197	0	477	1079834	0
	Co	59	50.763	ug/L	1.626	3	69	739550	2
>	Ge	72		ug/L			432270	431429	0
	Ni	60	51.850	ug/L	1.026	1	81	153138	1
	Ni	62	52.157	ug/L	1.680	3	65	21538	2
	Cu	63	51.503	ug/L	0.710	1	73	325004	1
	Cu	65	50.196	ug/L	1.173	2	32	139515	2
	Zn	66	49.561	ug/L	1.158	2	220	82266	2
	Zn	67	49.982	ug/L	0.956	1	39	13869	2
	Zn	68	49.909	ug/L	0.770	1	626	58132	1
	As	75	51.056	ug/L	0.543	1	1266	76841	1
	As-1	75	49.906	ug/L	0.862	1	6603	78186	1
	Se	82	83.465	ug/L	0.817	0	-10	13795	0
	Se	78	77.610	ug/L	1.529	1	6721	37824	1
	Mo	98	50.600	ug/L	0.434	0	26	208099	1
	Y	89		ug/L			327238	331000	1
	Kr	83		ug/L			1809	1829	3
>	In	115		ug/L			929401	936782	0
	Ag	107	50.507	ug/L	0.630	1	20	433948	1
	Cd	111	50.320	ug/L	0.660	1	75	226341	1
	Cd	114	48.984	ug/L	0.397	0	31	559633	0
	Sb	121	48.593	ug/L	0.100	0	417	725988	0
	Sb	123	48.364	ug/L	0.462	0	326	546255	0
	Ba	135	50.142	ug/L	0.620	1	23	200093	0
	Ba	137	50.143	ug/L	0.869	1	45	341581	1
>	Tb	159		ug/L			920152	948427	0
	Tl	205	48.780	ug/L	0.961	1	78	1522162	1
	Pb	208	49.425	ug/L	0.585	1	146	2024634	0
	Bi	209		ug/L			2152313	2136226	0
	Th	232	51.306	ug/L	2.564	4	1253	2099545	4
	U	238	51.955	ug/L	1.038	1	35	2230259	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:46:52
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1469308	1476018	1
[	Be	9	0.001	ug/L	0.002	195	18	24	48
	C	13		ug/L			115227	116392	1
	Cl	37		ug/L			5056971	5227374	2
[>	Sc	45		ug/L			1150108	1159302	1
[	V	51	-0.004	ug/L	0.016	360	6633	6596	5
[	V-1	51	0.003	ug/L	0.003	95	59	117	47
[	Cr	52	-0.019	ug/L	0.037	188	19531	19378	3
[	Cr	53	0.007	ug/L	0.015	217	104	117	21
[	Mn	55	0.004	ug/L	0.004	107	477	565	16
[	Co	59	0.003	ug/L	0.006	191	69	120	79
[>	Ge	72		ug/L			432270	431223	1
[	Ni	60	0.002	ug/L	0.004	197	81	86	12
[	Ni	62	0.008	ug/L	0.012	159	65	68	8
[	Cu	63	0.006	ug/L	0.007	111	73	110	37
[	Cu	65	0.002	ug/L	0.002	87	32	39	16
[	Zn	66	0.009	ug/L	0.014	150	220	234	8
[	Zn	67	0.026	ug/L	0.033	128	39	46	18
[	Zn	68	0.004	ug/L	0.021	587	626	628	4
[	As	75	-0.011	ug/L	0.026	237	1266	1247	3
[	As-1	75	0.000	ug/L	0.031	14161	6603	6587	0
[	Se	82	-0.067	ug/L	0.082	121	-10	-21	61
[	Se	78	-0.026	ug/L	0.141	547	6721	6694	0
[	Mo	98	0.011	ug/L	0.005	48	26	71	29
	Y	89		ug/L			327238	333047	1
	Kr	83		ug/L			1809	1806	2
[>	In	115		ug/L			929401	940020	1
[	Ag	107	0.002	ug/L	0.001	26	20	37	13
[	Cd	111	0.001	ug/L	0.001	101	75	81	7
[	Cd	114	0.001	ug/L	0.001	51	31	44	14
[	Sb	121	0.015	ug/L	0.007	49	417	641	16
[	Sb	123	0.015	ug/L	0.009	62	326	496	20
[	Ba	135	0.003	ug/L	0.001	41	23	34	12
[	Ba	137	-0.001	ug/L	0.001	212	45	41	18
[>	Tb	159		ug/L			920152	918359	1
[	Tl	205	0.001	ug/L	0.001	110	78	108	29
[	Pb	208	0.001	ug/L	0.000	24	146	174	3
[	Bi	209		ug/L			2152313	2151332	0
[	Th	232	0.080	ug/L	0.025	31	1253	4393	21
[	U	238	0.002	ug/L	0.000	23	35	118	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:51:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1447591	0
	Be	9	52.081	ug/L	0.717	1	18	260710	1
	C	13		ug/L			115227	114307	3
	Cl	37		ug/L			5056971	5079097	2
>	Sc	45		ug/L			1150108	1155721	1
	V	51	48.758	ug/L	0.794	1	6633	998321	0
	V-1	51	48.942	ug/L	1.102	2	59	993786	0
	Cr	52	49.770	ug/L	0.492	0	19531	810889	2
	Cr	53	50.447	ug/L	1.576	3	104	90180	1
	Mn	55	48.347	ug/L	1.141	2	477	1078689	2
	Co	59	50.062	ug/L	1.371	2	69	726597	1
>	Ge	72		ug/L			432270	429764	0
	Ni	60	50.169	ug/L	0.419	0	81	147613	0
	Ni	62	51.182	ug/L	0.782	1	65	21056	1
	Cu	63	50.554	ug/L	0.511	1	73	317797	1
	Cu	65	49.884	ug/L	0.130	0	32	138116	0
	Zn	66	49.545	ug/L	1.098	2	220	81915	2
	Zn	67	50.165	ug/L	0.432	0	39	13865	0
	Zn	68	50.491	ug/L	0.551	1	626	58578	1
	As	75	50.959	ug/L	0.369	0	1266	76401	0
	As-1	75	50.377	ug/L	0.296	0	6603	78557	0
	Se	82	54.799	ug/L	0.592	1	-10	9019	1
	Se	78	49.621	ug/L	0.373	0	6721	26500	0
	Mo	98	48.953	ug/L	1.218	2	26	200551	2
	Y	89		ug/L			327238	329687	0
	Kr	83		ug/L			1809	1828	2
>	In	115		ug/L			929401	941925	0
	Ag	107	49.914	ug/L	0.475	0	20	431203	1
	Cd	111	50.443	ug/L	0.665	1	75	228119	0
	Cd	114	49.129	ug/L	0.626	1	31	564328	0
	Sb	121	47.936	ug/L	0.284	0	417	720078	0
	Sb	123	47.611	ug/L	0.833	1	326	540656	0
	Ba	135	48.444	ug/L	0.626	1	23	194371	0
	Ba	137	48.465	ug/L	0.434	0	45	331955	0
>	Tb	159		ug/L			920152	940123	0
	Tl	205	48.556	ug/L	0.260	0	78	1502050	0
	Pb	208	49.590	ug/L	0.642	1	146	2013602	0
	Bi	209		ug/L			2152313	2157135	0
	Th	232	48.032	ug/L	1.180	2	1253	1948585	1
	U	238	51.291	ug/L	0.120	0	35	2182666	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:56:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1438294	0
	Be	9	0.001	ug/L	0.002	167	18	23	43
	C	13		ug/L			115227	116661	1
	Cl	37		ug/L			5056971	5126503	2
>	Sc	45		ug/L			1150108	1165714	1
	V	51	0.008	ug/L	0.004	55	6633	6886	2
	V-1	51	0.001	ug/L	0.001	77	59	76	15
	Cr	52	0.025	ug/L	0.016	63	19531	20204	2
	Cr	53	-0.000	ug/L	0.004	958	104	105	8
	Mn	55	0.001	ug/L	0.001	106	477	510	4
	Co	59	-0.000	ug/L	0.001	845	69	69	10
>	Ge	72		ug/L			432270	424778	1
	Ni	60	0.013	ug/L	0.013	97	81	117	31
	Ni	62	0.019	ug/L	0.017	85	65	72	8
	Cu	63	0.004	ug/L	0.001	32	73	94	8
	Cu	65	-0.000	ug/L	0.001	1702	32	31	4
	Zn	66	0.042	ug/L	0.013	31	220	285	8
	Zn	67	0.011	ug/L	0.015	134	39	41	10
	Zn	68	0.011	ug/L	0.031	288	626	627	4
	As	75	0.033	ug/L	0.021	64	1266	1292	1
	As-1	75	0.034	ug/L	0.067	196	6603	6536	0
	Se	82	-0.009	ug/L	0.093	985	-10	-12	124
	Se	78	0.124	ug/L	0.177	142	6721	6653	0
	Mo	98	0.014	ug/L	0.006	42	26	83	28
	Y	89		ug/L			327238	320952	1
	Kr	83		ug/L			1809	1844	3
>	In	115		ug/L			929401	932633	0
	Ag	107	0.002	ug/L	0.003	109	20	41	56
	Cd	111	0.001	ug/L	0.002	176	75	80	9
	Cd	114	0.002	ug/L	0.003	157	31	51	60
	Sb	121	0.086	ug/L	0.006	7	417	1693	5
	Sb	123	0.083	ug/L	0.004	5	326	1256	3
	Ba	135	0.002	ug/L	0.002	83	23	31	20
	Ba	137	0.000	ug/L	0.003	2309	45	46	39
>	Tb	159		ug/L			920152	915440	1
	Tl	205	0.001	ug/L	0.002	120	78	117	40
	Pb	208	0.001	ug/L	0.001	69	146	174	12
	Bi	209		ug/L			2152313	2177121	0
	Th	232	0.097	ug/L	0.023	23	1253	5098	18
	U	238	0.003	ug/L	0.001	43	35	141	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:00:21
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1469308	1424055	1
	Be	9	0.213	ug/L	0.007	3	18	1068	2
	C	13		ug/L			115227	120479	0
	Cl	37		ug/L			5056971	5162692	1
>	Sc	45		ug/L			1150108	1149984	1
	V	51	0.207	ug/L	0.012	5	6633	10830	1
	V-1	51	0.201	ug/L	0.004	2	59	4118	1
	Cr	52	0.555	ug/L	0.021	3	19531	28301	1
	Cr	53	0.533	ug/L	0.009	1	104	1051	2
	Mn	55	0.495	ug/L	0.006	1	477	11474	2
	Co	59	0.201	ug/L	0.004	2	69	2969	0
>	Ge	72		ug/L			432270	426570	1
	Ni	60	0.502	ug/L	0.003	0	81	1544	1
	Ni	62	0.526	ug/L	0.028	5	65	278	2
	Cu	63	0.552	ug/L	0.007	1	73	3514	1
	Cu	65	0.535	ug/L	0.023	4	32	1500	3
	Zn	66	4.152	ug/L	0.100	2	220	7012	1
	Zn	67	3.642	ug/L	0.137	3	39	1035	4
	Zn	68	4.020	ug/L	0.137	3	626	5195	1
	As	75	0.247	ug/L	0.012	4	1266	1612	2
	As-1	75	0.213	ug/L	0.079	37	6603	6817	0
	Se	82	0.652	ug/L	0.107	16	-10	96	19
	Se	78	0.520	ug/L	0.302	58	6721	6838	0
	Mo	98	0.204	ug/L	0.007	3	26	855	2
	Y	89		ug/L			327238	330663	2
	Kr	83		ug/L			1809	1778	2
>	In	115		ug/L			929401	930227	0
	Ag	107	0.209	ug/L	0.007	3	20	1799	3
	Cd	111	0.104	ug/L	0.003	2	75	541	2
	Cd	114	0.107	ug/L	0.000	0	31	1243	0
	Sb	121	0.203	ug/L	0.001	0	417	3420	0
	Sb	123	0.197	ug/L	0.003	1	326	2536	1
	Ba	135	0.484	ug/L	0.014	2	23	1940	2
	Ba	137	0.502	ug/L	0.006	1	45	3438	1
>	Tb	159		ug/L			920152	898137	1
	Tl	205	0.206	ug/L	0.005	2	78	6159	0
	Pb	208	0.109	ug/L	0.002	1	146	4385	0
	Bi	209		ug/L			2152313	2097916	5
	Th	232	0.200	ug/L	0.007	3	1253	8953	2
	U	238	0.205	ug/L	0.009	4	35	8366	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:04:29
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1444274	0
	Be	9	0.000	ug/L	0.002	2486	18	18	41
	C	13		ug/L			115227	249821	2
	Cl	37		ug/L			5056971	13112754	1
>	Sc	45		ug/L			1150108	1087598	1
	V	51	0.109	ug/L	0.028	25	6633	8359	5
	V-1	51	0.461	ug/L	0.009	2	59	8875	1
	Cr	52	0.941	ug/L	0.077	8	19531	32544	2
	Cr	53	2.227	ug/L	0.020	0	104	3842	0
	Mn	55	0.099	ug/L	0.002	1	477	2527	0
	Co	59	0.019	ug/L	0.002	12	69	322	9
>	Ge	72		ug/L			432270	404728	2
	Ni	60	0.394	ug/L	0.025	6	81	1166	4
	Ni	62	1.644	ug/L	0.135	8	65	695	5
	Cu	63	0.998	ug/L	0.031	3	73	5970	1
	Cu	65	0.377	ug/L	0.022	5	32	1013	5
	Zn	66	0.715	ug/L	0.030	4	220	1317	6
	Zn	67	6.447	ug/L	0.097	1	39	1709	1
	Zn	68	0.177	ug/L	0.023	12	626	777	5
	As	75	0.063	ug/L	0.024	37	1266	1273	2
	As-1	75	0.169	ug/L	0.164	97	6603	6406	2
	Se	82	-0.301	ug/L	0.047	15	-10	-56	14
	Se	78	0.586	ug/L	0.469	80	6721	6511	1
	Mo	98	404.562	ug/L	9.517	2	26	1560069	1
	Y	89		ug/L			327238	313771	1
	Kr	83		ug/L			1809	1947	3
>	In	115		ug/L			929401	924127	1
	Ag	107	0.022	ug/L	0.001	5	20	209	3
	Cd	111	0.112	ug/L	0.014	12	75	571	11
	Cd	114	0.183	ug/L	0.013	7	31	2093	5
	Sb	121	0.043	ug/L	0.002	4	417	1045	3
	Sb	123	0.039	ug/L	0.004	10	326	762	7
	Ba	135	0.044	ug/L	0.001	2	23	198	1
	Ba	137	0.038	ug/L	0.002	4	45	297	5
>	Tb	159		ug/L			920152	979650	2
	Tl	205	0.003	ug/L	0.002	65	78	171	31
	Pb	208	0.038	ug/L	0.001	3	146	1753	0
	Bi	209		ug/L			2152313	2006904	5
	Th	232	0.214	ug/L	0.097	45	1253	10286	36
	U	238	0.001	ug/L	0.000	3	35	85	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:09:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1448633	0
	Be	9	0.000	ug/L	0.002	2812	18	18	43
	C	13		ug/L			115227	231349	0
	Cl	37		ug/L			5056971	13052907	2
>	Sc	45		ug/L			1150108	1085631	2
	V	51	0.130	ug/L	0.107	82	6633	8777	25
	V-1	51	0.530	ug/L	0.014	2	59	10165	2
	Cr	52	20.320	ug/L	0.560	2	19531	321749	0
	Cr	53	21.891	ug/L	0.955	4	104	36801	1
	Mn	55	18.807	ug/L	0.465	2	477	394334	1
	Co	59	19.157	ug/L	0.732	3	69	261172	2
>	Ge	72		ug/L			432270	393144	0
	Ni	60	19.149	ug/L	0.205	1	81	51592	2
	Ni	62	21.079	ug/L	0.079	0	65	7968	0
	Cu	63	19.815	ug/L	0.241	1	73	113978	0
	Cu	65	19.684	ug/L	1.092	5	32	49856	4
	Zn	66	18.398	ug/L	0.486	2	220	27948	1
	Zn	67	22.689	ug/L	0.293	1	39	5755	1
	Zn	68	17.997	ug/L	0.551	3	626	19463	2
	As	75	18.240	ug/L	0.226	1	1266	25754	0
	As-1	75	18.902	ug/L	0.281	1	6603	30714	0
	Se	82	-0.469	ug/L	0.037	7	-10	-80	6
	Se	78	0.481	ug/L	0.187	38	6721	6288	0
	Mo	98	417.557	ug/L	6.780	1	26	1564485	0
	Y	89		ug/L			327238	305086	1
	Kr	83		ug/L			1809	1960	0
>	In	115		ug/L			929401	951261	0
	Ag	107	19.681	ug/L	0.415	2	20	171701	1
	Cd	111	18.957	ug/L	0.430	2	75	86625	1
	Cd	114	18.915	ug/L	0.138	0	31	219455	0
	Sb	121	0.046	ug/L	0.003	7	417	1128	4
	Sb	123	0.044	ug/L	0.003	7	326	841	4
	Ba	135	0.046	ug/L	0.005	10	23	211	8
	Ba	137	0.039	ug/L	0.003	7	45	316	6
>	Tb	159		ug/L			920152	1010847	1
	Tl	205	0.001	ug/L	0.000	7	78	127	3
	Pb	208	0.039	ug/L	0.001	1	146	1872	0
	Bi	209		ug/L			2152313	2193768	0
	Th	232	0.066	ug/L	0.017	25	1253	4232	17
	U	238	0.001	ug/L	0.000	12	35	83	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:15:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1475707	3
	Be	9	-0.000	ug/L	0.000	41	18	15	3
	C	13		ug/L			115227	118340	7
	Cl	37		ug/L			5056971	5278731	4
>	Sc	45		ug/L			1150108	1146443	0
	V	51	0.002	ug/L	0.014	855	6633	6644	4
	V-1	51	0.020	ug/L	0.003	13	59	470	11
	Cr	52	-0.001	ug/L	0.046	3655	19531	19449	3
	Cr	53	0.067	ug/L	0.008	11	104	223	5
	Mn	55	0.025	ug/L	0.003	11	477	1021	5
	Co	59	-0.000	ug/L	0.001	132	69	62	15
>	Ge	72		ug/L			432270	408513	0
	Ni	60	0.015	ug/L	0.003	22	81	117	7
	Ni	62	0.151	ug/L	0.026	17	65	120	7
	Cu	63	0.111	ug/L	0.001	1	73	735	1
	Cu	65	0.106	ug/L	0.006	5	32	308	4
	Zn	66	1.382	ug/L	0.070	5	220	2373	3
	Zn	67	1.293	ug/L	0.065	4	39	375	5
	Zn	68	1.375	ug/L	0.078	5	626	2090	3
	As	75	0.022	ug/L	0.042	189	1266	1228	4
	As-1	75	0.053	ug/L	0.050	93	6603	6312	0
	Se	82	0.027	ug/L	0.232	861	-10	-6	602
	Se	78	0.154	ug/L	0.202	130	6721	6410	0
	Mo	98	0.068	ug/L	0.016	23	326	288	21
	Y	89		ug/L			327238	316487	2
	Kr	83		ug/L			1809	1718	3
>	In	115		ug/L			929401	997621	1
	Ag	107	0.001	ug/L	0.001	161	20	27	36
	Cd	111	-0.000	ug/L	0.001	754	75	80	6
	Cd	114	0.001	ug/L	0.000	39	31	41	5
	Sb	121	-0.017	ug/L	0.001	7	417	174	12
	Sb	123	-0.018	ug/L	0.001	6	326	133	11
	Ba	135	0.021	ug/L	0.003	15	23	115	11
	Ba	137	0.019	ug/L	0.002	9	45	183	7
>	Tb	159		ug/L			920152	985325	0
	Tl	205	0.000	ug/L	0.001	227	78	92	21
	Pb	208	0.017	ug/L	0.001	4	146	871	4
	Bi	209		ug/L			2152313	2366508	0
	Th	232	-0.026	ug/L	0.000	1	1253	237	5
	U	238	-0.000	ug/L	0.000	13	35	22	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:20:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1521340	1
	Be	9	-0.000	ug/L	0.001	321	18	17	26
	C	13		ug/L			115227	124728	3
	Cl	37		ug/L			5056971	5208683	2
>	Sc	45		ug/L			1150108	1178281	2
	V	51	-0.004	ug/L	0.011	243	6633	6703	2
	V-1	51	0.012	ug/L	0.001	8	59	311	6
	Cr	52	-0.022	ug/L	0.041	187	19531	19652	2
	Cr	53	0.038	ug/L	0.001	1	104	176	2
	Mn	55	0.030	ug/L	0.001	4	477	1165	1
	Co	59	0.000	ug/L	0.001	201	69	78	17
>	Ge	72		ug/L			432270	412728	1
	Ni	60	0.009	ug/L	0.005	59	81	103	13
	Ni	62	0.017	ug/L	0.023	134	65	69	11
	Cu	63	0.148	ug/L	0.009	6	73	965	5
	Cu	65	0.145	ug/L	0.008	5	32	415	4
	Zn	66	2.092	ug/L	0.102	4	220	3522	3
	Zn	67	1.833	ug/L	0.123	6	39	522	4
	Zn	68	2.026	ug/L	0.045	2	626	2830	0
	As	75	0.015	ug/L	0.007	48	1266	1230	1
	As-1	75	0.110	ug/L	0.093	84	6603	6454	0
	Se	82	-0.078	ug/L	0.109	140	-10	-22	75
	Se	78	0.371	ug/L	0.350	94	6721	6558	0
	Mo	98	0.018	ug/L	0.005	30	26	95	23
	Y	89		ug/L			327238	323321	1
	Kr	83		ug/L			1809	1782	1
>	In	115		ug/L			929401	1019903	1
	Ag	107	0.000	ug/L	0.001	591	20	24	56
	Cd	111	0.001	ug/L	0.004	537	75	87	26
	Cd	114	0.005	ug/L	0.007	138	31	102	92
	Sb	121	-0.017	ug/L	0.003	19	417	185	30
	Sb	123	-0.017	ug/L	0.003	15	326	145	23
	Ba	135	0.019	ug/L	0.002	12	23	107	10
	Ba	137	0.020	ug/L	0.002	9	45	199	8
>	Tb	159		ug/L			920152	1009693	1
	Tl	205	0.000	ug/L	0.002	591	78	97	66
	Pb	208	0.020	ug/L	0.001	6	146	1034	6
	Bi	209		ug/L			2152313	2378812	1
	Th	232	-0.027	ug/L	0.001	4	1253	211	28
	U	238	-0.000	ug/L	0.001	2735	35	38	104

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:25:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1558214	2
	Be	9	49.781	ug/L	1.131	2	18	268145	0
	C	13		ug/L			115227	125327	0
	Cl	37		ug/L			5056971	5329852	3
>	Sc	45		ug/L			1150108	1171567	2
	V	51	47.413	ug/L	0.344	0	6633	984323	2
	V-1	51	47.553	ug/L	0.870	1	59	978748	1
	Cr	52	48.114	ug/L	0.568	1	19531	795134	1
	Cr	53	48.626	ug/L	2.771	5	104	88067	3
	Mn	55	47.967	ug/L	0.798	1	477	1084667	1
	Co	59	46.877	ug/L	1.447	3	69	689513	0
>	Ge	72		ug/L			432270	412906	3
	Ni	60	50.729	ug/L	1.146	2	81	143346	2
	Ni	62	51.102	ug/L	1.087	2	65	20190	2
	Cu	63	50.857	ug/L	2.997	5	73	306728	2
	Cu	65	49.407	ug/L	1.893	3	32	131307	0
	Zn	66	48.738	ug/L	1.746	3	220	77357	0
	Zn	67	51.112	ug/L	1.788	3	39	13561	0
	Zn	68	50.975	ug/L	2.116	4	626	56765	2
	As	75	51.163	ug/L	2.606	5	1266	73604	1
	As-1	75	50.441	ug/L	2.194	4	6603	75493	1
	Se	82	56.187	ug/L	3.023	5	-10	8873	1
	Se	78	50.585	ug/L	1.583	3	6721	25816	1
	Mo	98	50.467	ug/L	2.479	4	26	198397	1
	Y	89		ug/L			327238	335306	1
	Kr	83		ug/L			1809	1768	2
>	In	115		ug/L			929401	1021759	1
	Ag	107	48.703	ug/L	1.059	2	20	456323	1
	Cd	111	48.957	ug/L	0.463	0	75	240174	1
	Cd	114	49.012	ug/L	0.769	1	31	610688	1
	Sb	121	47.963	ug/L	0.462	0	417	781504	0
	Sb	123	47.332	ug/L	0.769	1	326	583003	0
	Ba	135	48.472	ug/L	0.886	1	23	210938	0
	Ba	137	49.124	ug/L	0.116	0	45	364991	1
>	Tb	159		ug/L			920152	1046748	1
	Tl	205	48.239	ug/L	1.238	2	78	1661051	1
	Pb	208	49.128	ug/L	0.593	1	146	2220940	0
	Bi	209		ug/L			2152313	2369460	1
	Th	232	49.627	ug/L	1.745	3	1253	2240934	1
	U	238	50.117	ug/L	1.242	2	35	2373973	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:31:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1550667	0
	Be	9	-0.000	ug/L	0.001	137	18	17	15
	C	13		ug/L			115227	126697	2
	Cl	37		ug/L			5056971	5305426	3
>	Sc	45		ug/L			1150108	1178786	0
	V	51	0.001	ug/L	0.006	502	6633	6822	1
	V-1	51	0.007	ug/L	0.001	13	59	202	8
	Cr	52	-0.002	ug/L	0.019	832	19531	19981	1
	Cr	53	0.018	ug/L	0.004	23	104	141	6
	Mn	55	-0.000	ug/L	0.004	8908	477	488	16
	Co	59	0.003	ug/L	0.005	170	69	113	62
>	Ge	72		ug/L			432270	417215	0
	Ni	60	-0.003	ug/L	0.010	393	81	71	39
	Ni	62	0.005	ug/L	0.032	639	65	65	18
	Cu	63	0.014	ug/L	0.009	66	73	153	35
	Cu	65	0.007	ug/L	0.011	150	32	50	57
	Zn	66	-0.008	ug/L	0.013	164	220	200	9
	Zn	67	-0.010	ug/L	0.022	221	39	35	15
	Zn	68	0.035	ug/L	0.010	29	626	643	2
	As	75	0.032	ug/L	0.017	53	1266	1268	1
	As-1	75	0.034	ug/L	0.024	70	6603	6420	0
	Se	82	-0.001	ug/L	0.112	7538	-10	-10	167
	Se	78	0.099	ug/L	0.089	89	6721	6526	0
	Mo	98	0.015	ug/L	0.002	13	26	86	8
	Y	89		ug/L			327238	330647	1
	Kr	83		ug/L			1809	1794	2
>	In	115		ug/L			929401	1019736	0
	Ag	107	0.002	ug/L	0.002	128	20	37	52
	Cd	111	0.000	ug/L	0.001	258	75	85	5
	Cd	114	0.001	ug/L	0.001	115	31	51	36
	Sb	121	0.062	ug/L	0.007	11	417	1458	7
	Sb	123	0.060	ug/L	0.004	6	326	1099	4
	Ba	135	0.002	ug/L	0.001	59	23	33	13
	Ba	137	0.000	ug/L	0.001	191	45	53	13
>	Tb	159		ug/L			920152	1000008	0
	Tl	205	-0.000	ug/L	0.001	3474	78	84	20
	Pb	208	0.000	ug/L	0.000	86	146	176	8
	Bi	209		ug/L			2152313	2385116	0
	Th	232	0.042	ug/L	0.008	18	1253	3193	10
	U	238	0.001	ug/L	0.000	35	35	98	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:37:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1556311	0
	Be	9	49.548	ug/L	1.315	2	18	266675	2
	C	13		ug/L			115227	121053	3
	Cl	37		ug/L			5056971	5532935	3
>	Sc	45		ug/L			1150108	1189285	3
	V	51	47.160	ug/L	1.610	3	6633	993202	1
	V-1	51	47.263	ug/L	1.491	3	59	987111	1
	Cr	52	47.999	ug/L	2.568	5	19531	804374	1
	Cr	53	48.376	ug/L	1.806	3	104	88946	1
	Mn	55	45.906	ug/L	1.666	3	477	1053114	0
	Co	59	45.827	ug/L	2.126	4	69	683869	0
>	Ge	72		ug/L			432270	413104	0
	Ni	60	50.025	ug/L	1.080	2	81	141485	2
	Ni	62	49.480	ug/L	1.475	2	65	19568	2
	Cu	63	50.494	ug/L	0.667	1	73	305111	1
	Cu	65	49.144	ug/L	1.429	2	32	130782	2
	Zn	66	49.684	ug/L	0.802	1	220	78959	1
	Zn	67	49.878	ug/L	1.429	2	39	13251	2
	Zn	68	50.570	ug/L	2.187	4	626	56385	3
	As	75	51.186	ug/L	0.445	0	1266	73759	0
	As-1	75	50.570	ug/L	0.992	1	6603	75773	1
	Se	82	56.255	ug/L	0.733	1	10	8900	1
	Se	78	51.017	ug/L	1.573	3	6721	26007	1
	Mo	98	51.238	ug/L	0.762	1	26	201764	1
	Y	89		ug/L			327238	329473	2
	Kr	83		ug/L			1809	1766	1
>	In	115		ug/L			929401	1016027	1
	Ag	107	46.715	ug/L	0.700	1	20	435242	0
	Cd	111	48.801	ug/L	0.936	1	75	238047	1
	Cd	114	49.306	ug/L	0.350	0	31	610923	1
	Sb	121	48.260	ug/L	0.768	1	417	781869	0
	Sb	123	47.645	ug/L	0.500	1	326	583614	0
	Ba	135	48.287	ug/L	0.629	1	23	208973	0
	Ba	137	49.113	ug/L	0.549	1	45	362832	0
>	Tb	159		ug/L			920152	1029473	2
	Tl	205	48.531	ug/L	1.463	3	78	1643139	0
	Pb	208	49.455	ug/L	1.194	2	146	2198246	0
	Bi	209		ug/L			2152313	2345645	0
	Th	232	50.266	ug/L	1.740	3	1253	2231980	1
	U	238	50.744	ug/L	1.532	3	35	2363425	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:43:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1510313	1
	Be	9	0.001	ug/L	0.001	132	18	22	24
	C	13		ug/L			115227	122990	0
	Cl	37		ug/L			5056971	5386220	2
>	Sc	45		ug/L			1150108	1177933	1
	V	51	-0.010	ug/L	0.003	29	6633	6584	1
	V-1	51	0.005	ug/L	0.001	12	59	167	9
	Cr	52	-0.033	ug/L	0.007	21	19531	19461	0
	Cr	53	0.022	ug/L	0.008	34	104	147	9
	Mn	55	-0.001	ug/L	0.001	44	477	459	2
	Co	59	-0.001	ug/L	0.001	159	69	62	23
>	Ge	72		ug/L			432270	414659	1
	Ni	60	-0.013	ug/L	0.002	14	81	41	14
	Ni	62	0.018	ug/L	0.042	236	65	69	23
	Cu	63	0.003	ug/L	0.002	75	73	87	15
	Cu	65	0.000	ug/L	0.001	249	32	31	6
	Zn	66	-0.006	ug/L	0.010	176	220	202	8
	Zn	67	-0.015	ug/L	0.020	131	39	33	15
	Zn	68	-0.002	ug/L	0.020	835	626	597	2
	As	75	0.052	ug/L	0.021	41	1266	1289	1
	As-1	75	0.069	ug/L	0.097	140	6603	6427	0
	Se	82	0.001	ug/L	0.212	27450	-10	-10	331
	Se	78	0.188	ug/L	0.359	191	6721	6518	0
	Mo	98	0.014	ug/L	0.003	23	26	79	15
	Y	89		ug/L			327238	322461	1
	Kr	83		ug/L			1809	1799	3
>	In	115		ug/L			92[illegible]01	1001866	0
	Ag	107	0.001	ug/L	0.000	36	20	29	10
	Cd	111	0.000	ug/L	0.001	109	75	84	3
	Cd	114	0.001	ug/L	0.000	40	31	42	8
	Sb	121	0.068	ug/L	0.002	3	417	1542	1
	Sb	123	0.067	ug/L	0.007	9	326	1160	6
	Ba	135	-0.000	ug/L	0.001	218	23	23	12
	Ba	137	-0.001	ug/L	0.001	73	45	43	8
>	Tb	159		ug/L			920152	997995	1
	Tl	205	-0.000	ug/L	0.000	139	78	75	18
	Pb	208	-0.000	ug/L	0.000	359	146	153	11
	Bi	209		ug/L			2152313	2363894	1
	Th	232	0.067	ug/L	0.014	21	1253	4227	14
	U	238	0.001	ug/L	0.000	20	35	92	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:49:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1595382	1
	Be	9	0.001	ug/L	0.001	79	18	24	15
	C	13		ug/L			115227	140198	1
	Cl	37		ug/L			5056971	5228259	1
>	Sc	45		ug/L			1150108	1206917	2
	V	51	0.002	ug/L	0.011	661	6633	6992	1
	V-1	51	0.010	ug/L	0.001	12	59	275	7
	Cr	52	0.104	ug/L	0.051	49	19531	22219	2
	Cr	53	0.136	ug/L	0.018	13	104	362	7
	Mn	55	0.017	ug/L	0.001	7	477	890	2
	Co	59	0.001	ug/L	0.001	210	69	81	19
>	Ge	72		ug/L			432270	424626	1
	Ni	60	-0.004	ug/L	0.003	76	81	67	14
	Ni	62	0.011	ug/L	0.013	113	65	68	7
	Cu	63	0.177	ug/L	0.009	4	73	1171	3
	Cu	65	0.157	ug/L	0.012	7	32	462	6
	Zn	66	1.357	ug/L	0.027	1	220	2426	0
	Zn	67	1.199	ug/L	0.084	7	39	364	5
	Zn	68	1.290	ug/L	0.103	7	626	2077	5
	As	75	0.012	ug/L	0.026	205	1266	1262	2
	As-1	75	0.005	ug/L	0.028	586	6603	6493	1
	Se	82	-0.095	ug/L	0.174	182	-10	-26	108
	Se	78	-0.000	ug/L	0.113	41413	6721	6602	1
	Mo	98	0.014	ug/L	0.004	28	26	82	19
	Y	89		ug/L			327238	334824	0
	Kr	83		ug/L			1809	1840	3
>	In	115		ug/L			929401	1034247	1
	Ag	107	-0.000	ug/L	0.000	160	20	20	13
	Cd	111	-0.001	ug/L	0.003	579	75	81	19
	Cd	114	0.001	ug/L	0.000	29	31	42	4
	Sb	121	0.004	ug/L	0.002	68	417	524	8
	Sb	123	0.003	ug/L	0.002	85	326	395	7
	Ba	135	0.009	ug/L	0.002	20	23	66	11
	Ba	137	0.008	ug/L	0.001	11	45	111	5
>	Tb	159		ug/L			920152	1017037	1
	Tl	205	0.001	ug/L	0.001	131	78	119	35
	Pb	208	0.015	ug/L	0.001	3	146	815	1
	Bi	209		ug/L			2152313	2387354	0
	Th	232	0.066	ug/L	0.019	28	1253	4294	18
	U	238	0.000	ug/L	0.000	2353	35	39	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:53:41
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120509.cal

Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1469308	1594024	1
[	Be	9	0.003	ug/L	0.001	41	18	37	19
	C	13		ug/L			115227	139679	0
	Cl	37		ug/L			5056971	5374840	1
[>	Sc	45		ug/L			1150108	1220068	0
[	V	51	0.004	ug/L	0.004	112	6633	7121	0
[	V-1	51	0.012	ug/L	0.001	10	59	319	7
[	Cr	52	0.104	ug/L	0.006	6	19531	22471	1
[	Cr	53	0.134	ug/L	0.013	9	104	364	7
[	Mn	55	0.064	ug/L	0.003	4	477	2014	2
[	Co	59	0.001	ug/L	0.001	81	69	85	10
[>	Ge	72		ug/L			432270	424589	0
[	Ni	60	-0.004	ug/L	0.005	124	81	68	21
[	Ni	62	-0.000	ug/L	0.023	5906	65	64	14
[	Cu	63	0.300	ug/L	0.007	2	73	1933	1
[	Cu	65	0.294	ug/L	0.011	3	32	836	3
[	Zn	66	1.378	ug/L	0.027	1	220	2461	1
[	Zn	67	1.195	ug/L	0.173	14	39	363	12
[	Zn	68	1.333	ug/L	0.042	3	626	2126	2
[	As	75	0.028	ug/L	0.008	29	1266	1285	0
[	As-1	75	0.107	ug/L	0.063	59	6603	6636	0
[	Se	82	-0.035	ug/L	0.013	36	-10	-16	12
[	Se	78	0.371	ug/L	0.232	62	6721	6748	0
[	Mo	98	0.005	ug/L	0.001	19	26	48	9
	Y	89		ug/L			327238	341409	2
	Kr	83		ug/L			1809	1841	0
[>	In	115		ug/L			929401	1041025	1
[	Ag	107	-0.000	ug/L	0.000	96	20	18	25
[	Cd	111	-0.001	ug/L	0.001	67	75	78	4
[	Cd	114	-0.000	ug/L	0.000	98	31	34	5
[	Sb	121	-0.011	ug/L	0.003	23	417	277	16
[	Sb	123	-0.012	ug/L	0.003	25	326	214	18
[	Ba	135	0.014	ug/L	0.003	19	23	87	13
[	Ba	137	0.014	ug/L	0.001	8	45	154	4
[>	Tb	159		ug/L			920152	1020284	0
[	Tl	205	0.001	ug/L	0.000	38	78	112	8
[	Pb	208	0.017	ug/L	0.001	6	146	933	5
[	Bi	209		ug/L			2152313	2366896	0
[	Th	232	0.018	ug/L	0.007	36	1253	2196	13
[	U	238	0.001	ug/L	0.002	161	35	82	84

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:57:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1631876	0
	Be	9	0.001	ug/L	0.001	43	18	28	12
	C	13		ug/L			115227	135779	1
	Cl	37		ug/L			5056971	5329100	7
>	Sc	45		ug/L			1150108	1292751	5
	V	51	-0.014	ug/L	0.009	67	6633	7129	2
	V-1	51	0.011	ug/L	0.001	8	59	304	3
	Cr	52	0.043	ug/L	0.043	99	19531	22697	1
	Cr	53	0.133	ug/L	0.012	9	104	382	2
	Mn	55	0.028	ug/L	0.003	10	477	1223	2
	Co	59	-0.000	ug/L	0.001	1623	69	77	14
>	Ge	72		ug/L			432270	425062	2
	Ni	60	-0.006	ug/L	0.001	15	81	62	2
	Ni	62	-0.001	ug/L	0.002	133	65	63	0
	Cu	63	0.180	ug/L	0.007	3	73	1190	5
	Cu	65	0.184	ug/L	0.006	3	32	534	4
	Zn	66	1.178	ug/L	0.042	3	220	2138	5
	Zn	67	1.103	ug/L	0.084	7	39	339	8
	Zn	68	1.134	ug/L	0.041	3	626	1903	2
	As	75	0.073	ug/L	0.018	25	1266	1351	3
	As-1	75	0.079	ug/L	0.061	77	6603	6604	1
	Se	82	0.126	ug/L	0.166	131	-10	10	260
	Se	78	0.204	ug/L	0.178	86	6721	6689	1
	Mo	98	0.005	ug/L	0.003	59	26	46	27
	Y	89		ug/L			327238	345823	2
	Kr	83		ug/L			1809	1806	1
>	In	115		ug/L			929401	1049072	3
	Ag	107	0.000	ug/L	0.001	193	20	26	25
	Cd	111	-0.002	ug/L	0.001	62	75	77	9
	Cd	114	0.001	ug/L	0.000	36	31	52	10
	Sb	121	-0.014	ug/L	0.002	17	417	234	16
	Sb	123	-0.016	ug/L	0.002	10	326	167	10
	Ba	135	0.013	ug/L	0.002	18	23	83	12
	Ba	137	0.013	ug/L	0.002	13	45	152	7
>	Tb	159		ug/L			920152	1024343	1
	Tl	205	-0.000	ug/L	0.000	103	78	72	20
	Pb	208	0.020	ug/L	0.002	10	146	1041	7
	Bi	209		ug/L			2152313	2451897	5
	Th	232	0.008	ug/L	0.013	179	1253	1731	35
	U	238	0.001	ug/L	0.001	161	35	63	60

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:01:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1469308	1587766	1
[	Be	9	0.003	ug/L	0.001	34	18	36	15
	C	13		ug/L			115227	136051	1
	Cl	37		ug/L			5056971	5324619	3
[>	Sc	45		ug/L			1150108	1227301	0
	V	51	0.003	ug/L	0.004	132	6633	7148	1
	V-1	51	0.011	ug/L	0.001	9	59	301	7
	Cr	52	0.116	ug/L	0.011	9	19531	22805	0
	Cr	53	0.145	ug/L	0.009	6	104	387	4
	Mn	55	0.035	ug/L	0.001	1	477	1336	1
[	Co	59	0.000	ug/L	0.001	239	69	79	14
[>	Ge	72		ug/L			432270	425482	1
	Ni	60	-0.001	ug/L	0.003	324	81	77	10
	Ni	62	-0.003	ug/L	0.035	1200	65	63	20
	Cu	63	0.288	ug/L	0.011	3	73	1862	2
	Cu	65	0.277	ug/L	0.013	4	32	789	3
	Zn	66	1.352	ug/L	0.070	5	220	2423	3
	Zn	67	1.207	ug/L	0.106	8	39	368	9
	Zn	68	1.349	ug/L	0.068	5	626	2148	2
	As	75	0.030	ug/L	0.003	9	1266	1290	1
	As-1	75	0.128	ug/L	0.056	43	6603	6680	0
	Se	82	-0.086	ug/L	0.028	32	-10	-24	19
	Se	78	0.417	ug/L	0.188	45	6721	6780	0
[	Mo	98	0.003	ug/L	0.001	53	26	37	14
	Y	89		ug/L			327238	348387	0
	Kr	83		ug/L			1809	1860	2
[>	In	115		ug/L			929401	1041103	0
	Ag	107	-0.001	ug/L	0.000	41	20	15	18
	Cd	111	-0.002	ug/L	0.002	137	75	76	15
	Cd	114	0.002	ug/L	0.001	40	31	57	15
	Sb	121	-0.018	ug/L	0.002	9	417	162	18
	Sb	123	-0.019	ug/L	0.001	6	326	127	12
	Ba	135	0.017	ug/L	0.004	22	23	99	15
[	Ba	137	0.018	ug/L	0.001	6	45	184	4
[>	Tb	159		ug/L			920152	1021165	0
	Tl	205	-0.001	ug/L	0.000	9	78	44	9
	Pb	208	0.028	ug/L	0.001	2	146	1411	1
	Bi	209		ug/L			2152313	2390515	0
	Th	232	-0.008	ug/L	0.003	35	1253	1036	12
[	U	238	-0.000	ug/L	0.000	9	35	21	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:06:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1613178	1
	Be	9	24.396	ug/L	0.294	1	18	136104	1
	C	13		ug/L			115227	142720	1
	Cl	37		ug/L			5056971	5392102	3
>	Sc	45		ug/L			1150108	1237621	1
	V	51	23.469	ug/L	0.177	0	6633	518404	1
	V-1	51	23.531	ug/L	0.072	0	59	511845	1
	Cr	52	24.077	ug/L	0.762	3	19531	430891	2
	Cr	53	24.305	ug/L	0.687	2	104	46593	2
	Mn	55	23.968	ug/L	1.052	4	477	573030	4
	Co	59	23.858	ug/L	0.545	2	69	370900	1
>	Ge	72		ug/L			432270	425919	1
	Ni	60	25.878	ug/L	0.275	1	81	75507	2
	Ni	62	26.100	ug/L	0.845	3	65	10674	4
	Cu	63	26.878	ug/L	0.633	2	73	167440	1
	Cu	65	26.200	ug/L	0.590	2	32	71888	0
	Zn	66	79.195	ug/L	2.009	2	220	129607	1
	Zn	67	74.231	ug/L	3.682	4	39	20304	3
	Zn	68	78.138	ug/L	1.704	2	626	89482	0
	As	75	27.626	ug/L	0.547	1	1266	41619	2
	As-1	75	24.833	ug/L	0.486	1	6603	41677	2
	Se	82	84.154	ug/L	1.032	1	-10	13730	0
	Se	78	75.228	ug/L	0.695	0	6721	36396	1
	Mo	98	0.008	ug/L	0.002	30	26	56	15
	Y	89		ug/L			327238	341166	2
	Kr	83		ug/L			1809	1854	1
>	In	115		ug/L			929401	1038272	1
	Ag	107	24.242	ug/L	0.077	0	20	230856	1
	Cd	111	24.202	ug/L	0.280	1	75	120694	1
	Cd	114	24.298	ug/L	0.934	3	31	307540	1
	Sb	121	-0.017	ug/L	0.002	9	117	185	13
	Sb	123	-0.017	ug/L	0.002	13	326	145	18
	Ba	135	24.384	ug/L	0.229	0	23	107853	1
	Ba	137	24.593	ug/L	0.742	3	45	185646	1
>	Tb	159		ug/L			920152	1021429	0
	Tl	205	25.098	ug/L	0.417	1	78	843536	1
	Pb	208	25.510	ug/L	0.274	1	146	1125508	0
	Bi	209		ug/L			2152313	2409532	0
	Th	232	23.894	ug/L	0.238	0	1253	1054035	1
	U	238	24.597	ug/L	0.277	1	35	1137226	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:10:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1616311	1
	Be	9	24.641	ug/L	0.812	3	18	137700	2
	C	13		ug/L			115227	142057	4
	Cl	37		ug/L			5056971	5303451	2
>	Sc	45		ug/L			1150108	1216434	1
	V	51	24.341	ug/L	0.736	3	6633	528010	1
	V-1	51	24.293	ug/L	0.720	2	59	519200	1
	Cr	52	25.072	ug/L	0.722	2	19531	440080	1
	Cr	53	24.901	ug/L	0.674	2	104	46911	1
	Mn	55	24.368	ug/L	0.859	3	477	572452	3
	Co	59	24.025	ug/L	0.690	2	69	367107	2
>	Ge	72		ug/L			432270	434400	1
	Ni	60	25.800	ug/L	0.593	2	81	76768	2
	Ni	62	26.108	ug/L	0.634	2	65	10889	2
	Cu	63	26.190	ug/L	0.185	0	73	166437	0
	Cu	65	25.781	ug/L	0.278	1	32	72158	0
	Zn	66	78.915	ug/L	2.830	3	220	131706	2
	Zn	67	70.743	ug/L	1.238	1	39	19745	1
	Zn	68	77.504	ug/L	3.077	3	626	90534	3
	As	75	27.648	ug/L	0.420	1	1266	42475	0
	As-1	75	24.898	ug/L	0.247	0	6603	42597	0
	Se	82	83.178	ug/L	2.083	2	-10	13839	1
	Se	78	74.328	ug/L	1.590	2	6721	36755	0
	Mo	98	0.006	ug/L	0.000	5	26	49	2
	Y	89		ug/L			327238	343067	2
	Kr	83		ug/L			1809	1876	1
>	In	115		ug/L			929401	1033613	1
	Ag	107	24.672	ug/L	0.679	2	20	233848	2
	Cd	111	24.798	ug/L	0.376	1	75	123094	0
	Cd	114	24.841	ug/L	0.399	1	31	313123	1
	Sb	121	-0.018	ug/L	0.002	8	417	165	16
	Sb	123	-0.019	ug/L	0.001	7	326	129	14
	Ba	135	24.443	ug/L	0.387	1	23	107622	0
	Ba	137	24.814	ug/L	0.393	1	45	186506	0
>	Tb	159		ug/L			920152	1019124	0
	Tl	205	25.242	ug/L	0.248	0	78	846565	1
	Pb	208	25.751	ug/L	0.252	0	146	1133586	0
	Bi	209		ug/L			2152313	2391295	1
	Th	232	24.458	ug/L	0.517	2	1253	1076279	1
	U	238	24.641	ug/L	0.087	0	35	1136722	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:14:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1584312	3
	Be	9	0.004	ug/L	0.001	23	18	43	10
	C	13		ug/L			115227	130888	2
	Cl	37		ug/L			5056971	5480841	3
>	Sc	45		ug/L			1150108	1233061	1
	V	51	0.206	ug/L	0.002	0	6633	11581	2
	V-1	51	0.217	ug/L	0.003	1	59	4762	2
	Cr	52	0.227	ug/L	0.019	8	19531	24790	0
	Cr	53	0.267	ug/L	0.023	8	104	620	5
	Mn	55	102.021	ug/L	3.012	2	477	2427513	1
	Co	59	0.015	ug/L	0.003	17	69	300	14
>	Ge	72		ug/L			432270	420676	1
	Ni	60	0.177	ug/L	0.016	9	81	587	7
	Ni	62	0.096	ug/L	0.032	32	65	102	13
	Cu	63	0.378	ug/L	0.007	1	73	2398	1
	Cu	65	0.192	ug/L	0.005	2	32	553	3
	Zn	66	2.327	ug/L	0.057	2	220	3969	2
	Zn	67	1.945	ug/L	0.061	3	39	562	1
	Zn	68	2.510	ug/L	0.022	0	626	3429	1
	As	75	0.104	ug/L	0.034	32	1266	1383	3
	As-1	75	0.144	ug/L	0.077	53	6603	6627	0
	Se	82	-0.003	ug/L	0.213	7548	-10	-11	311
	Se	78	0.283	ug/L	0.332	117	6721	6651	0
	Mo	98	0.001	ug/L	0.001	53	26	29	6
	Y	89		ug/L			327238	338801	1
	Kr	83		ug/L			1809	1837	3
>	In	115		ug/L			929401	1023244	0
	Ag	107	0.002	ug/L	0.000	26	20	39	11
	Cd	111	0.014	ug/L	0.002	14	75	153	7
	Cd	114	0.015	ug/L	0.000	3	31	219	2
	Sb	121	-0.013	ug/L	0.002	14	417	240	13
	Sb	123	-0.015	ug/L	0.001	9	326	168	10
	Ba	135	0.892	ug/L	0.006	0	23	3915	0
	Ba	137	0.905	ug/L	0.012	1	45	6785	0
>	Tb	159		ug/L			920152	1030447	0
	Tl	205	0.001	ug/L	0.000	39	78	126	11
	Pb	208	0.028	ug/L	0.001	2	146	1398	2
	Bi	209		ug/L			2152313	2340472	0
	Th	232	0.221	ug/L	0.077	34	1253	11209	29
	U	238	0.008	ug/L	0.001	10	35	403	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:18:27
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1494903	1
	Be	9	0.010	ug/L	0.001	5	18	69	5
	C	13		ug/L			115227	138670	3
	Cl	37		ug/L			5056971	5836152	2
>	Sc	45		ug/L			1150108	1231004	2
	V	51	0.917	ug/L	0.040	4	6633	26962	1
	V-1	51	0.944	ug/L	0.051	5	59	20475	3
	Cr	52	0.292	ug/L	0.013	4	19531	25857	3
	Cr	53	0.387	ug/L	0.031	7	104	847	4
	Mn	55	475.589	ug/L	13.011	2	477	11293844	1
	Co	59	0.065	ug/L	0.005	7	69	1079	5
>	Ge	72		ug/L			432270	395251	1
	Ni	60	0.833	ug/L	0.025	2	81	2327	3
	Ni	62	1.362	ug/L	0.286	21	65	572	17
	Cu	63	1.552	ug/L	0.056	3	73	9032	1
	Cu	65	0.506	ug/L	0.012	2	32	1318	0
	Zn	66	1.970	ug/L	0.045	2	220	3188	0
	Zn	67	1.723	ug/L	0.130	7	39	472	7
	Zn	68	3.461	ug/L	0.170	4	626	4224	2
	As	75	0.352	ug/L	0.024	6	1266	1636	3
	As-1	75	0.537	ug/L	0.020	3	6603	6743	1
	Se	82	0.126	ug/L	0.109	86	-10	9	179
	Se	78	0.979	ug/L	0.114	11	6721	6505	1
	Mo	98	0.017	ug/L	0.003	16	26	87	12
	Y	89		ug/L			327238	323653	0
	Kr	83		ug/L			1809	1760	1
>	In	115		ug/L			929401	999255	0
	Ag	107	0.001	ug/L	0.000	55	20	29	15
	Cd	111	0.059	ug/L	0.005	8	75	363	6
	Cd	114	0.064	ug/L	0.001	2	31	809	2
	Sb	121	0.016	ug/L	0.002	14	417	708	5
	Sb	123	0.016	ug/L	0.002	13	326	547	5
	Ba	135	4.407	ug/L	0.014	0	23	18783	1
	Ba	137	4.481	ug/L	0.034	0	45	32607	1
>	Tb	159		ug/L			920152	1043449	0
	Tl	205	0.001	ug/L	0.000	10	78	117	2
	Pb	208	0.028	ug/L	0.000	1	146	1447	2
	Bi	209		ug/L			2152313	2213457	0
	Th	232	0.197	ug/L	0.086	43	1253	10254	37
	U	238	0.027	ug/L	0.001	4	35	1310	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:22:34
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1473808	1
	Be	9	0.008	ug/L	0.003	32	18	59	21
	C	13		ug/L			115227	133460	2
	Cl	37		ug/L			5056971	5648885	1
>	Sc	45		ug/L			1,150,108	1,246,137	2
	V	51	0.880	ug/L	0.030	3	6633	26484	0
	V-1	51	0.916	ug/L	0.028	3	59	20111	0
	Cr	52	0.258	ug/L	0.021	8	19531	25572	2
	Cr	53	0.384	ug/L	0.011	2	104	851	1
	Mn	55	473.706	ug/L	25.543	5	477	11381701	3
	Co	59	0.069	ug/L	0.004	5	69	1154	2
>	Ge	72		ug/L			432270	384566	0
	Ni	60	0.832	ug/L	0.024	2	81	2261	2
	Ni	62	1.788	ug/L	0.184	10	65	714	9
	Cu	63	1.620	ug/L	0.014	0	73	9176	0
	Cu	65	0.524	ug/L	0.010	1	32	1326	2
	Zn	66	2.279	ug/L	0.075	3	220	3558	2
	Zn	67	2.041	ug/L	0.035	1	39	538	2
	Zn	68	3.818	ug/L	0.138	3	626	4478	2
	As	75	0.419	ug/L	0.030	7	1266	1679	1
	As-1	75	0.616	ug/L	0.070	11	6603	6662	0
	Se	82	0.265	ug/L	0.035	13	-10	29	16
	Se	78	1.209	ug/L	0.275	22	6721	6411	0
	Mo	98	0.017	ug/L	0.003	19	26	85	13
	Y	89		ug/L			327238	322131	0
	Kr	83		ug/L			1809	1733	2
>	In	115		ug/L			929401	1004495	0
	Ag	107	0.002	ug/L	0.002	98	20	36	40
	Cd	111	0.064	ug/L	0.005	7	75	391	5
	Cd	114	0.059	ug/L	0.001	2	31	761	2
	Sb	121	0.016	ug/L	0.001	3	417	709	1
	Sb	123	0.015	ug/L	0.002	11	326	534	3
	Ba	135	4.530	ug/L	0.056	1	23	19410	1
	Ba	137	4.542	ug/L	0.077	1	45	33215	0
>	Tb	159		ug/L			920152	1039822	1
	Tl	205	0.002	ug/L	0.000	26	78	145	8
	Pb	208	0.030	ug/L	0.001	3	146	1493	4
	Bi	209		ug/L			2152313	2248499	0
	Th	232	0.061	ug/L	0.017	27	1253	4128	16
	U	238	0.028	ug/L	0.001	2	35	1366	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:26:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1469308	1457769	0
[	Be	9	21.475	ug/L	0.409	1	18	108254	1
	C	13		ug/L			115227	129879	0
	Cl	37		ug/L			5056971	5715602	3
[>	Sc	45		ug/L			1150108	1240586	0
[	V	51	22.159	ug/L	0.696	3	6633	491008	3
[	V-1	51	22.501	ug/L	0.712	3	59	490610	3
[	Cr	52	21.219	ug/L	0.239	1	19531	383174	0
[	Cr	53	22.458	ug/L	0.234	1	104	43171	1
[	Mn	55	470.615	ug/L	17.641	3	477	11269568	4
[	Co	59	21.060	ug/L	0.549	2	69	328231	2
[>	Ge	72		ug/L			432270	374463	3
[	Ni	60	26.067	ug/L	0.723	2	81	66831	2
[	Ni	62	27.738	ug/L	1.286	4	65	9960	2
[	Cu	63	25.928	ug/L	0.770	2	73	141950	0
[	Cu	65	25.338	ug/L	0.273	1	32	61128	2
[	Zn	66	71.779	ug/L	2.289	3	220	103247	1
[	Zn	67	67.166	ug/L	1.899	2	39	16161	3
[	Zn	68	73.433	ug/L	2.520	3	626	73926	0
[	As	75	26.739	ug/L	1.119	4	1266	35418	0
[	As-1	75	24.775	ug/L	0.944	3	6603	36543	1
[	Se	82	78.648	ug/L	2.944	3	-10	11272	0
[	Se	78	72.669	ug/L	2.404	3	6721	31093	1
[	Mo	98	0.026	ug/L	0.003	13	26	114	7
	Y	89		ug/L			327238	314516	2
	Kr	83		ug/L			1809	1698	4
[>	In	115		ug/L			929401	1004607	2
[	Ag	107	20.967	ug/L	0.813	3	20	193075	1
[	Cd	111	22.357	ug/L	0.480	2	75	107864	1
[	Cd	114	22.962	ug/L	0.293	1	31	281286	1
[	Sb	121	0.018	ug/L	0.001	4	417	739	2
[	Sb	123	0.018	ug/L	0.002	10	326	573	1
[	Ba	135	29.693	ug/L	0.900	3	23	127032	1
[	Ba	137	29.677	ug/L	1.299	4	45	216669	1
[>	Tb	159		ug/L			920152	1050725	1
[	Tl	205	24.024	ug/L	0.281	1	78	830563	0
[	Pb	208	24.124	ug/L	0.283	1	146	1094890	0
[	Bi	209		ug/L			2152313	2248808	1
[	Th	232	24.362	ug/L	0.280	1	1253	1105414	1
[	U	238	24.410	ug/L	0.458	1	35	1160857	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:32:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1461177	2
	Be	9	48.083	ug/L	1.718	3	18	242839	1
	C	13		ug/L			115227	112614	1
	Cl	37		ug/L			5056971	5259258	1
>	Sc	45		ug/L			1150108	1147290	1
	V	51	48.125	ug/L	0.358	0	6633	978500	2
	V-1	51	48.047	ug/L	0.087	0	59	968758	1
	Cr	52	48.311	ug/L	0.706	1	19531	781948	2
	Cr	53	48.026	ug/L	0.860	1	104	85244	0
	Mn	55	46.959	ug/L	0.579	1	477	1040136	1
	Co	59	46.235	ug/L	0.740	1	69	666370	2
>	Ge	72		ug/L			432270	395082	1
	Ni	60	51.102	ug/L	0.554	1	81	138231	2
	Ni	62	51.692	ug/L	1.009	1	65	19549	2
	Cu	63	51.498	ug/L	0.489	0	73	297580	0
	Cu	65	50.816	ug/L	0.980	1	32	129322	0
	Zn	66	48.850	ug/L	1.881	3	220	74231	2
	Zn	67	50.147	ug/L	1.182	2	39	12741	2
	Zn	68	52.052	ug/L	1.304	2	626	55490	1
	As	75	50.354	ug/L	0.860	1	1266	69406	0
	As-1	75	49.662	ug/L	0.839	1	6603	71268	0
	Se	82	55.196	ug/L	0.792	1	-10	8501	0
	Se	78	50.845	ug/L	0.486	0	6721	24810	0
	Mo	98	50.838	ug/L	0.107	0	26	191459	1
	Y	89		ug/L			327238	317504	0
	Kr	83		ug/L			1809	1721	3
>	In	115		ug/L			929401	1017689	1
	Ag	107	42.554	ug/L	0.428	1	20	397186	1
	Cd	111	48.557	ug/L	0.970	1	75	237232	0
	Cd	114	49.455	ug/L	0.628	1	31	613778	1
	Sb	121	47.751	ug/L	0.830	1	417	774915	0
	Sb	123	47.774	ug/L	0.638	1	326	586153	1
	Ba	135	50.257	ug/L	0.205	0	23	217878	1
	Ba	137	50.552	ug/L	0.677	1	45	374069	0
>	Tb	159		ug/L			920152	1019985	0
	Tl	205	50.067	ug/L	0.584	1	78	1680278	0
	Pb	208	51.084	ug/L	0.280	0	146	2250570	0
	Bi	209		ug/L			2152313	2386870	0
	Th	232	52.709	ug/L	1.134	2	1253	2319770	1
	U	238	52.283	ug/L	0.378	0	35	2413793	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:38:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1445567	1
	Be	9	-0.000	ug/L	0.001	267	18	16	18
	C	13		ug/L			115227	113664	0
	Cl	37		ug/L			5056971	5211999	2
>	Sc	45		ug/L			1150108	1163357	3
	V	51	0.006	ug/L	0.015	243	6633	6827	2
	V-1	51	0.004	ug/L	0.000	9	59	132	3
	Cr	52	0.019	ug/L	0.058	298	19531	20048	1
	Cr	53	0.010	ug/L	0.011	107	104	124	13
	Mn	55	0.004	ug/L	0.001	25	477	575	2
	Co	59	-0.001	ug/L	0.000	83	69	62	11
>	Ge	72		ug/L			432270	392565	0
	Ni	60	-0.013	ug/L	0.003	20	81	37	19
	Ni	62	0.813	ug/L	0.015	1	65	364	1
	Cu	63	0.072	ug/L	0.003	3	73	480	3
	Cu	65	0.001	ug/L	0.001	46	32	33	5
	Zn	66	0.032	ug/L	0.009	28	220	248	5
	Zn	67	0.031	ug/L	0.019	59	39	43	10
	Zn	68	0.085	ug/L	0.011	12	626	657	1
	As	75	0.018	ug/L	0.006	32	1266	1175	0
	As-1	75	0.303	ug/L	0.096	31	6603	6393	2
	Se	82	-0.041	ug/L	0.142	345	-10	-15	133
	Se	78	1.157	ug/L	0.329	28	6721	6526	1
	Mo	98	0.007	ug/L	0.002	32	26	52	17
	Y	89		ug/L			327238	319787	2
	Kr	83		ug/L			1809	1728	4
>	In	115		ug/L			929401	1015307	0
	Ag	107	0.000	ug/L	0.001	185	20	25	25
	Cd	111	-0.001	ug/L	0.000	32	75	76	2
	Cd	114	0.000	ug/L	0.000	881	31	35	8
	Sb	121	0.056	ug/L	0.004	7	417	1354	4
	Sb	123	0.057	ug/L	0.008	13	326	1049	8
	Ba	135	0.002	ug/L	0.001	47	23	33	10
	Ba	137	-0.000	ug/L	0.000	258	45	48	4
>	Tb	159		ug/L			920152	973092	1
	Tl	205	-0.000	ug/L	0.000	92	78	72	13
	Pb	208	0.000	ug/L	0.000	237	146	159	7
	Bi	209		ug/L			2152313	2384661	0
	Th	232	0.046	ug/L	0.008	16	1253	3244	10
	U	238	0.001	ug/L	0.000	6	35	83	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R I-L REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:46:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1469308	1475293	1
[	Be	9	0.001	ug/L	0.001	86	18	22	16
	C	13		ug/L			115227	125105	2
	Cl	37		ug/L			5056971	5528011	1
[>	Sc	45		ug/L			1150108	1169342	0
!	V	51	0.199	ug/L	0.009	4	6633	10846	1
!	V-1	51	0.204	ug/L	0.006	3	59	4248	3
!	Cr	52	0.274	ug/L	0.036	13	19531	24262	2
!	Cr	53	0.291	ug/L	0.016	5	104	631	5
!	Mn	55	102.613	ug/L	1.312	1	477	2316145	1
[	Co	59	0.013	ug/L	0.002	13	69	267	10
[>	Ge	72		ug/L			432270	400340	2
!	Ni	60	0.156	ug/L	0.006	3	81	502	4
!	Ni	62	0.466	ug/L	0.011	2	65	238	2
!	Cu	63	0.394	ug/L	0.019	4	73	2374	2
!	Cu	65	0.194	ug/L	0.015	7	32	531	10
!	Zn	66	2.008	ug/L	0.145	7	220	3284	4
!	Zn	67	1.900	ug/L	0.189	9	39	523	7
!	Zn	68	2.323	ug/L	0.101	4	626	3061	0
!	As	75	U 0.126	ug/L	0.034	26	1266	1346	0
!	As-1	75	0.280	ug/L	0.154	54	6603	6484	0
!	Se	82	0.125	ug/L	0.043	34	-10	9	71
!	Se	78	0.818	ug/L	0.561	68	6721	6525	0
[	Mo	98	0.003	ug/L	0.001	24	26	37	11
	Y	89		ug/L			327238	323164	1
	Kr	83		ug/L			1809	1746	0
[>	In	115		ug/L			925401	1023332	0
!	Ag	107	0.001	ug/L	0.001	160	20	27	31
!	Cd	111	0.000	ug/L	0.003	802	75	85	18
!	Cd	114	0.002	ug/L	0.000	12	31	60	5
!	Sb	121	0.001	ug/L	0.003	276	417	479	11
!	Sb	123	-0.001	ug/L	0.003	381	326	350	9
!	Ba	135	0.870	ug/L	0.020	2	23	3817	2
[	Ba	137	0.885	ug/L	0.018	2	45	6631	1
[>	Tb	159		ug/L			920152	1012323	1
!	Tl	205	0.002	ug/L	0.001	64	78	147	26
!	Pb	208	0.024	ug/L	0.000	0	146	1232	1
!	Bi	209		ug/L			2152313	2356483	0
!	Th	232	0.052	ug/L	0.010	19	1253	3663	11
[	U	238	0.005	ug/L	0.000	6	35	290	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:50:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1442308	3
	Be	9	0.012	ug/L	0.001	9	18	79	4
	C	13		ug/L			115227	140450	5
	Cl	37		ug/L			5056971	5707893	7
>	Sc	45		ug/L			1150108	1246385	2
	V	51	0.847	ug/L	0.009	1	6633	25769	1
	V-1	51	0.888	ug/L	0.016	1	59	19502	2
	Cr	52	0.255	ug/L	0.063	24	19531	25518	2
	Cr	53	0.398	ug/L	0.053	13	104	879	10
	Mn	55	448.985	ug/L	7.889	1	477	10797698	0
	Co	59	0.068	ug/L	0.004	5	69	1146	7
>	Ge	72		ug/L			432270	395637	2
	Ni	60	0.722	ug/L	0.022	3	81	2028	5
	Ni	62	1.780	ug/L	0.251	14	65	731	12
	Cu	63	1.584	ug/L	0.013	0	73	9230	2
	Cu	65	0.501	ug/L	0.032	6	32	1305	6
	Zn	66	1.818	ug/L	0.043	2	220	2960	2
	Zn	67	1.597	ug/L	0.098	6	39	441	6
	Zn	68	3.332	ug/L	0.170	5	626	4091	3
	As	75	0.342	ug/L	0.032	9	1266	1623	1
	As-1	75	0.554	ug/L	0.111	20	6603	6771	0
	Se	82	0.089	ug/L	0.207	232	-10	3	878
	Se	78	1.109	ug/L	0.424	38	6721	6557	0
	Mo	98	0.014	ug/L	0.004	30	26	76	19
	Y	89		ug/L			327238	322608	1
	Kr	83		ug/L			1809	1793	2
>	In	115		ug/L			929401	1014697	0
	Ag	107	0.003	ug/L	0.001	17	20	49	9
	Cd	111	0.010	ug/L	0.003	29	75	130	10
	Cd	114	0.010	ug/L	0.001	8	31	157	6
	Sb	121	0.011	ug/L	0.003	30	417	632	8
	Sb	123	0.009	ug/L	0.001	15	326	460	4
	Ba	135	4.320	ug/L	0.121	2	23	18694	2
	Ba	137	4.363	ug/L	0.009	0	45	32239	0
>	Tb	159		ug/L			920152	1045200	2
	Tl	205	0.003	ug/L	0.000	13	78	197	5
	Pb	208	0.021	ug/L	0.001	2	146	1096	3
	Bi	209		ug/L			2152313	2238838	1
	Th	232	0.115	ug/L	0.047	41	1253	6591	29
	U	238	0.028	ug/L	0.001	3	35	1348	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R IDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:54:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1454297	2
	Be	9	0.007	ug/L	0.001	7	18	55	3
	C	13		ug/L			115227	137103	1
	Cl	37		ug/L			5056971	5706094	1
>	Sc	45		ug/L			1150108	1261170	3
	V	51	0.893	ug/L	0.018	1	6633	27077	1
	V-1	51	0.924	ug/L	0.014	1	59	20527	1
	Cr	52	0.258	ug/L	0.037	14	19531	25874	1
	Cr	53	0.367	ug/L	0.019	5	104	829	1
	Mn	55	469.127	ug/L	5.257	1	477	11420421	4
	Co	59	0.064	ug/L	0.004	5	69	1092	2
>	Ge	72		ug/L			432270	372411	2
	Ni	60	0.832	ug/L	0.024	2	81	2189	3
	Ni	62	2.322	ug/L	0.234	10	65	880	7
	Cu	63	1.685	ug/L	0.066	3	73	9234	2
	Cu	65	0.445	ug/L	0.029	6	32	1095	4
	Zn	66	1.877	ug/L	0.069	3	220	2870	1
	Zn	67	1.505	ug/L	0.143	9	39	393	9
	Zn	68	3.601	ug/L	0.146	4	626	4119	1
	As	75	0.419	ug/L	0.041	9	1266	1626	1
	As-1	75	0.815	ug/L	0.091	11	6603	6696	1
	Se	82	0.272	ug/L	0.029	10	-10	29	12
	Se	78	1.944	ug/L	0.303	15	6721	6462	1
	Mo	98	0.015	ug/L	0.004	25	26	74	18
	Y	89		ug/L			327238	313812	1
	Kr	83		ug/L			1809	1687	1
>	In	115		ug/L			929401	1003192	0
	Ag	107	-0.000	ug/L	0.001	1940	20	21	24
	Cd	111	0.008	ug/L	0.002	24	75	120	8
	Cd	114	0.009	ug/L	0.000	0	31	146	1
	Sb	121	0.010	ug/L	0.001	9	417	608	1
	Sb	123	0.008	ug/L	0.002	25	326	445	5
	Ba	135	4.607	ug/L	0.082	1	23	19710	1
	Ba	137	4.742	ug/L	0.109	2	45	34637	2
>	Tb	159		ug/L			920152	1048396	1
	Tl	205	0.001	ug/L	0.001	78	78	120	21
	Pb	208	0.019	ug/L	0.000	2	146	1036	1
	Bi	209		ug/L			2152313	2246420	0
	Th	232	0.038	ug/L	0.011	29	1253	3166	16
	U	238	0.026	ug/L	0.001	4	35	1257	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 ISPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:58:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1428340	2
	Be	9	21.844	ug/L	0.524	2	18	107886	2
	C	13		ug/L			115227	132214	5
	Cl	37		ug/L			5056971	5612299	2
>	Sc	45		ug/L			1150108	1264721	1
	V	51	22.559	ug/L	0.140	0	6633	509450	0
	V-1	51	22.458	ug/L	0.076	0	59	499192	1
	Cr	52	21.667	ug/L	0.700	3	19531	398339	1
	Cr	53	21.293	ug/L	0.409	1	104	41731	1
	Mn	55	473.994	ug/L	8.658	1	477	11567814	1
	Co	59	20.419	ug/L	0.492	2	69	324396	1
>	Ge	72		ug/L			432270	379866	2
	Ni	60	25.952	ug/L	0.158	0	81	67528	2
	Ni	62	27.137	ug/L	0.178	0	65	9894	1
	Cu	63	26.241	ug/L	0.530	2	73	145787	0
	Cu	65	24.748	ug/L	0.553	2	32	60558	0
	Zn	66	71.839	ug/L	2.875	4	220	104839	2
	Zn	67	67.842	ug/L	4.445	6	39	16545	4
	Zn	68	73.834	ug/L	3.278	4	626	75408	2
	As	75	26.665	ug/L	0.979	3	1266	35848	1
	As-1	75	24.489	ug/L	0.892	3	6603	36718	0
	Se	82	78.381	ug/L	2.888	3	-10	11400	1
	Se	78	71.579	ug/L	3.017	4	6721	31160	1
	Mo	98	0.018	ug/L	0.003	17	26	87	12
	Y	89		ug/L			327238	310476	2
	Kr	83		ug/L			1809	1694	3
>	In	115		ug/L			929401	1016179	1
	Ag	107	20.091	ug/L	0.686	3	20	187224	2
	Cd	111	22.743	ug/L	0.127	0	75	111015	1
	Cd	114	23.234	ug/L	0.459	1	31	287924	1
	Sb	121	0.008	ug/L	0.001	11	417	585	2
	Sb	123	0.007	ug/L	0.002	34	326	437	5
	Ba	135	30.351	ug/L	0.347	1	23	131383	0
	Ba	137	30.746	ug/L	0.666	2	45	227186	1
>	Tb	159		ug/L			920152	1047889	1
	Tl	205	24.631	ug/L	0.318	1	78	849230	0
	Pb	208	24.943	ug/L	0.547	2	146	1128814	0
	Bi	209		ug/L			2152313	2268301	0
	Th	232	25.255	ug/L	0.271	1	1253	1142694	0
	U	238	25.119	ug/L	0.450	1	35	1191294	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:02:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

Cr, Cu, Zn, As only 5/9/12 JWS

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1518870	1
	Be	9	0.003	ug/L	0.000	15	18	35	7
	C	13		ug/L			115227	127883	4
	Cl	37		ug/L			5056971	5389552	1
>	Sc	45		ug/L			1150108	1178097	0
	V	51	6.301	ug/L	0.220	3	6633	137430	2
	V-1	51	6.343	ug/L	0.211	3	59	131355	2
	Cr	52	U 0.279	ug/L	0.057	20	19531	24520	3
	Cr	53	0.396	ug/L	0.009	2	104	828	1
	Mn	55	87.212	ug/L	1.043	1	477	1983248	1
	Co	59	0.322	ug/L	0.007	2	69	4835	2
>	Ge	72		ug/L			432270	363482	4
	Ni	60	8.043	ug/L	0.287	3	81	20066	4
	Ni	62	8.920	ug/L	0.803	9	65	3141	4
	Cu	63	1.536	ug/L	0.042	2	73	8221	2
	Cu	65	0.810 ✓	ug/L	0.033	4	32	1921	0
	Zn	66	U 2.148	ug/L	0.102	4	220	3177	0
	Zn	67	2.647	ug/L	0.168	6	39	649	3
	Zn	68	3.231	ug/L	0.196	6	626	3659	3
	As	75	24.384 ✓	ug/L	0.875	3	1266	31445	0
	As-1	75	25.420	ug/L	1.033	4	6603	36242	0
	Se	82	0.218	ug/L	0.227	104	-10	21	144
	Se	78	1.493	ug/L	0.519	34	6721	6151	1
	Mo	98	5.492	ug/L	0.119	2	26	19035	1
	Y	89		ug/L			32238	310618	2
	Kr	83		ug/L			1809	1664	2
>	In	115		ug/L			929401	1021890	1
	Ag	107	0.017	ug/L	0.002	13	20	184	12
	Cd	111	0.009	ug/L	0.001	14	75	125	6
	Cd	114	0.013	ug/L	0.002	17	31	192	13
	Sb	121	0.160	ug/L	0.007	4	417	3063	2
	Sb	123	0.157	ug/L	0.004	2	326	2297	2
	Ba	135	13.254	ug/L	0.235	1	23	57715	1
	Ba	137	13.484	ug/L	0.149	1	45	100231	0
>	Tb	159		ug/L			920152	1065926	0
	Tl	205	0.002	ug/L	0.000	4	78	151	2
	Pb	208	0.061	ug/L	0.001	1	146	2959	0
	Bi	209		ug/L			2152313	2352033	0
	Th	232	0.110	ug/L	0.062	56	1253	6506	43
	U	238	0.600	ug/L	0.009	1	35	28971	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:06:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			1469308	1545082	1
Be	9	0.001	ug/L	0.001	63	18	25	17
C	13		ug/L			115227	140464	1
Cl	37		ug/L			5056971	5657715	2
Sc	45		ug/L			1150108	1209683	2
V	51	1.080	ug/L	0.037	3	6633	29949	0
V-1	51	1.102	ug/L	0.034	3	59	23476	1
Cr	52	U 0.352	ug/L	0.046	13	19531	26389	0
Cr	53	0.429	ug/L	0.047	10	104	912	8
Mn	55	31.349	ug/L	1.266	4	477	731939	2
Co	59	0.255	ug/L	0.006	2	69	3942	1
Ge	72		ug/L			432270	366429	0
Ni	60	1.614	ug/L	0.025	1	81	4114	1
Ni	62	1.768	ug/L	0.083	4	65	673	3
Cu	63	2.041	ug/L	0.051	2	73	10997	2
Cu	65	1.756	ug/L	0.008	0	32	4171	0
Zn	66	U 1.067	ug/L	0.045	4	220	1686	4
Zn	67	1.679	ug/L	0.075	4	39	427	3
Zn	68	2.264	ug/L	0.052	2	626	2746	1
As	75	9.971	ug/L	0.129	1	1266	13609	1
As-1	75	10.541	ug/L	0.104	0	6603	18441	0
Se	82	0.171	ug/L	0.149	87	-10	14	141
Se	78	1.386	ug/L	0.147	10	6721	6169	0
Mo	98	8.205	ug/L	0.253	3	26	28675	2
Y	89		ug/L			327238	312926	1
Kr	83		ug/L			1809	1665	0
In	115		ug/L			929401	1026058	1
Ag	107	0.003	ug/L	0.001	27	20	53	15
Cd	111	0.013	ug/L	0.003	23	75	148	11
Cd	114	0.018	ug/L	0.001	3	31	266	2
Sb	121	0.580	ug/L	0.004	0	417	9947	1
Sb	123	0.584	ug/L	0.022	3	326	7572	2
Ba	135	12.770	ug/L	0.170	1	23	55832	1
Ba	137	12.962	ug/L	0.160	1	45	96739	0
Tb	159		ug/L			920152	1054281	0
Tl	205	0.003	ug/L	0.000	7	78	183	3
Pb	208	0.094	ug/L	0.002	1	146	4469	0
Bi	209		ug/L			2152313	2394477	0
Th	232	0.009	ug/L	0.007	75	1253	1853	17
U	238	0.563	ug/L	0.009	1	35	26903	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 J REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:10:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1484745	2
	Be	9	0.006	ug/L	0.002	23	18	51	17
	C	13		ug/L			115227	133629	2
	Cl	37		ug/L			5056971	5586591	3
>	Sc	45		ug/L			1150108	1187629	2
	V	51	5.367	ug/L	0.290	5	6633	118947	3
	V-1	51	5.404	ug/L	0.293	5	59	112744	3
	Cr	52	0.212	ug/L	0.018	8	19531	23625	2
	Cr	53	0.315	ug/L	0.006	1	104	685	1
	Mn	55	83.718	ug/L	2.650	3	477	1918229	1
	Co	59	0.305	ug/L	0.004	1	69	4619	2
>	Ge	72		ug/L			432270	369744	1
	Ni	60	5.908	ug/L	0.138	2	81	15013	1
	Ni	62	5.653	ug/L	0.195	3	65	2049	1
	Cu	63	1.040	ug/L	0.024	2	73	5687	1
	Cu	65	0.498	ug/L	0.013	2	32	1214	4
	Zn	66	1.008	ug/L	0.006	0	220	1618	2
	Zn	67	1.678	ug/L	0.138	8	39	431	9
	Zn	68	2.137	ug/L	0.084	3	626	2645	1
	As	75	23.296	ug/L	0.066	0	1266	30637	1
	As-1	75	24.255	ug/L	0.117	0	6603	35468	1
	Se	82	0.018	ug/L	0.119	663	-10	-6	256
	Se	78	1.183	ug/L	0.171	14	6721	6155	0
	Mo	98	5.300	ug/L	0.161	3	26	18693	1
	Y	89		ug/L			327238	314146	2
	Kr	83		ug/L			1809	1716	1
>	In	115		ug/L			929401	1009788	0
	Ag	107	0.005	ug/L	0.001	16	20	72	11
	Cd	111	0.004	ug/L	0.003	66	75	103	13
	Cd	114	0.007	ug/L	0.001	12	31	122	8
	Sb	121	0.129	ug/L	0.005	4	417	2536	3
	Sb	123	0.128	ug/L	0.001	1	326	1916	0
	Ba	135	12.604	ug/L	0.213	1	23	54236	1
	Ba	137	12.665	ug/L	0.168	1	45	93031	0
>	Tb	159		ug/L			920152	1038276	0
	Tl	205	0.005	ug/L	0.001	15	78	260	9
	Pb	208	0.016	ug/L	0.001	4	146	871	3
	Bi	209		ug/L			2152313	2323020	1
	Th	232	-0.005	ug/L	0.002	49	1253	1191	9
	U	238	0.578	ug/L	0.007	1	35	27220	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 K REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:15:06
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1508235	2
	Be	9	0.003	ug/L	0.001	26	18	36	14
	C	13		ug/L			115227	146236	4
	Cl	37		ug/L			5056971	5686342	2
>	Sc	45		ug/L			1150108	1156829	3
	V	51	1.095	ug/L	0.055	5	6633	28948	0
	V-1	51	1.095	ug/L	0.055	5	59	22290	1
	Cr	52	0.405	ug/L	0.044	10	19531	26097	4
	Cr	53	0.400	ug/L	0.012	3	104	820	3
	Mn	55	34.415	ug/L	1.177	3	477	768543	3
	Co	59	0.292	ug/L	0.005	1	69	4308	1
>	Ge	72		ug/L			432270	372382	0
	Ni	60	1.557	ug/L	0.066	4	81	4036	3
	Ni	62	0.863	ug/L	0.055	6	65	363	4
	Cu	63	1.520	ug/L	0.041	2	73	8340	2
	Cu	65	1.230	ug/L	0.024	1	32	2978	2
	Zn	66	1.107	ug/L	0.044	3	220	1771	2
	Zn	67	1.774	ug/L	0.067	3	39	457	3
	Zn	68	2.313	ug/L	0.051	2	626	2839	2
	As	75	10.115 ✓	ug/L	0.043	0	1266	14014	0
	As-1	75	10.710	ug/L	0.031	0	6603	18949	0
	Se	82	0.420	ug/L	0.069	16	-10	50	20
	Se	78	1.604	ug/L	0.222	13	6721	6345	0
	Mo	98	7.736	ug/L	0.178	2	26	27483	2
	Y	89		ug/L			327238	316267	1
	Kr	83		ug/L			1809	1641	3
>	In	115		ug/L			929401	1000698	0
	Ag	107	0.004	ug/L	0.000	1	20	55	1
	Cd	111	0.009	ug/L	0.003	33	75	123	11
	Cd	114	0.009	ug/L	0.001	12	31	138	8
	Sb	121	0.581	ug/L	0.008	1	417	9711	1
	Sb	123	0.581	ug/L	0.019	3	326	7360	2
	Ba	135	13.310	ug/L	0.265	1	23	56754	1
	Ba	137	13.430	ug/L	0.131	0	45	97766	1
>	Tb	159		ug/L			920152	1036086	0
	Tl	205	0.006	ug/L	0.001	14	78	290	9
	Pb	208	0.025	ug/L	0.001	2	146	1283	2
	Bi	209		ug/L			2152513	2347590	1
	Th	232	-0.014	ug/L	0.002	12	1253	804	9
	U	238	0.577	ug/L	0.013	2	35	27110	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:19:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1402313	0
	Be	9	176.687	ug/L	5.497	3	18	856805	3
	C	13		ug/L			115227	119764	2
	Cl	37		ug/L			5056971	5651141	1
>	Sc	45		ug/L			1150108	1093483	0
	V	51	200.236	ug/L	5.192	2	6633	3860054	2
	V-1	51	196.855	ug/L	5.279	2	59	3782783	2
	Cr	52	205.244	ug/L	2.943	1	19531	3105673	0
	Cr	53	192.977	ug/L	2.486	1	104	326230	1
	Mn	55	190.596	ug/L	3.557	1	477	4022054	1
	Co	59	192.108	ug/L	2.704	1	69	2638892	2
>	Ge	72		ug/L			432270	382025	1
	Ni	60	200.577	ug/L	2.769	1	81	524348	1
	Ni	62	201.630	ug/L	2.034	1	65	73571	1
	Cu	63	193.473	ug/L	5.877	3	73	1080643	1
	Cu	65	195.501	ug/L	5.648	2	32	480976	2
	Zn	66	189.187	ug/L	4.372	2	220	277434	0
	Zn	67	189.924	ug/L	6.240	3	39	46562	3
	Zn	68	198.121	ug/L	3.451	1	626	202673	1
	As	75	201.278	ug/L	4.093	2	1266	264889	0
	As-1	75	199.661	ug/L	3.528	1	6603	259422	0
	Se	82	211.506	ug/L	6.921	3	-10	30960	1
	Se	78	193.536	ug/L	4.949	2	6721	74632	0
	Mo	98	204.517	ug/L	8.695	4	26	744371	2
	Y	89		ug/L			327238	308169	0
	Kr	83		ug/L			1809	1833	2
>	In	115		ug/L			929401	952474	0
	Ag	107	162.953	ug/L	1.160	0	20	1423434	0
	Cd	111	187.846	ug/L	1.017	0	75	858886	1
	Cd	114	198.303	ug/L	1.448	0	31	2303454	1
	Sb	121	196.564	ug/L	1.221	0	417	2984562	0
	Sb	123	193.717	ug/L	1.676	0	326	2223626	0
	Ba	135	201.837	ug/L	3.237	1	23	818941	2
	Ba	137	203.083	ug/L	1.710	0	45	1406532	1
>	Tb	159		ug/L			920152	985619	0
	Tl	205	199.716	ug/L	0.158	0	78	6476842	1
	Pb	208	203.273	ug/L	0.920	0	146	8653667	1
	Bi	209		ug/L			2152313	2169143	0
	Th	232	209.469	ug/L	1.085	0	1253	8905120	0
	U	238	206.497	ug/L	0.316	0	35	9212545	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:26:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1310296	3
	Be	9	-0.001	ug/L	0.000	3	18	11	5
	C	13		ug/L			115227	108101	5
	Cl	37		ug/L			5056971	5255588	1
>	Sc	45		ug/L			1150108	1098538	1
	V	51	0.013	ug/L	0.006	50	6633	6584	2
	V-1	51	0.007	ug/L	0.001	14	59	182	9
	Cr	52	0.158	ug/L	0.029	18	19531	21040	2
	Cr	53	0.136	ug/L	0.014	10	104	330	5
	Mn	55	0.013	ug/L	0.000	3	477	734	1
	Co	59	0.001	ug/L	0.000	39	69	81	7
>	Ge	72		ug/L			432270	381287	0
	Ni	60	-0.001	ug/L	0.005	330	81	67	18
	Ni	62	0.294	ug/L	0.017	5	65	164	3
	Cu	63	0.076	ug/L	0.000	0	73	490	0
	Cu	65	0.056	ug/L	0.010	18	32	166	14
	Zn	66	1.100	ug/L	0.056	5	220	1803	4
	Zn	67	0.995	ug/L	0.061	6	39	277	5
	Zn	68	1.078	ug/L	0.040	3	626	1649	2
	As	75	0.048	ug/L	0.042	87	1266	1180	4
	As-1	75	0.486	ug/L	0.019	3	6603	6440	0
	Se	82	-0.001	ug/L	0.163	30618	-10	-9	248
	Se	78	1.744	ug/L	0.055	3	6721	6547	0
	Mo	98	0.027	ug/L	0.003	12	26	122	9
	Y	89		ug/L			327238	302820	1
	Kr	83		ug/L			1809	1681	1
>	In	115		ug/L			929401	937229	0
	Ag	107	0.003	ug/L	0.001	51	20	42	27
	Cd	111	0.001	ug/L	0.001	90	75	82	5
	Cd	114	0.001	ug/L	0.000	19	31	47	7
	Sb	121	0.188	ug/L	0.013	6	417	3227	5
	Sb	123	0.191	ug/L	0.017	8	326	2486	7
	Ba	135	0.011	ug/L	0.001	12	23	67	9
	Ba	137	0.010	ug/L	0.001	11	45	115	7
>	Tb	159		ug/L			920152	909063	0
	Tl	205	0.008	ug/L	0.001	17	78	330	12
	Pb	208	0.016	ug/L	0.001	4	146	755	3
	Bi	209		ug/L			2152313	2233105	0
	Th	232	0.093	ug/L	0.019	19	1253	4887	13
	U	238	0.003	ug/L	0.000	15	35	168	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:32:38
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1346626	1
	Be	9	48.465	ug/L	1.536	3	18	225606	1
	C	13		ug/L			115227	105240	1
	Cl	37		ug/L			5056971	5527938	0
>	Sc	45		ug/L			1150108	1151017	0
	V	51	46.275	ug/L	1.012	2	6633	944092	1
	V-1	51	46.193	ug/L	0.625	1	59	934376	1
	Cr	52	47.279	ug/L	1.908	4	19531	768126	3
	Cr	53	46.987	ug/L	0.727	1	104	83691	1
	Mn	55	45.794	ug/L	0.361	0	477	1017680	0
	Co	59	45.928	ug/L	0.419	0	69	664121	1
>	Ge	72		ug/L			432270	400589	2
	Ni	60	50.065	ug/L	1.290	2	81	137250	0
	Ni	62	49.669	ug/L	1.447	2	65	19040	0
	Cu	63	50.731	ug/L	2.773	5	73	296993	3
	Cu	65	50.210	ug/L	1.075	2	32	129541	0
	Zn	66	49.291	ug/L	1.809	3	220	75920	1
	Zn	67	49.307	ug/L	0.644	1	39	12701	1
	Zn	68	50.174	ug/L	2.203	4	626	54229	2
	As	75	50.185	ug/L	1.275	2	1266	70123	0
	As-1	75	49.803	ug/L	1.409	2	6603	72432	1
	Se	82	55.062	ug/L	1.261	2	-10	8444	0
	Se	78	50.766	ug/L	1.666	3	6721	25118	0
	Mo	98	48.943	ug/L	2.030	4	26	186764	1
	Y	89		ug/L			327238	312565	0
	Kr	83		ug/L			1809	1735	2
>	In	115		ug/L			929401	954916	2
	Ag	107	41.661	ug/L	1.495	3	20	364690	2
	Cd	111	48.911	ug/L	0.689	1	75	224249	2
	Cd	114	49.077	ug/L	1.250	2	31	571317	0
	Sb	121	46.646	ug/L	1.416	3	417	710094	1
	Sb	123	46.388	ug/L	1.145	2	326	533894	0
	Ba	135	49.744	ug/L	0.783	1	23	202306	1
	Ba	137	49.787	ug/L	0.982	1	45	345633	1
>	Tb	159		ug/L			920152	943763	1
	Tl	205	49.234	ug/L	0.715	1	78	1528700	0
	Pb	208	50.449	ug/L	0.552	1	146	2056369	0
	Bi	209		ug/L			2152313	2220760	0
	Th	232	51.768	ug/L	2.976	5	1253	2107687	5
	U	238	52.785	ug/L	1.236	2	35	2254461	0

110.17%

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:38:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1277391	2
	Be	9	-0.002	ug/L	0.001	51	18	8	43
	C	13		ug/L			115227	108343	1
	Cl	37		ug/L			5056971	5289005	3
>	Sc	45		ug/L			1150108	1081189	1
	V	51	0.015	ug/L	0.012	75	6633	6528	2
	V-1	51	0.001	ug/L	0.001	36	59	82	10
	Cr	52	0.061	ug/L	0.043	70	19531	19269	2
	Cr	53	0.011	ug/L	0.002	21	104	116	4
	Mn	55	0.001	ug/L	0.002	135	477	476	6
	Co	59	0.001	ug/L	0.001	192	69	72	16
>	Ge	72		ug/L			432270	388491	0
	Ni	60	-0.015	ug/L	0.002	14	81	32	17
	Ni	62	0.279	ug/L	0.027	9	65	162	6
	Cu	63	0.025	ug/L	0.003	13	73	206	8
	Cu	65	-0.000	ug/L	0.002	1451	32	28	20
	Zn	66	0.058	ug/L	0.035	60	220	283	17
	Zn	67	0.036	ug/L	0.029	81	39	44	15
	Zn	68	0.123	ug/L	0.024	19	626	690	3
	As	75	0.048	ug/L	0.037	77	1266	1202	4
	As-1	75	0.482	ug/L	0.097	20	6603	6556	0
	Se	82	-0.038	ug/L	0.254	670	-10	-15	250
	Se	78	1.691	ug/L	0.322	19	6721	6650	0
	Mo	98	0.011	ug/L	0.007	63	26	63	40
	Y	89		ug/L			327238	309388	1
	Kr	83		ug/L			1809	1711	2
>	In	115		ug/L			929401	910644	1
	Ag	107	0.002	ug/L	0.002	109	20	37	53
	Cd	111	0.002	ug/L	0.004	208	75	83	23
	Cd	114	0.002	ug/L	0.002	120	31	51	48
	Sb	121	0.081	ug/L	0.009	10	417	1577	7
	Sb	123	0.082	ug/L	0.009	11	326	1223	7
	Ba	135	0.001	ug/L	0.001	118	23	27	21
	Ba	137	0.001	ug/L	0.001	143	45	48	13
>	Tb	159		ug/L			920152	907615	1
	Tl	205	0.003	ug/L	0.001	43	78	178	25
	Pb	208	0.001	ug/L	0.001	122	146	186	28
	Bi	209		ug/L			2152313	2190486	0
	Th	232	0.074	ug/L	0.012	16	1253	4150	11
	U	238	0.002	ug/L	0.001	33	35	117	23

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5·11·12 Analyst: JLB Page: 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		ICB 0			2934-14
		1			2933-5
		2			2931-4
		3			↓ -5
		4			2934-9
		5			2931-7
		River Sample			r ≥ 0.9994 (Cd, Pb)
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		Low Check			
		ICSA			
		ICSAB			Cr Ni 123%
		B1			
		B2			
		CCV2			Re high
		CCB2			
		USGS MRB+SPK	REN	2	Cu
		↓ MRB2SPK	↓	↓	↓
		USGS J			Ag CAF
		↓ JDUP			0.2ppb #1, spk #2 (½) Ag
		USGS A			Cu
		↓ B	↓	↓	↓

US15 : 00312

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.11.12 **Analyst:** JB **Page:** 2 of 3

All corrections made by analyst unless otherwise noted. 5.11.12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US 61C	REN	2	CW
		H			
		I			
		J			
		CCV3			
		CCB3			62 Ni high
X	~~5/10/12~~ JB	US 15 MB1	REN	2	CV CB prep pre DI MB
	✓	MB2			
	✓	~~MB3~~			
	✓	~~MB4~~		b	
Z	X	~~22 Z Z Z~~		10	
	✓	A		2	CRI
	✓	ADUP			CAF ND. PB6
AIR		AIR ~~ASPK~~			Crude Pb + Ni + Cd AIR no surr
		~~APOST~~			0.06ppb Pb, 0.06ppb Cd (10)
		~~B~~			
AIR		AIR ~~CCV4~~			Sample probe issue
		~~CCB4~~			not run here
		CCV4			
		CCB4			
		US 15 ASPK	REN	2	Ni low 71.6% PB recovery for 20
		APOST			Ni CAF
		B			PBS 10X
		CCV5			

US15 : 00313

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.11.12 **Analyst:** JMP **Page:** 3 of 3

All corrections made by analyst unless otherwise noted. 5.15.12 JMP

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		CCB5		✓	
		US15 H	REN	2	rr Ag 10x rr Ge
		G-L		10	+ Ni
		G		2	
		GDUP			
		~~G10K~~			
Z		~~G10KF~~			0.01 ug/g Sc, Y, Tl (x10)
		I			
		C			
		A			CAF Ni
		ADUP			
		CCV4			62Ni OK by DRC 5/15/12 JMP
		CCB4			62Ni in by DRC
		Rinse/DI			

JMP 5/14/12

US15 : 00314

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.11.12

MZ	Analyst MS 5.15	Peer MS 5.15	Comment
Logbooks:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	see log
Samples:			
RSD's & SD's	✓	✓	see log
Internal Standards	✓	✓	↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	see log
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	✓	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	MS15 CAF
Matrix Duplicates	✓	✓	MS15 CAF
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	MZ 5.17.15

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/11/2012 11:06:48 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

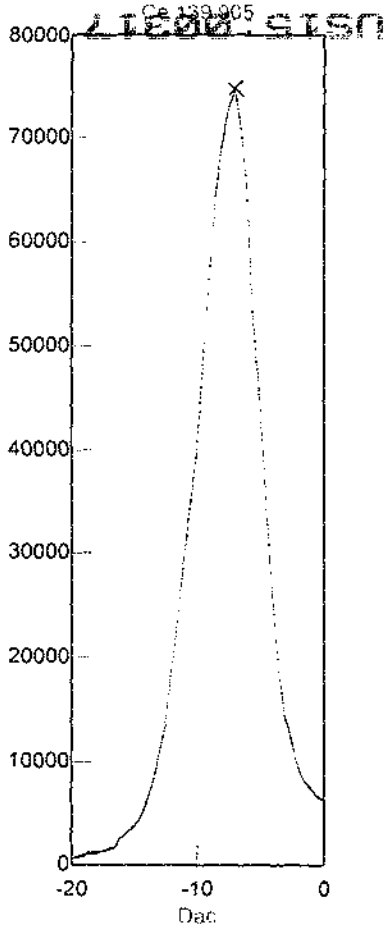
Initial Try

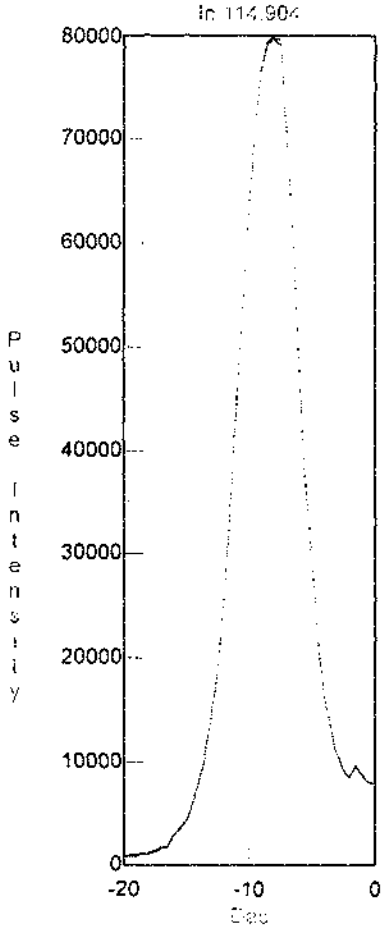
Obtained Intensity (Be 9.0122): 6949.17
Obtained Intensity (Mg 23.985): 48346.19
Obtained Intensity (In 114.904): 102382.11
Obtained Intensity (Pb 207.977): 40349.46
Obtained Intensity (U 238.05): 71184.42
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.021 (=1945.76 / 93860.95)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=1278.36 / 93860.95)

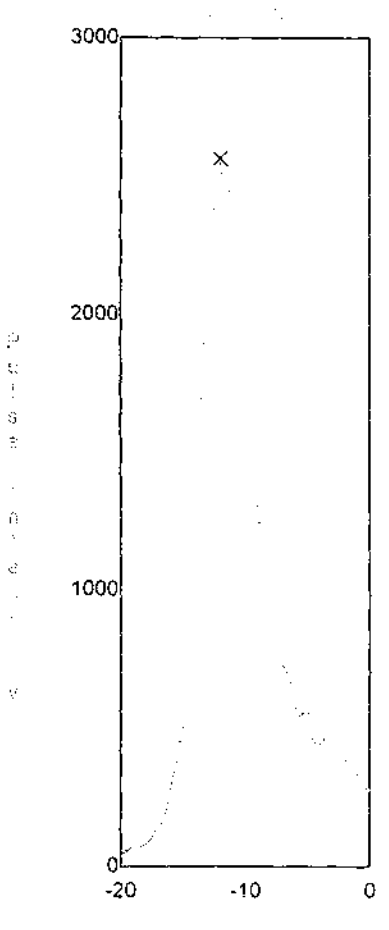
[Passed] Optimum value(s): N/A

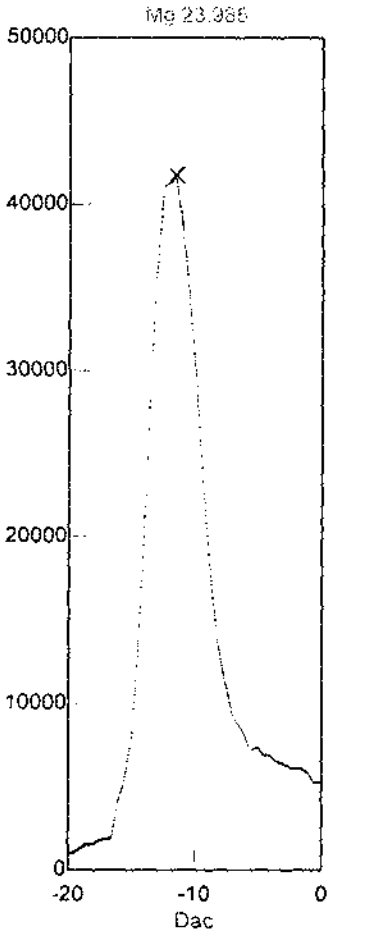
End Time: 5/11/2012 11:09:23 AM

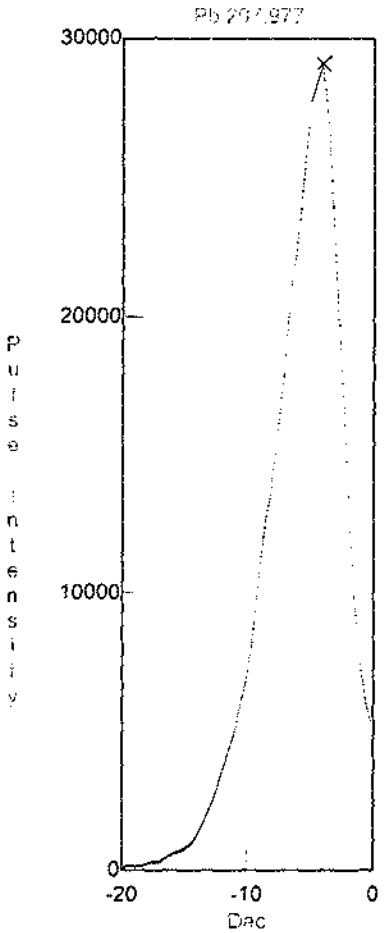
US15:00316

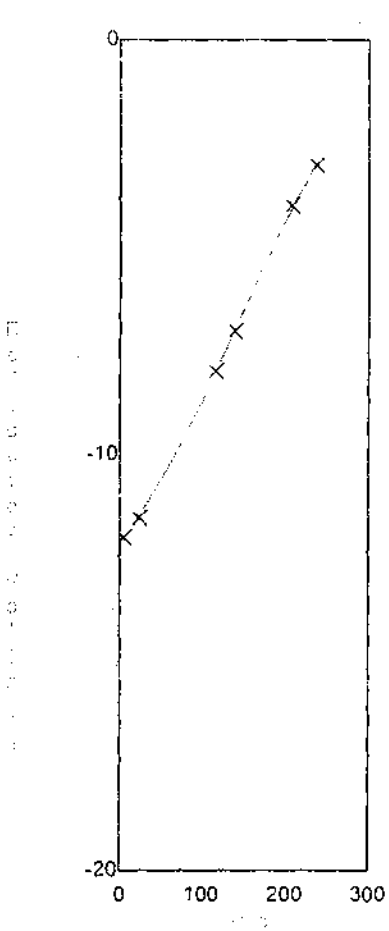

Ce 139.905
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 261.977
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


0
-10
-20
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/11/2012 10:38:24 AM
End Time: 5/11/2012 10:42:35 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.22

US15 : 00318

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/11/2012 10:33:37 AM
End Time: 5/11/2012 10:38:01 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.701)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.699)

US15:00319

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/11/2012 10:32:24 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.56 mm	-0.57 mm	72534.31

End Time: 5/11/2012 10:33:26 AM

US15 : 00326

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/11/2012 10:27:20 AM
End Time: 5/11/2012 10:29:55 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 4218.53
Obtained Intensity (Mg 23.985): 31349.13
Obtained Intensity (In 114.904): 58468.94
Obtained Intensity (Pb 207.977): 22394.39
Obtained Intensity (U 238.05): 43747.60
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=881.11 / 57258.52)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=780.10 / 57258.52)

US15 : 00321

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:41:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1633546	1
	Be	9		ug/L				10	14
	C	13		ug/L				107220	2
	Cl	37		ug/L				5888067	3
>	Sc	45		ug/L				1420932	1
	V	51		ug/L				8382	0
	V-1	51		ug/L				237	2
	Cr	52		ug/L				24727	0
	Cr	53		ug/L				189	10
	Mn	55		ug/L				577	0
	Co	59		ug/L				72	6
>	Ge	72		ug/L				673872	1
	Ni	60		ug/L				128	9
	Ni	62		ug/L				326	1
	Cu	63		ug/L				417	3
	Cu	65		ug/L				53	15
	Zn	66		ug/L				309	1
	Zn	67		ug/L				51	4
	Zn	68		ug/L				727	1
	As	75		ug/L				1616	2
	As-1	75		ug/L				9903	0
	Se	82		ug/L				-46	108
	Se	78		ug/L				10084	0
	Mo	98		ug/L				25	9
	Y	89		ug/L				452178	1
	Kr	83		ug/L				2458	4
>	In	115		ug/L				1233632	0
	Ag	107		ug/L				39	32
	Cd	111		ug/L				133	1
	Cd	114		ug/L				38	7
	Sb	121		ug/L				94	12
	Sb	123		ug/L				60	16
	Ba	135		ug/L				218	8
	Ba	137		ug/L				388	0
>	Tb	159		ug/L				1368167	1
	Tl	205		ug/L				31	12
	Pb	208		ug/L				215	5
	Bi	209		ug/L				3022716	0
	Th	232		ug/L				209	4
	U	238		ug/L				12	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:45:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1615601	2
	Be	9	0.200	ug/L	0.012	5	10	1081	5
	C	13		ug/L			107220	117494	0
	Cl	37		ug/L			5888067	5940247	1
>	Sc	45		ug/L			1420932	1398806	0
	V	51	0.200	ug/L	0.004	2	8382	13884	0
	V-1	51	0.200	ug/L	0.002	0	237	5555	1
	Cr	52	0.500	ug/L	0.029	5	24727	36297	1
	Cr	53	0.500	ug/L	0.015	2	189	1438	2
	Mn	55	0.500	ug/L	0.014	2	577	15660	2
	Co	59	0.200	ug/L	0.006	2	72	4420	2
>	Ge	72		ug/L			673872	678934	0
	Ni	60	0.500	ug/L	0.011	2	128	2339	1
	Ni	62	0.500	ug/L	0.025	4	326	666	2
	Cu	63	0.500	ug/L	0.011	2	417	5560	1
	Cu	65	0.500	ug/L	0.004	0	53	2379	1
	Zn	66	4.000	ug/L	0.057	1	309	11115	1
	Zn	67	4.000	ug/L	0.097	2	51	1694	1
	Zn	68	4.000	ug/L	0.064	1	727	8131	1
	As	75	0.200	ug/L	0.003	1	1616	2053	1
	As-1	75	0.200	ug/L	0.076	37	9903	10318	0
	Se	82	0.500	ug/L	0.030	6	-46	100	9
	Se	78	0.500	ug/L	0.332	66	10084	10360	0
	Mo	98	0.200	ug/L	0.005	2	25	1147	2
	Y	89		ug/L			452178	465980	0
	Kr	83		ug/L			2458	2361	0
>	In	115		ug/L			1233632	1243578	0
	Ag	107	0.200	ug/L	0.011	5	39	2765	5
	Cd	111	0.100	ug/L	0.002	1	133	779	0
	Cd	114	0.100	ug/L	0.005	5	38	1650	4
	Sb	121	0.200	ug/L	0.006	2	94	3778	3
	Sb	123	0.200	ug/L	0.002	0	60	2837	1
	Ba	135	0.500	ug/L	0.006	1	218	2823	0
	Ba	137	0.500	ug/L	0.003	0	388	4887	1
>	Tb	159		ug/L			1368167	1372110	0
	Tl	205	0.200	ug/L	0.004	1	31	8977	1
	Pb	208	0.100	ug/L	0.003	3	215	6194	2
	Bi	209		ug/L			3022716	3066398	0
	Th	232	0.200	ug/L	0.002	1	209	8933	1
	U	238	0.200	ug/L	0.003	1	12	10993	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:49:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1681684	0
	Be	9	10.000	ug/L	0.003	0	10	53753	0
	C	13		ug/L			107220	119291	0
	Cl	37		ug/L			5888067	5954339	2
>	Sc	45		ug/L			1420932	1482485	1
	V	51	10.000	ug/L	0.096	0	8382	274293	0
	V-1	51	10.000	ug/L	0.222	2	237	265911	1
	Cr	52	9.997	ug/L	0.021	0	24727	250325	1
	Cr	53	9.999	ug/L	0.407	4	189	25606	3
	Mn	55	10.000	ug/L	0.087	0	577	314625	1
	Co	59	10.000	ug/L	0.160	1	72	220230	1
>	Ge	72		ug/L			673872	695763	0
	Ni	60	10.001	ug/L	0.051	0	128	47659	0
	Ni	62	9.999	ug/L	0.152	1	326	6925	1
	Cu	63	9.999	ug/L	0.169	1	417	103385	1
	Cu	65	9.999	ug/L	0.163	1	53	45056	2
	Zn	66	10.037	ug/L	0.187	1	309	28760	2
	Zn	67	10.142	ug/L	0.243	2	51	4737	2
	Zn	68	10.063	ug/L	0.105	1	727	20606	0
	As	75	10.000	ug/L	0.167	1	1616	25636	1
	As-1	75	10.001	ug/L	0.155	1	9903	33120	1
	Se	82	10.000	ug/L	0.082	0	-46	2974	0
	Se	78	10.009	ug/L	0.288	2	10084	16881	0
	Mo	98	10.000	ug/L	0.021	0	25	57026	0
	Y	89		ug/L			452178	470829	0
	Kr	83		ug/L			2458	2364	1
>	In	115		ug/L			1233632	1257178	1
	Ag	107	10.000	ug/L	0.275	2	39	141471	2
	Cd	111	10.000	ug/L	0.127	1	133	63890	0
	Cd	114	10.000	ug/L	0.165	1	38	157184	0
	Sb	121	10.000	ug/L	0.129	1	94	192719	0
	Sb	123	10.000	ug/L	0.107	1	60	145939	0
	Ba	135	10.000	ug/L	0.095	0	218	52752	2
	Ba	137	9.999	ug/L	0.139	1	388	89418	0
>	Tb	159		ug/L			1368167	1409840	1
	Tl	205	10.000	ug/L	0.149	1	31	444259	0
	Pb	208	10.000	ug/L	0.150	1	215	581453	0
	Bi	209		ug/L			3022716	3092112	1
	Th	232	10.000	ug/L	0.405	4	209	496634	2
	U	238	10.000	ug/L	0.135	1	12	558572	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:53:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1672859	4
	Be	9	20.037	ug/L	0.687	3	10	107821	1
	C	13		ug/L			107220	120316	2
	Cl	37		ug/L			5888067	5943636	3
>	Sc	45		ug/L			1420932	1451130	2
	V	51	20.192	ug/L	0.550	2	8382	554155	0
	V-1	51	20.190	ug/L	0.547	2	237	545855	0
	Cr	52	20.101	ug/L	0.359	1	24727	476144	0
	Cr	53	20.096	ug/L	0.374	1	189	51149	1
	Mn	55	20.036	ug/L	0.474	2	577	620727	1
	Co	59	20.071	ug/L	0.206	1	72	438864	1
>	Ge	72		ug/L			673872	696343	2
	Ni	60	19.926	ug/L	0.246	1	128	93501	1
	Ni	62	20.018	ug/L	0.882	4	326	13578	1
	Cu	63	19.964	ug/L	0.407	2	417	204652	1
	Cu	65	20.042	ug/L	0.441	2	53	91061	0
	Zn	66	19.889	ug/L	0.359	1	309	55649	1
	Zn	67	20.061	ug/L	0.813	4	51	9416	1
	Zn	68	19.926	ug/L	0.544	2	727	39594	1
	As	75	20.014	ug/L	0.400	1	1616	49807	2
	As-1	75	20.051	ug/L	0.511	2	9903	56637	2
	Se	82	19.889	ug/L	0.467	2	-46	5835	0
	Se	78	20.038	ug/L	0.835	4	10084	23473	0
	Mo	98	20.108	ug/L	0.538	2	25	117216	1
	Y	89		ug/L			452178	458752	0
	Kr	83		ug/L			2458	2334	1
>	In	115		ug/L			1233632	1251671	0
	Ag	107	19.851	ug/L	0.297	1	39	271495	1
	Cd	111	20.024	ug/L	0.357	1	133	127865	1
	Cd	114	20.037	ug/L	0.056	0	38	315913	0
	Sb	121	20.009	ug/L	0.221	1	94	384595	1
	Sb	123	20.013	ug/L	0.133	0	60	291522	1
	Ba	135	20.033	ug/L	0.190	0	218	105687	0
	Ba	137	20.062	ug/L	0.149	0	388	180443	0
>	Tb	159		ug/L			1368167	1394837	0
	Tl	205	20.067	ug/L	0.158	0	31	894016	0
	Pb	208	20.065	ug/L	0.066	0	215	1169383	0
	Bi	209		ug/L			3022716	3031431	0
	Th	232	20.197	ug/L	0.489	2	209	1033347	2
	U	238	20.118	ug/L	0.074	0	12	1138839	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:58:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1689687	1
	Be	9	49.677	ug/L	1.788	3	10	261767	3
	C	13		ug/L			107220	115844	1
	Cl	37		ug/L			5888067	6158685	3
>	Sc	45		ug/L			1420932	1451743	1
	V	51	49.780	ug/L	1.146	2	8382	1326059	3
	V-1	51	49.808	ug/L	0.877	1	237	1322050	2
	Cr	52	49.818	ug/L	0.686	1	24727	1123594	2
	Cr	53	49.910	ug/L	1.384	2	189	125684	1
	Mn	55	49.929	ug/L	1.041	2	577	1535961	1
	Co	59	49.857	ug/L	1.377	2	72	1075212	3
>	Ge	72		ug/L			673872	681872	1
	Ni	60	50.030	ug/L	1.217	2	128	230380	1
	Ni	62	49.821	ug/L	1.681	3	326	32043	1
	Cu	63	49.831	ug/L	1.055	2	417	491329	0
	Cu	65	49.933	ug/L	1.368	2	53	220626	1
	Zn	66	49.961	ug/L	2.061	4	309	135883	2
	Zn	67	49.644	ug/L	0.645	1	51	21998	0
	Zn	68	49.923	ug/L	0.504	1	727	95352	0
	As	75	49.941	ug/L	0.818	1	1616	118575	0
	As-1	75	50.092	ug/L	0.675	1	9903	124603	1
	Se	82	49.712	ug/L	0.659	1	-46	13954	0
	Se	78	50.312	ug/L	0.246	0	10084	43354	1
	Mo	98	49.789	ug/L	0.990	1	25	278365	1
	Y	89		ug/L			459178	462066	0
	Kr	83		ug/L			2458	2410	1
>	In	115		ug/L			1233632	1232976	0
	Ag	107	49.892	ug/L	0.690	1	39	664940	1
	Cd	111	49.822	ug/L	0.676	1	133	307719	1
	Cd	114	49.792	ug/L	0.117	0	38	757531	0
	Sb	121	49.785	ug/L	0.410	0	94	922621	0
	Sb	123	49.760	ug/L	0.324	0	60	697183	0
	Ba	135	50.000	ug/L	0.702	1	218	259510	1
	Ba	137	50.057	ug/L	0.225	0	388	445462	0
>	Tb	159		ug/L			1368167	1408226	1
	Tl	205	49.959	ug/L	0.358	0	31	2237867	0
	Pb	208	49.727	ug/L	0.722	1	215	2847548	0
	Bi	209		ug/L			3022716	3008400	0
	Th	232	50.112	ug/L	1.248	2	209	2616994	1
	U	238	49.963	ug/L	0.941	1	12	2844425	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:04:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1613507	2
	Be	9	100.429	ug/L	1.216	1	10	512588	1
	C	13		ug/L			107220	117960	0
	Cl	37		ug/L			5888067	6121899	0
>	Sc	45		ug/L			1420932	1439658	0
	V	51	101.391	ug/L	0.849	0	8382	2798520	0
	V-1	51	101.200	ug/L	1.079	1	237	2774370	1
	Cr	52	100.782	ug/L	2.663	2	24727	2287147	2
	Cr	53	100.105	ug/L	1.047	1	189	250724	1
	Mn	55	100.595	ug/L	1.379	1	577	3130605	1
	Co	59	100.635	ug/L	1.766	1	72	2198800	2
>	Ge	72		ug/L			673872	676164	0
	Ni	60	100.173	ug/L	1.680	1	128	460014	1
	Ni	62	100.238	ug/L	0.960	0	326	64127	0
	Cu	63	99.978	ug/L	0.562	0	417	976610	1
	Cu	65	99.316	ug/L	0.401	0	53	425523	0
	Zn	66	99.614	ug/L	1.780	1	309	265075	1
	Zn	67	99.808	ug/L	1.164	1	51	43536	1
	Zn	68	99.786	ug/L	1.713	1	727	186957	1
	As	75	99.880	ug/L	1.044	1	1616	232645	0
	As-1	75	99.943	ug/L	1.013	1	9903	236226	0
	Se	82	99.645	ug/L	0.045	0	-46	27461	0
	Se	78	99.934	ug/L	1.552	1	10084	75266	1
	Mo	98	100.804	ug/L	1.199	1	25	574283	1
	Y	89		ug/L			452178	467175	1
	Kr	83		ug/L			2458	2468	0
>	In	115		ug/L			1233632	1202300	1
	Ag	107	99.949	ug/L	2.941	2	39	1296654	2
	Cd	111	99.907	ug/L	0.757	0	133	599730	1
	Cd	114	100.092	ug/L	0.538	0	38	1489382	0
	Sb	121	100.762	ug/L	1.287	1	94	1868075	0
	Sb	123	100.966	ug/L	1.589	1	60	1425203	1
	Ba	135	100.542	ug/L	0.513	0	218	517961	0
	Ba	137	100.586	ug/L	1.641	1	388	889767	0
>	Tb	159		ug/L			1368167	1384264	1
	Tl	205	99.855	ug/L	0.886	0	31	4375559	0
	Pb	208	100.195	ug/L	1.306	1	215	5676706	0
	Bi	209		ug/L			3022716	2917086	0
	Th	232	100.350	ug/L	1.601	1	209	5212258	0
	U	238	100.126	ug/L	1.966	1	12	5626796	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:10:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1610812	0
	Be	9	0.004	ug/L	0.002	52	10	32	35
	C	13		ug/L			107220	108711	0
	Cl	37		ug/L			5888067	6111018	3
>	Sc	45		ug/L			1420932	1428244	0
	V	51	0.026	ug/L	0.022	85	8382	9147	6
	V-1	51	0.012	ug/L	0.023	187	237	578	110
	Cr	52	0.067	ug/L	0.033	49	24727	26352	3
	Cr	53	0.019	ug/L	0.034	181	189	237	36
	Mn	55	0.016	ug/L	0.030	185	577	1085	86
	Co	59	0.016	ug/L	0.028	170	72	425	141
>	Ge	72		ug/L			673872	670341	1
	Ni	60	-0.001	ug/L	0.025	1977	128	123	95
	Ni	62	0.357	ug/L	0.034	9	326	549	4
	Cu	63	0.037	ug/L	0.013	35	417	777	18
	Cu	65	0.008	ug/L	0.017	209	53	88	85
	Zn	66	0.019	ug/L	0.018	93	309	358	15
	Zn	67	-0.001	ug/L	0.002	185	51	51	3
	Zn	68	0.025	ug/L	0.010	39	727	769	3
	As	75	0.021	ug/L	0.006	30	1616	1655	1
	As-1	75	0.044	ug/L	0.030	68	9903	9948	1
	Se	82	0.071	ug/L	0.040	55	-46	-26	38
	Se	78	0.117	ug/L	0.117	100	10084	10106	1
	Mo	98	0.017	ug/L	0.005	27	25	122	21
	Y	89		ug/L			452178	452208	1
	Kr	83		ug/L			2458	2415	0
>	In	115		ug/L			1233632	1223209	0
	Ag	107	0.002	ug/L	0.002	112	39	68	49
	Cd	111	0.000	ug/L	0.002	466	133	135	10
	Cd	114	0.001	ug/L	0.001	59	38	60	22
	Sb	121	0.058	ug/L	0.012	20	94	1178	19
	Sb	123	0.059	ug/L	0.012	20	60	908	18
	Ba	135	0.002	ug/L	0.004	252	218	225	9
	Ba	137	-0.001	ug/L	0.002	193	388	376	3
>	Tb	159		ug/L			1368167	1339613	0
	Tl	205	0.008	ug/L	0.001	7	31	380	7
	Pb	208	0.001	ug/L	0.001	60	215	279	14
	Bi	209		ug/L			3022716	3028523	0
	Th	232	0.137	ug/L	0.018	12	209	7090	12
	U	238	0.003	ug/L	0.001	29	12	159	27

Sample Information

Sample Date/Time: Friday, May 11, 2012 12:04:01
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9997**	0.019	0.20	10	20	50	100
V-1	51	**0.9997**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.016	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.022	0.50	10	20	50	100
Co	59	**0.9999**	0.015	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.014	0.50	10	20	50	100
Cu	65	**0.9999**	0.006	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**1.0000**	0.001	4.00	10	20	50	100
Zn	68	**1.0000**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9994**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.011	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**0.9999**	0.015	0.20	10	20	50	100
Sb	123	**0.9998**	0.012	0.20	10	20	50	100
Ba	135	**1.0000**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**1.0000**	0.032	0.20	10	20	50	100
Pb	208	**1.0000**	0.041	0.10	10	20	50	100
Bi	209							
Th	232	**1.0000**	0.038	0.20	10	20	50	100
U	238	**1.0000**	0.041	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:25:11
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1633509	0
	Be	9	51.658	ug/L	0.431	0	10	266986	0
	C	13		ug/L			107220	116389	3
	Cl	37		ug/L			5888067	5951471	1
>	Sc	45		ug/L			1420932	1463758	0
	V	51	49.569	ug/L	0.356	0	8382	1395526	1
	V-1	51	49.736	ug/L	0.231	0	237	1386448	0
	Cr	52	50.213	ug/L	0.514	1	24727	1171485	1
	Cr	53	50.806	ug/L	0.885	1	189	129474	1
	Mn	55	49.244	ug/L	0.637	1	577	1558447	1
	Co	59	51.629	ug/L	0.647	1	72	1146960	1
>	Ge	72		ug/L			673872	700417	3
	Ni	60	48.952	ug/L	0.844	1	128	232880	2
	Ni	62	49.461	ug/L	1.680	3	326	32927	1
	Cu	63	50.135	ug/L	1.561	3	417	507220	1
	Cu	65	50.028	ug/L	1.904	3	53	221892	1
	Zn	66	47.951	ug/L	1.299	2	309	132273	0
	Zn	67	49.373	ug/L	1.012	2	51	22325	1
	Zn	68	49.305	ug/L	2.150	4	727	95991	1
	As	75	49.266	ug/L	0.862	1	1616	119679	1
	As-1	75	48.589	ug/L	1.304	2	9903	124194	0
	Se	82	80.088	ug/L	1.484	1	-46	21753	1
	Se	78	75.959	ug/L	3.045	4	10084	61703	0
	Mo	98	48.875	ug/L	1.246	2	25	288289	0
	Y	89		ug/L			452178	468128	2
	Kr	83		ug/L			2458	2472	0
>	In	115		ug/L			1233632	1246340	0
	Ag	107	50.163	ug/L	0.849	1	39	674633	1
	Cd	111	49.660	ug/L	0.678	1	133	309070	1
	Cd	114	49.015	ug/L	0.450	0	38	756094	0
	Sb	121	47.703	ug/L	0.501	1	94	916895	0
	Sb	123	47.673	ug/L	0.397	0	60	697634	0
	Ba	135	49.309	ug/L	0.520	1	218	263445	0
	Ba	137	49.411	ug/L	0.394	0	388	453326	0
>	Tb	159		ug/L			1368167	1400713	1
	Tl	205	51.119	ug/L	0.439	0	31	2266625	0
	Pb	208	49.741	ug/L	0.392	0	215	2851892	0
	Bi	209		ug/L			3022716	3003278	0
	Th	232	51.300	ug/L	0.437	0	209	2696742	1
	U	238	51.305	ug/L	0.324	0	12	2917904	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:30:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1585606	1
	Be	9	0.003	ug/L	0.001	21	10	26	12
	C	13		ug/L			107220	106729	1
	Cl	37		ug/L			5888067	6079625	1
>	Sc	45		ug/L			1420932	1438523	1
	V	51	0.011	ug/L	0.002	23	8382	8784	1
	V-1	51	-0.001	ug/L	0.001	146	237	220	14
	Cr	52	0.037	ug/L	0.010	28	24727	25859	1
	Cr	53	-0.003	ug/L	0.003	100	189	183	3
	Mn	55	-0.001	ug/L	0.000	15	577	561	1
	Co	59	0.000	ug/L	0.000	238	72	74	6
>	Ge	72		ug/L			673872	675390	1
	Ni	60	-0.015	ug/L	0.002	11	128	59	12
	Ni	62	0.107	ug/L	0.048	44	326	395	6
	Cu	63	0.008	ug/L	0.004	46	417	499	6
	Cu	65	0.000	ug/L	0.003	893	53	54	25
	Zn	66	0.008	ug/L	0.005	64	309	331	2
	Zn	67	-0.003	ug/L	0.004	147	51	50	4
	Zn	68	0.023	ug/L	0.018	76	727	771	4
	As	75	0.006	ug/L	0.018	304	1616	1633	3
	As-1	75	0.032	ug/L	0.039	122	9903	9998	1
	Se	82	0.077	ug/L	0.030	39	-46	-26	30
	Se	78	0.092	ug/L	0.128	138	10084	10167	1
	Mo	98	0.012	ug/L	0.002	18	25	93	12
	Y	89		ug/L			452178	460735	0
	Kr	83		ug/L			2458	2400	2
>	In	115		ug/L			1233632	1223919	0
	Ag	107	0.001	ug/L	0.002	154	39	55	47
	Cd	111	-0.001	ug/L	0.002	195	133	127	7
	Cd	114	0.001	ug/L	0.001	102	38	49	23
	Sb	121	0.027	ug/L	0.006	23	94	604	20
	Sb	123	0.027	ug/L	0.009	31	60	450	27
	Ba	135	-0.001	ug/L	0.003	441	218	213	7
	Ba	137	-0.002	ug/L	0.002	130	388	370	5
>	Tb	159		ug/L			1368167	1334722	0
	Tl	205	0.004	ug/L	0.000	9	31	204	8
	Pb	208	0.001	ug/L	0.000	48	215	266	10
	Bi	209		ug/L			3022716	3008378	0
	Th	232	0.100	ug/L	0.017	17	209	5192	16
	U	238	0.002	ug/L	0.000	11	12	115	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:34:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1650190	1
	Be	9	49.795	ug/L	0.381	0	10	259966	1
	C	13		ug/L			107220	108824	1
	Cl	37		ug/L			5888067	6083796	1
>	Sc	45		ug/L			1420932	1497620	1
	V	51	46.683	ug/L	1.251	2	8382	1344988	2
	V-1	51	46.811	ug/L	1.357	2	237	1334903	2
	Cr	52	47.528	ug/L	1.060	2	24727	1135691	1
	Cr	53	47.986	ug/L	1.184	2	189	125107	1
	Mn	55	47.055	ug/L	0.880	1	577	1523534	1
	Co	59	47.204	ug/L	0.844	1	72	1072742	0
>	Ge	72		ug/L			673872	680016	1
	Ni	60	49.190	ug/L	0.130	0	128	227261	1
	Ni	62	50.297	ug/L	0.477	0	326	32522	0
	Cu	63	49.892	ug/L	0.806	1	417	490271	0
	Cu	65	50.975	ug/L	1.223	2	53	219630	1
	Zn	66	49.612	ug/L	0.601	1	309	132919	0
	Zn	67	51.280	ug/L	1.493	2	51	22515	1
	Zn	68	50.964	ug/L	0.988	1	727	96378	1
	As	75	49.913	ug/L	0.861	1	1616	117724	0
	As-1	75	49.912	ug/L	1.166	2	9903	123628	0
	Se	82	52.723	ug/L	0.466	0	-46	13892	0
	Se	78	50.203	ug/L	1.354	2	10084	43064	0
	Mo	98	47.936	ug/L	0.884	1	25	274624	0
	Y	89		ug/L			452178	465245	2
	Kr	83		ug/L			2458	2400	2
>	In	115		ug/L			1233632	1235825	2
	Ag	107	49.125	ug/L	1.449	2	39	654829	0
	Cd	111	49.584	ug/L	0.743	1	133	305931	0
	Cd	114	49.562	ug/L	1.185	2	38	757819	0
	Sb	121	48.298	ug/L	1.161	2	94	920192	0
	Sb	123	47.998	ug/L	1.049	2	60	696249	0
	Ba	135	48.669	ug/L	0.877	1	218	257772	0
	Ba	137	48.304	ug/L	1.415	2	388	439256	0
>	Tb	159		ug/L			1368167	1390835	0
	Tl	205	50.617	ug/L	0.430	0	31	2228602	0
	Pb	208	49.668	ug/L	0.298	0	215	2827726	0
	Bi	209		ug/L			3022716	2999599	0
	Th	232	50.556	ug/L	0.755	1	209	2638631	0
	U	238	51.192	ug/L	0.518	1	12	2890819	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:39:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1588845	1
[	Be	9	0.002	ug/L	0.001	70	10	20	34
	C	13		ug/L			107220	107372	2
	Cl	37		ug/L			5888067	5953035	1
[>	Sc	45		ug/L			1420932	1432635	1
[	V	51	0.019	ug/L	0.003	15	8382	8959	1
[	V-1	51	-0.001	ug/L	0.000	20	237	210	2
[	Cr	52	0.061	ug/L	0.011	17	24727	26297	1
[	Cr	53	-0.007	ug/L	0.000	6	189	173	1
[	Mn	55	-0.001	ug/L	0.000	49	577	561	2
[	Co	59	-0.000	ug/L	0.000	64	72	64	9
[>	Ge	72		ug/L			673872	678893	0
[	Ni	60	-0.017	ug/L	0.002	9	128	48	16
[	Ni	62	0.091	ug/L	0.049	54	326	386	8
[	Cu	63	0.009	ug/L	0.002	24	417	504	4
[	Cu	65	0.000	ug/L	0.003	915	53	54	21
[	Zn	66	0.006	ug/L	0.007	122	309	326	5
[	Zn	67	0.005	ug/L	0.012	229	51	54	9
[	Zn	68	0.024	ug/L	0.011	48	727	777	3
[	As	75	0.018	ug/L	0.032	176	1616	1670	3
[	As-1	75	0.037	ug/L	0.046	126	9903	10060	0
[	Se	82	0.107	ug/L	0.056	52	-46	-18	79
[	Se	78	0.104	ug/L	0.186	177	10084	10227	0
[	Mo	98	0.013	ug/L	0.001	5	25	99	4
	Y	89		ug/L			452178	455315	1
	Kr	83		ug/L			2458	2421	3
[>	In	115		ug/L			1233632	1224396	1
[	Ag	107	0.000	ug/L	0.001	903	39	39	21
[	Cd	111	0.000	ug/L	0.002	1993	133	133	7
[	Cd	114	0.000	ug/L	0.000	3128	38	38	12
[	Sb	121	0.071	ug/L	0.001	1	94	1436	0
[	Sb	123	0.071	ug/L	0.002	3	60	1087	4
[	Ba	135	0.003	ug/L	0.004	151	218	232	11
[	Ba	137	-0.000	ug/L	0.002	685	388	383	3
[>	Tb	159		ug/L			1368167	1323420	0
[	Tl	205	0.004	ug/L	0.000	7	31	200	6
[	Pb	208	0.001	ug/L	0.000	41	215	241	5
[	Bi	209		ug/L			3022716	3024172	1
[	Th	232	0.132	ug/L	0.031	23	209	6767	22
[	U	238	0.002	ug/L	0.000	18	12	138	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:43:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1571800	1
	Be	9	0.217	ug/L	0.012	5	10	1090	6
	C	13		ug/L			107220	113707	2
	Cl	37		ug/L			5888067	6008386	1
>	Sc	45		ug/L			1420932	1448382	1
	V	51	0.198	ug/L	0.011	5	8382	14018	1
	V-1	51	0.193	ug/L	0.002	0	237	5559	1
	Cr	52	0.531	ug/L	0.040	7	24727	37195	1
	Cr	53	0.518	ug/L	0.007	1	189	1498	2
	Mn	55	0.496	ug/L	0.010	2	577	16122	0
	Co	59	0.198	ug/L	0.003	1	72	4424	2
>	Ge	72		ug/L			673872	683079	0
	Ni	60	0.484	ug/L	0.015	3	128	2376	3
	Ni	62	0.499	ug/L	0.032	6	326	652	3
	Cu	63	0.529	ug/L	0.004	0	417	5639	1
	Cu	65	0.540	ug/L	0.007	1	53	2391	0
	Zn	66	4.066	ug/L	0.061	1	309	11231	0
	Zn	67	3.771	ug/L	0.094	2	51	1711	2
	Zn	68	3.960	ug/L	0.079	2	727	8203	1
	As	75	0.195	ug/L	0.042	21	1616	2093	4
	As-1	75	0.139	ug/L	0.028	19	9903	10357	0
	Se	82	0.639	ug/L	0.066	10	-46	122	14
	Se	78	0.322	ug/L	0.040	12	10084	10434	0
	Mo	98	0.193	ug/L	0.006	3	25	1136	3
	Y	89		ug/L			452178	456374	1
	Kr	83		ug/L			2458	2387	1
>	In	115		ug/L			1233632	1236595	0
	Ag	107	0.197	ug/L	0.001	0	39	2673	0
	Cd	111	0.109	ug/L	0.005	4	133	803	2
	Cd	114	0.104	ug/L	0.001	1	38	1630	1
	Sb	121	0.213	ug/L	0.005	2	94	4150	2
	Sb	123	0.213	ug/L	0.001	0	60	3148	0
	Ba	135	0.445	ug/L	0.004	0	218	2577	0
	Ba	137	0.443	ug/L	0.014	3	388	4417	2
>	Tb	159		ug/L			1368167	1327033	1
	Tl	205	0.209	ug/L	0.008	3	31	8813	2
	Pb	208	0.113	ug/L	0.004	3	215	6323	2
	Bi	209		ug/L			3022716	3020615	0
	Th	232	0.232	ug/L	0.010	4	209	11773	3
	U	238	0.204	ug/L	0.007	3	12	11001	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:48:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1646452	1
	Be	9	0.002	ug/L	0.001	51	10	21	24
	C	13		ug/L			107220	240241	3
	Cl	37		ug/L			5886067	15574543	1
>	Sc	45		ug/L			1420932	1447311	1
	V	51	0.107	ug/L	0.025	23	8382	11502	6
	V-1	51	0.809	ug/L	0.006	0	237	22541	0
	Cr	52	0.862	ug/L	0.066	7	24727	44641	2
	Cr	53	3.332	ug/L	0.071	2	189	8574	1
	Mn	55	0.090	ug/L	0.002	1	577	3409	1
	Co	59	0.020	ug/L	0.000	1	72	502	1
>	Ge	72		ug/L			673872	657513	2
	Ni	60	0.368	ug/L	0.014	3	128	1767	1
	Ni	62	5.190	ug/L	0.831	16	326	3537	16
	Cu	63	1.185	ug/L	0.064	5	417	11669	7
	Cu	65	0.358	ug/L	0.009	2	53	1544	3
	Zn	66	0.674	ug/L	0.028	4	309	2044	4
	Zn	67	5.796	ug/L	0.179	3	51	2506	3
	Zn	68	0.163	ug/L	0.020	11	727	1005	2
	As	75	0.043	ug/L	0.026	60	1616	1672	1
	As-1	75	0.272	ug/L	0.106	38	9903	10259	0
	Se	82	-0.228	ug/L	0.068	29	-46	-103	15
	Se	78	1.010	ug/L	0.256	25	9984	10477	0
	Mo	98	416.555	ug/L	3.248	0	25	2307404	1
	Y	89		ug/L			452178	460696	0
	Kr	83		ug/L			2458	2759	2
>	In	115		ug/L			1233632	1231851	0
	Ag	107	0.024	ug/L	0.001	5	39	352	4
	Cd	111	0.083	ug/L	0.013	16	133	645	13
	Cd	114	0.184	ug/L	0.006	3	38	2841	3
	Sb	121	0.057	ug/L	0.002	2	94	1174	2
	Sb	123	0.060	ug/L	0.001	2	60	927	2
	Ba	135	0.006	ug/L	0.004	56	218	250	7
	Ba	137	-0.001	ug/L	0.003	463	388	382	5
>	Tb	159		ug/L			1368167	1398371	0
	Tl	205	0.006	ug/L	0.003	53	31	278	47
	Pb	208	0.035	ug/L	0.001	2	215	2230	2
	Bi	209		ug/L			3022716	2811971	0
	Th	232	0.254	ug/L	0.106	41	209	13525	41
	U	238	0.002	ug/L	0.000	14	12	100	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:53:11
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1676843	1
[	Be	9	0.000	ug/L	0.001	339	10	12	30
	C	13		ug/L			107220	227869	1
	Cl	37		ug/L			5888067	15879559	1
[>	Sc	45		ug/L			1420932	1473806	1
[	V	51	0.029	ug/L	0.153	519	8382	9476	43
[	V-1	51	0.804	ug/L	0.012	1	237	22806	1
[	Cr	52	19.644	ug/L	0.637	3	24727	476896	1
[	Cr	53	22.622	ug/L	0.147	0	189	58152	1
[	Mn	55	18.997	ug/L	0.193	1	577	605660	0
[	Co	59	18.451	ug/L	0.177	0	72	412698	0
[>	Ge	72		ug/L			673872	666050	1
[	Ni	60	18.870	ug/L	0.423	2	128	85453	1
[	Ni	62	24.579	ug/L	0.370	1	326	15731	0
[	Cu	63	20.640	ug/L	0.794	3	417	198861	2
[	Cu	65	20.042	ug/L	0.475	2	53	84614	1
[	Zn	66	18.661	ug/L	0.328	1	309	49160	1
[	Zn	67	22.033	ug/L	0.383	1	51	9505	0
[	Zn	68	17.662	ug/L	0.170	0	727	33188	1
[	As	75	18.628	ug/L	0.294	1	1616	44035	0
[	As-1	75	19.209	ug/L	0.315	1	9903	52626	0
[	Se	82	-0.292	ug/L	0.024	8	-46	-121	5
[	Se	78	0.933	ug/L	0.159	17	10084	10565	0
[	Mo	98	435.187	ug/L	10.118	2	25	2441764	1
	Y	89		ug/L			452178	465224	1
	Kr	83		ug/L			2458	2925	1
[>	In	115		ug/L			1233632	1241672	0
[	Ag	107	20.503	ug/L	0.389	1	39	274730	1
[	Cd	111	19.070	ug/L	0.144	0	33	113325	0
[	Cd	114	18.892	ug/L	0.061	0	38	290362	0
[	Sb	121	0.066	ug/L	0.002	3	94	1365	3
[	Sb	123	0.068	ug/L	0.003	4	60	1052	4
[	Ba	135	0.009	ug/L	0.004	41	218	265	6
[	Ba	137	0.004	ug/L	0.004	94	388	431	8
[>	Tb	159		ug/L			1368167	1418857	0
[	Tl	205	0.003	ug/L	0.000	8	31	156	7
[	Pb	208	0.038	ug/L	0.000	0	215	2422	1
[	Bi	209		ug/L			3022716	2836612	0
[	Th	232	0.104	ug/L	0.023	22	209	5761	20
[	U	238	0.002	ug/L	0.000	13	12	99	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:58:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1607191	0
	Be	9	0.001	ug/L	0.001	96	10	13	22
	C	13		ug/L			107220	117869	1
	Cl	37		ug/L			5888067	5722222	0
>	Sc	45		ug/L			1420932	1387019	1
	V	51	0.025	ug/L	0.004	16	8382	8832	0
	V-1	51	0.046	ug/L	0.009	19	237	1454	15
	Cr	52	0.257	ug/L	0.020	7	24727	29691	0
	Cr	53	0.336	ug/L	0.020	5	189	995	3
	Mn	55	0.014	ug/L	0.002	12	577	994	4
	Co	59	0.000	ug/L	0.001	1039	72	71	15
>	Ge	72		ug/L			673872	668334	0
	Ni	60	0.019	ug/L	0.003	13	128	214	5
	Ni	62	0.287	ug/L	0.072	25	326	503	8
	Cu	63	0.057	ug/L	0.005	8	417	965	4
	Cu	65	0.042	ug/L	0.004	9	53	231	6
	Zn	66	0.749	ug/L	0.009	1	309	2274	0
	Zn	67	0.704	ug/L	0.016	2	51	354	1
	Zn	68	0.726	ug/L	0.024	3	727	2061	2
	As	75	0.067	ug/L	0.050	74	1616	1756	7
	As-1	75	0.020	ug/L	0.051	257	9903	9865	0
	Se	82	0.013	ug/L	0.140	1067	-46	-42	84
	Se	78	0.041	ug/L	0.189	459	10084	10027	0
	Mo	98	0.060	ug/L	0.009	15	25	361	13
	Y	89		ug/L			452178	452430	1
	Kr	83		ug/L			2458	2598	2
>	In	115		ug/L			1233632	1254121	1
	Ag	107	-0.001	ug/L	0.000	25	39	29	10
	Cd	111	-0.001	ug/L	0.002	239	133	129	13
	Cd	114	0.001	ug/L	0.000	21	38	53	7
	Sb	121	0.004	ug/L	0.001	27	94	178	14
	Sb	123	0.004	ug/L	0.001	36	60	117	18
	Ba	135	-0.021	ug/L	0.001	4	218	109	2
	Ba	137	-0.024	ug/L	0.001	3	338	178	3
>	Tb	159		ug/L			1368167	1377157	0
	Tl	205	0.002	ug/L	0.000	24	31	112	18
	Pb	208	0.011	ug/L	0.000	2	215	844	1
	Bi	209		ug/L			3022716	3041626	0
	Th	232	0.000	ug/L	0.000	63	209	230	4
	U	238	0.000	ug/L	0.000	79	12	18	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:04:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1600294	2
	Be	9	0.001	ug/L	0.001	104	10	16	38
	C	13		ug/L			107220	118396	1
	Cl	37		ug/L			5888067	5795080	3
>	Sc	45		ug/L			1420932	1422925	1
	V	51	0.012	ug/L	0.009	71	8382	8722	1
	V-1	51	0.022	ug/L	0.003	11	237	837	9
	Cr	52	0.221	ug/L	0.028	12	24727	29667	0
	Cr	53	0.259	ug/L	0.019	7	189	831	6
	Mn	55	0.030	ug/L	0.001	2	577	1509	1
	Co	59	0.000	ug/L	0.001	210	72	80	21
>	Ge	72		ug/L			673872	668820	2
	Ni	60	0.017	ug/L	0.000	1	128	203	1
	Ni	62	0.045	ug/L	0.020	44	326	352	5
	Cu	63	0.034	ug/L	0.004	11	417	744	7
	Cu	65	0.034	ug/L	0.004	11	53	195	8
	Zn	66	0.892	ug/L	0.042	4	309	2651	2
	Zn	67	0.772	ug/L	0.036	4	51	384	3
	Zn	68	0.868	ug/L	0.024	2	727	2324	2
	As	75	0.047	ug/L	0.015	32	516	1712	2
	As-1	75	0.060	ug/L	0.114	189	9903	9961	0
	Se	82	-0.027	ug/L	0.070	254	-46	-53	32
	Se	78	0.181	ug/L	0.390	215	10084	10122	0
	Mo	98	0.020	ug/L	0.008	39	25	140	34
	Y	89		ug/L			452178	459868	1
	Kr	83		ug/L			2458	2575	0
>	In	115		ug/L			1233632	1244065	0
	Ag	107	-0.001	ug/L	0.001	98	39	27	42
	Cd	111	-0.002	ug/L	0.002	122	133	123	11
	Cd	114	0.000	ug/L	0.000	31	38	45	5
	Sb	121	0.002	ug/L	0.001	45	94	137	13
	Sb	123	0.004	ug/L	0.001	27	60	124	13
	Ba	135	0.017	ug/L	0.003	17	218	313	4
	Ba	137	0.018	ug/L	0.005	28	388	556	7
>	Tb	159		ug/L			1368167	1378711	0
	Tl	205	0.001	ug/L	0.000	10	31	66	4
	Pb	208	0.008	ug/L	0.000	1	215	681	0
	Bi	209		ug/L			3022716	3041685	0
	Th	232	0.001	ug/L	0.000	16	209	269	3
	U	238	0.000	ug/L	0.000	247	12	14	37

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:12:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1674423	4
[	Be	9	50.732	ug/L	1.617	3	10	268514	2
	C	13		ug/L			107220	115446	3
	Cl	37		ug/L			5888067	5871286	4
[>	Sc	45		ug/L			1420932	1413046	3
[	V	51	48.018	ug/L	1.381	2	8382	1304505	0
[	V-1	51	48.140	ug/L	1.438	2	237	1294723	1
[	Cr	52	48.260	ug/L	0.954	1	24727	1087617	2
[	Cr	53	48.692	ug/L	0.505	1	189	119772	2
[	Mn	55	48.664	ug/L	0.972	1	577	1486160	1
[	Co	59	47.858	ug/L	2.088	4	72	1025501	2
[>	Ge	72		ug/L			673872	645354	1
[	Ni	60	49.313	ug/L	0.879	1	128	216261	3
[	Ni	62	50.096	ug/L	0.723	1	326	30748	2
[	Cu	63	50.556	ug/L	0.977	1	417	471461	1
[	Cu	65	51.972	ug/L	0.151	0	53	212556	1
[	Zn	66	50.532	ug/L	0.248	0	309	128500	2
[	Zn	67	51.797	ug/L	0.224	0	51	21587	2
[	Zn	68	50.703	ug/L	0.545	1	727	91004	1
[	As	75	52.128	ug/L	0.420	0	1616	116625	1
[	As-1	75	51.057	ug/L	0.596	1	9903	119824	2
[	Se	82	57.472	ug/L	0.896	1	-46	14373	0
[	Se	78	51.634	ug/L	0.311	0	10084	41764	1
[	Mo	98	52.787	ug/L	1.726	3	25	286950	2
	Y	89		ug/L			452178	467977	0
	Kr	83		ug/L			2458	2619	2
[>	In	115		ug/L			1233632	1246525	1
[	Ag	107	54.171	ug/L	0.330	0	39	728701	1
[	Cd	111	50.075	ug/L	0.388	0	133	311693	0
[	Cd	114	49.520	ug/L	0.375	0	38	764025	1
[	Sb	121	48.634	ug/L	0.735	1	94	934873	0
[	Sb	123	48.668	ug/L	0.592	1	60	712255	0
[	Ba	135	48.600	ug/L	0.865	1	218	259713	2
[	Ba	137	49.014	ug/L	0.362	0	388	449740	0
[>	Tb	159		ug/L			1368167	1411099	0
[	Tl	205	50.570	ug/L	1.307	2	31	2258692	1
[	Pb	208	49.156	ug/L	0.596	1	215	2839219	0
[	Bi	209		ug/L			3022716	2984886	0
[	Th	232	49.157	ug/L	1.621	3	209	2602707	2
[	U	238	49.410	ug/L	1.460	2	12	2830481	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:16:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1656210	2
	Be	9	0.002	ug/L	0.002	81	10	21	39
	C	13		ug/L			107220	114751	1
	Cl	37		ug/L			5888067	5979626	5
>	Sc	45		ug/L			1420932	1396140	0
	V	51	0.011	ug/L	0.013	110	8382	8539	3
	V-1	51	0.008	ug/L	0.002	24	237	438	10
	Cr	52	0.033	ug/L	0.044	131	24727	25020	3
	Cr	53	0.021	ug/L	0.008	38	189	236	7
	Mn	55	0.002	ug/L	0.001	74	577	620	5
	Co	59	-0.000	ug/L	0.001	1350244	72	70	26
>	Ge	72		ug/L			673872	654249	1
	Ni	60	-0.016	ug/L	0.002	10	128	52	15
	Ni	62	-0.046	ug/L	0.044	95	326	288	10
	Cu	63	-0.004	ug/L	0.010	263	417	371	26
	Cu	65	0.000	ug/L	0.002	726	53	52	17
	Zn	66	0.012	ug/L	0.003	27	309	330	3
	Zn	67	0.001	ug/L	0.016	2846	51	50	12
	Zn	68	0.000	ug/L	0.017	6899	727	706	3
	As	75	0.083	ug/L	0.010	11	1616	1754	2
	As-1	75	0.087	ug/L	0.054	62	9903	9803	0
	Se	82	0.027	ug/L	0.022	81	-46	-38	16
	Se	78	0.276	ug/L	0.237	85	10084	9963	0
	Mo	98	0.061	ug/L	0.072	117	25	365	110
	Y	89		ug/L			452178	451766	1
	Kr	83		ug/L			2458	2578	1
>	In	115		ug/L			1233632	1237662	0
	Ag	107	0.005	ug/L	0.010	202	39	105	127
	Cd	111	0.001	ug/L	0.007	655	133	140	30
	Cd	114	0.005	ug/L	0.007	155	38	109	100
	Sb	121	0.116	ug/L	0.015	13	94	2318	13
	Sb	123	0.114	ug/L	0.016	14	60	1714	13
	Ba	135	0.002	ug/L	0.005	276	218	228	11
	Ba	137	-0.001	ug/L	0.002	142	388	379	4
>	Tb	159		ug/L			1368167	1345070	0
	Tl	205	0.005	ug/L	0.003	51	31	244	44
	Pb	208	0.002	ug/L	0.002	133	215	301	39
	Bi	209		ug/L			3022716	3013531	0
	Th	232	0.149	ug/L	0.053	35	209	7736	35
	U	238	0.005	ug/L	0.003	58	12	258	55

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:20:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1706987	2
[	Be	9	24.937	ug/L	0.731	2	10	134623	1
	C	13		ug/L			107220	129359	1
	Cl	37		ug/L			5888067	6021105	2
[>	Sc	45		ug/L			1420932	1461131	1
[	V	51	24.030	ug/L	0.199	0	8382	679690	0
[	V-1	51	24.065	ug/L	0.214	0	237	669746	1
[	Cr	52	24.584	ug/L	0.330	1	24727	585474	1
[	Cr	53	24.716	ug/L	0.182	0	189	62978	1
[	Mn	55	24.696	ug/L	0.073	0	577	780509	1
[	Co	59	24.986	ug/L	1.057	4	72	553939	3
[>	Ge	72		ug/L			673872	667054	0
[	Ni	60	26.022	ug/L	0.479	1	128	117982	1
[	Ni	62	25.617	ug/L	0.110	0	326	16408	0
[	Cu	63	26.724	ug/L	0.747	2	417	257800	2
[	Cu	65	26.847	ug/L	0.722	2	53	113506	2
[	Zn	66	79.351	ug/L	2.610	3	309	208365	2
[	Zn	67	73.654	ug/L	1.216	1	51	31705	1
[	Zn	68	77.888	ug/L	0.764	0	727	144122	0
[	As	75	28.003	ug/L	0.637	2	1616	65493	1
[	As-1	75	25.825	ug/L	0.458	1	9903	67487	1
[	Se	82	83.650	ug/L	1.613	1	-46	21647	1
[	Se	78	76.374	ug/L	1.193	1	10084	59070	1
[	Mo	98	26.285	ug/L	0.590	2	25	147737	1
	Y	89		ug/L			452178	474877	1
	Kr	83		ug/L			2458	2660	1
[>	In	115		ug/L			1233632	1270113	0
[	Ag	107	27.527	ug/L	0.416	1	39	377315	1
[	Cd	111	24.680	ug/L	0.168	0	133	156600	0
[	Cd	114	24.093	ug/L	0.313	1	38	378749	0
[	Sb	121	24.504	ug/L	0.308	1	94	480025	1
[	Sb	123	24.332	ug/L	0.253	1	60	362886	0
[	Ba	135	24.347	ug/L	0.394	1	218	132669	1
[	Ba	137	24.145	ug/L	0.504	2	388	225937	1
[>	Tb	159		ug/L			1368167	1391924	1
[	Tl	205	25.495	ug/L	0.433	1	31	1123316	0
[	Pb	208	25.895	ug/L	0.268	1	215	1475441	0
[	Bi	209		ug/L			3022716	3082639	1
[	Th	232	24.786	ug/L	0.386	1	209	1294679	0
[	U	238	25.141	ug/L	0.402	1	12	1420770	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:24:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1674164	1
[	Be	9	24.648	ug/L	0.119	0	10	130569	1
	C	13		ug/L			107220	135920	3
	Cl	37		ug/L			5888067	6022271	1
[>	Sc	45		ug/L			1420932	1435571	1
|	V	51	23.702	ug/L	0.404	1	8382	658745	0
|	V-1	51	23.712	ug/L	0.552	2	237	648260	1
|	Cr	52	24.759	ug/L	0.320	1	24727	579090	0
|	Cr	53	24.808	ug/L	0.716	2	189	62084	1
|	Mn	55	24.488	ug/L	0.129	0	577	760343	1
[	Co	59	24.852	ug/L	0.759	3	72	541295	1
[>	Ge	72		ug/L			673872	678322	1
|	Ni	60	24.869	ug/L	0.243	0	128	114661	1
|	Ni	62	24.822	ug/L	0.195	0	326	16177	1
|	Cu	63	25.549	ug/L	0.266	1	417	250655	1
|	Cu	65	26.051	ug/L	0.514	1	53	111987	0
|	Zn	66	76.540	ug/L	2.364	3	309	204341	1
|	Zn	67	73.479	ug/L	1.770	2	51	32160	1
|	Zn	68	74.646	ug/L	1.768	2	727	140454	0
|	As	75	26.632	ug/L	0.208	0	1616	63432	2
|	As-1	75	24.293	ug/L	0.064	0	9903	65148	1
|	Se	82	80.989	ug/L	0.660	0	-46	21311	1
|	Se	78	73.136	ug/L	1.542	2	10084	57941	0
[	Mo	98	25.419	ug/L	0.281	1	25	145288	1
	Y	89		ug/L			452178	459473	2
	Kr	83		ug/L			2458	2661	2
[>	In	115		ug/L			1233632	1261244	2
|	Ag	107	27.472	ug/L	0.576	2	39	373810	0
|	Cd	111	24.339	ug/L	0.471	1	133	153332	1
|	Cd	114	24.231	ug/L	0.405	1	38	378191	0
|	Sb	121	24.161	ug/L	0.570	2	94	469848	0
|	Sb	123	24.146	ug/L	0.417	1	60	357529	1
|	Ba	135	24.213	ug/L	0.510	2	218	130990	0
[	Ba	137	24.362	ug/L	0.977	4	388	226257	1
[>	Tb	159		ug/L			1368167	1386280	0
|	Tl	205	25.342	ug/L	0.129	0	31	1112173	0
|	Pb	208	25.474	ug/L	0.133	0	215	1445638	0
|	Bi	209		ug/L			3022716	3078283	1
|	Th	232	24.669	ug/L	0.271	1	209	1283527	1
[	U	238	24.849	ug/L	0.189	0	12	1398709	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:28:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1602687	0
[	Be	9	0.089	ug/L	0.004	4	10	459	5
	C	13		ug/L			107220	142958	4
	Cl	37		ug/L			5888067	7727537	2
[>	Sc	45		ug/L			1420932	1556933	0
[	V	51	47.513	ug/L	0.319	0	8382	1423153	1
[	V-1	51	47.854	ug/L	0.397	0	237	1418885	1
[	Cr	52	9.355	ug/L	0.209	2	24727	254186	2
[	Cr	53	10.032	ug/L	0.086	0	189	27357	0
[	Mn	55	265.216	ug/L	6.278	2	577	8923885	1
[	Co	59	0.305	ug/L	0.007	2	72	7282	1
[>	Ge	72		ug/L			673872	610411	1
[	Ni	60	0.580	ug/L	0.009	1	128	2518	1
[	Ni	62	71.035	ug/L	5.352	7	326	41129	8
[	Cu	63	13.538	ug/L	0.231	1	417	119722	3
[	Cu	65	0.890	ug/L	0.043	4	53	3487	4
[	Zn	66	1.242	ug/L	0.067	5	309	3258	3
[	Zn	67	2.932	ug/L	0.114	3	51	1199	2
[	Zn	68	3.151	ug/L	0.037	1	727	5967	0
[	As	75	350.801	ug/L	4.459	1	1616	733898	0
[	As-1	75	358.736	ug/L	4.596	1	9903	742168	0
[	Se	82	0.497	ug/L	0.099	19	-46	75	30
[	Se	78	2.250	ug/L	0.408	18	10084	10457	2
[	Mo	98	0.544	ug/L	0.007	1	25	2823	0
	Y	89		ug/L			452178	499688	3
	Kr	83		ug/L			2458	2560	2
[>	In	115		ug/L			1233632	1130416	0
[	Ag	107	0.018	ug/L	0.000	0	39	258	1
[	Cd	111	-0.069	ug/L	0.042	60	133	-266	87
[	Cd	114	0.005	ug/L	0.001	10	38	109	7
[	Sb	121	0.069	ug/L	0.005	7	94	1284	6
[	Sb	123	0.069	ug/L	0.003	3	60	976	3
[	Ba	135	7.859	ug/L	0.038	0	218	38249	0
[	Ba	137	7.830	ug/L	0.047	0	388	65451	0
[>	Tb	159		ug/L			1368167	1343381	0
[	Tl	205	0.003	ug/L	0.001	21	31	166	16
[	Pb	208	0.039	ug/L	0.001	1	215	2364	1
[	Bi	209		ug/L			3022716	2526519	0
[	Th	232	0.563	ug/L	0.274	48	209	28554	47
[	U	238	0.109	ug/L	0.001	0	12	5941	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JPOST REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:32:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1578930	1
[	Be	9	22.645	ug/L	0.514	2	10	113106	1
	C	13		ug/L			107220	142405	2
	Cl	37		ug/L			5888067	7432647	2
[>	Sc	45		ug/L			1420932	1535880	3
[	V	51	71.885	ug/L	1.727	2	8382	2118430	1
[	V-1	51	72.258	ug/L	1.715	2	237	2112401	0
[	Cr	52	31.640	ug/L	0.522	1	24727	784250	2
[	Cr	53	32.401	ug/L	0.456	1	189	86692	1
[	Mn	55	285.888	ug/L	8.235	2	577	9485878	1
[	Co	59	22.538	ug/L	0.476	2	72	525179	1
[>	Ge	72		ug/L			673872	614022	0
[	Ni	60	25.055	ug/L	0.465	1	128	104569	1
[	Ni	62	93.366	ug/L	11.577	12	326	54291	12
[	Cu	63	37.296	ug/L	0.524	1	417	331083	2
[	Cu	65	26.061	ug/L	0.302	1	53	101434	1
[	Zn	66	69.045	ug/L	0.855	1	309	166948	1
[	Zn	67	67.553	ug/L	0.879	1	51	26774	1
[	Zn	68	71.055	ug/L	0.997	1	727	121083	1
[	As	75	366.169	ug/L	1.817	0	1616	770594	0
[	As-1	75	373.286	ug/L	2.326	0	9903	776546	0
[	Se	82	74.363	ug/L	0.281	0	-46	17710	0
[	Se	78	73.854	ug/L	1.499	2	10084	52880	1
[	Mo	98	26.735	ug/L	0.385	1	25	138331	1
	Y	89		ug/L			452178	486990	2
	Kr	83		ug/L			2458	2487	0
[>	In	115		ug/L			1233632	1131617	1
[	Ag	107	24.320	ug/L	0.131	0	39	296992	0
[	Cd	111	23.222	ug/L	0.141	0	133	131286	0
[	Cd	114	23.044	ug/L	0.041	0	38	322772	1
[	Sb	121	24.135	ug/L	0.282	1	94	421217	0
[	Sb	123	23.926	ug/L	0.087	0	60	317923	0
[	Ba	135	34.021	ug/L	0.262	0	218	165090	0
[	Ba	137	33.935	ug/L	0.310	0	388	282793	1
[>	Tb	159		ug/L			1368167	1336203	0
[	Tl	205	24.373	ug/L	0.130	0	31	1030984	0
[	Pb	208	24.184	ug/L	0.217	0	215	1322856	0
[	Bi	209		ug/L			3022716	2540699	0
[	Th	232	26.075	ug/L	0.312	1	209	1307554	0
[	U	238	25.714	ug/L	0.193	0	12	1395042	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:38:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1655434	0
[	Be	9	0.032	ug/L	0.032	101	10	176	95
	C	13		ug/L			107220	125692	0
	Cl	37		ug/L			5888067	6334958	3
[>	Sc	45		ug/L			1420932	1547916	0
[	V	51	1.070	ug/L	0.060	5	8382	40780	3
[	V-1	51	1.156	ug/L	0.065	5	237	34309	4
[	Cr	52	0.515	ug/L	0.020	3	24727	39363	1
[	Cr	53	0.807	ug/L	0.019	2	189	2378	1
[	Mn	55	325.498	ug/L	2.338	0	577	10890032	0
[	Co	59	0.187	ug/L	0.018	9	72	4461	8
[>	Ge	72		ug/L			673872	657538	1
[	Ni	60	0.826	ug/L	0.010	1	128	3813	2
[	Ni	62	12.994	ug/L	2.541	19	326	8340	16
[	Cu	63	1.641	ug/L	0.221	13	417	15957	11
[	Cu	65	0.338	ug/L	0.014	4	53	1459	3
[	Zn	66	0.712	ug/L	0.025	3	309	2142	3
[	Zn	67	0.804	ug/L	0.031	3	51	391	1
[	Zn	68	2.207	ug/L	0.091	4	727	4713	1
[	As	75	9.645	ug/L	0.114	1	1616	23268	1
[	As-1	75	9.993	ug/L	0.204	2	9903	31660	0
[	Se	82	0.071	ug/L	0.076	106	-46	-27	71
[	Se	78	0.754	ug/L	0.381	50	10084	10315	0
[	Mo	98	7.682	ug/L	0.048	0	25	42580	2
	Y	89		ug/L			452178	454046	2
	Kr	83		ug/L			2458	2555	2
[>	In	115		ug/L			1233632	1239557	0
[	Ag	107	0.002	ug/L	0.002	100	39	61	35
[	Cd	111	0.008	ug/L	0.001	16	133	184	5
[	Cd	114	0.009	ug/L	0.002	20	38	181	16
[	Sb	121	0.072	ug/L	0.001	0	94	1468	0
[	Sb	123	0.071	ug/L	0.001	1	60	1097	1
[	Ba	135	2.843	ug/L	0.024	0	218	15315	1
[	Ba	137	2.823	ug/L	0.031	1	388	26123	0
[>	Tb	159		ug/L			1368167	1411167	0
[	Tl	205	0.004	ug/L	0.001	19	31	222	17
[	Pb	208	0.023	ug/L	0.001	4	215	1542	4
[	Bi	209		ug/L			3022716	2910770	1
[	Th	232	0.163	ug/L	0.060	36	209	8848	36
[	U	238	0.024	ug/L	0.028	115	12	1388	115

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:42:19
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1622535	0
[	Be	9	0.011	ug/L	0.002	15	10	66	12
	C	13		ug/L			107220	125684	2
	Cl	37		ug/L			5888067	8670975	2
[>	Sc	45		ug/L			1420932	1517447	1
[	V	51	1.525	ug/L	0.071	4	8382	53169	1
[	V-1	51	1.699	ug/L	0.084	4	237	49308	3
[	Cr	52	0.315	ug/L	0.027	8	24727	33858	0
[	Cr	53	0.906	ug/L	0.068	7	189	2591	5
[	Mn	55	318.404	ug/L	8.613	2	577	10440097	1
[	Co	59	0.163	ug/L	0.003	1	72	3829	2
[>	Ge	72		ug/L			673872	629952	0
[	Ni	60	0.800	ug/L	0.006	0	128	3540	0
[	Ni	62	13.765	ug/L	1.535	11	326	8468	10
[	Cu	63	2.663	ug/L	0.155	5	417	24616	5
[	Cu	65	0.506	ug/L	0.000	0	53	2069	0
[	Zn	66	0.717	ug/L	0.017	2	309	2063	2
[	Zn	67	1.157	ug/L	0.064	5	51	518	5
[	Zn	68	2.151	ug/L	0.075	3	727	4420	3
[	As	75	3.407	ug/L	0.044	1	1616	8852	0
[	As-1	75	3.743	ug/L	0.059	1	9903	17153	0
[	Se	82	0.116	ug/L	0.058	49	-46	-15	92
[	Se	78	1.297	ug/L	0.108	8	10084	10214	0
[	Mo	98	2.647	ug/L	0.022	0	25	14070	0
	Y	89		ug/L			452178	448820	0
	Kr	83		ug/L			2458	2504	0
[>	In	115		ug/L			1233632	1210166	0
[	Ag	107	0.002	ug/L	0.000	14	39	68	7
[	Cd	111	0.003	ug/L	0.001	43	133	151	5
[	Cd	114	0.004	ug/L	0.001	14	38	96	9
[	Sb	121	0.273	ug/L	0.003	1	94	5181	1
[	Sb	123	0.282	ug/L	0.009	3	60	4062	2
[	Ba	135	8.482	ug/L	0.157	1	218	44176	1
[	Ba	137	8.411	ug/L	0.138	1	388	75240	0
[>	Tb	159		ug/L			1368167	1391006	0
[	Tl	205	0.002	ug/L	0.000	18	31	132	13
[	Pb	208	0.047	ug/L	0.001	1	215	2887	0
[	Bi	209		ug/L			3022716	2828068	0
[	Th	232	0.067	ug/L	0.011	16	209	3722	15
[	U	238	0.098	ug/L	0.002	1	12	5557	1

5/11/12 Okay

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:46:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1603289	2
[	Be	9	0.014	ug/L	0.001	8	10	80	5
	C	13		ug/L			107220	125420	0
	Cl	37		ug/L			5888067	6027664	1
[>	Sc	45		ug/L			1420932	1488444	0
[	V	51	0.410	ug/L	0.012	2	8382	20449	1
[	V-1	51	0.438	ug/L	0.012	2	237	12648	2
[	Cr	52	0.494	ug/L	0.016	3	24727	37357	0
[	Cr	53	0.591	ug/L	0.015	2	189	1726	1
[	Mn	55	168.483	ug/L	3.304	1	577	5420696	2
[	Co	59	0.262	ug/L	0.008	3	72	5986	2
[>	Ge	72		ug/L			673872	636456	1
[	Ni	60	1.828	ug/L	0.067	3	128	8016	2
[	Ni	62	9.914	ug/L	1.163	11	326	6252	12
[	Cu	63	1.689	ug/L	0.063	3	417	15915	4
[	Cu	65	0.871	ug/L	0.049	5	53	3559	4
[	Zn	66	0.726	ug/L	0.027	3	309	2107	2
[	Zn	67	0.885	ug/L	0.063	7	51	411	5
[	Zn	68	2.093	ug/L	0.065	3	727	4362	2
[	As	75	1.395	ug/L	0.076	5	1616	4561	2
[	As-1	75	1.541	ug/L	0.050	3	9903	12636	0
[	Se	82	0.273	ug/L	0.059	21	-46	23	62
[	Se	78	0.913	ug/L	0.027	2	10084	10084	1
[	Mo	98	11.956	ug/L	0.413	3	25	64116	2
	Y	89		ug/L			452178	455405	0
	Kr	83		ug/L			2458	2501	1
[>	In	115		ug/L			1233632	1239508	0
[	Ag	107	0.000	ug/L	0.001	269	39	43	25
[	Cd	111	0.007	ug/L	0.001	21	133	176	4
[	Cd	114	0.010	ug/L	0.001	5	38	193	4
[	Sb	121	0.244	ug/L	0.003	1	94	4752	1
[	Sb	123	0.241	ug/L	0.004	1	60	3568	1
[	Ba	135	4.436	ug/L	0.015	0	218	23768	0
[	Ba	137	4.463	ug/L	0.027	0	388	41075	0
[>	Tb	159		ug/L			1368167	1405525	0
[	Tl	205	0.005	ug/L	0.000	10	31	235	8
[	Pb	208	0.012	ug/L	0.001	5	215	923	4
[	Bi	209		ug/L			3022716	2883103	0
[	Th	232	0.036	ug/L	0.003	8	209	2100	7
[	U	238	0.366	ug/L	0.004	1	12	20909	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:50:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1620236	1
	Be	9	0.012	ug/L	0.002	15	10	73	13
	C	13		ug/L			107220	126592	1
	Cl	37		ug/L			5888067	8523173	1
>	Sc	45		ug/L			1420932	1458038	0
	V	51	1.557	ug/L	0.007	0	8382	51981	0
	V-1	51	1.684	ug/L	0.011	0	237	47002	0
	Cr	52	0.351	ug/L	0.024	6	24727	33345	2
	Cr	53	0.782	ug/L	0.006	0	189	2175	1
	Mn	55	332.096	ug/L	9.668	2	577	10465484	2
	Co	59	0.168	ug/L	0.003	1	72	3792	1
>	Ge	72		ug/L			673872	623890	1
	Ni	60	0.698	ug/L	0.024	3	128	3075	2
	Ni	62	9.219	ug/L	1.321	14	326	5721	14
	Cu	63	2.913	ug/L	0.079	2	417	26628	2
	Cu	65	1.063	ug/L	0.011	1	53	4248	0
	Zn	66	2.249	ug/L	0.081	3	309	5799	2
	Zn	67	2.566	ug/L	0.187	7	51	1078	5
	Zn	68	3.645	ug/L	0.087	2	727	6950	2
	As	75	3.672	ug/L	0.136	3	1616	9329	1
	As-1	75	3.916	ug/L	0.163	4	9903	17346	0
	Se	82	0.171	ug/L	0.057	33	-46	-1	774
	Se	78	1.086	ug/L	0.254	23	10084	9988	0
	Mo	98	2.888	ug/L	0.113	3	25	15197	2
	Y	89		ug/L			452178	447552	0
	Kr	83		ug/L			2458	2533	2
>	In	115		ug/L			1233632	1201969	0
	Ag	107	0.000	ug/L	0.000	139	39	41	11
	Cd	111	-0.002	ug/L	0.000	25	133	119	1
	Cd	114	0.002	ug/L	0.000	24	38	68	9
	Sb	121	0.285	ug/L	0.004	1	94	5367	2
	Sb	123	0.283	ug/L	0.001	0	60	4058	1
	Ba	135	8.759	ug/L	0.108	1	218	45303	0
	Ba	137	8.798	ug/L	0.206	2	388	78150	1
>	Tb	159		ug/L			1368167	1411662	0
	Tl	205	0.003	ug/L	0.000	11	31	172	9
	Pb	208	0.065	ug/L	0.001	2	215	3989	2
	Bi	209		ug/L			3022716	2791988	0
	Th	232	0.030	ug/L	0.004	14	209	1798	11
	U	238	0.104	ug/L	0.001	0	12	5991	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:54:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1619244	0
	Be	9	0.014	ug/L	0.002	17	10	80	14
	C	13		ug/L			107220	126590	0
	Cl	37		ug/L			5888067	6005394	2
>	Sc	45		ug/L			1420932	1481907	3
	V	51	0.381	ug/L	0.024	6	8382	19534	2
	V-1	51	0.409	ug/L	0.016	3	237	11769	0
	Cr	52	0.472	ug/L	0.041	8	24727	36675	1
	Cr	53	0.569	ug/L	0.036	6	189	1661	3
	Mn	55	166.329	ug/L	1.476	0	577	5326846	2
	Co	59	0.260	ug/L	0.008	3	72	5913	1
>	Ge	72		ug/L			673872	638118	2
	Ni	60	1.068	ug/L	0.067	6	128	4749	6
	Ni	62	5.555	ug/L	0.840	15	326	3646	14
	Cu	63	1.071	ug/L	0.069	6	417	10262	5
	Cu	65	0.531	ug/L	0.020	3	53	2198	5
	Zn	66	0.610	ug/L	0.024	3	309	1820	1
	Zn	67	0.726	ug/L	0.026	3	51	347	3
	Zn	68	1.922	ug/L	0.073	3	727	4072	1
	As	75	1.287	ug/L	0.027	2	1616	4339	1
	As-1	75	1.335	ug/L	0.116	8	9903	12226	0
	Se	82	0.105	ug/L	0.077	73	-46	-18	107
	Se	78	0.520	ug/L	0.333	63	1[illegible]84	9866	0
	Mo	98	11.207	ug/L	0.216	1	25	60262	1
	Y	89		ug/L			452178	452526	1
	Kr	83		ug/L			2458	2596	3
>	In	115		ug/L			1233632	1215211	0
	Ag	107	-0.001	ug/L	0.001	58	39	26	26
	Cd	111	0.002	ug/L	0.001	74	133	143	6
	Cd	114	0.006	ug/L	0.001	10	38	124	7
	Sb	121	0.238	ug/L	0.005	1	94	4556	2
	Sb	123	0.231	ug/L	0.007	3	60	3356	3
	Ba	135	4.334	ug/L	0.078	1	218	22774	1
	Ba	137	4.313	ug/L	0.030	0	388	38929	0
>	Tb	159		ug/L			1368167	1423842	1
	Tl	205	0.005	ug/L	0.000	2	31	250	2
	Pb	208	0.006	ug/L	0.000	3	215	564	2
	Bi	209		ug/L			3022716	2867083	0
	Th	232	0.017	ug/L	0.001	5	209	1137	5
	U	238	0.345	ug/L	0.013	3	12	19932	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:58:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1618293	1
[	Be	9	0.014	ug/L	0.002	17	10	82	16
	C	13		ug/L			107220	125782	1
	Cl	37		ug/L			5888067	6055887	1
[>	Sc	45		ug/L			1420932	1475260	1
|	V	51	0.387	ug/L	0.013	3	8382	19620	1
|	V-1	51	0.408	ug/L	0.010	2	237	11711	2
|	Cr	52	0.493	ug/L	0.031	6	24727	37001	0
|	Cr	53	0.568	ug/L	0.017	3	189	1651	1
|	Mn	55	172.521	ug/L	2.777	1	577	5500536	0
[	Co	59	0.263	ug/L	0.005	1	72	5956	1
[>	Ge	72		ug/L			673872	632331	0
|	Ni	60	1.073	ug/L	0.033	3	128	4728	3
|	Ni	62	3.383	ug/L	0.103	3	326	2319	2
|	Cu	63	0.907	ug/L	0.022	2	417	8674	1
|	Cu	65	0.506	ug/L	0.010	1	53	2078	2
|	Zn	66	0.911	ug/L	0.040	4	309	2554	3
|	Zn	67	0.981	ug/L	0.026	2	51	448	2
|	Zn	68	2.241	ug/L	0.113	5	727	4593	4
|	As	75	1.330	ug/L	0.016	1	1616	4393	0
|	As-1	75	1.415	ug/L	0.018	1	9903	12288	0
|	Se	82	0.103	ug/L	0.050	49	-46	-18	66
|	Se	78	0.680	ug/L	0.063	9	10084	9877	0
[	Mo	98	11.739	ug/L	0.079	0	25	62564	1
	Y	89		ug/L			452178	451767	1
	Kr	83		ug/L			2458	2600	2
[>	In	115		ug/L			1238632	1237181	0
|	Ag	107	-0.000	ug/L	0.000	75	39	33	12
|	Cd	111	0.004	ug/L	0.002	40	133	160	7
|	Cd	114	0.006	ug/L	0.001	14	38	126	10
|	Sb	121	0.241	ug/L	0.002	0	94	4698	0
|	Sb	123	0.236	ug/L	0.006	2	60	3492	1
|	Ba	135	4.379	ug/L	0.059	1	218	23423	0
[	Ba	137	4.371	ug/L	0.032	0	388	40166	0
[>	Tb	159		ug/L			1368167	1423182	0
|	Tl	205	0.004	ug/L	0.000	8	31	217	6
|	Pb	208	0.008	ug/L	0.001	7	215	691	5
|	Bi	209		ug/L			3022716	2876448	0
|	Th	232	0.018	ug/L	0.002	9	209	1167	7
[	U	238	0.353	ug/L	0.001	0	12	20393	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 14:04:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1580480	2
[	Be	9	50.457	ug/L	0.490	0	10	252286	2
	C	13		ug/L			107220	113240	0
	Cl	37		ug/L			5888067	6192850	1
[>	Sc	45		ug/L			1420932	1378609	1
|	V	51	47.507	ug/L	1.036	2	8382	1259770	0
|	V-1	51	47.955	ug/L	0.734	1	237	1258872	0
|	Cr	52	48.363	ug/L	1.001	2	24727	1063401	0
|	Cr	53	49.943	ug/L	0.272	0	189	119877	1
|	Mn	55	46.944	ug/L	1.224	2	577	1399095	1
[	Co	59	49.248	ug/L	0.461	0	72	1030466	2
[>	Ge	72		ug/L			673872	632532	1
|	Ni	60	49.361	ug/L	0.928	1	128	212108	2
|	Ni	62	51.514	ug/L	0.413	0	326	30980	2
|	Cu	63	51.359	ug/L	1.453	2	417	469338	1
|	Cu	65	50.874	ug/L	1.008	1	53	203887	0
|	Zn	66	49.853	ug/L	1.315	2	309	124211	0
|	Zn	67	51.353	ug/L	0.756	1	51	20975	1
|	Zn	68	50.393	ug/L	0.814	1	727	88668	2
|	As	75	50.925	ug/L	0.505	0	1616	111708	2
|	As-1	75	50.662	ug/L	0.402	0	9903	116599	1
|	Se	82	54.606	ug/L	0.419	0	-46	13385	1
|	Se	78	51.522	ug/L	0.969	1	10084	40861	0
[	Mo	98	50.415	ug/L	0.313	0	25	268675	1
	Y	89		ug/L			452178	437177	1
	Kr	83		ug/L			2458	2518	0
[>	In	115		ug/L			1233632	1235536	1
|	Ag	107	51.325	ug/L	1.130	2	39	684395	3
|	Cd	111	49.863	ug/L	0.787	1	133	307649	1
|	Cd	114	49.744	ug/L	0.329	0	38	760667	0
|	Sb	121	48.444	ug/L	0.690	1	94	923003	0
|	Sb	123	47.830	ug/L	0.937	1	160	693782	0
|	Ba	135	48.784	ug/L	0.510	1	218	258370	0
[	Ba	137	48.961	ug/L	0.394	0	388	445290	0
[>	Tb	159		ug/L			1368167	1403812	2
|	Tl	205	51.034	ug/L	1.671	3	31	2266873	1
|	Pb	208	49.620	ug/L	1.016	2	215	2850493	0
|	Bi	209		ug/L			3022716	3000970	1
|	Th	232	50.043	ug/L	2.332	4	209	2634490	2
[	U	238	50.093	ug/L	0.593	1	12	2854736	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 14:10:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1517146	0
	Be	9	-0.001	ug/L	0.000	66	10	6	36
	C	13		ug/L			107220	108304	2
	Cl	37		ug/L			5888067	5920832	0
>	Sc	45		ug/L			1420932	1340315	3
	V	51	0.015	ug/L	0.005	33	8382	8280	2
	V-1	51	0.001	ug/L	0.000	40	237	249	1
	Cr	52	0.049	ug/L	0.023	47	24727	24342	2
	Cr	53	0.002	ug/L	0.007	427	189	182	6
	Mn	55	0.002	ug/L	0.001	70	577	590	2
	Co	59	0.000	ug/L	0.000	323	72	69	8
>	Ge	72		ug/L			673872	625739	2
	Ni	60	-0.020	ug/L	0.001	5	128	34	11
	Ni	62	1.202	ug/L	0.084	7	326	1010	3
	Cu	63	0.091	ug/L	0.013	13	417	1210	7
	Cu	65	-0.001	ug/L	0.002	430	53	47	17
	Zn	66	0.010	ug/L	0.013	126	309	311	8
	Zn	67	-0.004	ug/L	0.023	604	51	46	18
	Zn	68	-0.001	ug/L	0.030	5494	727	674	6
	As	75	0.091	ug/L	0.036	39	1616	1696	5
	As-1	75	0.194	ug/L	0.090	46	9903	9600	1
	Se	82	0.094	ug/L	0.109	116	-46	-20	130
	Se	78	0.644	ug/L	0.335	52	10084	9751	1
	Mo	98	0.009	ug/L	0.000	3	25	72	2
	Y	89		ug/L			452178	426021	0
	Kr	83		ug/L			2458	2435	2
>	In	115		ug/L			1233632	1188154	0
	Ag	107	-0.000	ug/L	0.000	111	39	32	19
	Cd	111	-0.002	ug/L	0.002	79	133	115	9
	Cd	114	-0.000	ug/L	0.000	917	38	36	11
	Sb	121	0.055	ug/L	0.005	8	94	1094	7
	Sb	123	0.056	ug/L	0.004	6	60	840	5
	Ba	135	-0.000	ug/L	0.005	1289	218	208	11
	Ba	137	-0.003	ug/L	0.002	77	388	347	5
>	Tb	159		ug/L			1368167	1334169	0
	Tl	205	0.002	ug/L	0.000	13	31	125	10
	Pb	208	0.001	ug/L	0.000	47	215	245	6
	Bi	209		ug/L			3022716	2995248	0
	Th	232	0.075	ug/L	0.013	16	209	3954	15
	U	238	0.001	ug/L	0.000	10	12	89	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:22:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1633546	1593720	1
	Be	9	U	-0.000	ug/L	0.001	379	10	9	31
	C	13			ug/L			107220	123987	2
	Cl	37			ug/L			5888067	5935761	1
>	Sc	45			ug/L			1420932	1399809	0
	V	51		0.028	ug/L	0.010	36	8382	9002	3
	V-1	51		0.007	ug/L	0.001	7	237	417	3
	Cr	52	U	0.137	ug/L	0.033	23	24727	27360	2
	Cr	53		0.066	ug/L	0.002	3	189	346	1
	Mn	55		0.014	ug/L	0.001	8	577	1000	3
	Co	59		-0.000	ug/L	0.001	112	72	61	17
>	Ge	72			ug/L			673872	650835	1
	Ni	60	U	-0.014	ug/L	0.001	8	128	62	10
	Ni	62		0.715	ug/L	0.104	14	326	752	6
	Cu	63	U	0.198	ug/L	0.009	4	417	2261	2
	Cu	65		0.144	ug/L	0.004	2	53	645	2
	Zn	66	U	0.661	ug/L	0.015	2	309	1988	0
	Zn	67		0.559	ug/L	0.029	5	51	284	5
	Zn	68		0.627	ug/L	0.044	7	727	1827	2
	As	75	U	0.080	ug/L	0.014	17	1616	1738	1
	As-1	75		0.156	ug/L	0.093	59	9903	9902	0
	Se	82	U	-0.037	ug/L	0.028	74	-46	-54	11
	Se	78		0.506	ug/L	0.321	63	10084	10054	0
	Mo	98		0.004	ug/L	0.001	38	25	45	18
	Y	89			ug/L			452178	450224	1
	Kr	83			ug/L			2458	2601	0
>	In	115			ug/L			1233632	1244519	0
	Ag	107	U	-0.001	ug/L	0.000	20	39	28	8
	Cd	111	U	-0.002	ug/L	0.002	108	133	124	9
	Cd	114		0.000	ug/L	0.001	146	38	44	18
	Sb	121	U	0.004	ug/L	0.001	30	94	176	14
	Sb	123		0.005	ug/L	0.001	17	60	138	10
	Ba	135		-0.026	ug/L	0.002	6	218	79	10
	Ba	137		-0.026	ug/L	0.001	2	388	149	4
>	Tb	159			ug/L			1368167	1358662	1
	Tl	205	U	0.002	ug/L	0.001	38	31	105	26
	Pb	208	U	0.010	ug/L	0.000	2	215	756	2
	Bi	209			ug/L			3022716	3096747	1
	Th	232		0.026	ug/L	0.004	15	209	1554	12
	U	238		0.000	ug/L	0.000	51	12	23	24

US15:00353

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:26:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1590686	0
	Be	9	24.313	ug/L	0.346	1	10	122366	1
	C	13		ug/L			107220	129874	1
	Cl	37		ug/L			5888067	5847755	4
>	Sc	45		ug/L			1420932	1384964	1
	V	51	23.922	ug/L	0.373	1	8382	641357	0
	V-1	51	24.172	ug/L	0.517	2	237	637544	0
	Cr	52	24.123	ug/L	0.215	0	24727	544979	0
	Cr	53	25.001	ug/L	0.765	3	189	60363	1
	Mn	55	24.849	ug/L	0.273	1	577	744306	0
	Co	59	24.958	ug/L	0.356	1	72	524558	0
>	Ge	72		ug/L			673872	644668	1
	Ni	60	25.392	ug/L	0.634	2	128	111259	2
	Ni	62	26.150	ug/L	0.382	1	326	16178	0
	Cu	63	26.422	ug/L	0.727	2	417	246290	1
	Cu	65	26.722	ug/L	0.430	1	53	109179	0
	Zn	66	79.739	ug/L	2.004	2	309	202322	1
	Zn	67	73.262	ug/L	1.941	2	51	30472	1
	Zn	68	77.397	ug/L	1.268	1	727	138394	0
	As	75	26.909	ug/L	0.357	1	1616	60884	0
	As-1	75	25.103	ug/L	0.168	0	9903	63663	1
	Se	82	80.974	ug/L	1.405	1	-46	20249	1
	Se	78	75.030	ug/L	0.502	0	10084	56252	1
	Mo	98	25.828	ug/L	0.133	0	25	140298	1
	Y	89		ug/L			452178	448818	3
	Kr	83		ug/L			2458	2597	1
>	In	115		ug/L			1233632	1248606	1
	Ag	107	25.864	ug/L	1.013	3	39	348577	4
	Cd	111	24.309	ug/L	0.118	0	133	151647	1
	Cd	114	24.122	ug/L	0.569	2	38	372762	1
	Sb	121	23.699	ug/L	0.172	0	94	456375	0
	Sb	123	23.734	ug/L	0.263	1	60	347974	0
	Ba	135	24.108	ug/L	0.473	1	218	129139	1
	Ba	137	24.161	ug/L	0.050	0	388	222275	1
>	Tb	159		ug/L			1360167	1380576	0
	Tl	205	25.243	ug/L	0.059	0	31	1103248	0
	Pb	208	25.637	ug/L	0.150	0	215	1448911	0
	Bi	209		ug/L			3022716	3069581	0
	Th	232	24.441	ug/L	0.345	1	209	1266351	0
	U	238	24.905	ug/L	0.348	1	12	1396004	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:30:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

DEL

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1557777	2
[	Be	9	24.663	ug/L	0.973	3	110	121480	1
	C	13		ug/L			107220	126137	1
	Cl	37		ug/L			5888067	5871053	0
[>	Sc	45		ug/L			1420932	1374029	1
[	V	51	23.891	ug/L	0.085	0	8382	635540	1
[	V-1	51	24.002	ug/L	0.050	0	237	628203	1
[	Cr	52	25.072	ug/L	0.458	1	24727	560952	0
[	Cr	53	25.479	ug/L	0.321	1	189	61041	1
[	Mn	55	25.237	ug/L	0.382	1	577	749890	0
[	Co	59	24.964	ug/L	0.334	1	72	520547	0
[>	Ge	72		ug/L			673872	644007	0
[	Ni	60	25.491	ug/L	0.652	2	128	111588	2
[	Ni	62	25.710	ug/L	0.748	2	326	15899	3
[	Cu	63	26.832	ug/L	0.137	0	417	249923	0
[	Cu	65	26.790	ug/L	0.747	2	53	109350	2
[	Zn	66	78.504	ug/L	0.382	0	309	199041	1
[	Zn	67	72.557	ug/L	1.191	1	51	30156	1
[	Zn	68	76.658	ug/L	1.473	1	727	136955	1
[	As	75	26.660	ug/L	0.299	1	1616	60278	1
[	As-1	75	25.272	ug/L	0.260	1	3903	63967	1
[	Se	82	80.462	ug/L	0.979	1	-46	20102	1
[	Se	78	76.020	ug/L	0.885	1	10084	56813	1
[	Mo	98	25.244	ug/L	0.347	1	25	137001	1
	Y	89		ug/L			452178	450188	0
	Kr	83		ug/L			2458	2631	1
[>	In	115		ug/L			1233632	1233534	0
[	Ag	107	26.012	ug/L	0.711	2	39	346246	2
[	Cd	111	24.621	ug/L	0.395	1	133	151723	1
[	Cd	114	24.205	ug/L	0.267	1	38	369549	0
[	Sb	121	24.234	ug/L	0.193	0	94	461083	1
[	Sb	123	24.194	ug/L	0.316	1	60	350456	1
[	Ba	135	23.949	ug/L	0.120	0	218	126753	0
[	Ba	137	24.152	ug/L	0.079	0	388	219518	1
[>	Tb	159		ug/L			1368167	1357754	1
[	Tl	205	25.708	ug/L	0.157	0	31	1104992	0
[	Pb	208	25.974	ug/L	0.260	1	215	1443616	0
[	Bi	209		ug/L			3022716	3048746	0
[	Th	232	24.920	ug/L	0.142	0	1309	1269847	0
[	U	238	25.083	ug/L	0.130	0	12	1382761	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US45 A-L REN~~ 222222
Sample Dil Factor: 10 6/11/12 JB
Comments:
Sample Date/Time: Friday, May 11, 2012 14:36:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

DL

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1586629	3
	Be	9	U 0.000	ug/L	0.000	185	10	11	18
	C	13		ug/L			107220	116468	2
	Cl	37		ug/L			5888067	5980299	1
>	Sc	45		ug/L			1420932	1382314	1
	V	51	0.301	ug/L	0.008	2	8382	16116	1
	V-1	51	0.294	ug/L	0.002	0	237	7973	1
	Cr	52	U 0.217	ug/L	0.047	21	24727	26726	3
	Cr	53	0.190	ug/L	0.015	7	189	642	6
	Mn	55	2.340	ug/L	0.039	1	577	70468	2
	Co	59	0.045	ug/L	0.003	6	72	1010	5
>	Ge	72		ug/L			673872	643330	1
	Ni	60	2.121	ug/L	0.100	4	128	9382	3
	Ni	62	2.392	ug/L	0.076	3	326	1759	1
	Cu	63	0.542	ug/L	0.012	2	417	5435	1
	Cu	65	0.441	ug/L	0.009	2	53	1847	0
	Zn	66	U 1.101	ug/L	0.013	1	309	3080	1
	Zn	67	1.286	ug/L	0.113	8	51	582	9
	Zn	68	1.371	ug/L	0.041	2	727	3128	1
	As	75	1.394	ug/L	0.030	2	1616	4610	2
	As-1	75	1.348	ug/L	0.022	1	9903	12358	1
	Se	82	U 0.150	ug/L	0.071	46	-46	-7	249
	Se	78	0.057	ug/L	0.085	148	10084	9662	1
	Mo	98	0.685	ug/L	0.021	3	25	3739	3
	Y	89		ug/L			452178	441495	2
	Kr	83		ug/L			2458	2477	4
>	In	115		ug/L			1233032	1213048	0
	Ag	107	U 0.000	ug/L	0.000	45	39	42	4
	Cd	111	U 0.001	ug/L	0.003	198	133	139	10
	Cd	114	U 0.004	ug/L	0.001	21	38	97	12
	Sb	121	U 0.066	ug/L	0.003	4	94	1324	3
	Sb	123	0.067	ug/L	0.004	6	60	1007	5
	Ba	135	5.057	ug/L	0.049	0	218	26489	0
	Ba	137	4.982	ug/L	0.017	0	388	44826	0
>	Tb	159		ug/L			1368167	1341412	1
	Tl	205	U 0.001	ug/L	0.000	26	31	64	13
	Pb	208	U 0.015	ug/L	0.001	4	215	1048	2
	Bi	209		ug/L			3022716	2992191	1
	Th	232	0.134	ug/L	0.029	21	209	6944	19
	U	238	0.300	ug/L	0.007	2	12	16367	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:40:13
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1606262	0
[	Be	9	U 0.003	ug/L	0.001	25	10	25	15
	C	13		ug/L			107220	133000	2
	Cl	37		ug/L			5888067	6048574	0
[>	Sc	45		ug/L			1420932	1413973	1
[	V	51	1.366	ug/L	0.031	2	8382	45240	0
[	V-1	51	1.366	ug/L	0.020	1	237	36998	0
[	Cr	52	U 0.429	ug/L	0.042	9	24727	34052	2
[	Cr	53	0.416	ug/L	0.009	2	189	1212	3
[	Mn	55	10.642	ug/L	0.142	1	577	325750	0
[	Co	59	0.200	ug/L	0.003	1	72	4367	0
[>	Ge	72		ug/L			673872	621913	0
[	Ni	60	9.739	ug/L	0.103	1	128	41243	1
[	Ni	62	9.257	ug/L	0.048	0	326	5720	1
[	Cu	63	2.155	ug/L	0.093	4	417	19742	4
[	Cu	65	1.858	ug/L	0.030	1	53	7370	1
[	Zn	66	U 1.395	ug/L	0.037	2	309	3697	3
[	Zn	67	2.552	ug/L	0.056	2	51	1070	1
[	Zn	68	2.667	ug/L	0.088	3	727	5249	3
[	As	75	6.119	ug/L	0.088	1	1616	14509	1
[	As-1	75	6.168	ug/L	0.053	0	9903	21986	1
[	Se	82	U 0.287	ug/L	0.083	28	-46	26	76
[	Se	78	0.384	ug/L	0.128	33	10084	9537	1
[	Mo	98	3.388	ug/L	0.073	2	25	17776	1
	Y	89		ug/L			452178	444225	2
	Kr	83		ug/L			2458	2553	2
[>	In	115		ug/L			1233632	1176466	0
[	Ag	107	U 0.002	ug/L	0.001	64	39	66	28
[	Cd	111	U 0.019	ug/L	0.001	6	133	238	2
[	Cd	114	U 0.018	ug/L	0.001	4	38	295	3
[	Sb	121	0.249	ug/L	0.006	2	94	4613	2
[	Sb	123	0.250	ug/L	0.004	1	60	3507	1
[	Ba	135	24.826	ug/L	0.072	0	218	125309	0
[	Ba	137	24.873	ug/L	0.232	0	388	215595	1
[>	Tb	159		ug/L			1368167	1377781	0
[	Tl	205	U 0.001	ug/L	0.000	16	31	96	10
[	Pb	208	U 0.027	ug/L	0.001	4	215	1765	3
[	Bi	209		ug/L			3022716	2773727	0
[	Th	232	0.149	ug/L	0.051	34	209	7909	33
[	U	238	1.383	ug/L	0.008	0	12	77382	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:44:21
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

DEL

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1636732	1
[	Be	9	U 0.003	ug/L	0.001	44	10	26	27
	C	13		ug/L			107220	133099	2
	Cl	37		ug/L			5888067	6051785	1
[>	Sc	45		ug/L			1420932	1420750	0
[	V	51	1.364	ug/L	0.024	1	8382	45430	1
[	V-1	51	1.360	ug/L	0.017	1	237	37028	1
[	Cr	52	U 0.494	ug/L	0.033	6	24727	35657	2
[	Cr	53	0.467	ug/L	0.005	1	189	1342	1
[	Mn	55	10.554	ug/L	0.037	0	577	324668	0
[	Co	59	0.171	ug/L	0.005	2	72	3763	3
[>	Ge	72		ug/L			673872	610988	1
[	Ni	60	3.471	ug/L	0.102	2	128	14512	1
[	Ni	62	2.683	ug/L	0.137	5	326	1838	3
[	Cu	63	2.292	ug/L	0.072	3	417	20589	1
[	Cu	65	1.988	ug/L	0.045	2	53	7739	0
[	Zn	66	CJ 2.418	ug/L	0.008	0	309	6087	1
[	Zn	67	3.387	ug/L	0.061	1	51	1380	2
[	Zn	68	3.796	ug/L	0.136	3	727	7058	2
[	As	75	6.124	ug/L	0.181	2	1616	14261	1
[	As-1	75	6.273	ug/L	0.242	3	9903	21808	0
[	Se	82	U 0.143	ug/L	0.119	83	-46	-8	351
[	Se	78	0.729	ug/L	0.234	32	10084	9571	0
[	Mo	98	3.477	ug/L	0.077	2	25	17921	1
	Y	89		ug/L			452178	450154	1
	Kr	83		ug/L			2458	2617	2
[>	In	115		ug/L			1233632	1192293	0
[	Ag	107	U 0.002	ug/L	0.001	32	39	61	12
[	Cd	111	U 0.018	ug/L	0.001	6	133	236	2
[	Cd	114	0.015	ug/L	0.001	4	38	262	4
[	Sb	121	0.238	ug/L	0.003	1	94	4466	1
[	Sb	123	0.238	ug/L	0.005	1	60	3388	2
[	Ba	135	24.136	ug/L	0.203	0	218	123467	0
[	Ba	137	24.107	ug/L	0.220	0	388	211771	0
[>	Tb	159		ug/L			1368167	1380212	1
[	Tl	205	U 0.001	ug/L	0.000	7	31	89	3
[	Pb	208	U 0.031	ug/L	0.001	3	215	1956	2
[	Bi	209		ug/L			3022716	2795279	1
[	Th	232	0.063	ug/L	0.013	21	209	3456	18
[	U	238	1.362	ug/L	0.015	1	12	76351	0

US15 : 00358

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US15 ASPK REN~~ AIR 5/11/12 JA
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:48:28
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

#2

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	2290665	19
	Be	9	-0.002	ug/L	0.000	29	10	4	100
	C	13		ug/L			107220	82055	16
	Cl	37		ug/L			5888067	3076042	9
>	Sc	45		ug/L			1420932	2001080	23
	V	51	-0.217	ug/L	0.007	3	8382	3495	19
	V-1	51	-0.004	ug/L	0.001	21	237	166	5
	Cr	52	-0.781	ug/L	0.025	3	24727	10393	19
	Cr	53	-0.045	ug/L	0.004	8	189	110	13
	Mn	55	0.001	ug/L	0.011	1048	577	878	57
	Co	59	-0.001	ug/L	0.001	75	72	81	28
>	Ge	72		ug/L			673872	879059	17
	Ni	60	-0.022	ug/L	0.002	11	128	39	57
	Ni	62	-0.311	ug/L	0.019	6	326	166	8
	Cu	63	-0.027	ug/L	0.003	10	417	194	17
	Cu	65	-0.004	ug/L	0.000	8	53	46	21
	Zn	66	-0.035	ug/L	0.009	24	309	281	19
	Zn	67	-0.032	ug/L	0.007	22	51	48	10
	Zn	68	-0.091	ug/L	0.039	42	727	723	15
	As	75	-0.110	ug/L	0.146	132	1616	1779	28
	As-1	75	-1.726	ug/L	0.343	19	9903	7770	13
	Se	82	0.153	ug/L	0.122	79	-46	-13	353
	Se	78	-6.246	ug/L	1.178	18	10084	7795	13
	Mo	98	-0.003	ug/L	0.001	23	25	13	21
	Y	89		ug/L			452178	611524	22
	Kr	83		ug/L			2458	2350	32
>	In	115		ug/L			1233632	1937480	21
	Ag	107	-0.002	ug/L	0.000	9	39	12	30
	Cd	111	-0.012	ug/L	0.001	9	133	95	22
	Cd	114	-0.001	ug/L	0.000	58	38	44	11
	Sb	121	-0.002	ug/L	0.001	36	94	94	12
	Sb	123	-0.001	ug/L	0.000	17	60	67	14
	Ba	135	-0.036	ug/L	0.001	2	218	42	20
	Ba	137	-0.037	ug/L	0.001	1	388	74	10
>	Tb	159		ug/L			1368167	2149585	17
	Tl	205	0.000	ug/L	0.000	167	31	56	13
	Pb	208	-0.001	ug/L	0.000	26	215	225	6
	Bi	209		ug/L			3022716	4883789	11
	Th	232	0.152	ug/L	0.081	53	209	12076	44
	U	238	0.000	ug/L	0.000	106	12	30	36

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US15-APOST REN~~ AIR 5/14/12
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:52:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

AIR

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	2307451	16
[	Be	9	-0.001	ug/L	0.000	21	10	4	43
	C	13		ug/L			107220	78498	17
	Cl	37		ug/L			5888067	2958454	11
[>	Sc	45		ug/L			1420932	1877033	20
[	V	51	-0.212	ug/L	0.004	1	8382	3450	17
[	V-1	51	-0.004	ug/L	0.001	18	237	162	8
[	Cr	52	-0.762	ug/L	0.018	2	2[illegible]27	10312	17
[	Cr	53	-0.041	ug/L	0.007	16	189	114	16
[	Mn	55	0.002	ug/L	0.010	417	577	895	57
[	Co	59	-0.000	ug/L	0.001	137	72	81	15
[>	Ge	72		ug/L			673872	921646	13
[	Ni	60	-0.023	ug/L	0.001	2	128	32	23
[	Ni	62	-0.348	ug/L	0.027	7	326	143	15
[	Cu	63	-0.030	ug/L	0.003	8	417	165	20
[	Cu	65	-0.006	ug/L	0.000	7	53	40	14
[	Zn	66	-0.044	ug/L	0.006	13	309	262	7
[	Zn	67	-0.050	ug/L	0.023	45	51	40	27
[	Zn	68	-0.115	ug/L	0.019	16	727	705	20
[	As	75	-0.170	ug/L	0.123	72	1616	1680	26
[	As-1	75	-1.860	ug/L	0.131	7	9903	7795	12
[	Se	82	0.093	ug/L	0.094	101	-46	-33	120
[	Se	78	-6.724	ug/L	0.447	6	10084	7812	12
[	Mo	98	-0.003	ug/L	0.000	15	25	13	24
	Y	89		ug/L			452178	610237	12
	Kr	83		ug/L			2458	2278	27
[>	In	115		ug/L			123[illegible]02	1972571	12
[	Ag	107	-0.002	ug/L	0.000	6	39	11	22
[	Cd	111	-0.012	ug/L	0.001	9	133	94	16
[	Cd	114	-0.001	ug/L	0.000	52	38	47	23
[	Sb	121	-0.002	ug/L	0.001	32	94	81	22
[	Sb	123	-0.002	ug/L	0.001	47	60	60	24
[	Ba	135	-0.035	ug/L	0.002	4	218	47	18
[	Ba	137	-0.038	ug/L	0.001	2	388	71	28
[>	Tb	159		ug/L			1368167	2351338	6
[	Tl	205	0.000	ug/L	0.000	1044	31	54	10
[	Pb	208	-0.002	ug/L	0.000	11	215	220	10
[	Bi	209		ug/L			3022716	5095129	3
[	Th	232	0.057	ug/L	0.026	46	209	5319	38
[	U	238	-0.000	ug/L	0.000	273	12	18	42

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US15 B REN~~ AR 05/14/12 JLS
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:56:43
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

AR

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1968157	28
	Be	9	-0.001	ug/L	0.000	13	10	5	39
	C	13		ug/L			107220	72035	18
	Cl	37		ug/L			5888067	2774538	12
>	Sc	45		ug/L			1420932	1719254	31
	V	51	-0.210	ug/L	0.008	3	8382	3189	27
	V-1	51	-0.004	ug/L	0.001	27	237	157	14
	Cr	52	-0.754	ug/L	0.034	4	24727	9564	26
	Cr	53	-0.038	ug/L	0.009	23	189	111	11
	Mn	55	0.001	ug/L	0.008	674	577	782	54
	Co	59	-0.000	ug/L	0.001	734	72	83	29
>	Ge	72		ug/L			673872	854644	26
	Ni	60	-0.024	ug/L	0.001	3	28	25	41
	Ni	62	-0.353	ug/L	0.022	6	326	127	22
	Cu	63	-0.029	ug/L	0.004	15	417	164	13
	Cu	65	-0.006	ug/L	0.001	23	53	36	27
	Zn	66	-0.037	ug/L	0.011	28	309	260	15
	Zn	67	-0.052	ug/L	0.017	33	51	35	21
	Zn	68	-0.106	ug/L	0.007	6	727	670	23
	As	75	-0.136	ug/L	0.052	37	1616	1667	30
	As-1	75	-1.709	ug/L	0.369	21	9903	7483	13
	Se	82	0.102	ug/L	0.018	17	-46	-26	46
	Se	78	-6.203	ug/L	1.254	20	10084	7502	13
	Mo	98	-0.003	ug/L	0.000	19	25	13	32
	Y	89		ug/L			452178	553211	19
	Kr	83		ug/L			2458	2239	31
>	In	115		ug/L			1233632	1813595	25
	Ag	107	-0.002	ug/L	0.000	6	39	18	38
	Cd	111	-0.012	ug/L	0.001	9	133	86	28
	Cd	114	-0.000	ug/L	0.000	336	38	53	26
	Sb	121	-0.002	ug/L	0.001	27	94	76	27
	Sb	123	-0.002	ug/L	0.001	47	60	57	50
	Ba	135	-0.036	ug/L	0.000	1	218	39	23
	Ba	137	-0.038	ug/L	0.001	2	388	67	10
>	Tb	159		ug/L			1368167	2102585	23
	Tl	205	0.000	ug/L	0.000	340	31	50	18
	Pb	208	-0.001	ug/L	0.000	22	215	221	13
	Bi	209		ug/L			3022716	4827013	17
	Th	232	0.042	ug/L	0.016	37	209	3504	18
	U	238	0.000	ug/L	0.000	1065	12	18	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~CCV4~~ AIC 5/14/12 JW
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 15:02:57
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

KB

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1944402	13
	Be	9	-0.001	ug/L	0.000	13	10	4	25
	C	13		ug/L			107220	70831	13
	Cl	37		ug/L			5888067	2809252	8
>	Sc	45		ug/L			1420932	1869471	17
	V	51	-0.213	ug/L	0.007	3	8382	3415	16
	V-1	51	-0.004	ug/L	0.001	24	237	169	12
	Cr	52	-0.766	ug/L	0.027	3	24727	10192	17
	Cr	53	-0.041	ug/L	0.002	6	189	113	11
	Mn	55	0.001	ug/L	0.009	1083	577	810	53
	Co	59	-0.000	ug/L	0.000	155	72	84	6
>	Ge	72		ug/L			673872	837254	2
	Ni	60	-0.022	ug/L	0.001	3	128	31	9
	Ni	62	-0.358	ug/L	0.012	3	326	123	10
	Cu	63	-0.031	ug/L	0.002	5	417	146	11
	Cu	65	-0.003	ug/L	0.002	65	53	48	23
	Zn	66	-0.039	ug/L	0.014	34	309	254	16
	Zn	67	-0.029	ug/L	0.017	59	51	48	16
	Zn	68	-0.091	ug/L	0.034	37	727	694	14
	As	75	-0.101	ug/L	0.155	154	1616	1728	28
	As-1	75	-1.729	ug/L	0.230	13	9903	7468	11
	Se	82	0.185	ug/L	0.164	89	-46	2	2107
	Se	78	-6.298	ug/L	0.791	12	10084	7461	11
	Mo	98	-0.003	ug/L	0.000	8	25	10	18
	Y	89		ug/L			452178	578907	4
	Kr	83		ug/L			2458	2192	25
>	In	115		ug/L			1233632	1801879	9
	Ag	107	-0.002	ug/L	0.000	3	39	12	9
	Cd	111	-0.011	ug/L	0.001	5	133	97	6
	Cd	114	-0.000	ug/L	0.000	12	38	45	7
	Sb	121	-0.002	ug/L	0.001	44	94	81	40
	Sb	123	-0.001	ug/L	0.001	41	60	57	31
	Ba	135	-0.036	ug/L	0.002	5	218	43	35
	Ba	137	-0.037	ug/L	0.001	2	388	73	20
>	Tb	159		ug/L			1368167	2198583	9
	Tl	205	0.000	ug/L	0.000	231	31	55	19
	Pb	208	-0.002	ug/L	0.000	15	215	204	12
	Bi	209		ug/L			3022716	4715148	4
	Th	232	0.027	ug/L	0.005	19	209	2592	21
	U	238	-0.000	ug/L	0.000	53	12	14	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 15:14:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1511092	1
	Be	9	49.207	ug/L	1.050	2	10	235207	0
	C	13		ug/L			107220	106041	4
	Cl	37		ug/L			5888067	6135922	3
>	Sc	45		ug/L			1420932	1329087	2
	V	51	47.589	ug/L	1.563	3	8382	1216120	1
	V-1	51	47.961	ug/L	1.348	2	237	1213329	0
	Cr	52	48.505	ug/L	0.768	1	24727	1028064	1
	Cr	53	49.820	ug/L	1.760	3	189	115278	4
	Mn	55	48.247	ug/L	0.888	1	577	1386026	1
	Co	59	49.701	ug/L	0.895	1	72	1002259	1
>	Ge	72		ug/L			673872	616298	2
	Ni	60	48.784	ug/L	1.371	2	128	204164	0
	Ni	62	48.353	ug/L	0.729	1	326	28352	3
	Cu	63	49.633	ug/L	1.439	2	417	441861	0
	Cu	65	50.289	ug/L	1.740	3	53	196314	1
	Zn	66	50.189	ug/L	1.700	3	309	121802	0
	Zn	67	50.672	ug/L	1.866	3	51	20164	3
	Zn	68	50.568	ug/L	0.750	1	727	86663	1
	As	75	50.654	ug/L	1.545	3	1616	108212	0
	As-1	75	50.210	ug/L	1.693	3	9903	112617	0
	Se	82	54.009	ug/L	1.289	2	-46	12893	0
	Se	78	50.573	ug/L	1.861	3	10084	39236	0
	Mo	98	49.369	ug/L	1.988	4	25	256184	1
	Y	89		ug/L			452178	419726	1
	Kr	83		ug/L			2458	2655	0
>	In	115		ug/L			1233632	1172528	2
	Ag	107	50.380	ug/L	0.993	1	39	637270	0
	Cd	111	50.090	ug/L	0.839	1	133	293223	0
	Cd	114	50.009	ug/L	0.518	1	38	725644	1
	Sb	121	49.351	ug/L	0.519	1	94	892289	1
	Sb	123	49.053	ug/L	0.556	1	60	675222	1
	Ba	135	49.593	ug/L	0.291	0	218	249259	1
	Ba	137	48.545	ug/L	0.789	1	388	418923	0
>	Tb	159		ug/L			1368167	1323182	0
	Tl	205	52.541	ug/L	0.216	0	31	2200843	0
	Pb	208	51.054	ug/L	0.024	0	215	2765273	0
	Bi	209		ug/L			3022716	2946033	0
	Th	232	52.635	ug/L	0.540	1	209	2613701	1
	U	238	52.421	ug/L	0.174	0	12	2816358	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 15:20:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1436872	2
	Be	9	-0.001	ug/L	0.001	96	10	6	50
	C	13		ug/L			107220	103806	1
	Cl	37		ug/L			5888067	6000825	1
>	Sc	45		ug/L			1420932	1307251	2
	V	51	0.012	ug/L	0.003	25	8382	8018	3
	V-1	51	-0.002	ug/L	0.000	15	237	170	1
	Cr	52	0.040	ug/L	0.009	22	24727	23558	3
	Cr	53	-0.010	ug/L	0.005	53	189	152	6
	Mn	55	-0.001	ug/L	0.001	72	577	510	3
	Co	59	-0.000	ug/L	0.001	8073	72	66	22
>	Ge	72		ug/L			673872	618448	2
	Ni	60	-0.019	ug/L	0.001	7	128	37	16
	Ni	62	-0.242	ug/L	0.022	9	326	158	8
	Cu	63	-0.024	ug/L	0.001	3	417	168	6
	Cu	65	-0.004	ug/L	0.000	11	53	34	4
	Zn	66	-0.010	ug/L	0.005	57	309	260	4
	Zn	67	-0.003	ug/L	0.009	310	51	46	8
	Zn	68	0.007	ug/L	0.006	87	727	679	0
	As	75	0.142	ug/L	0.006	4	1616	1783	1
	As-1	75	0.114	ug/L	0.088	76	9903	9322	0
	Se	82	0.099	ug/L	0.089	90	-46	-18	112
	Se	78	0.396	ug/L	0.279	70	10084	9489	0
	Mo	98	0.009	ug/L	0.001	12	25	69	6
	Y	89		ug/L			452178	416532	1
	Kr	83		ug/L			2458	2558	0
>	In	115		ug/L			1233632	1143549	0
	Ag	107	-0.001	ug/L	0.000	11	39	27	3
	Cd	111	0.003	ug/L	0.003	110	133	138	12
	Cd	114	0.000	ug/L	0.000	2975	38	36	9
	Sb	121	0.069	ug/L	0.004	5	94	1307	6
	Sb	123	0.071	ug/L	0.003	4	60	1007	5
	Ba	135	-0.015	ug/L	0.001	6	218	126	4
	Ba	137	-0.016	ug/L	0.002	11	388	221	7
>	Tb	159		ug/L			1368167	1257504	2
	Tl	205	0.003	ug/L	0.000	5	31	143	3
	Pb	208	0.000	ug/L	0.000	102	215	218	10
	Bi	209		ug/L			3022716	2930996	1
	Th	232	0.101	ug/L	0.013	13	209	4946	10
	U	238	0.001	ug/L	0.000	14	12	81	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 15:30:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1542074	1
[	Be	9	23.560	ug/L	0.346	1	10	114964	2
	C	13		ug/L			107220	127413	3
	Cl	37		ug/L			5888067	5973987	1
[>	Sc	45		ug/L			1420932	1375868	1
[	V	51	25.186	ug/L	0.168	0	8382	670473	1
[	V-1	51	25.307	ug/L	0.171	0	237	663175	0
[	Cr	52	24.108	ug/L	0.206	0	24727	541116	1
[	Cr	53	24.515	ug/L	0.667	2	189	58812	2
[	Mn	55	34.809	ug/L	0.982	2	577	1035469	2
[	Co	59	23.883	ug/L	0.366	1	72	498722	1
[>	Ge	72		ug/L			673872	613585	0
[	Ni	60	27.648	ug/L	0.297	1	128	115304	1
[	Ni	62	26.623	ug/L	0.518	1	326	15673	1
[	Cu	63	26.806	ug/L	0.561	2	417	237863	1
[	Cu	65	26.926	ug/L	0.238	0	53	104725	0
[	Zn	66	72.665	ug/L	1.243	1	309	175538	0
[	Zn	67	68.500	ug/L	0.995	1	51	27127	1
[	Zn	68	73.197	ug/L	1.965	2	727	124615	2
[	As	75	33.241	ug/L	0.247	0	1616	71247	1
[	As-1	75	31.509	ug/L	0.220	0	9903	73762	1
[	Se	82	78.413	ug/L	0.408	0	-46	18664	0
[	Se	78	72.604	ug/L	0.430	0	10084	52107	0
[	Mo	98	29.717	ug/L	0.544	1	25	153650	2
	Y	89		ug/L			452178	437633	0
	Kr	83		ug/L			2458	2779	0
[>	In	115		ug/L			1233632	1158449	0
[	Ag	107	25.101	ug/L	0.368	1	39	313811	1
[	Cd	111	23.679	ug/L	0.115	0	133	137051	0
[	Cd	114	23.327	ug/L	0.188	0	38	334480	0
[	Sb	121	24.230	ug/L	0.044	0	94	432933	0
[	Sb	123	24.076	ug/L	0.358	1	60	327497	1
[	Ba	135	49.694	ug/L	0.051	0	218	246784	0
[	Ba	137	49.571	ug/L	0.525	1	188	422723	0
[>	Tb	159		ug/L			1368167	1338377	0
[	Tl	205	24.416	ug/L	0.093	0	31	1034512	0
[	Pb	208	24.390	ug/L	0.226	0	215	1336320	0
[	Bi	209		ug/L			3022716	2788435	0
[	Th	232	24.251	ug/L	0.312	1	209	1218181	1
[	U	238	26.672	ug/L	0.247	0	12	1449371	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 APOST REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 15:35:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Ni

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1558621	1
[	Be	9	24.634	ug/L	0.186	0	10	121486	1
	C	13		ug/L			107220	132493	1
	Cl	37		ug/L			5888067	6016344	1
[>	Sc	45		ug/L			1420932	1414383	1
[	V	51	25.441	ug/L	0.722	2	8382	695944	1
[	V-1	51	25.432	ug/L	0.597	2	237	684984	1
[	Cr	52	24.684	ug/L	0.738	2	24727	568782	1
[	Cr	53	24.644	ug/L	0.573	2	189	60767	1
[	Mn	55	33.956	ug/L	0.486	1	577	1038429	0
[	Co	59	23.954	ug/L	0.761	3	72	514028	1
[>	Ge	72		ug/L			673872	615692	1
[	Ni	60	34.959 ✓	ug/L	0.595	1	128	146267	2
[	Ni	62	34.351	ug/L	0.587	1	326	20205	1
[	Cu	63	27.375	ug/L	0.767	2	417	243701	1
[	Cu	65	27.530	ug/L	0.472	1	53	107429	1
[	Zn	66	74.322	ug/L	2.055	2	309	180116	1
[	Zn	67	71.351	ug/L	0.892	1	51	28349	0
[	Zn	68	74.847	ug/L	1.529	2	727	127836	0
[	As	75	34.131	ug/L	0.435	1	1616	73356	0
[	As-1	75	32.448	ug/L	0.505	1	9903	75938	0
[	Se	82	82.032	ug/L	0.869	1	-46	19592	0
[	Se	78	76.424	ug/L	1.474	1	10084	54545	0
[	Mo	98	29.802	ug/L	1.013	3	25	154565	2
	Y	89		ug/L			452178	445907	3
	Kr	83		ug/L			2458	2795	0
[>	In	115		ug/L			1233632	1169389	0
[	Ag	107	26.002	ug/L	0.698	2	39	328108	2
[	Cd	111	24.267	ug/L	0.500	2	133	141768	1
[	Cd	114	24.166	ug/L	0.051	0	38	349795	0
[	Sb	121	24.647	ug/L	0.195	0	94	444543	0
[	Sb	123	24.557	ug/L	0.136	0	60	337200	0
[	Ba	135	49.913	ug/L	0.462	0	218	250203	0
[	Ba	137	50.486	ug/L	0.035	0	388	434593	0
[>	Tb	159		ug/L			1368167	1347910	0
[	Tl	205	25.453	ug/L	0.276	1	31	1086112	0
[	Pb	208	24.941	ug/L	0.221	0	215	1376242	0
[	Bi	209		ug/L			3022716	2759434	0
[	Th	232	25.880	ug/L	0.235	0	209	1309240	1
[	U	238	27.510	ug/L	0.476	1	12	1505533	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 15:39:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

RR A5 10X

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			1633546	1481977	2
[	Be	9	U	0.015	ug/L	0.004	23	10	81	17
	C	13			ug/L			107220	126857	3
	Cl	37			ug/L			5888067	6232174	3
[>	Sc	45			ug/L			1420932	1483189	3
[	V	51		1.491	ug/L	0.038	2	8382	51011	1
[	V-1	51		1.580	ug/L	0.046	2	237	44849	1
[	Cr	52	U	0.349	ug/L	0.017	4	2727	33877	2
[	Cr	53		0.645	ug/L	0.044	6	189	1857	2
[	Mn	55		373.242	ug/L	13.702	3	577	11958142	2
[	Co	59		0.106	ug/L	0.002	2	72	2469	3
[>	Ge	72			ug/L			673872	623996	1
[	Ni	60		0.536	ug/L	0.020	3	128	2390	4
[	Ni	62		0.126	ug/L	0.034	27	326	376	5
[	Cu	63		1.426	ug/L	0.033	2	417	13236	2
[	Cu	65		0.877	ug/L	0.016	1	53	3517	2
[	Zn	66	U	1.540	ug/L	0.051	3	309	4063	2
[	Zn	67		1.394	ug/L	0.048	3	51	608	2
[	Zn	68		3.192	ug/L	0.069	2	727	6172	2
[	As	75		361.719	ug/L	4.221	1	1616	773571	0
[	As-1	75		369.442	ug/L	4.334	1	9903	781089	0
[	Se	82	U	0.274	ug/L	0.108	39	-46	23	113
[	Se	78		0.473	ug/L	0.045	9	10084	9622	1
[	Mo	98		0.076	ug/L	0.002	2	25	421	3
	Y	89			ug/L			452178	435636	1
	Kr	83			ug/L			2458	2619	0
[>	In	115			ug/L			1232	1164494	1
[	Ag	107	U	0.008	ug/L	0.002	28	39	140	20
[	Cd	111		0.110	ug/L	0.002	1	133	764	0
[	Cd	114		0.111	ug/L	0.004	3	38	1637	2
[	Sb	121	U	0.078	ug/L	0.003	4	94	1484	5
[	Sb	123		0.078	ug/L	0.002	2	60	1125	2
[	Ba	135		0.899	ug/L	0.004	0	218	4688	1
[	Ba	137		0.879	ug/L	0.014	1	388	7897	0
[>	Tb	159			ug/L			1368167	1342587	1
[	Tl	205	U	0.009	ug/L	0.002	16	31	433	13
[	Pb	208	U	0.068	ug/L	0.001	1	215	3946	0
[	Bi	209			ug/L			3022716	2783633	0
[	Th	232		0.325	ug/L	0.158	48	209	16530	46
[	U	238		0.009	ug/L	0.001	11	12	517	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 15:45:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1508589	1
[	Be	9	51.370	ug/L	0.189	0	10	245203	1
	C	13		ug/L			107220	112509	0
	Cl	37		ug/L			5888067	5942786	0
[>	Sc	45		ug/L			1420932	1362601	2
[	V	51	48.641	ug/L	2.057	4	8382	1274184	2
[	V-1	51	48.802	ug/L	2.192	4	237	1265654	2
[	Cr	52	49.235	ug/L	0.932	1	24727	1069484	0
[	Cr	53	49.808	ug/L	1.332	2	189	118124	0
[	Mn	55	48.547	ug/L	0.614	1	577	1430068	1
[	Co	59	49.370	ug/L	1.247	2	72	1020606	0
[>	Ge	72		ug/L			673872	646176	0
[	Ni	60	48.485	ug/L	0.292	0	128	212859	1
[	Ni	62	48.722	ug/L	1.661	3	326	29944	2
[	Cu	63	50.219	ug/L	0.947	1	417	468945	1
[	Cu	65	51.160	ug/L	0.527	1	53	209513	1
[	Zn	66	49.014	ug/L	0.395	0	309	124800	1
[	Zn	67	51.262	ug/L	1.007	1	51	21390	1
[	Zn	68	49.191	ug/L	0.799	1	727	88427	1
[	As	75	50.593	ug/L	0.262	0	1616	113387	1
[	As-1	75	50.266	ug/L	0.102	0	9903	118263	0
[	Se	82	54.077	ug/L	0.487	0	-46	13541	1
[	Se	78	51.017	ug/L	0.690	1	10084	41433	0
[	Mo	98	48.748	ug/L	0.838	1	25	265414	1
	Y	89		ug/L			452178	434989	1
	Kr	83		ug/L			2458	2757	2
[>	In	115		ug/L			1233632	1192075	1
[	Ag	107	50.647	ug/L	0.940	1	39	651490	2
[	Cd	111	50.051	ug/L	0.935	1	133	297899	0
[	Cd	114	49.756	ug/L	0.910	1	38	734019	1
[	Sb	121	48.983	ug/L	0.968	1	94	900376	0
[	Sb	123	48.645	ug/L	0.963	1	60	680766	0
[	Ba	135	49.019	ug/L	0.472	0	218	250480	0
[	Ba	137	49.061	ug/L	0.689	1	388	430474	0
[>	Tb	159		ug/L			1368167	1336212	0
[	Tl	205	52.210	ug/L	0.063	0	31	2208509	0
[	Pb	208	50.901	ug/L	0.447	0	215	2783980	0
[	Bi	209		ug/L			3022716	2939973	0
[	Th	232	52.213	ug/L	1.350	2	209	2617961	2
[	U	238	52.345	ug/L	0.914	1	12	2839648	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 15:51:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1482965	1
	Be	9	0.001	ug/L	0.004	333	10	14	114
	C	13		ug/L			107220	109153	0
	Cl	37		ug/L			5888067	5811957	2
>	Sc	45		ug/L			1420932	1352237	2
	V	51	0.017	ug/L	0.005	30	8382	8427	1
	V-1	51	-0.000	ug/L	0.004	2676	237	220	45
	Cr	52	0.059	ug/L	0.019	33	24727	24773	2
	Cr	53	-0.002	ug/L	0.010	446	189	174	10
	Mn	55	0.099	ug/L	0.017	17	577	3438	15
	Co	59	0.001	ug/L	0.002	176	72	95	47
>	Ge	72		ug/L			673872	624437	1
	Ni	60	-0.014	ug/L	0.002	11	128	60	10
	Ni	62	-0.344	ug/L	0.018	5	326	100	9
	Cu	63	-0.024	ug/L	0.005	19	417	174	25
	Cu	65	0.004	ug/L	0.005	114	53	67	31
	Zn	66	0.034	ug/L	0.012	36	309	369	9
	Zn	67	0.015	ug/L	0.026	170	51	54	18
	Zn	68	0.062	ug/L	0.003	5	727	780	1
	As	75	0.188	ug/L	0.022	11	1616	1899	2
	As-1	75	0.289	ug/L	0.052	17	9903	9781	0
	Se	82	0.074	ug/L	0.061	81	-46	-25	58
	Se	78	0.936	ug/L	0.210	22	10084	9907	0
	Mo	98	0.008	ug/L	0.001	13	25	67	7
	Y	89		ug/L			452178	415724	1
	Kr	83		ug/L			2458	2675	1
>	In	115		ug/L			1233632	1167648	0
	Ag	107	-0.000	ug/L	0.001	218	39	32	30
	Cd	111	-0.002	ug/L	0.002	81	133	113	9
	Cd	114	0.001	ug/L	0.001	87	38	45	17
	Sb	121	0.063	ug/L	0.005	8	94	1228	7
	Sb	123	0.063	ug/L	0.007	11	60	925	10
	Ba	135	-0.014	ug/L	0.003	18	218	136	9
	Ba	137	-0.016	ug/L	0.001	5	388	233	3
>	Tb	159		ug/L			1368167	1296259	1
	Tl	205	0.003	ug/L	0.000	3	31	134	3
	Pb	208	0.003	ug/L	0.003	101	215	336	38
	Bi	209		ug/L			3022716	2960313	0
	Th	232	0.096	ug/L	0.019	19	209	4855	17
	U	238	0.005	ug/L	0.006	120	12	253	114

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 15:56:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
IS	Li	6		ug/L			1633546	1464807	2
	Be	9	U 0.015	ug/L	0.007	43	10	81	41
	C	13		ug/L			107220	130636	2
	Cl	37		ug/L			5888067	6193797	1
IS	Sc	45		ug/L			1420932	1506989	1
	V	51	1.431	ug/L	0.045	3	8382	50082	1
	V-1	51	1.500	ug/L	0.045	3	237	43274	1
	Cr	52	U 0.384	ug/L	0.031	8	24727	35243	2
	Cr	53	0.612	ug/L	0.008	1	189	1805	2
	Mn	55	384.919	ug/L	12.817	3	577	12533705	2
	Co	59	0.211	ug/L	0.006	3	72	4896	4
IS	Ge	72		ug/L			673872	636517	2
	Ni	60	0.605	ug/L	0.034	5	128	2733	4
	Ni	62	U -0.074	ug/L	0.005	7	326	264	3
	Cu	63	0.864	ug/L	0.054	6	417	8324	3
	Cu	65	0.315	ug/L	0.012	3	53	1319	2
	Zn	66	U 1.182	ug/L	0.036	3	309	3248	1
	Zn	67	U 1.106	ug/L	0.027	2	51	502	3
	Zn	68	2.795	ug/L	0.134	4	727	5597	4
	As	75	362.312	ug/L	9.919	2	1616	790073	0
	As-1	75	370.077	ug/L	10.207	2	9903	797802	0
	Se	82	U 0.161	ug/L	0.041	25	-46	-4	240
	Se	78	U 0.401	ug/L	0.321	80	10084	9768	0
	Mo	98	0.070	ug/L	0.009	12	25	397	11
	Y	89		ug/L			452178	437914	1
	Kr	83		ug/L			2458	2626	1
IS	In	115		ug/L			1233632	1165004	1
	Ag	107	U 0.004	ug/L	0.000	11	39	87	8
	Cd	111	U 0.013	ug/L	0.004	28	133	204	10
	Cd	114	U 0.015	ug/L	0.001	7	38	247	4
	Sb	121	U 0.066	ug/L	0.004	6	94	1273	7
	Sb	123	U 0.066	ug/L	0.002	3	60	955	3
	Ba	135	0.934	ug/L	0.022	2	218	4868	2
	Ba	137	0.913	ug/L	0.016	1	388	8191	2
IS	Tb	159		ug/L			1368167	1325956	1
	Tl	205	U 0.009	ug/L	0.002	19	31	424	18
	Pb	208	U 0.067	ug/L	0.002	2	215	3817	1
	Bi	209		ug/L			3022716	2775007	1
	Th	232	0.244	ug/L	0.097	39	209	12309	38
	U	238	0.009	ug/L	0.006	67	12	512	67

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 G-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, May 11, 2012 16:00:10
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1633546	1538608	2
	Be	9	U	0.000	ug/L	0.001	489	10	10	28
	C	13			ug/L			107220	125235	1
	Cl	37			ug/L			5888067	5904257	2
>	Sc	45			ug/L			1420932	1397173	2
	V	51		0.293	ug/L	0.014	4	8382	16068	0
	V-1	51		0.280	ug/L	0.006	2	237	7682	1
	Cr	52	Q	0.224	ug/L	0.035	15	24727	29186	0
	Cr	53		0.177	ug/L	0.005	2	189	616	1
	Mn	55		2.350	ug/L	0.089	3	577	71523	3
	Co	59		0.033	ug/L	0.002	6	72	777	3
>	Ge	72			ug/L			673872	657905	1
	Ni	60	U	0.282	ug/L	0.022	7	128	1383	6
	Ni	62		-0.195	ug/L	0.020	10	326	198	4
	Cu	63	U	0.373	ug/L	0.015	3	417	3945	2
	Cu	65		0.349	ug/L	0.008	2	53	1506	2
	Zn	66	U	0.992	ug/L	0.009	0	309	2867	0
	Zn	67		1.174	ug/L	0.083	7	51	547	5
	Zn	68		1.276	ug/L	0.033	2	727	3027	1
	As	75		1.353	ug/L	0.066	4	1616	4622	1
	As-1	75		1.295	ug/L	0.076	5	9903	12519	0
	Se	82	U	0.119	ug/L	0.119	99	-46	-15	200
	Se	78		0.125	ug/L	0.161	129	10084	9924	0
	Mo	98		0.661	ug/L	0.016	2	25	3690	1
	Y	89			ug/L			452178	445699	1
	Kr	83			ug/L			2458	2646	2
>	In	115			ug/L			1233632	1204444	0
	Ag	107	U	-0.001	ug/L	0.000	27	39	22	19
	Cd	111	U	-0.000	ug/L	0.003	722	33	128	12
	Cd	114		0.001	ug/L	0.001	84	38	47	15
	Sb	121	U	0.069	ug/L	0.003	4	94	1378	4
	Sb	123		0.068	ug/L	0.002	3	60	1025	2
	Ba	135		4.885	ug/L	0.096	1	218	25414	2
	Ba	137		4.804	ug/L	0.039	0	388	42931	0
>	Tb	159			ug/L			1368167	1349158	1
	Tl	205	U	0.001	ug/L	0.000	34	31	81	22
	Pb	208	U	0.013	ug/L	0.001	4	215	907	3
	Bi	209			ug/L			3022716	2988868	1
	Th	232		0.014	ug/L	0.001	8	209	916	7
	U	238		0.291	ug/L	0.008	2	12	15947	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:04:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1598787	0
	Be	9	U 0.002	ug/L	0.000	16	10	21	9
	C	13		ug/L			107220	137291	0
	Cl	37		ug/L			5888067	5914960	2
>	Sc	45		ug/L			1420932	1420400	3
	V	51	1.290	ug/L	0.049	3	8382	43379	0
	V-1	51	1.280	ug/L	0.043	3	237	34842	0
	Cr	52	U 0.418	ug/L	0.034	8	24727	33956	1
	Cr	53	0.372	ug/L	0.012	3	189	1106	1
	Mn	55	10.643	ug/L	0.169	1	577	327184	1
	Co	59	0.153	ug/L	0.007	4	72	3356	1
>	Ge	72		ug/L			673872	630414	1
	Ni	60	1.455	ug/L	0.045	3	128	6347	3
	Ni	62	U 0.335	ug/L	0.041	12	326	504	4
	Cu	63	1.738	ug/L	0.069	3	417	16205	2
	Cu	65	1.460	ug/L	0.039	2	53	5881	2
	Zn	66	U 1.086	ug/L	0.025	2	309	2979	1
	Zn	67	2.354	ug/L	0.096	4	51	1004	3
	Zn	68	2.373	ug/L	0.024	1	727	4809	2
	As	75	5.862	ug/L	0.103	1	1616	14152	0
	As-1	75	5.887	ug/L	0.094	1	9903	21689	0
	Se	82	U 0.224	ug/L	0.079	35	-46	11	173
	Se	78	0.464	ug/L	0.168	36	10084	9715	0
	Mo	98	3.254	ug/L	0.039	1	25	17305	0
	Y	89		ug/L			452178	445340	1
	Kr	83		ug/L			2458	2750	0
>	In	115		ug/L			1233632	1172005	0
	Ag	107	U -0.000	ug/L	0.000	205	39	34	13
	Cd	111	U 0.007	ug/L	0.001	16	133	169	3
	Cd	114	0.004	ug/L	0.001	34	38	90	20
	Sb	121	0.279	ug/L	0.004	1	94	5138	1
	Sb	123	0.279	ug/L	0.007	2	60	3891	1
	Ba	135	23.597	ug/L	0.069	0	218	118665	0
	Ba	137	23.598	ug/L	0.161	0	388	203782	0
>	Tb	159		ug/L			1366167	1347597	0
	Tl	205	U 0.001	ug/L	0.000	15	31	69	8
	Pb	208	U 0.014	ug/L	0.001	4	215	962	3
	Bi	209		ug/L			3022716	2769380	1
	Th	232	0.046	ug/L	0.006	13	209	2522	12
	U	238	1.365	ug/L	0.018	1	12	74724	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 GDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:08:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1583114	1
	Be	9	0.001	ug/L	0.000	29	10	17	10
	C	13		ug/L			107220	136282	1
	Cl	37		ug/L			5888067	6024151	1
>	Sc	45		ug/L			1420932	1405243	1
	V	51	1.336	ug/L	0.026	1	8382	44170	2
	V-1	51	1.330	ug/L	0.016	1	237	35815	1
	Cr	52	0.914	ug/L	0.027	2	24727	44486	1
	Cr	53	0.888	ug/L	0.040	4	189	2354	2
	Mn	55	10.886	ug/L	0.268	2	577	331100	0
	Co	59	0.157	ug/L	0.004	2	72	3417	1
>	Ge	72		ug/L			673872	615984	0
	Ni	60	1.470	ug/L	0.048	3	128	6267	2
	Ni	62	0.359	ug/L	0.054	15	326	506	5
	Cu	63	1.778	ug/L	0.014	0	417	16193	0
	Cu	65	1.498	ug/L	0.020	1	53	5894	1
	Zn	66	1.287	ug/L	0.018	1	309	3398	0
	Zn	67	2.395	ug/L	0.212	8	51	997	8
	Zn	68	2.608	ug/L	0.052	1	727	5098	1
	As	75	6.046	ug/L	0.034	0	1616	14217	0
	As-1	75	6.114	ug/L	0.042	0	9903	21664	0
	Se	82	0.251	ug/L	0.048	19	-46	17	65
	Se	78	0.672	ug/L	0.039	5	10084	9617	0
	Mo	98	3.469	ug/L	0.048	1	25	18027	1
	Y	89		ug/L			452178	449573	0
	Kr	83		ug/L			2458	2721	1
>	In	115		ug/L			1233632	1168145	0
	Ag	107	0.000	ug/L	0.000	133	39	41	14
	Cd	111	0.006	ug/L	0.006	96	133	161	20
	Cd	114	0.004	ug/L	0.000	5	38	91	2
	Sb	121	0.281	ug/L	0.005	1	94	5143	0
	Sb	123	0.280	ug/L	0.007	2	60	3902	1
	Ba	135	24.308	ug/L	0.063	0	218	121832	0
	Ba	137	23.930	ug/L	0.127	0	388	205963	0
>	Tb	159		ug/L			1368167	1354946	1
	Tl	205	0.001	ug/L	0.000	43	31	70	25
	Pb	208	0.014	ug/L	0.001	4	215	1000	4
	Bi	209		ug/L			3022716	2763384	0
	Th	232	0.035	ug/L	0.006	16	209	1987	14
	U	238	1.393	ug/L	0.025	1	12	76637	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 GSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:12:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1589414	3
	Be	9	23.434	ug/L	0.832	3	10	117768	0
	C	13		ug/L			107220	135806	2
	Cl	37		ug/L			5888067	6110538	2
>	Sc	45		ug/L			1420932	1438208	3
	V	51	24.396	ug/L	0.871	3	8382	678681	2
	V-1	51	24.557	ug/L	1.069	4	237	672085	2
	Cr	52	23.550	ug/L	0.577	2	24727	552810	1
	Cr	53	24.100	ug/L	1.361	5	189	60358	1
	Mn	55	33.434	ug/L	1.794	5	577	1038391	1
	Co	59	23.472	ug/L	0.779	3	72	511913	0
>	Ge	72		ug/L			673872	620301	2
	Ni	60	25.199	ug/L	1.464	5	128	106157	3
	Ni	62	25.181	ug/L	0.711	2	326	14997	0
	Cu	63	26.387	ug/L	1.245	4	417	236570	2
	Cu	65	26.688	ug/L	0.446	1	53	104923	2
	Zn	66	70.963	ug/L	1.799	2	309	173259	0
	Zn	67	69.838	ug/L	0.757	1	51	27955	1
	Zn	68	71.593	ug/L	1.198	1	727	123219	1
	As	75	32.993	ug/L	0.966	2	1616	71467	0
	As-1	75	31.004	ug/L	0.920	2	9903	73486	0
	Se	82	78.840	ug/L	2.473	3	-46	18962	0
	Se	78	72.177	ug/L	2.393	3	10084	52400	0
	Mo	98	29.732	ug/L	1.254	4	25	155310	2
	Y	89		ug/L			452178	447796	1
	Kr	83		ug/L			2458	2818	0
>	In	115		ug/L			1233632	1161634	1
	Ag	107	25.494	ug/L	0.852	3	39	319505	2
	Cd	111	23.685	ug/L	0.465	1	133	137437	0
	Cd	114	23.768	ug/L	0.254	1	38	341719	0
	Sb	121	24.242	ug/L	0.236	0	94	434307	0
	Sb	123	24.244	ug/L	0.382	1	60	330658	0
	Ba	135	49.762	ug/L	0.934	1	218	247764	0
	Ba	137	49.913	ug/L	0.978	1	388	426742	0
>	Tb	159		ug/L			1368167	1347533	0
	Tl	205	24.616	ug/L	0.182	0	31	1050113	0
	Pb	208	24.448	ug/L	0.104	0	215	1348673	0
	Bi	209		ug/L			3022716	2748901	0
	Th	232	24.742	ug/L	0.095	0	209	1251354	0
	U	238	26.641	ug/L	0.241	0	12	1457618	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US15 GPOST REN~~ 222222

Sample Dil Factor: 2 5/16/12 SD

Comments:

Sample Date/Time: Friday, May 11, 2012 16:16:40

Number of Replicates: 3

Method File: C:\NexION\Data\Method\200.8nomin.mth

Tuning File: C:\NexION\Data\MassCal\default.tun

Optimization File: C:\NexION\Data\Conditions\default.dac

Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1570936	0
[	Be	9	25.098	ug/L	0.452	1	10	124741	1
	C	13		ug/L			107220	137649	1
	Cl	37		ug/L			5888067	6110524	1
[>	Sc	45		ug/L			1420932	1430066	0
[	V	51	25.531	ug/L	0.227	0	8382	706302	0
[	V-1	51	25.592	ug/L	0.040	0	237	697095	0
[	Cr	52	24.468	ug/L	0.292	1	24727	570455	0
[	Cr	53	24.669	ug/L	0.524	2	189	61516	2
[	Mn	55	34.371	ug/L	0.322	0	577	1062887	0
[	Co	59	24.423	ug/L	0.082	0	72	530109	0
[>	Ge	72		ug/L			673872	610888	1
[	Ni	60	27.252	ug/L	0.444	1	128	113145	0
[	Ni	62	26.452	ug/L	0.375	1	326	15505	0
[	Cu	63	27.517	ug/L	0.515	1	417	243077	0
[	Cu	65	27.757	ug/L	0.165	0	53	107479	1
[	Zn	66	75.187	ug/L	0.884	1	309	180818	0
[	Zn	67	72.649	ug/L	0.042	0	51	28641	1
[	Zn	68	75.537	ug/L	2.603	3	727	128013	3
[	As	75	34.700	ug/L	0.734	2	1616	73967	0
[	As-1	75	32.669	ug/L	0.522	1	9903	75798	0
[	Se	82	83.943	ug/L	1.369	1	-46	19893	0
[	Se	78	77.216	ug/L	0.539	0	10084	54591	0
[	Mo	98	30.331	ug/L	0.305	1	25	156122	0
	Y	89		ug/L			452178	442806	0
	Kr	83		ug/L			2458	2835	1
[>	In	115		ug/L			1233632	1168243	0
[	Ag	107	25.924	ug/L	0.313	1	39	326844	1
[	Cd	111	24.364	ug/L	0.125	0	133	142195	0
[	Cd	114	24.219	ug/L	0.424	1	38	350183	1
[	Sb	121	24.811	ug/L	0.129	0	94	447054	0
[	Sb	123	24.593	ug/L	0.168	0	60	337365	0
[	Ba	135	49.012	ug/L	0.735	1	218	245440	0
[	Ba	137	49.044	ug/L	0.430	0	388	421766	0
[>	Tb	159		ug/L			1368167	1337698	1
[	Tl	205	25.731	ug/L	0.096	0	31	1089669	0
[	Pb	208	25.357	ug/L	0.240	0	215	1388531	0
[	Bi	209		ug/L			3022716	2739811	0
[	Th	232	26.115	ug/L	0.364	1	209	1311006	1
[	U	238	27.568	ug/L	0.408	1	12	1497180	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:20:47
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1483598	0
	Be	9	0.045	ug/L	0.002	5	10	223	5
	C	13		ug/L			107220	143250	4
	Cl	37		ug/L			5888067	15605923	3
>	Sc	45		ug/L			1420932	1457436	0
	V	51	14.884	ug/L	0.038	0	8382	423228	0
	V-1	51	16.296	ug/L	0.077	0	237	452480	0
	Cr	52	3.870	ug/L	0.123	3	24727	113317	2
	Cr	53	8.669	ug/L	0.208	2	189	22159	2
	Mn	55	444.575	ug/L	6.721	1	577	14005089	1
	Co	59	0.391	ug/L	0.007	1	72	8719	1
>	Ge	72		ug/L			673872	572478	2
	Ni	60	0.607	ug/L	0.008	1	128	2467	3
	Ni	62	38.008	ug/L	7.534	19	326	20816	21
	Cu	63	12.851	ug/L	0.756	5	417	106663	7
	Cu	65	0.556	ug/L	0.013	2	53	2060	1
	Zn	66	0.902	ug/L	0.027	3	309	2292	0
	Zn	67	1.739	ug/L	0.055	3	51	685	5
	Zn	68	2.481	ug/L	0.074	2	727	4537	3
	As	75	28.126	ug/L	0.271	0	1616	56447	1
	As-1	75	28.759	ug/L	0.225	0	9903	63540	1
	Se	82	1.118	ug/L	0.141	12	-46	208	14
	Se	78	2.200	ug/L	0.126	5	10084	9782	3
	Mo	98	0.062	ug/L	0.006	10	25	319	8
	Y	89		ug/L			452178	435513	0
	Kr	83		ug/L			2458	2760	1
>	In	115		ug/L			1233632	1058533	0
	Ag	107	0.008	ug/L	0.002	19	39	129	13
	Cd	111	-0.132	ug/L	0.013	9	133	-583	10
	Cd	114	0.005	ug/L	0.001	21	38	103	15
	Sb	121	0.063	ug/L	0.002	3	94	1105	3
	Sb	123	0.063	ug/L	0.004	6	60	840	5
	Ba	135	7.164	ug/L	0.022	0	218	32666	0
	Ba	137	7.116	ug/L	0.047	0	388	55734	0
>	Tb	159		ug/L			1368167	1270778	0
	Tl	205	0.005	ug/L	0.000	1	31	247	2
	Pb	208	0.015	ug/L	0.000	0	215	996	1
	Bi	209		ug/L			3022716	2392010	0
	Th	232	0.303	ug/L	0.135	44	209	14631	44
	U	238	0.021	ug/L	0.000	2	12	1081	2

US15 : 00376

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:24:55
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

Ag As Cr Cu Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1459340	2
	Be	9	U 0.047	ug/L	0.005	10	10	225	7
	C	13		ug/L			107220	136150	2
	Cl	37		ug/L			5888067	15516970	1
>	Sc	45		ug/L			1420932	1480074	0
	V	51	16.153	ug/L	0.150	0	8382	465692	0
	V-1	51	17.584	ug/L	0.162	0	237	495773	0
	Cr	52	3.918	ug/L	0.082	2	24727	116162	1
	Cr	53	8.764	ug/L	0.041	0	189	22746	0
	Mn	55	450.584	ug/L	4.487	0	577	14414205	1
	Co	59	0.386	ug/L	0.002	0	72	8748	0
>	Ge	72		ug/L			673872	573415	1
	Ni	60	2.904	ug/L	0.043	1	128	11413	0
	Ni	62	38.238	ug/L	6.720	17	326	20963	19
	Cu	63	12.947	ug/L	0.481	3	417	107612	5
	Cu	65	0.875	ug/L	0.024	2	53	3224	4
	Zn	66	U 1.601	ug/L	0.027	1	309	3873	3
	Zn	67	2.354	ug/L	0.075	3	51	913	4
	Zn	68	3.354	ug/L	0.041	1	727	5928	2
	As	75	27.739	ug/L	0.255	0	1816	55781	1
	As-1	75	28.734	ug/L	0.206	0	9903	63596	1
	Se	82	1.184	ug/L	0.041	3	-46	224	3
	Se	78	3.344	ug/L	0.240	7	10084	10429	2
	Mo	98	0.067	ug/L	0.003	4	25	344	5
	Y	89		ug/L			452178	440064	1
	Kr	83		ug/L			2458	2619	2
>	In	115		ug/L			1233632	1066176	0
	Ag	107	U 0.003	ug/L	0.001	26	39	70	14
	Cd	111	-0.060	ug/L	0.024	40	133	-205	62
	Cd	114	0.064	ug/L	0.002	2	38	875	2
	Sb	121	0.051	ug/L	0.001	2	94	921	1
	Sb	123	0.053	ug/L	0.005	9	60	713	8
	Ba	135	7.258	ug/L	0.077	1	218	33333	1
	Ba	137	7.225	ug/L	0.070	0	388	56988	0
>	Tb	159		ug/L			1368167	1274379	0
	Tl	205	0.002	ug/L	0.000	19	31	105	13
	Pb	208	0.053	ug/L	0.001	2	215	2983	2
	Bi	209		ug/L			3022716	2396907	1
	Th	232	0.146	ug/L	0.032	21	1509	7174	21
	U	238	0.022	ug/L	0.000	1	12	1134	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:29:02
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1531813	1
	Be	9	U 0.002	ug/L	0.001	38	10	18	17
	C	13		ug/L			107220	125225	2
	Cl	37		ug/L			5888067	6203099	4
>	Sc	45		ug/L			1420932	1413892	2
	V	51	1.396	ug/L	0.059	4	8382	46043	1
	V-1	51	1.411	ug/L	0.062	4	237	38198	2
	Cr	52	0.546	ug/L	0.038	7	24727	36645	2
	Cr	53	0.588	ug/L	0.036	6	189	1632	4
	Mn	55	11.099	ug/L	0.129	1	577	339707	1
	Co	59	0.206	ug/L	0.007	3	72	4485	5
>	Ge	72		ug/L			673872	624802	0
	Ni	60	10.280	ug/L	0.221	2	128	43728	1
	Ni	62	20.626	ug/L	2.833	13	326	12438	13
	Cu	63	2.862	ug/L	0.148	5	417	26216	5
	Cu	65	1.920	ug/L	0.026	1	53	7651	1
	Zn	66	U 1.565	ug/L	0.035	2	309	4131	2
	Zn	67	2.814	ug/L	0.096	3	51	1180	3
	Zn	68	3.015	ug/L	0.092	3	727	5873	2
	As	75	6.228	ug/L	0.038	0	1616	14809	0
	As-1	75	6.593	ug/L	0.086	1	9903	22976	1
	Se	82	U 0.283	ug/L	0.114	40	-46	25	108
	Se	78	1.524	ug/L	0.159	10	10084	10268	1
	Mo	98	3.331	ug/L	0.029	0	25	17556	0
	Y	89		ug/L			452178	430683	1
	Kr	83		ug/L			2358	2610	2
>	In	115		ug/L			1233632	1150434	1
	Ag	107	U 0.001	ug/L	0.000	20	39	54	5
	Cd	111	U 0.018	ug/L	0.003	15	133	229	6
	Cd	114	U 0.018	ug/L	0.002	9	38	288	7
	Sb	121	0.248	ug/L	0.002	0	94	4495	0
	Sb	123	0.248	ug/L	0.005	2	60	3407	2
	Ba	135	25.308	ug/L	0.384	1	218	124898	0
	Ba	137	25.175	ug/L	0.266	1	388	213366	0
>	Tb	159		ug/L			1368167	1333138	1
	Tl	205	U 0.005	ug/L	0.001	26	31	238	22
	Pb	208	U 0.029	ug/L	0.001	2	215	1766	1
	Bi	209		ug/L			3022716	2774345	1
	Th	232	0.024	ug/L	0.001	4	209	1414	3
	U	238	1.442	ug/L	0.017	1	12	78085	1

US15 : 00378

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 16:33:10
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1538124	0
[	Be	9	U 0.001	ug/L	0.000	35	10	16	14
	C	13		ug/L			107220	120066	3
	Cl	37		ug/L			5888067	5876582	1
[>	Sc	45		ug/L			1420932	1375163	2
[	V	51	1.356	ug/L	0.053	3	8382	43742	3
[	V-1	51	1.356	ug/L	0.041	2	237	35737	3
[	Cr	52	0.510	ug/L	0.054	10	24727	34852	2
[	Cr	53	0.500	ug/L	0.013	2	189	1378	1
[	Mn	55	10.587	ug/L	0.291	2	577	315140	2
[	Co	59	0.174	ug/L	0.009	5	72	3691	4
[>	Ge	72		ug/L			673872	608180	0
[	Ni	60	3.462	ug/L	0.078	2	128	14414	2
[	Ni	62	7.245	ug/L	1.085	14	326	4445	14
[	Cu	63	2.506	ug/L	0.143	5	417	22388	6
[	Cu	65	1.921	ug/L	0.036	1	53	7450	1
[	Zn	66	U 1.346	ug/L	0.053	3	309	3496	3
[	Zn	67	2.508	ug/L	0.067	2	51	1029	2
[	Zn	68	2.658	ug/L	0.031	1	727	5117	0
[	As	75	6.088	ug/L	0.108	1	1616	14125	2
[	As-1	75	6.318	ug/L	0.234	3	9903	21805	2
[	Se	82	U 0.131	ug/L	0.145	111	-46	-11	311
[	Se	78	1.105	ug/L	0.465	42	10084	9749	2
[	Mo	98	3.303	ug/L	0.039	1	25	16946	1
	Y	89		ug/L			452178	426630	2
	Kr	83		ug/L			2458	2684	1
[>	In	115		ug/L			1233632	1151293	1
[	Ag	107	U 0.002	ug/L	0.000	17	39	59	5
[	Cd	111	U 0.016	ug/L	0.004	22	133	218	8
[	Cd	114	0.014	ug/L	0.000	2	38	241	2
[	Sb	121	0.237	ug/L	0.005	1	94	4295	2
[	Sb	123	0.239	ug/L	0.009	3	60	3282	2
[	Ba	135	24.098	ug/L	0.264	1	218	119029	0
[	Ba	137	24.051	ug/L	0.305	1	388	204017	1
[>	Tb	159		ug/L			1368167	1330143	0
[	Tl	205	U 0.002	ug/L	0.001	28	31	107	20
[	Pb	208	U 0.031	ug/L	0.001	3	215	1903	3
[	Bi	209		ug/L			3022716	2763176	0
[	Th	232	0.019	ug/L	0.001	7	209	1144	6
[	U	238	1.394	ug/L	0.007	0	12	75319	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 16:39:23
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1487782	1
	Be	9	49.074	ug/L	0.747	1	10	230970	0
	C	13		ug/L			107220	106494	1
	Cl	37		ug/L			5888067	6079542	0
>	Sc	45		ug/L			1420932	1343392	1
	V	51	48.303	ug/L	0.892	1	8382	1248414	3
	V-1	51	48.297	ug/L	0.756	1	237	1235773	2
	Cr	52	49.152	ug/L	0.567	1	24727	1052861	1
	Cr	53	49.144	ug/L	0.846	1	189	114930	0
	Mn	55	49.365	ug/L	1.748	3	577	1433431	2
	Co	59	49.101	ug/L	0.678	1	72	1000964	0
>	Ge	72		ug/L			673872	628872	1
	Ni	60	48.993	ug/L	1.552	3	128	209270	1
	Ni	62	51.602	ug/L	0.939	1	326	30853	2
	Cu	63	51.297	ug/L	0.816	1	417	466181	1
	Cu	65	50.723	ug/L	0.288	0	53	202157	1
	Zn	66	50.060	ug/L	0.750	1	309	124027	0
	Zn	67	51.652	ug/L	0.589	1	51	20975	0
	Zn	68	50.639	ug/L	1.767	3	727	88553	2
	As	75	50.523	ug/L	0.471	0	1616	110189	0
	As-1	75	50.986	ug/L	0.478	0	9903	116606	0
	Se	82	52.270	ug/L	1.086	2	-46	12735	1
	Se	78	51.829	ug/L	0.732	1	10084	40813	0
	Mo	98	48.725	ug/L	1.107	2	25	258163	2
	Y	89		ug/L			452178	427349	0
	Kr	83		ug/L			2458	2621	0
>	In	115		ug/L			1233632	1164622	0
	Ag	107	48.547	ug/L	1.306	2	39	610064	2
	Cd	111	50.211	ug/L	0.539	1	133	292013	0
	Cd	114	50.450	ug/L	0.480	0	38	727195	0
	Sb	121	48.511	ug/L	0.638	1	94	871271	0
	Sb	123	48.846	ug/L	0.250	0	60	667930	0
	Ba	135	49.412	ug/L	0.201	0	218	246692	0
	Ba	137	49.723	ug/L	0.974	1	388	426255	1
>	Tb	159		ug/L			1368167	1315795	0
	Tl	205	53.434	ug/L	0.380	0	31	2225797	1
	Pb	208	51.446	ug/L	0.485	0	215	2770789	0
	Bi	209		ug/L			3022716	2935740	0
	Th	232	53.027	ug/L	1.005	1	209	2618241	1
	U	238	53.437	ug/L	0.593	1	12	2854714	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 16:45:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1406138	1
[	Be	9	0.009	ug/L	0.010	109	10	50	89
	C	13		ug/L			107220	105064	0
	Cl	37		ug/L			5888067	5909362	0
[>	Sc	45		ug/L			1420132	1337743	0
[	V	51	0.030	ug/L	0.017	56	8382	8667	5
[	V-1	51	0.011	ug/L	0.008	68	237	506	38
[	Cr	52	0.090	ug/L	0.036	39	24727	25163	3
[	Cr	53	0.024	ug/L	0.003	10	189	233	2
[	Mn	55	0.156	ug/L	0.013	8	577	5066	7
[	Co	59	0.004	ug/L	0.005	112	72	155	63
[>	Ge	72		ug/L			673872	625464	3
[	Ni	60	-0.007	ug/L	0.007	97	128	88	37
[	Ni	62	1.289	ug/L	0.170	13	326	1059	6
[	Cu	63	0.059	ug/L	0.006	9	417	915	2
[	Cu	65	0.004	ug/L	0.004	108	53	64	27
[	Zn	66	0.057	ug/L	0.006	10	309	426	2
[	Zn	67	0.027	ug/L	0.007	27	51	58	3
[	Zn	68	0.087	ug/L	0.034	38	727	825	6
[	As	75	0.119	ug/L	0.026	21	1616	1753	0
[	As-1	75	0.271	ug/L	0.088	32	9903	9755	1
[	Se	82	0.087	ug/L	0.046	52	-46	-22	51
[	Se	78	0.931	ug/L	0.375	40	10084	9916	1
[	Mo	98	0.008	ug/L	0.003	33	25	67	22
	Y	89		ug/L			452178	416181	2
	Kr	83		ug/L			2458	2527	2
[>	In	115		ug/L			1233632	1133248	1
[	Ag	107	-0.001	ug/L	0.001	46	39	21	33
[	Cd	111	0.002	ug/L	0.003	162	133	132	13
[	Cd	114	0.000	ug/L	0.001	444	38	39	38
[	Sb	121	0.060	ug/L	0.003	5	94	1131	6
[	Sb	123	0.058	ug/L	0.003	5	60	828	6
[	Ba	135	-0.014	ug/L	0.001	9	218	133	3
[	Ba	137	-0.018	ug/L	0.002	13	388	203	10
[>	Tb	159		ug/L			1368167	1257956	0
[	Tl	205	0.002	ug/L	0.000	16	31	108	12
[	Pb	208	0.004	ug/L	0.003	94	215	386	46
[	Bi	209		ug/L			3022716	2926925	1
[	Th	232	0.092	ug/L	0.011	11	209	4538	11
[	U	238	0.009	ug/L	0.007	74	12	462	72

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.14.12 Analyst: JCB Page: 1 of 4

All corrections made by analyst unless otherwise noted. 5.14.12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			2934-14
		1			2933-5
		2			2935-12
		3			4 -13
		4			25 2934-9
		5			2935-05
		Rinse Sample			r = 0.9997
		SO			
		JCV		✓	2930-2
		ICB		✓	
		CCV1		✓	
		CCB1		✓	
		DI		✓	
		Low Check			
		ICSA			
		ICSAB			Mn, Fe 21%
		B1			
		B2			
		ERA P197-500		10 ✓	Yeast Cal.
		CCV2		✓	
		CCB2			
		SO			
		CCV3		✓	
		CCB3		✓	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5·14·12 Analyst: JLB Page: 2 of 4

All corrections made by analyst unless otherwise noted. 5.15.12 JLB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US15 MB1	REN	2	
	✓	MB2			Cu 0.5720 rr
		MB2spk			
		MB2spdup			
		A-L		10	
		A		2	Ni CAF Ni, Cl
		ADUP			
		Aspk			
		B		10	Ag 2x Cl 5/16/12 JLB
		H			
		CCV4			109.3%
		CCB4			
		US15 MB2	REN	2	(Cu U)
		G-L		10	Ni, Cl
		G		2	
		GDUP			
		Gspk			
		LRL200			
		B3			
		B4			
		CCV6			
		CCB5			
		US52 MB1	REN	2	Cu 1.092, Zn 4.0 rerun
		US52 MB2	REN		

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.14.12

MZ	Analyst 5.17.12	Peer 5.17.12	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	see log 6/7/12
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	see log
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	see log
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	see log
Matrix Spikes	✓	✓	US15 CAF
Matrix Duplicates	✓	✓	↓
Method Blanks	✓	✓	see log
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	US15 CAF

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/14/2012 12:06:49 PM

aily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 5670.26
Obtained Intensity (Mg 23.985): 42907.93
Obtained Intensity (In 114.904): 86700.19
Obtained Intensity (Pb 207.977): 35333.15
Obtained Intensity (U 238.05): 64521.71
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (CeO 155.9 / Ce 139.905): 0.014 (=1192.29 / 83650.41)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.011 (=885.38 / 83650.41)
Passed] Optimum value(s): N/A

nd Time: 5/14/2012 12:09:24 PM

US15 : 00385

SmartTune Wizard - Summary

ptimization Summary

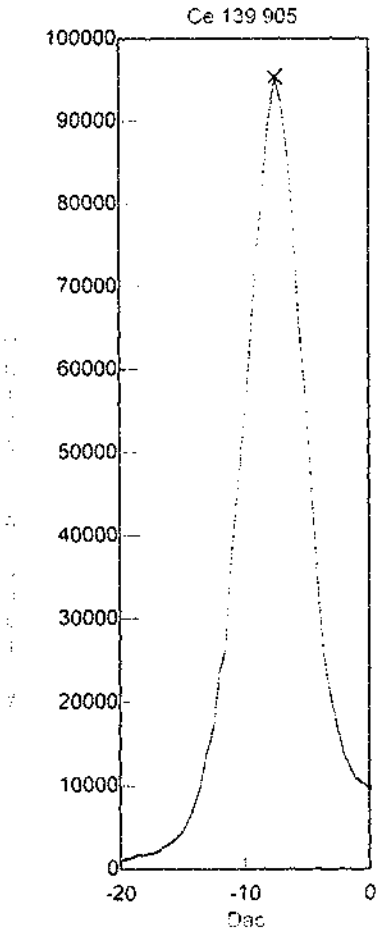
martTune file: C:\NexIONData\Wizard\SmartTune\arisTDaily+torch.swz

tart Time: 5/14/2012 12:02:33 PM
nd Time: 5/14/2012 12:05:08 PM

aily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 7314.01
Obtained Intensity (Mg 23.985): 51446.53
Obtained Intensity (In 114.904): 100931.29
Obtained Intensity (Pb 207.977): 39643.41
Obtained Intensity (U 238.05): 72320.06
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.024 (=2264.37 / 93497.32)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.015 (=1379.58 / 93497.32)

US15 : 00386

5/14/12 JH


Ce 139.905
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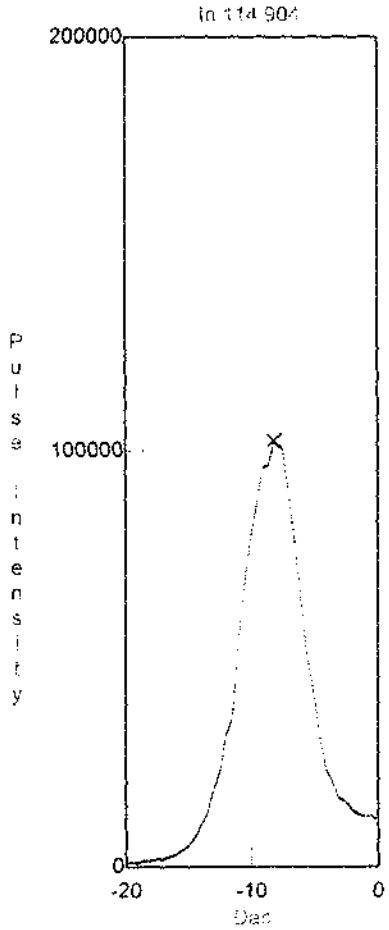
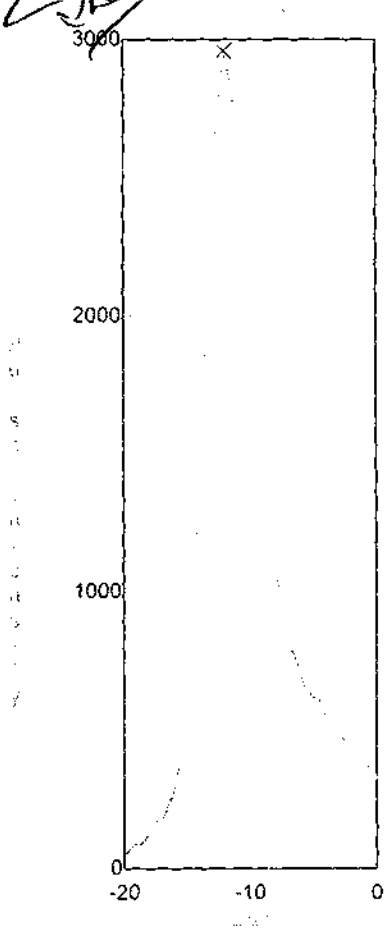
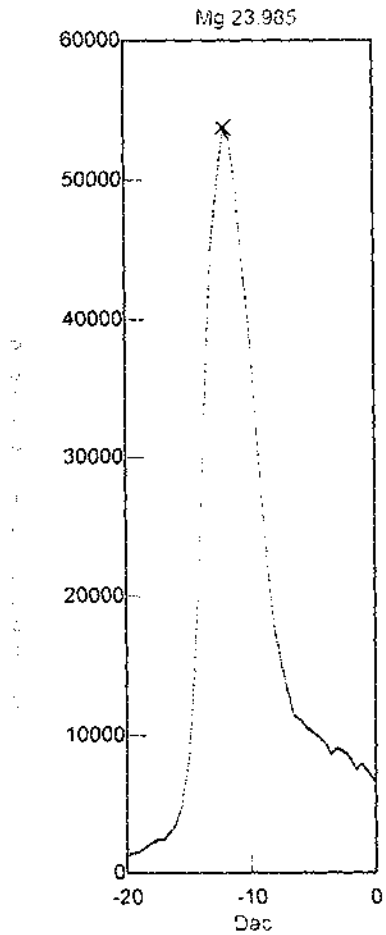
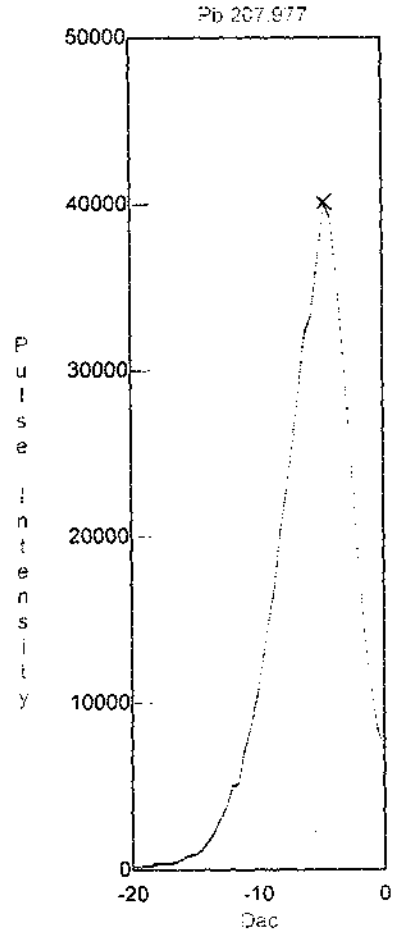
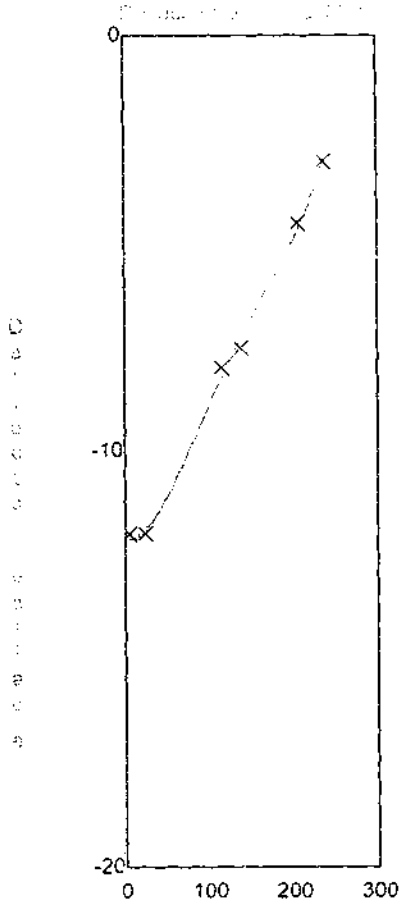
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
200000
100000
0
-20
-10
0
Dac
Pulse Intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


0
-10
-20
0
100
200
300

SmartTune Wizard - Summary

ptimization Summary

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

tart Time: 5/14/2012 11:57:34 AM
nd Time: 5/14/2012 12:01:46 PM

utoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.998; Intercept = -12.02

US15 : 00388

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/14/2012 11:54:33 AM

ass Calibration and Resolution
    Optimization Settings:
        Method: Tuning.mth.
        MassCal File: Default.tun
        Iterations: 6
        Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
        Peak height (%) for Res. Opt.: 10

    Optimization Results:
    Initial Try
        Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.706)
        Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.723)
        Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.711)
        Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.717)
Passed] Optimum value(s): N/A

nd Time: 5/14/2012 11:56:46 AM

US15 : 00389

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/14/2012 11:53:18 AM

orch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
Passed]	1.54 mm	-0.71 mm	105652.53

nd Time: 5/14/2012 11:54:05 AM

US15 : 00390

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/14/2012 11:46:25 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 5461.32
        Obtained Intensity (Mg 23.985): 39610.05
        Obtained Intensity (In 114.904): 80645.28
        Obtained Intensity (Pb 207.977): 33613.19
        Obtained Intensity (U 238.05): 59795.97
        Obtained Intensity (Bkgd 220): 0.00
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=1175.62 / 76597.03)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=786.37 / 76597.03)
[Passed] Optimum value(s): N/A

End Time: 5/14/2012 11:49:32 AM

US15 : 00391

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:37:03
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1248591	2
	Be	9		ug/L				4	13
	C	13		ug/L				97995	3
	Cl	37		ug/L				5673060	0
>	Sc	45		ug/L				1149011	2
	V	51		ug/L				6706	2
	V-1	51		ug/L				146	15
	Cr	52		ug/L				19805	2
	Cr	53		ug/L				140	1
	Mn	55		ug/L				400	0
	Co	59		ug/L				52	12
>	Ge	72		ug/L				544756	3
	Ni	60		ug/L				24	20
	Ni	62		ug/L				415	3
	Cu	63		ug/L				375	3
	Cu	65		ug/L				28	14
	Zn	66		ug/L				209	1
	Zn	67		ug/L				32	4
	Zn	68		ug/L				594	2
	As	75		ug/L				1176	0
	As-1	75		ug/L				8096	1
	Se	82		ug/L				-5	622
	Se	78		ug/L				8179	1
	Mo	98		ug/L				13	17
	Y	89		ug/L				370208	1
	Kr	83		ug/L				1639	5
>	In	115		ug/L				982225	2
	Ag	107		ug/L				10	26
	Cd	111		ug/L				94	8
	Cd	114		ug/L				28	26
	Sb	121		ug/L				43	12
	Sb	123		ug/L				30	18
	Ba	135		ug/L				31	16
	Ba	137		ug/L				53	15
>	Tb	159		ug/L				1075407	1
	Tl	205		ug/L				17	29
	Pb	208		ug/L				170	7
	Bi	209		ug/L				2537124	1
	Th	232		ug/L				43	11
	U	238		ug/L				6	44

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:41:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1250328	0
	Be	9	0.200	ug/L	0.006	2	4	869	3
	C	13		ug/L			97995	97561	1
	Cl	37		ug/L			5673060	5812574	4
>	Sc	45		ug/L			1149011	1166619	0
	V	51	0.200	ug/L	0.012	6	6706	11216	1
	V-1	51	0.200	ug/L	0.001	0	146	4662	0
	Cr	52	0.500	ug/L	0.041	8	19805	29143	1
	Cr	53	0.500	ug/L	0.005	0	140	1197	1
	Mn	55	0.500	ug/L	0.004	0	400	12959	0
	Co	59	0.200	ug/L	0.004	2	52	3589	2
>	Ge	72		ug/L			544756	550934	0
	Ni	60	0.500	ug/L	0.003	0	24	1972	0
	Ni	62	0.500	ug/L	0.017	3	415	718	2
	Cu	63	0.500	ug/L	0.020	3	375	4627	3
	Cu	65	0.500	ug/L	0.009	1	28	1950	1
	Zn	66	4.000	ug/L	0.066	1	209	9074	1
	Zn	67	4.000	ug/L	0.125	3	32	1387	3
	Zn	68	4.000	ug/L	0.127	3	594	6621	2
	As	75	0.200	ug/L	0.015	7	1176	1573	1
	As-1	75	0.200	ug/L	0.050	25	8096	8532	0
	Se	82	0.500	ug/L	0.030	5	-5	113	6
	Se	78	0.500	ug/L	0.188	37	8179	8519	0
	Mo	98	0.200	ug/L	0.007	3	13	955	2
	Y	89		ug/L			370208	373561	2
	Kr	83		ug/L			1639	1638	1
>	In	115		ug/L			982225	977403	1
	Ag	107	0.200	ug/L	0.006	3	10	1946	2
	Cd	111	0.100	ug/L	0.011	11	94	622	9
	Cd	114	0.100	ug/L	0.006	5	28	1365	6
	Sb	121	0.200	ug/L	0.005	2	43	3339	1
	Sb	123	0.200	ug/L	0.001	0	30	2520	1
	Ba	135	0.500	ug/L	0.011	2	31	2320	3
	Ba	137	0.500	ug/L	0.009	1	53	4003	2
>	Tb	159		ug/L			1076407	1067329	1
	Tl	205	0.200	ug/L	0.005	2	17	7449	1
	Pb	208	0.100	ug/L	0.003	3	170	5293	2
	Bi	209		ug/L			2537124	2536907	1
	Th	232	0.200	ug/L	0.007	3	43	8072	4
	U	238	0.200	ug/L	0.003	1	6	10096	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:45:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1248591	1238966	0
[	Be	9	10.000	ug/L	0.051	0	4	41736	0
	C	13		ug/L			97995	93252	0
	Cl	37		ug/L			5673060	5772921	1
[>	Sc	45		ug/L			1149011	1194771	2
[	V	51	10.000	ug/L	0.269	2	6706	224649	1
[	V-1	51	10.000	ug/L	0.294	2	146	220196	2
[	Cr	52	9.999	ug/L	0.351	3	19805	198423	1
[	Cr	53	9.999	ug/L	0.200	2	140	20998	0
[	Mn	55	9.999	ug/L	0.092	0	400	247013	2
[	Co	59	10.000	ug/L	0.090	0	52	175767	2
[>	Ge	72		ug/L			544756	549127	0
[	Ni	60	9.999	ug/L	0.053	0	24	36984	0
[	Ni	62	9.997	ug/L	0.082	0	415	5700	0
[	Cu	63	9.999	ug/L	0.070	0	375	80875	1
[	Cu	65	9.998	ug/L	0.080	0	28	35688	0
[	Zn	66	10.003	ug/L	0.086	0	209	22345	0
[	Zn	67	10.115	ug/L	0.193	1	32	3712	1
[	Zn	68	10.056	ug/L	0.248	2	594	16236	2
[	As	75	10.000	ug/L	0.031	0	1176	20693	0
[	As-1	75	10.000	ug/L	0.030	0	8096	27251	0
[	Se	82	9.999	ug/L	0.147	1	-5	2242	1
[	Se	78	10.002	ug/L	0.201	2	8179	13544	1
[	Mo	98	10.000	ug/L	0.087	0	13	46365	1
	Y	89		ug/L			370208	379311	2
	Kr	83		ug/L			1639	1662	1
[>	In	115		ug/L			982225	1010213	0
[	Ag	107	10.000	ug/L	0.132	1	10	92708	0
[	Cd	111	10.000	ug/L	0.010	0	94	51731	0
[	Cd	114	10.000	ug/L	0.115	1	28	128207	0
[	Sb	121	10.000	ug/L	0.038	0	43	158419	0
[	Sb	123	10.000	ug/L	0.095	0	30	118387	1
[	Ba	135	9.998	ug/L	0.071	0	31	43842	0
[	Ba	137	9.998	ug/L	0.060	0	53	75225	0
[>	Tb	159		ug/L			1075407	1098925	0
[	Tl	205	10.000	ug/L	0.119	1	17	360264	0
[	Pb	208	10.000	ug/L	0.065	0	170	476217	0
[	Bi	209		ug/L			2537124	2570814	0
[	Th	232	10.000	ug/L	0.311	3	43	449857	2
[	U	238	10.000	ug/L	0.062	0	6	481950	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:49:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1248591	1238662	1
[	Be	9	19.736	ug/L	0.738	3	4	78181	2
	C	13		ug/L			97995	91843	2
	Cl	37		ug/L			5673060	5925168	1
[>	Sc	45		ug/L			1149011	1195856	1
[	V	51	19.885	ug/L	0.404	2	6706	430577	0
[	V-1	51	19.846	ug/L	0.415	2	146	424236	0
[	Cr	52	19.944	ug/L	0.613	3	19805	371765	1
[	Cr	53	19.810	ug/L	0.753	3	140	39981	2
[	Mn	55	19.888	ug/L	0.524	2	400	480476	1
[	Co	59	19.822	ug/L	0.466	2	52	336639	0
[>	Ge	72		ug/L			544756	550619	3
[	Ni	60	19.853	ug/L	0.710	3	24	71469	1
[	Ni	62	19.818	ug/L	0.836	4	415	10542	1
[	Cu	63	19.851	ug/L	1.149	5	375	155832	2
[	Cu	65	19.878	ug/L	0.821	4	28	69376	1
[	Zn	66	19.862	ug/L	0.627	3	209	43226	0
[	Zn	67	19.956	ug/L	0.936	4	32	7249	1
[	Zn	68	19.855	ug/L	0.456	2	594	30787	1
[	As	75	19.862	ug/L	0.518	2	1176	38976	1
[	As-1	75	19.873	ug/L	0.735	3	8096	45253	0
[	Se	82	19.863	ug/L	0.520	2	-5	4349	0
[	Se	78	19.889	ug/L	1.386	6	8179	18588	0
[	Mo	98	19.914	ug/L	1.005	5	13	90910	2
	Y	89		ug/L			370208	385164	2
	Kr	83		ug/L			1639	1625	5
[>	In	115		ug/L			982225	983508	1
[	Ag	107	20.041	ug/L	0.388	1	10	182351	0
[	Cd	111	19.950	ug/L	0.437	2	94	99378	1
[	Cd	114	19.974	ug/L	0.067	0	28	248028	0
[	Sb	121	20.010	ug/L	0.368	1	43	309159	1
[	Sb	123	20.026	ug/L	0.215	1	30	231962	0
[	Ba	135	20.016	ug/L	0.230	1	31	85691	1
[	Ba	137	20.014	ug/L	0.459	2	53	146956	1
[>	Tb	159		ug/L			1075407	1088372	0
[	Tl	205	19.888	ug/L	0.261	1	17	694133	0
[	Pb	208	19.929	ug/L	0.215	1	170	926686	0
[	Bi	209		ug/L			2537124	2552652	1
[	Th	232	20.097	ug/L	0.241	1	43	913128	1
[	U	238	19.935	ug/L	0.382	1	6	939381	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:54:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1248591	1239420	0
[	Be	9	50.350	ug/L	1.288	2	4	206855	1
	C	13		ug/L			97995	96930	2
	Cl	37		ug/L			5673060	5980409	2
[>	Sc	45		ug/L			1149011	1187276	0
[	V	51	50.495	ug/L	0.457	0	6706	1130646	1
[	V-1	51	50.475	ug/L	0.266	0	146	1124612	0
[	Cr	52	50.514	ug/L	0.800	1	19805	951600	1
[	Cr	53	50.446	ug/L	0.443	0	140	105601	0
[	Mn	55	50.512	ug/L	0.751	1	400	1276497	1
[	Co	59	50.482	ug/L	0.223	0	52	894488	1
[>	Ge	72		ug/L			544756	552765	2
[	Ni	60	50.385	ug/L	1.642	3	24	189391	2
[	Ni	62	50.303	ug/L	0.962	1	415	27037	0
[	Cu	63	50.318	ug/L	0.727	1	375	409429	2
[	Cu	65	50.335	ug/L	1.153	2	28	182517	1
[	Zn	66	50.164	ug/L	0.946	1	209	111075	0
[	Zn	67	50.092	ug/L	1.661	3	32	18390	1
[	Zn	68	50.159	ug/L	1.511	3	594	78375	2
[	As	75	50.357	ug/L	0.457	0	1176	100977	1
[	As-1	75	50.355	ug/L	0.677	1	8096	106036	0
[	Se	82	50.196	ug/L	0.742	1	-5	11269	1
[	Se	78	50.200	ug/L	1.554	3	8179	35012	0
[	Mo	98	50.251	ug/L	2.764	5	13	236261	3
	Y	89		ug/L			370208	379567	1
	Kr	83		ug/L			1639	1706	2
[>	In	115		ug/L			982225	975350	0
[	Ag	107	50.294	ug/L	0.972	1	10	467617	1
[	Cd	111	50.378	ug/L	0.019	0	94	258544	0
[	Cd	114	50.336	ug/L	0.284	0	28	641418	0
[	Sb	121	50.540	ug/L	0.263	0	43	818570	0
[	Sb	123	50.518	ug/L	0.184	0	30	611991	0
[	Ba	135	50.566	ug/L	0.627	1	31	227515	1
[	Ba	137	50.573	ug/L	0.343	0	53	390603	0
[>	Tb	159		ug/L			1075407	1094615	0
[	Tl	205	50.456	ug/L	0.665	1	17	1855816	1
[	Pb	208	50.411	ug/L	0.385	0	170	2458334	0
[	Bi	209		ug/L			2537124	2507956	0
[	Th	232	50.742	ug/L	0.448	0	43	2504375	0
[	U	238	50.613	ug/L	0.298	0	6	2555427	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 12:59:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1197446	1
	Be	9	99.844	ug/L	1.384	1	4	394258	0
	C	13		ug/L			97995	92048	1
	Cl	37		ug/L			5673060	5932262	2
>	Sc	45		ug/L			1149011	1172003	1
	V	51	100.779	ug/L	1.582	1	6706	2279514	0
	V-1	51	100.730	ug/L	1.656	1	146	2270293	0
	Cr	52	100.372	ug/L	2.456	2	19805	1869288	1
	Cr	53	100.201	ug/L	3.244	3	140	208280	2
	Mn	55	100.368	ug/L	1.782	1	400	2534429	1
	Co	59	99.979	ug/L	2.609	2	52	1747120	1
>	Ge	72		ug/L			544756	535747	0
	Ni	60	99.813	ug/L	0.798	0	24	361465	0
	Ni	62	100.271	ug/L	1.831	1	415	52316	2
	Cu	63	99.603	ug/L	1.771	1	375	774779	0
	Cu	65	99.788	ug/L	0.875	0	28	348290	0
	Zn	66	99.576	ug/L	2.045	2	209	210570	1
	Zn	67	99.220	ug/L	1.783	1	32	34396	0
	Zn	68	99.177	ug/L	0.968	0	594	145694	0
	As	75	100.082	ug/L	0.606	0	1176	193908	0
	As-1	75	100.079	ug/L	0.677	0	8096	196919	0
	Se	82	100.049	ug/L	0.363	0	-5	21813	0
	Se	78	100.079	ug/L	0.536	0	8179	59814	0
	Mo	98	100.642	ug/L	0.918	0	13	468975	0
	Y	89		ug/L			370208	377266	0
	Kr	83		ug/L			1639	1787	2
>	In	115		ug/L			982225	963315	1
	Ag	107	99.894	ug/L	3.046	3	10	913892	1
	Cd	111	100.022	ug/L	1.630	1	94	507194	0
	Cd	114	99.745	ug/L	1.432	1	28	1244580	0
	Sb	121	99.817	ug/L	2.163	2	43	1586766	1
	Sb	123	99.941	ug/L	2.049	2	30	1193234	1
	Ba	135	100.153	ug/L	1.324	1	31	447264	0
	Ba	137	100.211	ug/L	2.208	2	53	769641	0
>	Tb	159		ug/L			1075407	1073684	1
	Tl	205	100.070	ug/L	1.490	1	17	3618284	0
	Pb	208	100.212	ug/L	1.266	1	170	4826923	0
	Bi	209		ug/L			2537124	2399540	0
	Th	232	100.532	ug/L	3.221	3	43	4953134	1
	U	238	100.149	ug/L	1.075	1	6	4984070	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:06:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1248591	1187389	1
	Be	9	0.005	ug/L	0.002	30	4	25	26
	C	13		ug/L			97995	93444	3
	Cl	37		ug/L			5673060	5799690	2
>	Sc	45		ug/L			1149011	1147031	1
	V	51	-0.009	ug/L	0.012	136	6706	6502	2
	V-1	51	0.001	ug/L	0.001	190	146	163	19
	Cr	52	-0.035	ug/L	0.044	123	19805	19124	2
	Cr	53	-0.003	ug/L	0.004	128	140	133	4
	Mn	55	0.004	ug/L	0.006	142	400	498	26
	Co	59	0.001	ug/L	0.001	62	52	67	15
>	Ge	72		ug/L			544756	540398	2
	Ni	60	0.000	ug/L	0.001	1275	24	24	10
	Ni	62	0.517	ug/L	0.129	25	415	681	8
	Cu	63	0.026	ug/L	0.005	17	375	577	4
	Cu	65	0.004	ug/L	0.002	49	28	41	17
	Zn	66	0.009	ug/L	0.004	43	209	227	5
	Zn	67	0.013	ug/L	0.017	130	32	37	15
	Zn	68	0.013	ug/L	0.020	152	594	608	4
	As	75	0.072	ug/L	0.020	27	1176	1305	1
	As-1	75	0.075	ug/L	0.058	77	8096	8173	0
	Se	82	0.022	ug/L	0.138	630	-5	0	3723
	Se	78	0.283	ug/L	0.218	76	8179	8260	0
	Mo	98	0.027	ug/L	0.016	58	13	143	54
	Y	89		ug/L			370208	377018	1
	Kr	83		ug/L			1639	1792	3
>	In	115		ug/L			982225	973263	2
	Ag	107	0.007	ug/L	0.009	124	10	77	110
	Cd	111	0.007	ug/L	0.008	107	94	131	33
	Cd	114	0.005	ug/L	0.009	167	28	95	119
	Sb	121	0.118	ug/L	0.007	5	43	1936	6
	Sb	123	0.122	ug/L	0.011	9	30	1502	8
	Ba	135	0.004	ug/L	0.003	77	31	49	30
	Ba	137	0.004	ug/L	0.002	60	53	82	23
>	Tb	159		ug/L			1075407	1047058	0
	Tl	205	0.005	ug/L	0.003	57	17	210	53
	Pb	208	0.002	ug/L	0.003	149	170	258	53
	Bi	209		ug/L			2537124	2491223	1
	Th	232	0.141	ug/L	0.036	25	43	6800	26
	U	238	0.005	ug/L	0.002	42	6	229	41

Sample Information

Sample Date/Time: Monday, May 14, 2012 12:59:47
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9998**	0.019	0.20	10	20	50	100
V-1	51	**0.9999**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.016	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.022	0.50	10	20	50	100
Co	59	**0.9999**	0.015	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**0.9999**	0.015	0.50	10	20	50	100
Cu	65	**1.0000**	0.007	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.004	0.20	10	20	50	100
As-1	75	**1.0000**	0.004	0.20	10	20	50	100
Se	82	**0.9997**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.009	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.009	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.013	0.10	10	20	50	100
Sb	121	**0.9999**	0.017	0.20	10	20	50	100
Sb	123	**0.9999**	0.012	0.20	10	20	50	100
Ba	135	**0.9999**	0.005	0.50	10	20	50	100
Ba	137	**0.9999**	0.008	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.034	0.20	10	20	50	100
Pb	208	**1.0000**	0.045	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.046	0.20	10	20	50	100
U	238	**0.9999**	0.046	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:15:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1189479	0
	Be	9		ug/L				14	18
	C	13		ug/L				92537	1
	Cl	37		ug/L				5664278	2
>	Sc	45		ug/L				1146320	2
	V	51		ug/L				6433	1
	V-1	51		ug/L				136	13
	Cr	52		ug/L				19074	1
	Cr	53		ug/L				141	3
	Mn	55		ug/L				395	10
	Co	59		ug/L				68	40
>	Ge	72		ug/L				524719	0
	Ni	60		ug/L				25	63
	Ni	62		ug/L				547	1
	Cu	63		ug/L				464	6
	Cu	65		ug/L				38	19
	Zn	66		ug/L				211	5
	Zn	67		ug/L				38	30
	Zn	68		ug/L				621	3
	As	75		ug/L				1367	1
	As-1	75		ug/L				8254	0
	Se	82		ug/L				2	600
	Se	78		ug/L				8327	0
	Mo	98		ug/L				28	13
	Y	89		ug/L				367134	2
	Kr	83		ug/L				1842	2
>	In	115		ug/L				978081	1
	Ag	107		ug/L				15	19
	Cd	111		ug/L				78	9
	Cd	114		ug/L				26	22
	Sb	121		ug/L				468	13
	Sb	123		ug/L				370	12
	Ba	135		ug/L				33	13
	Ba	137		ug/L				61	3
>	Tb	159		ug/L				1048717	0
	Tl	205		ug/L				58	15
	Pb	208		ug/L				189	7
	Bi	209		ug/L				2472390	2
	Th	232		ug/L				1843	6
	U	238		ug/L				29	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:19:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1201273	1
	Be	9	51.806	ug/L	1.939	3	14	205170	2
	C	13		ug/L			92537	96033	0
	Cl	37		ug/L			5664278	5728561	1
>	Sc	45		ug/L			1146320	1186374	1
	V	51	50.207	ug/L	1.091	2	6433	1152856	2
	V-1	51	50.126	ug/L	1.047	2	136	1143799	2
	Cr	52	50.635	ug/L	1.034	2	19074	963996	0
	Cr	53	50.356	ug/L	0.987	1	141	106035	0
	Mn	55	49.263	ug/L	1.194	2	395	1259342	1
	Co	59	50.287	ug/L	0.555	1	68	889660	0
>	Ge	72		ug/L			524719	540214	1
	Ni	60	51.519	ug/L	0.841	1	25	188126	0
	Ni	62	50.763	ug/L	0.961	1	547	27053	0
	Cu	63	51.416	ug/L	0.879	1	464	403574	1
	Cu	65	51.517	ug/L	1.670	3	38	181291	2
	Zn	66	50.902	ug/L	0.654	1	211	108670	2
	Zn	67	51.093	ug/L	0.765	1	38	17882	0
	Zn	68	51.642	ug/L	0.222	0	621	76832	1
	As	75	51.583	ug/L	0.658	1	1367	101576	0
	As-1	75	50.561	ug/L	1.103	2	8254	104744	0
	Se	82	83.505	ug/L	1.836	2	2	17562	2
	Se	78	78.124	ug/L	2.486	3	8327	49291	1
	Mo	98	51.200	ug/L	0.567	1	28	240590	1
	Y	89		ug/L			367134	383893	1
	Kr	83		ug/L			1842	1935	0
>	In	115		ug/L			978081	967790	1
	Ag	107	49.847	ug/L	0.471	0	15	458268	2
	Cd	111	49.740	ug/L	0.714	1	78	253435	1
	Cd	114	50.615	ug/L	0.946	1	26	634430	0
	Sb	121	51.000	ug/L	0.975	1	468	814928	1
	Sb	123	51.090	ug/L	0.866	1	370	613154	1
	Ba	135	50.740	ug/L	0.992	1	33	227634	0
	Ba	137	50.941	ug/L	1.036	2	61	393071	0
>	Tb	159		ug/L			1048717	1068668	1
	Tl	205	51.275	ug/L	1.224	2	58	1845162	0
	Pb	208	50.595	ug/L	1.152	2	189	2425402	0
	Bi	209		ug/L			2472390	2462633	0
	Th	232	52.571	ug/L	0.698	1	1843	2580466	1
	U	238	52.287	ug/L	1.561	2	29	2589415	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:26:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1181666	2
	Be	9	0.001	ug/L	0.000	47	14	18	9
	C	13		ug/L			92537	91701	1
	Cl	37		ug/L			5664278	5648033	2
>	Sc	45		ug/L			1146320	1123173	2
	V	51	0.009	ug/L	0.014	151	6433	6499	2
	V-1	51	-0.000	ug/L	0.001	202	136	127	8
	Cr	52	0.023	ug/L	0.049	210	19074	19088	2
	Cr	53	-0.010	ug/L	0.003	27	141	119	4
	Mn	55	-0.001	ug/L	0.000	39	395	372	0
	Co	59	-0.001	ug/L	0.000	51	68	56	7
>	Ge	72		ug/L			524719	528105	1
	Ni	60	-0.001	ug/L	0.002	163	25	21	30
	Ni	62	0.056	ug/L	0.030	52	547	579	2
	Cu	63	0.000	ug/L	0.005	2988	464	468	7
	Cu	65	-0.001	ug/L	0.001	67	38	35	4
	Zn	66	-0.005	ug/L	0.004	82	211	202	6
	Zn	67	-0.009	ug/L	0.024	260	38	35	21
	Zn	68	-0.032	ug/L	0.010	32	621	579	3
	As	75	0.034	ug/L	0.028	81	1367	1440	4
	As-1	75	-0.114	ug/L	0.032	27	8254	8095	1
	Se	82	-0.019	ug/L	0.118	627	2	0	2663
	Se	78	-0.353	ug/L	0.140	39	8327	8200	0
	Mo	98	0.006	ug/L	0.001	24	28	55	12
	Y	89		ug/L			367134	367470	0
	Kr	83		ug/L			1842	1986	0
>	In	115		ug/L			978081	959629	2
	Ag	107	0.001	ug/L	0.000	26	15	24	8
	Cd	111	0.004	ug/L	0.001	20	78	94	2
	Cd	114	0.000	ug/L	0.001	247	26	28	24
	Sb	121	0.001	ug/L	0.005	750	468	470	17
	Sb	123	-0.001	ug/L	0.001	145	370	352	6
	Ba	135	-0.001	ug/L	0.002	150	33	27	25
	Ba	137	-0.001	ug/L	0.001	119	61	53	12
>	Tb	159		ug/L			1048717	1038297	1
	Tl	205	0.002	ug/L	0.000	5	58	112	2
	Pb	208	-0.000	ug/L	0.000	58	189	166	6
	Bi	209		ug/L			2472390	2468837	1
	Th	232	0.068	ug/L	0.029	43	1843	5048	27
	U	238	0.001	ug/L	0.000	15	29	74	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:30:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1184630	1
	Be	9	51.228	ug/L	1.284	2	14	200099	0
	C	13		ug/L			92537	92510	0
	Cl	37		ug/L			5664278	5815291	0
>	Sc	45		ug/L			1146320	1172618	2
	V	51	50.249	ug/L	1.076	2	6433	1140100	0
	V-1	51	50.277	ug/L	1.237	2	136	1133535	0
	Cr	52	50.257	ug/L	0.753	1	19074	945799	1
	Cr	53	50.353	ug/L	1.286	2	141	104775	0
	Mn	55	49.654	ug/L	1.050	2	395	1254406	0
	Co	59	50.776	ug/L	1.564	3	68	887747	2
>	Ge	72		ug/L			524719	545009	1
	Ni	60	50.251	ug/L	0.709	1	25	185115	0
	Ni	62	50.310	ug/L	1.541	3	547	27049	1
	Cu	63	50.562	ug/L	0.865	1	464	400360	0
	Cu	65	50.278	ug/L	1.507	2	38	178480	1
	Zn	66	51.267	ug/L	0.778	1	211	110393	1
	Zn	67	52.270	ug/L	0.371	0	38	18459	2
	Zn	68	51.542	ug/L	1.095	2	621	77349	1
	As	75	50.059	ug/L	0.821	1	1367	99481	0
	As-1	75	49.587	ug/L	0.926	1	8254	103801	1
	Se	82	53.210	ug/L	0.672	1	2	11289	0
	Se	78	49.243	ug/L	0.933	1	8327	34544	1
	Mo	98	49.467	ug/L	0.420	0	28	234497	1
	Y	89		ug/L			367134	377268	1
	Kr	83		ug/L			1842	1981	2
>	In	115		ug/L			978081	958365	0
	Ag	107	50.599	ug/L	1.282	2	15	460617	2
	Cd	111	51.316	ug/L	0.910	1	78	258932	1
	Cd	114	51.193	ug/L	0.797	1	26	635544	1
	Sb	121	50.811	ug/L	0.242	0	468	804134	0
	Sb	123	50.621	ug/L	0.225	0	370	601715	0
	Ba	135	50.328	ug/L	0.580	1	33	223633	0
	Ba	137	50.280	ug/L	1.357	2	61	384242	2
>	Tb	159		ug/L			1048717	1060489	0
	Tl	205	50.696	ug/L	0.368	0	58	1810837	1
	Pb	208	50.451	ug/L	0.260	0	189	2400659	0
	Bi	209		ug/L			2472390	2443880	1
	Th	232	52.089	ug/L	0.969	1	1843	2537396	1
	U	238	52.474	ug/L	0.144	0	29	2579665	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:36:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1166154	0
	Be	9	0.002	ug/L	0.002	83	14	21	28
	C	13		ug/L			92537	92409	1
	Cl	37		ug/L			5664278	5561577	1
>	Sc	45		ug/L			1146320	1131545	2
	V	51	0.004	ug/L	0.009	248	6433	6427	1
	V-1	51	0.001	ug/L	0.000	47	136	146	5
	Cr	52	0.007	ug/L	0.030	450	19074	18937	1
	Cr	53	-0.004	ug/L	0.007	150	141	131	11
	Mn	55	0.001	ug/L	0.000	20	395	404	3
	Co	59	-0.001	ug/L	0.000	66	68	57	12
>	Ge	72		ug/L			524719	524974	1
	Ni	60	-0.001	ug/L	0.001	155	25	22	20
	Ni	62	0.036	ug/L	0.033	91	547	565	3
	Cu	63	0.003	ug/L	0.005	188	464	487	9
	Cu	65	0.001	ug/L	0.003	434	38	40	24
	Zn	66	0.003	ug/L	0.011	359	211	218	11
	Zn	67	-0.011	ug/L	0.016	144	38	34	15
	Zn	68	-0.010	ug/L	0.033	343	621	608	6
	As	75	0.043	ug/L	0.020	47	1367	1448	1
	As-1	75	-0.015	ug/L	0.045	301	8254	8230	0
	Se	82	0.029	ug/L	0.064	225	2	8	154
	Se	78	-0.006	ug/L	0.146	2353	8327	8327	0
	Mo	98	0.007	ug/L	0.000	6	28	61	4
	Y	89		ug/L			367134	371954	0
	Kr	83		ug/L			1842	1957	1
>	In	115		ug/L			978081	945486	1
	Ag	107	0.001	ug/L	0.001	102	15	20	29
	Cd	111	0.001	ug/L	0.001	121	78	80	9
	Cd	114	0.000	ug/L	0.000	306	26	26	15
	Sb	121	0.034	ug/L	0.004	12	468	988	4
	Sb	123	0.035	ug/L	0.004	11	370	769	4
	Ba	135	0.001	ug/L	0.000	19	33	35	1
	Ba	137	-0.000	ug/L	0.001	149	61	56	7
>	Tb	159		ug/L			1048717	1037938	0
	Tl	205	0.002	ug/L	0.000	25	58	111	12
	Pb	208	-0.000	ug/L	0.000	79	189	173	7
	Bi	209		ug/L			2472390	2460928	0
	Th	232	0.099	ug/L	0.033	33	1843	6546	24
	U	238	0.001	ug/L	0.001	60	29	86	40

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:40:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1189479	1183476	1
[	Be	9	0.002	ug/L	0.001	44	14	20	12
	C	13		ug/L			92537	89565	2
	Cl	37		ug/L			5664278	5534492	1
[>	Sc	45		ug/L			1146320	1145658	2
[	V	51	0.010	ug/L	0.006	61	6433	6649	2
[	V-1	51	0.003	ug/L	0.001	19	136	211	8
[	Cr	52	0.039	ug/L	0.023	59	19774	19755	1
[	Cr	53	0.016	ug/L	0.004	25	141	173	3
[	Mn	55	0.023	ug/L	0.003	11	395	955	5
[	Co	59	0.002	ug/L	0.001	51	68	97	13
[>	Ge	72		ug/L			524719	531617	0
[	Ni	60	0.065	ug/L	0.003	4	25	261	4
[	Ni	62	-0.013	ug/L	0.047	358	547	547	3
[	Cu	63	0.076	ug/L	0.003	3	464	1060	2
[	Cu	65	0.070	ug/L	0.004	5	38	280	4
[	Zn	66	1.016	ug/L	0.042	4	211	2343	3
[	Zn	67	0.838	ug/L	0.074	8	38	326	7
[	Zn	68	1.001	ug/L	0.030	2	621	2082	2
[	As	75	0.054	ug/L	0.029	52	1367	1489	2
[	As-1	75	-0.072	ug/L	0.067	92	8254	8227	0
[	Se	82	-0.036	ug/L	0.113	317	2	-4	495
[	Se	78	-0.263	ug/L	0.217	82	8327	8301	0
[	Mo	98	0.005	ug/L	0.002	35	28	50	16
	Y	89		ug/L			367134	374070	3
	Kr	83		ug/L			1842	2020	1
[>	In	115		ug/L			978081	964127	1
[	Ag	107	0.005	ug/L	0.001	28	15	62	22
[	Cd	111	0.002	ug/L	0.002	108	78	88	15
[	Cd	114	0.003	ug/L	0.002	67	26	58	35
[	Sb	121	-0.006	ug/L	0.003	53	468	372	11
[	Sb	123	-0.006	ug/L	0.004	57	370	289	13
[	Ba	135	0.067	ug/L	0.004	6	33	332	4
[	Ba	137	0.069	ug/L	0.005	7	61	589	5
[>	Tb	159		ug/L			1048717	1033776	1
[	Tl	205	0.003	ug/L	0.001	21	58	162	13
[	Pb	208	0.025	ug/L	0.001	2	189	1362	3
[	Bi	209		ug/L			2472390	2482116	1
[	Th	232	0.019	ug/L	0.010	53	1843	2722	19
[	U	238	0.001	ug/L	0.000	36	29	69	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:44:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1161234	1
	Be	9	0.219	ug/L	0.002	0	14	853	1
	C	13		ug/L			92537	94600	1
	Cl	37		ug/L			5664278	5457064	0
>	Sc	45		ug/L			1146320	1148652	2
	V	51	0.212	ug/L	0.005	2	6433	11128	1
	V-1	51	0.208	ug/L	0.009	4	136	4726	2
	Cr	52	0.536	ug/L	0.001	0	19074	28798	2
	Cr	53	0.523	ug/L	0.019	3	141	1206	0
	Mn	55	0.520	ug/L	0.008	1	395	13263	0
	Co	59	0.207	ug/L	0.008	4	68	3605	1
>	Ge	72		ug/L			524719	531693	2
	Ni	60	0.537	ug/L	0.023	4	25	1956	1
	Ni	62	0.482	ug/L	0.092	19	547	801	3
	Cu	63	0.556	ug/L	0.015	2	464	4761	0
	Cu	65	0.575	ug/L	0.031	5	38	2027	2
	Zn	66	4.359	ug/L	0.118	2	211	9350	1
	Zn	67	3.880	ug/L	0.110	2	38	1372	1
	Zn	68	4.222	ug/L	0.080	1	621	6759	1
	As	75	0.294	ug/L	0.038	12	1367	1946	3
	As-1	75	0.106	ug/L	0.113	106	8254	8558	0
	Se	82	0.712	ug/L	0.167	23	2	150	23
	Se	78	0.150	ug/L	0.378	251	8327	8512	0
	Mo	98	0.207	ug/L	0.010	4	28	985	2
	Y	89		ug/L			367134	368614	1
	Kr	83		ug/L			1842	1948	3
>	In	115		ug/L			978081	954289	1
	Ag	107	0.209	ug/L	0.012	5	15	1904	4
	Cd	111	0.119	ug/L	0.002	2	78	675	0
	Cd	114	0.112	ug/L	0.001	0	26	1412	2
	Sb	121	0.191	ug/L	0.008	3	468	3457	2
	Sb	123	0.187	ug/L	0.002	0	370	2568	2
	Ba	135	0.518	ug/L	0.009	1	33	2323	0
	Ba	137	0.513	ug/L	0.007	1	61	3962	0
>	Tb	159		ug/L			1048717	1026138	0
	Tl	205	0.214	ug/L	0.005	2	58	7452	1
	Pb	208	0.114	ug/L	0.003	2	189	5429	2
	Bi	209		ug/L			2472390	2466479	0
	Th	232	0.174	ug/L	0.004	2	1843	10009	2
	U	238	0.214	ug/L	0.002	0	29	10189	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:49:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1256950	4
	Be	9	0.000	ug/L	0.000	122	14	16	12
	C	13		ug/L			92537	203875	1
	Cl	37		ug/L			5664278	13746475	4
>	Sc	45		ug/L			1146320	1200977	2
	V	51	0.093	ug/L	0.017	18	6433	8881	2
	V-1	51	0.938	ug/L	0.007	0	136	21796	2
	Cr	52	0.829	ug/L	0.071	8	19074	35618	1
	Cr	53	3.761	ug/L	0.020	0	141	8154	2
	Mn	55	0.100	ug/L	0.004	4	395	2997	2
	Co	59	0.017	ug/L	0.001	3	68	374	3
>	Ge	72		ug/L			524719	531632	2
	Ni	60	0.370	ug/L	0.012	3	25	1356	3
	Ni	62	4.499	ug/L	1.005	22	547	2872	20
	Cu	63	1.042	ug/L	0.077	7	464	8518	9
	Cu	65	0.364	ug/L	0.002	0	38	1299	3
	Zn	66	0.680	ug/L	0.028	4	211	1638	1
	Zn	67	5.357	ug/L	0.119	2	38	1879	0
	Zn	68	0.159	ug/L	0.019	12	621	860	1
	As	75	0.021	ug/L	0.031	149	1367	1425	5
	As-1	75	0.033	ug/L	0.113	344	8254	8421	0
	Se	82	-0.291	ug/L	0.146	50	2	-56	51
	Se	78	0.321	ug/L	0.493	153	8327	8597	0
	Mo	98	421.479	ug/L	7.097	1	28	1948450	1
	Y	89		ug/L			367134	372933	0
	Kr	83		ug/L			1842	2238	2
>	In	115		ug/L			978081	986263	2
	Ag	107	0.026	ug/L	0.002	5	15	255	7
	Cd	111	0.137	ug/L	0.015	11	78	789	8
	Cd	114	0.200	ug/L	0.013	6	26	2577	4
	Sb	121	0.032	ug/L	0.003	9	468	995	5
	Sb	123	0.030	ug/L	0.003	11	370	744	4
	Ba	135	0.040	ug/L	0.002	5	33	217	4
	Ba	137	0.035	ug/L	0.002	5	61	334	3
>	Tb	159		ug/L			1048717	1120942	1
	Tl	205	0.003	ug/L	0.001	50	58	158	30
	Pb	208	0.035	ug/L	0.002	5	189	1986	3
	Bi	209		ug/L			2472390	2419573	2
	Th	232	0.206	ug/L	0.104	50	1843	12562	42
	U	238	0.001	ug/L	0.000	16	29	81	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 13:55:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1189479	1259031	1
[	Be	9	-0.001	ug/L	0.001	112	14	12	20
	C	13		ug/L			92537	198827	1
	Cl	37		ug/L			5664278	14117489	1
[>	Sc	45		ug/L			1146320	1207485	1
[	V	51	0.285	ug/L	0.128	45	6433	13424	23
[	V-1	51	0.937	ug/L	0.011	1	136	21912	1
[	Cr	52	20.945	ug/L	0.343	1	19074	417677	1
[	Cr	53	23.252	ug/L	0.630	2	141	49911	1
[	Mn	55	19.612	ug/L	0.149	0	395	510618	1
[	Co	59	18.877	ug/L	0.172	0	68	339957	0
[>	Ge	72		ug/L			524719	524128	1
[	Ni	60	20.020	ug/L	0.567	2	25	70939	1
[	Ni	62	24.228	ug/L	1.054	4	547	12812	3
[	Cu	63	21.397	ug/L	0.402	1	464	163213	0
[	Cu	65	20.071	ug/L	0.184	0	38	68565	0
[	Zn	66	19.764	ug/L	0.726	3	211	41052	2
[	Zn	67	22.863	ug/L	0.359	1	38	7785	0
[	Zn	68	18.938	ug/L	0.595	3	621	27725	2
[	As	75	19.576	ug/L	0.308	1	1367	38246	0
[	As-1	75	20.019	ug/L	0.377	1	8254	45218	0
[	Se	82	-0.246	ug/L	0.052	21	2	-47	21
[	Se	78	0.583	ug/L	0.241	41	8327	8612	0
[	Mo	98	431.920	ug/L	6.572	1	28	1968948	1
	Y	89		ug/L			367134	370716	1
	Kr	83		ug/L			1842	2256	0
[>	In	115		ug/L			978081	992259	1
[	Ag	107	20.096	ug/L	0.647	3	15	189412	2
[	Cd	111	19.400	ug/L	0.049	0	78	101401	1
[	Cd	114	19.733	ug/L	0.238	1	26	253649	0
[	Sb	121	0.044	ug/L	0.003	6	468	1194	3
[	Sb	123	0.041	ug/L	0.001	1	370	879	1
[	Ba	135	0.043	ug/L	0.001	3	33	231	1
[	Ba	137	0.037	ug/L	0.001	3	61	358	2
[>	Tb	159		ug/L			1048717	1138747	0
[	Tl	205	0.002	ug/L	0.000	18	58	124	8
[	Pb	208	0.037	ug/L	0.001	3	189	2111	3
[	Bi	209		ug/L			2472390	2406285	0
[	Th	232	0.061	ug/L	0.020	33	1843	5180	20
[	U	238	0.001	ug/L	0.000	3	29	76	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:00:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1231767	0
	Be	9	-0.001	ug/L	0.001	66	14	10	23
	C	13		ug/L			92537	104284	4
	Cl	37		ug/L			5664278	5827914	1
>	Sc	45		ug/L			1146320	1180019	2
	V	51	0.003	ug/L	0.009	254	6433	6696	1
	V-1	51	0.092	ug/L	0.009	10	136	2231	11
	Cr	52	0.180	ug/L	0.071	39	19074	22952	3
	Cr	53	0.488	ug/L	0.033	6	141	1166	5
	Mn	55	0.013	ug/L	0.002	12	395	746	3
	Co	59	-0.001	ug/L	0.000	81	68	59	15
>	Ge	72		ug/L			524719	529210	0
	Ni	60	0.040	ug/L	0.005	11	25	167	9
	Ni	62	0.256	ug/L	0.143	55	547	682	10
	Cu	63	0.066	ug/L	0.008	11	464	975	6
	Cu	65	0.055	ug/L	0.007	13	38	227	11
	Zn	66	0.818	ug/L	0.019	2	211	1920	1
	Zn	67	0.755	ug/L	0.048	6	38	297	5
	Zn	68	0.824	ug/L	0.058	6	621	1818	4
	As	75	0.044	ug/L	0.004	9	1367	1462	0
	As-1	75	-0.067	ug/L	0.006	8	8254	8199	0
	Se	82	-0.178	ug/L	0.092	51	2	-34	55
	Se	78	-0.225	ug/L	0.068	30	8327	8284	0
	Mo	98	0.048	ug/L	0.008	16	28	247	14
	Y	89		ug/L			367134	368896	3
	Kr	83		ug/L			1842	2093	1
>	In	115		ug/L			978081	991994	0
	Ag	107	-0.000	ug/L	0.000	42	15	13	7
	Cd	111	0.001	ug/L	0.000	14	78	82	1
	Cd	114	0.001	ug/L	0.001	140	26	33	29
	Sb	121	-0.022	ug/L	0.001	5	468	117	16
	Sb	123	-0.024	ug/L	0.001	2	370	83	10
	Ba	135	0.015	ug/L	0.001	8	33	103	6
	Ba	137	0.013	ug/L	0.001	10	61	163	5
>	Tb	159		ug/L			1048717	1102205	1
	Tl	205	0.001	ug/L	0.001	78	58	92	27
	Pb	208	0.012	ug/L	0.000	2	189	803	2
	Bi	209		ug/L			2472390	2593715	1
	Th	232	-0.034	ug/L	0.001	1	1843	221	14
	U	238	-0.000	ug/L	0.000	19	29	12	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:05:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1189479	1241138	0
[	Be	9	0.000	ug/L	0.001	4695	14	14	23
	C	13		ug/L			92537	102494	2
	Cl	37		ug/L			5664278	5618080	1
[>	Sc	45		ug/L			1146320	1162404	0
[	V	51	0.014	ug/L	0.016	117	6433	6826	4
[	V-1	51	0.054	ug/L	0.002	3	136	1338	4
[	Cr	52	0.238	ug/L	0.063	26	19074	23684	4
[	Cr	53	0.377	ug/L	0.023	5	141	921	5
[	Mn	55	0.034	ug/L	0.002	5	395	1263	2
[	Co	59	0.000	ug/L	0.000	196	68	71	5
[>	Ge	72		ug/L			524719	534537	1
[	Ni	60	0.036	ug/L	0.002	5	25	157	4
[	Ni	62	-0.077	ug/L	0.102	131	547	517	8
[	Cu	63	0.036	ug/L	0.003	8	464	751	1
[	Cu	65	0.040	ug/L	0.006	14	38	176	9
[	Zn	66	0.957	ug/L	0.034	3	211	2232	2
[	Zn	67	0.920	ug/L	0.054	5	38	357	4
[	Zn	68	0.952	ug/L	0.080	8	621	2022	4
[	As	75	0.056	ug/L	0.023	41	1367	1500	1
[	As-1	75	-0.075	ug/L	0.071	94	8254	8266	0
[	Se	82	-0.040	ug/L	0.068	167	2	-5	246
[	Se	78	-0.248	ug/L	0.255	103	8327	8354	0
[	Mo	98	0.015	ug/L	0.004	28	28	98	18
	Y	89		ug/L			367134	366875	1
	Kr	83		ug/L			1842	2055	1
[>	In	115		ug/L			978081	1003402	1
[	Ag	107	0.000	ug/L	0.000	106	15	19	20
[	Cd	111	0.001	ug/L	0.002	471	78	83	17
[	Cd	114	0.001	ug/L	0.001	78	26	37	21
[	Sb	121	-0.021	ug/L	0.000	2	468	133	5
[	Sb	123	-0.023	ug/L	0.002	7	370	99	18
[	Ba	135	0.054	ug/L	0.005	9	33	285	10
[	Ba	137	0.056	ug/L	0.003	5	61	511	6
[>	Tb	159		ug/L			1048717	1096425	1
[	Tl	205	-0.000	ug/L	0.000	50	58	50	10
[	Pb	208	0.008	ug/L	0.001	8	189	594	4
[	Bi	209		ug/L			2472390	2551854	0
[	Th	232	-0.034	ug/L	0.000	0	1843	193	6
[	U	238	-0.000	ug/L	0.000	22	29	8	58

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ERA P197-500 5/14/12 JAD
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 14:11:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1245891	1
	Be	9	6.888	ug/L	0.202	2	14	28307	1
	C	13		ug/L			92537	140311	2
	Cl	37		ug/L			5664278	5713097	1
>	Sc	45		ug/L			1146320	1166383	1
	V	51	52.587	ug/L	1.594	3	6433	1186552	1
	V-1	51	52.641	ug/L	1.510	2	136	1180651	1
	Cr	52	58.307	ug/L	1.204	2	19074	1088396	1
	Cr	53	58.507	ug/L	0.756	1	141	121101	0
	Mn	55	49.195	ug/L	0.995	2	395	1236443	1
	Co	59	95.425	ug/L	2.281	2	68	1659826	2
>	Ge	72		ug/L			524719	535215	0
	Ni	60	75.596	ug/L	1.652	2	25	273504	1
	Ni	62	74.818	ug/L	1.940	2	547	39246	2
	Cu	63	32.162	ug/L	0.554	1	464	250300	1
	Cu	65	31.880	ug/L	0.112	0	38	111194	0
	Zn	66	51.906	ug/L	1.067	2	211	109773	2
	Zn	67	50.829	ug/L	0.452	0	38	17627	0
	Zn	68	52.587	ug/L	1.125	2	621	77500	1
	As	75	22.860	ug/L	0.188	0	1367	45379	0
	As-1	75	22.392	ug/L	0.214	0	8254	50656	0
	Se	82	35.393	ug/L	0.652	1	2	7376	1
	Se	78	33.112	ug/L	0.764	2	8327	25595	1
	Mo	98	57.790	ug/L	0.258	0	28	269049	0
	Y	89		ug/L			367134	373880	1
	Kr	83		ug/L			1842	2027	0
>	In	115		ug/L			978081	1005827	2
	Ag	107	45.563	ug/L	0.898	1	15	435231	0
	Cd	111	15.479	ug/L	0.431	2	78	81995	0
	Cd	114	15.494	ug/L	0.498	3	26	201808	1
	Sb	121	32.431	ug/L	0.870	2	468	538623	0
	Sb	123	32.431	ug/L	0.638	1	370	404606	0
	Ba	135	47.231	ug/L	1.247	2	33	220190	1
	Ba	137	47.126	ug/L	1.310	2	61	377864	0
>	Tb	159		ug/L			1048717	1118655	1
	Tl	205	18.820	ug/L	0.221	1	58	709086	0
	Pb	208	216.229	ug/L	2.633	1	189	10851538	0
	Bi	209		ug/L			2472390	2581762	0
	Th	232	-0.034	ug/L	0.000	0	1843	225	6
	U	238	-0.000	ug/L	0.000	28	29	18	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:18:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1255386	3
	Be	9	52.511	ug/L	1.440	2	14	217300	0
	C	13		ug/L			92537	98879	1
	Cl	37		ug/L			5664278	5875937	3
>	Sc	45		ug/L			1146320	1191859	2
	V	51	48.395	ug/L	2.250	4	6433	1115633	1
	V-1	51	48.401	ug/L	2.620	5	136	1108386	2
	Cr	52	49.664	ug/L	1.271	2	19074	950049	1
	Cr	53	49.689	ug/L	2.402	4	141	105038	2
	Mn	55	49.738	ug/L	1.445	2	395	1276831	0
	Co	59	49.382	ug/L	2.222	4	68	876992	1
>	Ge	72		ug/L			524719	522903	1
	Ni	60	51.498	ug/L	0.688	1	25	182048	2
	Ni	62	51.101	ug/L	0.570	1	547	26358	0
	Cu	63	51.976	ug/L	0.684	1	464	394876	0
	Cu	65	50.961	ug/L	0.807	1	38	173611	1
	Zn	66	52.864	ug/L	0.938	1	211	109232	2
	Zn	67	52.255	ug/L	1.480	2	38	17700	1
	Zn	68	53.141	ug/L	0.525	0	621	76510	1
	As	75	51.775	ug/L	0.892	1	1367	98672	0
	As-1	75	51.631	ug/L	1.036	2	8254	103354	0
	Se	82	54.944	ug/L	0.768	1	2	11185	1
	Se	78	52.297	ug/L	0.988	1	8327	34683	0
	Mo	98	51.605	ug/L	0.775	1	28	234693	0
	Y	89		ug/L			367134	371328	1
	Kr	83		ug/L			1842	2034	1
>	In	115		ug/L			978081	983741	0
	Ag	107	53.274	ug/L	0.661	1	15	497849	1
	Cd	111	50.637	ug/L	0.321	0	78	262282	0
	Cd	114	51.256	ug/L	0.528	1	26	653203	1
	Sb	121	51.640	ug/L	0.570	1	468	838894	1
	Sb	123	52.305	ug/L	0.762	1	370	638176	1
	Ba	135	50.064	ug/L	0.361	0	33	228361	0
	Ba	137	50.090	ug/L	0.238	0	61	392964	0
>	Tb	159		ug/L			1048717	1106834	0
	Tl	205	50.134	ug/L	0.973	1	58	1868892	1
	Pb	208	49.625	ug/L	0.496	0	189	2464449	0
	Bi	209		ug/L			2472390	2479983	0
	Th	232	48.742	ug/L	1.125	2	1843	2478202	1
	U	238	49.222	ug/L	0.427	0	29	2525500	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:24:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1189479	1230151	1
	Be	9	0.002	ug/L	0.004	235	14	21	75
	C	13		ug/L			92537	98522	0
	Cl	37		ug/L			5664278	5836764	2
>	Sc	45		ug/L			1146320	1169869	1
	V	51	-0.005	ug/L	0.010	175	6433	6441	3
	V-1	51	0.015	ug/L	0.004	24	136	482	17
	Cr	52	-0.028	ug/L	0.029	104	19074	18948	2
	Cr	53	0.044	ug/L	0.010	22	141	235	7
	Mn	55	0.002	ug/L	0.003	142	395	460	17
	Co	59	0.001	ug/L	0.003	284	68	89	64
>	Ge	72		ug/L			524719	515489	1
	Ni	60	0.001	ug/L	0.005	347	25	30	55
	Ni	62	-0.320	ug/L	0.039	12	547	378	6
	Cu	63	-0.019	ug/L	0.005	24	464	314	12
	Cu	65	0.003	ug/L	0.002	66	38	48	16
	Zn	66	0.013	ug/L	0.006	46	211	233	3
	Zn	67	0.005	ug/L	0.013	272	38	39	12
	Zn	68	-0.017	ug/L	0.006	35	621	586	3
	As	75	0.088	ug/L	0.021	23	1367	1507	3
	As-1	75	0.030	ug/L	0.099	325	8254	8162	0
	Se	82	-0.063	ug/L	0.065	101	2	-9	129
	Se	78	0.148	ug/L	0.360	243	8327	8252	0
	Mo	98	0.012	ug/L	0.002	15	28	80	10
	Y	89		ug/L			367134	357172	3
	Kr	83		ug/L			1842	2080	1
>	In	115		ug/L			978081	980184	1
	Ag	107	0.001	ug/L	0.000	8	15	21	2
	Cd	111	0.006	ug/L	0.005	80	78	110	24
	Cd	114	0.006	ug/L	0.010	170	26	104	128
	Sb	121	0.046	ug/L	0.017	36	468	1214	24
	Sb	123	0.043	ug/L	0.016	37	370	894	23
	Ba	135	0.008	ug/L	0.014	181	33	69	94
	Ba	137	0.007	ug/L	0.014	189	61	120	93
>	Tb	159		ug/L			1048717	1063976	0
	Tl	205	0.007	ug/L	0.010	148	58	304	120
	Pb	208	0.005	ug/L	0.009	188	189	417	102
	Bi	209		ug/L			2472390	2462412	1
	Th	232	0.068	ug/L	0.027	39	1843	5202	25
	U	238	0.004	ug/L	0.006	130	29	247	115

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:34:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1240584	1
	Be	9		ug/L				15	17
	C	13		ug/L				97520	1
	Cl	37		ug/L				5649089	1
>	Sc	45		ug/L				1178780	1
	V	51		ug/L				6492	2
	V-1	51		ug/L				377	4
	Cr	52		ug/L				19113	2
	Cr	53		ug/L				204	3
	Mn	55		ug/L				416	7
	Co	59		ug/L				65	8
>	Ge	72		ug/L				516864	0
	Ni	60		ug/L				27	9
	Ni	62		ug/L				330	8
	Cu	63		ug/L				294	3
	Cu	65		ug/L				45	9
	Zn	66		ug/L				231	10
	Zn	67		ug/L				33	4
	Zn	68		ug/L				616	2
	As	75		ug/L				1496	3
	As-1	75		ug/L				8213	0
	Se	82		ug/L				-25	64
	Se	78		ug/L				8312	0
	Mo	98		ug/L				32	26
	Y	89		ug/L				357323	0
	Kr	83		ug/L				2130	0
>	In	115		ug/L				968294	0
	Ag	107		ug/L				18	62
	Cd	111		ug/L				91	12
	Cd	114		ug/L				34	16
	Sb	121		ug/L				276	18
	Sb	123		ug/L				203	15
	Ba	135		ug/L				32	38
	Ba	137		ug/L				60	21
>	Tb	159		ug/L				1066450	0
	Tl	205		ug/L				58	44
	Pb	208		ug/L				178	13
	Bi	209		ug/L				2499497	1
	Th	232		ug/L				1052	11
	U	238		ug/L				23	41

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:38:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1247833	1
	Be	9	52.532	ug/L	0.915	1	15	216157	0
	C	13		ug/L			97520	98085	2
	Cl	37		ug/L			5649089	5753999	0
>	Sc	45		ug/L			1178780	1166353	1
	V	51	49.594	ug/L	1.236	2	6492	1119345	1
	V-1	51	49.537	ug/L	1.461	2	377	1111314	1
	Cr	52	48.942	ug/L	0.983	2	19113	916181	0
	Cr	53	48.743	ug/L	1.821	3	204	100960	2
	Mn	55	49.092	ug/L	0.738	1	416	1233972	1
	Co	59	50.261	ug/L	0.087	0	65	874237	1
>	Ge	72		ug/L			516864	519411	0
	Ni	60	51.249	ug/L	0.371	0	27	179953	0
	Ni	62	51.324	ug/L	0.623	1	330	26086	0
	Cu	63	51.328	ug/L	1.044	2	294	387260	2
	Cu	65	51.476	ug/L	0.836	1	45	174237	2
	Zn	66	52.439	ug/L	1.090	2	231	107658	2
	Zn	67	53.034	ug/L	0.363	0	33	17843	0
	Zn	68	52.887	ug/L	0.470	0	616	75647	1
	As	75	51.806	ug/L	0.366	0	1496	98236	0
	As-1	75	51.606	ug/L	0.635	1	8213	102717	0
	Se	82	54.783	ug/L	0.599	1	-25	11050	1
	Se	78	51.568	ug/L	0.767	1	8312	34201	1
	Mo	98	51.047	ug/L	0.458	0	32	230644	0
	Y	89		ug/L			357323	361352	0
	Kr	83		ug/L			2130	2112	3
>	In	115		ug/L			968294	970530	1
	Ag	107	53.155	ug/L	0.625	1	18	490028	0
	Cd	111	50.964	ug/L	0.778	1	91	260421	1
	Cd	114	51.257	ug/L	0.106	0	34	644464	1
	Sb	121	51.842	ug/L	0.873	1	276	830556	0
	Sb	123	52.148	ug/L	0.470	0	203	627525	0
	Ba	135	50.177	ug/L	0.417	0	32	225788	0
	Ba	137	50.413	ug/L	1.376	2	60	390108	1
>	Tb	159		ug/L			1066450	1079177	1
	Tl	205	50.301	ug/L	0.273	0	58	1828286	0
	Pb	208	49.770	ug/L	0.697	1	178	2409753	0
	Bi	209		ug/L			2499497	2459702	0
	Th	232	49.645	ug/L	1.065	2	1052	2459969	1
	U	238	50.000	ug/L	0.685	1	23	2501365	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 14:44:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1197222	1
[	Be	9	0.001	ug/L	0.002	163	15	19	43
	C	13		ug/L			97520	96973	4
	Cl	37		ug/L			5649089	5640609	1
[>	Sc	45		ug/L			1178780	1139464	0
[	V	51	-0.001	ug/L	0.004	303	6492	6249	0
[	V-1	51	-0.003	ug/L	0.001	41	377	297	9
[	Cr	52	-0.002	ug/L	0.012	609	19113	18438	0
[	Cr	53	-0.009	ug/L	0.008	87	204	180	8
[	Mn	55	0.002	ug/L	0.001	44	416	461	5
[	Co	59	-0.000	ug/L	0.000	67	65	57	7
[>	Ge	72		ug/L			516864	519088	1
[	Ni	60	-0.001	ug/L	0.001	107	27	24	16
[	Ni	62	-0.030	ug/L	0.034	113	330	317	6
[	Cu	63	0.009	ug/L	0.002	23	294	360	2
[	Cu	65	0.009	ug/L	0.001	12	45	76	5
[	Zn	66	0.312	ug/L	0.019	6	231	871	3
[	Zn	67	0.324	ug/L	0.037	11	33	142	9
[	Zn	68	0.279	ug/L	0.016	5	616	1014	1
[	As	75	-0.012	ug/L	0.013	103	1496	1479	2
[	As-1	75	-0.058	ug/L	0.097	166	8213	8139	0
[	Se	82	0.007	ug/L	0.071	1080	-25	-24	58
[	Se	78	-0.235	ug/L	0.382	162	8312	8228	0
[	Mo	98	0.009	ug/L	0.000	0	32	73	2
	Y	89		ug/L			357323	361200	1
	Kr	83		ug/L			2130	2091	3
[>	In	115		ug/L			968294	961262	1
[	Ag	107	0.000	ug/L	0.000	73	18	22	13
[	Cd	111	0.000	ug/L	0.001	2781	91	90	7
[	Cd	114	0.001	ug/L	0.002	375	34	41	69
[	Sb	121	0.050	ug/L	0.008	15	276	1059	10
[	Sb	123	0.051	ug/L	0.008	14	203	809	9
[	Ba	135	0.004	ug/L	0.003	64	32	52	23
[	Ba	137	0.004	ug/L	0.001	16	60	93	5
[>	Tb	159		ug/L			1066450	1042016	1
[	Tl	205	0.002	ug/L	0.001	29	58	131	16
[	Pb	208	0.004	ug/L	0.001	17	178	347	8
[	Bi	209		ug/L			2499497	2445161	0
[	Th	232	0.095	ug/L	0.018	19	1052	5555	15
[	U	238	0.001	ug/L	0.000	33	23	86	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 14:49:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1247419	1
	Be	9	U 0.002	ug/L	0.001	92	15	21	27
	C	13		ug/L			97520	106254	1
	Cl	37		ug/L			5649089	5687480	1
>	Sc	45		ug/L			1178780	1171068	0
	V	51	0.009	ug/L	0.003	28	6492	6661	1
	V-1	51	0.005	ug/L	0.001	19	377	478	4
	Cr	52	U 0.179	ug/L	0.006	3	19113	22275	0
	Cr	53	0.162	ug/L	0.008	4	204	539	2
	Mn	55	0.050	ug/L	0.002	3	416	1676	3
	Co	59	0.001	ug/L	0.002	124	65	90	35
>	Ge	72		ug/L			516864	526338	1
	Ni	60	U 0.013	ug/L	0.004	29	27	75	17
	Ni	62	-0.056	ug/L	0.059	106	330	308	7
	Cu	63	U 0.248	ug/L	0.006	2	294	2190	3
	Cu	65	0.244	ug/L	0.015	6	45	880	4
	Zn	66	U 0.874	ug/L	0.072	8	231	2047	5
	Zn	67	0.868	ug/L	0.036	4	33	329	1
	Zn	68	0.860	ug/L	0.076	8	616	1863	5
	As	75	U 0.040	ug/L	0.018	44	1496	1598	1
	As-1	75	-0.072	ug/L	0.079	110	8213	8228	0
	Se	82	U 0.151	ug/L	0.031	20	-25	4	142
	Se	78	-0.356	ug/L	0.275	77	8312	8282	0
	Mo	98	0.008	ug/L	0.005	64	32	70	33
	Y	89		ug/L			357323	368730	1
	Kr	83		ug/L			2130	2103	1
>	In	115		ug/L			968294	975721	0
	Ag	107	U 0.001	ug/L	0.001	75	18	30	29
	Cd	111	U 0.000	ug/L	0.002	745	91	93	9
	Cd	114	-0.000	ug/L	0.001	187	34	30	22
	Sb	121	U 0.006	ug/L	0.003	45	276	368	11
	Sb	123	0.007	ug/L	0.003	47	203	289	14
	Ba	135	0.016	ug/L	0.002	14	32	107	10
	Ba	137	0.014	ug/L	0.002	17	60	171	11
>	Tb	159		ug/L			1066450	1076942	0
	Tl	205	U 0.005	ug/L	0.002	47	58	226	34
	Pb	208	U 0.010	ug/L	0.000	3	178	664	2
	Bi	209		ug/L			2499497	2444624	1
	Th	232	0.078	ug/L	0.017	21	1052	4930	17
	U	238	0.000	ug/L	0.000	48	23	40	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 14:53:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

DEV

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1240584	1222764	1
	Be	9	U	0.002	ug/L	0.001	29	15	22	9
	C	13			ug/L			97520	109155	1
	Cl	37			ug/L			5649089	5676051	2
>	Sc	45			ug/L			1178780	1188115	0
	V	51		0.018	ug/L	0.003	17	6492	6958	1
	V-1	51		0.003	ug/L	0.001	26	377	443	3
	Cr	52	U	0.207	ug/L	0.009	4	19113	23126	0
	Cr	53	U	0.154	ug/L	0.023	14	204	529	8
	Mn	55		0.027	ug/L	0.001	2	416	1120	1
	Co	59		0.000	ug/L	0.001	204	65	71	14
>	Ge	72			ug/L			516864	523066	0
	Ni	60	U	0.016	ug/L	0.002	14	27	84	9
	Ni	62	U	-0.008	ug/L	0.063	808	330	330	9
	Cu	63		0.528	ug/L	0.009	1	294	4304	0
	Cu	65		0.533	ug/L	0.020	3	45	1861	2
	Zn	66	U	0.764	ug/L	0.022	2	231	1809	1
	Zn	67	U	0.782	ug/L	0.065	8	33	298	7
	Zn	68		0.731	ug/L	0.039	5	616	1668	4
	As	75	U	0.011	ug/L	0.009	81	1496	1535	1
	As-1	75		-0.002	ug/L	0.035	1462	8213	8306	0
	Se	82	U	0.056	ug/L	0.126	227	-25	-14	172
	Se	78	U	-0.065	ug/L	0.111	170	8312	8379	0
	Mo	98		0.002	ug/L	0.002	83	32	44	20
	Y	89			ug/L			357323	372503	0
	Kr	83			ug/L			2130	2109	3
>	In	115			ug/L			968294	973924	0
	Ag	107	U	-0.000	ug/L	0.000	426	18	17	17
	Cd	111	U	-0.002	ug/L	0.002	90	91	80	13
	Cd	114	U	-0.000	ug/L	0.001	589	34	32	35
	Sb	121	U	-0.005	ug/L	0.001	33	276	205	12
	Sb	123	U	-0.003	ug/L	0.001	45	203	170	9
	Ba	135		0.015	ug/L	0.001	9	32	98	6
	Ba	137		0.013	ug/L	0.000	2	60	161	1
>	Tb	159			ug/L			1066450	1082154	0
	Tl	205	U	0.001	ug/L	0.000	8	58	105	3
	Pb	208	U	0.011	ug/L	0.001	7	178	698	5
	Bi	209			ug/L			2499497	2477259	0
	Th	232		0.026	ug/L	0.005	20	1052	2358	11
	U	238		0.000	ug/L	0.000	234	23	25	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 14:57:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1259269	1
	Be	9	25.201	ug/L	0.547	2	15	104662	1
	C	13		ug/L			97520	113082	2
	Cl	37		ug/L			5649089	5608448	2
>	Sc	45		ug/L			1178780	1184492	1
	V	51	24.383	ug/L	0.755	3	6492	562117	1
	V-1	51	24.473	ug/L	0.678	2	377	557718	1
	Cr	52	25.186	ug/L	0.866	3	19113	488067	2
	Cr	53	25.502	ug/L	0.429	1	204	53744	0
	Mn	55	25.196	ug/L	0.816	3	416	643496	4
	Co	59	25.058	ug/L	0.669	2	65	442548	1
>	Ge	72		ug/L			516864	527521	1
	Ni	60	26.277	ug/L	0.468	1	27	93724	2
	Ni	62	25.514	ug/L	0.717	2	330	13339	2
	Cu	63	26.157	ug/L	0.621	2	294	200530	1
	Cu	65	26.142	ug/L	0.730	2	45	89874	2
	Zn	66	80.591	ug/L	0.840	1	231	167883	0
	Zn	67	74.939	ug/L	0.293	0	33	25593	1
	Zn	68	80.567	ug/L	1.764	2	616	116684	0
	As	75	26.560	ug/L	0.536	2	1496	51889	1
	As-1	75	25.131	ug/L	0.500	1	8213	55100	1
	Se	82	80.807	ug/L	1.224	1	-25	16565	0
	Se	78	75.490	ug/L	1.111	1	8312	46912	1
	Mo	98	25.954	ug/L	0.296	1	32	119105	0
	Y	89		ug/L			357323	366601	0
	Kr	83		ug/L			2130	2074	0
>	In	115		ug/L			968294	998983	1
	Ag	107	25.695	ug/L	0.275	1	18	243866	2
	Cd	111	24.705	ug/L	0.435	1	91	130003	2
	Cd	114	24.784	ug/L	0.367	1	34	320718	0
	Sb	121	25.111	ug/L	0.206	0	276	414292	1
	Sb	123	25.265	ug/L	0.507	2	203	313005	0
	Ba	135	24.531	ug/L	0.336	1	32	113630	0
	Ba	137	24.420	ug/L	0.691	2	60	194533	1
>	Tb	159		ug/L			1066450	1075347	0
	Tl	205	25.466	ug/L	0.360	1	58	922387	1
	Pb	208	25.294	ug/L	0.169	0	178	1220538	0
	Bi	209		ug/L			2499497	2506116	0
	Th	232	24.264	ug/L	0.134	0	1052	1198788	0
	U	238	25.013	ug/L	0.421	1	23	1246865	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:01:29
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1236799	1
	Be	9	25.706	ug/L	0.355	1	15	104860	1
	C	13		ug/L			97520	106621	0
	Cl	37		ug/L			5649089	5722482	1
>	Sc	45		ug/L			1178780	1184149	0
	V	51	24.110	ug/L	0.457	1	6492	555923	1
	V-1	51	24.139	ug/L	0.526	2	377	550099	2
	Cr	52	25.034	ug/L	0.309	1	19113	485221	0
	Cr	53	25.135	ug/L	0.206	0	204	52967	1
	Mn	55	24.500	ug/L	0.338	1	416	625447	1
	Co	59	24.802	ug/L	0.137	0	65	438027	0
>	Ge	72		ug/L			516864	535583	0
	Ni	60	25.603	ug/L	0.344	1	27	92720	1
	Ni	62	25.267	ug/L	0.026	0	330	13417	0
	Cu	63	25.917	ug/L	0.099	0	294	201769	0
	Cu	65	26.477	ug/L	0.858	3	45	92421	2
	Zn	66	78.853	ug/L	0.868	1	231	166784	0
	Zn	67	73.615	ug/L	1.430	1	33	25524	1
	Zn	68	78.097	ug/L	0.807	1	616	114873	0
	As	75	26.040	ug/L	0.370	1	1496	51685	0
	As-1	75	24.446	ug/L	0.539	2	8213	54649	1
	Se	82	79.146	ug/L	1.149	1	-25	16472	0
	Se	78	73.275	ug/L	1.785	2	8312	46482	1
	Mo	98	25.313	ug/L	0.044	0	32	117955	0
	Y	89		ug/L			357323	370864	1
	Kr	83		ug/L			2130	2138	4
>	In	115		ug/L			968294	982262	0
	Ag	107	26.310	ug/L	0.608	2	18	245491	1
	Cd	111	24.604	ug/L	0.261	1	91	127298	0
	Cd	114	24.607	ug/L	0.202	0	34	313127	0
	Sb	121	25.524	ug/L	0.436	1	276	414044	1
	Sb	123	25.685	ug/L	0.275	1	203	312930	0
	Ba	135	24.740	ug/L	0.341	1	32	112691	1
	Ba	137	24.597	ug/L	0.270	1	60	192703	0
>	Tb	159		ug/L			1066450	1067030	0
	Tl	205	25.259	ug/L	0.379	1	58	907786	1
	Pb	208	25.049	ug/L	0.280	1	178	1199316	0
	Bi	209		ug/L			2499497	2503077	0
	Th	232	24.288	ug/L	0.387	1	1052	1190620	1
	U	238	24.664	ug/L	0.529	2	23	1219941	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 15:05:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1212373	1
[	Be	9	0.002	ug/L	0.001	44	15	23	17
	C	13		ug/L			97520	96723	3
	Cl	37		ug/L			5649089	5744724	1
[>	Sc	45		ug/L			1178780	1170712	1
[	V	51	0.292	ug/L	0.004	1	6492	13015	0
[	V-1	51	0.286	ug/L	0.001	0	377	6812	1
[	Cr	52	0.360	ug/L	0.011	3	19113	25599	0
[	Cr	53	0.340	ug/L	0.006	1	204	909	2
[	Mn	55	2.369	ug/L	0.018	0	416	60168	0
[	Co	59	0.042	ug/L	0.002	4	65	799	4
[>	Ge	72		ug/L			516864	520993	0
[	Ni	60	2.145	ug/L	0.040	1	27	7582	1
[	Ni	62	1.815	ug/L	0.054	2	330	1246	1
[	Cu	63	0.492	ug/L	0.010	2	294	4014	2
[	Cu	65	0.431	ug/L	0.014	3	45	1506	3
[	Zn	66	0.857	ug/L	0.017	2	231	1993	1
[	Zn	67	1.107	ug/L	0.072	6	33	406	6
[	Zn	68	1.123	ug/L	0.038	3	616	2219	2
[	As	75	1.311	ug/L	0.012	0	1496	3963	0
[	As-1	75	1.199	ug/L	0.016	1	8213	10480	0
[	Se	82	0.137	ug/L	0.011	8	-25	1	136
[	Se	78	-0.482	ug/L	0.041	8	8312	8136	0
[	Mo	98	0.689	ug/L	0.015	2	32	3155	1
	Y	89		ug/L			357323	364033	1
	Kr	83		ug/L			2130	2071	1
[>	In	115		ug/L			968294	970110	1
[	Ag	107	0.003	ug/L	0.003	95	18	45	56
[	Cd	111	0.007	ug/L	0.003	42	91	126	11
[	Cd	114	-0.000	ug/L	0.003	1218	34	31	109
[	Sb	121	0.060	ug/L	0.001	1	1276	1239	2
[	Sb	123	0.058	ug/L	0.005	7	203	903	7
[	Ba	135	5.052	ug/L	0.098	1	32	22752	0
[	Ba	137	5.008	ug/L	0.059	1	60	38798	0
[>	Tb	159		ug/L			1066450	1073604	0
[	Tl	205	0.001	ug/L	0.001	160	58	82	44
[	Pb	208	0.011	ug/L	0.001	6	178	707	4
[	Bi	209		ug/L			2499497	2435647	1
[	Th	232	0.154	ug/L	0.064	41	1052	8648	36
[	U	238	0.287	ug/L	0.003	0	23	14282	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:09:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1207797	1
	Be	9	U 0.003	ug/L	0.001	29	15	28	12
	C	13		ug/L			97520	110465	0
	Cl	37		ug/L			5649089	5837807	0
>	Sc	45		ug/L			1178780	1190256	0
	V	51	1.419	ug/L	0.019	1	6492	39062	1
	V-1	51	1.406	ug/L	0.025	1	377	32561	1
	Cr	52	0.549	ug/L	0.024	4	19113	29578	1
	Cr	53	0.501	ug/L	0.019	3	204	1263	2
	Mn	55	11.105	ug/L	0.235	2	416	285146	1
	Co	59	0.200	ug/L	0.003	1	65	3609	1
>	Ge	72		ug/L			516864	502494	1
	Ni	60	10.317	ug/L	0.092	0	27	35064	1
	Ni	62	9.217	ug/L	0.429	4	330	4795	3
	Cu	63	2.211	ug/L	0.031	1	294	16410	1
	Cu	65	1.954	ug/L	0.060	3	45	6439	1
	Zn	66	U 1.522	ug/L	0.037	2	231	3240	0
	Zn	67	2.622	ug/L	0.154	5	33	883	3
	Zn	68	2.678	ug/L	0.048	1	616	4274	2
	As	75	6.218	ug/L	0.108	1	1496	12685	0
	As-1	75	6.302	ug/L	0.135	2	8213	19141	0
	Se	82	U 0.195	ug/L	0.078	40	-25	12	118
	Se	78	0.201	ug/L	0.239	118	8312	8177	1
	Mo	98	3.513	ug/L	0.081	2	32	15381	0
	Y	89		ug/L			357323	362372	1
	Kr	83		ug/L			2130	2163	0
>	In	115		ug/L			968294	948249	1
	Ag	107	U 0.003	ug/L	0.001	23	18	47	13
	Cd	111	U 0.019	ug/L	0.005	26	91	185	14
	Cd	114	U 0.018	ug/L	0.003	16	34	252	15
	Sb	121	0.254	ug/L	0.005	1	276	4247	0
	Sb	123	0.252	ug/L	0.005	2	203	3165	2
	Ba	135	25.150	ug/L	0.504	2	32	110581	1
	Ba	137	25.081	ug/L	0.278	1	60	189689	1
>	Tb	159		ug/L			1066450	1072747	0
	Tl	205	U 0.002	ug/L	0.003	147	58	137	84
	Pb	208	U 0.028	ug/L	0.001	3	178	1507	3
	Bi	209	U	ug/L			2499497	2290840	0
	Th	232	0.148	ug/L	0.050	33	1052	8332	29
	U	238	1.374	ug/L	0.016	1	23	68347	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:13:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1208299	0
[	Be	9	U 0.002	ug/L	0.001	46	15	22	16
	C	13		ug/L			97520	108752	2
	Cl	37		ug/L			5649089	5760819	1
[>	Sc	45		ug/L			1178780	1212352	0
[	V	51	1.383	ug/L	0.014	1	6492	38929	0
[	V-1	51	1.373	ug/L	0.016	1	377	32396	0
[	Cr	52	0.515	ug/L	0.020	3	19113	29467	1
[	Cr	53	0.480	ug/L	0.001	0	204	1240	1
[	Mn	55	11.008	ug/L	0.026	0	416	287925	0
[	Co	59	0.164	ug/L	0.004	2	65	3028	1
[>	Ge	72		ug/L			516864	508064	2
[	Ni	60	3.573	ug/L	0.071	1	27	12300	4
[	Ni	62	2.456	ug/L	0.129	5	330	1529	2
[	Cu	63	2.272	ug/L	0.048	2	294	17036	0
[	Cu	65	1.971	ug/L	0.018	0	45	6566	1
[	Zn	66	U 1.401	ug/L	0.045	3	231	3032	1
[	Zn	67	2.633	ug/L	0.131	4	33	898	6
[	Zn	68	2.592	ug/L	0.064	2	616	4201	0
[	As	75	6.148	ug/L	0.226	3	1496	12693	1
[	As-1	75	6.181	ug/L	0.344	5	6213	19131	1
[	Se	82	U 0.325	ug/L	0.085	26	25	38	45
[	Se	78	0.040	ug/L	0.437	1088	8312	8187	0
[	Mo	98	3.448	ug/L	0.084	2	32	15262	0
	Y	89		ug/L			357323	368466	1
	Kr	83		ug/L			2130	2114	1
[>	In	115		ug/L			968294	942890	0
[	Ag	107	U 0.002	ug/L	0.000	10	18	32	4
[	Cd	111	U 0.020	ug/L	0.002	8	91	187	3
[	Cd	114	0.015	ug/L	0.001	7	34	213	7
[	Sb	121	0.246	ug/L	0.003	1	276	4103	1
[	Sb	123	0.253	ug/L	0.004	1	203	3149	1
[	Ba	135	25.028	ug/L	0.041	0	32	109435	0
[	Ba	137	24.867	ug/L	0.301	1	60	187018	1
[>	Tb	159		ug/L			1066450	1068534	1
[	Tl	205	U 0.000	ug/L	0.000	55	58	75	13
[	Pb	208	U 0.033	ug/L	0.000	0	178	1765	1
[	Bi	209		ug/L			2499497	2311351	0
[	Th	232	0.054	ug/L	0.012	23	1052	3702	17
[	U	238	1.362	ug/L	0.009	0	23	67493	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 15:17:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1202417	1
[	Be	9	24.881	ug/L	0.523	2	15	98694	3
	C	13		ug/L			97520	105397	1
	Cl	37		ug/L			5649089	5772962	1
[>	Sc	45		ug/L			1178780	1175122	1
[	V	51	25.986	ug/L	0.524	2	6492	593962	0
[	V-1	51	26.014	ug/L	0.426	1	377	588170	0
[	Cr	52	24.721	ug/L	0.725	2	19113	475574	0
[	Cr	53	24.815	ug/L	0.374	1	204	51887	0
[	Mn	55	35.769	ug/L	0.644	1	416	905759	0
[	Co	59	24.383	ug/L	0.374	1	65	427254	0
[>	Ge	72		ug/L			516864	500562	1
[	Ni	60	28.582	ug/L	0.810	2	27	96715	1
[	Ni	62	27.119	ug/L	0.550	2	330	13435	2
[	Cu	63	27.802	ug/L	0.511	1	294	202247	0
[	Cu	65	27.039	ug/L	0.187	0	45	88211	0
[	Zn	66	77.107	ug/L	1.331	1	231	152420	0
[	Zn	67	73.695	ug/L	0.978	1	33	23880	0
[	Zn	68	78.744	ug/L	1.145	1	616	108238	0
[	As	75	33.535	ug/L	0.923	2	1496	61787	2
[	As-1	75	32.343	ug/L	0.797	2	8213	65003	1
[	Se	82	80.493	ug/L	1.764	2	-25	15657	1
[	Se	78	75.808	ug/L	1.467	1	8312	44665	0
[	Mo	98	30.805	ug/L	0.287	0	32	134142	0
	Y	89		ug/L			35923	363902	1
	Kr	83		ug/L			2130	2142	3
[>	In	115		ug/L			968294	937655	1
[	Ag	107	24.934	ug/L	0.355	1	18	222086	0
[	Cd	111	23.973	ug/L	0.202	0	91	118404	0
[	Cd	114	24.324	ug/L	0.118	0	34	295489	1
[	Sb	121	25.868	ug/L	0.379	1	276	400535	0
[	Sb	123	26.081	ug/L	0.199	0	203	303315	0
[	Ba	135	50.782	ug/L	0.545	1	32	220763	0
[	Ba	137	50.450	ug/L	0.210	0	60	377243	0
[>	Tb	159		ug/L			1066450	1070624	0
[	Tl	205	24.663	ug/L	0.207	0	58	889368	0
[	Pb	208	24.253	ug/L	0.156	0	178	1165152	0
[	Bi	209		ug/L			2499497	2312100	1
[	Th	232	23.545	ug/L	0.302	1	1052	1158139	0
[	U	238	25.956	ug/L	0.269	1	23	1288191	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 B REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 15:22:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1158655	0
[	Be	9	0.000	ug/L	0.001	711	15	14	16
	C	13		ug/L			97520	94089	1
	Cl	37		ug/L			5649089	5716088	1
[>	Sc	45		ug/L			1178780	1159697	2
[	V	51	0.349	ug/L	0.017	4	6492	14159	0
[	V-1	51	0.380	ug/L	0.008	2	377	8835	1
[	Cr	52	0.341	ug/L	0.038	11	19113	25004	0
[	Cr	53	0.449	ug/L	0.008	1	204	1123	2
[	Mn	55	87.652	ug/L	1.258	1	416	2189791	1
[	Co	59	0.024	ug/L	0.001	5	65	480	4
[>	Ge	72		ug/L			516864	521325	1
[	Ni	60	0.130	ug/L	0.008	6	27	484	4
[	Ni	62	-0.223	ug/L	0.044	19	330	221	9
[	Cu	63	0.306	ug/L	0.017	5	294	2610	4
[	Cu	65	0.225	ug/L	0.010	4	45	808	3
[	Zn	66	0.991	ug/L	0.021	2	231	2269	1
[	Zn	67	0.868	ug/L	0.054	6	33	326	5
[	Zn	68	1.266	ug/L	0.005	0	616	2424	0
[	As	75	77.464	ug/L	0.678	0	1496	146681	0
[	As-1	75	78.889	ug/L	0.676	0	8213	153220	0
[	Se	82	0.177	ug/L	0.171	96	-25	9	360
[	Se	78	-0.447	ug/L	0.096	21	8312	8159	0
[	Mo	98	0.014	ug/L	0.001	8	32	95	4
	Y	89		ug/L			357323	361018	2
	Kr	83		ug/L			2130	2045	2
[>	In	115		ug/L			968294	963480	1
[	Ag	107	0.001	ug/L	0.000	64	18	25	18
[	Cd	111	0.026	ug/L	0.003	11	91	223	7
[	Cd	114	0.023	ug/L	0.001	5	34	319	4
[	Sb	121	0.013	ug/L	0.003	22	276	487	10
[	Sb	123	0.012	ug/L	0.003	22	203	351	9
[	Ba	135	0.194	ug/L	0.005	2	32	900	1
[	Ba	137	0.198	ug/L	0.003	1	60	1585	1
[>	Tb	159		ug/L			1066450	1061224	0
[	Tl	205	0.002	ug/L	0.000	21	58	112	9
[	Pb	208	0.020	ug/L	0.001	4	178	1141	2
[	Bi	209		ug/L			2499497	2437762	0
[	Th	232	0.160	ug/L	0.061	38	1052	8833	32
[	U	238	0.002	ug/L	0.001	31	23	112	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 H REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 15:27:56
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1130948	3
[	Be	9	0.001	ug/L	0.000	33	15	17	8
	C	13		ug/L			97520	95297	3
	Cl	37		ug/L			5649089	5627039	3
[>	Sc	45		ug/L			1178780	1143609	1
[	V	51	0.332	ug/L	0.006	1	6492	13603	0
[	V-1	51	0.352	ug/L	0.001	0	377	8105	1
[	Cr	52	0.385	ug/L	0.039	10	19113	25451	1
[	Cr	53	0.454	ug/L	0.017	3	204	1117	1
[	Mn	55	89.122	ug/L	1.024	1	416	2196015	1
[	Co	59	0.047	ug/L	0.002	3	65	871	2
[>	Ge	72		ug/L			516864	511032	1
[	Ni	60	0.123	ug/L	0.004	3	27	452	2
[	Ni	62	-0.243	ug/L	0.022	9	330	207	5
[	Cu	63	0.188	ug/L	0.008	4	294	1683	2
[	Cu	65	0.095	ug/L	0.005	5	45	361	5
[	Zn	66	0.867	ug/L	0.005	0	231	1975	1
[	Zn	67	0.791	ug/L	0.041	5	33	294	3
[	Zn	68	1.089	ug/L	0.057	5	616	2128	3
[	As	75	76.622	ug/L	1.665	2	1496	142218	0
[	As-1	75	78.177	ug/L	1.788	2	8213	148891	0
[	Se	82	0.126	ug/L	0.102	81	-25	0	2545
[	Se	78	0.120	ug/L	0.429	357	8312	8276	1
[	Mo	98	0.011	ug/L	0.001	8	32	79	3
	Y	89		ug/L			357323	366476	1
	Kr	83		ug/L			2130	2057	0
[>	In	115		ug/L			968294	959130	2
[	Ag	107	0.000	ug/L	0.001	152	18	22	28
[	Cd	111	0.002	ug/L	0.003	167	91	98	13
[	Cd	114	0.001	ug/L	0.001	62	34	49	20
[	Sb	121	0.001	ug/L	0.001	105	276	293	7
[	Sb	123	0.003	ug/L	0.001	17	203	238	2
[	Ba	135	0.193	ug/L	0.016	8	32	890	7
[	Ba	137	0.195	ug/L	0.009	4	60	1546	2
[>	Tb	159		ug/L			1066450	1061537	0
[	Tl	205	0.002	ug/L	0.002	93	58	134	52
[	Pb	208	0.019	ug/L	0.002	12	178	1082	9
[	Bi	209		ug/L			2499497	2396483	0
[	Th	232	0.040	ug/L	0.003	8	1052	3000	5
[	U	238	0.001	ug/L	0.001	148	23	70	99

US15 : 00425

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 15:34:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1188316	1
	Be	9	51.598	ug/L	1.357	2	15	202180	1
	C	13		ug/L			97520	92178	1
	Cl	37		ug/L			5649089	5807429	1
>	Sc	45		ug/L			1178780	1151133	2
	V	51	49.098	ug/L	1.071	2	6492	1093627	0
	V-1	51	48.824	ug/L	1.290	2	377	1080877	1
	Cr	52	49.636	ug/L	1.107	2	19113	916641	0
	Cr	53	48.687	ug/L	1.730	3	204	99503	1
	Mn	55	49.263	ug/L	1.304	2	416	1221729	1
	Co	59	48.826	ug/L	1.017	2	65	838076	2
>	Ge	72		ug/L			516864	510857	1
	Ni	60	51.808	ug/L	0.220	0	27	178929	1
	Ni	62	49.682	ug/L	1.700	3	330	24840	1
	Cu	63	51.906	ug/L	1.313	2	294	385063	1
	Cu	65	52.100	ug/L	0.699	1	45	173411	0
	Zn	66	53.195	ug/L	0.801	1	231	107381	0
	Zn	67	53.200	ug/L	1.084	2	33	17601	0
	Zn	68	53.488	ug/L	0.656	1	616	75238	2
	As	75	51.720	ug/L	0.784	1	1496	96450	0
	As-1	75	51.453	ug/L	0.985	1	8213	100737	0
	Se	82	55.155	ug/L (110.3%)	0.974	1	-25	10940	0
	Se	78	51.787	ug/L	1.694	3	8312	33738	1
	Mo	98	50.760	ug/L	0.739	1	32	225551	0
	Y	89		ug/L			357323	356656	0
	Kr	83		ug/L			2130	2123	1
>	In	115		ug/L			968294	954285	0
	Ag	107	50.771	ug/L	0.354	0	18	460257	0
	Cd	111	50.580	ug/L	0.747	1	91	254157	1
	Cd	114	51.120	ug/L	1.085	2	34	631976	2
	Sb	121	51.493	ug/L	0.747	1	276	811265	1
	Sb	123	51.499	ug/L	0.815	1	203	609390	1
	Ba	135	49.939	ug/L	0.307	0	32	220969	0
	Ba	137	50.042	ug/L	0.557	1	60	380836	1
>	Tb	159		ug/L			1066450	1066684	0
	Tl	205	48.848	ug/L	0.836	1	58	1754854	1
	Pb	208	48.506	ug/L	1.038	2	178	2321246	1
	Bi	209		ug/L			2499497	2391690	0
	Th	232	49.497	ug/L	0.753	1	1052	2424498	1
	U	238	49.616	ug/L	0.532	1	23	2453267	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 15:41:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1136744	0
	Be	9	-0.001	ug/L	0.002	205	15	10	60
	C	13		ug/L			97320	90251	1
	Cl	37		ug/L			5649089	5687878	1
>	Sc	45		ug/L			1178780	1123367	1
	V	51	0.009	ug/L	0.013	141	6492	6384	2
	V-1	51	-0.009	ug/L	0.000	1	377	171	1
	Cr	52	0.032	ug/L	0.048	149	19113	18772	2
	Cr	53	-0.030	ug/L	0.003	10	204	134	3
	Mn	55	0.004	ug/L	0.000	7	416	491	1
	Co	59	-0.000	ug/L	0.000	211	65	59	15
>	Ge	72		ug/L			516864	504788	1
	Ni	60	-0.002	ug/L	0.001	81	27	20	24
	Ni	62	-0.384	ug/L	0.015	3	330	135	4
	Cu	63	-0.001	ug/L	0.003	260	294	278	7
	Cu	65	0.016	ug/L	0.001	6	45	96	2
	Zn	66	0.486	ug/L	0.004	0	231	1192	1
	Zn	67	0.453	ug/L	0.046	10	33	180	7
	Zn	68	0.500	ug/L	0.034	6	616	1291	3
	As	75	0.053	ug/L	0.030	57	1496	1556	2
	As-1	75	0.020	ug/L	0.037	185	8213	8056	0
	Se	82	0.207	ug/L	0.252	121	25	15	322
	Se	78	0.029	ug/L	0.131	452	8312	8131	0
	Mo	98	0.006	ug/L	0.003	53	32	57	25
	Y	89		ug/L			357323	353798	2
	Kr	83		ug/L			2130	2042	5
>	In	115		ug/L			968294	947447	0
	Ag	107	0.003	ug/L	0.004	138	18	43	82
	Cd	111	0.001	ug/L	0.001	171	91	93	7
	Cd	114	0.001	ug/L	0.002	363	34	40	59
	Sb	121	0.040	ug/L	0.003	7	276	891	4
	Sb	123	0.041	ug/L	0.006	13	203	680	9
	Ba	135	0.007	ug/L	0.003	51	32	61	25
	Ba	137	0.007	ug/L	0.003	37	60	114	18
>	Tb	159		ug/L			1066450	1020137	0
	Tl	205	0.001	ug/L	0.001	96	58	105	45
	Pb	208	0.002	ug/L	0.001	45	178	260	16
	Bi	209		ug/L			2499497	2380111	0
	Th	232	0.063	ug/L	0.016	24	1052	3973	17
	U	238	0.001	ug/L	0.001	43	23	79	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:00:38
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			1240584	1135036	2
[	Be	9	-0.000	U	ug/L	0.000	193	15	13	13
	C	13			ug/L			97520	100052	1
	Cl	37			ug/L			5649089	5597677	1
[>	Sc	45			ug/L			1178780	1109193	1
[	V	51	0.023		ug/L	0.008	33	6492	6594	2
[	V-1	51	-0.000		ug/L	0.001	484	377	352	5
[	Cr	52	0.148	U	ug/L	0.040	26	19113	20555	2
[	Cr	53	0.069		ug/L	0.025	36	204	326	13
[	Mn	55	0.025		ug/L	0.004	13	416	999	7
[	Co	59	-0.000		ug/L	0.001	1019	65	60	19
[>	Ge	72			ug/L			516864	507329	0
[	Ni	60	0.018	U	ug/L	0.003	18	27	88	13
[	Ni	62	-0.446		ug/L	0.039	8	330	106	17
[	Cu	63	0.219	U	ug/L	0.014	6	294	1904	5
[	Cu	65	0.242		ug/L	0.009	3	45	843	4
[	Zn	66	2.766	U	ug/L	0.170	6	231	5760	5
[	Zn	67	2.515		ug/L	0.174	6	33	858	7
[	Zn	68	2.715		ug/L	0.121	4	616	4367	3
[	As	75	0.055	U	ug/L	0.010	18	1496	1568	0
[	As-1	75	0.033		ug/L	0.003	9	8213	8120	0
[	Se	82	0.196	U	ug/L	0.126	64	-25	13	186
[	Se	78	0.069		ug/L	0.061	88	8312	8193	1
[	Mo	98	0.002		ug/L	0.002	96	32	40	19
	Y	89			ug/L			355923	355712	1
	Kr	83			ug/L			2130	2061	2
[>	In	115			ug/L			968294	950185	0
[	Ag	107	0.000	U	ug/L	0.001	493	18	19	26
[	Cd	111	-0.002	U	ug/L	0.003	131	91	79	15
[	Cd	114	-0.001	U	ug/L	0.000	51	34	25	14
[	Sb	121	-0.001	U	ug/L	0.003	409	276	260	18
[	Sb	123	0.000		ug/L	0.003	1454	203	202	17
[	Ba	135	0.027		ug/L	0.001	3	32	150	3
[	Ba	137	0.029		ug/L	0.005	18	60	278	14
[>	Tb	159			ug/L			1066450	1023710	1
[	Tl	205	0.001	U	ug/L	0.001	85	58	84	29
[	Pb	208	0.023	U	ug/L	0.001	3	178	1245	1
[	Bi	209			ug/L			2499497	2363023	1
[	Th	232	0.027		ug/L	0.003	12	1052	2286	8
[	U	238	-0.000		ug/L	0.000	101	23	17	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 G-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 14, 2012 16:04:45
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni, Ge

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1169548	1
	Be	9	-0.001	ug/L	0.001	105	15	11	26
	C	13		ug/L			97520	97004	1
	Cl	37		ug/L			5649089	5621812	1
>	Sc	45		ug/L			1178780	1157434	1
	V	51	0.286	ug/L	0.008	2	6492	12735	0
	V-1	51	0.268	ug/L	0.008	2	377	6338	1
	Cr	52	0.363	ug/L	0.019	5	19113	25364	1
	Cr	53	0.302	ug/L	0.019	6	204	820	4
	Mn	55	2.281	ug/L	0.013	0	416	57282	1
	Co	59	0.031	ug/L	0.001	3	65	606	1
>	Ge	72		ug/L			516564	511115	1
	Ni	60	U 0.325	ug/L	0.011	3	27	1150	3
	Ni	62	-0.253	ug/L	0.008	3	330	202	1
	Cu	63	0.395	ug/L	0.022	5	294	3220	3
	Cu	65	0.334	ug/L	0.016	4	45	1156	3
	Zn	66	0.926	ug/L	0.020	2	231	2093	1
	Zn	67	1.124	ug/L	0.060	5	33	404	4
	Zn	68	1.111	ug/L	0.008	0	616	2160	1
	As	75	1.272	ug/L	0.007	0	1496	3816	1
	As-1	75	1.180	ug/L	0.054	4	8213	10245	1
	Se	82	U 0.155	ug/L	0.013	8	-25	5	49
	Se	78	-0.323	ug/L	0.243	75	8312	8060	1
	Mo	98	0.677	ug/L	0.010	1	32	3041	0
	Y	89		ug/L			357323	359194	2
	Kr	83		ug/L			2130	2072	0
>	In	115		ug/L			968294	942753	1
	Ag	107	-0.000	ug/L	0.001	427	18	16	35
	Cd	111	-0.001	ug/L	0.002	182	91	83	13
	Cd	114	0.000	ug/L	0.000	4334	34	33	8
	Sb	121	0.051	ug/L	0.001	2	276	1069	0
	Sb	123	0.051	ug/L	0.002	4	203	790	2
	Ba	135	4.953	ug/L	0.137	2	32	21673	1
	Ba	137	4.974	ug/L	0.093	1	60	37443	0
>	Tb	159		ug/L			1066450	1049039	1
	Tl	205	-0.000	ug/L	0.000	68	58	43	24
	Pb	208	0.008	ug/L	0.000	3	178	567	3
	Bi	209		ug/L			2499497	2373461	1
	Th	232	-0.000	ug/L	0.003	6041	1052	1033	13
	U	238	0.277	ug/L	0.002	0	23	13475	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:08:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni, Co

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1191388	0
[	Be	9	0.000	ug/L	0.001	264	15	16	31
	C	13		ug/L			97520	113209	2
	Cl	37		ug/L			5649089	5669176	1
[>	Sc	45		ug/L			1178780	1190464	0
[	V	51	1.308	ug/L	0.020	1	6492	36513	1
[	V-1	51	1.300	ug/L	0.015	1	377	30153	1
[	Cr	52	0.463	ug/L	0.015	3	19113	27970	1
[	Cr	53	0.436	ug/L	0.004	0	204	1126	0
[	Mn	55	10.810	ug/L	0.240	2	416	277658	2
[	Co	59	0.148	ug/L	0.005	3	65	2698	3
[>	Ge	72		ug/L			516864	495779	2
[	Ni	60	1.434	ug/L	0.062	4	27	4831	4
[	Ni	62	0.208	ug/L	0.030	14	330	417	4
[	Cu	63	1.757	ug/L	0.061	3	294	12921	2
[	Cu	65	1.488	ug/L	0.034	2	45	4847	0
[	Zn	66	1.147	ug/L	0.078	6	231	2461	3
[	Zn	67	2.253	ug/L	0.186	8	33	754	9
[	Zn	68	2.300	ug/L	0.194	8	616	3701	4
[	As	75	5.928	ug/L	0.164	2	1496	11996	0
[	As-1	75	5.985	ug/L	0.264	4	8213	18327	0
[	Se	82	0.334	ug/L	0.096	28	-25	39	44
[	Se	78	0.284	ug/L	0.485	170	8312	8105	0
[	Mo	98	3.374	ug/L	0.099	2	32	14573	0
	Y	89		ug/L			357323	355663	1
	Kr	83		ug/L			2130	2144	2
[>	In	115		ug/L			968294	935354	0
[	Ag	107	0.001	ug/L	0.000	12	18	24	4
[	Cd	111	0.005	ug/L	0.001	16	91	113	4
[	Cd	114	0.003	ug/L	0.000	12	34	69	6
[	Sb	121	0.276	ug/L	0.006	2	276	4521	1
[	Sb	123	0.279	ug/L	0.008	2	203	3429	2
[	Ba	135	23.953	ug/L	0.140	0	32	103898	0
[	Ba	137	23.778	ug/L	0.059	0	60	177399	1
[>	Tb	159		ug/L			1066450	1058321	1
[	Tl	205	0.001	ug/L	0.000	22	58	80	7
[	Pb	208	0.013	ug/L	0.001	4	178	774	2
[	Bi	209		ug/L			2499497	2272931	0
[	Th	232	0.040	ug/L	0.011	28	1052	2970	19
[	U	238	1.320	ug/L	0.009	0	23	64772	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 GDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:13:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni, Ge

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1184946	1
[	Be	9	0.001	ug/L	0.001	122	15	17	22
	C	13		ug/L			97520	115067	1
	Cl	37		ug/L			5649089	5684640	1
[>	Sc	45		ug/L			1178780	1176029	2
[	V	51	1.372	ug/L	0.017	1	6492	37530	1
[	V-1	51	1.360	ug/L	0.008	0	377	31128	1
[	Cr	52	0.492	ug/L	0.026	5	19113	28168	2
[	Cr	53	0.447	ug/L	0.017	3	204	1135	5
[	Mn	55	10.861	ug/L	0.200	1	416	275512	1
[	Co	59	0.146	ug/L	0.002	1	65	2628	4
[>	Ge	72		ug/L			516864	492820	1
[	Ni	60	1.433	ug/L	0.004	0	27	4800	1
[	Ni	62	U 0.233	ug/L	0.070	30	330	426	6
[	Cu	63	1.759	ug/L	0.104	5	294	12857	4
[	Cu	65	1.521	ug/L	0.006	0	45	4927	1
[	Zn	66	8.021	ug/L	0.126	1	231	15807	1
[	Zn	67	8.590	ug/L	0.288	3	33	2767	1
[	Zn	68	9.139	ug/L	0.021	0	616	12888	1
[	As	75	5.964	ug/L	0.108	1	1496	11991	0
[	As-1	75	6.019	ug/L	0.164	2	8213	18281	0
[	Se	82	U 0.279	ug/L	0.089	31	-25	28	58
[	Se	78	0.205	ug/L	0.266	129	8312	8022	0
[	Mo	98	3.496	ug/L	0.082	2	32	15013	1
	Y	89		ug/L			357323	359353	2
	Kr	83		ug/L			2130	2125	2
[>	In	115		ug/L			968294	930104	1
[	Ag	107	0.001	ug/L	0.000	15	18	26	5
[	Cd	111	0.005	ug/L	0.002	43	91	110	7
[	Cd	114	0.003	ug/L	0.000	9	34	65	3
[	Sb	121	0.287	ug/L	0.008	2	276	4671	1
[	Sb	123	0.284	ug/L	0.009	3	203	3468	4
[	Ba	135	24.594	ug/L	0.342	1	32	106065	0
[	Ba	137	24.423	ug/L	0.360	1	60	181161	0
[>	Tb	159		ug/L			1066450	1052817	0
[	Tl	205	-0.000	ug/L	0.000	141	58	52	14
[	Pb	208	0.015	ug/L	0.000	2	178	872	1
[	Bi	209		ug/L			2499297	2271732	1
[	Th	232	0.021	ug/L	0.006	29	1052	2053	14
[	U	238	1.355	ug/L	0.020	1	23	66133	0

US15 : 00432

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 GSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 14, 2012 16:17:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

Ni 62

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1240584	1191918	1
[	Be	9	24.408	ug/L	0.293	1	15	95953	0
	C	13		ug/L			97520	111742	1
	Cl	37		ug/L			5649089	5722071	0
[>	Sc	45		ug/L			1178780	1159700	2
[	V	51	25.346	ug/L	0.574	2	6192	571811	0
[	V-1	51	25.261	ug/L	0.654	2	377	563529	0
[	Cr	52	24.606	ug/L	0.823	3	19113	467162	0
[	Cr	53	24.309	ug/L	1.129	4	204	50140	2
[	Mn	55	34.890	ug/L	1.178	3	416	871685	1
[	Co	59	23.805	ug/L	0.891	3	65	411505	1
[>	Ge	72		ug/L			516864	491074	2
[	Ni	60	27.362	ug/L	0.872	3	27	90803	0
[	Ni	62	25.052	ug/L	0.948	3	330	12192	1
[	Cu	63	27.414	ug/L	0.377	1	294	195631	1
[	Cu	65	26.623	ug/L	0.693	2	45	85177	0
[	Zn	66	74.551	ug/L	2.894	3	231	144508	1
[	Zn	67	70.882	ug/L	1.940	2	33	22530	2
[	Zn	68	75.113	ug/L	1.843	2	616	101289	1
[	As	75	32.672	ug/L	1.149	3	1496	59070	1
[	As-1	75	31.429	ug/L	1.315	4	8213	62163	1
[	Se	82	78.709	ug/L	1.435	1	-25	15016	0
[	Se	78	73.927	ug/L	2.119	2	8312	42915	0
[	Mo	98	30.605	ug/L	0.884	2	32	130703	1
	Y	89		ug/L			357323	353386	1
	Kr	83		ug/L			2130	2141	3
[>	In	115		ug/L			968294	928957	1
[	Ag	107	24.615	ug/L	0.296	1	18	217251	2
[	Cd	111	24.014	ug/L	0.160	0	91	117505	1
[	Cd	114	23.878	ug/L	0.372	1	34	287336	0
[	Sb	121	25.840	ug/L	0.482	1	276	396375	0
[	Sb	123	25.961	ug/L	0.404	1	203	299087	0
[	Ba	135	50.036	ug/L	0.324	0	32	215524	1
[	Ba	137	49.926	ug/L	0.453	0	60	369843	0
[>	Tb	159		ug/L			1066450	1054005	1
[	Tl	205	24.503	ug/L	0.306	1	58	869869	0
[	Pb	208	24.081	ug/L	0.263	1	178	1138859	0
[	Bi	209		ug/L			2499497	2256938	1
[	Th	232	23.904	ug/L	0.447	1	1052	1157444	1
[	U	238	25.633	ug/L	0.136	0	23	1252418	0

US15 : 00433

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:21:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1102175	0
	Be	9	204.819	ug/L	2.467	1	15	744540	1
	C	13		ug/L			97520	96525	1
	Cl	37		ug/L			5649089	5740210	3
>	Sc	45		ug/L			1178780	1074457	0
	V	51	205.041	ug/L	2.440	1	6492	4245161	0
	V-1	51	203.613	ug/L	2.614	1	377	4207430	0
	Cr	52	203.635	ug/L	2.184	1	19113	3457169	1
	Cr	53	198.676	ug/L	1.257	0	204	378593	0
	Mn	55	202.707	ug/L	3.381	1	416	4692150	0
	Co	59	200.587	ug/L	6.559	3	65	3213471	2
>	Ge	72		ug/L			516864	483844	1
	Ni	60	199.395	ug/L	1.821	0	27	652155	1
	Ni	62	196.336	ug/L	3.263	1	330	92091	2
	Cu	63	196.586	ug/L	5.574	2	294	1380455	1
	Cu	65	196.479	ug/L	3.437	1	45	619252	0
	Zn	66	190.732	ug/L	3.539	1	231	364101	0
	Zn	67	198.503	ug/L	1.171	0	33	62130	1
	Zn	68	195.024	ug/L	1.024	0	616	258280	0
	As	75	200.206	ug/L	2.851	1	1496	349640	1
	As-1	75	200.360	ug/L	3.053	1	8213	349340	1
	Se	82	204.493	ug/L	1.834	0	-25	38487	0
	Se	78	195.908	ug/L	2.737	1	8312	99245	0
	Mo	98	201.462	ug/L	2.250	1	32	847773	0
	Y	89		ug/L			357323	343495	2
	Kr	83		ug/L			2130	2268	3
>	In	115		ug/L			96294	897618	1
	Ag	107	192.434	ug/L	1.568	0	18	1640809	1
	Cd	111	195.479	ug/L	0.296	0	91	923675	0
	Cd	114	203.968	ug/L	1.792	0	34	2371758	1
	Sb	121	210.046	ug/L	2.223	1	276	3111847	0
	Sb	123	209.561	ug/L	1.944	0	203	2331735	0
	Ba	135	202.209	ug/L	1.939	0	32	841462	0
	Ba	137	204.846	ug/L	1.593	0	60	1466147	0
>	Tb	159		ug/L			1066450	1024827	0
	Tl	205	192.943	ug/L	1.327	0	58	6659802	0
	Pb	208	194.029	ug/L	0.873	0	178	8921534	0
	Bi	209		ug/L			2499497	2224370	0
	Th	232	196.845	ug/L	2.537	1	1052	9261255	1
	U	238	195.556	ug/L	2.364	1	23	9290582	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:28:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1098358	0
	Be	9	0.001	ug/L	0.003	216	15	18	62
	C	13		ug/L			97520	86513	1
	Cl	37		ug/L			5649089	5604098	1
>	Sc	45		ug/L			1178780	1077738	1
	V	51	0.014	ug/L	0.007	46	6492	6233	3
	V-1	51	-0.000	ug/L	0.001	3127	377	344	8
	Cr	52	0.343	ug/L	0.017	5	19113	23287	2
	Cr	53	0.294	ug/L	0.009	3	204	748	2
	Mn	55	0.038	ug/L	0.001	3	416	1264	1
	Co	59	0.001	ug/L	0.002	146	65	78	33
>	Ge	72		ug/L			516064	497471	0
	Ni	60	0.066	ug/L	0.006	8	27	249	7
	Ni	62	-0.312	ug/L	0.079	25	330	168	22
	Cu	63	0.140	ug/L	0.013	8	294	1293	6
	Cu	65	0.162	ug/L	0.008	4	45	568	4
	Zn	66	2.227	ug/L	0.026	1	231	4590	0
	Zn	67	2.105	ug/L	0.064	3	33	709	2
	Zn	68	2.208	ug/L	0.023	1	616	3592	0
	As	75	0.065	ug/L	0.013	19	1496	1556	1
	As-1	75	0.084	ug/L	0.023	27	8213	8051	0
	Se	82	0.082	ug/L	0.099	120	-25	-9	209
	Se	78	0.296	ug/L	0.073	24	8312	8142	0
	Mo	98	0.031	ug/L	0.011	34	32	164	27
	Y	89		ug/L			357323	342824	2
	Kr	83		ug/L			2130	2140	3
>	In	115		ug/L			968294	917788	0
	Ag	107	0.010	ug/L	0.007	71	18	103	58
	Cd	111	0.006	ug/L	0.005	83	91	113	19
	Cd	114	0.006	ug/L	0.005	96	34	98	64
	Sb	121	0.168	ug/L	0.015	8	276	2806	8
	Sb	123	0.170	ug/L	0.018	10	203	2122	9
	Ba	135	0.037	ug/L	0.004	10	32	188	8
	Ba	137	0.038	ug/L	0.000	0	60	335	1
>	Tb	159		ug/L			1066450	1001731	0
	Tl	205	0.011	ug/L	0.003	28	58	438	24
	Pb	208	0.044	ug/L	0.002	4	178	2162	4
	Bi	209		ug/L			2499497	2304213	0
	Th	232	0.116	ug/L	0.027	23	1052	6337	19
	U	238	0.004	ug/L	0.002	45	23	222	41

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:36:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	.ntens. RSD
>	Li	6		ug/L			1240584	1099254	1
	Be	9	-0.001	ug/L	0.000	14	15	9	6
	C	13		ug/L			97520	86161	0
	Cl	37		ug/L			5649089	5523364	1
>	Sc	45		ug/L			1178780	1084685	0
	V	51	0.002	ug/L	0.010	445	6492	6017	2
	V-1	51	-0.008	ug/L	0.000	1	377	190	1
	Cr	52	0.328	ug/L	0.041	12	19113	23176	2
	Cr	53	0.295	ug/L	0.016	5	204	755	4
	Mn	55	0.012	ug/L	0.000	1	416	666	0
	Co	59	0.000	ug/L	0.000	2869	65	60	12
>	Ge	72		ug/L			516864	482216	0
	Ni	60	0.026	ug/L	0.001	5	27	109	3
	Ni	62	-0.427	ug/L	0.027	6	330	109	10
	Cu	63	0.032	ug/L	0.002	5	294	500	3
	Cu	65	0.052	ug/L	0.003	5	45	205	4
	Zn	66	1.094	ug/L	0.013	1	231	2295	1
	Zn	67	0.957	ug/L	0.047	4	33	329	4
	Zn	68	1.072	ug/L	0.031	2	616	1987	2
	As	75	0.085	ug/L	0.019	22	1496	1542	1
	As-1	75	0.140	ug/L	0.038	26	8213	7900	1
	Se	82	0.108	ug/L	0.151	140	-25	-3	718
	Se	78	0.501	ug/L	0.123	24	8312	7988	1
	Mo	98	0.003	ug/L	0.002	46	32	45	15
	Y	89		ug/L			357323	339255	2
	Kr	83		ug/L			2130	2102	4
>	In	115		ug/L			968294	923182	1
	Ag	107	0.001	ug/L	0.001	77	18	23	19
	Cd	111	-0.002	ug/L	0.001	36	91	77	3
	Cd	114	-0.000	ug/L	0.001	231	34	29	28
	Sb	121	0.026	ug/L	0.007	27	276	661	15
	Sb	123	0.029	ug/L	0.008	26	203	519	15
	Ba	135	0.012	ug/L	0.001	12	32	81	6
	Ba	137	0.011	ug/L	0.002	18	60	142	11
>	Tb	159		ug/L			1066450	987853	2
	Tl	205	0.002	ug/L	0.000	21	58	131	14
	Pb	208	0.011	ug/L	0.000	3	178	668	0
	Bi	209		ug/L			2499497	2339311	0
	Th	232	0.012	ug/L	0.003	27	1052	1513	10
	U	238	0.000	ug/L	0.000	30	23	37	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:40:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1240584	1118955	2
	Be	9	51.060	ug/L	0.636	1	15	188447	2
	C	13		ug/L			97520	85521	1
	Cl	37		ug/L			5649089	5677821	1
>	Sc	45		ug/L			1178780	1100773	3
	V	51	49.250	ug/L	1.815	3	6492	1048544	1
	V-1	51	48.942	ug/L	1.884	3	377	1035622	1
	Cr	52	50.490	ug/L	1.446	2	19113	891162	2
	Cr	53	49.423	ug/L	1.635	3	204	96569	1
	Mn	55	50.152	ug/L	1.245	2	416	1189072	1
	Co	59	49.416	ug/L	1.418	2	65	810912	2
>	Ge	72		ug/L			516864	497925	1
	Ni	60	50.558	ug/L	0.960	1	27	170210	3
	Ni	62	49.441	ug/L	1.286	2	330	24108	3
	Cu	63	51.810	ug/L	0.906	1	294	374690	1
	Cu	65	50.179	ug/L	0.708	1	45	162797	0
	Zn	66	52.357	ug/L	1.086	2	231	103019	1
	Zn	67	52.700	ug/L	0.646	1	33	16996	0
	Zn	68	53.402	ug/L	0.718	1	316	73211	1
	As	75	51.039	ug/L	0.858	1	96	92790	0
	As-1	75	50.847	ug/L	0.911	1	8213	97128	0
	Se	82	54.399	ug/L	0.383	0	-25	10518	1
	Se	78	51.368	ug/L	0.311	0	8312	32689	0
	Mo	98	50.087	ug/L	0.829	1	32	216930	1
	Y	89		ug/L			357323	349909	1
	Kr	83		ug/L			2130	2089	1
>	In	115		ug/L			968294	923348	0
	Ag	107	47.866	ug/L	1.359	2	18	419790	2
	Cd	111	50.474	ug/L	0.614	1	91	245387	0
	Cd	114	50.682	ug/L	0.680	1	34	606203	0
	Sb	121	50.963	ug/L	0.216	0	276	776879	0
	Sb	123	50.929	ug/L	0.819	1	203	583044	0
	Ba	135	50.000	ug/L	0.589	1	32	214052	0
	Ba	137	49.535	ug/L	0.327	0	60	364741	0
>	Tb	159		ug/L			1066450	1024767	0
	Tl	205	48.679	ug/L	0.214	0	58	1680179	0
	Pb	208	48.234	ug/L	0.128	0	178	2217833	0
	Bi	209		ug/L			2499197	2314183	0
	Th	232	49.893	ug/L	0.900	1	52	2347976	1
	U	238	50.705	ug/L	0.436	0	23	2408693	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 14, 2012 16:47:48
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120514.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			1240584	1107038	0
⌊	Be	9	-0.001	ug/L	0.001	134	15	10	45
	C	13		ug/L			97520	87968	1
	Cl	37		ug/L			5649089	5488609	1
⌈>	Sc	45		ug/L			1178780	1064287	2
⌈	V	51	0.012	ug/L	0.007	55	6092	6114	3
⌈	V-1	51	-0.011	ug/L	0.000	3	377	123	5
⌈	Cr	52	0.063	ug/L	0.027	43	19113	18311	4
⌈	Cr	53	-0.017	ug/L	0.003	19	204	153	6
⌈	Mn	55	0.008	ug/L	0.000	3	416	547	3
⌊	Co	59	0.000	ug/L	0.000	480	65	60	5
⌈>	Ge	72		ug/L			516864	481980	2
⌈	Ni	60	-0.000	ug/L	0.001	295	27	24	18
⌈	Ni	62	-0.457	ug/L	0.007	1	330	95	1
⌈	Cu	63	-0.002	ug/L	0.002	147	294	263	8
⌈	Cu	65	0.020	ug/L	0.007	36	45	105	22
⌈	Zn	66	0.821	ug/L	0.024	2	231	1774	2
⌈	Zn	67	0.820	ug/L	0.051	6	33	287	8
⌈	Zn	68	0.831	ug/L	0.048	5	616	1670	6
⌈	As	75	0.097	ug/L	0.051	53	1496	1561	3
⌈	As-1	75	0.150	ug/L	0.034	22	8213	7913	1
⌈	Se	82	0.182	ug/L	0.036	19	-25	9	68
⌈	Se	78	0.543	ug/L	0.095	17	8312	8003	2
⌊	Mo	98	0.005	ug/L	0.000	1	32	50	3
	Y	89		ug/L			357323	338887	2
	Kr	83		ug/L			2130	2083	3
⌈>	In	115		ug/L			968294	904260	0
⌈	Ag	107	0.002	ug/L	0.003	118	18	36	62
⌈	Cd	111	0.000	ug/L	0.001	294	91	87	6
⌈	Cd	114	0.001	ug/L	0.001	131	34	39	24
⌈	Sb	121	0.052	ug/L	0.008	14	276	1039	10
⌈	Sb	123	0.050	ug/L	0.009	18	203	752	13
⌈	Ba	135	0.010	ug/L	0.001	6	32	71	3
⌊	Ba	137	0.009	ug/L	0.001	8	60	119	4
⌈>	Tb	159		ug/L			1066450	976868	0
⌈	Tl	205	0.002	ug/L	0.000	6	58	112	3
⌈	Pb	208	0.008	ug/L	0.000	2	178	521	2
⌈	Bi	209		ug/L			2499497	2325987	0
⌈	Th	232	0.064	ug/L	0.013	20	1052	3824	15
⌊	U	238	0.001	ug/L	0.000	19	23	71	14

Mercury Analysis Log

Analyst: TM

Instrument: CETAC

Date: 5-08-12

Page: 2 of 4

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments	
STD 0.0	Twin	1X			
STD 0.1	Twin	1X			
STD 0.5	Twin	1X			
STD 1.0	Twin	1X			
STD 2.0	Twin	1X			
STD 5.0	Twin	1X			
STD 10.0	Twin	1X			
ICV	Twin	1X	7.98	beg in CLP %R=100	✓
ICB	Twin	1X	-0.04		✓
CCV1	Twin	1X	4.09	%R=102	✓
CCB1	Twin	1X	-0.02		✓
CRA	Twin	1X	0.10		✓
US15 MB1	Twin	1X	-0.00		✓
US15 MB1SPK	Twin	1X	2.12	%R=106	✓
US15 A	Twin	1X	-0.01		
US15 ADUP	Twin	1X	-0.00	NO RPD: Undetected	✓
US15 ASPK	Twin	1X	1.12	%R=112	✓
US15 B	Twin	1X			
US16 MB2	Twin	1X	0.00		✓
US15 MB2SPK	Twin	1X	2.06	%R=103	✓
US15 C	Twin	1X	-0.01		
CCV2	Twin	1X	4.21	%R=105	✓
CCB2	Twin	1X	-0.01		✓
US15 CDUP	Twin	1X	0.00	NO RPD: Undetected	✓
US15 CSPK	Twin	1X	1.08	%R=108	✓
US15 H	Twin	1X			
US52 MB1	Twin	1X	-0.00		✓
US52 MB1SPK	Twin	1X	2.08	%R=104	✓
US52 G	Twin	1X	-0.01		
US52 GDUP	Twin	1X	0.00	NO RPD: Undetected	✓

Chemical/Reagent ID:

10% $SnCl_2$: MP2092

14% NH_2OH/NaCl: MP2289

Standard ID:

Standard: 2983-13

ICV/CCV: 5c-18

US15 : 00439

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 5-08-12

Page: 3 of 4

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
U552	GSPK	TWM	1X	1.10	%R=110	✓
U552	MB2	TWM	1X	-0.00		✓
U552	MB2SPK	TWM	1X	2.05	%R=103	✓
CCV3		TWM	1X	4.06	%R=102	✓
CCB3		TWM	1X	-0.01		✓
U552	P	TWM	1X	-0.00		
U552	POUP	TWM	1X	-0.00	NO RPD: Undetected	✓
U552	PSPK	TWM	1X	1.06	%R=106	✓
U561	MB1	TWM	1X	-0.01		✓
U561	MB1SPK	TWM	1X	2.02	%R=101	✓
U561	A	TWM	1X			
U561	B	TWM	1X			
DM 5-8-12 U561	C	TWM	1X			
U561	D	TWM	1X	0.00		
U561	DOUP	TWM	1X	0.00	NO RPD: Undetected	✓
CCV4		TWM	1X	4.22	%R=106	✓
CCB4		TWM	1X	-0.01		✓
U561	DSPK	TWM	1X	1.03	%R=103	✓
U561	MB2	TWM	1X	-0.00		✓
U561	MB2SPK	TWM	1X	2.05	%R=103	✓
U561	G	TWM	1X	-0.00		
U561	GOUP	TWM	1X	-0.00	NO RPD: Undetected	✓
U561	GSPK	TWM	1X	1.07	%R=107	✓
U561	H	TWM	1X			
U561	I	TWM	1X			
U561	J	TWM	1X			
CCV5		TWM	1X	4.21	%R=105	✓
CCB5		TWM	1X	-0.01	ENDOP	✓
U574	MB	TWM	1X	-0.00		✓
U574	MB2SPK	TWM	1X	2.10	%R=105	✓

Chemical/Reagent ID:

10% $SnCl_2$: MP2292

14% NH_4OH/NaCl: MP2289

Standard ID:

Standard: 2933-13

ICV/CCV: SL-16

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA (CVA) **Analysis Date:** 5-08-12

	Analyst SS 5/8	Peer BLD 5/8	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	—	—	
Carry-over	—	—	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	—	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	See RUN LOG
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analyte Notes and CAF's	✓	✓	See CAF

US15 00044

CETAC Hg Analysis Report - 12050800.DB - Tuesday, May 08, 2012, 12:55:57 PM

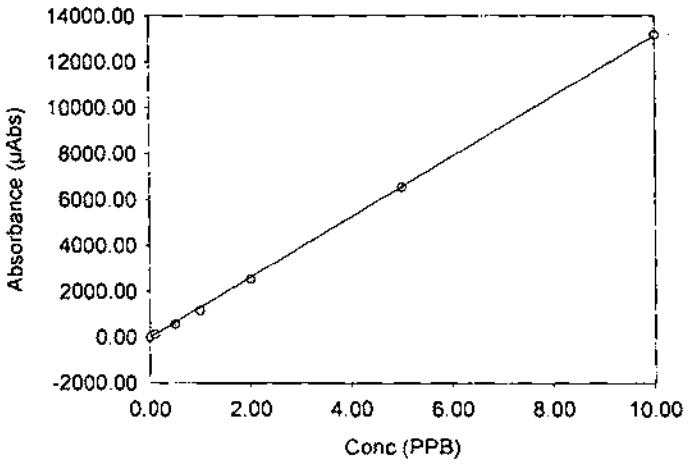
JLB 5/8/12

Analyst	
Date Started	Tuesday, May 08, 2012, 10:33:02
Worksheet	ARI 10ppb CALIB
Comment	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 10:33	3.94	0.31	4770.00	1.00	
QC Blank	08-May-2012, 10:34	-0.01	6.93	-14.20	1.00	
US34 A SWM	08-May-2012, 10:36	10.00	1.13	12100.00	10.00	O - High
QC Standard	08-May-2012, 10:38	3.98	0.53	4820.00	1.00	
QC Blank	08-May-2012, 10:39	-0.02	12.30	-18.40	1.00	
US34 A SWM	08-May-2012, 10:41	4.29	4.50	5200.00	20.00	
QC Standard	08-May-2012, 10:43	3.93	0.46	4750.00	1.00	
QC Blank	08-May-2012, 10:45	-0.01	7.88	-15.70	1.00	
Calibration Zero	08-May-2012, 10:47	0.00	50.00	-7.83	1.00	
Standard #1	08-May-2012, 10:48	0.10	1.69	120.00	1.00	
Standard #2	08-May-2012, 10:50	0.50	0.64	564.00	1.00	
Standard #3	08-May-2012, 10:51	1.00	0.19	1170.00	1.00	
Standard #4	08-May-2012, 10:53	2.00	0.64	2530.00	1.00	
Standard #5	08-May-2012, 10:55	5.00	0.31	6550.00	1.00	
Standard #6	08-May-2012, 10:56	10.00	0.39	13200.00	1.00	

TWM

Calibration Data



Int.	0.000
Slope	1314.013
Correlation	0.99985

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	08-May-2012, 10:59	7.98	0.44	10500.00	1.00	
ICB	08-May-2012, 11:01	-0.04	4.88	-46.00	1.00	

Begin CP

US15 : 00442

CETAC Hg Analysis Report - 12050800.DB - Tuesday, May 08, 2012, 12:55:57 PM

Analyst
Date Started Tuesday, May 08, 2012, 11:03:10
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 11:03	4.09	0.50	5380.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 11:04	-0.02	16.30	-31.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	08-May-2012, 11:06	0.10	2.14	127.00	1.00	
US15 MB1 TWM	08-May-2012, 11:08	-0.00	62.50	-3.73	1.00	
US15 MB1SPK TWM	08-May-2012, 11:09	2.12	0.29	2780.00	1.00	
US15 A TWM	08-May-2012, 11:11	-0.01	7.34	-10.30	1.00	
US15 ADUP TWM	08-May-2012, 11:12	-0.00	138.00	-2.68	1.00	
US15 ASPK TWM	08-May-2012, 11:14	1.12	0.37	1470.00	1.00	
US15 B TWM	08-May-2012, 11:16	-0.00	14.40	-4.57	1.00	
US15 MB2 TWM	08-May-2012, 11:17	0.00	101.00	5.12	1.00	
US15 MB2SPK TWM	08-May-2012, 11:19	2.06	0.49	2710.00	1.00	
US15 G TWM	08-May-2012, 11:20	-0.01	25.00	-7.47	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 11:22	4.21	0.28	5540.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 11:24	-0.01	18.60	-9.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US15 GDUP TWM	08-May-2012, 11:25	0.00	205.00	0.62	1.00	
US15 GSPK TWM	08-May-2012, 11:27	1.08	0.33	1420.00	1.00	
US15 H TWM	08-May-2012, 11:29	0.00	27.10	3.28	1.00	
US52 MB1 TWM	08-May-2012, 11:30	-0.00	58.90	-3.75	1.00	
US52 MB1SPK TWM	08-May-2012, 11:32	2.08	0.13	2740.00	1.00	
US52 G TWM	08-May-2012, 11:33	-0.01	43.90	-11.80	1.00	
US52 GDUP TWM	08-May-2012, 11:35	0.00	36.00	2.87	1.00	
US52 GSPK TWM	08-May-2012, 11:37	1.10	0.37	1440.00	1.00	
US52 MB2 TWM	08-May-2012, 11:38	-0.00	561.00	-0.82	1.00	
US52 MB2SPK TWM	08-May-2012, 11:40	2.05	0.21	2690.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 11:42	4.06	0.21	5330.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	08-May-2012, 11:43	-0.01	7.40	-18.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US52 P TWM	08-May-2012, 11:45	-0.00	71.00	-4.31	1.00	
US52 PDUP TWM	08-May-2012, 11:47	-0.00	293.00	-0.96	1.00	
US52 PSPK TWM	08-May-2012, 11:48	1.06	0.53	1390.00	1.00	
US61 MB1 TWM	08-May-2012, 11:50	-0.01	23.60	-10.30	1.00	
US61 MB1SPK TWM	08-May-2012, 11:51	2.02	0.26	2660.00	1.00	
US61 A TWM	08-May-2012, 11:53	-0.02	3.70	-29.40	1.00	
US61 B TWM	08-May-2012, 11:55	0.00	104.00	4.19	1.00	
US61 C TWM	08-May-2012, 11:56	-0.00	81.40	-3.28	1.00	
US61 D TWM	08-May-2012, 11:58	0.00	17.20	3.24	1.00	
US61 DDUP TWM	08-May-2012, 11:59	0.00	36.80	6.43	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	08-May-2012, 12:01	4.22	0.28	5550.00	1.00	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: SMM Instrument: CETAC
Analyst: KM Date: 5/03/12
Bath Temp: 95°C Start Time: 1320 End Time: 1350

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	50.0	0.0	3
STD1	2933-12	0.01	50.0	0.1	2
STD2	2933-12	0.05	50.0	0.5	2
STD3	2933-12	0.10	50.0	1.0	2
STD4	2933-12	0.20	50.0	2.0	2
STD5	2933-12	0.50	50.0	5.0	2
STD6	2933-12	1.00	50.0	10.0	2
CRA	2933-12	0.01	50.0	0.1	1
ICB/CCB	—	0.00	50.0	0.0	3
ICV/LCS	56-18	0.08	50.0	8.0	2
CCV	56-18	0.04	50.0	4.0	3

Chemical/Reagent ID:
HNO_3: I7370 H_2SO_4: I7184 HCl: —
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

Prep Code: TWM Digested 20.0mL Instrument: CETAC
Analyst: DM Date: 5-04-12
Bath Temp: 95°C Start Time: 0940 End Time: 1140

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	1
STD1	2933-13	0.01	100.0	0.1	1
STD2	2933-13	0.05	100.0	0.5	1
STD3	2933-13	0.10	100.0	1.0	1
STD4	2933-13	0.20	100.0	2.0	1
STD5	2933-13	0.50	100.0	5.0	1
STD6	2933-13	1.00	100.0	10.0	1
CRA	2933-13	0.01	100.0	0.1	1
ICB/CCB	—	0.00	100.0	0.0	1
ICV/LCS	56-18	0.16	100.0	8.0	1
CCV	56-18	0.08	100.0	4.0	1

Chemical/Reagent ID:
HNO_3: I7466 H_2SO_4: I7184 HCl: —
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

US15 : 00444

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 90°C
Start Time: 1335
Matrix: water
Date: 05.07.12
End Time: 1535

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US15 A	1	✓	20.0	20.0	05.11 1	Y	
US15 ADUP	1	✓	20.0	20.0	1	Y	
US15 ASPK	1	✓	20.0	20.0	1	Y	
US15 B	1	✓	20.0	20.0	1	Y	
US15 MB1	—	✓	20.0	20.0	1	Y	
US15 MB1SPK	—	✓	20.0	20.0	1	Y	
US15 G	1	✓	20.0	20.0	1	Y	
US15 GDUP	1	✓	20.0	20.0	1	Y	
US15 GSPK	1	✓	20.0	20.0	1	Y	
US15 H	1	✓	20.0	20.0	1	Y	
US15 MB2	—	✓	20.0	20.0	1	Y	
US15 MB2SPK	—	✓	20.0	20.0	1	Y	
US52 G	7	✓	20.0	20.0	05.13 1	Y	
US52 GDUP	7	✓	20.0	20.0	1	Y	
US52 GSPK	7	✓	20.0	20.0	1	Y	
US52 MB1	—	✓	20.0	20.0	1	Y	
US52 MB1SPK	—	✓	20.0	20.0	1	Y	
US52 P	1	✓	20.0	20.0	1	Y	
US52 PDUP	1	✓	20.0	20.0	1	Y	
US52 PSPK	1	✓	20.0	20.0	1	Y	
US52 MB2	—	✓	20.0	20.0	1	Y	
US52 MB2SPK	—	✓	20.0	20.0	1	Y	
				05.07.12 MJ			

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 05.02.12

Final Volume 50

Final Volume (Hg):

Sample ID US27 ESPK, MBISPK

Prepcode:		TWC		
Spike Solution:		ICP Routine	ICP No GFA	GFA
Standard No.:		2902-1		
Vol Added (mL):		0.5		
STOCK CONCENTRATION	Ag	50		2.0
	Al	200 ✓	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000 ✓	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200 ✓	200	
	K	1000 ✓	1000	
	Mg	1000 ✓	1000	
	Mn	50 ✓	50	
	Na	1000 ✓	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

9th06 · 9ISN

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 05.02.12

Final Volume _____

Final Volume (Hg): 20

Sample ID US27 CSPK, MB1SPK, HSPK, MB2SPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	TWM	CVA	1.0	0.02	2408-1
Hg MBSPK	TWM	CVA	1.0	0.04	2408-1
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 05.02.12 Time: 1200

Matrix: Water Block ID: #7 Block Temp: 91°C Thermometer: MP28

ARI Sample ID	Btl #	pH<2	Prep Code: TWC Initial ~~Wt (g)~~ Vol (mL)	Prep Code: TWC Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US29 A	7	✓	50.0	50.0			
US29 ADUP	7	✓	50.0	50.0			
US29 ASPK	7	✓	50.0	50.0			
US29 B	7	✓	50.0	50.0			
US29 MB	—	✓	50.0	50.0			
US29 MBSPK	—	✓	50.0	50.0			
US27 E	2	✓	50.0	50.0			
US27 EDUP	2	✓	50.0	50.0			
US27 ESPK	2	✓	50.0	50.0			
US27 MB1	—	✓	50.0	50.0			
US27 MBSPK	—	✓	50.0	50.0			
US51 A	6	✓	50.0	50.0			
US51 MB	—	✓	50.0	50.0			
US51 MBSPK	—	✓	50.0	50.0			

05.02.12 MJ

Chemical/Reagent ID:

HNO_3: I7370 HCl: MP2290 H_2O_2: —— Tube Lot #: 111173

US15 00448

Digestion Log

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Analyst: MJ Date: 05.02.12 Time: 1400

Matrix: water Block ID: — Block Temp: — Thermometer: —

ARI Sample ID	Btl #	pH<2	Prep Code: WMN Initial Wt (g) Vol (mL)	Prep Code: WMN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US27 J	1	✓	—	—			
US27 JDUP	1	✓	—	—			
US27 JSPK	1	✓	—	—			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 91C
Start Time: 1420
Matrix: water
Date: 05.02.12
End Time: 1620

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US27 C	1	✓	20.0	20.0	05.11 1	Y	
US27 CDUP	1	✓	20.0	20.0	1	Y	
US27 CSPK	1	✓	20.0	20.0	1	Y	
US27 D	1	✓	20.0	20.0	1	Y	
US27 MBI	—	✓	20.0	20.0	1	Y	
US27 MBISPK	—	✓	20.0	20.0	1	Y	
US27 H	1	✓	20.0	20.0	1	Y	
US27 HDUP	1	✓	20.0	20.0	1	Y	
US27 HSPK	1	✓	20.0	20.0	1	Y	
US27 I	1	✓	20.0	20.0	1	Y	
US27 MB2	—	✓	20.0	20.0	1	Y	
US27 MB2SPK	—	✓	20.0	20.0	1	Y	

05.02.12 MJ

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MB2272
5% $KMnO_4$: MB2273
Digest Tube Lot: 111173

US15 00459

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 05.03.12

Final Volume 25

Final Volume (Hg):

Sample ID US27 ESPK, JSPK

		Prepcode:		
		Spike Solution:	ICP Routine	ICP No GFA	GFA
		Standard No.:			
		Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2927-9		
	0.05		
Ag	25 ✓		
Al			500
As	25 ✓		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25 ✓		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80 ✓		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 05.03.12

Final Volume 25

Final Volume (Hg):

Sample ID US27 CSPK, HSPK, MBSPK, MB2SPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN ICP-MS #1	REN ICP-MS #2	ICP-MS Minerals
	2927-9	2893-16	
	0.05	0.05	
Ag	25 ✓		
Al			500
As	25 ✓		
Ba	25		
Be	25 ✓		
Ca			500
Cd	25 ✓		
Co	25		
Cr	25 ✓		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25 ✓		
Pb	25 ✓		
Sb		25 ✓	
Se	80 ✓		
Tl	25 ✓		
U	25		
V	25		
Zn	80 ✓		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

25th08.9251

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 05.03.12 Time: 0850

Matrix: water Block ID: #13 Block Temp: 90 C Thermometer: MP29

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US27 A	4	✓	50.0	25.0			
US27 C	1	✓	50.0	25.0			
US27 CDUP	1	✓	50.0	25.0			
US27 CSPK	1	✓	50.0	25.0			
US27 D	1	✓	50.0	25.0			
US27 E	2	✓	50.0	25.0			
US27 EDUP	2	✓	50.0	25.0			
US27 ESPK	2	✓	50.0	25.0			
US27 MBI	—	✓	50.0	25.0			
US27 MBISPK	—	✓	50.0	25.0			
US27 G	1	✓	50.0	25.0			
US27 H	1	✓	50.0	25.0			
US27 HDUP	1	✓	50.0	25.0			
US27 HSPK	1	✓	50.0	25.0			
US27 I	1	✓	50.0	25.0			
US27 J	1	✓	50.0	25.0			
US27 JDUP	1	✓	50.0	25.0			
US27 JSPK	1	✓	50.0	25.0			
US27 MB2	—	✓	50.0	25.0			
US27 MB2SPK	—	✓	50.0	25.0			

05.03.12 MJ

Chemical/Reagent ID:

HNO_3: MP2287 HCl: —— H_2O_2: I7403 Tube Lot #: 111173

US15 : 00453

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:		ARI Job No.:	VG27
Unacceptable Blank:	☐	Date of Event:	5.7.12
Unacceptable Duplicate:	☐	Client ID:	ERM
Unacceptable Spike:	☑	Method/Element:	MS Ag
Unacceptable Reference:	☐	Prep Code:	REN

Details of Problem/Recommended Corrective Action:

Ag spike recovery low in Sample & Spk
Post spike ok

Samples Affected:

Corrective Action Taken: E Post Ag

Analyst Initials: [signature] **Supervisor:**

Date: 5.8.12 **Date:**

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:		ARI Job No.:	US 27
Unacceptable Blank:	☐	Date of Event:	5.8.12 / 5.11.15
Unacceptable Duplicate:	☐	Client ID:	ERM
Unacceptable Spike:	☑	Method/Element:	MS Ag
Unacceptable Reference:	☐	Prep Code:	REN

Details of Problem/Recommended Corrective Action:

J Clark Ag low % Rec 52%) 5/11/12 JM
J & Post ok

(Rerun sample C Ag only import error in data)

Samples Affected:

Corrective Action Taken: J Post Ag 5.11.12 CLB

Analyst Initials: JM 5.11.12 **Supervisor:**

Date: **Date:**

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Metals Laboratory Analyst Notes

ARI Job No.: 0527, 0561

Client ID: ERM

Parameter:

Client Project:

List problems, concerns, corrective actions and any other pertinent information
CCV5, CCB5 were run in reverse order because of mistaken position entries in the sample table.

Analyst Initials:	5/8/12	Date:	5.8.12

US15 : 00456

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: 3.19.12 Analysis Date: 5.4.12 Analyst: BW

LR Date: 3.19.12 Page: 1 of 3

All corrections made by analyst unless otherwise noted. BW 5.4.12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		std 0			2930-15
		2			2931-8
		3			-9
		4			-10
		5			2932-1
		ICV			2925-3
		ICB			
		CRI			
		ICSA			V 0.006
		ICSAB			
		CCV 1			
		CCB1			
		std 2			
		3			
		CCV2			
		CCB2			
		US51MB	TWC		
		US27MB1			
		E-L		5	✓
		E			✓
		Edup			✓
		Esd			✓ Fe Na STL
Z		~~Z 2932-2 CP051~~			~~Fe Na~~
		US51A			

US15:00457

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 5.4.12 Analyst: BW

LR Date: — Page: 2 of 3

All corrections made by analyst unless otherwise noted. BW 5.4.12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		US51MBSph	TWC	✓	
		US27MBSph	↓	✓	
		CCV3			
		CCB3			
		US27 MB2	WMN		
		J-L		5	✓
		J			
		Jdup		✓	
		Jsph		✓	0.08 ml ICPsph Fe STL
		US29 Adup	TWC	✓	
		A			
		Asph		✓	Ca Mg STL
		MBSph		✓	
		US27 MB2Sph	WMN	✓	0.08 ml ICPsph
		CCV4			
		CCB4			
Z		ZZZZZZ			OR Na high
↓		ZZZZZZ			
		CCV5			
		CCB5			
		CRI			
		ICSA			
		ICSAB			
		CCV6			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 5.4.12 Analyst: BW

LR Date: — Page: 3 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		CCB6			end CLP
		US29 MB	TwC		
	✓	↓ B	↓		Fe Mg Na Sr high
DIL		↓ B	↓	5	
		CCV			
		CCB			

BW 5/4

5076F
ICP-OES-02-Daily Run Log

Revision 000
3/20/09

US15 : 00459

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: (ICP) ICP-MS GFA CVA **Analysis Date:** 5-4-12

ICP 2	Analyst BW 5.4	Peer #5-7	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	see log
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysis Notes and CAF's	—	—	

Analysis Begun

Start Time: 5/4/2012 10:21:55 AM
Plasma On Time: 5/4/2012 9:24:35 AM
Logged In Analyst: metals
Technique: ICP Continuous
Spectrometer Model: Optima 7300 DV, S/N 077C8121202Autosampler Model: AS-93plus

Sample Information File: C:\pe\metals\Sample Information\CRISETb.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

Method Loaded
Method Name: 7300bcESI2FAST
Method Last Saved: 3/19/2012 10:25:21 AM
IEC File: IEC031612.iec
MSF File:
Method Description: 12Axial Elements

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Al 308.215	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
B 249.677	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Be 313.042	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ca 317.933	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cd 228.802	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Cr 267.716	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Fe 273.955	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Mg 279.077	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mn 257.610	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Na 330.237	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ni 231.604	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Si 288.158	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Ti 334.903	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Zn 206.200	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
ScA 357.253	Lin, Calc Int	Peak Area	Axial	n/a	n/a
ScR 361.383	Lin, Calc Int	Peak Area	Radial	n/a	n/a

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 5/4/2012 10:21:56 AM
Data Type: Original

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2680545.9	3367.57	0.13%	100.0	%
ScR 361.383	410515.6	3605.24	0.88%	100.0	%
Ag 328.068†	-234.1	9.01	3.85%	[0.00]	mg/L
Al 308.215†	144.7	5.54	3.83%	[0.00]	mg/L
As 188.979†	-3.7	6.42	171.33%	[0.00]	mg/L
B 249.677†	35.2	5.98	17.00%	[0.00]	mg/L

Ba 233.527†	19.4	4.17	21.50%	[0.00] mg/L
Be 313.042†	1259.2	16.21	1.29%	[0.00] mg/L
Ca 317.933†	415.8	12.38	2.98%	[0.00] mg/L
Cd 228.802†	284.0	5.01	1.76%	[0.00] mg/L
Co 228.616†	-11.5	3.14	27.16%	[0.00] mg/L
Cr 267.716†	-43.8	4.86	11.11%	[0.00] mg/L
Cu 324.752†	1119.7	21.76	1.94%	[0.00] mg/L
Fe 273.955†	-20.2	0.72	3.54%	[0.00] mg/L
K 766.490†	-403.9	32.18	7.97%	[0.00] mg/L
Mg 279.077†	-65.5	1.89	2.89%	[0.00] mg/L
Mn 257.610†	-19.1	1.75	9.18%	[0.00] mg/L
Mo 202.031†	96.4	7.26	7.53%	[0.00] mg/L
Na 589.592†	521.8	55.51	10.64%	[0.00] mg/L
Na 330.237†	-15.8	9.23	58.40%	[0.00] mg/L
Ni 231.604†	-8.0	2.24	27.89%	[0.00] mg/L
Pb 220.353†	160.8	5.92	3.68%	[0.00] mg/L
Sb 206.836†	260.5	1.45	0.56%	[0.00] mg/L
Se 196.026†	-123.5	2.03	1.65%	[0.00] mg/L
Si 288.158†	77.4	6.91	8.93%	[0.00] mg/L
Sn 189.927†	-41.1	6.17	15.01%	[0.00] mg/L
Sr 421.552†	-577.6	12.92	2.24%	[0.00] mg/L
Ti 334.903†	-120.2	7.68	6.39%	[0.00] mg/L
Tl 190.801†	-4.9	1.45	29.73%	[0.00] mg/L
V 292.402†	549.2	27.49	5.00%	[0.00] mg/L
Zn 206.200†	-61.3	2.17	3.54%	[0.00] mg/L

Sequence No.: 2
Sample ID: STD2

Autosampler Location: 2
Date Collected: 5/4/2012 10:26:09 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2716228.9	12561.99	0.46%	101.3	%
ScR 361.383	409081.3	6161.97	1.51%	99.65	%
Ba 233.527†	90093.4	892.27	0.99%	[10]	mg/L
Cd 228.802†	323543.6	740.15	0.23%	[10]	mg/L
Co 228.616†	418803.3	983.14	0.23%	[10]	mg/L
Cr 267.716†	90338.9	282.71	0.31%	[10]	mg/L
Cu 324.752†	2305762.1	2927.25	0.13%	[10]	mg/L
Mn 257.610†	588240.5	7044.02	1.20%	[10]	mg/L
V 292.402†	1883667.1	12250.57	0.65%	[10]	mg/L

Sequence No.: 3
Sample ID: STD3

Autosampler Location: 3
Date Collected: 5/4/2012 10:27:54 AM
Data Type: Original

Nebulizer Parameters: STD3

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: STD3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2687498.7	21917.44	0.82%	100.3	%
ScR 361.383	400489.2	1849.00	0.46%	97.56	%
Ag 328.068†	271857.7	1552.76	0.57%	(1.0)	mg/L
As 188.979†	25102.2	82.78	0.33%	[10]	mg/L
B 249.677†	66109.7	540.01	0.82%	[10]	mg/L
Be 313.042†	3778588.8	23162.88	0.61%	(5.0)	mg/L
Na 589.592†	659474.8	1518.44	0.23%	(50)	mg/L
Ni 231.604†	49841.3	425.68	0.85%	[10]	mg/L
Pb 220.353†	125547.3	1224.00	0.97%	(10)	mg/L
Se 196.026†	19184.8	84.33	0.44%	[10]	mg/L
Sr 421.552†	4361031.1	20726.36	0.48%	[5]	mg/L
Tl 190.801†	26710.5	116.26	0.44%	(10)	mg/L
Zn 206.200†	30190.9	319.31	1.06%	[10]	mg/L

Sequence No.: 4
Sample ID: STD4

Autosampler Location: 4
Date Collected: 5/4/2012 10:30:09 AM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2737688.0	24351.54	0.89%	102.1	%
ScR 361.383	414822.7	1628.01	0.39%	101.0	%
Mo 202.031†	221261.3	2347.58	1.06%	[10]	mg/L
Sb 206.836†	38182.9	334.66	0.88%	[10]	mg/L
Si 288.158†	22412.6	66.38	0.30%	[10]	mg/L
Sn 189.927†	73882.6	749.81	1.01%	[10]	mg/L
Ti 334.903†	297401.7	244.08	0.08%	[10]	mg/L

Sequence No.: 5
Sample ID: STD5

Autosampler Location: 5
Date Collected: 5/4/2012 10:32:21 AM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2535076.0	13095.17	0.52%	94.57	%
ScR 361.383	407772.1	3653.37	0.90%	99.33	%
Al 308.215†	49737.4	636.34	1.28%	[30]	mg/L
Ca 317.933†	332708.1	2591.10	0.78%	[30]	mg/L
Fe 273.955†	149096.5	608.18	0.41%	[100]	mg/L
K 766.490†	233089.5	1012.28	0.43%	[100]	mg/L
Mg 279.077†	40032.8	689.42	1.72%	[30]	mg/L
Na 330.237†	3158.7	46.43	1.47%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	271900	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1658	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	2510	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	6611	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	9009	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	755700	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	11090	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	32350	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	41880	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	9034	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	230600	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1491	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	2331	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	1334	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	58820	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	22130	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	13190	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	31.59	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	4984	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	12550	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	3818	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	1918	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	2241	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	7388	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	872200	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	29740	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	2671	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	188400	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	3019	0.00000	1.000000	

Analysis Begun

Start Time: 5/4/2012 10:37:18 AM
Logged In Analyst: metals
Spectrometer Model: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 5/4/2012 9:24:35 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\metals\Sample Information\0504.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

Sequence No.: 1
Sample ID: CV
Autosampler Location: 7
Date Collected: 5/4/2012 10:37:19 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2697516.4	100.6	%	0.50				0.50%
ScR 361.383	411424.4	100.2	%	0.12				0.12%
Ag 328.068†	275989.7	1.015	mg/L	0.0055	1.015	mg/L	0.0055	0.54%
Al 308.215†	3300.3	1.961	mg/L	0.0033	1.961	mg/L	0.0033	0.17%
As 188.979†	4921.2	1.965	mg/L	0.0103	1.965	mg/L	0.0103	0.52%
B 249.677†	6451.4	0.9739	mg/L	0.00068	0.9739	mg/L	0.00068	0.07%
Ba 233.527†	8790.0	0.9752	mg/L	0.00213	0.9752	mg/L	0.00213	0.22%
Be 313.042†	712593.0	0.9423	mg/L	0.00124	0.9423	mg/L	0.00124	0.13%
Ca 317.933†	22306.9	2.011	mg/L	0.0033	2.011	mg/L	0.0033	0.16%
Cd 228.802†	33228.9	1.021	mg/L	0.0065	1.021	mg/L	0.0065	0.64%
Co 228.616†	41034.2	0.9780	mg/L	0.00672	0.9780	mg/L	0.00672	0.69%
Cr 267.716†	9062.5	1.003	mg/L	0.0020	1.003	mg/L	0.0020	0.20%
Cu 324.752†	234813.0	1.018	mg/L	0.0028	1.018	mg/L	0.0028	0.28%
Fe 273.955†	2977.4	1.992	mg/L	0.0082	1.992	mg/L	0.0082	0.41%
K 766.490†	46583.4	19.99	mg/L	0.023	19.99	mg/L	0.023	0.11%
Mg 279.077†	2631.3	1.977	mg/L	0.0056	1.977	mg/L	0.0056	0.28%
Mn 257.610†	54415.9	0.9258	mg/L	0.00053	0.9258	mg/L	0.00053	0.06%
Mo 202.031†	22715.2	1.027	mg/L	0.0049	1.027	mg/L	0.0049	0.48%
Na 589.592†	634267.4	48.09	mg/L	0.148	48.09	mg/L	0.148	0.31%
Na 330.237†	1620.5	51.34	mg/L	0.421	51.34	mg/L	0.421	0.82%
Ni 231.604†	4795.9	0.9642	mg/L	0.00232	0.9642	mg/L	0.00232	0.24%
Pb 220.353†	25225.3	2.010	mg/L	0.0102	2.010	mg/L	0.0102	0.51%
Sb 206.836†	7952.7	2.082	mg/L	0.0072	2.082	mg/L	0.0072	0.34%
Se 196.026†	3778.1	1.969	mg/L	0.0125	1.969	mg/L	0.0125	0.64%
Si 288.158†	4610.2	2.061	mg/L	0.0076	2.061	mg/L	0.0076	0.37%
Sn 189.927†	7559.2	1.025	mg/L	0.0064	1.025	mg/L	0.0064	0.63%
Sr 421.552†	847772.6	0.9720	mg/L	0.00018	0.9720	mg/L	0.00018	0.02%
Ti 334.903†	29003.0	0.9736	mg/L	0.00033	0.9736	mg/L	0.00033	0.03%
Tl 190.801†	5257.9	1.967	mg/L	0.0105	1.967	mg/L	0.0105	0.53%
V 292.402†	187570.8	1.000	mg/L	0.0007	1.000	mg/L	0.0007	0.07%
Zn 206.200†	2997.1	0.9933	mg/L	0.00295	0.9933	mg/L	0.00295	0.30%

Sequence No.: 2
Sample ID: \CB

Autosampler Location: 1
Date Collected: 5/4/2012 10:41:19 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2735403.5	102.0	%	1.05				1.03%
ScR 361.383	418842.3	102.0	%	0.14				0.14%
Ag 328.068†	37.3	0.00014	mg/L	0.000149	0.00014	mg/L	0.000149	109.06%
Al 308.215†	8.8	0.00528	mg/L	0.002752	0.00528	mg/L	0.002752	52.16%
As 188.979†	0.5	0.00022	mg/L	0.001372	0.00022	mg/L	0.001372	624.91%
B 249.677†	19.1	0.00289	mg/L	0.001553	0.00289	mg/L	0.001553	53.73%
Ba 233.527†	-0.4	-0.00004	mg/L	0.000538	-0.00004	mg/L	0.000538	>999.9%
Be 313.042†	11.2	0.00001	mg/L	0.000020	0.00001	mg/L	0.000020	132.14%
Ca 317.933†	2.5	0.00022	mg/L	0.000866	0.00022	mg/L	0.000866	386.20%
Cd 228.802†	1.9	0.00006	mg/L	0.000118	0.00006	mg/L	0.000118	203.85%
Co 228.616†	-4.1	-0.00010	mg/L	0.000153	-0.00010	mg/L	0.000153	155.14%
Cr 267.716†	6.8	0.00076	mg/L	0.000198	0.00076	mg/L	0.000198	26.16%
Cu 324.752†	111.3	0.00048	mg/L	0.000045	0.00048	mg/L	0.000045	9.34%
Fe 273.955†	2.4	0.00159	mg/L	0.000994	0.00159	mg/L	0.000994	62.40%
K 766.490†	8.0	0.00342	mg/L	0.002317	0.00342	mg/L	0.002317	67.72%
Mg 279.077†	5.6	0.00422	mg/L	0.001848	0.00422	mg/L	0.001848	43.81%
Mn 257.610†	5.4	0.00009	mg/L	0.000054	0.00009	mg/L	0.000054	59.00%
Mo 202.031†	10.5	0.00047	mg/L	0.000208	0.00047	mg/L	0.000208	43.94%
Na 589.592†	19.5	0.00148	mg/L	0.001841	0.00148	mg/L	0.001841	124.80%
Na 330.237†	3.9	0.1239	mg/L	0.12859	0.1239	mg/L	0.12859	103.80%
Ni 231.604†	1.6	0.00032	mg/L	0.001120	0.00032	mg/L	0.001120	345.66%
Pb 220.353†	-5.1	-0.00040	mg/L	0.000862	-0.00040	mg/L	0.000862	213.86%
Sb 206.836†	1.5	0.00039	mg/L	0.001007	0.00039	mg/L	0.001007	258.69%
Se 196.026†	2.7	0.00143	mg/L	0.000990	0.00143	mg/L	0.000990	69.29%
Si 288.158†	-0.6	-0.00025	mg/L	0.001706	-0.00025	mg/L	0.001706	685.60%
Sn 189.927†	4.1	0.00055	mg/L	0.000585	0.00055	mg/L	0.000585	106.57%
Sr 421.552†	62.1	0.00007	mg/L	0.000027	0.00007	mg/L	0.000027	37.77%
Ti 334.903†	18.1	0.00061	mg/L	0.000415	0.00061	mg/L	0.000415	68.54%
Tl 190.801†	-1.9	-0.00070	mg/L	0.000854	-0.00070	mg/L	0.000854	121.90%
V 292.402†	-41.3	-0.00022	mg/L	0.000019	-0.00022	mg/L	0.000019	8.86%
Zn 206.200†	-0.4	-0.00014	mg/L	0.000420	-0.00014	mg/L	0.000420	306.68%

Sequence No.: 3
Sample ID: CRI

Autosampler Location: 301
Date Collected: 5/4/2012 10:45:32 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2754660.3	102.8	%	0.12				0.12%
ScR 361.383	420177.3	102.4	%	0.81				0.79%
Ag 328.068†	847.3	0.00312	mg/L	0.000078	0.00312	mg/L	0.000078	2.52%
Al 308.215†	85.0	0.05117	mg/L	0.002926	0.05117	mg/L	0.002926	5.72%
As 188.979†	120.7	0.04812	mg/L	0.001871	0.04812	mg/L	0.001871	3.89%
B 249.677†	135.2	0.02045	mg/L	0.000220	0.02045	mg/L	0.000220	1.08%
Ba 233.527†	23.5	0.00260	mg/L	0.000213	0.00260	mg/L	0.000213	8.17%
Be 313.042†	684.2	0.00090	mg/L	0.000028	0.00090	mg/L	0.000028	3.10%
Ca 317.933†	522.9	0.04715	mg/L	0.001733	0.04715	mg/L	0.001733	3.68%
Cd 228.802†	73.1	0.00210	mg/L	0.000116	0.00210	mg/L	0.000116	5.51%
Co 228.616†	119.8	0.00285	mg/L	0.000034	0.00285	mg/L	0.000034	1.18%
Cr 267.716†	43.9	0.00485	mg/L	0.000657	0.00485	mg/L	0.000657	13.53%
Cu 324.752†	499.7	0.00217	mg/L	0.000138	0.00217	mg/L	0.000138	6.35%
Fe 273.955†	73.8	0.04951	mg/L	0.001541	0.04951	mg/L	0.001541	3.11%
K 766.490†	1149.7	0.4933	mg/L	0.01341	0.4933	mg/L	0.01341	2.72%
Mg 279.077†	76.1	0.05700	mg/L	0.004199	0.05700	mg/L	0.004199	7.37%
Mn 257.610†	62.6	0.00107	mg/L	0.000124	0.00107	mg/L	0.000124	11.61%
Mo 202.031†	110.7	0.00500	mg/L	0.000091	0.00500	mg/L	0.000091	1.82%
Na 589.592†	6019.2	0.4564	mg/L	0.00392	0.4564	mg/L	0.00392	0.86%
Na 330.237†	19.6	0.6197	mg/L	0.10443	0.6197	mg/L	0.10443	16.85%
Ni 231.604†	48.1	0.00969	mg/L	0.000290	0.00969	mg/L	0.000290	3.00%
Pb 220.353†	238.3	0.01899	mg/L	0.000257	0.01899	mg/L	0.000257	1.35%
Sb 206.836†	186.6	0.04888	mg/L	0.000911	0.04888	mg/L	0.000911	1.86%
Se 196.026†	103.9	0.05418	mg/L	0.005374	0.05418	mg/L	0.005374	9.92%
Si 288.158†	129.1	0.05759	mg/L	0.003502	0.05759	mg/L	0.003502	6.08%
Sn 189.927†	72.1	0.00980	mg/L	0.000486	0.00980	mg/L	0.000486	4.96%
Sr 421.552†	908.9	0.00104	mg/L	0.000026	0.00104	mg/L	0.000026	2.49%
Ti 334.903†	140.5	0.00471	mg/L	0.000358	0.00471	mg/L	0.000358	7.58%
Tl 190.801†	127.3	0.04766	mg/L	0.001948	0.04766	mg/L	0.001948	4.09%
V 292.402†	491.1	0.00262	mg/L	0.000065	0.00262	mg/L	0.000065	2.49%
Zn 206.200†	28.0	0.00927	mg/L	0.000574	0.00927	mg/L	0.000574	6.19%

Sequence No.: 4
Sample ID: ICSA

Autosampler Location: 302
Date Collected: 5/4/2012 10:49:45 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2596830.3	96.88	%	0.464				0.48%
ScR 361.383	407743.0	99.32	%	0.095				0.10%
Ag 328.068†	-165.0	-0.00126	mg/L	0.000103	-0.00126	mg/L	0.000103	8.12%
Al 308.215†	329327.6	198.6	mg/L	1.78	198.6	mg/L	1.78	0.90%
As 188.979†	4.2	-0.01399	mg/L	0.001718	-0.01399	mg/L	0.001718	12.28%
B 249.677†	37.5	0.00567	mg/L	0.002910	0.00567	mg/L	0.002910	51.33%
Ba 233.527†	110.5	0.00236	mg/L	0.000271	0.00236	mg/L	0.000271	11.51%
Be 313.042†	63.3	0.00006	mg/L	0.000009	0.00006	mg/L	0.000009	13.56%
Ca 317.933†	1093704.7	98.62	mg/L	0.250	98.62	mg/L	0.250	0.25%
Cd 228.802†	79.3	0.00060	mg/L	0.000108	0.00060	mg/L	0.000108	17.95%
Co 228.616†	105.4	0.00251	mg/L	0.000027	0.00251	mg/L	0.000027	1.10%
Cr 267.716†	-26.5	-0.00013	mg/L	0.000739	-0.00013	mg/L	0.000739	568.66%
Cu 324.752†	-3541.7	-0.00187	mg/L	0.000194	-0.00187	mg/L	0.000194	10.34%
Fe 273.955†	289460.8	194.1	mg/L	1.85	194.1	mg/L	1.85	0.95%
K 766.490†	60.5	0.02597	mg/L	0.002432	0.02597	mg/L	0.002432	9.37%
Mg 279.077†	128893.3	96.48	mg/L	0.517	96.48	mg/L	0.517	0.54%
Mn 257.610†	64.8	0.00024	mg/L	0.000104	0.00024	mg/L	0.000104	44.30%
Mo 202.031†	129.9	0.00419	mg/L	0.000225	0.00419	mg/L	0.000225	5.36%
Na 589.592†	376.6	0.02855	mg/L	0.002186	0.02855	mg/L	0.002186	7.66%
Na 330.237†	23.6	0.1058	mg/L	0.19643	0.1058	mg/L	0.19643	185.59%
Ni 231.604†	-5.0	-0.00091	mg/L	0.000827	-0.00091	mg/L	0.000827	90.87%
Pb 220.353†	-268.7	-0.00658	mg/L	0.001289	-0.00658	mg/L	0.001289	19.58%
Sb 206.836†	399.1	0.01722	mg/L	0.000415	0.01722	mg/L	0.000415	2.41%
Se 196.026†	-27.0	0.00822	mg/L	0.007355	0.00822	mg/L	0.007355	89.52%
Si 288.158†	-38.2	-0.01702	mg/L	0.002967	-0.01702	mg/L	0.002967	17.44%
Sn 189.927†	-109.8	-0.01191	mg/L	0.000875	-0.01191	mg/L	0.000875	7.35%
Sr 421.552†	8770.8	0.01006	mg/L	0.000054	0.01006	mg/L	0.000054	0.54%
Ti 334.903†	92.9	-0.00032	mg/L	0.000253	-0.00032	mg/L	0.000253	79.15%
Tl 190.801†	-42.3	0.00970	mg/L	0.003304	0.00970	mg/L	0.003304	34.08%
V 292.402†	5565.3	0.00609	mg/L	0.000325	0.00609	mg/L	0.000325	5.35%
Zn 206.200†	-34.9	-0.00426	mg/L	0.000970	-0.00426	mg/L	0.000970	22.75%

cont.

Sequence No.: 5
Sample ID: ICSAB

Autosampler Location: 303
Date Collected: 5/4/2012 10:53:59 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2618099.8	97.67	%	0.207				0.21%
ScR 361.383	408025.4	99.39	%	0.758				0.76%
Ag 328.068†	288748.3	1.062	mg/L	0.0038	1.062	mg/L	0.0038	0.36%
Al 308.215†	329387.0	198.7	mg/L	0.40	198.7	mg/L	0.40	0.20%
As 188.979†	2482.9	0.9733	mg/L	0.00214	0.9733	mg/L	0.00214	0.22%
B 249.677†	37.1	0.00289	mg/L	0.000652	0.00289	mg/L	0.000652	22.59%
Ba 233.527†	8868.3	0.9741	mg/L	0.00512	0.9741	mg/L	0.00512	0.53%
Be 313.042†	725972.1	0.9600	mg/L	0.00359	0.9600	mg/L	0.00359	0.37%
Ca 317.933†	1095546.2	98.78	mg/L	0.353	98.78	mg/L	0.353	0.36%
Cd 228.802†	33399.7	1.028	mg/L	0.0060	1.028	mg/L	0.0060	0.58%
Co 228.616†	39275.9	0.9374	mg/L	0.00538	0.9374	mg/L	0.00538	0.57%
Cr 267.716†	9047.2	1.004	mg/L	0.0046	1.004	mg/L	0.0046	0.46%
Cu 324.752†	241464.8	1.061	mg/L	0.0080	1.061	mg/L	0.0080	0.75%
Fe 273.955†	289957.8	194.5	mg/L	0.63	194.5	mg/L	0.63	0.32%
K 766.490†	24.4	0.01048	mg/L	0.008518	0.01048	mg/L	0.008518	81.28%
Mg 279.077†	128770.8	96.39	mg/L	0.092	96.39	mg/L	0.092	0.10%
Mn 257.610†	54465.7	0.9254	mg/L	0.00150	0.9254	mg/L	0.00150	0.16%
Mo 202.031†	135.9	0.00446	mg/L	0.000355	0.00446	mg/L	0.000355	7.95%
Na 589.592†	174.3	0.01321	mg/L	0.000881	0.01321	mg/L	0.000881	6.67%
Na 330.237†	32.0	0.1743	mg/L	0.21859	0.1743	mg/L	0.21859	125.42%
Ni 231.604†	4602.0	0.9244	mg/L	0.00337	0.9244	mg/L	0.00337	0.36%
Pb 220.353†	11905.8	0.9638	mg/L	0.00277	0.9638	mg/L	0.00277	0.29%
Sb 206.836†	4089.6	0.9754	mg/L	0.00505	0.9754	mg/L	0.00505	0.52%
Se 196.026†	1869.4	0.9959	mg/L	0.00659	0.9959	mg/L	0.00659	0.66%
Si 288.158†	-53.1	-0.01985	mg/L	0.000573	-0.01985	mg/L	0.000573	2.89%
Sn 189.927†	-121.3	-0.01273	mg/L	0.000632	-0.01273	mg/L	0.000632	4.97%
Sr 421.552†	8673.8	0.00994	mg/L	0.000078	0.00994	mg/L	0.000078	0.79%
Ti 334.903†	97.2	-0.00040	mg/L	0.000385	-0.00040	mg/L	0.000385	95.60%
Tl 190.801†	2439.6	0.9345	mg/L	0.00124	0.9345	mg/L	0.00124	0.13%
V 292.402†	191184.3	0.9959	mg/L	0.01030	0.9959	mg/L	0.01030	1.03%
Zn 206.200†	2726.1	0.9109	mg/L	0.00515	0.9109	mg/L	0.00515	0.57%

Sequence No.: 6
Sample ID: CV

Autosampler Location: 7
Date Collected: 5/4/2012 10:57:59 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2712380.2	101.2	%	0.83				0.82%
ScR 361.383	415047.6	101.1	%	1.33				1.32%
Ag 328.068†	272902.9	1.004	mg/L	0.0060	1.004	mg/L	0.0060	0.59%
Al 308.215†	3301.1	1.962	mg/L	0.0333	1.962	mg/L	0.0333	1.70%
As 188.979†	4822.3	1.926	mg/L	0.0152	1.926	mg/L	0.0152	0.79%
B 249.677†	6410.5	0.9677	mg/L	0.01502	0.9677	mg/L	0.01502	1.55%
Ba 233.527†	8648.5	0.9595	mg/L	0.01649	0.9595	mg/L	0.01649	1.72%
Be 313.042†	699433.4	0.9248	mg/L	0.00766	0.9248	mg/L	0.00766	0.83%
Ca 317.933†	22197.7	2.002	mg/L	0.0403	2.002	mg/L	0.0403	2.01%
Cd 228.802†	32902.1	1.011	mg/L	0.0149	1.011	mg/L	0.0149	1.47%
Co 228.616†	40537.7	0.9662	mg/L	0.01101	0.9662	mg/L	0.01101	1.14%
Cr 267.716†	8985.9	0.9942	mg/L	0.01838	0.9942	mg/L	0.01838	1.85%
Cu 324.752†	234025.0	1.015	mg/L	0.0114	1.015	mg/L	0.0114	1.12%
Fe 273.955†	2941.6	1.968	mg/L	0.0329	1.968	mg/L	0.0329	1.67%
K 766.490†	46529.3	19.96	mg/L	0.045	19.96	mg/L	0.045	0.23%
Mg 279.077†	2617.5	1.967	mg/L	0.0307	1.967	mg/L	0.0307	1.56%
Mn 257.610†	53601.7	0.9119	mg/L	0.00708	0.9119	mg/L	0.00708	0.78%
Mo 202.031†	22355.0	1.010	mg/L	0.0082	1.010	mg/L	0.0082	0.81%
Na 589.592†	622166.8	47.17	mg/L	0.480	47.17	mg/L	0.480	1.02%
Na 330.237†	1616.0	51.20	mg/L	0.698	51.20	mg/L	0.698	1.36%
Ni 231.604†	4699.9	0.9449	mg/L	0.01562	0.9449	mg/L	0.01562	1.65%
Pb 220.353†	24766.3	1.974	mg/L	0.0144	1.974	mg/L	0.0144	0.73%
Sb 206.836†	7865.7	2.059	mg/L	0.0183	2.059	mg/L	0.0183	0.89%
Se 196.026†	3684.2	1.920	mg/L	0.0186	1.920	mg/L	0.0186	0.97%
Si 288.158†	4550.3	2.034	mg/L	0.0258	2.034	mg/L	0.0258	1.27%
Sn 189.927†	7390.3	1.002	mg/L	0.0074	1.002	mg/L	0.0074	0.74%
Sr 421.552†	839345.8	0.9623	mg/L	0.00632	0.9623	mg/L	0.00632	0.66%
Ti 334.903†	28629.8	0.9610	mg/L	0.00659	0.9610	mg/L	0.00659	0.69%
Tl 190.801†	5149.3	1.927	mg/L	0.0169	1.927	mg/L	0.0169	0.88%
V 292.402†	186843.9	0.9963	mg/L	0.00532	0.9963	mg/L	0.00532	0.53%
Zn 206.200†	2948.2	0.9771	mg/L	0.01770	0.9771	mg/L	0.01770	1.81%

Sequence No.: 7
Sample ID: CB

Autosampler Location: 1
Date Collected: 5/4/2012 11:02:00 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2749212.2	102.6	%	0.50				0.49%
ScR 361.383	421421.8	102.7	%	0.65				0.64%
Ag 328.068†	6.4	0.00002	mg/L	0.000147	0.00002	mg/L	0.000147	630.68%
Al 308.215†	8.4	0.00506	mg/L	0.001609	0.00506	mg/L	0.001609	31.78%
As 188.979†	-2.6	-0.00102	mg/L	0.001625	-0.00102	mg/L	0.001625	159.22%
B 249.677†	6.8	0.00103	mg/L	0.000805	0.00103	mg/L	0.000805	78.37%
Ba 233.527†	-2.3	-0.00026	mg/L	0.000399	-0.00026	mg/L	0.000399	154.23%
Be 313.042†	-10.4	-0.00001	mg/L	0.000038	-0.00001	mg/L	0.000038	278.32%
Ca 317.933†	-2.1	-0.00019	mg/L	0.001666	-0.00019	mg/L	0.001666	865.56%
Cd 228.802†	0.7	0.00003	mg/L	0.000092	0.00003	mg/L	0.000092	352.97%
Co 228.616†	-10.8	-0.00026	mg/L	0.000115	-0.00026	mg/L	0.000115	44.23%
Cr 267.716†	-1.2	-0.00013	mg/L	0.000900	-0.00013	mg/L	0.000900	679.83%
Cu 324.752†	122.7	0.00053	mg/L	0.000103	0.00053	mg/L	0.000103	19.29%
Fe 273.955†	5.4	0.00359	mg/L	0.001891	0.00359	mg/L	0.001891	52.60%
K 766.490†	3.1	0.00132	mg/L	0.001823	0.00132	mg/L	0.001823	137.91%
Mg 279.077†	10.5	0.00788	mg/L	0.002389	0.00788	mg/L	0.002389	30.34%
Mn 257.610†	3.8	0.00006	mg/L	0.000117	0.00006	mg/L	0.000117	184.13%
Mo 202.031†	2.6	0.00012	mg/L	0.000194	0.00012	mg/L	0.000194	164.43%
Na 589.592†	-200.3	-0.01519	mg/L	0.000700	-0.01519	mg/L	0.000700	4.61%
Na 330.237†	-0.6	-0.01856	mg/L	0.235934	-0.01856	mg/L	0.235934	>999.9%
Ni 231.604†	6.1	0.00122	mg/L	0.000698	0.00122	mg/L	0.000698	57.00%
Pb 220.353†	-15.5	-0.00123	mg/L	0.000942	-0.00123	mg/L	0.000942	76.29%
Sb 206.836†	-1.1	-0.00028	mg/L	0.001109	-0.00028	mg/L	0.001109	390.72%
Se 196.026†	9.4	0.00488	mg/L	0.004020	0.00488	mg/L	0.004020	82.31%
Si 288.158†	-6.6	-0.00295	mg/L	0.002023	-0.00295	mg/L	0.002023	68.50%
Sn 189.927†	0.5	0.00007	mg/L	0.000176	0.00007	mg/L	0.000176	242.40%
Sr 421.552†	63.1	0.00007	mg/L	0.000019	0.00007	mg/L	0.000019	26.50%
Ti 334.903†	17.4	0.00058	mg/L	0.000257	0.00058	mg/L	0.000257	44.01%
Tl 190.801†	0.2	0.00006	mg/L	0.001965	0.00006	mg/L	0.001965	>999.9%
V 292.402†	-46.3	-0.00025	mg/L	0.000113	-0.00025	mg/L	0.000113	45.89%
Zn 206.200†	2.7	0.00089	mg/L	0.000756	0.00089	mg/L	0.000756	85.16%

Analysis Begun

Start Time: 5/4/2012 11:06:40 AM
Logged In Analyst: metals
Spectrometer Model: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 5/4/2012 9:24:35 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\metals\Sample Information\0504.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

Sequence No.: 1
Sample ID: STD2
Date Collected: 5/4/2012 11:06:41 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2771877.1	8895.67	0.32%	103.4	%
ScR 361.383	423091.2	2183.90	0.52%	103.1	%
Ba 233.527†	85794.2	418.86	0.49%	[10]	mg/L
Cd 228.802†	321931.1	582.73	0.18%	[10]	mg/L
Co 228.616†	414439.0	212.20	0.05%	[10]	mg/L
Cr 267.716†	88432.3	343.83	0.39%	[10]	mg/L
Cu 324.752†	2325802.2	4578.00	0.20%	[10]	mg/L
Mn 257.610†	555320.0	2178.25	0.39%	[10]	mg/L
V 292.402†	1870055.2	1658.07	0.09%	[10]	mg/L

Sequence No.: 2
Sample ID: STD3

Date Collected: 5/4/2012 11:08:27 AM
Data Type: Original

Nebulizer Parameters: STD3

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: STD3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2753221.2	9668.53	0.35%	102.7	%
ScR 361.383	413358.5	3848.29	0.93%	100.7	%
Ag 328.068†	263067.4	1157.09	0.44%	[1.0]	mg/L
As 188.979†	24163.1	42.22	0.17%	[10]	mg/L
B 249.677†	64508.5	473.27	0.73%	[10]	mg/L
Be 313.042†	3592071.3	16751.18	0.47%	[5.0]	mg/L
Na 589.592†	628362.1	3416.46	0.54%	[50]	mg/L
Ni 231.604†	47328.5	582.45	1.23%	[10]	mg/L
Pb 220.353†	121039.5	142.71	0.12%	[10]	mg/L
Se 196.026†	18380.9	40.75	0.22%	[10]	mg/L
Sr 421.552†	4218673.7	17120.56	0.41%	[5]	mg/L
Tl 190.801†	25710.2	99.36	0.39%	[10]	mg/L
Zn 206.200†	28937.0	104.26	0.36%	[10]	mg/L

Analysis Begun

Start Time: 5/4/2012 11:10:26 AM
Logged In Analyst: metals
Spectrometer Model: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 5/4/2012 9:24:35 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\metals\Sample Information\0504.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

Sequence No.: 1
Sample ID: CV 2
Autosampler Location: 7
Date Collected: 5/4/2012 11:10:27 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2739379.8	102.2	%	0.46				0.45%
ScR 361.383	415766.7	101.3	%	0.32				0.31%
Ag 328.068†	269683.4	1.025	mg/L	0.0049	1.025	mg/L	0.0049	0.48%
Al 308.215†	3293.5	1.957	mg/L	0.0112	1.957	mg/L	0.0112	0.57%
As 188.979†	4751.0	1.971	mg/L	0.0117	1.971	mg/L	0.0117	0.59%
B 249.677†	6511.2	1.007	mg/L	0.0054	1.007	mg/L	0.0054	0.54%
Ba 233.527†	8597.7	1.002	mg/L	0.0048	1.002	mg/L	0.0048	0.48%
Be 313.042†	693869.1	0.9652	mg/L	0.00241	0.9652	mg/L	0.00241	0.25%
Ca 317.933†	22164.0	1.999	mg/L	0.0083	1.999	mg/L	0.0083	0.41%
Cd 228.802†	32692.7	1.009	mg/L	0.0051	1.009	mg/L	0.0051	0.50%
Co 228.616†	40203.0	0.9683	mg/L	0.00434	0.9683	mg/L	0.00434	0.45%
Cr 267.716†	8953.2	1.012	mg/L	0.0046	1.012	mg/L	0.0046	0.45%
Cu 324.752†	232305.2	0.9987	mg/L	0.00515	0.9987	mg/L	0.00515	0.52%
Fe 273.955†	2928.5	1.960	mg/L	0.0083	1.960	mg/L	0.0083	0.42%
K 766.490†	46047.2	19.76	mg/L	0.109	19.76	mg/L	0.109	0.55%
Mg 279.077†	2608.2	1.960	mg/L	0.0059	1.960	mg/L	0.0059	0.30%
Mn 257.610†	53008.9	0.9553	mg/L	0.00330	0.9553	mg/L	0.00330	0.35%
Mo 202.031†	22063.2	0.9971	mg/L	0.00555	0.9971	mg/L	0.00555	0.56%
Na 589.592†	624375.9	49.68	mg/L	0.255	49.68	mg/L	0.255	0.51%
Na 330.237†	1625.9	51.50	mg/L	0.083	51.50	mg/L	0.083	0.16%
Ni 231.604†	4674.6	0.9896	mg/L	0.00314	0.9896	mg/L	0.00314	0.32%
Pb 220.353†	24439.6	2.020	mg/L	0.0124	2.020	mg/L	0.0124	0.62%
Sb 206.836†	7752.6	2.029	mg/L	0.0093	2.029	mg/L	0.0093	0.46%
Se 196.026†	3625.7	1.972	mg/L	0.0119	1.972	mg/L	0.0119	0.61%
Si 288.158†	4517.3	2.019	mg/L	0.0128	2.019	mg/L	0.0128	0.64%
Sn 189.927†	7276.9	0.9870	mg/L	0.00544	0.9870	mg/L	0.00544	0.55%
Sr 421.552†	833444.8	0.9878	mg/L	0.00288	0.9878	mg/L	0.00288	0.29%
Ti 334.903†	28424.3	0.9541	mg/L	0.00254	0.9541	mg/L	0.00254	0.27%
Tl 190.801†	5078.9	1.974	mg/L	0.0089	1.974	mg/L	0.0089	0.45%
V 292.402†	185219.3	0.9949	mg/L	0.00241	0.9949	mg/L	0.00241	0.24%
Zn 206.200†	2939.7	1.017	mg/L	0.0035	1.017	mg/L	0.0035	0.34%

Sequence No.: 2
Sample ID: CB 2
Dilution: 1X

Autosampler Location: 1
Date Collected: 5/4/2012 11:14:28 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2751823.3	102.7	%	0.63				0.62%
ScR 361.383	416974.7	101.6	%	0.76				0.75%
Ag 328.068†	37.1	0.00014	mg/L	0.000153	0.00014	mg/L	0.000153	108.51%
Al 308.215†	9.0	0.00546	mg/L	0.000598	0.00546	mg/L	0.000598	10.96%
As 188.979†	0.8	0.00033	mg/L	0.000748	0.00033	mg/L	0.000748	223.99%
B 249.677†	31.8	0.00494	mg/L	0.000526	0.00494	mg/L	0.000526	10.66%
Ba 233.527†	1.6	0.00018	mg/L	0.000470	0.00018	mg/L	0.000470	255.35%
Be 313.042†	12.5	0.00002	mg/L	0.000033	0.00002	mg/L	0.000033	186.63%
Ca 317.933†	-3.0	-0.00027	mg/L	0.000429	-0.00027	mg/L	0.000429	159.90%
Cd 228.802†	6.2	0.00019	mg/L	0.000090	0.00019	mg/L	0.000090	47.22%
Co 228.616†	-7.2	-0.00018	mg/L	0.000152	-0.00018	mg/L	0.000152	86.26%
Cr 267.716†	-2.0	-0.00023	mg/L	0.000379	-0.00023	mg/L	0.000379	164.02%
Cu 324.752†	135.5	0.00058	mg/L	0.000088	0.00058	mg/L	0.000088	15.12%
Fe 273.955†	1.5	0.00104	mg/L	0.001141	0.00104	mg/L	0.001141	109.76%
K 766.490†	13.9	0.00596	mg/L	0.008258	0.00596	mg/L	0.008258	138.63%
Mg 279.077†	9.2	0.00690	mg/L	0.009381	0.00690	mg/L	0.009381	135.90%
Mn 257.610†	6.9	0.00012	mg/L	0.000065	0.00012	mg/L	0.000065	52.39%
Mo 202.031†	1.7	0.00008	mg/L	0.000150	0.00008	mg/L	0.000150	195.64%
Na 589.592†	-216.3	-0.01721	mg/L	0.003107	-0.01721	mg/L	0.003107	18.05%
Na 330.237†	-3.9	-0.1236	mg/L	0.44049	-0.1236	mg/L	0.44049	356.43%
Ni 231.604†	2.8	0.00058	mg/L	0.000182	0.00058	mg/L	0.000182	31.13%
Pb 220.353†	-10.1	-0.00083	mg/L	0.000567	-0.00083	mg/L	0.000567	68.20%
Sb 206.836†	0.3	0.00009	mg/L	0.001035	0.00009	mg/L	0.001035	>999.9%
Se 196.026†	2.5	0.00136	mg/L	0.000518	0.00136	mg/L	0.000518	38.00%
Si 288.158†	-2.9	-0.00127	mg/L	0.002266	-0.00127	mg/L	0.002266	178.06%
Sn 189.927†	0.9	0.00012	mg/L	0.000395	0.00012	mg/L	0.000395	321.46%
Sr 421.552†	82.4	0.00010	mg/L	0.000049	0.00010	mg/L	0.000049	49.66%
Ti 334.903†	15.6	0.00052	mg/L	0.000652	0.00052	mg/L	0.000652	124.25%
Tl 190.801†	-0.7	-0.00027	mg/L	0.001166	-0.00027	mg/L	0.001166	430.85%
V 292.402†	-49.3	-0.00027	mg/L	0.000085	-0.00027	mg/L	0.000085	31.93%
Zn 206.200†	-0.8	-0.00028	mg/L	0.000347	-0.00028	mg/L	0.000347	123.59%

Sequence No.: 3
Sample ID: US51 MB TWC

Autosampler Location: 304
Date Collected: 5/4/2012 11:18:41 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US51 MB TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US51 MB TWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2772569.7	103.4	%	0.73				0.71%
ScR 361.383	420168.5	102.4	%	0.20				0.19%
Ag 328.068†	30.3	0.00012	mg/L	0.000161	0.00012	mg/L	0.000161	139.98%
Al 308.215†	10.6	0.00639	mg/L	0.000545	0.00639	mg/L	0.000545	8.53%
As 188.979†	0.1	0.00003	mg/L	0.000948	0.00003	mg/L	0.000948	>999.9%
B 249.677†	16.0	0.00247	mg/L	0.001012	0.00247	mg/L	0.001012	40.92%
Ba 233.527†	-2.2	-0.00026	mg/L	0.000175	-0.00026	mg/L	0.000175	67.42%
Be 313.042†	-35.4	-0.00005	mg/L	0.000011	-0.00005	mg/L	0.000011	21.41%
Ca 317.933†	88.4	0.00797	mg/L	0.000473	0.00797	mg/L	0.000473	5.94%
Cd 228.802†	-0.7	-0.00002	mg/L	0.000079	-0.00002	mg/L	0.000079	368.49%
Co 228.616†	-9.5	-0.00023	mg/L	0.000128	-0.00023	mg/L	0.000128	55.19%
Cr 267.716†	6.1	0.00068	mg/L	0.000840	0.00068	mg/L	0.000840	122.63%
Cu 324.752†	178.3	0.00077	mg/L	0.000157	0.00077	mg/L	0.000157	20.44%
Fe 273.955†	5.2	0.00352	mg/L	0.000912	0.00352	mg/L	0.000912	25.91%
K 766.490†	10.8	0.00463	mg/L	0.006383	0.00463	mg/L	0.006383	137.95%
Mg 279.077†	9.1	0.00679	mg/L	0.004508	0.00679	mg/L	0.004508	66.36%
Mn 257.610†	4.4	0.00008	mg/L	0.000070	0.00008	mg/L	0.000070	88.91%
Mo 202.031†	-8.1	-0.00037	mg/L	0.000272	-0.00037	mg/L	0.000272	74.43%
Na 589.592†	-193.6	-0.01541	mg/L	0.001676	-0.01541	mg/L	0.001676	10.88%
Na 330.237†	6.7	0.2128	mg/L	0.23334	0.2128	mg/L	0.23334	109.64%
Ni 231.604†	1.5	0.00032	mg/L	0.001248	0.00032	mg/L	0.001248	395.36%
Pb 220.353†	-19.4	-0.00161	mg/L	0.000722	-0.00161	mg/L	0.000722	44.97%
Sb 206.836†	-12.2	-0.00320	mg/L	0.001734	-0.00320	mg/L	0.001734	54.14%
Se 196.026†	3.5	0.00188	mg/L	0.001735	0.00188	mg/L	0.001735	92.09%
Si 288.158†	3.3	0.00148	mg/L	0.001413	0.00148	mg/L	0.001413	95.75%
Sn 189.927†	2.2	0.00030	mg/L	0.000488	0.00030	mg/L	0.000488	161.82%
Sr 421.552†	71.7	0.00009	mg/L	0.000016	0.00009	mg/L	0.000016	19.23%
Ti 334.903†	16.0	0.00054	mg/L	0.000151	0.00054	mg/L	0.000151	28.18%
Tl 190.801†	-1.9	-0.00075	mg/L	0.000927	-0.00075	mg/L	0.000927	123.40%
V 292.402†	-65.6	-0.00035	mg/L	0.000095	-0.00035	mg/L	0.000095	27.15%
Zn 206.200†	1.1	0.00039	mg/L	0.000860	0.00039	mg/L	0.000860	218.61%

Sequence No.: 4
Sample ID: US27 MB1 TWC

Autosampler Location: 305
Date Collected: 5/4/2012 11:22:54 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 MB1 TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 MB1 TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2761554.9	103.0	%	0.77				0.74%
ScR 361.383	425904.5	103.7	%	1.77				1.71%
Ag 328.068†	33.3	0.00013	mg/L	0.000078	0.00013	mg/L	0.000078	61.96%
Al 308.215†	8.2	0.00495	mg/L	0.002077	0.00495	mg/L	0.002077	41.96%
As 188.979†	2.2	0.00090	mg/L	0.002845	0.00090	mg/L	0.002845	317.44%
B 249.677†	6.8	0.00106	mg/L	0.000935	0.00106	mg/L	0.000935	87.98%
Ba 233.527†	-6.1	-0.00071	mg/L	0.000188	-0.00071	mg/L	0.000188	26.29%
Be 313.042†	-50.3	-0.00007	mg/L	0.000008	-0.00007	mg/L	0.000008	10.79%
Ca 317.933†	123.5	0.01114	mg/L	0.001794	0.01114	mg/L	0.001794	16.11%
Cd 228.802†	3.9	0.00012	mg/L	0.000075	0.00012	mg/L	0.000075	64.19%
Co 228.616†	-14.9	-0.00036	mg/L	0.000066	-0.00036	mg/L	0.000066	18.30%
Cr 267.716†	7.4	0.00084	mg/L	0.000355	0.00084	mg/L	0.000355	42.47%
Cu 324.752†	167.5	0.00072	mg/L	0.000055	0.00072	mg/L	0.000055	7.60%
Fe 273.955†	3.9	0.00264	mg/L	0.002057	0.00264	mg/L	0.002057	77.80%
K 766.490†	27.6	0.01186	mg/L	0.009713	0.01186	mg/L	0.009713	81.92%
Mg 279.077†	8.7	0.00650	mg/L	0.000975	0.00650	mg/L	0.000975	15.00%
Mn 257.610†	2.8	0.00005	mg/L	0.000101	0.00005	mg/L	0.000101	206.42%
Mo 202.031†	-3.6	-0.00016	mg/L	0.000162	-0.00016	mg/L	0.000162	99.43%
Na 589.592†	-294.9	-0.02346	mg/L	0.003244	-0.02346	mg/L	0.003244	13.83%
Na 330.237†	-6.9	-0.2184	mg/L	0.23451	-0.2184	mg/L	0.23451	107.39%
Ni 231.604†	-0.5	-0.00011	mg/L	0.000608	-0.00011	mg/L	0.000608	579.23%
Pb 220.353†	-16.4	-0.00136	mg/L	0.000352	-0.00136	mg/L	0.000352	25.94%
Sb 206.836†	-13.3	-0.00348	mg/L	0.000783	-0.00348	mg/L	0.000783	22.49%
Se 196.026†	3.4	0.00188	mg/L	0.002865	0.00188	mg/L	0.002865	152.65%
Si 288.158†	-1.0	-0.00043	mg/L	0.003420	-0.00043	mg/L	0.003420	798.20%
Sn 189.927†	3.4	0.00046	mg/L	0.000353	0.00046	mg/L	0.000353	77.10%
Sr 421.552†	72.2	0.00009	mg/L	0.000023	0.00009	mg/L	0.000023	26.62%
Ti 334.903†	-4.8	-0.00016	mg/L	0.000162	-0.00016	mg/L	0.000162	101.22%
Tl 190.801†	1.2	0.00048	mg/L	0.000849	0.00048	mg/L	0.000849	178.59%
V 292.402†	-55.5	-0.00029	mg/L	0.000020	-0.00029	mg/L	0.000020	6.97%
Zn 206.200†	2.7	0.00094	mg/L	0.000965	0.00094	mg/L	0.000965	102.76%

Sequence No.: 5
Sample ID: US27 E-L TWC

Autosampler Location: 306
Date Collected: 5/4/2012 11:27:06 AM
Data Type: Original

Dilution: 5X

Nebulizer Parameters: US27 E-L TWC

Analyte	Back Pressure	Flow
All	209.0 kPa	0.75 L/min

Mean Data: US27 E-L TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2781317.9	103.8	%	0.87				0.84%
ScR 361.383	421836.5	102.8	%	0.08				0.08%
Ag 328.068†	-1.5	-0.00004	mg/L	0.000261	-0.00020	mg/L	0.001307	664.46%
Al 308.215†	158.7	0.09536	mg/L	0.006980	0.4768	mg/L	0.03490	7.32%
As 188.979†	193.5	0.08022	mg/L	0.001612	0.4011	mg/L	0.00806	2.01%
B 249.677†	433.2	0.06716	mg/L	0.000345	0.3358	mg/L	0.00173	0.51%
Ba 233.527†	16.2	0.00177	mg/L	0.000311	0.00887	mg/L	0.001554	17.52%
Be 313.042†	-12.9	-0.00003	mg/L	0.000002	-0.00014	mg/L	0.000012	8.22%
Ca 317.933†	41396.2	3.733	mg/L	0.0264	18.66	mg/L	0.132	0.71%
Cd 228.802†	19.8	0.00032	mg/L	0.000098	0.00162	mg/L	0.000491	30.38%
Co 228.616†	0.9	-0.00003	mg/L	0.000209	-0.00015	mg/L	0.001044	703.53%
Cr 267.716†	31.9	0.00351	mg/L	0.001062	0.01757	mg/L	0.005308	30.21%
Cu 324.752†	225.9	0.00109	mg/L	0.000081	0.00547	mg/L	0.000404	7.38%
Fe 273.955†	2968.5	1.991	mg/L	0.0025	9.955	mg/L	0.0127	0.13%
K 766.490†	6817.5	2.925	mg/L	0.0174	14.62	mg/L	0.087	0.60%
Mg 279.077†	3354.9	2.513	mg/L	0.0120	12.56	mg/L	0.060	0.48%
Mn 257.610†	3506.2	0.06313	mg/L	0.000187	0.3157	mg/L	0.00094	0.30%
Mo 202.031†	10.8	0.00042	mg/L	0.000302	0.00212	mg/L	0.001512	71.30%
Na 589.592†	416358.7	33.13	mg/L	0.365	165.7	mg/L	1.83	1.10%
Na 330.237†	1059.7	33.53	mg/L	0.204	167.7	mg/L	1.02	0.61%
Ni 231.604†	9.9	0.00209	mg/L	0.000668	0.01044	mg/L	0.003342	31.99%
Pb 220.353†	-22.6	-0.00198	mg/L	0.000657	-0.00990	mg/L	0.003283	33.15%
Sb 206.836†	-5.7	-0.00172	mg/L	0.001109	-0.00859	mg/L	0.005543	64.57%
Se 196.026†	13.9	0.00775	mg/L	0.001257	0.03876	mg/L	0.006285	16.22%
Si 288.158†	8995.9	4.014	mg/L	0.0488	20.07	mg/L	0.244	1.22%
Sn 189.927†	-0.1	0.00011	mg/L	0.000276	0.00057	mg/L	0.001379	243.79%
Sr 421.552†	20261.6	0.02401	mg/L	0.000020	0.1201	mg/L	0.00010	0.08%
Ti 334.903†	892.1	0.02986	mg/L	0.000290	0.1493	mg/L	0.00145	0.97%
Tl 190.801†	-0.1	0.00018	mg/L	0.000710	0.00092	mg/L	0.003550	386.35%
V 292.402†	2772.7	0.01459	mg/L	0.000326	0.07297	mg/L	0.001628	2.23%
Zn 206.200†	3.6	0.00120	mg/L	0.000570	0.00599	mg/L	0.002848	47.58%

Sequence No.: 6
Sample ID: US27 E TWC

Autosampler Location: 307
Date Collected: 5/4/2012 11:31:18 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 E TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 E TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2703367.1	100.9	%	0.63				0.62%
ScR 361.383	410167.7	99.92	%	0.686				0.69%
Ag 328.068†	30.9	-0.00005	mg/L	0.000095	-0.00005	mg/L	0.000095	198.49%
Al 308.215†	769.2	0.4623	mg/L	0.00209	0.4623	mg/L	0.00209	0.45%
As 188.979†	966.3	0.4006	mg/L	0.00224	0.4006	mg/L	0.00224	0.56%
B 249.677†	2145.4	0.3326	mg/L	0.00274	0.3326	mg/L	0.00274	0.82%
Ba 233.527†	92.3	0.01021	mg/L	0.000436	0.01021	mg/L	0.000436	4.27%
Be 313.042†	102.3	0.00009	mg/L	0.000021	0.00009	mg/L	0.000021	23.47%
Ca 317.933†	201157.6	18.14	mg/L	0.131	18.14	mg/L	0.131	0.72%
Cd 228.802†	64.1	0.00054	mg/L	0.000167	0.00054	mg/L	0.000167	31.08%
Co 228.616†	24.3	0.00033	mg/L	0.000049	0.00033	mg/L	0.000049	14.83%
Cr 267.716†	130.0	0.01424	mg/L	0.000281	0.01424	mg/L	0.000281	1.97%
Cu 324.752†	708.9	0.00367	mg/L	0.000088	0.00367	mg/L	0.000088	2.39%
Fe 273.955†	15078.2	10.11	mg/L	0.011	10.11	mg/L	0.011	0.11%
K 766.490†	34486.0	14.80	mg/L	0.028	14.80	mg/L	0.028	0.19%
Mg 279.077†	16874.5	12.64	mg/L	0.040	12.64	mg/L	0.040	0.32%
Mn 257.610†	17662.3	0.3180	mg/L	0.00210	0.3180	mg/L	0.00210	0.66%
Mo 202.031†	64.3	0.00260	mg/L	0.000152	0.00260	mg/L	0.000152	5.85%
Na 589.592†	2105760.2	167.6	mg/L	1.26	167.6	mg/L	1.26	0.75%
Na 330.237†	5360.7	169.6	mg/L	0.13	169.6	mg/L	0.13	0.08%
Ni 231.604†	41.8	0.00884	mg/L	0.000398	0.00884	mg/L	0.000398	4.51%
Pb 220.353†	-42.7	-0.00411	mg/L	0.000884	-0.00411	mg/L	0.000884	21.52%
Sb 206.836†	14.4	0.00264	mg/L	0.000592	0.00264	mg/L	0.000592	22.42%
Se 196.026†	21.6	0.01260	mg/L	0.004253	0.01260	mg/L	0.004253	33.76%
Si 288.158†	46299.5	20.66	mg/L	0.134	20.66	mg/L	0.134	0.65%
Sn 189.927†	-29.4	-0.00337	mg/L	0.000314	-0.00337	mg/L	0.000314	9.33%
Sr 421.552†	103067.0	0.1222	mg/L	0.00045	0.1222	mg/L	0.00045	0.37%
Ti 334.903†	4514.4	0.1512	mg/L	0.00049	0.1512	mg/L	0.00049	0.32%
Tl 190.801†	4.8	0.00298	mg/L	0.001569	0.00298	mg/L	0.001569	52.68%
V 292.402†	14032.2	0.07383	mg/L	0.000911	0.07383	mg/L	0.000911	1.23%
Zn 206.200†	-2.2	-0.00098	mg/L	0.000396	-0.00098	mg/L	0.000396	40.47%

Sequence No.: 7
Sample ID: US27 EDUP TWC

Autosampler Location: 308
Date Collected: 5/4/2012 11:35:32 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 EDUP TWC

Analyte	Back Pressure	Flow
All	209.0 kPa	0.75 L/min

Mean Data: US27 EDUP TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2718807.9	101.4	%	0.34				0.34%
ScR 361.383	412166.3	100.4	%	0.58				0.57%
Ag 328.068†	53.1	0.00004	mg/L	0.000118	0.00004	mg/L	0.000118	298.56%
Al 308.215†	763.1	0.4586	mg/L	0.00832	0.4586	mg/L	0.00832	1.81%
As 188.979†	958.9	0.3976	mg/L	0.00067	0.3976	mg/L	0.00067	0.17%
B 249.677†	2101.3	0.3257	mg/L	0.00303	0.3257	mg/L	0.00303	0.93%
Ba 233.527†	89.1	0.00984	mg/L	0.000125	0.00984	mg/L	0.000125	1.27%
Be 313.042†	112.1	0.00010	mg/L	0.000040	0.00010	mg/L	0.000040	38.68%
Ca 317.933†	198360.0	17.89	mg/L	0.043	17.89	mg/L	0.043	0.24%
Cd 228.802†	64.1	0.00055	mg/L	0.000144	0.00055	mg/L	0.000144	26.38%
Co 228.616†	28.5	0.00043	mg/L	0.000237	0.00043	mg/L	0.000237	55.18%
Cr 267.716†	133.9	0.01468	mg/L	0.000725	0.01468	mg/L	0.000725	4.93%
Cu 324.752†	696.3	0.00361	mg/L	0.000244	0.00361	mg/L	0.000244	6.75%
Fe 273.955†	14903.9	9.996	mg/L	0.1153	9.996	mg/L	0.1153	1.15%
K 766.490†	34275.8	14.71	mg/L	0.192	14.71	mg/L	0.192	1.30%
Mg 279.077†	16716.2	12.52	mg/L	0.173	12.52	mg/L	0.173	1.38%
Mn 257.610†	17404.9	0.3134	mg/L	0.00570	0.3134	mg/L	0.00570	1.82%
Mo 202.031†	59.2	0.00237	mg/L	0.000040	0.00237	mg/L	0.000040	1.67%
Na 589.592†	2074200.2	165.0	mg/L	1.01	165.0	mg/L	1.01	0.61%
Na 330.237†	5322.1	168.4	mg/L	2.14	168.4	mg/L	2.14	1.27%
Ni 231.604†	14.1	0.00298	mg/L	0.000613	0.00298	mg/L	0.000613	20.57%
Pb 220.353†	-34.3	-0.00340	mg/L	0.000570	-0.00340	mg/L	0.000570	16.75%
Sb 206.836†	6.5	0.00058	mg/L	0.000671	0.00058	mg/L	0.000671	115.72%
Se 196.026†	20.1	0.01178	mg/L	0.000943	0.01178	mg/L	0.000943	8.01%
Si 288.158†	16819.0	7.504	mg/L	0.0943	7.504	mg/L	0.0943	1.26%
Sn 189.927†	-21.9	-0.00236	mg/L	0.000593	-0.00236	mg/L	0.000593	25.06%
Sr 421.552†	101340.3	0.1201	mg/L	0.00049	0.1201	mg/L	0.00049	0.41%
Ti 334.903†	4505.7	0.1509	mg/L	0.00096	0.1509	mg/L	0.00096	0.64%
Tl 190.801†	2.8	0.00220	mg/L	0.000589	0.00220	mg/L	0.000589	26.76%
V 292.402†	13994.8	0.07365	mg/L	0.000551	0.07365	mg/L	0.000551	0.75%
Zn 206.200†	1.9	0.00043	mg/L	0.000949	0.00043	mg/L	0.000949	219.46%

Sequence No.: 8
Sample ID: US27 ESPK TWC

Autosampler Location: 309
Date Collected: 5/4/2012 11:39:46 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 ESPK TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 ESPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2700255.7	100.7	%	0.14				0.14%
ScR 361.383	422816.4	103.0	%	1.00				0.97%
Ag 328.068†	138959.1	0.5280	mg/L	0.00296	0.5280	mg/L	0.00296	0.56%
Al 308.215†	3990.1	2.395	mg/L	0.0224	2.395	mg/L	0.0224	0.94%
As 188.979†	5863.5	2.427	mg/L	0.0103	2.427	mg/L	0.0103	0.42%
B 249.677†	2068.3	0.3192	mg/L	0.00578	0.3192	mg/L	0.00578	1.81%
Ba 233.527†	17051.9	1.987	mg/L	0.0203	1.987	mg/L	0.0203	1.02%
Be 313.042†	351421.5	0.4888	mg/L	0.00635	0.4888	mg/L	0.00635	1.30%
Ca 317.933†	305755.9	27.57	mg/L	0.082	27.57	mg/L	0.082	0.30%
Cd 228.802†	17022.9	0.5206	mg/L	0.00320	0.5206	mg/L	0.00320	0.61%
Co 228.616†	20327.0	0.4897	mg/L	0.00247	0.4897	mg/L	0.00247	0.50%
Cr 267.716†	4528.4	0.5110	mg/L	0.00669	0.5110	mg/L	0.00669	1.31%
Cu 324.752†	121061.8	0.5213	mg/L	0.00079	0.5213	mg/L	0.00079	0.15%
Fe 273.955†	17413.3	11.68	mg/L	0.106	11.68	mg/L	0.106	0.90%
K 766.490†	55596.6	23.85	mg/L	0.223	23.85	mg/L	0.223	0.93%
Mg 279.077†	28618.5	21.44	mg/L	0.141	21.44	mg/L	0.141	0.66%
Mn 257.610†	42674.1	0.7691	mg/L	0.00938	0.7691	mg/L	0.00938	1.22%
Mo 202.031†	85.6	0.00340	mg/L	0.000201	0.00340	mg/L	0.000201	5.91%
Na 589.592†	2136638.9	170.0	mg/L	1.18	170.0	mg/L	1.18	0.69%
Na 330.237†	5549.7	175.5	mg/L	1.90	175.5	mg/L	1.90	1.08%
Ni 231.604†	2211.8	0.4673	mg/L	0.00450	0.4673	mg/L	0.00450	0.96%
Pb 220.353†	23669.6	1.955	mg/L	0.0102	1.955	mg/L	0.0102	0.52%
Sb 206.836†	28.5	0.00146	mg/L	0.001182	0.00146	mg/L	0.001182	80.85%
Se 196.026†	3754.3	2.043	mg/L	0.0109	2.043	mg/L	0.0109	0.53%
Si 288.158†	45785.6	20.43	mg/L	0.162	20.43	mg/L	0.162	0.80%
Sn 189.927†	-35.0	-0.00379	mg/L	0.000794	-0.00379	mg/L	0.000794	20.94%
Sr 421.552†	512713.2	0.6077	mg/L	0.00310	0.6077	mg/L	0.00310	0.51%
Ti 334.903†	4501.3	0.1503	mg/L	0.00178	0.1503	mg/L	0.00178	1.19%
Tl 190.801†	4955.8	1.926	mg/L	0.0086	1.926	mg/L	0.0086	0.45%
V 292.402†	108498.6	0.5810	mg/L	0.00251	0.5810	mg/L	0.00251	0.43%
Zn 206.200†	1383.8	0.4785	mg/L	0.00676	0.4785	mg/L	0.00676	1.41%

Sequence No.: 9
Sample ID: ~~US27 EPOST TWC~~ zzzzz BaSO4
Dilution: 1X

Autosampler Location: 310
Date Collected: 5/4/2012 11:44:01 AM
Data Type: Original

Nebulizer Parameters: US27 EPOST TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 EPOST TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2649762.9	98.85	%	0.312				0.32%
ScR 361.383	419443.3	102.2	%	0.98				0.96%
Ag 328.068†	133245.1	0.5063	mg/L	0.00242	0.5063	mg/L	0.00242	0.48%
Al 308.215†	4027.1	2.417	mg/L	0.0276	2.417	mg/L	0.0276	1.14%
As 188.979†	6007.3	2.486	mg/L	0.0080	2.486	mg/L	0.0080	0.32%
B 249.677†	2075.8	0.3204	mg/L	0.00444	0.3204	mg/L	0.00444	1.38%
Ba 233.527†	17407.6	2.028	mg/L	0.0257	2.028	mg/L	0.0257	1.27%
Be 313.042†	348582.3	0.4848	mg/L	0.00795	0.4848	mg/L	0.00795	1.64%
Ca 317.933†	307644.2	27.74	mg/L	0.105	27.74	mg/L	0.105	0.38%
Cd 228.802†	17201.2	0.5260	mg/L	0.00399	0.5260	mg/L	0.00399	0.76%
Co 228.616†	20549.1	0.4951	mg/L	0.00166	0.4951	mg/L	0.00166	0.33%
Cr 267.716†	4507.3	0.5086	mg/L	0.00625	0.5086	mg/L	0.00625	1.23%
Cu 324.752†	122781.8	0.5287	mg/L	0.00211	0.5287	mg/L	0.00211	0.40%
Fe 273.955†	17513.2	11.74	mg/L	0.127	11.74	mg/L	0.127	1.08%
K 766.490†	55372.2	23.76	mg/L	0.247	23.76	mg/L	0.247	1.04%
Mg 279.077†	28583.9	21.42	mg/L	0.057	21.42	mg/L	0.057	0.27%
Mn 257.610†	43033.9	0.7756	mg/L	0.00939	0.7756	mg/L	0.00939	1.21%
Mo 202.031†	88.2	0.00351	mg/L	0.000122	0.00351	mg/L	0.000122	3.47%
Na 589.592†	2144177.3	170.6	mg/L	2.89	170.6	mg/L	2.89	1.70%
Na 330.237†	5577.8	176.3	mg/L	2.06	176.3	mg/L	2.06	1.17%
Ni 231.604†	2323.8	0.4910	mg/L	0.00724	0.4910	mg/L	0.00724	1.47%
Pb 220.353†	24330.4	2.010	mg/L	0.0065	2.010	mg/L	0.0065	0.32%
Sb 206.836†	41.8	0.00496	mg/L	0.001992	0.00496	mg/L	0.001992	40.13%
Se 196.026†	3864.1	2.103	mg/L	0.0037	2.103	mg/L	0.0037	0.17%
Si 288.158†	43894.6	19.59	mg/L	0.189	19.59	mg/L	0.189	0.96%
Sn 189.927†	-39.9	-0.00444	mg/L	0.000693	-0.00444	mg/L	0.000693	15.62%
Sr 421.552†	514948.9	0.6103	mg/L	0.00673	0.6103	mg/L	0.00673	1.10%
Ti 334.903†	4404.8	0.1470	mg/L	0.00216	0.1470	mg/L	0.00216	1.47%
Tl 190.801†	5091.2	1.979	mg/L	0.0059	1.979	mg/L	0.0059	0.30%
V 292.402†	109130.9	0.5844	mg/L	0.00463	0.5844	mg/L	0.00463	0.79%
Zn 206.200†	1391.9	0.4813	mg/L	0.00645	0.4813	mg/L	0.00645	1.34%

Sequence No.: 10
Sample ID: US51 A TWC

Autosampler Location: 311
Date Collected: 5/4/2012 11:48:16 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US51 A TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US51 A TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2577676.9	96.16	%	0.915				0.95%
ScR 361.383	400839.6	97.64	%	1.873				1.92%
Ag 328.068†	274.3	-0.00045	mg/L	0.000063	-0.00045	mg/L	0.000063	14.11%
Al 308.215†	24.5	0.01464	mg/L	0.003400	0.01464	mg/L	0.003400	23.22%
As 188.979†	-6.7	-0.00488	mg/L	0.002902	-0.00488	mg/L	0.002902	59.41%
B 249.677†	1128.9	0.1750	mg/L	0.00398	0.1750	mg/L	0.00398	2.27%
Ba 233.527†	351.0	0.04091	mg/L	0.001229	0.04091	mg/L	0.001229	3.00%
Be 313.042†	100.0	0.00014	mg/L	0.000045	0.00014	mg/L	0.000045	32.71%
Ca 317.933†	2456201.7	221.5	mg/L	2.44	221.5	mg/L	2.44	1.10%
Cd 228.802†	37.6	0.00118	mg/L	0.000046	0.00118	mg/L	0.000046	3.87%
Co 228.616†	67.6	0.00161	mg/L	0.000154	0.00161	mg/L	0.000154	9.54%
Cr 267.716†	59.2	-0.00187	mg/L	0.000875	-0.00187	mg/L	0.000875	46.82%
Cu 324.752†	1364.4	0.00544	mg/L	0.000224	0.00544	mg/L	0.000224	4.12%
Fe 273.955†	34.8	0.02335	mg/L	0.001513	0.02335	mg/L	0.001513	6.48%
K 766.490†	20663.9	8.865	mg/L	0.1675	8.865	mg/L	0.1675	1.89%
Mg 279.077†	123905.5	92.85	mg/L	1.918	92.85	mg/L	1.918	2.07%
Mn 257.610†	243.9	0.00381	mg/L	0.000053	0.00381	mg/L	0.000053	1.40%
Mo 202.031†	196.4	0.00511	mg/L	0.000444	0.00511	mg/L	0.000444	8.68%
Na 589.592†	1229730.2	97.85	mg/L	1.802	97.85	mg/L	1.802	1.84%
Na 330.237†	3178.1	99.17	mg/L	1.827	99.17	mg/L	1.827	1.84%
Ni 231.604†	40.2	0.00851	mg/L	0.001164	0.00851	mg/L	0.001164	13.68%
Pb 220.353†	-115.9	-0.00957	mg/L	0.000632	-0.00957	mg/L	0.000632	6.60%
Sb 206.836†	47.4	0.01228	mg/L	0.000740	0.01228	mg/L	0.000740	6.02%
Se 196.026†	57.4	0.03125	mg/L	0.004334	0.03125	mg/L	0.004334	13.87%
Si 288.158†	29541.9	13.18	mg/L	0.268	13.18	mg/L	0.268	2.03%
Sn 189.927†	-90.1	-0.00572	mg/L	0.000427	-0.00572	mg/L	0.000427	7.47%
Sr 421.552†	814510.4	0.9654	mg/L	0.01225	0.9654	mg/L	0.01225	1.27%
Ti 334.903†	250.4	0.00069	mg/L	0.000308	0.00069	mg/L	0.000308	44.63%
Tl 190.801†	18.8	0.00734	mg/L	0.002485	0.00734	mg/L	0.002485	33.86%
V 292.402†	648.1	0.00349	mg/L	0.000112	0.00349	mg/L	0.000112	3.20%
Zn 206.200†	3.2	-0.00182	mg/L	0.000477	-0.00182	mg/L	0.000477	26.21%

Sequence No.: 11
Sample ID: US51 MBSPK TWC

Autosampler Location: 312
Date Collected: 5/4/2012 11:52:29 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US51 MBSPK TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US51 MBSPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2700744.8	100.8	%	0.66				0.66%
ScR 361.383	415884.4	101.3	%	0.90				0.89%
Ag 328.068†	140206.0	0.5329	mg/L	0.00331	0.5329	mg/L	0.00331	0.62%
Al 308.215†	3373.1	2.025	mg/L	0.0182	2.025	mg/L	0.0182	0.90%
As 188.979†	4913.2	2.033	mg/L	0.0129	2.033	mg/L	0.0129	0.63%
B 249.677†	14.1	0.00070	mg/L	0.001100	0.00070	mg/L	0.001100	157.01%
Ba 233.527†	17308.3	2.017	mg/L	0.0181	2.017	mg/L	0.0181	0.90%
Be 313.042†	354288.9	0.4928	mg/L	0.00409	0.4928	mg/L	0.00409	0.83%
Ca 317.933†	109880.6	9.908	mg/L	0.0368	9.908	mg/L	0.0368	0.37%
Cd 228.802†	17165.2	0.5265	mg/L	0.00627	0.5265	mg/L	0.00627	1.19%
Co 228.616†	21085.2	0.5083	mg/L	0.00373	0.5083	mg/L	0.00373	0.73%
Cr 267.716†	4568.5	0.5160	mg/L	0.00408	0.5160	mg/L	0.00408	0.79%
Cu 324.752†	119807.1	0.5153	mg/L	0.00288	0.5153	mg/L	0.00288	0.56%
Fe 273.955†	2954.7	1.979	mg/L	0.0135	1.979	mg/L	0.0135	0.68%
K 766.490†	22892.5	9.821	mg/L	0.0580	9.821	mg/L	0.0580	0.59%
Mg 279.077†	13007.9	9.748	mg/L	0.0143	9.748	mg/L	0.0143	0.15%
Mn 257.610†	26389.0	0.4758	mg/L	0.00342	0.4758	mg/L	0.00342	0.72%
Mo 202.031†	29.1	0.00115	mg/L	0.000222	0.00115	mg/L	0.000222	19.37%
Na 589.592†	125884.2	10.02	mg/L	0.048	10.02	mg/L	0.048	0.48%
Na 330.237†	340.7	10.62	mg/L	0.108	10.62	mg/L	0.108	1.01%
Ni 231.604†	2279.6	0.4817	mg/L	0.00561	0.4817	mg/L	0.00561	1.17%
Pb 220.353†	24628.8	2.035	mg/L	0.0103	2.035	mg/L	0.0103	0.51%
Sb 206.836†	19.5	-0.00003	mg/L	0.000932	-0.00003	mg/L	0.000932	>999.9%
Se 196.026†	3721.5	2.024	mg/L	0.0100	2.024	mg/L	0.0100	0.50%
Si 288.158†	74.6	0.03527	mg/L	0.010695	0.03527	mg/L	0.010695	30.33%
Sn 189.927†	-8.9	-0.00083	mg/L	0.000092	-0.00083	mg/L	0.000092	11.07%
Sr 421.552†	419382.1	0.4971	mg/L	0.00302	0.4971	mg/L	0.00302	0.61%
Ti 334.903†	16.9	0.00011	mg/L	0.000046	0.00011	mg/L	0.000046	42.21%
Tl 190.801†	5235.5	2.034	mg/L	0.0103	2.034	mg/L	0.0103	0.51%
V 292.402†	95568.7	0.5131	mg/L	0.00460	0.5131	mg/L	0.00460	0.90%
Zn 206.200†	1418.5	0.4907	mg/L	0.00401	0.4907	mg/L	0.00401	0.82%

Sequence No.: 12
Sample ID: US27 MB1SPK TWC

Autosampler Location: 313
Date Collected: 5/4/2012 11:56:26 AM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 MB1SPK TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 MB1SPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2712136.4	101.2	%	0.31				0.31%
ScR 361.383	414510.5	101.0	%	1.31				1.30%
Ag 328.068†	139540.2	0.5304	mg/L	0.00271	0.5304	mg/L	0.00271	0.51%
Al 308.215†	3389.9	2.035	mg/L	0.0240	2.035	mg/L	0.0240	1.18%
As 188.979†	4923.6	2.037	mg/L	0.0116	2.037	mg/L	0.0116	0.57%
B 249.677†	15.7	0.00097	mg/L	0.000929	0.00097	mg/L	0.000929	96.04%
Ba 233.527†	17411.1	2.029	mg/L	0.0221	2.029	mg/L	0.0221	1.09%
Be 313.042†	358054.1	0.4980	mg/L	0.00223	0.4980	mg/L	0.00223	0.45%
Ca 317.933†	109255.3	9.851	mg/L	0.0327	9.851	mg/L	0.0327	0.33%
Cd 228.802†	17017.1	0.5219	mg/L	0.00402	0.5219	mg/L	0.00402	0.77%
Co 228.616†	20906.1	0.5039	mg/L	0.00323	0.5039	mg/L	0.00323	0.64%
Cr 267.716†	4588.5	0.5182	mg/L	0.00618	0.5182	mg/L	0.00618	1.19%
Cu 324.752†	119146.7	0.5125	mg/L	0.00291	0.5125	mg/L	0.00291	0.57%
Fe 273.955†	2972.8	1.992	mg/L	0.0195	1.992	mg/L	0.0195	0.98%
K 766.490†	23150.0	9.932	mg/L	0.0348	9.932	mg/L	0.0348	0.35%
Mg 279.077†	13026.8	9.762	mg/L	0.0209	9.762	mg/L	0.0209	0.21%
Mn 257.610†	26582.0	0.4793	mg/L	0.00405	0.4793	mg/L	0.00405	0.84%
Mo 202.031†	29.7	0.00118	mg/L	0.000262	0.00118	mg/L	0.000262	22.29%
Na 589.592†	126767.4	10.09	mg/L	0.104	10.09	mg/L	0.104	1.03%
Na 330.237†	335.0	10.43	mg/L	0.185	10.43	mg/L	0.185	1.77%
Ni 231.604†	2299.5	0.4859	mg/L	0.00617	0.4859	mg/L	0.00617	1.27%
Pb 220.353†	24539.4	2.028	mg/L	0.0134	2.028	mg/L	0.0134	0.66%
Sb 206.836†	15.3	-0.00114	mg/L	0.000485	-0.00114	mg/L	0.000485	42.42%
Se 196.026†	3734.5	2.032	mg/L	0.0136	2.032	mg/L	0.0136	0.67%
Si 288.158†	23.1	0.01230	mg/L	0.004890	0.01230	mg/L	0.004890	39.75%
Sn 189.927†	-11.2	-0.00115	mg/L	0.000810	-0.00115	mg/L	0.000810	70.10%
Sr 421.552†	422176.2	0.5004	mg/L	0.00263	0.5004	mg/L	0.00263	0.53%
Ti 334.903†	16.9	0.00011	mg/L	0.000146	0.00011	mg/L	0.000146	133.32%
Tl 190.801†	5252.5	2.041	mg/L	0.0119	2.041	mg/L	0.0119	0.58%
V 292.402†	95904.0	0.5149	mg/L	0.00397	0.5149	mg/L	0.00397	0.77%
Zn 206.200†	1425.8	0.4933	mg/L	0.00528	0.4933	mg/L	0.00528	1.07%

Sequence No.: 13
Sample ID: CV 3
Dilution: 1X

Autosampler Location: 7
Date Collected: 5/4/2012 12:00:23 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2701444.7	100.8	%	0.33				0.33%
ScR 361.383	409025.5	99.64	%	0.134				0.13%
Ag 328.068†	275099.3	1.046	mg/L	0.0055	1.046	mg/L	0.0055	0.52%
Al 308.215†	3371.5	2.003	mg/L	0.0091	2.003	mg/L	0.0091	0.46%
As 188.979†	4849.3	2.012	mg/L	0.0044	2.012	mg/L	0.0044	0.22%
B 249.677†	6538.7	1.012	mg/L	0.0040	1.012	mg/L	0.0040	0.40%
Ba 233.527†	8722.4	1.016	mg/L	0.0022	1.016	mg/L	0.0022	0.22%
Be 313.042†	702929.5	0.9777	mg/L	0.00197	0.9777	mg/L	0.00197	0.20%
Ca 317.933†	22775.7	2.054	mg/L	0.0087	2.054	mg/L	0.0087	0.42%
Cd 228.802†	33888.9	1.046	mg/L	0.0045	1.046	mg/L	0.0045	0.43%
Co 228.616†	41826.9	1.007	mg/L	0.0014	1.007	mg/L	0.0014	0.13%
Cr 267.716†	9151.2	1.034	mg/L	0.0005	1.034	mg/L	0.0005	0.05%
Cu 324.752†	241454.0	1.038	mg/L	0.0047	1.038	mg/L	0.0047	0.45%
Fe 273.955†	2974.3	1.990	mg/L	0.0088	1.990	mg/L	0.0088	0.44%
K 766.490†	46768.9	20.06	mg/L	0.067	20.06	mg/L	0.067	0.33%
Mg 279.077†	2676.2	2.011	mg/L	0.0067	2.011	mg/L	0.0067	0.33%
Mn 257.610†	53907.9	0.9715	mg/L	0.00103	0.9715	mg/L	0.00103	0.11%
Mo 202.031†	22516.8	1.018	mg/L	0.0018	1.018	mg/L	0.0018	0.18%
Na 589.592†	644600.5	51.29	mg/L	0.067	51.29	mg/L	0.067	0.13%
Na 330.237†	1656.5	52.47	mg/L	0.097	52.47	mg/L	0.097	0.18%
Ni 231.604†	4712.6	0.9977	mg/L	0.00256	0.9977	mg/L	0.00256	0.26%
Pb 220.353†	24994.7	2.066	mg/L	0.0069	2.066	mg/L	0.0069	0.33%
Sb 206.836†	7951.3	2.081	mg/L	0.0137	2.081	mg/L	0.0137	0.66%
Se 196.026†	3685.0	2.004	mg/L	0.0044	2.004	mg/L	0.0044	0.22%
Si 288.158†	4650.4	2.079	mg/L	0.0105	2.079	mg/L	0.0105	0.50%
Sn 189.927†	7418.5	1.006	mg/L	0.0027	1.006	mg/L	0.0027	0.27%
Sr 421.552†	848209.1	1.005	mg/L	0.0022	1.005	mg/L	0.0022	0.22%
Ti 334.903†	28877.3	0.9693	mg/L	0.00316	0.9693	mg/L	0.00316	0.33%
Tl 190.801†	5162.3	2.007	mg/L	0.0045	2.007	mg/L	0.0045	0.23%
V 292.402†	192112.1	1.032	mg/L	0.0083	1.032	mg/L	0.0083	0.80%
Zn 206.200†	3003.0	1.038	mg/L	0.0006	1.038	mg/L	0.0006	0.06%

Sequence No.: 14
Sample ID: CB 3
Dilution: 1X

Autosampler Location: 1
Date Collected: 5/4/2012 12:04:24 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2767877.1	103.3	%	0.63				0.61%
ScR 361.383	418438.2	101.9	%	0.39				0.38%
Ag 328.068†	55.4	0.00021	mg/L	0.000156	0.00021	mg/L	0.000156	74.09%
Al 308.215†	10.1	0.00612	mg/L	0.002744	0.00612	mg/L	0.002744	44.85%
As 188.979†	2.2	0.00090	mg/L	0.000447	0.00090	mg/L	0.000447	49.50%
B 249.677†	7.8	0.00121	mg/L	0.000580	0.00121	mg/L	0.000580	48.04%
Ba 233.527†	-3.5	-0.00041	mg/L	0.000506	-0.00041	mg/L	0.000506	124.67%
Be 313.042†	11.5	0.00002	mg/L	0.000033	0.00002	mg/L	0.000033	206.04%
Ca 317.933†	4.1	0.00037	mg/L	0.000525	0.00037	mg/L	0.000525	143.35%
Cd 228.802†	7.8	0.00024	mg/L	0.000114	0.00024	mg/L	0.000114	47.53%
Co 228.616†	-9.4	-0.00023	mg/L	0.000097	-0.00023	mg/L	0.000097	42.71%
Cr 267.716†	1.0	0.00012	mg/L	0.001000	0.00012	mg/L	0.001000	866.53%
Cu 324.752†	210.9	0.00091	mg/L	0.000130	0.00091	mg/L	0.000130	14.40%
Fe 273.955†	-0.3	-0.00018	mg/L	0.001177	-0.00018	mg/L	0.001177	656.41%
K 766.490†	41.4	0.01776	mg/L	0.016617	0.01776	mg/L	0.016617	93.56%
Mg 279.077†	2.9	0.00216	mg/L	0.004794	0.00216	mg/L	0.004794	221.56%
Mn 257.610†	3.8	0.00007	mg/L	0.000088	0.00007	mg/L	0.000088	129.50%
Mo 202.031†	3.3	0.00015	mg/L	0.000344	0.00015	mg/L	0.000344	232.01%
Na 589.592†	-126.5	-0.01006	mg/L	0.001814	-0.01006	mg/L	0.001814	18.03%
Na 330.237†	-1.7	-0.05531	mg/L	0.293758	-0.05531	mg/L	0.293758	531.08%
Ni 231.604†	1.5	0.00033	mg/L	0.000655	0.00033	mg/L	0.000655	201.07%
Pb 220.353†	-17.6	-0.00145	mg/L	0.001220	-0.00145	mg/L	0.001220	83.85%
Sb 206.836†	2.1	0.00056	mg/L	0.001966	0.00056	mg/L	0.001966	352.18%
Se 196.026†	10.2	0.00555	mg/L	0.003915	0.00555	mg/L	0.003915	70.48%
Si 288.158†	14.1	0.00628	mg/L	0.005291	0.00628	mg/L	0.005291	84.22%
Sn 189.927†	4.5	0.00061	mg/L	0.000218	0.00061	mg/L	0.000218	35.55%
Sr 421.552†	70.9	0.00008	mg/L	0.000005	0.00008	mg/L	0.000005	6.14%
Ti 334.903†	15.8	0.00053	mg/L	0.000354	0.00053	mg/L	0.000354	66.55%
Tl 190.801†	1.5	0.00059	mg/L	0.000731	0.00059	mg/L	0.000731	123.48%
V 292.402†	-23.8	-0.00013	mg/L	0.000083	-0.00013	mg/L	0.000083	65.08%
Zn 206.200†	1.1	0.00038	mg/L	0.000535	0.00038	mg/L	0.000535	139.51%

Sequence No.: 15
Sample ID: US27 MB2 WMN

Autosampler Location: 314
Date Collected: 5/4/2012 12:08:37 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 MB2 WMN

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 MB2 WMN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2798919.4	104.4	%	1.12				1.07%
ScR 361.383	426232.8	103.8	%	0.13				0.13%
Ag 328.068†	16.1	0.00006	mg/L	0.000092	0.00006	mg/L	0.000092	150.14%
Al 308.215†	2.4	0.00148	mg/L	0.002755	0.00148	mg/L	0.002755	185.58%
As 188.979†	3.6	0.00148	mg/L	0.000883	0.00148	mg/L	0.000883	59.74%
B 249.677†	-3.2	-0.00050	mg/L	0.000597	-0.00050	mg/L	0.000597	118.76%
Ba 233.527†	-0.9	-0.00011	mg/L	0.000157	-0.00011	mg/L	0.000157	144.77%
Be 313.042†	-30.1	-0.00004	mg/L	0.000011	-0.00004	mg/L	0.000011	26.76%
Ca 317.933†	-16.4	-0.00148	mg/L	0.001128	-0.00148	mg/L	0.001128	76.40%
Cd 228.802†	6.9	0.00021	mg/L	0.000097	0.00021	mg/L	0.000097	46.49%
Co 228.616†	-8.0	-0.00019	mg/L	0.000012	-0.00019	mg/L	0.000012	6.31%
Cr 267.716†	3.6	0.00041	mg/L	0.000560	0.00041	mg/L	0.000560	138.28%
Cu 324.752†	151.2	0.00065	mg/L	0.000044	0.00065	mg/L	0.000044	6.69%
Fe 273.955†	2.2	0.00150	mg/L	0.000868	0.00150	mg/L	0.000868	57.94%
K 766.490†	16.1	0.00691	mg/L	0.014611	0.00691	mg/L	0.014611	211.35%
Mg 279.077†	5.2	0.00387	mg/L	0.006715	0.00387	mg/L	0.006715	173.43%
Mn 257.610†	-0.1	0.00000	mg/L	0.000113	0.00000	mg/L	0.000113	>999.9%
Mo 202.031†	-8.5	-0.00038	mg/L	0.000113	-0.00038	mg/L	0.000113	29.45%
Na 589.592†	338.7	0.02695	mg/L	0.003200	0.02695	mg/L	0.003200	11.87%
Na 330.237†	-8.3	-0.2625	mg/L	0.05281	-0.2625	mg/L	0.05281	20.11%
Ni 231.604†	-2.4	-0.00052	mg/L	0.000220	-0.00052	mg/L	0.000220	42.33%
Pb 220.353†	-14.4	-0.00119	mg/L	0.001103	-0.00119	mg/L	0.001103	92.43%
Sb 206.836†	-16.2	-0.00424	mg/L	0.003290	-0.00424	mg/L	0.003290	77.66%
Se 196.026†	15.7	0.00854	mg/L	0.000917	0.00854	mg/L	0.000917	10.73%
Si 288.158†	-9.4	-0.00421	mg/L	0.001385	-0.00421	mg/L	0.001385	32.88%
Sn 189.927†	3.4	0.00045	mg/L	0.000202	0.00045	mg/L	0.000202	44.34%
Sr 421.552†	49.2	0.00006	mg/L	0.000027	0.00006	mg/L	0.000027	46.91%
Ti 334.903†	-9.4	-0.00032	mg/L	0.000389	-0.00032	mg/L	0.000389	123.24%
Tl 190.801†	-1.4	-0.00054	mg/L	0.000750	-0.00054	mg/L	0.000750	138.42%
V 292.402†	-39.5	-0.00021	mg/L	0.000051	-0.00021	mg/L	0.000051	24.14%
Zn 206.200†	3.2	0.00110	mg/L	0.000626	0.00110	mg/L	0.000626	56.97%

Sequence No.: 16
Sample ID: US27 J-L WMN

Autosampler Location: 315
Date Collected: 5/4/2012 12:12:50 PM
Data Type: Original

Dilution: 5X

Nebulizer Parameters: US27 J-L WMN

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 J-L WMN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2682207.4	100.1	%	1.09				1.09%
ScR 361.383	414656.2	101.0	%	0.29				0.29%
Ag 328.068†	22.9	0.00005	mg/L	0.000033	0.00026	mg/L	0.000165	63.37%
Al 308.215†	85.2	0.05114	mg/L	0.007133	0.2557	mg/L	0.03566	13.95%
As 188.979†	185.8	0.07690	mg/L	0.003071	0.3845	mg/L	0.01535	3.99%
B 249.677†	444.6	0.06892	mg/L	0.000337	0.3446	mg/L	0.00169	0.49%
Ba 233.527†	12.8	0.00139	mg/L	0.000228	0.00695	mg/L	0.001138	16.38%
Be 313.042†	7.9	0.00000	mg/L	0.000016	0.00002	mg/L	0.000079	464.27%
Ca 317.933†	41320.8	3.726	mg/L	0.0466	18.63	mg/L	0.233	1.25%
Cd 228.802†	21.6	0.00039	mg/L	0.000040	0.00196	mg/L	0.000200	10.22%
Co 228.616†	-7.2	-0.00019	mg/L	0.000156	-0.00097	mg/L	0.000780	80.37%
Cr 267.716†	14.5	0.00155	mg/L	0.000151	0.00774	mg/L	0.000756	9.76%
Cu 324.752†	209.7	0.00103	mg/L	0.000120	0.00513	mg/L	0.000601	11.72%
Fe 273.955†	2899.4	1.945	mg/L	0.0185	9.723	mg/L	0.0926	0.95%
K 766.490†	6811.0	2.922	mg/L	0.0465	14.61	mg/L	0.233	1.59%
Mg 279.077†	3382.7	2.534	mg/L	0.0227	12.67	mg/L	0.113	0.90%
Mn 257.610†	3460.8	0.06232	mg/L	0.000720	0.3116	mg/L	0.00360	1.16%
Mo 202.031†	12.8	0.00051	mg/L	0.000133	0.00257	mg/L	0.000667	25.94%
Na 589.592†	415962.2	33.10	mg/L	0.213	165.5	mg/L	1.06	0.64%
Na 330.237†	1073.0	33.95	mg/L	0.168	169.7	mg/L	0.84	0.49%
Ni 231.604†	2.5	0.00053	mg/L	0.000451	0.00265	mg/L	0.002255	85.05%
Pb 220.353†	-7.0	-0.00069	mg/L	0.000471	-0.00347	mg/L	0.002357	67.85%
Sb 206.836†	9.5	0.00226	mg/L	0.000414	0.01129	mg/L	0.002071	18.34%
Se 196.026†	11.3	0.00631	mg/L	0.004879	0.03156	mg/L	0.024394	77.29%
Si 288.158†	11481.8	5.123	mg/L	0.0403	25.61	mg/L	0.202	0.79%
Sn 189.927†	-7.9	-0.00095	mg/L	0.000799	-0.00476	mg/L	0.003996	83.92%
Sr 421.552†	19793.8	0.02346	mg/L	0.000266	0.1173	mg/L	0.00133	1.13%
Ti 334.903†	365.4	0.01215	mg/L	0.000603	0.06077	mg/L	0.003016	4.96%
Tl 190.801†	0.3	0.00034	mg/L	0.000788	0.00170	mg/L	0.003938	232.02%
V 292.402†	2081.4	0.01090	mg/L	0.000169	0.05452	mg/L	0.000847	1.55%
Zn 206.200†	-0.6	-0.00026	mg/L	0.000672	-0.00130	mg/L	0.003361	258.83%

Sequence No.: 17
Sample ID: US27 J WMN

Autosampler Location: 316
Date Collected: 5/4/2012 12:17:02 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 J WMN

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 J WMN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2712824.5	101.2	%	0.09				0.09%
ScR 361.383	403884.9	98.38	%	1.034				1.05%
Ag 328.068†	36.0	-0.00004	mg/L	0.000189	-0.00004	mg/L	0.000189	538.71%
Al 308.215†	413.6	0.2483	mg/L	0.00683	0.2483	mg/L	0.00683	2.75%
As 188.979†	960.0	0.3974	mg/L	0.00091	0.3974	mg/L	0.00091	0.23%
B 249.677†	2202.9	0.3415	mg/L	0.00493	0.3415	mg/L	0.00493	1.44%
Ba 233.527†	76.7	0.00841	mg/L	0.000179	0.00841	mg/L	0.000179	2.13%
Be 313.042†	103.6	0.00011	mg/L	0.000026	0.00011	mg/L	0.000026	24.71%
Ca 317.933†	200127.4	18.05	mg/L	0.253	18.05	mg/L	0.253	1.40%
Cd 228.802†	64.0	0.00054	mg/L	0.000095	0.00054	mg/L	0.000095	17.59%
Co 228.616†	18.4	0.00033	mg/L	0.000064	0.00033	mg/L	0.000064	19.38%
Cr 267.716†	90.2	0.00972	mg/L	0.000523	0.00972	mg/L	0.000523	5.38%
Cu 324.752†	178.3	0.00139	mg/L	0.000106	0.00139	mg/L	0.000106	7.57%
Fe 273.955†	14670.6	9.839	mg/L	0.1350	9.839	mg/L	0.1350	1.37%
K 766.490†	34995.6	15.01	mg/L	0.201	15.01	mg/L	0.201	1.34%
Mg 279.077†	17307.8	12.96	mg/L	0.178	12.96	mg/L	0.178	1.37%
Mn 257.610†	17554.0	0.3161	mg/L	0.00481	0.3161	mg/L	0.00481	1.52%
Mo 202.031†	47.4	0.00184	mg/L	0.000267	0.00184	mg/L	0.000267	14.55%
Na 589.592†	2145100.5	170.7	mg/L	2.34	170.7	mg/L	2.34	1.37%
Na 330.237†	5471.8	173.1	mg/L	2.77	173.1	mg/L	2.77	1.60%
Ni 231.604†	1.7	0.00035	mg/L	0.000697	0.00035	mg/L	0.000697	198.57%
Pb 220.353†	-34.7	-0.00346	mg/L	0.000436	-0.00346	mg/L	0.000436	12.58%
Sb 206.836†	2.5	-0.00051	mg/L	0.001373	-0.00051	mg/L	0.001373	269.17%
Se 196.026†	37.9	0.02148	mg/L	0.002517	0.02148	mg/L	0.002517	11.72%
Si 288.158†	59898.4	26.73	mg/L	0.399	26.73	mg/L	0.399	1.49%
Sn 189.927†	-23.3	-0.00260	mg/L	0.000465	-0.00260	mg/L	0.000465	17.88%
Sr 421.552†	101338.4	0.1201	mg/L	0.00128	0.1201	mg/L	0.00128	1.06%
Ti 334.903†	1964.8	0.06543	mg/L	0.000468	0.06543	mg/L	0.000468	0.72%
Tl 190.801†	4.1	0.00278	mg/L	0.002101	0.00278	mg/L	0.002101	75.62%
V 292.402†	10422.4	0.05460	mg/L	0.000694	0.05460	mg/L	0.000694	1.27%
Zn 206.200†	-16.9	-0.00606	mg/L	0.001018	-0.00606	mg/L	0.001018	16.80%

Sequence No.: 18
Sample ID: US27 JDUP WMN

Autosampler Location: 317
Date Collected: 5/4/2012 12:21:16 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 JDUP WMN

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 JDUP WMN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2718171.5	101.4	%	1.04				1.02%
ScR 361.383	406746.4	99.08	%	0.381				0.38%
Ag 328.068†	51.0	0.00002	mg/L	0.000061	0.00002	mg/L	0.000061	272.30%
Al 308.215†	425.1	0.2552	mg/L	0.00378	0.2552	mg/L	0.00378	1.48%
As 188.979†	967.6	0.4006	mg/L	0.00383	0.4006	mg/L	0.00383	0.96%
B 249.677†	2222.9	0.3446	mg/L	0.00168	0.3446	mg/L	0.00168	0.49%
Ba 233.527†	78.9	0.00867	mg/L	0.000407	0.00867	mg/L	0.000407	4.69%
Be 313.042†	85.8	0.00008	mg/L	0.000034	0.00008	mg/L	0.000034	41.50%
Ca 317.933†	199635.3	18.00	mg/L	0.211	18.00	mg/L	0.211	1.17%
Cd 228.802†	64.3	0.00054	mg/L	0.000072	0.00054	mg/L	0.000072	13.41%
Co 228.616†	18.9	0.00034	mg/L	0.000091	0.00034	mg/L	0.000091	26.68%
Cr 267.716†	94.4	0.01020	mg/L	0.000681	0.01020	mg/L	0.000681	6.68%
Cu 324.752†	184.9	0.00142	mg/L	0.000181	0.00142	mg/L	0.000181	12.75%
Fe 273.955†	14701.9	9.860	mg/L	0.0491	9.860	mg/L	0.0491	0.50%
K 766.490†	34992.6	15.01	mg/L	0.030	15.01	mg/L	0.030	0.20%
Mg 279.077†	17349.4	13.00	mg/L	0.058	13.00	mg/L	0.058	0.44%
Mn 257.610†	17522.5	0.3155	mg/L	0.00159	0.3155	mg/L	0.00159	0.50%
Mo 202.031†	49.0	0.00191	mg/L	0.000146	0.00191	mg/L	0.000146	7.64%
Na 589.592†	2116665.8	168.4	mg/L	0.93	168.4	mg/L	0.93	0.55%
Na 330.237†	5445.2	172.3	mg/L	0.46	172.3	mg/L	0.46	0.27%
Ni 231.604†	7.4	0.00156	mg/L	0.001090	0.00156	mg/L	0.001090	69.91%
Pb 220.353†	-31.9	-0.00324	mg/L	0.000415	-0.00324	mg/L	0.000415	12.82%
Sb 206.836†	5.1	0.00016	mg/L	0.000747	0.00016	mg/L	0.000747	473.21%
Se 196.026†	37.9	0.02149	mg/L	0.004303	0.02149	mg/L	0.004303	20.02%
Si 288.158†	59740.0	26.65	mg/L	0.094	26.65	mg/L	0.094	0.35%
Sn 189.927†	-21.4	-0.00234	mg/L	0.000636	-0.00234	mg/L	0.000636	27.15%
Sr 421.552†	101082.5	0.1198	mg/L	0.00063	0.1198	mg/L	0.00063	0.53%
Ti 334.903†	1991.2	0.06632	mg/L	0.000868	0.06632	mg/L	0.000868	1.31%
Tl 190.801†	8.0	0.00428	mg/L	0.000860	0.00428	mg/L	0.000860	20.11%
V 292.402†	10432.3	0.05465	mg/L	0.000625	0.05465	mg/L	0.000625	1.14%
Zn 206.200†	-16.3	-0.00586	mg/L	0.000368	-0.00586	mg/L	0.000368	6.28%

Sequence No.: 19
Sample ID: US27 JSPK WMN

Autosampler Location: 318
Date Collected: 5/4/2012 12:25:29 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 JSPK WMN

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 JSPK WMN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2697910.7	100.6	%	0.86				0.85%
ScR 361.383	416638.7	101.5	%	0.98				0.97%
Ag 328.068†	126018.8	0.4788	mg/L	0.00344	0.4788	mg/L	0.00344	0.72%
Al 308.215†	3815.5	2.290	mg/L	0.0295	2.290	mg/L	0.0295	1.29%
As 188.979†	6345.6	2.626	mg/L	0.0101	2.626	mg/L	0.0101	0.38%
B 249.677†	2154.9	0.3326	mg/L	0.00326	0.3326	mg/L	0.00326	0.98%
Ba 233.527†	18090.1	2.108	mg/L	0.0232	2.108	mg/L	0.0232	1.10%
Be 313.042†	361122.0	0.5023	mg/L	0.00839	0.5023	mg/L	0.00839	1.67%
Ca 317.933†	313538.4	28.27	mg/L	0.110	28.27	mg/L	0.110	0.39%
Cd 228.802†	18142.9	0.5547	mg/L	0.00303	0.5547	mg/L	0.00303	0.55%
Co 228.616†	21198.5	0.5109	mg/L	0.00294	0.5109	mg/L	0.00294	0.58%
Cr 267.716†	4650.8	0.5248	mg/L	0.00418	0.5248	mg/L	0.00418	0.80%
Cu 324.752†	123807.5	0.5332	mg/L	0.00305	0.5332	mg/L	0.00305	0.57%
Fe 273.955†	17257.7	11.57	mg/L	0.087	11.57	mg/L	0.087	0.75%
K 766.490†	57404.7	24.63	mg/L	0.441	24.63	mg/L	0.441	1.79%
Mg 279.077†	29642.3	22.21	mg/L	0.214	22.21	mg/L	0.214	0.96%
Mn 257.610†	44152.8	0.7957	mg/L	0.01337	0.7957	mg/L	0.01337	1.68%
Mo 202.031†	75.7	0.00294	mg/L	0.000352	0.00294	mg/L	0.000352	11.97%
Na 589.592†	2169380.2	172.6	mg/L	2.62	172.6	mg/L	2.62	1.52%
Na 330.237†	5678.3	179.5	mg/L	2.27	179.5	mg/L	2.27	1.27%
Ni 231.604†	2371.1	0.5010	mg/L	0.00519	0.5010	mg/L	0.00519	1.04%
Pb 220.353†	25449.9	2.103	mg/L	0.0132	2.103	mg/L	0.0132	0.63%
Sb 206.836†	28.0	0.00108	mg/L	0.000464	0.00108	mg/L	0.000464	42.98%
Se 196.026†	4532.0	2.466	mg/L	0.0184	2.466	mg/L	0.0184	0.74%
Si 288.158†	56422.7	25.18	mg/L	0.330	25.18	mg/L	0.330	1.31%
Sn 189.927†	-34.6	-0.00375	mg/L	0.000199	-0.00375	mg/L	0.000199	5.29%
Sr 421.552†	526329.5	0.6238	mg/L	0.00676	0.6238	mg/L	0.00676	1.08%
Ti 334.903†	1890.2	0.06245	mg/L	0.000883	0.06245	mg/L	0.000883	1.41%
Tl 190.801†	5313.5	2.066	mg/L	0.0109	2.066	mg/L	0.0109	0.53%
V 292.402†	107781.8	0.5773	mg/L	0.00413	0.5773	mg/L	0.00413	0.72%
Zn 206.200†	1477.9	0.5111	mg/L	0.00495	0.5111	mg/L	0.00495	0.97%

Sequence No.: 20
Sample ID: US29 ADUP TWC

Autosampler Location: 319
Date Collected: 5/4/2012 12:29:43 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US29 ADUP TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US29 ADUP TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2241909.1	83.64	%	0.604				0.72%
ScR 361.383	369985.8	90.13	%	1.218				1.35%
Ag 328.068†	205.9	-0.00013	mg/L	0.000234	-0.00013	mg/L	0.000234	180.52%
Al 308.215†	0.7	0.00013	mg/L	0.007722	0.00013	mg/L	0.007722	>999.9%
As 188.979†	17.6	-0.00073	mg/L	0.002940	-0.00073	mg/L	0.002940	404.08%
B 249.677†	10204.8	1.582	mg/L	0.0212	1.582	mg/L	0.0212	1.34%
Ba 233.527†	206.6	0.02385	mg/L	0.000156	0.02385	mg/L	0.000156	0.66%
Be 313.042†	183.2	0.00025	mg/L	0.000033	0.00025	mg/L	0.000033	12.99%
Ca 317.933†	1392258.3	125.5	mg/L	0.92	125.5	mg/L	0.92	0.74%
Cd 228.802†	37.7	0.00196	mg/L	0.000152	0.00196	mg/L	0.000152	7.78%
Co 228.616†	878.0	0.02097	mg/L	0.000186	0.02097	mg/L	0.000186	0.89%
Cr 267.716†	1312.7	0.1330	mg/L	0.00109	0.1330	mg/L	0.00109	0.82%
Cu 324.752†	11621.5	0.04859	mg/L	0.000655	0.04859	mg/L	0.000655	1.35%
Fe 273.955†	4026.1	2.700	mg/L	0.0306	2.700	mg/L	0.0306	1.13%
K 766.490†	309988.4	133.0	mg/L	1.14	133.0	mg/L	1.14	0.86%
Mg 279.077†	454228.4	340.4	mg/L	1.78	340.4	mg/L	1.78	0.52%
Mn 257.610†	17333.7	0.3100	mg/L	0.00516	0.3100	mg/L	0.00516	1.66%
Mo 202.031†	646.3	0.02708	mg/L	0.000283	0.02708	mg/L	0.000283	1.04%
Na 589.592†	Saturated3							
Na 330.237†	104642.1	3312	mg/L	25.8	3312	mg/L	25.8	0.78%
Ni 231.604†	6120.3	1.293	mg/L	0.0148	1.293	mg/L	0.0148	1.14%
Pb 220.353†	-87.4	-0.00715	mg/L	0.000692	-0.00715	mg/L	0.000692	9.68%
Sb 206.836†	90.5	0.02180	mg/L	0.002088	0.02180	mg/L	0.002088	9.58%
Se 196.026†	74.0	0.04030	mg/L	0.003092	0.04030	mg/L	0.003092	7.67%
Si 288.158†	19214.6	8.573	mg/L	0.1242	8.573	mg/L	0.1242	1.45%
Sn 189.927†	-79.6	-0.00709	mg/L	0.000591	-0.00709	mg/L	0.000591	8.33%
Sr 421.552†	2010056.7	2.382	mg/L	0.0173	2.382	mg/L	0.0173	0.72%
Ti 334.903†	150.9	0.00063	mg/L	0.000252	0.00063	mg/L	0.000252	40.24%
Tl 190.801†	19.5	0.00793	mg/L	0.001068	0.00793	mg/L	0.001068	13.48%
V 292.402†	192.6	0.00140	mg/L	0.000105	0.00140	mg/L	0.000105	7.46%
Zn 206.200†	-0.8	-0.00188	mg/L	0.001319	-0.00188	mg/L	0.001319	70.31%

Sequence No.: 21
Sample ID: US29 A TWC

Autosampler Location: 320
Date Collected: 5/4/2012 12:33:55 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US29 A TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US29 A TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2260925.7	84.35	%	0.719				0.85%
ScR 361.383	371602.1	90.52	%	0.413				0.46%
Ag 328.068†	192.3	-0.00017	mg/L	0.000209	-0.00017	mg/L	0.000209	122.41%
Al 308.215†	-1.9	-0.00141	mg/L	0.002748	-0.00141	mg/L	0.002748	195.51%
As 188.979†	16.8	-0.00099	mg/L	0.002174	-0.00099	mg/L	0.002174	219.93%
B 249.677†	10121.8	1.569	mg/L	0.0102	1.569	mg/L	0.0102	0.65%
Ba 233.527†	197.6	0.02280	mg/L	0.000489	0.02280	mg/L	0.000489	2.15%
Be 313.042†	139.1	0.00019	mg/L	0.000020	0.00019	mg/L	0.000020	10.42%
Ca 317.933†	1377028.6	124.2	mg/L	0.34	124.2	mg/L	0.34	0.28%
Cd 228.802†	42.8	0.00210	mg/L	0.000087	0.00210	mg/L	0.000087	4.14%
Co 228.616†	866.0	0.02068	mg/L	0.000367	0.02068	mg/L	0.000367	1.78%
Cr 267.716†	1310.3	0.1329	mg/L	0.00084	0.1329	mg/L	0.00084	0.63%
Cu 324.752†	11430.5	0.04778	mg/L	0.000447	0.04778	mg/L	0.000447	0.93%
Fe 273.955†	3936.2	2.640	mg/L	0.0106	2.640	mg/L	0.0106	0.40%
K 766.490†	307051.3	131.7	mg/L	0.53	131.7	mg/L	0.53	0.40%
Mg 279.077†	449630.1	336.9	mg/L	0.26	336.9	mg/L	0.26	0.08%
Mn 257.610†	17068.6	0.3053	mg/L	0.00222	0.3053	mg/L	0.00222	0.73%
Mo 202.031†	634.1	0.02655	mg/L	0.000221	0.02655	mg/L	0.000221	0.83%
Na 589.592†	Saturated3							
Na 330.237†	106556.2	3373	mg/L	45.3	3373	mg/L	45.3	1.34%
Ni 231.604†	5996.1	1.267	mg/L	0.0064	1.267	mg/L	0.0064	0.50%
Pb 220.353†	-95.6	-0.00783	mg/L	0.000450	-0.00783	mg/L	0.000450	5.75%
Sb 206.836†	86.6	0.02078	mg/L	0.001021	0.02078	mg/L	0.001021	4.91%
Se 196.026†	81.3	0.04425	mg/L	0.004012	0.04425	mg/L	0.004012	9.07%
Si 288.158†	18984.1	8.470	mg/L	0.0892	8.470	mg/L	0.0892	1.05%
Sn 189.927†	-83.3	-0.00763	mg/L	0.001147	-0.00763	mg/L	0.001147	15.03%
Sr 421.552†	1984667.4	2.352	mg/L	0.0097	2.352	mg/L	0.0097	0.41%
Ti 334.903†	126.4	-0.00015	mg/L	0.000198	-0.00015	mg/L	0.000198	135.36%
Tl 190.801†	25.5	0.01026	mg/L	0.003519	0.01026	mg/L	0.003519	34.31%
V 292.402†	222.3	0.00157	mg/L	0.000282	0.00157	mg/L	0.000282	17.98%
Zn 206.200†	-1.0	-0.00191	mg/L	0.000579	-0.00191	mg/L	0.000579	30.26%

Sequence No.: 22
Sample ID: US29 ASPK TWC

Autosampler Location: 321
Date Collected: 5/4/2012 12:38:07 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US29 ASPK TWC

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: US29 ASPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2265623.8	84.52	%	0.651				0.77%
ScR 361.383	376400.4	91.69	%	0.815				0.89%
Ag 328.068†	155887.7	0.5916	mg/L	0.00119	0.5916	mg/L	0.00119	0.20%
Al 308.215†	3491.8	2.096	mg/L	0.0192	2.096	mg/L	0.0192	0.91%
As 188.979†	5638.7	2.325	mg/L	0.0199	2.325	mg/L	0.0199	0.86%
B 249.677†	10330.5	1.600	mg/L	0.0147	1.600	mg/L	0.0147	0.92%
Ba 233.527†	17708.2	2.064	mg/L	0.0173	2.064	mg/L	0.0173	0.84%
Be 313.042†	343557.3	0.4779	mg/L	0.00439	0.4779	mg/L	0.00439	0.92%
Ca 317.933†	1497869.4	135.1	mg/L	0.60	135.1	mg/L	0.60	0.44%
Cd 228.802†	19477.2	0.5981	mg/L	0.00393	0.5981	mg/L	0.00393	0.66%
Co 228.616†	21091.2	0.5082	mg/L	0.00317	0.5082	mg/L	0.00317	0.62%
Cr 267.716†	5798.8	0.6397	mg/L	0.00543	0.6397	mg/L	0.00543	0.85%
Cu 324.752†	139565.9	0.5989	mg/L	0.00198	0.5989	mg/L	0.00198	0.33%
Fe 273.955†	6866.3	4.603	mg/L	0.0337	4.603	mg/L	0.0337	0.73%
K 766.490†	332416.7	142.6	mg/L	1.12	142.6	mg/L	1.12	0.78%
Mg 279.077†	463738.2	347.5	mg/L	1.52	347.5	mg/L	1.52	0.44%
Mn 257.610†	43322.9	0.7787	mg/L	0.00800	0.7787	mg/L	0.00800	1.03%
Mo 202.031†	630.2	0.02619	mg/L	0.000156	0.02619	mg/L	0.000156	0.60%
Na 589.592†	Saturated3							
Na 330.237†	103671.9	3281	mg/L	15.0	3281	mg/L	15.0	0.46%
Ni 231.604†	8193.5	1.731	mg/L	0.0166	1.731	mg/L	0.0166	0.96%
Pb 220.353†	23720.6	1.960	mg/L	0.0143	1.960	mg/L	0.0143	0.73%
Sb 206.836†	103.9	0.02026	mg/L	0.000962	0.02026	mg/L	0.000962	4.75%
Se 196.026†	4302.4	2.340	mg/L	0.0115	2.340	mg/L	0.0115	0.49%
Si 288.158†	19805.7	8.839	mg/L	0.0715	8.839	mg/L	0.0715	0.81%
Sn 189.927†	-91.7	-0.00838	mg/L	0.000586	-0.00838	mg/L	0.000586	7.00%
Sr 421.552†	2415815.4	2.863	mg/L	0.0238	2.863	mg/L	0.0238	0.83%
Ti 334.903†	145.3	0.00000	mg/L	0.000263	0.00000	mg/L	0.000263	>999.9%
Tl 190.801†	4532.6	1.761	mg/L	0.0172	1.761	mg/L	0.0172	0.98%
V 292.402†	94955.6	0.5101	mg/L	0.00263	0.5101	mg/L	0.00263	0.51%
Zn 206.200†	1398.0	0.4821	mg/L	0.00429	0.4821	mg/L	0.00429	0.89%

Sequence No.: 23
Sample ID: US29 MBSPK TWC

Autosampler Location: 322
Date Collected: 5/4/2012 12:41:51 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US29 MBSPK TWC

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US29 MBSPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2733161.1	102.0	%	0.91				0.89%
ScR 361.383	416628.1	101.5	%	1.29				1.27%
Ag 328.068†	139936.8	0.5319	mg/L	0.00372	0.5319	mg/L	0.00372	0.70%
Al 308.215†	3359.6	2.016	mg/L	0.0173	2.016	mg/L	0.0173	0.86%
As 188.979†	4969.3	2.056	mg/L	0.0196	2.056	mg/L	0.0196	0.95%
B 249.677†	38.4	0.00447	mg/L	0.001724	0.00447	mg/L	0.001724	38.56%
Ba 233.527†	17712.0	2.064	mg/L	0.0261	2.064	mg/L	0.0261	1.26%
Be 313.042†	360829.9	0.5019	mg/L	0.00413	0.5019	mg/L	0.00413	0.82%
Ca 317.933†	111480.5	10.05	mg/L	0.029	10.05	mg/L	0.029	0.29%
Cd 228.802†	17046.5	0.5227	mg/L	0.00236	0.5227	mg/L	0.00236	0.45%
Co 228.616†	21090.3	0.5084	mg/L	0.00313	0.5084	mg/L	0.00313	0.62%
Cr 267.716†	4619.1	0.5217	mg/L	0.00576	0.5217	mg/L	0.00576	1.10%
Cu 324.752†	118870.5	0.5113	mg/L	0.00354	0.5113	mg/L	0.00354	0.69%
Fe 273.955†	3000.8	2.010	mg/L	0.0256	2.010	mg/L	0.0256	1.27%
K 766.490†	23497.5	10.08	mg/L	0.079	10.08	mg/L	0.079	0.78%
Mg 279.077†	13793.3	10.34	mg/L	0.108	10.34	mg/L	0.108	1.05%
Mn 257.610†	27896.1	0.5030	mg/L	0.00609	0.5030	mg/L	0.00609	1.21%
Mo 202.031†	29.1	0.00115	mg/L	0.000365	0.00115	mg/L	0.000365	31.88%
Na 589.592†	140446.2	11.18	mg/L	0.292	11.18	mg/L	0.292	2.61%
Na 330.237†	359.1	11.19	mg/L	0.254	11.19	mg/L	0.254	2.27%
Ni 231.604†	2324.6	0.4912	mg/L	0.00629	0.4912	mg/L	0.00629	1.28%
Pb 220.353†	24821.5	2.051	mg/L	0.0172	2.051	mg/L	0.0172	0.84%
Sb 206.836†	18.1	-0.00043	mg/L	0.001435	-0.00043	mg/L	0.001435	330.98%
Se 196.026†	3764.7	2.048	mg/L	0.0221	2.048	mg/L	0.0221	1.08%
Si 288.158†	114.0	0.05283	mg/L	0.004366	0.05283	mg/L	0.004366	8.26%
Sn 189.927†	-12.2	-0.00129	mg/L	0.000166	-0.00129	mg/L	0.000166	12.90%
Sr 421.552†	422754.1	0.5011	mg/L	0.00321	0.5011	mg/L	0.00321	0.64%
Ti 334.903†	8.8	-0.00017	mg/L	0.000321	-0.00017	mg/L	0.000321	186.57%
Tl 190.801†	5267.9	2.047	mg/L	0.0180	2.047	mg/L	0.0180	0.88%
V 292.402†	96314.9	0.5171	mg/L	0.00444	0.5171	mg/L	0.00444	0.86%
Zn 206.200†	1459.4	0.5049	mg/L	0.00342	0.5049	mg/L	0.00342	0.68%

Sequence No.: 24
Sample ID: US27 MB2SPK WMN

Autosampler Location: 323
Date Collected: 5/4/2012 12:45:48 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: US27 MB2SPK WMN

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: US27 MB2SPK WMN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2749494.1	102.6	%	0.84				0.82%
ScR 361.383	414265.1	100.9	%	0.85				0.84%
Ag 328.068†	138598.6	0.5268	mg/L	0.00301	0.5268	mg/L	0.00301	0.57%
Al 308.215†	3491.5	2.096	mg/L	0.0222	2.096	mg/L	0.0222	1.06%
As 188.979†	5267.8	2.180	mg/L	0.0122	2.180	mg/L	0.0122	0.56%
B 249.677†	21.6	0.00182	mg/L	0.000660	0.00182	mg/L	0.000660	36.19%
Ba 233.527†	18252.3	2.127	mg/L	0.0176	2.127	mg/L	0.0176	0.83%
Be 313.042†	363140.0	0.5051	mg/L	0.00666	0.5051	mg/L	0.00666	1.32%
Ca 317.933†	113851.8	10.27	mg/L	0.113	10.27	mg/L	0.113	1.10%
Cd 228.802†	18184.6	0.5577	mg/L	0.00174	0.5577	mg/L	0.00174	0.31%
Co 228.616†	21673.3	0.5224	mg/L	0.00164	0.5224	mg/L	0.00164	0.31%
Cr 267.716†	4640.1	0.5240	mg/L	0.00370	0.5240	mg/L	0.00370	0.71%
Cu 324.752†	119507.2	0.5141	mg/L	0.00444	0.5141	mg/L	0.00444	0.86%
Fe 273.955†	3031.6	2.031	mg/L	0.0271	2.031	mg/L	0.0271	1.34%
K 766.490†	24207.6	10.39	mg/L	0.164	10.39	mg/L	0.164	1.58%
Mg 279.077†	14127.3	10.59	mg/L	0.072	10.59	mg/L	0.072	0.68%
Mn 257.610†	28864.7	0.5205	mg/L	0.00350	0.5205	mg/L	0.00350	0.67%
Mo 202.031†	26.0	0.00100	mg/L	0.000145	0.00100	mg/L	0.000145	14.45%
Na 589.592†	145550.5	11.58	mg/L	0.225	11.58	mg/L	0.225	1.94%
Na 330.237†	367.9	11.47	mg/L	0.287	11.47	mg/L	0.287	2.50%
Ni 231.604†	2427.4	0.5129	mg/L	0.00438	0.5129	mg/L	0.00438	0.85%
Pb 220.353†	26174.1	2.163	mg/L	0.0173	2.163	mg/L	0.0173	0.80%
Sb 206.836†	9.2	-0.00280	mg/L	0.001352	-0.00280	mg/L	0.001352	48.33%
Se 196.026†	4315.1	2.347	mg/L	0.0086	2.347	mg/L	0.0086	0.36%
Si 288.158†	-5.3	-0.00025	mg/L	0.000891	-0.00025	mg/L	0.000891	355.41%
Sn 189.927†	-13.8	-0.00149	mg/L	0.000165	-0.00149	mg/L	0.000165	11.06%
Sr 421.552†	430186.1	0.5099	mg/L	0.00679	0.5099	mg/L	0.00679	1.33%
Ti 334.903†	9.6	-0.00015	mg/L	0.000092	-0.00015	mg/L	0.000092	60.81%
Tl 190.801†	5533.1	2.150	mg/L	0.0102	2.150	mg/L	0.0102	0.47%
V 292.402†	97729.9	0.5247	mg/L	0.00633	0.5247	mg/L	0.00633	1.21%
Zn 206.200†	1511.4	0.5229	mg/L	0.00380	0.5229	mg/L	0.00380	0.73%

Sequence No.: 25
Sample ID: CV 4

Dilution: 1X

Autosampler Location: 7
Date Collected: 5/4/2012 12:49:45 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2684192.8	100.1	%	0.92				0.92%
ScR 361.383	402908.9	98.15	%	0.922				0.94%
Ag 328.068†	273963.2	1.041	mg/L	0.0078	1.041	mg/L	0.0078	0.75%
Al 308.215†	3401.5	2.022	mg/L	0.0316	2.022	mg/L	0.0316	1.56%
As 188.979†	4872.7	2.022	mg/L	0.0189	2.022	mg/L	0.0189	0.94%
B 249.677†	6611.2	1.023	mg/L	0.0168	1.023	mg/L	0.0168	1.65%
Ba 233.527†	8845.9	1.031	mg/L	0.0148	1.031	mg/L	0.0148	1.44%
Be 313.042†	707819.0	0.9846	mg/L	0.00927	0.9846	mg/L	0.00927	0.94%
Ca 317.933†	23055.8	2.079	mg/L	0.0328	2.079	mg/L	0.0328	1.58%
Cd 228.802†	33592.8	1.037	mg/L	0.0135	1.037	mg/L	0.0135	1.30%
Co 228.616†	41548.9	1.001	mg/L	0.0125	1.001	mg/L	0.0125	1.25%
Cr 267.716†	9266.5	1.047	mg/L	0.0175	1.047	mg/L	0.0175	1.67%
Cu 324.752†	238844.9	1.027	mg/L	0.0142	1.027	mg/L	0.0142	1.38%
Fe 273.955†	3021.2	2.022	mg/L	0.0264	2.022	mg/L	0.0264	1.31%
K 766.490†	47308.9	20.30	mg/L	0.234	20.30	mg/L	0.234	1.15%
Mg 279.077†	2711.4	2.037	mg/L	0.0304	2.037	mg/L	0.0304	1.49%
Mn 257.610†	54324.6	0.9790	mg/L	0.01012	0.9790	mg/L	0.01012	1.03%
Mo 202.031†	22513.0	1.017	mg/L	0.0090	1.017	mg/L	0.0090	0.88%
Na 589.592†	642261.4	51.11	mg/L	0.518	51.11	mg/L	0.518	1.01%
Na 330.237†	1669.4	52.87	mg/L	0.742	52.87	mg/L	0.742	1.40%
Ni 231.604†	4795.4	1.015	mg/L	0.0118	1.015	mg/L	0.0118	1.17%
Pb 220.353†	25181.6	2.082	mg/L	0.0201	2.082	mg/L	0.0201	0.97%
Sb 206.836†	7944.7	2.080	mg/L	0.0241	2.080	mg/L	0.0241	1.16%
Se 196.026†	3708.5	2.017	mg/L	0.0141	2.017	mg/L	0.0141	0.70%
Si 288.158†	4733.2	2.116	mg/L	0.0363	2.116	mg/L	0.0363	1.71%
Sn 189.927†	7486.2	1.015	mg/L	0.0091	1.015	mg/L	0.0091	0.89%
Sr 421.552†	851738.6	1.009	mg/L	0.0087	1.009	mg/L	0.0087	0.86%
Ti 334.903†	29060.7	0.9755	mg/L	0.00886	0.9755	mg/L	0.00886	0.91%
Tl 190.801†	5176.0	2.012	mg/L	0.0195	2.012	mg/L	0.0195	0.97%
V 292.402†	190958.6	1.026	mg/L	0.0173	1.026	mg/L	0.0173	1.69%
Zn 206.200†	3062.3	1.059	mg/L	0.0148	1.059	mg/L	0.0148	1.40%

Sequence No.: 26
Sample ID: CB 4
Dilution: 1X

Autosampler Location: 1
Date Collected: 5/4/2012 12:53:45 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2735807.4	102.1	%	0.29				0.28%
ScR 361.383	412772.3	100.5	%	0.46				0.45%
Ag 328.068†	53.4	0.00020	mg/L	0.000118	0.00020	mg/L	0.000118	58.31%
Al 308.215†	11.6	0.00697	mg/L	0.004390	0.00697	mg/L	0.004390	62.98%
As 188.979†	3.6	0.00147	mg/L	0.000497	0.00147	mg/L	0.000497	33.78%
B 249.677†	17.2	0.00266	mg/L	0.000900	0.00266	mg/L	0.000900	33.78%
Ba 233.527†	0.4	0.00004	mg/L	0.000201	0.00004	mg/L	0.000201	491.99%
Be 313.042†	65.4	0.00009	mg/L	0.000071	0.00009	mg/L	0.000071	78.23%
Ca 317.933†	22.9	0.00207	mg/L	0.001043	0.00207	mg/L	0.001043	50.50%
Cd 228.802†	8.3	0.00025	mg/L	0.000069	0.00025	mg/L	0.000069	27.34%
Co 228.616†	-3.9	-0.00009	mg/L	0.000102	-0.00009	mg/L	0.000102	108.71%
Cr 267.716†	4.2	0.00047	mg/L	0.000107	0.00047	mg/L	0.000107	22.57%
Cu 324.752†	156.7	0.00067	mg/L	0.000145	0.00067	mg/L	0.000145	21.47%
Fe 273.955†	1.9	0.00125	mg/L	0.001360	0.00125	mg/L	0.001360	108.38%
K 766.490†	101.3	0.04348	mg/L	0.013059	0.04348	mg/L	0.013059	30.03%
Mg 279.077†	6.3	0.00469	mg/L	0.000458	0.00469	mg/L	0.000458	9.76%
Mn 257.610†	14.4	0.00026	mg/L	0.000064	0.00026	mg/L	0.000064	24.73%
Mo 202.031†	7.1	0.00032	mg/L	0.000275	0.00032	mg/L	0.000275	85.20%
Na 589.592†	3978.3	0.3166	mg/L	0.00858	0.3166	mg/L	0.00858	2.71%
Na 330.237†	4.9	0.1567	mg/L	0.33080	0.1567	mg/L	0.33080	211.17%
Ni 231.604†	4.2	0.00088	mg/L	0.000488	0.00088	mg/L	0.000488	55.42%
Pb 220.353†	-6.0	-0.00050	mg/L	0.000619	-0.00050	mg/L	0.000619	124.15%
Sb 206.836†	-2.4	-0.00063	mg/L	0.000650	-0.00063	mg/L	0.000650	103.93%
Se 196.026†	2.9	0.00155	mg/L	0.003380	0.00155	mg/L	0.003380	217.63%
Si 288.158†	21.4	0.00956	mg/L	0.003005	0.00956	mg/L	0.003005	31.42%
Sn 189.927†	3.5	0.00047	mg/L	0.000029	0.00047	mg/L	0.000029	6.17%
Sr 421.552†	142.4	0.00017	mg/L	0.000099	0.00017	mg/L	0.000099	58.90%
Ti 334.903†	8.3	0.00028	mg/L	0.000859	0.00028	mg/L	0.000859	309.38%
Tl 190.801†	-1.0	-0.00038	mg/L	0.000075	-0.00038	mg/L	0.000075	19.91%
V 292.402†	-21.9	-0.00012	mg/L	0.000129	-0.00012	mg/L	0.000129	111.84%
Zn 206.200†	-0.3	-0.00012	mg/L	0.000459	-0.00012	mg/L	0.000459	399.05%

User canceled analysis.

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Analysis Begun

Start Time: 5/4/2012 12:58:00 PM **Plasma On Time: 5/4/2012 9:24:35 AM**
Logged In Analyst: metals **Technique: ICP Continuous**
Spectrometer Model: Optima 7300 DV, S/N 077C8121202 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\metals\Sample Information\0504.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

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Sequence No.: 27 **Autosampler Location: 324**
Sample ID: ~~CRI~~ 222222 **Date Collected: 5/4/2012 12:58:01 PM**
Data Type: Original

Dilution: 1X 5.4

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2615410.9	97.57	%	0.263				0.27%
ScR 361.383	411356.9	100.2	%	0.11				0.11%
Ag 328.068†	844.8	0.00321	mg/L	0.000068	0.00321	mg/L	0.000068	2.11%
Al 308.215†	104.4	0.06289	mg/L	0.007504	0.06289	mg/L	0.007504	11.93%
As 188.979†	127.6	0.05284	mg/L	0.000915	0.05284	mg/L	0.000915	1.73%
B 249.677†	141.5	0.02193	mg/L	0.000252	0.02193	mg/L	0.000252	1.15%
Ba 233.527†	26.8	0.00312	mg/L	0.000276	0.00312	mg/L	0.000276	8.87%
Be 313.042†	733.7	0.00102	mg/L	0.000013	0.00102	mg/L	0.000013	1.28%
Ca 317.933†	572.2	0.05159	mg/L	0.001244	0.05159	mg/L	0.001244	2.41%
Cd 228.802†	96.0	0.00281	mg/L	0.000163	0.00281	mg/L	0.000163	5.81%
Co 228.616†	123.5	0.00297	mg/L	0.000018	0.00297	mg/L	0.000018	0.62%
Cr 267.716†	51.4	0.00581	mg/L	0.000328	0.00581	mg/L	0.000328	5.65%
Cu 324.752†	707.5	0.00304	mg/L	0.000064	0.00304	mg/L	0.000064	2.10%
Fe 273.955†	74.2	0.04978	mg/L	0.001079	0.04978	mg/L	0.001079	2.17%
K 766.490†	1190.2	0.5106	mg/L	0.01010	0.5106	mg/L	0.01010	1.98%
Mg 279.077†	72.9	0.05460	mg/L	0.005231	0.05460	mg/L	0.005231	9.58%
Mn 257.610†	67.7	0.00123	mg/L	0.000080	0.00123	mg/L	0.000080	6.54%
Mo 202.031†	117.4	0.00530	mg/L	0.000151	0.00530	mg/L	0.000151	2.86%
Na 589.592†	9775.4	0.7778	mg/L	0.00792	0.7778	mg/L	0.00792	1.02%
Na 330.237†	24.3	0.7679	mg/L	0.39850	0.7679	mg/L	0.39850	51.90%
Ni 231.604†	51.3	0.01090	mg/L	0.000117	0.01090	mg/L	0.000117	1.08%
Pb 220.353†	255.3	0.02110	mg/L	0.000410	0.02110	mg/L	0.000410	1.94%
Sb 206.836†	204.2	0.05349	mg/L	0.000590	0.05349	mg/L	0.000590	1.10%
Se 196.026†	98.1	0.05338	mg/L	0.000990	0.05338	mg/L	0.000990	1.85%
Si 288.158†	159.0	0.07097	mg/L	0.003754	0.07097	mg/L	0.003754	5.29%
Sn 189.927†	77.2	0.01050	mg/L	0.000440	0.01050	mg/L	0.000440	4.19%
Sr 421.552†	929.2	0.00110	mg/L	0.000023	0.00110	mg/L	0.000023	2.07%
Ti 334.903†	138.2	0.00464	mg/L	0.000920	0.00464	mg/L	0.000920	19.83%
Tl 190.801†	133.3	0.05186	mg/L	0.001124	0.05186	mg/L	0.001124	2.17%
V 292.402†	576.2	0.00310	mg/L	0.000067	0.00310	mg/L	0.000067	2.16%
Zn 206.200†	27.4	0.00949	mg/L	0.000937	0.00949	mg/L	0.000937	9.88%

Sequence No.: 28
Sample ID: ~~ICSA~~ ZZZZZZ
Dilution: 1X aw 5.4

Autosampler Location: 325
Date Collected: 5/4/2012 1:02:14 PM
Data Type: Original

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2566125.3	95.73	%	0.050				0.05%
ScR 361.383	405712.9	98.83	%	0.836				0.85%
Ag 328.068†	-123.1	-0.00114	mg/L	0.000230	-0.00114	mg/L	0.000230	20.19%
Al 308.215†	333537.1	201.2	mg/L	1.88	201.2	mg/L	1.88	0.94%
As 188.979†	4.8	-0.01391	mg/L	0.003268	-0.01391	mg/L	0.003268	23.50%
B 249.677†	19.6	0.00304	mg/L	0.003545	0.00304	mg/L	0.003545	116.44%
Ba 233.527†	113.9	0.00322	mg/L	0.000514	0.00322	mg/L	0.000514	15.98%
Be 313.042†	65.7	0.00007	mg/L	0.000015	0.00007	mg/L	0.000015	21.33%
Ca 317.933†	1122761.6	101.2	mg/L	0.15	101.2	mg/L	0.15	0.15%
Cd 228.802†	88.4	0.00087	mg/L	0.000240	0.00087	mg/L	0.000240	27.49%
Co 228.616†	100.4	0.00242	mg/L	0.000013	0.00242	mg/L	0.000013	0.53%
Cr 267.716†	-25.7	-0.00011	mg/L	0.001262	-0.00011	mg/L	0.001262	>999.9%
Cu 324.752†	-3504.6	-0.00138	mg/L	0.000186	-0.00138	mg/L	0.000186	13.45%
Fe 273.955†	293886.7	197.1	mg/L	1.86	197.1	mg/L	1.86	0.94%
K 766.490†	124.9	0.05356	mg/L	0.004731	0.05356	mg/L	0.004731	8.83%
Mg 279.077†	131756.4	98.62	mg/L	0.611	98.62	mg/L	0.611	0.62%
Mn 257.610†	50.8	0.00003	mg/L	0.000213	0.00003	mg/L	0.000213	616.42%
Mo 202.031†	139.5	0.00458	mg/L	0.000127	0.00458	mg/L	0.000127	2.78%
Na 589.592†	3309.7	0.2634	mg/L	0.00593	0.2634	mg/L	0.00593	2.25%
Na 330.237†	28.2	0.2339	mg/L	0.23401	0.2339	mg/L	0.23401	100.03%
Ni 231.604†	-2.3	-0.00038	mg/L	0.000655	-0.00038	mg/L	0.000655	174.03%
Pb 220.353†	-283.0	-0.00840	mg/L	0.000294	-0.00840	mg/L	0.000294	3.50%
Sb 206.836†	410.7	0.01906	mg/L	0.001703	0.01906	mg/L	0.001703	8.93%
Se 196.026†	-39.8	0.00095	mg/L	0.004373	0.00095	mg/L	0.004373	462.11%
Si 288.158†	-23.3	-0.01038	mg/L	0.003966	-0.01038	mg/L	0.003966	38.20%
Sn 189.927†	-122.1	-0.01350	mg/L	0.001549	-0.01350	mg/L	0.001549	11.47%
Sr 421.552†	8712.8	0.01033	mg/L	0.000078	0.01033	mg/L	0.000078	0.76%
Ti 334.903†	92.8	-0.00041	mg/L	0.000212	-0.00041	mg/L	0.000212	51.14%
Tl 190.801†	-35.4	0.01218	mg/L	0.006985	0.01218	mg/L	0.006985	57.33%
V 292.402†	5561.4	0.00592	mg/L	0.000476	0.00592	mg/L	0.000476	8.03%
Zn 206.200†	-37.0	-0.00542	mg/L	0.000452	-0.00542	mg/L	0.000452	8.35%

Analysis Begun

Start Time: 5/4/2012 1:06:31 PM
Logged In Analyst: metals
Spectrometer Model: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 5/4/2012 9:24:35 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\metals\Sample Information\0504b.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

Sequence No.: 1
Sample ID: CV 5
Dilution: 1X
Autosampler Location: 7
Date Collected: 5/4/2012 1:06:32 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	210.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2706922.8	101.0	%	0.56				0.55%
ScR 361.383	408063.3	99.40	%	0.702				0.71%
Ag 328.068†	274543.3	1.044	mg/L	0.0074	1.044	mg/L	0.0074	0.71%
Al 308.215†	3401.1	2.021	mg/L	0.0210	2.021	mg/L	0.0210	1.04%
As 188.979†	4890.0	2.029	mg/L	0.0130	2.029	mg/L	0.0130	0.64%
B 249.677†	6581.3	1.018	mg/L	0.0117	1.018	mg/L	0.0117	1.15%
Ba 233.527†	8847.4	1.031	mg/L	0.0083	1.031	mg/L	0.0083	0.81%
Be 313.042†	710902.0	0.9888	mg/L	0.00843	0.9888	mg/L	0.00843	0.85%
Ca 317.933†	21759.5	1.962	mg/L	0.0016	1.962	mg/L	0.0016	0.08%
Cd 228.802†	33451.2	1.033	mg/L	0.0093	1.033	mg/L	0.0093	0.90%
Co 228.616†	41434.1	0.9980	mg/L	0.00773	0.9980	mg/L	0.00773	0.77%
Cr 267.716†	9234.2	1.044	mg/L	0.0115	1.044	mg/L	0.0115	1.10%
Cu 324.752†	237635.8	1.022	mg/L	0.0069	1.022	mg/L	0.0069	0.68%
Fe 273.955†	3030.7	2.028	mg/L	0.0120	2.028	mg/L	0.0120	0.59%
K 766.490†	47249.9	20.27	mg/L	0.201	20.27	mg/L	0.201	0.99%
Mg 279.077†	2703.4	2.031	mg/L	0.0232	2.031	mg/L	0.0232	1.14%
Mn 257.610†	54424.7	0.9808	mg/L	0.00725	0.9808	mg/L	0.00725	0.74%
Mo 202.031†	22550.1	1.019	mg/L	0.0078	1.019	mg/L	0.0078	0.77%
Na 589.592†	635789.6	50.59	mg/L	0.419	50.59	mg/L	0.419	0.83%
Na 330.237†	1657.5	52.50	mg/L	0.306	52.50	mg/L	0.306	0.58%
Ni 231.604†	4805.7	1.017	mg/L	0.0078	1.017	mg/L	0.0078	0.77%
Pb 220.353†	25208.9	2.084	mg/L	0.0148	2.084	mg/L	0.0148	0.71%
Sb 206.836†	7947.5	2.080	mg/L	0.0104	2.080	mg/L	0.0104	0.50%
Se 196.026†	3714.3	2.020	mg/L	0.0145	2.020	mg/L	0.0145	0.72%
Si 288.158†	4687.5	2.095	mg/L	0.0286	2.095	mg/L	0.0286	1.36%
Sn 189.927†	7494.4	1.016	mg/L	0.0069	1.016	mg/L	0.0069	0.68%
Sr 421.552†	852120.4	1.010	mg/L	0.0078	1.010	mg/L	0.0078	0.77%
Ti 334.903†	29112.6	0.9772	mg/L	0.00721	0.9772	mg/L	0.00721	0.74%
Tl 190.801†	5182.7	2.015	mg/L	0.0171	2.015	mg/L	0.0171	0.85%
V 292.402†	190022.3	1.021	mg/L	0.0055	1.021	mg/L	0.0055	0.54%
Zn 206.200†	3063.9	1.059	mg/L	0.0119	1.059	mg/L	0.0119	1.12%

Sequence No.: 2
Sample ID: CB 5
Dilution: 1X

Autosampler Location: 1
Date Collected: 5/4/2012 1:10:33 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2720118.9	101.5	%	0.20				0.20%
ScR 361.383	417178.7	101.6	%	0.76				0.75%
Ag 328.068†	29.7	0.00011	mg/L	0.000170	0.00011	mg/L	0.000170	150.79%
Al 308.215†	14.8	0.00893	mg/L	0.002359	0.00893	mg/L	0.002359	26.43%
As 188.979†	0.8	0.00032	mg/L	0.000529	0.00032	mg/L	0.000529	166.29%
B 249.677†	14.3	0.00222	mg/L	0.001235	0.00222	mg/L	0.001235	55.55%
Ba 233.527†	-3.0	-0.00035	mg/L	0.000410	-0.00035	mg/L	0.000410	116.38%
Be 313.042†	6.0	0.00001	mg/L	0.000050	0.00001	mg/L	0.000050	587.95%
Ca 317.933†	0.1	0.00001	mg/L	0.000411	0.00001	mg/L	0.000411	>999.9%
Cd 228.802†	6.7	0.00021	mg/L	0.000058	0.00021	mg/L	0.000058	28.19%
Co 228.616†	-13.6	-0.00033	mg/L	0.000134	-0.00033	mg/L	0.000134	41.03%
Cr 267.716†	4.3	0.00049	mg/L	0.000369	0.00049	mg/L	0.000369	75.24%
Cu 324.752†	154.5	0.00066	mg/L	0.000067	0.00066	mg/L	0.000067	10.15%
Fe 273.955†	3.5	0.00237	mg/L	0.000973	0.00237	mg/L	0.000973	41.03%
K 766.490†	71.0	0.03045	mg/L	0.022228	0.03045	mg/L	0.022228	73.00%
Mg 279.077†	4.6	0.00343	mg/L	0.005018	0.00343	mg/L	0.005018	146.35%
Mn 257.610†	9.8	0.00018	mg/L	0.000063	0.00018	mg/L	0.000063	36.01%
Mo 202.031†	9.7	0.00044	mg/L	0.000167	0.00044	mg/L	0.000167	38.22%
Na 589.592†	2170.3	0.1727	mg/L ✓	0.00478	0.1727	mg/L	0.00478	2.77%
Na 330.237†	0.3	0.00850	mg/L	0.527081	0.00850	mg/L	0.527081	>999.9%
Ni 231.604†	3.8	0.00080	mg/L	0.000605	0.00080	mg/L	0.000605	75.19%
Pb 220.353†	-10.7	-0.00088	mg/L	0.000428	-0.00088	mg/L	0.000428	48.55%
Sb 206.836†	4.2	0.00110	mg/L	0.000923	0.00110	mg/L	0.000923	84.04%
Se 196.026†	7.2	0.00390	mg/L	0.000576	0.00390	mg/L	0.000576	14.78%
Si 288.158†	6.0	0.00266	mg/L	0.004242	0.00266	mg/L	0.004242	159.67%
Sn 189.927†	4.3	0.00059	mg/L	0.000203	0.00059	mg/L	0.000203	34.69%
Sr 421.552†	31.1	0.00004	mg/L	0.000021	0.00004	mg/L	0.000021	56.15%
Ti 334.903†	8.9	0.00030	mg/L	0.000406	0.00030	mg/L	0.000406	135.33%
Tl 190.801†	0.2	0.00007	mg/L	0.000780	0.00007	mg/L	0.000780	>999.9%
V 292.402†	-42.0	-0.00022	mg/L	0.000038	-0.00022	mg/L	0.000038	17.19%
Zn 206.200†	-1.3	-0.00044	mg/L	0.000593	-0.00044	mg/L	0.000593	133.76%

Sequence No.: 3
Sample ID: CRI

Autosampler Location: 324
Date Collected: 5/4/2012 1:14:45 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2722498.3	101.6	%	0.60				0.59%
ScR 361.383	412292.5	100.4	%	0.20				0.20%
Ag 328.068†	843.5	0.00321	mg/L	0.000138	0.00321	mg/L	0.000138	4.30%
Al 308.215†	97.6	0.05879	mg/L	0.002853	0.05879	mg/L	0.002853	4.85%
As 188.979†	129.1	0.05343	mg/L	0.002152	0.05343	mg/L	0.002152	4.03%
B 249.677†	133.8	0.02073	mg/L	0.000813	0.02073	mg/L	0.000813	3.92%
Ba 233.527†	24.4	0.00284	mg/L	0.000037	0.00284	mg/L	0.000037	1.29%
Be 313.042†	717.9	0.00100	mg/L	0.000036	0.00100	mg/L	0.000036	3.56%
Ca 317.933†	568.2	0.05124	mg/L	0.000844	0.05124	mg/L	0.000844	1.65%
Cd 228.802†	80.8	0.00234	mg/L	0.000141	0.00234	mg/L	0.000141	6.05%
Co 228.616†	119.2	0.00287	mg/L	0.000059	0.00287	mg/L	0.000059	2.07%
Cr 267.716†	50.7	0.00573	mg/L	0.001222	0.00573	mg/L	0.001222	21.32%
Cu 324.752†	578.5	0.00249	mg/L	0.000114	0.00249	mg/L	0.000114	4.58%
Fe 273.955†	77.0	0.05165	mg/L	0.000922	0.05165	mg/L	0.000922	1.78%
K 766.490†	1194.2	0.5124	mg/L	0.00626	0.5124	mg/L	0.00626	1.22%
Mg 279.077†	82.1	0.06149	mg/L	0.003743	0.06149	mg/L	0.003743	6.09%
Mn 257.610†	61.6	0.00112	mg/L	0.000095	0.00112	mg/L	0.000095	8.51%
Mo 202.031†	109.0	0.00492	mg/L	0.000155	0.00492	mg/L	0.000155	3.16%
Na 589.592†	8241.6	0.6558	mg/L ✓	0.00701	0.6558	mg/L	0.00701	1.07%
Na 330.237†	17.3	0.5464	mg/L	0.25588	0.5464	mg/L	0.25588	46.83%
Ni 231.604†	51.6	0.01095	mg/L	0.001096	0.01095	mg/L	0.001096	10.01%
Pb 220.353†	242.5	0.02005	mg/L	0.000662	0.02005	mg/L	0.000662	3.30%
Sb 206.836†	192.4	0.05038	mg/L	0.001592	0.05038	mg/L	0.001592	3.16%
Se 196.026†	99.8	0.05429	mg/L	0.004223	0.05429	mg/L	0.004223	7.78%
Si 288.158†	138.8	0.06195	mg/L	0.002480	0.06195	mg/L	0.002480	4.00%
Sn 189.927†	75.5	0.01026	mg/L	0.000420	0.01026	mg/L	0.000420	4.09%
Sr 421.552†	892.9	0.00106	mg/L	0.000016	0.00106	mg/L	0.000016	1.54%
Ti 334.903†	142.8	0.00479	mg/L	0.000313	0.00479	mg/L	0.000313	6.53%
Tl 190.801†	130.8	0.05087	mg/L	0.000660	0.05087	mg/L	0.000660	1.30%
V 292.402†	513.2	0.00276	mg/L	0.000073	0.00276	mg/L	0.000073	2.63%
Zn 206.200†	27.3	0.00946	mg/L	0.001347	0.00946	mg/L	0.001347	14.24%

User canceled analysis.

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Analysis Begun

Start Time: 5/4/2012 1:19:12 PM **Plasma On Time: 5/4/2012 9:24:35 AM**
Logged In Analyst: metals **Technique: ICP Continuous**
Spectrometer Model: Optima 7300 DV, S/N 077C8121202 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\metals\Sample Information\0504b.sif
Batch ID:
Results Data Set: I2120504
Results Library: C:\pe\metals\Results\Results.mdb

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Sequence No.: 4 **Autosampler Location: 325**
Sample ID: ICSA **Date Collected: 5/4/2012 1:19:13 PM**
Data Type: Original

Dilution: 1X

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2568314.7	95.81	%	0.405				0.42%
ScR 361.383	402316.9	98.00	%	0.897				0.92%
Ag 328.068†	-121.2	-0.00113	mg/L	0.000107	-0.00113	mg/L	0.000107	9.46%
Al 308.215†	336740.6	203.1	mg/L	1.16	203.1	mg/L	1.16	0.57%
As 188.979†	5.9	-0.01356	mg/L	0.002523	-0.01356	mg/L	0.002523	18.61%
B 249.677†	27.4	0.00424	mg/L	0.002370	0.00424	mg/L	0.002370	55.92%
Ba 233.527†	112.5	0.00303	mg/L	0.000243	0.00303	mg/L	0.000243	8.02%
Be 313.042†	63.2	0.00007	mg/L	0.000015	0.00007	mg/L	0.000015	22.07%
Ca 317.933†	1116493.4	100.7	mg/L	0.29	100.7	mg/L	0.29	0.29%
Cd 228.802†	84.6	0.00075	mg/L	0.000152	0.00075	mg/L	0.000152	20.29%
Co 228.616†	95.8	0.00230	mg/L	0.000092	0.00230	mg/L	0.000092	3.98%
Cr 267.716†	-35.4	-0.00118	mg/L	0.000418	-0.00118	mg/L	0.000418	35.46%
Cu 324.752†	-3473.9	-0.00122	mg/L	0.000183	-0.00122	mg/L	0.000183	15.01%
Fe 273.955†	294521.5	197.5	mg/L	1.77	197.5	mg/L	1.77	0.90%
K 766.490†	127.0	0.05449	mg/L	0.013865	0.05449	mg/L	0.013865	25.45%
Mg 279.077†	131925.7	98.75	mg/L	0.211	98.75	mg/L	0.211	0.21%
Mn 257.610†	54.1	0.00008	mg/L	0.000153	0.00008	mg/L	0.000153	185.62%
Mo 202.031†	139.3	0.00458	mg/L	0.000086	0.00458	mg/L	0.000086	1.87%
Na 589.592†	2392.3	0.1904	mg/L	0.00320	0.1904	mg/L	0.00320	1.68%
Na 330.237†	22.3	0.05245	mg/L	0.218838	0.05245	mg/L	0.218838	417.25%
Ni 231.604†	-2.6	-0.00045	mg/L	0.000393	-0.00045	mg/L	0.000393	87.95%
Pb 220.353†	-287.3	-0.00852	mg/L	0.000357	-0.00852	mg/L	0.000357	4.18%
Sb 206.836†	398.1	0.01510	mg/L	0.002752	0.01510	mg/L	0.002752	18.23%
Se 196.026†	-26.1	0.00845	mg/L	0.002709	0.00845	mg/L	0.002709	32.07%
Si 288.158†	-30.3	-0.01350	mg/L	0.002512	-0.01350	mg/L	0.002512	18.61%
Sn 189.927†	-117.4	-0.01288	mg/L	0.001191	-0.01288	mg/L	0.001191	9.25%
Sr 421.552†	8801.5	0.01043	mg/L	0.000116	0.01043	mg/L	0.000116	1.11%
Ti 334.903†	100.1	-0.00015	mg/L	0.000417	-0.00015	mg/L	0.000417	274.77%
Tl 190.801†	-39.9	0.01047	mg/L	0.000622	0.01047	mg/L	0.000622	5.94%
V 292.402†	5505.9	0.00557	mg/L	0.000412	0.00557	mg/L	0.000412	7.39%
Zn 206.200†	-36.8	-0.00525	mg/L	0.000560	-0.00525	mg/L	0.000560	10.66%

cont.

Sequence No.: 5
Sample ID: ICSAB

Autosampler Location: 326
Date Collected: 5/4/2012 1:23:11 PM
Data Type: Original

Dilution: 1X

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2559017.1	95.47	%	0.581				0.61%
ScR 361.383	401995.4	97.92	%	1.514				1.55%
Ag 328.068†	282895.0	1.075	mg/L	0.0044	1.075	mg/L	0.0044	0.41%
Al 308.215†	336271.0	202.8	mg/L	1.40	202.8	mg/L	1.40	0.69%
As 188.979†	2493.5	1.016	mg/L	0.0116	1.016	mg/L	0.0116	1.14%
B 249.677†	43.2	0.00386	mg/L	0.000769	0.00386	mg/L	0.000769	19.91%
Ba 233.527†	8848.6	1.021	mg/L	0.0154	1.021	mg/L	0.0154	1.51%
Be 313.042†	727688.7	1.012	mg/L	0.0144	1.012	mg/L	0.0144	1.42%
Ca 317.933†	1104253.5	99.57	mg/L	0.777	99.57	mg/L	0.777	0.78%
Cd 228.802†	34170.6	1.057	mg/L	0.0034	1.057	mg/L	0.0034	0.32%
Co 228.616†	40363.8	0.9736	mg/L	0.00189	0.9736	mg/L	0.00189	0.19%
Cr 267.716†	9138.7	1.036	mg/L	0.0152	1.036	mg/L	0.0152	1.47%
Cu 324.752†	244332.4	1.064	mg/L	0.0025	1.064	mg/L	0.0025	0.23%
Fe 273.955†	293649.6	196.9	mg/L	1.41	196.9	mg/L	1.41	0.71%
K 766.490†	52.9	0.02267	mg/L	0.012892	0.02267	mg/L	0.012892	56.86%
Mg 279.077†	131251.5	98.25	mg/L	0.850	98.25	mg/L	0.850	0.86%
Mn 257.610†	54092.5	0.9736	mg/L	0.01287	0.9736	mg/L	0.01287	1.32%
Mo 202.031†	144.0	0.00482	mg/L	0.000279	0.00482	mg/L	0.000279	5.79%
Na 589.592†	1903.1	0.1514	mg/L	0.00460	0.1514	mg/L	0.00460	3.04%
Na 330.237†	29.1	0.06704	mg/L	0.215851	0.06704	mg/L	0.215851	321.97%
Ni 231.604†	4575.5	0.9678	mg/L	0.01644	0.9678	mg/L	0.01644	1.70%
Pb 220.353†	12123.9	1.018	mg/L	0.0109	1.018	mg/L	0.0109	1.07%
Sb 206.836†	4157.1	0.9912	mg/L	0.01095	0.9912	mg/L	0.01095	1.10%
Se 196.026†	1868.5	1.038	mg/L	0.0133	1.038	mg/L	0.0133	1.28%
Si 288.158†	-48.7	-0.01776	mg/L	0.001698	-0.01776	mg/L	0.001698	9.56%
Sn 189.927†	-122.4	-0.01284	mg/L	0.000623	-0.01284	mg/L	0.000623	4.85%
Sr 421.552†	8665.8	0.01027	mg/L	0.000112	0.01027	mg/L	0.000112	1.09%
Ti 334.903†	98.4	-0.00040	mg/L	0.000325	-0.00040	mg/L	0.000325	81.92%
Tl 190.801†	2463.5	0.9795	mg/L	0.00975	0.9795	mg/L	0.00975	1.00%
V 292.402†	193131.0	1.014	mg/L	0.0101	1.014	mg/L	0.0101	1.00%
Zn 206.200†	2746.7	0.9574	mg/L	0.01409	0.9574	mg/L	0.01409	1.47%

Sequence No.: 6
Sample ID: CV 6

Dilution: 1X

Autosampler Location: 7
Date Collected: 5/4/2012 1:26:55 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2602170.1	97.08	%	0.304				0.31%
ScR 361.383	402639.5	98.08	%	0.717				0.73%
Ag 328.068†	272833.2	1.037	mg/L	0.0029	1.037	mg/L	0.0029	0.28%
Al 308.215†	3416.2	2.030	mg/L	0.0190	2.030	mg/L	0.0190	0.94%
As 188.979†	4976.6	2.065	mg/L	0.0084	2.065	mg/L	0.0084	0.40%
B 249.677†	6590.8	1.020	mg/L	0.0067	1.020	mg/L	0.0067	0.66%
Ba 233.527†	8835.0	1.029	mg/L	0.0108	1.029	mg/L	0.0108	1.05%
Be 313.042†	712442.5	0.9910	mg/L	0.01452	0.9910	mg/L	0.01452	1.47%
Ca 317.933†	22950.2	2.069	mg/L	0.0126	2.069	mg/L	0.0126	0.61%
Cd 228.802†	34258.1	1.058	mg/L	0.0050	1.058	mg/L	0.0050	0.47%
Co 228.616†	42316.5	1.019	mg/L	0.0056	1.019	mg/L	0.0056	0.55%
Cr 267.716†	9236.6	1.044	mg/L	0.0078	1.044	mg/L	0.0078	0.75%
Cu 324.752†	240524.0	1.034	mg/L	0.0060	1.034	mg/L	0.0060	0.58%
Fe 273.955†	3025.4	2.024	mg/L	0.0208	2.024	mg/L	0.0208	1.03%
K 766.490†	47456.6	20.36	mg/L	0.269	20.36	mg/L	0.269	1.32%
Mg 279.077†	2701.4	2.030	mg/L	0.0194	2.030	mg/L	0.0194	0.95%
Mn 257.610†	54458.7	0.9814	mg/L	0.01270	0.9814	mg/L	0.01270	1.29%
Mo 202.031†	23060.5	1.042	mg/L	0.0032	1.042	mg/L	0.0032	0.31%
Na 589.592†	633958.2	50.45	mg/L	0.559	50.45	mg/L	0.559	1.11%
Na 330.237†	1665.5	52.75	mg/L	0.477	52.75	mg/L	0.477	0.90%
Ni 231.604†	4797.3	1.016	mg/L	0.0126	1.016	mg/L	0.0126	1.24%
Pb 220.353†	25704.5	2.125	mg/L	0.0037	2.125	mg/L	0.0037	0.17%
Sb 206.836†	8178.8	2.141	mg/L	0.0088	2.141	mg/L	0.0088	0.41%
Se 196.026†	3768.0	2.049	mg/L	0.0059	2.049	mg/L	0.0059	0.29%
Si 288.158†	4682.7	2.093	mg/L	0.0122	2.093	mg/L	0.0122	0.58%
Sn 189.927†	7631.0	1.035	mg/L	0.0046	1.035	mg/L	0.0046	0.45%
Sr 421.552†	856539.0	1.015	mg/L	0.0117	1.015	mg/L	0.0117	1.15%
Ti 334.903†	29174.7	0.9793	mg/L	0.01076	0.9793	mg/L	0.01076	1.10%
Tl 190.801†	5299.7	2.060	mg/L	0.0042	2.060	mg/L	0.0042	0.20%
V 292.402†	191674.8	1.030	mg/L	0.0083	1.030	mg/L	0.0083	0.81%
Zn 206.200†	3028.6	1.047	mg/L	0.0085	1.047	mg/L	0.0085	0.81%

Sequence No.: 7
Sample ID: CB

Dilution: 1X

Autosampler Location: 1
Date Collected: 5/4/2012 1:30:41 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	211.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2691008.8	100.4	%	1.23				1.23%
ScR 361.383	409113.1	99.66	%	0.113				0.11%
Ag 328.068†	37.7	0.00014	mg/L	0.000058	0.00014	mg/L	0.000058	40.62%
Al 308.215†	16.7	0.01006	mg/L	0.004803	0.01006	mg/L	0.004803	47.75%
As 188.979†	-2.4	-0.00098	mg/L	0.000199	-0.00098	mg/L	0.000199	20.32%
B 249.677†	9.7	0.00151	mg/L	0.000507	0.00151	mg/L	0.000507	33.58%
Ba 233.527†	-1.1	-0.00012	mg/L	0.000205	-0.00012	mg/L	0.000205	167.39%
Be 313.042†	32.9	0.00005	mg/L	0.000050	0.00005	mg/L	0.000050	109.20%
Ca 317.933†	22.5	0.00203	mg/L	0.001088	0.00203	mg/L	0.001088	53.62%
Cd 228.802†	4.3	0.00014	mg/L	0.000069	0.00014	mg/L	0.000069	50.47%
Co 228.616†	-10.2	-0.00025	mg/L	0.000103	-0.00025	mg/L	0.000103	41.81%
Cr 267.716†	4.0	0.00045	mg/L	0.000754	0.00045	mg/L	0.000754	166.33%
Cu 324.752†	159.7	0.00069	mg/L	0.000052	0.00069	mg/L	0.000052	7.61%
Fe 273.955†	3.8	0.00252	mg/L	0.001023	0.00252	mg/L	0.001023	40.59%
K 766.490†	28.3	0.01213	mg/L	0.006738	0.01213	mg/L	0.006738	55.52%
Mg 279.077†	7.5	0.00561	mg/L	0.001216	0.00561	mg/L	0.001216	21.66%
Mn 257.610†	4.9	0.00009	mg/L	0.000019	0.00009	mg/L	0.000019	21.14%
Mo 202.031†	10.1	0.00046	mg/L	0.000177	0.00046	mg/L	0.000177	38.61%
Na 589.592†	1297.1	0.1032	mg/L	0.00228	0.1032	mg/L	0.00228	2.21%
Na 330.237†	2.0	0.06193	mg/L	0.190640	0.06193	mg/L	0.190640	307.81%
Ni 231.604†	2.3	0.00049	mg/L	0.000449	0.00049	mg/L	0.000449	91.81%
Pb 220.353†	-15.6	-0.00129	mg/L	0.000625	-0.00129	mg/L	0.000625	48.58%
Sb 206.836†	7.4	0.00193	mg/L	0.001373	0.00193	mg/L	0.001373	71.20%
Se 196.026†	6.3	0.00345	mg/L	0.001930	0.00345	mg/L	0.001930	55.88%
Si 288.158†	8.4	0.00375	mg/L	0.001893	0.00375	mg/L	0.001893	50.44%
Sn 189.927†	1.6	0.00022	mg/L	0.000192	0.00022	mg/L	0.000192	87.01%
Sr 421.552†	49.8	0.00006	mg/L	0.000005	0.00006	mg/L	0.000005	8.08%
Ti 334.903†	2.6	0.00009	mg/L	0.000328	0.00009	mg/L	0.000328	378.49%
Tl 190.801†	-3.2	-0.00122	mg/L	0.000627	-0.00122	mg/L	0.000627	51.21%
V 292.402†	-39.3	-0.00021	mg/L	0.000282	-0.00021	mg/L	0.000282	135.25%
Zn 206.200†	-1.1	-0.00037	mg/L	0.000142	-0.00037	mg/L	0.000142	38.33%

end
CLP

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.7.12 **Analyst:** JLB **Page:** 1 of 3

All corrections made by analyst unless otherwise noted. 5.7.12 JLB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			2933-3
		↓			↓
		1			2933-5
		2			2933-4
		3			2931-5
		4			2933-4
		5			2931-7
		River Sample			r ≥ 0.9998
		SO			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		LAW Check			✓
		ICSA			
		ICSAB			^{59}Co 1278 ^{62}Ni 1208
		B1			^{59}Co 0.634
		B2			
		CCV2 5 reps			
		CCB2			
		JLJ7 MB1	REN	2	✓
		MB2			✓
		MB2 spk			✓
		MB1 spk			✓

US15 00511

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.7.12 **Analyst:** VB **Page:** 2 of 3

All corrections made by analyst unless otherwise noted. 5.7.12 VB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	US27 A	REN	2	rr 4x As
	✓	D			rr 20x As only
	✓	G			rr 40x As
		I			rr As 20x only
		LR200			
		B3			
		CCV3			
		CCB3			62Ni high
		US27 C L	REN	10	
		C		2	
		CDUP		↓ ✓	
		CSPK		✓	
✓		~~CPOST~~		↓	
		E-L		10	rerun As E-L ~~40x~~ ~~100x~~ 20x for As 5/8/12
		E		2	rr As ~~40x~~ 20x
		EDUP		↓	↓
		ESPK			As low CS2 CRI
		EPOST		↓	As
		CCV4			VB 62Ni high
		CCB4			63Cu high
		US27 H-L	REN	2 10 5.8.12 VB	rerun Be/Cr/Pb
		H		2	
		HDUP		↓ ✓	
		HSPK		↓ ✓	↓

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.7.12 **Analyst:** JB **Page:** 3 of 3

All corrections made by analyst unless otherwise noted. 5.8.12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
Z		~~0927 HPOST~~	REN	2	
		0927 J-L		10	rr As ICV rr Cr ICV
		J		2	rr As 20x rr Cr 2x
		~~JPOST~~			↓ ↓
Z		~~JSPK~~			↓ AR? Inserted tube
Z		~~kJPOST~~		↓	
		CCV5			Below V, Cr, Mn, ~~60~~Ni, Pb, Th all low, ~~60~~Ni, ~~53~~Cr high
		CCB5			
		Rinse/DI			

JB 5.9.12

US15 : 00513

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/7/2012 11:27:00 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

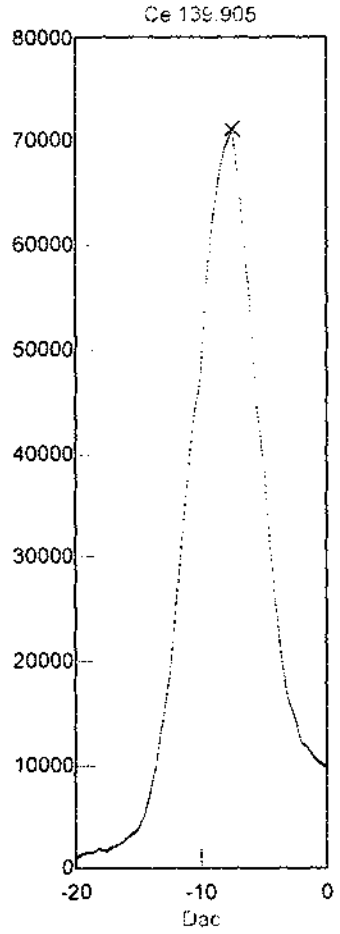
Obtained Intensity (Be 9.0122): 5217.37
Obtained Intensity (Mg 23.985): 38237.01
Obtained Intensity (In 114.904): 58432.09
Obtained Intensity (Pb 207.977): 23405.82
Obtained Intensity (U 238.05): 42971.18
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=898.72 / 59879.64)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.011 (=650.16 / 59879.64)

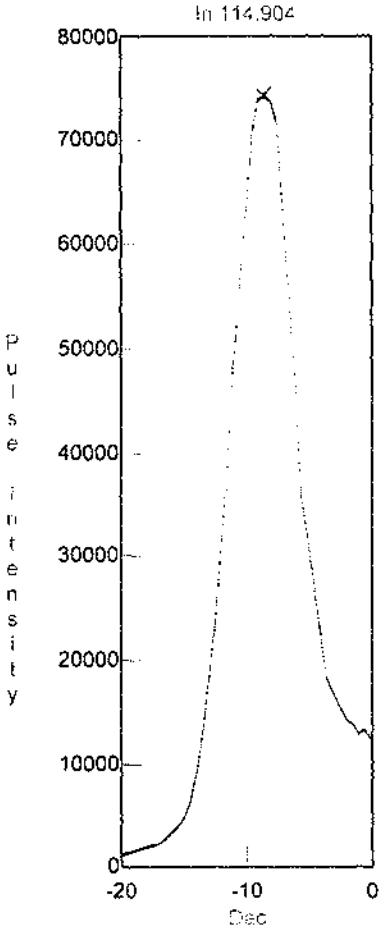
[Passed] Optimum value(s): N/A

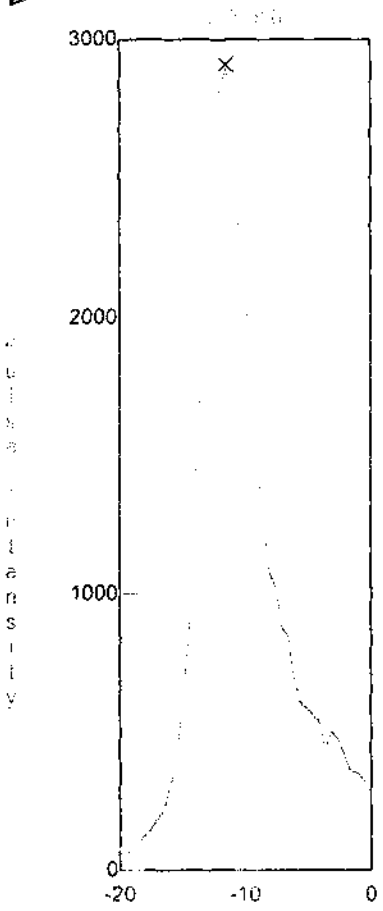
End Time: 5/7/2012 11:29:35 AM

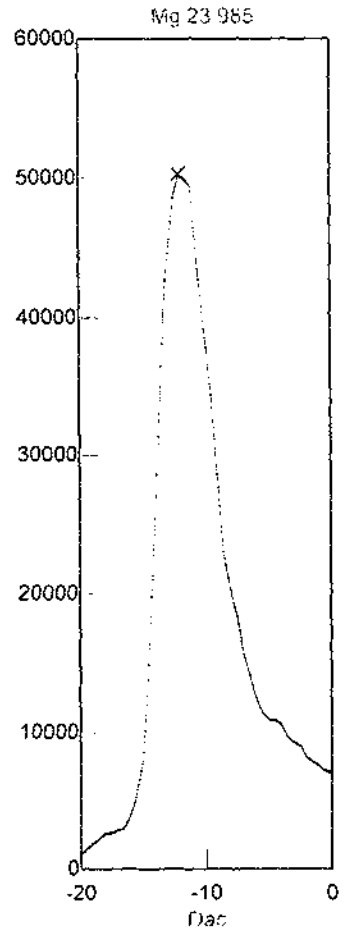
US15 : 00514

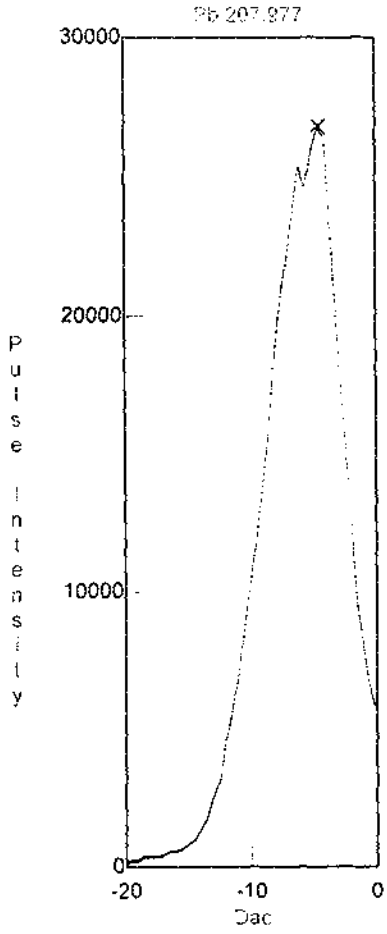
5/1/12

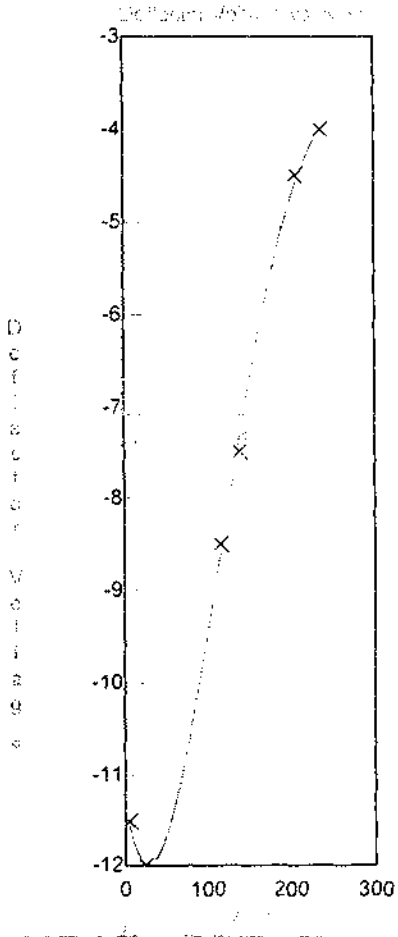












US15 : 00515

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/7/2012 11:12:25 AM

Mass Calibration and Resolution

Optimization Settings:

Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:

Initial Try

Target/Obtained mass (7.016/7.125), Target/Obtained resolution (0.7/0.697) - <Target not achieved>
Target/Obtained mass (23.985/23.925), Target/Obtained resolution (0.7/0.702) - <Target not achieve
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.699)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.691)
[Failed]

Retry 1

Target/Obtained mass (7.016/6.975), Target/Obtained resolution (0.7/0.697)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.705)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.707)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.694)

[Passed] Optimum value(s): N/A

End Time: 5/7/2012 11:16:49 AM

US15 : 00516

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/7/2012 11:11:15 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.34 mm	-0.55 mm	75369.30

End Time: 5/7/2012 11:11:59 AM

US15 : 00517

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/7/2012 11:08:07 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

Obtained Intensity (Be 9.0122): 5597.21
Obtained Intensity (Mg 23.985): 41073.72
Obtained Intensity (In 114.904): 63315.22
Obtained Intensity (Pb 207.977): 23545.95
Obtained Intensity (U 238.05): 43145.28
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1034.73 / 63245.96)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=773.04 / 63245.96)

[Passed] Optimum value(s): N/A

End Time: 5/7/2012 11:10:42 AM

US15 : 00518

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/7/2012 11:08:07 AM
End Time: 5/7/2012 11:10:42 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 5597.21
Obtained Intensity (Mg 23.985): 41073.72
Obtained Intensity (In 114.904): 63315.22
Obtained Intensity (Pb 207.977): 23545.95
Obtained Intensity (U 238.05): 43145.28
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1034.73 / 63245.96)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=773.04 / 63245.96)

US15 : 80519

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/7/2012 11:01:22 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 4859.22
        Obtained Intensity (Mg 23.985): 36622.64
        Obtained Intensity (In 114.904): 56422.47
        Obtained Intensity (Pb 207.977): 21856.36
        Obtained Intensity (U 238.05): 39893.67 - <Target not achieved> 40,000
        Obtained Intensity (Bkgd 220): 0.00
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.013 (=775.57 / 58533.49)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=570.42 / 58533.49)
        [Failed]
[Failed]

End Time: 5/7/2012 11:04:25 AM

US15 : 00520

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:02:10
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			0	1270719	1
	Be	9		ug/L			0	5	75
	C	13		ug/L			0	86755	0
	Cl	37		ug/L			0	4380475	3
>	Sc	45		ug/L			0	980733	1
	V	51		ug/L			0	4828	2
	V-1	51		ug/L			0	83	10
	Cr	52		ug/L			0	14307	2
	Cr	53		ug/L			0	99	4
	Mn	55		ug/L			0	346	6
	Co	59		ug/L			0	33	19
>	Ge	72		ug/L			0	410921	2
	Ni	60		ug/L			0	16	39
	Ni	62		ug/L			0	108	15
	Cu	63		ug/L			0	77	14
	Cu	65		ug/L			0	21	34
	Zn	66		ug/L			0	160	12
	Zn	67		ug/L			0	27	34
	Zn	68		ug/L			0	139	12
	As	75		ug/L			0	469	1
	As-1	75		ug/L			0	6086	1
	Se	82		ug/L			0	-14	43
	Se	78		ug/L			0	6141	1
	Mo	98		ug/L			0	11	31
	Y	89		ug/L			0	316654	1
	Kr	83		ug/L			0	734	0
>	In	115		ug/L			0	753807	1
	Ag	107		ug/L			0	8	36
	Cd	111		ug/L			0	63	3
	Cd	114		ug/L			0	12	34
	Sb	121		ug/L			0	21	19
	Sb	123		ug/L			0	19	43
	Ba	135		ug/L			0	16	24
	Ba	137		ug/L			0	24	14
>	Tb	159		ug/L			0	876110	0
	Tl	205		ug/L			0	13	7
	Pb	208		ug/L			0	97	17
	Bi	209		ug/L			0	1755624	1
	Th	232		ug/L			0	37	13
	U	238		ug/L			0	2	94

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:19:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1259321	1
	Be	9		ug/L				5	36
	C	13		ug/L				87262	0
	Cl	37		ug/L				4353617	1
>	Sc	45		ug/L				969651	2
	V	51		ug/L				4755	2
	V-1	51		ug/L				94	2
	Cr	52		ug/L				14058	2
	Cr	53		ug/L				98	9
	Mn	55		ug/L				346	6
	Co	59		ug/L				35	9
>	Ge	72		ug/L				395849	1
	Ni	60		ug/L				17	19
	Ni	62		ug/L				83	11
	Cu	63		ug/L				68	14
	Cu	65		ug/L				29	9
	Zn	66		ug/L				151	6
	Zn	67		ug/L				23	15
	Zn	68		ug/L				133	5
	As	75		ug/L				489	5
	As-1	75		ug/L				6001	1
	Se	82		ug/L				-17	26
	Se	78		ug/L				6043	1
	Mo	98		ug/L				10	40
	Y	89		ug/L				302644	1
	Kr	83		ug/L				751	3
>	In	115		ug/L				739061	1
	Ag	107		ug/L				10	20
	Cd	111		ug/L				75	19
	Cd	114		ug/L				8	51
	Sb	121		ug/L				36	13
	Sb	123		ug/L				26	22
	Ba	135		ug/L				22	33
	Ba	137		ug/L				30	13
>	Tb	159		ug/L				870967	1
	Tl	205		ug/L				14	24
	Pb	208		ug/L				94	7
	Bi	209		ug/L				1734751	1
	Th	232		ug/L				19	10
	U	238		ug/L				3	62

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:23:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1259321	1286677	0
	Be	9	0.200	ug/L	0.007	3	5	805	4
	C	13		ug/L			87262	86414	1
	Cl	37		ug/L			4353617	4289907	1
>	Sc	45		ug/L			969651	1002954	1
	V	51	0.200	ug/L	0.013	6	4755	8344	1
	V-1	51	0.200	ug/L	0.008	4	94	3516	2
	Cr	52	0.500	ug/L	0.021	4	14058	21373	0
	Cr	53	0.500	ug/L	0.006	1	98	871	1
	Mn	55	0.500	ug/L	0.007	1	346	9571	2
	Co	59	0.200	ug/L	0.001	0	35	2463	0
>	Ge	72		ug/L			395849	413942	1
	Ni	60	0.500	ug/L	0.017	3	17	1349	1
	Ni	62	0.500	ug/L	0.046	9	83	278	5
	Cu	63	0.500	ug/L	0.014	2	68	2985	0
	Cu	65	0.500	ug/L	0.019	3	29	1306	2
	Zn	66	4.000	ug/L	0.171	4	151	8381	2
	Zn	67	4.000	ug/L	0.090	2	23	1253	0
	Zn	68	4.000	ug/L	0.130	3	133	5579	2
	As	75	0.200	ug/L	0.012	5	489	806	2
	As-1	75	0.200	ug/L	0.494	247	6001	6311	0
	Se	82	0.500	ug/L	0.075	15	-17	68	20
	Se	78	0.500	ug/L	0.762	152	6043	6262	0
	Mo	98	0.200	ug/L	0.008	3	10	696	4
	Y	89		ug/L			302644	309768	2
	Kr	83		ug/L			751	760	4
>	In	115		ug/L			739061	749355	0
	Ag	107	0.200	ug/L	0.004	2	10	1298	1
	Cd	111	0.100	ug/L	0.003	2	75	422	1
	Cd	114	0.100	ug/L	0.004	4	8	921	4
	Sb	121	0.200	ug/L	0.000	0	36	2155	0
	Sb	123	0.200	ug/L	0.010	5	26	1624	5
	Ba	135	0.500	ug/L	0.015	3	22	1926	2
	Ba	137	0.500	ug/L	0.007	1	30	3356	1
>	Tb	159		ug/L			870967	882244	1
	Tl	205	0.200	ug/L	0.003	1	14	5195	0
	Pb	208	0.100	ug/L	0.000	0	94	4146	1
	Bi	209		ug/L			1734751	1769849	0
	Th	232	0.200	ug/L	0.002	0	19	5374	1
	U	238	0.200	ug/L	0.002	0	3	6570	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:27:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1259321	1282271	3
	Be	9	10.000	ug/L	0.281	2	5	38758	0
	C	13		ug/L			87262	85092	2
	Cl	37		ug/L			4353617	4263418	1
>	Sc	45		ug/L			969651	1003131	1
	V	51	10.000	ug/L	0.095	0	4755	174619	1
	V-1	51	10.000	ug/L	0.092	0	94	170679	1
	Cr	52	10.000	ug/L	0.116	1	14058	150757	2
	Cr	53	10.000	ug/L	0.241	2	98	15775	3
	Mn	55	10.000	ug/L	0.073	0	346	182520	2
	Co	59	10.000	ug/L	0.139	1	35	126111	1
>	Ge	72		ug/L			395849	416076	0
	Ni	60	10.000	ug/L	0.326	3	17	26835	3
	Ni	62	9.999	ug/L	0.096	0	83	3789	0
	Cu	63	9.999	ug/L	0.373	3	68	56022	3
	Cu	65	10.000	ug/L	0.140	1	29	25404	0
	Zn	66	9.496	ug/L	0.245	2	151	15082	1
	Zn	67	9.699	ug/L	0.329	3	23	2546	2
	Zn	68	9.614	ug/L	0.334	3	133	10730	2
	As	75	10.000	ug/L	0.196	1	489	14167	0
	As-1	75	10.003	ug/L	0.345	3	6001	19016	1
	Se	82	9.998	ug/L	0.196	1	-17	1613	1
	Se	78	10.034	ug/L	0.733	7	6043	9534	1
	Mo	98	10.000	ug/L	0.114	1	10	36371	0
	Y	89		ug/L			302644	321451	1
	Kr	83		ug/L			751	764	3
>	In	115		ug/L			739061	769780	0
	Ag	107	10.000	ug/L	0.092	0	10	65348	0
	Cd	111	10.000	ug/L	0.209	2	75	34064	2
	Cd	114	10.000	ug/L	0.116	1	8	87915	0
	Sb	121	10.000	ug/L	0.120	1	36	111586	1
	Sb	123	10.000	ug/L	0.090	0	26	82289	1
	Ba	135	9.995	ug/L	0.232	2	22	33133	1
	Ba	137	9.995	ug/L	0.057	0	30	56620	1
>	Tb	159		ug/L			870967	899739	0
	Tl	205	10.000	ug/L	0.023	0	14	255522	1
	Pb	208	10.000	ug/L	0.044	0	94	336116	0
	Bi	209		ug/L			1734751	1813755	0
	Th	232	10.000	ug/L	0.276	2	19	302457	3
	U	238	10.000	ug/L	0.116	1	3	328087	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:31:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1259321	1307255	0
[	Be	9	19.941	ug/L	0.282	1	5	77929	1
	C	13		ug/L			87262	87614	1
	Cl	37		ug/L			4353617	4440145	2
[>	Sc	45		ug/L			969651	1019634	1
|	V	51	19.926	ug/L	0.717	3	4755	343604	2
|	V-1	51	19.926	ug/L	0.752	3	94	340416	2
|	Cr	52	19.958	ug/L	0.321	1	14058	288768	1
|	Cr	53	19.957	ug/L	0.362	1	98	31611	0
|	Mn	55	19.940	ug/L	0.480	2	346	365146	2
[	Co	59	19.938	ug/L	0.311	1	35	252407	1
[>	Ge	72		ug/L			395849	416009	0
|	Ni	60	19.928	ug/L	0.535	2	17	52698	2
|	Ni	62	20.027	ug/L	0.333	1	83	7540	1
|	Cu	63	20.012	ug/L	0.123	0	68	112318	0
|	Cu	65	19.970	ug/L	0.137	0	29	50395	0
|	Zn	66	19.747	ug/L	0.360	1	151	29896	1
|	Zn	67	19.929	ug/L	0.573	2	23	5144	2
|	Zn	68	19.870	ug/L	0.374	1	133	21544	1
|	As	75	19.999	ug/L	0.123	0	489	27815	1
|	As-1	75	20.084	ug/L	0.197	0	6001	32261	1
|	Se	82	19.905	ug/L	0.403	2	-17	3168	1
|	Se	78	20.244	ug/L	0.316	1	6043	13099	0
[	Mo	98	19.999	ug/L	0.153	0	10	72699	0
	Y	89		ug/L			302644	318033	2
	Kr	83		ug/L			751	784	1
[>	In	115		ug/L			739061	769589	1
|	Ag	107	19.965	ug/L	0.294	1	10	129508	1
|	Cd	111	20.043	ug/L	0.359	1	75	68743	0
|	Cd	114	20.003	ug/L	0.502	2	8	175895	1
|	Sb	121	19.966	ug/L	0.236	1	36	221232	2
|	Sb	123	20.069	ug/L	0.385	1	26	167335	0
|	Ba	135	20.020	ug/L	0.408	2	22	66585	0
[	Ba	137	20.035	ug/L	0.342	1	30	114202	0
[>	Tb	159		ug/L			870967	902737	0
|	Tl	205	19.931	ug/L	0.207	1	14	503956	0
|	Pb	208	20.003	ug/L	0.055	0	94	674967	0
|	Bi	209		ug/L			1734751	1796793	0
|	Th	232	20.138	ug/L	0.124	0	19	628295	0
[	U	238	20.058	ug/L	0.163	0	3	668133	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:36:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1259321	1300127	0
	Be	9	49.850	ug/L	0.514	1	5	190877	1
	C	13		ug/L			87262	87234	0
	Cl	37		ug/L			4353617	4429134	1
>	Sc	45		ug/L			969651	1016572	0
	V	51	49.917	ug/L	0.646	1	4755	844000	1
	V-1	51	49.845	ug/L	0.765	1	94	836244	1
	Cr	52	49.872	ug/L	1.034	2	14058	688707	1
	Cr	53	49.617	ug/L	0.335	0	98	75343	0
	Mn	55	49.793	ug/L	0.600	1	346	890244	1
	Co	59	49.712	ug/L	0.387	0	35	609918	1
>	Ge	72		ug/L			395849	409017	1
	Ni	60	49.764	ug/L	1.022	2	17	126354	0
	Ni	62	49.877	ug/L	1.087	2	83	18112	1
	Cu	63	49.937	ug/L	0.422	0	68	273729	0
	Cu	65	49.724	ug/L	1.331	2	29	119987	1
	Zn	66	49.842	ug/L	1.365	2	151	72831	1
	Zn	67	49.661	ug/L	1.589	3	23	12168	1
	Zn	68	49.564	ug/L	0.853	1	133	50508	1
	As	75	49.860	ug/L	0.799	1	489	66488	0
	As-1	75	49.942	ug/L	0.682	1	6001	69280	0
	Se	82	49.809	ug/L	1.008	2	-17	7675	0
	Se	78	50.136	ug/L	0.381	0	6043	22903	0
	Mo	98	49.785	ug/L	0.909	1	10	174167	0
	Y	89		ug/L			302644	317042	1
	Kr	83		ug/L			751	793	3
>	In	115		ug/L			739061	769652	0
	Ag	107	49.894	ug/L	1.844	3	10	320254	2
	Cd	111	49.683	ug/L	0.967	1	75	165105	1
	Cd	114	49.687	ug/L	0.621	1	8	423772	0
	Sb	121	49.594	ug/L	0.643	1	36	527978	0
	Sb	123	49.539	ug/L	1.072	2	26	394877	1
	Ba	135	49.814	ug/L	0.461	0	22	162670	0
	Ba	137	49.883	ug/L	0.645	1	30	281083	0
>	Tb	159		ug/L			870967	912844	0
	Tl	205	49.700	ug/L	0.328	0	14	1233768	0
	Pb	208	49.628	ug/L	0.512	1	94	1632334	0
	Bi	209		ug/L			1734751	1776440	0
	Th	232	49.866	ug/L	0.757	1	19	1552368	1
	U	238	49.747	ug/L	0.721	1	3	1634082	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:41:51
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1259321	1273269	1
[	Be	9	100.554	ug/L	1.293	1	5	384116	0
	C	13		ug/L			87262	86279	1
	Cl	37		ug/L			4353617	4435413	3
[>	Sc	45		ug/L			969651	1009918	1
|	V	51	100.785	ug/L	2.096	2	4755	1732735	1
|	V-1	51	100.799	ug/L	2.891	2	94	1725322	1
|	Cr	52	100.225	ug/L	0.135	0	14058	1370488	1
|	Cr	53	100.271	ug/L	3.087	3	98	152494	2
|	Mn	55	100.161	ug/L	2.112	2	346	1787830	0
[	Co	59	99.721	ug/L	1.669	1	35	1204184	2
[>	Ge	72		ug/L			395849	406040	0
|	Ni	60	100.087	ug/L	2.617	2	17	253011	2
|	Ni	62	100.761	ug/L	1.035	1	83	37180	0
|	Cu	63	99.895	ug/L	0.792	0	68	541647	0
|	Cu	65	99.936	ug/L	0.214	0	29	238916	0
|	Zn	66	99.386	ug/L	1.403	1	151	141166	1
|	Zn	67	99.515	ug/L	0.593	0	23	23806	0
|	Zn	68	99.926	ug/L	1.539	1	133	100712	2
|	As	75	100.093	ug/L	1.472	1	489	132424	1
|	As-1	75	100.112	ug/L	1.782	1	6001	132163	1
|	Se	82	99.901	ug/L	1.189	1	-17	15251	0
|	Se	78	99.951	ug/L	1.715	1	6043	39113	0
[	Mo	98	101.044	ug/L	1.921	1	10	363579	1
	Y	89		ug/L			302644	315689	2
	Kr	83		ug/L			751	807	2
[>	In	115		ug/L			739061	753901	1
|	Ag	107	99.410	ug/L	0.858	0	10	613082	1
|	Cd	111	100.123	ug/L	2.320	2	75	327143	1
|	Cd	114	100.164	ug/L	1.397	1	8	841406	1
|	Sb	121	100.814	ug/L	1.472	1	36	1080545	0
|	Sb	123	100.733	ug/L	1.594	1	26	806187	0
|	Ba	135	100.435	ug/L	1.024	1	22	325952	0
[	Ba	137	100.405	ug/L	1.236	1	30	561750	1
[>	Tb	159		ug/L			870967	906927	0
|	Tl	205	101.039	ug/L	0.410	0	14	2581402	0
|	Pb	208	99.937	ug/L	0.564	0	94	3258842	0
|	Bi	209		ug/L			1734751	1725520	1
|	Th	232	101.144	ug/L	0.720	0	19	3252293	0
[	U	238	101.139	ug/L	0.144	0	3	3431226	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:48:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1259321	1258349	0
	Be	9	0.001	ug/L	0.001	64	5	11	31
	C	13		ug/L			87262	83656	2
	Cl	37		ug/L			4353617	4342650	1
>	Sc	45		ug/L			969651	983818	1
	V	51	-0.008	ug/L	0.005	58	4755	4686	1
	V-1	51	-0.001	ug/L	0.000	71	94	84	9
	Cr	52	-0.036	ug/L	0.018	48	14058	13785	1
	Cr	53	-0.009	ug/L	0.008	86	98	86	12
	Mn	55	-0.001	ug/L	0.001	113	346	338	3
	Co	59	0.001	ug/L	0.001	65	35	48	16
>	Ge	72		ug/L			395849	397882	0
	Ni	60	0.001	ug/L	0.002	143	17	21	23
	Ni	62	0.070	ug/L	0.027	38	83	109	8
	Cu	63	0.007	ug/L	0.003	49	68	103	16
	Cu	65	-0.000	ug/L	0.001	594	29	28	10
	Zn	66	-0.007	ug/L	0.002	37	151	143	2
	Zn	67	0.007	ug/L	0.032	478	23	24	29
	Zn	68	0.000	ug/L	0.014	5370	133	134	10
	As	75	0.038	ug/L	0.026	69	489	541	6
	As-1	75	-0.028	ug/L	0.030	108	6001	5998	1
	Se	82	0.099	ug/L	0.102	103	-17	-2	603
	Se	78	-0.092	ug/L	0.085	92	6043	6045	1
	Mo	98	0.019	ug/L	0.002	11	10	76	10
	Y	89		ug/L			302644	304736	1
	Kr	83		ug/L			751	775	2
>	In	115		ug/L			739061	745237	0
	Ag	107	0.003	ug/L	0.002	45	10	31	29
	Cd	111	-0.000	ug/L	0.000	63	75	74	0
	Cd	114	0.001	ug/L	0.001	90	8	15	37
	Sb	121	0.101	ug/L	0.014	14	36	1106	13
	Sb	123	0.099	ug/L	0.015	15	26	810	14
	Ba	135	-0.002	ug/L	0.000	24	22	17	6
	Ba	137	-0.001	ug/L	0.000	22	30	27	2
>	Tb	159		ug/L			870967	868971	0
	Tl	205	0.006	ug/L	0.001	17	14	168	16
	Pb	208	0.001	ug/L	0.000	17	94	121	4
	Bi	209		ug/L			1734751	1762900	0
	Th	232	0.119	ug/L	0.018	15	19	3672	14
	U	238	0.003	ug/L	0.000	8	3	89	7

Sample Information

Sample Date/Time: Monday, May 07, 2012 12:41:51
Method File: C:\NexIONData\Method\200.8nomin.mth
Mass Calibration File: C:\NexIONData\MassCal\default.tun
Conditions File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120507.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9999**	0.017	0.20	10	20	50	100
V-1	51	**0.9999**	0.017	0.20	10	20	50	100
Cr	52	**1.0000**	0.013	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**1.0000**	0.018	0.50	10	20	50	100
Co	59	**1.0000**	0.012	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.006	0.50	10	20	50	100
Ni	62	**0.9999**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.013	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**0.9998**	0.003	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.002	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9998**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9998**	0.009	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**0.9999**	0.008	0.20	10	20	50	100
Cd	111	**1.0000**	0.004	0.10	10	20	50	100
Cd	114	**1.0000**	0.011	0.10	10	20	50	100
Sb	121	**0.9999**	0.014	0.20	10	20	50	100
Sb	123	**0.9999**	0.011	0.20	10	20	50	100
Ba	135	**1.0000**	0.004	0.50	10	20	50	100
Ba	137	**1.0000**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.028	0.20	10	20	50	100
Pb	208	**1.0000**	0.036	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.035	0.20	10	20	50	100
U	238	**0.9998**	0.037	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:54:51
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1261646	0
	Be	9		ug/L				9	22
	C	13		ug/L				83631	2
	Cl	37		ug/L				4167618	0
>	Sc	45		ug/L				978840	0
	V	51		ug/L				4838	0
	V-1	51		ug/L				99	23
	Cr	52		ug/L				14295	1
	Cr	53		ug/L				99	11
	Mn	55		ug/L				350	5
	Co	59		ug/L				45	7
>	Ge	72		ug/L				396414	1
	Ni	60		ug/L				22	29
	Ni	62		ug/L				117	3
	Cu	63		ug/L				99	5
	Cu	65		ug/L				22	45
	Zn	66		ug/L				146	9
	Zn	67		ug/L				24	16
	Zn	68		ug/L				134	5
	As	75		ug/L				607	4
	As-1	75		ug/L				5989	1
	Se	82		ug/L				-5	208
	Se	78		ug/L				6021	1
	Mo	98		ug/L				26	44
	Y	89		ug/L				308043	0
	Kr	83		ug/L				851	1
>	In	115		ug/L				749907	0
	Ag	107		ug/L				18	38
	Cd	111		ug/L				70	7
	Cd	114		ug/L				19	21
	Sb	121		ug/L				366	17
	Sb	123		ug/L				260	16
	Ba	135		ug/L				16	0
	Ba	137		ug/L				38	24
>	Tb	159		ug/L				870411	0
	Tl	205		ug/L				85	11
	Pb	208		ug/L				120	16
	Bi	209		ug/L				1750755	1
	Th	232		ug/L				1146	2
	U	238		ug/L				46	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 12:59:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1288428	1
	Be	9	50.185	ug/L	0.957	1	9	193980	0
	C	13		ug/L			83631	86183	3
	Cl	37		ug/L			4167618	4289111	0
>	Sc	45		ug/L			978840	992605	2
	V	51	49.983	ug/L	0.674	1	4838	847419	3
	V-1	51	49.889	ug/L	0.486	0	99	839649	2
	Cr	52	50.980	ug/L	0.446	0	14295	692339	2
	Cr	53	50.646	ug/L	1.318	2	99	75749	0
	Mn	55	50.182	ug/L	0.896	1	350	880675	1
	Co	59	51.421	ug/L	0.450	0	45	610277	1
>	Ge	72		ug/L			396414	408345	2
	Ni	60	49.701	ug/L	1.304	2	22	126375	3
	Ni	62	48.643	ug/L	1.486	3	117	18123	1
	Cu	63	49.561	ug/L	1.467	2	99	270262	2
	Cu	65	49.671	ug/L	0.930	1	22	119399	0
	Zn	66	47.813	ug/L	0.439	0	146	68370	1
	Zn	67	48.730	ug/L	1.934	3	24	11730	1
	Zn	68	48.033	ug/L	1.092	2	134	48739	0
	As	75	50.130	ug/L	0.926	1	607	67061	1
	As-1	75	48.823	ug/L	1.079	2	5989	67960	1
	Se	82	79.536	ug/L	1.100	1	-5	11873	1
	Se	78	77.151	ug/L	1.705	2	6021	31739	1
	Mo	98	49.753	ug/L	1.401	2	26	180004	0
	Y	89		ug/L			308043	313558	0
	Kr	83		ug/L			851	870	3
>	In	115		ug/L			749907	760359	0
	Ag	107	50.856	ug/L	0.537	1	18	316335	1
	Cd	111	48.807	ug/L	1.069	2	70	160903	2
	Cd	114	49.395	ug/L	0.622	1	19	418521	1
	Sb	121	48.856	ug/L	0.177	0	366	528547	0
	Sb	123	48.676	ug/L	0.939	1	260	393204	2
	Ba	135	50.454	ug/L	0.296	0	16	165159	0
	Ba	137	50.073	ug/L	0.164	0	38	282588	0
>	Tb	159		ug/L			870411	913543	0
	Tl	205	48.584	ug/L	0.458	0	85	1250356	0
	Pb	208	50.075	ug/L	0.985	1	120	1644779	1
	Bi	209		ug/L			1750755	1770513	0
	Th	232	49.137	ug/L	0.491	0	1146	1592704	0
	U	238	49.147	ug/L	0.712	1	46	1679453	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:04:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1255596	1
	Be	9	0.002	ug/L	0.002	112	9	16	48
	C	13		ug/L			83631	84817	2
	Cl	37		ug/L			4167618	4221009	1
>	Sc	45		ug/L			978840	975192	2
	V	51	-0.009	ug/L	0.010	111	4838	4675	1
	V-1	51	-0.000	ug/L	0.000	33	99	94	3
	Cr	52	-0.032	ug/L	0.043	136	14295	13821	2
	Cr	53	-0.002	ug/L	0.009	510	99	96	11
	Mn	55	-0.001	ug/L	0.001	127	350	334	4
	Co	59	-0.000	ug/L	0.000	793	45	44	10
>	Ge	72		ug/L			396414	402679	3
	Ni	60	-0.001	ug/L	0.002	451	22	21	26
	Ni	62	-0.019	ug/L	0.016	82	117	112	8
	Cu	63	0.001	ug/L	0.004	544	99	103	15
	Cu	65	0.002	ug/L	0.001	72	22	27	13
	Zn	66	-0.015	ug/L	0.008	56	146	128	6
	Zn	67	0.020	ug/L	0.004	21	24	29	0
	Zn	68	-0.018	ug/L	0.022	121	134	118	15
	As	75	-0.010	ug/L	0.018	192	607	604	1
	As-1	75	-0.117	ug/L	0.147	125	5989	5932	0
	Se	82	0.019	ug/L	0.081	431	-5	-2	397
	Se	78	-0.417	ug/L	0.540	129	6021	5976	0
	Mo	98	0.008	ug/L	0.002	25	26	57	10
	Y	89		ug/L			308043	306623	1
	Kr	83		ug/L			851	851	2
>	In	115		ug/L			749907	744268	1
	Ag	107	0.001	ug/L	0.001	173	18	22	29
	Cd	111	0.001	ug/L	0.001	220	70	71	5
	Cd	114	0.000	ug/L	0.001	481	19	21	47
	Sb	121	0.014	ug/L	0.011	75	366	514	21
	Sb	123	0.017	ug/L	0.013	77	260	390	25
	Ba	135	0.000	ug/L	0.001	3969	16	16	28
	Ba	137	-0.001	ug/L	0.001	51	38	31	12
>	Tb	159		ug/L			870411	873996	0
	Tl	205	0.001	ug/L	0.001	148	85	100	22
	Pb	208	0.000	ug/L	0.001	217	120	134	21
	Bi	209		ug/L			1750755	1763610	0
	Th	232	0.062	ug/L	0.017	26	1146	3062	17
	U	238	0.001	ug/L	0.001	64	46	82	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:08:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1298536	1
[	Be	9	49.510	ug/L	1.979	3	9	192808	2
	C	13		ug/L			83631	85489	2
	Cl	37		ug/L			4167618	4435045	2
[>	Sc	45		ug/L			978840	1017269	2
[	V	51	48.288	ug/L	1.547	3	4838	838818	2
[	V-1	51	48.223	ug/L	1.522	3	99	831475	2
[	Cr	52	49.151	ug/L	1.295	2	14295	684442	1
[	Cr	53	48.922	ug/L	1.307	2	99	74993	1
[	Mn	55	49.212	ug/L	0.440	0	350	885136	1
[	Co	59	49.312	ug/L	1.826	3	45	599551	1
[>	Ge	72		ug/L			396414	405058	1
[	Ni	60	51.006	ug/L	0.134	0	22	128654	1
[	Ni	62	49.111	ug/L	0.861	1	117	18154	1
[	Cu	63	50.579	ug/L	0.743	1	99	273626	1
[	Cu	65	50.935	ug/L	0.840	1	22	121472	1
[	Zn	66	49.904	ug/L	1.335	2	146	70765	1
[	Zn	67	49.789	ug/L	1.424	2	24	11893	2
[	Zn	68	50.123	ug/L	0.830	1	134	50452	0
[	As	75	49.848	ug/L	1.105	2	607	66146	0
[	As-1	75	49.973	ug/L	1.133	2	5989	68852	0
[	Se	82	51.118	ug/L	0.984	1	-5	7567	0
[	Se	78	50.169	ug/L	1.142	2	6021	22624	0
[	Mo	98	48.639	ug/L	1.812	3	26	174582	2
	Y	89		ug/L			308043	316136	1
	Kr	83		ug/L			851	896	4
[>	In	115		ug/L			749907	764482	0
[	Ag	107	51.195	ug/L	1.014	1	18	320158	1
[	Cd	111	49.825	ug/L	0.635	1	70	165144	1
[	Cd	114	49.573	ug/L	0.672	1	19	422307	1
[	Sb	121	48.877	ug/L	0.239	0	366	531635	0
[	Sb	123	47.957	ug/L	0.142	0	260	389491	0
[	Ba	135	49.597	ug/L	0.185	0	16	163234	0
[	Ba	137	49.494	ug/L	0.088	0	38	280830	0
[>	Tb	159		ug/L			870411	902893	0
[	Tl	205	48.562	ug/L	0.546	1	85	1235242	1
[	Pb	208	50.305	ug/L	0.505	1	120	1633152	0
[	Bi	209		ug/L			1750755	1777613	0
[	Th	232	48.383	ug/L	0.477	0	1146	1550040	1
[	U	238	48.562	ug/L	0.753	1	46	1640145	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:13:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1273993	2
	Be	9	0.000	ug/L	0.001	259	9	10	37
	C	13		ug/L			83631	83913	1
	Cl	37		ug/L			4167618	4238742	0
>	Sc	45		ug/L			978840	980802	1
	V	51	-0.013	ug/L	0.014	105	4838	4630	3
	V-1	51	-0.000	ug/L	0.001	317	99	95	11
	Cr	52	-0.042	ug/L	0.041	97	14295	13774	2
	Cr	53	0.004	ug/L	0.009	199	99	106	13
	Mn	55	-0.000	ug/L	0.001	244	350	344	3
	Co	59	-0.000	ug/L	0.001	1413	45	44	16
>	Ge	72		ug/L			396414	397120	1
	Ni	60	-0.002	ug/L	0.002	75	22	16	25
	Ni	62	-0.002	ug/L	0.026	1544	117	117	9
	Cu	63	0.003	ug/L	0.002	61	99	113	6
	Cu	65	-0.000	ug/L	0.004	1304	22	21	42
	Zn	66	0.004	ug/L	0.011	288	146	152	8
	Zn	67	-0.013	ug/L	0.016	124	24	21	17
	Zn	68	0.003	ug/L	0.010	350	134	137	6
	As	75	-0.008	ug/L	0.024	298	607	598	6
	As-1	75	0.010	ug/L	0.078	786	5989	6010	0
	Se	82	-0.074	ug/L	0.110	148	-5	-16	95
	Se	78	0.055	ug/L	0.324	587	6021	6049	0
	Mo	98	0.012	ug/L	0.002	15	26	70	11
	Y	89		ug/L			308043	305786	1
	Kr	83		ug/L			851	881	4
>	In	115		ug/L			749907	745691	0
	Ag	107	0.002	ug/L	0.000	8	18	33	4
	Cd	111	0.001	ug/L	0.005	477	70	73	21
	Cd	114	0.001	ug/L	0.001	111	19	29	40
	Sb	121	0.078	ug/L	0.002	3	366	1186	2
	Sb	123	0.081	ug/L	0.010	11	260	903	8
	Ba	135	0.001	ug/L	0.001	70	16	20	16
	Ba	137	0.001	ug/L	0.000	51	38	42	4
>	Tb	159		ug/L			870411	872977	0
	Tl	205	0.002	ug/L	0.001	50	85	136	18
	Pb	208	0.001	ug/L	0.001	107	120	144	17
	Bi	209		ug/L			1750755	1762209	0
	Th	232	0.079	ug/L	0.022	27	1146	3601	18
	U	238	0.002	ug/L	0.000	18	46	114	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:17:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1263680	1
	Be	9	0.204	ug/L	0.005	2	9	781	1
	C	13		ug/L			83631	82030	0
	Cl	37		ug/L			4167618	4150195	1
>	Sc	45		ug/L			978840	973618	0
	V	51	0.187	ug/L	0.017	9	4838	7897	3
	V-1	51	0.203	ug/L	0.009	4	99	3443	3
	Cr	52	0.468	ug/L	0.023	4	14295	20329	1
	Cr	53	0.528	ug/L	0.010	1	99	872	2
	Mn	55	0.516	ug/L	0.002	0	350	9229	0
	Co	59	0.218	ug/L	0.009	4	45	2576	3
>	Ge	72		ug/L			396414	399162	1
	Ni	60	0.537	ug/L	0.008	1	22	1357	0
	Ni	62	0.481	ug/L	0.030	6	117	292	4
	Cu	63	0.536	ug/L	0.002	0	99	2957	1
	Cu	65	0.530	ug/L	0.028	5	22	1267	5
	Zn	66	4.059	ug/L	0.082	2	146	5808	1
	Zn	67	3.558	ug/L	0.099	2	24	860	3
	Zn	68	3.929	ug/L	0.135	3	134	4021	2
	As	75	0.260	ug/L	0.026	10	607	947	2
	As-1	75	0.152	ug/L	0.054	35	5989	6218	0
	Se	82	0.582	ug/L	0.066	11	-5	79	12
	Se	78	0.274	ug/L	0.231	84	6021	6151	0
	Mo	98	0.192	ug/L	0.009	4	26	706	4
	Y	89		ug/L			308043	302895	0
	Kr	83		ug/L			851	883	3
>	In	115		ug/L			749907	746118	0
	Ag	107	0.208	ug/L	0.005	2	18	1290	2
	Cd	111	0.107	ug/L	0.001	1	70	415	0
	Cd	114	0.109	ug/L	0.002	1	19	924	1
	Sb	121	0.201	ug/L	0.005	2	366	2495	1
	Sb	123	0.199	ug/L	0.009	4	260	1834	4
	Ba	135	0.517	ug/L	0.028	5	16	1677	5
	Ba	137	0.507	ug/L	0.006	1	38	2846	0
>	Tb	159		ug/L			870411	873638	0
	Tl	205	0.202	ug/L	0.003	1	85	5048	0
	Pb	208	0.110	ug/L	0.002	1	120	3571	2
	Bi	209		ug/L			1750755	1769953	0
	Th	232	0.191	ug/L	0.007	3	1146	7062	3
	U	238	0.201	ug/L	0.004	2	46	6628	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:21:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1379131	2
	Be	9	0.001	ug/L	0.001	188	9	13	46
	C	13		ug/L			83631	174791	2
	Cl	37		ug/L			4167618	11149170	2
>	Sc	45		ug/L			978840	1074406	4
	V	51	0.119	ug/L	0.016	13	4838	7481	5
	V-1	51	1.566	ug/L	0.048	3	99	28662	7
	Cr	52	0.837	ug/L	0.072	8	14295	27706	1
	Cr	53	6.053	ug/L	0.129	2	99	9904	6
	Mn	55	0.102	ug/L	0.001	1	350	2318	5
	Co	59	0.018	ug/L	0.002	11	45	282	9
>	Ge	72		ug/L			396414	413293	1
	Ni	60	0.363	ug/L	0.009	2	22	956	4
	Ni	62	5.834	ug/L	0.681	11	117	2311	12
	Cu	63	0.794	ug/L	0.053	6	99	4488	8
	Cu	65	0.396	ug/L	0.005	1	22	987	1
	Zn	66	0.826	ug/L	0.020	2	146	1346	2
	Zn	67	2.704	ug/L	0.030	1	24	682	1
	Zn	68	0.181	ug/L	0.006	3	134	325	0
	As	75	0.029	ug/L	0.027	93	607	672	3
	As-1	75	0.105	ug/L	0.055	51	5989	6378	1
	Se	82	-0.344	ug/L	0.123	35	-5	-57	30
	Se	78	0.419	ug/L	0.089	21	6021	6418	2
	Mo	98	397.028	ug/L	2.544	0	26	1454243	2
	Y	89		ug/L			308043	316011	0
	Kr	83		ug/L			851	1111	2
>	In	115		ug/L			749907	778183	1
	Ag	107	0.024	ug/L	0.002	6	18	169	4
	Cd	111	0.285	ug/L	0.015	5	70	1034	3
	Cd	114	0.322	ug/L	0.001	0	19	2814	1
	Sb	121	0.037	ug/L	0.005	14	366	784	8
	Sb	123	0.036	ug/L	0.005	14	260	571	7
	Ba	135	0.043	ug/L	0.004	8	16	159	7
	Ba	137	0.039	ug/L	0.001	1	38	262	3
>	Tb	159		ug/L			870411	947272	1
	Tl	205	0.002	ug/L	0.001	39	85	156	15
	Pb	208	0.041	ug/L	0.001	3	120	1525	1
	Bi	209		ug/L			1750755	1738603	0
	Th	232	0.214	ug/L	0.103	47	1146	8382	39
	U	238	0.001	ug/L	0.000	54	46	78	21

US15 : 00536

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:27:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1420695	2
	Be	9	-0.000	ug/L	0.001	126	9	8	24
	C	13		ug/L			83631	186395	2
	Cl	37		ug/L			4167618	11311289	2
>	Sc	45		ug/L			978840	1113371	0
	V	51	0.201	ug/L	0.096	47	4838	9293	19
	V-1	51	1.585	ug/L	0.052	3	99	30035	3
	Cr	52	20.356	ug/L	0.455	2	14295	319851	2
	Cr	53	25.454	ug/L	0.429	1	99	42776	2
	Mn	55	19.103	ug/L	0.347	1	350	376366	2
	Co	59	18.770	ug/L	0.411	2	45	249903	1
>	Ge	72		ug/L			396414	412680	3
	Ni	60	19.585	ug/L	0.592	3	22	50312	1
	Ni	62	25.625	ug/L	0.833	3	117	9707	3
	Cu	63	20.729	ug/L	0.319	1	99	114298	2
	Cu	65	20.534	ug/L	0.882	4	22	49872	2
	Zn	66	19.621	ug/L	0.741	3	146	28425	0
	Zn	67	19.743	ug/L	0.800	4	24	4818	2
	Zn	68	17.942	ug/L	0.990	5	134	18474	3
	As	75	18.476	ug/L	0.649	3	607	25364	0
	As-1	75	19.482	ug/L	0.893	4	5989	31133	0
	Se	82	-0.373	ug/L	0.118	31	-5	-62	27
	Se	78	0.695	ug/L	0.910	130	6021	6495	1
	Mo	98	406.587	ug/L	1.019	0	26	1486948	2
	Y	89		ug/L			308043	325496	2
	Kr	83		ug/L			851	1142	2
>	In	115		ug/L			749907	801449	0
	Ag	107	19.055	ug/L	0.317	1	18	124929	0
	Cd	111	19.401	ug/L	0.235	1	70	67462	1
	Cd	114	19.860	ug/L	0.169	0	19	177369	0
	Sb	121	0.042	ug/L	0.004	8	366	874	5
	Sb	123	0.045	ug/L	0.003	7	260	657	4
	Ba	135	0.038	ug/L	0.001	3	16	148	3
	Ba	137	0.033	ug/L	0.001	3	38	237	1
>	Tb	159		ug/L			870411	961453	1
	Tl	205	0.000	ug/L	0.000	163	85	95	3
	Pb	208	0.040	ug/L	0.000	0	120	1514	2
	Bi	209		ug/L			1750755	1775382	0
	Th	232	0.062	ug/L	0.017	27	1146	3382	15
	U	238	0.000	ug/L	0.000	62	46	64	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:32:32
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1305781	0
	Be	9	-0.001	ug/L	0.000	20	9	6	8
	C	13		ug/L			83631	95059	1
	Cl	37		ug/L			4167618	4300639	2
>	Sc	45		ug/L			978840	1023754	0
	V	51	-0.006	ug/L	0.004	68	4838	4955	1
	V-1	51	0.151	ug/L	0.022	14	99	2730	14
	Cr	52	-0.030	ug/L	0.010	34	14295	14539	1
	Cr	53	0.537	ug/L	0.087	16	99	931	14
	Mn	55	0.017	ug/L	0.003	16	350	674	7
	Co	59	0.001	ug/L	0.000	24	45	59	5
>	Ge	72		ug/L			396414	405668	1
	Ni	60	0.026	ug/L	0.000	1	22	87	0
	Ni	62	0.397	ug/L	0.037	9	117	266	3
	Cu	63	0.072	ug/L	0.006	8	99	492	5
	Cu	65	0.065	ug/L	0.005	7	22	177	7
	Zn	66	0.784	ug/L	0.044	5	146	1260	3
	Zn	67	0.742	ug/L	0.067	9	24	201	6
	Zn	68	0.757	ug/L	0.037	4	134	898	2
	As	75	0.029	ug/L	0.025	85	607	659	3
	As-1	75	-0.104	ug/L	0.101	97	5989	5997	1
	Se	82	-0.047	ug/L	0.076	162	-5	-13	87
	Se	78	-0.333	ug/L	0.317	95	6021	6052	0
	Mo	98	0.158	ug/L	0.162	102	26	600	98
	Y	89		ug/L			308043	311695	0
	Kr	83		ug/L			851	967	4
>	In	115		ug/L			749907	786583	0
	Ag	107	0.003	ug/L	0.003	98	18	41	52
	Cd	111	-0.001	ug/L	0.000	64	70	71	1
	Cd	114	0.004	ug/L	0.002	43	19	53	26
	Sb	121	-0.024	ug/L	0.002	9	366	118	20
	Sb	123	-0.022	ug/L	0.001	5	260	93	10
	Ba	135	0.018	ug/L	0.004	20	16	76	16
	Ba	137	0.016	ug/L	0.002	10	38	131	6
>	Tb	159		ug/L			870411	895858	1
	Tl	205	-0.001	ug/L	0.001	103	85	72	21
	Pb	208	0.019	ug/L	0.000	0	120	732	1
	Bi	209		ug/L			1750755	1799014	1
	Th	232	-0.031	ug/L	0.000	1	1146	182	7
	U	238	-0.001	ug/L	0.000	20	46	19	32

US15 : 00538

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:38:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1270200	1
	Be	9	-0.001	ug/L	0.000	40	9	6	18
	C	13		ug/L			83631	94797	1
	Cl	37		ug/L			4167618	4149664	0
>	Sc	45		ug/L			978840	1025419	1
	V	51	-0.003	ug/L	0.010	361	4838	5018	2
	V-1	51	0.072	ug/L	0.008	11	99	1355	9
	Cr	52	-0.027	ug/L	0.026	99	14295	14605	1
	Cr	53	0.243	ug/L	0.023	9	99	479	6
	Mn	55	0.019	ug/L	0.001	6	350	709	3
	Co	59	0.000	ug/L	0.000	173	45	49	8
>	Ge	72		ug/L			396414	407075	2
	Ni	60	0.028	ug/L	0.001	3	22	92	4
	Ni	62	0.263	ug/L	0.032	12	117	217	4
	Cu	63	0.069	ug/L	0.011	15	99	477	9
	Cu	65	0.063	ug/L	0.006	9	22	172	7
	Zn	66	0.805	ug/L	0.032	3	146	1294	2
	Zn	67	0.709	ug/L	0.045	6	24	194	3
	Zn	68	0.713	ug/L	0.015	2	134	857	2
	As	75	0.065	ug/L	0.030	46	607	708	4
	As-1	75	-0.078	ug/L	0.132	168	5989	6049	1
	Se	82	-0.064	ug/L	0.028	43	-5	-15	28
	Se	78	-0.277	ug/L	0.501	180	6021	6089	1
	Mo	98	0.014	ug/L	0.004	30	26	78	18
	Y	89		ug/L			308043	309334	1
	Kr	83		ug/L			851	1020	2
>	In	115		ug/L			749907	771155	1
	Ag	107	-0.000	ug/L	0.000	123	18	16	17
	Cd	111	-0.006	ug/L	0.000	4	70	52	2
	Cd	114	0.000	ug/L	0.000	1087	19	20	20
	Sb	121	-0.026	ug/L	0.002	6	366	93	21
	Sb	123	-0.024	ug/L	0.001	3	260	72	11
	Ba	135	0.024	ug/L	0.004	18	16	95	15
	Ba	137	0.020	ug/L	0.001	6	38	152	6
>	Tb	159		ug/L			870411	892999	0
	Tl	205	-0.002	ug/L	0.000	20	85	40	24
	Pb	208	0.021	ug/L	0.001	6	120	794	5
	Bi	209		ug/L			1750755	1803086	1
	Th	232	-0.032	ug/L	0.000	1	1146	151	7
	U	238	-0.001	ug/L	0.000	10	46	9	43

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:43:16
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1338096	1
	Be	9	49.964	ug/L	0.791	1	9	200595	1
	C	13		ug/L			83631	92625	0
	Cl	37		ug/L			4167618	4458836	1
>	Sc	45		ug/L			978840	1058346	2
	V	51	48.221	ug/L	1.265	2	4838	871503	1
	V-1	51	48.472	ug/L	1.290	2	99	869487	1
	Cr	52	48.903	ug/L	0.906	1	14295	708581	0
	Cr	53	49.811	ug/L	1.953	3	99	79424	2
	Mn	55	48.571	ug/L	0.838	1	350	908806	1
	Co	59	49.487	ug/L	2.785	5	45	625790	3
>	Ge	72		ug/L			396414	410848	0
	Ni	60	50.335	ug/L	0.367	0	22	128773	0
	Ni	62	50.046	ug/L	1.202	2	117	18762	1
	Cu	63	50.475	ug/L	0.584	1	99	276980	0
	Cu	65	51.205	ug/L	1.318	2	22	123854	1
	Zn	66	50.212	ug/L	0.495	0	146	72235	0
	Zn	67	51.396	ug/L	1.452	2	24	12451	1
	Zn	68	49.822	ug/L	0.726	1	134	50872	0
	As	75	49.903	ug/L	0.084	0	607	67181	0
	As-1	75	49.661	ug/L	0.280	0	5989	69453	0
	Se	82	51.971	ug/L	0.412	0	-5	7805	1
	Se	78	50.208	ug/L	0.795	1	6021	22964	0
	Mo	98	47.902	ug/L	1.014	2	26	174419	1
	Y	89		ug/L			308043	314588	0
	Kr	83		ug/L			851	1107	2
>	In	115		ug/L			749907	805366	1
	Ag	107	48.511	ug/L	0.437	0	18	319587	0
	Cd	111	49.441	ug/L	0.314	0	70	172623	0
	Cd	114	49.189	ug/L	0.709	1	19	441439	1
	Sb	121	48.234	ug/L	0.396	0	366	552672	0
	Sb	123	48.223	ug/L	0.226	0	260	412582	1
	Ba	135	48.011	ug/L	1.091	2	16	166442	1
	Ba	137	47.481	ug/L	0.662	1	38	283786	0
>	Tb	159		ug/L			870411	936136	1
	Tl	205	47.728	ug/L	0.961	2	85	1258550	0
	Pb	208	49.736	ug/L	0.334	0	120	1674101	0
	Bi	209		ug/L			1750755	1813045	1
	Th	232	47.981	ug/L	1.390	2	1146	1593401	1
	U	238	48.454	ug/L	0.358	0	46	1696755	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 13:47:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1289176	2
[	Be	9	0.001	ug/L	0.001	141	9	13	40
	C	13		ug/L			83631	89129	0
	Cl	37		ug/L			4167618	4352025	2
[>	Sc	45		ug/L			978840	1001829	1
[	V	51	-0.007	ug/L	0.009	139	4838	4841	3
[	V-1	51	0.026	ug/L	0.002	8	99	550	5
[	Cr	52	-0.043	ug/L	0.015	35	14295	14056	1
[	Cr	53	0.076	ug/L	0.018	23	99	216	11
[	Mn	55	0.000	ug/L	0.002	607	350	363	7
[	Co	59	0.002	ug/L	0.002	109	45	64	30
[>	Ge	72		ug/L			396414	402215	1
[	Ni	60	0.000	ug/L	0.002	389	22	23	16
[	Ni	62	0.175	ug/L	0.040	22	117	182	6
[	Cu	63	0.009	ug/L	0.004	48	99	149	14
[	Cu	65	0.004	ug/L	0.003	86	22	31	22
[	Zn	66	-0.009	ug/L	0.005	60	146	136	7
[	Zn	67	0.011	ug/L	0.034	302	24	27	29
[	Zn	68	0.009	ug/L	0.002	27	134	145	1
[	As	75	0.143	ug/L	0.024	16	607	803	4
[	As-1	75	-0.072	ug/L	0.053	73	5989	5985	0
[	Se	82	0.000	ug/L	0.091	34740	-5	-5	226
[	Se	78	-0.273	ug/L	0.223	81	6021	6019	0
[	Mo	98	0.028	ug/L	0.007	25	26	125	17
	Y	89		ug/L			308043	303865	2
	Kr	83		ug/L			851	1100	1
[>	In	115		ug/L			749907	760403	1
[	Ag	107	0.004	ug/L	0.002	57	18	41	30
[	Cd	111	-0.000	ug/L	0.000	137	70	70	1
[	Cd	114	0.002	ug/L	0.002	114	19	32	44
[	Sb	121	0.119	ug/L	0.010	8	366	1656	5
[	Sb	123	0.126	ug/L	0.007	5	260	1277	3
[	Ba	135	0.003	ug/L	0.003	125	16	24	41
[	Ba	137	-0.001	ug/L	0.003	236	38	32	48
[>	Tb	159		ug/L			870411	877772	1
[	Tl	205	0.002	ug/L	0.002	75	85	140	29
[	Pb	208	0.002	ug/L	0.002	131	120	174	39
[	Bi	209		ug/L			1750755	1774806	0
[	Th	232	0.127	ug/L	0.040	31	1146	5120	24
[	U	238	0.004	ug/L	0.002	47	46	180	34

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:04:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			1261646	1329902	0
[	Be	9	U	0.000	ug/L	0.001	792	9	10	40
	C	13			ug/L			83631	98837	1
	Cl	37			ug/L			4167618	4135307	1
[>	Sc	45			ug/L			978840	1036298	1
[	V	51		-0.002	ug/L	0.006	384	4838	5095	2
[	V-1	51		0.018	ug/L	0.001	4	99	427	2
[	Cr	52	U	-0.022	ug/L	0.012	56	14295	14836	2
[	Cr	53		0.050	ug/L	0.013	26	99	183	10
[	Mn	55		0.026	ug/L	0.002	7	350	853	2
[	Co	59		0.001	ug/L	0.001	91	45	57	17
[>	Ge	72			ug/L			396414	406112	1
[	Ni	60	U	0.018	ug/L	0.003	18	22	67	10
[	Ni	62		0.047	ug/L	0.044	94	117	137	10
[	Cu	63	U	0.123	ug/L	0.007	5	99	767	5
[	Cu	65		0.125	ug/L	0.007	5	22	322	4
[	Zn	66	U	0.674	ug/L	0.012	1	146	1106	3
[	Zn	67		0.618	ug/L	0.031	4	24	172	5
[	Zn	68		0.680	ug/L	0.024	3	134	822	1
[	As	75	U	0.154	ug/L	0.007	4	507	826	2
[	As-1	75		-0.054	ug/L	0.089	163	5989	6065	0
[	Se	82	U	0.030	ug/L	0.009	29	-5	-1	86
[	Se	78		-0.256	ug/L	0.350	136	6021	6083	0
[	Mo	98		0.009	ug/L	0.002	23	26	59	11
	Y	89			ug/L			308043	309276	1
	Kr	83			ug/L			851	1094	2
[>	In	115			ug/L			749907	782321	1
[	Ag	107	U	-0.000	ug/L	0.001	281	18	18	17
[	Cd	111	U	-0.001	ug/L	0.001	85	70	68	4
[	Cd	114		0.001	ug/L	0.000	60	19	25	11
[	Sb	121	U	-0.006	ug/L	0.006	90	366	314	18
[	Sb	123		-0.006	ug/L	0.007	105	260	217	24
[	Ba	135		0.008	ug/L	0.002	20	16	45	11
[	Ba	137		0.007	ug/L	0.001	21	38	81	12
[>	Tb	159			ug/L			870411	915988	0
[	Tl	205	U	-0.000	ug/L	0.001	440	85	85	20
[	Pb	208	U	0.008	ug/L	0.000	0	120	379	1
[	Bi	209			ug/L			1750755	1817014	0
[	Th	232		0.017	ug/L	0.006	35	1146	1750	10
[	U	238		-0.001	ug/L	0.000	26	46	26	23

US15 : 60542

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:08:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass		Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			1261646	1342706	1
[	Be	9	U	0.000	ug/L	0.001	319	9	10	32
	C	13			ug/L			83631	100224	2
	Cl	37			ug/L			4167618	4142810	1
[>	Sc	45			ug/L			978840	1045362	0
[	V	51		0.008	ug/L	0.011	129	4838	5311	3
[	V-1	51		0.017	ug/L	0.001	5	99	406	4
[	Cr	52	U	0.011	ug/L	0.035	328	14295	15414	2
[	Cr	53		0.042	ug/L	0.006	14	99	173	6
[	Mn	55		0.043	ug/L	0.002	5	350	1159	3
[	Co	59		0.001	ug/L	0.001	64	45	64	16
[>	Ge	72			ug/L			396414	406857	2
[	Ni	60	U	0.015	ug/L	0.002	15	22	60	11
[	Ni	62		0.004	ug/L	0.031	825	117	121	7
[	Cu	63	U	0.126	ug/L	0.007	5	99	783	5
[	Cu	65		0.129	ug/L	0.006	4	22	331	6
[	Zn	66	U	0.749	ug/L	0.034	4	146	1214	3
[	Zn	67		0.588	ug/L	0.027	4	24	165	2
[	Zn	68		0.713	ug/L	0.036	5	134	856	3
[	As	75	U	0.173	ug/L	0.024	13	607	851	2
[	As-1	75		-0.032	ug/L	0.052	163	5989	6105	0
[	Se	82	U	-0.016	ug/L	0.024	145	-5	-8	41
[	Se	78		-0.274	ug/L	0.221	80	6021	6089	1
[	Mo	98		0.001	ug/L	0.001	73	26	32	12
	Y	89			ug/L			308043	315284	1
	Kr	83			ug/L			851	1105	1
[>	In	115			ug/L			749907	789776	0
[	Ag	107	U	-0.001	ug/L	0.001	70	18	14	26
[	Cd	111	U	-0.003	ug/L	0.002	53	70	62	9
[	Cd	114		-0.000	ug/L	0.000	171	19	18	21
[	Sb	121	U	-0.023	ug/L	0.002	9	366	131	18
[	Sb	123		-0.021	ug/L	0.003	13	260	97	23
[	Ba	135		0.010	ug/L	0.001	10	16	51	6
[	Ba	137		0.008	ug/L	0.001	12	38	86	6
[>	Tb	159			ug/L			870411	904797	1
[	Tl	205	U	-0.002	ug/L	0.000	11	85	48	9
[	Pb	208	U	0.009	ug/L	0.001	9	120	407	5
[	Bi	209			ug/L			1750755	1832810	0
[	Th	232		-0.006	ug/L	0.004	73	1146	1008	14
[	U	238		-0.001	ug/L	0.000	8	46	16	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:13:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1305576	0
	Be	9	24.336	ug/L	0.254	1	9	95345	1
	C	13		ug/L			83631	103313	1
	Cl	37		ug/L			4167618	4200623	4
>	Sc	45		ug/L			978840	1031341	0
	V	51	23.674	ug/L	0.346	1	4838	419631	0
	V-1	51	23.951	ug/L	0.238	0	99	418850	0
	Cr	52	24.039	ug/L	0.650	2	14295	347124	1
	Cr	53	25.037	ug/L	0.448	1	99	38975	2
	Mn	55	24.568	ug/L	0.225	0	350	448215	0
	Co	59	24.984	ug/L	0.243	0	45	308142	1
>	Ge	72		ug/L			396414	405401	1
	Ni	60	25.287	ug/L	0.111	0	22	63850	2
	Ni	62	24.291	ug/L	0.083	0	117	9048	2
	Cu	63	25.393	ug/L	0.461	1	99	137537	1
	Cu	65	25.667	ug/L	0.196	0	22	61275	1
	Zn	66	76.566	ug/L	3.360	4	146	108556	2
	Zn	67	71.885	ug/L	0.569	0	24	17176	1
	Zn	68	76.872	ug/L	2.506	3	134	77356	2
	As	75	26.292	ug/L	0.271	1	607	35216	1
	As-1	75	23.907	ug/L	0.283	1	5989	36166	1
	Se	82	75.963	ug/L	1.117	1	-5	11257	0
	Se	78	73.817	ug/L	1.019	1	6021	30416	0
	Mo	98	24.314	ug/L	0.521	2	26	87359	0
	Y	89		ug/L			308043	316247	2
	Kr	83		ug/L			851	1109	1
>	In	115		ug/L			749907	789089	0
	Ag	107	24.636	ug/L	0.256	1	18	159039	0
	Cd	111	24.701	ug/L	0.115	0	70	84543	0
	Cd	114	24.651	ug/L	0.273	1	19	216766	0
	Sb	121	24.610	ug/L	0.079	0	366	276494	0
	Sb	123	24.444	ug/L	0.051	0	260	205052	0
	Ba	135	23.926	ug/L	0.510	2	16	81289	1
	Ba	137	23.576	ug/L	0.496	2	38	138097	1
>	Tb	159		ug/L			870411	903750	1
	Tl	205	24.497	ug/L	0.444	1	85	623671	0
	Pb	208	25.521	ug/L	0.410	1	120	829290	0
	Bi	209		ug/L			1750755	1838140	2
	Th	232	24.112	ug/L	0.852	3	1146	773541	2
	U	238	24.609	ug/L	0.631	2	46	831803	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:17:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1298219	1
	Be	9	24.419	ug/L	0.109	0	9	95128	1
	C	13		ug/L			83631	101669	2
	Cl	37		ug/L			4167618	4257050	1
>	Sc	45		ug/L			978840	1039715	1
	V	51	24.334	ug/L	0.375	1	4838	434677	1
	V-1	51	24.344	ug/L	0.519	2	99	429157	2
	Cr	52	24.673	ug/L	0.494	2	14295	358761	0
	Cr	53	24.711	ug/L	0.915	3	99	38775	3
	Mn	55	25.110	ug/L	0.474	1	350	461797	1
	Co	59	25.307	ug/L	1.047	4	45	314608	3
>	Ge	72		ug/L			396414	404815	2
	Ni	60	25.845	ug/L	0.459	1	22	65151	1
	Ni	62	25.505	ug/L	0.179	0	117	9480	1
	Cu	63	26.041	ug/L	0.796	3	99	140803	1
	Cu	65	25.953	ug/L	0.290	1	22	61868	1
	Zn	66	79.838	ug/L	1.895	2	146	113057	1
	Zn	67	72.492	ug/L	1.002	1	24	17296	2
	Zn	68	77.112	ug/L	2.165	2	134	77519	3
	As	75	27.077	ug/L	0.357	1	607	36201	2
	As-1	75	24.799	ug/L	0.202	0	5989	37233	1
	Se	82	77.577	ug/L	1.073	1	-5	11482	2
	Se	78	75.883	ug/L	1.131	1	6021	31049	0
	Mo	98	25.062	ug/L	0.769	3	26	89905	1
	Y	89		ug/L			308043	309967	2
	Kr	83		ug/L			851	1085	1
>	In	115		ug/L			749907	797804	1
	Ag	107	25.132	ug/L	0.085	0	18	164027	1
	Cd	111	24.975	ug/L	0.374	1	70	86422	1
	Cd	114	24.801	ug/L	0.252	1	19	220475	0
	Sb	121	25.048	ug/L	0.345	1	366	284488	1
	Sb	123	24.946	ug/L	0.265	1	260	211559	1
	Ba	135	24.294	ug/L	0.098	0	16	83449	1
	Ba	137	24.197	ug/L	0.441	1	38	143278	0
>	Tb	159		ug/L			870411	917263	0
	Tl	205	24.736	ug/L	0.127	0	85	639244	0
	Pb	208	25.924	ug/L	0.163	0	120	855087	0
	Bi	209		ug/L			1750755	1843393	1
	Th	232	24.663	ug/L	0.106	0	1146	803308	1
	U	238	24.718	ug/L	0.259	1	46	848134	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:21:16
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

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	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1293687	1
[	Be	9	0.027	ug/L	0.009	34	9	112	30
	C	13		ug/L			83631	111691	1
	Cl	37		ug/L			4167618	4522133	1
[>	Sc	45		ug/L			978840	1089891	1
[	V	51	17.464	ug/L	0.338	1	4838	328486	0
[	V-1	51	17.515	ug/L	0.366	2	99	323655	0
[	Cr	52	5.636	ug/L	0.135	2	14295	98191	2
[	Cr	53	5.755	ug/L	0.172	2	99	9550	1
[	Mn	55	90.441	ug/L	0.825	0	350	1742562	1
[	Co	59	1.439	ug/L	0.025	1	45	18797	0
[>	Ge	72		ug/L			396414	382060	0
[	Ni	60	5.836	ug/L	0.254	4	22	13904	4
[	Ni	62	4.374	ug/L	0.166	3	117	1628	2
[	Cu	63	63.834	ug/L	1.038	1	99	325760	2
[	Cu	65	63.971	ug/L	1.371	2	22	143900	2
[	Zn	66	33.294	ug/L	0.511	1	146	44587	0
[	Zn	67	32.670	ug/L	0.285	0	24	7369	0
[	Zn	68	33.840	ug/L	0.184	0	134	32174	0
[	As	75	1109.299	ug/L	6.114	0	607	1376333	1
[	As-1	75	1161.417	ug/L	6.360	0	5989	1381316	1
[	Se	82	0.193	ug/L	0.007	3	-5	21	3
[	Se	78	0.355	ug/L	0.163	45	6021	5913	0
[	Mo	98	9.976	ug/L	0.150	1	26	33801	1
	Y	89		ug/L			308043	332328	1
	Kr	83		ug/L			851	1129	3
[>	In	115		ug/L			749907	748874	0
[	Ag	107	0.291	ug/L	0.002	0	18	1802	1
[	Cd	111	0.063	ug/L	0.001	2	70	273	2
[	Cd	114	0.050	ug/L	0.001	2	19	433	3
[	Sb	121	1.563	ug/L	0.014	0	366	17001	0
[	Sb	123	1.553	ug/L	0.025	1	260	12607	1
[	Ba	135	32.974	ug/L	0.608	1	16	106307	1
[	Ba	137	33.011	ug/L	0.048	0	38	183494	0
[>	Tb	159		ug/L			870411	908130	0
[	Tl	205	0.009	ug/L	0.003	27	85	324	19
[	Pb	208	0.484	ug/L	0.001	0	120	15938	0
[	Bi	209		ug/L			1750755	1657653	0
[	Th	232	0.411	ug/L	0.219	53	1146	14399	48
[	U	238	1.343	ug/L	0.009	0	46	45686	0

ICP-MS Quantitative Analysis - Summary Report

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Sample ID: US27 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:25:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1274902	0
[	Be	9	U 0.013	ug/L	0.002	16	9	59	14
	C	13		ug/L			83631	106487	1
	Cl	37		ug/L			4167618	4732306	1
[>	Sc	45		ug/L			978840	1162275	1
[	V	51	5.010	ug/L	0.013	0	4838	104606	1
[	V-1	51	5.164	ug/L	0.021	0	99	101858	1
[	Cr	52	1.055 ✓	ug/L	0.049	4	14295	33393	1
[	Cr	53	1.587	ug/L	0.071	4	99	2894	2
[	Mn	55	435.429	ug/L	6.672	1	350	8944601	0
[	Co	59	0.237	ug/L	0.004	1	45	3342	1
[>	Ge	72		ug/L			396414	387352	0
[	Ni	60	0.909 ✓	ug/L	0.030	3	22	2212	2
[	Ni	62	9.359	ug/L	3.747	40	117	3395	38
[	Cu	63	4.037	ug/L	0.355	8	99	20970	8
[	Cu	65	2.072 ✓	ug/L	0.035	1	22	4747	1
[	Zn	66	U 1.724	ug/L	0.026	1	146	2477	1
[	Zn	67	1.970	ug/L	0.111	5	24	472	5
[	Zn	68	2.916	ug/L	0.090	3	134	2930	2
[	As	75	740.479	ug/L	13.807	1	607	931721	2
[	As-1	75	775.264	ug/L	14.441	1	5989	936836	2
[	Se	82	U 0.131	ug/L	0.119	91	-5	12	131
[	Se	78	0.308	ug/L	0.115	37	6021	5981	0
[	Mo	98	0.160	ug/L	0.009	5	26	574	4
	Y	89		ug/L			308043	307413	1
	Kr	83		ug/L			851	1075	4
[>	In	115		ug/L			749907	755180	1
[	Ag	107	U 0.006	ug/L	0.002	32	18	54	21
[	Cd	111	0.212 ✓	ug/L	0.010	4	70	763	3
[	Cd	114	0.229	ug/L	0.010	4	19	1945	5
[	Sb	121	U 0.127	ug/L	0.006	4	366	1737	4
[	Sb	123	0.130	ug/L	0.004	2	260	1305	1
[	Ba	135	3.866	ug/L	0.075	1	16	12583	1
[	Ba	137	3.853	ug/L	0.048	1	38	21634	2
[>	Tb	159		ug/L			870411	910998	0
[	Tl	205	U 0.002	ug/L	0.000	26	85	136	8
[	Pb	208	0.103 ✓	ug/L	0.002	1	120	3507	1
[	Bi	209		ug/L			1750755	1635268	0
[	Th	232	0.139	ug/L	0.049	35	1146	5681	27
[	U	238	0.011	ug/L	0.001	5	46	430	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:29:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

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	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1295314	1
	Be	9	0.019	ug/L	0.002	10	9	82	7
	C	13		ug/L			83631	109315	1
	Cl	37		ug/L			4167618	4375949	1
>	Sc	45		ug/L			978840	1085249	1
	V	51	15.599	ug/L	0.368	2	4838	292752	1
	V-1	51	15.657	ug/L	0.418	2	99	288110	1
	Cr	52	5.167	ug/L	0.107	2	14295	90977	2
	Cr	53	5.317	ug/L	0.155	2	99	8795	3
	Mn	55	86.858	ug/L	1.002	1	350	1666397	0
	Co	59	1.408	ug/L	0.026	1	45	18322	3
>	Ge	72		ug/L			396414	379813	0
	Ni	60	5.298	ug/L	0.101	1	22	12548	1
	Ni	62	5.667	ug/L	0.398	7	117	2063	6
	Cu	63	11.277	ug/L	0.213	1	99	57279	1
	Cu	65	10.749	ug/L	0.117	1	22	24055	0
	Zn	66	30.681	ug/L	0.723	2	146	40858	2
	Zn	67	30.651	ug/L	0.830	2	24	6875	2
	Zn	68	31.879	ug/L	0.339	1	134	30140	1
	As	75	1095.031	ug/L	6.691	0	607	1350600	0
	As-1	75	1146.408	ug/L	7.041	0	5989	1355473	0
	Se	82	0.244	ug/L	0.076	31	-5	28	37
	Se	78	0.122	ug/L	0.112	91	6021	5807	0
	Mo	98	9.653	ug/L	0.147	1	26	32514	0
	Y	89		ug/L			308043	322861	3
	Kr	83		ug/L			851	1110	2
>	In	115		ug/L			749907	743971	0
	Ag	107	0.043	ug/L	0.000	0	18	279	1
	Cd	111	0.024	ug/L	0.002	7	70	148	3
	Cd	114	0.013	ug/L	0.003	24	19	128	20
	Sb	121	1.252	ug/L	0.014	1	366	13609	0
	Sb	123	1.266	ug/L	0.008	0	260	10254	0
	Ba	135	32.281	ug/L	0.168	0	16	103398	0
	Ba	137	31.874	ug/L	0.164	0	38	176014	0
>	Tb	159		ug/L			870411	908722	1
	Tl	205	0.002	ug/L	0.001	25	85	147	9
	Pb	208	0.080	ug/L	0.002	1	120	2724	1
	Bi	209		ug/L			1750755	1650917	0
	Th	232	0.045	ug/L	0.005	10	1146	2652	4
	U	238	1.287	ug/L	0.034	2	46	43795	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 14:33:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

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	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1259317	0
	Be	9	U 0.010	ug/L	0.002	16	9	45	13
	C	13		ug/L			83631	105409	2
	Cl	37		ug/L			4167618	4813115	0
>	Sc	45		ug/L			978840	1149338	1
	V	51	4.541	ug/L	0.047	1	4838	94299	1
	V-1	51	4.712	ug/L	0.028	0	99	91917	1
	Cr	52	0.978	ug/L	0.070	7	14295	31839	2
	Cr	53	1.573	ug/L	0.117	7	99	2836	5
	Mn	55	426.095	ug/L	6.996	1	350	8655020	0
	Co	59	0.226	ug/L	0.006	2	45	3154	1
>	Ge	72		ug/L			396414	383253	1
	Ni	60	0.873	ug/L	0.034	3	22	2102	3
	Ni	62	5.808	ug/L	0.916	15	117	2129	13
	Cu	63	2.463	ug/L	0.185	7	99	12691	6
	Cu	65	0.936	ug/L	0.042	4	22	2132	3
	Zn	66	U 1.282	ug/L	0.114	8	146	1857	7
	Zn	67	1.554	ug/L	0.049	3	24	373	2
	Zn	68	2.384	ug/L	0.069	2	134	2394	1
	As	75	720.152	ug/L	6.677	0	607	896435	0
	As-1	75	753.968	ug/L	7.017	0	5989	901484	0
	Se	82	U 0.106	ug/L	0.082	77	-5	9	126
	Se	78	0.257	ug/L	0.244	95	6021	5901	0
	Mo	98	0.125	ug/L	0.005	4	26	450	4
	Y	89		ug/L			308043	309309	2
	Kr	83		ug/L			851	1070	3
>	In	115		ug/L			749907	745463	0
	Ag	107	U 0.003	ug/L	0.001	25	18	35	12
	Cd	111	U 0.003	ug/L	0.002	60	70	79	6
	Cd	114	0.001	ug/L	0.001	40	19	30	15
	Sb	121	U 0.113	ug/L	0.006	5	366	1566	4
	Sb	123	0.111	ug/L	0.008	7	260	1133	4
	Ba	135	3.351	ug/L	0.068	2	16	10770	1
	Ba	137	3.359	ug/L	0.061	1	38	18622	1
>	Tb	159		ug/L			870411	916678	0
	Tl	205	U 0.000	ug/L	0.000	60	85	93	2
	Pb	208	U 0.024	ug/L	0.001	5	120	902	4
	Bi	209		ug/L			1750755	1644387	0
	Th	232	0.031	ug/L	0.010	33	1146	2202	15
	U	238	0.009	ug/L	0.001	8	46	341	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 14:37:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1241966	0
	Be	9	193.716	ug/L	3.365	1	9	721838	1
	C	13		ug/L			83631	89769	2
	Cl	37		ug/L			4167618	4386990	2
>	Sc	45		ug/L			978840	970639	1
	V	51	203.686	ug/L	4.302	2	4838	3360915	0
	V-1	51	201.596	ug/L	5.128	2	99	3316528	1
	Cr	52	203.051	ug/L	1.816	0	14295	2654108	1
	Cr	53	195.523	ug/L	4.294	2	99	285719	0
	Mn	55	200.823	ug/L	0.872	0	350	3445795	1
	Co	59	200.228	ug/L	1.741	0	45	2323814	1
>	Ge	72		ug/L			396414	381183	0
	Ni	60	195.170	ug/L	0.942	0	22	463208	0
	Ni	62	189.524	ug/L	3.955	2	117	65614	2
	Cu	63	193.199	ug/L	3.351	1	99	983400	1
	Cu	65	195.171	ug/L	2.098	1	22	437992	1
	Zn	66	187.910	ug/L	3.207	1	146	250432	1
	Zn	67	188.122	ug/L	3.333	1	24	42230	1
	Zn	68	186.699	ug/L	1.604	0	134	176524	0
	As	75	194.034	ug/L	1.638	0	607	240671	1
	As-1	75	194.229	ug/L	2.597	1	5989	235263	1
	Se	82	195.131	ug/L	1.408	0	-5	27206	1
	Se	78	190.420	ug/L	5.137	2	6021	64634	2
	Mo	98	197.485	ug/L	4.897	2	26	667104	2
	Y	89		ug/L			308043	295463	0
	Kr	83		ug/L			851	1172	3
>	In	115		ug/L			749907	742428	2
	Ag	107	188.526	ug/L	3.395	1	18	1144697	0
	Cd	111	192.520	ug/L	3.828	1	70	619326	0
	Cd	114	194.157	ug/L	3.598	1	19	1605827	0
	Sb	121	200.869	ug/L	3.042	1	366	2120258	0
	Sb	123	193.720	ug/L	6.972	3	260	1526435	1
	Ba	135	198.246	ug/L	4.927	2	16	633395	0
	Ba	137	198.267	ug/L	4.330	2	38	1092104	0
>	Tb	159		ug/L			870411	893940	1
	Tl	205	194.337	ug/L	2.565	1	85	4893478	0
	Pb	208	199.732	ug/L	1.417	0	120	6419575	0
	Bi	209		ug/L			1750755	1675407	1
	Th	232	201.777	ug/L	3.688	1	1146	6395435	0
	U	238	199.716	ug/L	2.481	1	46	6677804	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 14:43:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1196703	1
	Be	9	0.028	ug/L	0.035	124	9	111	115
	C	13		ug/L			83631	90438	1
	Cl	37		ug/L			4167618	4086500	1
>	Sc	45		ug/L			978840	943486	1
	V	51	0.017	ug/L	0.034	205	4838	4933	11
	V-1	51	0.032	ug/L	0.032	99	99	611	83
	Cr	52	-0.020	ug/L	0.034	168	14295	13527	3
	Cr	53	0.035	ug/L	0.025	70	99	146	24
	Mn	55	0.081	ug/L	0.078	96	350	1688	77
	Co	59	0.020	ug/L	0.020	101	45	264	84
>	Ge	72		ug/L			396414	370006	2
	Ni	60	0.028	ug/L	0.012	44	22	85	33
	Ni	62	2.207	ug/L	0.211	9	117	849	6
	Cu	63	0.146	ug/L	0.014	9	99	814	7
	Cu	65	0.061	ug/L	0.011	17	22	154	16
	Zn	66	0.877	ug/L	0.021	2	146	1271	4
	Zn	67	0.726	ug/L	0.026	3	24	180	4
	Zn	68	0.810	ug/L	0.027	3	134	867	1
	As	75	0.224	ug/L	0.089	39	607	836	13
	As-1	75	0.159	ug/L	0.100	62	5989	5771	1
	Se	82	-0.119	ug/L	0.125	104	-5	-21	77
	Se	78	0.321	ug/L	0.272	84	6021	5715	0
	Mo	98	0.068	ug/L	0.071	103	26	252	94
	Y	89		ug/L			308043	281705	1
	Kr	83		ug/L			851	1077	1
>	In	115		ug/L			749907	726522	1
	Ag	107	0.032	ug/L	0.046	145	18	209	133
	Cd	111	0.024	ug/L	0.035	145	70	144	77
	Cd	114	0.023	ug/L	0.035	148	19	209	135
	Sb	121	0.233	ug/L	0.023	10	366	2760	9
	Sb	123	0.235	ug/L	0.017	7	260	2066	7
	Ba	135	0.036	ug/L	0.020	57	16	127	51
	Ba	137	0.033	ug/L	0.020	60	38	218	51
>	Tb	159		ug/L			870411	847681	0
	Tl	205	0.018	ug/L	0.014	79	85	516	66
	Pb	208	0.024	ug/L	0.017	70	120	844	60
	Bi	209		ug/L			1750755	1710246	0
	Th	232	0.115	ug/L	0.049	42	1146	4574	31
	U	238	0.035	ug/L	0.051	146	46	1135	140

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 14:50:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1273673	1
[	Be	9	50.047	ug/L	1.172	2	9	191218	1
	C	13		ug/L			83631	88312	0
	Cl	37		ug/L			4167618	4299003	1
[>	Sc	45		ug/L			978840	991823	0
|	V	51	48.595	ug/L	0.896	1	4838	823312	2
|	V-1	51	48.415	ug/L	0.719	1	99	814203	2
|	Cr	52	49.676	ug/L	0.652	1	14295	674469	1
|	Cr	53	49.033	ug/L	0.675	1	99	73302	0
|	Mn	55	49.563	ug/L	0.166	0	350	869257	0
[	Co	59	49.328	ug/L	1.457	2	45	584958	2
[>	Ge	72		ug/L			396414	385869	1
|	Ni	60	50.247	ug/L	1.438	2	22	120698	1
|	Ni	62	49.211	ug/L	1.103	2	117	17329	2
|	Cu	63	50.195	ug/L	1.574	3	99	258625	1
|	Cu	65	50.073	ug/L	0.952	1	22	113751	1
|	Zn	66	49.630	ug/L	1.472	2	146	67041	1
|	Zn	67	49.692	ug/L	0.988	1	24	11307	0
|	Zn	68	49.575	ug/L	1.733	3	134	47528	1
|	As	75	49.495	ug/L	0.363	0	607	62581	0
|	As-1	75	49.222	ug/L	0.606	1	5989	64699	0
|	Se	82	51.521	ug/L	0.410	0	-5	7266	0
|	Se	78	49.723	ug/L	1.504	3	6021	21412	0
[	Mo	98	48.536	ug/L	0.946	1	26	165969	0
	Y	89		ug/L			308043	290086	1
	Kr	83		ug/L			851	1070	3
[>	In	115		ug/L			749907	752830	0
|	Ag	107	48.900	ug/L	0.706	1	18	301150	1
|	Cd	111	50.460	ug/L	0.857	1	70	164690	1
|	Cd	114	50.679	ug/L	0.936	1	19	425125	1
|	Sb	121	49.756	ug/L	0.493	0	366	532924	0
|	Sb	123	49.273	ug/L	0.021	0	260	394069	0
|	Ba	135	49.651	ug/L	0.225	0	16	160924	0
[	Ba	137	49.452	ug/L	0.268	0	38	276316	0
[>	Tb	159		ug/L			870411	891449	0
|	Tl	205	49.040	ug/L	0.409	0	85	1231582	0
|	Pb	208	51.137	ug/L	0.181	0	120	1639166	0
|	Bi	209		ug/L			1750755	1753701	0
|	Th	232	49.523	ug/L	0.675	1	1146	1566495	1
[	U	238	49.462	ug/L	0.515	1	46	1649391	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 14:56:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1218287	0
	Be	9	0.001	ug/L	0.001	186	9	11	43
	C	13		ug/L			83631	85821	1
	Cl	37		ug/L			4167618	4100179	3
>	Sc	45		ug/L			978840	924399	0
	V	51	-0.011	ug/L	0.006	50	4838	4391	2
	V-1	51	0.004	ug/L	0.001	30	99	149	11
	Cr	52	-0.035	ug/L	0.021	61	14295	13072	2
	Cr	53	0.019	ug/L	0.006	31	99	120	7
	Mn	55	0.002	ug/L	0.002	74	350	364	6
	Co	59	0.002	ug/L	0.002	90	45	62	28
>	Ge	72		ug/L			396414	368506	1
	Ni	60	0.000	ug/L	0.004	926	22	21	39
	Ni	62	1.125	ug/L	0.096	8	117	484	4
	Cu	63	0.047	ug/L	0.004	9	99	325	6
	Cu	65	0.004	ug/L	0.004	118	22	28	33
	Zn	66	0.011	ug/L	0.004	36	146	150	5
	Zn	67	0.015	ug/L	0.032	207	24	25	28
	Zn	68	0.007	ug/L	0.016	237	134	130	8
	As	75	0.146	ug/L	0.013	9	607	739	0
	As-1	75	0.029	ug/L	0.114	389	5989	5599	0
	Se	82	-0.054	ug/L	0.101	186	-5	-12	105
	Se	78	0.092	ug/L	0.397	429	6021	5623	0
	Mo	98	0.007	ug/L	0.001	20	26	46	9
	Y	89		ug/L			308043	284950	1
	Kr	83		ug/L			851	1027	2
>	In	115		ug/L			749907	713960	1
	Ag	107	0.002	ug/L	0.001	26	18	30	10
	Cd	111	-0.004	ug/L	0.001	14	70	54	2
	Cd	114	0.001	ug/L	0.001	181	19	23	35
	Sb	121	0.067	ug/L	0.010	14	366	1033	10
	Sb	123	0.072	ug/L	0.015	20	260	793	14
	Ba	135	0.006	ug/L	0.006	97	16	33	51
	Ba	137	0.003	ug/L	0.006	204	38	51	59
>	Tb	159		ug/L			870411	843685	0
	Tl	205	0.005	ug/L	0.004	94	85	194	54
	Pb	208	0.002	ug/L	0.004	182	120	176	61
	Bi	209		ug/L			1750755	1706652	1
	Th	232	0.062	ug/L	0.012	19	1146	2955	12
	U	238	0.002	ug/L	0.002	124	46	106	72

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 C-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 07, 2012 15:01:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1259819	2
	Be	9	U 0.012	ug/L	0.019	150	9	57	127
	C	13		ug/L			83631	92482	1
	Cl	37		ug/L			4167618	4160897	0
>	Sc	45		ug/L			978840	1002635	0
	V	51	0.334	ug/L	0.012	3	4838	10646	2
	V-1	51	0.397	ug/L	0.028	7	99	6847	8
	Cr	52	U 0.151	ug/L	0.005	3	14295	16676	1
	Cr	53	0.375	ug/L	0.079	21	99	669	18
	Mn	55	6.001	ug/L	0.071	1	350	106716	1
	Co	59	0.095	ug/L	0.008	8	45	1180	8
>	Ge	72		ug/L			396414	385055	0
	Ni	60	0.586	ug/L	0.008	1	22	1426	0
	Ni	62	2.438	ug/L	0.305	12	117	965	11
	Cu	63	0.744	ug/L	0.006	0	99	3922	1
	Cu	65	U 0.242	ug/L	0.010	4	22	571	4
	Zn	66	U 1.439	ug/L	0.056	3	146	2079	4
	Zn	67	1.352	ug/L	0.061	4	24	329	3
	Zn	68	1.524	ug/L	0.051	3	134	1585	3
	As	75	2.011	ug/L	0.011	0	607	3104	0
	As-1	75	1.963	ug/L	0.013	0	5989	8160	0
	Se	82	U -0.030	ug/L	0.088	291	-5	-9	123
	Se	78	0.016	ug/L	0.037	235	6021	5854	0
	Mo	98	0.913	ug/L	0.023	2	26	3140	1
	Y	89		ug/L			308043	295913	1
	Kr	83		ug/L			851	1062	2
>	In	115		ug/L			749907	746309	0
	Ag	107	U 0.001	ug/L	0.001	105	18	26	30
	Cd	111	U 0.006	ug/L	0.009	151	70	88	32
	Cd	114	0.014	ug/L	0.002	17	19	131	14
	Sb	121	U 0.040	ug/L	0.008	20	366	785	10
	Sb	123	0.041	ug/L	0.004	11	260	581	5
	Ba	135	2.408	ug/L	0.025	1	16	7753	0
	Ba	137	2.386	ug/L	0.032	1	38	13254	1
>	Tb	159		ug/L			870411	882497	0
	Tl	205	U 0.010	ug/L	0.007	67	85	337	50
	Pb	208	U 0.023	ug/L	0.001	2	120	848	1
	Bi	209		ug/L			1750755	1705358	0
	Th	232	0.074	ug/L	0.014	19	1146	3480	12
	U	238	0.036	ug/L	0.010	29	46	1225	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:05:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1256257	1
	Be	9	U 0.004	ug/L	0.002	41	9	24	26
	C	13		ug/L			83631	103001	1
	Cl	37		ug/L			4167618	4475140	1
>	Sc	45		ug/L			978840	1057882	0
	V	51	1.566	ug/L	0.041	2	4838	33350	1
	V-1	51	1.844	ug/L	0.058	3	99	33173	2
	Cr	52	0.725	ug/L	0.055	7	14295	25719	2
	Cr	53	1.722	ug/L	0.105	6	99	2849	5
	Mn	55	27.240	ug/L	0.243	0	350	509721	0
	Co	59	0.402	ug/L	0.004	0	45	5137	0
>	Ge	72		ug/L			396414	359670	1
	Ni	60	2.816	ug/L	0.085	3	22	6327	4
	Ni	62	13.744	ug/L	4.443	32	117	4604	33
	Cu	63	3.701	ug/L	0.183	4	99	17872	6
	Cu	65	0.976	ug/L	0.051	5	22	2086	5
	Zn	66	U 2.561	ug/L	0.053	2	146	3351	2
	Zn	67	U 2.550	ug/L	0.206	8	24	561	6
	Zn	68	3.217	ug/L	0.008	0	134	2989	2
	As	75	9.124	ug/L	0.255	2	607	11199	0
	As-1	75	9.739	ug/L	0.250	2	5989	16289	0
	Se	82	U 0.148	ug/L	0.029	19	-5	14	25
	Se	78	1.612	ug/L	0.088	5	6021	5933	1
	Mo	98	4.828	ug/L	0.028	0	26	15410	1
	Y	89		ug/L			308043	304562	2
	Kr	83		ug/L			851	1043	0
>	In	115		ug/L			749907	718460	1
	Ag	107	U 0.003	ug/L	0.002	56	18	34	27
	Cd	111	U 0.048	ug/L	0.010	19	70	217	14
	Cd	114	0.062	ug/L	0.003	4	19	511	4
	Sb	121	U 0.152	ug/L	0.002	1	366	1905	1
	Sb	123	U 0.151	ug/L	0.005	3	260	1404	2
	Ba	135	11.956	ug/L	0.212	1	16	36988	1
	Ba	137	12.009	ug/L	0.090	0	38	64062	0
>	Tb	159		ug/L			870411	873300	0
	Tl	205	U 0.004	ug/L	0.001	29	85	189	15
	Pb	208	U 0.049	ug/L	0.001	1	120	1646	1
	Bi	209		ug/L			1750755	1550089	0
	Th	232	0.162	ug/L	0.061	37	1146	6168	30
	U	238	0.136	ug/L	0.002	1	46	4481	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 CDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07; 2012 15:09:17
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1264802	2
	Be	9	U 0.004	ug/L	0.001	35	9	22	18
	C	13		ug/L			83631	101293	1
	Cl	37		ug/L			4167618	4445717	2
>	Sc	45		ug/L			978840	1049801	2
	V	51	1.547	ug/L	0.053	3	4838	32740	0
	V-1	51	1.868	ug/L	0.045	2	99	33341	1
	Cr	52	0.738	ug/L	0.058	7	14295	25697	1
	Cr	53	1.891	ug/L	0.053	2	99	3095	4
	Mn	55	27.954	ug/L	0.944	3	350	518761	0
	Co	59	0.409	ug/L	0.020	4	45	5179	2
>	Ge	72		ug/L			396414	367590	0
	Ni	60	2.786	ug/L	0.031	1	22	6396	1
	Ni	62	27.543	ug/L	4.606	16	117	9295	17
	Cu	63	4.291	ug/L	0.221	5	99	21154	5
	Cu	65	0.910	ug/L	0.006	0	22	1990	1
	Zn	66	U 1.796	ug/L	0.031	1	146	2443	1
	Zn	67	1.960	ug/L	0.037	1	24	446	1
	Zn	68	2.498	ug/L	0.149	5	134	2400	5
	As	75	8.992	ug/L	0.069	0	607	11292	1
	As-1	75	9.546	ug/L	0.030	0	5989	16430	0
	Se	82	U 0.225	ug/L	0.033	14	-5	24	17
	Se	78	1.436	ug/L	0.193	13	6021	6011	1
	Mo	98	4.740	ug/L	0.059	1	26	15466	1
	Y	89		ug/L			308043	299425	1
	Kr	83		ug/L			851	1046	0
>	In	115		ug/L			749907	710757	0
	Ag	107	U 0.001	ug/L	0.001	154	18	22	34
	Cd	111	U 0.042	ug/L	0.005	12	70	196	8
	Cd	114	0.059	ug/L	0.004	6	19	488	5
	Sb	121	U 0.142	ug/L	0.004	2	366	1778	1
	Sb	123	0.146	ug/L	0.003	2	260	1347	2
	Ba	135	12.239	ug/L	0.117	0	16	37461	0
	Ba	137	12.164	ug/L	0.095	0	38	64196	0
>	Tb	159		ug/L			870411	862928	0
	Tl	205	U 0.001	ug/L	0.000	8	85	118	2
	Pb	208	U 0.042	ug/L	0.002	5	120	1431	5
	Bi	209		ug/L			1750755	1544001	0
	Th	232	0.051	ug/L	0.014	28	1146	2705	16
	U	238	0.139	ug/L	0.002	1	46	4533	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 CSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:13:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1256291	0
[	Be	9	22.603	ug/L	0.319	1	9	85198	0
	C	13		ug/L			83631	102712	1
	Cl	37		ug/L			4167618	4461593	2
[>	Sc	45		ug/L			978840	1055160	1
[	V	51	23.946	ug/L	0.227	0	4838	434215	1
[	V-1	51	24.297	ug/L	0.334	1	99	434703	1
[	Cr	52	23.218	ug/L	0.251	1	14295	343561	1
[	Cr	53	24.476	ug/L	0.359	1	99	38978	0
[	Mn	55	50.118	ug/L	0.483	0	350	935164	2
[	Co	59	22.117	ug/L	0.373	1	45	279043	0
[>	Ge	72		ug/L			396414	365849	0
[	Ni	60	27.380	ug/L	0.693	2	22	62379	1
[	Ni	62	63.156	ug/L	4.517	7	117	21064	7
[	Cu	63	29.149	ug/L	0.280	0	99	142483	1
[	Cu	65	25.283	ug/L	0.308	1	22	54470	0
[	Zn	66	72.034	ug/L	0.745	1	146	92226	1
[	Zn	67	64.836	ug/L	0.796	1	24	13984	1
[	Zn	68	68.617	ug/L	0.864	1	134	62344	0
[	As	75	35.640	ug/L	0.303	0	607	42883	0
[	As-1	75	34.102	ug/L	0.289	0	5989	44203	1
[	Se	82	72.761	ug/L	1.604	2	-5	9732	1
[	Se	78	71.801	ug/L	0.806	1	6021	26854	1
[	Mo	98	30.253	ug/L	0.355	1	26	98112	1
	Y	89		ug/L			308043	296661	2
	Kr	83		ug/L			851	1039	4
[>	In	115		ug/L			749907	704928	1
[	Ag	107	22.045	ug/L	0.380	1	18	127132	1
[	Cd	111	23.200	ug/L	0.333	1	70	70933	0
[	Cd	114	22.847	ug/L	0.378	1	19	179475	2
[	Sb	121	25.205	ug/L	0.452	1	366	252922	0
[	Sb	123	25.003	ug/L	0.637	2	260	187320	1
[	Ba	135	37.857	ug/L	0.228	0	16	114889	0
[	Ba	137	37.814	ug/L	0.782	2	38	197816	0
[>	Tb	159		ug/L			870411	864434	0
[	Tl	205	23.771	ug/L	0.312	1	85	578899	0
[	Pb	208	24.575	ug/L	0.132	0	120	763899	0
[	Bi	209		ug/L			1750755	1548495	0
[	Th	232	25.291	ug/L	0.269	1	1146	776225	0
[	U	238	25.730	ug/L	0.413	1	46	831963	0

US15 : 00557

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US27 CPOST REN~~ 222222 5/7/12 JB
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:17:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1229254	1
	Be	9	23.458	ug/L	0.331	1	9	86512	1
	C	13		ug/L			83631	99507	1
	Cl	37		ug/L			4167618	4465514	3
>	Sc	45		ug/L			978840	1034970	1
	V	51	25.115	ug/L	0.411	1	4838	446405	1
	V-1	51	25.464	ug/L	0.462	1	99	446848	1
	Cr	52	24.065	ug/L	0.108	0	14295	348760	1
	Cr	53	25.317	ug/L	0.412	1	99	39551	2
	Mn	55	50.101	ug/L	0.399	0	350	916908	1
	Co	59	23.441	ug/L	0.280	1	45	290104	1
>	Ge	72		ug/L			396414	364498	2
	Ni	60	27.863	ug/L	0.410	1	22	63238	1
	Ni	62	71.038	ug/L	3.737	5	117	23595	6
	Cu	63	29.484	ug/L	0.305	1	99	143590	2
	Cu	65	26.222	ug/L	0.097	0	22	56284	2
	Zn	66	77.135	ug/L	0.817	1	146	98382	2
	Zn	67	70.656	ug/L	1.276	1	24	15177	1
	Zn	68	74.541	ug/L	1.286	1	134	67451	1
	As	75	35.718	ug/L	0.809	2	607	42803	0
	As-1	75	34.693	ug/L	0.857	2	5989	44691	0
	Se	82	73.992	ug/L	1.310	1	-5	9858	1
	Se	78	75.132	ug/L	1.709	2	6021	27732	1
	Mo	98	30.190	ug/L	0.420	1	26	97530	1
	Y	89		ug/L			308043	290261	1
	Kr	83		ug/L			851	1028	3
>	In	115		ug/L			749907	696294	0
	Ag	107	23.009	ug/L	0.487	2	18	131075	2
	Cd	111	23.819	ug/L	0.395	1	70	71942	1
	Cd	114	23.580	ug/L	0.366	1	19	182965	1
	Sb	121	25.283	ug/L	0.164	0	366	250637	0
	Sb	123	25.304	ug/L	0.211	0	260	187293	1
	Ba	135	38.481	ug/L	0.216	0	16	115359	0
	Ba	137	38.339	ug/L	0.399	1	38	198143	1
>	Tb	159		ug/L			870411	864778	0
	Tl	205	24.360	ug/L	0.302	1	85	593538	1
	Pb	208	25.227	ug/L	0.161	0	120	784506	0
	Bi	209		ug/L			1750755	1557860	0
	Th	232	26.538	ug/L	0.137	0	1146	814825	1
	U	238	26.146	ug/L	0.176	0	46	845876	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 E-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 07, 2012 15:21:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1253350	1
	Be	9	0.026	ug/L	0.001	4	9	106	5
	C	13		ug/L			83631	90687	1
	Cl	37		ug/L			4167618	4184187	3
>	Sc	45		ug/L			978840	964874	1
	V	51	14.202	ug/L	0.568	4	4838	237447	4
	V-1	51	14.406	ug/L	0.569	3	99	235760	4
	Cr	52	2.548	ug/L	0.073	2	14295	47024	2
	Cr	53	3.220	ug/L	0.073	2	99	4774	2
	Mn	55	60.350	ug/L	1.367	2	350	1029568	2
	Co	59	0.073	ug/L	0.005	7	45	891	6
>	Ge	72		ug/L			396414	379279	1
	Ni	60	0.290	ug/L	0.022	7	22	704	5
	Ni	62	28.625	ug/L	1.821	6	117	9955	6
	Cu	63	2.241	ug/L	0.083	3	99	11439	2
	Cu	65	0.636	ug/L	0.003	0	22	1440	1
	Zn	66	U 1.483	ug/L	0.029	1	146	2106	3
	Zn	67	2.089	ug/L	0.090	4	24	489	2
	Zn	68	1.577	ug/L	0.013	0	134	1610	2
	As	75	71.306	ug/L	0.624	0	607	88361	0
	As-1	75	74.668	ug/L	0.671	0	5989	93510	0
	Se	82	0.018	ug/L	0.109	590	-5	-3	481
	Se	78	0.546	ug/L	0.271	49	6021	5928	1
	Mo	98	0.126	ug/L	0.004	3	26	447	4
	Y	89		ug/L			308043	297231	1
	Kr	83		ug/L			851	1017	3
>	In	115		ug/L			749907	719640	0
	Ag	107	U 0.004	ug/L	0.000	8	18	44	4
	Cd	111	U 0.007	ug/L	0.002	21	70	90	4
	Cd	114	U 0.007	ug/L	0.002	24	19	71	18
	Sb	121	U 0.040	ug/L	0.005	12	366	757	6
	Sb	123	U 0.039	ug/L	0.004	10	260	546	5
	Ba	135	1.823	ug/L	0.052	2	16	5663	2
	Ba	137	1.803	ug/L	0.040	2	38	9667	3
>	Tb	159		ug/L			870411	863869	1
	Tl	205	U 0.004	ug/L	0.003	66	85	182	36
	Pb	208	U 0.056	ug/L	0.002	3	120	1846	3
	Bi	209	U	ug/L			1750755	1694741	2
	Th	232	0.154	ug/L	0.036	23	1146	5869	20
	U	238	0.040	ug/L	0.003	8	46	1341	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:25:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1228037	2
	Be	9	0.121	ug/L	0.004	3	9	454	0
	C	13		ug/L			83631	108008	4
	Cl	37		ug/L			4167618	5019117	4
>	Sc	45		ug/L			978840	1063685	2
	V	51	63.676	ug/L	2.231	3	4838	1154564	0
	V-1	51	64.236	ug/L	2.251	3	99	1157734	0
	Cr	52	11.509	ug/L	0.255	2	14295	179459	0
	Cr	53	13.236	ug/L	0.331	2	99	21292	0
	Mn	55	267.575	ug/L	8.557	3	350	5028419	1
	Co	59	0.339	ug/L	0.009	2	45	4356	0
>	Ge	72		ug/L			396414	360150	0
	Ni	60	1.280	ug/L	0.058	4	22	2890	4
	Ni	62	106.805	ug/L	14.642	13	117	34989	13
	Cu	63	12.711	ug/L	1.167	9	99	61224	9
	Cu	65	3.108	ug/L	0.125	4	22	6609	4
	Zn	66	U 2.295	ug/L	0.063	2	146	3021	1
	Zn	67	6.026	ug/L	0.123	2	24	1299	2
	Zn	68	3.386	ug/L	0.161	4	134	3144	4
	As	75	344.153	ug/L	4.070	1	607	402897	1
	As-1	75	360.764	ug/L	4.398	1	5989	408221	1
	Se	82	0.451	ug/L	0.083	18	-5	54	19
	Se	78	2.742	ug/L	0.538	19	6021	6272	3
	Mo	98	0.648	ug/L	0.025	3	26	2090	3
	Y	89		ug/L			308043	334931	1
	Kr	83		ug/L			851	1048	2
>	In	115		ug/L			749907	679451	1
	Ag	107	U 0.022	ug/L	0.003	13	18	137	13
	Cd	111	0.040	ug/L	0.005	12	70	181	9
	Cd	114	0.022	ug/L	0.002	7	19	185	6
	Sb	121	0.056	ug/L	0.002	4	366	869	2
	Sb	123	0.063	ug/L	0.008	12	260	687	7
	Ba	135	9.259	ug/L	0.193	2	16	27090	1
	Ba	137	9.289	ug/L	0.139	1	38	46869	2
>	Tb	159		ug/L			870411	850956	2
	Tl	205	0.001	ug/L	0.000	32	85	108	9
	Pb	208	0.194	ug/L	0.002	1	120	6050	2
	Bi	209		ug/L			1750755	1536841	2
	Th	232	0.389	ug/L	0.056	14	1146	12888	14
	U	238	0.184	ug/L	0.004	2	46	5893	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 EDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:29:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

5/7/12 JB
10x
(rr Ag 20x)

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1216745	1
[	Be	9	0.144	ug/L	0.007	4	9	534	4
	C	13		ug/L			83631	102797	2
	Cl	37		ug/L			4167618	4786272	2
[>	Sc	45		ug/L			978840	1043099	3
[	V	51	64.891	ug/L	1.970	3	4838	1153641	1
[	V-1	51	65.435	ug/L	1.969	3	99	1156440	1
[	Cr	52	11.652 ✓	ug/L	0.043	0	14295	178033	3
[	Cr	53	13.315	ug/L	0.088	0	99	21012	3
[	Mn	55	270.599	ug/L	3.094	1	350	4988736	2
[	Co	59	0.352	ug/L	0.011	3	45	4430	0
[>	Ge	72		ug/L			396414	363051	2
[	Ni	60	1.311	ug/L	0.036	2	22	2982	2
[	Ni	62	96.929	ug/L	11.057	11	117	31993	10
[	Cu	63	11.858	ug/L	0.882	7	99	57528	6
[	Cu	65	3.173 ✓	ug/L	0.177	5	22	6798	3
[	Zn	66	U 2.454	ug/L	0.169	6	146	3244	4
[	Zn	67	6.042	ug/L	0.108	1	24	1313	4
[	Zn	68	3.516	ug/L	0.149	4	134	3284	1
[	As	75	335.748 ✓	ug/L	7.526	2	607	396117	1
[	As-1	75	351.878	ug/L	8.028	2	5989	401386	1
[	Se	82	0.391	ug/L	0.040	10	-5	46	9
[	Se	78	2.338	ug/L	0.632	27	6021	6200	2
[	Mo	98	0.627	ug/L	0.029	4	26	2039	3
	Y	89		ug/L			308043	332787	2
	Kr	83		ug/L			851	1052	0
[>	In	115		ug/L			749907	667399	1
[	Ag	107	U 0.047	ug/L	0.003	5	18	273	3
[	Cd	111	0.064	ug/L	0.014	22	70	246	17
[	Cd	114	0.037	ug/L	0.002	5	19	295	3
[	Sb	121	0.054	ug/L	0.006	10	366	838	7
[	Sb	123	0.052	ug/L	0.005	10	260	597	5
[	Ba	135	9.404	ug/L	0.058	0	16	27030	1
[	Ba	137	9.337	ug/L	0.118	1	38	46274	1
[>	Tb	159		ug/L			870411	847120	0
[	Tl	205	0.015	ug/L	0.001	4	85	442	3
[	Pb	208	0.219	ug/L	0.006	2	120	6790	3
[	Bi	209		ug/L			1750755	1521691	1
[	Th	232	0.308	ug/L	0.007	2	1146	10361	2
[	U	238	0.204	ug/L	0.008	3	46	6494	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 ESPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:34:02
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120507.cal

(FF AS27)

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1195354	3
	Be	9	21.949	ug/L	0.452	2	9	78727	3
	C	13		ug/L			83631	101730	2
	Cl	37		ug/L			4167618	4763144	2
>	Sc	45		ug/L			978840	1026687	2
	V	51	88.345	ug/L	0.695	0	4838	1544942	1
	V-1	51	88.852	ug/L	0.750	0	99	1546416	1
	Cr	52	33.670	ug/L	0.679	2	14295	477945	1
	Cr	53	35.192	ug/L	0.944	2	99	54479	1
	Mn	55	296.528	ug/L	3.432	1	350	5381136	1
	Co	59	22.196	ug/L	0.130	0	45	272514	1
>	Ge	72		ug/L			396414	357515	1
	Ni	60	27.182	ug/L	0.633	2	22	60532	3
	Ni	62	129.802	ug/L	8.733	6	117	42197	7
	Cu	63	36.493	ug/L	0.856	2	99	174315	3
	Cu	65	27.673	ug/L	0.688	2	22	58260	2
	Zn	66	70.108	ug/L	0.476	0	146	87717	1
	Zn	67	69.739	ug/L	1.842	2	24	14697	2
	Zn	68	69.488	ug/L	1.355	1	134	61695	1
	As	75	373.694	ug/L	3.311	0	607	434208	0
	As-1	75	389.089	ug/L	3.523	0	5989	436602	0
	Se	82	70.190	ug/L	0.584	0	-5	9174	0
	Se	78	72.819	ug/L	1.222	1	6021	26538	1
	Mo	98	0.647	ug/L	0.031	4	26	2076	5
	Y	89		ug/L			308043	328535	0
	Kr	83		ug/L			851	1076	5
>	In	115		ug/L			749907	652849	0
	Ag	107	17.137	ug/L	0.114	0	18	91530	0
	Cd	111	23.146	ug/L	0.225	0	70	65544	0
	Cd	114	23.167	ug/L	0.084	0	19	168551	1
	Sb	121	0.053	ug/L	0.005	8	366	811	4
	Sb	123	0.059	ug/L	0.003	4	260	639	3
	Ba	135	35.961	ug/L	0.346	0	16	101074	1
	Ba	137	36.153	ug/L	0.379	1	38	175197	1
>	Tb	159		ug/L			870411	837588	1
	Tl	205	23.651	ug/L	0.122	0	85	558127	1
	Pb	208	24.805	ug/L	0.284	1	120	747063	0
	Bi	209		ug/L			1750755	1513185	1
	Th	232	25.475	ug/L	0.273	1	1146	757670	2
	U	238	25.546	ug/L	0.277	1	46	800416	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 EPOST REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:38:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

Anony

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1247760	2
[	Be	9	22.388	ug/L	0.328	1	9	83803	0
	C	13		ug/L			83631	106864	0
	Cl	37		ug/L			4167618	4796370	0
[>	Sc	45		ug/L			978840	1048477	2
[	V	51	87.011	ug/L	2.383	2	4838	1553337	0
[	V-1	51	87.485	ug/L	2.378	2	99	1554291	0
[	Cr	52	33.913	ug/L	0.674	1	14295	491429	1
[	Cr	53	35.322	ug/L	0.619	1	99	55836	1
[	Mn	55	279.807	ug/L	10.032	3	350	5182865	1
[	Co	59	22.965	ug/L	0.745	3	45	287767	0
[>	Ge	72		ug/L			396414	362584	1
[	Ni	60	26.698	ug/L	0.212	0	22	60292	1
[	Ni	62	131.896	ug/L	6.175	4	117	43488	6
[	Cu	63	37.218	ug/L	1.109	2	99	180324	4
[	Cu	65	28.399	ug/L	0.741	2	22	60628	1
[	Zn	66	73.612	ug/L	0.651	0	146	93396	1
[	Zn	67	71.537	ug/L	0.792	1	24	15291	2
[	Zn	68	72.454	ug/L	1.701	2	134	65229	1
[	As	75	361.886	ug/L	1.870	0	607	426462	1
[	As-1	75	376.532	ug/L	1.782	0	5989	428674	1
[	Se	82	73.259	ug/L	0.558	0	-5	9711	1
[	Se	78	75.497	ug/L	0.259	0	6021	27701	1
[	Mo	98	25.933	ug/L	0.346	1	26	83348	1
	Y	89		ug/L			308043	331790	1
	Kr	83		ug/L			851	1051	2
[>	In	115		ug/L			749907	672700	0
[	Ag	107	23.252	ug/L	0.168	0	18	127972	1
[	Cd	111	23.741	ug/L	0.289	1	70	69269	0
[	Cd	114	23.794	ug/L	0.251	1	19	178363	1
[	Sb	121	24.881	ug/L	0.194	0	366	238288	0
[	Sb	123	25.017	ug/L	0.278	1	260	178888	0
[	Ba	135	35.992	ug/L	0.438	1	16	104233	0
[	Ba	137	35.997	ug/L	0.478	1	38	179726	0
[>	Tb	159		ug/L			870411	847529	0
[	Tl	205	25.053	ug/L	0.263	1	85	598234	0
[	Pb	208	25.789	ug/L	0.101	0	120	785974	0
[	Bi	209		ug/L			1750755	1522355	0
[	Th	232	27.185	ug/L	0.091	0	1146	818025	0
[	U	238	26.769	ug/L	0.487	1	46	848726	1

US15:00553

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 15:45:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1214365	2
[	Be	9	47.441	ug/L	1.135	2	9	172827	2
	C	13		ug/L			83631	78688	2
	Cl	37		ug/L			4167618	3829834	2
[>	Sc	45		ug/L			978840	907977	2
[	V	51	49.690	ug/L	1.194	2	4838	770244	1
[	V-1	51	49.777	ug/L	1.255	2	99	765992	1
[	Cr	52	51.036	ug/L	1.439	2	14295	633726	1
[	Cr	53	51.358	ug/L	1.696	3	99	70251	1
[	Mn	55	50.754	ug/L	2.275	4	350	814241	1
[	Co	59	51.075	ug/L	1.953	3	45	554169	1
[>	Ge	72		ug/L			396414	378054	0
[	Ni	60	49.989	ug/L	1.170	2	22	117684	2
[	Ni	62	78.551	ug/L	2.073	2	117	27039	3
[	Cu	63	51.555	ug/L	0.545	1	99	260328	0
[	Cu	65	51.012	ug/L	1.492	2	22	113545	2
[	Zn	66	49.092	ug/L	0.744	1	146	64990	1
[	Zn	67	50.561	ug/L	1.641	3	24	11272	2
[	Zn	68	49.524	ug/L	0.375	0	134	46536	1
[	As	75	49.809	ug/L	0.971	1	607	61700	1
[	As-1	75	50.266	ug/L	0.806	1	5989	64617	0
[	Se	82	50.380	ug/L	0.759	1	-5	6961	1
[	Se	78	51.057	ug/L	0.114	0	6021	21392	0
[	Mo	98	47.328	ug/L	0.864	1	26	158586	1
	Y	89		ug/L			308043	286669	1
	Kr	83		ug/L			851	1015	1
[>	In	115		ug/L			749907	703719	0
[	Ag	107	48.632	ug/L	0.406	0	18	279957	0
[	Cd	111	50.710	ug/L	0.209	0	70	154712	0
[	Cd	114	51.064	ug/L	0.805	1	19	400451	2
[	Sb	121	49.412	ug/L	0.189	0	366	494738	1
[	Sb	123	49.102	ug/L	0.088	0	260	367085	0
[	Ba	135	50.809	ug/L	0.523	1	16	153939	1
[	Ba	137	50.015	ug/L	0.110	0	38	261230	0
[>	Tb	159		ug/L			870411	849888	2
[	Tl	205	50.078	ug/L	0.923	1	85	1198744	0
[	Pb	208	52.754	ug/L	0.542	1	120	1611946	1
[	Bi	209		ug/L			1750755	1721332	1
[	Th	232	51.328	ug/L	1.425	2	1146	1547233	1
[	U	238	51.204	ug/L	0.911	1	46	1627542	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 15:51:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1196288	1
	Be	9	0.005	ug/L	0.011	204	9	28	142
	C	13		ug/L			83631	78805	1
	Cl	37		ug/L			4167618	3713648	1
>	Sc	45		ug/L			978840	849189	2
	V	51	0.010	ug/L	0.016	157	4838	4347	7
	V-1	51	0.024	ug/L	0.015	62	99	432	52
	Cr	52	0.004	ug/L	0.017	376	14295	12453	2
	Cr	53	0.054	ug/L	0.009	15	99	155	8
	Mn	55	0.031	ug/L	0.035	110	350	781	69
	Co	59	0.007	ug/L	0.008	126	45	107	82
>	Ge	72		ug/L			396414	355495	1
	Ni	60	0.004	ug/L	0.010	246	22	28	77
	Ni	62	22.834	ug/L	0.328	1	117	7466	2
	Cu	63	1.026	ug/L	0.019	1	99	4958	0
	Cu	65	0.022	ug/L	0.006	26	22	67	19
	Zn	66	0.027	ug/L	0.009	34	146	165	7
	Zn	67	-0.009	ug/L	0.018	207	24	19	17
	Zn	68	0.018	ug/L	0.027	152	134	136	17
	As	75	0.144	ug/L	0.045	31	607	710	7
	As-1	75	0.236	ug/L	0.095	40	5989	5631	2
	Se	82	-0.030	ug/L	0.057	188	-5	-9	79
	Se	78	0.852	ug/L	0.323	37	6021	5646	2
	Mo	98	0.007	ug/L	0.003	39	26	45	18
	Y	89		ug/L			308043	265256	4
	Kr	83		ug/L			851	967	4
>	In	115		ug/L			749907	690068	0
	Ag	107	0.001	ug/L	0.000	31	18	23	8
	Cd	111	-0.001	ug/L	0.005	608	70	62	23
	Cd	114	0.000	ug/L	0.000	222	19	19	14
	Sb	121	0.049	ug/L	0.012	23	366	817	14
	Sb	123	0.060	ug/L	0.011	17	260	682	11
	Ba	135	0.002	ug/L	0.001	35	16	22	12
	Ba	137	0.001	ug/L	0.002	222	38	40	26
>	Tb	159		ug/L			870411	814517	1
	Tl	205	0.006	ug/L	0.010	164	85	220	105
	Pb	208	0.012	ug/L	0.021	166	120	479	127
	Bi	209		ug/L			1750755	1705787	0
	Th	232	0.071	ug/L	0.011	14	1146	3139	11
	U	238	0.010	ug/L	0.016	160	46	346	141

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 H-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 07, 2012 15:55:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1270212	1
[	Be	9	U 0.002	ug/L	0.002	118	9	15	46
	C	13		ug/L			83631	81892	2
	Cl	37		ug/L			4167618	3895475	1
[>	Sc	45		ug/L			978840	935648	3
[	V	51	0.325	ug/L	0.011	3	4838	9787	2
[	V-1	51	0.410	ug/L	0.009	2	99	6593	4
[	Cr	52	U 0.170	ug/L	0.021	12	14295	15790	2
[	Cr	53	0.474	ug/L	0.018	3	99	762	6
[	Mn	55	5.964	ug/L	0.095	1	350	98944	2
[	Co	59	0.095	ug/L	0.003	3	45	1108	2
[>	Ge	72		ug/L			396414	377042	1
[	Ni	60	U 0.490	ug/L	0.045	9	22	1170	8
[	Ni	62	24.271	ug/L	1.110	4	117	8409	5
[	Cu	63	1.688	ug/L	0.064	3	99	8591	4
[	Cu	65	U 0.226	ug/L	0.010	4	22	522	3
[	Zn	66	U 1.730	ug/L	0.075	4	146	2418	2
[	Zn	67	1.631	ug/L	0.047	2	24	384	1
[	Zn	68	1.841	ug/L	0.022	1	134	1848	0
[	As	75	2.039	ug/L	0.019	0	607	3073	0
[	As-1	75	2.104	ug/L	0.126	6	5989	8154	1
[	Se	82	U -0.041	ug/L	0.096	233	-5	-11	117
[	Se	78	0.397	ug/L	0.441	111	6021	5848	2
[	Mo	98	0.981	ug/L	0.009	0	26	3303	0
	Y	89		ug/L			308043	292224	1
	Kr	83		ug/L			851	1027	1
[>	In	115		ug/L			749907	712858	2
[	Ag	107	U 0.007	ug/L	0.011	168	18	56	115
[	Cd	111	U 0.002	ug/L	0.011	618	70	72	46
[	Cd	114	0.009	ug/L	0.010	111	19	90	88
[	Sb	121	U 0.029	ug/L	0.001	3	366	639	1
[	Sb	123	0.030	ug/L	0.006	20	260	477	8
[	Ba	135	2.394	ug/L	0.038	1	16	7361	0
[	Ba	137	2.371	ug/L	0.061	2	38	12578	1
[>	Tb	159		ug/L			870411	854561	0
[	Tl	205	U 0.005	ug/L	0.006	123	85	200	72
[	Pb	208	U 0.031	ug/L	0.004	11	120	1056	10
[	Bi	209		ug/L			1750755	1689675	0
[	Th	232	0.062	ug/L	0.024	39	1146	3002	25
[	U	238	0.028	ug/L	0.002	7	46	928	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 15:59:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1257182	1
	Be	9	U 0.002	ug/L	0.001	43	9	16	19
	C	13		ug/L			83631	101214	1
	Cl	37		ug/L			4167618	4303233	3
>	Sc	45		ug/L			978840	998391	3
	V	51	1.507	ug/L	0.095	6	4838	30444	2
	V-1	51	1.868	ug/L	0.053	2	99	31704	2
	Cr	52	0.753	ug/L	0.093	12	14295	24625	1
	Cr	53	2.050	ug/L	0.112	5	99	3185	8
	Mn	55	26.827	ug/L	1.071	3	350	473392	1
	Co	59	0.407	ug/L	0.004	0	45	4909	2
>	Ge	72		ug/L			396414	358075	0
	Ni	60	2.242	ug/L	0.024	1	22	5018	0
	Ni	62	53.870	ug/L	10.388	19	117	17606	19
	Cu	63	5.359	ug/L	0.437	8	99	25719	8
	Cu	65	0.604	ug/L	0.018	2	22	1293	3
	Zn	66	U 1.472	ug/L	0.046	3	146	1973	2
	Zn	67	1.661	ug/L	0.045	2	24	371	2
	Zn	68	2.240	ug/L	0.108	4	134	2109	4
	As	75	9.334	ug/L	0.171	1	607	11399	2
	As-1	75	10.082	ug/L	0.283	2	5989	16601	2
	Se	82	U 0.162	ug/L	0.133	82	-5	15	109
	Se	78	2.068	ug/L	0.411	19	3021	6040	2
	Mo	98	4.918	ug/L	0.103	2	26	15632	2
	Y	89		ug/L			308043	292798	2
	Kr	83		ug/L			851	1031	5
>	In	115		ug/L			749907	696541	1
	Ag	107	U 0.000	ug/L	0.001	160	18	19	16
	Cd	111	U -0.002	ug/L	0.008	460	70	60	39
	Cd	114	0.017	ug/L	0.001	7	19	150	5
	Sb	121	U 0.127	ug/L	0.009	7	366	1600	5
	Sb	123	0.127	ug/L	0.006	5	260	1178	3
	Ba	135	11.679	ug/L	0.174	1	16	35030	0
	Ba	137	11.514	ug/L	0.075	0	38	59548	0
>	Tb	159		ug/L			870411	853110	0
	Tl	205	U 0.001	ug/L	0.000	62	85	100	9
	Pb	208	U 0.020	ug/L	0.001	4	120	724	2
	Bi	209		ug/L			1750755	1530783	0
	Th	232	0.117	ug/L	0.048	40	1146	4640	30
	U	238	0.133	ug/L	0.004	3	46	4277	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 HDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 16:03:38
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

rr Be, Cr, Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1243980	1
[	Be	9	U 0.004	ug/L	0.001	40	9	22	24
	C	13		ug/L			83631	101808	1
	Cl	37		ug/L			4167618	4268843	2
[>	Sc	45		ug/L			978840	997449	1
[	V	51	1.472	ug/L	0.038	2	4838	29853	1
[	V-1	51	1.839	ug/L	0.039	2	99	31195	1
[	Cr	52	0.723	ug/L	0.046	6	14295	24226	1
[	Cr	53	2.042	ug/L	0.051	2	99	3166	1
[	Mn	55	27.273	ug/L	0.574	2	350	481183	2
[	Co	59	0.411	ug/L	0.011	2	45	4948	2
[>	Ge	72		ug/L			396414	359913	2
[	Ni	60	2.206	ug/L	0.088	4	22	4959	1
[	Ni	62	72.905	ug/L	8.807	12	117	23856	9
[	Cu	63	6.287	ug/L	0.499	7	99	30267	5
[	Cu	65	0.593	ug/L	0.006	1	22	1277	3
[	Zn	66	U 1.543	ug/L	0.026	1	146	2073	1
[	Zn	67	1.631	ug/L	0.126	7	24	367	8
[	Zn	68	2.201	ug/L	0.039	1	134	2085	3
[	As	75	8.987	ug/L	0.166	1	607	11048	1
[	As-1	75	9.742	ug/L	0.220	2	5989	16302	0
[	Se	82	U 0.224	ug/L	0.019	8	-5	24	8
[	Se	78	2.189	ug/L	0.439	20	6021	6104	1
[	Mo	98	4.906	ug/L	0.114	2	26	15668	0
	Y	89		ug/L			308043	287387	1
	Kr	83		ug/L			851	1019	1
[>	In	115		ug/L			749907	687483	1
[	Ag	107	U 0.002	ug/L	0.001	42	18	28	18
[	Cd	111	U -0.001	ug/L	0.001	92	70	60	6
[	Cd	114	0.017	ug/L	0.001	4	19	151	5
[	Sb	121	U 0.124	ug/L	0.004	3	366	1547	3
[	Sb	123	0.131	ug/L	0.010	7	260	1191	4
[	Ba	135	11.950	ug/L	0.075	0	16	35378	0
[	Ba	137	11.786	ug/L	0.062	0	38	60163	0
[>	Tb	159		ug/L			870411	859361	0
[	Tl	205	U 0.001	ug/L	0.001	47	85	113	12
[	Pb	208	U 0.017	ug/L	0.001	4	120	642	4
[	Bi	209		ug/L			1750755	1538854	0
[	Th	232	0.033	ug/L	0.011	34	1146	2124	16
[	U	238	0.134	ug/L	0.003	2	46	4361	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 HSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 16:07:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1238377	2
	Be	9	21.579	ug/L	0.127	0	9	80184	1
	C	13		ug/L			83631	97480	2
	Cl	37		ug/L			4167618	4201301	3
>	Sc	45		ug/L			978840	989218	3
	V	51	24.382	ug/L	0.513	2	4838	414425	4
	V-1	51	24.695	ug/L	0.555	2	99	414186	3
	Cr	52	23.586	ug/L	0.290	1	14295	326897	2
	Cr	53	24.710	ug/L	0.959	3	99	36863	0
	Mn	55	48.924	ug/L	1.081	2	350	855497	2
	Co	59	22.884	ug/L	1.338	5	45	270377	2
>	Ge	72		ug/L			396414	352655	2
	Ni	60	26.691	ug/L	1.476	5	22	58571	3
	Ni	62	106.415	ug/L	6.869	6	117	34111	5
	Cu	63	30.394	ug/L	1.404	4	99	143100	2
	Cu	65	24.873	ug/L	0.637	2	22	51640	1
	Zn	66	69.588	ug/L	1.844	2	146	85849	0
	Zn	67	65.788	ug/L	2.307	3	24	13670	1
	Zn	68	69.022	ug/L	2.872	4	134	60415	2
	As	75	35.259	ug/L	1.103	3	607	40883	1
	As-1	75	34.454	ug/L	1.040	3	5989	42974	0
	Se	82	71.403	ug/L	1.898	2	-5	9203	1
	Se	78	73.134	ug/L	1.736	2	6021	26259	0
	Mo	98	30.359	ug/L	1.243	4	26	94842	1
	Y	89		ug/L			308043	281874	1
	Kr	83		ug/L			851	1013	1
>	In	115		ug/L			749907	684835	0
	Ag	107	21.704	ug/L	0.383	1	18	121604	2
	Cd	111	22.921	ug/L	0.280	1	70	68086	0
	Cd	114	22.774	ug/L	0.255	1	19	173793	0
	Sb	121	24.796	ug/L	0.184	0	366	241762	0
	Sb	123	24.964	ug/L	0.187	0	260	181729	0
	Ba	135	37.434	ug/L	0.061	0	16	110373	0
	Ba	137	37.106	ug/L	0.941	2	38	188589	1
>	Tb	159		ug/L			870411	847268	1
	Tl	205	23.914	ug/L	0.281	1	85	570843	1
	Pb	208	24.667	ug/L	0.270	1	120	751463	0
	Bi	209		ug/L			1750755	1535473	0
	Th	232	25.959	ug/L	0.357	1	1146	780824	0
	U	238	25.640	ug/L	0.266	1	46	812609	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US27 HPOST REN~~ 222222
Sample Dil Factor: 2
Comments: 5/8/12 JLG
Sample Date/Time: Monday, May 07, 2012 16:11:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	1180165	2
[	Be	9	22.276	ug/L	0.285	1	9	78871	0
	C	13		ug/L			83631	96780	0
	Cl	37		ug/L			4167618	4047378	3
[>	Sc	45		ug/L			978840	904819	1
|	V	51	26.606	ug/L	0.198	0	4838	413191	0
|	V-1	51	26.869	ug/L	0.146	0	99	412228	1
|	Cr	52	25.744	ug/L	0.244	0	14295	325256	1
|	Cr	53	26.688	ug/L	0.464	1	99	36445	2
|	Mn	55	51.275	ug/L	0.334	0	350	820336	0
[	Co	59	24.675	ug/L	0.794	3	45	267007	3
[>	Ge	72		ug/L			396414	338161	0
|	Ni	60	27.423	ug/L	0.441	1	22	57754	1
|	Ni	62	112.701	ug/L	5.958	5	117	34651	5
|	Cu	63	31.884	ug/L	0.927	2	99	144035	2
|	Cu	65	25.407	ug/L	0.461	1	22	50595	1
|	Zn	66	73.557	ug/L	0.749	1	146	87043	1
|	Zn	67	67.871	ug/L	1.249	1	24	13529	1
|	Zn	68	71.941	ug/L	0.771	1	134	60413	0
|	As	75	35.886	ug/L	0.567	1	607	39908	1
|	As-1	75	35.694	ug/L	0.497	1	5989	42524	0
|	Se	82	73.212	ug/L	1.530	2	-5	9052	2
|	Se	78	77.352	ug/L	1.317	1	6021	26343	0
[	Mo	98	30.025	ug/L	1.081	3	26	90002	3
	Y	89		ug/L			308043	265972	3
	Kr	83		ug/L			851	944	1
[>	In	115		ug/L			749907	656235	0
|	Ag	107	21.950	ug/L	0.264	1	18	117845	1
|	Cd	111	24.074	ug/L	0.219	0	70	68524	0
|	Cd	114	23.700	ug/L	0.515	2	19	173310	2
|	Sb	121	25.293	ug/L	0.203	0	366	236317	1
|	Sb	123	25.800	ug/L	0.304	1	260	179968	0
|	Ba	135	38.991	ug/L	0.747	1	16	110156	1
[	Ba	137	38.789	ug/L	0.680	1	38	188928	1
[>	Tb	159		ug/L			870411	828611	1
|	Tl	205	24.858	ug/L	0.665	2	85	580224	1
|	Pb	208	25.516	ug/L	0.645	2	120	760180	1
|	Bi	209		ug/L			1750755	1494720	0
|	Th	232	27.059	ug/L	0.649	2	1146	795914	1
[	U	238	27.012	ug/L	0.551	2	46	837180	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~U627 J.L REN~~ 222222
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, May 07, 2012 16:16:01
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120507.cal

Ag, Cr, Cu, Zn, As 10X
Cr CC 10X
JCL
5/8/12

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	1054197	9
	Be	9	0.021	ug/L	0.001	6	9	73	3
	C	13		ug/L			83631	70880	10
	Cl	37		ug/L			4167618	3276850	8
>	Sc	45		ug/L			978840	700693	11
	V	51	11.778	ug/L	0.223	1	4838	143390	9
	V-1	51	12.006	ug/L	0.203	1	99	142505	9
	Cr	52	CC 2.398	ug/L	0.112	4	14295	32679	9
	Cr	53	3.167	ug/L	0.037	1	99	3409	10
	Mn	55	69.171	ug/L	2.079	3	350	855018	8
	Co	59	0.081	ug/L	0.002	2	45	713	9
>	Ge	72		ug/L			396414	326053	4
	Ni	60	0.150	ug/L	0.007	4	22	322	6
	Ni	62	51.915	ug/L	3.138	6	117	15469	10
	Cu	63	3.001	ug/L	0.190	6	99	13168	10
	Cu	65	U 0.284	ug/L	0.006	2	22	564	6
	Zn	66	U 1.591	ug/L	0.026	1	146	1933	5
	Zn	67	U 1.969	ug/L	0.128	6	24	398	10
	Zn	68	1.742	ug/L	0.067	3	134	1519	7
	As	75	72.106	ug/L	0.597	0	607	76829	4
	As-1	75	75.623	ug/L	0.655	0	5989	81374	4
	Se	82	0.082	ug/L	0.021	25	-5	4	52
	Se	78	0.926	ug/L	0.291	31	6021	5197	4
	Mo	98	0.099	ug/L	0.017	17	26	310	20
	Y	89		ug/L			308043	239661	5
	Kr	83		ug/L			851	829	7
>	In	115		ug/L			749907	635267	5
!	Ag	107	U 0.004	ug/L	0.003	66	18	36	42
	Cd	111	0.005	ug/L	0.005	99	70	72	20
	Cd	114	0.004	ug/L	0.003	74	19	42	50
	Sb	121	0.018	ug/L	0.006	34	366	471	6
	Sb	123	0.020	ug/L	0.009	47	260	353	12
	Ba	135	1.645	ug/L	0.052	3	16	4506	2
	Ba	137	1.631	ug/L	0.038	2	38	7721	5
>	Tb	159		ug/L			870411	793093	2
	Tl	205	0.002	ug/L	0.002	95	85	130	40
	Pb	208	0.029	ug/L	0.003	10	120	951	11
	Bi	209		ug/L			1750755	1583399	2
	Th	232	0.148	ug/L	0.049	33	1146	5219	29
	U	238	0.025	ug/L	0.003	10	46	782	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 16:20:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	642739	3
	Be	9	0.090	ug/L	0.003	2	9	178	5
	C	13		ug/L			83631	52377	2
	Cl	37		ug/L			4167618	2655926	2
>	Sc	45		ug/L			978840	422859	2
	V	51	58.563	ug/L	0.347	0	4838	422575	2
	V-1	51	59.230	ug/L	0.424	0	99	424667	2
	Cr	52	12.045	ug/L	0.099	0	14295	74409	3
	Cr	53	14.189	ug/L	0.300	2	99	9077	4
	Mn	55	356.727	ug/L	2.788	0	350	2666326	2
	Co	59	0.441	ug/L	0.006	1	45	2247	1
>	Ge	72		ug/L			396414	230655	1
	Ni	60	0.524	ug/L	0.009	1	22	765	1
	Ni	62	153.469	ug/L	27.210	17	117	32133	17
	Cu	63	13.063	ug/L	1.733	13	99	40258	12
	Cu	65	1.065	ug/L	0.018	1	22	1459	2
	Zn	66	1.233	ug/L	0.046	3	146	1078	3
	Zn	67	4.620	ug/L	0.186	4	24	641	2
	Zn	68	2.365	ug/L	0.021	0	134	1430	1
	As	75	350.094	ug/L	3.822	1	607	262475	1
	As-1	75	367.484	ug/L	4.000	1	5989	266241	1
	Se	82	0.223	ug/L	0.028	12	-5	15	16
	Se	78	4.405	ug/L	0.032	0	6021	4327	0
	Mo	98	0.483	ug/L	0.008	1	26	1002	1
	Y	89		ug/L			308043	190622	3
	Kr	83		ug/L			851	676	0
>	In	115		ug/L			749907	462904	2
	Ag	107	0.015	ug/L	0.002	14	18	70	12
	Cd	111	0.008	ug/L	0.011	124	70	60	33
	Cd	114	0.004	ug/L	0.001	34	19	31	22
	Sb	121	0.033	ug/L	0.004	11	366	441	4
	Sb	123	0.035	ug/L	0.003	7	260	331	4
	Ba	135	8.800	ug/L	0.196	2	16	17542	2
	Ba	137	8.848	ug/L	0.154	1	38	30419	2
>	Tb	159		ug/L			870411	658667	2
	Tl	205	0.000	ug/L	0.000	179	85	67	6
	Pb	208	0.049	ug/L	0.001	3	120	1247	1
	Bi	209		ug/L			1750755	1236164	1
	Th	232	0.266	ug/L	0.048	17	1146	7086	18
	U	238	0.121	ug/L	0.004	3	46	3015	2

US15 : 00572

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, May 07, 2012 16:24:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120507.cal

Ag, Be, Co 5/8/12 JKS
Se As 204 rrCC 24
DEL 5/8/12 JKS

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	580195	2
	Be	9	0.084	ug/L	0.010	12	9	150	14
	C	13		ug/L			83631	46997	1
	Cl	37		ug/L			4167618	2518145	2
>	Sc	45		ug/L			978840	387930	1
	V	51	55.520	ug/L	0.759	1	4838	367563	1
	V-1	51	56.156	ug/L	0.846	1	99	369298	1
	Cr	52	11.363	ug/L	0.240	2	14295	64701	1
	Cr	53	13.409	ug/L	0.422	3	99	7866	1
	Mn	55	344.137	ug/L	6.224	1	350	2359580	1
	Co	59	0.426	ug/L	0.024	5	45	1993	5
>	Ge	72		ug/L			396414	218031	1
	Ni	60	0.520	ug/L	0.037	7	22	717	6
	Ni	62	148.020	ug/L	13.482	9	117	29306	8
	Cu	63	12.365	ug/L	0.899	7	99	36031	6
	Cu	65	U 1.120	ug/L	0.042	3	22	1449	3
	Zn	66	U 1.211	ug/L	0.020	1	146	1003	0
	Zn	67	4.283	ug/L	0.150	3	24	562	2
	Zn	68	2.390	ug/L	0.040	1	134	1365	0
	As	75	340.406	ug/L	1.739	0	607	241245	1
	As-1	75	357.299	ug/L	1.886	0	5989	244777	0
	Se	82	0.354	ug/L	0.100	28	-5	24	31
	Se	78	4.533	ug/L	0.471	10	6021	4112	0
	Mo	98	0.476	ug/L	0.004	0	26	935	1
	Y	89		ug/L			308043	171219	1
	Kr	83		ug/L			851	669	0
>	In	115		ug/L			749907	418783	2
	Ag	107	U 0.016	ug/L	0.004	24	18	64	22
	Cd	111	0.011	ug/L	0.011	101	70	59	36
	Cd	114	0.002	ug/L	0.000	5	19	21	0
	Sb	121	0.030	ug/L	0.002	6	366	385	1
	Sb	123	0.033	ug/L	0.007	20	260	293	9
	Ba	135	8.387	ug/L	0.112	1	16	15127	1
	Ba	137	8.500	ug/L	0.083	0	38	26433	1
>	Tb	159		ug/L			870411	591071	2
	Tl	205	-0.000	ug/L	0.001	316	85	53	25
	Pb	208	0.062	ug/L	0.003	4	120	1395	1
	Bi	209		ug/L			1750755	1154695	0
	Th	232	0.173	ug/L	0.007	3	1146	4402	5
	U	238	0.124	ug/L	0.003	2	46	2772	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US27 JSPK REN~~ 222222

Sample Dil Factor: 2

Comments: 5/8/12 JW

Sample Date/Time: Monday, May 07, 2012 16:28:24

Number of Replicates: 3

Method File: C:\NexION Data\Method\200.8nomin.mth

Tuning File: C:\NexION Data\MassCal\default.tun

Optimization File: C:\NexION Data\Conditions\default.dac

Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	644119	75
	Be	9	0.001	ug/L	0.005	477	9	9	146
	C	13		ug/L			83631	21176	37
	Cl	37		ug/L			4167618	893178	40
>	Sc	45		ug/L			978840	437697	74
	V	51	2.120	ug/L	3.647	172	4838	23237	162
	V-1	51	2.300	ug/L	3.700	160	99	22762	165
	Cr	52	0.188	ug/L	0.811	432	14295	6483	114
	Cr	53	0.826	ug/L	0.780	94	99	580	140
	Mn	55	12.739	ug/L	21.119	165	350	133803	165
	Co	59	0.023	ug/L	0.023	99	45	140	135
>	Ge	72		ug/L			396414	276412	73
	Ni	60	0.017	ug/L	0.030	172	22	48	137
	Ni	62	103.691	ug/L	124.830	120	117	11314	9
	Cu	63	4.119	ug/L	4.545	110	99	7273	10
	Cu	65	0.086	ug/L	0.066	76	22	121	107
	Zn	66	0.042	ug/L	0.057	137	146	132	77
	Zn	67	0.097	ug/L	0.159	163	24	36	99
	Zn	68	0.106	ug/L	0.138	130	134	151	94
	As	75	12.171	ug/L	19.386	159	607	13224	160
	As-1	75	14.179	ug/L	18.382	129	5989	15578	137
	Se	82	0.020	ug/L	0.236	1202	-5	-12	121
	Se	78	6.988	ug/L	27.631	395	6021	2801	14
	Mo	98	0.013	ug/L	0.026	196	26	54	153
	Y	89		ug/L			308043	197093	70
	Kr	83		ug/L			851	616	54
>	In	115		ug/L			749907	549245	72
	Ag	107	-0.000	ug/L	0.001	217	18	10	81
	Cd	111	-0.008	ug/L	0.001	8	70	32	70
	Cd	114	-0.001	ug/L	0.001	132	19	10	87
	Sb	121	-0.026	ug/L	0.004	15	366	68	86
	Sb	123	-0.023	ug/L	0.005	24	260	45	78
	Ba	135	0.338	ug/L	0.557	164	16	1007	160
	Ba	137	0.336	ug/L	0.551	163	38	1727	160
>	Tb	159		ug/L			870411	765827	71
	Tl	205	0.001	ug/L	0.003	425	85	61	47
	Pb	208	0.006	ug/L	0.005	86	120	235	92
	Bi	209		ug/L			1750755	2011957	73
	Th	232	0.041	ug/L	0.043	103	1146	2623	93
	U	238	0.005	ug/L	0.010	196	46	228	156

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US27 JPOST REN~~ 222222
Sample Dil Factor: 2
Comments: 5/8/12
Sample Date/Time: Monday, May 07, 2012 16:32:32
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120507.cal

Ag, Cr, Cu, Zn
DO As

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	677875	7
	Be	9	19.274	ug/L	0.380	1	9	39208	7
	C	13		ug/L			83631	50705	4
	Cl	37		ug/L			4167618	2816438	5
>	Sc	45		ug/L			978840	431934	4
	V	51	78.159	ug/L	0.358	0	4838	575328	4
	V-1	51	78.784	ug/L	0.221	0	99	576950	4
	Cr	52	36.425	ug/L	0.740	2	14295	217051	5
	Cr	53	38.444	ug/L	0.352	0	99	25045	5
	Mn	55	348.629	ug/L	4.430	1	350	2661872	5
	Co	59	29.602	ug/L	0.729	2	45	152891	5
>	Ge	72		ug/L			396414	206993	3
	Ni	60	24.678	ug/L	0.608	2	22	31830	5
	Ni	62	162.104	ug/L	25.236	15	117	30595	18
	Cu	63	37.002	ug/L	1.695	4	99	102414	7
	Cu	65	26.094	ug/L	0.494	1	22	31822	5
	Zn	66	70.869	ug/L	1.247	1	146	51358	5
	Zn	67	69.614	ug/L	1.087	1	24	8497	5
	Zn	68	71.810	ug/L	2.199	3	134	36928	6
	As	75	375.376	ug/L	3.591	0	607	252572	4
	As-1	75	391.528	ug/L	4.175	1	5989	254408	4
	Se	82	71.853	ug/L	2.779	3	-5	5433	1
	Se	78	77.512	ug/L	0.597	0	6021	16154	4
	Mo	98	24.859	ug/L	0.703	2	26	45602	3
	Y	89		ug/L			308043	169825	2
	Kr	83		ug/L			851	664	5
>	In	115		ug/L			749907	446475	4
	Ag	107	24.257	ug/L	1.420	5	18	88465	3
	Cd	111	23.531	ug/L	0.173	0	70	45560	4
	Cd	114	23.804	ug/L	0.597	2	19	118364	3
	Sb	121	28.446	ug/L	0.713	2	366	180650	2
	Sb	123	29.162	ug/L	0.528	1	260	138312	3
	Ba	135	36.739	ug/L	0.743	2	16	70601	4
	Ba	137	36.679	ug/L	0.145	0	38	121540	4
>	Tb	159		ug/L			870411	616345	4
	Tl	205	27.369	ug/L	0.711	2	85	474931	1
	Pb	208	28.619	ug/L	0.577	2	120	633957	2
	Bi	209		ug/L			1750755	1259516	1
	Th	232	30.914	ug/L	0.538	1	1146	676041	2
	U	238	30.795	ug/L	0.492	1	46	709729	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 16:39:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	606907	7
	Be	9	44.279	ug/L	1.667	3	9	80520	5
	C	13		ug/L			83631	37850	5
	Cl	37		ug/L			4167618	2005808	6
>	Sc	45		ug/L			978840	353586	3
	V	51	59.072	ug/L	0.836	1	4838	358286	2
	V-1	51	59.562	ug/L	0.932	1	99	356952	2
	Cr	52	62.922	ug/L	0.528	0	14295	303148	3
	Cr	53	64.706	ug/L	0.907	1	99	34468	3
	Mn	55	65.653	ug/L	1.667	2	350	410197	1
	Co	59	74.912	ug/L	3.095	4	45	316408	0
>	Ge	72		ug/L			396414	243636	0
	Ni	60	45.542	ug/L	1.123	2	22	69093	2
	Ni	62	87.265	ug/L	3.681	4	117	19351	4
	Cu	63	48.027	ug/L	0.569	1	99	156295	1
	Cu	65	48.683	ug/L	0.777	1	22	69837	1
	Zn	66	46.724	ug/L	1.172	2	146	39867	2
	Zn	67	47.031	ug/L	0.567	1	24	6759	0
	Zn	68	46.973	ug/L	1.227	2	134	28446	2
	As	75	48.820	ug/L	0.234	0	607	38981	0
	As-1	75	50.477	ug/L	0.201	0	5989	41803	0
	Se	82	46.313	ug/L	0.512	1	-5	4124	0
	Se	78	51.136	ug/L	0.381	0	6021	13801	0
	Mo	98	43.670	ug/L	0.189	0	26	94308	1
	Y	89		ug/L			308043	164046	1
	Kr	83		ug/L			851	651	4
>	In	115		ug/L			749907	469420	1
	Ag	107	46.112	ug/L	0.597	1	18	177057	0
	Cd	111	47.438	ug/L	0.524	1	70	96556	2
	Cd	114	49.243	ug/L	0.981	1	19	257580	2
	Sb	121	53.745	ug/L	0.426	0	366	358957	2
	Sb	123	54.708	ug/L	0.395	0	260	272801	1
	Ba	135	54.451	ug/L	0.791	1	16	110032	1
	Ba	137	54.123	ug/L	0.548	1	38	188573	1
>	Tb	159		ug/L			870411	634296	3
	Tl	205	53.695	ug/L	0.887	1	85	959224	1
	Pb	208	56.708	ug/L	1.283	2	120	1292835	1
	Bi	209		ug/L			1750755	1413804	0
	Th	232	57.898	ug/L	1.635	2	1146	1302232	1
	U	238	57.525	ug/L	1.279	2	46	1364369	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 16:45:37
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	620477	2
	Be	9	-0.001	ug/L	0.002	270	9	3	96
	C	13		ug/L			83631	38815	3
	Cl	37		ug/L			4167618	2072034	4
>	Sc	45		ug/L			978840	352588	3
	V	51	0.083	ug/L	0.002	2	4838	2240	2
	V-1	51	0.023	ug/L	0.005	20	99	175	18
	Cr	52	0.305	ug/L	0.020	6	14295	6585	1
	Cr	53	0.091	ug/L	0.011	11	99	84	7
	Mn	55	0.029	ug/L	0.017	59	350	310	38
	Co	59	0.005	ug/L	0.002	37	45	38	23
>	Ge	72		ug/L			396414	241397	1
	Ni	60	-0.002	ug/L	0.001	57	22	9	23
	Ni	62	30.924	ug/L	1.723	5	117	6835	3
	Cu	63	1.399	ug/L	0.095	6	99	4564	5
	Cu	65	0.024	ug/L	0.009	36	22	47	24
	Zn	66	0.022	ug/L	0.009	40	146	108	8
	Zn	67	0.040	ug/L	0.016	39	24	20	10
	Zn	68	0.038	ug/L	0.007	18	134	104	2
	As	75	0.132	ug/L	0.049	36	607	474	9
	As-1	75	0.328	ug/L	0.048	14	5989	3892	0
	Se	82	0.164	ug/L	0.072	43	-5	10	58
	Se	78	1.249	ug/L	0.263	21	6021	3910	0
	Mo	98	0.018	ug/L	0.020	112	26	55	80
	Y	89		ug/L			308043	164858	2
	Kr	83		ug/L			851	602	3
>	In	115		ug/L			749907	471539	2
	Ag	107	0.010	ug/L	0.017	173	18	49	133
	Cd	111	0.006	ug/L	0.012	205	70	56	47
	Cd	114	0.006	ug/L	0.010	175	19	43	126
	Sb	121	0.059	ug/L	0.015	25	366	625	19
	Sb	123	0.061	ug/L	0.018	30	260	469	22
	Ba	135	0.007	ug/L	0.009	118	16	25	72
	Ba	137	0.007	ug/L	0.008	126	38	48	65
>	Tb	159		ug/L			870411	628050	1
	Tl	205	0.002	ug/L	0.005	283	85	90	90
	Pb	208	0.003	ug/L	0.004	136	120	156	61
	Bi	209		ug/L			1750755	1398113	1
	Th	232	0.080	ug/L	0.021	26	1146	2604	17
	U	238	0.002	ug/L	0.002	139	46	74	77

ICP-MS Quantitative Analysis - Summary Report

Sample ID: R1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 16:49:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	719647	5
	Be	9	-0.001	ug/L	0.000	19	9	2	21
	C	13		ug/L			83631	45034	2
	Cl	37		ug/L			4167618	2286818	3
>	Sc	45		ug/L			978840	407083	3
	V	51	0.085	ug/L	0.008	9	4838	2604	5
	V-1	51	0.027	ug/L	0.002	6	99	227	4
	Cr	52	0.396	ug/L	0.033	8	14295	8107	4
	Cr	53	0.187	ug/L	0.024	12	99	156	6
	Mn	55	0.256	ug/L	0.007	2	350	1989	5
	Co	59	0.007	ug/L	0.003	40	45	53	24
>	Ge	72		ug/L			396414	251149	4
	Ni	60	0.270	ug/L	0.012	4	22	436	6
	Ni	62	25.561	ug/L	1.586	6	117	5885	2
	Cu	63	1.390	ug/L	0.108	7	99	4714	3
	Cu	65	0.286	ug/L	0.012	4	22	437	6
	Zn	66	2.988	ug/L	0.115	3	146	2714	4
	Zn	67	2.721	ug/L	0.101	3	24	417	0
	Zn	68	2.945	ug/L	0.119	4	134	1917	4
	As	75	0.126	ug/L	0.043	34	607	487	4
	As-1	75	0.430	ug/L	0.142	33	5989	4126	1
	Se	82	0.041	ug/L	0.128	313	-5	0	4981
	Se	78	1.655	ug/L	0.611	36	6021	4148	1
	Mo	98	0.008	ug/L	0.005	56	26	35	30
	Y	89		ug/L			308043	176541	2
	Kr	83		ug/L			851	661	1
>	In	115		ug/L			749907	525832	1
	Ag	107	0.015	ug/L	0.001	8	18	78	8
	Cd	111	-0.001	ug/L	0.003	264	70	46	15
	Cd	114	0.005	ug/L	0.002	44	19	41	28
	Sb	121	0.010	ug/L	0.007	70	366	330	16
	Sb	123	0.009	ug/L	0.008	80	260	235	19
	Ba	135	0.073	ug/L	0.010	13	16	176	13
	Ba	137	0.079	ug/L	0.006	7	38	334	5
>	Tb	159		ug/L			870411	661401	1
	Tl	205	0.005	ug/L	0.001	17	85	154	8
	Pb	208	0.199	ug/L	0.002	1	120	4834	2
	Bi	209		ug/L			1750755	1447344	2
	Th	232	0.154	ug/L	0.074	48	1146	4464	38
	U	238	0.000	ug/L	0.000	83	46	37	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: R2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 16:53:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	768762	4
[	Be	9	-0.002	ug/L	0.001	30	9	1	69
	C	13		ug/L			83631	48509	4
	Cl	37		ug/L			4167618	2402032	3
[>	Sc	45		ug/L			978840	440314	4
[	V	51	0.083	ug/L	0.006	7	4838	2793	3
[	V-1	51	0.023	ug/L	0.002	7	99	218	4
[	Cr	52	0.358	ug/L	0.029	7	14295	8536	2
[	Cr	53	0.145	ug/L	0.014	9	99	141	1
[	Mn	55	0.250	ug/L	0.005	1	350	2105	3
[	Co	59	0.006	ug/L	0.001	12	45	52	6
[>	Ge	72		ug/L			396414	268462	2
[	Ni	60	0.257	ug/L	0.013	5	22	444	7
[	Ni	62	21.329	ug/L	1.014	4	117	5267	2
[	Cu	63	1.206	ug/L	0.049	4	99	4387	2
[	Cu	65	0.257	ug/L	0.012	4	22	422	6
[	Zn	66	2.922	ug/L	0.025	0	146	2840	2
[	Zn	67	2.615	ug/L	0.067	2	24	429	2
[	Zn	68	2.795	ug/L	0.070	2	134	1950	3
[	As	75	0.093	ug/L	0.027	28	607	492	4
[	As-1	75	0.240	ug/L	0.062	25	5989	4255	2
[	Se	82	0.006	ug/L	0.068	1083	-5	-3	200
[	Se	78	0.947	ug/L	0.210	22	6021	4283	2
[	Mo	98	0.005	ug/L	0.002	29	26	30	12
	Y	89		ug/L			308043	185491	2
	Kr	83		ug/L			851	685	1
[>	In	115		ug/L			749907	540990	2
[	Ag	107	0.015	ug/L	0.004	26	18	80	20
[	Cd	111	-0.001	ug/L	0.005	521	70	48	22
[	Cd	114	0.005	ug/L	0.001	23	19	41	14
[	Sb	121	-0.010	ug/L	0.003	32	366	191	14
[	Sb	123	-0.006	ug/L	0.004	71	260	153	16
[	Ba	135	0.080	ug/L	0.002	2	16	197	0
[	Ba	137	0.077	ug/L	0.003	4	38	336	3
[>	Tb	159		ug/L			870411	693946	2
[	Tl	205	0.002	ug/L	0.001	54	85	102	17
[	Pb	208	0.196	ug/L	0.007	3	120	4992	2
[	Bi	209		ug/L			1750755	1503862	1
[	Th	232	0.029	ug/L	0.013	46	1146	1618	19
[	U	238	-0.001	ug/L	0.000	41	46	22	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: R3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 16:58:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	783877	11
	Be	9	-0.001	ug/L	0.000	16	9	2	24
	C	13		ug/L			83631	48013	9
	Cl	37		ug/L			4167618	2412159	8
>	Sc	45		ug/L			978840	449451	11
	V	51	0.090	ug/L	0.010	11	4838	2907	11
	V-1	51	0.026	ug/L	0.001	5	99	240	11
	Cr	52	0.392	ug/L	0.047	11	14295	8912	9
	Cr	53	0.162	ug/L	0.032	19	99	154	4
	Mn	55	0.247	ug/L	0.012	4	350	2116	6
	Co	59	0.007	ug/L	0.002	24	45	56	14
>	Ge	72		ug/L			396414	269643	6
	Ni	60	0.259	ug/L	0.006	2	22	451	8
	Ni	62	18.711	ug/L	2.129	11	117	4630	4
	Cu	63	1.096	ug/L	0.077	6	99	4001	1
	Cu	65	0.263	ug/L	0.012	4	22	433	9
	Zn	66	2.879	ug/L	0.144	4	146	2806	3
	Zn	67	2.623	ug/L	0.109	4	24	433	10
	Zn	68	2.821	ug/L	0.072	2	134	1976	7
	As	75	0.090	ug/L	0.046	51	607	492	12
	As-1	75	0.285	ug/L	0.233	82	5989	4303	2
	Se	82	-0.080	ug/L	0.237	296	-5	-11	202
	Se	78	1.152	ug/L	0.912	79	6021	4339	2
	Mo	98	0.005	ug/L	0.002	35	26	29	18
	Y	89		ug/L			308043	191519	4
	Kr	83		ug/L			851	720	1
>	In	115		ug/L			749907	544788	5
	Ag	107	0.015	ug/L	0.001	6	18	82	6
	Cd	111	0.002	ug/L	0.003	155	70	55	16
	Cd	114	0.004	ug/L	0.000	11	19	40	5
	Sb	121	-0.015	ug/L	0.002	10	366	148	12
	Sb	123	-0.014	ug/L	0.004	27	260	110	24
	Ba	135	0.077	ug/L	0.003	3	16	192	8
	Ba	137	0.075	ug/L	0.009	11	38	330	12
>	Tb	159		ug/L			870411	677696	5
	Tl	205	0.001	ug/L	0.001	113	85	88	26
	Pb	208	0.200	ug/L	0.004	1	120	4969	3
	Bi	209		ug/L			1750755	1477490	3
	Th	232	0.008	ug/L	0.007	92	1146	1067	10
	U	238	-0.001	ug/L	0.000	29	46	21	22

ICP-MS Quantitative Analysis - Summary Report

Sample ID: R4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 17:02:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	889584	0
	Be	9	-0.001	ug/L	0.000	57	9	4	26
	C	13		ug/L			83631	54947	3
	Cl	37		ug/L			4167618	2673733	0
>	Sc	45		ug/L			978840	513506	2
	V	51	0.064	ug/L	0.007	10	4838	3097	1
	V-1	51	0.019	ug/L	0.002	10	99	220	6
	Cr	52	0.283	ug/L	0.014	4	14295	9445	1
	Cr	53	0.123	ug/L	0.017	13	99	147	9
	Mn	55	0.237	ug/L	0.005	2	350	2331	3
	Co	59	0.004	ug/L	0.002	58	45	47	27
>	Ge	72		ug/L			396414	282417	2
	Ni	60	0.261	ug/L	0.012	4	22	475	2
	Ni	62	15.959	ug/L	0.887	5	117	4166	3
	Cu	63	0.984	ug/L	0.051	5	99	3779	2
	Cu	65	0.253	ug/L	0.008	3	22	435	2
	Zn	66	2.956	ug/L	0.094	3	146	3020	2
	Zn	67	2.538	ug/L	0.025	0	24	439	3
	Zn	68	2.933	ug/L	0.133	4	134	2147	2
	As	75	0.105	ug/L	0.014	13	607	528	1
	As-1	75	0.203	ug/L	0.113	55	5989	4443	1
	Se	82	0.073	ug/L	0.031	42	-5	3	92
	Se	78	0.834	ug/L	0.435	52	6021	4479	1
	Mo	98	0.002	ug/L	0.001	75	26	23	12
	Y	89		ug/L			308043	201317	1
	Kr	83		ug/L			851	721	1
>	In	115		ug/L			749907	582287	0
	Ag	107	0.013	ug/L	0.002	17	18	77	14
	Cd	111	-0.001	ug/L	0.004	535	70	52	19
	Cd	114	0.003	ug/L	0.001	33	19	34	18
	Sb	121	-0.019	ug/L	0.002	13	366	130	16
	Sb	123	-0.016	ug/L	0.004	22	260	101	22
	Ba	135	0.076	ug/L	0.003	4	16	202	3
	Ba	137	0.068	ug/L	0.001	0	38	323	1
>	Tb	159		ug/L			870411	726984	1
	Tl	205	0.001	ug/L	0.000	45	85	87	9
	Pb	208	0.194	ug/L	0.005	2	120	5165	0
	Bi	209		ug/L			1750755	1559958	1
	Th	232	-0.007	ug/L	0.002	31	1146	764	6
	U	238	-0.001	ug/L	0.000	30	46	17	37

ICP-MS Quantitative Analysis - Summary Report

Sample ID: D1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 17:06:16
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	793941	2
[	Be	9	-0.002	ug/L	0.001	34	9	1	114
	C	13		ug/L			83631	47402	4
	Cl	37		ug/L			4167618	2492068	1
[>	Sc	45		ug/L			978840	454095	0
[	V	51	0.055	ug/L	0.003	5	4838	2669	1
[	V-1	51	0.012	ug/L	0.000	3	99	137	2
[	Cr	52	0.204	ug/L	0.001	0	14295	7870	0
[	Cr	53	0.049	ug/L	0.011	22	99	79	9
[	Mn	55	0.001	ug/L	0.001	45	350	173	3
[	Co	59	0.001	ug/L	0.002	134	45	27	32
[>	Ge	72		ug/L			396414	264123	1
[	Ni	60	-0.002	ug/L	0.001	56	22	11	18
[	Ni	62	15.332	ug/L	1.245	8	117	3746	6
[	Cu	63	0.708	ug/L	0.049	6	99	2562	4
[	Cu	65	0.017	ug/L	0.004	23	22	40	15
[	Zn	66	-0.002	ug/L	0.018	709	146	95	16
[	Zn	67	0.021	ug/L	0.015	70	24	19	13
[	Zn	68	0.004	ug/L	0.019	526	134	91	11
[	As	75	0.163	ug/L	0.013	7	607	544	0
[	As-1	75	0.359	ug/L	0.124	34	5989	4283	0
[	Se	82	0.107	ug/L	0.113	105	-5	6	165
[	Se	78	1.374	ug/L	0.448	32	6021	4305	0
[	Mo	98	-0.004	ug/L	0.000	11	26	7	12
	Y	89		ug/L			308043	180713	2
	Kr	83		ug/L			851	711	3
[>	In	115		ug/L			749907	531349	0
[	Ag	107	-0.002	ug/L	0.001	46	18	6	50
[	Cd	111	-0.004	ug/L	0.002	45	70	40	10
[	Cd	114	-0.001	ug/L	0.001	111	19	10	33
[	Sb	121	-0.028	ug/L	0.002	5	366	44	26
[	Sb	123	-0.027	ug/L	0.001	2	260	34	12
[	Ba	135	0.001	ug/L	0.001	242	16	12	25
[	Ba	137	-0.002	ug/L	0.002	89	38	20	30
[>	Tb	159		ug/L			870411	662616	2
[	Tl	205	-0.003	ug/L	0.000	7	85	12	28
[	Pb	208	-0.001	ug/L	0.000	16	120	66	5
[	Bi	209		ug/L			1750755	1472046	2
[	Th	232	-0.035	ug/L	0.000	0	1146	41	18
[	U	238	-0.001	ug/L	0.000	3	46	3	34

ICP-MS Quantitative Analysis - Summary Report

Sample ID: D2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 17:10:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1261646	790888	4
	Be	9	-0.001	ug/L	0.001	73	9	2	78
	C	13		ug/L			83631	50195	4
	Cl	37		ug/L			4167618	2547803	1
>	Sc	45		ug/L			978840	469162	3
	V	51	0.046	ug/L	0.012	25	4838	2684	0
	V-1	51	0.009	ug/L	0.002	24	99	119	12
	Cr	52	0.189	ug/L	0.026	13	14295	8033	1
	Cr	53	0.056	ug/L	0.011	19	99	87	11
	Mn	55	0.000	ug/L	0.002	6970	350	167	6
	Co	59	0.002	ug/L	0.002	84	45	35	35
>	Ge	72		ug/L			396414	263530	3
	Ni	60	-0.004	ug/L	0.002	57	22	7	52
	Ni	62	13.806	ug/L	0.872	6	117	3373	4
	Cu	63	0.644	ug/L	0.020	3	99	2333	4
	Cu	65	0.018	ug/L	0.002	11	22	43	5
	Zn	66	-0.003	ug/L	0.015	538	146	95	14
	Zn	67	-0.019	ug/L	0.033	170	24	13	40
	Zn	68	0.017	ug/L	0.019	112	134	100	13
	As	75	0.153	ug/L	0.036	23	607	534	3
	As-1	75	0.412	ug/L	0.107	26	5989	4316	2
	Se	82	-0.032	ug/L	0.222	687	-5	-7	292
	Se	78	1.556	ug/L	0.448	28	6021	4334	2
	Mo	98	-0.004	ug/L	0.002	37	26	8	46
	Y	89		ug/L			308043	181716	2
	Kr	83		ug/L			851	738	7
>	In	115		ug/L			749907	542012	3
	Ag	107	-0.001	ug/L	0.001	92	18	8	61
	Cd	111	-0.003	ug/L	0.002	56	70	43	6
	Cd	114	-0.000	ug/L	0.000	397	19	13	20
	Sb	121	-0.030	ug/L	0.001	4	366	30	29
	Sb	123	-0.028	ug/L	0.002	5	260	24	37
	Ba	135	0.001	ug/L	0.002	257	16	13	34
	Ba	137	-0.002	ug/L	0.001	70	38	21	21
>	Tb	159		ug/L			870411	671420	4
	Tl	205	-0.003	ug/L	0.000	9	85	18	27
	Pb	208	-0.001	ug/L	0.000	11	120	72	7
	Bi	209		ug/L			1750755	1481792	3
	Th	232	-0.035	ug/L	0.000	0	1146	40	10
	U	238	-0.001	ug/L	0.000	2	46	3	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: D3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 17:14:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	865893	3
[	Be	9	-0.001	ug/L	0.000	30	9	3	33
	C	13		ug/L			83631	51887	2
	Cl	37		ug/L			4167618	2673173	3
[>	Sc	45		ug/L			978840	503713	5
[	V	51	0.043	ug/L	0.008	19	4838	2852	3
[	V-1	51	0.009	ug/L	0.001	6	99	130	2
[	Cr	52	0.159	ug/L	0.036	22	14295	8423	3
[	Cr	53	0.040	ug/L	0.008	20	99	81	3
[	Mn	55	-0.000	ug/L	0.001	2591	350	179	6
[	Co	59	0.000	ug/L	0.001	158	45	25	12
[>	Ge	72		ug/L			396414	272566	3
[	Ni	60	-0.003	ug/L	0.001	33	22	10	14
[	Ni	62	12.347	ug/L	0.711	5	117	3127	2
[	Cu	63	0.571	ug/L	0.017	2	99	2145	1
[	Cu	65	0.017	ug/L	0.002	13	22	42	6
[	Zn	66	0.005	ug/L	0.004	78	146	105	5
[	Zn	67	-0.001	ug/L	0.033	5127	24	16	30
[	Zn	68	0.005	ug/L	0.017	318	134	95	8
[	As	75	0.137	ug/L	0.033	24	607	538	1
[	As-1	75	0.335	ug/L	0.132	39	5989	4398	1
[	Se	82	-0.040	ug/L	0.081	199	-5	-7	98
[	Se	78	1.268	ug/L	0.445	35	6021	4418	1
[	Mo	98	-0.005	ug/L	0.001	21	26	7	29
	Y	89		ug/L			308043	187737	3
	Kr	83		ug/L			851	749	2
[>	In	115		ug/L			749907	552101	3
[	Ag	107	-0.002	ug/L	0.001	38	18	6	48
[	Cd	111	-0.004	ug/L	0.002	52	70	41	11
[	Cd	114	-0.001	ug/L	0.001	112	19	9	49
[	Sb	121	-0.031	ug/L	0.000	1	366	28	10
[	Sb	123	-0.029	ug/L	0.001	2	260	19	25
[	Ba	135	0.001	ug/L	0.001	139	16	13	18
[	Ba	137	-0.002	ug/L	0.001	33	38	18	16
[>	Tb	159		ug/L			870411	677783	1
[	Tl	205	-0.003	ug/L	0.000	10	85	17	31
[	Pb	208	-0.001	ug/L	0.001	66	120	74	17
[	Bi	209		ug/L			1750755	1496640	2
[	Th	232	-0.036	ug/L	0.000	1	1146	38	27
[	U	238	-0.001	ug/L	0.000	9	46	3	96

US15 : 60584

ICP-MS Quantitative Analysis - Summary Report

Sample ID: D4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, May 07, 2012 17:18:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1261646	845582	2
[	Be	9	-0.001	ug/L	0.001	63	9	3	41
	C	13		ug/L			83631	53430	1
	Cl	37		ug/L			4167618	2610849	0
[>	Sc	45		ug/L			978840	499263	2
[	V	51	0.050	ug/L	0.012	24	4838	2890	2
[	V-1	51	0.010	ug/L	0.001	5	99	131	1
[	Cr	52	0.198	ug/L	0.046	22	14295	8616	2
[	Cr	53	0.054	ug/L	0.011	19	99	91	9
[	Mn	55	-0.001	ug/L	0.001	144	350	170	5
[	Co	59	0.001	ug/L	0.001	67	45	28	10
[>	Ge	72		ug/L			396414	270413	2
[	Ni	60	-0.004	ug/L	0.001	29	22	9	19
[	Ni	62	11.433	ug/L	0.298	2	117	2882	3
[	Cu	63	0.545	ug/L	0.013	2	99	2035	0
[	Cu	65	0.021	ug/L	0.005	23	22	49	14
[	Zn	66	0.023	ug/L	0.009	38	146	121	5
[	Zn	67	-0.005	ug/L	0.007	156	24	15	9
[	Zn	68	0.003	ug/L	0.011	315	134	94	10
[	As	75	0.154	ug/L	0.035	22	607	549	2
[	As-1	75	0.404	ug/L	0.075	18	5989	4422	1
[	Se	82	0.072	ug/L	0.099	137	-5	3	307
[	Se	78	1.543	ug/L	0.251	16	6021	4445	1
[	Mo	98	-0.004	ug/L	0.002	57	26	9	58
	Y	89		ug/L			308043	188279	3
	Kr	83		ug/L			851	728	4
[>	In	115		ug/L			749907	549723	2
[	Ag	107	-0.002	ug/L	0.000	15	18	4	35
[	Cd	111	-0.007	ug/L	0.000	5	70	35	4
[	Cd	114	0.000	ug/L	0.001	461	19	15	42
[	Sb	121	-0.031	ug/L	0.001	3	366	24	33
[	Sb	123	-0.030	ug/L	0.001	1	260	16	18
[	Ba	135	0.001	ug/L	0.001	265	16	13	26
[	Ba	137	-0.002	ug/L	0.003	113	38	19	51
[>	Tb	159		ug/L			870411	687172	1
[	Tl	205	-0.003	ug/L	0.000	7	85	12	31
[	Pb	208	-0.001	ug/L	0.000	2	120	68	0
[	Bi	209		ug/L			1750755	1497982	2
[	Th	232	-0.035	ug/L	0.001	1	1146	40	38
[	U	238	-0.001	ug/L	0.000	1	46	1	34

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.8.12 Analyst: JB Page: 1 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			2934-5
		0			↓
		1			2933-6
		2			2931-4
		3			6-03
		4			2932-4
		5			2931-7
		Rinse Sample			r ≥ 0.9997
		SO			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		Low Check		✓	
		ICSA			
		ICSAB			5% Cs 10% Ni Leg
		B1			
		B2			
		CCV2			
		CCB2			
		US27 E-L	REN	100 ✓	AD
		E		20	
		EDUP		✓	
		EGJK	↓	↓	1282 STL

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Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5·8·12 **Analyst:** JB **Page:** 3 of 4

All corrections made by analyst unless otherwise noted. 5·8·12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		U527A	REN	40	Ag
		D		20	
		G		40	
		I		20	
		LR200			✓
		~~BB~~ BB			
		CCV3			
		CCB3			✓
		U527 H-L	REN	10	Be, Cr, Pb
		H		2	
		HDUP			
	✓	HSPK			rerun
		J-L		10	✓ Cr Cu, Zn, Ag
		J		2	
		JDUP			✓
		JSPK			✓ CAF Ag low
		CCV4			Ni, Cu, Ba, Ce, W 5.8.12 JB
		CCB4			Ce, Ba, W
		U527 J-L	REN	100	✓ Ag
		J		20	
		JDUP			✓
		JSPK			✓ Ag, STL 96.3%
		LR300			Zn, Ag low
		D4			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 5·8·12 **Analyst:** JMB **Page:** 3 of 4

All corrections made by analyst unless otherwise noted. 5-7-12 JMB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BG			
		U427 HIGH	REN	2	Cr Be Pb
CCB5		CCB5 ~~CCV5~~			^{62}Ni high ^{63}Cu high
CCV5		CCV5 ~~CCB5~~			^{62}Ni high
		5061 MB1	REN	2	Cr Cu
		MB2			Cr Cu
		~~MB2 DUP~~			
		~~MB2 SPK~~			
		A			
		B			
		C			
		H			
		I			
		J			
		CCV6			
		CCB6			^{62}Ni high
		U561 D-L	REN	10	
		D		2	
		DDUP			
		~~D SPK~~			
Z		~~D DUP~~			
		G-L		10	
		G		2	
		GDUP			

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.8.12

MR	Analyst JB 5.11.12	Peer MSH	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	A.N (CV, CB 5 ppb)
ICB/CCB	✓	✓	↓ see log
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	V, Q1 CAF
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	A.N, CAF

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/8/2012 11:16:02 AM

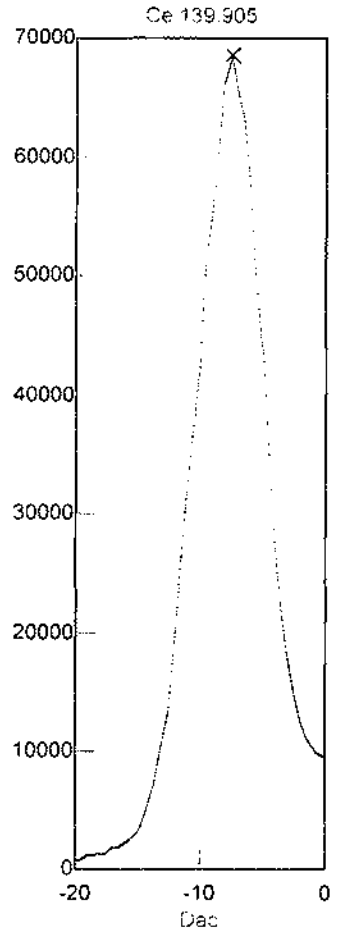
Daily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

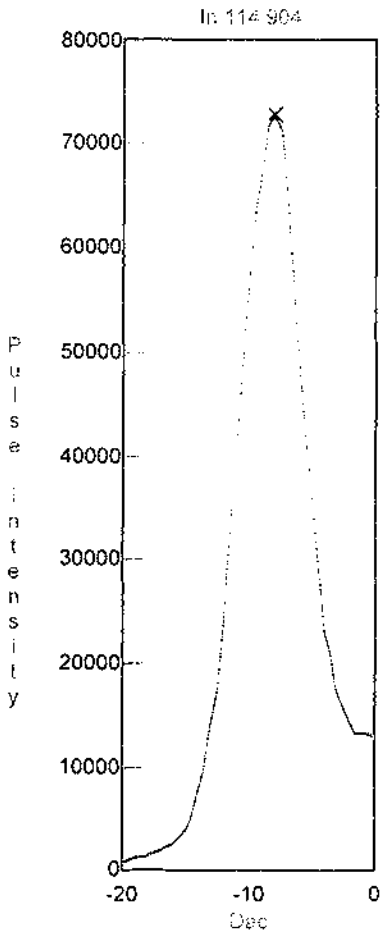
Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 5763.86
Obtained Intensity (Mg 23.985): 42361.90
Obtained Intensity (In 114.904): 63414.18
Obtained Intensity (Pb 207.977): 23270.05
Obtained Intensity (U 238.05): 41428.06
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.020 (=1242.49 / 61916.47)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.013 (=825.37 / 61916.47)
[Passed] Optimum value(s): N/A

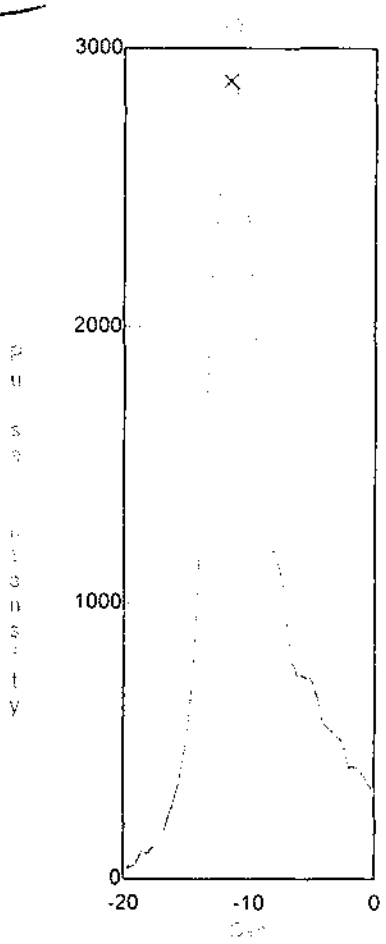
End Time: 5/8/2012 11:18:37 AM

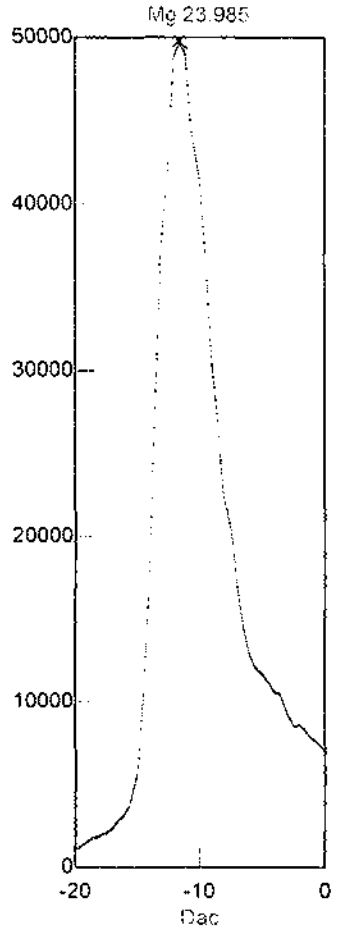
US15 : 00590

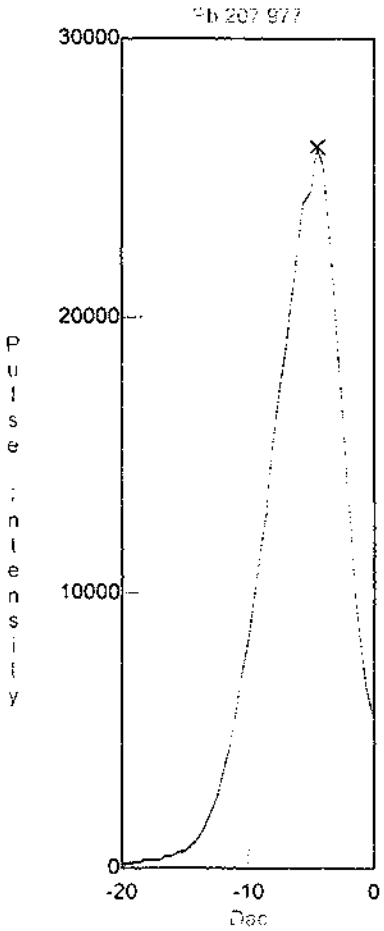
5.8.12

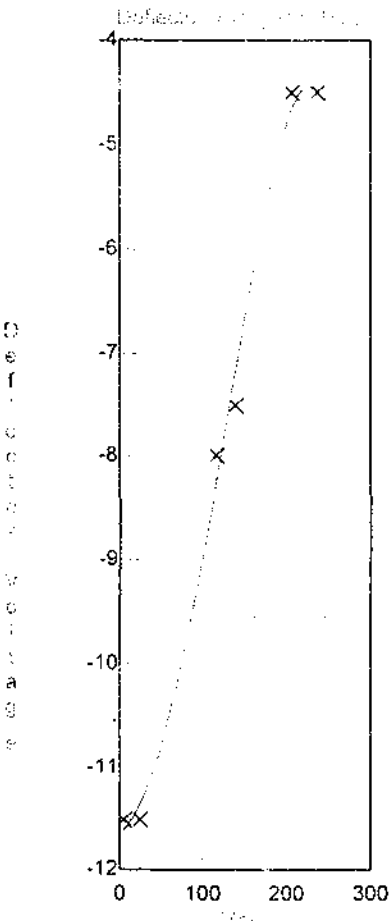












US15 : 00591

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/8/2012 11:05:11 AM
End Time: 5/8/2012 11:09:23 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.995; Intercept = -11.63

US15 : 00592

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/8/2012 11:02:45 AM
End Time: 5/8/2012 11:04:57 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/6.975), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.693)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.701)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.686)

US15 : 00593

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/8/2012 11:01:50 AM
End Time: 5/8/2012 11:02:37 AM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
1.08 mm	-0.67 mm	74048.54

US15 : 00591

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/8/2012 10:57:01 AM
End Time: 5/8/2012 10:59:37 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 5893.55
Obtained Intensity (Mg 23.985): 41696.80
Obtained Intensity (In 114.904): 61211.46
Obtained Intensity (Pb 207.977): 23929.44
Obtained Intensity (U 238.05): 43155.79
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1027.00 / 63376.08)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.013 (=848.84 / 63376.08)

US15 : 00595

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 11:49:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			0	1525866	0
	Be	9		ug/L			0	7	32
	C	13		ug/L			0	83373	1
	Cl	37		ug/L			0	4051181	1
>	Sc	45		ug/L			0	1154765	1
	V	51		ug/L			0	5926	3
	V-1	51		ug/L			0	85	11
	Cr	52		ug/L			0	17493	3
	Cr	53		ug/L			0	109	2
	Mn	55		ug/L			0	476	7
	Co	59		ug/L			0	42	11
>	Ge	72		ug/L			0	465529	1
	Ni	60		ug/L			0	20	10
	Ni	62		ug/L			0	1100	2
	Cu	63		ug/L			0	879	4
	Cu	65		ug/L			0	45	12
	Zn	66		ug/L			0	198	5
	Zn	67		ug/L			0	28	25
	Zn	68		ug/L			0	186	2
	As	75		ug/L			0	1362	3
	As-1	75		ug/L			0	7360	0
	Se	82		ug/L			0	-3	173
	Se	78		ug/L			0	7445	0
	Mo	98		ug/L			0	12	26
	Y	89		ug/L			0	349617	1
	Kr	83		ug/L			0	1868	1
>	In	115		ug/L			0	791401	0
	Ag	107		ug/L			0	13	22
	Cd	111		ug/L			0	43	31
	Cd	114		ug/L			0	22	11
	Sb	121		ug/L			0	39	14
	Sb	123		ug/L			0	22	34
	Ba	135		ug/L			0	18	15
	Ba	137		ug/L			0	36	13
>	Tb	159		ug/L			0	884912	0
	Tl	205		ug/L			0	21	29
	Pb	208		ug/L			0	137	4
	Bi	209		ug/L			0	1744082	1
	Th	232		ug/L			0	35	24
	U	238		ug/L			0	5	39

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:07:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1491153	2
	Be	9		ug/L				5	20
	C	13		ug/L				81102	0
	Cl	37		ug/L				4019798	2
>	Sc	45		ug/L				1140960	1
	V	51		ug/L				6017	1
	V-1	51		ug/L				85	5
	Cr	52		ug/L				17749	1
	Cr	53		ug/L				108	3
	Mn	55		ug/L				497	1
	Co	59		ug/L				39	13
>	Ge	72		ug/L				458765	0
	Ni	60		ug/L				19	2
	Ni	62		ug/L				953	1
	Cu	63		ug/L				745	1
	Cu	65		ug/L				38	5
	Zn	66		ug/L				183	13
	Zn	67		ug/L				29	21
	Zn	68		ug/L				170	3
	As	75		ug/L				1381	4
	As-1	75		ug/L				7215	0
	Se	82		ug/L				7	219
	Se	78		ug/L				7289	0
	Mo	98		ug/L				12	32
	Y	89		ug/L				339420	1
	Kr	83		ug/L				1843	1
>	In	115		ug/L				778052	0
	Ag	107		ug/L				12	29
	Cd	111		ug/L				44	7
	Cd	114		ug/L				22	17
	Sb	121		ug/L				37	10
	Sb	123		ug/L				29	39
	Ba	135		ug/L				21	10
	Ba	137		ug/L				32	21
>	Tb	159		ug/L				874820	1
	Tl	205		ug/L				14	21
	Pb	208		ug/L				122	7
	Bi	209		ug/L				1711035	0
	Th	232		ug/L				25	28
	U	238		ug/L				3	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:11:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1491153	1517732	1
	Be	9	0.200	ug/L	0.016	8	5	936	6
	C	13		ug/L			81102	85036	2
	Cl	37		ug/L			4019798	4120109	2
>	Sc	45		ug/L			1140960	1143450	1
	V	51	0.200	ug/L	0.012	6	6017	9776	2
	V-1	51	0.200	ug/L	0.003	1	85	4220	1
	Cr	52	0.500	ug/L	0.027	5	17749	25696	1
	Cr	53	0.500	ug/L	0.022	4	108	1126	3
	Mn	55	0.500	ug/L	0.010	1	497	12035	0
	Co	59	0.200	ug/L	0.009	4	39	3215	2
>	Ge	72		ug/L			458765	456301	0
	Ni	60	0.500	ug/L	0.003	0	19	1699	1
	Ni	62	0.500	ug/L	0.152	30	953	1130	4
	Cu	63	0.500	ug/L	0.005	0	745	4481	1
	Cu	65	0.500	ug/L	0.008	1	38	1686	2
	Zn	66	4.000	ug/L	0.095	2	183	9678	1
	Zn	67	4.000	ug/L	0.240	6	29	1462	5
	Zn	68	4.000	ug/L	0.068	1	170	6610	2
	As	75	0.200	ug/L	0.020	9	1381	1703	2
	As-1	75	0.200	ug/L	0.031	15	7215	7595	0
	Se	82	0.500	ug/L	0.069	13	7	80	13
	Se	78	0.500	ug/L	0.097	19	7289	7552	0
	Mo	98	0.200	ug/L	0.005	2	12	818	2
	Y	89		ug/L			339420	342606	1
	Kr	83		ug/L			1843	1866	3
>	In	115		ug/L			778052	781200	1
	Ag	107	0.200	ug/L	0.002	0	12	1536	1
	Cd	111	0.100	ug/L	0.005	4	44	439	3
	Cd	114	0.100	ug/L	0.003	2	22	1035	3
	Sb	121	0.200	ug/L	0.004	1	37	2339	2
	Sb	123	0.200	ug/L	0.007	3	29	1747	3
	Ba	135	0.500	ug/L	0.007	1	21	2094	1
	Ba	137	0.500	ug/L	0.017	3	32	3532	3
>	Tb	159		ug/L			874820	878125	0
	Tl	205	0.200	ug/L	0.001	0	14	5154	0
	Pb	208	0.100	ug/L	0.002	1	122	4258	1
	Bi	209		ug/L			1711035	1705897	2
	Th	232	0.200	ug/L	0.005	2	25	5305	2
	U	238	0.200	ug/L	0.003	1	3	6669	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:15:29
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1491153	1513066	1
[	Be	9	10.000	ug/L	0.249	2	5	46592	1
	C	13		ug/L			81102	90000	1
	Cl	37		ug/L			4019798	4183612	5
[>	Sc	45		ug/L			1140960	1156576	1
[	V	51	10.000	ug/L	0.342	3	6017	216707	2
[	V-1	51	10.000	ug/L	0.305	3	85	210674	1
[	Cr	52	10.002	ug/L	0.431	4	17749	190044	2
[	Cr	53	9.999	ug/L	0.291	2	108	19545	1
[	Mn	55	10.000	ug/L	0.313	3	497	235464	2
[	Co	59	10.000	ug/L	0.161	1	39	159439	0
[>	Ge	72		ug/L			458765	477012	0
[	Ni	60	9.999	ug/L	0.064	0	19	33571	0
[	Ni	62	10.004	ug/L	0.083	0	953	5607	0
[	Cu	63	9.998	ug/L	0.297	2	745	74160	3
[	Cu	65	9.998	ug/L	0.043	0	38	32412	0
[	Zn	66	9.647	ug/L	0.113	1	183	19803	1
[	Zn	67	9.772	ug/L	0.091	0	29	3235	1
[	Zn	68	9.699	ug/L	0.280	2	170	13921	2
[	As	75	10.000	ug/L	0.098	0	1381	17842	0
[	As-1	75	9.998	ug/L	0.041	0	7215	23135	0
[	Se	82	10.006	ug/L	0.255	2	7	2043	2
[	Se	78	9.989	ug/L	0.182	1	7289	11932	0
[	Mo	98	10.000	ug/L	0.141	1	12	41794	1
	Y	89		ug/L			339420	353956	0
	Kr	83		ug/L			1843	1854	1
[>	In	115		ug/L			778052	796426	1
[	Ag	107	10.000	ug/L	0.382	3	12	74073	2
[	Cd	111	10.000	ug/L	0.166	1	44	39470	0
[	Cd	114	10.000	ug/L	0.204	2	22	99827	2
[	Sb	121	10.000	ug/L	0.146	1	37	119214	2
[	Sb	123	10.000	ug/L	0.081	0	29	89521	0
[	Ba	135	9.995	ug/L	0.258	2	21	35372	2
[	Ba	137	9.995	ug/L	0.110	1	32	60053	0
[>	Tb	159		ug/L			874820	901542	0
[	Tl	205	10.000	ug/L	0.101	1	14	260521	0
[	Pb	208	10.000	ug/L	0.021	0	122	346159	0
[	Bi	209		ug/L			1711035	1730831	0
[	Th	232	10.000	ug/L	0.264	2	25	304125	2
[	U	238	10.000	ug/L	0.146	1	3	329822	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:19:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1491153	1520983	0
[	Be	9	19.976	ug/L	0.239	1	5	93146	1
	C	13		ug/L			81102	86489	1
	Cl	37		ug/L			4019798	4442621	0
[>	Sc	45		ug/L			1140960	1167714	1
|	V	51	19.979	ug/L	0.233	1	6017	429278	1
|	V-1	51	20.004	ug/L	0.254	1	85	425781	1
|	Cr	52	19.925	ug/L	0.135	0	17749	359168	1
|	Cr	53	20.011	ug/L	0.499	2	108	39467	0
|	Mn	55	19.968	ug/L	0.418	2	497	471244	1
[	Co	59	19.924	ug/L	0.382	1	39	315902	1
[>	Ge	72		ug/L			458765	466067	1
|	Ni	60	20.081	ug/L	0.218	1	19	66937	2
|	Ni	62	20.056	ug/L	0.422	2	953	10110	0
|	Cu	63	20.057	ug/L	0.510	2	745	146215	1
|	Cu	65	19.936	ug/L	0.268	1	38	62307	0
|	Zn	66	19.930	ug/L	0.363	1	183	39302	2
|	Zn	67	20.040	ug/L	0.244	1	29	6495	0
|	Zn	68	19.907	ug/L	0.399	2	170	27302	2
|	As	75	20.067	ug/L	0.286	1	1381	34006	0
|	As-1	75	20.097	ug/L	0.338	1	7215	38634	0
|	Se	82	20.072	ug/L	0.377	1	7	4056	1
|	Se	78	20.212	ug/L	0.441	2	7289	16389	0
[	Mo	98	20.062	ug/L	0.421	2	12	82934	1
	Y	89		ug/L			339420	346697	1
	Kr	83		ug/L			1843	1864	1
[>	In	115		ug/L			778052	796371	2
|	Ag	107	19.969	ug/L	0.493	2	12	147001	0
|	Cd	111	20.001	ug/L	0.448	2	44	78905	0
|	Cd	114	19.968	ug/L	0.716	3	22	197934	1
|	Sb	121	20.047	ug/L	0.436	2	37	241108	0
|	Sb	123	19.980	ug/L	0.562	2	29	178042	0
|	Ba	135	19.984	ug/L	0.468	2	21	70460	0
[	Ba	137	20.029	ug/L	0.524	2	32	120952	0
[>	Tb	159		ug/L			874820	893692	0
|	Tl	205	19.979	ug/L	0.289	1	14	513753	0
|	Pb	208	20.017	ug/L	0.275	1	122	689010	0
|	Bi	209		ug/L			1711035	1728616	0
|	Th	232	20.154	ug/L	0.131	0	25	626946	0
[	U	238	20.074	ug/L	0.246	1	3	666134	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:24:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1491153	1482893	1
[	Be	9	49.858	ug/L	1.614	3	5	223379	1
	C	13		ug/L			81102	90278	1
	Cl	37		ug/L			4019798	4604033	2
[>	Sc	45		ug/L			1140960	1130877	1
[	V	51	50.000	ug/L	1.111	2	6017	1031159	0
[	V-1	51	49.940	ug/L	1.366	2	85	1022940	0
[	Cr	52	49.924	ug/L	0.386	0	17749	838869	2
[	Cr	53	49.713	ug/L	0.949	1	108	92163	1
[	Mn	55	49.754	ug/L	1.674	3	497	1108874	1
[	Co	59	49.877	ug/L	1.401	2	39	756434	2
[>	Ge	72		ug/L			458765	456346	0
[	Ni	60	49.722	ug/L	0.485	0	19	157853	0
[	Ni	62	50.181	ug/L	0.086	0	953	23761	0
[	Cu	63	49.701	ug/L	0.197	0	745	343476	0
[	Cu	65	49.912	ug/L	0.782	1	38	151367	1
[	Zn	66	49.513	ug/L	1.117	2	183	91045	2
[	Zn	67	49.516	ug/L	1.839	3	29	14973	3
[	Zn	68	49.502	ug/L	0.610	1	170	63172	1
[	As	75	49.882	ug/L	0.960	1	1381	79808	1
[	As-1	75	49.989	ug/L	0.911	1	7215	83338	1
[	Se	82	49.595	ug/L	0.850	1	7	9422	1
[	Se	78	49.973	ug/L	0.720	1	7289	28944	0
[	Mo	98	49.752	ug/L	1.342	2	12	196499	2
	Y	89		ug/L			339420	341007	1
	Kr	83		ug/L			1843	1891	5
[>	In	115		ug/L			778052	780377	0
[	Ag	107	50.073	ug/L	0.183	0	12	363942	0
[	Cd	111	49.748	ug/L	0.591	1	44	187587	1
[	Cd	114	49.696	ug/L	0.369	0	22	468659	1
[	Sb	121	49.583	ug/L	0.471	0	37	561069	0
[	Sb	123	49.776	ug/L	0.380	0	29	425249	1
[	Ba	135	49.864	ug/L	0.850	1	21	170005	2
[	Ba	137	49.825	ug/L	0.289	0	32	289826	1
[>	Tb	159		ug/L			874820	879413	1
[	Tl	205	49.914	ug/L	0.503	1	14	1252190	0
[	Pb	208	49.788	ug/L	0.513	1	122	1651072	0
[	Bi	209		ug/L			1711035	1680875	1
[	Th	232	50.055	ug/L	0.485	0	25	1540527	1
[	U	238	49.977	ug/L	0.753	1	3	1628053	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:29:56
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1491153	1474942	0
	Be	9	99.742	ug/L	0.598	0	5	440847	0
	C	13		ug/L			81102	89312	0
	Cl	37		ug/L			4019798	4624714	1
>	Sc	45		ug/L			1140960	1118496	1
	V	51	100.745	ug/L	2.068	2	6017	2101372	1
	V-1	51	100.745	ug/L	2.277	2	85	2093340	1
	Cr	52	100.382	ug/L	1.768	1	17749	1671816	2
	Cr	53	100.382	ug/L	1.360	1	108	186346	0
	Mn	55	100.909	ug/L	2.846	2	497	2293818	1
	Co	59	100.256	ug/L	1.018	1	39	1517008	0
>	Ge	72		ug/L			458765	441211	0
	Ni	60	100.499	ug/L	1.265	1	19	313669	1
	Ni	62	100.504	ug/L	1.597	1	953	45845	1
	Cu	63	99.606	ug/L	1.103	1	745	656217	1
	Cu	65	99.949	ug/L	1.140	1	38	292517	0
	Zn	66	99.656	ug/L	2.760	2	183	175012	3
	Zn	67	100.144	ug/L	1.851	1	29	29391	2
	Zn	68	99.750	ug/L	1.271	1	170	121897	1
	As	75	100.710	ug/L	0.665	0	1381	158149	0
	As-1	75	100.760	ug/L	0.603	0	7215	159226	0
	Se	82	100.365	ug/L	1.469	1	7	18655	1
	Se	78	100.521	ug/L	1.179	1	7289	49944	0
	Mo	98	101.402	ug/L	0.425	0	12	406206	0
	Y	89		ug/L			339420	335318	1
	Kr	83		ug/L			1843	1883	1
>	In	115		ug/L			778052	752367	0
	Ag	107	99.666	ug/L	1.115	1	12	690717	1
	Cd	111	100.231	ug/L	0.579	0	44	367156	0
	Cd	114	100.139	ug/L	0.426	0	22	914656	0
	Sb	121	101.257	ug/L	0.319	0	37	1152992	0
	Sb	123	101.286	ug/L	0.473	0	29	871582	0
	Ba	135	100.952	ug/L	1.582	1	21	342655	1
	Ba	137	100.928	ug/L	0.970	0	32	584022	0
>	Tb	159		ug/L			874820	873859	0
	Tl	205	100.693	ug/L	0.829	0	14	2569732	0
	Pb	208	99.882	ug/L	0.043	0	122	3278709	0
	Bi	209		ug/L			1711035	1614114	1
	Th	232	101.187	ug/L	1.183	1	25	3222192	1
	U	238	100.953	ug/L	0.592	0	3	3375715	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:36:08
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120507.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1491153	1415819	3
[	Be	9	0.003	ug/L	0.002	59	5	19	45
	C	13		ug/L			81102	79093	3
	Cl	37		ug/L			4019798	4337815	4
[>	Sc	45		ug/L			1140960	1114240	1
[	V	51	-0.003	ug/L	0.001	37	6017	5809	1
[	V-1	51	0.004	ug/L	0.004	84	85	173	43
[	Cr	52	-0.008	ug/L	0.024	314	17749	17204	1
[	Cr	53	0.019	ug/L	0.033	167	108	141	41
[	Mn	55	0.016	ug/L	0.026	163	497	843	68
[	Co	59	0.023	ug/L	0.035	152	39	382	136
[>	Ge	72		ug/L			458765	455879	0
[	Ni	60	0.021	ug/L	0.032	151	19	88	118
[	Ni	62	0.593	ug/L	0.146	24	953	1221	4
[	Cu	63	0.056	ug/L	0.012	21	745	1118	7
[	Cu	65	0.022	ug/L	0.024	106	38	105	68
[	Zn	66	0.033	ug/L	0.038	112	183	243	28
[	Zn	67	0.012	ug/L	0.025	210	29	32	22
[	Zn	68	0.029	ug/L	0.012	42	170	206	7
[	As	75	0.005	ug/L	0.019	382	1381	1380	1
[	As-1	75	0.017	ug/L	0.011	63	7215	7195	0
[	Se	82	0.068	ug/L	0.180	263	7	20	172
[	Se	78	0.049	ug/L	0.045	92	7289	7265	0
[	Mo	98	0.034	ug/L	0.019	55	12	153	50
	Y	89		ug/L			339420	337557	1
	Kr	83		ug/L			1843	1794	4
[>	In	115		ug/L			778052	762109	2
[	Ag	107	0.015	ug/L	0.015	100	12	116	90
[	Cd	111	0.016	ug/L	0.013	78	44	104	47
[	Cd	114	0.008	ug/L	0.009	111	22	101	88
[	Sb	121	0.108	ug/L	0.015	13	37	1281	11
[	Sb	123	0.104	ug/L	0.016	15	29	930	12
[	Ba	135	0.004	ug/L	0.003	75	21	36	32
[	Ba	137	0.006	ug/L	0.004	66	32	67	36
[>	Tb	159		ug/L			874820	858383	2
[	Tl	205	0.011	ug/L	0.005	43	14	287	43
[	Pb	208	0.004	ug/L	0.004	84	122	261	47
[	Bi	209		ug/L			1711035	1679516	1
[	Th	232	0.135	ug/L	0.017	12	25	4268	14
[	U	238	0.005	ug/L	0.002	38	3	176	39

Sample Information

Sample Date/Time: Tuesday, May 08, 2012 12:29:56
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9999**	0.019	0.20	10	20	50	100
V-1	51	**0.9999**	0.019	0.20	10	20	50	100
Cr	52	**1.0000**	0.015	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**0.9998**	0.020	0.50	10	20	50	100
Co	59	**1.0000**	0.014	0.20	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.007	0.50	10	20	50	100
Ni	62	**0.9999**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.015	0.50	10	20	50	100
Cu	65	**1.0000**	0.007	0.50	10	20	50	100
Zn	66	**0.9999**	0.004	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.003	4.00	10	20	50	100
As	75	**0.9999**	0.004	0.20	10	20	50	100
As-1	75	**0.9999**	0.003	0.20	10	20	50	100
Se	82	**0.9997**	0.000	0.50	10	20	50	100
Se	78	**0.9999**	0.001	0.50	10	20	50	100
Mo	98	**0.9997**	0.009	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.009	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**0.9997**	0.015	0.20	10	20	50	100
Sb	123	**0.9997**	0.011	0.20	10	20	50	100
Ba	135	**0.9998**	0.005	0.50	10	20	50	100
Ba	137	**0.9998**	0.008	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.029	0.20	10	20	50	100
Pb	208	**1.0000**	0.038	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.036	0.20	10	20	50	100
U	238	**0.9998**	0.038	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:44:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1411952	1
	Be	9		ug/L				7	60
	C	13		ug/L				82728	3
	Cl	37		ug/L				4074015	3
>	Sc	45		ug/L				1091639	3
	V	51		ug/L				5656	2
	V-1	51		ug/L				83	7
	Cr	52		ug/L				16764	2
	Cr	53		ug/L				112	6
	Mn	55		ug/L				485	4
	Co	59		ug/L				57	15
>	Ge	72		ug/L				444301	1
	Ni	60		ug/L				16	9
	Ni	62		ug/L				966	2
	Cu	63		ug/L				754	3
	Cu	65		ug/L				39	6
	Zn	66		ug/L				197	4
	Zn	67		ug/L				32	23
	Zn	68		ug/L				191	3
	As	75		ug/L				1284	0
	As-1	75		ug/L				7106	0
	Se	82		ug/L				-5	398
	Se	78		ug/L				7187	0
	Mo	98		ug/L				29	27
	Y	89		ug/L				323430	0
	Kr	83		ug/L				1769	4
>	In	115		ug/L				748057	0
	Ag	107		ug/L				15	18
	Cd	111		ug/L				43	2
	Cd	114		ug/L				22	28
	Sb	121		ug/L				335	20
	Sb	123		ug/L				270	30
	Ba	135		ug/L				19	10
	Ba	137		ug/L				36	21
>	Tb	159		ug/L				853957	0
	Tl	205		ug/L				75	17
	Pb	208		ug/L				139	15
	Bi	209		ug/L				1664508	1
	Th	232		ug/L				1034	4
	U	238		ug/L				25	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:49:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1465429	1
	Be	9	50.270	ug/L	1.333	2	7	220719	1
	C	13		ug/L			82728	85558	1
	Cl	37		ug/L			4074015	4560046	3
>	Sc	45		ug/L			1091639	1119898	1
	V	51	48.796	ug/L	1.353	2	5656	1022040	2
	V-1	51	49.053	ug/L	1.645	3	83	1020705	3
	Cr	52	49.509	ug/L	1.633	3	16764	833828	1
	Cr	53	50.431	ug/L	1.262	2	112	93795	2
	Mn	55	48.603	ug/L	2.090	4	485	1106142	2
	Co	59	49.825	ug/L	1.397	2	57	754718	1
>	Ge	72		ug/L			444301	450062	1
	Ni	60	48.525	ug/L	1.954	4	16	154438	2
	Ni	62	49.308	ug/L	0.643	1	966	23462	1
	Cu	63	50.354	ug/L	2.484	4	754	338663	3
	Cu	65	48.810	ug/L	1.629	3	39	145700	2
	Zn	66	48.733	ug/L	1.752	3	197	87376	2
	Zn	67	49.028	ug/L	1.294	2	32	14692	1
	Zn	68	48.369	ug/L	2.809	5	191	60375	4
	As	75	48.824	ug/L	1.197	2	1284	78835	1
	As-1	75	48.119	ug/L	1.276	2	7106	81364	0
	Se	82	80.013	ug/L	2.580	3	-5	14337	2
	Se	78	76.048	ug/L	2.793	3	7187	40379	1
	Mo	98	47.787	ug/L	0.974	2	29	195264	1
	Y	89		ug/L			323430	336995	1
	Kr	83		ug/L			1769	1829	2
>	In	115		ug/L			748057	763904	1
	Ag	107	50.048	ug/L	0.332	0	15	352157	1
	Cd	111	49.440	ug/L	1.233	2	43	183867	1
	Cd	114	49.199	ug/L	1.468	2	22	456155	1
	Sb	121	48.395	ug/L	1.285	2	335	559687	1
	Sb	123	47.520	ug/L	0.870	1	270	415378	1
	Ba	135	49.590	ug/L	1.592	3	19	170865	1
	Ba	137	49.609	ug/L	1.065	2	36	291434	0
>	Tb	159		ug/L			853957	879274	0
	Tl	205	48.412	ug/L	0.792	1	75	1243171	1
	Pb	208	49.522	ug/L	0.775	1	139	1635740	1
	Bi	209		ug/L			1664508	1640161	1
	Th	232	48.873	ug/L	0.468	0	1034	1566981	0
	U	238	48.175	ug/L	0.630	1	25	1620795	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:54:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1439348	1
	Be	9	0.002	ug/L	0.000	10	7	14	3
	C	13		ug/L			82728	79844	0
	Cl	37		ug/L			4074015	4325934	2
>	Sc	45		ug/L			1091639	1100968	1
	V	51	0.010	ug/L	0.009	89	5656	5900	1
	V-1	51	0.001	ug/L	0.000	8	83	102	2
	Cr	52	0.033	ug/L	0.027	81	16764	17441	1
	Cr	53	0.002	ug/L	0.008	463	112	116	13
	Mn	55	-0.001	ug/L	0.001	141	485	469	6
	Co	59	-0.000	ug/L	0.001	177	57	52	17
>	Ge	72		ug/L			444301	441118	2
	Ni	60	0.002	ug/L	0.000	23	16	21	7
	Ni	62	0.066	ug/L	0.095	142	966	988	2
	Cu	63	0.009	ug/L	0.007	82	754	808	6
	Cu	65	0.002	ug/L	0.001	66	39	45	10
	Zn	66	-0.004	ug/L	0.007	181	197	189	6
	Zn	67	-0.008	ug/L	0.010	121	32	29	8
	Zn	68	0.013	ug/L	0.016	124	191	204	7
	As	75	0.037	ug/L	0.059	158	1284	1332	4
	As-1	75	0.064	ug/L	0.150	233	7106	7148	0
	Se	82	0.056	ug/L	0.123	220	-5	4	479
	Se	78	0.191	ug/L	0.526	276	7187	7213	0
	Mo	98	0.007	ug/L	0.002	29	29	58	13
	Y	89		ug/L			323430	325295	0
	Kr	83		ug/L			1769	1777	2
>	In	115		ug/L			748057	756218	0
	Ag	107	0.001	ug/L	0.000	10	15	25	4
	Cd	111	0.004	ug/L	0.002	50	43	57	12
	Cd	114	0.000	ug/L	0.000	56	22	26	8
	Sb	121	0.016	ug/L	0.007	44	335	516	15
	Sb	123	0.015	ug/L	0.010	66	270	402	21
	Ba	135	0.000	ug/L	0.002	489	19	20	27
	Ba	137	0.001	ug/L	0.001	157	36	41	15
>	Tb	159		ug/L			853957	847431	1
	Tl	205	0.001	ug/L	0.000	36	75	103	10
	Pb	208	0.001	ug/L	0.000	56	139	156	6
	Bi	209		ug/L			1664508	1646043	0
	Th	232	0.057	ug/L	0.013	23	1034	2804	16
	U	238	0.002	ug/L	0.000	25	25	82	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 12:58:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1442408	2
	Be	9	50.450	ug/L	0.662	1	7	218049	2
	C	13		ug/L			82728	85562	2
	Cl	37		ug/L			4074015	4569539	3
>	Sc	45		ug/L			1091639	1117183	1
	V	51	48.442	ug/L	0.524	1	5656	1012230	1
	V-1	51	48.362	ug/L	0.602	1	83	1003775	0
	Cr	52	49.219	ug/L	0.930	1	16764	827309	2
	Cr	53	48.935	ug/L	1.235	2	112	90782	1
	Mn	55	48.575	ug/L	0.270	0	485	1103387	1
	Co	59	48.957	ug/L	1.840	3	57	739688	2
>	Ge	72		ug/L			444301	448061	1
	Ni	60	49.662	ug/L	0.330	0	16	157425	2
	Ni	62	49.360	ug/L	0.706	1	966	23379	0
	Cu	63	50.276	ug/L	0.868	1	754	336692	0
	Cu	65	49.140	ug/L	0.462	0	39	146087	2
	Zn	66	49.868	ug/L	0.280	0	197	89033	0
	Zn	67	47.994	ug/L	1.383	2	32	14320	2
	Zn	68	50.311	ug/L	0.754	1	191	62536	0
	As	75	48.646	ug/L	0.811	1	1284	78211	1
	As-1	75	48.410	ug/L	0.981	2	7106	81459	1
	Se	82	52.159	ug/L	0.253	0	-5	9304	1
	Se	78	48.580	ug/L	0.792	1	7187	28303	1
	Mo	98	47.622	ug/L	1.009	2	29	193713	0
	Y	89		ug/L			323430	337491	1
	Kr	83		ug/L			1769	1814	0
>	In	115		ug/L			748057	766612	0
	Ag	107	49.382	ug/L	0.951	1	15	348716	2
	Cd	111	49.338	ug/L	0.172	0	43	184173	0
	Cd	114	49.361	ug/L	0.728	1	22	459384	1
	Sb	121	48.301	ug/L	0.813	1	335	560703	1
	Sb	123	47.845	ug/L	0.665	1	270	419752	1
	Ba	135	48.643	ug/L	0.480	0	19	168249	1
	Ba	137	48.580	ug/L	0.880	1	36	286451	1
>	Tb	159		ug/L			853957	872126	0
	Tl	205	47.812	ug/L	0.540	1	75	1217821	0
	Pb	208	49.486	ug/L	0.563	1	139	1621257	0
	Bi	209		ug/L			1664508	1644240	1
	Th	232	48.028	ug/L	0.359	0	1034	1527412	0
	U	238	47.901	ug/L	0.427	0	25	1598552	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:04:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1388144	0
	Be	9	0.001	ug/L	0.001	55	7	11	18
	C	13		ug/L			82728	79413	2
	Cl	37		ug/L			4074015	4204765	3
>	Sc	45		ug/L			1091639	1094805	0
	V	51	0.006	ug/L	0.010	182	5656	5788	3
	V-1	51	0.001	ug/L	0.000	22	83	98	3
	Cr	52	0.021	ug/L	0.034	157	16764	17155	2
	Cr	53	0.003	ug/L	0.006	160	112	119	9
	Mn	55	0.000	ug/L	0.001	998	485	489	4
	Co	59	-0.000	ug/L	0.001	134	57	51	16
>	Ge	72		ug/L			444301	437521	1
	Ni	60	0.001	ug/L	0.001	93	16	19	15
	Ni	62	0.048	ug/L	0.055	114	966	972	3
	Cu	63	0.009	ug/L	0.009	100	754	801	7
	Cu	65	0.003	ug/L	0.000	7	39	48	1
	Zn	66	0.003	ug/L	0.006	186	197	199	5
	Zn	67	0.007	ug/L	0.025	345	32	34	22
	Zn	68	0.003	ug/L	0.013	405	191	192	7
	As	75	0.018	ug/L	0.006	31	1284	1292	1
	As-1	75	0.059	ug/L	0.059	100	7106	7085	1
	Se	82	-0.066	ug/L	0.172	259	-5	-16	182
	Se	78	0.195	ug/L	0.186	95	7187	7160	1
	Mo	98	0.010	ug/L	0.004	36	29	68	21
	Y	89		ug/L			323430	333089	2
	Kr	83		ug/L			1769	1806	3
>	In	115		ug/L			748057	757756	0
	Ag	107	0.002	ug/L	0.000	23	15	28	9
	Cd	111	0.004	ug/L	0.001	22	43	58	4
	Cd	114	0.000	ug/L	0.001	813	22	23	29
	Sb	121	0.074	ug/L	0.007	9	335	1191	6
	Sb	123	0.068	ug/L	0.008	12	270	862	7
	Ba	135	0.001	ug/L	0.002	223	19	22	33
	Ba	137	0.001	ug/L	0.002	207	36	42	26
>	Tb	159		ug/L			853957	846531	0
	Tl	205	0.003	ug/L	0.000	13	75	137	5
	Pb	208	-0.000	ug/L	0.000	343	139	134	8
	Bi	209		ug/L			1664508	1648155	0
	Th	232	0.099	ug/L	0.026	26	1034	4083	19
	U	238	0.002	ug/L	0.000	14	25	79	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:08:28
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1409134	1
	Be	9	0.200	ug/L	0.002	1	7	853	1
	C	13		ug/L			82728	83767	2
	Cl	37		ug/L			4074015	4415042	1
>	Sc	45		ug/L			1091639	1109143	2
	V	51	0.201	ug/L	0.013	6	5656	9896	1
	V-1	51	0.196	ug/L	0.002	0	83	4130	1
	Cr	52	0.497	ug/L	0.051	10	16764	25134	0
	Cr	53	0.480	ug/L	0.021	4	112	996	2
	Mn	55	0.493	ug/L	0.009	1	485	11600	0
	Co	59	0.200	ug/L	0.009	4	57	3051	1
>	Ge	72		ug/L			444301	442079	0
	Ni	60	0.502	ug/L	0.014	2	16	1586	2
	Ni	62	0.332	ug/L	0.022	6	966	1110	0
	Cu	63	0.511	ug/L	0.016	3	754	4122	2
	Cu	65	0.515	ug/L	0.028	5	39	1549	4
	Zn	66	3.984	ug/L	0.092	2	197	7199	2
	Zn	67	3.475	ug/L	0.120	3	32	1053	3
	Zn	68	3.853	ug/L	0.077	1	191	4901	2
	As	75	0.225	ug/L	0.016	7	1284	1628	1
	As-1	75	0.195	ug/L	0.051	26	7106	7365	0
	Se	82	0.534	ug/L	0.075	14	-5	88	14
	Se	78	0.522	ug/L	0.217	41	7187	7375	1
	Mo	98	0.193	ug/L	0.011	5	29	804	5
	Y	89		ug/L			323430	331074	2
	Kr	83		ug/L			1769	1810	0
>	In	115		ug/L			748057	753686	1
	Ag	107	0.198	ug/L	0.015	7	15	1389	5
	Cd	111	0.108	ug/L	0.002	1	43	439	3
	Cd	114	0.106	ug/L	0.004	3	22	989	2
	Sb	121	0.195	ug/L	0.002	0	335	2558	2
	Sb	123	0.200	ug/L	0.007	3	270	1999	4
	Ba	135	0.490	ug/L	0.008	1	19	1684	0
	Ba	137	0.501	ug/L	0.010	1	36	2939	0
>	Tb	159		ug/L			853957	860625	0
	Tl	205	0.198	ug/L	0.005	2	75	5041	1
	Pb	208	0.105	ug/L	0.001	1	139	3543	0
	Bi	209		ug/L			1664508	1665246	0
	Th	232	0.186	ug/L	0.007	3	1034	6866	2
	U	238	0.193	ug/L	0.002	1	25	6385	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:13:12
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1519814	4
	Be	9	0.000	ug/L	0.000	98	7	10	17
	C	13		ug/L			82728	183992	1
	Cl	37		ug/L			4074015	12228383	4
>	Sc	45		ug/L			1091639	1149712	2
	V	51	0.111	ug/L	0.027	23	5656	8335	8
	V-1	51	1.321	ug/L	0.019	1	83	28305	2
	Cr	52	0.844	ug/L	0.034	4	16764	31955	2
	Cr	53	5.181	ug/L	0.134	2	112	9996	1
	Mn	55	0.131	ug/L	0.006	4	485	3563	4
	Co	59	0.017	ug/L	0.002	10	57	324	6
>	Ge	72		ug/L			444301	433245	0
	Ni	60	0.395	ug/L	0.024	6	16	1225	5
	Ni	62	12.217	ug/L	1.639	13	966	6306	11
	Cu	63	1.306	ug/L	0.143	10	754	9174	10
	Cu	65	0.388	ug/L	0.022	5	39	1152	5
	Zn	66	0.758	ug/L	0.016	2	197	1498	2
	Zn	67	2.888	ug/L	0.217	7	32	863	7
	Zn	68	0.185	ug/L	0.017	9	191	407	4
	As	75	0.103	ug/L	0.063	61	1284	1411	7
	As-1	75	0.710	ug/L	0.020	2	7106	7983	0
	Se	82	-0.310	ug/L	0.014	4	-5	-58	3
	Se	78	2.523	ug/L	0.180	7	7187	8066	0
	Mo	98	391.315	ug/L	3.899	0	29	1539246	1
	Y	89		ug/L			323430	338930	2
	Kr	83		ug/L			1769	2104	1
>	In	115		ug/L			748057	769539	0
	Ag	107	0.020	ug/L	0.003	12	15	160	11
	Cd	111	0.205	ug/L	0.009	4	43	811	3
	Cd	114	0.248	ug/L	0.003	1	22	2341	1
	Sb	121	0.035	ug/L	0.003	8	335	747	4
	Sb	123	0.033	ug/L	0.006	18	270	571	9
	Ba	135	0.038	ug/L	0.002	5	19	150	4
	Ba	137	0.034	ug/L	0.001	3	36	237	3
>	Tb	159		ug/L			853957	898591	1
	Tl	205	0.003	ug/L	0.003	83	75	159	40
	Pb	208	0.038	ug/L	0.001	3	139	1415	4
	Bi	209		ug/L			1664508	1589214	1
	Th	232	0.200	ug/L	0.089	44	1034	7620	36
	U	238	0.001	ug/L	0.000	18	25	58	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:18:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1530636	2
	Be	9	0.002	ug/L	0.001	48	7	18	24
	C	13		ug/L			82728	179741	1
	Cl	37		ug/L			4074015	12533797	0
>	Sc	45		ug/L			1091639	1154833	2
	V	51	0.240	ug/L	0.081	33	5656	11139	16
	V-1	51	1.405	ug/L	0.051	3	83	30228	1
	Cr	52	20.503	ug/L	0.402	1	16764	366505	0
	Cr	53	24.752	ug/L	0.677	2	112	47519	0
	Mn	55	18.551	ug/L	0.469	2	485	445136	0
	Co	59	18.975	ug/L	0.606	3	57	296430	2
>	Ge	72		ug/L			444301	436758	0
	Ni	60	19.003	ug/L	0.177	0	16	58724	0
	Ni	62	30.147	ug/L	0.734	2	966	14290	2
	Cu	63	20.763	ug/L	0.367	1	754	135993	1
	Cu	65	20.097	ug/L	0.032	0	39	58256	0
	Zn	66	18.936	ug/L	0.095	0	197	33076	0
	Zn	67	19.233	ug/L	0.320	1	32	5613	1
	Zn	68	17.767	ug/L	0.223	1	191	21651	1
	As	75	18.232	ug/L	0.058	0	1284	29365	0
	As-1	75	19.326	ug/L	0.068	0	7106	35899	0
	Se	82	-0.297	ug/L	0.077	26	-5	-56	23
	Se	78	2.256	ug/L	0.237	10	787	8019	1
	Mo	98	399.861	ug/L	3.846	0	29	1585569	0
	Y	89		ug/L			323430	336056	0
	Kr	83		ug/L			1769	2088	1
>	In	115		ug/L			748057	779263	0
	Ag	107	18.938	ug/L	0.034	0	15	135945	0
	Cd	111	18.996	ug/L	0.042	0	43	72108	0
	Cd	114	19.104	ug/L	0.316	1	22	180743	1
	Sb	121	0.046	ug/L	0.002	4	335	890	2
	Sb	123	0.039	ug/L	0.003	6	270	630	4
	Ba	135	0.042	ug/L	0.002	4	19	166	3
	Ba	137	0.039	ug/L	0.001	3	36	273	2
>	Tb	159		ug/L			853957	890577	0
	Tl	205	0.000	ug/L	0.000	106	75	87	10
	Pb	208	0.039	ug/L	0.000	0	139	1444	1
	Bi	209		ug/L			1664508	1579838	0
	Th	232	0.062	ug/L	0.017	27	1034	3075	17
	U	238	0.001	ug/L	0.000	10	25	66	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:23:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1446828	1
[	Be	9	-0.000	ug/L	0.000	419	7	7	28
	C	13		ug/L			82728	85496	1
	Cl	37		ug/L			4074015	4370362	3
[>	Sc	45		ug/L			1091639	1120667	2
[	V	51	0.000	ug/L	0.001	1038	5656	5807	2
[	V-1	51	0.056	ug/L	0.010	18	83	1256	19
[	Cr	52	-0.018	ug/L	0.009	48	16764	16913	1
[	Cr	53	0.183	ug/L	0.038	20	112	455	17
[	Mn	55	0.028	ug/L	0.003	11	485	1126	8
[	Co	59	-0.000	ug/L	0.000	335	57	56	8
[>	Ge	72		ug/L			444301	442477	1
[	Ni	60	0.026	ug/L	0.007	25	16	99	20
[	Ni	62	1.568	ug/L	0.333	21	966	1663	7
[	Cu	63	0.163	ug/L	0.028	17	754	1828	8
[	Cu	65	0.099	ug/L	0.003	2	39	330	2
[	Zn	66	1.405	ug/L	0.034	2	197	2668	2
[	Zn	67	1.319	ug/L	0.099	7	32	420	6
[	Zn	68	1.313	ug/L	0.028	2	191	1797	2
[	As	75	0.091	ug/L	0.006	6	1284	1421	0
[	As-1	75	0.054	ug/L	0.059	108	7106	7158	0
[	Se	82	0.055	ug/L	0.106	192	-5	4	392
[	Se	78	0.165	ug/L	0.210	127	7187	7228	0
[	Mo	98	0.080	ug/L	0.014	17	29	348	15
	Y	89		ug/L			323430	334367	0
	Kr	83		ug/L			1769	1895	2
[>	In	115		ug/L			748057	785072	2
[	Ag	107	0.001	ug/L	0.001	149	15	21	32
[	Cd	111	0.003	ug/L	0.001	22	43	58	3
[	Cd	114	0.001	ug/L	0.001	92	22	32	26
[	Sb	121	-0.020	ug/L	0.002	10	335	118	17
[	Sb	123	-0.020	ug/L	0.001	7	270	100	11
[	Ba	135	0.017	ug/L	0.005	31	19	81	22
[	Ba	137	0.016	ug/L	0.003	15	36	136	9
[>	Tb	159		ug/L			853957	870679	1
[	Tl	205	0.000	ug/L	0.000	21	75	84	2
[	Pb	208	0.016	ug/L	0.001	7	139	679	6
[	Bi	209		ug/L			1664508	1706509	1
[	Th	232	-0.026	ug/L	0.001	1	1034	235	8
[	U	238	-0.000	ug/L	0.000	135	25	18	53

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:29:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1469637	1
	Be	9	0.000	ug/L	0.001	549	7	8	43
	C	13		ug/L			82728	88611	0
	Cl	37		ug/L			4074015	4266160	1
>	Sc	45		ug/L			1091639	1123162	1
	V	51	0.016	ug/L	0.013	79	5656	6156	4
	V-1	51	0.028	ug/L	0.003	9	83	680	8
	Cr	52	0.050	ug/L	0.032	64	16764	18081	3
	Cr	53	0.095	ug/L	0.005	5	112	292	3
	Mn	55	0.033	ug/L	0.001	1	485	1246	1
	Co	59	-0.000	ug/L	0.001	501	57	56	15
>	Ge	72		ug/L			444301	442617	1
	Ni	60	0.026	ug/L	0.002	7	16	97	5
	Ni	62	0.270	ug/L	0.174	64	966	1082	6
	Cu	63	0.140	ug/L	0.012	8	754	1677	3
	Cu	65	0.122	ug/L	0.002	1	39	399	0
	Zn	66	1.352	ug/L	0.037	2	197	2576	1
	Zn	67	1.158	ug/L	0.082	7	32	372	6
	Zn	68	1.264	ug/L	0.029	2	191	1737	1
	As	75	0.072	ug/L	0.022	30	1284	1393	2
	As-1	75	0.042	ug/L	0.039	93	7106	7143	0
	Se	82	-0.092	ug/L	0.127	138	-5	-21	104
	Se	78	0.075	ug/L	0.188	251	7187	7192	1
	Mo	98	0.027	ug/L	0.020	74	29	136	59
	Y	89		ug/L			323430	331970	1
	Kr	83		ug/L			1769	1916	2
>	In	115		ug/L			748057	774215	2
	Ag	107	-0.001	ug/L	0.000	48	15	12	14
	Cd	111	0.001	ug/L	0.001	76	43	48	5
	Cd	114	0.000	ug/L	0.000	146	22	25	10
	Sb	121	-0.020	ug/L	0.002	10	335	108	22
	Sb	123	-0.023	ug/L	0.001	5	270	78	14
	Ba	135	0.018	ug/L	0.001	4	19	83	1
	Ba	137	0.017	ug/L	0.001	8	36	138	6
>	Tb	159		ug/L			853957	861961	1
	Tl	205	-0.001	ug/L	0.000	18	75	49	10
	Pb	208	0.024	ug/L	0.002	6	139	926	4
	Bi	209		ug/L			1664508	1706380	1
	Th	232	-0.030	ug/L	0.000	1	1034	104	8
	U	238	-0.001	ug/L	0.000	25	25	9	48

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:34:49
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1501497	1
	Be	9	49.714	ug/L	0.922	1	7	223662	1
	C	13		ug/L			82728	91260	3
	Cl	37		ug/L			4074015	4603296	2
>	Sc	45		ug/L			1091639	1151814	1
	V	51	46.635	ug/L	0.628	1	5656	1004866	1
	V-1	51	46.435	ug/L	0.645	1	83	993696	1
	Cr	52	48.148	ug/L	0.564	1	16764	834714	0
	Cr	53	47.436	ug/L	0.548	1	112	90750	1
	Mn	55	46.825	ug/L	0.353	0	485	1096556	1
	Co	59	46.859	ug/L	1.253	2	57	730024	1
>	Ge	72		ug/L			444301	455438	2
	Ni	60	48.465	ug/L	0.553	1	16	156154	3
	Ni	62	47.032	ug/L	3.197	6	966	22665	3
	Cu	63	49.376	ug/L	0.653	1	754	336202	3
	Cu	65	48.217	ug/L	1.796	3	39	145587	0
	Zn	66	49.334	ug/L	1.730	3	197	89487	1
	Zn	67	47.280	ug/L	0.936	1	32	14338	1
	Zn	68	48.316	ug/L	1.536	3	191	61027	1
	As	75	47.692	ug/L	0.806	1	1284	77957	2
	As-1	75	47.404	ug/L	1.126	2	7106	81214	1
	Se	82	50.904	ug/L	0.807	1	-5	9228	1
	Se	78	47.355	ug/L	1.976	4	7187	28217	1
	Mo	98	46.231	ug/L	1.702	3	29	191057	0
	Y	89		ug/L			323430	339838	0
	Kr	83		ug/L			1769	1939	1
>	In	115		ug/L			748057	791711	0
	Ag	107	47.968	ug/L	0.511	1	15	349820	1
	Cd	111	48.818	ug/L	0.378	0	43	188197	0
	Cd	114	48.710	ug/L	0.784	1	22	468222	2
	Sb	121	47.652	ug/L	0.514	1	335	571284	0
	Sb	123	47.147	ug/L	0.576	1	270	427208	1
	Ba	135	47.696	ug/L	0.227	0	19	170376	1
	Ba	137	47.915	ug/L	0.624	1	36	291787	1
>	Tb	159		ug/L			853057	894371	0
	Tl	205	47.132	ug/L	0.733	1	75	1231057	1
	Pb	208	48.954	ug/L	0.815	1	139	1644631	1
	Bi	209		ug/L			1664508	1695238	0
	Th	232	47.172	ug/L	0.205	0	1034	1538474	0
	U	238	47.468	ug/L	0.362	0	25	1624483	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:40:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1410953	0
	Be	9	0.002	ug/L	0.002	64	7	17	36
	C	13		ug/L			82728	82821	2
	Cl	37		ug/L			4074015	4333938	1
>	Sc	45		ug/L			1091639	1113809	2
	V	51	-0.012	ug/L	0.007	59	5656	5521	2
	V-1	51	0.012	ug/L	0.002	13	83	330	11
	Cr	52	-0.042	ug/L	0.022	51	16764	16416	1
	Cr	53	0.044	ug/L	0.005	11	112	195	4
	Mn	55	-0.001	ug/L	0.001	96	485	475	2
	Co	59	-0.000	ug/L	0.001	883	57	57	18
>	Ge	72		ug/L			444301	437562	1
	Ni	60	0.004	ug/L	0.003	69	16	27	29
	Ni	62	-0.060	ug/L	0.149	246	966	924	6
	Cu	63	-0.012	ug/L	0.006	45	754	664	6
	Cu	65	0.001	ug/L	0.003	203	39	43	20
	Zn	66	0.004	ug/L	0.026	713	197	201	23
	Zn	67	0.014	ug/L	0.038	266	32	36	30
	Zn	68	0.016	ug/L	0.024	155	191	207	15
	As	75	0.065	ug/L	0.048	73	1284	1365	4
	As-1	75	0.027	ug/L	0.060	219	7106	7038	0
	Se	82	-0.101	ug/L	0.033	32	-5	-22	26
	Se	78	0.077	ug/L	0.198	256	7187	7111	0
	Mo	98	0.014	ug/L	0.002	12	29	84	6
	Y	89		ug/L			323430	318967	0
	Kr	83		ug/L			1769	1914	1
>	In	115		ug/L			748057	766641	2
	Ag	107	0.001	ug/L	0.001	91	15	26	36
	Cd	111	0.004	ug/L	0.001	21	43	58	2
	Cd	114	0.000	ug/L	0.000	88	22	26	12
	Sb	121	0.059	ug/L	0.005	9	335	1026	4
	Sb	123	0.054	ug/L	0.008	15	270	749	6
	Ba	135	-0.000	ug/L	0.001	4676	19	19	20
	Ba	137	0.000	ug/L	0.001	1786	36	38	20
>	Tb	159		ug/L			853957	852519	1
	Tl	205	0.002	ug/L	0.002	114	75	129	48
	Pb	208	0.000	ug/L	0.002	1736	139	143	41
	Bi	209		ug/L			1664508	1675386	1
	Th	232	0.065	ug/L	0.019	30	1034	3052	20
	U	238	0.002	ug/L	0.002	76	25	100	57

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 E-L REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:55:26
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1470869	1
[	Be	9	0.003	ug/L	0.001	35	7	19	21
	C	13		ug/L			82728	89828	0
	Cl	37		ug/L			4074015	4172335	4
[>	Sc	45		ug/L			1091639	1124912	0
[	V	51	1.401	ug/L	0.022	1	5656	35128	0
[	V-1	51	1.423	ug/L	0.020	1	83	29827	1
[	Cr	52	0.232	ug/L	0.019	8	16764	21126	1
[	Cr	53	0.309	ug/L	0.011	3	112	692	2
[	Mn	55	5.998	ug/L	0.059	0	485	137608	0
[	Co	59	0.006	ug/L	0.001	15	57	156	9
[>	Ge	72		ug/L			444301	445197	1
[	Ni	60	0.046	ug/L	0.002	3	16	160	2
[	Ni	62	-0.488	ug/L	0.084	17	966	747	3
[	Cu	63	0.171	ug/L	0.016	9	754	1890	4
[	Cu	65	0.148	ug/L	0.010	6	39	477	6
[	Zn	66	1.200	ug/L	0.017	1	197	2321	0
[	Zn	67	1.068	ug/L	0.064	6	32	348	5
[	Zn	68	1.190	ug/L	0.077	6	191	1656	4
[	As	75	7.075	ug/L	0.097	1	1284	12402	0
[	As-1	75	7.116	ug/L	0.186	2	7106	17970	0
[	Se	82	-0.039	ug/L	0.106	269	-5	-12	155
[	Se	78	-0.470	ug/L	0.287	61	7187	6998	0
[	Mo	98	0.011	ug/L	0.003	26	29	74	14
	Y	89		ug/L			323130	329642	1
	Kr	83		ug/L			1769	1871	3
[>	In	115		ug/L			748057	786204	1
[	Ag	107	-0.001	ug/L	0.000	55	15	11	21
[	Cd	111	0.002	ug/L	0.002	107	43	52	11
[	Cd	114	-0.000	ug/L	0.000	203	22	21	22
[	Sb	121	-0.006	ug/L	0.004	64	335	276	18
[	Sb	123	-0.008	ug/L	0.003	36	270	211	13
[	Ba	135	0.189	ug/L	0.012	6	19	691	4
[	Ba	137	0.187	ug/L	0.006	2	36	1167	2
[>	Tb	159		ug/L			853957	892008	0
[	Tl	205	0.001	ug/L	0.001	72	75	116	23
[	Pb	208	0.019	ug/L	0.001	6	139	788	4
[	Bi	209		ug/L			1664508	1702612	0
[	Th	232	-0.007	ug/L	0.001	11	1034	848	3
[	U	238	0.003	ug/L	0.000	2	25	134	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 E REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 13:59:33
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			1411952	1468776	1
⌊	Be	9	0.015	ug/L	0.001	8	7	73	7
	C	13		ug/L			82728	88869	0
	Cl	37		ug/L			4074015	4316411	2
⌈>	Sc	45		ug/L			1091639	1137460	0
⌈	V	51	7.069	ug/L	0.087	1	5656	155435	1
⌊	V-1	51	7.123	ug/L	0.084	1	83	150614	1
⌈	Cr	52	1.280	ug/L	0.025	1	16764	38920	1
⌊	Cr	53	1.452	ug/L	0.012	0	112	2856	1
⌈	Mn	55	29.739	ug/L	0.280	0	485	687985	1
⌊	Co	59	0.039	ug/L	0.001	1	57	657	1
⌈>	Ge	72		ug/L			444301	445808	0
⌈	Ni	60	0.157	ug/L	0.004	2	16	510	2
⌊	Ni	62	2.431	ug/L	1.413	58	966	2065	30
⌈	Cu	63	0.837	ug/L	0.108	12	754	6317	10
⌊	Cu	65	0.370	ug/L	0.017	4	39	1132	4
⌈	Zn	66	1.318	ug/L	0.065	4	197	2533	4
⌊	Zn	67	1.506	ug/L	0.079	5	32	478	4
⌊	Zn	68	1.435	ug/L	0.029	2	191	1961	1
⌈	As	75	36.107	ug/L	0.693	1	1284	58099	1
⌊	As-1	75	37.078	ug/L	0.714	1	7106	63753	1
⌈	Se	82	0.069	ug/L	0.096	140	-5	7	242
⌊	Se	78	-0.250	ug/L	0.106	42	7187	7104	0
⌊	Mo	98	0.059	ug/L	0.002	3	29	268	3
	Y	89		ug/L			323430	334116	2
	Kr	83		ug/L			1769	1836	1
⌈>	In	115		ug/L			748057	779285	1
⌈	Ag	107	0.002	ug/L	0.000	14	15	29	6
⌊	Cd	111	0.005	ug/L	0.001	22	43	63	5
⌊	Cd	114	0.004	ug/L	0.001	22	22	60	15
⌈	Sb	121	-0.013	ug/L	0.003	21	335	200	17
⌊	Sb	123	-0.013	ug/L	0.003	22	270	162	15
⌈	Ba	135	0.912	ug/L	0.002	0	19	3225	1
⌊	Ba	137	0.905	ug/L	0.005	0	36	5463	1
⌈>	Tb	159		ug/L			853957	883247	0
⌈	Tl	205	0.001	ug/L	0.000	47	75	97	9
⌊	Pb	208	0.036	ug/L	0.001	3	139	1326	3
⌈	Bi	209		ug/L			1664508	1647702	0
⌈	Th	232	0.021	ug/L	0.004	18	1034	1731	6
⌊	U	238	0.018	ug/L	0.001	4	25	630	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 EDUP REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:03:41
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1447924	1
[	Be	9	0.016	ug/L	0.001	6	7	79	4
	C	13		ug/L			82728	90338	1
	Cl	37		ug/L			4074015	4362491	3
[>	Sc	45		ug/L			1091639	1144303	1
[	V	51	7.042	ug/L	0.093	1	5656	155777	0
[	V-1	51	7.112	ug/L	0.100	1	83	151264	0
[	Cr	52	1.295	ug/L	0.048	3	16764	39403	3
[	Cr	53	1.523	ug/L	0.018	1	112	3009	0
[	Mn	55	31.110	ug/L	0.460	1	485	723937	1
[	Co	59	0.042	ug/L	0.001	3	57	707	1
[>	Ge	72		ug/L			444301	447164	0
[	Ni	60	0.163	ug/L	0.006	3	16	531	2
[	Ni	62	3.477	ug/L	1.349	38	966	2546	23
[	Cu	63	0.942	ug/L	0.096	10	754	7039	8
[	Cu	65	0.398	ug/L	0.011	2	39	1219	2
[	Zn	66	1.695	ug/L	0.015	0	197	3212	1
[	Zn	67	1.806	ug/L	0.033	1	32	569	2
[	Zn	68	1.720	ug/L	0.093	5	191	2319	5
[	As	75	36.845	ug/L	0.010	0	1284	59440	0
[	As-1	75	37.816	ug/L	0.032	0	7106	65078	0
[	Se	82	-0.001	ug/L	0.200	16260	-5	-5	654
[	Se	78	-0.314	ug/L	0.053	16	7187	7098	0
[	Mo	98	0.057	ug/L	0.007	12	29	260	11
	Y	89		ug/L			323430	334563	0
	Kr	83		ug/L			1769	1887	3
[>	In	115		ug/L			748057	766593	0
[	Ag	107	0.005	ug/L	0.001	23	15	54	16
[	Cd	111	0.003	ug/L	0.003	127	43	54	22
[	Cd	114	0.004	ug/L	0.000	10	22	62	6
[	Sb	121	-0.015	ug/L	0.001	4	335	171	4
[	Sb	123	-0.015	ug/L	0.001	6	270	143	6
[	Ba	135	0.939	ug/L	0.017	1	19	3265	1
[	Ba	137	0.937	ug/L	0.007	0	36	5562	1
[>	Tb	159		ug/L			853957	873091	1
[	Tl	205	0.002	ug/L	0.001	39	75	120	12
[	Pb	208	0.040	ug/L	0.001	2	139	1463	3
[	Bi	209		ug/L			1664508	1660179	1
[	Th	232	0.015	ug/L	0.001	9	1034	1529	3
[	U	238	0.020	ug/L	0.001	5	25	707	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 ESPK REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:07:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1458596	1
[	Be	9	2.608	ug/L	0.018	0	7	11404	0
	C	13		ug/L			82728	88355	1
	Cl	37		ug/L			4074015	4290984	1
[>	Sc	45		ug/L			1091639	1123480	2
[	V	51	9.660	ug/L	0.176	1	5656	207616	0
[	V-1	51	9.707	ug/L	0.205	2	83	202636	0
[	Cr	52	3.794	ug/L	0.050	1	16764	80053	2
[	Cr	53	3.939	ug/L	0.114	2	112	7453	1
[	Mn	55	33.369	ug/L	0.970	2	485	762094	0
[	Co	59	2.510	ug/L	0.070	2	57	38190	1
[>	Ge	72		ug/L			444301	440541	2
[	Ni	60	2.807	ug/L	0.076	2	16	8758	0
[	Ni	62	7.434	ug/L	1.602	21	966	4266	14
[	Cu	63	3.559	ug/L	0.211	5	754	24116	3
[	Cu	65	2.939	ug/L	0.029	1	39	8626	1
[	Zn	66	9.436	ug/L	0.380	4	197	16714	2
[	Zn	67	8.887	ug/L	0.213	2	32	2632	0
[	Zn	68	9.277	ug/L	0.205	2	191	11490	1
[	As	75	39.310	ug/L	0.649	1	1084	62378	0
[	As-1	75	40.116	ug/L	0.727	1	7106	67570	0
[	Se	82	8.680	ug/L	0.073	0	-5	1518	2
[	Se	78	7.956	ug/L	0.346	4	7187	10515	0
[	Mo	98	0.064	ug/L	0.003	3	29	286	1
	Y	89		ug/L			323430	337949	2
	Kr	83		ug/L			1769	1878	2
[>	In	115		ug/L			748057	765416	0
[	Ag	107	1.818	ug/L	0.063	3	15	12828	2
[	Cd	111	2.565	ug/L	0.046	1	43	9602	0
[	Cd	114	2.539	ug/L	0.006	0	22	23611	1
[	Sb	121	-0.015	ug/L	0.001	6	335	172	5
[	Sb	123	-0.018	ug/L	0.002	9	270	117	12
[	Ba	135	3.430	ug/L	0.023	0	19	11862	1
[	Ba	137	3.465	ug/L	0.009	0	36	20433	1
[>	Tb	159		ug/L			853957	876424	1
[	Tl	205	2.462	ug/L	0.049	2	75	63072	0
[	Pb	208	2.585	ug/L	0.044	1	139	85241	0
[	Bi	209		ug/L			1664508	1641720	1
[	Th	232	2.358	ug/L	0.031	1	1034	76381	2
[	U	238	2.508	ug/L	0.075	2	25	84118	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 A REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:11:56
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1420757	0
[	Be	9	0.002	ug/L	0.001	84	7	15	41
	C	13		ug/L			82728	86252	2
	Cl	37		ug/L			4074015	4132167	2
[>	Sc	45		ug/L			1091639	1119271	1
[	V	51	0.920	ug/L	0.034	3	5656	24940	1
[	V-1	51	0.937	ug/L	0.025	2	83	19558	1
[	Cr	52	0.301	ug/L	0.031	10	16764	22142	0
[	Cr	53	0.359	ug/L	0.020	5	112	781	4
[	Mn	55	4.794	ug/L	0.095	1	485	109531	0
[	Co	59	0.077	ug/L	0.004	5	57	1228	5
[>	Ge	72		ug/L			444301	441237	2
[	Ni	60	0.327	ug/L	0.013	4	16	1037	2
[	Ni	62	0.414	ug/L	0.484	116	966	1141	16
[	Cu	63	3.419	ug/L	0.094	2	754	23244	1
[	Cu	65	3.397	ug/L	0.183	5	39	9974	3
[	Zn	66	3.104	ug/L	0.046	1	197	5641	2
[	Zn	67	2.852	ug/L	0.055	1	32	868	2
[	Zn	68	3.074	ug/L	0.106	3	191	3940	3
[	As	75	56.653	ug/L	1.562	2	1284	89465	1
[	As-1	75	58.227	ug/L	1.682	2	7106	95029	0
[	Se	82	0.126	ug/L	0.062	49	-5	17	64
[	Se	78	-0.161	ug/L	0.564	349	7187	7066	2
[	Mo	98	0.462	ug/L	0.001	0	29	1878	2
	Y	89		ug/L			323430	329048	1
	Kr	83		ug/L			1769	1868	0
[>	In	115		ug/L			748057	772442	0
[	Ag	107	0.012	ug/L	0.001	8	15	104	7
[	Cd	111	0.004	ug/L	0.003	68	43	60	17
[	Cd	114	0.002	ug/L	0.000	19	22	44	8
[	Sb	121	0.055	ug/L	0.002	2	335	988	2
[	Sb	123	0.055	ug/L	0.002	4	270	761	1
[	Ba	135	1.633	ug/L	0.009	0	19	5710	0
[	Ba	137	1.633	ug/L	0.030	1	36	9741	1
[>	Tb	159		ug/L			853957	867626	0
[	Tl	205	-0.001	ug/L	0.000	41	75	54	17
[	Pb	208	0.041	ug/L	0.000	0	139	1472	0
[	Bi	209		ug/L			1664508	1686014	0
[	Th	232	-0.000	ug/L	0.008	3826	1034	1044	23
[	U	238	0.066	ug/L	0.002	2	25	2207	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 D REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:16:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1414153	0
	Be	9	0.001	ug/L	0.000	46	7	12	16
	C	13		ug/L			82728	88110	1
	Cl	37		ug/L			4074015	4456050	1
>	Sc	45		ug/L			1091639	1106574	0
	V	51	0.552	ug/L	0.018	3	5656	17097	1
	V-1	51	0.600	ug/L	0.022	3	83	12419	2
	Cr	52	0.101	ug/L	0.002	2	16764	18637	0
	Cr	53	0.270	ug/L	0.018	6	112	610	4
	Mn	55	48.036	ug/L	0.877	1	485	1080718	1
	Co	59	0.027	ug/L	0.001	4	57	458	4
>	Ge	72		ug/L			444301	436979	2
	Ni	60	0.115	ug/L	0.005	4	16	370	3
	Ni	62	0.341	ug/L	0.134	39	966	1101	7
	Cu	63	0.459	ug/L	0.018	3	754	3735	4
	Cu	65	0.322	ug/L	0.013	3	39	973	1
	Zn	66	6.860	ug/L	0.915	13	197	12093	11
	Zn	67	5.961	ug/L	0.819	13	32	1760	12
	Zn	68	6.627	ug/L	0.918	13	191	8187	12
	As	75	78.026	ug/L	1.532	1	1284	121568	1
	As-1	75	80.370	ug/L	1.644	2	7106	127264	1
	Se	82	0.008	ug/L	0.069	898	-5	-3	336
	Se	78	0.118	ug/L	0.508	429	7187	7116	1
	Mo	98	0.016	ug/L	0.003	17	29	91	14
	Y	89		ug/L			323430	331218	4
	Kr	83		ug/L			1769	1831	1
>	In	115		ug/L			748057	773924	1
	Ag	107	0.000	ug/L	0.001	395	15	17	33
	Cd	111	0.030	ug/L	0.002	7	43	159	4
	Cd	114	0.024	ug/L	0.001	2	22	244	1
	Sb	121	-0.008	ug/L	0.001	14	335	250	4
	Sb	123	-0.010	ug/L	0.001	12	270	189	6
	Ba	135	0.404	ug/L	0.023	5	19	1430	4
	Ba	137	0.409	ug/L	0.003	0	36	2470	1
>	Tb	159		ug/L			853957	866606	0
	Tl	205	-0.001	ug/L	0.000	36	75	55	14
	Pb	208	0.032	ug/L	0.001	4	139	1173	3
	Bi	209		ug/L			1664508	1655927	1
	Th	232	-0.007	ug/L	0.002	32	1034	818	9
	U	238	0.001	ug/L	0.000	34	25	51	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 G REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:20:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1412869	1
	Be	9	0.001	ug/L	0.000	43	7	12	14
	C	13		ug/L			82728	87726	2
	Cl	37		ug/L			4074015	4367901	1
>	Sc	45		ug/L			1091639	1090479	1
	V	51	0.852	ug/L	0.020	2	5656	22927	1
	V-1	51	0.861	ug/L	0.017	1	83	17523	1
	Cr	52	0.277	ug/L	0.007	2	16764	21195	1
	Cr	53	0.306	ug/L	0.017	5	112	666	5
	Mn	55	4.676	ug/L	0.086	1	485	104103	0
	Co	59	0.074	ug/L	0.001	1	57	1151	3
>	Ge	72		ug/L			444301	431315	0
	Ni	60	0.300	ug/L	0.011	3	16	930	4
	Ni	62	-0.102	ug/L	0.137	133	966	893	6
	Cu	63	0.674	ug/L	0.029	4	754	5070	3
	Cu	65	0.662	ug/L	0.003	0	39	1930	0
	Zn	66	3.009	ug/L	0.066	2	197	5352	2
	Zn	67	2.818	ug/L	0.192	6	32	839	7
	Zn	68	3.009	ug/L	0.088	2	191	3774	2
	As	75	57.344	ug/L	0.727	1	1284	88537	1
	As-1	75	59.041	ug/L	0.782	1	7106	94129	1
	Se	82	0.016	ug/L	0.173	1078	-5	-2	1417
	Se	78	0.197	ug/L	0.045	22	7187	7060	0
	Mo	98	0.456	ug/L	0.003	0	29	1812	0
	Y	89		ug/L			323430	324914	3
	Kr	83		ug/L			1769	1886	3
>	In	115		ug/L			748057	764344	0
	Ag	107	0.001	ug/L	0.000	33	15	23	10
	Cd	111	0.004	ug/L	0.003	70	43	59	17
	Cd	114	0.001	ug/L	0.001	81	22	32	24
	Sb	121	0.042	ug/L	0.003	6	335	828	4
	Sb	123	0.039	ug/L	0.003	8	270	615	3
	Ba	135	1.601	ug/L	0.011	0	19	5539	1
	Ba	137	1.586	ug/L	0.016	0	36	9362	1
>	Tb	159		ug/L			853957	856668	1
	Tl	205	-0.001	ug/L	0.000	32	75	46	20
	Pb	208	0.021	ug/L	0.000	1	139	803	1
	Bi	209		ug/L			1664508	1679581	1
	Th	232	-0.024	ug/L	0.001	3	1034	296	10
	U	238	0.064	ug/L	0.001	1	25	2138	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 I REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:24:18
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1407696	2
[	Be	9	0.001	ug/L	0.000	51	7	11	18
	C	13		ug/L			82728	86729	2
	Cl	37		ug/L			4074015	4486976	2
[>	Sc	45		ug/L			1091639	1103165	0
[	V	51	0.528	ug/L	0.015	2	5656	16546	1
[	V-1	51	0.560	ug/L	0.007	1	83	11566	0
[	Cr	52	0.106	ug/L	0.015	14	16764	18659	1
[	Cr	53	0.220	ug/L	0.022	9	112	516	8
[	Mn	55	47.896	ug/L	0.934	1	485	1074214	1
[	Co	59	0.026	ug/L	0.003	9	57	452	9
[>	Ge	72		ug/L			444301	437163	0
[	Ni	60	0.115	ug/L	0.007	5	16	372	5
[	Ni	62	0.289	ug/L	0.547	189	966	1077	21
[	Cu	63	0.336	ug/L	0.030	8	754	2932	5
[	Cu	65	0.195	ug/L	0.008	4	39	603	3
[	Zn	66	1.370	ug/L	0.048	3	197	2574	2
[	Zn	67	1.229	ug/L	0.022	1	32	389	2
[	Zn	68	1.480	ug/L	0.034	2	191	1977	2
[	As	75	77.054	ug/L	1.302	1	1284	120143	1
[	As-1	75	79.335	ug/L	1.346	1	7106	125793	1
[	Se	82	0.026	ug/L	0.059	228	-5	0	2223
[	Se	78	-0.009	ug/L	0.071	754	7187	7068	0
[	Mo	98	0.010	ug/L	0.001	9	29	69	5
	Y	89		ug/L			323430	324770	1
	Kr	83		ug/L			1769	1819	3
[>	In	115		ug/L			748057	766478	1
[	Ag	107	-0.000	ug/L	0.000	213	15	14	17
[	Cd	111	0.007	ug/L	0.003	42	43	70	13
[	Cd	114	0.000	ug/L	0.000	79	22	26	10
[	Sb	121	-0.010	ug/L	0.001	9	335	228	6
[	Sb	123	-0.014	ug/L	0.000	3	270	159	4
[	Ba	135	0.334	ug/L	0.019	5	19	1174	4
[	Ba	137	0.339	ug/L	0.011	3	36	2036	2
[>	Tb	159		ug/L			853957	860878	0
[	Tl	205	-0.001	ug/L	0.000	31	75	47	18
[	Pb	208	0.020	ug/L	0.001	3	139	772	3
[	Bi	209		ug/L			1664508	1636193	0
[	Th	232	-0.017	ug/L	0.001	4	1034	503	4
[	U	238	0.000	ug/L	0.000	58	25	37	18

US15 : 00524

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:29:30
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1355532	1
	Be	9	199.066	ug/L	0.474	0	7	808611	1
	C	13		ug/L			82728	86333	1
	Cl	37		ug/L			4074015	4543964	1
>	Sc	45		ug/L			1091639	1092158	0
	V	51	191.811	ug/L	3.482	1	5656	3901410	1
	V-1	51	190.329	ug/L	2.749	1	83	3861791	0
	Cr	52	191.095	ug/L	4.201	2	16764	3091749	1
	Cr	53	185.783	ug/L	1.544	0	112	336697	0
	Mn	55	184.884	ug/L	3.255	1	485	4103801	1
	Co	59	189.771	ug/L	2.490	1	57	2803839	0
>	Ge	72		ug/L			444301	406624	1
	Ni	60	191.262	ug/L	3.871	2	16	550009	0
	Ni	62	195.372	ug/L	4.431	2	966	81353	0
	Cu	63	193.561	ug/L	2.882	1	754	1174480	1
	Cu	65	188.858	ug/L	5.536	2	39	509281	2
	Zn	66	187.001	ug/L	3.938	2	197	302459	1
	Zn	67	186.296	ug/L	4.434	2	32	50361	2
	Zn	68	185.783	ug/L	2.495	1	191	209098	0
	As	75	193.451	ug/L	5.572	2	1284	278704	1
	As-1	75	193.301	ug/L	5.286	2	7106	275669	1
	Se	82	199.914	ug/L	4.179	2	-5	32373	1
	Se	78	188.669	ug/L	2.652	1	7187	80783	1
	Mo	98	194.938	ug/L	4.551	2	29	719482	0
	Y	89		ug/L			323430	313881	1
	Kr	83		ug/L			1769	2006	3
>	In	115		ug/L			748057	725637	0
	Ag	107	185.038	ug/L	0.702	0	15	1236793	1
	Cd	111	187.349	ug/L	1.332	0	43	661853	1
	Cd	114	190.023	ug/L	2.145	1	22	1674093	2
	Sb	121	200.888	ug/L	2.679	1	335	2206366	1
	Sb	123	192.254	ug/L	1.962	1	270	1595691	0
	Ba	135	198.209	ug/L	1.956	0	19	648860	1
	Ba	137	196.938	ug/L	1.722	0	36	1099110	1
>	Tb	159		ug/L			853957	853283	1
	Tl	205	190.887	ug/L	0.576	0	75	4756945	1
	Pb	208	193.606	ug/L	1.003	0	139	6205517	1
	Bi	209		ug/L			1664508	1549115	0
	Th	232	200.403	ug/L	2.458	1	1034	6231968	0
	U	238	199.079	ug/L	0.219	0	25	6500105	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:35:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1318040	1
	Be	9	0.014	ug/L	0.011	79	7	62	69
	C	13		ug/L			82728	82170	3
	Cl	37		ug/L			4074015	4224488	0
>	Sc	45		ug/L			1091639	1020481	2
	V	51	0.029	ug/L	0.012	42	5656	5843	4
	V-1	51	0.017	ug/L	0.011	63	83	400	50
	Cr	52	0.066	ug/L	0.016	25	16764	16657	2
	Cr	53	0.022	ug/L	0.011	49	112	141	13
	Mn	55	0.043	ug/L	0.008	17	485	1348	12
	Co	59	0.007	ug/L	0.008	105	57	154	68
>	Ge	72		ug/L			444301	410382	2
	Ni	60	0.034	ug/L	0.008	23	16	113	19
	Ni	62	0.787	ug/L	0.333	42	966	1217	9
	Cu	63	0.202	ug/L	0.028	14	754	1930	7
	Cu	65	0.155	ug/L	0.002	1	39	457	3
	Zn	66	2.110	ug/L	0.051	2	197	3624	0
	Zn	67	1.949	ug/L	0.128	6	32	561	4
	Zn	68	1.960	ug/L	0.133	6	191	2400	5
	As	75	0.132	ug/L	0.038	28	1284	1376	1
	As-1	75	0.179	ug/L	0.116	64	7106	6813	0
	Se	82	-0.010	ug/L	0.147	1405	-5	-6	353
	Se	78	0.516	ug/L	0.385	74	7187	6841	0
	Mo	98	0.030	ug/L	0.016	53	29	137	40
	Y	89		ug/L			323430	303621	1
	Kr	83		ug/L			1769	1821	3
>	In	115		ug/L			748057	731705	1
	Ag	107	0.041	ug/L	0.061	150	15	284	142
	Cd	111	0.048	ug/L	0.065	134	43	211	105
	Cd	114	0.049	ug/L	0.058	118	22	452	111
	Sb	121	0.278	ug/L	0.038	13	335	3408	12
	Sb	123	0.269	ug/L	0.033	12	270	2517	11
	Ba	135	0.053	ug/L	0.033	61	19	192	55
	Ba	137	0.049	ug/L	0.028	56	36	313	49
>	Tb	159		ug/L			853957	812607	0
	Tl	205	0.037	ug/L	0.023	63	75	957	58
	Pb	208	0.039	ug/L	0.017	43	139	1334	39
	Bi	209		ug/L			1664508	1586510	0
	Th	232	0.108	ug/L	0.028	25	1034	4183	20
	U	238	0.017	ug/L	0.013	76	25	562	73

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:40:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1374206	0
	Be	9	50.528	ug/L	0.607	1	7	208072	0
	C	13		ug/L			82728	85336	0
	Cl	37		ug/L			4074015	4580462	3
>	Sc	45		ug/L			1091639	1088038	1
	V	51	47.213	ug/L	0.903	1	5656	960813	0
	V-1	51	47.163	ug/L	1.167	2	83	953245	1
	Cr	52	47.959	ug/L	0.576	1	16764	785643	2
	Cr	53	47.785	ug/L	0.638	1	112	86357	1
	Mn	55	46.893	ug/L	1.043	2	485	1037599	3
	Co	59	47.896	ug/L	1.385	2	57	704921	2
>	Ge	72		ug/L			444301	425975	2
	Ni	60	48.014	ug/L	0.731	1	16	144655	0
	Ni	62	47.717	ug/L	0.589	1	966	21517	1
	Cu	63	48.603	ug/L	0.858	1	754	309448	1
	Cu	65	47.991	ug/L	1.091	2	39	135583	0
	Zn	66	48.549	ug/L	0.593	1	197	82403	1
	Zn	67	48.883	ug/L	1.279	2	32	13863	1
	Zn	68	49.226	ug/L	1.446	2	191	58159	1
	As	75	48.282	ug/L	0.798	1	1284	73800	0
	As-1	75	48.025	ug/L	0.865	1	7106	76872	1
	Se	82	51.377	ug/L	0.421	0	-5	8712	1
	Se	78	47.947	ug/L	0.867	1	7187	26646	2
	Mo	98	47.208	ug/L	1.244	2	29	182530	0
	Y	89		ug/L			323430	315928	1
	Kr	83		ug/L			1769	1842	4
>	In	115		ug/L			748057	746401	0
	Ag	107	48.441	ug/L	1.161	2	15	333088	3
	Cd	111	49.384	ug/L	0.620	1	43	179479	0
	Cd	114	49.799	ug/L	0.780	1	22	451287	2
	Sb	121	49.246	ug/L	0.465	0	335	556618	0
	Sb	123	47.783	ug/L	0.442	0	270	408189	1
	Ba	135	48.489	ug/L	0.678	1	19	163303	2
	Ba	137	48.432	ug/L	0.331	0	36	278058	0
>	Tb	159		ug/L			853957	852701	1
	Tl	205	48.014	ug/L	0.874	1	75	1195501	0
	Pb	208	49.401	ug/L	1.069	2	139	1582133	1
	Bi	209		ug/L			1664508	1622890	0
	Th	232	48.511	ug/L	1.169	2	1034	1508045	0
	U	238	47.979	ug/L	1.354	2	25	1565235	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 14:47:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1335100	2
	Be	9	0.002	ug/L	0.001	74	7	13	35
	C	13		ug/L			82728	81651	2
	Cl	37		ug/L			4074015	4396277	2
>	Sc	45		ug/L			1091639	1054837	0
	V	51	0.003	ug/L	0.016	633	5656	5515	5
	V-1	51	0.003	ug/L	0.000	12	83	134	5
	Cr	52	0.006	ug/L	0.060	1057	16764	16284	5
	Cr	53	0.006	ug/L	0.001	22	112	119	1
	Mn	55	-0.002	ug/L	0.002	112	485	428	11
	Co	59	-0.001	ug/L	0.000	31	57	38	14
>	Ge	72		ug/L			444301	409468	2
	Ni	60	0.002	ug/L	0.000	19	16	20	2
	Ni	62	0.087	ug/L	0.222	254	966	924	7
	Cu	63	-0.005	ug/L	0.007	140	754	665	4
	Cu	65	0.001	ug/L	0.001	112	39	39	7
	Zn	66	0.009	ug/L	0.003	34	197	196	5
	Zn	67	0.019	ug/L	0.010	51	32	35	4
	Zn	68	0.016	ug/L	0.012	73	191	193	4
	As	75	0.159	ug/L	0.052	33	1284	1412	3
	As-1	75	0.173	ug/L	0.099	56	7106	6789	0
	Se	82	0.108	ug/L	0.205	189	-5	12	264
	Se	78	0.555	ug/L	0.360	64	7187	6841	0
	Mo	98	0.008	ug/L	0.001	13	29	56	8
	Y	89		ug/L			323430	306788	1
	Kr	83		ug/L			1769	1833	2
>	In	115		ug/L			748057	740586	0
	Ag	107	0.001	ug/L	0.000	10	15	21	2
	Cd	111	0.004	ug/L	0.002	33	43	59	9
	Cd	114	-0.000	ug/L	0.001	505	22	20	27
	Sb	121	0.079	ug/L	0.012	14	335	1214	10
	Sb	123	0.075	ug/L	0.015	20	270	902	13
	Ba	135	0.001	ug/L	0.000	50	19	21	4
	Ba	137	-0.000	ug/L	0.001	366	36	34	21
>	Tb	159		ug/L			853957	815072	0
	Tl	205	0.005	ug/L	0.000	8	75	184	4
	Pb	208	-0.001	ug/L	0.000	30	139	114	5
	Bi	209		ug/L			1664508	1611050	0
	Th	232	0.065	ug/L	0.011	17	1034	2926	11
	U	238	0.001	ug/L	0.000	32	25	54	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 H-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:02:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Be, Cr, Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1357817	3
	Be	9	U 0.001	ug/L	0.001	98	7	12	43
	C	13		ug/L			82728	85590	2
	Cl	37		ug/L			4074015	4372293	1
>	Sc	45		ug/L			1091639	1051260	2
	V	51	0.331	ug/L	0.003	0	5656	11916	1
	V-1	51	0.376	ug/L	0.007	1	83	7415	3
	Cr	52	U 0.205	ug/L	0.011	5	16764	19314	1
	Cr	53	U 0.364	ug/L	0.029	8	112	743	7
	Mn	55	5.864	ug/L	0.124	2	485	125721	1
	Co	59	0.085	ug/L	0.002	2	57	1270	4
>	Ge	72		ug/L			444301	409115	2
	Ni	60	0.452	ug/L	0.014	3	16	1321	0
	Ni	62	3.998	ug/L	1.877	46	966	2543	30
	Cu	63	0.959	ug/L	0.126	13	754	6540	10
	Cu	65	0.227	ug/L	0.017	7	39	651	6
	Zn	66	2.855	ug/L	0.030	1	197	4826	2
	Zn	67	2.576	ug/L	0.159	6	32	729	3
	Zn	68	2.867	ug/L	0.079	2	191	3419	2
	As	75	2.007	ug/L	0.046	2	1284	4079	1
	As-1	75	2.133	ug/L	0.142	6	7106	9529	1
	Se	82	0.110	ug/L	0.047	42	-5	13	59
	Se	78	0.607	ug/L	0.427	70	7187	6856	1
	Mo	98	0.961	ug/L	0.045	4	29	3593	2
	Y	89		ug/L			323430	308771	0
	Kr	83		ug/L			1769	1758	0
>	In	115		ug/L			748057	730287	1
	Ag	107	0.000	ug/L	0.001	308	15	17	47
	Cd	111	0.004	ug/L	0.004	93	43	57	22
	Cd	114	0.003	ug/L	0.001	16	22	49	10
	Sb	121	0.043	ug/L	0.012	27	335	804	14
	Sb	123	0.038	ug/L	0.007	18	270	579	8
	Ba	135	2.453	ug/L	0.104	4	19	8097	2
	Ba	137	2.413	ug/L	0.040	1	36	13588	0
>	Tb	159		ug/L			853957	843837	1
	Tl	205	0.010	ug/L	0.008	78	75	328	59
	Pb	208	U 0.025	ug/L	0.001	3	139	937	2
	Bi	209		ug/L			1664508	1539641	0
	Th	232	0.034	ug/L	0.005	15	1034	2079	6
	U	238	0.027	ug/L	0.001	2	25	882	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:06:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Be, Cr, Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1371430	1
	Be	9	0.000	ug/L	0.001	477	7	8	33
	C	13		ug/L			82728	85824	2
	Cl	37		ug/L			4074015	4294875	2
>	Sc	45		ug/L			1091639	1099634	1
	V	51	0.160	ug/L	0.007	4	5656	8975	2
	V-1	51	0.196	ug/L	0.007	3	83	4078	3
	Cr	52	0.105	ug/L	0.007	6	16764	18580	1
	Cr	53	0.231	ug/L	0.013	5	112	533	3
	Mn	55	2.813	ug/L	0.087	3	485	63345	1
	Co	59	0.042	ug/L	0.001	2	57	675	1
>	Ge	72		ug/L			444301	430804	1
	Ni	60	0.232	ug/L	0.012	5	16	721	4
	Ni	62	1.215	ug/L	0.135	11	966	1466	2
	Cu	63	0.534	ug/L	0.020	3	754	4164	2
	Cu	65	0.253	ug/L	0.005	1	39	761	3
	Zn	66	2.201	ug/L	0.143	6	197	3958	4
	Zn	67	1.957	ug/L	0.077	3	32	591	2
	Zn	68	2.110	ug/L	0.094	4	191	2699	3
	As	75	0.971	ug/L	0.031	3	1284	2721	0
	As-1	75	0.914	ug/L	0.103	11	7106	8238	0
	Se	82	0.036	ug/L	0.126	352	-5	1	1587
	Se	78	-0.043	ug/L	0.274	636	7187	6950	0
	Mo	98	0.454	ug/L	0.016	3	29	1803	4
	Y	89		ug/L			323430	323700	0
	Kr	83		ug/L			1769	1832	3
>	In	115		ug/L			748057	755286	1
	Ag	107	-0.000	ug/L	0.001	119	15	12	28
	Cd	111	0.002	ug/L	0.003	137	43	50	17
	Cd	114	0.002	ug/L	0.001	28	22	43	15
	Sb	121	0.001	ug/L	0.004	489	335	347	13
	Sb	123	-0.001	ug/L	0.005	672	270	267	16
	Ba	135	1.122	ug/L	0.012	1	19	3840	0
	Ba	137	1.141	ug/L	0.024	2	36	6666	3
>	Tb	159		ug/L			853957	853578	0
	Tl	205	0.001	ug/L	0.000	16	75	102	3
	Pb	208	0.034	ug/L	0.001	1	139	1239	1
	Bi	209		ug/L			1664508	1620625	1
	Th	232	-0.005	ug/L	0.004	91	1034	890	14
	U	238	0.012	ug/L	0.001	5	25	418	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 HDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:11:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1405718	0
[	Be	9	U 0.000	ug/L	0.001	219	7	9	33
	C	13		ug/L			82728	85511	2
	Cl	37		ug/L			4074015	4209865	2
[>	Sc	45		ug/L			1091639	1078063	3
[	V	51	0.178	ug/L	0.016	8	5656	9153	0
[	V-1	51	0.211	ug/L	0.011	5	83	4303	1
[	Cr	52	U 0.130	ug/L	0.027	20	16764	18607	1
[	Cr	53	0.247	ug/L	0.010	3	112	551	1
[	Mn	55	2.998	ug/L	0.044	1	485	66138	2
[	Co	59	0.045	ug/L	0.003	6	57	704	3
[>	Ge	72		ug/L			444301	422828	1
[	Ni	60	0.259	ug/L	0.022	8	16	790	7
[	Ni	62	1.056	ug/L	0.132	12	966	1371	3
[	Cu	63	0.537	ug/L	0.027	5	754	4105	3
[	Cu	65	0.254	ug/L	0.016	6	39	750	5
[	Zn	66	2.065	ug/L	0.046	2	197	3659	0
[	Zn	67	1.961	ug/L	0.082	4	32	581	3
[	Zn	68	2.084	ug/L	0.093	4	191	2618	2
[	As	75	1.043	ug/L	0.029	2	1284	2779	0
[	As-1	75	1.050	ug/L	0.147	13	7106	8281	1
[	Se	82	0.016	ug/L	0.131	803	-5	-2	987
[	Se	78	0.196	ug/L	0.472	241	7187	6919	1
[	Mo	98	0.480	ug/L	0.018	3	29	1871	2
	Y	89		ug/L			323430	319324	1
	Kr	83		ug/L			1769	1822	1
[>	In	115		ug/L			748057	758010	1
[	Ag	107	-0.001	ug/L	0.000	24	15	9	15
[	Cd	111	0.001	ug/L	0.005	506	43	47	35
[	Cd	114	0.001	ug/L	0.000	13	22	34	5
[	Sb	121	-0.002	ug/L	0.004	193	335	315	16
[	Sb	123	-0.003	ug/L	0.002	54	270	245	7
[	Ba	135	1.146	ug/L	0.048	4	19	3937	3
[	Ba	137	1.145	ug/L	0.037	3	36	6708	2
[>	Tb	159		ug/L			853957	850519	0
[	Tl	205	0.001	ug/L	0.000	47	75	89	7
[	Pb	208	U 0.035	ug/L	0.001	3	139	1253	2
[	Bi	209		ug/L			1664508	1611369	1
[	Th	232	-0.013	ug/L	0.002	17	1034	625	11
[	U	238	0.014	ug/L	0.001	9	25	468	9

US15 : 00631

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 HSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:15:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

RL rerun

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1398898	0
	Be	9	2.513	ug/L	0.042	1	7	10542	1
	C	13		ug/L			82728	86574	1
	Cl	37		ug/L			4074015	4263492	0
>	Sc	45		ug/L			1091639	1097070	0
	V	51	2.504	ug/L	0.097	3	5656	56760	2
	V-1	51	2.526	ug/L	0.086	3	83	51561	2
	Cr	52	2.495	ug/L	0.105	4	16764	57172	3
	Cr	53	2.574	ug/L	0.054	2	112	4797	1
	Mn	55	5.138	ug/L	0.125	2	485	115028	1
	Co	59	2.448	ug/L	0.095	3	57	36391	3
>	Ge	72		ug/L			444301	425037	2
	Ni	60	2.650	ug/L	0.024	0	16	7982	2
	Ni	62	3.490	ug/L	0.119	3	966	2427	2
	Cu	63	2.975	ug/L	0.069	2	754	19577	1
	Cu	65	2.731	ug/L	0.049	1	39	7734	1
	Zn	66	9.680	ug/L	0.186	1	197	16542	0
	Zn	67	8.952	ug/L	0.456	5	32	2559	5
	Zn	68	9.463	ug/L	0.271	2	191	11312	5
	As	75	3.715	ug/L	0.062	1	1284	6800	1
	As-1	75	3.504	ug/L	0.157	4	7106	11896	0
	Se	82	8.318	ug/L	0.199	2	-5	1403	1
	Se	78	7.883	ug/L	0.450	5	7187	10114	0
	Mo	98	2.880	ug/L	0.019	0	29	11141	2
	Y	89		ug/L			323430	320966	1
	Kr	83		ug/L			1769	1862	3
>	In	115		ug/L			748057	753061	0
	Ag	107	2.359	ug/L	0.077	3	15	16381	3
	Cd	111	2.424	ug/L	0.045	1	43	8931	2
	Cd	114	2.450	ug/L	0.043	1	22	22421	1
	Sb	121	2.496	ug/L	0.054	2	35	28783	2
	Sb	123	2.400	ug/L	0.031	1	270	20943	1
	Ba	135	3.519	ug/L	0.054	1	19	11972	1
	Ba	137	3.518	ug/L	0.079	2	36	20413	2
>	Tb	159		ug/L			853957	849996	0
	Tl	205	2.414	ug/L	0.037	1	75	59988	1
	Pb	208	2.500	ug/L	0.040	1	139	79953	1
	Bi	209		ug/L			1664508	1609464	1
	Th	232	2.278	ug/L	0.055	2	1034	71601	2
	U	238	2.443	ug/L	0.052	2	25	79478	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:19:16
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Cr, Cu, Zn, Ag

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1415337	0
[	Be	9	0.021	ug/L	0.001	6	7	95	5
	C	13		ug/L			82728	89520	2
	Cl	37		ug/L			4074015	4618700	3
[>	Sc	45		ug/L			1091639	1122249	1
[	V	51	10.408	ug/L	0.127	1	5656	223030	1
[	V-1	51	10.547	ug/L	0.132	1	83	219981	1
[	Cr	52	2.066	ug/L	0.029	1	16764	51400	1
[	Cr	53	2.535	ug/L	0.080	3	112	4833	1
[	Mn	55	58.594	ug/L	1.420	2	485	1336637	1
[	Co	59	0.067	ug/L	0.002	2	57	1068	1
[>	Ge	72		ug/L			444301	419090	1
[	Ni	60	0.141	ug/L	0.009	6	16	433	4
[	Ni	62	5.114	ug/L	2.285	44	966	3079	31
[	Cu	63	1.156	ug/L	0.146	12	754	7931	11
[	Cu	65	U 0.243	ug/L	0.007	3	39	713	2
[	Zn	66	1.615	ug/L	0.086	5	197	2876	4
[	Zn	67	L 1.850	ug/L	0.058	3	32	545	2
[	Zn	68	1.826	ug/L	0.127	6	191	2295	5
[	As	75	73.227	ug/L	0.772	1	1284	109512	0
[	As-1	75	75.462	ug/L	0.833	1	7106	115028	0
[	Se	82	0.114	ug/L	0.053	46	-5	14	62
[	Se	78	0.508	ug/L	0.207	40	7187	6985	0
[	Mo	98	0.099	ug/L	0.000	0	29	403	1
	Y	89		ug/L			323430	329985	1
	Kr	83		ug/L			1769	1835	2
[>	In	115		ug/L			748057	737080	0
[	Ag	107	U 0.002	ug/L	0.001	36	15	32	18
[	Cd	111	0.009	ug/L	0.005	52	43	75	22
[	Cd	114	0.001	ug/L	0.001	215	22	26	38
[	Sb	121	-0.007	ug/L	0.002	27	335	257	8
[	Sb	123	-0.011	ug/L	0.003	28	270	173	15
[	Ba	135	1.614	ug/L	0.023	1	19	5386	1
[	Ba	137	1.593	ug/L	0.041	2	36	9065	2
[>	Tb	159		ug/L			853957	857578	1
[	Tl	205	0.001	ug/L	0.001	106	75	89	15
[	Pb	208	0.024	ug/L	0.002	7	139	921	5
[	Bi	209		ug/L			1664508	1580906	0
[	Th	232	0.075	ug/L	0.021	28	1034	3374	18
[	U	238	0.022	ug/L	0.001	4	25	753	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:23:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Cr, Cu, Zn, Ag

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1357362	1
	Be	9	0.093	ug/L	0.004	4	7	384	4
	C	13		ug/L			82728	111262	1
	Cl	37		ug/L			4074015	5677718	1
>	Sc	45		ug/L			1091639	1203412	1
	V	51	47.220	ug/L	1.366	2	5656	1062837	1
	V-1	51	47.447	ug/L	1.414	2	83	1060675	1
	Cr	52	9.385	ug/L	0.263	2	16764	184853	1
	Cr	53	10.058	ug/L	0.439	4	112	20197	3
	Mn	55	258.985	ug/L	1.975	0	485	6334190	0
	Co	59	0.289	ug/L	0.005	1	57	4768	2
>	Ge	72		ug/L			444301	388028	1
	Ni	60	0.575	ug/L	0.004	0	16	1593	1
	Ni	62	99.576	ug/L	32.886	33	966	40090	33
	Cu	63	11.945	ug/L	2.730	22	754	69910	23
	Cu	65	1.064	ug/L	0.044	4	39	2773	5
	Zn	66	U 1.357	ug/L	0.010	0	197	2265	1
	Zn	67	3.813	ug/L	0.058	1	32	1011	0
	Zn	68	2.633	ug/L	0.083	3	191	2992	1
	As	75	343.437	ug/L	5.074	1	1284	471391	0
	As-1	75	354.662	ug/L	5.128	1	7106	477574	0
	Se	82	0.288	ug/L	0.164	56	-5	39	63
	Se	78	4.024	ug/L	0.360	8	7187	7789	2
	Mo	98	0.517	ug/L	0.020	3	29	1847	2
	Y	89		ug/L			323430	356239	0
	Kr	83		ug/L			1769	1928	3
>	In	115		ug/L			748057	700103	0
	Ag	107	U 0.017	ug/L	0.002	14	15	125	12
	Cd	111	U 0.012	ug/L	0.010	81	43	80	39
	Cd	114	0.006	ug/L	0.002	27	22	68	19
	Sb	121	0.025	ug/L	0.001	5	335	573	3
	Sb	123	0.022	ug/L	0.001	3	270	426	2
	Ba	135	7.895	ug/L	0.170	2	19	24949	1
	Ba	137	7.781	ug/L	0.235	3	36	41922	2
>	Tb	159		ug/L			853957	839786	0
	Tl	205	0.000	ug/L	0.000	98	75	85	13
	Pb	208	0.046	ug/L	0.000	0	139	1573	1
	Bi	209		ug/L			1664508	1378872	1
	Th	232	0.215	ug/L	0.039	18	1034	7594	15
	U	238	0.104	ug/L	0.002	2	25	3367	1

US15:00634

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:27:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Cr, Cu, Zn, M

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1396066	2
	Be	9	0.088	ug/L	0.002	2	7	374	3
	C	13		ug/L			82728	107892	1
	Cl	37		ug/L			4074015	5712492	1
>	Sc	45		ug/L			1091639	1208129	0
	V	51	46.778	ug/L	0.837	1	5656	1057219	1
	V-1	51	46.938	ug/L	0.866	1	83	1053561	1
	Cr	52	9.148	ug/L	0.101	1	16764	181394	0
	Cr	53	9.583	ug/L	0.209	2	112	19327	1
	Mn	55	252.320	ug/L	7.076	2	485	6195094	2
	Co	59	0.280	ug/L	0.003	1	57	4643	1
>	Ge	72		ug/L			444301	393484	1
	Ni	60	0.545	ug/L	0.015	2	16	1531	2
	Ni	62	129.942	ug/L	12.940	9	966	52614	8
	Cu	63	13.977	ug/L	0.885	6	754	82650	5
	Cu	65	1.184	ug/L	0.017	1	39	3124	0
	Zn	66	1.177	ug/L	0.021	1	197	2015	1
	Zn	67	3.897	ug/L	0.092	2	32	1047	1
	Zn	68	2.499	ug/L	0.113	4	191	2888	3
	As	75	332.014	ug/L	4.636	1	1284	462167	1
	As-1	75	342.972	ug/L	4.796	1	7106	468541	1
	Se	82	0.414	ug/L	0.096	23	-5	60	23
	Se	78	4.264	ug/L	0.570	13	7187	7986	1
	Mo	98	0.491	ug/L	0.020	4	29	1780	2
	Y	89		ug/L			323430	355867	1
	Kr	83		ug/L			1769	1872	1
>	In	115		ug/L			748057	693844	0
	Ag	107	0.015	ug/L	0.001	5	15	107	4
	Cd	111	0.027	ug/L	0.003	11	43	130	7
	Cd	114	0.004	ug/L	0.001	36	22	52	22
	Sb	121	0.022	ug/L	0.002	7	335	540	2
	Sb	123	0.020	ug/L	0.001	4	270	412	2
	Ba	135	7.691	ug/L	0.054	0	19	24090	1
	Ba	137	7.660	ug/L	0.103	1	36	40908	1
>	Tb	159		ug/L			853957	828396	0
	Tl	205	-0.000	ug/L	0.000	377	75	70	14
	Pb	208	0.054	ug/L	0.001	1	139	1815	1
	Bi	209		ug/L			1664508	1389647	0
	Th	232	0.142	ug/L	0.010	6	1034	5280	5
	U	238	0.104	ug/L	0.005	4	25	3326	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:31:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

C, Cu, Zn, Ag

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1379698	2
[	Be	9	22.124	ug/L	0.580	2	7	91471	3
	C	13		ug/L			82728	107185	2
	Cl	37		ug/L			4074015	5712197	2
[>	Sc	45		ug/L			1091639	1201230	1 ✓
[	V	51	66.254	ug/L	1.211	1	5656	1486326	2
[	V-1	51	66.480	ug/L	1.098	1	83	1483759	2
[	Cr	52	29.197 ✓	ug/L	0.725	2	16764	535084	1
[	Cr	53	29.871	ug/L	0.181	0	112	59643	1
[	Mn	55	266.306	ug/L	2.194	0	485	6502277	2
[	Co	59	20.218	ug/L	0.133	0	57	328619	1
[>	Ge	72		ug/L			444301	393417	1 ✓
[	Ni	60	23.832	ug/L	0.622	2	16	66317	1
[	Ni	62	177.573	ug/L	19.500	10	966	71716	12
[	Cu	63	38.484	ug/L	1.321	3	754	226555	4
[	Cu	65	24.238	ug/L	0.741	3	39	63264	1
[	Zn	66	66.482	ug/L	1.344	2	197	104154	1
[	Zn	67	64.606	ug/L	1.370	2	32	16917	2
[	Zn	68	67.290	ug/L	2.036	3	191	73381	2
[	As	75	351.992	ug/L	7.585	2	1284	489757	0
[	As-1	75	361.723	ug/L	7.671	2	7106	493665	0
[	Se	82	69.774	ug/L	1.400	2	-5	10928	0
[	Se	78	70.355	ug/L	1.094	1	7187	33137	1
[	Mo	98	0.493	ug/L	0.013	2	29	1787	1
	Y	89		ug/L			323430	349650	0
	Kr	83		ug/L			1769	1879	0
[>	In	115		ug/L			748057	690399	1 ✓
[	Ag	107	13.051	ug/L	0.260	1	15	82989	0
[	Cd	111	22.094	ug/L	0.180	0	43	74297	1
[	Cd	114	22.100	ug/L	0.231	1	22	185229	0
[	Sb	121	0.024	ug/L	0.001	2	335	563	1
[	Sb	123	0.023	ug/L	0.002	7	270	434	1
[	Ba	135	32.301	ug/L	0.265	0	19	100631	2
[	Ba	137	32.353	ug/L	0.799	2	36	171852	3
[>	Tb	159		ug/L			853957	825084	2 ✓
[	Tl	205	22.647	ug/L	0.383	1	75	545663	1
[	Pb	208	23.171	ug/L	0.246	1	139	718156	1
[	Bi	209		ug/L			1664508	1378720	1
[	Th	232	24.202	ug/L	0.525	2	1034	728480	0
[	U	238	24.554	ug/L	0.380	1	25	775072	0

US15 : 00536

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:39:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1387369	0
	Be	9	49.514	ug/L	0.443	0	7	205850	0
	C	13		ug/L			82728	85020	2
	Cl	37		ug/L			4074015	4364761	2
>	Sc	45		ug/L			1091639	1052024	1
	V	51	46.460	ug/L	0.581	1	5656	914427	1
	V-1	51	46.406	ug/L	0.478	1	83	907053	0
	Cr	52	48.139	ug/L	0.332	0	16764	762337	1
	Cr	53	47.952	ug/L	0.673	1	112	83786	0
	Mn	55	47.856	ug/L	0.847	1	485	1023567	1
	Co	59	47.146	ug/L	0.344	0	57	671075	1
>	Ge	72		ug/L			444301	411532	0
	Ni	60	48.644	ug/L	0.958	1	16	141609	1
	Ni	62	121.258	ug/L	0.104	0	966	51455	0
	Cu	63	53.057	ug/L	1.449	2	754	326393	3
	Cu	65	47.635	ug/L	1.345	2	39	130059	2
	Zn	66	48.874	ug/L	0.214	0	197	80154	0
	Zn	67	49.282	ug/L	1.619	3	32	13507	3
	Zn	68	49.430	ug/L	0.808	1	191	56445	1
	As	75	48.355	ug/L	0.450	0	1284	71419	0
	As-1	75	48.542	ug/L	0.604	1	7106	75010	0
	Se	82	51.767	ug/L	0.699	1	-5	8482	1
	Se	78	49.911	ug/L	0.943	1	7187	26527	1
	Mo	98	46.514	ug/L	0.680	1	29	173812	1
	Y	89		ug/L			323430	308744	1
	Kr	83		ug/L			1769	1778	1
>	In	115		ug/L			748057	740168	0
	Ag	107	46.820	ug/L	0.395	0	15	319199	0
	Cd	111	48.802	ug/L	0.487	0	43	175880	0
	Cd	114	49.338	ug/L	0.703	1	22	443350	1
	Sb	121	48.358	ug/L	0.439	0	335	541997	0
	Sb	123	48.146	ug/L	0.368	0	270	407847	1
	Ba	135	48.108	ug/L	0.204	0	19	160658	1
	Ba	137	48.444	ug/L	0.973	2	36	275779	1
>	Tb	159		ug/L			853957	850005	1
	Tl	205	47.913	ug/L	1.020	2	75	1189171	0
	Pb	208	49.294	ug/L	0.573	1	139	1573833	0
	Bi	209		ug/L			1664508	1621861	1
	Th	232	48.241	ug/L	0.390	0	1034	1495341	2
	U	238	48.520	ug/L	1.506	3	25	1577598	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:46:35
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1334512	1
	Be	9	0.000	ug/L	0.002	514	7	9	98
	C	13		ug/L			82728	81308	1
	Cl	37		ug/L			4074015	4094696	1
>	Sc	45		ug/L			1091639	979132	1
	V	51	0.013	ug/L	0.005	42	5656	5307	3
	V-1	51	0.007	ug/L	0.002	23	83	201	16
	Cr	52	0.034	ug/L	0.014	41	16764	15533	2
	Cr	53	0.013	ug/L	0.002	17	112	122	1
	Mn	55	0.008	ug/L	0.003	35	485	592	10
	Co	59	0.000	ug/L	0.001	209	57	57	23
>	Ge	72		ug/L			444301	395632	0
	Ni	60	0.001	ug/L	0.001	60	16	18	11
	Ni	62	40.306	ug/L	4.262	10	966	17007	9
	Cu	63	2.174	ug/L	0.233	10	754	13494	9
	Cu	65	0.045	ug/L	0.004	9	39	152	6
	Zn	66	0.393	ug/L	0.033	8	197	794	5
	Zn	67	0.328	ug/L	0.027	8	32	115	5
	Zn	68	0.352	ug/L	0.036	10	191	555	6
	As	75	0.088	ug/L	0.040	45	1284	1267	5
	As-1	75	0.328	ug/L	0.034	10	7106	6773	1
	Se	82	-0.047	ug/L	0.131	277	-5	-11	171
	Se	78	1.118	ug/L	0.120	10	7187	6828	1
	Mo	98	0.004	ug/L	0.001	31	29	38	9
	Y	89		ug/L			323430	288957	1
	Kr	83		ug/L			1769	1734	2
>	In	115		ug/L			748057	710605	1
	Ag	107	0.001	ug/L	0.001	74	15	19	18
	Cd	111	0.002	ug/L	0.003	132	43	49	21
	Cd	114	-0.001	ug/L	0.000	51	22	14	24
	Sb	121	0.041	ug/L	0.007	16	335	756	10
	Sb	123	0.037	ug/L	0.002	5	270	555	4
	Ba	135	0.003	ug/L	0.002	83	19	26	28
	Ba	137	0.002	ug/L	0.004	200	36	45	46
>	Tb	159		ug/L			853957	789349	0
	Tl	205	0.004	ug/L	0.005	121	75	156	67
	Pb	208	0.003	ug/L	0.003	119	139	208	45
	Bi	209		ug/L			1664508	1567831	1
	Th	232	0.065	ug/L	0.009	14	1034	2836	9
	U	238	0.002	ug/L	0.003	103	25	98	78

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J-L REN
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:50:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1381773	2
	Be	9	0.002	ug/L	0.001	34	7	16	18
	C	13		ug/L			82728	85380	1
	Cl	37		ug/L			4074015	4019754	4
>	Sc	45		ug/L			1091639	1031963	1
	V	51	1.083	ug/L	0.003	0	5656	26136	1
	V-1	51	1.098	ug/L	0.002	0	83	21132	1
	Cr	52	0.218	ug/L	0.011	4	16764	19155	1
	Cr	53	0.268	ug/L	0.017	6	112	564	3
	Mn	55	6.180	ug/L	0.014	0	485	130067	1
	Co	59	0.007	ug/L	0.000	6	57	149	2
>	Ge	72		ug/L			444301	410854	1
	Ni	60	0.030	ug/L	0.002	8	16	102	8
	Ni	62	32.702	ug/L	0.348	1	966	14506	2
	Cu	63	1.922	ug/L	0.031	1	754	12480	3
	Cu	65	0.156	ug/L	0.005	3	39	462	2
	Zn	66	1.187	ug/L	0.005	0	197	2121	1
	Zn	67	1.065	ug/L	0.073	6	32	320	7
	Zn	68	1.165	ug/L	0.052	4	191	1499	2
	As	75	7.273	ug/L	0.142	1	1284	11731	0
	As-1	75	7.517	ug/L	0.182	2	7106	17148	0
	Se	82	0.156	ug/L	0.041	26	-5	20	34
	Se	78	0.468	ug/L	0.296	63	7187	6831	1
	Mo	98	0.010	ug/L	0.002	24	29	63	15
	Y	89		ug/L			323430	298287	2
	Kr	83		ug/L			1769	1745	1
>	In	115		ug/L			748057	729204	3
	Ag	107	0.000	ug/L	0.001	1029	15	15	44
	Cd	111	0.004	ug/L	0.002	49	43	54	8
	Cd	114	0.001	ug/L	0.001	122	22	26	20
	Sb	121	-0.005	ug/L	0.003	58	335	275	13
	Sb	123	-0.007	ug/L	0.004	57	270	206	19
	Ba	135	0.170	ug/L	0.003	1	19	578	2
	Ba	137	0.165	ug/L	0.007	4	36	962	4
>	Tb	159		ug/L			853957	827652	1
	Tl	205	0.005	ug/L	0.004	77	75	187	45
	Pb	208	0.015	ug/L	0.000	2	139	600	3
	Bi	209		ug/L			1664508	1629400	1
	Th	232	0.017	ug/L	0.007	37	1034	1522	11
	U	238	0.002	ug/L	0.000	18	25	92	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:55:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1387802	1
[	Be	9	0.010	ug/L	0.002	16	7	49	15
	C	13		ug/L			82728	85030	1
	Cl	37		ug/L			4074015	4087134	1
[>	Sc	45		ug/L			1091639	1035992	2
|	V	51	5.379	ug/L	0.117	2	5656	108989	1
|	V-1	51	5.439	ug/L	0.116	2	83	104742	1
|	Cr	52	1.048	ug/L	0.033	3	16764	31915	3
|	Cr	53	1.247	ug/L	0.025	2	112	2248	0
|	Mn	55	30.495	ug/L	0.708	2	485	642308	0
[	Co	59	0.034	ug/L	0.002	4	57	535	5
[>	Ge	72		ug/L			444301	405208	0
|	Ni	60	0.071	ug/L	0.005	6	16	217	6
|	Ni	62	36.311	ug/L	3.152	8	966	15789	8
|	Cu	63	2.483	ug/L	0.155	6	754	15692	5
|	Cu	65	0.215	ug/L	0.011	5	39	613	5
|	Zn	66	0.858	ug/L	0.024	2	197	1562	2
|	Zn	67	0.939	ug/L	0.015	1	32	282	1
|	Zn	68	0.946	ug/L	0.020	2	191	1234	1
|	As	75	36.135	ug/L	0.549	1	1284	52848	1
|	As-1	75	37.295	ug/L	0.566	1	7106	58248	1
|	Se	82	0.186	ug/L	0.038	20	-5	25	24
|	Se	78	0.669	ug/L	0.011	1	7187	6817	0
[	Mo	98	0.047	ug/L	0.001	2	29	198	2
	Y	89		ug/L			323430	306339	2
	Kr	83		ug/L			1769	1733	1
[>	In	115		ug/L			748057	732138	0
|	Ag	107	0.001	ug/L	0.001	116	15	20	32
|	Cd	111	-0.001	ug/L	0.002	143	43	38	15
|	Cd	114	0.000	ug/L	0.001	432	22	22	18
|	Sb	121	-0.010	ug/L	0.002	18	335	214	10
|	Sb	123	-0.012	ug/L	0.004	35	270	165	21
|	Ba	135	0.769	ug/L	0.003	0	19	2557	1
[	Ba	137	0.774	ug/L	0.007	0	36	4393	0
[>	Tb	159		ug/L			853957	829789	0
|	Tl	205	0.001	ug/L	0.001	93	75	90	17
|	Pb	208	0.017	ug/L	0.001	3	139	680	2
|	Bi	209		ug/L			1664508	1584812	0
|	Th	232	0.027	ug/L	0.006	21	1034	1836	10
[	U	238	0.011	ug/L	0.000	2	25	366	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JDUP REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 15:59:26
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1413076	1
[	Be	9	0.009	ug/L	0.002	26	7	46	24
	C	13		ug/L			82728	88583	2
	Cl	37		ug/L			4074015	4135307	3
[>	Sc	45		ug/L			1091639	1071240	2
[	V	51	5.079	ug/L	0.111	2	5656	106709	0
[	V-1	51	5.156	ug/L	0.093	1	83	102667	0
[	Cr	52	0.937	ug/L	0.072	7	16764	31228	1
[	Cr	53	1.197	ug/L	0.044	3	112	2236	3
[	Mn	55	29.054	ug/L	1.042	3	485	632651	1
[	Co	59	0.032	ug/L	0.001	1	57	520	0
[>	Ge	72		ug/L			444301	412248	0
[	Ni	60	0.071	ug/L	0.004	5	16	221	5
[	Ni	62	30.855	ug/L	0.802	2	966	13783	1
[	Cu	63	2.206	ug/L	0.040	1	754	14264	1
[	Cu	65	0.207	ug/L	0.006	2	39	603	2
[	Zn	66	0.787	ug/L	0.014	1	197	1473	1
[	Zn	67	0.877	ug/L	0.045	5	32	270	4
[	Zn	68	0.851	ug/L	0.026	3	191	1147	2
[	As	75	35.512	ug/L	0.222	0	1284	52861	1
[	As-1	75	36.660	ug/L	0.124	0	7106	58363	0
[	Se	82	0.088	ug/L	0.121	137	-5	9	205
[	Se	78	0.655	ug/L	0.303	46	7187	6930	1
[	Mo	98	0.046	ug/L	0.004	9	29	198	8
	Y	89		ug/L			323430	315447	1
	Kr	83		ug/L			1769	1797	1
[>	In	115		ug/L			748057	737244	1
[	Ag	107	0.000	ug/L	0.000	160	15	16	12
[	Cd	111	-0.001	ug/L	0.003	369	43	39	28
[	Cd	114	-0.000	ug/L	0.000	1853	22	21	16
[	Sb	121	-0.015	ug/L	0.003	16	335	163	16
[	Sb	123	-0.016	ug/L	0.002	14	270	135	12
[	Ba	135	0.763	ug/L	0.025	3	19	2558	4
[	Ba	137	0.762	ug/L	0.007	0	36	4355	2
[>	Tb	159		ug/L			853957	830942	0
[	Tl	205	-0.000	ug/L	0.000	207	75	68	15
[	Pb	208	0.019	ug/L	0.001	2	139	731	1
[	Bi	209		ug/L			1664308	1632252	0
[	Th	232	0.008	ug/L	0.003	33	1034	1263	7
[	U	238	0.011	ug/L	0.001	5	25	373	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JSPK REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:03:34
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1409615	0
	Be	9	2.473	ug/L	0.031	1	7	10452	1
	C	13		ug/L			82728	85998	1
	Cl	37		ug/L			4074015	4095005	2
>	Sc	45		ug/L			1091639	1062473	1
	V	51	7.510	ug/L	0.136	1	5656	153874	0
	V-1	51	7.570	ug/L	0.128	1	83	149485	0
	Cr	52	3.365	ug/L	0.126	3	16764	68979	2
	Cr	53	3.565	ug/L	0.088	2	112	6391	1
	Mn	55	31.080	ug/L	0.783	2	485	671485	2
	Co	59	2.384	ug/L	0.041	1	57	34311	1
>	Ge	72		ug/L			444301	412253	0
	Ni	60	2.505	ug/L	0.017	0	16	7319	0
	Ni	62	27.493	ug/L	0.699	2	966	12379	1
	Cu	63	4.340	ug/L	0.088	2	754	27382	1
	Cu	65	2.694	ug/L	0.038	1	39	7402	1
	Zn	66	8.672	ug/L	0.237	2	197	14397	2
	Zn	67	8.117	ug/L	0.203	2	32	2253	2
	Zn	68	8.636	ug/L	0.228	2	191	10024	2
	As	75	37.339	ug/L	0.407	1	1284	55517	0
	As-1	75	38.155	ug/L	0.335	0	7106	60475	0
	Se	82	8.704	ug/L	0.361	4	-5	1424	3
	Se	78	8.111	ug/L	0.151	1	7187	9904	0
	Mo	98	0.044	ug/L	0.003	7	29	193	6
	Y	89		ug/L			323430	312093	1
	Kr	83		ug/L			1769	1700	1
>	In	115		ug/L			748057	732115	1
	Ag	107	1.686	ug/L	0.014	0	15	11383	0
	Cd	111	2.490	ug/L	0.029	1	43	8917	0
	Cd	114	2.469	ug/L	0.041	1	22	21964	0
	Sb	121	-0.017	ug/L	0.001	8	335	141	10
	Sb	123	-0.020	ug/L	0.001	6	270	99	9
	Ba	135	3.220	ug/L	0.092	2	19	10652	1
	Ba	137	3.178	ug/L	0.021	0	36	17930	1
>	Tb	159		ug/L			853957	823425	1
	Tl	205	2.460	ug/L	0.022	0	75	59228	0
	Pb	208	2.561	ug/L	0.050	1	139	79329	0
	Bi	209		ug/L			1664508	1577705	0
	Th	232	2.344	ug/L	0.060	2	1034	71326	2
	U	238	2.528	ug/L	0.065	2	25	79656	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:09:45
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1314383	1
	Be	9	287.309	ug/L	2.613	0	7	1131540	1
	C	13		ug/L			82728	89289	1
	Cl	37		ug/L			4074015	4424372	0
>	Sc	45		ug/L			1091639	997973	2
	V	51	299.736	ug/L	4.144	1	5656	5567038	1
	V-1	51	298.187	ug/L	5.518	1	83	5527135	1
	Cr	52	295.392	ug/L	0.778	0	16764	4358977	2
	Cr	53	289.827	ug/L	4.267	1	112	479803	1
	Mn	55	287.630	ug/L	6.630	2	485	5832248	1
	Co	59	295.268	ug/L	7.706	2	57	3984692	0
>	Ge	72		ug/L			444301	387837	0
	Ni	60	281.951	ug/L	2.427	0	16	773545	1
	Ni	62	301.723	ug/L	5.518	1	966	119395	0
	Cu	63	284.689	ug/L	5.342	1	754	1647394	1
	Cu	65	281.541	ug/L	3.289	1	39	724233	1
	Zn	66	272.265	ug/L	0.721	0	197	420019	0
	Zn	67	272.009	ug/L	4.977	1	32	70125	1
	Zn	68	266.994	ug/L	1.517	0	191	286591	1
	As	75	282.566	ug/L	3.697	1	1284	387873	1
	As-1	75	282.591	ug/L	3.708	1	7106	381617	0
	Se	82	290.029	ug/L	2.362	0	-5	44804	0
	Se	78	274.354	ug/L	5.054	1	7187	109197	0
	Mo	98	299.237	ug/L	2.696	0	29	1053647	0
	Y	89		ug/L			323430	291615	2
	Kr	83		ug/L			1769	2073	4
>	In	115		ug/L			748057	683721	1
	Ag	107	268.153	ug/L	3.219	1	15	1688965	2
	Cd	111	283.012	ug/L	1.008	0	43	942066	1
	Cd	114	292.813	ug/L	1.798	0	22	2430336	0
	Sb	121	308.039	ug/L	2.345	0	335	3187672	1
	Sb	123	304.563	ug/L	4.221	1	270	2381708	1
	Ba	135	300.174	ug/L	2.829	0	19	925810	0
	Ba	137	302.867	ug/L	1.468	0	36	1592669	1
>	Tb	159		ug/L			853957	822017	1
	Tl	205	290.352	ug/L	1.162	0	75	6970160	1
	Pb	208	296.898	ug/L	3.340	1	139	9166630	0
	Bi	209		ug/L			1664508	1458543	1
	Th	232	308.528	ug/L	3.437	1	1034	9242016	0
	U	238	302.697	ug/L	4.482	1	25	9520036	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:16:37
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1312376	1
	Be	9	0.002	ug/L	0.001	42	7	16	22
	C	13		ug/L			82728	80789	0
	Cl	37		ug/L			4074015	4215187	3
>	Sc	45		ug/L			1091639	986090	1
	V	51	0.020	ug/L	0.008	40	5656	5479	1
	V-1	51	0.011	ug/L	0.000	4	83	274	3
	Cr	52	0.064	ug/L	0.028	43	16764	16063	1
	Cr	53	0.030	ug/L	0.005	15	112	150	5
	Mn	55	0.041	ug/L	0.002	5	485	1252	4
	Co	59	0.001	ug/L	0.000	4	57	66	1
>	Ge	72		ug/L			444301	398699	1
	Ni	60	0.020	ug/L	0.003	14	16	70	10
	Ni	62	10.651	ug/L	0.453	4	966	5168	2
	Cu	63	0.714	ug/L	0.031	4	754	4924	3
	Cu	65	0.183	ug/L	0.003	1	39	518	2
	Zn	66	1.451	ug/L	0.013	0	197	2477	0
	Zn	67	1.318	ug/L	0.146	11	32	378	10
	Zn	68	1.411	ug/L	0.058	4	191	1727	2
	As	75	0.127	ug/L	0.029	22	1284	1332	2
	As-1	75	0.223	ug/L	0.063	28	7106	6680	0
	Se	82	-0.020	ug/L	0.119	599	-5	-7	246
	Se	78	0.695	ug/L	0.216	31	7187	6717	0
	Mo	98	0.033	ug/L	0.004	10	29	144	7
	Y	89		ug/L			323430	291734	2
	Kr	83		ug/L			1769	1778	2
>	In	115		ug/L			748057	697398	2
	Ag	107	0.006	ug/L	0.001	18	15	50	11
	Cd	111	0.006	ug/L	0.001	25	43	59	5
	Cd	114	0.001	ug/L	0.001	114	22	28	33
	Sb	121	0.169	ug/L	0.040	23	335	2092	18
	Sb	123	0.172	ug/L	0.047	27	270	1618	21
	Ba	135	0.018	ug/L	0.001	4	19	74	3
	Ba	137	0.021	ug/L	0.003	13	36	145	10
>	Tb	159		ug/L			853957	786274	1
	Tl	205	0.013	ug/L	0.001	8	75	372	8
	Pb	208	0.029	ug/L	0.000	1	139	993	0
	Bi	209		ug/L			1664508	1571331	1
	Th	232	0.084	ug/L	0.007	8	1034	3350	7
	U	238	0.005	ug/L	0.000	5	25	159	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:23:08
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1336965	0
	Be	9	0.003	ug/L	0.001	49	7	17	28
	C	13		ug/L			82728	80991	1
	Cl	37		ug/L			4074015	4057313	2
>	Sc	45		ug/L			1091639	974738	4
	V	51	0.009	ug/L	0.006	63	5656	5208	2
	V-1	51	0.009	ug/L	0.000	3	83	239	4
	Cr	52	0.029	ug/L	0.022	76	16764	15381	3
	Cr	53	0.030	ug/L	0.010	32	112	149	12
	Mn	55	0.039	ug/L	0.001	2	485	1210	2
	Co	59	0.001	ug/L	0.001	172	57	61	27
>	Ge	72		ug/L			444301	390058	2
	Ni	60	0.023	ug/L	0.002	8	16	77	9
	Ni	62	8.659	ug/L	0.142	1	966	4270	3
	Cu	63	0.648	ug/L	0.015	2	754	4436	4
	Cu	65	0.223	ug/L	0.009	4	39	611	2
	Zn	66	1.676	ug/L	0.061	3	197	2773	5
	Zn	67	1.529	ug/L	0.092	5	32	424	3
	Zn	68	1.630	ug/L	0.055	3	191	1926	5
	As	75	0.121	ug/L	0.034	28	1284	1294	3
	As-1	75	0.203	ug/L	0.055	26	7106	6508	1
	Se	82	-0.004	ug/L	0.124	2799	-5	-5	362
	Se	78	0.638	ug/L	0.219	34	7187	6549	1
	Mo	98	0.006	ug/L	0.002	41	29	46	18
	Y	89		ug/L			323430	283159	5
	Kr	83		ug/L			1769	1728	1
>	In	115		ug/L			748057	688340	1
	Ag	107	0.002	ug/L	0.001	26	15	29	15
	Cd	111	0.005	ug/L	0.002	42	43	58	14
	Cd	114	0.001	ug/L	0.001	64	22	27	17
	Sb	121	0.030	ug/L	0.013	42	335	621	20
	Sb	123	0.030	ug/L	0.014	44	270	487	21
	Ba	135	0.019	ug/L	0.003	16	19	76	11
	Ba	137	0.020	ug/L	0.001	2	36	141	3
>	Tb	159		ug/L			853957	785104	0
	Tl	205	0.008	ug/L	0.001	13	75	242	10
	Pb	208	0.035	ug/L	0.001	3	139	1164	3
	Bi	209		ug/L			1664508	1543092	0
	Th	232	0.015	ug/L	0.002	10	1034	1373	3
	U	238	0.001	ug/L	0.000	19	25	57	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 HSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:29:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

Cr Be Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1411952	1373085	1
[	Be	9	22.300	ug/L	0.407	1	7	91751	1
	C	13		ug/L			82728	102881	1
	Cl	37		ug/L			4074015	4659517	3
[>	Sc	45		ug/L			1091639	1098542	0
[	V	51	23.895	ug/L	0.096	0	5656	493884	0
[	V-1	51	24.123	ug/L	0.037	0	83	492434	0
[	Cr	52	22.574	ug/L	0.403	1	16764	382253	1
[	Cr	53	23.386	ug/L	0.433	1	112	42730	1
[	Mn	55	45.852	ug/L	0.636	1	485	1024151	1
[	Co	59	21.501	ug/L	0.351	1	57	319606	1
[>	Ge	72		ug/L			444301	377082	1
[	Ni	60	25.295	ug/L	0.380	1	16	67473	0
[	Ni	62	63.963	ug/L	6.214	9	966	25234	7
[	Cu	63	29.301	ug/L	0.866	2	754	165391	1
[	Cu	65	23.561	ug/L	0.456	1	39	58952	1
[	Zn	66	67.206	ug/L	1.815	2	197	100907	1
[	Zn	67	62.585	ug/L	1.641	2	32	15707	2
[	Zn	68	67.613	ug/L	2.477	3	191	70658	2
[	As	75	33.818	ug/L	0.797	2	1284	46085	0
[	As-1	75	33.335	ug/L	0.926	2	7106	49078	0
[	Se	82	71.517	ug/L	0.780	1	-5	10737	0
[	Se	78	70.008	ug/L	1.303	1	7187	31633	0
[	Mo	98	30.242	ug/L	0.082	0	29	103560	1
	Y	89		ug/L			323430	304747	1
	Kr	83		ug/L			1769	1743	0
[>	In	115		ug/L			748057	683760	0
[	Ag	107	21.765	ug/L	0.466	2	15	137083	1
[	Cd	111	22.354	ug/L	0.251	1	43	74449	1
[	Cd	114	21.954	ug/L	0.350	1	22	182262	1
[	Sb	121	24.443	ug/L	0.389	1	335	253247	1
[	Sb	123	24.049	ug/L	0.436	1	270	188314	1
[	Ba	135	36.256	ug/L	0.310	0	19	111856	0
[	Ba	137	36.211	ug/L	0.276	0	36	190461	0
[>	Tb	159		ug/L			853957	821349	1
[	Tl	205	22.621	ug/L	0.180	0	75	542646	0
[	Pb	208	23.284	ug/L	0.315	1	139	718418	0
[	Bi	209		ug/L			1664508	1387621	0
[	Th	232	25.102	ug/L	0.738	2	1034	752174	2
[	U	238	24.569	ug/L	0.474	1	25	772074	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~CCV5~~ CCB5 5/9/12 JW
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:36:13
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1357406	1
	Be	9	-0.001	ug/L	0.001	92	7	4	66
	C	13		ug/L			82728	81163	2
	Cl	37		ug/L			4074015	3933830	1
>	Sc	45		ug/L			1091639	990535	0
	V	51	0.024	ug/L	0.009	38	5656	5581	3
	V-1	51	0.007	ug/L	0.001	7	83	210	4
	Cr	52	0.083	ug/L	0.026	31	16764	16416	2
	Cr	53	0.022	ug/L	0.010	45	112	137	12
	Mn	55	0.004	ug/L	0.002	40	485	527	6
	Co	59	-0.000	ug/L	0.000	64	57	45	9
>	Ge	72		ug/L			444301	395690	3
	Ni	60	0.002	ug/L	0.002	76	16	21	23
	Ni	62	17.639	ug/L	1.564	8	966	7925	6
	Cu	63	0.872	ug/L	0.077	8	754	5814	6
	Cu	65	0.013	ug/L	0.002	14	39	69	8
	Zn	66	0.372	ug/L	0.012	3	197	760	2
	Zn	67	0.356	ug/L	0.023	6	32	122	2
	Zn	68	0.352	ug/L	0.028	8	191	556	8
	As	75	0.130	ug/L	0.020	15	1284	1325	3
	As-1	75	0.259	ug/L	0.175	67	7106	6674	0
	Se	82	0.175	ug/L	0.098	55	-5	23	70
	Se	78	0.906	ug/L	0.615	67	7187	6743	0
	Mo	98	0.001	ug/L	0.002	287	29	28	28
	Y	89		ug/L			323430	292520	1
	Kr	83		ug/L			1769	1710	1
>	In	115		ug/L			748057	707741	0
	Ag	107	0.001	ug/L	0.000	74	15	18	16
	Cd	111	-0.000	ug/L	0.001	257	43	40	7
	Cd	114	-0.000	ug/L	0.000	1097	22	20	6
	Sb	121	0.002	ug/L	0.009	549	335	334	27
	Sb	123	0.000	ug/L	0.009	2364	270	259	26
	Ba	135	0.002	ug/L	0.001	91	19	23	19
	Ba	137	-0.000	ug/L	0.003	3776	36	34	42
>	Tb	159		ug/L			853957	791238	1
	Tl	205	-0.001	ug/L	0.000	22	75	36	20
	Pb	208	0.001	ug/L	0.000	24	139	146	3
	Bi	209		ug/L			1664508	1549361	0
	Th	232	0.011	ug/L	0.005	49	1034	1265	11
	U	238	0.000	ug/L	0.000	24	25	35	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~CCB5~~ CCV5 5/9/12 JH
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 08, 2012 16:43:06
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1411952	1398959	2
	Be	9	48.460	ug/L	1.168	2	7	203124	2
	C	13		ug/L			82728	83996	2
	Cl	37		ug/L			4074015	4251817	4
>	Sc	45		ug/L			1091639	1026194	2
	V	51	48.078	ug/L	0.268	0	5656	922823	2
	V-1	51	48.060	ug/L	0.410	0	83	916294	2
	Cr	52	49.271	ug/L	0.953	1	16764	760547	1
	Cr	53	49.211	ug/L	0.950	1	112	83853	0
	Mn	55	48.531	ug/L	0.881	1	485	1012294	0
	Co	59	48.633	ug/L	0.695	1	57	675128	1
>	Ge	72		ug/L			444301	414002	1
	Ni	60	47.757	ug/L	1.359	2	16	139834	1
	Ni	62	55.896	ug/L	1.991	3	966	24339	2
	Cu	63	49.782	ug/L	1.216	2	754	308058	1
	Cu	65	47.782	ug/L	0.217	0	39	131248	1
	Zn	66	49.035	ug/L	1.257	2	197	80882	1
	Zn	67	48.726	ug/L	1.175	2	32	13432	1
	Zn	68	49.896	ug/L	2.255	4	191	57291	3
	As	75	47.790	ug/L	0.949	1	1284	71011	0
	As-1	75	47.408	ug/L	0.867	1	7106	73844	0
	Se	82	51.141	ug/L	1.542	3	-5	8427	1
	Se	78	47.321	ug/L	1.259	2	7187	25644	0
	Mo	98	46.189	ug/L	0.888	1	29	173608	0
	Y	89		ug/L			323430	303921	0
	Kr	83		ug/L			1769	1793	0
>	In	115		ug/L			748057	729076	1
	Ag	107	47.643	ug/L	0.920	1	15	320005	3
	Cd	111	49.209	ug/L	0.796	1	43	174690	1
	Cd	114	48.801	ug/L	0.311	0	22	431944	0
	Sb	121	48.133	ug/L	0.797	1	335	531361	0
	Sb	123	47.582	ug/L	0.935	1	270	396960	0
	Ba	135	48.299	ug/L	0.598	1	19	158866	0
	Ba	137	47.950	ug/L	0.220	0	36	268896	1
>	Tb	159		ug/L			853957	831430	1
	Tl	205	48.225	ug/L	0.232	0	75	1170995	0
	Pb	208	49.602	ug/L	0.584	1	139	1549126	0
	Bi	209		ug/L			1664508	1584435	1
	Th	232	48.719	ug/L	1.646	3	1034	1476729	2
	U	238	48.652	ug/L	0.304	0	25	1547817	0

US15 00648

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.11.12 **Analyst:** JLB **Page:** 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		ICB 0			2934-14
		1			2933-5
		2			2931-4
		3			↓ -5
		4			2934-9
		5			2931-7
		River Sample			r ≥ 0.9994 (62Ni)
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		Low Check			
		ICSA			
		ICSAB			62Ni 122%
		B1			
		B2			
		CCV2			Re Rhig
		CCB2			
		US01 MB/LCSK	REN	2	Cu
		↓ MB2SK			↓
		US27 J			Ag CAF
		↓ JDUP			0.02ppb #1, spk #2 (1/10) Ag
		US01 A			Cu
		↓ B			↓

US15 : 00649

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.11.12 **Analyst:** JB **Page:** 2 of 3

All corrections made by analyst unless otherwise noted. 5.11.12 JB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		US 61C	REN	2	Cu
		H			
		I			
		J			
		CCV3			
		CCB3			2 Ni high
X	✓	US 15 MB1	REN	2	CV CB prep pos blanks
	✓	MB2			
	✓	MB2SD			
	✓	MB1SD		10	
Z	X	~~ZZZZZ~~ A-L		10	
	✓	A		2	crust
	✓	ADUP			CAF N. PBb
Air		AR ~~ASPK~~			Sample Pb+ Wet Ash Air no work
		~~APOST~~			prep #1, prep #2 (2x)
		B			
Air		AIR ~~CCV4~~			Sample prep issues
		~~CCB4~~			not run here
		CCV4			
		CCB4			
		US 15 ASPK	REN	2	Ni low 71.6% Pb recovery 2x
		APOST			Ni CAF
		B			PDS 10X
		CCV5			

US15 00659

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.11.12

MZ	Analyst 5.15	Peer MS15	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	see log
Samples:			
RSD's & SD's	✓	✓	see log
Internal Standards	✓	✓	↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	see log
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	✓	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	US15 CAF
Matrix Duplicates	✓	✓	US15 CAF
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	Ver 1, 15

SmartTune Wizard - Details

)ptimization Details

;martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

)ptimization Status

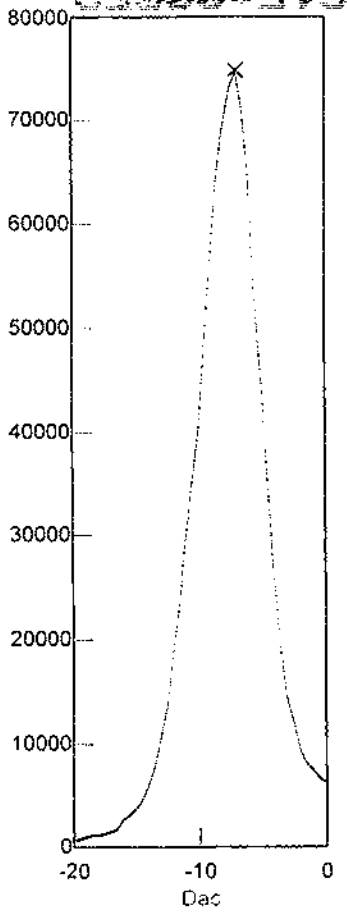
;tart Time: 5/11/2012 11:06:48 AM

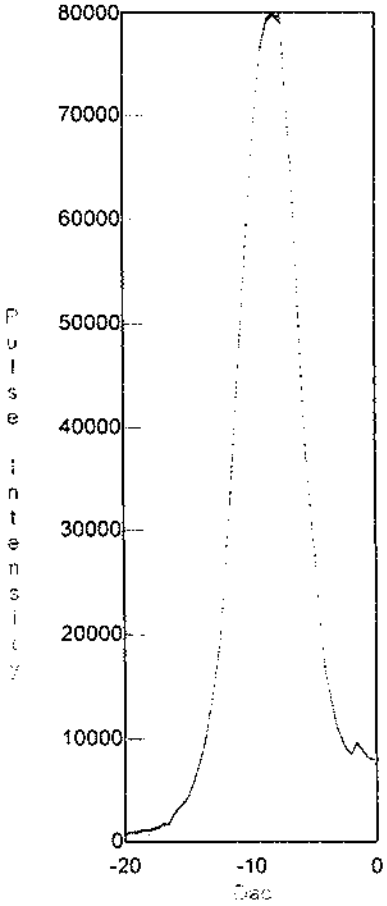
)aily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

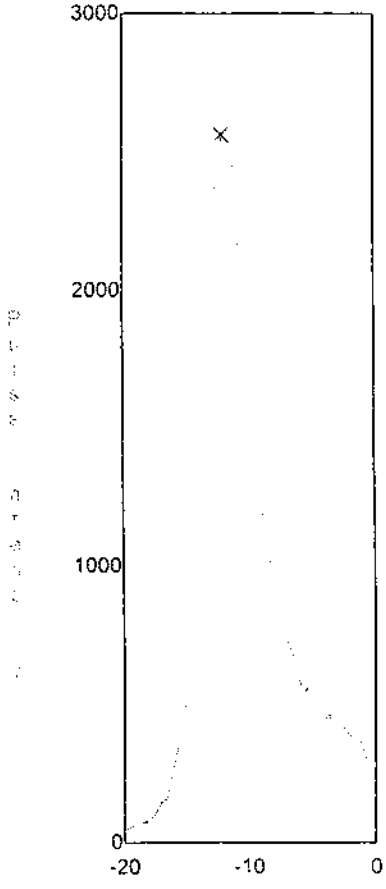
Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 6949.17
Obtained Intensity (Mg 23.985): 48346.19
Obtained Intensity (In 114.904): 102382.11
Obtained Intensity (Pb 207.977): 40349.46
Obtained Intensity (U 238.05): 71184.42
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.021 (=1945.76 / 93860.95)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=1278.36 / 93860.95)
[Passed] Optimum value(s): N/A

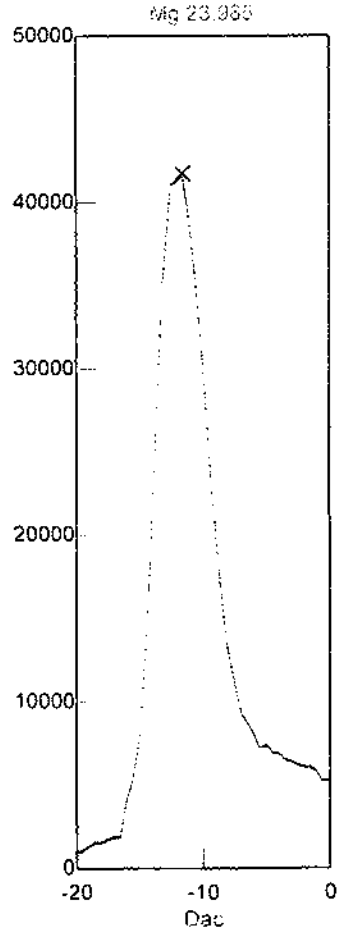
:nd Time: 5/11/2012 11:09:23 AM

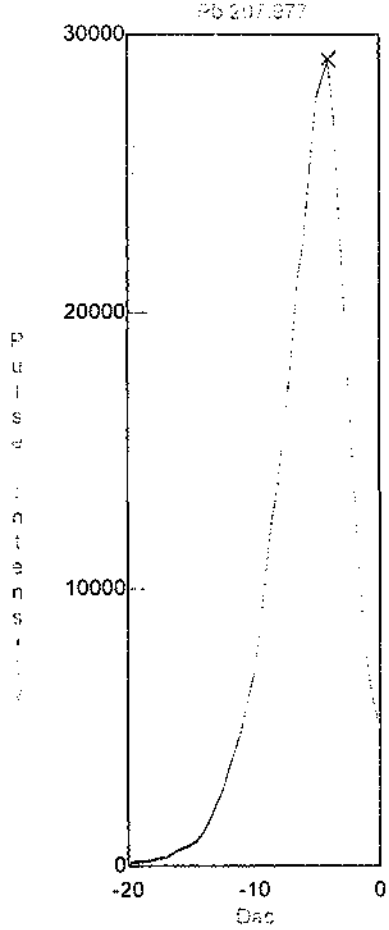
US15:00652

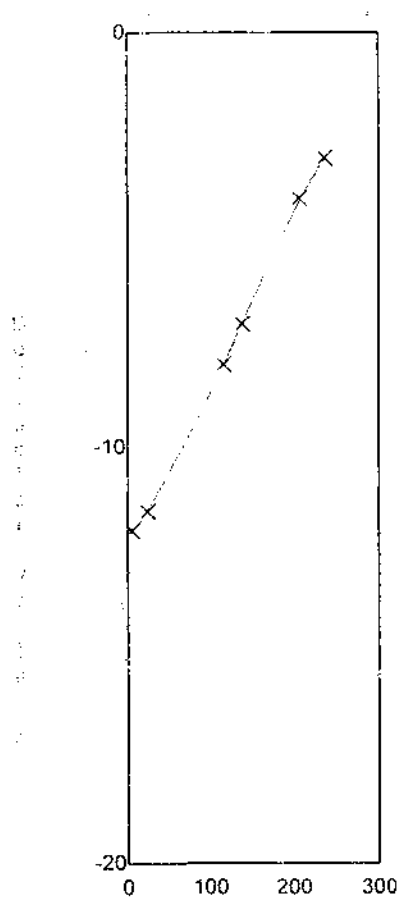

80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
30000
20000
10000
0
-20
-10
0
Dac
Pulse intensity


0
-10
-20
0
100
200
300

SmartTune Wizard - Summary

ptimization Summary

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

tart Time: 5/11/2012 10:38:24 AM
nd Time: 5/11/2012 10:42:35 AM

utoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.22

US15 : 00654

SmartTune Wizard - Summary

)ptimization Summary

;martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

;tart Time: 5/11/2012 10:33:37 AM
:nd Time: 5/11/2012 10:38:01 AM

1ass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.701)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.699)

US15 : 00555

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/11/2012 10:32:24 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.56 mm	-0.57 mm	72534.31

End Time: 5/11/2012 10:33:26 AM

US15.00556

SmartTune Wizard - Summary

)ptimization Summary

;martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

;tart Time: 5/11/2012 10:27:20 AM
:nd Time: 5/11/2012 10:29:55 AM

)aily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 4218.53
Obtained Intensity (Mg 23.985): 31349.13
Obtained Intensity (In 114.904): 58468.94
Obtained Intensity (Pb 207.977): 22394.39
Obtained Intensity (U 238.05): 43747.60
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=881.11 / 57258.52)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=780.10 / 57258.52)

US15 : 00557

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:41:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L				1633546	1
Be	9		ug/L				10	14
C	13		ug/L				107220	2
Cl	37		ug/L				5888067	3
Sc	45		ug/L				1420932	1
V	51		ug/L				8382	0
V-1	51		ug/L				237	2
Cr	52		ug/L				24727	0
Cr	53		ug/L				189	10
Mn	55		ug/L				577	0
Co	59		ug/L				72	6
Ge	72		ug/L				673872	1
Ni	60		ug/L				128	9
Ni	62		ug/L				326	1
Cu	63		ug/L				417	3
Cu	65		ug/L				53	15
Zn	66		ug/L				309	1
Zn	67		ug/L				51	4
Zn	68		ug/L				727	1
As	75		ug/L				1616	2
As-1	75		ug/L				9903	0
Se	82		ug/L				-46	108
Se	78		ug/L				10084	0
Mo	98		ug/L				25	9
Y	89		ug/L				452178	1
Kr	83		ug/L				2458	4
In	115		ug/L				1233632	0
Ag	107		ug/L				39	32
Cd	111		ug/L				133	1
Cd	114		ug/L				38	7
Sb	121		ug/L				94	12
Sb	123		ug/L				60	16
Ba	135		ug/L				218	8
Ba	137		ug/L				388	0
Tb	159		ug/L				1368167	1
Tl	205		ug/L				31	12
Pb	208		ug/L				215	5
Bi	209		ug/L				3022716	0
Th	232		ug/L				209	4
U	238		ug/L				12	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:45:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1615601	2
	Be	9	0.200	ug/L	0.012	5	10	1081	5
	C	13		ug/L			107220	117494	0
	Cl	37		ug/L			5888067	5940247	1
>	Sc	45		ug/L			1420932	1398806	0
	V	51	0.200	ug/L	0.004	2	8382	13884	0
	V-1	51	0.200	ug/L	0.002	0	237	5555	1
	Cr	52	0.500	ug/L	0.029	5	24727	36297	1
	Cr	53	0.500	ug/L	0.015	2	189	1438	2
	Mn	55	0.500	ug/L	0.014	2	577	15660	2
	Co	59	0.200	ug/L	0.006	2	72	4420	2
>	Ge	72		ug/L			673872	678934	0
	Ni	60	0.500	ug/L	0.011	2	128	2339	1
	Ni	62	0.500	ug/L	0.025	4	326	666	2
	Cu	63	0.500	ug/L	0.011	2	417	5560	1
	Cu	65	0.500	ug/L	0.004	0	53	2379	1
	Zn	66	4.000	ug/L	0.057	1	309	11115	1
	Zn	67	4.000	ug/L	0.097	2	51	1694	1
	Zn	68	4.000	ug/L	0.064	1	727	8131	1
	As	75	0.200	ug/L	0.003	1	1616	2053	1
	As-1	75	0.200	ug/L	0.076	37	9903	10318	0
	Se	82	0.500	ug/L	0.030	6	-46	100	9
	Se	78	0.500	ug/L	0.332	66	10084	10360	0
	Mo	98	0.200	ug/L	0.005	2	25	1147	2
	Y	89		ug/L			452178	465980	0
	Kr	83		ug/L			2458	2361	0
>	In	115		ug/L			1233632	1243578	0
	Ag	107	0.200	ug/L	0.011	5	39	2765	5
	Cd	111	0.100	ug/L	0.002	1	133	779	0
	Cd	114	0.100	ug/L	0.005	5	38	1650	4
	Sb	121	0.200	ug/L	0.006	2	94	3778	3
	Sb	123	0.200	ug/L	0.002	0	60	2837	1
	Ba	135	0.500	ug/L	0.006	1	218	2823	0
	Ba	137	0.500	ug/L	0.003	0	388	4887	1
>	Tb	159		ug/L			1368167	1372110	0
	Tl	205	0.200	ug/L	0.004	1	31	8977	1
	Pb	208	0.100	ug/L	0.003	3	215	6194	2
	Bi	209		ug/L			3022716	3066398	0
	Th	232	0.200	ug/L	0.002	1	209	8933	1
	U	238	0.200	ug/L	0.003	1	12	10993	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:49:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1681684	0
[	Be	9	10.000	ug/L	0.003	0	10	53753	0
	C	13		ug/L			107220	119291	0
	Cl	37		ug/L			5888067	5954339	2
[>	Sc	45		ug/L			1420932	1482485	1
|	V	51	10.000	ug/L	0.096	0	8382	274293	0
|	V-1	51	10.000	ug/L	0.222	2	237	265911	1
|	Cr	52	9.997	ug/L	0.021	0	24727	250325	1
|	Cr	53	9.999	ug/L	0.407	4	189	25606	3
|	Mn	55	10.000	ug/L	0.087	0	577	314625	1
[	Co	59	10.000	ug/L	0.160	1	72	220230	1
[>	Ge	72		ug/L			673872	695763	0
|	Ni	60	10.001	ug/L	0.051	0	128	47659	0
|	Ni	62	9.999	ug/L	0.152	1	326	6925	1
|	Cu	63	9.999	ug/L	0.169	1	417	103385	1
|	Cu	65	9.999	ug/L	0.163	1	53	45056	2
|	Zn	66	10.037	ug/L	0.187	1	309	28760	2
|	Zn	67	10.142	ug/L	0.243	2	51	4737	2
|	Zn	68	10.063	ug/L	0.105	1	727	20606	0
|	As	75	10.000	ug/L	0.167	1	1616	25636	1
|	As-1	75	10.001	ug/L	0.155	1	9903	33120	1
|	Se	82	10.000	ug/L	0.082	0	-46	2974	0
|	Se	78	10.009	ug/L	0.288	2	10084	16881	0
[	Mo	98	10.000	ug/L	0.021	0	25	57026	0
	Y	89		ug/L			452178	470829	0
	Kr	83		ug/L			2458	2364	1
[>	In	115		ug/L			1233632	1257178	1
|	Ag	107	10.000	ug/L	0.275	2	39	141471	2
|	Cd	111	10.000	ug/L	0.127	1	133	63890	0
|	Cd	114	10.000	ug/L	0.165	1	38	157184	0
|	Sb	121	10.000	ug/L	0.129	1	94	192719	0
|	Sb	123	10.000	ug/L	0.107	1	60	145939	0
|	Ba	135	10.000	ug/L	0.095	0	218	52752	2
[	Ba	137	9.999	ug/L	0.139	1	388	89418	0
[>	Tb	159		ug/L			1368167	1409840	1
|	Tl	205	10.000	ug/L	0.149	1	31	444259	0
|	Pb	208	10.000	ug/L	0.150	1	215	581453	0
|	Bi	209		ug/L			3022716	3092112	1
|	Th	232	10.000	ug/L	0.405	4	209	496634	2
[	U	238	10.000	ug/L	0.135	1	12	558572	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:53:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1672859	4
	Be	9	20.037	ug/L	0.687	3	10	107821	1
	C	13		ug/L			107220	120316	2
	Cl	37		ug/L			5888067	5943636	3
>	Sc	45		ug/L			1420932	1451130	2
	V	51	20.192	ug/L	0.550	2	8382	554155	0
	V-1	51	20.190	ug/L	0.547	2	237	545855	0
	Cr	52	20.101	ug/L	0.359	1	24727	476144	0
	Cr	53	20.096	ug/L	0.374	1	189	51149	1
	Mn	55	20.036	ug/L	0.474	2	577	620727	1
	Co	59	20.071	ug/L	0.206	1	72	438864	1
>	Ge	72		ug/L			673872	696343	2
	Ni	60	19.926	ug/L	0.246	1	128	93501	1
	Ni	62	20.018	ug/L	0.882	4	326	13578	1
	Cu	63	19.964	ug/L	0.407	2	417	204652	1
	Cu	65	20.042	ug/L	0.441	2	53	91061	0
	Zn	66	19.889	ug/L	0.359	1	309	55649	1
	Zn	67	20.061	ug/L	0.813	4	51	9416	1
	Zn	68	19.926	ug/L	0.544	2	727	39594	1
	As	75	20.014	ug/L	0.400	1	1616	49807	2
	As-1	75	20.051	ug/L	0.511	2	9903	56637	2
	Se	82	19.889	ug/L	0.467	2	-46	5835	0
	Se	78	20.038	ug/L	0.835	4	10084	23473	0
	Mo	98	20.108	ug/L	0.538	2	25	117216	1
	Y	89		ug/L			452178	458752	0
	Kr	83		ug/L			2458	2334	1
>	In	115		ug/L			1233632	1251671	0
	Ag	107	19.851	ug/L	0.297	1	39	271495	1
	Cd	111	20.024	ug/L	0.357	1	133	127865	1
	Cd	114	20.037	ug/L	0.056	0	38	315913	0
	Sb	121	20.009	ug/L	0.221	1	94	384595	1
	Sb	123	20.013	ug/L	0.133	0	60	291522	1
	Ba	135	20.033	ug/L	0.190	0	218	105687	0
	Ba	137	20.062	ug/L	0.149	0	388	180443	0
>	Tb	159		ug/L			1368167	1394837	0
	Tl	205	20.067	ug/L	0.158	0	31	894016	0
	Pb	208	20.065	ug/L	0.066	0	215	1169383	0
	Bi	209		ug/L			3022716	3031431	0
	Th	232	20.197	ug/L	0.489	2	209	1033347	2
	U	238	20.118	ug/L	0.074	0	12	1138839	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 11:58:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1689687	1
[	Be	9	49.677	ug/L	1.788	3	10	261767	3
	C	13		ug/L			107220	115844	1
	Cl	37		ug/L			5888067	6158685	3
[>	Sc	45		ug/L			1420932	1451743	1
[	V	51	49.780	ug/L	1.146	2	8382	1326059	3
[	V-1	51	49.808	ug/L	0.877	1	237	1322050	2
[	Cr	52	49.818	ug/L	0.686	1	24727	1123594	2
[	Cr	53	49.910	ug/L	1.384	2	189	125684	1
[	Mn	55	49.929	ug/L	1.041	2	577	1535961	1
[	Co	59	49.857	ug/L	1.377	2	72	1075212	3
[>	Ge	72		ug/L			673872	681872	1
[	Ni	60	50.030	ug/L	1.217	2	128	230380	1
[	Ni	62	49.821	ug/L	1.681	3	326	32043	1
[	Cu	63	49.831	ug/L	1.055	2	417	491329	0
[	Cu	65	49.933	ug/L	1.368	2	53	220626	1
[	Zn	66	49.961	ug/L	2.061	4	309	135883	2
[	Zn	67	49.644	ug/L	0.645	1	51	21998	0
[	Zn	68	49.923	ug/L	0.504	1	727	95352	0
[	As	75	49.941	ug/L	0.818	1	1616	118575	0
[	As-1	75	50.092	ug/L	0.675	1	9903	124603	1
[	Se	82	49.712	ug/L	0.659	1	-46	13954	0
[	Se	78	50.312	ug/L	0.246	0	10084	43354	1
[	Mo	98	49.789	ug/L	0.990	1	25	278365	1
	Y	89		ug/L			452178	462066	0
	Kr	83		ug/L			2458	2410	1
[>	In	115		ug/L			1233632	1232976	0
[	Ag	107	49.892	ug/L	0.690	1	39	664940	1
[	Cd	111	49.822	ug/L	0.676	1	133	307719	1
[	Cd	114	49.792	ug/L	0.117	0	38	757531	0
[	Sb	121	49.785	ug/L	0.410	0	94	922621	0
[	Sb	123	49.760	ug/L	0.324	0	60	697183	0
[	Ba	135	50.000	ug/L	0.702	1	218	259510	1
[	Ba	137	50.057	ug/L	0.225	0	388	445462	0
[>	Tb	159		ug/L			1368167	1408226	1
[	Tl	205	49.959	ug/L	0.358	0	31	2237867	0
[	Pb	208	49.727	ug/L	0.722	1	215	2847548	0
[	Bi	209		ug/L			3022716	3008400	0
[	Th	232	50.112	ug/L	1.248	2	209	2616994	1
[	U	238	49.963	ug/L	0.941	1	12	2844425	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:04:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1613507	2
[	Be	9	100.429	ug/L	1.216	1	10	512588	1
	C	13		ug/L			107220	117960	0
	Cl	37		ug/L			5888067	6121899	0
[>	Sc	45		ug/L			1420932	1439658	0
|	V	51	101.391	ug/L	0.849	0	8382	2798520	0
|	V-1	51	101.200	ug/L	1.079	1	237	2774370	1
|	Cr	52	100.782	ug/L	2.663	2	24727	2287147	2
|	Cr	53	100.105	ug/L	1.047	1	189	250724	1
|	Mn	55	100.595	ug/L	1.379	1	577	3130605	1
[	Co	59	100.635	ug/L	1.766	1	72	2198800	2
[>	Ge	72		ug/L			673872	676164	0
|	Ni	60	100.173	ug/L	1.680	1	128	460014	1
|	Ni	62	100.238	ug/L	0.960	0	326	64127	0
|	Cu	63	99.978	ug/L	0.562	0	417	976610	1
|	Cu	65	99.316	ug/L	0.401	0	53	425523	0
|	Zn	66	99.614	ug/L	1.780	1	309	265075	1
|	Zn	67	99.808	ug/L	1.164	1	51	43536	1
|	Zn	68	99.786	ug/L	1.713	1	727	186957	1
|	As	75	99.880	ug/L	1.044	1	1616	232645	0
|	As-1	75	99.943	ug/L	1.013	1	9903	236226	0
|	Se	82	99.645	ug/L	0.045	0	-46	27461	0
|	Se	78	99.934	ug/L	1.552	1	10084	75266	1
[	Mo	98	100.804	ug/L	1.199	1	25	574283	1
	Y	89		ug/L			452178	467175	1
	Kr	83		ug/L			2458	2468	0
[>	In	115		ug/L			1233632	1202300	1
|	Ag	107	99.949	ug/L	2.941	2	39	1296654	2
|	Cd	111	99.907	ug/L	0.757	0	133	599730	1
|	Cd	114	100.092	ug/L	0.538	0	38	1489382	0
|	Sb	121	100.762	ug/L	1.287	1	94	1868075	0
|	Sb	123	100.966	ug/L	1.589	1	60	1425203	1
|	Ba	135	100.542	ug/L	0.513	0	218	517961	0
[	Ba	137	100.586	ug/L	1.641	1	388	889767	0
[>	Tb	159		ug/L			1368167	1384264	1
|	Tl	205	99.855	ug/L	0.886	0	31	4375559	0
|	Pb	208	100.195	ug/L	1.306	1	215	5676706	0
|	Bi	209		ug/L			3022716	2917086	0
|	Th	232	100.350	ug/L	1.601	1	209	5212258	0
[	U	238	100.126	ug/L	1.966	1	12	5626796	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:10:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1610812	0
[	Be	9	0.004	ug/L	0.002	52	10	32	35
	C	13		ug/L			107220	108711	0
	Cl	37		ug/L			5888067	6111018	3
[>	Sc	45		ug/L			1420932	1428244	0
|	V	51	0.026	ug/L	0.022	85	8382	9147	6
|	V-1	51	0.012	ug/L	0.023	187	237	578	110
|	Cr	52	0.067	ug/L	0.033	49	24727	26352	3
|	Cr	53	0.019	ug/L	0.034	181	189	237	36
|	Mn	55	0.016	ug/L	0.030	185	577	1085	86
[	Co	59	0.016	ug/L	0.028	170	72	425	141
[>	Ge	72		ug/L			673872	670341	1
|	Ni	60	-0.001	ug/L	0.025	1977	128	123	95
|	Ni	62	0.357	ug/L	0.034	9	326	549	4
|	Cu	63	0.037	ug/L	0.013	35	417	777	18
|	Cu	65	0.008	ug/L	0.017	209	53	88	85
|	Zn	66	0.019	ug/L	0.018	93	309	358	15
|	Zn	67	-0.001	ug/L	0.002	185	51	51	3
|	Zn	68	0.025	ug/L	0.010	39	727	769	3
|	As	75	0.021	ug/L	0.006	30	1616	1655	1
|	As-1	75	0.044	ug/L	0.030	68	9903	9948	1
|	Se	82	0.071	ug/L	0.040	55	-46	-26	38
|	Se	78	0.117	ug/L	0.117	100	10084	10106	1
[	Mo	98	0.017	ug/L	0.005	27	25	122	21
	Y	89		ug/L			452178	452208	1
	Kr	83		ug/L			2458	2415	0
[>	In	115		ug/L			1233632	1223209	0
|	Ag	107	0.002	ug/L	0.002	112	39	68	49
|	Cd	111	0.000	ug/L	0.002	466	133	135	10
|	Cd	114	0.001	ug/L	0.001	59	38	60	22
|	Sb	121	0.058	ug/L	0.012	20	94	1178	19
|	Sb	123	0.059	ug/L	0.012	20	60	908	18
|	Ba	135	0.002	ug/L	0.004	252	218	225	9
[	Ba	137	-0.001	ug/L	0.002	193	388	376	3
[>	Tb	159		ug/L			1368167	1339613	0
|	Tl	205	0.008	ug/L	0.001	7	31	380	7
|	Pb	208	0.001	ug/L	0.001	60	215	279	14
|	Bi	209		ug/L			3022716	3028523	0
|	Th	232	0.137	ug/L	0.018	12	209	7090	12
[	U	238	0.003	ug/L	0.001	29	12	159	27

Sample Information

Sample Date/Time: Friday, May 11, 2012 12:04:01
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9997**	0.019	0.20	10	20	50	100
V-1	51	**0.9997**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.016	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.022	0.50	10	20	50	100
Co	59	**0.9999**	0.015	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.014	0.50	10	20	50	100
Cu	65	**0.9999**	0.006	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**1.0000**	0.001	4.00	10	20	50	100
Zn	68	**1.0000**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9994**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.011	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**0.9999**	0.015	0.20	10	20	50	100
Sb	123	**0.9998**	0.012	0.20	10	20	50	100
Ba	135	**1.0000**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**1.0000**	0.032	0.20	10	20	50	100
Pb	208	**1.0000**	0.041	0.10	10	20	50	100
Bi	209							
Th	232	**1.0000**	0.038	0.20	10	20	50	100
U	238	**1.0000**	0.041	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:25:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1633509	0
[	Be	9	51.658	ug/L	0.431	0	10	266986	0
	C	13		ug/L			107220	116389	3
	Cl	37		ug/L			5888067	5951471	1
[>	Sc	45		ug/L			1420932	1463758	0
[	V	51	49.569	ug/L	0.356	0	8382	1395526	1
[	V-1	51	49.736	ug/L	0.231	0	237	1386448	0
[	Cr	52	50.213	ug/L	0.514	1	24727	1171485	1
[	Cr	53	50.806	ug/L	0.885	1	189	129474	1
[	Mn	55	49.244	ug/L	0.637	1	577	1558447	1
[	Co	59	51.629	ug/L	0.647	1	72	1146960	1
[>	Ge	72		ug/L			673872	700417	3
[	Ni	60	48.952	ug/L	0.844	1	128	232880	2
[	Ni	62	49.461	ug/L	1.680	3	326	32927	1
[	Cu	63	50.135	ug/L	1.561	3	417	507220	1
[	Cu	65	50.028	ug/L	1.904	3	53	221892	1
[	Zn	66	47.951	ug/L	1.299	2	309	132273	0
[	Zn	67	49.373	ug/L	1.012	2	51	22325	1
[	Zn	68	49.305	ug/L	2.150	4	727	95991	1
[	As	75	49.266	ug/L	0.862	1	1616	119679	1
[	As-1	75	48.589	ug/L	1.304	2	9903	124194	0
[	Se	82	80.088	ug/L	1.484	1	-46	21753	1
[	Se	78	75.959	ug/L	3.045	4	10084	61703	0
[	Mo	98	48.875	ug/L	1.246	2	25	288289	0
	Y	89		ug/L			452178	468128	2
	Kr	83		ug/L			2458	2472	0
[>	In	115		ug/L			1230632	1246340	0
[	Ag	107	50.163	ug/L	0.849	1	39	674633	1
[	Cd	111	49.660	ug/L	0.678	1	133	309070	1
[	Cd	114	49.015	ug/L	0.450	0	38	756094	0
[	Sb	121	47.703	ug/L	0.501	1	94	916895	0
[	Sb	123	47.673	ug/L	0.397	0	60	697634	0
[	Ba	135	49.309	ug/L	0.520	1	218	263445	0
[	Ba	137	49.411	ug/L	0.394	0	388	453326	0
[>	Tb	159		ug/L			1368167	1400713	1
[	Tl	205	51.119	ug/L	0.439	0	31	2266625	0
[	Pb	208	49.741	ug/L	0.392	0	215	2851892	0
[	Bi	209		ug/L			3022716	3003278	0
[	Th	232	51.300	ug/L	0.437	0	209	2696742	1
[	U	238	51.305	ug/L	0.324	0	12	2917904	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:30:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1585606	1
[	Be	9	0.003	ug/L	0.001	21	10	26	12
	C	13		ug/L			107220	106729	1
	Cl	37		ug/L			5888067	6079625	1
[>	Sc	45		ug/L			1420932	1438523	1
[	V	51	0.011	ug/L	0.002	23	8382	8784	1
[	V-1	51	-0.001	ug/L	0.001	146	237	220	14
[	Cr	52	0.037	ug/L	0.010	28	24727	25859	1
[	Cr	53	-0.003	ug/L	0.003	100	189	183	3
[	Mn	55	-0.001	ug/L	0.000	15	577	561	1
[	Co	59	0.000	ug/L	0.000	238	72	74	6
[>	Ge	72		ug/L			673872	675390	1
[	Ni	60	-0.015	ug/L	0.002	11	128	59	12
[	Ni	62	0.107	ug/L	0.048	44	326	395	6
[	Cu	63	0.008	ug/L	0.004	46	417	499	6
[	Cu	65	0.000	ug/L	0.003	893	53	54	25
[	Zn	66	0.008	ug/L	0.005	64	309	331	2
[	Zn	67	-0.003	ug/L	0.004	147	51	50	4
[	Zn	68	0.023	ug/L	0.018	76	727	771	4
[	As	75	0.006	ug/L	0.018	304	1616	1633	3
[	As-1	75	0.032	ug/L	0.039	122	9903	9998	1
[	Se	82	0.077	ug/L	0.030	39	-46	-26	30
[	Se	78	0.092	ug/L	0.128	138	10084	10167	1
[	Mo	98	0.012	ug/L	0.002	18	25	93	12
	Y	89		ug/L			452178	460735	0
	Kr	83		ug/L			2458	2400	2
[>	In	115		ug/L			1233632	1223919	0
[	Ag	107	0.001	ug/L	0.002	154	39	55	47
[	Cd	111	-0.001	ug/L	0.002	195	133	127	7
[	Cd	114	0.001	ug/L	0.001	102	38	49	23
[	Sb	121	0.027	ug/L	0.006	23	94	604	20
[	Sb	123	0.027	ug/L	0.009	31	60	450	27
[	Ba	135	-0.001	ug/L	0.003	441	218	213	7
[	Ba	137	-0.002	ug/L	0.002	130	388	370	5
[>	Tb	159		ug/L			1368167	1334722	0
[	Tl	205	0.004	ug/L	0.000	9	31	204	8
[	Pb	208	0.001	ug/L	0.000	48	215	266	10
[	Bi	209		ug/L			3022716	3008378	0
[	Th	232	0.100	ug/L	0.017	17	209	5192	16
[	U	238	0.002	ug/L	0.000	11	12	115	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:34:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1650190	1
	Be	9	49.795	ug/L	0.381	0	10	259966	1
	C	13		ug/L			107220	108824	1
	Cl	37		ug/L			5888067	6083796	1
>	Sc	45		ug/L			1420932	1497620	1
	V	51	46.683	ug/L	1.251	2	8382	1344988	2
	V-1	51	46.811	ug/L	1.357	2	237	1334903	2
	Cr	52	47.528	ug/L	1.060	2	24727	1135691	1
	Cr	53	47.986	ug/L	1.184	2	189	125107	1
	Mn	55	47.055	ug/L	0.880	1	577	1523534	1
	Co	59	47.204	ug/L	0.844	1	72	1072742	0
>	Ge	72		ug/L			673872	680016	1
	Ni	60	49.190	ug/L	0.130	0	128	227261	1
	Ni	62	50.297	ug/L	0.477	0	326	32522	0
	Cu	63	49.892	ug/L	0.806	1	417	490271	0
	Cu	65	50.975	ug/L	1.223	2	53	219630	1
	Zn	66	49.612	ug/L	0.601	1	309	132919	0
	Zn	67	51.280	ug/L	1.493	2	51	22515	1
	Zn	68	50.964	ug/L	0.988	1	727	96378	1
	As	75	49.913	ug/L	0.861	1	1616	117724	0
	As-1	75	49.912	ug/L	1.166	2	9903	123628	0
	Se	82	52.723	ug/L	0.466	0	-46	13892	0
	Se	78	50.203	ug/L	1.354	2	10084	43064	0
	Mo	98	47.936	ug/L	0.884	1	25	274624	0
	Y	89		ug/L			452178	465245	2
	Kr	83		ug/L			2458	2400	2
>	In	115		ug/L			1233632	1235825	2
	Ag	107	49.125	ug/L	1.449	2	39	654829	0
	Cd	111	49.584	ug/L	0.743	1	133	305931	0
	Cd	114	49.562	ug/L	1.185	2	38	757819	0
	Sb	121	48.298	ug/L	1.161	2	94	920192	0
	Sb	123	47.998	ug/L	1.049	2	60	696249	0
	Ba	135	48.669	ug/L	0.877	1	218	257772	0
	Ba	137	48.304	ug/L	1.415	2	388	439256	0
>	Tb	159		ug/L			1368167	1390835	0
	Tl	205	50.617	ug/L	0.430	0	31	2228602	0
	Pb	208	49.668	ug/L	0.298	0	215	2827726	0
	Bi	209		ug/L			3022716	2999599	0
	Th	232	50.556	ug/L	0.755	1	209	2638631	0
	U	238	51.192	ug/L	0.518	1	12	2890819	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:39:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1588845	1
	Be	9	0.002	ug/L	0.001	70	10	20	34
	C	13		ug/L			107220	107372	2
	Cl	37		ug/L			5888067	5953035	1
>	Sc	45		ug/L			1420932	1432635	1
	V	51	0.019	ug/L	0.003	15	8382	8959	1
	V-1	51	-0.001	ug/L	0.000	20	237	210	2
	Cr	52	0.061	ug/L	0.011	17	24727	26297	1
	Cr	53	-0.007	ug/L	0.000	6	189	173	1
	Mn	55	-0.001	ug/L	0.000	49	577	561	2
	Co	59	-0.000	ug/L	0.000	64	72	64	9
>	Ge	72		ug/L			673872	678893	0
	Ni	60	-0.017	ug/L	0.002	9	128	48	16
	Ni	62	0.091	ug/L	0.049	54	326	386	8
	Cu	63	0.009	ug/L	0.002	24	417	504	4
	Cu	65	0.000	ug/L	0.003	915	53	54	21
	Zn	66	0.006	ug/L	0.007	122	309	326	5
	Zn	67	0.005	ug/L	0.012	229	51	54	9
	Zn	68	0.024	ug/L	0.011	48	727	777	3
	As	75	0.018	ug/L	0.032	176	1616	1670	3
	As-1	75	0.037	ug/L	0.046	126	9903	10060	0
	Se	82	0.107	ug/L	0.056	52	-46	-18	79
	Se	78	0.104	ug/L	0.186	177	10084	10227	0
	Mo	98	0.013	ug/L	0.001	5	25	99	4
	Y	89		ug/L			452178	455315	1
	Kr	83		ug/L			2458	2421	3
>	In	115		ug/L			1233632	1224396	1
	Ag	107	0.000	ug/L	0.001	903	39	39	21
	Cd	111	0.000	ug/L	0.002	1993	133	133	7
	Cd	114	0.000	ug/L	0.000	3128	38	38	12
	Sb	121	0.071	ug/L	0.001	1	94	1436	0
	Sb	123	0.071	ug/L	0.002	3	60	1087	4
	Ba	135	0.003	ug/L	0.004	151	218	232	11
	Ba	137	-0.000	ug/L	0.002	685	388	383	3
>	Tb	159		ug/L			1368167	1323420	0
	Tl	205	0.004	ug/L	0.000	7	31	200	6
	Pb	208	0.001	ug/L	0.000	41	215	241	5
	Bi	209		ug/L			3022716	3024172	1
	Th	232	0.132	ug/L	0.031	23	209	6767	22
	U	238	0.002	ug/L	0.000	18	12	138	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:43:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1571800	1
	Be	9	0.217	ug/L	0.012	5	10	1090	6
	C	13		ug/L			107220	113707	2
	Cl	37		ug/L			5888067	6008386	1
>	Sc	45		ug/L			1420932	1448382	1
	V	51	0.198	ug/L	0.011	5	8382	14018	1
	V-1	51	0.193	ug/L	0.002	0	237	5559	1
	Cr	52	0.531	ug/L	0.040	7	24727	37195	1
	Cr	53	0.518	ug/L	0.007	1	189	1498	2
	Mn	55	0.496	ug/L	0.010	2	577	16122	0
	Co	59	0.198	ug/L	0.003	1	72	4424	2
>	Ge	72		ug/L			673872	683079	0
	Ni	60	0.484	ug/L	0.015	3	128	2376	3
	Ni	62	0.499	ug/L	0.032	6	326	652	3
	Cu	63	0.529	ug/L	0.004	0	417	5639	1
	Cu	65	0.540	ug/L	0.007	1	53	2391	0
	Zn	66	4.066	ug/L	0.061	1	309	11231	0
	Zn	67	3.771	ug/L	0.094	2	51	1711	2
	Zn	68	3.960	ug/L	0.079	2	727	8203	1
	As	75	0.195	ug/L	0.042	21	1616	2093	4
	As-1	75	0.139	ug/L	0.028	19	9903	10357	0
	Se	82	0.639	ug/L	0.066	10	-46	122	14
	Se	78	0.322	ug/L	0.040	12	10084	10434	0
	Mo	98	0.193	ug/L	0.006	3	25	1136	3
	Y	89		ug/L			452178	456374	1
	Kr	83		ug/L			2458	2387	1
>	In	115		ug/L			1233632	1236595	0
	Ag	107	0.197	ug/L	0.001	0	39	2673	0
	Cd	111	0.109	ug/L	0.005	4	133	803	2
	Cd	114	0.104	ug/L	0.001	1	38	1630	1
	Sb	121	0.213	ug/L	0.005	2	94	4150	2
	Sb	123	0.213	ug/L	0.001	0	60	3148	0
	Ba	135	0.445	ug/L	0.004	0	218	2577	0
	Ba	137	0.443	ug/L	0.014	3	388	4417	2
>	Tb	159		ug/L			1368167	1327033	1
	Tl	205	0.209	ug/L	0.008	3	31	8813	2
	Pb	208	0.113	ug/L	0.004	3	215	6323	2
	Bi	209		ug/L			3022716	3020615	0
	Th	232	0.232	ug/L	0.010	4	209	11773	3
	U	238	0.204	ug/L	0.007	3	12	11001	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:48:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1646452	1
[	Be	9	0.002	ug/L	0.001	51	10	21	24
	C	13		ug/L			107220	240241	3
	Cl	37		ug/L			5888067	15574543	1
[>	Sc	45		ug/L			1420932	1447311	1
[	V	51	0.107	ug/L	0.025	23	8382	11502	6
[	V-1	51	0.809	ug/L	0.006	0	237	22541	0
[	Cr	52	0.862	ug/L	0.066	7	24727	44641	2
[	Cr	53	3.332	ug/L	0.071	2	189	8574	1
[	Mn	55	0.090	ug/L	0.002	1	577	3409	1
[	Co	59	0.020	ug/L	0.000	1	72	502	1
[>	Ge	72		ug/L			673872	657513	2
[	Ni	60	0.368	ug/L	0.014	3	128	1767	1
[	Ni	62	5.190	ug/L	0.831	16	326	3537	16
[	Cu	63	1.185	ug/L	0.064	5	417	11669	7
[	Cu	65	0.358	ug/L	0.009	2	53	1544	3
[	Zn	66	0.674	ug/L	0.028	4	309	2044	4
[	Zn	67	5.796	ug/L	0.179	3	51	2506	3
[	Zn	68	0.163	ug/L	0.020	11	727	1005	2
[	As	75	0.043	ug/L	0.026	60	1616	1672	1
[	As-1	75	0.272	ug/L	0.106	38	9903	10259	0
[	Se	82	-0.228	ug/L	0.068	29	-46	-103	15
[	Se	78	1.010	ug/L	0.256	25	10384	10477	0
[	Mo	98	416.555	ug/L	3.248	0	25	2307404	1
	Y	89		ug/L			452178	460696	0
	Kr	83		ug/L			2458	2759	2
[>	In	115		ug/L			1233632	1231851	0
[	Ag	107	0.024	ug/L	0.001	5	39	352	4
[	Cd	111	0.083	ug/L	0.013	16	133	645	13
[	Cd	114	0.184	ug/L	0.006	3	38	2841	3
[	Sb	121	0.057	ug/L	0.002	2	94	1174	2
[	Sb	123	0.060	ug/L	0.001	2	60	927	2
[	Ba	135	0.006	ug/L	0.004	56	218	250	7
[	Ba	137	-0.001	ug/L	0.003	463	388	382	5
[>	Tb	159		ug/L			1368167	1398371	0
[	Tl	205	0.006	ug/L	0.003	53	31	278	47
[	Pb	208	0.035	ug/L	0.001	2	215	2230	2
[	Bi	209		ug/L			3022716	2811971	0
[	Th	232	0.254	ug/L	0.106	41	209	13525	41
[	U	238	0.002	ug/L	0.000	14	12	100	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:53:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1676843	1
[	Be	9	0.000	ug/L	0.001	339	10	12	30
	C	13		ug/L			107220	227869	1
	Cl	37		ug/L			5888067	15879559	1
[>	Sc	45		ug/L			1420932	1473806	1
[	V	51	0.029	ug/L	0.153	519	8382	9476	43
[	V-1	51	0.804	ug/L	0.012	1	237	22806	1
[	Cr	52	19.644	ug/L	0.637	3	24727	476896	1
[	Cr	53	22.622	ug/L	0.147	0	189	58152	1
[	Mn	55	18.997	ug/L	0.193	1	577	605660	0
[	Co	59	18.451	ug/L	0.177	0	72	412698	0
[>	Ge	72		ug/L			673872	666050	1
[	Ni	60	18.870	ug/L	0.423	2	128	85453	1
[	Ni	62	24.579	ug/L	0.370	1	326	15731	0
[	Cu	63	20.640	ug/L	0.794	3	417	198861	2
[	Cu	65	20.042	ug/L	0.475	2	53	84614	1
[	Zn	66	18.661	ug/L	0.328	1	309	49160	1
[	Zn	67	22.033	ug/L	0.383	1	51	9505	0
[	Zn	68	17.662	ug/L	0.170	0	727	33188	1
[	As	75	18.628	ug/L	0.294	1	1616	44035	0
[	As-1	75	19.209	ug/L	0.315	1	9903	52626	0
[	Se	82	-0.292	ug/L	0.024	8	-46	-121	5
[	Se	78	0.933	ug/L	0.159	17	10084	10565	0
[	Mo	98	435.187	ug/L	10.118	2	25	2441764	1
	Y	89		ug/L			452178	465224	1
	Kr	83		ug/L			2458	2925	1
[>	In	115		ug/L			1233632	1241672	0
[	Ag	107	20.503	ug/L	0.389	1	39	274730	1
[	Cd	111	19.070	ug/L	0.144	0	33	113325	0
[	Cd	114	18.892	ug/L	0.061	0	38	290362	0
[	Sb	121	0.066	ug/L	0.002	3	94	1365	3
[	Sb	123	0.068	ug/L	0.003	4	60	1052	4
[	Ba	135	0.009	ug/L	0.004	41	218	265	6
[	Ba	137	0.004	ug/L	0.004	94	388	431	8
[>	Tb	159		ug/L			1368167	1418857	0
[	Tl	205	0.003	ug/L	0.000	8	31	156	7
[	Pb	208	0.038	ug/L	0.000	0	215	2422	1
[	Bi	209		ug/L			3022716	2836612	0
[	Th	232	0.104	ug/L	0.023	22	209	5761	20
[	U	238	0.002	ug/L	0.000	13	12	99	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 12:58:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1607191	0
	Be	9	0.001	ug/L	0.001	96	10	13	22
	C	13		ug/L			107220	117869	1
	Cl	37		ug/L			5888067	5722222	0
>	Sc	45		ug/L			1420932	1387019	1
	V	51	0.025	ug/L	0.004	16	8382	8832	0
	V-1	51	0.046	ug/L	0.009	19	237	1454	15
	Cr	52	0.257	ug/L	0.020	7	24727	29691	0
	Cr	53	0.336	ug/L	0.020	5	189	995	3
	Mn	55	0.014	ug/L	0.002	12	577	994	4
	Co	59	0.000	ug/L	0.001	1039	72	71	15
>	Ge	72		ug/L			673872	668334	0
	Ni	60	0.019	ug/L	0.003	13	128	214	5
	Ni	62	0.287	ug/L	0.072	25	326	503	8
	Cu	63	0.057	ug/L	0.005	8	417	965	4
	Cu	65	0.042	ug/L	0.004	9	53	231	6
	Zn	66	0.749	ug/L	0.009	1	309	2274	0
	Zn	67	0.704	ug/L	0.016	2	51	354	1
	Zn	68	0.726	ug/L	0.024	3	727	2061	2
	As	75	0.067	ug/L	0.050	74	1616	1756	7
	As-1	75	0.020	ug/L	0.051	257	9903	9865	0
	Se	82	0.013	ug/L	0.140	1067	-46	-42	84
	Se	78	0.041	ug/L	0.189	459	10084	10027	0
	Mo	98	0.060	ug/L	0.009	15	25	361	13
	Y	89		ug/L			452178	452430	1
	Kr	83		ug/L			2458	2598	2
>	In	115		ug/L			1233632	1254121	1
	Ag	107	-0.001	ug/L	0.000	25	39	29	10
	Cd	111	-0.001	ug/L	0.002	239	133	129	13
	Cd	114	0.001	ug/L	0.000	21	38	53	7
	Sb	121	0.004	ug/L	0.001	27	94	178	14
	Sb	123	0.004	ug/L	0.001	36	60	117	18
	Ba	135	-0.021	ug/L	0.001	4	218	109	2
	Ba	137	-0.024	ug/L	0.001	3	338	178	3
>	Tb	159		ug/L			1368167	1377157	0
	Tl	205	0.002	ug/L	0.000	24	31	112	18
	Pb	208	0.011	ug/L	0.000	2	215	844	1
	Bi	209		ug/L			3022716	3041626	0
	Th	232	0.000	ug/L	0.000	63	209	230	4
	U	238	0.000	ug/L	0.000	79	12	18	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:04:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1600294	2
	Be	9	0.001	ug/L	0.001	104	10	16	38
	C	13		ug/L			107220	118396	1
	Cl	37		ug/L			5888067	5795080	3
>	Sc	45		ug/L			1420932	1422925	1
	V	51	0.012	ug/L	0.009	71	8382	8722	1
	V-1	51	0.022	ug/L	0.003	11	237	837	9
	Cr	52	0.221	ug/L	0.028	12	24727	29667	0
	Cr	53	0.259	ug/L	0.019	7	189	831	6
	Mn	55	0.030	ug/L	0.001	2	577	1509	1
	Co	59	0.000	ug/L	0.001	210	72	80	21
>	Ge	72		ug/L			673872	668820	2
	Ni	60	0.017	ug/L	0.000	1	128	203	1
	Ni	62	0.045	ug/L	0.020	44	326	352	5
	Cu	63	0.034	ug/L	0.004	11	417	744	7
	Cu	65	0.034	ug/L	0.004	11	53	195	8
	Zn	66	0.892	ug/L	0.042	4	309	2651	2
	Zn	67	0.772	ug/L	0.036	4	51	384	3
	Zn	68	0.868	ug/L	0.024	2	727	2324	2
	As	75	0.047	ug/L	0.015	32	1516	1712	2
	As-1	75	0.060	ug/L	0.114	189	9903	9961	0
	Se	82	-0.027	ug/L	0.070	254	-46	-53	32
	Se	78	0.181	ug/L	0.390	215	10084	10122	0
	Mo	98	0.020	ug/L	0.008	39	25	140	34
	Y	89		ug/L			452178	459868	1
	Kr	83		ug/L			2458	2575	0
>	In	115		ug/L			1233632	1244065	0
	Ag	107	-0.001	ug/L	0.001	98	39	27	42
	Cd	111	-0.002	ug/L	0.002	122	133	123	11
	Cd	114	0.000	ug/L	0.000	31	38	45	5
	Sb	121	0.002	ug/L	0.001	45	94	137	13
	Sb	123	0.004	ug/L	0.001	27	60	124	13
	Ba	135	0.017	ug/L	0.003	17	218	313	4
	Ba	137	0.018	ug/L	0.005	28	388	556	7
>	Tb	159		ug/L			1368167	1378711	0
	Tl	205	0.001	ug/L	0.000	10	31	66	4
	Pb	208	0.008	ug/L	0.000	1	215	681	0
	Bi	209		ug/L			3022716	3041685	0
	Th	232	0.001	ug/L	0.000	16	209	269	3
	U	238	0.000	ug/L	0.000	247	12	14	37

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:12:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1674423	4
	Be	9	50.732	ug/L	1.617	3	10	268514	2
	C	13		ug/L			107220	115446	3
	Cl	37		ug/L			5888067	5871286	4
>	Sc	45		ug/L			1420932	1413046	3
	V	51	48.018	ug/L	1.381	2	8382	1304505	0
	V-1	51	48.140	ug/L	1.438	2	237	1294723	1
	Cr	52	48.260	ug/L	0.954	1	24727	1087617	2
	Cr	53	48.692	ug/L	0.505	1	189	119772	2
	Mn	55	48.664	ug/L	0.972	1	577	1486160	1
	Co	59	47.858	ug/L	2.088	4	72	1025501	2
>	Ge	72		ug/L			673872	645354	1
	Ni	60	49.313	ug/L	0.879	1	128	216261	3
	Ni	62	50.096	ug/L	0.723	1	326	30748	2
	Cu	63	50.556	ug/L	0.977	1	417	471461	1
	Cu	65	51.972	ug/L	0.151	0	53	212556	1
	Zn	66	50.532	ug/L	0.248	0	309	128500	2
	Zn	67	51.797	ug/L	0.224	0	51	21587	2
	Zn	68	50.703	ug/L	0.545	1	727	91004	1
	As	75	52.128	ug/L	0.420	0	1616	116625	1
	As-1	75	51.057	ug/L	0.596	1	9903	119824	2
	Se	82	57.472	ug/L	0.896	1	-46	14373	0
	Se	78	51.634	ug/L	0.311	0	10084	41764	1
	Mo	98	52.787	ug/L	1.726	3	25	286950	2
	Y	89		ug/L			452178	467977	0
	Kr	83		ug/L			2458	2619	2
>	In	115		ug/L			1233632	1246525	1
	Ag	107	54.171	ug/L	0.330	0	39	728701	1
	Cd	111	50.075	ug/L	0.388	0	133	311693	0
	Cd	114	49.520	ug/L	0.375	0	38	764025	1
	Sb	121	48.634	ug/L	0.735	1	94	934873	0
	Sb	123	48.668	ug/L	0.592	1	60	712255	0
	Ba	135	48.600	ug/L	0.865	1	218	259713	2
	Ba	137	49.014	ug/L	0.362	0	388	449740	0
>	Tb	159		ug/L			1368167	1411099	0
	Tl	205	50.570	ug/L	1.307	2	31	2258692	1
	Pb	208	49.156	ug/L	0.596	1	215	2839219	0
	Bi	209		ug/L			3022716	2984886	0
	Th	232	49.157	ug/L	1.621	3	209	2602707	2
	U	238	49.410	ug/L	1.460	2	12	2830481	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 13:16:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1656210	2
	Be	9	0.002	ug/L	0.002	81	10	21	39
	C	13		ug/L			107220	114751	1
	Cl	37		ug/L			5888067	5979626	5
>	Sc	45		ug/L			1420932	1396140	0
	V	51	0.011	ug/L	0.013	110	8382	8539	3
	V-1	51	0.008	ug/L	0.002	24	237	438	10
	Cr	52	0.033	ug/L	0.044	131	24727	25020	3
	Cr	53	0.021	ug/L	0.008	38	189	236	7
	Mn	55	0.002	ug/L	0.001	74	577	620	5
	Co	59	-0.000	ug/L	0.001	1350244	72	70	26
>	Ge	72		ug/L			673972	654249	1
	Ni	60	-0.016	ug/L	0.002	10	128	52	15
	Ni	62	-0.046	ug/L	0.044	95	326	288	10
	Cu	63	-0.004	ug/L	0.010	263	417	371	26
	Cu	65	0.000	ug/L	0.002	726	53	52	17
	Zn	66	0.012	ug/L	0.003	27	309	330	3
	Zn	67	0.001	ug/L	0.016	2846	51	50	12
	Zn	68	0.000	ug/L	0.017	6899	727	706	3
	As	75	0.083	ug/L	0.010	11	1616	1754	2
	As-1	75	0.087	ug/L	0.054	62	9903	9803	0
	Se	82	0.027	ug/L	0.022	81	-46	-38	16
	Se	78	0.276	ug/L	0.237	85	10084	9963	0
	Mo	98	0.061	ug/L	0.072	117	25	365	110
	Y	89		ug/L			452178	451766	1
	Kr	83		ug/L			2458	2578	1
>	In	115		ug/L			1233632	1237662	0
	Ag	107	0.005	ug/L	0.010	202	39	105	127
	Cd	111	0.001	ug/L	0.007	655	133	140	30
	Cd	114	0.005	ug/L	0.007	155	38	109	100
	Sb	121	0.116	ug/L	0.015	13	2394	2318	13
	Sb	123	0.114	ug/L	0.016	14	1760	1714	13
	Ba	135	0.002	ug/L	0.005	276	218	228	11
	Ba	137	-0.001	ug/L	0.002	142	388	379	4
>	Tb	159		ug/L			1368167	1345070	0
	Tl	205	0.005	ug/L	0.003	51	31	244	44
	Pb	208	0.002	ug/L	0.002	133	215	301	39
	Bi	209		ug/L			3022716	3013531	0
	Th	232	0.149	ug/L	0.053	35	209	7736	35
	U	238	0.005	ug/L	0.003	58	12	258	55

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:20:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1706987	2
[	Be	9	24.937	ug/L	0.731	2	10	134623	1
	C	13		ug/L			107220	129359	1
	Cl	37		ug/L			5888067	6021105	2
[>	Sc	45		ug/L			1420932	1461131	1
|	V	51	24.030	ug/L	0.199	0	8382	679690	0
|	V-1	51	24.065	ug/L	0.214	0	237	669746	1
|	Cr	52	24.584	ug/L	0.330	1	24727	585474	1
|	Cr	53	24.716	ug/L	0.182	0	189	62978	1
|	Mn	55	24.696	ug/L	0.073	0	577	780509	1
[	Co	59	24.986	ug/L	1.057	4	72	553939	3
[>	Ge	72		ug/L			673872	667054	0
|	Ni	60	26.022	ug/L	0.479	1	128	117982	1
|	Ni	62	25.617	ug/L	0.110	0	326	16408	0
|	Cu	63	26.724	ug/L	0.747	2	417	257800	2
|	Cu	65	26.847	ug/L	0.722	2	53	113506	2
|	Zn	66	79.351	ug/L	2.610	3	309	208365	2
|	Zn	67	73.654	ug/L	1.216	1	51	31705	1
|	Zn	68	77.888	ug/L	0.764	0	727	144122	0
|	As	75	28.003	ug/L	0.637	2	1616	65493	1
|	As-1	75	25.825	ug/L	0.458	1	9903	67487	1
|	Se	82	83.650	ug/L	1.613	1	-46	21647	1
|	Se	78	76.374	ug/L	1.193	1	10084	59070	1
[	Mo	98	26.285	ug/L	0.590	2	25	147737	1
	Y	89		ug/L			452178	474877	1
	Kr	83		ug/L			2458	2660	1
[>	In	115		ug/L			1233632	1270113	0
|	Ag	107	27.527	ug/L	0.416	1	39	377315	1
|	Cd	111	24.680	ug/L	0.168	0	133	156600	0
|	Cd	114	24.093	ug/L	0.313	1	38	378749	0
|	Sb	121	24.504	ug/L	0.308	1	94	480025	1
|	Sb	123	24.332	ug/L	0.253	1	60	362886	0
|	Ba	135	24.347	ug/L	0.394	1	218	132669	1
[	Ba	137	24.145	ug/L	0.504	2	388	225937	1
[>	Tb	159		ug/L			1368167	1391924	1
|	Tl	205	25.495	ug/L	0.433	1	31	1123316	0
|	Pb	208	25.895	ug/L	0.268	1	215	1475441	0
|	Bi	209		ug/L			3022716	3082639	1
|	Th	232	24.786	ug/L	0.386	1	209	1294679	0
[	U	238	25.141	ug/L	0.402	1	12	1420770	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:24:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1674164	1
	Be	9	24.648	ug/L	0.119	0	10	130569	1
	C	13		ug/L			107220	135920	3
	Cl	37		ug/L			5888067	6022271	1
>	Sc	45		ug/L			1420932	1435571	1
	V	51	23.702	ug/L	0.404	1	8382	658745	0
	V-1	51	23.712	ug/L	0.552	2	237	648260	1
	Cr	52	24.759	ug/L	0.320	1	24727	579090	0
	Cr	53	24.808	ug/L	0.716	2	189	62084	1
	Mn	55	24.488	ug/L	0.129	0	577	760343	1
	Co	59	24.852	ug/L	0.759	3	72	541295	1
>	Ge	72		ug/L			673872	678322	1
	Ni	60	24.869	ug/L	0.243	0	128	114661	1
	Ni	62	24.822	ug/L	0.195	0	326	16177	1
	Cu	63	25.549	ug/L	0.266	1	417	250655	1
	Cu	65	26.051	ug/L	0.514	1	53	111987	0
	Zn	66	76.540	ug/L	2.364	3	309	204341	1
	Zn	67	73.479	ug/L	1.770	2	51	32160	1
	Zn	68	74.646	ug/L	1.768	2	727	140454	0
	As	75	26.632	ug/L	0.208	0	1616	63432	2
	As-1	75	24.293	ug/L	0.064	0	9903	65148	1
	Se	82	80.989	ug/L	0.660	0	-46	21311	1
	Se	78	73.136	ug/L	1.542	2	10084	57941	0
	Mo	98	25.419	ug/L	0.281	1	25	145288	1
	Y	89		ug/L			452178	459473	2
	Kr	83		ug/L			2458	2661	2
>	In	115		ug/L			1233632	1261244	2
	Ag	107	27.472	ug/L	0.576	2	39	373810	0
	Cd	111	24.339	ug/L	0.471	1	133	153332	1
	Cd	114	24.231	ug/L	0.405	1	38	378191	0
	Sb	121	24.161	ug/L	0.570	2	94	469848	0
	Sb	123	24.146	ug/L	0.417	1	60	357529	1
	Ba	135	24.213	ug/L	0.510	2	218	130990	0
	Ba	137	24.362	ug/L	0.977	4	388	226257	1
>	Tb	159		ug/L			1368167	1386280	0
	Tl	205	25.342	ug/L	0.129	0	31	1112173	0
	Pb	208	25.474	ug/L	0.133	0	215	1445638	0
	Bi	209		ug/L			3022716	3078283	1
	Th	232	24.669	ug/L	0.271	1	209	1283527	1
	U	238	24.849	ug/L	0.189	0	12	1398709	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:28:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1602687	0
[	Be	9	0.089	ug/L	0.004	4	10	459	5
	C	13		ug/L			107220	142958	4
	Cl	37		ug/L			5888067	7727537	2
[>	Sc	45		ug/L			1420932	1556933	0
[	V	51	47.513	ug/L	0.319	0	8382	1423153	1
[	V-1	51	47.854	ug/L	0.397	0	237	1418885	1
[	Cr	52	9.355	ug/L	0.209	2	24727	254186	2
[	Cr	53	10.032	ug/L	0.086	0	189	27357	0
[	Mn	55	265.216	ug/L	6.278	2	577	8923885	1
[	Co	59	0.305	ug/L	0.007	2	72	7282	1
[>	Ge	72		ug/L			673872	610411	1
[	Ni	60	0.580	ug/L	0.009	1	128	2518	1
[	Ni	62	71.035	ug/L	5.352	7	326	41129	8
[	Cu	63	13.538	ug/L	0.231	1	417	119722	3
[	Cu	65	0.890	ug/L	0.043	4	53	3487	4
[	Zn	66	1.242	ug/L	0.067	5	309	3258	3
[	Zn	67	2.932	ug/L	0.114	3	51	1199	2
[	Zn	68	3.151	ug/L	0.037	1	727	5967	0
[	As	75	350.801	ug/L	4.459	1	1616	733898	0
[	As-1	75	358.736	ug/L	4.596	1	9903	742168	0
[	Se	82	0.497	ug/L	0.099	19	-46	75	30
[	Se	78	2.250	ug/L	0.408	18	10084	10457	2
[	Mo	98	0.544	ug/L	0.007	1	25	2823	0
	Y	89		ug/L			452178	499688	3
	Kr	83		ug/L			2458	2560	2
[>	In	115		ug/L			1233632	1130416	0
[	Ag	107	U 0.018	ug/L	0.000	0	39	258	1
[	Cd	111	-0.069	ug/L	0.042	60	133	-266	87
[	Cd	114	0.005	ug/L	0.001	10	38	109	7
[	Sb	121	0.069	ug/L	0.005	7	94	1284	6
[	Sb	123	0.069	ug/L	0.003	3	60	976	3
[	Ba	135	7.859	ug/L	0.038	0	218	38249	0
[	Ba	137	7.830	ug/L	0.047	0	388	65451	0
[>	Tb	159		ug/L			1368167	1343381	0
[	Tl	205	0.003	ug/L	0.001	21	31	166	16
[	Pb	208	0.039	ug/L	0.001	1	215	2364	1
[	Bi	209		ug/L			3022716	2526519	0
[	Th	232	0.563	ug/L	0.274	48	209	28554	47
[	U	238	0.109	ug/L	0.001	0	12	5941	0

US15:00679

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 JPOST REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:32:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1578930	1
[	Be	9	22.645	ug/L	0.514	2	10	113106	1
	C	13		ug/L			107220	142405	2
	Cl	37		ug/L			5888067	7432647	2
[>	Sc	45		ug/L			1420932	1535880	3
[	V	51	71.885	ug/L	1.727	2	8382	2118430	1
[	V-1	51	72.258	ug/L	1.715	2	237	2112401	0
[	Cr	52	31.640	ug/L	0.522	1	24727	784250	2
[	Cr	53	32.401	ug/L	0.456	1	189	86692	1
[	Mn	55	285.888	ug/L	8.235	2	577	9485878	1
[	Co	59	22.538	ug/L	0.476	2	72	525179	1
[>	Ge	72		ug/L			673872	614022	0
[	Ni	60	25.055	ug/L	0.465	1	128	104569	1
[	Ni	62	93.366	ug/L	11.577	12	326	54291	12
[	Cu	63	37.296	ug/L	0.524	1	417	331083	2
[	Cu	65	26.061	ug/L	0.302	1	53	101434	1
[	Zn	66	69.045	ug/L	0.855	1	309	166948	1
[	Zn	67	67.553	ug/L	0.879	1	51	26774	1
[	Zn	68	71.055	ug/L	0.997	1	727	121083	1
[	As	75	366.169	ug/L	1.817	0	1616	770594	0
[	As-1	75	373.286	ug/L	2.326	0	9903	776546	0
[	Se	82	74.363	ug/L	0.281	0	-46	17710	0
[	Se	78	73.854	ug/L	1.499	2	10084	52880	1
[	Mo	98	26.735	ug/L	0.385	1	25	138331	1
	Y	89		ug/L			452178	486990	2
	Kr	83		ug/L			2458	2487	0
[>	In	115		ug/L			1233632	1131617	1
[	Ag	107	24.320	ug/L	0.131	0	39	296992	0
[	Cd	111	23.222	ug/L	0.141	0	133	131286	0
[	Cd	114	23.044	ug/L	0.041	0	38	322772	1
[	Sb	121	24.135	ug/L	0.282	1	94	421217	0
[	Sb	123	23.926	ug/L	0.087	0	60	317923	0
[	Ba	135	34.021	ug/L	0.262	0	218	165090	0
[	Ba	137	33.935	ug/L	0.310	0	388	282793	1
[>	Tb	159		ug/L			1368167	1336203	0
[	Tl	205	24.373	ug/L	0.130	0	31	1030984	0
[	Pb	208	24.184	ug/L	0.217	0	215	1322856	0
[	Bi	209		ug/L			3022716	2540699	0
[	Th	232	26.075	ug/L	0.312	1	209	1307554	0
[	U	238	25.714	ug/L	0.193	0	12	1395042	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:38:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1655434	0
	Be	9	0.032	ug/L	0.032	101	10	176	95
	C	13		ug/L			107220	125692	0
	Cl	37		ug/L			5888067	6334958	3
>	Sc	45		ug/L			1420932	1547916	0
	V	51	1.070	ug/L	0.060	5	8382	40780	3
	V-1	51	1.156	ug/L	0.065	5	237	34309	4
	Cr	52	0.515	ug/L	0.020	3	24727	39363	1
	Cr	53	0.807	ug/L	0.019	2	189	2378	1
	Mn	55	325.498	ug/L	2.338	0	577	10890032	0
	Co	59	0.187	ug/L	0.018	9	72	4461	8
>	Ge	72		ug/L			673872	657538	1
	Ni	60	0.826	ug/L	0.010	1	128	3813	2
	Ni	62	12.994	ug/L	2.541	19	326	8340	16
	Cu	63	1.641	ug/L	0.221	13	417	15957	11
	Cu	65	0.338	ug/L	0.014	4	53	1459	3
	Zn	66	0.712	ug/L	0.025	3	309	2142	3
	Zn	67	0.804	ug/L	0.031	3	51	391	1
	Zn	68	2.207	ug/L	0.091	4	727	4713	1
	As	75	9.645	ug/L	0.114	1	1616	23268	1
	As-1	75	9.993	ug/L	0.204	2	9903	31660	0
	Se	82	0.071	ug/L	0.076	106	-46	-27	71
	Se	78	0.754	ug/L	0.381	50	10084	10315	0
	Mo	98	7.682	ug/L	0.048	0	25	42580	2
	Y	89		ug/L			452178	454046	2
	Kr	83		ug/L			2458	2555	2
>	In	115		ug/L			1233632	1239557	0
	Ag	107	0.002	ug/L	0.002	100	39	61	35
	Cd	111	0.008	ug/L	0.001	16	133	184	5
	Cd	114	0.009	ug/L	0.002	20	38	181	16
	Sb	121	0.072	ug/L	0.001	0	94	1468	0
	Sb	123	0.071	ug/L	0.001	1	60	1097	1
	Ba	135	2.843	ug/L	0.024	0	218	15315	1
	Ba	137	2.823	ug/L	0.031	1	388	26123	0
>	Tb	159		ug/L			1368167	1411167	0
	Tl	205	0.004	ug/L	0.001	19	31	222	17
	Pb	208	0.023	ug/L	0.001	4	215	1542	4
	Bi	209		ug/L			3022716	2910770	1
	Th	232	0.163	ug/L	0.060	36	209	8848	36
	U	238	0.024	ug/L	0.028	115	12	1388	115

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:42:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1622535	0
	Be	9	0.011	ug/L	0.002	15	10	66	12
	C	13		ug/L			107220	125684	2
	Cl	37		ug/L			5888067	8670975	2
>	Sc	45		ug/L			1420932	1517447	1
	V	51	1.525	ug/L	0.071	4	8382	53169	1
	V-1	51	1.699	ug/L	0.084	4	237	49308	3
	Cr	52	0.315	ug/L	0.027	8	24727	33858	0
	Cr	53	0.906	ug/L	0.068	7	189	2591	5
	Mn	55	318.404	ug/L	8.613	2	577	10440097	1
	Co	59	0.163	ug/L	0.003	1	72	3829	2
>	Ge	72		ug/L			673872	629952	0
	Ni	60	0.800	ug/L	0.006	0	128	3540	0
	Ni	62	13.765	ug/L	1.535	11	326	8468	10
	Cu	63	2.663	ug/L	0.155	5	417	24616	5
	Cu	65	0.506	ug/L	0.000	0	53	2069	0
	Zn	66	0.717	ug/L	0.017	2	309	2063	2
	Zn	67	1.157	ug/L	0.064	5	51	518	5
	Zn	68	2.151	ug/L	0.075	3	727	4420	3
	As	75	3.407	ug/L	0.044	1	1616	8852	0
	As-1	75	3.743	ug/L	0.059	1	9903	17153	0
	Se	82	0.116	ug/L	0.058	49	-46	-15	92
	Se	78	1.297	ug/L	0.108	8	10084	10214	0
	Mo	98	2.647	ug/L	0.022	0	25	14070	0
	Y	89		ug/L			452178	448820	0
	Kr	83		ug/L			2458	2504	0
>	In	115		ug/L			1232632	1210166	0
	Ag	107	0.002	ug/L	0.000	14	39	68	7
	Cd	111	0.003	ug/L	0.001	43	133	151	5
	Cd	114	0.004	ug/L	0.001	14	38	96	9
	Sb	121	0.273	ug/L	0.003	1	94	5181	1
	Sb	123	0.282	ug/L	0.009	3	60	4062	2
	Ba	135	8.482	ug/L	0.157	1	218	44176	1
	Ba	137	8.411	ug/L	0.138	1	388	75240	0
>	Tb	159		ug/L			1368167	1391006	0
	Tl	205	0.002	ug/L	0.000	18	31	132	13
	Pb	208	0.047	ug/L	0.001	1	215	2887	0
	Bi	209		ug/L			3022716	2828068	0
	Th	232	0.067	ug/L	0.011	16	209	3722	15
	U	238	0.098	ug/L	0.002	1	12	5557	1

5/11/12 okay

US15 : 00582

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:46:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1603289	2
	Be	9	0.014	ug/L	0.001	8	10	80	5
	C	13		ug/L			107220	125420	0
	Cl	37		ug/L			5888067	6027664	1
>	Sc	45		ug/L			1420932	1488444	0
	V	51	0.410	ug/L	0.012	2	8382	20449	1
	V-1	51	0.438	ug/L	0.012	2	237	12648	2
	Cr	52	0.494	ug/L	0.016	3	24727	37357	0
	Cr	53	0.591	ug/L	0.015	2	189	1726	1
	Mn	55	168.483	ug/L	3.304	1	577	5420696	2
	Co	59	0.262	ug/L	0.008	3	72	5986	2
>	Ge	72		ug/L			673872	636456	1
	Ni	60	1.828	ug/L	0.067	3	128	8016	2
	Ni	62	9.914	ug/L	1.163	11	326	6252	12
	Cu	63	1.689	ug/L	0.063	3	417	15915	4
	Cu	65	0.871	ug/L	0.049	5	53	3559	4
	Zn	66	0.726	ug/L	0.027	3	309	2107	2
	Zn	67	0.885	ug/L	0.063	7	51	411	5
	Zn	68	2.093	ug/L	0.065	3	727	4362	2
	As	75	1.395	ug/L	0.076	5	1616	4561	2
	As-1	75	1.541	ug/L	0.050	3	9903	12636	0
	Se	82	0.273	ug/L	0.059	21	-46	23	62
	Se	78	0.913	ug/L	0.027	2	10084	10084	1
	Mo	98	11.956	ug/L	0.413	3	25	64116	2
	Y	89		ug/L			452178	455405	0
	Kr	83		ug/L			2458	2501	1
>	In	115		ug/L			1233632	1239508	0
	Ag	107	0.000	ug/L	0.001	269	39	43	25
	Cd	111	0.007	ug/L	0.001	21	133	176	4
	Cd	114	0.010	ug/L	0.001	5	38	193	4
	Sb	121	0.244	ug/L	0.003	1	94	4752	1
	Sb	123	0.241	ug/L	0.004	1	60	3568	1
	Ba	135	4.436	ug/L	0.015	0	218	23768	0
	Ba	137	4.463	ug/L	0.027	0	388	41075	0
>	Tb	159		ug/L			1368167	1405525	0
	Tl	205	0.005	ug/L	0.000	10	31	235	8
	Pb	208	0.012	ug/L	0.001	5	215	923	4
	Bi	209		ug/L			3022716	2883103	0
	Th	232	0.036	ug/L	0.003	8	209	2100	7
	U	238	0.366	ug/L	0.004	1	12	20909	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:50:34
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1620236	1
	Be	9	0.012	ug/L	0.002	15	10	73	13
	C	13		ug/L			107220	126592	1
	Cl	37		ug/L			5888067	8523173	1
>	Sc	45		ug/L			1420932	1458038	0
	V	51	1.557	ug/L	0.007	0	8382	51981	0
	V-1	51	1.684	ug/L	0.011	0	237	47002	0
	Cr	52	0.351	ug/L	0.024	6	24727	33345	2
	Cr	53	0.782	ug/L	0.006	0	189	2175	1
	Mn	55	332.096	ug/L	9.668	2	577	10465484	2
	Co	59	0.168	ug/L	0.003	1	72	3792	1
>	Ge	72		ug/L			673872	623890	1
	Ni	60	0.698	ug/L	0.024	3	128	3075	2
	Ni	62	9.219	ug/L	1.321	14	326	5721	14
	Cu	63	2.913	ug/L	0.079	2	417	26628	2
	Cu	65	1.063	ug/L	0.011	1	53	4248	0
	Zn	66	2.249	ug/L	0.081	3	309	5799	2
	Zn	67	2.566	ug/L	0.187	7	51	1078	5
	Zn	68	3.645	ug/L	0.087	2	727	6950	2
	As	75	3.672	ug/L	0.136	3	1616	9329	1
	As-1	75	3.916	ug/L	0.163	4	9903	17346	0
	Se	82	0.171	ug/L	0.057	33	-46	-1	774
	Se	78	1.086	ug/L	0.254	23	10084	9988	0
	Mo	98	2.888	ug/L	0.113	3	25	15197	2
	Y	89		ug/L			452178	447552	0
	Kr	83		ug/L			2458	2533	2
>	In	115		ug/L			1233632	1201969	0
	Ag	107	0.000	ug/L	0.000	139	39	41	11
	Cd	111	-0.002	ug/L	0.000	25	133	119	1
	Cd	114	0.002	ug/L	0.000	24	38	68	9
	Sb	121	0.285	ug/L	0.004	1	94	5367	2
	Sb	123	0.283	ug/L	0.001	0	60	4058	1
	Ba	135	8.759	ug/L	0.108	1	218	45303	0
	Ba	137	8.798	ug/L	0.206	2	388	78150	1
>	Tb	159		ug/L			1368167	1411662	0
	Tl	205	0.003	ug/L	0.000	11	31	172	9
	Pb	208	0.065	ug/L	0.001	2	215	3989	2
	Bi	209		ug/L			3022716	2791988	0
	Th	232	0.030	ug/L	0.004	14	209	1798	11
	U	238	0.104	ug/L	0.001	0	12	5991	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:54:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1619244	0
	Be	9	0.014	ug/L	0.002	17	10	80	14
	C	13		ug/L			107220	126590	0
	Cl	37		ug/L			5888067	6005394	2
>	Sc	45		ug/L			1420932	1481907	3
	V	51	0.381	ug/L	0.024	6	8382	19534	2
	V-1	51	0.409	ug/L	0.016	3	237	11769	0
	Cr	52	0.472	ug/L	0.041	8	24727	36675	1
	Cr	53	0.569	ug/L	0.036	6	189	1661	3
	Mn	55	166.329	ug/L	1.476	0	577	5326846	2
	Co	59	0.260	ug/L	0.008	3	72	5913	1
>	Ge	72		ug/L			673872	638118	2
	Ni	60	1.068	ug/L	0.067	6	128	4749	6
	Ni	62	5.555	ug/L	0.840	15	326	3646	14
	Cu	63	1.071	ug/L	0.069	6	417	10262	5
	Cu	65	0.531	ug/L	0.020	3	53	2198	5
	Zn	66	0.610	ug/L	0.024	3	309	1820	1
	Zn	67	0.726	ug/L	0.026	3	51	347	3
	Zn	68	1.922	ug/L	0.073	3	727	4072	1
	As	75	1.287	ug/L	0.027	2	1616	4339	1
	As-1	75	1.335	ug/L	0.116	8	9903	12226	0
	Se	82	0.105	ug/L	0.077	73	-46	-18	107
	Se	78	0.520	ug/L	0.333	63	1084	9866	0
	Mo	98	11.207	ug/L	0.216	1	25	60262	1
	Y	89		ug/L			452178	452526	1
	Kr	83		ug/L			2458	2596	3
>	In	115		ug/L			1233632	1215211	0
	Ag	107	-0.001	ug/L	0.001	58	39	26	26
	Cd	111	0.002	ug/L	0.001	74	133	143	6
	Cd	114	0.006	ug/L	0.001	10	38	124	7
	Sb	121	0.238	ug/L	0.005	1	94	4556	2
	Sb	123	0.231	ug/L	0.007	3	60	3356	3
	Ba	135	4.334	ug/L	0.078	1	218	22774	1
	Ba	137	4.313	ug/L	0.030	0	388	38929	0
>	Tb	159		ug/L			1368167	1423842	1
	Tl	205	0.005	ug/L	0.000	2	31	250	2
	Pb	208	0.006	ug/L	0.000	3	215	564	2
	Bi	209		ug/L			3022716	2867083	0
	Th	232	0.017	ug/L	0.001	5	209	1137	5
	U	238	0.345	ug/L	0.013	3	12	19932	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 13:58:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1618293	1
	Be	9	0.014	ug/L	0.002	17	10	82	16
	C	13		ug/L			107220	125782	1
	Cl	37		ug/L			5888067	6055887	1
>	Sc	45		ug/L			1420932	1475260	1
	V	51	0.387	ug/L	0.013	3	8382	19620	1
	V-1	51	0.408	ug/L	0.010	2	237	11711	2
	Cr	52	0.493	ug/L	0.031	6	24727	37001	0
	Cr	53	0.568	ug/L	0.017	3	189	1651	1
	Mn	55	172.521	ug/L	2.777	1	577	5500536	0
	Co	59	0.263	ug/L	0.005	1	72	5956	1
>	Ge	72		ug/L			673872	632331	0
	Ni	60	1.073	ug/L	0.033	3	128	4728	3
	Ni	62	3.383	ug/L	0.103	3	326	2319	2
	Cu	63	0.907	ug/L	0.022	2	417	8674	1
	Cu	65	0.506	ug/L	0.010	1	53	2078	2
	Zn	66	0.911	ug/L	0.040	4	309	2554	3
	Zn	67	0.981	ug/L	0.026	2	51	448	2
	Zn	68	2.241	ug/L	0.113	5	727	4593	4
	As	75	1.330	ug/L	0.016	1	1616	4393	0
	As-1	75	1.415	ug/L	0.018	1	9903	12288	0
	Se	82	0.103	ug/L	0.050	49	-46	-18	66
	Se	78	0.680	ug/L	0.063	9	10084	9877	0
	Mo	98	11.739	ug/L	0.079	0	25	62564	1
	Y	89		ug/L			452178	451767	1
	Kr	83		ug/L			2458	2600	2
>	In	115		ug/L			1232[illegible]32	1237181	0
	Ag	107	-0.000	ug/L	0.000	75	39	33	12
	Cd	111	0.004	ug/L	0.002	40	133	160	7
	Cd	114	0.006	ug/L	0.001	14	38	126	10
	Sb	121	0.241	ug/L	0.002	0	94	4698	0
	Sb	123	0.236	ug/L	0.006	2	60	3492	1
	Ba	135	4.379	ug/L	0.059	1	218	23423	0
	Ba	137	4.371	ug/L	0.032	0	388	40166	0
>	Tb	159		ug/L			1368167	1423182	0
	Tl	205	0.004	ug/L	0.000	8	31	217	6
	Pb	208	0.008	ug/L	0.001	7	215	691	5
	Bi	209		ug/L			3022716	2876448	0
	Th	232	0.018	ug/L	0.002	9	209	1167	7
	U	238	0.353	ug/L	0.001	0	12	20393	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 14:04:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1633546	1580480	2
[	Be	9	50.457	ug/L	0.490	0	10	252286	2
	C	13		ug/L			107220	113240	0
	Cl	37		ug/L			5888067	6192850	1
[>	Sc	45		ug/L			1420932	1378609	1
[	V	51	47.507	ug/L	1.036	2	8382	1259770	0
[	V-1	51	47.955	ug/L	0.734	1	237	1258872	0
[	Cr	52	48.363	ug/L	1.001	2	24727	1063401	0
[	Cr	53	49.943	ug/L	0.272	0	189	119877	1
[	Mn	55	46.944	ug/L	1.224	2	577	1399095	1
[	Co	59	49.248	ug/L	0.461	0	72	1030466	2
[>	Ge	72		ug/L			673872	632532	1
[	Ni	60	49.361	ug/L	0.928	1	128	212108	2
[	Ni	62	51.514	ug/L	0.413	0	326	30980	2
[	Cu	63	51.359	ug/L	1.453	2	417	469338	1
[	Cu	65	50.874	ug/L	1.008	1	53	203887	0
[	Zn	66	49.853	ug/L	1.315	2	309	124211	0
[	Zn	67	51.353	ug/L	0.756	1	51	20975	1
[	Zn	68	50.393	ug/L	0.814	1	727	88668	2
[	As	75	50.925	ug/L	0.505	0	1616	111708	2
[	As-1	75	50.662	ug/L	0.402	0	9903	116599	1
[	Se	82	54.606	ug/L	0.419	0	-46	13385	1
[	Se	78	51.522	ug/L	0.969	1	10084	40861	0
[	Mo	98	50.415	ug/L	0.313	0	25	268675	1
	Y	89		ug/L			452178	437177	1
	Kr	83		ug/L			2458	2518	0
[>	In	115		ug/L			1233632	1235536	1
[	Ag	107	51.325	ug/L	1.130	2	39	684395	3
[	Cd	111	49.863	ug/L	0.787	1	133	307649	1
[	Cd	114	49.744	ug/L	0.329	0	38	760667	0
[	Sb	121	48.444	ug/L	0.690	1	94	923003	0
[	Sb	123	47.830	ug/L	0.937	1	60	693782	0
[	Ba	135	48.784	ug/L	0.510	1	218	258370	0
[	Ba	137	48.961	ug/L	0.394	0	388	445290	0
[>	Tb	159		ug/L			1368167	1403812	2
[	Tl	205	51.034	ug/L	1.671	3	31	2266873	1
[	Pb	208	49.620	ug/L	1.016	2	215	2850493	0
[	Bi	209		ug/L			3022716	3000970	1
[	Th	232	50.043	ug/L	2.332	4	209	2634490	2
[	U	238	50.093	ug/L	0.593	1	12	2854736	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 11, 2012 14:10:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1517146	0
	Be	9	-0.001	ug/L	0.000	66	10	6	36
	C	13		ug/L			107220	108304	2
	Cl	37		ug/L			5888067	5920832	0
>	Sc	45		ug/L			1420932	1340315	3
	V	51	0.015	ug/L	0.005	33	8382	8280	2
	V-1	51	0.001	ug/L	0.000	40	237	249	1
	Cr	52	0.049	ug/L	0.023	47	24727	24342	2
	Cr	53	0.002	ug/L	0.007	427	189	182	6
	Mn	55	0.002	ug/L	0.001	70	577	590	2
	Co	59	0.000	ug/L	0.000	323	72	69	8
>	Ge	72		ug/L			673872	625739	2
	Ni	60	-0.020	ug/L	0.001	5	128	34	11
	Ni	62	1.202	ug/L	0.084	7	326	1010	3
	Cu	63	0.091	ug/L	0.013	13	417	1210	7
	Cu	65	-0.001	ug/L	0.002	430	53	47	17
	Zn	66	0.010	ug/L	0.013	126	309	311	8
	Zn	67	-0.004	ug/L	0.023	604	51	46	18
	Zn	68	-0.001	ug/L	0.030	5494	727	674	6
	As	75	0.091	ug/L	0.036	39	1616	1696	5
	As-1	75	0.194	ug/L	0.090	46	9903	9600	1
	Se	82	0.094	ug/L	0.109	116	-46	-20	130
	Se	78	0.644	ug/L	0.335	52	10084	9751	1
	Mo	98	0.009	ug/L	0.000	3	25	72	2
	Y	89		ug/L			452178	426021	0
	Kr	83		ug/L			2458	2435	2
>	In	115		ug/L			1233632	1188154	0
	Ag	107	-0.000	ug/L	0.000	111	39	32	19
	Cd	111	-0.002	ug/L	0.002	79	133	115	9
	Cd	114	-0.000	ug/L	0.000	917	38	36	11
	Sb	121	0.055	ug/L	0.005	8	94	1094	7
	Sb	123	0.056	ug/L	0.004	6	60	840	5
	Ba	135	-0.000	ug/L	0.005	1289	218	208	11
	Ba	137	-0.003	ug/L	0.002	77	388	347	5
>	Tb	159		ug/L			1368167	1334169	0
	Tl	205	0.002	ug/L	0.000	13	31	125	10
	Pb	208	0.001	ug/L	0.000	47	215	245	6
	Bi	209		ug/L			3022716	2995248	0
	Th	232	0.075	ug/L	0.013	16	209	3954	15
	U	238	0.001	ug/L	0.000	10	12	89	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 11, 2012 14:18:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120511.cal

DEL

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1633546	1570495	2
	Be	9	U 0.001	ug/L	0.001	105	10	14	31
	C	13		ug/L			107220	129297	1
	Cl	37		ug/L			5888067	5886146	1
>	Sc	45		ug/L			1420932	1402964	0
	V	51	0.036	ug/L	0.013	35	8382	9247	3
	V-1	51	0.008	ug/L	0.000	6	237	434	3
	Cr	52	U 0.169	ug/L	0.033	19	24727	28122	2
	Cr	53	0.071	ug/L	0.011	15	189	359	7
	Mn	55	0.048	ug/L	0.002	3	577	2029	2
	Co	59	0.000	ug/L	0.000	250	72	75	14
>	Ge	72		ug/L			673872	634444	0
	Ni	60	U -0.012	ug/L	0.002	20	128	70	14
	Ni	62	0.917	ug/L	0.019	2	326	854	1
	Cu	63	U 0.302	ug/L	0.013	4	417	3158	4
	Cu	65	0.249	ug/L	0.007	2	53	1052	2
	Zn	66	U 0.664	ug/L	0.012	1	309	1947	1
	Zn	67	0.626	ug/L	0.042	6	51	304	5
	Zn	68	0.674	ug/L	0.038	5	727	1864	3
	As	75	U 0.097	ug/L	0.012	12	1616	1731	1
	As-1	75	0.210	ug/L	0.038	18	9903	9769	0
	Se	82	U 0.006	ug/L	0.045	812	-46	-42	26
	Se	78	0.716	ug/L	0.164	22	10084	9932	0
	Mo	98	0.006	ug/L	0.001	16	25	55	9
	Y	89		ug/L			452178	444269	0
	Kr	83		ug/L			2458	2567	1
>	In	115		ug/L			1233632	1226652	0
	Ag	107	U -0.000	ug/L	0.000	673	39	38	13
	Cd	111	U -0.002	ug/L	0.003	198	133	123	15
	Cd	114	0.001	ug/L	0.001	81	38	49	17
	Sb	121	U 0.014	ug/L	0.003	22	94	351	15
	Sb	123	0.014	ug/L	0.002	15	60	260	11
	Ba	135	-0.023	ug/L	0.002	7	218	93	10
	Ba	137	-0.027	ug/L	0.001	3	388	144	6
>	Tb	159		ug/L			1368167	1364268	1
	Tl	205	U 0.004	ug/L	0.002	43	31	221	37
	Pb	208	U 0.012	ug/L	0.001	4	215	866	1
	Bi	209		ug/L			3022716	3045639	0
	Th	232	0.055	ug/L	0.011	19	209	3034	17
	U	238	0.000	ug/L	0.000	37	12	36	26

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5-17-12 Analyst: MB Page: 1 of 2

All corrections made by analyst unless otherwise noted. 5-21-12 MB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STDC			2926-4
		1			2933-5
		2			2935-12
		3			-13
		4			-14
		5			-15
		RinseSample			r = 0.9996
		ICV		✓	2930-2
		ICB		✓	
		CCV1		✓	
		CCB1		✓	
		LowCheck			
		ICSA			
		ICSAB			
		LR200		✓	
		B1			
		B2			
		CCV2		✓	
		CCB2			
		V527C	REN	2	Agonly
		B2			
		Dry. Blank SW			
		CCV4		✓	
		CCB4			62Ni high

US15 : 00699

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.17.12

IN2	Analyst JD 5.18.12	Peer BWS 5.18	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	see log
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	—	—	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	—	—	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and Cert.:	—	—	

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/17/2012 9:29:38 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

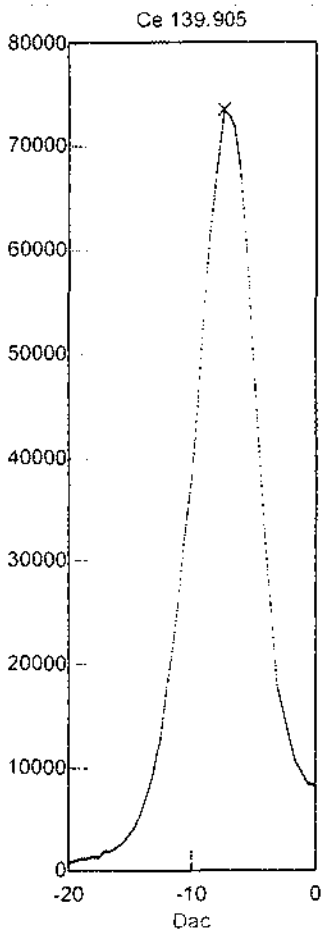
Initial Try

Obtained Intensity (Be 9.0122): 4631.42
Obtained Intensity (Mg 23.985): 35573.71
Obtained Intensity (In 114.904): 73710.59
Obtained Intensity (Pb 207.977): 32476.63
Obtained Intensity (U 238.05): 58885.05
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (CeO 155.9 / Ce 139.905): 0.012 (=869.25 / 74340.73)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.011 (=839.71 / 74340.73)

[Passed] Optimum value(s): N/A

End Time: 5/17/2012 9:32:13 AM

US15 : 00692


Ce 139.905
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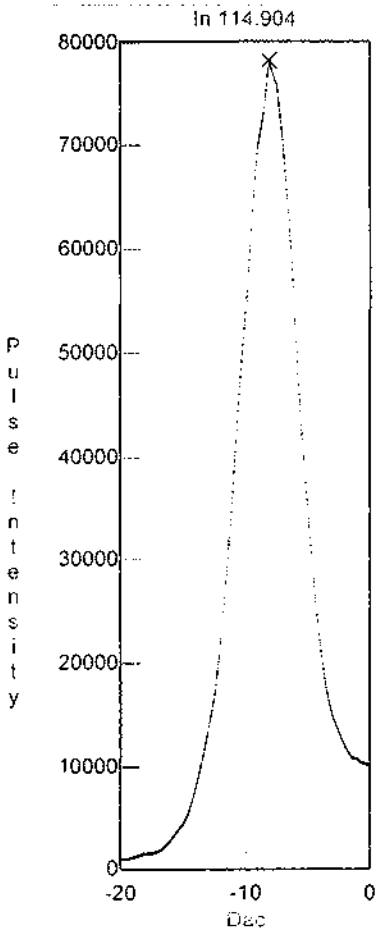
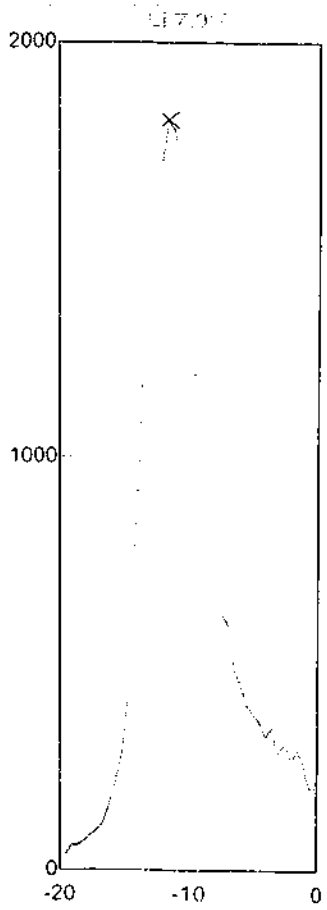
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
Pulse Intensity
-20
-10
0
Dac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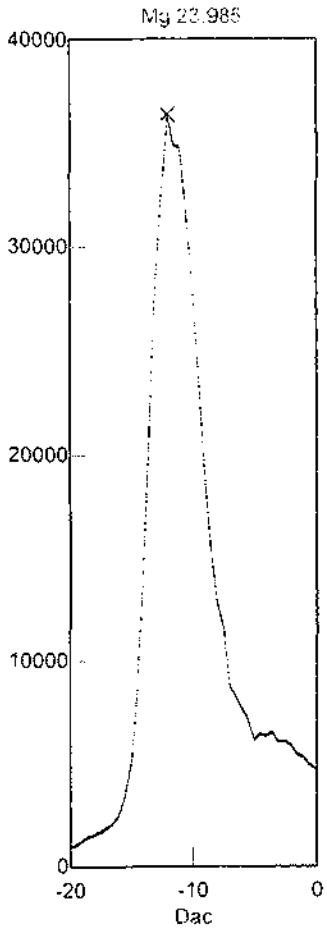
Mg 23.985
40000
30000
20000
10000
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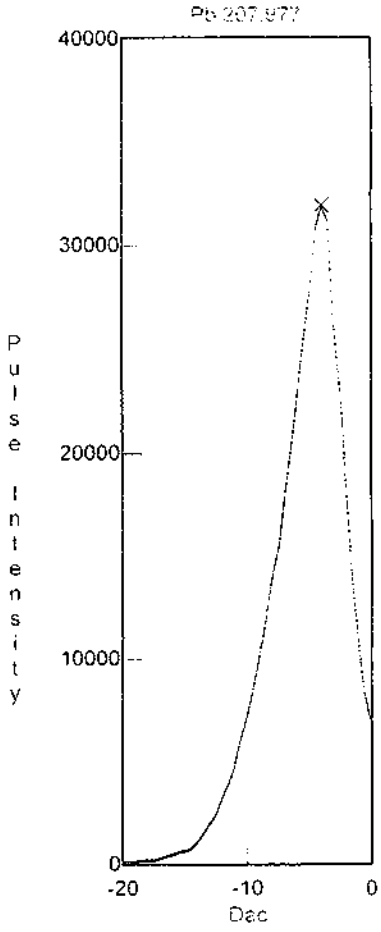
-10
0
Dac


Pb 207.977
40000
30000
20000
10000
0
Pulse Intensity
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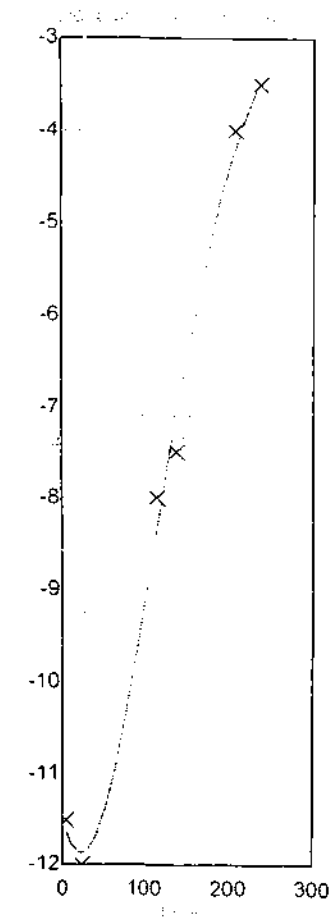
-10
0
Dac


-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/17/2012 9:24:52 AM
End Time: 5/17/2012 9:29:04 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.993; Intercept = -11.36

US15 : 00694

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/17/2012 9:22:19 AM
End Time: 5/17/2012 9:24:31 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.726)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.703)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.707)

US15 : 00695

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/17/2012 9:21:25 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.26 mm	-0.64 mm	73661.13

End Time: 5/17/2012 9:22:06 AM

US15 : 00696

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/17/2012 9:17:42 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 3378.55
        Obtained Intensity (Mg 23.985): 27050.77
        Obtained Intensity (In 114.904): 59552.17
        Obtained Intensity (Pb 207.977): 26008.93
        Obtained Intensity (U 238.05): 45723.10
        Obtained Intensity (Bkgd 220): 0.03
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.010 (=591.55 / 59869.83)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.009 (=533.28 / 59869.83)
[Passed] Optimum value(s): N/A

End Time: 5/17/2012 9:20:49 AM

US15 : 00697

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:03:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1076522	2
	Be	9		ug/L				12	46
	C	13		ug/L				59558	2
	Cl	37		ug/L				4587445	1
>	Sc	45		ug/L				952082	3
	V	51		ug/L				4902	2
	V-1	51		ug/L				71	5
	Cr	52		ug/L				14444	2
	Cr	53		ug/L				87	13
	Mn	55		ug/L				432	3
	Co	59		ug/L				47	13
>	Ge	72		ug/L				478848	1
	Ni	60		ug/L				79	1
	Ni	62		ug/L				131	15
	Cu	63		ug/L				237	8
	Cu	65		ug/L				88	35
	Zn	66		ug/L				584	8
	Zn	67		ug/L				90	14
	Zn	68		ug/L				887	5
	As	75		ug/L				1089	5
	As-1	75		ug/L				7286	1
	Se	82		ug/L				7	47
	Se	78		ug/L				7339	1
	Mo	98		ug/L				26	23
	Y	89		ug/L				336847	2
	Kr	83		ug/L				1447	3
>	In	115		ug/L				869512	1
	Ag	107		ug/L				14	26
	Cd	111		ug/L				78	8
	Cd	114		ug/L				23	29
	Sb	121		ug/L				404	14
	Sb	123		ug/L				325	16
	Ba	135		ug/L				140	7
	Ba	137		ug/L				229	8
>	Tb	159		ug/L				1016351	0
	Tl	205		ug/L				70	8
	Pb	208		ug/L				266	4
	Bi	209		ug/L				2408229	0
	Th	232		ug/L				1504	6
	U	238		ug/L				27	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:07:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1098158	1
	Be	9	0.200	ug/L	0.003	1	12	695	2
	C	13		ug/L			59558	62434	2
	Cl	37		ug/L			4587445	4694455	1
>	Sc	45		ug/L			952082	998733	2
	V	51	0.200	ug/L	0.003	1	4902	8697	2
	V-1	51	0.200	ug/L	0.011	5	71	3773	4
	Cr	52	0.500	ug/L	0.017	3	14444	22623	1
	Cr	53	0.500	ug/L	0.033	6	87	981	3
	Mn	55	0.500	ug/L	0.004	0	432	11017	1
	Co	59	0.200	ug/L	0.008	3	47	2951	1
>	Ge	72		ug/L			478848	491975	0
	Ni	60	0.500	ug/L	0.011	2	79	1687	1
	Ni	62	0.500	ug/L	0.035	6	131	350	4
	Cu	63	0.500	ug/L	0.013	2	237	3708	2
	Cu	65	0.500	ug/L	0.011	2	88	1655	1
	Zn	66	4.000	ug/L	0.069	1	584	7957	1
	Zn	67	4.000	ug/L	0.071	1	90	1148	1
	Zn	68	4.000	ug/L	0.057	1	887	5952	1
	As	75	0.200	ug/L	0.014	7	1089	1453	1
	As-1	75	0.200	ug/L	0.045	22	7286	7913	1
	Se	82	0.500	ug/L	0.137	27	7	102	25
	Se	78	0.500	ug/L	0.119	23	7339	7874	0
	Mo	98	0.200	ug/L	0.008	4	26	808	4
	Y	89		ug/L			336847	356636	2
	Kr	83		ug/L			1447	1487	6
>	In	115		ug/L			869512	884615	1
	Ag	107	0.200	ug/L	0.007	3	14	1568	2
	Cd	111	0.100	ug/L	0.012	12	78	514	9
	Cd	114	0.100	ug/L	0.005	4	23	1144	4
	Sb	121	0.200	ug/L	0.009	4	404	2921	3
	Sb	123	0.200	ug/L	0.008	3	325	2169	2
	Ba	135	0.500	ug/L	0.011	2	140	2357	2
	Ba	137	0.500	ug/L	0.014	2	229	3917	1
>	Tb	159		ug/L			1016351	1025268	1
	Tl	205	0.200	ug/L	0.001	0	70	6756	1
	Pb	208	0.100	ug/L	0.004	3	266	4967	1
	Bi	209		ug/L			2408229	2453570	0
	Th	232	0.200	ug/L	0.002	1	7804	8118	2
	U	238	0.200	ug/L	0.002	0	27	8646	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:11:54
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1092958	2
	Be	9	10.000	ug/L	0.333	3	12	30996	0
	C	13		ug/L			59558	63751	2
	Cl	37		ug/L			4587445	4780197	1
>	Sc	45		ug/L			952082	1009394	2
	V	51	10.000	ug/L	0.093	0	4902	180117	3
	V-1	51	10.000	ug/L	0.073	0	71	175452	2
	Cr	52	9.999	ug/L	0.169	1	14444	160093	1
	Cr	53	9.998	ug/L	0.333	3	87	16598	2
	Mn	55	9.998	ug/L	0.200	1	432	197463	0
	Co	59	10.000	ug/L	0.172	1	47	136508	0
>	Ge	72		ug/L			478848	493928	1
	Ni	60	9.998	ug/L	0.176	1	79	30413	1
	Ni	62	9.999	ug/L	0.047	0	131	4269	0
	Cu	63	9.998	ug/L	0.146	1	237	65047	0
	Cu	65	9.997	ug/L	0.179	1	88	28297	1
	Zn	66	9.971	ug/L	0.154	1	584	18689	0
	Zn	67	10.196	ug/L	0.099	0	90	3172	1
	Zn	68	10.033	ug/L	0.156	1	887	13871	1
	As	75	10.000	ug/L	0.156	1	1089	16828	1
	As-1	75	9.998	ug/L	0.141	1	7286	22869	0
	Se	82	9.999	ug/L	0.237	2	7	1838	2
	Se	78	9.986	ug/L	0.324	3	7339	11889	0
	Mo	98	10.000	ug/L	0.246	2	26	39644	2
	Y	89		ug/L			33217	355901	1
	Kr	83		ug/L			1447	1516	5
>	In	115		ug/L			869512	883279	2
	Ag	107	10.000	ug/L	0.421	4	14	72456	2
	Cd	111	10.000	ug/L	0.158	1	78	40298	0
	Cd	114	10.000	ug/L	0.238	2	23	102136	1
	Sb	121	10.000	ug/L	0.189	1	404	129229	0
	Sb	123	10.000	ug/L	0.254	2	325	97396	0
	Ba	135	9.995	ug/L	0.162	1	140	36593	1
	Ba	137	9.996	ug/L	0.288	2	229	62728	0
>	Tb	159		ug/L			1016351	1035360	2
	Tl	205	10.000	ug/L	0.194	1	70	316677	0
	Pb	208	10.000	ug/L	0.249	2	266	413734	0
	Bi	209		ug/L			2408229	2478756	0
	Th	232	10.000	ug/L	0.501	5	1504	379444	2
	U	238	10.000	ug/L	0.222	2	27	404552	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:16:16
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1054743	1
	Be	9	20.091	ug/L	0.356	1	12	61232	0
	C	13		ug/L			59558	62886	1
	Cl	37		ug/L			4587445	4771950	1
>	Sc	45		ug/L			952082	989488	1
	V	51	20.044	ug/L	0.387	1	4902	351791	1
	V-1	51	20.019	ug/L	0.466	2	71	345433	2
	Cr	52	19.974	ug/L	0.619	3	14444	297068	3
	Cr	53	19.882	ug/L	0.323	1	87	31535	1
	Mn	55	20.014	ug/L	0.405	2	432	388173	0
	Co	59	19.998	ug/L	0.609	3	47	267444	1
>	Ge	72		ug/L			478848	490568	1
	Ni	60	19.870	ug/L	0.501	2	79	58439	3
	Ni	62	19.920	ug/L	0.255	1	131	8183	0
	Cu	63	19.872	ug/L	0.358	1	237	124970	0
	Cu	65	19.987	ug/L	0.612	3	88	55936	1
	Zn	66	19.942	ug/L	0.645	3	584	36162	1
	Zn	67	19.908	ug/L	0.391	1	90	5969	1
	Zn	68	19.871	ug/L	0.960	4	887	25826	2
	As	75	19.881	ug/L	0.205	1	1089	31401	1
	As-1	75	19.868	ug/L	0.264	1	7286	36983	1
	Se	82	19.931	ug/L	0.361	1	7	3582	0
	Se	78	19.869	ug/L	0.741	3	7339	15834	0
	Mo	98	19.842	ug/L	0.506	2	26	75685	1
	Y	89		ug/L			336847	354985	0
	Kr	83		ug/L			1447	1482	4
>	In	115		ug/L			869512	866468	1
	Ag	107	19.929	ug/L	0.624	3	14	139694	1
	Cd	111	19.983	ug/L	0.381	1	78	78664	0
	Cd	114	19.885	ug/L	0.127	0	23	191772	1
	Sb	121	19.985	ug/L	0.169	0	404	252264	1
	Sb	123	19.973	ug/L	0.474	2	325	189506	0
	Ba	135	19.945	ug/L	0.341	1	140	70728	0
	Ba	137	19.941	ug/L	0.164	0	229	121164	1
>	Tb	159		ug/L			1016351	1029567	1
	Tl	205	19.845	ug/L	0.292	1	70	606225	1
	Pb	208	19.919	ug/L	0.233	1	266	806362	0
	Bi	209		ug/L			2408229	2438398	0
	Th	232	19.984	ug/L	0.411	2	1504	750500	0
	U	238	19.906	ug/L	0.335	1	27	786220	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:20:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1073354	1
	Be	9	50.176	ug/L	1.070	2	12	158393	2
	C	13		ug/L			59558	61897	2
	Cl	37		ug/L			4587445	4865815	0
>	Sc	45		ug/L			952082	988606	1
	V	51	50.324	ug/L	1.470	2	4902	903788	2
	V-1	51	50.362	ug/L	1.613	3	71	900700	2
	Cr	52	50.340	ug/L	1.200	2	14444	750259	2
	Cr	53	50.472	ug/L	0.531	1	87	83791	0
	Mn	55	50.189	ug/L	0.303	0	432	990814	1
	Co	59	50.480	ug/L	1.147	2	47	708604	1
>	Ge	72		ug/L			478848	486075	0
	Ni	60	50.037	ug/L	0.436	0	79	146228	0
	Ni	62	50.262	ug/L	0.429	0	131	20800	0
	Cu	63	50.337	ug/L	1.011	2	237	324285	2
	Cu	65	50.246	ug/L	0.808	1	88	142755	1
	Zn	66	49.947	ug/L	0.683	1	584	88435	1
	Zn	67	49.953	ug/L	1.305	2	90	14639	2
	Zn	68	49.817	ug/L	0.163	0	887	61757	0
	As	75	50.431	ug/L	0.787	1	1089	80652	1
	As-1	75	50.399	ug/L	0.461	0	7286	84680	0
	Se	82	50.375	ug/L	0.904	1	7	9311	1
	Se	78	50.255	ug/L	0.468	0	7339	28846	0
	Mo	98	50.447	ug/L	0.767	1	26	199604	1
	Y	89		ug/L			336847	352054	0
	Kr	83		ug/L			1447	1497	4
>	In	115		ug/L			869512	874206	1
	Ag	107	50.138	ug/L	0.813	1	14	359622	1
	Cd	111	50.247	ug/L	0.822	1	78	204496	0
	Cd	114	50.348	ug/L	0.701	1	23	515414	0
	Sb	121	50.311	ug/L	0.623	1	404	660584	0
	Sb	123	50.306	ug/L	0.538	1	325	496314	0
	Ba	135	50.339	ug/L	0.036	0	140	186217	1
	Ba	137	50.302	ug/L	0.782	1	229	317596	0
>	Tb	159		ug/L			1016351	1028719	0
	Tl	205	50.433	ug/L	0.219	0	70	1609036	0
	Pb	208	50.344	ug/L	0.399	0	266	2108737	0
	Bi	209		ug/L			2408229	2373429	0
	Th	232	51.005	ug/L	0.626	1	1504	2125455	0
	U	238	50.877	ug/L	0.111	0	27	2201037	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:27:01
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1064979	2
	Be	9	99.896	ug/L	2.923	2	12	311699	0
	C	13		ug/L			59558	61539	2
	Cl	37		ug/L			4587445	4716545	0
>	Sc	45		ug/L			952082	968439	1
	V	51	100.530	ug/L	2.276	2	4902	1795242	0
	V-1	51	100.528	ug/L	2.082	2	71	1792692	0
	Cr	52	99.951	ug/L	1.390	1	14444	1442404	0
	Cr	53	99.948	ug/L	0.679	0	87	162176	0
	Mn	55	100.217	ug/L	1.913	1	432	1951572	1
	Co	59	99.761	ug/L	1.652	1	47	1360905	0
>	Ge	72		ug/L			478848	468731	2
	Ni	60	100.215	ug/L	3.642	3	79	284326	3
	Ni	62	100.581	ug/L	2.567	2	131	40783	0
	Cu	63	99.902	ug/L	3.375	3	237	618077	1
	Cu	65	100.295	ug/L	3.884	3	88	277272	1
	Zn	66	99.507	ug/L	2.178	2	584	166568	1
	Zn	67	99.487	ug/L	0.457	0	90	27561	2
	Zn	68	100.207	ug/L	2.423	2	397	119689	1
	As	75	100.456	ug/L	2.744	2	1089	156172	0
	As-1	75	100.502	ug/L	3.057	3	7286	158212	0
	Se	82	99.981	ug/L	1.273	1	7	17800	0
	Se	78	100.125	ug/L	2.343	2	7339	48450	0
	Mo	98	100.576	ug/L	1.076	1	26	391184	1
	Y	89		ug/L			336847	346924	0
	Kr	83		ug/L			1447	1528	1
>	In	115		ug/L			869512	852128	0
	Ag	107	99.708	ug/L	2.170	2	14	690347	1
	Cd	111	99.585	ug/L	0.140	0	78	389644	1
	Cd	114	99.520	ug/L	0.804	0	23	977454	0
	Sb	121	100.044	ug/L	1.245	1	404	1281928	0
	Sb	123	100.322	ug/L	1.852	1	325	974881	0
	Ba	135	100.636	ug/L	0.213	0	140	370596	0
	Ba	137	100.596	ug/L	0.841	0	229	631519	1
>	Tb	159		ug/L			1016351	1021838	1
	Tl	205	100.796	ug/L	0.742	0	70	3281195	0
	Pb	208	100.310	ug/L	1.315	1	266	4216533	0
	Bi	209		ug/L			2408229	2315747	0
	Th	232	100.235	ug/L	1.533	1	1504	4180128	1
	U	238	100.068	ug/L	0.949	0	27	4310123	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:33:55
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1050628	1
	Be	9	0.003	ug/L	0.002	52	12	22	24
	C	13		ug/L			59558	60505	0
	Cl	37		ug/L			4587445	4667863	0
>	Sc	45		ug/L			952382	937810	0
	V	51	0.014	ug/L	0.007	50	4902	5069	2
	V-1	51	0.002	ug/L	0.001	49	71	104	16
	Cr	52	0.050	ug/L	0.020	39	14444	14923	1
	Cr	53	0.008	ug/L	0.011	133	87	98	16
	Mn	55	0.004	ug/L	0.002	46	432	497	6
	Co	59	0.003	ug/L	0.001	43	47	87	20
>	Ge	72		ug/L			478848	473062	1
	Ni	60	0.010	ug/L	0.003	36	79	105	10
	Ni	62	0.043	ug/L	0.037	87	131	147	11
	Cu	63	0.012	ug/L	0.014	110	237	312	28
	Cu	65	0.007	ug/L	0.006	87	88	106	16
	Zn	66	0.007	ug/L	0.013	170	584	590	3
	Zn	67	-0.003	ug/L	0.031	905	90	88	10
	Zn	68	0.048	ug/L	0.013	26	887	934	2
	As	75	0.012	ug/L	0.023	198	1089	1094	2
	As-1	75	0.216	ug/L	0.046	21	7286	7525	0
	Se	82	-0.009	ug/L	0.083	875	7	5	264
	Se	78	0.818	ug/L	0.178	21	7339	7590	0
	Mo	98	0.012	ug/L	0.001	12	26	71	8
	Y	89		ug/L			336847	347713	1
	Kr	83		ug/L			1447	1476	1
>	In	115		ug/L			869512	860921	0
	Ag	107	0.003	ug/L	0.003	97	14	37	60
	Cd	111	0.004	ug/L	0.002	62	78	92	9
	Cd	114	0.003	ug/L	0.003	109	23	49	58
	Sb	121	0.090	ug/L	0.018	19	404	1558	14
	Sb	123	0.086	ug/L	0.013	14	325	1167	10
	Ba	135	0.003	ug/L	0.005	161	140	149	11
	Ba	137	0.005	ug/L	0.005	97	229	261	12
>	Tb	159		ug/L			1016351	1003479	1
	Tl	205	0.006	ug/L	0.005	82	70	256	59
	Pb	208	0.004	ug/L	0.003	87	266	421	32
	Bi	209		ug/L			2408229	2377126	1
	Th	232	0.072	ug/L	0.005	7	1504	4421	5
	U	238	0.004	ug/L	0.002	65	27	180	55

Sample Information

Sample Date/Time: Thursday, May 17, 2012 12:27:01
Method File: C:\NexION\Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION\Data\MassCal\default.tun
Conditions File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712B.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9999**	0.018	0.20	10	20	50	100
V-1	51	**0.9999**	0.018	0.20	10	20	50	100
Cr	52	**1.0000**	0.015	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**1.0000**	0.020	0.50	10	20	50	100
Co	59	**0.9999**	0.014	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.006	0.50	10	20	50	100
Ni	62	**0.9999**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.013	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**1.0000**	0.003	4.00	10	20	50	100
As	75	**0.9999**	0.003	0.20	10	20	50	100
As-1	75	**0.9999**	0.003	0.20	10	20	50	100
Se	82	**0.9996**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.008	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**0.9999**	0.012	0.10	10	20	50	100
Sb	121	**1.0000**	0.015	0.20	10	20	50	100
Sb	123	**1.0000**	0.011	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.032	0.20	10	20	50	100
Pb	208	**1.0000**	0.041	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.041	0.20	10	20	50	100
U	238	**0.9998**	0.042	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:40:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1049782	2
	Be	9	51.678	ug/L	0.374	0	12	159003	2
	C	13		ug/L			59558	62532	1
	Cl	37		ug/L			4587445	4729964	1
>	Sc	45		ug/L			952082	979561	1
	V	51	50.858	ug/L	0.344	0	4902	921369	2
	V-1	51	50.701	ug/L	0.173	0	71	914710	1
	Cr	52	51.802	ug/L	1.240	2	14444	763407	3
	Cr	53	51.243	ug/L	0.821	1	87	84135	0
	Mn	55	51.720	ug/L	0.765	1	432	1018860	0
	Co	59	51.249	ug/L	0.512	0	47	707249	1
>	Ge	72		ug/L			478848	485017	0
	Ni	60	51.317	ug/L	0.663	1	79	150722	1
	Ni	62	50.344	ug/L	0.662	1	131	21195	1
	Cu	63	50.870	ug/L	1.981	3	237	325891	3
	Cu	65	51.022	ug/L	0.092	0	88	146077	0
	Zn	66	50.044	ug/L	1.282	2	584	86990	2
	Zn	67	51.275	ug/L	1.305	2	90	14742	2
	Zn	68	49.107	ug/L	0.848	1	887	61165	1
	As	75	49.713	ug/L	0.207	0	1089	80558	0
	As-1	75	49.157	ug/L	0.496	1	7286	83874	0
	Se	82	81.078	ug/L	0.627	0	7	14256	1
	Se	78	78.075	ug/L	0.822	1	7339	40720	0
	Mo	98	50.746	ug/L	0.766	1	26	204268	1
	Y	89		ug/L			336847	345852	1
	Kr	83		ug/L			1447	1527	3
>	In	115		ug/L			869512	858373	0
	Ag	107	51.823	ug/L	1.906	3	14	361402	2
	Cd	111	51.051	ug/L	0.311	0	78	201242	0
	Cd	114	51.364	ug/L	0.731	1	23	508170	0
	Sb	121	51.099	ug/L	0.797	1	404	659750	0
	Sb	123	50.232	ug/L	0.715	1	325	491882	0
	Ba	135	50.316	ug/L	0.879	1	140	186699	0
	Ba	137	50.922	ug/L	0.411	0	229	322109	0
>	Tb	159		ug/L			1016351	1021666	0
	Tl	205	49.366	ug/L	0.550	1	70	1606792	0
	Pb	208	50.022	ug/L	0.183	0	266	2102637	0
	Bi	209		ug/L			2408229	2346646	0
	Th	232	52.001	ug/L	0.408	0	1504	2169115	0
	U	238	51.876	ug/L	0.689	1	27	2233962	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:47:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1036645	3
	Be	9	0.002	ug/L	0.001	36	12	19	15
	C	13		ug/L			59558	59083	2
	Cl	37		ug/L			4587445	4594923	1
>	Sc	45		ug/L			952082	961126	1
	V	51	-0.000	ug/L	0.005	9500	4902	4948	2
	V-1	51	0.000	ug/L	0.000	93	71	75	4
	Cr	52	0.003	ug/L	0.014	520	14444	14620	2
	Cr	53	0.003	ug/L	0.004	119	87	93	6
	Mn	55	-0.001	ug/L	0.002	245	432	423	9
	Co	59	-0.000	ug/L	0.000	2930	47	47	10
>	Ge	72		ug/L			478848	477327	0
	Ni	60	-0.001	ug/L	0.004	372	79	75	15
	Ni	62	-0.026	ug/L	0.028	104	131	120	8
	Cu	63	-0.002	ug/L	0.001	43	237	226	2
	Cu	65	-0.006	ug/L	0.004	62	88	72	13
	Zn	66	-0.061	ug/L	0.007	12	584	480	2
	Zn	67	-0.058	ug/L	0.013	21	90	73	5
	Zn	68	-0.024	ug/L	0.028	119	887	856	3
	As	75	0.024	ug/L	0.055	229	1089	1123	7
	As-1	75	0.127	ug/L	0.115	90	7286	7456	1
	Se	82	-0.011	ug/L	0.126	1133	7	5	393
	Se	78	0.446	ug/L	0.377	84	7339	7501	1
	Mo	98	0.005	ug/L	0.001	14	26	46	6
	Y	89		ug/L			336847	348368	1
	Kr	83		ug/L			1447	1487	3
>	In	115		ug/L			869512	851770	0
	Ag	107	0.001	ug/L	0.001	73	14	19	18
	Cd	111	-0.001	ug/L	0.002	212	78	72	11
	Cd	114	0.000	ug/L	0.000	142	23	25	12
	Sb	121	0.003	ug/L	0.007	241	404	434	21
	Sb	123	0.001	ug/L	0.006	688	325	327	18
	Ba	135	-0.008	ug/L	0.002	29	140	109	7
	Ba	137	-0.005	ug/L	0.002	34	229	192	5
>	Tb	159		ug/L			1016351	980523	1
	Tl	205	0.001	ug/L	0.000	24	70	96	7
	Pb	208	0.000	ug/L	0.000	96	266	265	3
	Bi	209		ug/L			2408229	2389575	0
	Th	232	0.036	ug/L	0.007	18	1504	2879	9
	U	238	0.001	ug/L	0.000	8	27	60	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:51:18
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1043956	2
	Be	9	51.085	ug/L	1.311	2	12	156257	0
	C	13		ug/L			59558	59649	2
	Cl	37		ug/L			4587445	4769975	3
>	Sc	45		ug/L			952082	988285	0
	V	51	50.018	ug/L	0.613	1	4902	914256	1
	V-1	51	49.775	ug/L	0.630	1	71	905995	0
	Cr	52	50.644	ug/L	0.520	1	14444	753325	1
	Cr	53	49.785	ug/L	0.848	1	87	82484	1
	Mn	55	50.611	ug/L	0.629	1	432	1006038	0
	Co	59	49.949	ug/L	1.585	3	47	695423	2
>	Ge	72		ug/L			478848	479955	0
	Ni	60	50.764	ug/L	0.364	0	79	147544	0
	Ni	62	50.280	ug/L	0.507	1	131	20948	1
	Cu	63	50.445	ug/L	0.376	0	237	319840	1
	Cu	65	50.522	ug/L	0.382	0	88	143140	1
	Zn	66	51.369	ug/L	0.576	1	584	88353	1
	Zn	67	51.000	ug/L	0.670	1	90	14511	1
	Zn	68	50.445	ug/L	0.706	1	887	62157	1
	As	75	49.980	ug/L	0.289	0	1089	80140	0
	As-1	75	49.985	ug/L	0.210	0	7286	84276	0
	Se	82	53.211	ug/L	0.860	1	7	9261	1
	Se	78	50.843	ug/L	0.454	0	7339	28807	0
	Mo	98	50.543	ug/L	0.734	1	26	201333	1
	Y	89		ug/L			336847	353962	2
	Kr	83		ug/L			1447	1472	2
>	In	115		ug/L			869512	855143	1
	Ag	107	51.781	ug/L	0.791	1	14	359828	1
	Cd	111	50.510	ug/L	0.264	0	78	198371	1
	Cd	114	51.730	ug/L	0.941	1	23	509846	0
	Sb	121	51.211	ug/L	0.656	1	404	658718	0
	Sb	123	49.960	ug/L	0.445	0	325	487388	0
	Ba	135	49.841	ug/L	0.905	1	140	184240	1
	Ba	137	50.013	ug/L	0.582	1	229	315170	1
>	Tb	159		ug/L			1016351	1018213	0
	Tl	205	49.028	ug/L	0.495	1	70	1590470	1
	Pb	208	49.779	ug/L	0.118	0	266	2085373	0
	Bi	209		ug/L			2408229	2366066	0
	Th	232	51.235	ug/L	0.380	0	1504	2129978	0
	U	238	51.154	ug/L	0.209	0	27	2195446	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 12:57:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1012609	2
	Be	9	0.003	ug/L	0.003	98	12	20	39
	C	13		ug/L			59558	56807	1
	Cl	37		ug/L			4587445	4537858	0
>	Sc	45		ug/L			952082	939466	0
	V	51	-0.002	ug/L	0.010	631	4902	4808	3
	V-1	51	0.001	ug/L	0.000	83	71	79	8
	Cr	52	-0.001	ug/L	0.036	2640	14444	14232	3
	Cr	53	0.006	ug/L	0.001	13	87	96	1
	Mn	55	0.000	ug/L	0.001	1413	432	428	5
	Co	59	0.001	ug/L	0.001	75	47	63	19
>	Ge	72		ug/L			478848	466850	1
	Ni	60	-0.005	ug/L	0.001	25	79	62	4
	Ni	62	-0.009	ug/L	0.032	371	131	125	11
	Cu	63	-0.003	ug/L	0.003	106	237	213	10
	Cu	65	-0.005	ug/L	0.003	60	88	71	13
	Zn	66	-0.043	ug/L	0.014	32	584	499	4
	Zn	67	-0.008	ug/L	0.040	511	90	86	14
	Zn	68	0.012	ug/L	0.004	34	887	880	1
	As	75	0.029	ug/L	0.028	95	1089	1107	3
	As-1	75	0.246	ug/L	0.056	22	7286	7471	0
	Se	82	-0.009	ug/L	0.065	750	7	5	189
	Se	78	0.886	ug/L	0.206	23	7339	7517	0
	Mo	98	0.007	ug/L	0.003	47	26	52	22
	Y	89		ug/L			330747	343916	1
	Kr	83		ug/L			1447	1467	1
>	In	115		ug/L			869512	835158	1
	Ag	107	0.001	ug/L	0.002	180	14	20	58
	Cd	111	0.000	ug/L	0.004	5378	78	75	19
	Cd	114	0.001	ug/L	0.002	134	23	36	51
	Sb	121	0.036	ug/L	0.009	25	404	835	14
	Sb	123	0.034	ug/L	0.010	29	325	632	15
	Ba	135	-0.005	ug/L	0.004	78	140	117	9
	Ba	137	-0.003	ug/L	0.002	67	229	201	7
>	Tb	159		ug/L			1016351	974293	1
	Tl	205	0.002	ug/L	0.001	43	70	126	20
	Pb	208	0.000	ug/L	0.001	1011	266	258	11
	Bi	209		ug/L			2408229	2353658	0
	Th	232	0.058	ug/L	0.006	10	1504	3747	5
	U	238	0.001	ug/L	0.001	50	27	69	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:01:59
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1043837	0
	Be	9	0.221	ug/L	0.015	6	12	688	7
	C	13		ug/L			59558	61034	1
	Cl	37		ug/L			4587445	4545404	1
>	Sc	45		ug/L			952082	963550	0
	V	51	0.202	ug/L	0.008	4	4902	8543	1
	V-1	51	0.200	ug/L	0.002	0	71	3617	0
	Cr	52	0.527	ug/L	0.012	2	444	22101	0
	Cr	53	0.517	ug/L	0.027	5	87	922	4
	Mn	55	0.522	ug/L	0.009	1	432	10550	1
	Co	59	0.210	ug/L	0.004	1	47	2902	1
>	Ge	72		ug/L			478848	475041	1
	Ni	60	0.521	ug/L	0.016	3	79	1577	1
	Ni	62	0.487	ug/L	0.030	6	131	330	2
	Cu	63	0.542	ug/L	0.014	2	237	3632	3
	Cu	65	0.543	ug/L	0.016	2	88	1607	2
	Zn	66	4.504	ug/L	0.165	3	584	8196	2
	Zn	67	4.182	ug/L	0.161	3	90	1259	2
	Zn	68	4.351	ug/L	0.209	4	887	6110	4
	As	75	0.278	ug/L	0.069	24	1089	1517	8
	As-1	75	0.362	ug/L	0.034	9	7286	7780	0
	Se	82	0.592	ug/L	0.100	16	7	109	14
	Se	78	1.135	ug/L	0.166	14	7339	7754	0
	Mo	98	0.196	ug/L	0.002	0	26	800	0
	Y	89		ug/L			336847	349713	2
	Kr	83		ug/L			1447	1562	12
>	In	115		ug/L			812	848510	2
	Ag	107	0.214	ug/L	0.005	2	14	1492	0
	Cd	111	0.102	ug/L	0.005	5	78	473	6
	Cd	114	0.110	ug/L	0.010	8	23	1094	7
	Sb	121	0.196	ug/L	0.005	2	404	2891	1
	Sb	123	0.194	ug/L	0.005	2	325	2196	4
	Ba	135	0.483	ug/L	0.022	4	140	1904	2
	Ba	137	0.486	ug/L	0.021	4	229	3256	1
>	Tb	159		ug/L			1016351	988777	1
	Tl	205	0.202	ug/L	0.003	1	70	6442	1
	Pb	208	0.112	ug/L	0.001	1	266	4823	2
	Bi	209		ug/L			2408229	2394305	1
	Th	232	0.176	ug/L	0.001	0	1504	8575	0
	U	238	0.199	ug/L	0.003	1	27	8306	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:06:06
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1143391	0
	Be	9	0.004	ug/L	0.005	124	12	27	63
	C	13		ug/L			59558	147098	1
	Cl	37		ug/L			4587445	11552647	0
>	Sc	45		ug/L			952082	1050765	2
	V	51	0.121	ug/L	0.027	22	4902	7735	5
	V-1	51	0.865	ug/L	0.029	3	71	16817	5
	Cr	52	0.842	ug/L	0.070	8	14444	28966	1
	Cr	53	3.455	ug/L	0.040	1	87	6177	3
	Mn	55	0.108	ug/L	0.002	1	432	2762	4
	Co	59	0.018	ug/L	0.002	10	47	315	11
>	Ge	72		ug/L			479848	479943	4
	Ni	60	0.341	ug/L	0.009	2	79	1071	6
	Ni	62	3.993	ug/L	0.743	18	131	1793	21
	Cu	63	0.985	ug/L	0.037	3	237	6485	7
	Cu	65	0.332	ug/L	0.005	1	88	1027	3
	Zn	66	0.705	ug/L	0.037	5	584	1788	1
	Zn	67	5.165	ug/L	0.166	3	90	1550	3
	Zn	68	0.213	ug/L	0.054	25	887	1147	3
	As	75	0.131	ug/L	0.030	22	1089	1299	2
	As-1	75	0.406	ug/L	0.128	31	7286	7922	1
	Se	82	-0.217	ug/L	0.026	12	7	-30	16
	Se	78	1.661	ug/L	0.519	31	7339	8050	1
	Mo	98	425.256	ug/L	15.758	3	26	1691901	0
	Y	89		ug/L			336847	354389	2
	Kr	83		ug/L			1447	1929	1
>	In	115		ug/L			869512	894178	2
	Ag	107	0.024	ug/L	0.001	5	14	192	3
	Cd	111	0.177	ug/L	0.015	8	78	807	5
	Cd	114	0.225	ug/L	0.003	1	23	2338	1
	Sb	121	0.036	ug/L	0.002	6	404	895	4
	Sb	123	0.030	ug/L	0.001	2	325	640	3
	Ba	135	0.017	ug/L	0.003	18	140	209	5
	Ba	137	0.013	ug/L	0.001	8	229	320	1
>	Tb	159		ug/L			1016351	1080317	2
	Tl	205	0.004	ug/L	0.002	69	70	194	40
	Pb	208	0.044	ug/L	0.001	2	266	2222	3
	Bi	209		ug/L			2408229	2313141	1
	Th	232	0.190	ug/L	0.088	46	1504	9930	36
	U	238	0.003	ug/L	0.003	114	27	162	95

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:12:38
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1181649	2
	Be	9	0.000	ug/L	0.001	703	12	14	21
	C	13		ug/L			59558	156221	2
	Cl	37		ug/L			4587445	11861821	4
>	Sc	45		ug/L			952082	1086349	0
	V	51	0.151	ug/L	0.105	69	4902	8628	25
	V-1	51	0.907	ug/L	0.017	1	71	18237	2
	Cr	52	20.432	ug/L	0.226	1	14444	343929	1
	Cr	53	22.997	ug/L	0.164	0	87	41936	0
	Mn	55	19.330	ug/L	0.169	0	432	422711	1
	Co	59	18.843	ug/L	0.214	1	47	288423	1
>	Ge	72		ug/L			478848	491799	0
	Ni	60	19.812	ug/L	0.315	1	79	59053	1
	Ni	62	22.954	ug/L	1.037	4	131	9872	4
	Cu	63	20.698	ug/L	0.766	3	237	134605	3
	Cu	65	19.681	ug/L	0.210	1	88	57190	0
	Zn	66	19.178	ug/L	0.384	2	584	34176	2
	Zn	67	21.792	ug/L	0.415	1	90	6407	2
	Zn	68	18.230	ug/L	0.116	0	887	23598	0
	As	75	18.584	ug/L	0.291	1	1089	31236	1
	As-1	75	19.279	ug/L	0.350	1	7286	37903	1
	Se	82	-0.317	ug/L	0.053	16	7	-48	19
	Se	78	1.132	ug/L	0.137	12	7339	8026	0
	Mo	98	415.784	ug/L	3.940	0	26	1696847	0
	Y	89		ug/L			336847	370387	0
	Kr	83		ug/L			1447	1904	0
>	In	115		ug/L			869512	923118	0
	Ag	107	18.921	ug/L	0.312	1	14	141953	2
	Cd	111	19.606	ug/L	0.316	1	78	83162	0
	Cd	114	19.792	ug/L	0.292	1	23	210599	0
	Sb	121	0.042	ug/L	0.002	4	404	1018	1
	Sb	123	0.040	ug/L	0.005	12	325	765	6
	Ba	135	0.008	ug/L	0.001	15	140	182	3
	Ba	137	0.007	ug/L	0.003	40	229	293	7
>	Tb	159		ug/L			1010951	1108440	1
	Tl	205	0.001	ug/L	0.000	32	70	118	10
	Pb	208	0.036	ug/L	0.002	5	266	1909	3
	Bi	209		ug/L			2408229	2383439	0
	Th	232	0.059	ug/L	0.015	25	1504	4310	16
	U	238	0.001	ug/L	0.000	23	27	68	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:19:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1134013	0
	Be	9	198.094	ug/L	5.878	2	5512	658293	2
	C	13		ug/L			59558	70724	2
	Cl	37		ug/L			4587445	5256217	2
>	Sc	45		ug/L			952082	1029776	3
	V	51	208.048	ug/L	4.732	2	4902	3943725	1
	V-1	51	205.019	ug/L	5.022	2	71	3886191	1
	Cr	52	208.006	ug/L	6.601	3	14444	3173407	1
	Cr	53	197.354	ug/L	6.578	3	87	340196	0
	Mn	55	203.176	ug/L	9.243	4	432	4202858	1
	Co	59	201.367	ug/L	4.884	2	47	2919840	1
>	Ge	72		ug/L			478848	481974	1
	Ni	60	198.542	ug/L	5.074	2	79	579259	3
	Ni	62	199.574	ug/L	5.018	2	131	83096	2
	Cu	63	198.318	ug/L	6.277	3	237	1261583	1
	Cu	65	193.608	ug/L	3.044	1	88	550506	1
	Zn	66	188.512	ug/L	3.469	1	584	323971	0
	Zn	67	194.698	ug/L	4.048	2	90	55365	1
	Zn	68	190.440	ug/L	2.254	1	887	233130	0
	As	75	196.556	ug/L	2.377	1	1089	313236	0
	As-1	75	195.236	ug/L	2.745	1	7286	309204	0
	Se	82	204.828	ug/L	1.553	0	7	35776	1
	Se	78	190.848	ug/L	1.965	1	7339	88239	1
	Mo	98	201.426	ug/L	3.688	1	26	805495	0
	Y	89		ug/L			336847	348759	2
	Kr	83		ug/L			1447	1764	1
>	In	115		ug/L			869512	889268	1
	Ag	107	194.603	ug/L	4.266	2	14	1406051	1
	Cd	111	198.233	ug/L	3.070	1	78	809269	0
	Cd	114	211.126	ug/L	1.346	0	23	2163969	0
	Sb	121	210.764	ug/L	1.672	0	404	2818247	1
	Sb	123	211.417	ug/L	4.513	2	325	2143574	1
	Ba	135	204.972	ug/L	1.542	0	140	787601	1
	Ba	137	203.978	ug/L	1.984	0	229	1335972	0
>	Tb	159		ug/L			1016351	1076654	1
	Tl	205	194.893	ug/L	4.272	2	70	6683721	1
	Pb	208	197.577	ug/L	1.641	0	266	8750672	0
	Bi	209		ug/L			2408229	2326014	0
	Th	232	197.431	ug/L	3.541	1	1504	8673067	0
	U	238	198.246	ug/L	2.521	1	27	8995592	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:26:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1120252	0
	Be	9	0.003	ug/L	0.001	33	12	22	13
	C	13		ug/L			59558	64921	0
	Cl	37		ug/L			4587445	5182289	1
>	Sc	45		ug/L			95[illegible]82	1047782	2
	V	51	-0.012	ug/L	0.004	31	[illegible]02	5171	1
	V-1	51	0.032	ug/L	0.003	10	71	694	7
	Cr	52	-0.019	ug/L	0.016	83	14444	15603	1
	Cr	53	0.134	ug/L	0.020	14	87	331	8
	Mn	55	0.023	ug/L	0.011	48	432	956	23
	Co	59	0.006	ug/L	0.011	175	47	141	110
>	Ge	72		ug/L			478848	484063	1
	Ni	60	-0.006	ug/L	0.009	165	79	63	44
	Ni	62	0.157	ug/L	0.027	17	131	198	4
	Cu	63	0.099	ug/L	0.003	3	237	872	1
	Cu	65	0.086	ug/L	0.003	3	88	333	0
	Zn	66	5.402	ug/L	0.140	2	584	9897	0
	Zn	67	4.912	ug/L	0.236	4	90	1491	2
	Zn	68	5.363	ug/L	0.154	2	887	7464	0
	As	75	0.047	ug/L	0.010	22	[illegible]089	1176	0
	As-1	75	0.112	ug/L	0.113	100	7286	7537	0
	Se	82	-0.095	ug/L	0.055	58	7	-9	104
	Se	78	0.449	ug/L	0.432	96	7339	7607	0
	Mo	98	0.030	ug/L	0.003	9	[illegible]26	147	7
	Y	89		ug/L			33[illegible]47	354215	0
	Kr	83		ug/L			1447	1632	1
>	In	115		ug/L			869512	896035	1
	Ag	107	0.003	ug/L	0.002	64	14	36	37
	Cd	111	0.004	ug/L	0.003	74	78	94	9
	Cd	114	0.001	ug/L	0.002	236	23	31	55
	Sb	121	0.160	ug/L	0.012	7	404	2575	5
	Sb	123	0.160	ug/L	0.007	4	325	1968	3
	Ba	135	0.192	ug/L	0.007	3	140	885	2
	Ba	137	0.191	ug/L	0.003	1	229	1497	2
>	Tb	159		ug/L			1016351	1045002	1
	Tl	205	0.007	ug/L	0.001	15	70	311	11
	Pb	208	0.023	ug/L	0.001	2	266	1283	3
	Bi	209		ug/L			2408229	2466258	0
	Th	232	0.086	ug/L	0.026	30	[illegible]504	5236	22
	U	238	0.003	ug/L	0.000	16	27	141	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:31:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1109755	2✓
	Be	9	0.001	ug/L	0.001	61	12	16	12
	C	13		ug/L			59558	65224	0
	Cl	37		ug/L			4587445	5062505	1
>	Sc	45		ug/L			952082	1031760	1✓
	V	51	-0.008	ug/L	0.015	195	4902	5160	4
	V-1	51	0.025	ug/L	0.002	8	71	552	5
	Cr	52	0.004	ug/L	0.045	1052	13444	15712	3
	Cr	53	0.120	ug/L	0.004	3	287	301	3
	Mn	55	0.017	ug/L	0.000	2	432	828	2
	Co	59	0.001	ug/L	0.000	25	47	61	4
>	Ge	72		ug/L			478848	485254	0✓
	Ni	60	-0.007	ug/L	0.005	65	79	59	23
	Ni	62	0.081	ug/L	0.009	11	131	167	2
	Cu	63	0.104	ug/L	0.002	1	237	907	1
	Cu	65	0.105	ug/L	0.007	6	88	389	5
	Zn	66	5.925	ug/L	0.084	1	584	10828	1
	Zn	67	5.359	ug/L	0.075	1	90	1623	1
	Zn	68	5.816	ug/L	0.080	1	887	8040	1
	As	75	0.035	ug/L	0.038	108	1089	1161	5
	As-1	75	0.073	ug/L	0.053	72	7286	7497	1
	Se	82	-0.073	ug/L	0.137	188	7	-5	454
	Se	78	0.313	ug/L	0.161	51	7339	7570	1
	Mo	98	0.011	ug/L	0.001	10	26	72	6
	Y	89		ug/L			336847	351899	1
	Kr	83		ug/L			1447	1605	0
>	In	115		ug/L			86112	894019	1✓
	Ag	107	0.000	ug/L	0.000	17	14	17	3
	Cd	111	-0.001	ug/L	0.003	298	78	76	14
	Cd	114	0.000	ug/L	0.000	291	23	25	14
	Sb	121	0.027	ug/L	0.007	26	404	778	11
	Sb	123	0.027	ug/L	0.006	20	325	611	8
	Ba	135	0.194	ug/L	0.009	4	140	892	2
	Ba	137	0.198	ug/L	0.009	4	229	1537	2
>	Tb	159		ug/L			1016351	1038327	0
	Tl	205	0.002	ug/L	0.000	19	70	153	10
	Pb	208	0.025	ug/L	0.000	1	266	1339	1
	Bi	209		ug/L			2408229	2477232	0
	Th	232	0.001	ug/L	0.005	426	1504	1586	13
	U	238	0.000	ug/L	0.000	42	27	42	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:36:46
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1134810	2
	Be	9	49.795	ug/L	1.532	3	12	165563	1
	C	13		ug/L			59558	67043	0
	Cl	37		ug/L			4587445	5182303	1
>	Sc	45		ug/L			952082	1040380	0
	V	51	48.332	ug/L	1.003	2	4902	930068	1
	V-1	51	48.600	ug/L	0.596	1	71	931207	0
	Cr	52	48.654	ug/L	0.537	1	14444	762422	0
	Cr	53	49.597	ug/L	0.927	1	87	86518	2
	Mn	55	49.318	ug/L	0.630	1	432	1032011	0
	Co	59	48.201	ug/L	0.183	0	47	706507	0
>	Ge	72		ug/L			478848	490076	1
	Ni	60	49.833	ug/L	0.869	1	79	147867	0
	Ni	62	49.460	ug/L	2.034	4	31	21038	3
	Cu	63	49.533	ug/L	0.597	1	237	320638	0
	Cu	65	50.220	ug/L	1.594	3	88	145237	1
	Zn	66	49.784	ug/L	0.993	1	584	87448	2
	Zn	67	50.283	ug/L	0.675	1	90	14610	2
	Zn	68	49.975	ug/L	1.131	2	887	62866	0
	As	75	49.305	ug/L	1.106	2	1089	80724	1
	As-1	75	48.824	ug/L	1.093	2	7286	84208	0
	Se	82	53.143	ug/L	1.050	1	7	9442	1
	Se	78	49.193	ug/L	1.168	2	7339	28697	0
	Mo	98	49.199	ug/L	1.096	2	26	200060	0
	Y	89		ug/L			336847	360133	2
	Kr	83		ug/L			1447	1570	0
>	In	115		ug/L			869512	905715	0
	Ag	107	50.615	ug/L	0.369	0	14	372542	1
	Cd	111	50.266	ug/L	0.607	1	78	209094	1
	Cd	114	50.155	ug/L	0.753	1	23	523584	0
	Sb	121	49.881	ug/L	0.395	0	404	679596	0
	Sb	123	48.649	ug/L	0.519	1	325	502724	1
	Ba	135	48.603	ug/L	0.410	0	140	190318	1
	Ba	137	49.381	ug/L	0.252	0	229	329602	0
>	Tb	159		ug/L			1016351	1053744	1
	Tl	205	48.596	ug/L	0.719	1	70	1631207	0
	Pb	208	49.224	ug/L	0.657	1	266	2133748	0
	Bi	209		ug/L			2408229	2443565	0
	Th	232	50.114	ug/L	0.995	1	1504	2155782	1
	U	238	50.073	ug/L	0.717	1	27	2223624	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:43:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1097891	0
	Be	9	0.002	ug/L	0.001	71	12	18	20
	C	13		ug/L			59558	65259	3
	Cl	37		ug/L			4587445	4907047	2
>	Sc	45		ug/L			952082	1016800	2
	V	51	-0.010	ug/L	0.007	71	4902	5056	2
	V-1	51	0.012	ug/L	0.002	15	71	300	10
	Cr	52	-0.028	ug/L	0.023	81	14444	15007	2
	Cr	53	0.048	ug/L	0.007	15	87	175	9
	Mn	55	-0.002	ug/L	0.000	28	432	427	1
	Co	59	0.000	ug/L	0.000	222	47	53	11
>	Ge	72		ug/L			478848	477200	0
	Ni	60	-0.005	ug/L	0.004	69	79	63	15
	Ni	62	0.034	ug/L	0.039	116	131	145	10
	Cu	63	-0.003	ug/L	0.001	35	237	220	2
	Cu	65	-0.008	ug/L	0.002	26	88	65	8
	Zn	66	-0.073	ug/L	0.017	23	584	459	6
	Zn	67	-0.059	ug/L	0.006	10	90	73	3
	Zn	68	-0.044	ug/L	0.028	64	887	831	3
	As	75	0.045	ug/L	0.009	20	1089	1156	2
	As-1	75	0.207	ug/L	0.012	5	7286	7579	0
	Se	82	-0.010	ug/L	0.063	627	7	5	190
	Se	78	0.788	ug/L	0.064	8	7339	7644	0
	Mo	98	0.006	ug/L	0.000	3	26	49	2
	Y	89		ug/L			336847	354966	0
	Kr	83		ug/L			1447	1554	2
>	In	115		ug/L			869512	888503	1
	Ag	107	0.001	ug/L	0.001	124	14	19	31
	Cd	111	-0.002	ug/L	0.002	94	78	72	10
	Cd	114	-0.000	ug/L	0.000	39471	23	24	19
	Sb	121	0.041	ug/L	0.010	24	404	953	13
	Sb	123	0.040	ug/L	0.009	23	325	736	11
	Ba	135	-0.013	ug/L	0.003	21	140	92	12
	Ba	137	-0.010	ug/L	0.001	9	229	165	3
>	Tb	159		ug/L			1016351	1029168	1
	Tl	205	0.003	ug/L	0.001	36	70	157	21
	Pb	208	-0.001	ug/L	0.001	149	266	243	17
	Bi	209		ug/L			2408229	2411042	0
	Th	232	0.052	ug/L	0.012	23	1504	3710	14
	U	238	0.001	ug/L	0.001	65	27	87	45

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US27 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:49:40
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\051712B.cal

Ag only

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1099367	1
	Be	9	0.004	ug/L	0.002	36	12	26	17
	C	13		ug/L			59558	77697	0
	Cl	37		ug/L			4587445	5348820	0
>	Sc	45		ug/L			952082	1092356	1
	V	51	1.605	ug/L	0.010	0	4902	37867	1
	V-1	51	1.737	ug/L	0.022	1	71	35038	2
	Cr	52	0.786	ug/L	0.040	5	14444	29226	0
	Cr	53	1.255	ug/L	0.079	6	87	2398	7
	Mn	55	27.502	ug/L	0.509	1	432	604391	0
	Co	59	0.412	ug/L	0.005	1	47	6386	0
>	Ge	72		ug/L			478848	459207	0
	Ni	60	2.749	ug/L	0.091	3	79	7714	3
	Ni	62	13.268	ug/L	5.218	39	131	5370	37
	Cu	63	6.245	ug/L	0.473	7	237	38067	6
	Cu	65	0.973	ug/L	0.011	1	88	2720	0
	Zn	66	1.470	ug/L	0.020	1	584	2963	1
	Zn	67	1.427	ug/L	0.097	6	90	472	4
	Zn	68	2.403	ug/L	0.141	5	887	3644	5
	As	75	8.992	ug/L	0.109	1	1089	14653	1
	As-1	75	9.639	ug/L	0.065	0	7286	21188	0
	Se	82	0.248	ug/L	0.067	26	7	48	23
	Se	78	2.049	ug/L	0.271	13	7339	7864	0
	Mo	98	4.839	ug/L	0.025	0	26	18466	0
	Y	89		ug/L			336847	356048	2
	Kr	83		ug/L			1447	1553	1
>	In	115		ug/L			869512	839596	1
	Ag	107	U 0.003	ug/L	0.001	24	14	33	13
	Cd	111	U 0.025	ug/L	0.006	23	78	170	12
	Cd	114	0.057	ug/L	0.003	5	23	570	5
	Sb	121	0.159	ug/L	0.007	4	404	2402	2
	Sb	123	0.154	ug/L	0.010	6	325	1784	3
	Ba	135	12.253	ug/L	0.265	2	140	44565	0
	Ba	137	12.240	ug/L	0.163	1	229	75888	0
>	Tb	159		ug/L			1016351	1038263	1
	Tl	205	0.007	ug/L	0.004	61	70	314	48
	Pb	208	0.032	ug/L	0.001	3	266	1641	2
	Bi	209		ug/L			2408229	2147891	0
	Th	232	0.179	ug/L	0.070	39	1504	9137	33
	U	238	0.128	ug/L	0.001	0	27	5613	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:53:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1115542	1
	Be	9	-0.001	ug/L	0.001	77	12	8	45
	C	13		ug/L			59558	62124	2
	Cl	37		ug/L			4587445	4843697	2
>	Sc	45		ug/L			953082	1016902	2
	V	51	0.023	ug/L	0.008	36	4902	5659	0
	V-1	51	0.030	ug/L	0.004	13	71	635	14
	Cr	52	0.089	ug/L	0.032	36	14444	16748	0
	Cr	53	0.113	ug/L	0.011	9	87	285	8
	Mn	55	0.025	ug/L	0.002	6	432	962	3
	Co	59	0.001	ug/L	0.000	53	47	63	9
>	Ge	72		ug/L			478848	479818	3
	Ni	60	-0.002	ug/L	0.001	46	79	72	5
	Ni	62	1.253	ug/L	0.178	14	131	651	14
	Cu	63	0.267	ug/L	0.005	1	237	1931	1
	Cu	65	0.218	ug/L	0.014	6	88	705	4
	Zn	66	6.476	ug/L	0.233	3	584	11639	2
	Zn	67	5.706	ug/L	0.292	5	90	1702	4
	Zn	68	6.210	ug/L	0.104	1	887	8429	3
	As	75	0.055	ug/L	0.047	85	1089	1179	8
	As-1	75	0.219	ug/L	0.153	69	7286	7633	0
	Se	82	0.022	ug/L	0.207	946	7	11	311
	Se	78	0.829	ug/L	0.573	69	7339	7698	0
	Mo	98	0.004	ug/L	0.002	36	26	43	14
	Y	89		ug/L			336647	357548	2
	Kr	83		ug/L			1447	1563	0
>	In	115		ug/L			869512	866769	1
	Ag	107	-0.000	ug/L	0.001	285	14	13	27
	Cd	111	-0.002	ug/L	0.000	13	78	69	1
	Cd	114	0.000	ug/L	0.001	434	23	24	24
	Sb	121	-0.012	ug/L	0.001	8	404	241	3
	Sb	123	-0.014	ug/L	0.003	22	325	185	14
	Ba	135	0.018	ug/L	0.002	13	140	206	4
	Ba	137	0.021	ug/L	0.001	4	229	364	1
>	Tb	159		ug/L			1016351	1008423	1
	Tl	205	0.001	ug/L	0.001	75	70	99	23
	Pb	208	0.062	ug/L	0.002	3	266	2836	4
	Bi	209		ug/L			2408229	2437293	2
	Th	232	-0.027	ug/L	0.001	5	1504	392	17
	U	238	-0.000	ug/L	0.000	44	27	17	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: NEX. BLANKSOLN
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 13:57:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1120964	0
	Be	9	-0.001	ug/L	0.000	31	12	8	18
	C	13		ug/L			59558	64203	2
	Cl	37		ug/L			4587445	4866625	2
>	Sc	45		ug/L			952082	1005958	1
	V	51	0.021	ug/L	0.007	35	4902	5569	2
	V-1	51	0.016	ug/L	0.001	7	71	375	6
	Cr	52	0.080	ug/L	0.028	35	14444	16451	1
	Cr	53	0.063	ug/L	0.006	8	87	198	3
	Mn	55	0.005	ug/L	0.003	55	432	562	11
	Co	59	0.000	ug/L	0.000	103	47	55	8
>	Ge	72		ug/L			478848	478928	2
	Ni	60	-0.007	ug/L	0.000	3	79	57	3
	Ni	62	0.859	ug/L	0.057	6	131	486	4
	Cu	63	0.053	ug/L	0.001	2	237	571	3
	Cu	65	0.023	ug/L	0.002	9	88	151	6
	Zn	66	1.138	ug/L	0.049	4	584	2523	2
	Zn	67	1.030	ug/L	0.049	4	90	381	6
	Zn	68	1.152	ug/L	0.066	5	887	2283	3
	As	75	0.028	ug/L	0.019	66	1089	1133	0
	As-1	75	0.167	ug/L	0.113	67	7286	7542	0
	Se	82	-0.062	ug/L	0.093	150	7	-3	510
	Se	78	0.664	ug/L	0.429	64	7339	7616	0
	Mo	98	-0.000	ug/L	0.001	1613	26	26	18
	Y	89		ug/L			336847	353881	1
	Kr	83		ug/L			1447	1565	4
>	In	115		ug/L			860512	861142	2
	Ag	107	0.000	ug/L	0.001	461	14	15	24
	Cd	111	-0.002	ug/L	0.002	108	78	71	11
	Cd	114	0.001	ug/L	0.001	92	23	29	18
	Sb	121	-0.019	ug/L	0.002	12	404	153	17
	Sb	123	-0.020	ug/L	0.002	11	325	125	16
	Ba	135	-0.019	ug/L	0.002	9	140	66	8
	Ba	137	-0.018	ug/L	0.001	6	229	114	4
>	Tb	159		ug/L			1016351	1003278	0
	Tl	205	-0.001	ug/L	0.000	17	70	45	10
	Pb	208	0.009	ug/L	0.001	7	266	641	4
	Bi	209		ug/L			2408229	2406831	1
	Th	232	-0.028	ug/L	0.002	5	1504	321	21
	U	238	-0.000	ug/L	0.000	33	27	18	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:02:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1084840	0
	Be	9	50.678	ug/L	0.265	0	12	161143	0
	C	13		ug/L			59558	62799	3
	Cl	37		ug/L			4587445	4998223	0
>	Sc	45		ug/L			952082	1001678	1
	V	51	49.693	ug/L	1.375	2	4902	920355	1
	V-1	51	49.610	ug/L	1.027	2	71	915026	0
	Cr	52	49.989	ug/L	1.825	3	14444	753503	1
	Cr	53	49.695	ug/L	1.143	2	87	83441	2
	Mn	55	50.362	ug/L	1.090	2	432	1014434	0
	Co	59	49.345	ug/L	0.840	1	47	696325	2
>	Ge	72		ug/L			4748	489091	1
	Ni	60	49.428	ug/L	0.341	0	79	146398	1
	Ni	62	48.998	ug/L	0.648	1	131	20808	2
	Cu	63	48.246	ug/L	0.053	0	237	311725	1
	Cu	65	49.557	ug/L	1.013	2	88	143054	1
	Zn	66	50.010	ug/L	1.140	2	584	87651	0
	Zn	67	49.850	ug/L	0.717	1	90	14458	2
	Zn	68	48.760	ug/L	1.347	2	887	61238	1
	As	75	49.317	ug/L	0.609	1	1089	80590	1
	As-1	75	48.784	ug/L	0.799	1	7286	83985	1
	Se	82	53.475	ug/L	0.782	1	7	9483	0
	Se	78	49.450	ug/L	1.567	3	7339	28750	1
	Mo	98	49.128	ug/L	0.508	1	26	199429	2
	Y	89		ug/L			336847	357230	0
	Kr	83		ug/L			1447	1621	2
>	In	115		ug/L			853512	860120	2
	Ag	107	50.923	ug/L	0.807	1	14	355857	0
	Cd	111	49.935	ug/L	0.376	0	78	197229	1
	Cd	114	51.638	ug/L	1.144	2	23	511815	0
	Sb	121	50.432	ug/L	0.558	1	504	652463	1
	Sb	123	49.082	ug/L	0.961	1	325	481524	0
	Ba	135	50.550	ug/L	1.280	2	140	187905	0
	Ba	137	50.094	ug/L	0.706	1	229	317478	0
>	Tb	159		ug/L			1016351	1024399	1
	Tl	205	48.975	ug/L	0.793	1	70	1598086	0
	Pb	208	49.601	ug/L	0.528	1	266	2090296	0
	Bi	209		ug/L			2408229	2386460	1
	Th	232	49.895	ug/L	2.391	4	1504	2086448	4
	U	238	50.963	ug/L	0.924	1	27	2200076	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 17, 2012 14:08:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\051712B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1076522	1070479	2
	Be	9	0.001	ug/L	0.001	82	12	16	16
	C	13		ug/L			59558	62193	3
	Cl	37		ug/L			4587445	4655954	0
>	Sc	45		ug/L			952082	973838	0
	V	51	0.009	ug/L	0.003	29	4902	5174	1
	V-1	51	0.009	ug/L	0.001	14	71	235	9
	Cr	52	0.038	ug/L	0.010	26	14444	15315	1
	Cr	53	0.038	ug/L	0.004	10	87	151	4
	Mn	55	-0.001	ug/L	0.001	228	432	431	5
	Co	59	0.001	ug/L	0.002	200	47	59	35
>	Ge	72		ug/L			478848	472458	1
	Ni	60	-0.005	ug/L	0.002	36	79	64	8
	Ni	62	0.557	ug/L	0.031	5	131	357	4
	Cu	63	0.020	ug/L	0.004	19	237	360	7
	Cu	65	-0.006	ug/L	0.002	35	88	68	8
	Zn	66	-0.074	ug/L	0.005	6	84	452	2
	Zn	67	-0.121	ug/L	0.020	16	90	55	9
	Zn	68	-0.028	ug/L	0.015	54	887	843	2
	As	75	0.037	ug/L	0.043	116	1089	1133	5
	As-1	75	0.209	ug/L	0.038	18	7286	7506	0
	Se	82	-0.005	ug/L	0.096	1854	7	6	255
	Se	78	0.792	ug/L	0.135	17	7339	7569	0
	Mo	98	0.004	ug/L	0.002	50	26	42	20
	Y	89		ug/L			336847	347640	0
	Kr	83		ug/L			1447	1520	1
>	In	115		ug/L			869512	841368	0
	Ag	107	0.000	ug/L	0.000	313	14	14	17
	Cd	111	-0.003	ug/L	0.002	71	78	65	10
	Cd	114	-0.000	ug/L	0.000	182	23	20	15
	Sb	121	0.030	ug/L	0.006	20	404	776	10
	Sb	123	0.026	ug/L	0.011	40	325	568	18
	Ba	135	-0.010	ug/L	0.001	14	140	100	5
	Ba	137	-0.010	ug/L	0.002	22	229	160	7
>	Tb	159		ug/L			1010451	986254	0
	Tl	205	0.000	ug/L	0.000	46	70	83	7
	Pb	208	-0.001	ug/L	0.000	26	266	223	4
	Bi	209		ug/L			2408229	2357125	0
	Th	232	0.044	ug/L	0.010	23	1504	3217	12
	U	238	0.001	ug/L	0.000	1	27	50	1

Mercury Analysis Log

Analyst: TM

Date: 5-03-12

Instrument: CETAC

Page: 3 of 4

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
URB1	F	5mm	1X			
URB1	G	5mm	1X			
URB1	H	5mm	1X			
URB1	I	5mm	1X			
URB1	J	5mm	1X			
CCVL		5mm	1X	4.08	%R = 104	✓
CCBL		5mm	1X	-0.00		✓
US18	B	5mm	2X	5.45		
US18	BDUP	5mm	2X	5.66	RPD = 3.78 %	✓
US18	BSPK	5mm	2X	6.15	%R = 70 LOW	X
CCV7		5mm	1X	4.04	%R = 101	✓
CCB7		5mm	1X	-0.01	END CLP	✓
STD	0.0	Twm	1X			
STD	0.1	Twm	1X			
STD	0.5	Twm	1X			
STD	1.0	Twm	1X			
STD	2.0	Twm	1X			
STD	5.0	Twm	1X			
STD	10.0	Twm	1X			
ICV		Twm	1X	8.63	Begin CLP %R = 108	✓
ICB		Twm	1X	-0.01		✓
CCV1		Twm	1X	4.18	%R = 105	✓
CCB1		Twm	1X	-0.00		✓
CRA		Twm	1X	0.11		✓
URB7	MB2	Twm	1X	0.01		✓
URB7	MB2SPK	Twm	1X	2.10	%R = 105	✓
URB7	D	Twm	1X	0.01		
URB7	DDUP	Twm	1X	0.01	NO RPD: Undetected	✓
URB7	DSPK	Twm	1X	1.13	%R = 113	✓
US02	MB1	Twm	1X	0.01		✓

Chemical/Reagent ID:

10% $SnCl_2$: MP2292

14% NH_2OH/NaCl: MP2289

Standard ID:

Standard: 2931-1 (5mm)

2932-3 (Twm)

ICV/CCV: SC-18

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 5.03.12

Page: 4 of 4

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments
US02	MB1SPK	TWM	1X	2.17	%R=109 ✓
US02	A	TWM	1X	0.00	
US02	ADUP	TWM	1X	0.01	NO RPD: Undetected ✓
CCV2		TWM	1X	4.10	%R=103 ✓
CCB2		TWM	1X	-0.00	✓
US02	ASPK	TWM	1X	1.08	%R=108 ✓
US02	F	TWM	1X		
US02	MB2	TWM	1X	0.00	✓
US02	MB2SPK	TWM	1X	2.10	%R=105 ✓
US02	I	TWM	1X	0.01	
US02	IDUP	TWM	1X	0.01	NO RPD: Undetected ✓
US02	ISPK	TWM	1X	1.05	%R=105 ✓
US02	N	TWM	1X		
US27	MB1	TWM	1X	0.00	✓
US27	MB1SPK	TWM	1X	2.16	%R=108 ✓
CCV3		TWM	1X	4.11	%R=103 ✓
CCB3		TWM	1X	0.01	✓
US27	C	TWM	1X	0.01	
US27	CDUP	TWM	1X	0.01	NO RPD: Undetected ✓
US27	CSPK	TWM	1X	1.08	%R=106 ✓
US27	D	TWM	1X		
US27	MB2	TWM	1X	0.01	✓
US27	MB2SPK	TWM	1X	2.14	%R=107 ✓
US27	H	TWM	1X	0.01	
US27	HDUP	TWM	1X	0.01	NO RPD: Undetected ✓
US27	HSPK	TWM	1X	1.08	%R=108 ✓
US27	I	TWM	1X		
CCV4		TWM	1X	4.07	%R=102 ✓
CCB4		TWM	1X	0.00	END CLP ✓
			5-3-12	DM	

Chemical/Reagent ID:

10% $SnCl_2$: MP2292

14% NH_2OH/NaCl: MP2259

Standard ID:

Standard: 2932-3

ICV/CCV: 56-18

US15 00724

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA

Analysis Date: 5-03-12

	Analyst 5-3 DM	Peer 5-3 P	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓		
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	—	—	
Carry-over	—	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	—	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	—	SEE RUN LOG
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and QA	✓	✓	SEE CAF

CETAC Hg Analysis Report - 12050300.DB - Thursday, May 03, 2012, 12:35:46 PM

Analyst
Date Started: Thursday, May 03, 2012, 10:54:00
Worksheet: ARI 10ppb CALIB
Comment

5/3/12

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
UR81 E SMM	03-May-2012, 10:54	0.29	0.38	777.00	1.00	
UR81 F SMM	03-May-2012, 10:55	0.68	0.26	1830.00	1.00	
UR81 G SMM	03-May-2012, 10:57	0.13	1.33	356.00	1.00	
UR81 H SMM	03-May-2012, 10:58	0.57	0.92	1520.00	1.00	
UR81 I SMM	03-May-2012, 11:00	0.59	0.63	1570.00	1.00	
UR81 J SMM	03-May-2012, 11:02	0.54	0.36	1450.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:03	4.08	0.16	10900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:05	-0.00	18.40	-11.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US18 B SMM	03-May-2012, 11:07	5.45	0.62	14600.00	2.00	
US18 BDUP SMM	03-May-2012, 11:09	5.66	0.69	15200.00	2.00	
US18 BSPK SMM	03-May-2012, 11:10	6.15	0.37	16500.00	2.00	- LOW %R

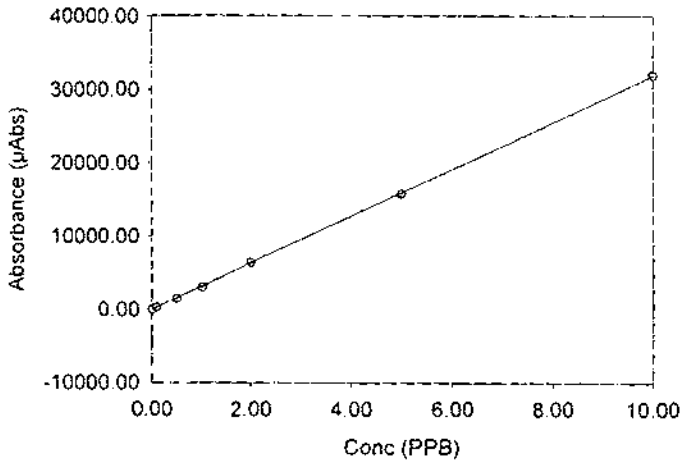
Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:12	4.04	1.38	10800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:13	-0.01	3.42	-38.40	1.00	END CLP

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	03-May-2012, 11:16	0.00	3.41	-46.50	1.00	
Standard #1	03-May-2012, 11:17	0.10	1.97	323.00	1.00	
Standard #2	03-May-2012, 11:19	0.50	0.13	1490.00	1.00	
Standard #3	03-May-2012, 11:21	1.00	0.54	3060.00	1.00	
Standard #4	03-May-2012, 11:22	2.00	0.15	6370.00	1.00	
Standard #5	03-May-2012, 11:24	5.00	0.62	15800.00	1.00	
Standard #6	03-May-2012, 11:25	10.00	1.10	32000.00	1.00	

TWM

Calibration Data



Int.	0.000
Slope	3187.983
Correlation	0.99996

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	03-May-2012, 11:28	8.63	0.53	27500.00	1.00	
ICB	03-May-2012, 11:30	-0.01	3.23	-37.40	1.00	Begin CLP

Analyst
Date Started Thursday, May 03, 2012, 11:32:08
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:32	4.18	0.53	13300.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:33	-0.00	28.00	-12.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	03-May-2012, 11:35	0.11	1.23	356.00	1.00	
UR87 MB2 TWM	03-May-2012, 11:37	0.01	4.25	19.30	1.00	
UR87 MB2SPK TWM	03-May-2012, 11:38	2.10	0.54	6680.00	1.00	
UR87 D TWM	03-May-2012, 11:40	0.01	10.70	18.60	1.00	
UR87 DDUP TWM	03-May-2012, 11:41	0.01	12.00	22.00	1.00	
UR87 DSPK TWM	03-May-2012, 11:43	1.13	0.50	3600.00	1.00	
US02 MB1 TWM	03-May-2012, 11:45	0.01	5.49	23.00	1.00	
US02 MB1SPK TWM	03-May-2012, 11:46	2.17	0.25	6910.00	1.00	
US02 A TWM	03-May-2012, 11:48	0.00	176.00	1.01	1.00	
US02 ADUP TWM	03-May-2012, 11:49	0.01	9.13	38.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:51	4.10	0.27	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:53	-0.00	27.10	-10.30	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US02 ASPK TWM	03-May-2012, 11:54	1.08	1.37	3450.00	1.00	
US02 F TWM	03-May-2012, 11:56	0.00	23.60	10.80	1.00	
US02 MB2 TWM	03-May-2012, 11:58	0.00	16.00	11.70	1.00	
US02 MB2SPK TWM	03-May-2012, 11:59	2.10	0.59	6690.00	1.00	
US02 I TWM	03-May-2012, 12:01	0.01	3.30	26.70	1.00	
US02 IDUP TWM	03-May-2012, 12:02	0.01	6.63	33.20	1.00	
US02 ISPK TWM	03-May-2012, 12:04	1.05	1.31	3350.00	1.00	
US02 N TWM	03-May-2012, 12:06	0.01	22.10	23.10	1.00	
US27 MB1 TWM	03-May-2012, 12:07	0.00	14.60	13.40	1.00	
US27 MB1SPK TWM	03-May-2012, 12:09	2.16	0.24	6890.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 12:11	4.11	0.80	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 12:12	0.01	6.55	20.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US27 C TWM	03-May-2012, 12:14	0.01	2.89	29.20	1.00	
US27 CDUP TWM	03-May-2012, 12:15	0.01	12.40	35.80	1.00	
US27 CSPK TWM	03-May-2012, 12:17	1.08	0.67	3450.00	1.00	
US27 D TWM	03-May-2012, 12:19	0.01	7.60	29.50	1.00	
US27 MB2 TWM	03-May-2012, 12:20	0.01	6.32	30.60	1.00	
US27 MB2SPK TWM	03-May-2012, 12:22	2.14	0.96	6820.00	1.00	
US27 H TWM	03-May-2012, 12:24	0.01	7.01	18.80	1.00	
US27 HDUP TWM	03-May-2012, 12:25	0.01	21.20	36.10	1.00	
US27 HSPK TWM	03-May-2012, 12:27	1.08	1.38	3430.00	1.00	
US27 I TWM	03-May-2012, 12:28	0.01	2.53	32.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 12:30	4.07	0.76	13000.00	1.00	

Analyst
Date Started Thursday, May 03, 2012, 12:32:11
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags	
QC Blank	03-May-2012, 12:32	0.00	9.75	10.60	1.00		END CAL

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: SMM Instrument: CETAC
Analyst: KM Date: 4/27/12
Bath Temp: 95°C Start Time: 1450 End Time: 1520

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	50.0	0.0	3
STD1	2931-1	0.01	50.0	0.1	2
STD2	2931-1	0.05	50.0	0.5	2
STD3	2931-1	0.10	50.0	1.0	2
STD4	2931-1	0.20	50.0	2.0	2
STD5	2931-1	0.50	50.0	5.0	2
STD6	2931-1	1.00	50.0	10.0	2
CRA	2931-1	0.01	50.0	0.1	1
ICB/CCB	—	0.00	50.0	0.0	3
ICV/LCS	56-18	0.08	50.0	8.0	2
CCV	56-18	0.04	50.0	4.0	3

Chemical/Reagent ID:
HNO_3: I7370 H_2SO_4: I7184 HCl: —
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

Prep Code: TWM Digested 20.0mL Instrument: CETAC
Analyst: KM Date: 4/30/12
Bath Temp: 95°C Start Time: 1600 End Time: 1800

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	1
STD1	2932-3	0.01	100.0	0.1	1
STD2	2932-3	0.05	100.0	0.5	1
STD3	2932-3	0.10	100.0	1.0	1
STD4	2932-3	0.20	100.0	2.0	1
STD5	2932-3	0.50	100.0	5.0	1
STD6	2932-3	1.00	100.0	10.0	1
CRA	2932-3	0.01	100.0	0.1	1
ICB/CCB	—	0.00	100.0	0.0	1
ICV/LCS	56-18	0.16	100.0	8.0	1
CCV	56-18	0.08	100.0	4.0	1

Chemical/Reagent ID:
HNO_3: I7370 H_2SO_4: I7184 HCl: —
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

US15:00729

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 91C
Start Time: 1420
Matrix: water
Date: 05.02.12
End Time: 1620

ARI Sample ID	Sample Bottle #	pH<2	~~Initial Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US27 C	1	✓	20.0	20.0	05.11 1	Y	
US27 CDUP	1	✓	20.0	20.0	1	Y	
US27 CSPK	1	✓	20.0	20.0	1	Y	
US27 D	1	✓	20.0	20.0	1	Y	
US27 MB1	—	✓	20.0	20.0	1	Y	
US27 MB1SPK	—	✓	20.0	20.0	1	Y	
US27 H	1	✓	20.0	20.0	1	Y	
US27 HDUP	1	✓	20.0	20.0	1	Y	
US27 HSPK	1	✓	20.0	20.0	1	Y	
US27 I	1	✓	20.0	20.0	1	Y	
US27 MB2	—	✓	20.0	20.0	1	Y	
US27 MB2SPK	—	✓	20.0	20.0	1	Y	

05.02.12 MJ

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7154
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

US15 : 00736

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: US15, US27

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method SM2540D

Data Release Authorized:
Reported: 05/01/12
Date Received: 04/27/12
Page 1 of 1

QC Report No: US15-ERM-West
Project: RG Spring GW Sampling
155129.09

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
MW-7S-042712 US15D 12-7627	04/27/12	Water	04/30/12 10:22 043012#1	1.1	1.4
MW-10-042712 US15E 12-7628	04/27/12	Water	04/30/12 10:22 043012#1	1.1	< 1.1 U

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

US15:00732

LAB CONTROL RESULTS-CONVENTIONALS
US15-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/01/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Total Suspended Solids	04/30/12 10:22	mg/L	49.5	50.0	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
US15-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/01/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	04/30/12 10:22	mg/L	< 1.0 U

SAMPLE RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: MK
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Client ID: MW-13-043012
ARI ID: 12-7676 US27A

Analyte	Date Batch	Method	Units	RL	Sample
Total Suspended Solids	05/02/12 050212#1	SM2540D	mg/L	1.1	1.5

RL Analytical reporting limit
U Undetected at reported detection limit

US15:00735

SAMPLE RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: JAB
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Client ID: MW-14D-043012
ARI ID: 12-7680 US27E

Analyte	Date Batch	Method	Units	RL	Sample
Alkalinity	05/02/12 050212#1	SM 2320	mg/L CaCO3	1.0	412
Carbonate	05/02/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Bicarbonate	05/02/12	SM 2320	mg/L CaCO3	1.0	412
Hydroxide	05/02/12	SM 2320	mg/L CaCO3	1.0	< 1.0 U
Total Suspended Solids	05/02/12 050212#1	SM2540D	mg/L	1.1	< 1.1 U
Chloride	05/02/12 050212#1	EPA 300.0	mg/L	1.0	38.5
N-Nitrate	05/01/12 050112#1	EPA 300.0	mg-N/L	0.1	< 0.1 U
Total Phosphorus	05/08/12 050812#1	SM4500-PE	mg-P/L	0.016	1.78
Sulfate	05/01/12 050112#1	EPA 300.0	mg/L	0.1	0.5
Total Organic Carbon	05/16/12 051612#1	EPA 9060M	mg/L	1.50	21.0

RL Analytical reporting limit
U Undetected at reported detection limit

US15:00736

MS/MSD RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Analyte	Method	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: US27E Client ID: MW-14D-043012							
Chloride	EPA 300.0	05/02/12	mg/L	38.5	79.6	40.0	102.8%
N-Nitrate	EPA 300.0	05/01/12	mg-N/L	< 0.1	2.0	2.0	100.0%
Sulfate	EPA 300.0	05/01/12	mg/L	0.5	2.7	2.0	110.0%
Total Organic Carbon	EPA 9060M	05/16/12	mg/L	21.0	40.0	20.0	95.0%

US15 00737

REPLICATE RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/30/12
Date Received: 04/30/12

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: US27E Client ID: MW-14D-043012						
Alkalinity	SM 2320	05/02/12	mg/L CaCO3	412	411	0.2%
Carbonate	SM 2320	05/02/12	mg/L CaCO3	< 1.0	< 1.0	NA
Bicarbonate	SM 2320	05/02/12	mg/L CaCO3	412	411	0.2%
Hydroxide	SM 2320	05/02/12	mg/L CaCO3	< 1.0	< 1.0	NA
Chloride	EPA 300.0	05/02/12	mg/L	38.5	38.6	0.3%
N-Nitrate	EPA 300.0	05/01/12	mg-N/L	< 0.1	< 0.1	NA
Sulfate	EPA 300.0	05/01/12	mg/L	0.5	0.5	0.0%
Total Organic Carbon	EPA 9060M	05/16/12	mg/L	21.0	21.2	0.9%

METHOD BLANK RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Total Suspended Solids	SM2540D	05/02/12	mg/L	< 1.0 U	
Chloride	EPA 300.0	05/02/12	mg/L	< 0.1 U	
N-Nitrate	EPA 300.0	05/01/12	mg-N/L	< 0.1 U	
Total Phosphorus	SM4500-PE	05/08/12	mg-P/L	< 0.008 U	
Sulfate	EPA 300.0	05/01/12	mg/L	< 0.1 U	
Total Organic Carbon	EPA 9060M	05/16/12	mg/L	< 1.50 U	

US15:00799

LAB CONTROL RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Suspended Solids SM2540D	LCVL	05/02/12	mg/L	49.4	50.0	98.8%

US15:00746

STANDARD REFERENCE RESULTS-CONVENTIONALS
US27-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 05/18/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Method	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P114506	SM 2320	05/02/12	mg/L CaCO3	29.9	31.1	96.1%
Chloride ERA #411010	EPA 300.0	05/02/12	mg/L	3.0	3.0	100.0%
N-Nitrate ERA #230511	EPA 300.0	05/01/12	mg-N/L	3.1	3.0	103.3%
Total Phosphorus ERA #3303093	SM4500-PE	05/08/12	mg-P/L	0.098	0.100	98.0%
Sulfate ERA #160111	EPA 300.0	05/01/12	mg/L	3.0	3.0	100.0%
Total Organic Carbon ERA 0523-11-05	EPA 9060M	05/16/12	mg/L	21.3	20.0	106.5%

Subcontracted Results
Total Organic Halides Analyzed by Columbia Analytical Services Inc.

ARI Job ID: US15, US27

May 29, 2012 Analytical Report for Service Request No: K1204373

Sue Dunnihoo
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: RG Spring GW Sampling/US27

Dear Sue:

Enclosed are the results of the sample submitted to our laboratory on May 08, 2012. For your reference, these analyses have been assigned our service request number K1204373.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3363. You may also contact me via Email at Lisa.Domenighini@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Lisa Domenighini
Project Chemist

LD/jw

Columbia Analytical Services

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

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RIGHT SOLUTIONS RIGHT PARTNER

US15 : 00743

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

US15 : 00744

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

US15 : 66745

Columbia Analytical Services, Inc. - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	-
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

US15 00746

Case Narrative

US15/00747

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K1204373
Project:	RG Spring GW Sampling/US27	**Date Received:**	05/08/12
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water samples was received for analysis at Columbia Analytical Services on 05/08/12. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Approved by Lynda A Donaghue **Date** 5/30/12

US15 : 00748

Chain of Custody

US15 00749

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 04/30/12

ANALYTICAL RESOURCES INCORPORATED

ARI Project: US27

K1204373

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: ERM-West
Project ID: RG Spring GW Sampling
ARI PM: Sue Dunnihoo
Phone: 206-695-6207
Fax: 206-695-6201
Email: subdata@arilabs.com

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around:
Email Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
12-7680-US27	MW-14D-043012	04/30/12 13:01	Water	1	Total Organic Halides

Special Instructions: Lv3 Pkg, Method 9020, 2 EDD's

Carrier UPS		Airbill 12 832 695 03 5108 6955	Date 5-7-12
Relinquished by	Company ARI	Date 5-7-12	Time 1020
Received by	Company ALS	Date 5/8/12	Time 1020

Subcontractor Custody Form - US27
Page 1 of 1

PC 1 of a

Cooler Receipt and Preservation Form

Client / Project: ARI Service Request K12 4373

Received: 5/8/12 Opened: 5/8/12 By: AT Unloaded: 5/8/12 By: AT

1. Samples were received via? *Mail* *Fed Ex* (*UPS*) *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filed
2.8	✓	257		128826950351081955		

4. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
15. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

*Notes, Discrepancies, & Resolutions:*_____

General Chemistry Parameters

US15:007752

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K1204373
Project:	RG Spring GW Sampling/US27	**Date Collected:**	4/30/2012
Sample Matrix:	Water	**Date Received:**	5/8/2012

Halides, Total Organic (TOX)

Prep Method:	NONE	Units:	ug/L (ppb)
Analysis Method:	9020B	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-14D-043012	K1204373-001	10	4	1	NA	5/23/2012	15	
Method Blank	K1204373-MB	10	4	1	NA	5/23/2012	6	J

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K1204373
Project:	RG Spring GW Sampling/US27	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	5/23/2012

Matrix Spike/Duplicate Matrix Spike Summary
Halides, Total Organic (TOX)

Sample Name:	Batch QC	Units:	ug/L (ppb)
Lab Code:	K1204849-004MS, K1204849-004DMS	Basis:	NA
Test Notes:			

									Percent Recovery				
	Prep	**Analysis**		**Spike Level**		**Sample**	**Spike Result**				CAS Acceptance	**Relative Percent**	**Result**
Analyte	**Method**	**Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Notes**
Halides, Total Organic (TOX)	NONE	9020B	1000	10000	10000	1870	11600	11400	97	95	82-121	2	

DMS/020597p

US15 : 00754

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group
QA/QC Report

Client: Analytical Resources, Incorporated
Project: RG Spring GW Sampling/US27
Sample Matrix: Water

Service Request: K1204373
Date Collected: NA
Date Received: NA
Date Analyzed: 5/23/2012

Calibration and Method Blank Summary
Halides, Total Organic (TOX)
EPA Method 9020

	Halide Check Standard (µg)	Instrument Calibration Standard (µg)	Adsorption Standard (µg/L)	Method Blank (µg/L)
True Value	3.64	10.0	100	ND
Run A	3.99	9.7	96	6 J
Percent Recovery	110	97	96	
Run B	3.46	9.7		
Percent Recovery	95	97		

US15 00755

Work Request # (Original) K4373 K4390 K4578 K4849 292805

Tier: IV IV I (#5) II

Date Analyzed: 5/23/12

Analyst: EM

Analysis: TOX 9020B KTOX03

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	yes/(no)
6.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/(NA)
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
9.	Are results for methods blanks all ND?	(yes)/no/NA
10	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/(no)/NA
11.	Are all exceptions explained?	(yes)/no/NA
12.	Have all applicable service requests been reviewed?	(yes)/no/NA
13.	Are all samples labeled correctly?	(yes)/no/NA
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	(yes)/no/NA
15.	Are detection limits and units reported correctly?	(yes)/no/NA
16.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/(no)/NA

COMMENTS:

See bench sheet for QC failure comments.

K4373 due 5/25
K4390 due 5/25
K4578 due 5/28
~~K4849~~ EM 5/25/12

Final Approved by: _____ Date: 5/28/12

DQREPORT

US15 : 00756

AOX/TOX Benchsheet

Service Request #: K1204373, K1204390, K1204578, K1204849 Method # : TOX-9020B

Analysis For : Total Organic Halides Instrument: Crackers

Calibration Date: 7/5/2001 IPR Date: 5/9/2000

Instrument:	Volume	Concentration	Result	Reported Value	% Rec.
Halide Check	Run A = 10 µL	3.64	3.9900	3.9900	109.6
	Run B = 10 µL	3.64	3.4570	3.4570	95
NO_3 Wash Blank	2 mL	1) 0.2760	2) 0.1360	Average =	0.2060
Inst. Cal. Std.	Run A = 10 µL	10.0	9.8720	9.6660	97
	Run B = 10 µL	10.0	9.9440	9.7380	97

Lab Code	Initial Volume (mls)	Final Volume (mls)	OBS A µg	OBS B µg	Conc. (ppb)	Reported Value (ppb)	% Break-through	% RPD	Head-space	pH	% Recovery
MB	100	100	0.4610	0.1570	6	< 10					
PAR STD	100	100	9.6700	0.3900	96	96	1.9				96
K4373-1	25	100	0.4130	0.3060	12	NR	32.6		y	2	
K4390-1	100	100	0.4960	0.3050	4		25.4		y	2	
K4390-2	50	100	0.3390	NA	3	NR	282.2		y	2	
K4390-3	25	100	0.4320	0.3890	16	NR	44.7		y	2	
K4578-5	25	100	5.8790	3.7500	369	NR	38.5		n	5	
K4578-6	25	100	6.5370	2.5640	348	NR	27.1		n	7	
NO_3 Wash Blank	2 mL		1) 0.2100		2) 0.2110		Average =			0.2105	
ICS	10 µl				10.228	10.0175					100

Comments: High break through is disregarded if sample concentration is at or near MRL.

NA signifies B column is equal to or less than the nitrate wash blank and should be disregarded as per method.

K4578-6 moved to K-TOX-02.

sulfuric acid: EMD 51299 nitric acid: JTB K23022

Halide Check = 3.64 µg/L **Inst. Cal Std. =** 10.0 µg/L

TOX-9020B (ppb) = $\frac{[(OBS.A - NO_3\ Blank) + (OBS.B - NO_3\ Blank)] \times (DF)}{Volume\ Analyzed\ (L)}$

AOX-506 (ppb)

AOX-1650C (ppb) = $\frac{((OBS.A + OBS.B) - (MB\ OBS.A + MB\ OBS.B))}{Initial\ Volume\ Analyzed\ (L)}$

% Breakthrough = $\frac{(OBS.B - MB\ OBS.B) \times 100}{(OBS.A - MB\ OBS.A) + (OBS.B - MB\ OBS.B)}$

Matrix Spike = $\frac{10\ µl \times 1\ µg \times 100\ ml}{1\ µl \times 1ml \times 0.1\ L}$ = 10000 µg/L

NO_3 Wash ID #: TOX/3-27-P

Electrolyte ID #: TOX/3-60-AA

Carbon Lot #: 1111136

0.0103 NaCl ID #: TOX/3-70-N

1000 ppm TCP (PAR) ID #: TOX/3-72-G

1000 ppm TCP (ICS) ID #: TOX/3-72-F

NO3 = < 1.0

ICS = 90%-110%

PAR = 87-113%

MS =82-121%

Analyzed By:	EM	Date:	5/23/12 0959
Reviewed By:		Date:	5/25/12

US15 : 00757

AOX/TOX Benchsheet

Service Request #: K1204373, K1204390, K1204578, K1204849 Method # : TOX-9020B

Analysis For : Total Organic Halides Instrument: Crackers

Lab Code	Initial Volume (mls)	Final Volume (mls)	OBS A µg	OBS B µg	Conc. (ppb)	Reported Value (ppb)	% Break-through	% RPD	Head-space	pH	% Recovery
K4849-4	1	100	1.5640	0.7160	1859		27.2		y	7	
K4373-1D	100	100	1.2040	0.7220	15		34.0				
K4390-1D	100	100	0.8000	0.4640	8	6J	30.1	67*			1+1d
K4390-2D	100	100	0.4990	0.4490	5		45.3				
K4390-2T	100	100	0.5650	0.3520	5	5J	28.5	<1			2d+2t
K4390-3D	100	100	1.1560	0.6220	14		30.3				
K4578-5D	5	100	2.1230	0.2730	395		3.2				
K4578-5T	10	100	3.5210	0.6410	374	390	11.5	5			5d+5t
NO3 Wash Blank	2 mL		1)	0.2610	2)	0.2090	Average =				0.2350
ICS	10 µl				10.174	9.9390					99
K4373-1T	100	100	1.2160	0.7480	15	15	34.3	<1			1d+1t
K4849-4MS	1	100	11.0330	0.9990	11562	11600	6.6				97
K4849-4MSD	1	100	10.8660	1.0160	11412	11400	6.8	2			95
K4849-4D	2	100	2.7620	1.4490	1871	1870	32.5	<1			4+4d
LOD	100	100	0.9300	0.2360	7	7	<1				
LOQ	100	100	1.1770	0.1610	9	9	<1				
K4390-3T	100	100	0.9360	0.9290	14	14	49.7	<1			3d+3t
ICS	10 µl				10.127	9.8920					99

Comments: K4390-1/1d high RPD due to sample concentration less than five times MRL.

K4578-5t break through greater than 10%. See chloride titration bench sheet.

K4849-4/4d break through greater than 10%. See chloride titration bench sheet.

Analyzed By: EM	Date: 5/23/12
Reviewed By:	Date: 5/24/12

US15 : 90758

Blank Report

Blank Results

Data ID : AOX205232012.001

Reps.	Mode	Counts(µg)	Total Counts	$\bar{X}$	SD	RSD(%)	ABC No.	Date
1-1	AOX-2	0.276					1	05/23/12 09:59
1-2	AOX-2	0.136	0.412	0.412	***.**	***.**	1	05/23/12 10:04

BM 5/23/12

US15 : 00759

Sample Report

Sample All Data

Data ID : AOX205232012.001
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	ICS	10.00 µl	1.0000	9.872			1
1-2	ICS	10.00 µl	1.0000	9.944	19.816	0.19 %	1
n = 1	$\bar{X}$ = 0.19 %			SD = ****.**		RSD(%) = ***.**	

BM 5/23/12

US15-00750

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	MB	100.00 ml	1.0000	0.461			1
1-2	MB	100.00 ml	1.0000	0.157	0.618	2.06 ppb	1
	n = 1 $\bar{X}$ = 2.06 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	PAR	100.00 ml	1.0000	9.670			1
1-2	PAR	100.00 ml	1.0000	0.390	10.060	96.48 ppb	1
	n = 1 $\bar{X}$ = 96.48 ppb			SD = ****.**		RSD(%) = ***.**	
NR 1-1	K4373-1 over dilute	100.00 ml	0.2500	0.413			1
1-2	K4373-1	100.00 ml	0.2500	0.306	0.719	12.28 ppb	1
	n = 1 $\bar{X}$ = 12.28 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	K4390-1	100.00 ml	1.0000	0.496 A			1
(1) 1-2	~~K4390-1~~ K4390-2	100.00 ml	(1) ~~1.0000~~ 0.5000	0.339 A	NR 0.835 over dilute	4.23 ppb	1
	n = 1 $\bar{X}$ = 4.23 ppb			SD = ****.**		RSD(%) = ***.**	
(1) 1-1	K4390-2	100.00 ml	0.5000	0.162 B	NR over dilute		1
(1) 1-2	~~K4390-2~~ K4390-3	100.00 ml	(1) ~~0.5000~~ 0.2500	0.432 A	NR 0.594 over dilute	3.64 ppb	1
	n = 1 $\bar{X}$ = 3.64 ppb			SD = ****.**		RSD(%) = ***.**	
(1) 1-1	K4390-3	100.00 ml	0.2500	0.389 B	NR over dilute		1
(1) 1-2	~~K4390-3~~ K4390-1	100.00 ml	(1) ~~0.2500~~ 1.0000	0.305 B	0.694	11.28 ppb	1
	n = 1 $\bar{X}$ = 11.28 ppb			SD = ****.**		RSD(%) = ***.**	
NR 1-1	K4578-5	100.00 ml	0.2500	5.879			1
1-2	K4578-5	100.00 ml	0.2500	3.750	9.629	368.68 ppb	1
	n = 1 $\bar{X}$ = 368.68 ppb			SD = ****.**		RSD(%) = ***.**	
NR 1-1	K4578-6	100.00 ml	0.2500	6.537			1
1-2	K4578-6	100.00 ml	0.2500	2.564	9.101	347.56 ppb	1
	n = 1 $\bar{X}$ = 347.56 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	NITRATE WASH BLANK	100.00 ml	1.0000	0.210			1
1-2	NITRATE WASH BLANK	100.00 ml	1.0000	0.211	0.421	0.09 ppb	1
	n = 1 $\bar{X}$ = 0.09 ppb			SD = ****.**		RSD(%) = ***.**	
1-1	ICS	10.00 µl	1.0000	10.228	10.228	981.60 ppm	1
	n = 1 $\bar{X}$ = 981.60 ppm			SD = ****.**		RSD(%) = ***.**	

(1) Analyst inadvertently skipped over K4390-1 column B, then went back after K4390-3 column B was analyzed and injected it causing columns to be rearranged 19 transition

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	K4849-4	100.00 ml	0.0100	1.564			1
1-2	K4849-4	100.00 ml	0.0100	0.716	2.280	1.87 ppm	1
n = 1	$\bar{X}$ = 1.87 ppm		SD = ****.**		RSD(%) = ***.**		
1-1	K4373-1D	100.00 ml	1.0000	1.204			1
1-2	K4373-1D	100.00 ml	1.0000	0.722	1.926	15.14 ppb	1
n = 1	$\bar{X}$ = 15.14 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4390-1D	100.00 ml	1.0000	0.800			1
1-2	K4390-1D	100.00 ml	1.0000	0.464	1.264	8.52 ppb	1
n = 1	$\bar{X}$ = 8.52 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4390-2D	100.00 ml	1.0000	0.499			1
1-2	K4390-2D	100.00 ml	1.0000	0.449	0.948	5.36 ppb	1
n = 1	$\bar{X}$ = 5.36 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4390-2T	100.00 ml	1.0000	0.565			1
1-2	K4390-2T	100.00 ml	1.0000	0.352	0.917	5.05 ppb	1
n = 1	$\bar{X}$ = 5.05 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4390-3D	100.00 ml	1.0000	1.156			1
1-2	K4390-3D	100.00 ml	1.0000	0.622	1.778	13.66 ppb	1
n = 1	$\bar{X}$ = 13.66 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4578-5D	100.00 ml	0.0500	2.123			1
1-2	K4578-5D	100.00 ml	0.0500	0.273	2.396	396.80 ppb	1
n = 1	$\bar{X}$ = 396.80 ppb		SD = ****.**		RSD(%) = ***.**		
1-1	K4578-5T	100.00 ml	0.1000	3.521			1
1-2	K4578-5T	100.00 ml	0.1000	0.641	4.162	375.00 ppb	1
n = 1	$\bar{X}$ = 375.00 ppb		SD = ****.**		RSD(%) = ***.**		
2-1	NITRATE WASH BLANK	100.00 ml	1.0000	0.261			1
2-2	NITRATE WASH BLANK	100.00 ml	1.0000	0.209	0.470	0.58 ppb	1
n = 1	$\bar{X}$ = 0.58 ppb		SD = ****.**		RSD(%) = ***.**		
2-1	ICS	10.00 µl	1.0000	10.174	10.174	976.20 ppm	1
n = 1	$\bar{X}$ = 976.20 ppm		SD = ****.**		RSD(%) = ***.**		

EM 5/23/12

US15 : 00762

Sample Report

Sample All Data

Data ID : AOX205232012.002
Blank : 0.412 µg/2Column

Reps.	Sample ID	Sample Size	Dilution Rate	Counts(µg)	Total Counts	Concentration	ABC No.
1-1	K4373-1T	100.00 ml	0.0200	1.216			1
1-2	K4373-1T	100.00 ml	0.0200	0.748	1.964	776.00 ppb	1
	n = 1	$\bar{X}$ = 776.00 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	K4849-4MS	100.00 ml	0.0100	11.033			1
1-2	K4849-4MS	100.00 ml	0.0100	0.999	12.032	11.62 ppm	1
	n = 1	$\bar{X}$ = 11.62 ppm		SD = ****.**		RSD(%) = ***.**	
1-1	K4849-4MSD	100.00 ml	0.0100	10.866			1
1-2	K4849-4MSD	100.00 ml	0.0100	1.016	11.882	11.47 ppm	1
	n = 1	$\bar{X}$ = 11.47 ppm		SD = ****.**		RSD(%) = ***.**	
1-1	K4849-4D	100.00 ml	0.0200	2.762			1
1-2	K4849-4D	100.00 ml	0.0200	1.449	4.211	1.90 ppm	1
	n = 1	$\bar{X}$ = 1.90 ppm		SD = ****.**		RSD(%) = ***.**	
1-1	LOD	100.00 ml	1.0000	0.930			1
1-2	LOD	100.00 ml	1.0000	0.236	1.166	7.54 ppb	1
	n = 1	$\bar{X}$ = 7.54 ppb		SD = ****.**		RSD(%) = ***.**	
1-1	LOQ	100.00 ml	1.0000	1.177			1
1-2	LOQ	100.00 ml	1.0000	0.161	1.338	9.26 ppb	1
	n = 1	$\bar{X}$ = 9.26 ppb		SD = ****.**		RSD(%) = ***.**	
2-1	K4390-3D	100.00 ml	1.0000	0.936			1
2-2	K4390-3D	100.00 ml	1.0000	0.929	1.865	14.53 ppb	1
	n = 1	$\bar{X}$ = 14.53 ppb		SD = ****.**		RSD(%) = ***.**	
3-1	ICS	10.00 µl	1.0000	10.127	10.127	971.50 ppm	1
	n = 1	$\bar{X}$ = 971.50 ppm		SD = ****.**		RSD(%) = ***.**	

DM 5/23/12

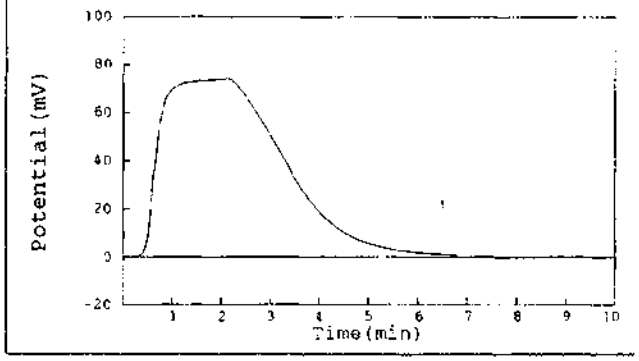
US15:00763

Sample Report

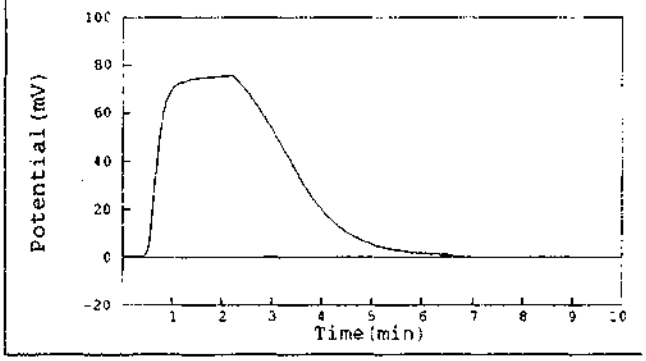
Sample Charts

Data ID : AOX205232012.001

Reps. : 1-1 05/23/12 10:12
Sample ID : ICS
Counts(µg): 9.872



Reps. : 1-2 05/23/12 10:20
Sample ID : ICS
Counts(µg): 9.944



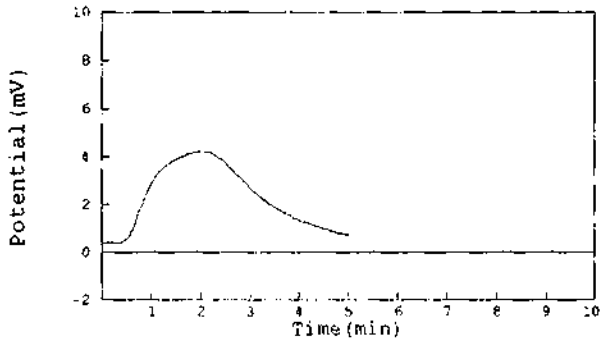
US15 90754

Sample Report

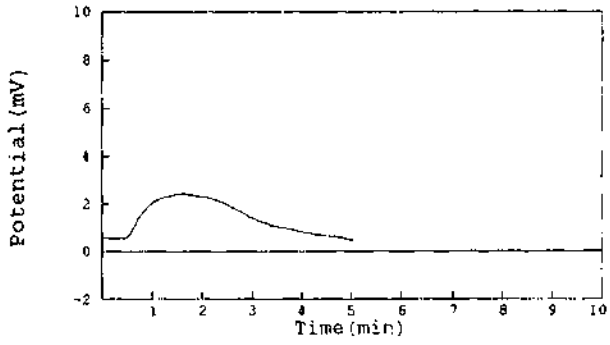
Sample Charts

Data ID : AOX205232012.002

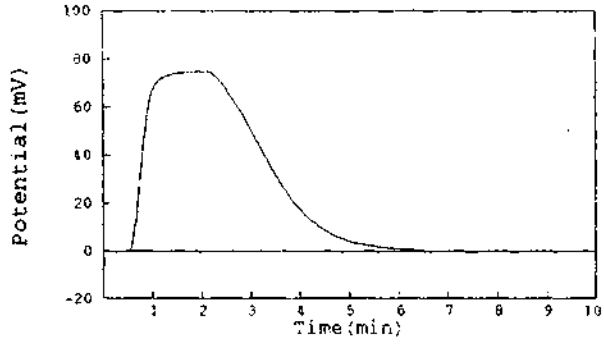
Reps. : 1-1 05/23/12 10:34
Sample ID : MB
Counts(µg): 0.461



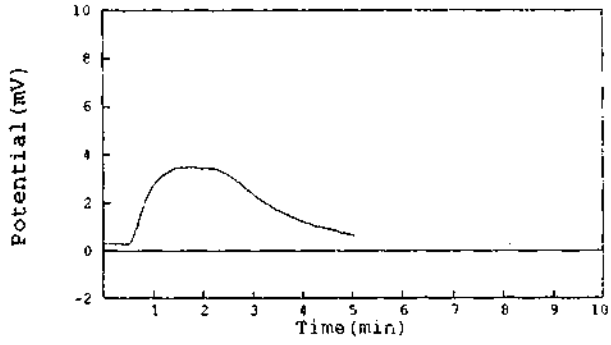
Reps. : 1-2 05/23/12 10:39
Sample ID : MB
Counts(µg): 0.157



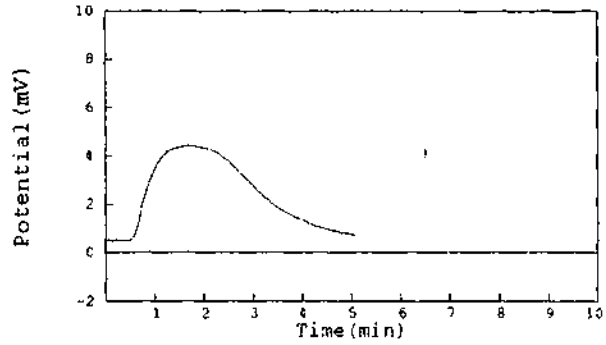
Reps. : 1-1 05/23/12 10:47
Sample ID : PAR
Counts(µg): 9.670



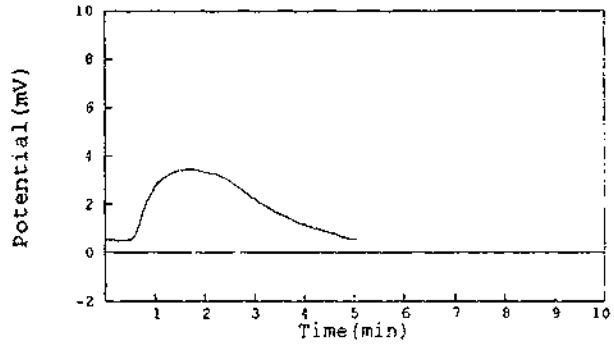
Reps. : 1-2 05/23/12 10:53
Sample ID : PAR
Counts(µg): 0.390



Reps. : 1-1 05/23/12 10:59
Sample ID : K4373-1
Counts(µg): 0.413



Reps. : 1-2 05/23/12 11:05
Sample ID : K4373-1
Counts(µg): 0.306



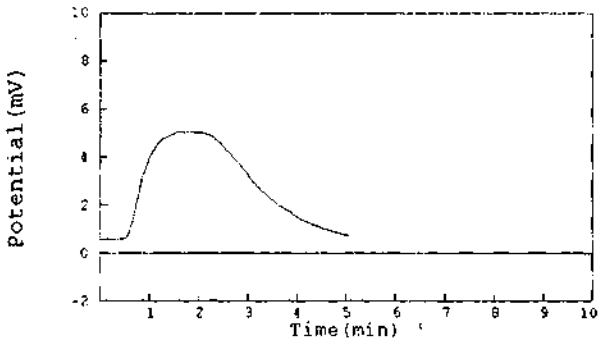
US15:00755

Sample Report

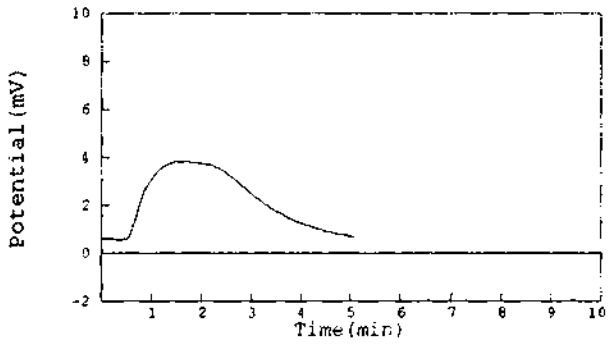
Sample Charts

Data ID : AOX205232012.002

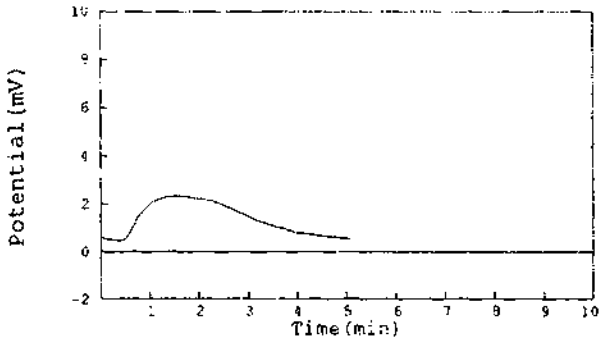
Reps. : 1-1 05/23/12 11:10
Sample ID : K4390-1
Counts(µg): 0.496



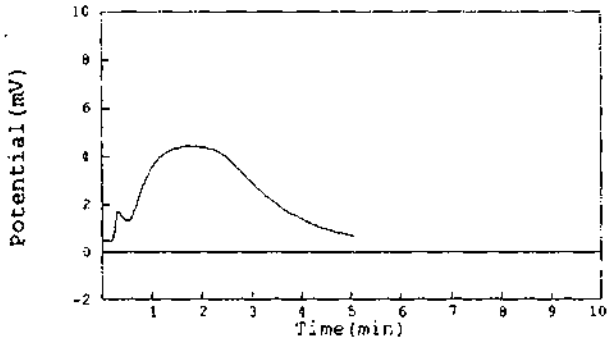
Reps. : 1-2 05/23/12 11:16
Sample ID : K4390-1
Counts(µg): 0.339



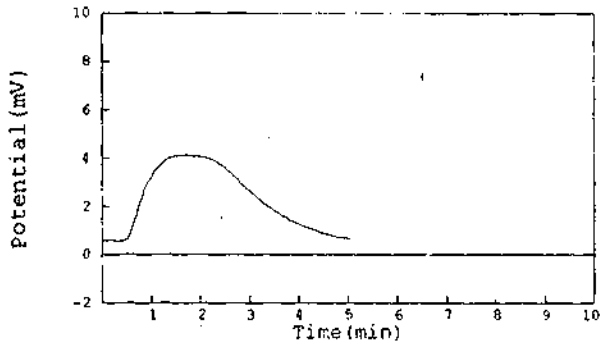
Reps. : 1-1 05/23/12 11:21
Sample ID : K4390-2
Counts(µg): 0.162



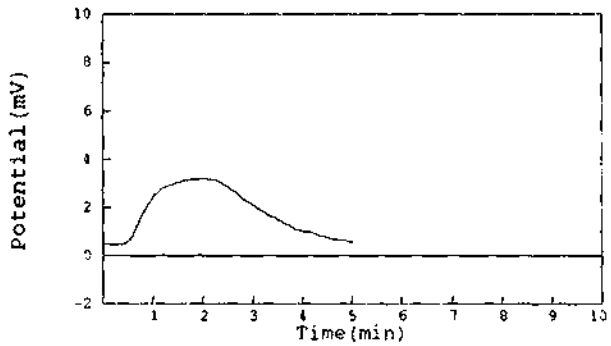
Reps. : 1-2 05/23/12 11:27
Sample ID : K4390-2
Counts(µg): 0.432



Reps. : 1-1 05/23/12 11:33
Sample ID : K4390-3
Counts(µg): 0.389



Reps. : 1-2 05/23/12 11:40
Sample ID : K4390-3
Counts(µg): 0.305



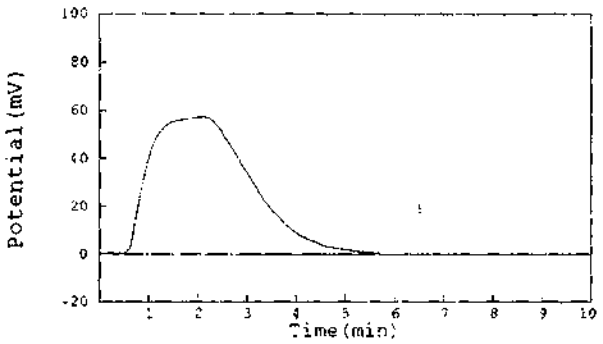
US15 : 00766

Sample Report

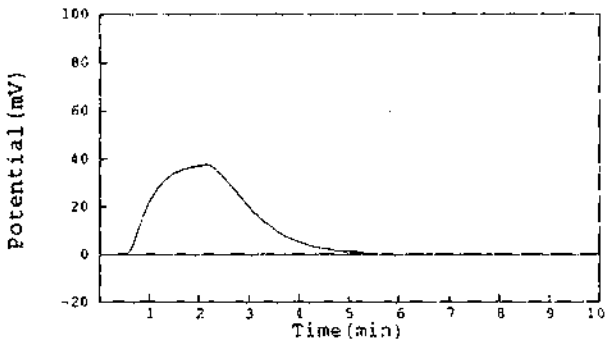
Sample Charts

Data ID : AOX205232012.002

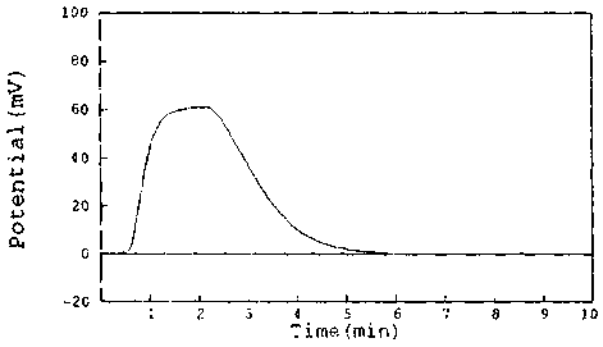
Reps. : 1-1 05/23/12 11:48
Sample ID : K4578-5
Counts(µg): 5.879



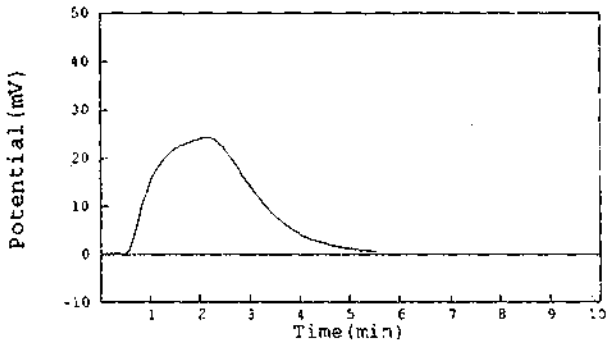
Reps. : 1-2 05/23/12 11:55
Sample ID : K4578-5
Counts(µg): 3.750



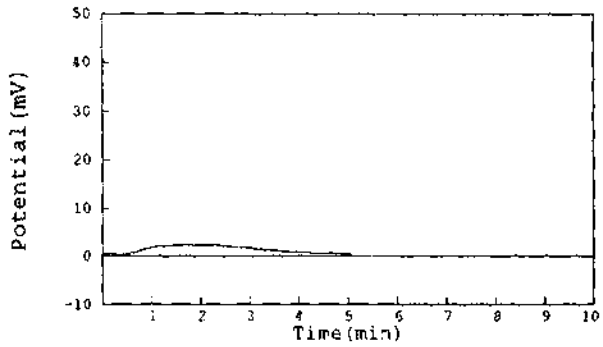
Reps. : 1-1 05/23/12 12:02
Sample ID : K4578-6
Counts(µg): 6.537



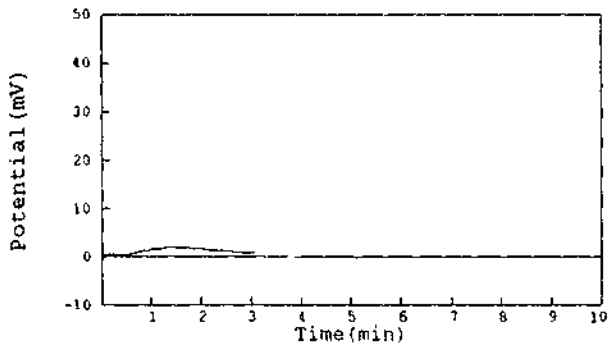
Reps. : 1-2 05/23/12 12:08
Sample ID : K4578-6
Counts(µg): 2.564



Reps. : 1-1 05/23/12 12:18
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.210



Reps. : 1-2 05/23/12 12:28
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.211



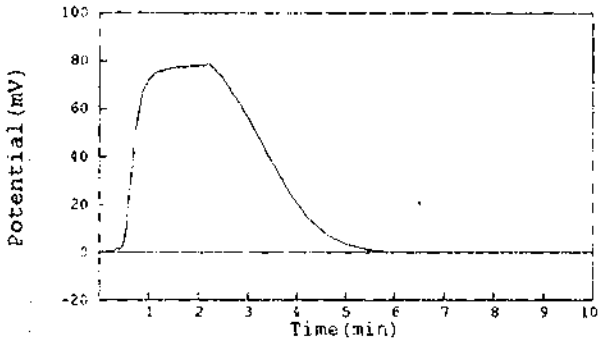
US15:00767

Sample Report

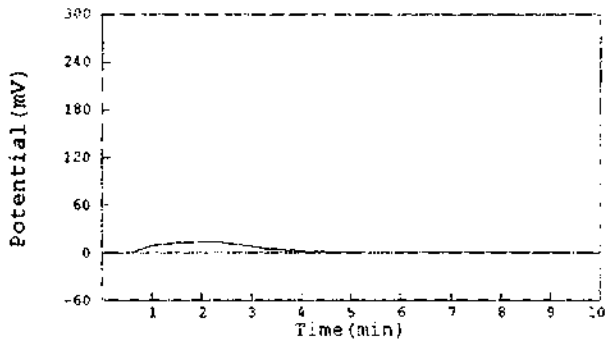
Sample Charts

Data ID : AOX205232012.002

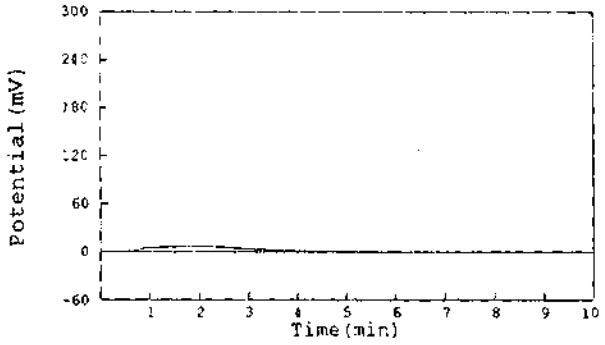
Reps. : 1-1 05/23/12 12:37
Sample ID : ICS
Counts(µg): 10.228



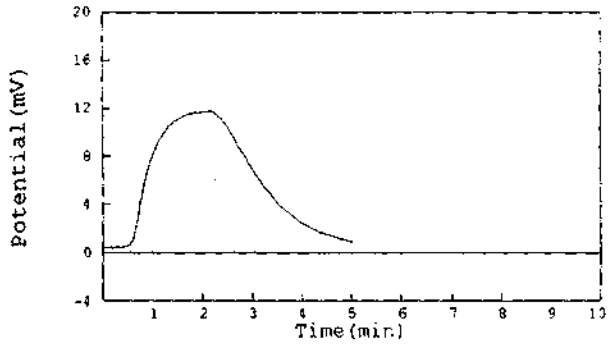
Reps. : 1-1 05/23/12 12:50
Sample ID : K4849-4
Counts(µg): 1.564



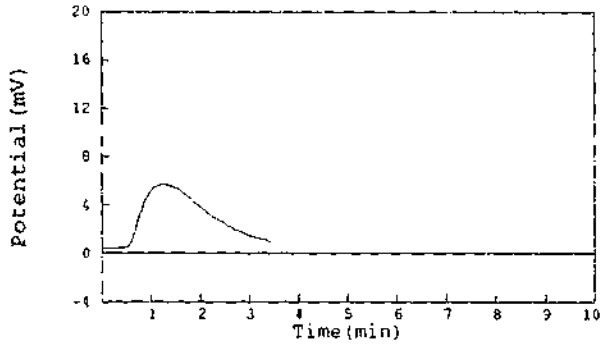
Reps. : 1-2 05/23/12 12:57
Sample ID : K4849-4
Counts(µg): 0.716



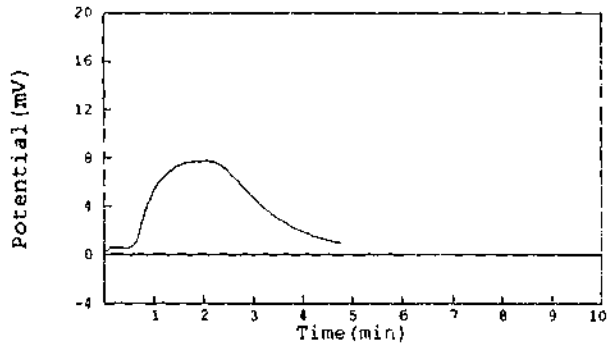
Reps. : 1-1 05/23/12 13:05
Sample ID : K4373-1D
Counts(µg): 1.204



Reps. : 1-2 05/23/12 13:10
Sample ID : K4373-1D
Counts(µg): 0.722



Reps. : 1-1 05/23/12 13:18
Sample ID : K4390-1D
Counts(µg): 0.800



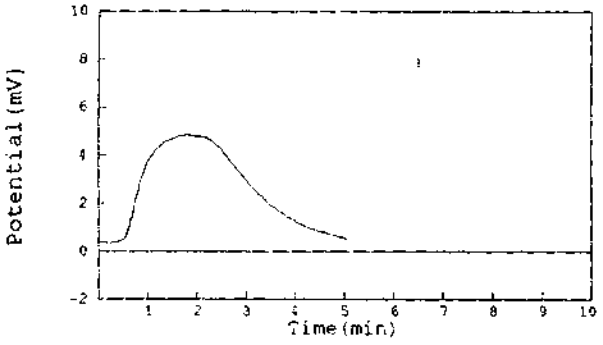
US15:00768

Sample Report

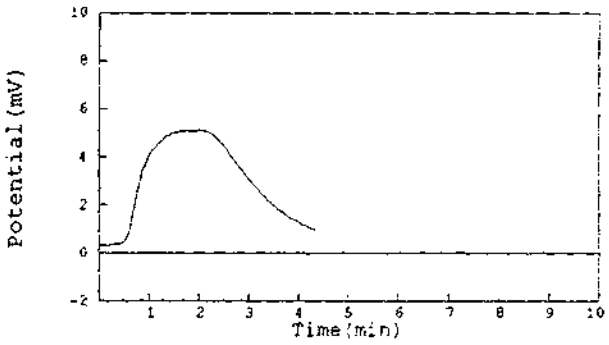
Sample Charts

Data ID : AOX205232012.002

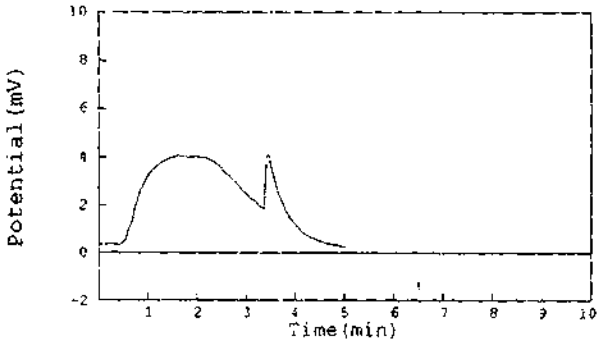
Reps. : 1-2 05/23/12 13:24
Sample ID : K4390-1D
Counts(µg): 0.464



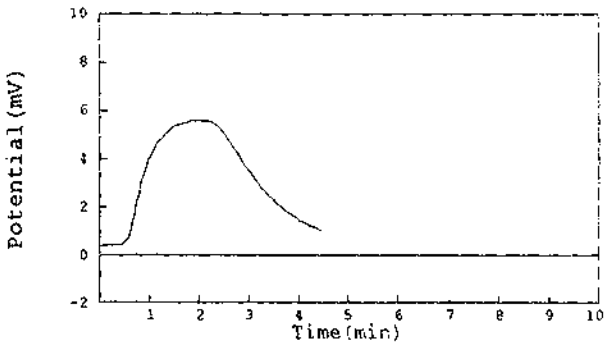
Reps. : 1-1 05/23/12 13:29
Sample ID : K4390-2D
Counts(µg): 0.499



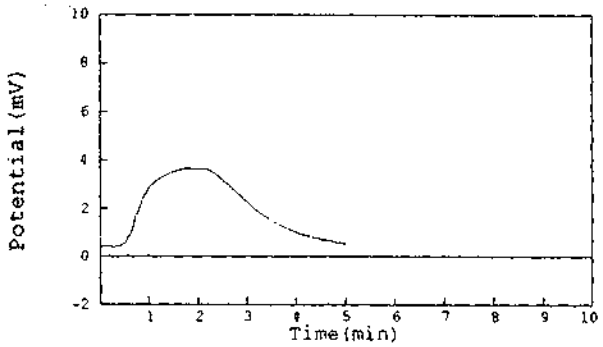
Reps. : 1-2 05/23/12 13:38
Sample ID : K4390-2D
Counts(µg): 0.449



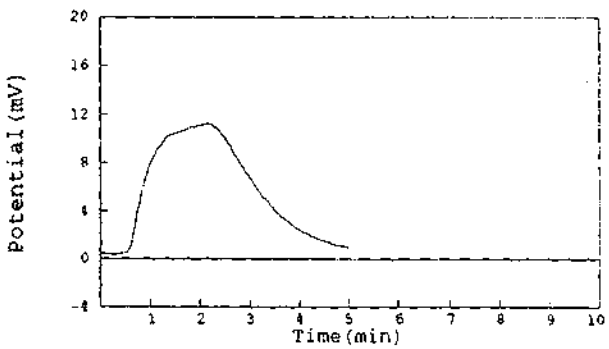
Reps. : 1-1 05/23/12 13:54
Sample ID : K4390-2T
Counts(µg): 0.565



Reps. : 1-2 05/23/12 14:01
Sample ID : K4390-2T
Counts(µg): 0.352



Reps. : 1-1 05/23/12 14:08
Sample ID : K4390-3D
Counts(µg): 1.156



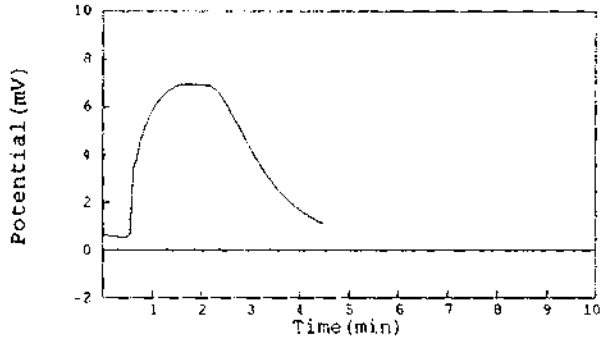
US15:00769

Sample Report

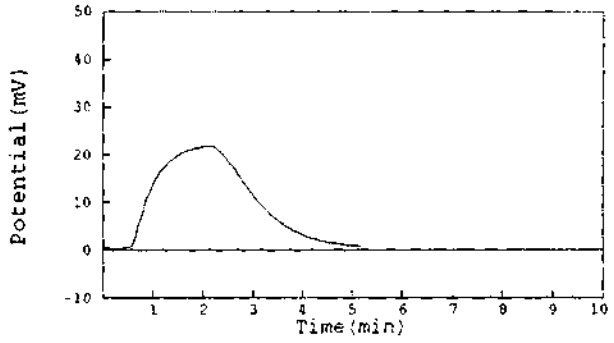
Sample Charts

Data ID : AOX205232012.002

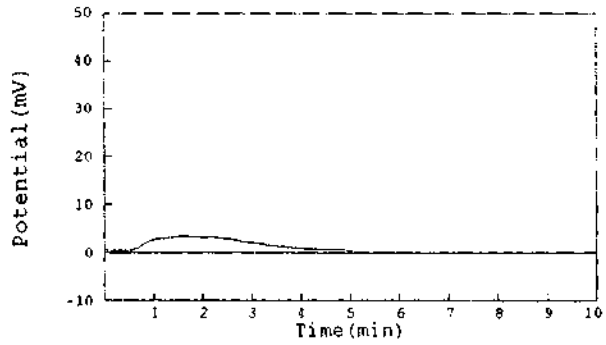
Reps. : 1-2 05/23/12 14:13
Sample ID : K4390-3D
Counts(µg): 0.622



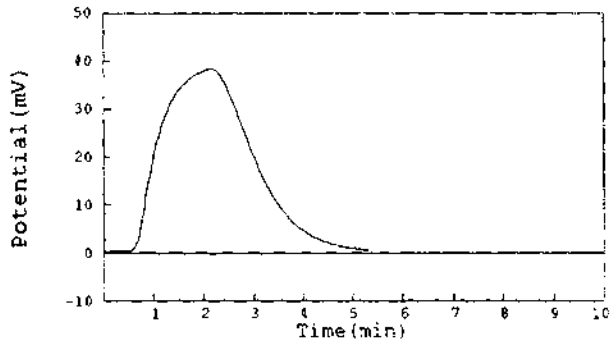
Reps. : 1-1 05/23/12 14:20
Sample ID : K4578-5D
Counts(µg): 2.123



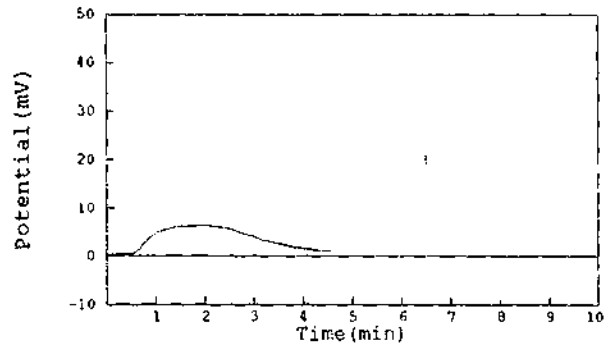
Reps. : 1-2 05/23/12 14:26
Sample ID : K4578-5D
Counts(µg): 0.273



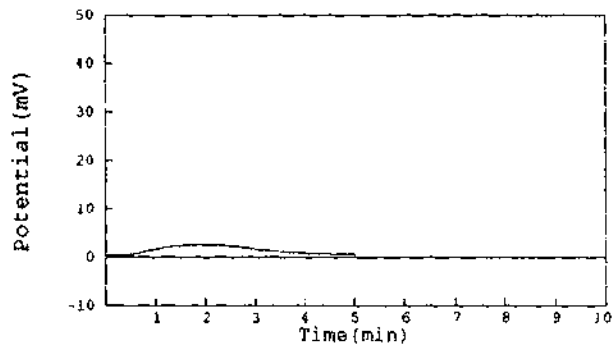
Reps. : 1-1 05/23/12 14:37
Sample ID : K4578-5T
Counts(µg): 3.521



Reps. : 1-2 05/23/12 14:42
Sample ID : K4578-5T
Counts(µg): 0.641



Reps. : 2-1 05/23/12 14:50
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.261



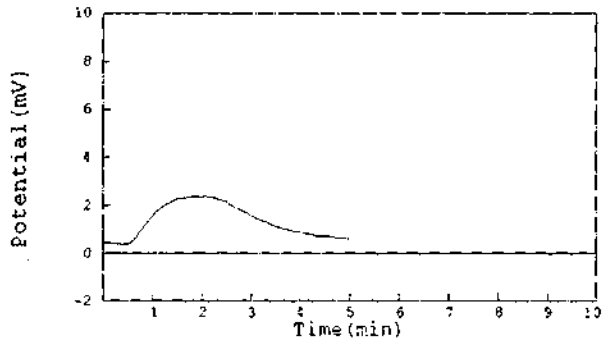
US15:00770

Sample Report

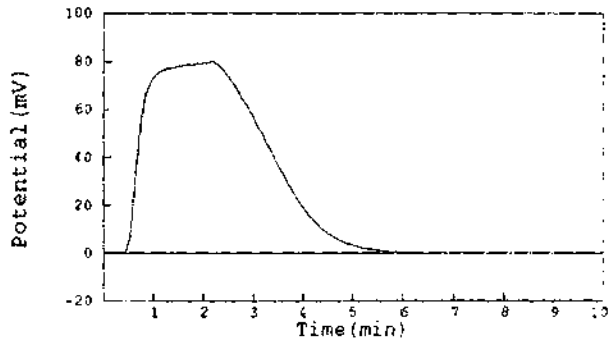
Sample Charts

Data ID : AOX205232012.002

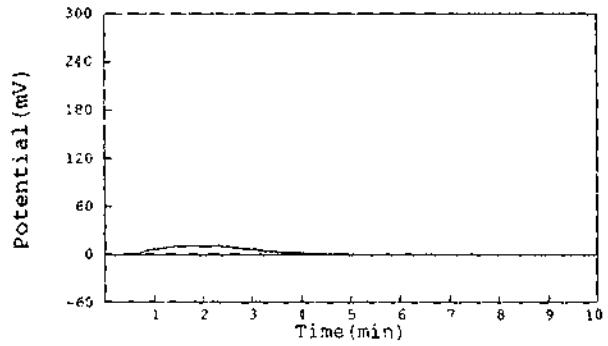
Reps. : 2-2 05/23/12 14:58
Sample ID : NITRATE WASH BLANK
Counts(µg): 0.209



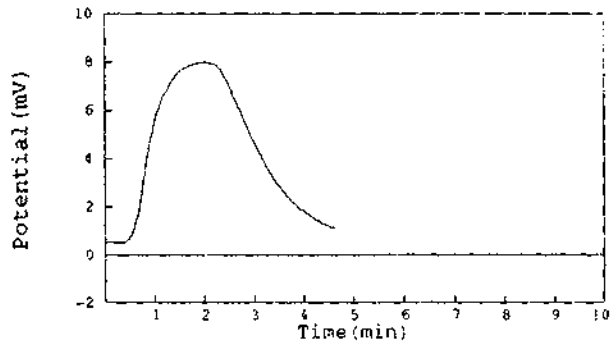
Reps. : 2-1 05/23/12 15:08
Sample ID : ICS
Counts(µg): 10.174



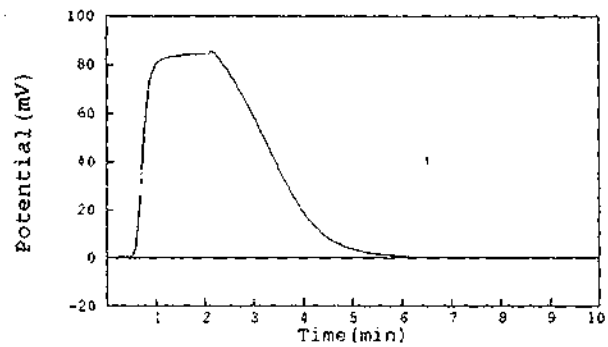
Reps. : 1-1 05/23/12 15:21
Sample ID : K4373-1T
Counts(µg): 1.216



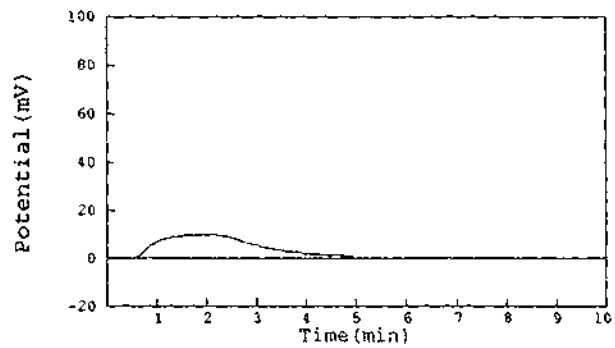
Reps. : 1-2 05/23/12 15:27
Sample ID : K4373-1T
Counts(µg): 0.748



Reps. : 1-1 05/23/12 15:36
Sample ID : K4849-4MS
Counts(µg): 11.033



Reps. : 1-2 05/23/12 15:41
Sample ID : K4849-4MS
Counts(µg): 0.999



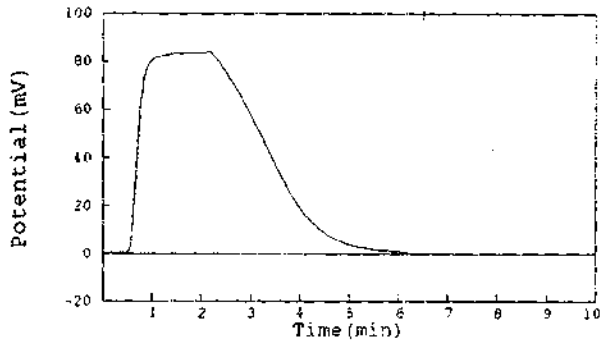
US15:00771

Sample Report

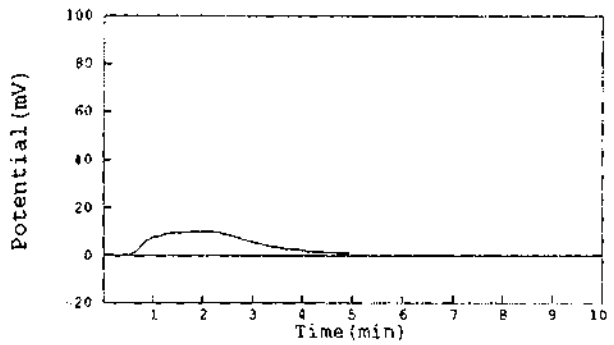
Sample Charts

Data ID : AOX205232012.002

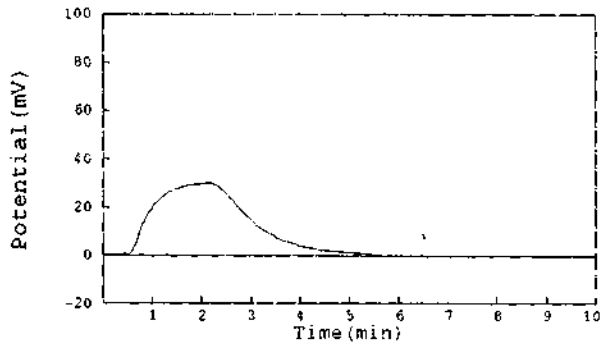
Reps. : 1-1 05/23/12 15:48
Sample ID : K4849-4MSD
Counts(µg): 10.866



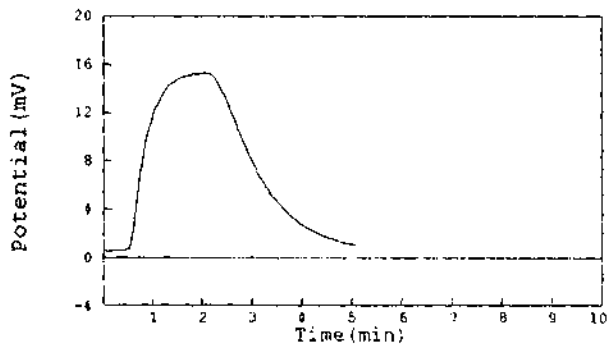
Reps. : 1-2 05/23/12 15:54
Sample ID : K4849-4MSD
Counts(µg): 1.016



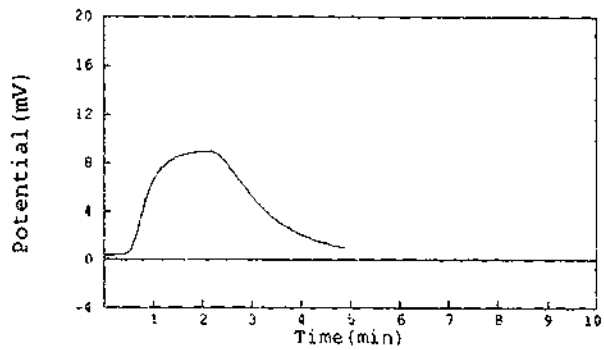
Reps. : 1-1 05/23/12 16:14
Sample ID : K4849-4D
Counts(µg): 2.762



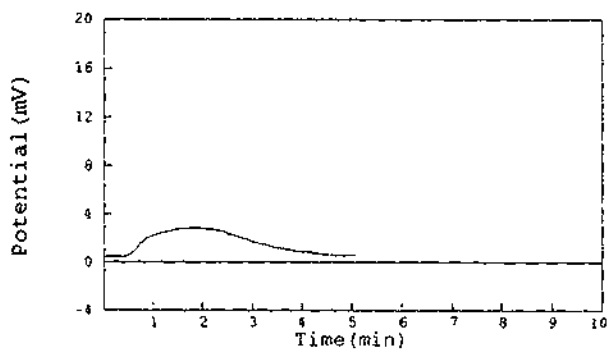
Reps. : 1-2 05/23/12 16:20
Sample ID : K4849-4D
Counts(µg): 1.449



Reps. : 1-1 05/23/12 16:29
Sample ID : LOD
Counts(µg): 0.930



Reps. : 1-2 05/23/12 16:36
Sample ID : LOD
Counts(µg): 0.236



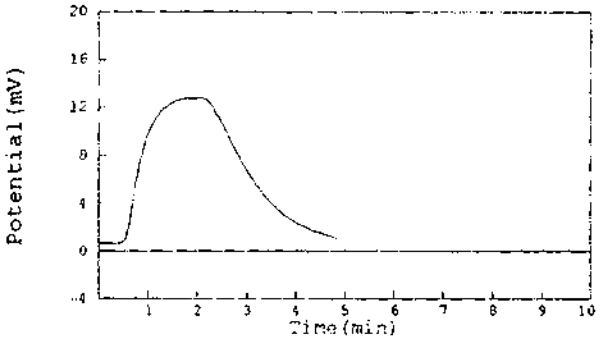
US15:00772

Sample Report

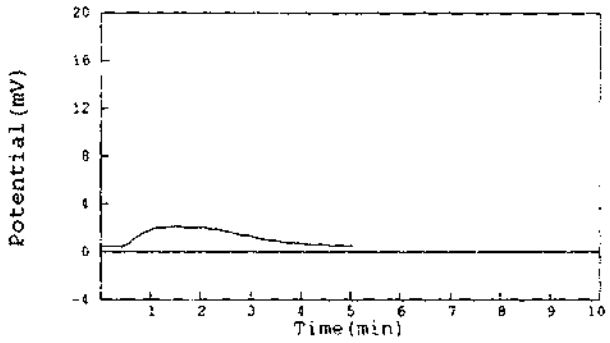
Sample Charts

Data ID : AOX205232012.002

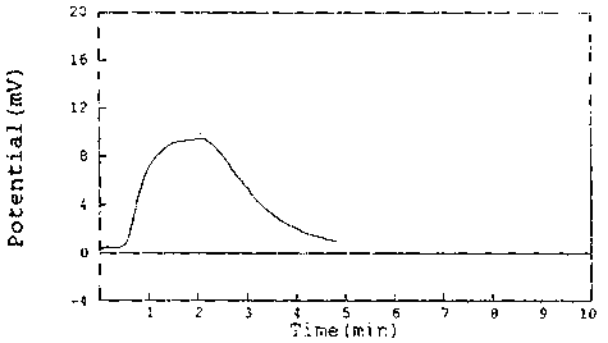
Reps. : 1-1 05/23/12 16:42
Sample ID : LOQ
Counts(µg): 1.177



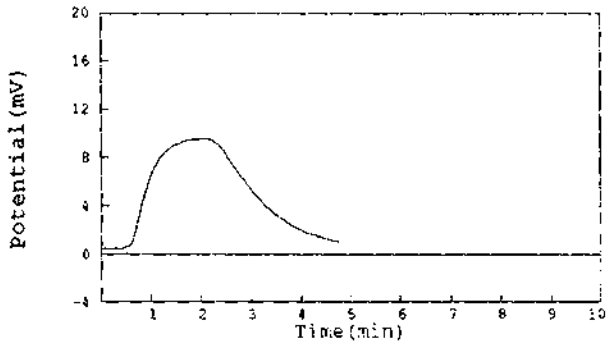
Reps. : 1-2 05/23/12 16:50
Sample ID : LOQ
Counts(µg): 0.161



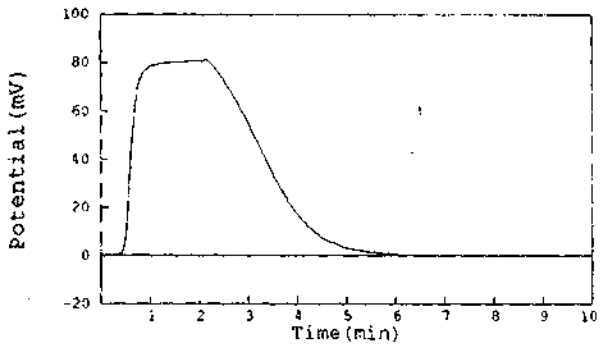
Reps. : 2-1 05/23/12 16:56
Sample ID : K4390-3D
Counts(µg): 0.936



Reps. : 2-2 05/23/12 17:03
Sample ID : K4390-3D
Counts(µg): 0.929



Reps. : 3-1 05/23/12 17:11
Sample ID : ICS
Counts(µg): 10.127



US15:00773

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: (K4578) K4849 Method: 9252 / SM 4500 Cl-C

Analysis: Chloride

Standardization Data	Trial 1	Trial 2	Trial 3
$Hg(NO_3)_2$ Titrated			
Blank Correction			
Amount of Titrant			
Chloride mg/L			
Percent Recovery			

Sample Number	Blank Corr.	CCV-1	CCB-1	MBlank	APG	K4578-5	K4849-4
Sample Aliquot (mL)		50	50			25	0.5
NaOH Added? (Y or N)						N	N
Titrant Used						1.38	2.10
Blank Correction						0.10	0.10
Final Amount of Titrant						1.28	2.00
Chloride mg/L						26	2000

Sample Number							
Sample Aliquot (mL)							
NaOH Added? (Y or N)							
Titrant Used							
Blank Correction							
Final Amount of Titrant							
Chloride mg/L							

Sample Number							
Sample Aliquot (mL)							
NaOH Added? (Y or N)							
Titrant Used							
Blank Correction							
Final Amount of Titrant							
Chloride mg/L							

APG 4053 Lot # : ID#: T.V.= %Recovery =

Titrant ID: CCV ID:

NA EM 5/25/12

Chloride (mg/l) = [(Titrant Used - Blank Correction)/Aliquot] X 35.453 X (0.0141 Low Range) or (0.141 High Range)

Analyzed By: EM	Date: 5/25/12
Reviewed By:	Date:

US15:00774

Method Detection Limit - LOD Verification

Columbia Analytical Services - Kelso

Analytical Method:	EPA 9020B	Instrument:	Crackers - TOX-03
Extr./Dig. Method:	NA	Analyst(s):	EM
Matrix:	Water		
Units:	ug/L		

		Sample ID:	K1203990							
		Date Analyzed:	5/23/2012							
Analyte	MDL	Spike Level	Result 1	s/n >3	Result 2	s/n >3	Result 3	s/n >3	Result 4	s/n >3
Total Organic Halides	4	5	7	y						
Supervisor Approval:			✓							
QA Approval:										

US15-00775

Limit of Quantitation - LOQ Verification

Columbia Analytical Services - Kelso

Analytical Method:	EPA 9020B								
Extr./Dig. Method:	NA			Instrument:	Crackers - TOX-03				
Matrix:	water			Analyst(s):	EM				
Units:	ug/L								
Quarter:									
Service Request:	K1203990								
Date Analyzed:	5/23/2012					Percent	Percent	Acceptance	% RSD
Analyte	Spike Level	Result	Result	Result	Result	Recovery	RSD	Limits	Limits
Total Organic Halides	10.000	9.000				90	#DIV/0!	75-125%	30
						#DIV/0!	#DIV/0!		
						#DIV/0!	#DIV/0!		
Supervisor Approval:									
QA Approval:									

USAS-00776

General Chemistry Raw Data
Analyst Notes and Raw Data

ARI Job ID: US15, US27

5-1-12

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS) DATE: 4/30/2012

Methods : SM 2540 D-97, 2540 E-97 ANALYST: KE 10:22

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: N / A

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# **6399J*** 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time			4/22/12 12:04 KE		4/30/12 13:40 KE										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1141	0.1141	0.1141	STOP		0.0	**<1**						
LCS # 00594-10		1000	0.1085	0.1581	0.1580	STOP		49.5	**49.5**	99.0%	% Recovery				
UR84 A1		60	0.1226	0.2052	0.2050	STOP		82.4	**1373.3**						
UR84 A1 dup		60	0.1223	0.2087	0.2084	STOP		86.1	**1435.0**						
								RPD =	*4.4%*					*RPD =*	*NA*
US08 A1		50	0.1206	0.1441	0.1441	STOP		23.5	**470.0**						
US08 A1 dup		50	0.1206	0.1458	0.1458	STOP		25.2	**504.0**						
								RPD =	*7.0%*					*RPD =*	*NA*
US15 D4		930	0.1194	0.1207	0.1207	STOP		1.3	**1.4**						
US15 E6		930	0.1199	0.1203	0.1203	STOP		0.4	**< 1.1**						

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Analyst:	LD	Date/Time:	4-30-12 10:22	Oven #:	12	Muffle Furnance:	N/A	Balance:	1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

LCS (Cellulose from MP Biochemicals) Lott #		6398J	0.0500 Gram to 1000 mL = **50 mg / L TSS**								
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02		
Date & Time:			4-30-12 12:04	4-30-12 12:40							
Cal Weight (10.0000g):			10.0000 (R)	10.0000 (W)							

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams)			Dry Wt mg	TSS	Ash Weight 550°C		LOI - mg	TVSS mg/L
				1	2	3			1	2		
BLANK	P8904	1000	0.1141	0.1141	0.1141							
LCS0059440	P8905	1000	0.1085	0.1581	0.1580							
LL284 A1	P8906	60	0.1226	0.2052	0.2050							
↓ MA1	P8907	60	0.1223	0.2087	0.2084							
LL505 A1	P8110	52	0.1206	0.1441	0.1441							
↓ MA1	P8112	52	0.1206	0.1458	0.1458							
LL515 D4	P8111	930	0.1174	0.1207	0.1207							
↓ E4	P8113	930	0.1199	0.1203	0.1203							
						4-30-12 10						

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS) DATE: 5/2/2012

Methods : SM 2540 D-97, 2540 E-97 ANALYST: CDE 11:05

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: NA

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# 6399J* 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time				5/2/12 12:38	5/2/12 14:52										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1219	0.1217	0.1217	STOP		-0.2	**< 1**						
LCS # 594-13		1000	0.1094	0.1589	0.1588	STOP		49.4	**49.4**	98.8%	% Recovery				
US27 A5		940	0.1086	0.1100	0.1100	STOP		1.4	**1.5**						
US27 E3		930	0.1217	0.1225	0.1225	STOP		0.8	**< 1.1**						
US29 A6		955	0.1200	0.1223	0.1224	STOP		2.3	**2.4**						
US29 B5		460	0.1095	0.1546	0.1545	STOP		45.0	**97.8**						
US29 B5 dup		460	0.1216	0.1686	0.1684	STOP		46.8	**101.7**						
								RPD =	*3.9%*					*RPD =*	*NA*
US36 C1		1000	0.1222	0.1252	0.1252	STOP		3.0	**3.0**						
US43 C1		400	0.1081	0.1175	0.1174	STOP		9.3	**23.3**						
US43 C1 dup		400	0.1100	0.1189	0.1187	STOP		8.7	**21.8**						
								RPD =	*6.7%*					*RPD =*	*NA*
US51 A4		950	0.1215	0.1217	0.1216	STOP		0.1	**< 1.1**						

5/2/55 - 5:51

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Analyst:	CMK	Date/Time:	5-2-12 1:05	Oven #:	12	Muffle Furnance:		Balance:	1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as:
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as:
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

LCS (Cellulose from MP Biochemicals) Lott #		6399J	0.0500 Gram to 1000 mL = 50 mg / L TSS							
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	
Date & Time:			5-2-12 12:39	5-2-12 14:52						
Cal Weight (10.0000g):			10.0000 gm	10.0000 gm						

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams)			Dry Wt mg	TSS	Ash Weight 550°C		LOI - mg	TVSS mg/L
				1	2	3			1	2		
BLANK	P8896	1000	0.1219	0.1217	0.1217							
LCS#594-13	92	↓	0.1594	0.1589	0.1588							
US27 A5	98	940	0.1086	0.1100	0.1100							
↓ E3	99	930	0.1217	0.1225	0.1225							
US29 A6	P8900	955	0.1200	0.1223	0.1224							
↓ B5	01	960	0.1095	0.1546	0.1545							
US29 B5b	02	↓	0.1216	0.1686	0.1684							
US56 C'	03	1000	0.1222	0.1252	0.1252							
US43 C'	08	900	0.1081	0.1175	0.1174							
↓ C'R	09	↓	0.1100	0.1189	0.1187							
US51 A4	10	950	0.1215	0.1217	0.1216							

5-2-12 CMK

ALKALINITY BENCHSHEET

methods: **SM 2320 B-97**

Date/Time: 5/2/12 12:28

Analyst: KE

pH meter verification — pH meter ID: **ACCUMET AR60** — Buret ID: **01G30627**

Buffer pH: **7.00** — pH Probe ID: **AR60**

Measured pH: 7.02 — Calibration OK — **HIGH CURVE**

Standardization of acid titrant *(titration to pH 4.5)*

ARI ID: **00126-7**

grams Na2CO3 = **0.6251** to **250** ml DI

Normality Na2CO3 = 0.0472

Assumed Acid Normality = **0.1**

Standardized Acid Normality= 0.0998 ***OK!***

BLANK		STANDARD TITRATION		
BLANK	ml ACID	ml Na2CO3	ml ACID	N H2SO4
1	0.02	5	2.38	0.100
2	0.02	5	2.41	0.099
3	0.02	5	2.36	0.101
AVERAGE	0.02			0.100

Partitioning Calculations (T=Total, P=Phenolphthalein)

Obs	HCO3	CO3	OH
P =0	T	0	0
P< 0.5T	T - 2P	2P	0
P= 0.5T	0	2P	0
P> 0.5T	0	2(T - P)	2P - T
P =T	0	0	T

Calibration Verification Standard (second source sodium carbonate solution)

ARI ID: **00126-6**

grams Na2CO3 = **0.6253** grams in **250** mL = **2360** mg/L CaCO3

dilution: **5.0** mL to **95** CVS = **124.2**

DQL Std (2ppm) — dilute **0.085** mL stock to 100 mL DI = **2.0**

Laboratory Control Standard (LCS)

Source: **P197 - 506** — **31.10** mg/L CaCO3

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample (shaded cells are calculated, make no entries)

low level = {{{(2 X mL4.5)-mL4.2] X Nacid) X 50,000} / mL sample

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4 pH=8.3	ml H2SO4 pH =4.5	ml H2SO4 pH=4.2	ALK (mg CaCO3/l) Phenolph	ALK (mg CaCO3/l) TOT HIGH	ALK (mg CaCO3/l) TOT LOW	Partitioning (mg/l CaCO3) HCO3	Partitioning (mg/l CaCO3) CO3	Partitioning (mg/l CaCO3) OH	(mg/l) FREE CO2
ICV		10.42	100	21.8	1.16	2.38	0.00	57.9	117.8		*94.8%*	*OK!*		
ICB		5.31	100	21.8	0.00	0.02	0.04	0.0		0.0	0.0	0.0	0.0	-0.5
LCS		8.75	50	20.5	0.12	0.30	0.33	12.0	29.9		*96.3%*	*OK!*		
US47 A1		7.45	100	24.0	0.00	4.57	0.00	0.0	228.1		228.1	0.0	0.0	16.2
US47 A1 dup		7.45	100	23.8	0.00	4.58	0.00	0.0	228.6		228.6	0.0	0.0	16.2
RPD =									*0.2%*		*0.2%*			*0.2%*
UR96 K4		7.72	100	20.8	0.00	6.36	0.00	0.0	317.5		317.5	0.0	0.0	12.1
UR96 K4 dup		7.69	100	20.9	0.00	6.33	0.00	0.0	316.0		316.0	0.0	0.0	12.9
RPD =									*0.5%*		*0.5%*			*6.4%*
UR96 Q5		9.88	100	20.3	33.04	84.24	0.00	1649.2	4204.8		906.5	3298.4	0.0	0.2
UR96 R4		7.61	100	20.3	0.00	6.31	0.00	0.0	315.0		315.0	0.0	0.0	15.5
UR96 S9		7.34	100	21.1	0.00	12.96	0.00	0.0	646.9		646.9	0.0	0.0	59.1
UR96 T8		9.77	100	21.4	9.88	32.44	0.00	493.2	1619.2		632.9	986.3	0.0	0.2
UR97 A8		9.75	100	21.8	9.73	32.77	0.00	485.7	1635.7		664.4	971.3	0.0	0.2
UR29 A3		6.68	100	21.1	0.00	2.26	0.00	0.0	112.8		112.8	0.0	0.0	47.1
CCV		10.44	100	22.1	1.16	2.40	0.00	57.9	118.8		*95.6%*	*OK!*		0.0
UR29 B3		6.01	100	20.2	0.00	18.35	0.00	0.0	915.9		915.9	0.0	0.0	1790.2
UR27 E6		6.85	100	21.7	0.00	8.26	0.00	0.0	412.3		412.3	0.0	0.0	116.5
UR27 E6 dup		6.88	100	21.9	0.00	8.24	0.00	0.0	411.3		411.3	0.0	0.0	108.4
RPD =									*0.2%*		*0.2%*			*7.1%*
US50 B2		7.53	100	20.6	0.00	11.30	0.00	0.0	564.0		564.0	0.0	0.0	33.3
US50 D2		7.87	100	21.6	0.00	9.04	0.00	0.0	451.2		451.2	0.0	0.0	12.2
US50 E2		7.66	100	21.8	0.00	5.95	0.00	0.0	297.0		297.0	0.0	0.0	13.0
US50 G2		9.96	100	21.6	15.82	39.08	0.00	789.7	1950.7		371.4	1579.3	0.0	0.1
US50 H2		9.86	100	21.7	13.20	36.22	0.00	658.9	1807.9		490.2	1317.8	0.0	0.1
US50 J 2		7.00	100	21.7	0.00	14.17	0.00	0.0	707.3		707.3	0.0	0.0	141.5

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample *(shaded cells are calculated, make no entries)*

low level = {(((2 X mL4.5)-mL4.2] X Nacid) X 50,000] / mL sample

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4			ALK (mg CaCO3/l)			Partitioning (mg/l CaCO3)			(mg/l)
					pH=8.3	pH =4.5	pH=4.2	Phenolph	TOT HIGH	TOT LOW	HCO3	CO3	OH	FREE CO2
CCV		10.45	100	22.1	1.16	2.40	0.00	57.9	118.8		95.6%	OK!		0.0

(1) 9-195-2-12 (W)

ALKALINITY BENCHSHEET

methods: **SM 2320 B-97**

Date/Time: 5-2-12

Analyst: (W) 12:29

pH meter verification | **pH meter ID:** ACCUMET AR60 | **Buret ID:** 01G30627

Buffer pH: 7.00 | **pH Probe ID :** AR60

Measured pH: 7.02 | must agree within 0.1 pH unit | **HIGH CURVE**

Standardization of acid titrant *(titration to pH 4.5)*

ARI ID: 00126-7

grams Na2CO3 =	0.6251	to 250	ml DI
Normality Na2CO3 =	0.0472		
Assumed Acid Normality =	0.1		
Standardized Acid Normality=			

BLANK		STANDARD TITRATION		
BLANK	ml ACID	ml Na2CO3	ml ACID	N H2SO4
1	0.02	5	2.38	
2	0.02	5	2.41	
3	0.02	5	2.36	
AVERAGE				

Partitioning Calculations

T=Total, P=Phenolphthalein

Obs	HCO3	CO3	OH
P =0	T	0	0
P< 0.5T	T - 2P	2P	0
P= 0.5T	0	2P	0
P> 0.5T	0	2(T - P)	2P - T
P =T	0	0	T

Calibration Verification Standard (second source sodium carbonate solution)

ARI ID: 00126-6

grams Na2CO3 =	0.6253	grams in	250	mL =	2360
dilution:	5.0	mL to	95	CVS =	124.2
DQL Std (2ppm)	dilute	0.085	mL stock to 100 mL DI =		2.0

Laboratory Control Standard (LCS)

Source: P197 - 506

mg/L CaCO3: 31.10

SAMPLE DATA

Alk (mg/L CaCO3 = [(mL acid X Nacid) X 50,000] / mL sample

low level = [(((2 X mL4.5)-mL4.2] X Nacid) X 50,000] / mL sample

(shaded cells are calculated, make no entries)

Sample Number	Sample ID	Initial pH	Volume (ml)	TEMP (C)	ml H2SO4 pH=8.3	ml H2SO4 pH =4.5	ml H2SO4 pH=4.2	ALK (mg CaCO3/l) Phenolph	ALK (mg CaCO3/l) TOT HIGH	ALK (mg CaCO3/l) TOT LOW	Partitioning (mg/l CaCO3) HCO3	Partitioning (mg/l CaCO3) CO3	Partitioning (mg/l CaCO3) OH	(mg/l) FREE CO2
ICV		10.42	100	21.8	1.16	2.38	0.00							
ICB		5.31	100	21.8	0.00	0.02	0.04							
LCS		8.75	50	20.5	0.12	0.30	0.33							
US47 A1		7.45	100	24.0	0.00	4.57	0.00							
↓ DUP A1		7.47	100	23.8	0.00	4.58	0.00							
UR96 K4		7.72	100	20.8	0.00	6.36	0.00							
DUP K4		7.69	100	20.9	0.00	6.33	0.00							
Q5		9.88	100	20.3	0.00	84.24	0.00							
R4		7.61	100	20.3	0.00	6.31	0.00							
S9		7.34	100	21.1	0.00	12.96	0.00							
↓ TB		9.77	100	21.4	3.00	32.44	0.00							
UR97 A8		9.75	100	21.8	2.00	32.77	0.00							
UR29 A23		6.68	100	20.1	0.00	2.26	0.00							
CCV		10.44	100	22.1	1.14	2.40	0.00							
UR29 B3		10.01	100	20.2	0.00	18.35	0.00							
US27 E6		6.85	100	21.7	0.00	8.26	0.00							
↓ DUP E6		6.88	100	21.9	0.00	8.24	0.00							
US50 B2		7.53	100	20.6	0.00	11.30	0.00							
D4		7.87	100	21.6	0.00	9.04	0.00							
E3		7.66	100	21.8	0.00	5.95	0.00							
G3		9.96	100	21.6	15.82	38.05	0.00							
H3		9.46	1100	21.7	13.20	36.22	0.00							
↓ J3		7.00	100	21.7	0.00	14.17	0.00							
					5-2-12 (W)									
CCV		10.45	100	22.1	1.16	2.40	0.00							

(2) 33.04

(3) 9.88 5-2-12 (N)

(4) 9.73

(5) 39.08 5-2-12 (W)

18/95 - 95N

Calibration

Calibration Details

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.4957
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9995

No.	Injection Name	Calibration Level	X Value Fluoride	Y Value Fluoride	Amount mg/l Fluoride	Area µS*min Fluoride	Height µS Fluoride
1	STD1	01	0.1000	0.0727	0.1467	0.073	0.387
2	STD2	02	0.5000	0.2635	0.5317	0.264	1.911
3	STD3	03	1.0000	0.5176	1.0441	0.518	3.889
4	STD4	04	2.5000	1.2612	2.5444	1.261	10.077
5	STD5	05	5.0000	2.4610	4.9649	2.461	20.142

Calibration Details

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	n.a.	*Slope (C1)*	0.3076
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9998

No.	Injection Name	Calibration Level	X Value Chloride	Y Value Chloride	Amount mg/l Chloride	Area µS*min Chloride	Height µS Chloride
1	STD1	01	0.1000	0.0341	0.1110	0.034	0.254
2	STD2	02	0.5000	0.1487	0.4671	0.144	1.094
3	STD3	03	1.0000	0.3072	0.9986	0.307	2.316
4	STD4	04	2.5000	0.7556	2.4562	0.756	5.867
5	STD5	05	5.0000	1.5458	5.0252	1.546	12.099

Calibration Details

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.7051
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9994

No.	Injection Name	Calibration Level	X Value Nitrite	Y Value Nitrite	Amount mg/l Nitrite	Area µS*min Nitrite	Height µS Nitrite
1	STD1	01	0.1000	0.0264	0.0374	0.026	0.192
2	STD2	02	0.5000	0.3463	0.4912	0.346	2.214
3	STD3	03	1.0000	0.7292	1.0342	0.729	4.512
4	STD4	04	2.5000	1.8017	2.5553	1.802	10.784

Calibration Details — **Sulfate**

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.2252
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9998

Calibration Results

No.	Injection Name	Calibration Level	X Value Sulfate	Y Value Sulfate	Amount mg/l Sulfate	Area µS*min Sulfate	Height µS Sulfate
1	STD1	01	0.1000	0.0256	0.1270	0.029	0.109
2	STD2	02	0.5000	0.1169	0.5180	0.117	0.438
3	STD3	03	1.0000	0.2240	0.9968	0.225	0.874
4	STD4	04	2.5000	0.5556	2.4651	0.555	2.236
5	STD5	05	5.0000	1.1298	5.0153	1.129	4.617

Calibration Details — **Nitrate**

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.7470
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9984

Calibration Results

No.	Injection Name	Calibration Level	X Value Nitrate	Y Value Nitrate	Amount mg/l Nitrate	Area µS*min Nitrate	Height µS Nitrate
1	STD1	01	0.1000	0.0515	0.0703	0.053	0.257
2	STD2	02	0.5000	0.3066	0.4131	0.309	1.361
3	STD3	03	1.0000	0.6744	0.9041	0.675	2.851
4	STD4	04	2.5000	1.8167	2.4320	1.817	7.179
5	STD5	05	5.0000	3.7817	5.0825	3.782	13.644

Calibration Details — **Phosphate**

Calibration Type	Lin	*Offset (C0)*	0.0000
Evaluation Type	Area	*Slope (C1)*	0.3123
Number of Calibration Points	5	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	0.9989

Calibration Results

No.	Injection Name	Calibration Level	X Value Phosphate	Y Value Phosphate	Amount mg/l Phosphate	Area µS*min Phosphate	Height µS Phosphate
1	STD1	01	0.1000	0.0161	0.0515	0.016	0.111
2	STD2	02	0.5000	0.1314	0.4206	0.131	0.835
3	STD3	03	1.0000	0.2926	0.9369	0.293	1.790
4	STD4	04	2.5000	0.7635	2.4455	0.764	4.385
5	STD5	05	5.0000	1.5769	5.0488	1.577	8.176

Amount Summary

Sequence Details

Name:	**MAY0212RR**	*Calibration:*	**APRIL2112RR** **ARI # 593-01**
Directory:	**Instrument Data\MAY 2012**	*Calibration exp:*	~~5/8/2011~~ 5/21/12
Data Vault:	**ChromeleonLocal**	*Queue Start:*	**5/2/2012 16:56**
No. of Injections:	**28.000**	*User:*	**RR**

By Component

		ERA 161110	ERA 411010	ERA 401010	ERA 111109	ERA 160111	ERA 230511	ERA 200610
Name	Dilution	Amount n.a. Fluoride	Amount n.a. Chloride	Amount n.a. Nitrite	Amount n.a. Bromide	Amount n.a. Sulfate	Amount n.a. Nitrate	Amount n.a. Phosphate
RINSE	1.0	n.a.	n.a.	n.a.	n.a.	0.040	n.a.	n.a.
ICV	1.0	3.016	2.976	2.987	2.917	2.975	3.122	2.973
%R=		**100.5%**	**99.2%**	**99.6%**	**97.2%**	**99.2%**	**104.1%**	**99.1%**
ICB	1.0	n.a.	n.a.	n.a.	n.a.	0.042	n.a.	n.a.
			5.185			n.a.		0.374
			5.182			n.a.		0.326
%RPD=			**0.08%**	**8.22%**			**0.53%**	**13.56%**
			7.052			n.a.		1.822
%R=		**3.8%**	**93.3%**	**102.2%**	**66.1%**		**102.7%**	**91.1%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
			27.928			13.078	n.a.	n.a.
		0.300	37.889	n.a.	n.a.	22.435		n.a.
		0.320	37.933	n.a.	n.a.	22.414		n.a.
%RPD=		**6.30%**	**0.12%**			**0.09%**	**11.28%**	
		2.354	39.034	1.965	1.662	23.469		1.866
%R=		**102.7%**	**57.3%**	**98.3%**	**83.1%**	**51.7%**	**101.3%**	**93.3%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
		0.569	7.973	n.a.	n.a.			n.a.
		0.543	98.055	n.a.	0.295			1.097
US56 A2	1.0	18.676	6.060	n.a.	n.a.	n.a.	0.978	n.a.
CCV	1.0	2.945	3.018	3.013	2.918	2.972	3.116	2.959
%R=		**98.2%**	**100.6%**	**100.4%**	**97.3%**	**99.1%**	**103.9%**	**98.6%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.056	n.a.	n.a.
		0.394	9.603	n.a.	4.684		8.897	n.a.
		0.110		n.a.	n.a.	1.099	n.a.	1.090
		0.116		n.a.	n.a.	1.031	n.a.	1.112
%RPD=		**5.30%**	**0.23%**			**6.47%**		**1.97%**
		n.a.		n.a.	n.a.	1.502	n.a.	0.861
%R=			**102.7%**					
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
		n.a.		n.a.	n.a.		n.a.	n.a.
		n.a.		n.a.	n.a.		n.a.	n.a.
%RPD=			**1.76%**			**2.40%**		
		n.a.		n.a.	n.a.		n.a.	n.a.
%R=			**100.3%**			**98.5%**		
SPK=	**0.02mL*10000ppm/5mL**		**=40ppm**					
		0.237	8.677	n.a.	n.a.			n.a.
		0.503	57.605	n.a.	n.a.			n.a.
		0.370		n.a.	n.a.	12.475		n.a.
CCV	1.0	2.969	2.997	3.010	2.902	2.925	3.110	2.987
%R=		**99.0%**	**99.9%**	**100.3%**	**96.7%**	**97.5%**	**103.7%**	**99.6%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.053	n.a.	n.a.
STOP	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00787

Sequence Details

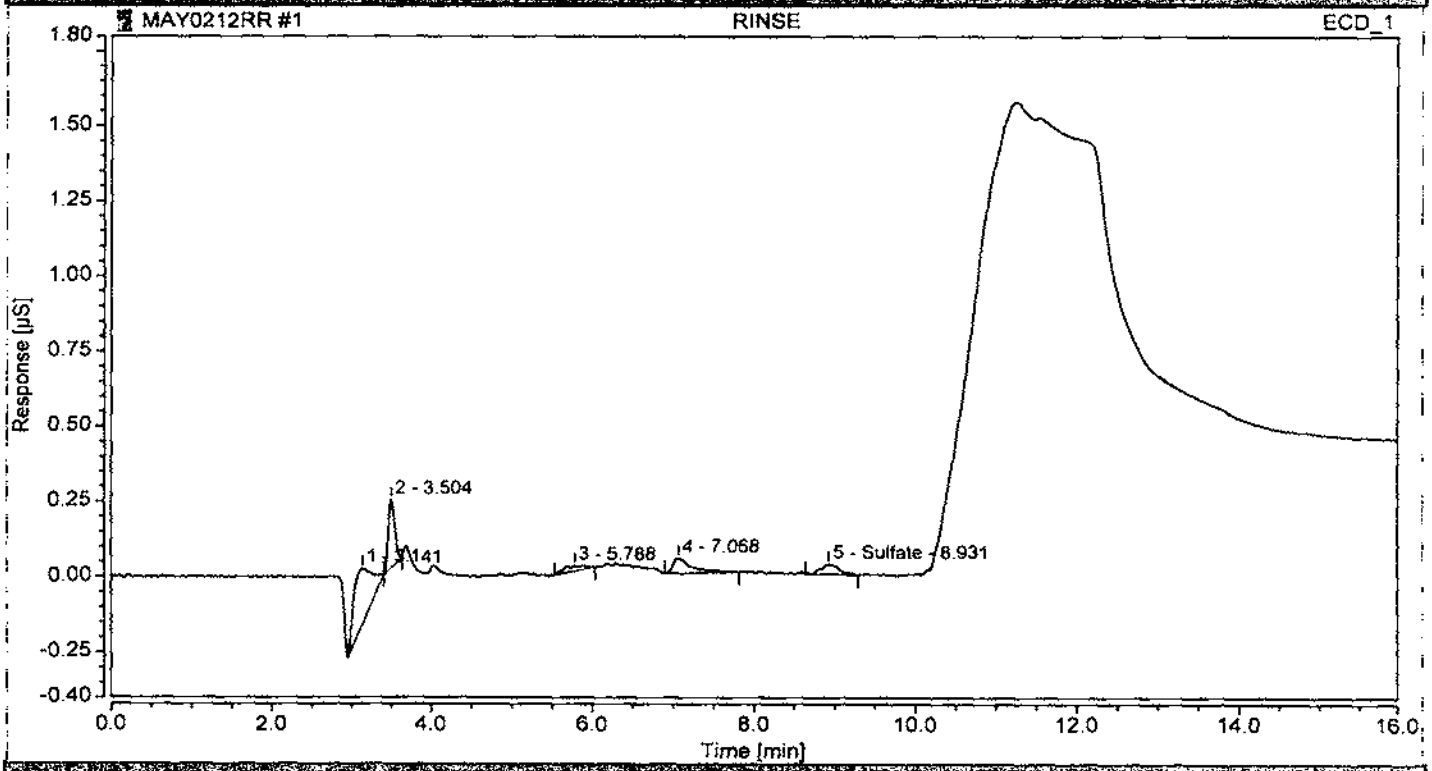
Name:	**MAY0212RR**	*Queue Start:*	**2012-05-02T16:56:16-**
Directory:	**Instrument Data\MAY 2012**	*Created By:*	**pat**
Data Vault:	**ChromeleonLocal**		
No. of Injections:	**28**		

Injection Details

No.	Injection Name	Position	Type	Level	Dilution	Inject Time
1	RINSE	7	Unknown		1.0	02/May/12 16:56:16
2	CCV	2	Check Standard	06	1.0	02/May/12 17:15:10
3	CCB	3	Blank		1.0	02/May/12 17:34:21
4	US45 A1	4	Unknown		1.0	02/May/12 17:53:38
5	US45 A1 DUP	5	Unknown		1.0	02/May/12 18:13:00
6	US45 A1 MS	6	Unknown		1.0	02/May/12 18:32:28
7	US46 B1	7	Unknown		1.0	02/May/12 18:52:02
8	US52 G1	8	Unknown		1.0	02/May/12 19:11:41
9	US52 G1 DUP	9	Unknown		1.0	02/May/12 19:31:26
10	US52 G1 MS	10	Unknown		1.0	02/May/12 19:51:16
11	US52 H1	11	Unknown		1.0	02/May/12 20:11:12
12	US52 I1	12	Unknown		1.0	02/May/12 20:31:13
13	US58 A2	13	Unknown		1.0	02/May/12 20:51:19
14	CCV	2	Check Standard	06	1.0	02/May/12 21:11:30
15	CCB	3	Blank		1.0	02/May/12 21:32:05
16	US26 B1	14	Unknown		10.0	02/May/12 21:52:47
17	US27 E1	15	Unknown		10.0	02/May/12 22:13:16
18	US27 E1 DUP	16	Unknown		10.0	02/May/12 22:33:49
19	US27 E1 MS	17	Unknown		20.0	02/May/12 22:54:27
20	US47 A2	18	Unknown		10.0	02/May/12 23:15:10
21	US47 A2 DUP	19	Unknown		10.0	02/May/12 23:35:59
22	US47 A2 MS	20	Unknown		20.0	02/May/12 23:55:18
23	US61 A12	21	Unknown		1.0	03/May/12 00:14:41
24	US61 B12	22	Unknown		1.0	03/May/12 00:35:12
25	US61 C12	23	Unknown		1.0	03/May/12 00:55:32
26	CCV	2	Check Standard	06	1.0	03/May/12 01:15:41
27	CCB	3	Blank		1.0	03/May/12 01:36:59
28	STOP	1	Unknown		1.0	03/May/12 01:58:19

US15 : 00788

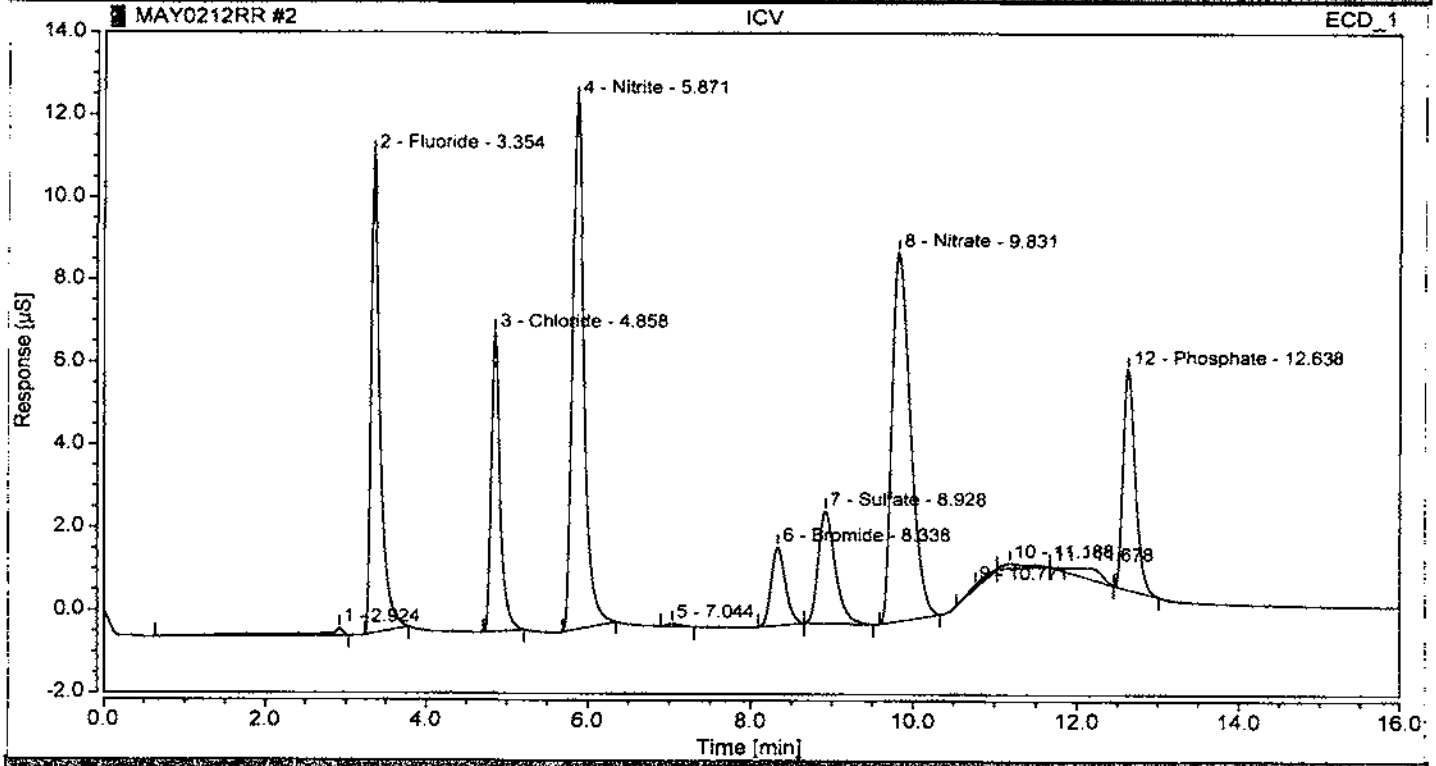
Injection Name:	*RINSE*	Inject Number:	1
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 16:56*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	3.14	0.949	0.183	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.50	0.021	0.276	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	5.78	0.065	0.017	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.07	0.016	0.049	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.0100	8.91	0.0089	0.033	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00789

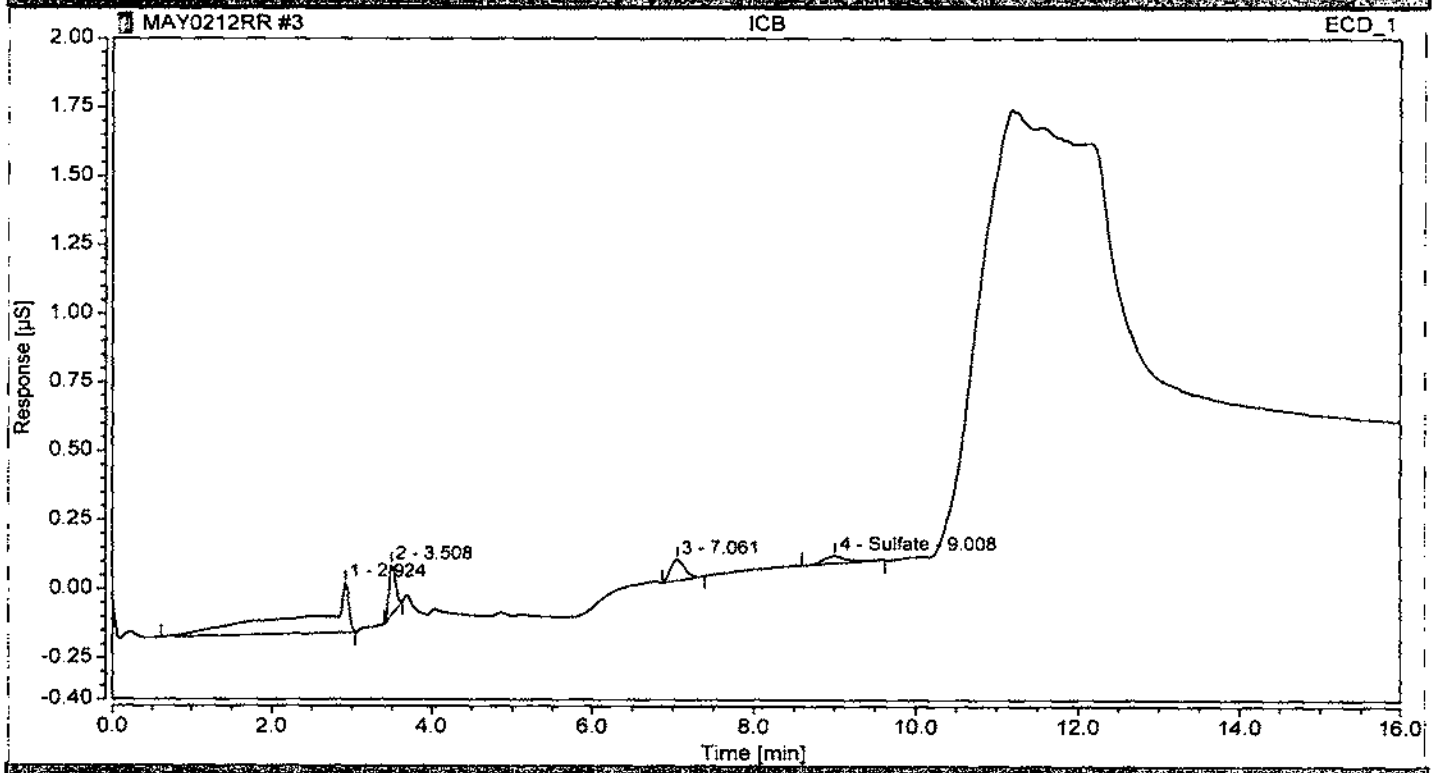
Injection Name:	*ICV*	Inject Number:	2
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 17:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.9	0.036	0.160	FALSE	n.a.
2	Fluoride	1.0	3.013	3.35	1.256	11.686	FALSE	0.54
3	Chloride	1.0	2.979	4.86	0.919	7.214	FALSE	-0.79
4	Nitrite	1.0	9.958	5.87	2.165	12.821	FALSE	-0.42
5		1.0	n.a.	7.04	0.015	0.083	FALSE	n.a.
6	Bromide	1.0	2.774	8.34	0.438	1.858	FALSE	-2.76
7	Sulfate	1.0	9.918	8.93	1.599	6.711	FALSE	-0.82
8	Nitrate	1.0	9.616	9.83	1.552	6.516	FALSE	-4.07
9		1.0	n.a.	10.71	0.041	0.253	FALSE	n.a.
10		1.0	n.a.	11.19	0.021	0.115	FALSE	n.a.
11		1.0	n.a.	11.81	0.001	0.001	FALSE	n.a.
12	Phosphate	1.0	2.973	12.64	0.929	5.312	FALSE	-0.89

US15 : 00799

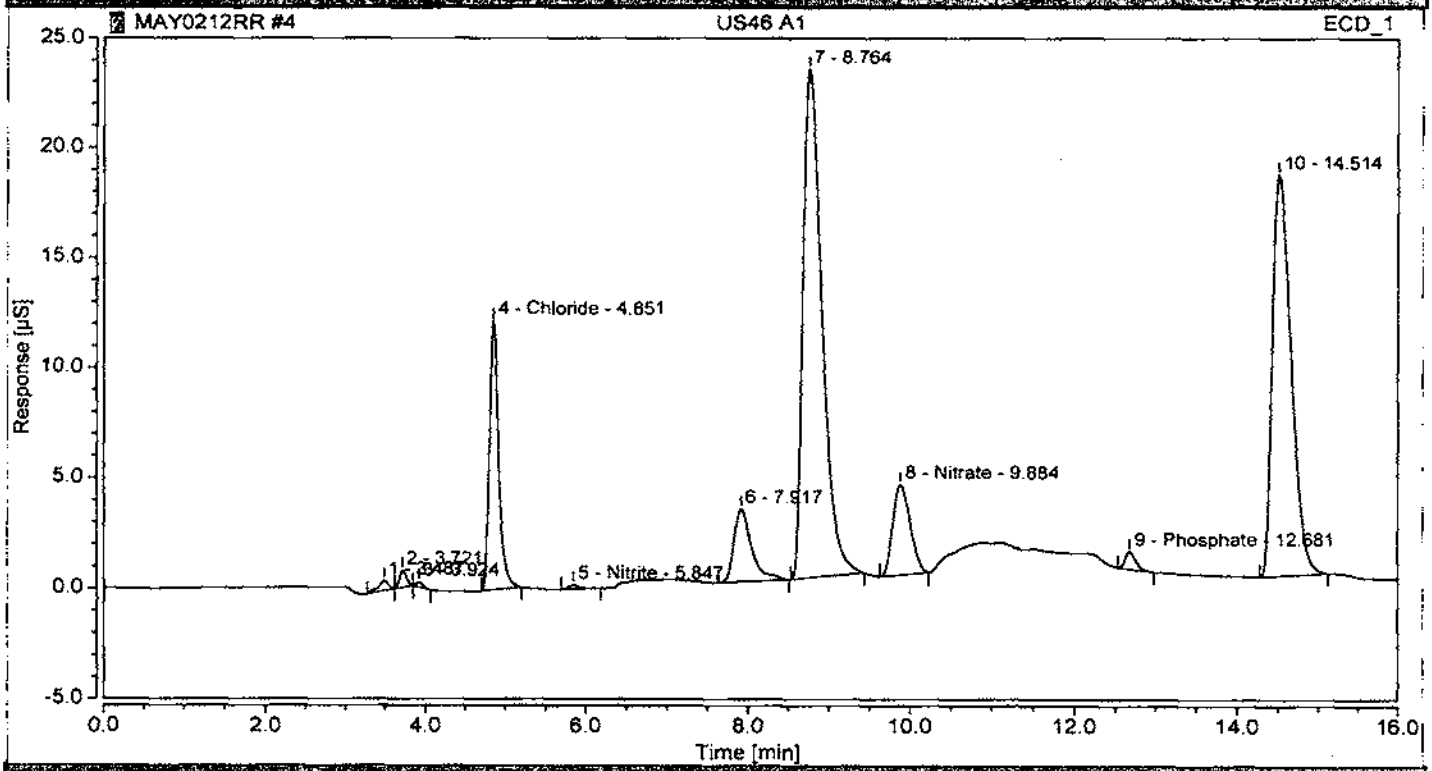
Injection Name:	*ICB*	Inject Number:	3
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 17:34*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.0104	0.179	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.0177	0.177	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		1.0	n.a.	7.06	0.0576	0.076	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	0.042	9.01	0.0689	0.027	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00791

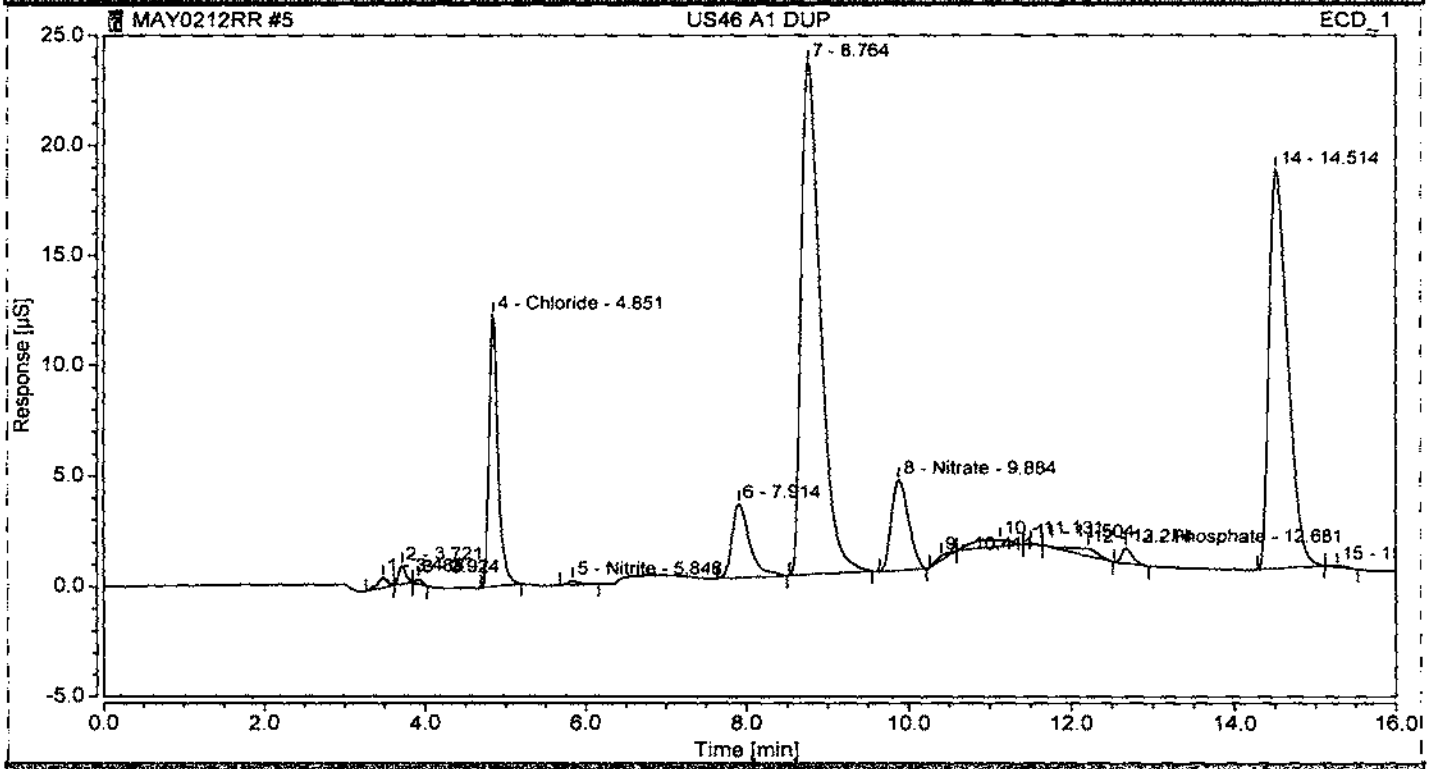
Injection Name:	*US46 A1*	Inject Number:	4
Vial Number:	*4*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Data/Time:	*02/05/12 17:53*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.0	n.a.	2.49	0.0041	0.437	FALSE	n.a.
2		1.0	n.a.	3.72	0.175	0.734	FALSE	n.a.
3		1.0	n.a.	3.92	0.322	0.241	FALSE	n.a.
4	Chloride	1.0	10.108	4.65	1.695	12.218	FALSE	n.a.
5	Nitrite	1.0	0.000	5.85	0.026	0.178	FALSE	n.a.
6		1.0	n.a.	7.92	0.934	5.212	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	8.76	2.240	23.080	FALSE	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	0.332	9.88	0.098	0.678	FALSE	n.a.
9	Phosphate	1.0	0.324	12.68	0.117	0.774	FALSE	n.a.
10		1.0	n.a.	14.51	2.823	18.184	FALSE	n.a.

US15 : 00792

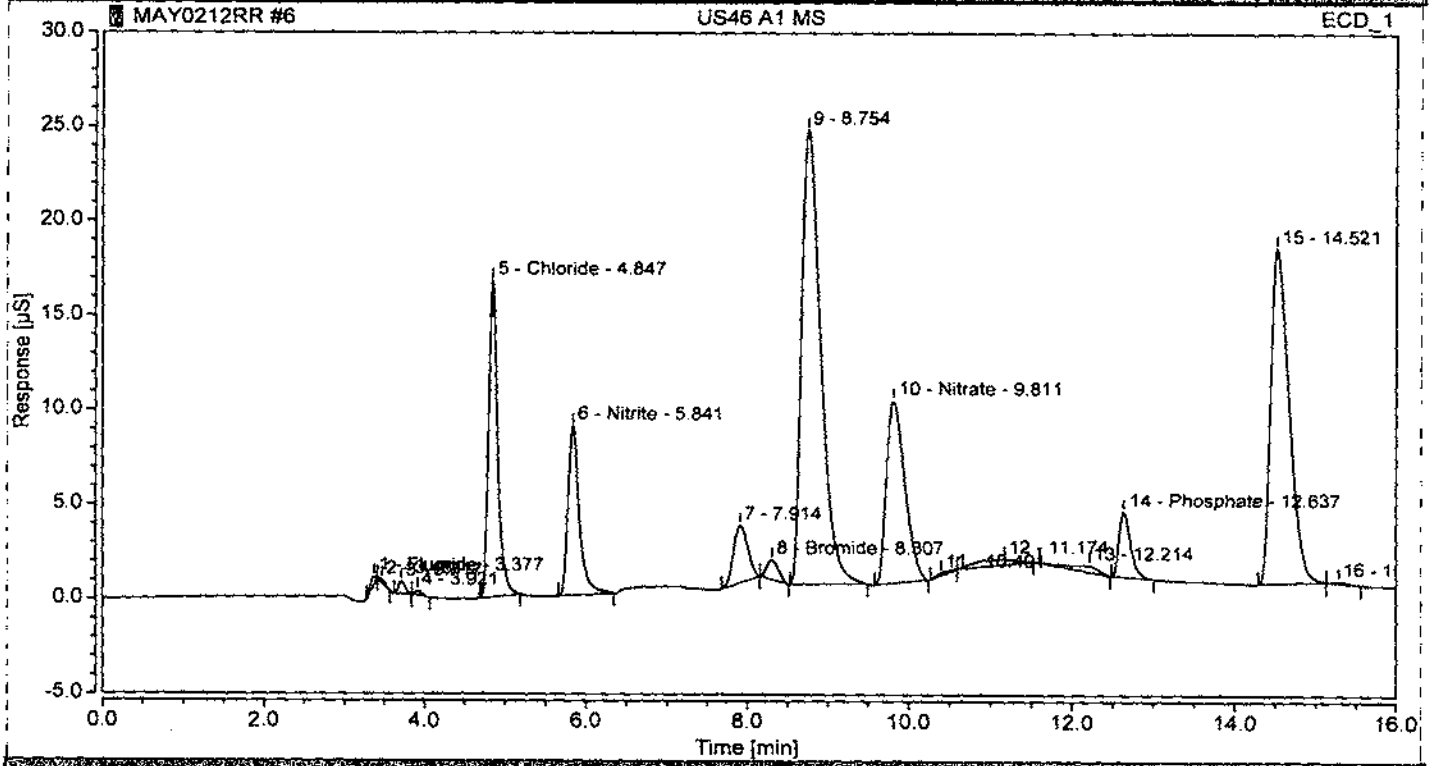
Injection Name:	*US46 A1 DUP*	Inject Number:	5
Vial Number:	*5*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 18:13*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
n.a.	Fluoride	1.0	n/a	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.0	n/a	3.48	0.067	0.482	FALSE	n.a.
2		1.0	n/a	3.72	0.042	0.617	FALSE	n.a.
3		1.0	n/a	4.24	0.108	0.938	FALSE	n.a.
4	Chloride	1.0	1.000	4.85	1.593	12.270	FALSE	n.a.
5	Nitrite	1.0	1.000	5.85	0.928	6.186	FALSE	n.a.
6		1.0	n/a	7.91	0.473	3.640	FALSE	n.a.
n.a.	Bromide	1.0	n/a	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n/a	8.76	5.990	25.220	FALSE	n.a.
n.a.	Sulfate	1.0	n/a	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	n/a	9.88	1.106	7.368	FALSE	n.a.
9		1.0	n/a	10.44	0.133	0.776	FALSE	n.a.
10		1.0	n/a	11.31	0.294	1.941	FALSE	n.a.
11		1.0	n/a	11.90	0.068	0.458	FALSE	n.a.
12		1.0	n/a	12.21	0.134	0.834	FALSE	n.a.
13	Phosphate	1.0	0.268	12.68	0.162	0.665	FALSE	n.a.
14		1.0	n/a	14.51	4.791	18.068	FALSE	n.a.
15		1.0	n/a	15.27	0.017	0.076	FALSE	n.a.

US15 : 66795

Injection Name:	*US46 A1 MS*	Inject Number:	6
Vial Number:	*6*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 18:32*		

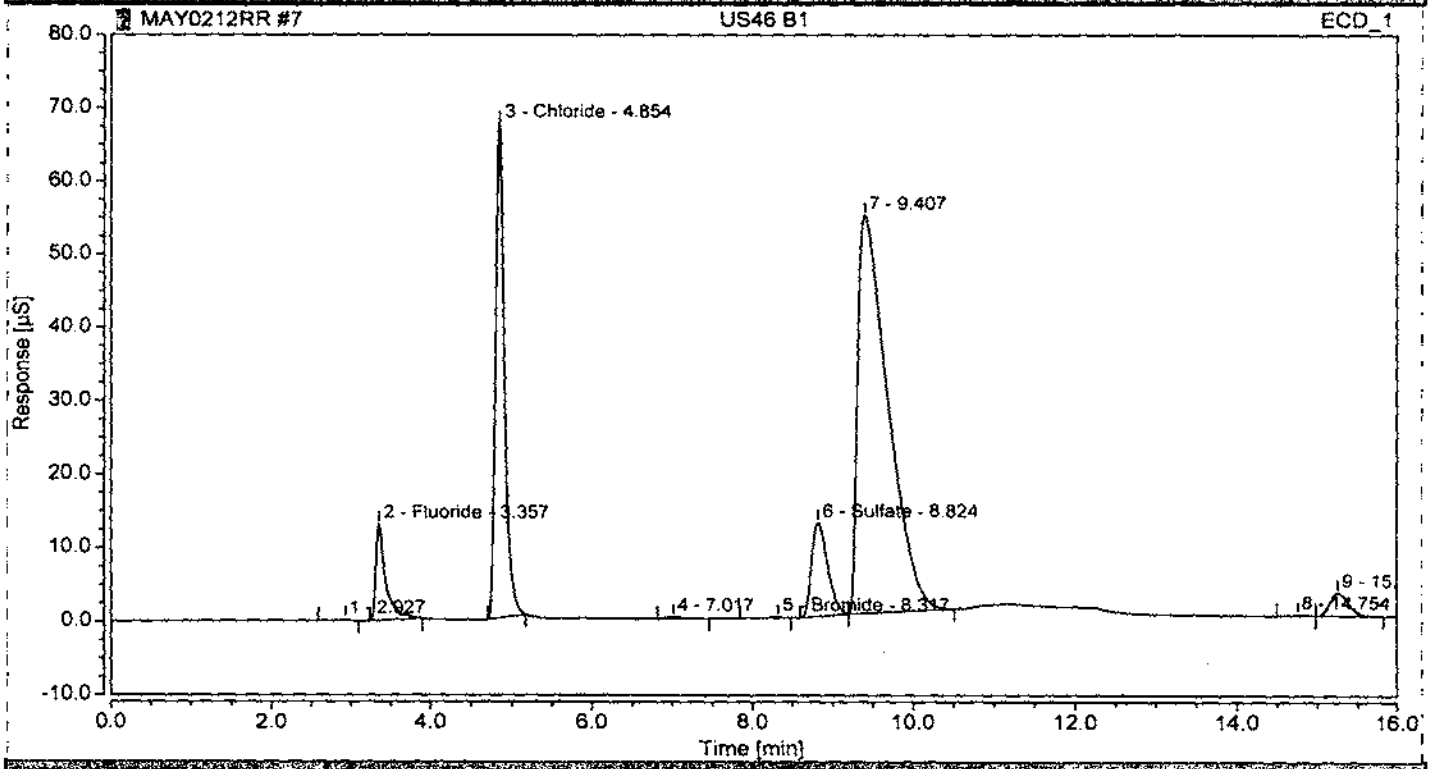


No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	1.0	0.077	3.38	0.038	0.396	FALSE	n.a.
2		1.0	n.a.	3.96	0.014	0.188	FALSE	n.a.
3		1.0	n.a.	4.72	0.082	0.834	FALSE	n.a.
4		1.0	n.a.	5.08	0.025	0.275	FALSE	n.a.
5	Chloride	1.0	1.052	5.85	1.581	15.744	FALSE	n.a.
6	Nitrite	1.0	0.980	7.03	0.911	9.079	FALSE	n.a.
7		1.0	n.a.	7.91	0.348	3.604	FALSE	n.a.
8	Bromide	1.0	1.822	8.81	0.778	7.010	FALSE	n.a.
9		1.0	3.005	8.75	2.438	24.001	FALSE	n.a.
n.a.	Sulfate	1.0	2.808	9.00	1.116	11.445	FALSE	n.a.
10	Nitrate	1.0	2.520	9.81	1.010	10.537	FALSE	n.a.
11		1.0	n.a.	10.40	0.023	0.317	FALSE	n.a.
12		1.0	n.a.	11.17	0.179	2.262	FALSE	n.a.
13		1.0	n.a.	12.21	0.138	1.540	FALSE	n.a.
14	Phosphate	1.0	1.622	12.64	0.568	3.438	FALSE	n.a.
15		1.0	n.a.	14.52	1.566	17.597	FALSE	n.a.
16		1.0	n.a.	15.28	0.019	0.086	FALSE	n.a.

US15 : 00794

Chromatogram and Results

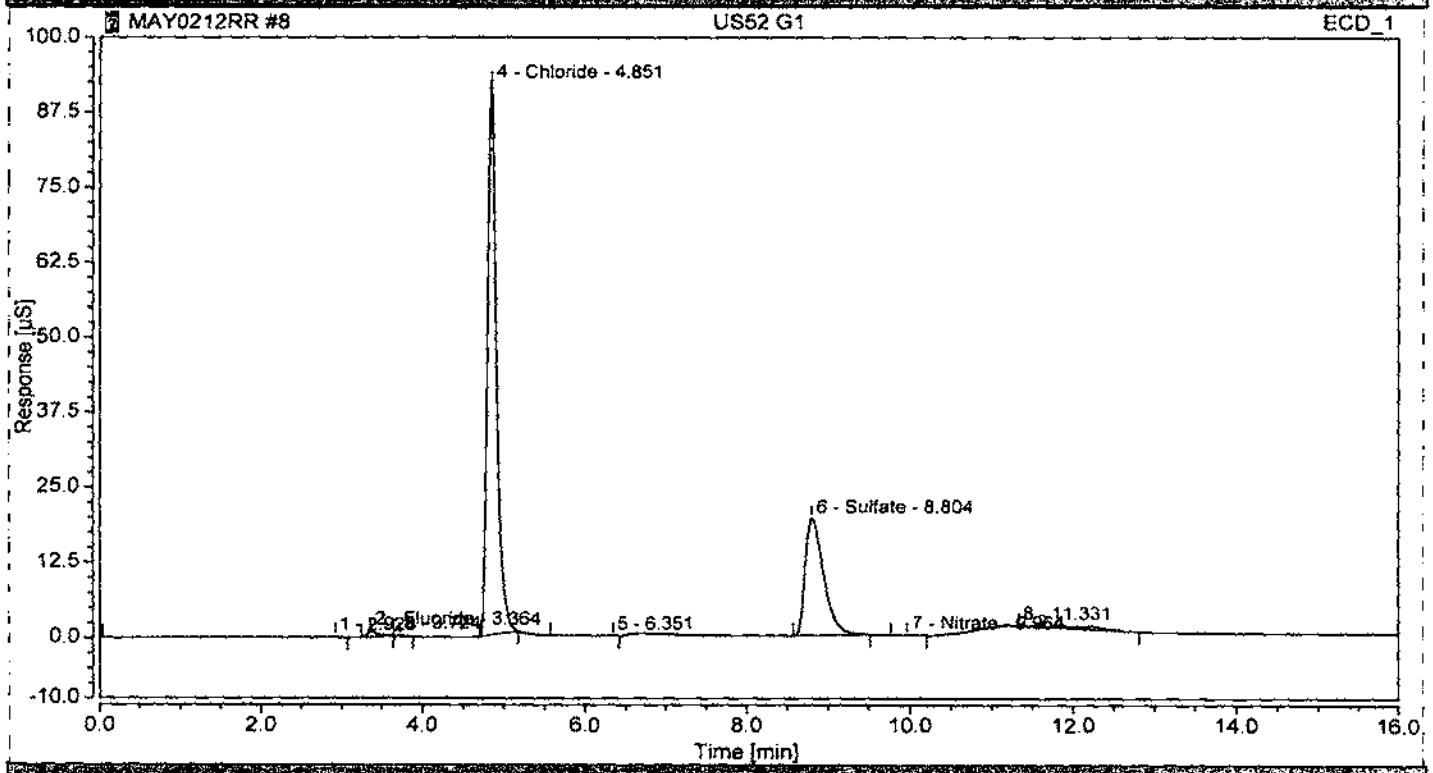
Injection Name:	*US46 B1*	Inject Number:	7
Vial Number:	*7*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 18:52*		



Integration Results

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.93	0.017	0.144	FALSE	n.a.
2	Fluoride	1.0	3.758	3.36	1.582	13.062	FALSE	n.a.
3	Chloride	1.0	27.928	4.86	8.591	67.400	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.02	0.053	0.194	FALSE	n.a.
5	Bromide	1.0	0.209	8.32	0.027	0.129	FALSE	n.a.
6	Sulfate	1.0	13.078	11.682	2.945	12.663	FALSE	n.a.
7		1.0	n.a.	9.41	28.528	54.178	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		1.0	n.a.	14.75	0.023	0.101	FALSE	n.a.
9		1.0	n.a.	15.25	0.798	3.112	FALSE	n.a.

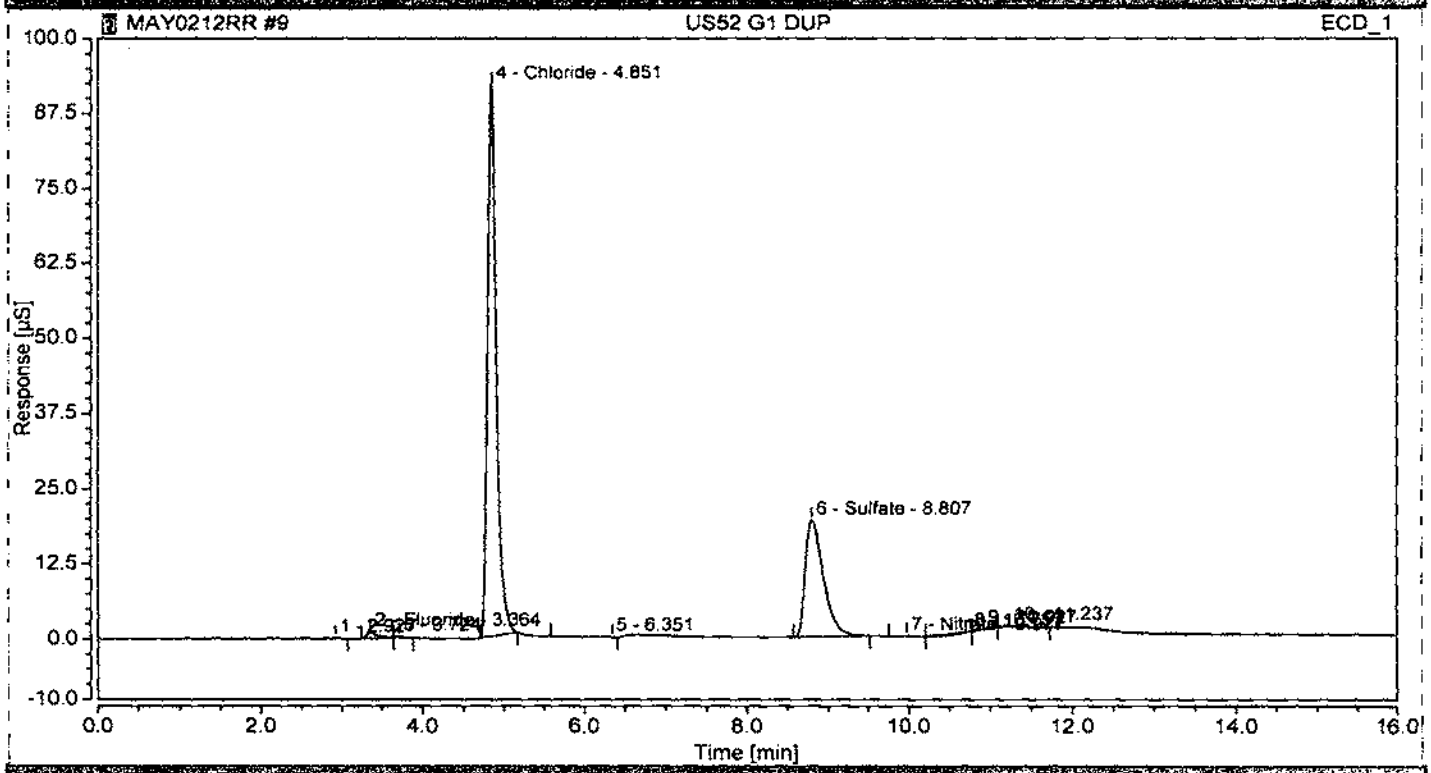
Injection Name:	*US52 G1*	Inject Number:	8
Vial Number:	*8*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 19:11*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.98	0.36	0.188	FALSE	n.a.
2	Fluoride	1.0	n.a.	3.36	0.09	1.038	FALSE	n.a.
3		1.0	n.a.	3.72	0.13	0.092	FALSE	n.a.
4	Chloride	1.0	n.a.	4.85	2.58	1.671	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	6.35	0.02	0.171	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	n.a.	8.80	6.05	0.350	FALSE	n.a.
7	Nitrate	1.0	n.a.	9.87	0.08	0.041	FALSE	n.a.
8		1.0	n.a.	11.33	0.29	0.000	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

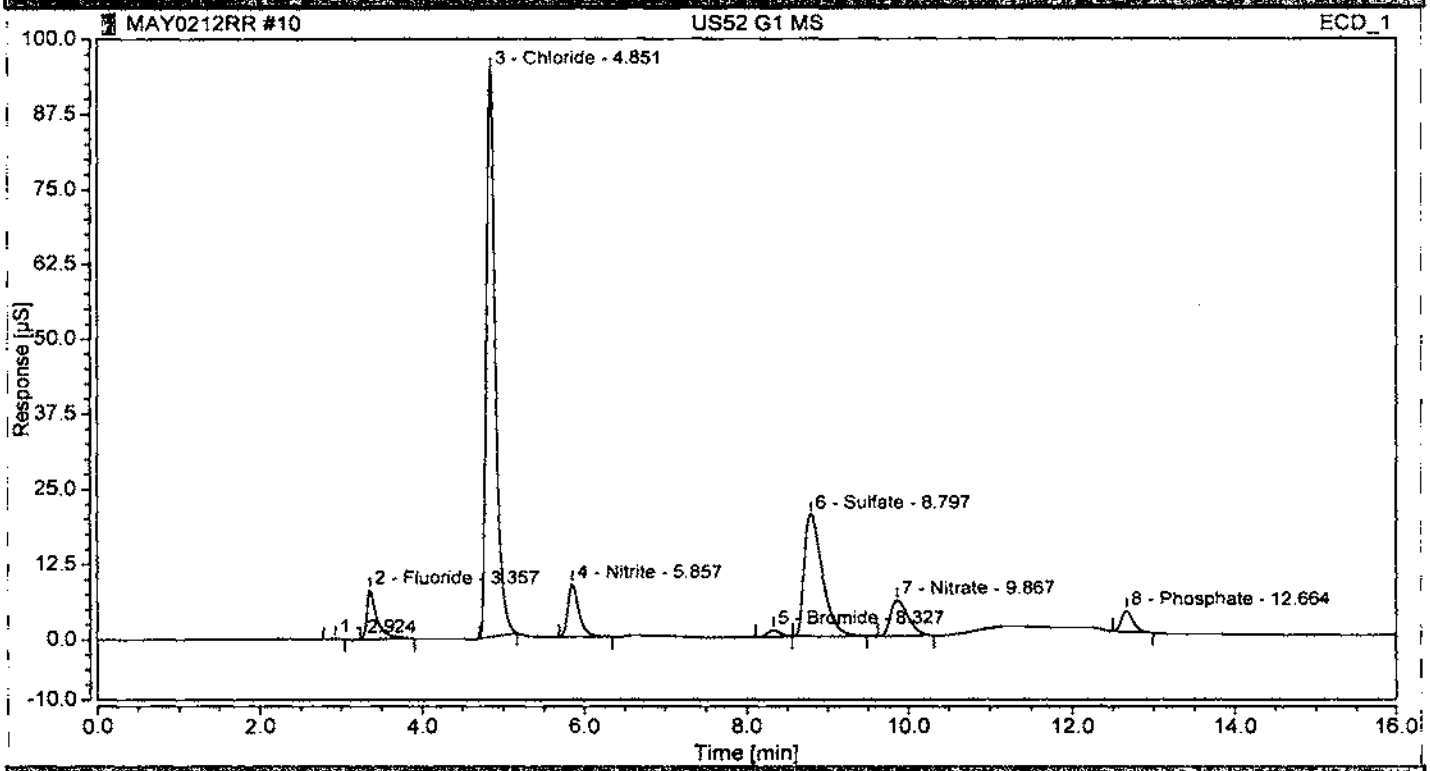
US15 : 00795

Injection Name:	*US52 G1 DUP*	Inject Number:	9
Vial Number:	*9*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 19:31*		



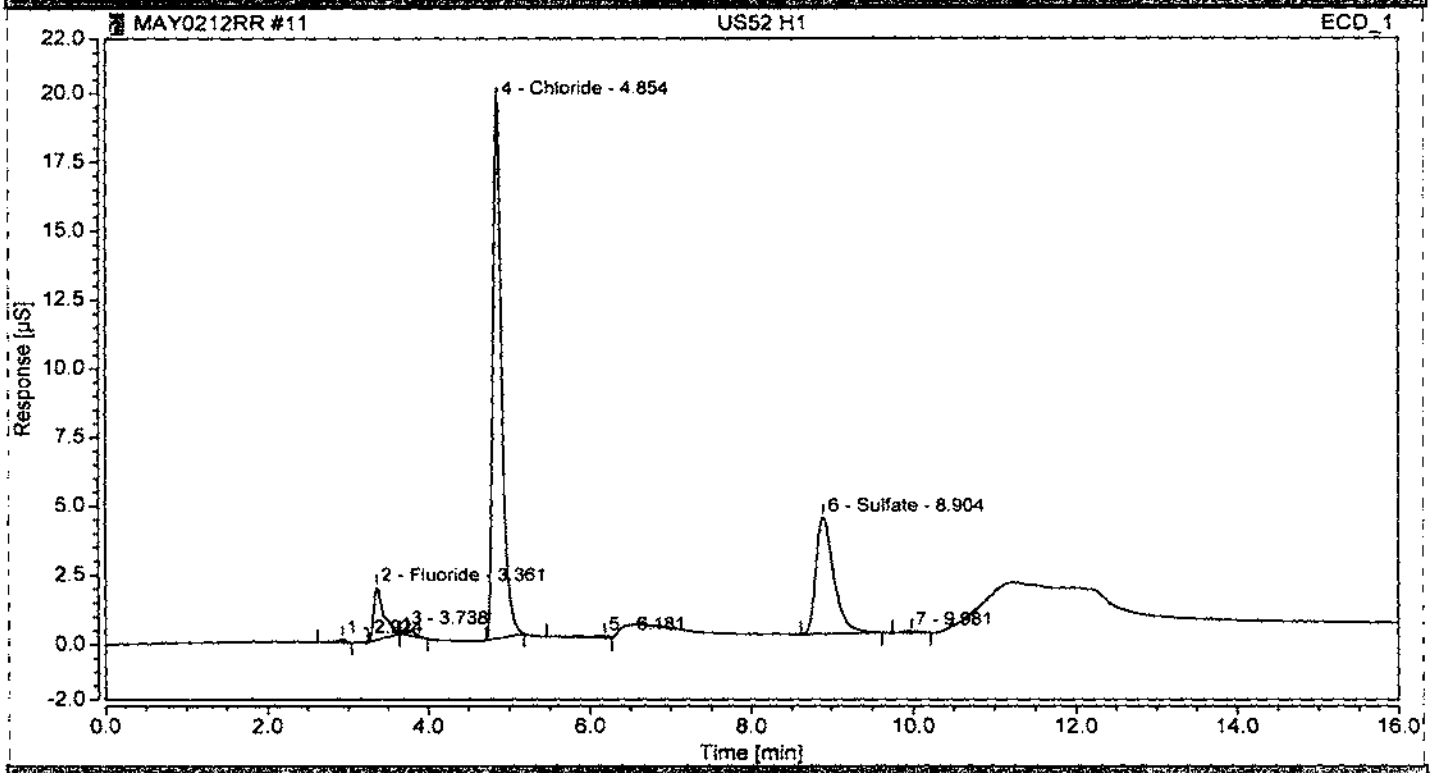
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0				0.136	FALSE	n.a.
2	Fluoride						FALSE	n.a.
3							FALSE	n.a.
4	Chloride						FALSE	n.a.
n.a.	Nitrite					n.a.	n.a.	n.a.
5							FALSE	n.a.
n.a.	Bromide					n.a.	n.a.	n.a.
6	Sulfate						FALSE	n.a.
7	Nitrate						FALSE	n.a.
8							FALSE	n.a.
9							FALSE	n.a.
10							FALSE	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US52 G1 MS*	Inject Number:	10
Vial Number:	*10*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 19:51*		



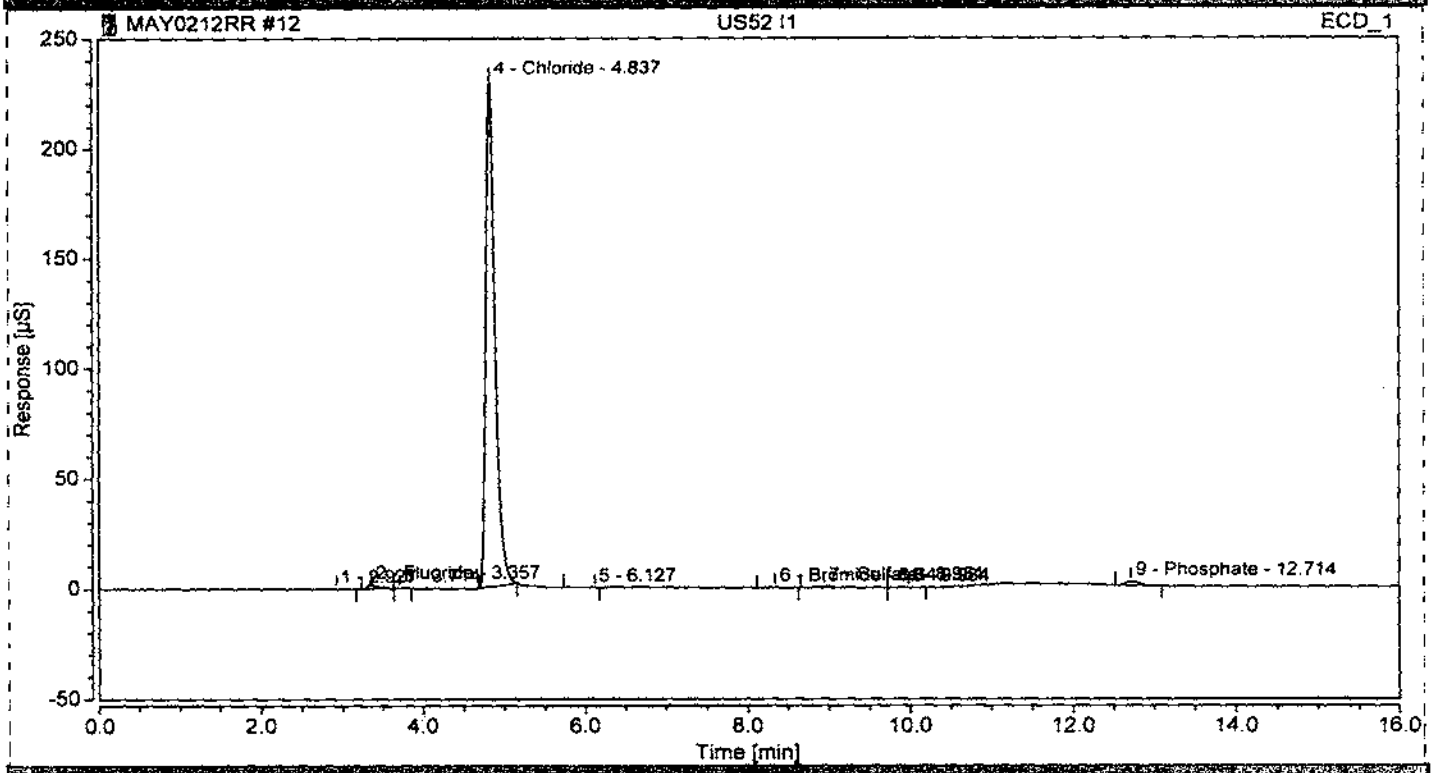
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0		2.92	0.018	0.112	FALSE	n.a.
2	Fluoride	1.0		3.36	0.060	0.360	FALSE	n.a.
3	Chloride	1.0		4.85	0.007	0.045	FALSE	n.a.
4	Nitrite	1.0		5.86	0.066	0.372	FALSE	n.a.
5	Bromide	1.0		8.33	0.025	0.158	FALSE	n.a.
6	Sulfate	1.0		8.80	0.060	0.360	FALSE	n.a.
7	Nitrate	1.0		9.87	0.032	0.241	FALSE	n.a.
8	Phosphate	1.0		12.66	0.063	0.487	FALSE	n.a.

Injection Name:	*US52 H1*	Inject Number:	11
Vial Number:	*11*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 20:11*		



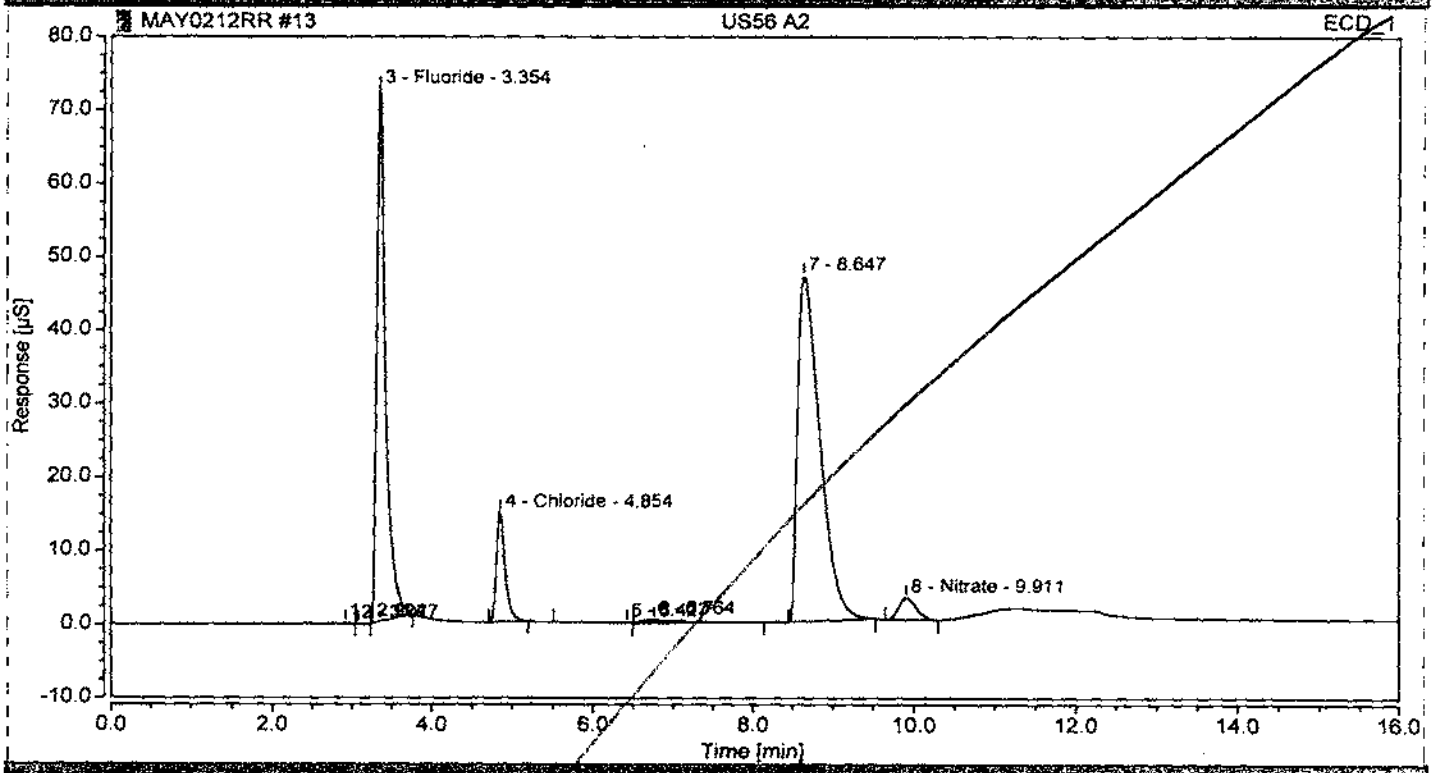
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1								
2	Fluoride							
3								
4	Chloride							
n.a.	Nitrite							
5								
n.a.	Bromide							
6	Sulfate							
n.a.	Nitrate							
7								
n.a.	Phosphate							

Injection Name:	*US52 I1*	Inject Number:	12
Vial Number:	*12*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 20:31*		



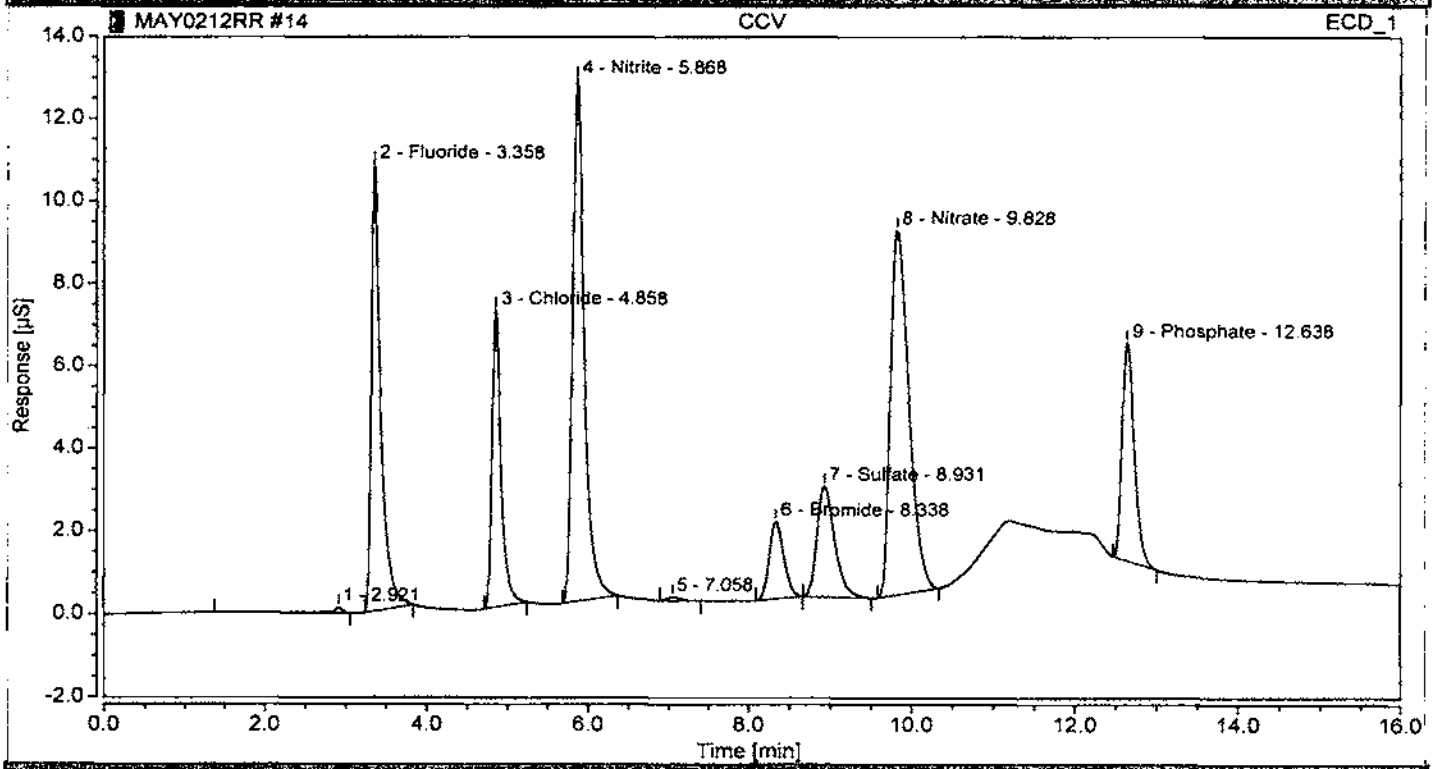
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0					FALSE	n.a.
2		1.0					FALSE	n.a.
3		1.0					FALSE	n.a.
4	Chloride	1.0					FALSE	n.a.
n.a.	Nitrite	1.0					n.a.	n.a.
5		1.0					FALSE	n.a.
6	Bromide	1.0					FALSE	n.a.
7	Sulfate	1.0					FALSE	n.a.
n.a.	Nitrate	1.0					n.a.	n.a.
8		1.0					FALSE	n.a.
9	Phosphate	1.0					FALSE	n.a.

Injection Name:	*US56 A2*	Inject Number:	13
Vial Number:	*13*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 20:51*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1			n.a.		0.139	0.138	FALSE	n.a.
2					0.013	0.022	FALSE	n.a.
3	Fluoride					72.361	FALSE	n.a.
4	Chloride					14.787	FALSE	n.a.
n.a.	Nitrite					n.a.	n.a.	n.a.
5					0.082	0.074	FALSE	n.a.
6						0.879	FALSE	n.a.
n.a.	Bromide					n.a.	n.a.	n.a.
7						246.096	FALSE	n.a.
n.a.	Sulfate					n.a.	n.a.	n.a.
8	Nitrate					7.947	FALSE	n.a.
n.a.	Phosphate					n.a.	n.a.	n.a.

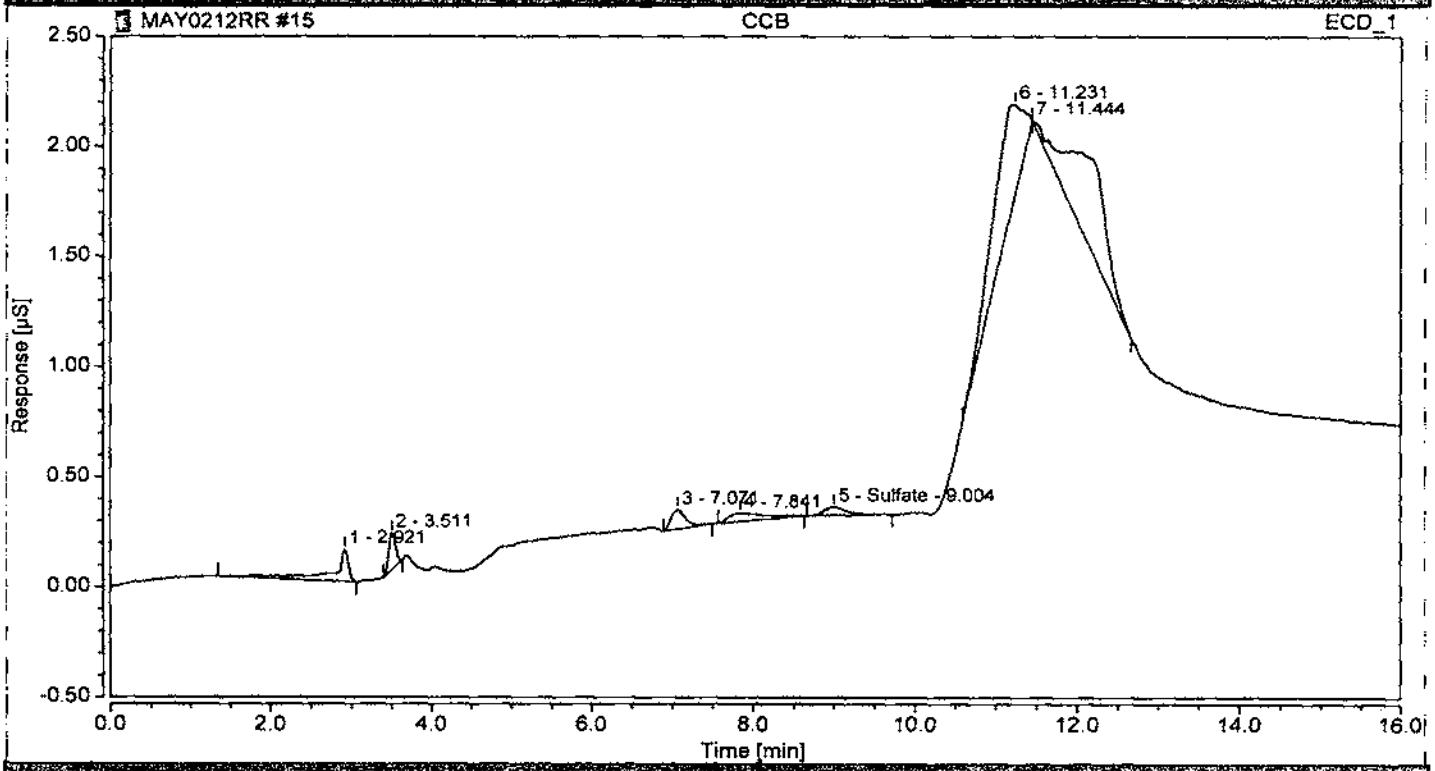
Injection Name:	*CCV*	Inject Number:	14
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 21:11*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.033	0.140	FALSE	n.a.
2	Fluoride	1.0	2.000	3.36	1.240	10.816	FALSE	-1.84
3	Chloride	1.0	2.000	4.86	0.928	7.66	FALSE	0.59
4	Nitrite	1.0	2.000	5.87	2.183	12.550	FALSE	0.43
5		1.0	n.a.	7.06	0.015	0.083	FALSE	n.a.
6	Bromide	1.0	2.000	8.34	0.959	7.063	FALSE	-2.72
7	Sulfate	1.0	2.000	8.93	1.008	4.278	FALSE	-0.94
8	Nitrate	1.0	2.000	9.83	2.028	8.830	FALSE	3.88
9	Phosphate	1.0	2.000	12.64	0.924	5.279	FALSE	-1.36

US15 : 09892

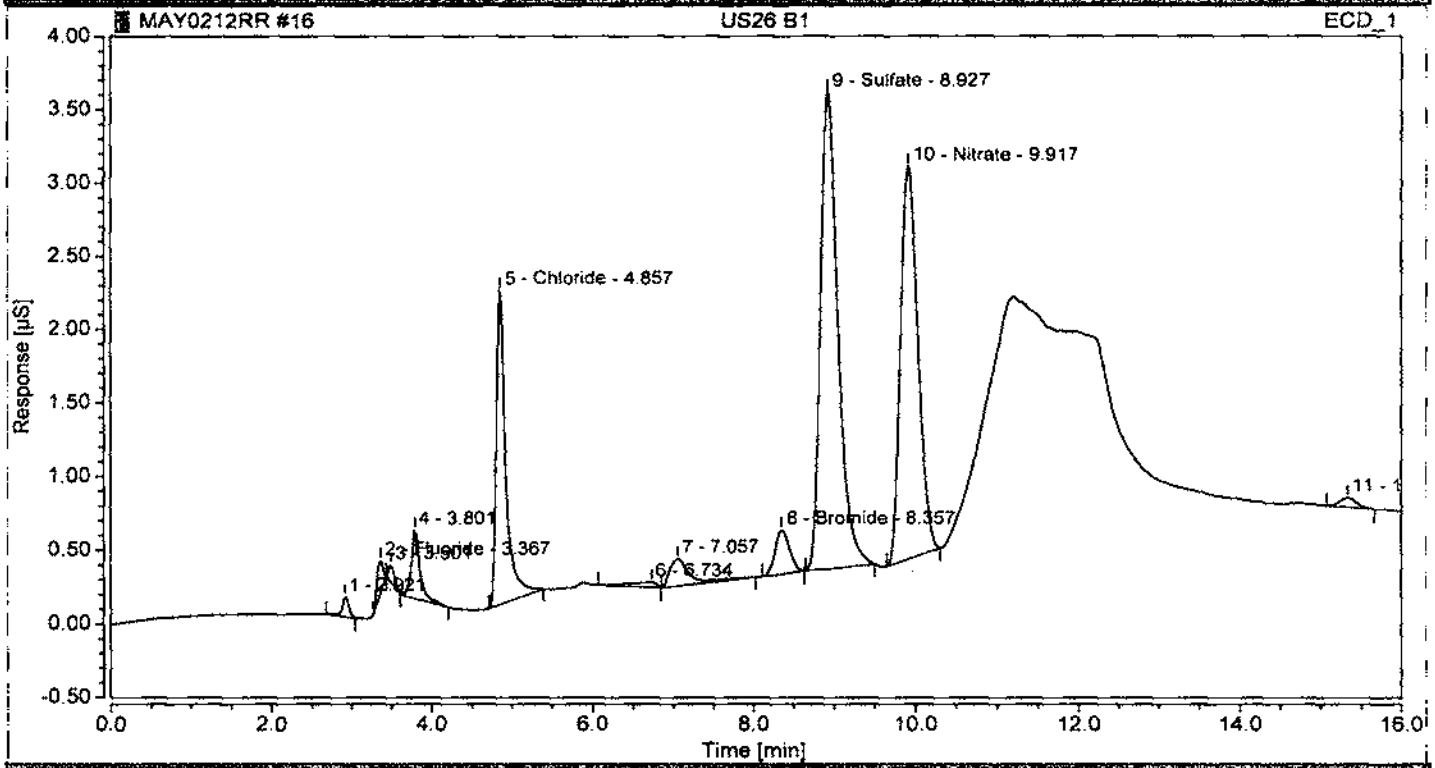
Injection Name:	*CCB*	Inject Number:	15
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*02/05/12 21:32*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1			n.a.	2.92	0.037	0.148	FALSE	n.a.
n.a.	Fluoride		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2			n.a.	3.51	0.018	0.166	FALSE	n.a.
n.a.	Chloride		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3			0.54	7.07	0.018	0.088	FALSE	n.a.
4			0.00	7.84	0.000	0.000	FALSE	n.a.
n.a.	Bromide		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate		0.00	9.00	0.000	0.137	FALSE	n.a.
n.a.	Nitrate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6			2.11	11.23	0.000	0.000	FALSE	n.a.
7			0.00	11.44	0.000	0.000	FALSE	n.a.
n.a.	Phosphate		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

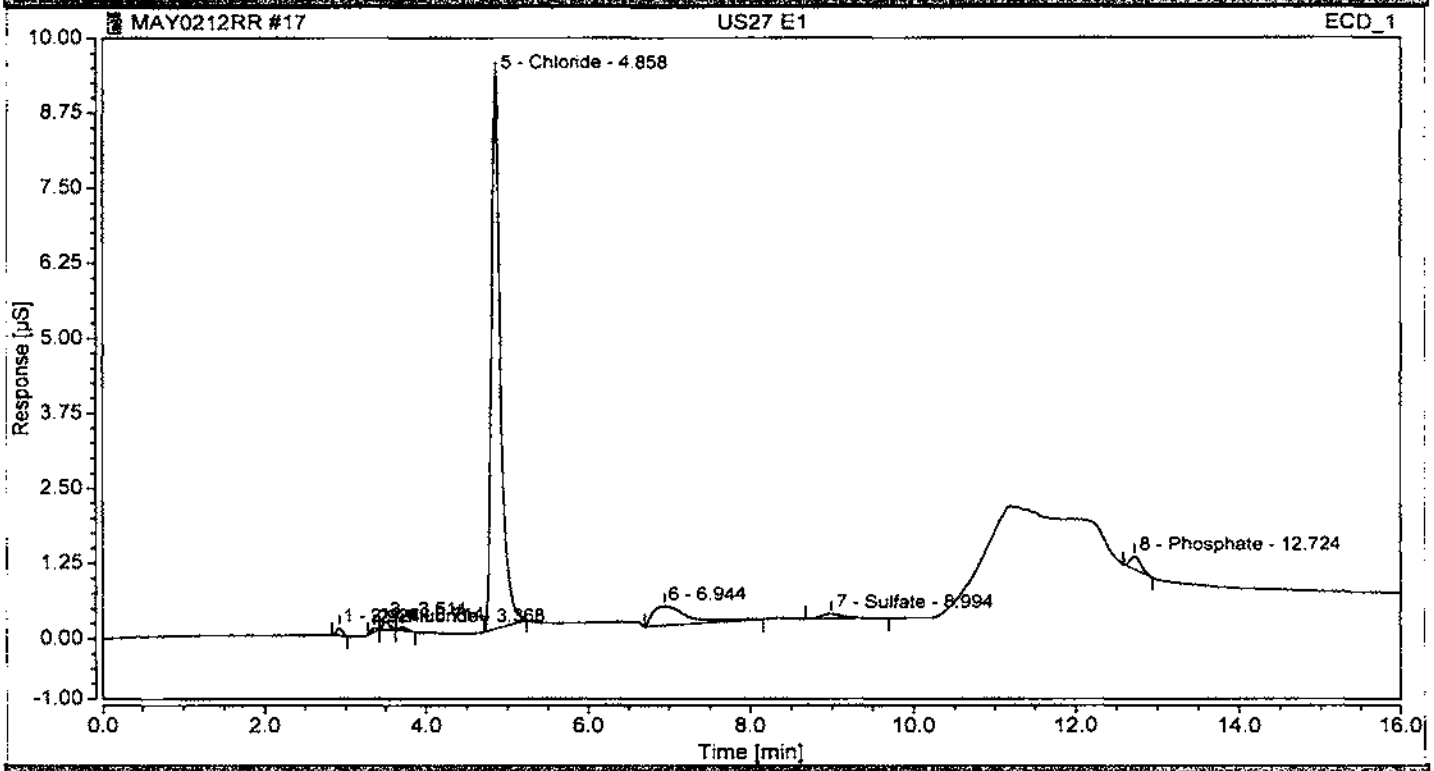
US15 : 00803

Injection Name:	*US26 B1*	Inject Number:	16
Vial Number:	*14*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 21:52*		



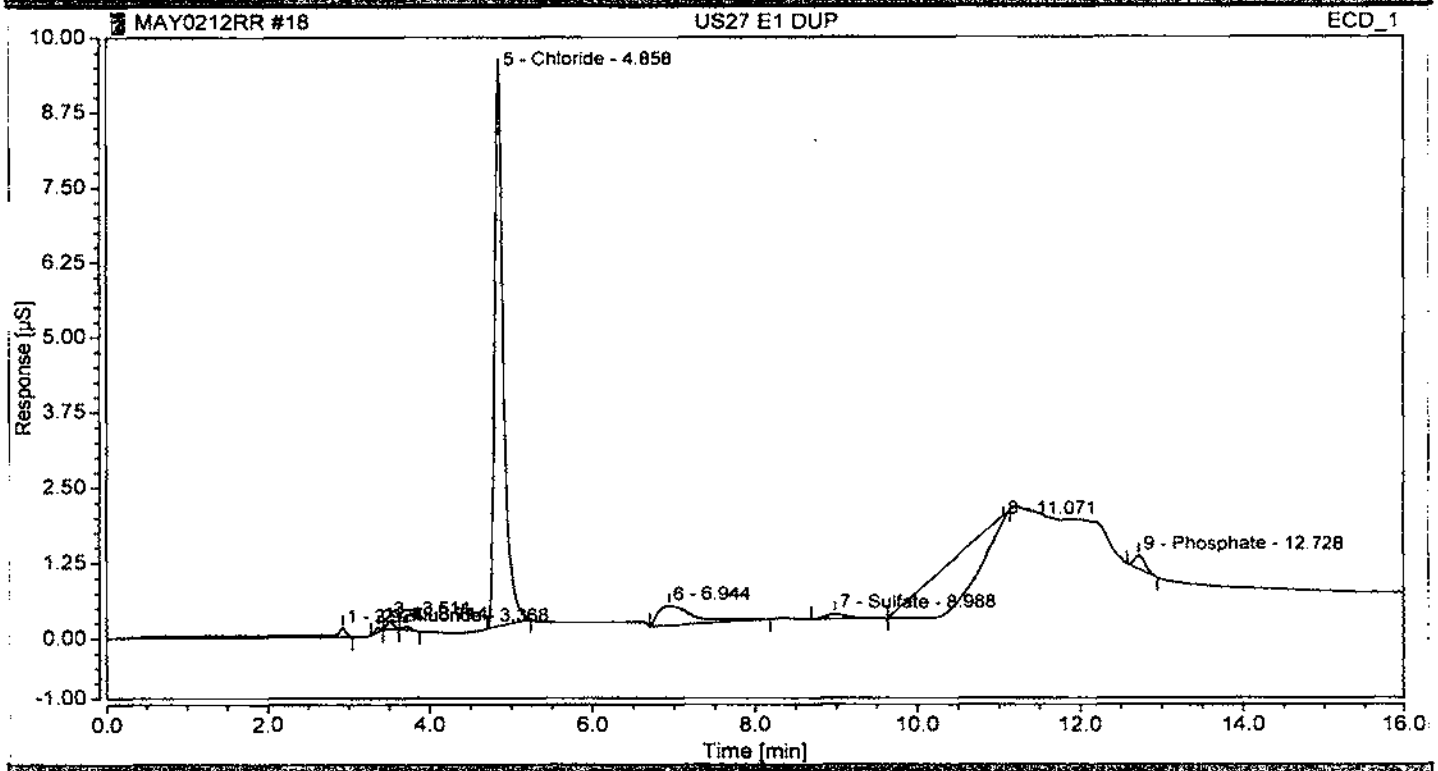
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.013	0.134	FALSE	n.a.
2	Fluoride	10.0	0.354	3.37	0.030	0.220	FALSE	n.a.
3		10.0	n.a.	3.80	0.078	0.718	FALSE	n.a.
4		10.0	n.a.	4.01	0.038	0.363	FALSE	n.a.
5	Chloride	10.0	0.924	4.86	0.265	2.235	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	n.a.	6.73	0.013	0.094	FALSE	n.a.
7		10.0	n.a.	7.06	0.030	0.215	FALSE	n.a.
8	Bromide	10.0	n.a.	8.36	0.058	0.365	FALSE	n.a.
9	Sulfate	10.0	3.000	8.93	0.772	4.760	FALSE	n.a.
10	Nitrate	10.0	2.401	9.92	0.652	3.572	FALSE	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11		10.0	n.a.	15.33	0.015	0.065	FALSE	n.a.

Injection Name:	*US27 E1*	Inject Number:	17
Vial Number:	*15*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:13*		



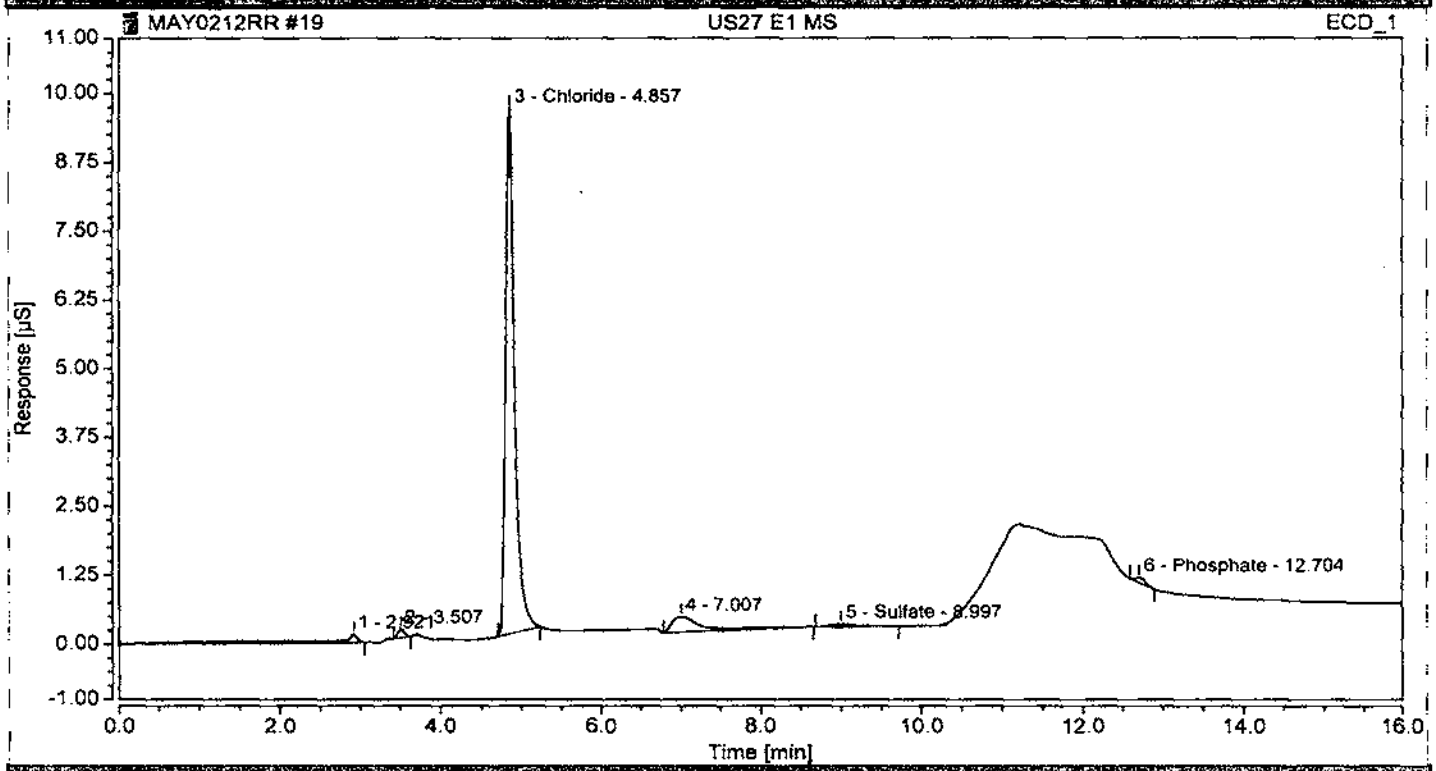
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.010	0.124	FALSE	n.a.
2	Fluoride	10.0	0.110	4.05	0.006	0.067	FALSE	n.a.
3		10.0	n.a.	3.51	0.013	0.139	FALSE	n.a.
4		10.0	n.a.	3.77	0.021	0.055	FALSE	n.a.
5	Chloride	10.0	2.536	4.86	1.194	9.227	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	0.099	6.94	0.042	0.114	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	0.098	8.99	0.026	0.179	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Phosphate	10.0	0.099	12.72	0.034	0.216	FALSE	n.a.

Injection Name:	*US27 E1 DUP*	Inject Number:	18
Vial Number:	*16*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:33*		



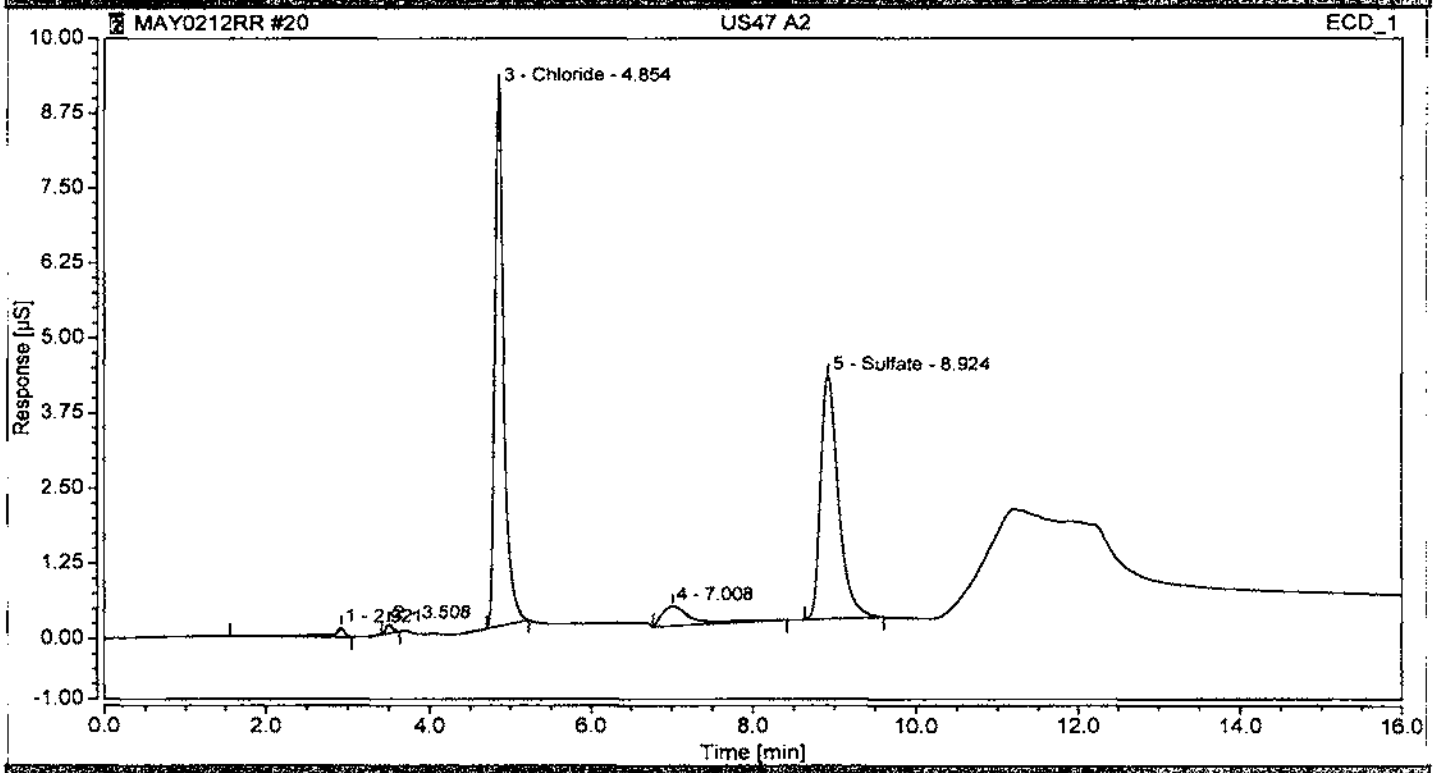
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.52	0.106	0.145	FALSE	n.a.
2	Fluoride	10.0	0.115	3.368	0.035	0.070	FALSE	n.a.
3		10.0	n.a.	3.516	0.036	0.100	FALSE	n.a.
4		10.0	n.a.	4.171	0.008	0.050	FALSE	n.a.
5	Chloride	10.0	0.580	4.858	3.156	0.250	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		10.0	n.a.	6.944	0.040	0.320	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Sulfate	10.0	0.931	8.988	0.078	0.175	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		10.0	n.a.	11.071	0.040	0.055	FALSE	n.a.
9	Phosphate	10.0	1.112	12.728	0.035	0.225	FALSE	n.a.

Injection Name:	*US27 E1 MS*	Inject Number:	19
Vial Number:	*17*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 22:54*		



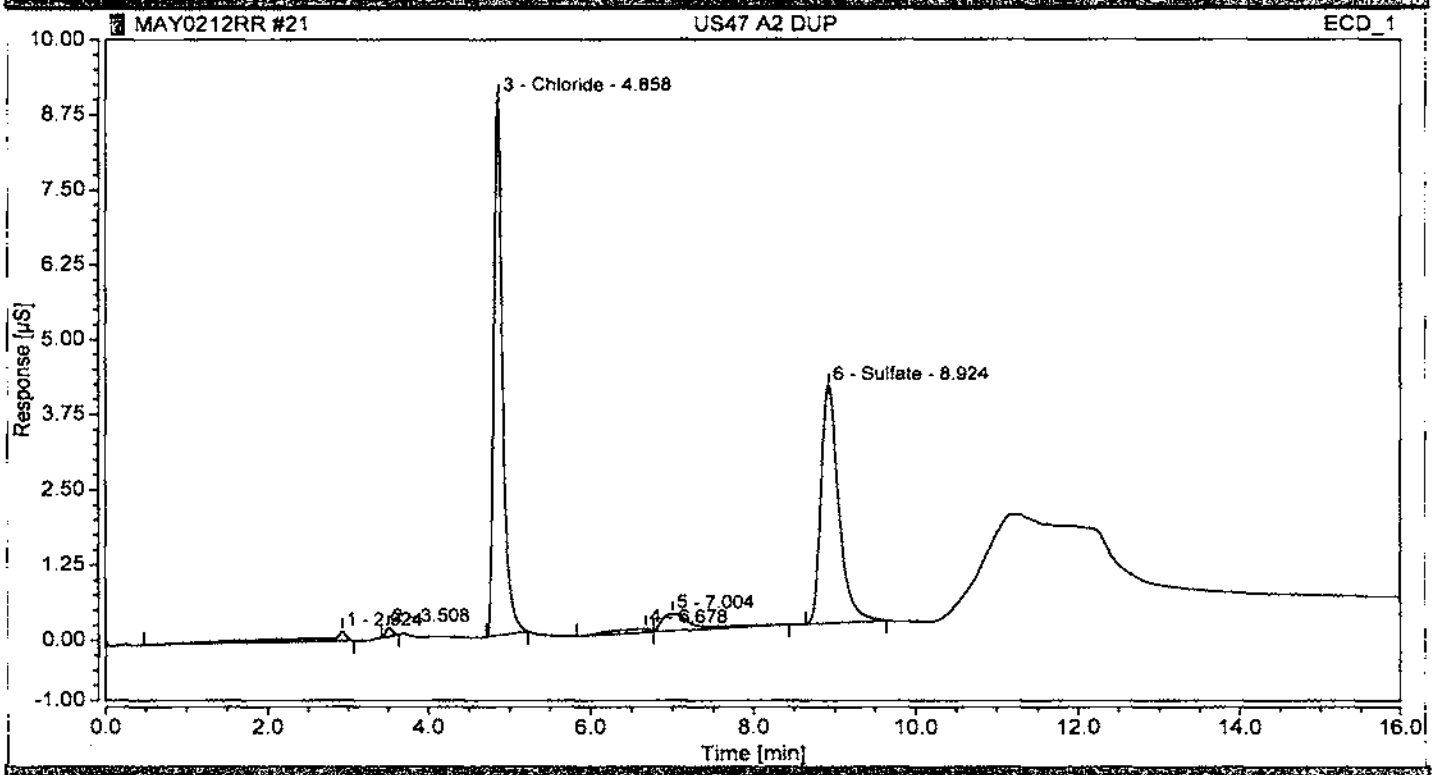
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	3.52	0.107	0.150	FALSE	n.a.
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.81	0.015	0.164	FALSE	n.a.
3	Chloride	20.0	0.000	4.86	1.425	0.000	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	5.64	n.a.	n.a.	n.a.	n.a.
4		20.0	n.a.	7.01	0.180	0.275	FALSE	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	n.a.	8.99	0.517	0.000	FALSE	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Phosphate	20.0	0.000	12.70	0.913	0.036	FALSE	n.a.

Injection Name:	*US47 A2*	inject Number:	20
Vial Number:	*18*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	3.92	0.034	0.147	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	4.13	0.084	0.336	FALSE	n.a.
3	Chloride	10.0	4.305	4.85	1.150	3.364	FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.	7.01	0.199	0.820	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	10.0	5.043	8.92	1.024	4.043	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

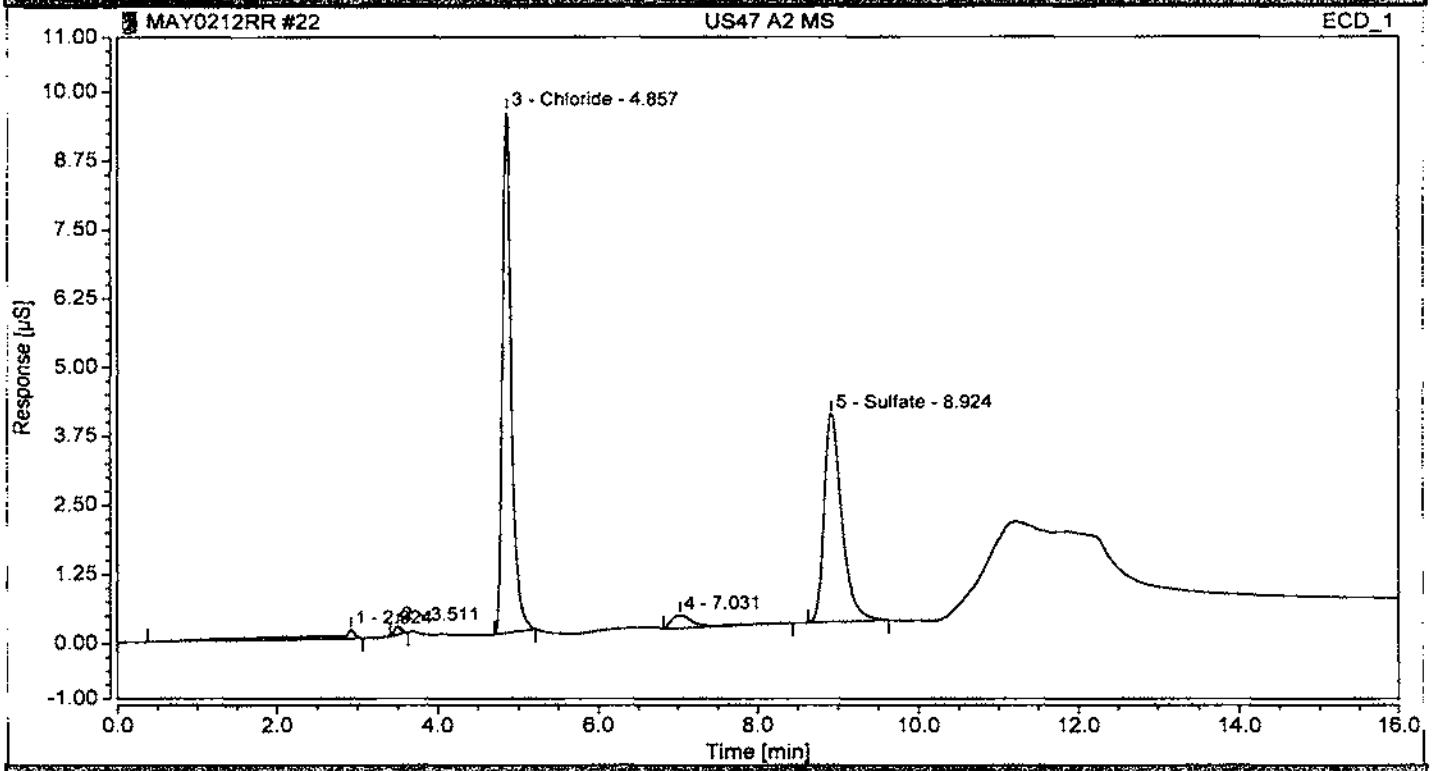
Injection Name:	*US47 A2 DUP*	Inject Number:	21
Vial Number:	*19*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.				FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.				FALSE	n.a.
3	Chloride	10.0					FALSE	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		10.0	n.a.				FALSE	n.a.
5		10.0	n.a.				FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	10.0					FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

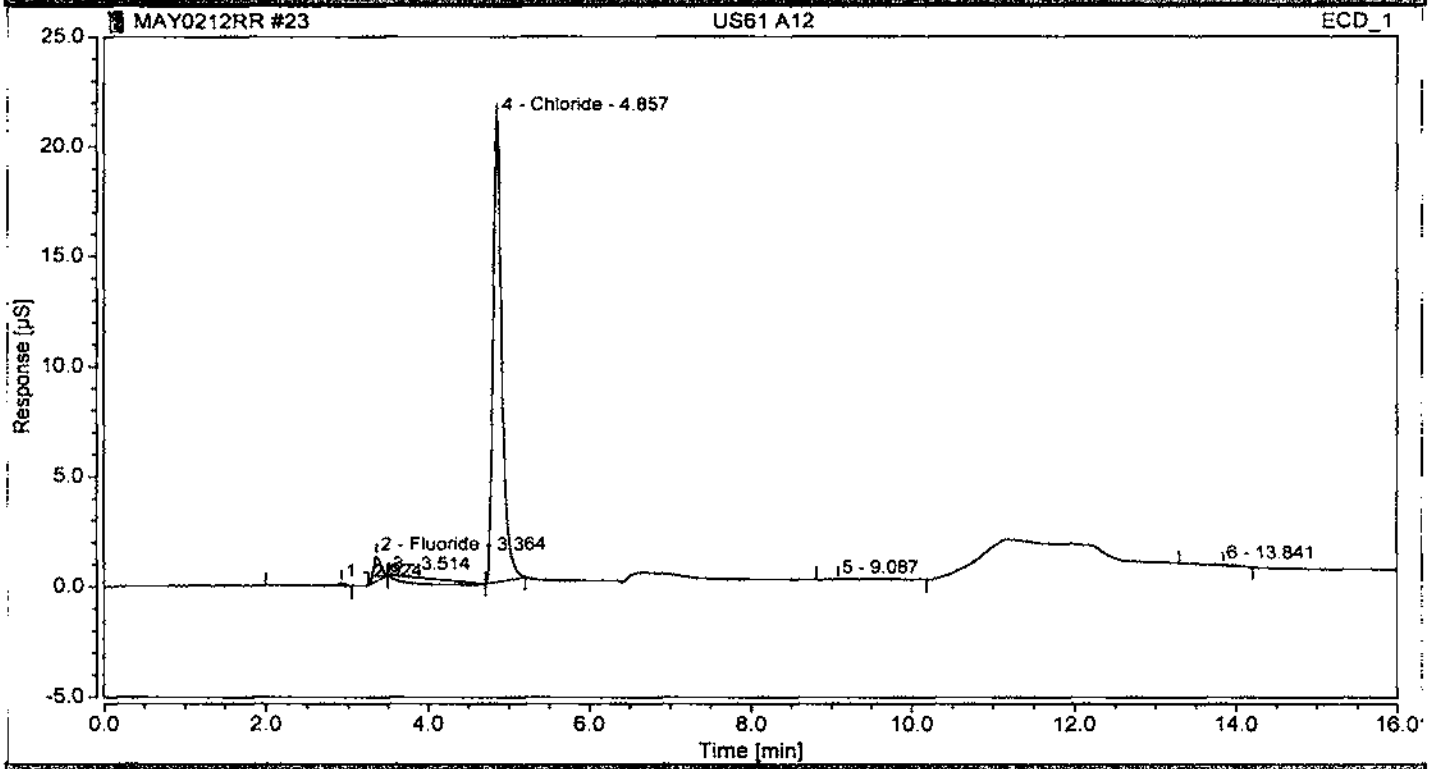
US15 : 00803

Injection Name:	*US47 A2 MS*	Inject Number:	22
Vial Number:	*20*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*02/05/12 23:55*		



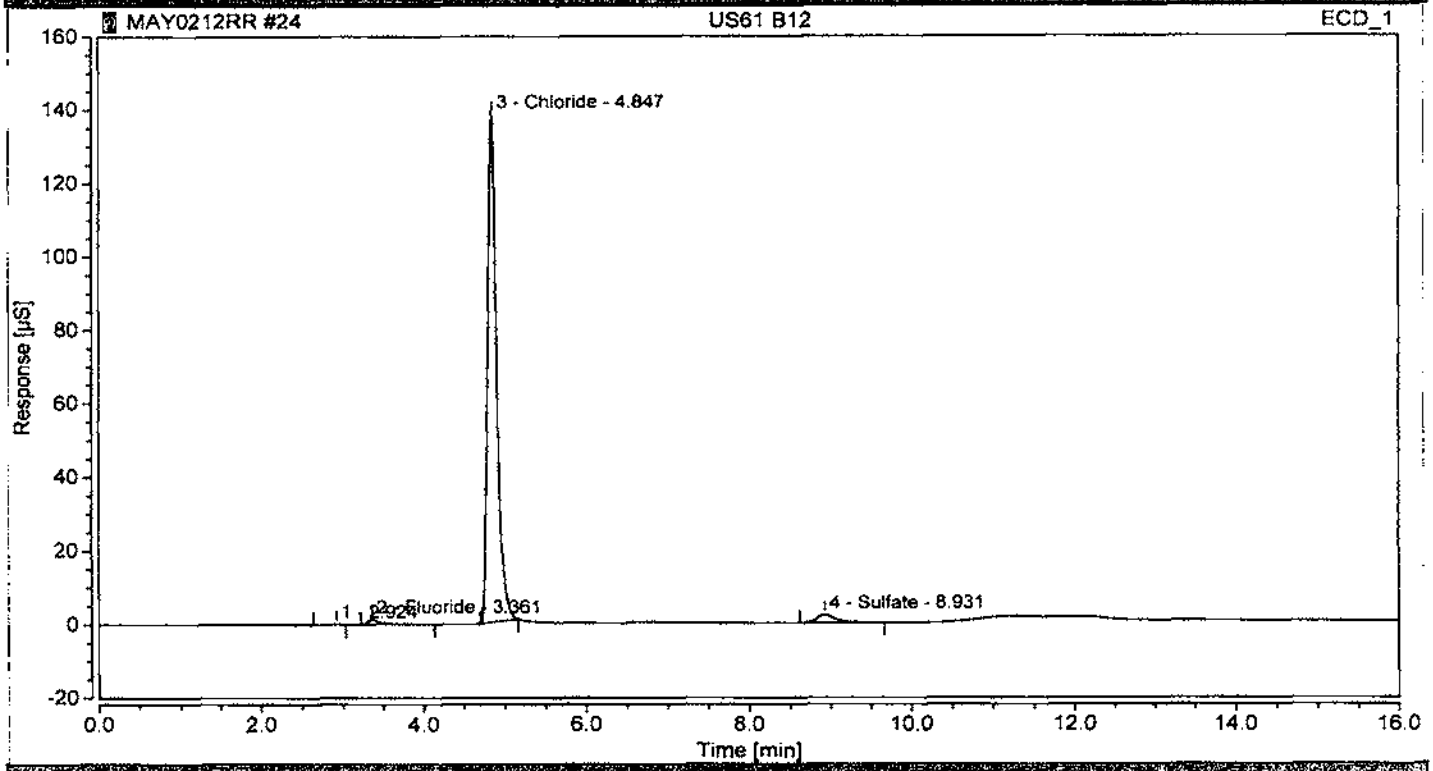
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.82	0.101	0.154	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
3	Chloride	20.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		20.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	20.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US61 A12*	Inject Number:	23
Vial Number:	*21*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:14*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	3.392	0.022	0.137	FALSE	n.a.
2	Fluoride	1.0	0.20	3.364	0.149	1.109	FALSE	n.a.
3		1.0	n.a.	3.514	0.023	0.135	FALSE	n.a.
4	Chloride	1.0	0.46	4.857	0.368	1.748	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	9.087	0.040	0.224	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	13.841	0.020	0.042	FALSE	n.a.

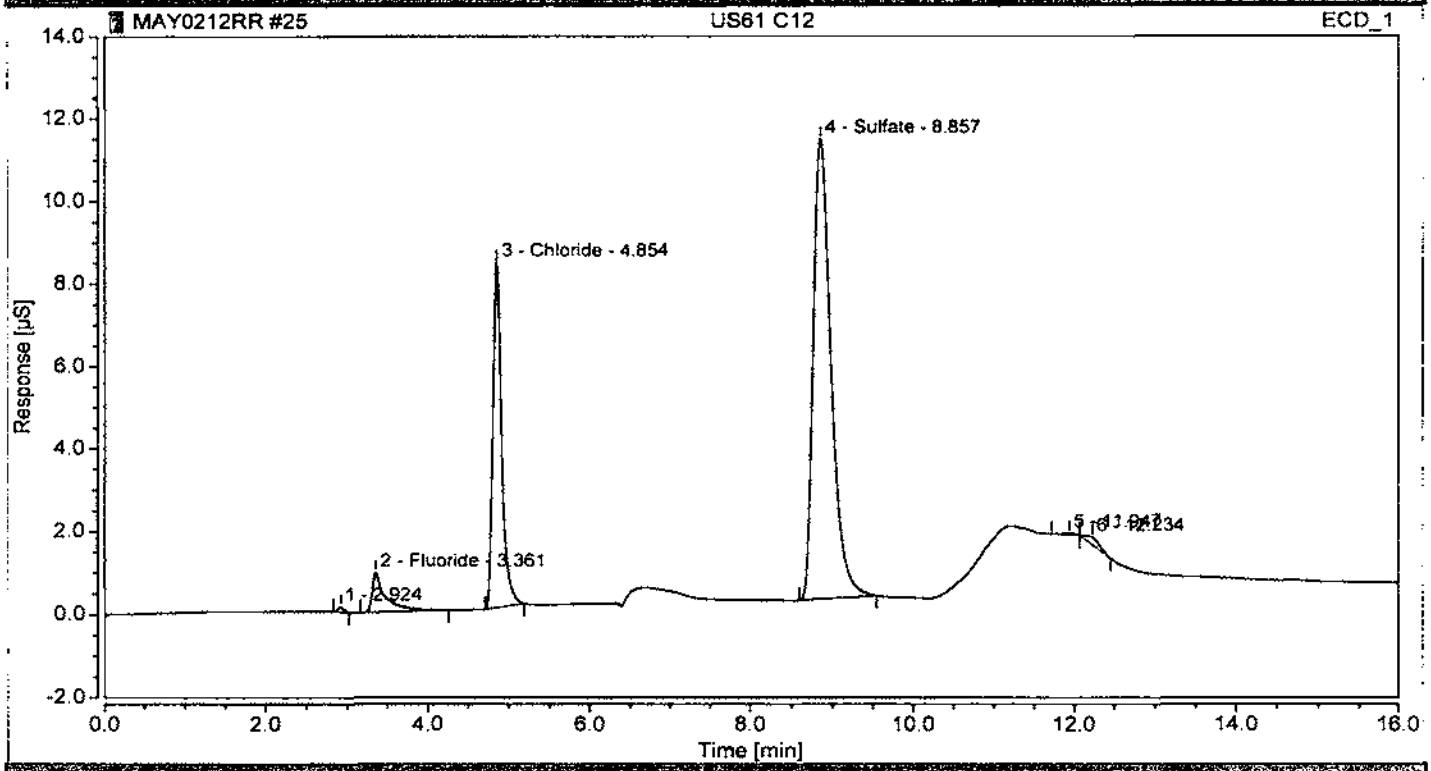
Injection Name:	*US61 B12*	Inject Number:	24
Vial Number:	*22*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 00:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.98	0.001	0.127	FALSE	n.a.
2	Fluoride	1.0	0.0500	3.36	0.250	1.392	FALSE	n.a.
3	Chloride	1.0	0.800	4.85	17.720	108.239	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	1.0	2.50	8.93	0.564	2.746	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00812

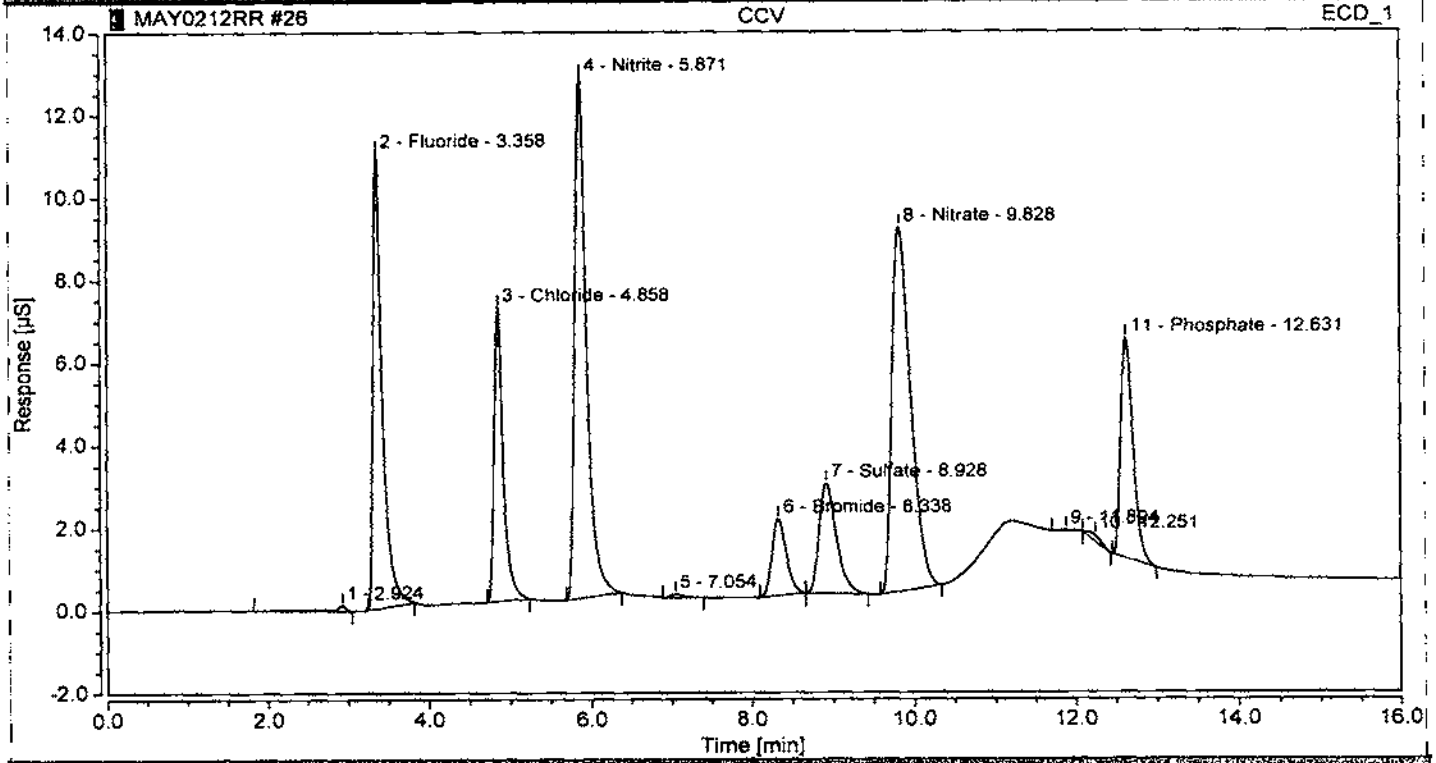
Injection Name:	*US61 C12*	Inject Number:	25
Vial Number:	*23*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodai*		
Injection Date/Time:	*03/05/12 00:55*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1							FALSE	n.a.
2	Fluoride						FALSE	n.a.
3	Chloride						FALSE	n.a.
n.a.	Nitrite						n.a.	n.a.
n.a.	Bromide						n.a.	n.a.
4	Sulfate						FALSE	n.a.
n.a.	Nitrate						n.a.	n.a.
5							FALSE	n.a.
6							FALSE	n.a.
n.a.	Phosphate						n.a.	n.a.

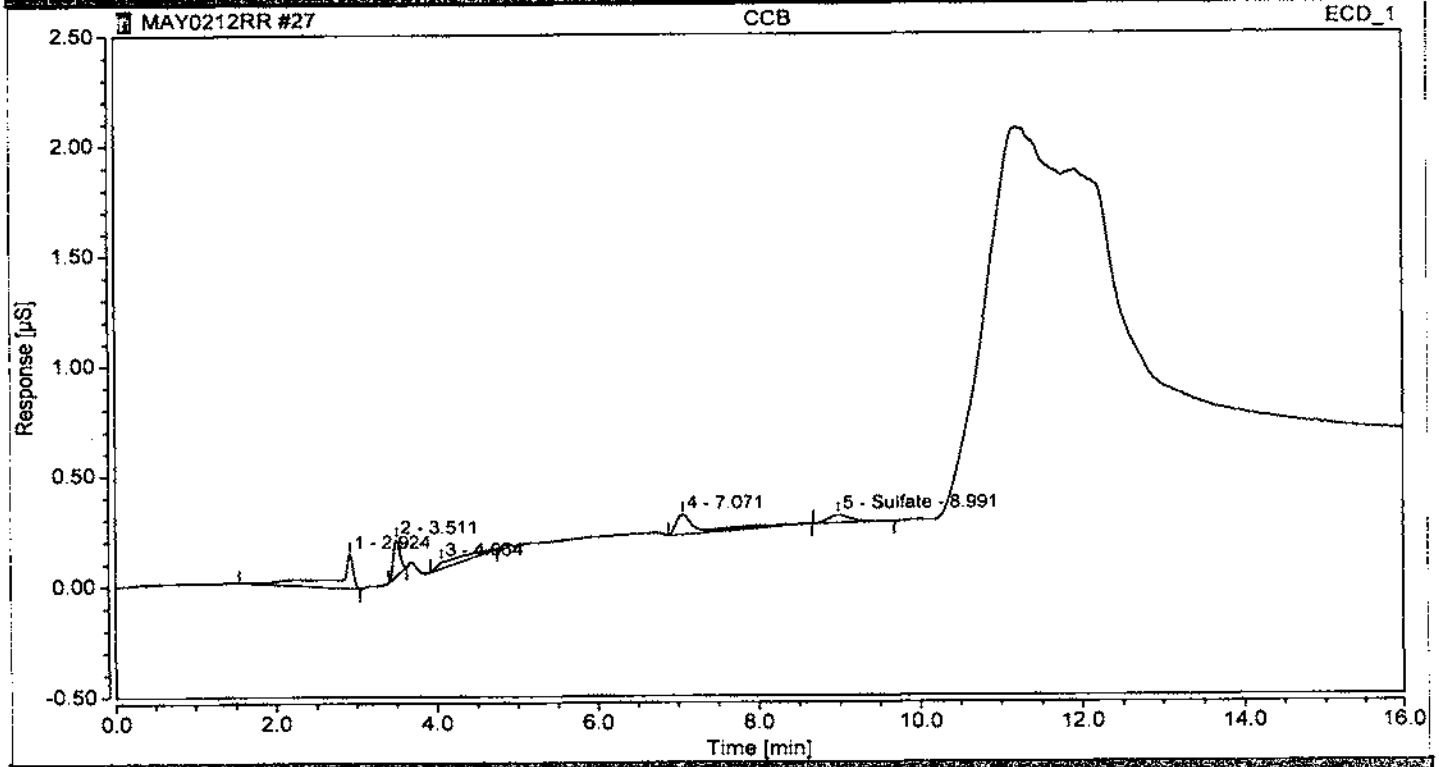
US15 : 00813

Injection Name:	*CCV*	Inject Number:	26
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 01:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1				2.92	0.086	0.147	FALSE	n.a.
2	Fluoride			3.36	1.474	11.028	FALSE	-1.03
3	Chloride			4.86	1.093	7.103	FALSE	0.09
4	Nitrite			5.87	2.386	17.605	FALSE	0.34
5				7.05	0.077	0.099	FALSE	n.a.
6	Bromide			8.34	0.961	6.884	FALSE	-3.28
7	Sulfate			8.93	0.665	4.765	FALSE	2.50
8	Nitrate			9.83	0.975	6.906	FALSE	3.65
9				10.89	0.017	0.093	FALSE	n.a.
10				12.25	0.000	0.000	FALSE	n.a.
11	Phosphate			12.63	0.939	5.320	FALSE	-0.42

Injection Name:	*CCB*	Inject Number:	27
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*03/05/12 01:36*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.041	0.151	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.51	0.016	0.164	FALSE	n.a.
3		1.0	n.a.	4.06	0.011	0.031	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.07	0.035	0.089	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.055	8.99	0.012	0.0563	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*STOP*	Inject Number:	28
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0212RR
Dilution Factor:	*1.0*		
Instrument Method:	*SHUTDOWN*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*03/05/12 01:58*		

Can't read channel ECD_1 from injection #28 - STOP.
Channel is not available.

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			n.a.	min	natogram in con	matogram in		n.a.

US15 : 00816

Name:	**MAY0112RR**	*Calibration:*	**APRIL2112RR** **ARI # 593-01**
Directory:	**Instrument Data\MAY 2012**	*Calibration exp:*	~~3/8/2011~~ 4/12/12
Data Vault:	**ChromeleonLocal**	*Queue Start:*	
No. of Injections:	**25.000**	*User:*	

Name	Dilution	ERA 161110 Amount n.a. Fluoride	ERA 411010 Amount n.a. Chloride	ERA 401010 Amount n.a. Nitrite	ERA 111109 Amount n.a. Bromide	ERA 160111 Amount n.a. Sulfate	ERA 230611 Amount n.a. Nitrate	ERA 200610 Amount n.a. Phosphate
RINSE	1.0	n.a.	n.a.	n.a.	n.a.	0.051	n.a.	n.a.
ICV	1.0	3.019	2.980	2.989	2.973	3.041	3.103	2.933
%R=		**100.6%**	**99.3%**	**99.6%**	**99.1%**	**101.4%**	**103.4%**	**97.8%**
ICB	1.0	n.a.	n.a.	n.a.	n.a.	0.059	n.a.	n.a.
			5.457			n.a.	n.a.	0.416
			5.469			n.a.	n.a.	0.419
%RPD=		**0.62%**	**0.22%**	**3.31%**	**4.09%**			**0.81%**
			7.330			n.a.	n.a.	2.374
%R=		**94.1%**	**93.6%**	**115.8%**	**93.5%**			**97.9%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
			9.695			n.a.	n.a.	n.a.
		0.539	38.840	n.a.	0.359			1.464
		0.538	38.749	n.a.	0.331			1.466
%RPD=		**0.24%**	**0.23%**		**8.16%**	**0.17%**		**0.10%**
		2.431	40.945	1.948	2.178			3.489
%R=		**94.6%**	**105.3%**	**97.4%**	**91.0%**	**107.8%**	**101.1%**	**101.2%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
UQ59 B1	10.0	n.a.	n.a.	n.a.	n.a.	1.586	n.a.	n.a.
UQ59 B1 DUP	10.0	n.a.	n.a.	n.a.	n.a.	1.649	n.a.	n.a.
UQ59 B1 MS	20.0	n.a.	n.a.	n.a.	n.a.	72.141	n.a.	n.a.
CCV	1.0	3.013	3.067	3.032	2.967	3.050	3.091	2.952
%R=		**100.4%**	**102.2%**	**101.1%**	**98.9%**	**101.7%**	**103.0%**	**98.4%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.060	n.a.	n.a.
		0.328		0.364	0.883			0.305
		0.333		0.339	0.872			0.293
%RPD=		**1.33%**	**0.64%**	**7.03%**	**1.32%**	**1.14%**	**0.48%**	**4.02%**
		10.244		10.128	10.146			9.793
%R=		**99.2%**	**94.2%**	**101.3%**	**92.6%**	**85.8%**	**99.5%**	**94.9%**
SPK=	**0.25mL*200ppm/5mL**		**=10ppm**					
		1.510		n.a.	5.010	n.a.		n.a.
		0.175	38.459	n.a.	n.a.	n.a.		n.a.
		0.164	38.523	n.a.	n.a.	n.a.		n.a.
%RPD=		**5.15%**	**0.17%**					
		2.198	40.216	2.095	1.530	n.a.		1.709
%R=		**101.1%**	**87.8%**	**104.8%**	**76.5%**		**104.7%**	**85.5%**
SPK=	**0.05mL*200ppm/5mL**		**=2ppm**					
CCV	1.0	3.020	2.926	3.019	2.940	2.994	3.090	2.963
%R=		**100.7%**	**97.5%**	**100.6%**	**98.0%**	**99.8%**	**103.0%**	**98.8%**
CCB	1.0	n.a.	n.a.	n.a.	n.a.	0.058	n.a.	n.a.
STOP	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

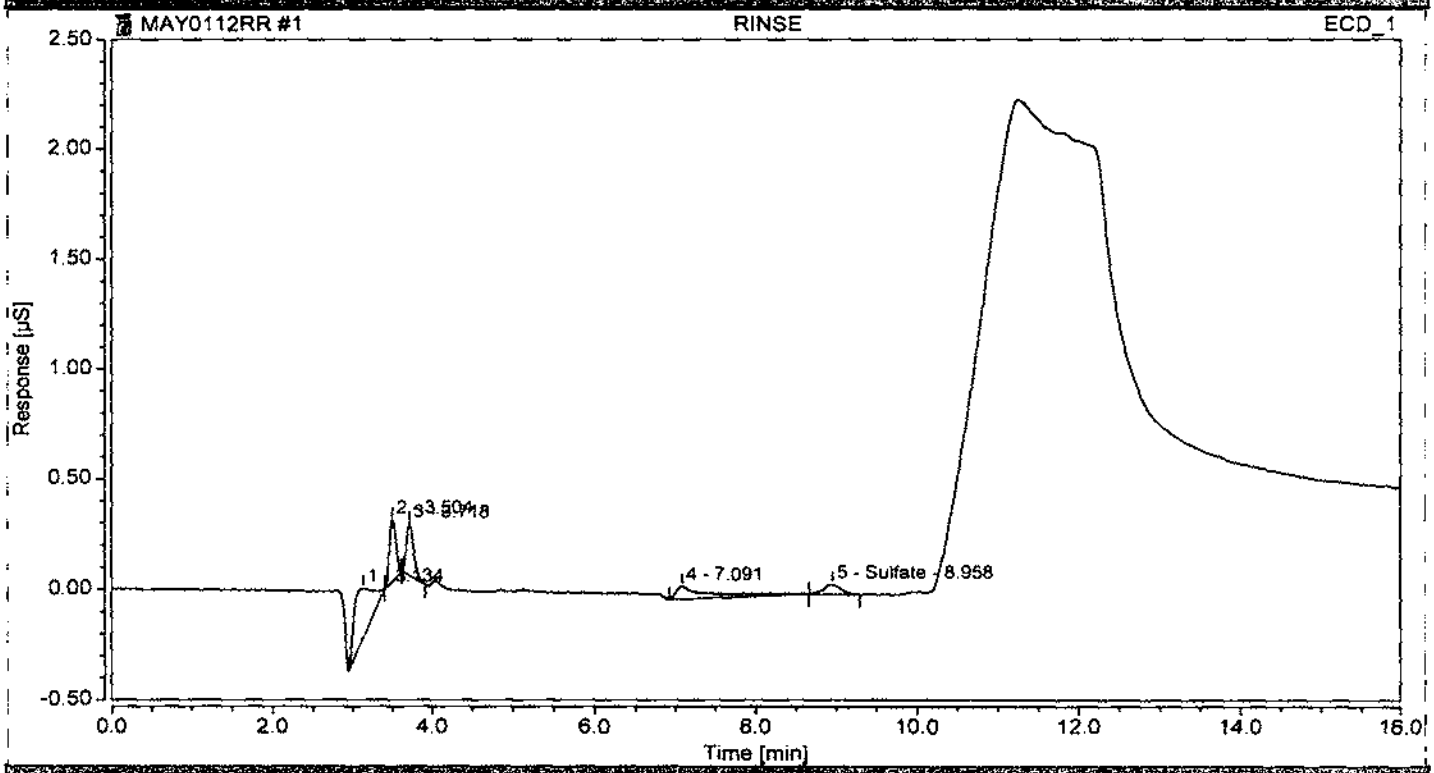
US15 : 00817

Name:	**MAY0112RR**	*Queue Start:*	**2012-05-01T12:16:27-**
Directory:	**Instrument Data\MAY 2012**	*Created By:*	**pat**
Data Vault:	**ChromeleonLocal**		
No. of Injections:	**25**		

No.	Injection Name	Position	Type	Level	Dilution	Inject Time
1	RINSE	1	Unknown		1.0	01/May/12 12:16:27
2	ICV	2	Check Standard	05	1.0	01/May/12 12:35:23
3	ICB	3	Blank		1.0	01/May/12 12:54:34
4	US26 A1	4	Unknown		1.0	01/May/12 13:13:58
5	US26 A1 DUP	5	Unknown		1.0	01/May/12 13:33:13
6	US26 A1 MS	6	Unknown		1.0	01/May/12 13:52:41
7	US26 B1	7	Unknown		1.0	01/May/12 14:12:14
8	US27 E1	8	Unknown		1.0	01/May/12 14:31:54
9	US27 E1 DUP	9	Unknown		1.0	01/May/12 14:51:39
10	US27 E1 MS	10	Unknown		1.0	01/May/12 15:11:29
11	UO56 B1	11	Unknown		10.0	01/May/12 15:31:25
12	UO56 B1 DUP	12	Unknown		10.0	01/May/12 15:51:26
13	UO56 B1 MS	13	Unknown		20.0	01/May/12 16:11:33
14	CCV	2	Check Standard	05	1.0	01/May/12 16:31:48
15	CCB	3	Blank		1.0	01/May/12 16:52:22
16	US26 A1	14	Unknown		5.0	01/May/12 17:13:05
17	US26 A1 DUP	15	Unknown		5.0	01/May/12 17:33:34
18	US26 A1 MS	16	Unknown		5.0	01/May/12 17:54:07
19	US26 B1	17	Unknown		2.0	01/May/12 18:14:48
20	US47 A2	18	Unknown		1.0	01/May/12 18:35:29
21	US47 A2 DUP	19	Unknown		1.0	01/May/12 18:56:19
22	US47 A2 MS	20	Unknown		1.0	01/May/12 19:15:39
23	CCV	2	Check Standard	05	1.0	01/May/12 19:35:06
24	CCB	3	Blank		1.0	01/May/12 19:55:16
25	STOP	1	Unknown		1.0	01/May/12 20:15:37

US15 : 00813

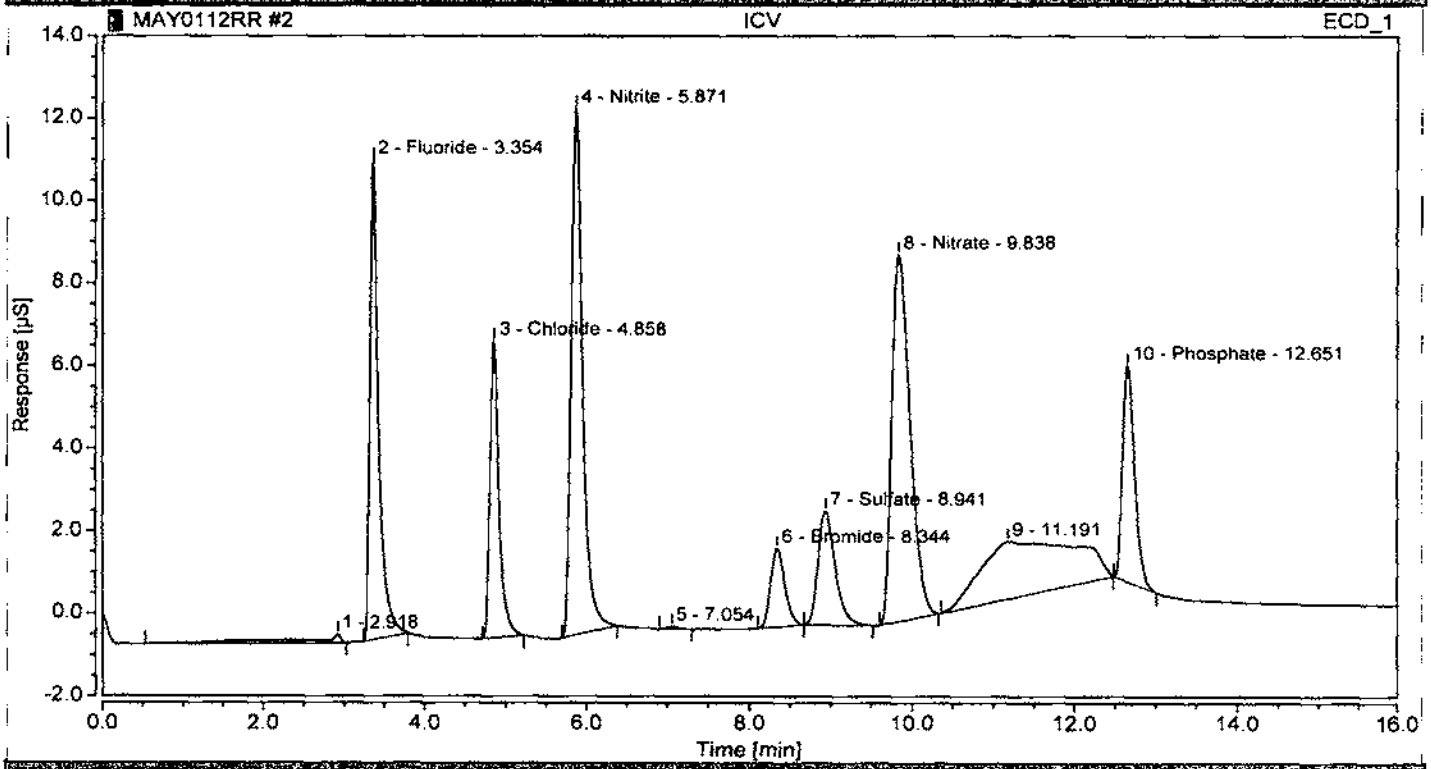
Injection Name:	*RINSE*	Inject Number:	1
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 12:16*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	3.13	0.062	0.224	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.50	0.078	0.278	FALSE	n.a.
3		1.0	n.a.	3.72	0.026	0.095	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.09	0.048	0.087	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.005	8.96	0.011	0.044	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00819

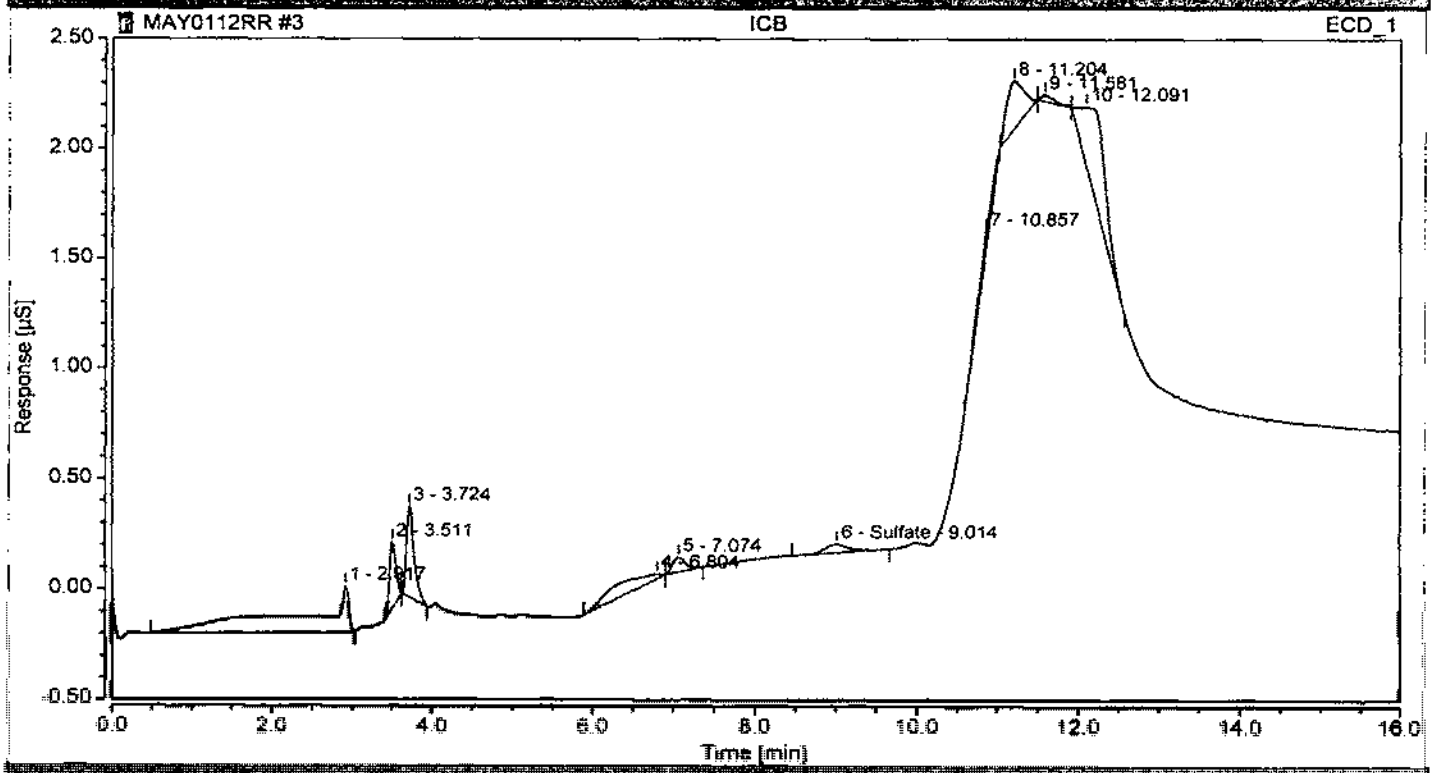
Injection Name:	*ICV*	Inject Number:	2
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 12:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.03	0.208	FALSE	n.a.
2	Fluoride	1.0	0.19	3.35	1.08	11.678	FALSE	0.63
3	Chloride	1.0	0.80	4.86	0.81	9.880	FALSE	0.65
4	Nitrite	1.0	2.36	5.87	1.98	21.048	FALSE	0.36
5		1.0	n.a.	7.05	0.07	0.980	FALSE	n.a.
6	Bromide	1.0	1.10	8.34	0.60	4.693	FALSE	0.90
7	Sulfate	1.0	2.62	8.94	1.95	9.488	FALSE	1.38
8	Nitrate	1.0	1.03	9.84	1.31	12.976	FALSE	3.43
9		1.0	n.a.	11.19	0.58	1.396	FALSE	n.a.
10	Phosphate	1.0	2.53	12.65	1.61	6.241	FALSE	2.24

US15 : 00820

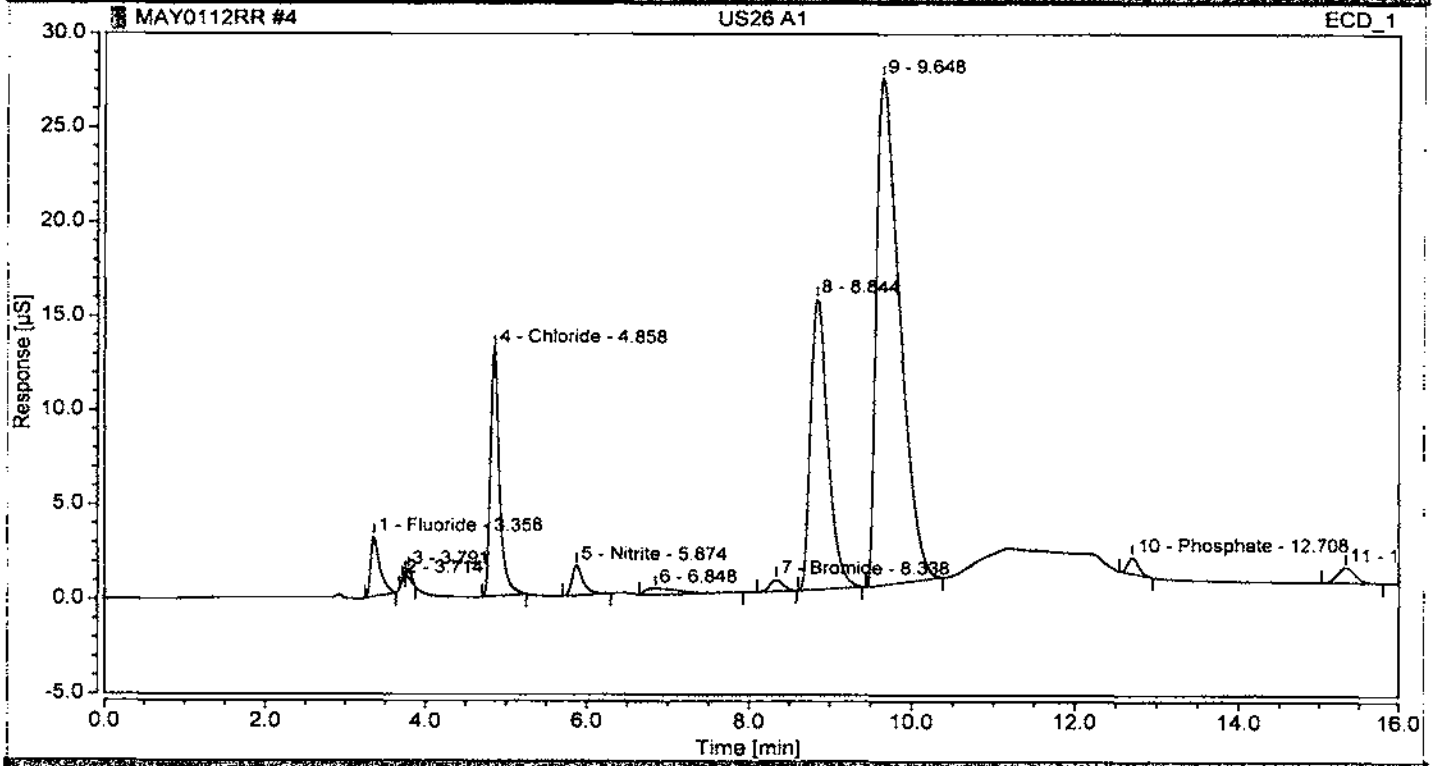
Injection Name:	*ICB*	Inject Number:	3
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 12:54*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.145	0.209	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.50	0.028	0.238	FALSE	n.a.
3		1.0	n.a.	3.72	0.045	0.412	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	6.80	0.005	0.021	FALSE	n.a.
5		1.0	n.a.	7.07	0.012	0.065	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Sulfate	1.0	0.0108	9.01	0.014	0.038	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		1.0	n.a.	10.86	0.018	0.077	FALSE	n.a.
8		1.0	n.a.	11.20	0.084	0.210	FALSE	n.a.
9		1.0	n.a.	11.58	0.006	0.029	FALSE	n.a.
10		1.0	n.a.	12.08	0.127	0.270	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

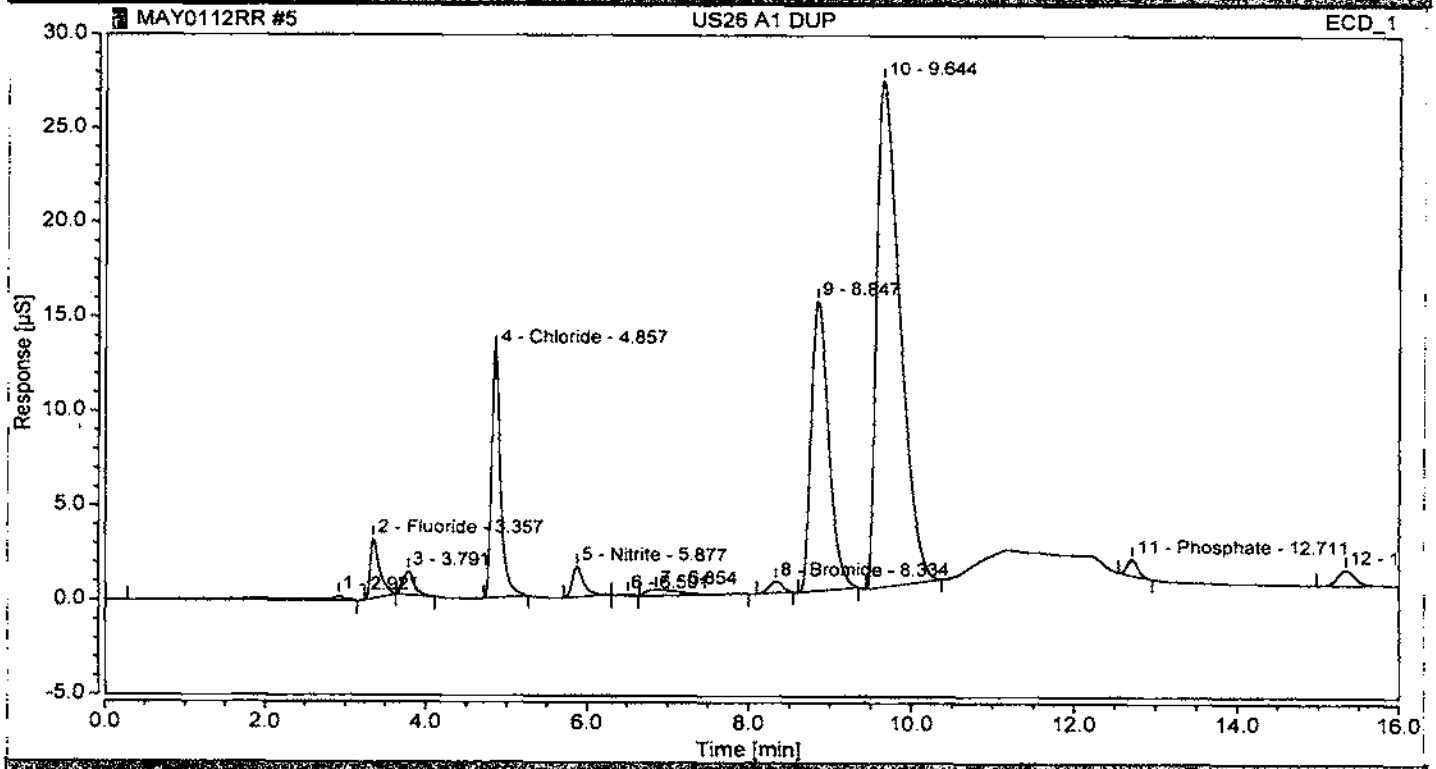
US15 : 00821

Injection Name:	*US26 A1*	Inject Number:	4
Vial Number:	*4*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 13:13*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1	Fluoride	1.0	0.031	3.36	0.027	0.150	FALSE	n.a.
2		1.0	n.a.	3.71	0.008	0.120	FALSE	n.a.
3		1.0	n.a.	3.79	0.004	0.043	FALSE	n.a.
4	Chloride	1.0	3.46	4.86	0.276	1.382	FALSE	n.a.
5	Nitrite	1.0	0.05	5.87	0.011	0.068	FALSE	n.a.
6		1.0	n.a.	6.85	0.004	0.040	FALSE	n.a.
7	Bromide	1.0	0.03	8.39	0.015	0.071	FALSE	n.a.
8		1.0	n.a.	8.84	0.026	0.210	FALSE	n.a.
n.a.	Sulfate	1.0	0.04	9.65	0.032	n.a.	n.a.	n.a.
9		1.0	n.a.	9.65	0.032	0.221	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Phosphate	1.0	0.16	12.71	0.130	0.853	FALSE	n.a.
11		1.0	n.a.	15.33	0.203	0.814	FALSE	n.a.

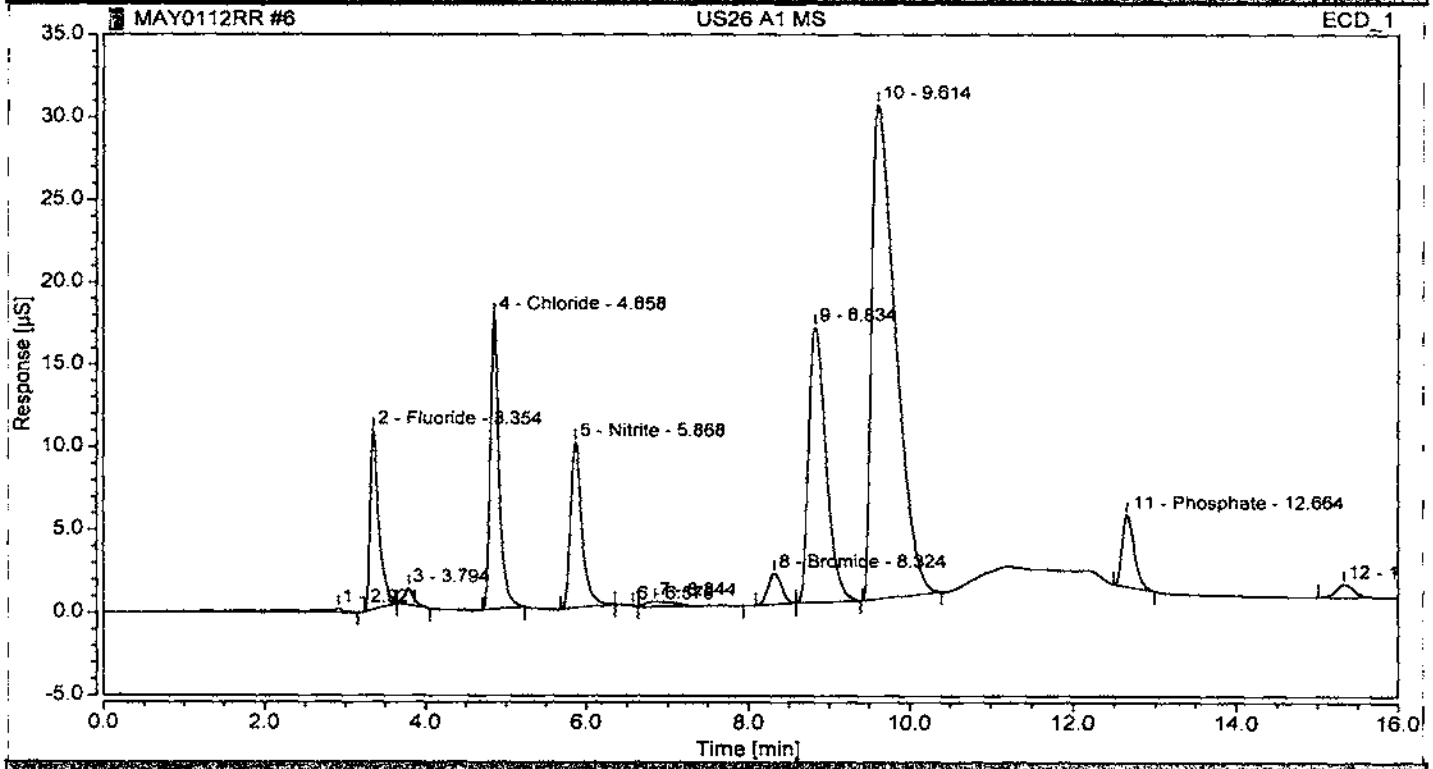
Injection Name:	*US26 A1 DUP*	Inject Number:	5
Vial Number:	*5*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 13:33*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.95	0.204	0.228	FALSE	n.a.
2	Fluoride	1.0	0.153	3.357	0.424	0.440	FALSE	n.a.
3		1.0	n.a.	3.791	0.187	0.248	FALSE	n.a.
4	Chloride	2.0	0.[illegible]	4.857	0.[illegible]	0.[illegible]	FALSE	n.a.
5	Nitrite	1.0	0.[illegible]	5.877	0.[illegible]	0.[illegible]	FALSE	n.a.
6		1.0	n.a.	6.554	0.[illegible]	0.[illegible]	FALSE	n.a.
7		1.0	n.a.	7.[illegible]	0.[illegible]	0.[illegible]	FALSE	n.a.
8	Bromide	1.0	0.[illegible]	8.334	0.[illegible]	0.[illegible]	FALSE	n.a.
9		2.0	n.a.	8.647	0.[illegible]	0.[illegible]	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10		1.0	n.a.	9.644	0.[illegible]	0.[illegible]	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11	Phosphate	1.0	0.419	12.711	0.131	0.855	FALSE	n.a.
12		1.0	n.a.	15.33	0.212	0.823	FALSE	n.a.

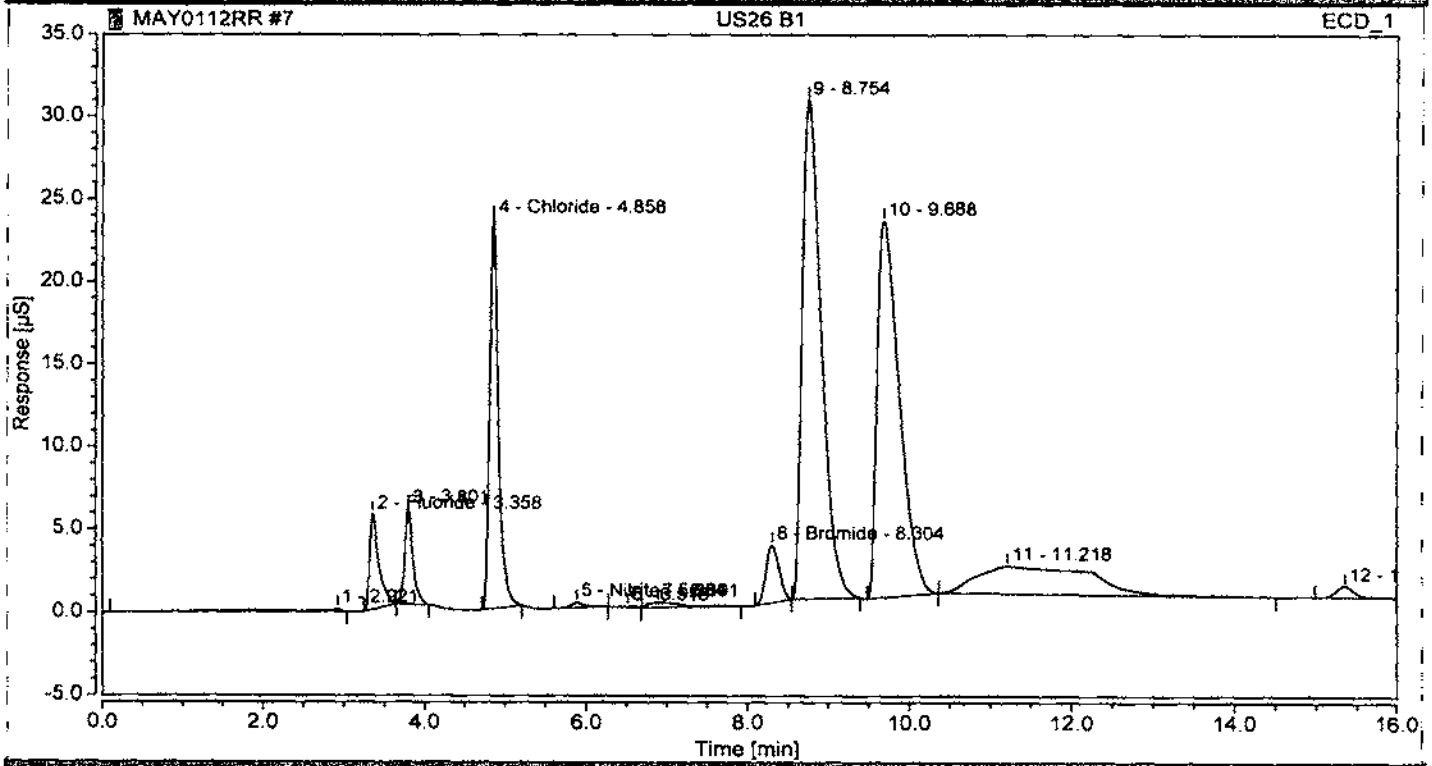
US15 : 00822

Injection Name:	*US26 A1 MS*	Inject Number:	6
Vial Number:	*6*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 13:52*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		10	n.a.	2.93	0.235	0.228	FALSE	n.a.
2	Fluoride	10	0.373	3.35	1.050	10.918	FALSE	n.a.
3		10	n.a.	3.79	0.081	0.819	FALSE	n.a.
4	Chloride	10	0.701	4.66	2.617	18.705	FALSE	n.a.
5	Nitrite	10	0.473	5.87	1.502	9.879	FALSE	n.a.
6		10	n.a.	6.58	0.103	0.908	FALSE	n.a.
7		10	n.a.	6.84	0.148	1.299	FALSE	n.a.
8	Bromide	10	n.a.	8.32	0.707	5.304	FALSE	n.a.
9		10	n.a.	8.83	2.420	17.859	FALSE	n.a.
n.a.	Sulfate	10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10		10	n.a.	9.61	3.269	29.694	FALSE	n.a.
n.a.	Nitrate	10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11	Phosphate	10	2.374	12.66	0.742	4.856	FALSE	n.a.
12		10	n.a.	15.33	0.207	0.804	FALSE	n.a.

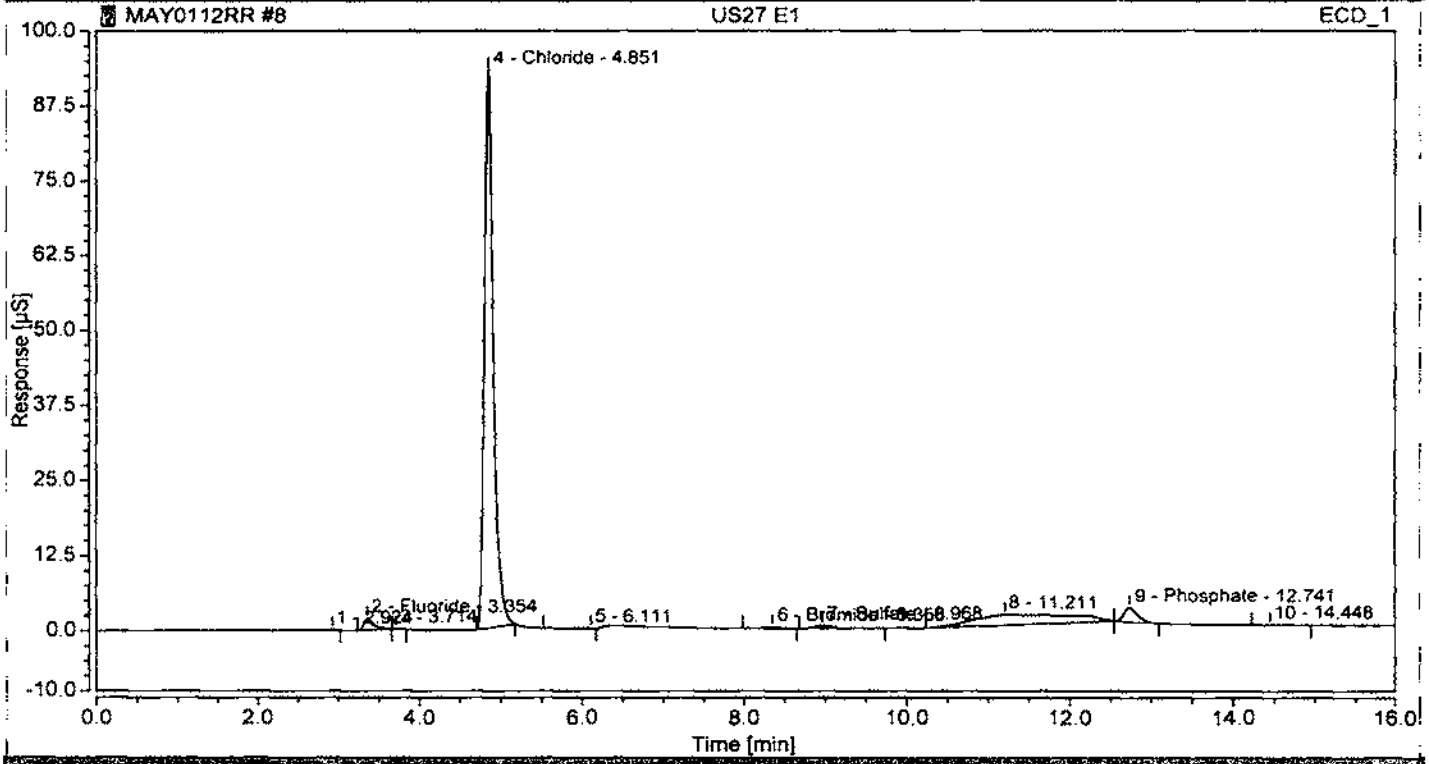
Injection Name:	*US26 B1*	Inject Number:	7
Vial Number:	*7*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 14:12*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.324	0.057	0.188	FALSE	n.a.
2	Fluoride	1.0	n.a.	[illegible]	0.762	5.720	FALSE	n.a.
3		1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
4	Chloride	1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
5	Nitrite	1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
6		1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
7		1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
8	Bromide	1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
9		1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	[illegible]	[illegible]	n.a.	n.a.	n.a.
10		1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	[illegible]	[illegible]	n.a.	n.a.	n.a.
11		1.0	n.a.	[illegible]	[illegible]	[illegible]	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12		1.0	n.a.	15.35	0.174	0.670	FALSE	n.a.

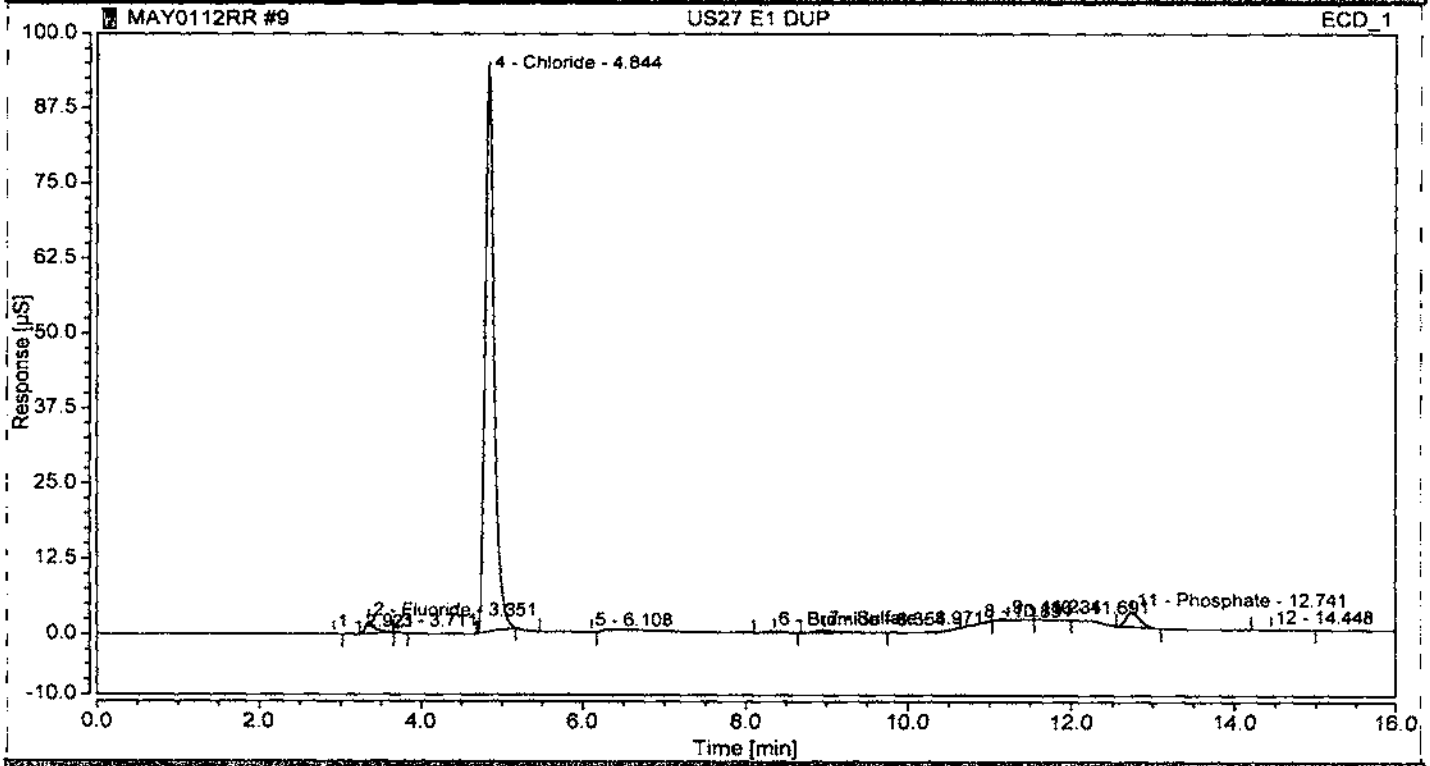
US15 : 00829

Injection Name:	*US27 E1*	Inject Number:	8
Vial Number:	*8*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 14:31*		



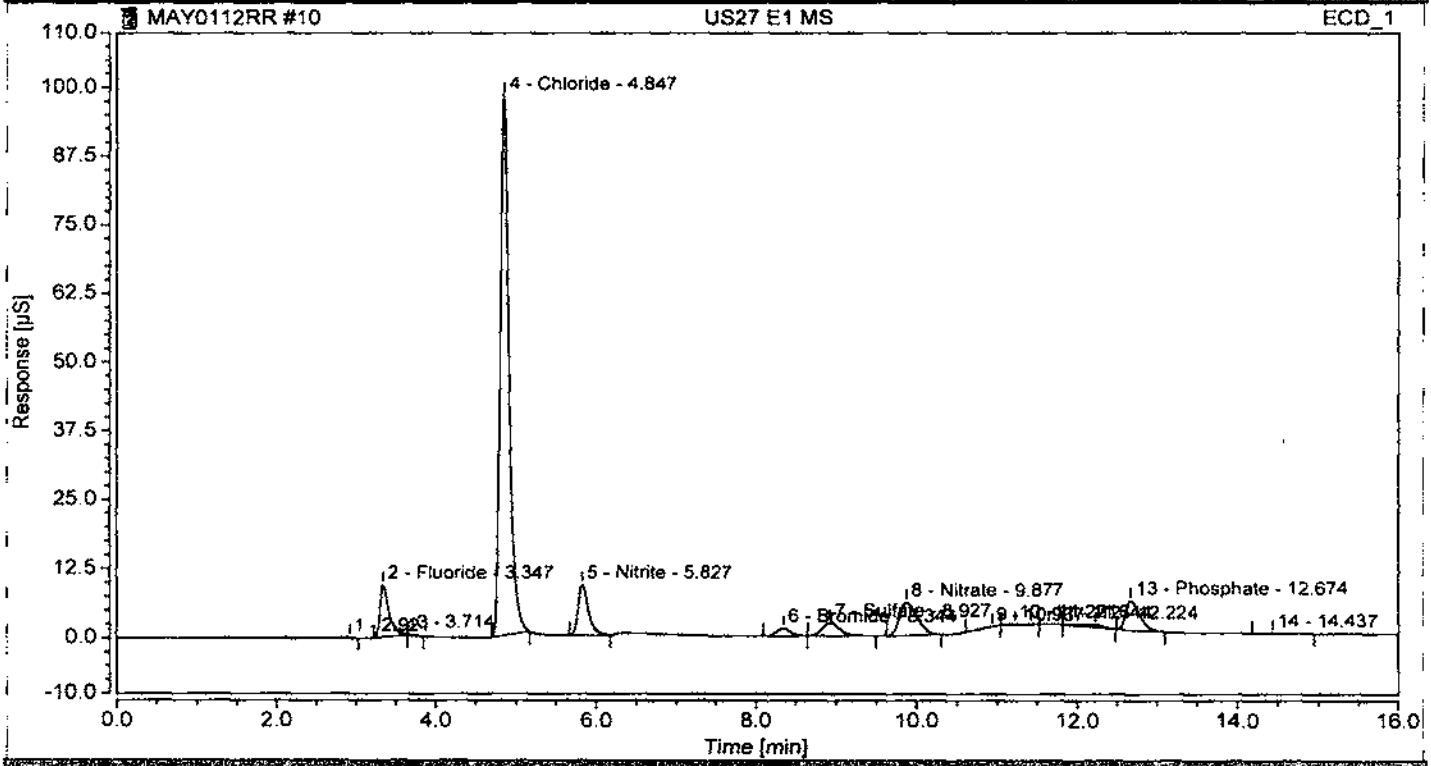
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.99	0.160	0.065	FALSE	n.a.
2	Fluoride	1.0	0.369	3.85	0.017	0.007	FALSE	n.a.
3		1.0		4.71	0.006	0.003	FALSE	n.a.
4	Chloride	1.0	3.60	4.85	0.183	0.151	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0		6.11	0.009	0.004	FALSE	n.a.
6	Bromide	1.0		8.96	0.005	0.002	FALSE	n.a.
7	Sulfate	1.0		8.97	0.023	0.007	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		1.0		11.21	0.008	0.004	FALSE	n.a.
9	Phosphate	1.0		12.74	0.015	0.005	FALSE	n.a.
10		1.0	n.a.	14.45	0.016	0.004	FALSE	n.a.

Injection Name:	*US27 E1 DUP*	Inject Number:	9
Vial Number:	*9*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 14:51*		



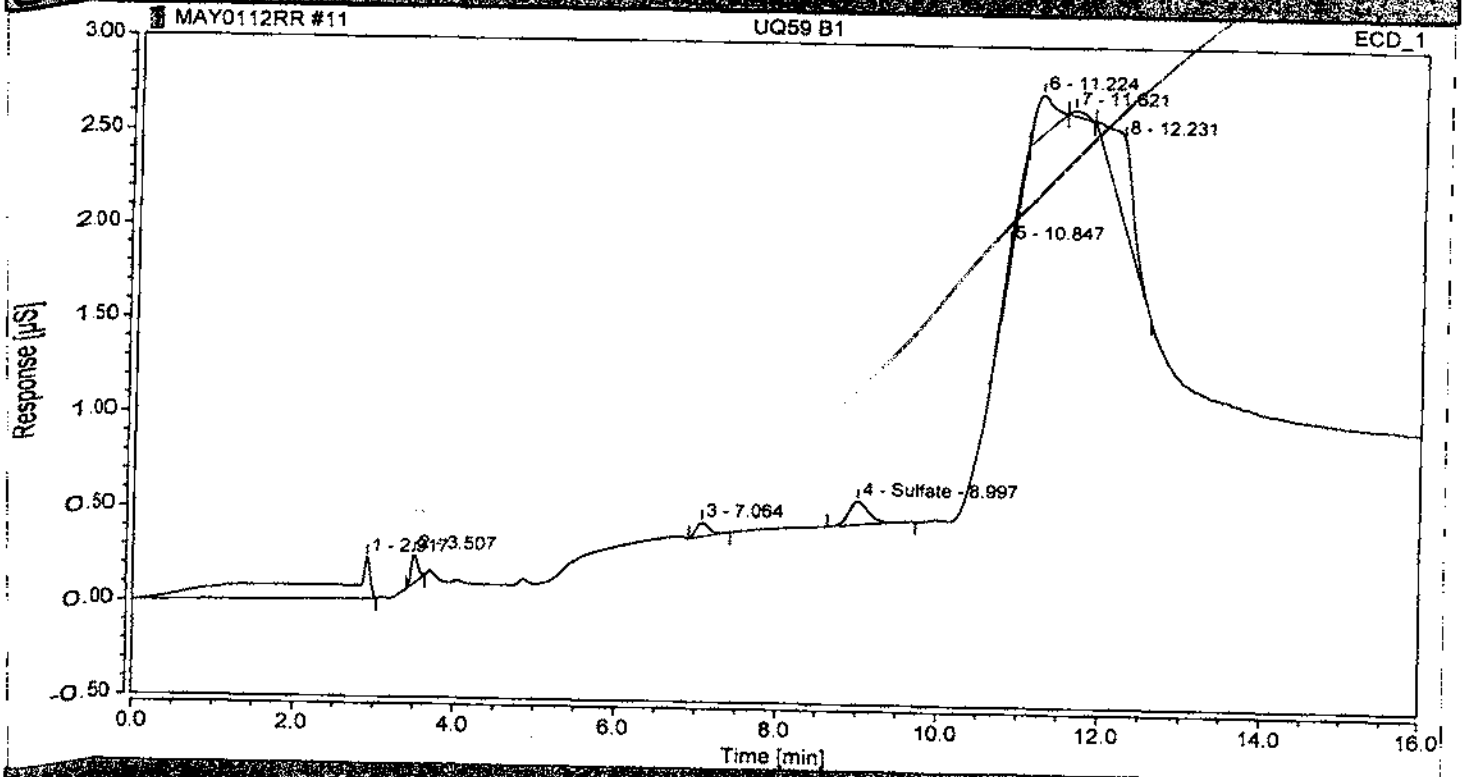
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n/a	2.923	0.146	0.138	FALSE	n.a.
2	Fluoride	1.0	0.538	3.351	0.287	1.513	FALSE	n.a.
3		1.0	n/a	3.771	0.006	0.065	FALSE	n.a.
4	Chloride	1.0	3.6743	4.844	1.520	12.813	FALSE	n.a.
n.a.	Nitrite	1.0	n/a	5.114	0.087	n/a	n/a	n.a.
5		1.0	n/a	6.108	0.060	0.083	FALSE	n.a.
6	Bromide	1.0	0.000	8.358	0.000	0.000	FALSE	n.a.
7	Sulfate	1.0	4.008	8.971	0.313	0.414	FALSE	n.a.
n.a.	Nitrate	1.0	n/a	9.241	0.000	n/a	n/a	n.a.
8		1.0	n/a	10.691	0.000	0.000	FALSE	n.a.
9		1.0	n/a	11.691	0.000	0.000	FALSE	n.a.
10		1.0	n/a	12.741	0.000	0.000	FALSE	n.a.
11	Phosphate	1.0	0.456	12.741	0.018	0.044	FALSE	n.a.
12		1.0	n/a	14.448	0.018	0.060	FALSE	n.a.

Injection Name:	*US27 E1 MS*	Inject Number:	10
Vial Number:	*10*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 15:11*		



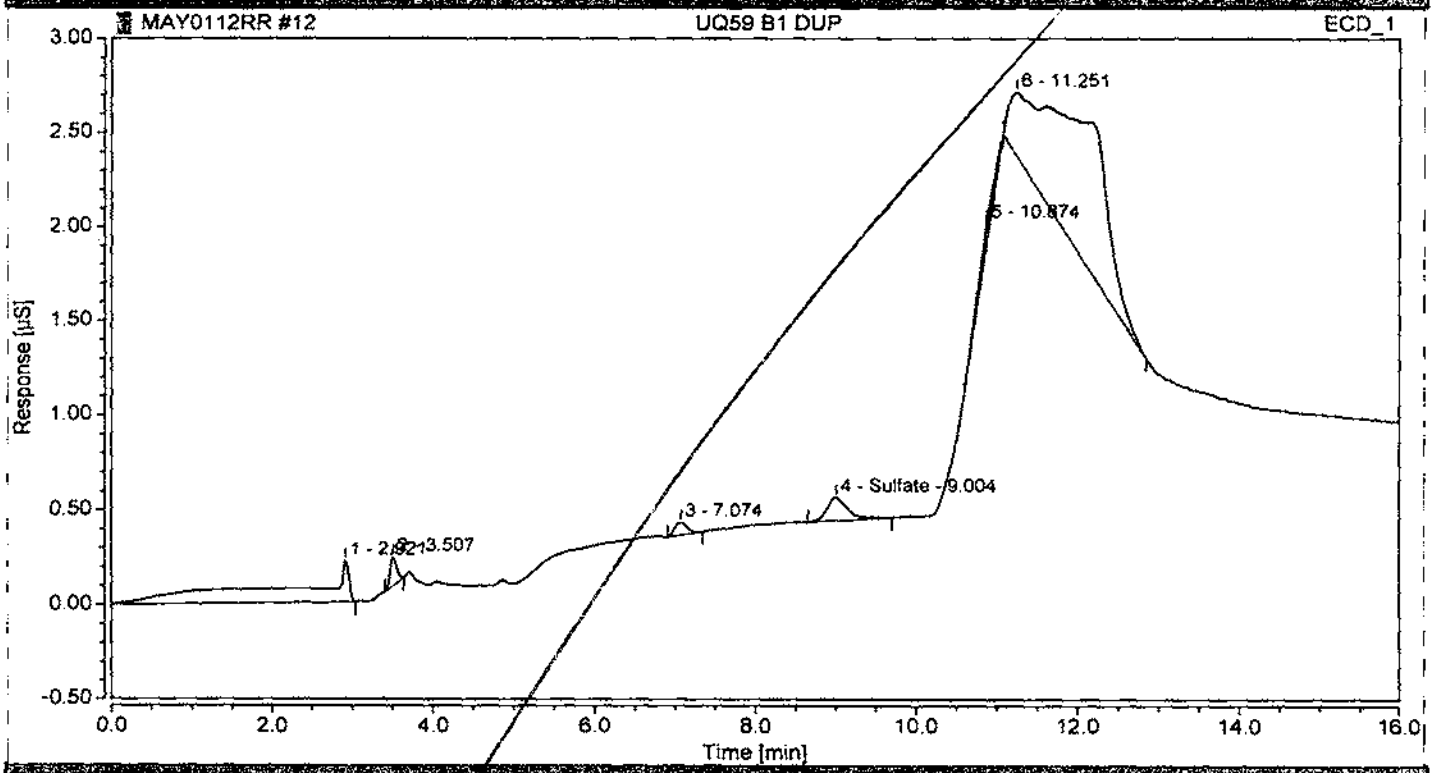
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.98	0.165	0.131	FALSE	n.a.
2	Fluoride	1.0	0.471	3.35	0.245	0.168	FALSE	n.a.
3		1.0	0.000	3.71	0.024	0.023	FALSE	n.a.
4	Chloride	1.0	1.000	4.85	0.551	0.376	FALSE	n.a.
5	Nitrite	1.0	0.000	5.83	0.123	0.109	FALSE	n.a.
6	Bromide	1.0	0.000	6.34	0.000	0.002	FALSE	n.a.
7	Sulfate	1.0	0.000	8.93	0.000	0.000	FALSE	n.a.
8	Nitrate	1.0	0.000	9.88	0.000	0.000	FALSE	n.a.
9		1.0	0.000	10.93	0.000	0.000	FALSE	n.a.
10		1.0	0.000	12.22	0.000	0.000	FALSE	n.a.
11		1.0	0.000	13.01	0.000	0.000	FALSE	n.a.
12		1.0	0.000	13.72	0.000	0.000	FALSE	n.a.
13	Phosphate	1.0	3.489	12.67	5.050	5.300	FALSE	n.a.
14		1.0	n.a.	14.44	0.020	0.065	FALSE	n.a.

Injection Name:	UQ59 B1	Inject Number:	11
Vial Number:	11	User:	pat
Injection Type:	Unknown	Sequence:	MAY0112RR
Dilution Factor:	10.0		
Instrument Method:	INSTRMETH		
Processing Method:	processmethodat		
Injection Date/Time:	01/05/12 15:31		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.390	0.219	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	2.92	0.390	0.219	FALSE	n.a.

Injection Name:	*UQ59 B1 DUP*	Inject Number:	12
Vial Number:	*12*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*10.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 15:51*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		10.0	n.a.	2.92	0.139	0.218	FALSE	n.a.
n.a.	Fluoride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		10.0	n.a.	3.51	0.150	0.160	FALSE	n.a.
n.a.	Chloride	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		10.0	n.a.	7.07	0.616	0.367	FALSE	n.a.
n.a.	Bromide	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	10.0	n.a.	9.00	0.837	0.121	FALSE	n.a.
n.a.	Nitrate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		10.0	n.a.	10.87	0.0000	0.004	FALSE	n.a.
6		10.0	n.a.	11.25	0.743	0.309	FALSE	n.a.
n.a.	Phosphate	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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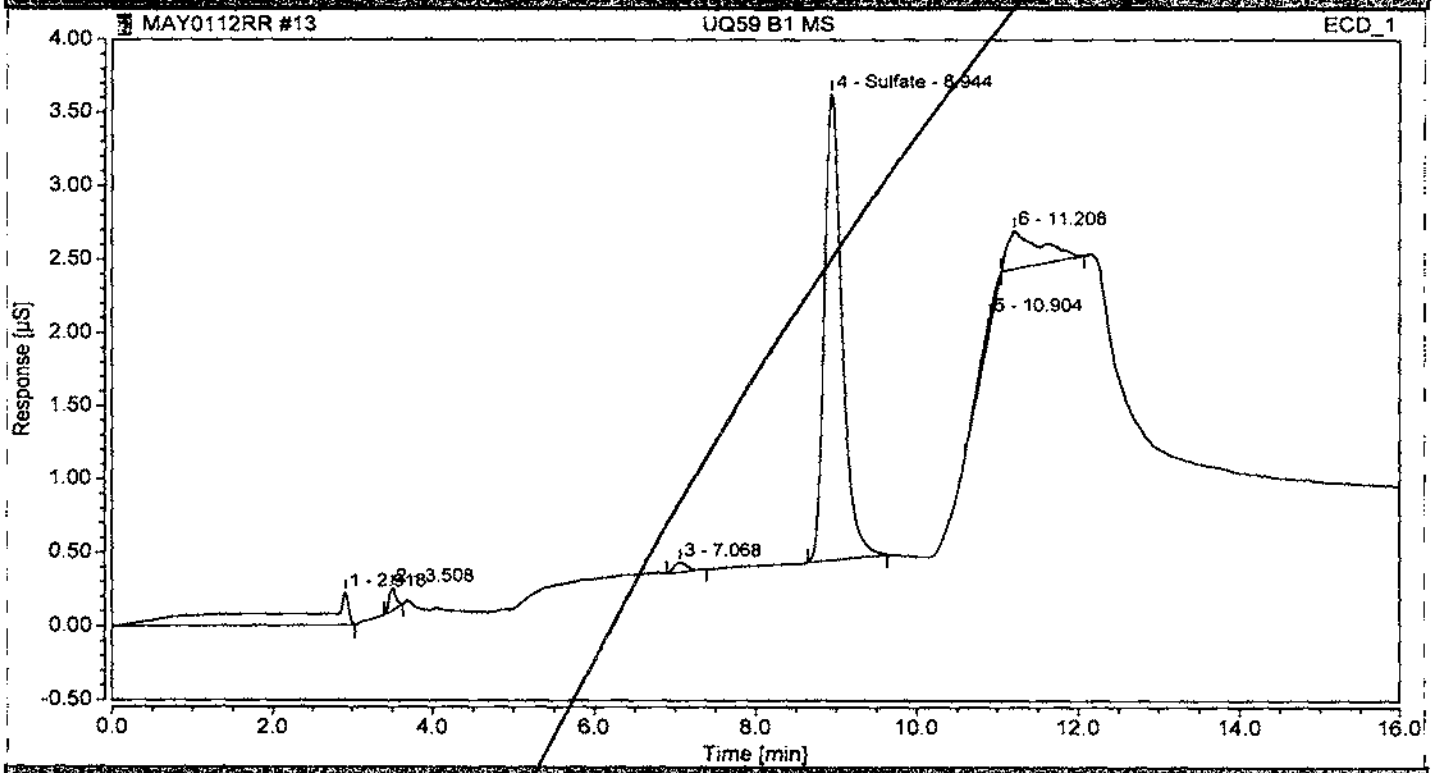
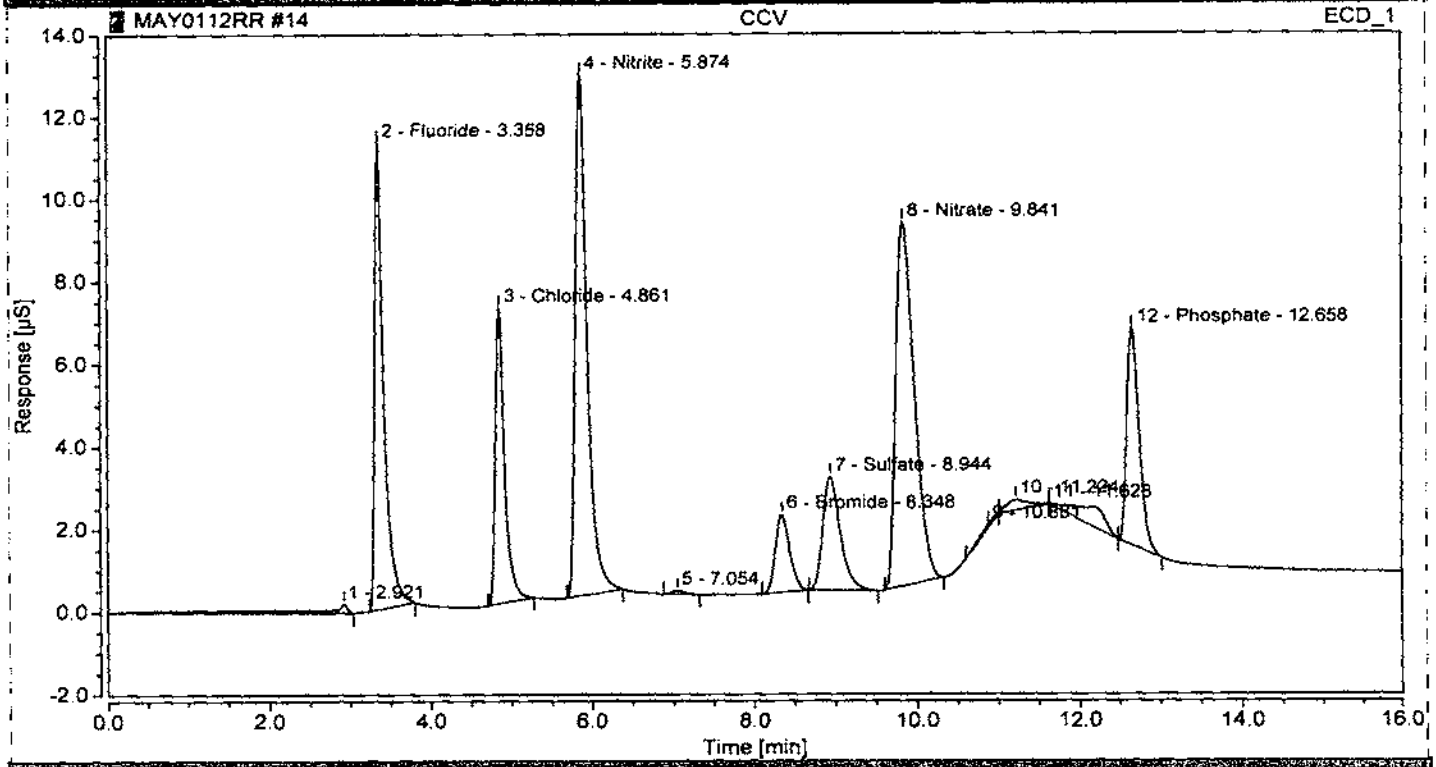
Injection Name:	*UQ59 B1 MS*	Inject Number:	13
Vial Number:	*13*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*20.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 16:11*		



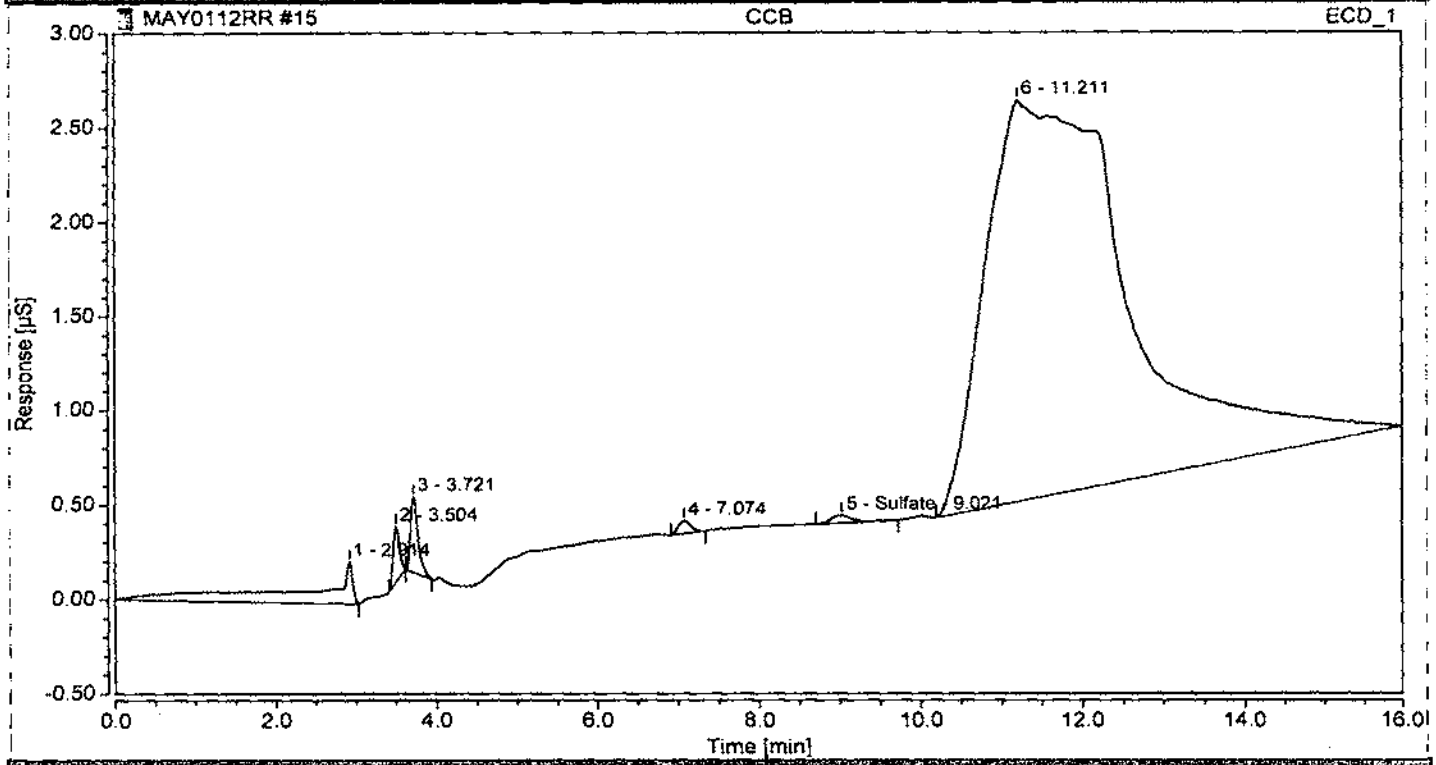
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		20.0	n.a.	2.82	0.3806	0.219	FALSE	n.a.
n.a.	Fluoride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		20.0	n.a.	3.36	0.015	0.154	FALSE	n.a.
n.a.	Chloride	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		20.0	10.6	7.06	0.612	0.186	FALSE	n.a.
n.a.	Bromide	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	20.0	42.4	8.91	0.812	3.176	FALSE	n.a.
n.a.	Nitrate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		20.0	8.8	10.90	0.824	0.188	FALSE	n.a.
6		20.0	9.6	11.21	0.916	0.268	FALSE	n.a.
n.a.	Phosphate	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*CCV*	Inject Number:	14
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 16:31*		



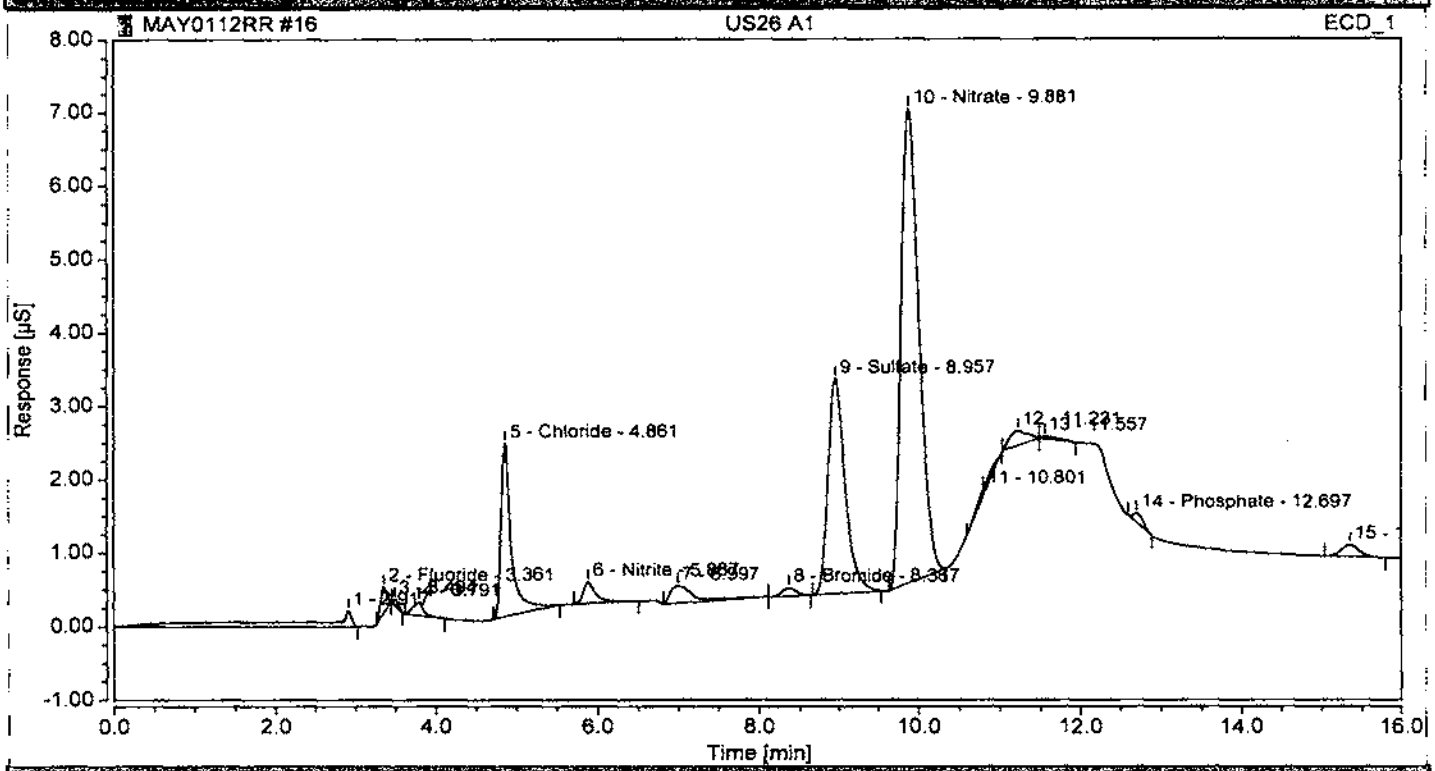
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.160	0.214	FALSE	n.a.
2	Fluoride	1.0	2.013	3.36	1.482	1.305	FALSE	0.45
3	Chloride	1.0	2.067	4.86	0.949	0.749	FALSE	2.24
4	Nitrite	1.0	3.019	5.87	2.183	1.881	FALSE	1.95
5		1.0	n.a.	7.05	0.013	0.007	FALSE	n.a.
6	Bromide	1.0	10.07	8.35	3.956	3.088	FALSE	-1.09
7	Sulfate	1.0	3.000	8.94	1.812	1.274	FALSE	1.66
8	Nitrate	1.0	4.970	9.84	3.005	2.103	FALSE	3.04
9		1.0	n.a.	10.63	0.615	0.280	FALSE	n.a.
10		1.0	n.a.	10.89	0.204	0.083	FALSE	n.a.
11		1.0	n.a.	11.22	0.208	0.098	FALSE	n.a.
12	Phosphate	1.0	2.952	12.66	5.922	5.245	FALSE	-1.60

Injection Name:	*CCB*	Inject Number:	15
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 16:52*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.91	0.155	0.220	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	n.a.	3.50	0.126	0.280	FALSE	n.a.
3		1.0	n.a.	3.72	0.044	0.209	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	7.07	0.084	0.064	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	n.a.	9.02	0.000	0.000	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	11.21	2.367	2.127	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Injection Name:	*US26 A1*	Inject Number:	16
Vial Number:	*14*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 17:13*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.92	0.176	0.217	FALSE	n.a.
2	Fluoride	5.0	0.328	3.36	0.033	0.353	FALSE	n.a.
3		5.0	n.a.	3.48	0.007	0.071	FALSE	n.a.
4		5.0	n.a.	3.79	0.027	0.191	FALSE	n.a.
5	Chloride	5.0	n.a.	4.86	0.316	2.987	FALSE	n.a.
6	Nitrite	5.0	n.a.	5.99	0.051	0.284	FALSE	n.a.
7		5.0	n.a.	7.31	0.009	0.080	FALSE	n.a.
8	Bromide	5.0	n.a.	8.39	0.026	0.142	FALSE	n.a.
9	Sulfate	5.0	n.a.	8.96	0.742	3.928	FALSE	n.a.
10	Nitrate	5.0	n.a.	9.88	1.570	7.046	FALSE	n.a.
11		5.0	n.a.	10.80	0.812	3.706	FALSE	n.a.
12		5.0	n.a.	11.23	0.053	0.197	FALSE	n.a.
13		5.0	n.a.	11.56	0.009	0.057	FALSE	n.a.
14	Phosphate	5.0	n.a.	12.70	0.319	1.234	FALSE	n.a.
15		5.0	n.a.	15.06	0.040	0.158	FALSE	n.a.

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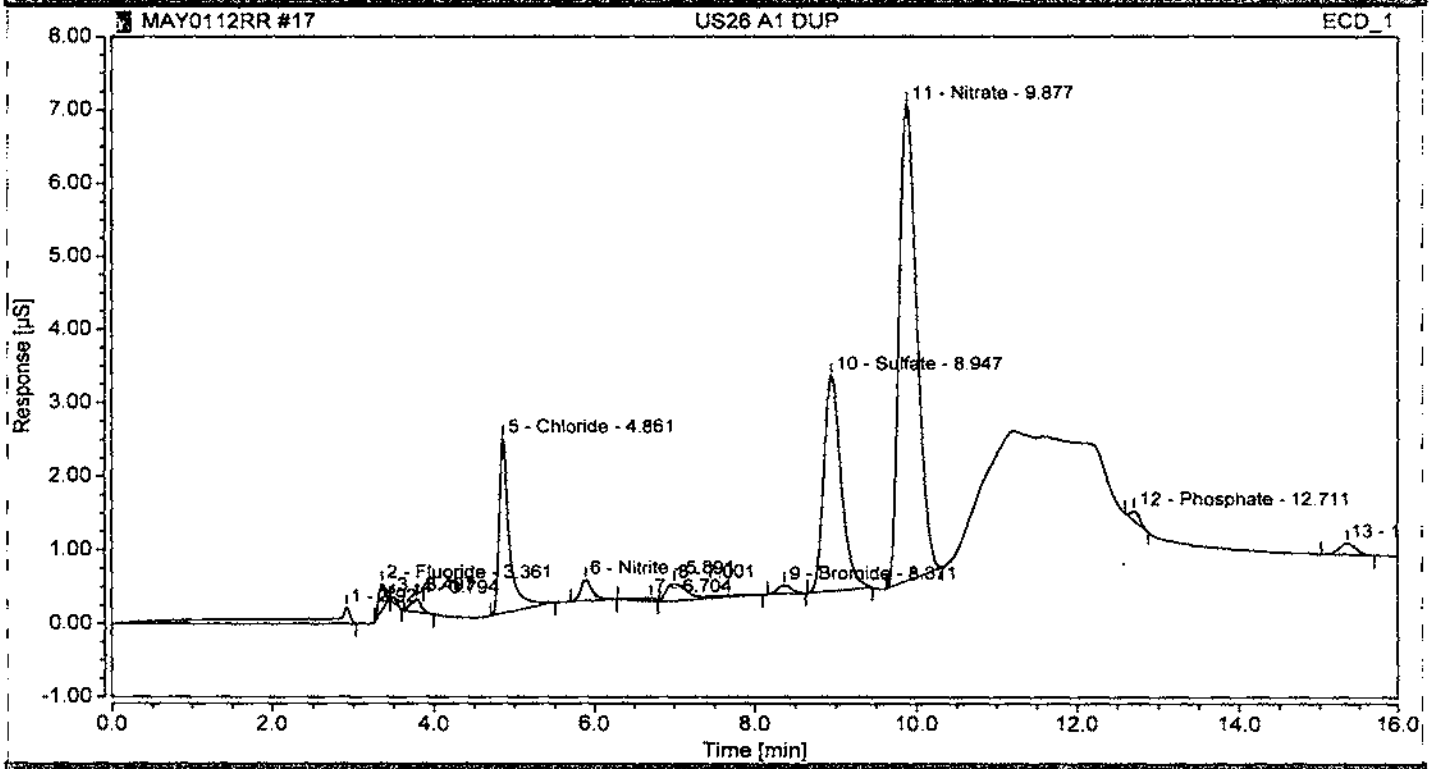
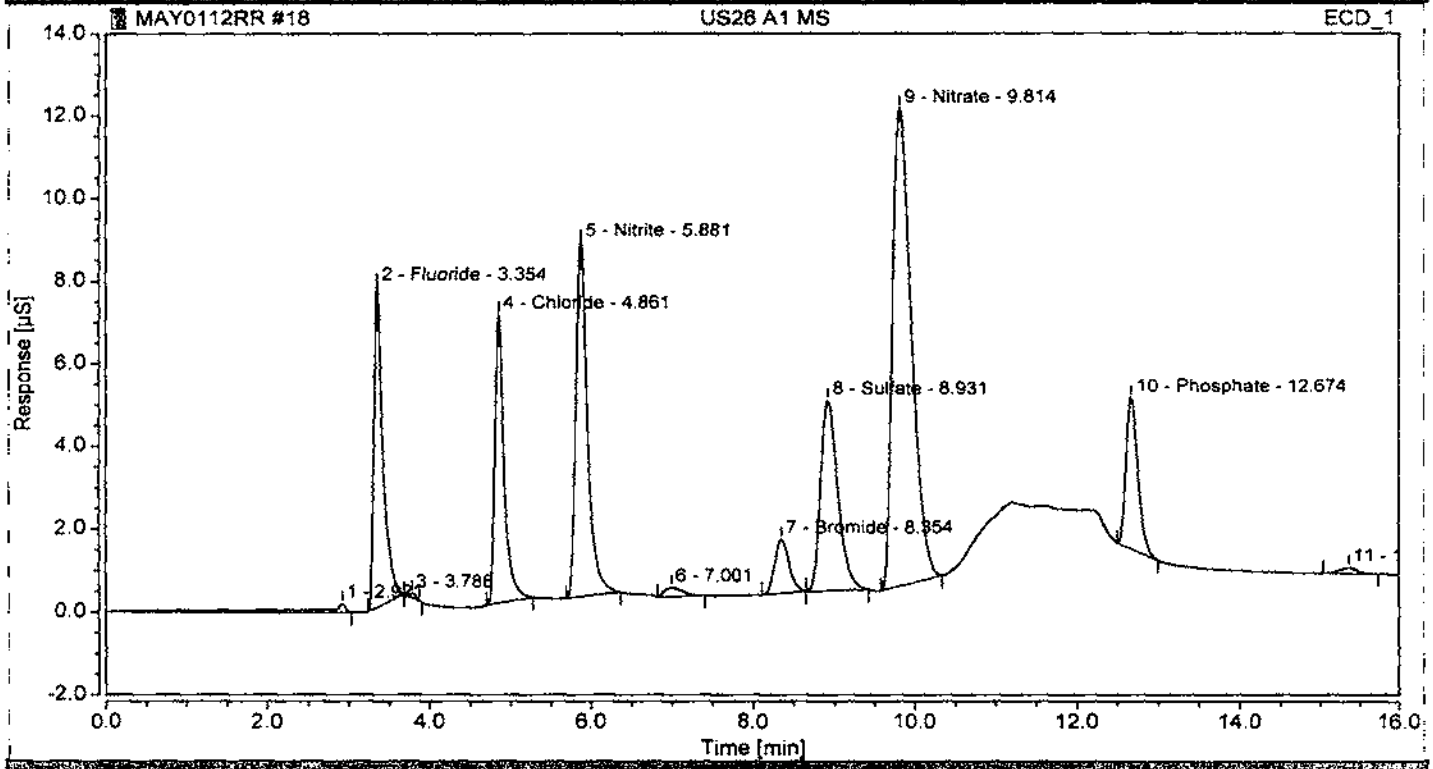
Injection Name:	*US26 A1 DUP*	Inject Number:	17
Vial Number:	*15*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 17:33*		



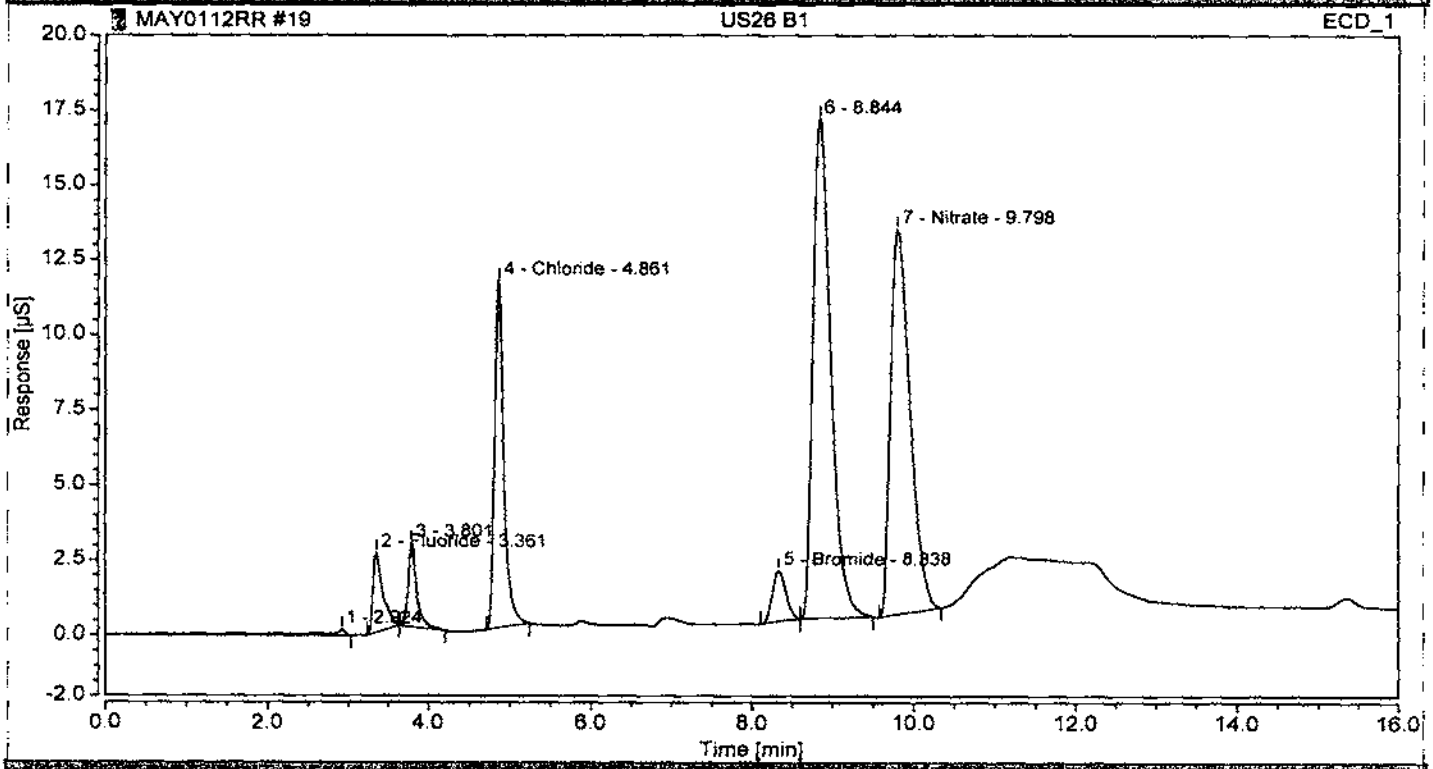
No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	[illegible]	[illegible]	0.63[illegible]	0.216	FALSE	n.a.
2	Fluoride	5.0	[illegible]	[illegible]	0.053[illegible]	0.057	FALSE	n.a.
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
5	Chloride	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
6	Nitrite	5.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
7	[illegible]	5.0	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n/a
9	Bromide	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
10	Sulfate	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
11	Nitrate	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
12	Phosphate	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	FALSE	n.a.
13	[illegible]	[illegible]	[illegible]	[illegible]	0.038[illegible]	0.156	FALSE	n.a.

Injection Name:	*US26 A1 MS*	Inject Number:	18
Vial Number:	*16*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*5.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 17:54*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt Dev.
			mg/l	min	µS*min	µS		mg/l
1		5.0	n.a.	2.982	0.166	0.418	FALSE	n.a.
2	Fluoride	5.0	0.214	3.354	1.116	7.760	FALSE	n.a.
3		5.0	n.a.	3.786	0.010	0.193	FALSE	n.a.
4	Chloride	5.0	0.274	4.861	0.835	6.974	FALSE	n.a.
5	Nitrite	5.0	0.261	5.881	1.005	8.096	FALSE	n.a.
6		5.0	n.a.	7.001	0.015	0.259	FALSE	n.a.
7	Bromide	5.0	0.000	8.354	0.000	0.000	FALSE	n.a.
8	Sulfate	5.0	0.000	8.931	0.000	0.000	FALSE	n.a.
9	Nitrate	5.0	0.000	9.814	0.000	0.000	FALSE	n.a.
10	Phosphate	5.0	0.000	12.674	0.000	0.000	FALSE	n.a.
11		5.0	n.a.	13.536	0.007	0.148	FALSE	n.a.

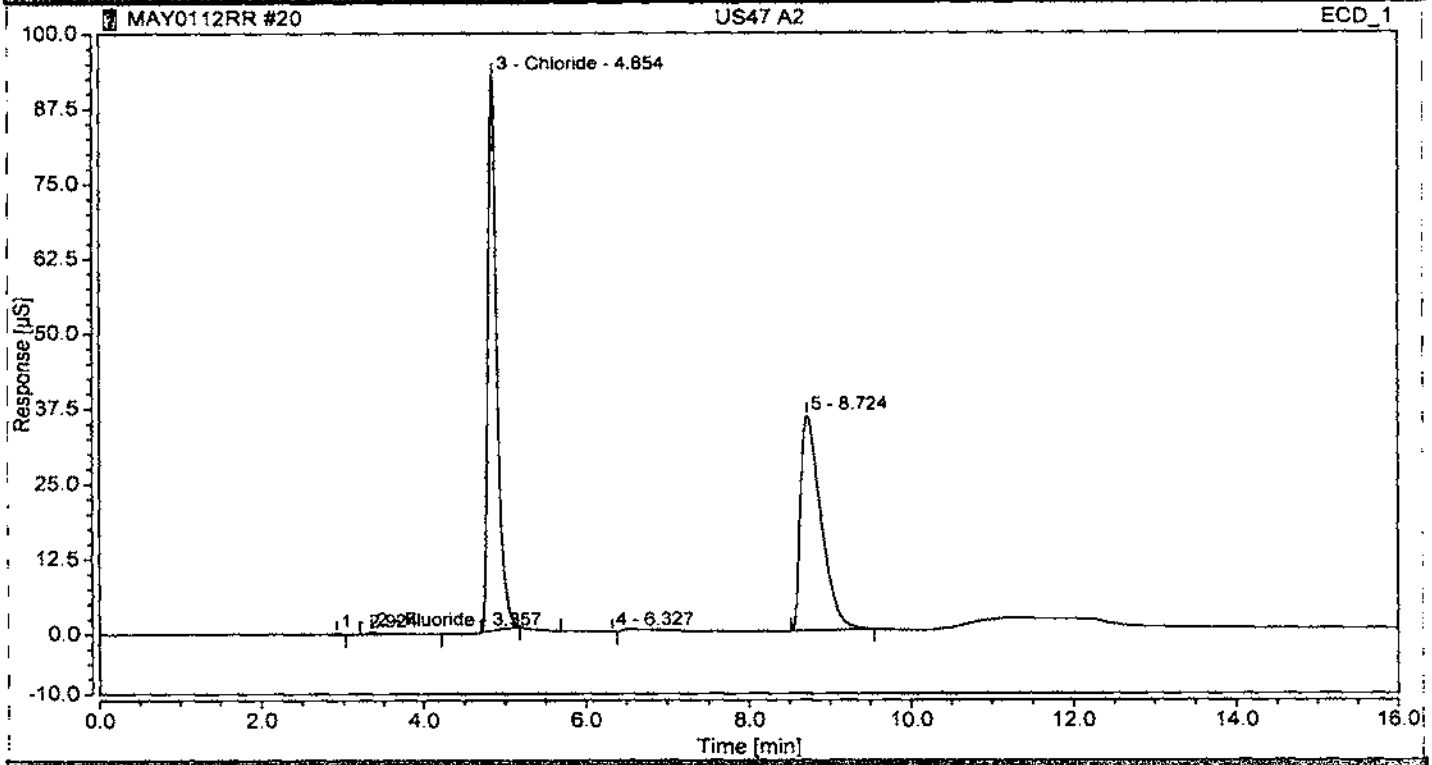
Injection Name:	*US26 B1*	Inject Number:	19
Vial Number:	*17*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*2.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 18:14*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		2.0	n.a.	2.92	0.152	0.210	FALSE	n.a.
2	Fluoride	2.0	0.519	3.36	0.324	2.651	FALSE	n.a.
3		2.0	0.540	3.80	0.140	2.791	FALSE	n.a.
4	Chloride	2.0	1.000	4.86	1.003	11.647	FALSE	n.a.
n.a.	Nitrite	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Bromide	2.0	0.870	8.84	0.488	1.797	FALSE	n.a.
6		2.0	2.000	8.84	2.280	16.824	FALSE	n.a.
n.a.	Sulfate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Nitrate	2.0	2.000	9.80	2.360	12.822	FALSE	n.a.
n.a.	Phosphate	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00937

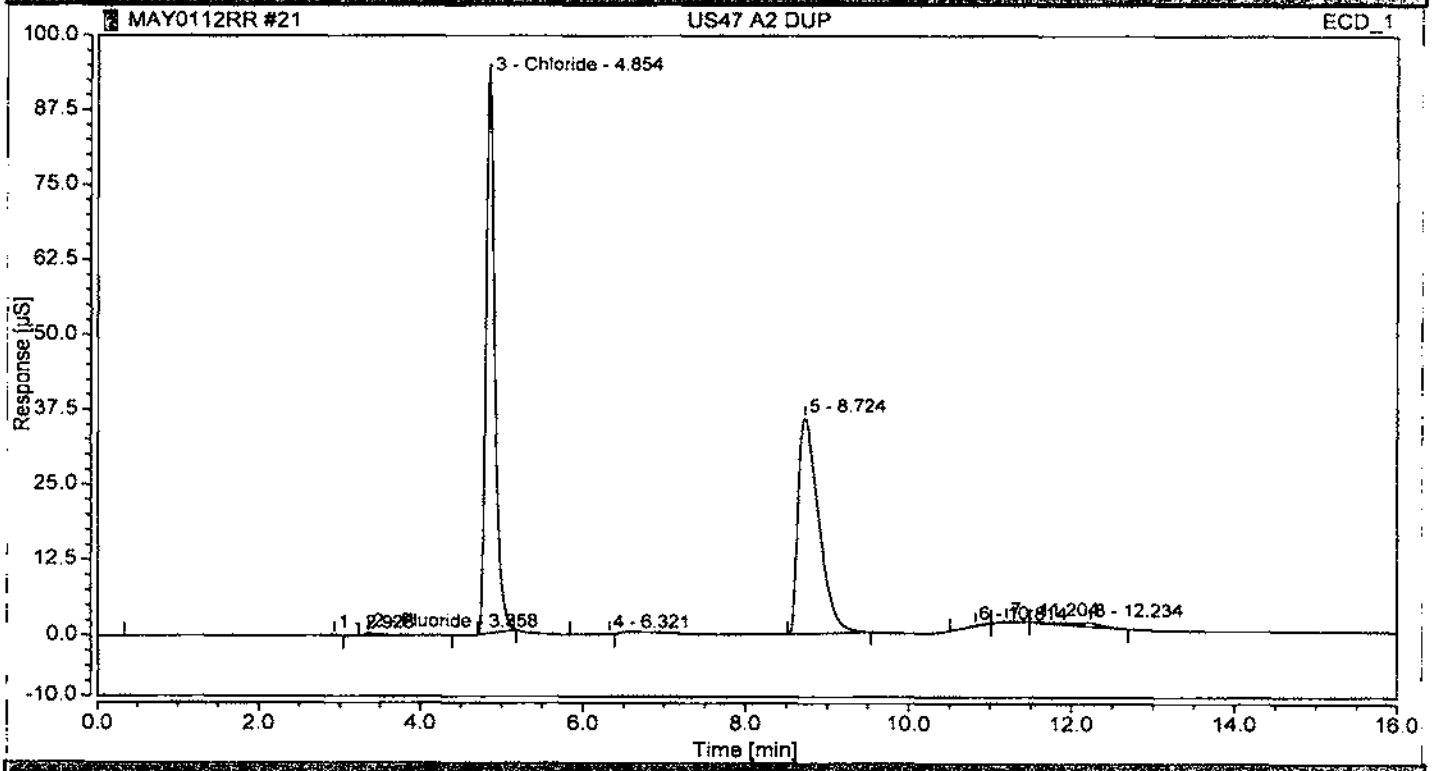
Injection Name:	*US47 A2*	Inject Number:	20
Vial Number:	*18*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 18:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.92	0.133	0.182	FALSE	n.a.
2	Fluoride	1.0	0.175	3.36	0.087	0.417	FALSE	n.a.
3	Chloride	1.0	36.459	4.85	11.830	92.377	FALSE	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	n.a.	6.33	0.029	0.081	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5		1.0	n.a.	8.72	0.512	0.663	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 00938

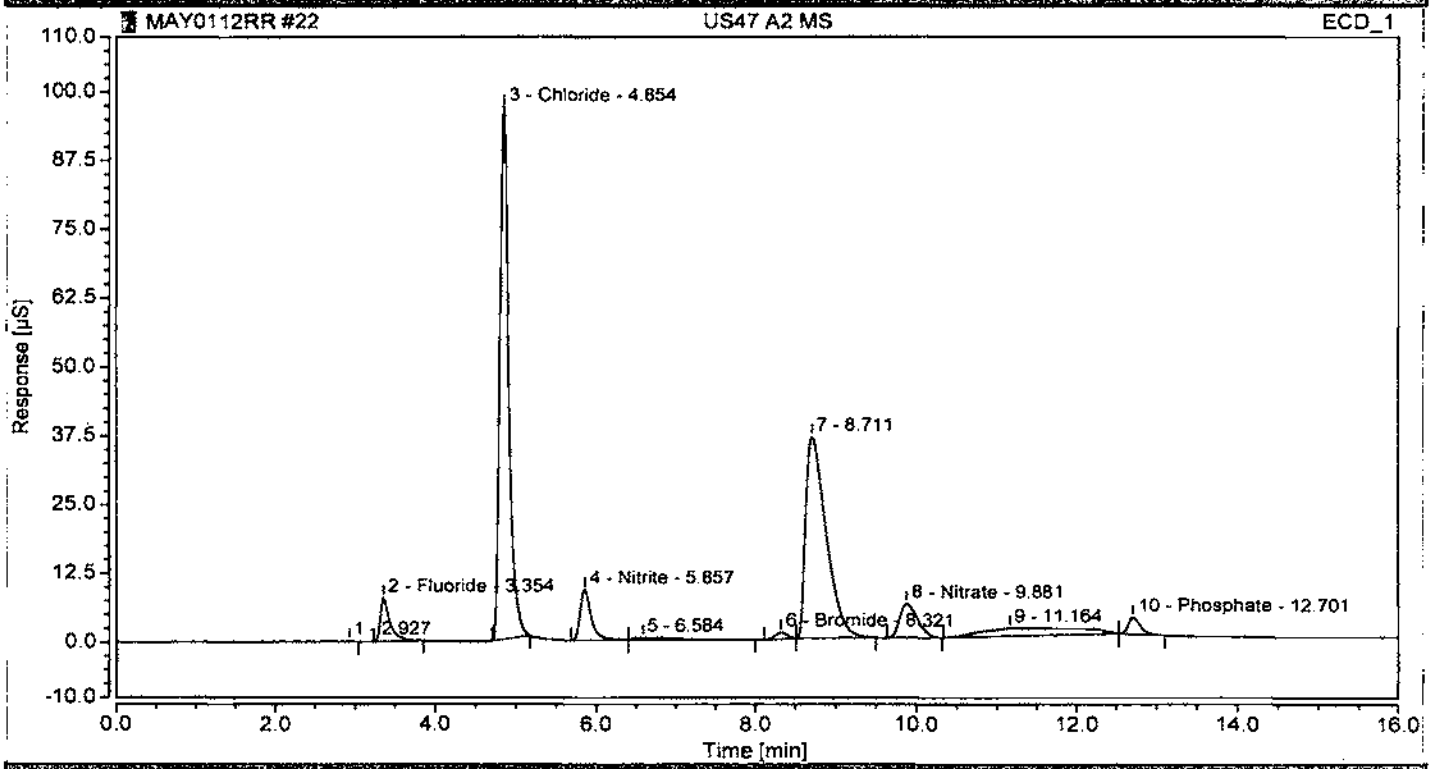
Injection Name:	*US47 A2 DUP*	Inject Number:	21
Vial Number:	*19*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 18:56*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0		2.928	0.0055	0.191	FALSE	n.a.
2	Fluoride	1.0		3.358	0.0091	0.411	FALSE	n.a.
3	Chloride	1.0		4.854	1.0870	32.770	FALSE	n.a.
n.a.	Nitrite	1.0		6.321	n.a.	n.a.	n.a.	n.a.
4		1.0		8.724	0.0208	0.555	FALSE	n.a.
n.a.	Bromide	1.0		10.234	n.a.	n.a.	n.a.	n.a.
5		1.0		12.234	0.3707	35.797	FALSE	n.a.
n.a.	Sulfate	1.0		14.208	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	1.0		15.213	n.a.	n.a.	n.a.	n.a.
6		1.0		16.213	0.0125	0.425	FALSE	n.a.
7		1.0		17.213	0.0160	0.497	FALSE	n.a.
8		1.0		18.213	0.0218	0.697	FALSE	n.a.
n.a.	Phosphate	1.0		19.213	n.a.	n.a.	n.a.	n.a.

US15 : 00835

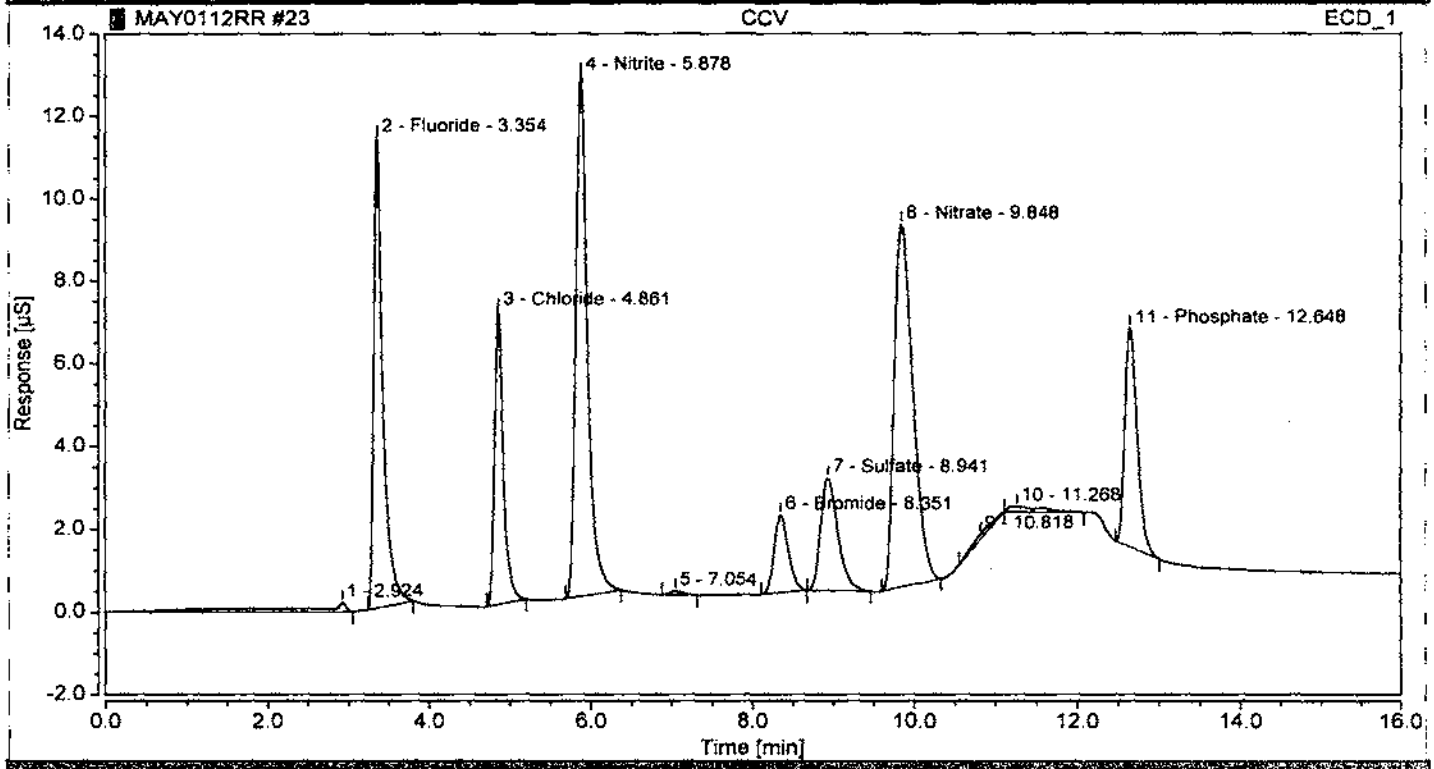
Injection Name:	*US47 A2 MS*	Inject Number:	22
Vial Number:	*20*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 19:15*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.936	0.197	0.185	FALSE	n.a.
2	Fluoride	1.0	1.56	3.356	0.849	7.571	FALSE	n.a.
3	Chloride	1.0	9.216	4.854	12.571	96.861	FALSE	n.a.
4	Nitrite	1.0	4.008	5.857	4.477	35.127	FALSE	n.a.
5		1.0	n.a.	6.584	0.258	0.413	FALSE	n.a.
6	Bromide	1.0	1.730	8.321	0.615	1.394	FALSE	n.a.
7		1.0	10.801	8.711	10.801	36.452	FALSE	n.a.
n.a.	Sulfate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Nitrate	1.0	2.088	9.881	1.564	6.135	FALSE	n.a.
9		1.0	n.a.	11.164	0.481	1.404	FALSE	n.a.
10	Phosphate	1.0	1.709	12.701	0.564	2.958	FALSE	n.a.

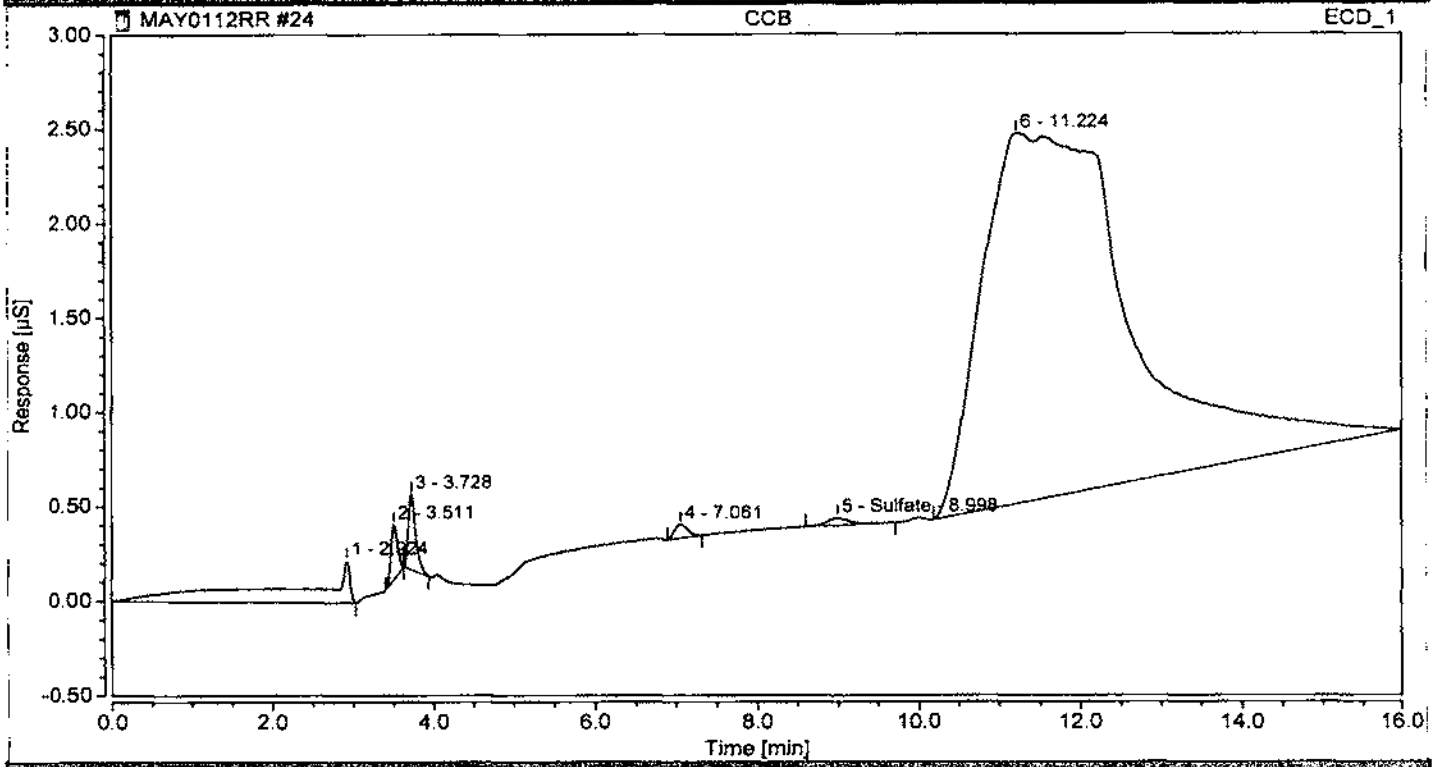
US15 : 00848

Injection Name:	*CCV*	Inject Number:	23
Vial Number:	*2*	User:	pat
Injection Type:	*Check Standard*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodat*		
Injection Date/Time:	*01/05/12 19:35*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1			n.a.				FALSE	n.a.
2	Fluoride						FALSE	0.67
3	Chloride						FALSE	-2.47
4	Nitrite						FALSE	0.63
5							FALSE	n.a.
6	Bromide						FALSE	-1.99
7	Sulfate						FALSE	-0.19
8	Nitrate						FALSE	2.99
9							FALSE	n.a.
10							FALSE	n.a.
11	Phosphate				0.925		FALSE	-1.25

Injection Name:	*CCB*	Inject Number:	24
Vial Number:	*3*	User:	pat
Injection Type:	*Blank*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*INSTRMETH*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 19:55*		



No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			mg/l	min	µS*min	µS		mg/l
1		1.0	n.a.	2.224	0.183	0.224	FALSE	n.a.
n.a.	Fluoride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		1.0	0.0	3.511	0.027	0.269	FALSE	n.a.
3		1.0	0.0	3.728	0.043	0.338	FALSE	n.a.
n.a.	Chloride	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4		1.0	0.0	7.061	0.017	0.072	FALSE	n.a.
n.a.	Bromide	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Sulfate	1.0	0.0	8.998	0.013	0.040	FALSE	n.a.
n.a.	Nitrate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		1.0	n.a.	11.224	4.162	1.959	FALSE	n.a.
n.a.	Phosphate	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

US15 : 69842

Injection Name:	*STOP*	Inject Number:	25
Vial Number:	*1*	User:	pat
Injection Type:	*Unknown*	Sequence:	MAY0112RR
Dilution Factor:	*1.0*		
Instrument Method:	*SHUTDOWN*		
Processing Method:	*processmethodal*		
Injection Date/Time:	*01/05/12 20:15*		

Can't read channel ECD_1 from injection #25 - STOP.
Channel is not available.

No.	Peak Name	Dilution	Amount	Retention	Area	Height	anipulated	Amnt.Dev.
			n.a.	min	natogram in con	matogram in		n.a.

5/17/12

TOC, Aqueous Data Summary (Apollo 9000) DATE: 5/16/2012
EPA 9060 A, SM 5310 B-00 ANALYST: CDE 9:59
Analysis Mode: **NPOC** *Instrument:* ***Apollo 9000***

Detection Limits (mgC/L)
MRL = 1.5 **upper blank =** 1.5 **lower blank =** -1.5

Calibration Data
Stock ID: ARI 00125-4 | factor (m): 1.478E+05 | r: 0.99947
Curve Date: 5/25/2012 | intercept (b_{cal}): 46951 | sys blk (b_{sys}) 21111
Curve ID: 052512X 0-50ppm

LCS, Verification Standard and Inorganic Sparge Check

	Organic Carbon			Inorganic carbon		
Source:	**ERA 0523-11-05**			**ARI # 0104-9**		
Conc:	5,000	*mg/L*		1,000	*mg/L*	
dilution:	2.00	*mL to*	mg C/ L	5.00	*mL to*	mg C/ L
Volume:	500	*mL =*	**20.0**	250	*mL =*	**20**

Sample Data

SAMPLE ID	Dilution Factor	Carbon (mg C/L) *enter Form as TC, TIC, NPOC* Form	# reps	mean	stdev	Measured	Report as	Notes: *will flag if RSD >5%*
ICV	1	NPOC	3	21.3349	0.30	21.33	21.3	*106.50%*
ICB	1	NPOC	3	-0.1425	0.06	-0.14	<1.5	*OK!*
1.5 ppm	1	NPOC	3	1.4151	0.14	1.42	<1.5	94.34%
IC Sparge Check	1	NPOC	3	19.2664	0.48	19.27	19.3	*96.50%*
US26 A2	4	NPOC	3	22.4405	0.48	89.76	89.8	
US26 A2dup	4	NPOC	3	21.3171	0.45	85.27	85.3	*RPD =5.1%*
US26 B2	1	NPOC	3	19.7819	0.24	19.78	19.8	
US26 A2ms	10	NPOC	3	18.1963	0.17	181.96	182	*92.20%*
Spike at	0.100	*mL of*	2,000	*ppm Std to*	2.00	*mL =*	100.0	*mg/L*
CCV	1	NPOC	3	20.9159	0.25	20.92	20.9	*104.50%*
CCB	1	NPOC	3	-0.0699	0.08	-0.07	<1.5	*OK!*
US46 B5	1	NPOC	3	2.5241	0.20	2.52	2.52	RSD > 5% chk value*
US46 A2	2	NPOC	3	39.1819	0.67	78.36	78.4	
US87 A4	1	NPOC	3	9.1840	0.70	9.18	9.18	
US87 B4	1	NPOC	3	3.4181	0.19	3.42	3.42	
US93 A6	1	NPOC	3	0.9685	0.12	0.97	<1.5	
US93 B6	1	NPOC	3	1.7348	0.06	1.73	1.73	
US27 E4	1	NPOC	3	20.9868	0.69	20.99	21	
US27 E4dup	1	NPOC	3	21.1716	0.77	21.17	21.2	*RPD =0.9%*
US27 E4ms	1	NPOC	3	39.9930	1.19	39.99	40	*95.03%*
Spike at	0.200	*mL of*	2,000	*ppm Std to*	20.00	*mL =*	20.0	*mg/L*
CCV	1	NPOC	3	22.0335	0.27	22.03	22	*110.00%*
CCB	1	NPOC	3	0.2330	0.10	0.23	<1.5	*OK!*

* = Sample is < 5x the MRL (7.5) and RSD >5% is expected due to low concentration in sample.

Calibration Report Print Date/Time: 2012/04/24 13:21:09

Cal. Curve ID: 042412X 0-50ppm
Created: 2012/04/24 13:21
Calibration Factor (m): 1.478e+05
Y Intercept (b): 46951
r-squared: 0.99947

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
BLK	33238	0.000	-0.093	Low Sample De	2012/04/24 11:24
1.5	145425	0.750	0.666		2012/04/24 11:46
5.0	406211	2.500	2.430		2012/04/24 12:08
10.0	790461	5.000	5.029		2012/04/24 12:30
25.0	1957990	12.500	12.927		2012/04/24 12:53
50.0	3711768	25.000	24.790		2012/04/24 13:18

Detailed Analysis Report Print Date/Time: 2012/05/17 9:59:01

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161121
Timestamp: 2012/05/16 11:44
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21.4841	10.7421	1634989	14.774	15.771	171
2	21.5291	10.7645	1638313	14.933	15.930	171
3	20.9914	10.4957	1598568	15.007	16.006	167

<<<Statistics>>> Mean: 21.3349 Std Dev: 0.2983 RSD: 1.40

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161121
Timestamp: 2012/05/16 12:06
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.1851	-0.0926	33267	15.244	15.380	120
2	-0.0772	-0.0386	41241	15.064	15.285	120
3	-0.1650	-0.0825	34751	15.082	15.234	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.1424 Std Dev: 0.0574 RSD: -40.29

Sample ID: 1.5 ppm
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161121
Timestamp: 2012/05/16 12:28
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.2533	0.6267	139593	15.760	16.759	117
2	1.5203	0.7602	159329	15.499	16.492	119
3	1.4717	0.7358	155731	15.482	16.468	118

<<<Statistics>>> Mean: 1.4151 Std Dev: 0.1422 RSD: 10.05

Sample ID: CHECK
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161121
Timestamp: 2012/05/16 12:52
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19.7048	9.8524	1503469	16.355	17.354	146
2	18.7507	9.3754	1432945	16.514	17.514	148
3	19.3437	9.6719	1476775	16.310	17.306	148

<<<Statistics>>> Mean: 19.2664 Std Dev: 0.4817 RSD: 2.50

5-17-12 CDE

Sample ID: US26 A2
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161121
Timestamp: 2012/05/16 13:15
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	50.7635	25.3817	3752274	16.990	17.989	153
2	50.4462	25.2231	3728824	17.297	18.296	151
3	49.8267	24.9134	3683033	17.379	18.377	147

<<<Statistics>>> Mean: 50.3455 Std Dev: 0.4765 RSD: 0.95

Sample ID: US26 A2 4X
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 13:48
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.9702	11.4851	1697884	17.789	18.787	136
2	22.3165	11.1582	1649561	17.673	18.671	135
3	22.0347	11.0174	1628738	17.532	18.528	138

<<<Statistics>>> Mean: 22.4405 Std Dev: 0.4799 RSD: 2.14

Sample ID: US26 A2 DUP 4X
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 14:11
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21.7899	10.8949	1610639	17.196	18.195	137
2	21.2771	10.6385	1572735	16.708	17.704	137
3	20.8844	10.4422	1543707	16.436	17.426	137

<<<Statistics>>> Mean: 21.3171 Std Dev: 0.4541 RSD: 2.13

Sample ID: US26 B2
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 14:58
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20.0617	10.0308	1482894	18.054	19.049	138
2	19.6580	9.8290	1453058	18.264	19.253	137
3	19.6261	9.8130	1450697	18.108	19.104	138

<<<Statistics>>> Mean: 19.7819 Std Dev: 0.2428 RSD: 1.23

Sample ID: US26 A2 MS 10X
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 15:21
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	18.3868	9.1934	1359096	18.347	19.346	143
2	18.1337	9.0668	1340382	18.436	19.428	141
3	18.0685	9.0343	1335566	18.354	19.345	140

<<<Statistics>>> Mean: 18.1963 Std Dev: 0.1681 RSD: 0.92

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 15:45
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21.1454	10.5727	1609951	18.676	19.674	171
2	20.6541	10.3270	1573632	18.545	19.544	168
3	20.9483	10.4742	1595386	18.405	19.401	171

<<<Statistics>>> Mean: 20.9159 Std Dev: 0.2472 RSD: 1.18

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm

Mode: TOC
Filename: 05161326

Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Timestamp: 2012/05/16 16:07
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.1392	-0.0696	36665	18.576	18.641	120
2	0.0133	0.0067	47935	18.248	19.243	115
3	-0.0838	-0.0419	40760	18.107	18.250	120

Last Message: Out of Calibration
<<<Statistics>>> Mean: -0.0699 Std Dev: 0.0772 RSD: -110.44

Sample ID: US46 A2
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 16:32
Sample Type: Sample

5-17-12 CM

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	75.0100	37.5050	5544499	18.965	19.963	185
2	75.9859	37.9929	5616634	18.904	19.899	185
3	76.9354	38.4677	5686817	18.753	19.753	192

<<<Statistics>>> Mean: 75.9771 Std Dev: 0.9627 RSD: 1.27

Sample ID: US46 B5
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 16:54
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.7383	1.3692	202407	18.943	19.926	118
2	2.4803	1.2401	183333	18.540	19.530	118
3	2.3537	1.1768	173974	18.398	19.387	118

<<<Statistics>>> Mean: 2.5241 Std Dev: 0.1960 RSD: 7.77

Sample ID: US46 A2 2X
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 17:18
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	39.0216	19.5108	2884350	19.060	20.054	163
2	38.6066	19.3033	2853678	18.862	19.858	162
3	39.9175	19.9587	2950572	18.655	19.651	170

<<<Statistics>>> Mean: 39.1819 Std Dev: 0.6700 RSD: 1.71

Sample ID: US87 A4
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 17:41
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	9.9715	4.9857	737058	19.013	20.010	136
2	8.6326	4.3163	638096	18.999	19.993	132
3	8.9478	4.4739	661395	18.708	19.696	133

<<<Statistics>>> Mean: 9.1840 Std Dev: 0.7000 RSD: 7.62

Sample ID: US87 B4
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 18:03
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.2157	1.6078	237693	19.264	20.250	119
2	3.4368	1.7184	254036	18.820	19.804	118
3	3.6018	1.8009	266231	18.587	19.572	120

<<<Statistics>>> Mean: 3.4181 Std Dev: 0.1937 RSD: 5.67

Sample ID: US93 A6
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 18:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.8397	0.4199	62070	18.962	19.947	112
2	1.0006	0.5003	73963	18.555	19.540	113
3	1.0652	0.5326	78735	18.364	19.357	112

<<<Statistics>>> Mean: 0.9685 Std Dev: 0.1161 RSD: 11.99

Sample ID: US93 B6
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 18:46
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.7230	0.8615	127361	19.015	20.007	117
2	1.6793	0.8397	124131	18.612	19.610	116
3	1.8020	0.9010	133200	18.463	19.455	118

<<<Statistics>>> Mean: 1.7348 Std Dev: 0.0622 RSD: 3.58

Sample ID: US27 E4
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 19:09
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21.5811	10.7905	1595204	19.275	20.269	146
2	21.1534	10.5767	1563591	19.121	20.113	147
3	20.2258	10.1129	1495026	18.931	19.929	145

<<<Statistics>>> Mean: 20.9868 Std Dev: 0.6928 RSD: 3.30

Sample ID: US27 E4 DUP
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 19:32
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	22.0636	11.0318	1630870	19.317	20.314	149
2	20.6662	10.3331	1527578	19.204	20.203	143
3	20.7851	10.3926	1536371	19.010	20.008	145

<<<Statistics>>> Mean: 21.1716 Std Dev: 0.7747 RSD: 3.66

Sample ID: US27 E4 MS
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE
Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 19:56
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time

1	41.1238	20.5619	3039742	19.385	20.381	159
2	38.7528	19.3764	2864485	20.054	21.044	147
3	40.1024	20.0512	2964241	19.485	20.484	153

<<<Statistics>>> Mean: 39.9930 Std Dev: 1.1893 RSD: 2.97

Sample ID: ICV/CCV
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 20:20
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	21.7595	10.8797	1655342	19.275	20.273	167
2	22.3037	11.1518	1695566	19.017	20.013	168
3	22.0373	11.0187	1675881	18.877	19.872	169

Last Message: Out of Calibration
<<<Statistics>>> Mean: 22.0335 Std Dev: 0.2721 RSD: 1.24

Sample ID: ICB / CCB
Method: TOC 0 to 50 ppm
Cal. Curve: 042412X 0-50ppm
Operator ID: CDE

Mode: TOC
Filename: 05161326
Timestamp: 2012/05/16 20:42
Sample Type: Cal. Verification

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.1407	0.0704	57352	19.198	20.190	115
2	0.2240	0.1120	63509	18.782	19.773	115
3	0.3342	0.1671	71654	18.574	19.561	117

<<<Statistics>>> Mean: 0.2330 Std Dev: 0.0971 RSD: 41.66

PHOSPHORUS BENCHSHEET, Aqueous				Digested:	Analyzed:
Soluble Reactive P (SRP) by EPA 365.2, SM 4500-P			Date	5/8/12 12:00	5/8/12 19:37
Indicate "Total" or "SRP"	Total		Analyst	CDE	CDE
Total P by digestion (indicate procedure used)				SM 4500-P B5-99, Acid persulfate	
NOTE: curve standards must be digested !				~~SM 4500-P B4-99, Sulfuric-Nitric Acid~~	
Curve Standards				make no entries to shaded cells, they are calculated !!	
Stock Standard					
Stock #: 123-9	Prep date: 2/9/2012		Conc =	50.00 mg/L P	
Intermediate Standard					
5	mL stk to	50	mL DI =	5.00	mg P/L

Calibration Curve for Digested Curve

std make-up volume (mL) =	25		Digest Final Vol (mL) =	50	
mL intermediate Std	CONC		UNITS	AVG	
SRP	Total P	(mg/L)	(ABS 880 nm 5cm cell)		mg/L
0.00	0.00	0.000	0.000	0.000	0.001
0.08	0.08	0.008	0.022	0.022	0.008
0.25	0.25	0.025	0.075	0.075	0.024
0.75	0.75	0.075	0.230	0.230	0.073
2.50	2.50	0.250	0.803	0.803	0.254
5.00	5.00	0.500	1.580	1.580	0.498

REGRESSION DATA

CONC = (ABS-intercept)/ slope

intercept =	-0.0022
Slope =	3.1742
r =	0.9999
Comment:	Calibration OK!
maxabs =	1.580

Verification Standards			Source:	ERA# 3303093		Conc (mg/L)	1000	
Intermediate		0.50	mL to	50		mL DI =	10.0	mg/L
SRP ICV	dilution =	0.75	mL Int to	50	mL DI =	0.150	mg/L	CVS
Tot P LCS	dilution =	0.25	mL Int to	25	mL DI =	0.100	mg/L	LCS
DQL Standard (low level)			Source:	Curve Int.		Conc (mg/L)	5.0	
SRP	0.080	ml to	50	ml DI =	0.008	mg/L		
Total P	0.080	ml to	25	ml DI =	0.016	mg/L		

Sample Data

Spike with 5 mg/L Intermediate Standard — enter dilution as final vol / sample vol

SAMPLE ID	Tot P Digest		Analysis Data			TOT P	SRP	Notes
	mL sample	mL digest	Abs	Dilution	(mg/L)	(mg/L)	(mg/L)	
MB Total	25	50	0.000	1.0	0.0007	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%
DQL Total	25	50	0.023	1.0	0.0080	0.0159		99.40%
UR75 A3	25	50	0.070	1.0	0.0228	0.0456		
UR75 B3	25	50	0.159	1.0	0.0508	0.1016		
UR75 C3	25	50	0.005	1.0	0.0023	<0.008		
UR75 D3	25	50	0.034	1.0	0.0114	0.0228		
UR75 E3	25	50	0.018	1.0	0.0064	0.0128		
UR75 F3	25	50	0.022	1.0	0.0076	0.0153		
UR75 F3 dup	25	50	0.022	1.0	0.0076	0.0153		RPD na
UR75 F3 ms	25	50	0.077	1.0	0.0250	0.0499		124.8% Rec
Spike =	0.2	ml of	5	mg/L to	25	ml sample =	0.040	
UR75 G3	25	50	0.019	1.0	0.0067	0.0134		
UR75 H3	25	50	0.027	1.0	0.0092	0.0184		
MB total	25	50	0.000	1.0	0.0007	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%
UR75 I 3	25	50	0.021	1.0	0.0073	0.0146		
US27 E5	25	50	1.409	2.0	0.4440	1.2791		
US52 G16	25	50	0.619	1.0	0.1957	0.3914		
US52 H6	25	50	1.371	2.0	0.4328	1.2305		
US52 I 5	25	50	1.012	2.0	0.3195	1.0781		
US61 A11	25	50	1.001	2.0	0.3161	1.0637		
US61 A11 dup	25	50	1.014	2.0	0.3202	1.0809		RPD = 1.29
US61 A11 ms	25	50	1.033	2.0	0.3261	1.1058		100.8% Rec
Spike =	0.2	ml of	5	mg/L to	25	ml sample =	0.040	
US61 B11	25	50	0.846	2.0	0.2672	1.0688		
US61 C11	25	50	0.616	1.0	0.1948	0.3895		
MB total	25	50	0.000	1.0	0.0007	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.82%
US82 A8	25	50	0.022	1.0	0.0076	0.0153		
US82 B9	25	50	0.214	1.0	0.0681	0.1363		

US82 C4	25	50	0.197	1.0	0.0628	0.1255		
~~US82 E4~~	25	50	~~1.731~~	~~1.0~~	0.5460	~~1.0921~~		~~offscale~~
US82 E4	25	50	0.852	2.0	0.2691	1.0765		
MB total	25	50	0.001	1.0	0.0010	<0.008		OK
LCS 1	25	50	0.153	1.0	0.0489	0.0978		97.62%

PHOSPHORUS BENCHSHEET, Aqueous

	Digested:	Analyzed:
Soluble Reactive P (SRP) by EPA 365.2, SM 4500-P Date	5-8-12 12:00	5-8-12 19:37
Indicate "Total" or "SRP" **Total** Analyst	CVL	CVL

Total P by digestion (indicate procedure used) ***SM 4500-P B5-99, Acid persulfate***

NOTE: *curve standards must be digested !* ***~~SM 4500-P B4-00, Sulfuric-Nitric Acid~~***

Curve Standards ***make no entries to shaded cells, they are calculated !!***

Stock Standard

Stock #: 123-9 *Prep date:* 2/9/2012 Conc = **50.00** *mg/L P*

Intermediate Standard

5 *mL stk to* 50 *mL DI =* ***5.00*** *mg P/L*

Calibration Curve for Digested Curve

std make-up volume (mL) = **25** Digest Final Vol (mL) = **50**

mL intermediate Std		CONC	UNITS	AVG	
SRP	Total P	(mg/L)	(ABS 880 nm 5cm cell)		mg/L
	0.00	0.000	0.000		
	0.08	0.008	0.022		
	0.25	0.025	0.075		
	0.75	0.075	0.230		
	2.50	0.250	0.803		
	5.00	0.500	1.580		

REGRESSION DATA

CONC = (ABS-intercept)/ slope

intercept =

Slope =

r =

Comment:

maxabs = 0.000

Verification Standards *Source:* ERA# 3303093 *Conc (mg/L)* 1000

Intermediate		0.50	*mL to*	50	*mL DI =*	***10.0***	*mg/L*	
SRP ICV	*dilution =*	0.75	*mL Int to*	50	*mL DI =*	***0.150***	*mg/L*	*CVS*
Tot P LCS	*dilution =*	0.25	*mL Int to*	25	*mL DI =*	***0.100***	*mg/L*	*LCS*

DQL Standard (low level) *Source:* ***Curve Int.*** *Conc (mg/L)* 5.0

SRP	0.080	*ml to*	50	*ml DI =*	***0.008***	*mg/L*
Total P	0.080	*ml to*	25	*ml DI =*	***0.016***	*mg/L*

Sample Data

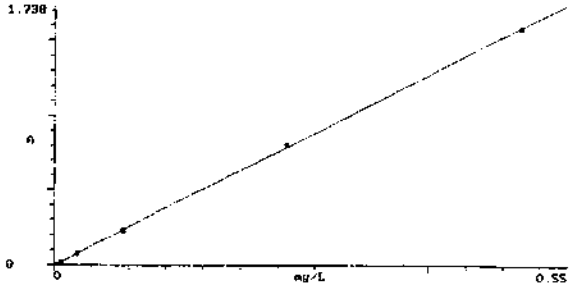
Spike with 5 mg/L Intermediate Standard *enter dilution as final vol / sample vol*

SAMPLE ID	Tot P Digest		Analysis Data			TOT P	SRP	
	mL sample	mL digest	Abs	Dilution	(mg/L)	(mg/L)	(mg/L)	Notes
MB Total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
DQL Total	25	50	0.023	1.0				
UR75 A3	25	50	0.070	1.0				
UR75 B3	25	50	0.159	1.0				
UR75 C3	25	50	0.005	1.0				
UR75 D3	25	50	0.034	1.0				
UR75 E3	25	50	0.018	1.0				
UR75 F3	25	50	0.022	1.0				
UR75 F3 dup	25	50	0.022	1.0				
UR75 F3 ms	25	50	0.077	1.0				0% Rec
Spike =	0.10.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.020	
UR75 G3	25	50	0.019	1.0				
UR75 H3	25	50	0.027	1.0				
MB total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
UR75 I3	25	50	0.021	1.0				
US27 E5	25	50	1.409	~~1.0~~ 2X				
US52 G16	25	50	0.619	1.0				
US52 H6	25	50	1.371	~~1.0~~ 2X				
US52 I5	25	50	1.012	~~1.0~~ 2X				
US61 A11	25	50	1.001	~~1.0~~ 2X				
US61 A11 dup	25	50	1.014	~~1.0~~ 2X				
US61 A11 ms	25	50	1.033	~~1.0~~ 2X				0% Rec
Spike =	~~0.1~~0.2	*ml of*	5	*mg/L to*	25	*ml sample =*	0.020	
US61 B11	25	50	0.946	~~1.0~~ 2X				
US61 C11	25	50	0.616	1.0				
MB total	25	50	0.000	1.0				
LCS 1	25	50	0.153	1.0				
US82 A8	25	50	0.022	1.0				
US82 B9	25	50	0.214	1.0				

US82 C4	25	50	0.197	1.0				
US82 E4	25	50	1.731	1.0				
US82 E4	25	50	0.852	1.0				
CCB	25	50	0.001	1.0				
CCV	25	50	0.153	1.0				
	25	50		1.0				
	25	50		1.0				
	25	50		1.0				
MB total	25	50		1.0				
LCS 1	25	50		1.0				

TEST SETUP
GENESYS 10 v3.001 207H048001

Standard Curve	8:03pm 8May12
Test Name	TPHOS
Date Standards Measured	8May12
Wavelength	880nm
Ref. Wavelength Correction	Off
Curve Fit	Linear
Number of Standards	6
Units	mg/L
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On



Curve Fit	Linear
Slope	3.17
Intercept	-0.00224
Std Dev	0.007
Corr Coeff	1.000

Std #	Conc. mg/L	Abs 880nm
[illegible]	[illegible]	[illegible]

1	0.000	0.000
2	0.008	0.022
3	0.025	0.075
4	0.075	0.230
5	0.250	0.803
6	0.500	1.580

5-8-12

TEST SETUP
GENESYS 10 v3.001 2D7H048001

Advanced A-%T-C	8:04pm 8May12
Test Name	TPHOS[Saved]
Measurement Mode	Absorbance
Wavelength	880nm
Ref. Wavelength Correction	Off
Delay Time (min:sec)	0:00
ID# (0=OFF)	1
Low/High Limits	-9999/9999
Statistics	Off
Auto Print	On

ID#	Abs 880nm
1	0.000
2	0.153
3	0.023
4	0.070
5	0.159
6	0.005
7	0.034

7	0.034
8	0.018
9	0.022
10	0.022
11	0.077
12	0.019
13	0.027
14	0.000
15	0.153
16	0.021
17	1.409
18	0.619
19	1.371
20	1.012
21	1.001

22	1.014
23	1.033
24	0.846
25	0.616
26	0.000
27	0.153
28	0.022
29	0.214
30	0.197
31	1.731
32	0.852
33	0.001
34	0.153

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Project: 155129.09 RG Spring GW Sampling

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Signature

May-24-2012
Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

May 24, 2012

Michael F. Mendes
ERM-West, Inc.
1218 3rd Avenue, Suite 1412
Seattle, WA 98101

RE: RG Spring GW Sampling, 155129.09
ARI Job Nos.: UR78 & US02

Dear Mr. Mendes:

Please find enclosed Chain-of-Custody (COC) records, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and details of these analyses are discussed in the Case Narrative.

Please note that current ARI control limits are available at www.arilabs.com.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
-For-
Susan D. Dunnihoo
Director, Client Services
206-695-6207
sue@arilabs.com

Enclosures

cc: eFile UR78_US02

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: UR78, US02

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UR78	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: EIRM	Phone: 425 214 0458	Date: 4/25/12	Ice Present? Y
Client Contact: Mike Mendes		No. of Coolers: 3	Cooler Temps:
Client Project Name: RG Spring GW Sampling			
Client Project #: 155129.09	Samplers: Cyrus / Matt		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	TPH-Gx	TPH-Dx	Phenol, Chlorinated phenols	Total As	Dissolved As *	Total Cr, Cu, As, Pb	Dissolved * Cr, Cu, As, Pb	Hex Cr	8260 VOCs	Notes/Comments
MW-1S-042512	4/25/12	639	water	17	X	X	X	X	X	X	X	X		MS MSD TPH-Gx & TPH-Dx
TB-042512-1	4/25/12	639	water	2	X								X	
MW-2D-042512	4/25/12	813	water	4			X	X	X					
MW-17-042512	4/25/12	0916	water	4			X	X	X					
MW-4S-042512	4/25/12	1017	water	7			X	X	X				X	
DUP-042512-1	4/25/12	800	water	2			X							
MW-22-042512	4/25/12	1131	water	12			X	X	X					MS/MSD Total & Dissolved As
MW-23-042512	4/25/12	1310	water	4			X	X	X					

Short hold time

+ phenols/chlorinated phenols

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
* Dissolved metals samples filtered in the field	Printed Name: Cyrus Gorman	Printed Name: Chris Atwell	Printed Name:	Printed Name:
	Company: EIRM	Company: ARI	Company:	Company:
	Date & Time: 4/25/12 1500	Date & Time: 4/25/12 1500	Date & Time:	Date & Time:

UR78 00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: ERM

Project Name: R-6 Spring GW

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: UR78

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 3.6 4.3 0.8

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90401610

Cooler Accepted by: (-S) CA Date: 4-25-12 Time: 1500

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		(YES)	NO
What kind of packing material was used?	Bubble Wrap, Wet Ice, Gel Packs, Baggies, Foam Block, Paper, Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)	4/24/12	

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV Date: 4/25/12 Time: 1716

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

PRESERVATION VERIFICATION 04/25/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UR78

PC: Sue D.
VTSR: 04/25/12

Inquiry Number: NONE
Analysis Requested: 04/26/12
Contact: Mendes, Michael F.
Client: ERM-West
Logged by: AV
Sample Set Used: Yes-481
Validatable Package: Lv4
Deliverables:

Project #: 155129.09
Project: RG Spring GW Sampling
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-7339 UR78A	MW-1S-042512						TOT															
12-7340 UR78B	MW-1D-042512						TOT															
12-7341 UR78C	MW-17-042512						TOT															
12-7342 UR78D	MW-4S-042512						TOT															
12-7343 UR78E	MW-22-042512						TOT															
12-7344 UR78F	MW-23-042512						TOT															
12-7347 UR78I	MW-1S-042512						DIS									Y						
12-7348 UR78J	MW-1D-042512						DIS									Y						
12-7349 UR78K	MW-17-042512						DIS									Y						
12-7350 UR78L	MW-4S-042512						DIS									Y						
12-7351 UR78M	MW-22-042512						DIS									Y						
12-7352 UR78N	MW-23-042512						DIS									Y						

SDG# UR78 ALL

Checked By AV Date 4/25/12

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: US02	Turn-around Requested: Standard
ARI Client Company: ERM	Phone: 425 214 0458
Client Contact: Mike Mendes	
Client Project Name: RG Spring GW Sampling	
Client Project #: 155129.09	Samplers: Cyrus / Matt

Page: 2 of 2
Date: 4/25/12 Ice Present? yes
No. of Coolers: 2 Cooler Temps: 0.4, 2.5

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Phenol / Chlorinated Phenols	Total As	Dissolved* As	(A) Total Metals	(B) *Dissolved Metals				Notes/Comments
MW-24-042512	4/25/12	1457	water	4	X	X	X	X	X				
MW-20-042612	4/26/12	0853	Water	4	X	X	X						
MW-25-042612	4/26/12	0945	Water	4	X	X	X						
MW-21-042612	4/26/12	1101	Water	4	X	X	X						
DUP-042612-1	4/26/12	1030	Water	2		X	X						
MW-65-042612	4/26/12	1232	Water	4	X	X	X						
MW-20-042612	4/26/12	1344	water	4	X	X	X	X	X				
DUP-042612-2	4/26/12	0900	water	2		X	X						

If two letter D's

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
* Dissolved metals samples filtered in the field	Printed Name: Cyrus Gorman	Printed Name: Chris Atwell	Printed Name:	Printed Name:
	Company: ERM	Company: ARI	Company:	Company:
	Date & Time: 4/26/12 1510	Date & Time: 4/26/12 1510	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

(A) Total metals = Cr, Cu, Ag, Zn, Sb, Be, Cd, Pb, Ni, Se, Tl, Hg

SOOSO: 8/24/11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: ERM Project Name: PG Spring GW Sampling

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: USC2 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	0.4 2.5	

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90946119

Cooler Accepted by: OA Date: 4/26/12 Time: 1510

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	(Bubble Wrap) (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

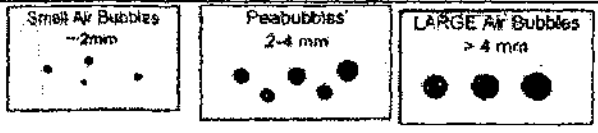
Samples Logged by: AV Date: 4/27/12 Time: 1203

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

PRESERVATION VERIFICATION 04/27/12
Page 1 of 2

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **US02**

Inquiry Number: NONE
Analysis Requested: 04/27/12
Contact: Mendes, Michael F.
Client: ERM-West
Logged by: AV
Sample Set Used: Yes-481
Validatable Package: Lv3
Deliverables:

PC: Sue D.
VTSR: 04/26/12

Project #: 155129.09
Project: RG Spring GW Sampling
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-7559 US02A	MW-24-042512						TOT															
12-7560 US02B	MW-2D-042612						TOT															
12-7561 US02C	MW-2S-042612						TOT															
12-7562 US02D	MW-21-042612						TOT															
12-7563 US02E	MW-6S-042612						TOT															
12-7564 US02F	MW-20-042612						TOT															
12-7565 US02G	DUP-042612-1						TOT															
12-7566 US02H	DUP-042612-2						TOT															
12-7567 US02I	MW-24-042512						DIS									Y						
12-7568 US02J	MW-2D-042612						DIS									Y						
12-7569 US02K	MW-2S-042612						DIS									Y						
12-7570 US02L	MW-21-042612						DIS									Y						
12-7571 US02M	MW-6S-042612						DIS									Y						
12-7572 US02N	MW-20-042612						DIS									Y						

Checked By AV Date 4/27/12

PRESERVATION VERIFICATION 04/27/12
Page 2 of 2

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **US02**

Client: ERM-West

Project #: 155129.09
Project: RG Spring GW Sampling

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-7573 **US02O**	DUP-042612-1						DIS									Y						
12-7574 **US02P**	DUP-042612-2						DIS									Y						

Checked By AV Date 4/27/12

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: UR78, US02

Narrative

Client: ERM-West, Inc.
Project: RG Spring GW Sampling, 155129.09
ARI Job Nos.: UR78 & US02

Sample Receipt

Seven water samples and a trip blank were received on April 25, 2012 under ARI job UR78. The cooler temperatures measured by IR thermometer following ARI SOP were 0.8, 3.6, and 4.3°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Eight water samples were received on April 26, 2012 under ARI job US02. The cooler temperatures measured by IR thermometer following ARI SOP were 0.4 and 2.5°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Volatiles by SW8260

The samples were analyzed within recommended holding times.

The initial calibrations were within method requirements.

The continuing calibration was outside the 20% control limit high Acetone and Hexachlorobutadiene, and out low for Chloroethane and Acrolein. All detected results for these compounds have been flagged with a "Q" qualifier. No further corrective action was taken.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

Tetrachloroethene, Hexachlorobutadiene, 1,2,4-Trichlorobenzene, and 1,2,3-Trichlorobenzene were present in **MB-043012A** at levels greater than ½ the reporting limits. All detected results for these compounds have been flagged with a "B" qualifier. No further corrective action was taken.

The LCSD percent recovery of Chloroethane and the LCS percent recovery of Hexachlorobutadiene were outside the control limits for **LCS-043012A**. All other surrogate percent recoveries were within control limits. No corrective action was taken.

UR78 : 00011

Semivolatiles by SW8270

The samples and associated laboratory QC were extracted and analyzed within recommended holding times.
The initial calibrations were within method requirements for requested compounds.

The continuing calibration was outside the 20% control limit high for 2,3,4,6-Tetrachlorophenol. All detected results for this compound have been flagged with a "Q" qualifier. No further corrective action was taken.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Pentachlorophenol by SW8041

The samples and associated laboratory QC were extracted and analyzed within recommended holding times.

The initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS percent recovery was within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

NWTPH-Dx

The sample and associated laboratory QC were extracted and analyzed within recommended holding times.

The initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS percent recovery was within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

NWTPH-Gx

The samples and associated laboratory QC were and analyzed within recommended holding times.

The initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS and LCSD percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Total and Dissolved Metals by SW6010/6020/7470

The samples and associated laboratory QC were digested and analyzed within recommended holding times.

Initial and continuing calibrations were within limits.

Total and dissolved arsenic were present in the 5/3/12 method blank at a level that was greater than the reporting limit. All sample results associated with this method blank contained levels of arsenic that were greater than ten times the level found in the blank. No corrective action was taken.

The method blanks were clean at the detection limits. The LCS percent recoveries were within control limits.

The matrix spike percent recoveries and duplicate RPDs were within control limits.

General Chemistry Parameters

The sample and associated laboratory QC were prepared and analyzed within recommended holding times.

The method blank was clean at the detection limit. The SRM percent recovery was within limits.

The matrix spike percent recovery of Hexavalent Chromium fell outside the control limits low for sample **MW-1S-042512**. A post digestion spike was performed with comparable recoveries. All other quality control parameters were met for this analysis. No corrective action was taken.

The replicate RPD was within control limits.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UR78
Client: ERM-West
Project Event: 155129.09
Project Name: RG Spring GW Sampling

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW-1S-042512	UR78A	12-7339	Water	04/25/12 06:39	04/25/12 15:00
2.	MW-1D-042512	UR78B	12-7340	Water	04/25/12 08:13	04/25/12 15:00
3.	MW-17-042512	UR78C	12-7341	Water	04/25/12 09:16	04/25/12 15:00
4.	MW-4S-042512	UR78D	12-7342	Water	04/25/12 10:17	04/25/12 15:00
5.	MW-22-042512	UR78E	12-7343	Water	04/25/12 11:31	04/25/12 15:00
6.	MW-23-042512	UR78F	12-7344	Water	04/25/12 13:10	04/25/12 15:00
7.	DUP-042512-1	UR78G	12-7345	Water	04/25/12 08:00	04/25/12 15:00
8.	TB-042512-1	UR78H	12-7346	Water	04/25/12	04/25/12 15:00
9.	MW-1S-042512	UR78I	12-7347	Water	04/25/12 06:39	04/25/12 15:00
10.	MW-1D-042512	UR78J	12-7348	Water	04/25/12 08:13	04/25/12 15:00
11.	MW-17-042512	UR78K	12-7349	Water	04/25/12 09:16	04/25/12 15:00
12.	MW-4S-042512	UR78L	12-7350	Water	04/25/12 10:17	04/25/12 15:00
13.	MW-22-042512	UR78M	12-7351	Water	04/25/12 11:31	04/25/12 15:00
14.	MW-23-042512	UR78N	12-7352	Water	04/25/12 13:10	04/25/12 15:00

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: US02
Client: ERM-West
Project Event: 155129.09
Project Name: RG Spring GW Sampling

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW-24-042512	US02A	12-7559	Water	04/25/12 14:57	04/26/12 15:10
2.	MW-2D-042612	US02B	12-7560	Water	04/26/12 08:33	04/26/12 15:10
3.	MW-2S-042612	US02C	12-7561	Water	04/26/12 09:45	04/26/12 15:10
4.	MW-21-042612	US02D	12-7562	Water	04/26/12 11:01	04/26/12 15:10
5.	MW-6S-042612	US02E	12-7563	Water	04/26/12 12:32	04/26/12 15:10
6.	MW-20-042612	US02F	12-7564	Water	04/26/12 13:44	04/26/12 15:10
7.	DUP-042612-1	US02G	12-7565	Water	04/26/12 10:30	04/26/12 15:10
8.	DUP-042612-2	US02H	12-7566	Water	04/26/12 09:00	04/26/12 15:10
9.	MW-24-042512	US02I	12-7567	Water	04/25/12 14:57	04/26/12 15:10
10.	MW-2D-042612	US02J	12-7568	Water	04/26/12 08:33	04/26/12 15:10
11.	MW-2S-042612	US02K	12-7569	Water	04/26/12 09:45	04/26/12 15:10
12.	MW-21-042612	US02L	12-7570	Water	04/26/12 11:01	04/26/12 15:10
13.	MW-6S-042612	US02M	12-7571	Water	04/26/12 12:32	04/26/12 15:10
14.	MW-20-042612	US02N	12-7572	Water	04/26/12 13:44	04/26/12 15:10
15.	DUP-042612-1	US02O	12-7573	Water	04/26/12 10:30	04/26/12 15:10
16.	DUP-042612-2	US02P	12-7574	Water	04/26/12 09:00	04/26/12 15:10

UR78:00016

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

UR78 : 00017

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

UR78 : 00018

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

UR78:00019

SURR SOLUTIONS

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1953-4	ABN	100/150	MEOH	07/05/12
B	1917-2	SIM PNA	15/75	ACETONE	05/30/12
C	NA	SIM ABN	25/37.5	MEOH	NA
D	1925-5	LOW PCB	0.2	ACETONE	05/28/12
E	1900-2	HERB	62.5	MEOH	10/06/12
F	1919-5	PCP	12.5	ACETONE	12/09/12
G	1906-3	d8-DIOXANE	100	MEOH	04/30/12
H	1847-2	OP-PEST	25	ACETONE	03/23/12
I	1896-3	LOW S. PNA	1.5	ACETONE	09/22/12
J	1915-4	TBT-PORE	0.125	MECL2	11/23/12
K	1925-4	MED PCB	20	ACETONE	05/28/12
L	1915-3	TBT	2.5	MECL2	11/23/12
M	1888-4	EPH	1500	MECL2	04/04/12
N	1914-2	PCB	2	ACETONE	05/28/12
O	1947-2	TPH	450	MECL2	09/28/12
P	1948-3	HCID	2250	MECL2	09/28/12
Q	NA	EDB	1	MEOH	NA
R	NA	RESIN ACID	250	ACETONE	NA
S	1864-1	PBDE	.5	MEOH	05/21/12
T	1884-2	ALKYL PNA	10	MEOH	07/15/12
U	NA	CONGENER	2.5	ACETONE	NA
V	1925-2	LOW PCP	1.25	ACETONE	12/09/12

LCS SOLUTIONS

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1907-1	PCB 1660	20	ACETONE	11/01/12
2#		BCOC PEST	10	ACETONE	NA
3	1922-2	PEST	01/02/10	ACETONE	12/13/12
4	1922-3	LOW PEST	.1/.2/1	ACETONE	12/13/12
5	1902-4	EPH	1500	MECL2	10/04/12
6	1919-2	PCP	12.5/125	ACETONE	10/15/12
7	1926-2	ABN	100	MEOH	05/31/12
8	1916-2	TBT	2.5	MECL2	11/23/12
9	1918-2	PORE TBT	.125/.25	MECL2	11/23/12
10					
11	1860-4	TPHD	15000	ACETONE	05/12/12
12					
13	1948-1	LOW PCB	2	ACETONE	11/01/12
14					
15	1929-1	SIM PNA	15/75	MEOH	06/21/12
16	1906-4	1,4-DIOXANE	100	MEOH	04/30/12
17	1869-4	1248 PCB	10	ACETONE	06/14/12
18	1927-2	LOW SIM PNA	1.5	ACETONE	06/20/12
19	1931-1	AK103	7500	ACETONE	05/17/12
20	1930-1	PNA	100	ACETONE	06/23/12
21	1943-2	SKY/BHT	100	MEOH	07/27/12
22	1957-1	HERB	04 to 5000	MEOH	04/22/12
23	1887-2	EXTRA PNA	15	ACETONE	08/25/12
24					
25#		DIPHENYL	100	MEOH	NA
26	1951-2	OP-PEST	25	MEOH	03/31/12
27		STEROLS	200	MEOH	NA
28#		ADD. PEST	2	ACETONE	NA
29#		DECANES	100	MEOH	NA

UR78 : 00021

LCS SOLUTIONS

30		EDB/DBCP	0.2	MEOH	NA
31	1944-1	TERPINEOL	100	MEOH	07/27/12
32	NA	GUAIACOL	50-200	ACETONE	NA
33		RETENE	100	MEOH	NA
34	NA	CONGENERS	0.5	ACETONE	NA
35	1875-3	ALKYL PNA A	10	MEOH	07/18/12
36		ALKYL PNA B	10	MEOH	NA
37		CAR/PERY	100	ACETONE	NA
38	1926-3	ABN ACID	200-450	MEOH	06/19/12
39	1853-4	BENZIDINE	500	MEOH	04/30/12
40	1851-3	PBDE	0.5	MEOH	04/22/12
50	1900-1	FULL RESIN	250	ACETONE	08/12/12
51		DDTS	0.01	ACETONE	NA
52		1232 PCB	20	ACETONE	NA
53	1919-1	DALAPON	50	MEOH	08/22/12
54		T-CHLORDANE	10	ACETONE	NA
55		TOXAPHENE	50	ACETONE	NA
56	1952-3	ABN BASE	50-200	MEOH	08/14/12
#=PROJECT SPECIFIC SOLUTION					

LOD[1], LOQ[2] and Control Limits Summary for VOA Analysis of Water 10 mL Purge Volume (EPA Methods 8260C)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS Recovery[2]	Replicate RPD[3]
Chloromethane	0.095	0.25	**0.5**	69 – 122	≤ 40
Vinyl Chloride	0.057	0.1	**0.2**	**80 – 120**	≤ 40
Bromomethane	0.252	0.5	**1.0**	71 – 120	≤ 40
Chloroethane	0.086	0.1	**0.2**	**80 – 120**	≤ 40
Trichlorofluoromethane	0.037	0.1	**0.2**	**80 – 120**	≤ 40
Acrolein	2.476	2.5	**5.0**	69 – 126	≤ 40
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.043	0.1	**0.2**	**80** – 121	≤ 40
Acetone	2.057	2.5	**5.0**	71 – **120**	≤ 40
1,1-Dichloroethene	0.054	0.1	**0.2**	**80 – 120**	≤ 40
Bromoethane	0.041	0.1	**0.2**	**80 – 120**	≤ 40
Iodomethane	0.227	0.5	**1.0**	76 – 120	≤ 40
Methylene Chloride	0.485	0.5	**1.0**	**80 – 120**	≤ 40
Acrylonitrile	0.604	1.0	**1.0**	79 – **120**	≤ 40
Carbon Disulfide	0.037	0.1	**0.2**	**80 – 120**	≤ 40
trans-1,2-Dichloroethene	0.048	0.1	**0.2**	**80 – 120**	≤ 40
Vinyl Acetate	0.069	0.1	**0.2**	**80 – 120**	≤ 40
1,1-Dichloroethane	0.053	0.1	**0.2**	**80 – 120**	≤ 40
2-Butanone	0.814	2.5	**5.0**	**80 – 120**	≤ 40
2,2-Dichloropropane	0.052	0.1	**0.2**	**80 – 120**	≤ 40
cis-1,2-Dichloroethene	0.043	0.1	**0.2**	**80 – 120**	≤ 40
Chloroform	0.027	0.1	**0.2**	**80 – 120**	≤ 40
Bromochloromethane	0.061	0.1	**0.2**	**80 – 120**	≤ 40
1,1,1-Trichloroethane	0.041	0.1	**0.2**	**80 – 120**	≤ 40
1,1-Dichloropropene	0.034	0.1	**0.2**	**80 – 120**	≤ 40
Carbon Tetrachloride	0.044	0.1	**0.2**	**80 – 120**	≤ 40
1,2-Dichloroethane	0.072	0.1	**0.2**	**80 – 120**	≤ 40
Benzene	0.027	0.1	**0.2**	**80 – 120**	≤ 40
Trichloroethene	0.049	0.1	**0.2**	**80 – 120**	≤ 40
1,2-Dichloropropane	0.035	0.1	**0.2**	**80 – 120**	≤ 40
Bromodichloromethane	0.051	0.1	**0.2**	**80 – 120**	≤ 40
Dibromomethane	0.145	0.2	**0.2**	**80 – 120**	≤ 40
2-Chloroethylvinyl Ether	0.250	0.5	**1.0**	**80 – 120**	≤ 40
4-Methyl-2-Pentanone	0.974	2.5	**5.0**	**80 – 120**	≤ 40
cis 1,3-dichloropropene	0.061	0.1	**0.2**	**80 – 120**	≤ 40
Toluene	0.040	0.1	**0.2**	**80 – 120**	≤ 40
trans 1,3-Dichloropropene	0.081	0.1	**0.2**	**80 – 120**	≤ 40
2-Hexanone	0.902	2.5	**5.0**	**80 – 120**	≤ 40
1,1,2-Trichloroethane	0.129	0.2	**0.2**	**80 – 120**	≤ 40
1,3-Dichloropropane	0.062	0.1	**0.2**	**80 – 120**	≤ 40
Tetrachloroethene	0.047	0.1	**0.2**	**80 – 120**	≤ 40
Dibromochloromethane	0.048	0.1	**0.2**	**80 – 120**	≤ 40
1,2-Dibromoethane	0.075	0.1	**0.2**	**80 – 120**	≤ 40

UR78 : 00023

LOD[1], LOQ[2] and Control Limits Summary for VOA Analysis of Water 10 mL Purge Volume (EPA Methods 8260C)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS Recovery[2]	Replicate RPD[3]
Chlorobenzene	0.023	0.1	**0.2**	**80 – 120**	≤ 40
Ethyl Benzene	0.037	0.1	**0.2**	**80 – 120**	≤ 40
1,1,1,2-Tetrachloroethane	0.040	0.1	**0.2**	**80 – 120**	≤ 40
m,p-xylene	0.052	0.2	**0.4**	**80 – 120**	≤ 40
o-Xylene	0.035	0.1	**0.2**	**80 – 120**	≤ 40
Styrene	0.045	0.1	**0.2**	**80 – 120**	≤ 40
Bromoform	0.062	0.1	**0.2**	**80 – 120**	≤ 40
1,1,2,2-Tetrachloroethane	0.060	0.1	**0.2**	**80 – 120**	≤ 40
1,2,3-Trichloropropane	0.131	0.25	**0.5**	**80 – 120**	≤ 40
trans-1,4-Dichloro 2-Butene	0.324	0.5	**1.0**	74 – 122	≤ 40
n-Propyl Benzene	0.023	0.1	**0.2**	**80 – 120**	≤ 40
Bromobenzene	0.060	0.1	**0.2**	**80 – 120**	≤ 40
iso-propyl Benzene	0.021	0.1	**0.2**	**80 – 120**	≤ 40
2-Chloro Toluene	0.024	0.1	**0.2**	**80 – 120**	≤ 40
4-Chloro Toluene	0.016	0.1	**0.2**	**80 – 120**	≤ 40
tert-Butyl Benzene	0.026	0.1	**0.2**	**80 – 120**	≤ 40
1,3,5-Trimethyl Benzene	0.015	0.1	**0.2**	**80 – 120**	≤ 40
1,2,4-Trimethylbenzene	0.024	0.1	**0.2**	**80 – 120**	≤ 40
sec-Butyl Benzene	0.024	0.1	**0.2**	**80 – 120**	≤ 40
4-Isopropyl Toluene	0.026	0.1	**0.2**	**80 – 120**	≤ 40
1,3-Dichlorobenzene	0.036	0.1	**0.2**	**80 – 120**	≤ 40
1,4-Dichlorobenzene	0.040	0.1	**0.2**	**80 – 120**	≤ 40
n-Butyl Benzene	0.025	0.1	**0.2**	**80 – 120**	≤ 40
1,2-Dichlorobenzene	0.036	0.1	**0.2**	**80 – 120**	≤ 40
1,2-Dibromo 3-Chloropropane	0.366	0.5	**0.5**	76 – **120**	≤ 40
1,2,4-Trichlorobenzene	0.107	0.25	**0.5**	77 – **120**	≤ 40
Hexachloro-1,3-Butadiene	0.073	0.25	**0.5**	77 – 120	≤ 40
Naphthalene	0.118	0.25	**0.5**	76 – **120**	≤ 40
1,2,3-Trichlorobenzene	0.110	0.25	**0.5**	79 – **120**	≤ 40
Dichlorodifluoromethane	0.052	0.1	**0.2**	69 – 122	≤ 40
Methyl-*tert*-butyl ether	0.073	0.25	**0.5**	**80 – 120**	≤ 40
Surrogate Standards			**MB / LCS**	**Samples**	**RPD**
Dibromofluoromethane			**80 – 120**	**80 – 120**	≤ 40
1,2-Dichlorobenzene-d_4			**80 – 120**	**80 – 120**	≤ 40
Toluene-d_8			**80 – 120**	**80 – 120**	≤ 40
4-Bromofluorobenzene			**80 – 120**	**80 – 120**	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Control limits calculated using all data from 7/1/09 through 6/30/10.
(3) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

UR78 : 00024

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C) or Separatory Funnel (EPA method 3510C) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
Phenol	**0.445**	**0.5**	**1**	26 – 112	≤ 40
Bis(2-Chloroethyl)ether	**0.257**	**0.5**	**1**	51 – **100**	≤ 40
2-Chlorophenol	**0.246**	**0.5**	**1**	50 – **100**	≤ 40
1,3-Dichlorobenzene	**0.499**	**0.5**	**1**	27 – **100**	≤ 40
1,4-Dichlorobenzene	**0.470**	**0.5**	**1**	29 – **100**	≤ 40
1,2-Dichlorobenzene	**0.436**	**0.5**	**1**	32 – **100**	≤ 40
Benzyl alcohol	**0.409**	**1.0**	**2**	**10** - 128	≤ 40
2,2'-oxybis(1-Chloropropane)	**0.221**	**0.5**	**1**	39 - 101	≤ 40
2-Methylphenol	**0.329**	**0.5**	**1**	47 – **100**	≤ 40
Hexachloroethane	**0.610**	**1.0**	**2**	19 – **100**	≤ 40
N-Nitroso-di-n-propylamine	**0.365**	**0.5**	**1**	46 – **100**	≤ 40
4-Methylphenol	**0.536**	**1.0**	**2**	46 – **100**	≤ 40
Nitrobenzene	**0.490**	**0.5**	**1**	46 – 103	≤ 40
Isophorone	**0.258**	**0.5**	**1**	62 – 105	≤ 40
2-Nitrophenol	**0.979**	**1.5**	**3**	32 – 116	≤ 40
2,4-Dimethylphenol	**0.627**	**1.5**	**3**	15 – **100**	≤ 40
Bis(2-Chloroethoxy)methane	**0.252**	**0.5**	**1**	44 – **100**	≤ 40
2,4-Dichlorophenol	**1.109**	**1.5**	**3**	35 – 114	≤ 40
1,2,4-Trichlorobenzene	**0.495**	**0.5**	**1**	34 – **100**	≤ 40
Naphthalene	**0.326**	**0.5**	**1**	48 – **100**	≤ 40
Benzoic acid	**8.647**	**10**	**20**	**10** - 172	≤ 40
4-Chloroaniline	**1.733**	**2.5**	**5**	**10** - 153	≤ 40
2,6-Dinitrotoluene	**1.300**	**1.5**	**3**	32 – 129	≤ 40
Hexachlorobutadiene	**0.604**	**1.5**	**3**	22 – **100**	≤ 40
4-Chloro-3-methylphenol	**0.919**	**1.5**	**3**	33 – 123	≤ 40
Hexachlorocyclopentadiene	**1.862**	**2.5**	**5**	**10** – **100**	≤ 40
2,4,6-Trichlorophenol	**1.235**	**1.5**	**3**	37 – 120	≤ 40
2,4,5-Trichlorophenol	**1.706**	**2.5**	**5**	37 – 124	≤ 40
2-Chloronaphthalene	**0.340**	**0.5**	**1**	49 – **100**	≤ 40
2-Nitroaniline	**0.784**	**1.5**	**3**	18 – 140	≤ 40
Acenaphthylene	**0.274**	**0.5**	**1**	47 – 110	≤ 40
Dimethylphthalate	**0.264**	**0.5**	**1**	60 – 106	≤ 40
Acenaphthene	**0.347**	**0.5**	**1**	55 – 101	≤ 40

UR78 : 00025

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C) or Separatory Funnel (EPA method 3510C) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
3-Nitroaniline	1.140	1.5	3	10 – 208	≤ 40
2-Methylnaphthalene	0.241	0.5	1	38 – 100	≤ 40
2,4-Dinitrophenol	5.474	10	20	10 – 224	≤ 40
Dibenzofuran	0.198	0.5	1	46 – 108	≤ 40
4-Nitrophenol	2.895	5.0	10	10 – 103	≤ 40
2,4-Dinitrotoluene	1.277	1.5	3	33 – 134	≤ 40
Fluorene	0.266	0.5	1	59 – 108	≤ 40
4-Chlorophenyl-phenylether	0.342	0.5	1	54 – 104	≤ 40
Diethylphthalate	0.407	0.5	1	60 - 108	≤ 40
4-Nitroaniline	1.366	1.5	3	13 – 144	≤ 40
4,6-Dinitro-2-methylphenol	4.928	5.0	10	10 – 190	≤ 40
N-Nitrosodiphenylamine	0.392	0.5	1	39 – 100	≤ 40
4-Bromophenyl-phenylether	0.262	0.5	1	56 – 105	≤ 40
Hexachlorobenzene	0.335	0.5	1	54 – 108	≤ 40
Pentachlorophenol	2.746	5.0	10	25 – 144	≤ 40
Phenanthrene	0.283	0.5	1	64 – 115	≤ 40
Anthrcene	0.303	0.5	1	59 – 107	≤ 40
Carbazole	0.251	0.5	1	36 – 123	≤ 40
Di-n-butylphthalate	0.304	0.5	1	62 – 110	≤ 40
Fluoranthene	0.290	0.5	1	63 – 119	≤ 40
Pyrene	0.379	0.5	1	57 – 117	≤ 40
Butylbenzylphthalate	0.402	0.5	1	49 – 118	≤ 40
Benzo(a)anthracene	0.373	0.5	1	61 – 113	≤ 40
3,3'-Dichlorobenzidine	1.553	2.5	5	10 – 151	≤ 40
Chrysene	0.397	0.5	1	62 – 115	≤ 40
bis(2-Ethylhexyl)phthalate	1.050	1.5	3	47 – 127	≤ 40
Di-n-octylphthalate	0.331	0.5	1	60 – 106	≤ 40
Benzo(b)fluoranthene	0.298	0.5	1	61 – 120	≤ 40
Benzo(k)fluoranthene	0.487	0.5	1	59 – 120	≤ 40
Benzo(a)pyrene	0.425	0.5	1	46 – 105	≤ 40
Indeno(1,2,3-cd)pyrene	0.435	0.5	1	42 – 134	≤ 40
Dibenzo(a,h)anthracene	0.437	0.5	1	46 – 132	≤ 40
Benzo(g,h,i)perylene	0.464	0.5	1	33 – 135	≤ 40
N-Nitrosodimethylamine	1.209	1.5	3	17 - 106	≤ 40

UR79 00025

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C) or Separatory Funnel (EPA method 3510C) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
Aniline	**0.470**	**0.5**	**1**	**10** – 113	≤ 40
1-methylnaphthalene	**0.199**	**0.5**	**1**	43 – **100**	≤ 40
Azobenzene (1,2-DP-Hydrazine)	**0.214**	**0.5**	**1**	52 - 111	≤ 40
Benzofluoranthenes, Total	**2.317**	**2.5**	**5**		≤ 40
1,4-Dioxane[5]				13 – 114	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
2-Fluorophenol			33 – 100	23 – **100**	≤ 40
Phenol-d_5			15 - 121	16 – 106	≤ 40
2-Chlorophenol-d_4			46 – 102	33 – 100	≤ 40
1,2-Dichlorobenzene-d_4			40 – **100**	27 – **100**	≤ 40
Nitrobenzene-d_5			50 – **100**	34 – 101	≤ 40
2-Fluorobiphenyl			51 – **100**	38 – **100**	≤ 40
2,4,6-Tribromophenol			46 – 125	31 – 128	≤ 40
p-Terphenyl-d_{14}			54 – 117	27 – 122	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Control limits calculated using all data from 8/1/10 through 7/31/11.
(3) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(5) Sample extracts for 1,4-Dioxane analysis are concentrated to 1 mL.

UR78 : 00027

Chlorinated Phenols
DL, LOD, LOQ and Control Limit Summary [1]
EPA Method 8041A

Analyte	Aqueous Samples [2,3]				Solid Samples [2,4]				RPD [5]
	DL µg/L	LOD µg/L	LOQ µg/L	LCS Recovery [6]	DL µg/kg	LOD µg/kg	LOQ µg/kg	LCS Recovery [6]	
Pentachlorophenol (PCP)	0.085	**0.13**	**0.25**	48 – 116%	0.83	**3.13**	**6.25**	56 – 111%	≤ 40
2,4,6-Trichlorophenol	0.106	**0.13**	**0.25**	30 – 160%	1.21	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,6-Trichlorophenol	0.066	**0.13**	**0.25**	30 – 160%	2.96	**3.13**	**6.25**	30 – 160%	≤ 40
2,4,5-Trichlorophenol	0.077	**0.13**	**0.25**	30 – 160%	2.24	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,4-Trichlorophenol	0.126	**0.13**	**0.25**	30 – 160%	1.67	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,5,6-Tetrachlorophenol	0.091	**0.13**	**0.25**	30 – 160%	1.61	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,4,5-Tetrachlorophenol	0.077	**0.13**	**0.25**	30 – 160%	1.26	**3.13**	**6.25**	30 – 160%	≤ 40
2,4-Dichlorophenol	1.510	**3.0**	**6.0**	30 – 160%	16.6	**31.3**	**62.5**	30 – 160%	≤ 40
Pentachlorophenol (PCP)(low level prep)	0.014 [7]	**0.013**	**0.025**	36 – 159%					≤ 40
Surrogate % Recovery	**MB / LCS**	**Sample**			**MB / LCS**	**Sample**			
2,4,6-Tribromophenol	41 – 98	26 – 113			39 – 99	**10** – 129 [8]			≤ 40
2,4,6-Tribromophenol (low level preparation)	33 – 151	**10** – 181 [8]							≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation as defined in ARI SOP 1018S
(2) Control limits calculated using all data from 1/1/10 through 8/1/11.
(3) Separatory funnel extraction (EPA Method 3510C) 500 mL sample to 50 mL final volume (5 mL for low level Prep)
(4) Microwave assisted extraction (EPA Method 3546) 10 g sample to 25 mL final volume
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(6) 30 – 160 are default values used when there is insufficient data to calculate historic control limits.
(7) MDL study QS97 (4/30/10)
(8) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.

UR78 : 00028

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Quality Control Criteria
Total Petroleum Hydrocarbons
(Diesel & Motor Oil)

Analysis Code	Analyte[5]	DL[1]	LOD[1]	LOQ[2] ppm	Spike % Recovery Control Limits[3]			RPD[4]
					LCS	MB/LCS Surrogate	Sample Surrogate	
HCIWVX	NWTPH-HCID – Water Samples	--	--	0.50 [7]	--	--	50-150	≤ 40
HCISVX	NWTPH-HCID – Solid Samples	--	--	50 [7]	--	--	50-150	
Aqueous Samples – No Extract Clean-up – Separatory Funnel Extraction – 500 to 1.0 mL								
DIESWI	DRO – NWTPH-Dext (C_{12}-C_{24})	0.022	0.05	0.1	64-112	50-150	50-150	≤ 40
AK2WSI	DRO – AK102 (C_{10}-C_{25})	0.022	0.05	0.1	75-125 [6]	60-120	50-150	
OILWSI	RRO – NWTPH-Dext (C_{24}-C_{38})	0.044	0.1	0.2	64-112	50-150	50-150	
AK3WSI	RRO – AK103 (C_{25}-C_{36})	0.030 [9]	0.1	0.2	60-120 [6]	60-120	50-150	
Aqueous Samples – With Acid and/or Silica Gel Clean-up – Separatory Funnel Extraction – 500 to 1.0 mL								
DIESWI	DRO – NWTPH-Dext (C_{12}-C_{24})	0.039	0.05	0.1	61-104	50-150	50-150	≤ 40
AK2WSI	DRO – AK102 (C_{10}-C_{25})	0.042	0.05	0.1	75-125 [6]	60-120	50-150	
OILWSI	RRO – NWTPH-Dext (C_{24}-C_{38})	0.010	0.1	0.2	61-104	50-150	50-150	
AK3WSI	RRO – AK103 (C_{25}-C_{36})	0.030 [8]	0.1	0.2	60-120 [6]	60-120	50-150	
Solid Matrix Samples – No Extract Clean-up – Microwave Extraction – 10 g to 1 mL								
DIESMI	DRO – NWTPH-Dext (C_{12}-C_{24})	1.35	2.5	5	62-119	50-150	50-150	≤ 40
DIESMI	DRO – NWTPH-Dext Jet A	2.22 [11]	2.5	5	60 – 130 [8]	50-150	50-150	
AK2SMI	DRO – AK102 (C_{10}-C_{25})	2.43	2.5	5	75-125 [6]	60-120	50-150	
OILSMI	RRO – NWTPH-Dext (C_{24}-C_{38})	2.48	5	10	62-119	50-150	50-150	
AK3SMI	RRO – AK103 (C_{25}-C_{36})	0.665 [9]	5	10	60-120 [6]	60-120	50-150	
Solid Matrix Samples – With Acid and/or Silica Gel Clean-up – Microwave Extraction – 10 g to 1 mL								
DIESMI	DRO – NWTPH-Dext (C_{12}-C_{24})	1.28	2.5	5	60-108	50-150	50-150	≤ 40
AK2SMI	DRO – AK102 (C_{10}-C_{25})	2.06	2.5	5	75-125 [6]	60-120	50-150	
OILSMI	RRO – NWTPH-Dext (C_{24}-C_{38})	1.57	5	10	60-108	50-150	50-150	
AK3SMI	RRO – AK103 (C_{25}-C_{36})	0.665 [10]	5	10	60-120 [6]	60-120	50-150	

(1) DL (Detection Limit) and LOD (Limit of Detection) as defined in ARI SOP 1018S.
(2) Limit of Quantitation as defined in ARI SOP 1018S. The spike concentration used to determine the DL and the concentration of the lowest standard used to calibrate the GC-FID instrument.
(3) All surrogate recovery limits are specified in the published methods (AK102, AK103 & NWTPH-Dext). The surrogate standard is o-Terphenyl.
(4) Acceptance criteria for the relative percent difference (RPD) between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$
(5) DRO = Diesel Range Organics and RRO = Residual Range Organics as defined in the methods referenced in footnote 3.
(6) Method specified LCS acceptance limits.
(7) Method specified reporting limits
(8) Default LCS control limits pending calculation of historic limits
(9) MDL study QD55 completed 2/12/10
(10) MDL study QD35 completed 1/29/10
(11) LOD Study UI44 completed 2/28/12

UR78 : 00029

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Quality Control Criteria
Gasoline and BTEX

Method	Analyte	DL[1]	LOD[1]	LOQ[1]	Spike % Recovery Control Limits[3]			RPD[3]
					LCS	MB/LCS Surrogate	Sample Surrogate	
Aqueous Samples 5 mL purge volume (DL, LOD & LOQ values in µg/L (ppb) for BTEX and mg/L (ppm) for gasoline								
NWTPH-G	Toluene – Naphthalene	0.057	0.125	0.25	75 – 124	--	--	≤ 40
8015B	2-methylpentane – 1,2,4-Trimethylbenzene	0.031	0.125	0.25	75 – 124	--	--	
WA-TPH-G	Toluene – nC_{12})	0.087	0.125	0.25	75 – 124	--	--	
AK-101	nC_6 – nC_{12}	0.032	0.050	0.10	75 – 124	--	--	
	Trifluorotoluene (TFT)	--	--	--	--	**80 - 120**	**80** - 120	
	Bromobenzene	--	--	--	--	**80 - 120**	**80** - 120	
8021B	Benzene	0.094	0.5	1.0	73 – **120**	--	--	≤ 40
8021B	Toluene	0.113	0.5	1.0	73 – **120**	--	--	
8021B	Ethylbenzene	0.117	0.5	1.0	69 – **120**	--	--	
8021B	m/p-Xylene	0.265	1.0	2.0	72 – **120**	--	--	
8021B	o-Xylene	0.136	0.5	1.0	73 – **120**	--	--	
8021B	MTBE	0.412	0.5	1.0	30 – 182	--	--	
	Trifluorotoluene (TFT)	--	--	--	--	79 – **120**	**80 - 120**	
	Bromobenzene	--	--	--	--	79 – **120**	**80 - 120**	
Solid Samples (DL, LOD & LOQ values in µg/kg (ppb) for BTEX and mg/kg (ppm) for gasoline								
NWTPH-G	Toluene – Naphthalene	1.66	2.5	5	74 – 124	--	--	≤ 40
8015B	2-methylpentane – 1,2,4-Trimethylbenzene	1.57	2.5	5	74 – 124	--	--	
WA-TPH-G	Toluene – nC_{12})	1.54	2.5	5	74 – 124	--	--	
AK-101	nC_6 – nC_{12}	1.84	2.5	5	74 – 124	--	--	
	Trifluorotoluene (TFT)	--	--	--	--	**80 - 120**	66-123	
	Bromobenzene	--	--	--	--	**80 - 120**	62-130	
8021B	Benzene	4.59	12.5	25	72 – **120**	--	--	≤ 40
8021B	Toluene	7.13	12.5	25	72 – **120**	--	--	
8021B	Ethylbenzene	4.98	12.5	25	71 – **120**	--	--	
8021B	m/p-Xylene	11.9	25.0	50	72 – **120**	--	--	
8021B	o-Xylene	6.23	12.5	25	72 – **120**	--	--	
8021B	MTBE	3.82	12.5	25	40 – 163	--	--	
	Trifluorotoluene (TFT)	--	--	--	--	80 – **120**	68 – 124	
	Bromobenzene	--	--	--	--	77 – **120**	62 – 134	

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S.
(2) Highlighted control limits (bold font) are adjusted from the calculated values as follows:
a) Highlighted control limits (**bold font**) adjusted to demonstrate that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
b) Control limits for analytes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.
(3) Acceptance criteria for the relative percent difference (RPD) between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

UR78 : 00030

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Quality Control Parameters for Metals Analysis using ICP-OES

	Aqueous Samples[2]			Spike Recovery		RPD[5]	Solids[3]	Tissue[4]
Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ mg/kg	LOQ mg/kg
Aluminum	7.57	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Antimony	6.28	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Arsenic	3.33	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Barium	1.33	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Beryllium	0.16	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Boron	7.39	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Cadmium	0.18	0.5	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Calcium	11.27	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Chromium	1.24	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Cobalt	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Copper	0.92	1.0	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Iron	7.50	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Lead	1.55	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Magnesium	9.61	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Manganese	0.28	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Molybdenum	0.79	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Nickel	3.86	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Potassium	65.70	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Selenium	4.99	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Silicon	8.17	30	**60**	75 – 125	80 – 120	≤ 20	**(6)**	**(6)**
Silver	0.43	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Sodium	11.35	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Strontium	0.09	1.0	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Thallium	3.10	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Tin	1.41	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Titanium	2.11	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.01**
Vanadium	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Zinc	1.45	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Tissue is reported on an "as received" (wet weight) basis using 2.5 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(6) ARI does not analyze for Silicon in solids or tissue samples

UR78 : 00031

Quality Control Parameters for Metals Analysis using ICP-MS

Analyte	Mass	Aqueous Samples[2]			Spike Recovery		RPD[4]	Solids[3]
		DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ[1] mg/kg
Aluminum	27	1.601	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Antimony	121	0.010	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
	123	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #1	75	0.048	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #2	75	0.092	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Barium	135	0.020	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	137	0.019	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Beryllium	9	0.021	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Cadmium	111	0.010	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
	114	0.005	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Calcium	43	3.983	25	**50.0**	75 – 125	80 – 120	≤ 20	**50.0**
Chromium	52	0.045	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	53	0.118	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Cobalt	59	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Copper	63	0.158	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	65	0.236	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Iron	54	5.753	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
	57	3.876	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Lead	208	0.046	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Magnesium	24	0.297	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Manganese	55	0.022	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Molybdenum	98	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Nickel	60	0.079	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	62	0.089	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Potassium	39	2.944	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Selenium	82	0.127	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	78	0.324	0.25	**2.0**	75 – 125	80 – 120	≤ 20	**2.0**
Silver	107	0.008	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Sodium	23	2.833	50	**100.0**	75 – 125	80 – 120	≤ 20	**100.0**
Thorium[5]	232	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Thallium	205	0.004	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Uranium[5]	238	0.003	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Vanadium	51	0.043	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Zinc	66	0.497	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	67	0.531	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	68	0.524	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(5) ARI has no accreditation for these elements.

UR78 : 00032

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Conventional Wet Chemistry

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

UR78 00033

Volatile Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW-4S-042512**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UR78D
LIMS ID: 12-7342
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 04/30/12 22:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**16**	**Q**
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	**Chloroform**	**0.2**	**0.2**	**J**
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW-4S-042512**
Page 2 of 2 **SAMPLE**

Lab Sample ID: UR78D
LIMS ID: 12-7342
Matrix: Water
Date Analyzed: 04/30/12 22:33

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U
1634-04-4	Methyl tert-Butyl Ether	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	104%
Bromofluorobenzene	96.7%
d4-1,2-Dichlorobenzene	105%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TB-042512-1**
 Trip Blanks

Lab Sample ID: UR78H
LIMS ID: 12-7346
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling 155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 04/30/12 22:59

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	**Methylene Chloride**	**1.0**	**0.6**	**J**
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TB-042512-1**
 Trip Blanks

Lab Sample ID: UR78H
LIMS ID: 12-7346
Matrix: Water
Date Analyzed: 04/30/12 22:59

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U
1634-04-4	Methyl tert-Butyl Ether	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	104%
Bromofluorobenzene	99.9%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-043012A	Method Blank	10	109%	104%	101%	101%	0
LCS-043012A	Lab Control	10	104%	110%	99.5%	101%	0
LCSD-043012A	Lab Control Dup	10	108%	106%	99.1%	99.9%	0
UR78D	MW-4S-042512	10	112%	104%	96.7%	105%	0
UR78H	TB-042512-1	10	113%	104%	99.9%	104%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	80-120	80-120
(TOL) = d8-Toluene	80-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120

Prep Method: SW5030B
Log Number Range: 12-7342 to 12-7346

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-043012A**
Page 1 of 2 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-043012A
LIMS ID: 12-7342
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 04/30/12 14:48
LCSD: 04/30/12 15:16

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.0		10.0	100%	9.2		10.0	92.0%	8.3%
Bromomethane	9.2		10.0	92.0%	8.4		10.0	84.0%	9.1%
Vinyl Chloride	9.5		10.0	95.0%	9.0		10.0	90.0%	5.4%
Chloroethane	8.4	Q	10.0	84.0%	7.6	Q	10.0	76.0%	10.0%
Methylene Chloride	10.7		10.0	107%	9.9		10.0	99.0%	7.8%
Acetone	55.3	Q	50.0	111%	53.4	Q	50.0	107%	3.5%
Carbon Disulfide	9.6		10.0	96.0%	9.0		10.0	90.0%	6.5%
1,1-Dichloroethene	9.6		10.0	96.0%	8.9		10.0	89.0%	7.6%
1,1-Dichloroethane	9.9		10.0	99.0%	9.4		10.0	94.0%	5.2%
trans-1,2-Dichloroethene	9.4		10.0	94.0%	8.7		10.0	87.0%	7.7%
cis-1,2-Dichloroethene	9.5		10.0	95.0%	9.1		10.0	91.0%	4.3%
Chloroform	9.9		10.0	99.0%	9.6		10.0	96.0%	3.1%
1,2-Dichloroethane	11.0		10.0	110%	10.7		10.0	107%	2.8%
2-Butanone	50.4		50.0	101%	50.9		50.0	102%	1.0%
1,1,1-Trichloroethane	10.4		10.0	104%	9.8		10.0	98.0%	5.9%
Carbon Tetrachloride	11.2		10.0	112%	10.4		10.0	104%	7.4%
Vinyl Acetate	9.6		10.0	96.0%	10.2		10.0	102%	6.1%
Bromodichloromethane	10.8		10.0	108%	10.6		10.0	106%	1.9%
1,2-Dichloropropane	10.3		10.0	103%	10.0		10.0	100%	3.0%
cis-1,3-Dichloropropene	11.3		10.0	113%	11.5		10.0	115%	1.8%
Trichloroethene	9.8		10.0	98.0%	9.6		10.0	96.0%	2.1%
Dibromochloromethane	10.2		10.0	102%	10.1		10.0	101%	1.0%
1,1,2-Trichloroethane	10.9		10.0	109%	10.7		10.0	107%	1.9%
Benzene	9.9		10.0	99.0%	9.4		10.0	94.0%	5.2%
trans-1,3-Dichloropropene	11.5		10.0	115%	11.7		10.0	117%	1.7%
2-Chloroethylvinylether	10.4		10.0	104%	11.5		10.0	115%	10.0%
Bromoform	10.8		10.0	108%	11.4		10.0	114%	5.4%
4-Methyl-2-Pentanone (MIBK)	58.7		50.0	117%	57.0		50.0	114%	2.9%
2-Hexanone	57.1		50.0	114%	59.2		50.0	118%	3.6%
Tetrachloroethene	10.2	B	10.0	102%	9.8	B	10.0	98.0%	4.0%
1,1,2,2-Tetrachloroethane	9.7		10.0	97.0%	9.6		10.0	96.0%	1.0%
Toluene	10.7		10.0	107%	10.3		10.0	103%	3.8%
Chlorobenzene	10.0		10.0	100%	9.6		10.0	96.0%	4.1%
Ethylbenzene	10.4		10.0	104%	9.9		10.0	99.0%	4.9%
Styrene	10.9		10.0	109%	10.5		10.0	105%	3.7%
Trichlorofluoromethane	11.1		10.0	111%	10.0		10.0	100%	10.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.6		10.0	96.0%	9.0		10.0	90.0%	6.5%
m,p-Xylene	21.0		20.0	105%	19.8		20.0	99.0%	5.9%
o-Xylene	10.3		10.0	103%	9.7		10.0	97.0%	6.0%
1,2-Dichlorobenzene	9.7		10.0	97.0%	9.3		10.0	93.0%	4.2%
1,3-Dichlorobenzene	9.8		10.0	98.0%	9.6		10.0	96.0%	2.1%
1,4-Dichlorobenzene	9.6		10.0	96.0%	9.4		10.0	94.0%	2.1%
Acrolein	40.7	Q	50.0	81.4%	41.0	Q	50.0	82.0%	0.7%
Methyl Iodide	9.5		10.0	95.0%	8.7		10.0	87.0%	8.8%
Bromoethane	9.3		10.0	93.0%	8.8		10.0	88.0%	5.5%
Acrylonitrile	9.5		10.0	95.0%	9.7		10.0	97.0%	2.1%
1,1-Dichloropropene	10.4		10.0	104%	9.9		10.0	99.0%	4.9%
Dibromomethane	10.3		10.0	103%	10.2		10.0	102%	1.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-043012A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-043012A QC Report No: UR78-ERM-West
LIMS ID: 12-7342 Project: RG Spring GW Sampling
Matrix: Water 155129.09

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	9.8		10.0	98.0%	9.3		10.0	93.0%	5.2%
1,2-Dibromo-3-chloropropane	10.0		10.0	100%	9.9		10.0	99.0%	1.0%
1,2,3-Trichloropropane	9.9		10.0	99.0%	10.2		10.0	102%	3.0%
trans-1,4-Dichloro-2-butene	9.4		10.0	94.0%	10.2		10.0	102%	8.2%
1,3,5-Trimethylbenzene	10.8		10.0	108%	10.5		10.0	105%	2.8%
1,2,4-Trimethylbenzene	11.0		10.0	110%	10.8		10.0	108%	1.8%
Hexachlorobutadiene	13.0	QB	10.0	130%	11.9	QB	10.0	119%	8.8%
Ethylene Dibromide	10.8		10.0	108%	10.9		10.0	109%	0.9%
Bromochloromethane	9.6		10.0	96.0%	9.4		10.0	94.0%	2.1%
2,2-Dichloropropane	10.9		10.0	109%	9.5		10.0	95.0%	13.7%
1,3-Dichloropropane	10.0		10.0	100%	10.2		10.0	102%	2.0%
Isopropylbenzene	10.9		10.0	109%	10.5		10.0	105%	3.7%
n-Propylbenzene	10.7		10.0	107%	10.3		10.0	103%	3.8%
Bromobenzene	9.8		10.0	98.0%	9.8		10.0	98.0%	0.0%
2-Chlorotoluene	10.4		10.0	104%	10.0		10.0	100%	3.9%
4-Chlorotoluene	10.3		10.0	103%	10.2		10.0	102%	1.0%
tert-Butylbenzene	11.1		10.0	111%	10.8		10.0	108%	2.7%
sec-Butylbenzene	11.1		10.0	111%	10.7		10.0	107%	3.7%
4-Isopropyltoluene	11.6		10.0	116%	11.1		10.0	111%	4.4%
n-Butylbenzene	11.7		10.0	117%	11.1		10.0	111%	5.3%
1,2,4-Trichlorobenzene	10.5	B	10.0	105%	10.0	B	10.0	100%	4.9%
Naphthalene	10.5		10.0	105%	10.1		10.0	101%	3.9%
1,2,3-Trichlorobenzene	10.5	B	10.0	105%	10.2	B	10.0	102%	2.9%
Methyl tert-Butyl Ether	10.0		10.0	100%	9.5		10.0	95.0%	5.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	108%
d8-Toluene	110%	106%
Bromofluorobenzene	99.5%	99.1%
d4-1,2-Dichlorobenzene	101%	99.9%

4A

VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0430

Lab Name: ANALYTICAL RESOURCES INC

Client: ERM-WEST

ARI Job No: UR78

Project: RG SPRING GW SAMPLING

Lab File ID: MB0430

Lab Sample ID: MB0430

Date Analyzed: 04/30/12

Time Analyzed: 1542

Instrument ID: NT2

Heated Purge: (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0430	LCS0430	LCS0430	1448
02	LCS0430	LCS0430	LCS0430A	1516
03	MW-4S-042512	UR78D	UR78D	2233
04	TB-042512-1	UR78H	UR78H	2259
05				
06				
07				
08				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-043012A**
 METHOD BLANK

Lab Sample ID: MB-043012A
LIMS ID: 12-7342
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling 155129.09
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 04/30/12 15:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.2**	**0.1**	**J**
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-043012A**
 METHOD BLANK

Lab Sample ID: MB-043012A
LIMS ID: 12-7342
Matrix: Water
Date Analyzed: 04/30/12 15:42

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	**Hexachlorobutadiene**	**0.5**	**0.2**	**J**
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	**1,2,4-Trichlorobenzene**	**0.5**	**0.1**	**J**
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	**1,2,3-Trichlorobenzene**	**0.5**	**0.2**	**J**
1634-04-4	Methyl tert-Butyl Ether	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	104%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	101%

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES INC Contract: ERM-WEST

Lab Code: ARI Case No.: RG SPRING GW SAMPLING SDG No.: UR78

Lab File ID: BFB0416A BFB Injection Date: 04/16/12

Instrument ID: NT2 BFB Injection Time: 1107

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	48.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	72.9
175	5.0 - 9.0% of mass 174	5.5 (7.5)1
176	95.0 - 101.0% of mass 174	70.6 (96.8)1
177	5.0 - 9.0% of mass 176	4.3 (6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.2	VSTD0.2	0020416	04/16/12	1228
02	VSTD0.5	VSTD0.5	0050416	04/16/12	1254
03	VSTD01	VSTD01	0100416	04/16/12	1321
04	VSTD10	VSTD10	1000416	04/16/12	1414
05	VSTD20	VSTD20	2000416	04/16/12	1441
06	VSTD40	VSTD40	4000416	04/16/12	1507
07	VSTD60	VSTD60	6000416	04/16/12	1533
08	VSTD02	VSTD02	0200416A	04/16/12	1627
09	ICV10	ICV10	ICV0416	04/16/12	1653
10					
11					
12					
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21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES INC Contract: ERM-WEST

Lab Code: ARI Case No.: RG SPRING GW SAMPLING SDG No.: UR78

Lab File ID: BFB0430 BFB Injection Date: 04/30/12

Instrument ID: NT2 BFB Injection Time: 1348

GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	51.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 100.0% of mass 95	67.8
175	5.0 - 9.0% of mass 174	5.0 (7.4)1
176	95.0 - 101.0% of mass 174	66.3 (97.8)1
177	5.0 - 9.0% of mass 176	4.5 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0430	CC0430	CC0430	04/30/12	1422
02	LCS0430	LCS0430	LCS0430	04/30/12	1448
03	LCS0430	LCS0430	LCS0430A	04/30/12	1516
04	MB0430	MB0430	MB0430	04/30/12	1542
05	MW-4S-042512	UR78D	UR78D	04/30/12	2233
06	TB-042512-1	UR78H	UR78H	04/30/12	2259
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF0.2: 0020416 RF0.5: 0050416 RF1: 0100416
RF2: 0200416A RF10: 1000416

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF10
Chloromethane		1.227	1.222	1.198	1.067
Vinyl Chloride	1.142	1.128	1.091	1.091	1.014
Bromomethane		0.542	0.521	0.553	0.483
Chloroethane	0.807	0.728	0.557	0.635	0.568
Trichlorofluoromethane	0.888	0.911	0.858	0.898	0.840
Acrolein		0.100	0.100	0.103	0.094
112Trichloro122Trifluoroetha	0.693	0.755	0.742	0.730	0.655
Acetone			0.185	0.148	0.117
1,1-Dichloroethene	0.761	0.706	0.792	0.762	0.672
Bromoethane	0.484	0.580	0.585	0.570	0.514
Iodomethane	1.108	1.095	1.117	1.088	1.006
Methylene Chloride		1.528	1.230	1.019	0.784
Acrylonitrile		0.178	0.166	0.182	0.165
Carbon Disulfide	2.738	2.568	2.872	2.818	2.622
Trans-1,2-Dichloroethene	0.805	0.844	0.848	0.816	0.724
Vinyl Acetate		0.620	0.682	0.735	0.691
1,1-Dichloroethane	1.463	1.519	1.540	1.553	1.392
2-Butanone		0.167	0.176	0.183	0.170
2,2-Dichloropropane	0.858	0.886	0.842	0.911	0.834
Cis-1,2-Dichloroethene	0.704	0.816	0.769	0.802	0.748
Chloroform	1.253	1.278	1.277	1.316	1.231
Bromochloromethane	0.271	0.297	0.306	0.302	0.287
1,1,1-Trichloroethane	0.996	1.090	0.996	1.069	1.026
1,1-Dichloropropene	0.565	0.611	0.592	0.647	0.627
Carbon Tetrachloride	0.497	0.515	0.435	0.514	0.488
1,2-Dichloroethane	0.416	0.476	0.450	0.484	0.451
Benzene	1.882	1.855	1.660	1.918	1.764
Trichloroethene	0.363	0.395	0.351	0.389	0.364
1,2-Dichloropropane	0.418	0.386	0.406	0.409	0.394
Bromodichloromethane	0.360	0.430	0.430	0.452	0.448
Dibromomethane	0.178	0.177	0.163	0.183	0.177
2-Chloroethyl Vinyl Ether			0.105	0.121	0.121
4-Methyl-2-Pentanone		0.086	0.076	0.103	0.101
Cis 1,3-dichloropropene	0.406	0.408	0.411	0.490	0.499
Toluene	0.887	0.862	0.818	0.963	0.901
Trans 1,3-Dichloropropene	0.354	0.319	0.340	0.388	0.385
2-Hexanone		0.132	0.145	0.165	0.160

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF0.2: 0020416 RF0.5: 0050416 RF1: 0100416
RF2: 0200416A RF10: 1000416

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF10
1,1,2-Trichloroethane	0.185	0.209	0.206	0.216	0.206
1,3-Dichloropropane	0.433	0.432	0.460	0.489	0.486
Tetrachloroethene	0.358	0.433	0.387	0.414	0.416
Chlorodibromomethane	0.223	0.230	0.240	0.253	0.284
1,2-Dibromoethane	0.199	0.173	0.185	0.203	0.194
Chlorobenzene	0.976	1.073	1.045	1.093	1.061
Ethyl Benzene	0.483	0.542	0.559	0.592	0.623
1,1,1,2-Tetrachloroethane	0.313	0.381	0.360	0.396	0.406
m,p-xylene	0.592	0.664	0.689	0.753	0.781
o-Xylene	0.554	0.711	0.674	0.803	0.824
Styrene	0.806	0.943	0.976	1.133	1.238
Bromoform	0.162	0.193	0.207	0.230	0.248
1,1,2,2-Tetrachloroethane	0.528	0.580	0.618	0.604	0.617
1,2,3-Trichloropropane		0.151	0.167	0.166	0.169
Trans-1,4-Dichloro 2-Butene			0.168	0.160	0.166
N-Propyl Benzene	3.104	3.414	3.801	3.865	3.931
Bromobenzene	0.634	0.683	0.699	0.711	0.699
Isopropyl Benzene	2.336	2.635	2.765	3.279	3.447
2-Chloro Toluene	2.122	2.469	2.714	2.816	2.841
4-Chloro Toluene	1.938	2.088	2.413	2.536	2.476
T-Butyl Benzene	1.503	1.768	2.110	2.279	2.448
1,3,5-Trimethyl Benzene	2.001	2.332	2.634	2.814	2.971
1,2,4-Trimethylbenzene	1.854	2.290	2.601	2.888	2.946
S-Butyl Benzene	2.471	2.983	3.264	3.599	3.690
4-Isopropyl Toluene	1.732	2.324	2.491	2.820	2.971
1,3-Dichlorobenzene	1.311	1.498	1.486	1.568	1.502
1,4-Dichlorobenzene	1.443	1.544	1.549	1.634	1.530
N-Butyl Benzene	2.195	2.348	2.401	2.778	2.857
1,2-Dichlorobenzene	1.353	1.503	1.376	1.518	1.442
1,2-Dibromo 3-Chloropropane		0.095	0.081	0.101	0.099
1,2,4-Trichlorobenzene	0.852	0.848	0.770	0.977	0.946
Hexachloro 1,3-Butadiene		0.441	0.391	0.464	0.426
Naphthalene		1.070	1.186	1.487	1.531
1,2,3-Trichlorobenzene		0.653	0.639	0.799	0.729
Dichlorodifluoromethane	0.705	0.741	0.773	0.773	0.711
Methyl tert butyl ether	1.754	1.942	1.969	2.044	1.892

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF0.2: 0020416 RF0.5: 0050416 RF1: 0100416
RF2: 0200416A RF10: 1000416

COMPOUND	RF0.2	RF0.5	RF1	RF2	RF10
d4-1,2-Dichloroethane	0.631	0.615	0.640	0.629	0.610
d8-Toluene	1.184	1.173	1.119	1.204	1.201
4-Bromofluorobenzene	0.589	0.587	0.563	0.577	0.620
d4-1,2-Dichlorobenzene	0.936	0.928	0.884	0.924	0.915
Dibromofluoromethane	0.592	0.588	0.580	0.579	0.565

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF20: 2000416 RF40: 4000416 RF60: 6000416

COMPOUND	RF20	RF40	RF60
Chloromethane	1.056	0.983	0.913
Vinyl Chloride	0.984	0.964	0.898
Bromomethane	0.446	0.418	0.380
Chloroethane	0.509	0.404	
Trichlorofluoromethane	0.807	0.795	0.721
Acrolein	0.094	0.094	0.090
112Trichloro122Trifluoroetha	0.626	0.610	0.566
Acetone	0.121	0.121	0.116
1,1-Dichloroethene	0.622	0.582	0.577
Bromoethane	0.503	0.487	0.455
Iodomethane	0.989	0.952	0.866
Methylene Chloride	0.791	0.761	0.706
Acrylonitrile	0.174	0.177	0.172
Carbon Disulfide	2.439	2.208	2.176
Trans-1,2-Dichloroethene	0.745	0.723	0.677
Vinyl Acetate	0.764	0.815	0.851
1,1-Dichloroethane	1.390	1.368	1.298
2-Butanone	0.171	0.174	0.179
2,2-Dichloropropane	0.801	0.759	0.699
Cis-1,2-Dichloroethene	0.731	0.719	0.685
Chloroform	1.194	1.162	1.116
Bromochloromethane	0.278	0.270	0.263
1,1,1-Trichloroethane	0.989	0.961	0.913
1,1-Dichloropropene	0.600	0.587	0.552
Carbon Tetrachloride	0.466	0.450	0.411
1,2-Dichloroethane	0.430	0.425	0.410
Benzene	1.662	1.611	1.511
Trichloroethene	0.346	0.342	0.334
1,2-Dichloropropane	0.378	0.381	0.385
Bromodichloromethane	0.439	0.442	0.448
Dibromomethane	0.166	0.165	0.166
2-Chloroethyl Vinyl Ether	0.126	0.139	0.158
4-Methyl-2-Pentanone	0.098	0.096	0.096
Cis 1,3-dichloropropene	0.492	0.517	0.545
Toluene	0.849	0.868	0.869
Trans 1,3-Dichloropropene	0.389	0.402	0.423
2-Hexanone	0.158	0.159	0.166

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF20: 2000416 RF40: 4000416 RF60: 6000416

COMPOUND	RF20	RF40	RF60
1,1,2-Trichloroethane	0.198	0.208	0.220
1,3-Dichloropropane	0.478	0.480	0.500
Tetrachloroethene	0.395	0.368	0.354
Chlorodibromomethane	0.277	0.288	0.289
1,2-Dibromoethane	0.185	0.198	0.212
Chlorobenzene	1.002	0.982	0.959
Ethyl Benzene	0.566	0.561	0.537
1,1,1,2-Tetrachloroethane	0.400	0.379	0.348
m,p-xylene	0.721	0.665	0.628
o-Xylene	0.777	0.726	0.690
Styrene	1.165	1.153	1.132
Bromoform	0.278	0.285	
1,1,2,2-Tetrachloroethane	0.599	0.622	0.638
1,2,3-Trichloropropane	0.164	0.162	0.165
Trans-1,4-Dichloro 2-Butene	0.166	0.177	0.185
N-Propyl Benzene	3.803	3.740	3.690
Bromobenzene	0.686	0.669	0.706
Isopropyl Benzene	3.374	3.205	3.249
2-Chloro Toluene	2.757	2.765	2.743
4-Chloro Toluene	2.353	2.467	2.502
T-Butyl Benzene	2.403	2.318	2.341
1,3,5-Trimethyl Benzene	2.867	2.801	2.698
1,2,4-Trimethylbenzene	2.796	2.726	2.749
S-Butyl Benzene	3.594	3.373	3.363
4-Isopropyl Toluene	2.860	2.809	2.724
1,3-Dichlorobenzene	1.474	1.437	1.412
1,4-Dichlorobenzene	1.459	1.439	1.420
N-Butyl Benzene	2.775	2.645	2.585
1,2-Dichlorobenzene	1.364	1.307	1.301
1,2-Dibromo 3-Chloropropane	0.096	0.093	0.097
1,2,4-Trichlorobenzene	0.965	0.864	0.828
Hexachloro 1,3-Butadiene	0.410	0.382	0.359
Naphthalene	1.519	1.392	1.413
1,2,3-Trichlorobenzene	0.703	0.620	0.610
Dichlorodifluoromethane	0.700	0.648	0.621
Methyl tert butyl ether	1.842	1.838	1.748

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

LAB FILE ID: RF20: 2000416 RF40: 4000416 RF60: 6000416

COMPOUND	RF20	RF40	RF60
d4-1,2-Dichloroethane	0.600	0.596	0.605
d8-Toluene	1.179	1.212	1.261
4-Bromofluorobenzene	0.576	0.579	0.563
d4-1,2-Dichlorobenzene	0.903	0.873	0.866
Dibromofluoromethane	0.564	0.557	0.542

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
Chloromethane	AVRG	1.095	11.3
Vinyl Chloride	AVRG	1.039	8.4
Bromomethane	AVRG	0.478	13.8
Chloroethane	2ORDR		0.9996
Trichlorofluoromethane	AVRG	0.840	7.6
Acrolein	AVRG	0.096	4.8
112Trichloro122Trifluoroetha	AVRG	0.672	10.3
Acetone	LINR		0.9987
1,1-Dichloroethene	AVRG	0.684	12.4
Bromoethane	AVRG	0.522	9.5
Iodomethane	AVRG	1.028	8.7
Methylene Chloride	LINR		0.9963
Acrylonitrile	AVRG	0.173	3.6
Carbon Disulfide	AVRG	2.555	10.3
Trans-1,2-Dichloroethene	AVRG	0.773	8.2
Vinyl Acetate	AVRG	0.737	10.9
1,1-Dichloroethane	AVRG	1.440	6.4
2-Butanone	AVRG	0.174	3.2
2,2-Dichloropropane	AVRG	0.824	8.4
Cis-1,2-Dichloroethene	AVRG	0.747	6.2
Chloroform	AVRG	1.228	5.4
Bromochloromethane	AVRG	0.284	5.6
1,1,1-Trichloroethane	AVRG	1.005	5.6
1,1-Dichloropropene	AVRG	0.598	5.2
Carbon Tetrachloride	AVRG	0.472	8.0
1,2-Dichloroethane	AVRG	0.443	6.2
Benzene	AVRG	1.733	8.4
Trichloroethene	AVRG	0.361	6.1
1,2-Dichloropropane	AVRG	0.395	3.7
Bromodichloromethane	AVRG	0.431	6.9
Dibromomethane	AVRG	0.172	4.3
2-Chloroethyl Vinyl Ether	AVRG	0.128	14.2
4-Methyl-2-Pentanone	AVRG	0.094	10.0
Cis 1,3-dichloropropene	AVRG	0.471	11.6
Toluene	AVRG	0.877	4.8
Trans 1,3-Dichloropropene	AVRG	0.375	9.2
2-Hexanone	AVRG	0.155	8.0

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
1,1,2-Trichloroethane	AVRG	0.206	5.2
1,3-Dichloropropane	AVRG	0.470	5.4
Tetrachloroethene	AVRG	0.390	7.5
Chlorodibromomethane	AVRG	0.260	10.4
1,2-Dibromoethane	AVRG	0.194	6.3
Chlorobenzene	AVRG	1.024	4.9
Ethyl Benzene	AVRG	0.558	7.3
1,1,1,2-Tetrachloroethane	AVRG	0.373	8.4
m,p-xylene	AVRG	0.687	9.2
o-Xylene	AVRG	0.720	11.9
Styrene	AVRG	1.068	13.6
Bromoform	AVRG	0.229	19.7
1,1,2,2-Tetrachloroethane	AVRG	0.601	5.7
1,2,3-Trichloropropane	AVRG	0.164	3.6
Trans-1,4-Dichloro 2-Butene	AVRG	0.170	5.4
N-Propyl Benzene	AVRG	3.668	7.5
Bromobenzene	AVRG	0.686	3.6
Isopropyl Benzene	AVRG	3.036	13.3
2-Chloro Toluene	AVRG	2.654	9.2
4-Chloro Toluene	AVRG	2.347	9.2
T-Butyl Benzene	AVRG	2.146	15.8
1,3,5-Trimethyl Benzene	AVRG	2.640	12.2
1,2,4-Trimethylbenzene	AVRG	2.606	14.0
S-Butyl Benzene	AVRG	3.292	12.2
4-Isopropyl Toluene	AVRG	2.592	15.7
1,3-Dichlorobenzene	AVRG	1.461	5.2
1,4-Dichlorobenzene	AVRG	1.502	4.9
N-Butyl Benzene	AVRG	2.573	9.2
1,2-Dichlorobenzene	AVRG	1.396	6.0
1,2-Dibromo 3-Chloropropane	AVRG	0.095	7.1
1,2,4-Trichlorobenzene	AVRG	0.881	8.3
Hexachloro 1,3-Butadiene	AVRG	0.411	8.9
Naphthalene	AVRG	1.371	12.9
1,2,3-Trichlorobenzene	AVRG	0.679	10.0
Dichlorodifluoromethane	AVRG	0.709	7.7
Methyl tert butyl ether	AVRG	1.878	5.5

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Calibration Date: 04/16/12

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
d4-1,2-Dichloroethane	AVRG	0.616	2.6
d8-Toluene	AVRG	1.192	3.4
4-Bromofluorobenzene	AVRG	0.582	3.1
d4-1,2-Dichlorobenzene	AVRG	0.904	2.9
Dibromofluoromethane	AVRG	0.571	3.0

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Cont. Calib. Date: 04/30/12

Init. Calib. Date: 04/16/12 Cont. Calib. Time: 1422

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Chloromethane	1.095	1.0598	0.100	AVRG	-3.2	
Vinyl Chloride	1.039	0.9425	0.010	AVRG	-9.3	
Bromomethane	0.478	0.3980	0.010	AVRG	-16.7	
Chloroethane	10.000	7.600	0.010	2ORDR	-24.0	<-
Trichlorofluoromethane	0.840	0.8660	0.010	AVRG	3.1	
Acrolein	0.097	0.0769	0.010	AVRG	-20.4	<-
112Trichloro122Trifluoroetha	0.672	0.6255	0.010	AVRG	-6.9	
Acetone	50.000	64.194	0.010	LINR	28.4	<-
1,1-Dichloroethene	0.684	0.6232	0.010	AVRG	-8.9	
Bromoethane	0.522	0.4646	0.010	AVRG	-11.0	
Iodomethane	1.028	0.9181	0.010	AVRG	-10.7	
Methylene Chloride	10.000	10.030	0.010	LINR	0.3	
Acrylonitrile	0.173	0.1679	0.010	AVRG	-2.9	
Carbon Disulfide	2.555	2.3390	0.010	AVRG	-8.4	
Trans-1,2-Dichloroethene	0.773	0.6874	0.010	AVRG	-11.1	
Vinyl Acetate	0.737	0.7406	0.010	AVRG	0.5	
1,1-Dichloroethane	1.440	1.3865	0.100	AVRG	-3.7	
2-Butanone	0.174	0.1894	0.010	AVRG	8.8	
2,2-Dichloropropane	0.824	0.8053	0.010	AVRG	-2.3	
Cis-1,2-Dichloroethene	0.747	0.6838	0.010	AVRG	-8.5	
Chloroform	1.228	1.2029	0.010	AVRG	-2.0	
Bromochloromethane	0.284	0.2757	0.010	AVRG	-2.9	
1,1,1-Trichloroethane	1.005	0.9989	0.010	AVRG	-0.6	
1,1-Dichloropropene	0.598	0.6127	0.010	AVRG	2.4	
Carbon Tetrachloride	0.472	0.4932	0.010	AVRG	4.5	
1,2-Dichloroethane	0.443	0.4834	0.010	AVRG	9.1	
Benzene	1.733	1.6927	0.010	AVRG	-2.3	
Trichloroethene	0.360	0.3543	0.010	AVRG	-1.6	
1,2-Dichloropropane	0.395	0.3984	0.010	AVRG	0.9	
Bromodichloromethane	0.431	0.4509	0.010	AVRG	4.6	
Dibromomethane	0.172	0.1804	0.010	AVRG	4.9	
2-Chloroethyl Vinyl Ether	0.128	0.1445	0.010	AVRG	12.9	
4-Methyl-2-Pentanone	0.094	0.1071	0.010	AVRG	13.9	
Cis 1,3-dichloropropene	0.471	0.5303	0.010	AVRG	12.6	
Toluene	0.877	0.9384	0.010	AVRG	7.0	
Trans 1,3-Dichloropropene	0.375	0.4367	0.010	AVRG	16.4	
2-Hexanone	0.155	0.1854	0.010	AVRG	19.6	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII VOA

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Cont. Calib. Date: 04/30/12

Init. Calib. Date: 04/16/12 Cont. Calib. Time: 1422

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
1,1,2-Trichloroethane	0.206	0.2204	0.010	AVRG	7.0	
1,3-Dichloropropane	0.470	0.4795	0.010	AVRG	2.0	
Tetrachloroethene	0.391	0.3975	0.010	AVRG	1.7	
Chlorodibromomethane	0.260	0.2588	0.010	AVRG	-0.5	
1,2-Dibromoethane	0.194	0.2107	0.010	AVRG	8.6	
Chlorobenzene	1.024	1.0008	0.300	AVRG	-2.3	
Ethyl Benzene	0.558	0.5664	0.010	AVRG	1.5	
1,1,1,2-Tetrachloroethane	0.373	0.3531	0.010	AVRG	-5.3	
m,p-xylene	0.687	0.7111	0.010	AVRG	3.5	
o-Xylene	0.720	0.7218	0.010	AVRG	0.2	
Styrene	1.068	1.1230	0.010	AVRG	5.1	
Bromoform	0.229	0.2530	0.100	AVRG	10.5	
1,1,2,2-Tetrachloroethane	0.601	0.5800	0.300	AVRG	-3.5	
1,2,3-Trichloropropane	0.163	0.1707	0.010	AVRG	4.7	
Trans-1,4-Dichloro 2-Butene	0.170	0.1757	0.010	AVRG	3.4	
N-Propyl Benzene	3.668	3.9705	0.010	AVRG	8.2	
Bromobenzene	0.686	0.6791	0.010	AVRG	-1.0	
Isopropyl Benzene	3.036	3.3094	0.010	AVRG	9.0	
2-Chloro Toluene	2.653	2.7386	0.010	AVRG	3.2	
4-Chloro Toluene	2.347	2.4784	0.010	AVRG	5.6	
T-Butyl Benzene	2.146	2.3986	0.010	AVRG	11.8	
1,3,5-Trimethyl Benzene	2.640	2.8856	0.010	AVRG	9.3	
1,2,4-Trimethylbenzene	2.606	2.8779	0.010	AVRG	10.4	
S-Butyl Benzene	3.292	3.7319	0.010	AVRG	13.4	
4-Isopropyl Toluene	2.591	3.0128	0.010	AVRG	16.3	
1,3-Dichlorobenzene	1.461	1.4558	0.010	AVRG	-0.4	
1,4-Dichlorobenzene	1.502	1.4660	0.010	AVRG	-2.4	
N-Butyl Benzene	2.573	3.0533	0.010	AVRG	18.7	
1,2-Dichlorobenzene	1.396	1.3415	0.010	AVRG	-3.9	
1,2-Dibromo 3-Chloropropane	0.094	0.0901	0.010	AVRG	-4.1	
1,2,4-Trichlorobenzene	0.881	0.9181	0.010	AVRG	4.2	
Hexachloro 1,3-Butadiene	0.410	0.5326	0.010	AVRG	29.9	<-
Naphthalene	1.371	1.3756	0.010	AVRG	0.3	
1,2,3-Trichlorobenzene	0.679	0.7042	0.010	AVRG	3.7	
Dichlorodifluoromethane	0.709	0.7037	0.010	AVRG	-0.7	
Methyl tert butyl ether	1.879	1.7802	0.010	AVRG	-5.2	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

UR78:00057

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT2 Cont. Calib. Date: 04/30/12

Init. Calib. Date: 04/16/12 Cont. Calib. Time: 1422

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
d4-1,2-Dichloroethane	0.616	0.6503	0.010	AVRG	5.6
d8-Toluene	1.192	1.2807	0.010	AVRG	7.4
4-Bromofluorobenzene	0.582	0.5689	0.010	AVRG	-2.2
d4-1,2-Dichlorobenzene	0.904	0.9074	0.010	AVRG	0.4
Dibromofluoromethane	0.571	0.5594	0.010	AVRG	-2.0

<- Exceeds QC limit of 20% D

* RF less than minimum RF

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 Ical Date: 04/16/12

Instrument ID: NT2 Project Run Date: 04/16/12

		IS1(PFB) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CLB) AREA	#	RT	#
	ICAL MIDPT	208250		5.45		328641		5.85		264744		7.92	
	UPPER LIMIT	416500		5.95		657282		6.35		529488		8.42	
	LOWER LIMIT	104125		4.95		164320		5.35		132372		7.42	
	Sample ID												
01	ICV10	212095		5.45		340138		5.85		291069		7.92	
02													
03													
04													
05													
06													
07													
08													
09													
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13													
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16													
17													
18													
19													
20													
21													
22													

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = d5-Chlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC | Client: ERM-WEST

ARI Job No: UR78 | Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 | Ical Date: 04/16/12

Instrument ID: NT2 | Project Run Date: 04/16/12

	Sample ID	IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	182729	9.62				
	UPPER LIMIT	365458	10.12				
	LOWER LIMIT	91364	9.12				
01	ICV10	184224	9.62				
02							
03							
04							
05							
06							
07							
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22							

IS4 (DCB) = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 Ical Date: 04/16/12

Instrument ID: NT2 Project Run Date: 04/30/12

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CLB) AREA #	RT #
	ICAL MIDPT	208250	5.45	328641	5.85	264744	7.92
	UPPER LIMIT	416500	5.95	657282	6.35	529488	8.42
	LOWER LIMIT	104125	4.95	164320	5.35	132372	7.42
	Sample ID						
01	LCS0430	166064	5.45	256792	5.85	236461	7.92
02	LCS0430	175874	5.45	280988	5.85	256037	7.92
03	MB0430	164786	5.45	260066	5.85	238755	7.92
04	MW-4S-042512	160427	5.45	256089	5.84	226743	7.92
05	TB-042512-1	153962	5.45	244982	5.85	215947	7.92
06							
07							
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22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = d5-Chlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 1000416 Ical Date: 04/16/12

Instrument ID: NT2 Project Run Date: 04/30/12

		IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	182729	9.62				
	UPPER LIMIT	365458	10.12				
	LOWER LIMIT	91364	9.12				
	Sample ID						
01	LCS0430	148441	9.62				
02	LCS0430	154828	9.62				
03	MB0430	151746	9.62				
04	MW-4S-042512	140519	9.62				
05	TB-042512-1	138463	9.62				
06							
07							
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21							
22							

IS4 (DCB) = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Ical midpoint
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Ical midpoint

* Values outside of QC limits.

Semivolatile Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-1S-042512
SAMPLE

Lab Sample ID: UR78A
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 14:07
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.8%	2-Fluorobiphenyl	61.2%
d14-p-Terphenyl	76.4%	d4-1,2-Dichlorobenzene	54.8%
2-Fluorophenol	59.2%	2,4,6-Tribromophenol	83.5%
d4-2-Chlorophenol	64.8%		

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-1D-042512
SAMPLE

Lab Sample ID: UR78B
LIMS ID: 12-7340
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 14:42
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	57.6%	2-Fluorobiphenyl	62.8%
d14-p-Terphenyl	55.2%	d4-1,2-Dichlorobenzene	52.8%
d5-Phenol	59.7%	2-Fluorophenol	59.7%
2,4,6-Tribromophenol	96.3%	d4-2-Chlorophenol	67.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-17-042512
SAMPLE

Lab Sample ID: UR78C
LIMS ID: 12-7341
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 15:17
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	57.6%	2-Fluorobiphenyl	62.0%
d14-p-Terphenyl	80.8%	d4-1,2-Dichlorobenzene	54.0%
d5-Phenol	60.3%	2-Fluorophenol	59.7%
2,4,6-Tribromophenol	90.1%	d4-2-Chlorophenol	65.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-4S-042512
SAMPLE

Lab Sample ID: UR78D
LIMS ID: 12-7342
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 15:51
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.0%	2-Fluorobiphenyl	60.4%
d14-p-Terphenyl	77.6%	d4-1,2-Dichlorobenzene	51.2%
d5-Phenol	59.5%	2-Fluorophenol	63.2%
2,4,6-Tribromophenol	91.2%	d4-2-Chlorophenol	64.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-22-042512
SAMPLE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 16:26
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.4%	2-Fluorobiphenyl	66.8%
d14-p-Terphenyl	79.2%	d4-1,2-Dichlorobenzene	58.0%
d5-Phenol	64.3%	2-Fluorophenol	67.5%
2,4,6-Tribromophenol	97.3%	d4-2-Chlorophenol	69.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MW-23-042512
SAMPLE

Lab Sample ID: UR78F
LIMS ID: 12-7344
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 18:09
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.0%	2-Fluorobiphenyl	64.4%
d14-p-Terphenyl	87.2%	d4-1,2-Dichlorobenzene	54.4%
d5-Phenol	64.8%	2-Fluorophenol	68.8%
2,4,6-Tribromophenol	98.9%	d4-2-Chlorophenol	70.7%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: DUP-042512-1
SAMPLE

Lab Sample ID: UR78G
LIMS ID: 12-7345
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 18:43
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	52.8%	2-Fluorobiphenyl	56.8%
d14-p-Terphenyl	72.4%	d4-1,2-Dichlorobenzene	51.6%
d5-Phenol	55.2%	2-Fluorophenol	58.9%
2,4,6-Tribromophenol	82.4%	d4-2-Chlorophenol	60.5%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MW-1S-042512	56.8%	61.2%	76.4%	54.8%	NA	59.2%	83.5%	64.8%	0
MW-1D-042512	57.6%	62.8%	55.2%	52.8%	59.7%	59.7%	96.3%	67.2%	0
MW-17-042512	57.6%	62.0%	80.8%	54.0%	60.3%	59.7%	90.1%	65.1%	0
MW-4S-042512	56.0%	60.4%	77.6%	51.2%	59.5%	63.2%	91.2%	64.0%	0
MB-043012	66.8%	69.6%	82.0%	60.4%	70.9%	69.9%	97.3%	77.3%	0
LCS-043012	60.4%	66.4%	80.0%	56.0%	67.2%	62.7%	104%	69.3%	0
MW-22-042512	60.4%	66.8%	79.2%	58.0%	64.3%	67.5%	97.3%	69.6%	0
MW-22-042512 MS	56.4%	63.6%	80.0%	49.6%	62.7%	59.5%	104%	64.8%	0
MW-22-042512 MSD	60.4%	66.4%	80.0%	53.2%	67.2%	65.1%	98.4%	69.3%	0
MW-23-042512	62.0%	64.4%	87.2%	54.4%	64.8%	68.8%	98.9%	70.7%	0
DUP-042512-1	52.8%	56.8%	72.4%	51.6%	55.2%	58.9%	82.4%	60.5%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-100)	(39-100)
(FBP) = 2-Fluorobiphenyl	(49-100)	(42-100)
(TPH) = d14-p-Terphenyl	(53-119)	(26-114)
(DCB) = d4-1,2-Dichlorobenzene	(38-100)	(32-100)
(PHL) = d5-Phenol	(50-100)	(41-100)
(2FP) = 2-Fluorophenol	(46-100)	(38-100)
(TBP) = 2,4,6-Tribromophenol	(52-123)	(48-118)
(2CP) = d4-2-Chlorophenol	(53-100)	(44-100)

Prep Method: SW3520C
Log Number Range: 12-7339 to 12-7345

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-24-042512
SAMPLE

Lab Sample ID: US02A
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 19:17
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.4%	2-Fluorobiphenyl	61.6%
d14-p-Terphenyl	78.0%	d4-1,2-Dichlorobenzene	52.4%
d5-Phenol	60.3%	2-Fluorophenol	65.6%
2,4,6-Tribromophenol	90.9%	d4-2-Chlorophenol	66.1%

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-2D-042612
SAMPLE

Lab Sample ID: US02B
LIMS ID: 12-7560
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 19:52
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	52.4%	2-Fluorobiphenyl	57.6%
d14-p-Terphenyl	60.4%	d4-1,2-Dichlorobenzene	49.2%
d5-Phenol	55.7%	2-Fluorophenol	58.1%
2,4,6-Tribromophenol	92.8%	d4-2-Chlorophenol	60.8%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-2S-042612
SAMPLE

Lab Sample ID: US02C
LIMS ID: 12-7561
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 20:26
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	61.2%	2-Fluorobiphenyl	66.0%
d14-p-Terphenyl	80.4%	d4-1,2-Dichlorobenzene	59.6%
d5-Phenol	63.7%	2-Fluorophenol	67.5%
2,4,6-Tribromophenol	95.7%	d4-2-Chlorophenol	69.9%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-21-042612
SAMPLE

Lab Sample ID: US02D
LIMS ID: 12-7562
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 21:00
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	54.8%	2-Fluorobiphenyl	60.0%
d14-p-Terphenyl	79.2%	d4-1,2-Dichlorobenzene	52.8%
d5-Phenol	56.8%	2-Fluorophenol	60.5%
2,4,6-Tribromophenol	86.1%	d4-2-Chlorophenol	62.4%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-6S-042612
SAMPLE

Lab Sample ID: US02E
LIMS ID: 12-7563
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 21:35
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.0%	2-Fluorobiphenyl	63.2%
d14-p-Terphenyl	80.8%	d4-1,2-Dichlorobenzene	58.0%
d5-Phenol	60.5%	2-Fluorophenol	64.8%
2,4,6-Tribromophenol	85.9%	d4-2-Chlorophenol	66.4%

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-20-042612
SAMPLE

Lab Sample ID: US02F
LIMS ID: 12-7564
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 22:09
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	59.6%	2-Fluorobiphenyl	64.8%
d14-p-Terphenyl	80.0%	d4-1,2-Dichlorobenzene	57.6%
d5-Phenol	64.3%	2-Fluorophenol	68.3%
2,4,6-Tribromophenol	93.1%	d4-2-Chlorophenol	68.5%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-043012	66.8%	69.6%	82.0%	60.4%	70.9%	69.9%	97.3%	77.3%	0
LCS-043012	60.4%	66.4%	80.0%	56.0%	67.2%	62.7%	104%	69.3%	0
MW-24-042512	56.4%	61.6%	78.0%	52.4%	60.3%	65.6%	90.9%	66.1%	0
MW-2D-042612	52.4%	57.6%	60.4%	49.2%	55.7%	58.1%	92.8%	60.8%	0
MW-2S-042612	61.2%	66.0%	80.4%	59.6%	63.7%	67.5%	95.7%	69.9%	0
MW-21-042612	54.8%	60.0%	79.2%	52.8%	56.8%	60.5%	86.1%	62.4%	0
MW-6S-042612	58.0%	63.2%	80.8%	58.0%	60.5%	64.8%	85.9%	66.4%	0
MW-20-042612	59.6%	64.8%	80.0%	57.6%	64.3%	68.3%	93.1%	68.5%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-100)	(39-100)
(FBP) = 2-Fluorobiphenyl	(49-100)	(42-100)
(TPH) = d14-p-Terphenyl	(53-119)	(26-114)
(DCB) = d4-1,2-Dichlorobenzene	(38-100)	(32-100)
(PHL) = d5-Phenol	(50-100)	(41-100)
(2FP) = 2-Fluorophenol	(46-100)	(38-100)
(TBP) = 2,4,6-Tribromophenol	(52-123)	(48-118)
(2CP) = d4-2-Chlorophenol	(53-100)	(44-100)

Prep Method: SW3520C
Log Number Range: 12-7559 to 12-7564

UR78:00078

ANALYTICAL RESOURCES INCORPORATED

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Semivolatiles by SW8270D GC/MS
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Sample ID: MW-22-042512
MS/MSD

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted MS/MSD: 04/30/12

Date Analyzed MS: 05/02/12 17:00
MSD: 05/02/12 17:35
Instrument/Analyst MS: NT6/JZ
MSD: NT6/JZ

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 1.00
MSD: 1.00

GPC Cleanup: NO

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 1.0 U	16.4	25.0	65.6%	18.3	25.0	73.2%	11.0%
2-Chlorophenol	< 1.0 U	15.5	25.0	62.0%	17.2	25.0	68.8%	10.4%
2,4-Dichlorophenol	< 5.0 U	52.5	75.0	70.0%	56.6	75.0	75.5%	7.5%
2,4,6-Trichlorophenol	< 5.0 U	58.0	75.0	77.3%	61.0	75.0	81.3%	5.0%
2,4,5-Trichlorophenol	< 5.0 U	58.2	75.0	77.6%	61.0	75.0	81.3%	4.7%
2,3,4,6-Tetrachlorophenol	< 1.0 U	23.3 Q	25.0	93.2%	23.5 Q	25.0	94.0%	0.9%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
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Sample ID: MW-22-042512
MATRIX SPIKE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 17:00
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	---
95-57-8	2-Chlorophenol	1.0	---
120-83-2	2,4-Dichlorophenol	5.0	---
88-06-2	2,4,6-Trichlorophenol	5.0	---
95-95-4	2,4,5-Trichlorophenol	5.0	---
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	---

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.4%	2-Fluorobiphenyl	63.6%
d14-p-Terphenyl	80.0%	d4-1,2-Dichlorobenzene	49.6%
d5-Phenol	62.7%	2-Fluorophenol	59.5%
2,4,6-Tribromophenol	104%	d4-2-Chlorophenol	64.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
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Sample ID: MW-22-042512
MATRIX SPIKE DUP

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 17:35
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	---
95-57-8	2-Chlorophenol	1.0	---
120-83-2	2,4-Dichlorophenol	5.0	---
88-06-2	2,4,6-Trichlorophenol	5.0	---
95-95-4	2,4,5-Trichlorophenol	5.0	---
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	---

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.4%	2-Fluorobiphenyl	66.4%
d14-p-Terphenyl	80.0%	d4-1,2-Dichlorobenzene	53.2%
d5-Phenol	67.2%	2-Fluorophenol	65.1%
2,4,6-Tribromophenol	98.4%	d4-2-Chlorophenol	69.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
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Sample ID: LCS-043012
LAB CONTROL

Lab Sample ID: LCS-043012
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 12:57
Instrument/Analyst: NT6/JZ
GPC Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Phenol	17.6	25.0	70.4%
2-Chlorophenol	16.9	25.0	67.6%
2,4-Dichlorophenol	54.4	75.0	72.5%
2,4,6-Trichlorophenol	58.5	75.0	78.0%
2,4,5-Trichlorophenol	59.0	75.0	78.7%
2,3,4,6-Tetrachlorophenol	22.7 Q	25.0	90.8%

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.4%	2-Fluorobiphenyl	66.4%
d14-p-Terphenyl	80.0%	d4-1,2-Dichlorobenzene	56.0%
d5-Phenol	67.2%	2-Fluorophenol	62.7%
2,4,6-Tribromophenol	104%	d4-2-Chlorophenol	69.3%

Results reported in µg/L

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

UR78MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: ERM-WEST

ARI Job No: UR78

Project: RG SPRING GW SAMPLIN

Lab File ID: 05021202

Date Extracted: 04/30/12

Instrument ID: NT6

Date Analyzed: 05/02/12

Matrix: LIQUID

Time Analyzed: 1222

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	UR78LCSW1	UR78LCSW1	05021203	05/02/12
02	MW-1S-042512	UR78A	05021205	05/02/12
03	MW-1D-042512	UR78B	05021206	05/02/12
04	MW-17-042512	UR78C	05021207	05/02/12
05	MW-4S-042512	UR78D	05021208	05/02/12
06	MW-22-042512	UR78E	05021209	05/02/12
07	MW-22-042512 MS	UR78EMS	05021210	05/02/12
08	MW-22-042512 MSD	UR78EMSD	05021211	05/02/12
09	MW-23-042512	UR78F	05021212	05/02/12
10	DUP-042512-1	UR78G	05021213	05/02/12
11	MW-24-042512	US02A	05021214	05/02/12
12	MW-2D-042612	US02B	05021215	05/02/12
13	MW-2S-042612	US02C	05021216	05/02/12
14	MW-21-042612	US02D	05021217	05/02/12
15	MW-6S-042612	US02E	05021218	05/02/12
16	MW-20-042612	US02F	05021219	05/02/12
17				
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: MB-043012
METHOD BLANK

Lab Sample ID: MB-043012
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/03/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Date Extracted: 04/30/12
Date Analyzed: 05/02/12 12:22
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.8%	2-Fluorobiphenyl	69.6%
d14-p-Terphenyl	82.0%	d4-1,2-Dichlorobenzene	60.4%
d5-Phenol	70.9%	2-Fluorophenol	69.9%
2,4,6-Tribromophenol	97.3%	d4-2-Chlorophenol	77.3%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

Instrument ID: NT6 Project: RG SPRING GW SAMPLING

DFTPP Injection Date: 01/27/12 DFTPP Injection Time: 1327

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	30.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	34.8
70	Less than 2.0% of mass 69	0.3 (0.8)1
127	10.0 - 80.0% of mass 198	47.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	28.1
365	Greater than 1.0% of mass 198	3.44
441	0.0 - 24.0% of mass 442	22.4 (14.5)2
442	50.0 - 200.0% of mass 198	154.7
443	15.0 - 24.0% of mass 442	30.4 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC250127	IC250127	01271201	01/27/12	1327
02	IC10127	IC10127	01271202	01/27/12	1400
03	IC50127	IC50127	01271203	01/27/12	1433
04	IC100127	IC100127	01271204	01/27/12	1505
05	IC400127	IC400127	01271205	01/27/12	1538
06	IC600127	IC600127	01271206	01/27/12	1611
07	IC800127	IC800127	01271207	01/27/12	1644
08					
09					
10					
11					
12					
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14					
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19					
20					
21					
22					

UR78:00085

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

Instrument ID: NT6 Project: RG SPRING GW SAMPLING

DFTPP Injection Date: 05/02/12 DFTPP Injection Time: 1147

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	27.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	30.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	10.0 - 80.0% of mass 198	43.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 60.0% of mass 198	30.8
365	Greater than 1.0% of mass 198	4.17
441	0.0 - 24.0% of mass 442	28.0 (14.6)2
442	50.0 - 200.0% of mass 198	191.9
443	15.0 - 24.0% of mass 442	37.5 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0502	CC0502	05021201	05/02/12	1147
02	UR78MBW1	UR78MBW1	05021202	05/02/12	1222
03	UR78LCSW1	UR78LCSW1	05021203	05/02/12	1257
04	MW-1S-042512	UR78A	05021205	05/02/12	1407
05	MW-1D-042512	UR78B	05021206	05/02/12	1442
06	MW-17-042512	UR78C	05021207	05/02/12	1517
07	MW-4S-042512	UR78D	05021208	05/02/12	1551
08	MW-22-042512	UR78E	05021209	05/02/12	1626
09	MW-22-042512 MS	UR78EMS	05021210	05/02/12	1700
10	MW-22-042512 MSD	UR78EMSD	05021211	05/02/12	1735
11	MW-23-042512	UR78F	05021212	05/02/12	1809
12	DUP-042512-1	UR78G	05021213	05/02/12	1843
13	MW-24-042512	US02A	05021214	05/02/12	1917
14	MW-2D-042612	US02B	05021215	05/02/12	1952
15	MW-2S-042612	US02C	05021216	05/02/12	2026
16	MW-21-042612	US02D	05021217	05/02/12	2100
17	MW-6S-042612	US02E	05021218	05/02/12	2135
18	MW-20-042612	US02F	05021219	05/02/12	2209
19					
20					
21					
22					

FORM V SV

UR78:00086

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Calibration Date: 01/27/12

LAB FILE ID: RRF1 =01271202 RRF5 =01271203 RRF10 =01271204
RRF25 =01271201 RRF40 =01271205 RRF60 =01271206
RRF80 =01271207

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Phenol	1.667	1.342	1.566	1.629	1.537	1.355	1.332	1.490	9.6
Bis(2-Chloroethyl)ether	1.273	1.034	1.170	1.211	1.196	1.070	1.042	1.142	8.2
2-Chlorophenol	1.481	1.212	1.405	1.446	1.410	1.262	1.227	1.349	8.3
1,3-Dichlorobenzene	1.700	1.342	1.515	1.563	1.545	1.354	1.293	1.473	10.0
1,4-Dichlorobenzene	1.668	1.357	1.527	1.557	1.540	1.345	1.269	1.466	9.8
1,2-Dichlorobenzene	1.568	1.282	1.446	1.489	1.474	1.278	1.238	1.396	9.2
Benzyl alcohol	0.935	0.835	0.964	1.020	0.982	0.897	0.917	0.936	6.5
2,2'-oxybis(1-Chloropropane)	1.495	1.224	1.386	1.417	1.374	1.212	1.179	1.327	9.1
2-Methylphenol	1.259	1.048	1.232	1.275	1.255	1.130	1.086	1.184	7.9
Hexachloroethane	0.565	0.484	0.545	0.577	0.583	0.538	0.530	0.546	6.2
N-Nitroso-di-n-propylamine	0.821	0.717	0.812	0.851	0.841	0.758	0.743	0.792	6.6
4-Methylphenol	1.280	1.073	1.278	1.317	1.299	1.148	1.092	1.212	8.6
Nitrobenzene	0.378	0.319	0.346	0.348	0.341	0.303	0.291	0.332	9.0
Isophorone	0.526	0.465	0.503	0.516	0.509	0.460	0.452	0.490	6.2
2-Nitrophenol	0.183	0.172	0.201	0.211	0.212	0.200	0.198	0.197	7.4
2,4-Dimethylphenol	0.331	0.294	0.329	0.334	0.326	0.295	0.285	0.313	6.7
Bis(2-Chloroethoxy)methane	0.404	0.357	0.385	0.390	0.385	0.345	0.330	0.371	7.3
2,4-Dichlorophenol	0.280	0.273	0.311	0.315	0.311	0.283	0.272	0.292	6.6
1,2,4-Trichlorobenzene	0.377	0.315	0.338	0.342	0.340	0.303	0.287	0.329	9.1
Naphthalene	1.258	1.043	1.113	1.068	0.983	0.757		1.037	16.0
Benzoic acid		0.093	0.142	0.178	0.220	0.218	0.233	0.181	0.996
4-Chloroaniline	0.514	0.450	0.497	0.494	0.444	0.387	0.363	0.450	12.8
Hexachlorobutadiene	0.213	0.177	0.194	0.198	0.199	0.178	0.172	0.190	7.8
4-Chloro-3-methylphenol	0.257	0.238	0.274	0.280	0.282	0.256	0.252	0.263	6.3
2-Methylnaphthalene	0.689	0.578	0.639	0.637	0.596	0.507	0.465	0.587	13.4
Hexachlorocyclopentadiene		0.229	0.288	0.311	0.340	0.325	0.324	0.303	13.3
2,4,6-Trichlorophenol	0.312	0.299	0.354	0.367	0.372	0.341	0.336	0.340	8.0
2,4,5-Trichlorophenol	0.302	0.318	0.377	0.390	0.403	0.374	0.368	0.362	10.3
2-Chloronaphthalene	1.197	0.994	1.070	1.054	1.010	0.834	0.750	0.987	15.2
2-Nitroaniline	0.267	0.261	0.297	0.309	0.305	0.281	0.279	0.286	6.5
Acenaphthylene	2.002	1.700	1.865	1.786	1.674	1.302	1.148	1.640	18.7
Dimethylphthalate	1.164	0.999	1.099	1.107	1.083	0.939	0.900	1.042	9.3
2,6-Dinitrotoluene	0.228	0.222	0.262	0.274	0.286	0.262	0.260	0.256	9.1
Acenaphthene	1.307	1.045	1.145	1.124	1.099	0.908	0.844	1.067	14.5
3-Nitroaniline	0.321	0.296	0.345	0.348	0.305	0.249	0.223	0.298	15.8
2,4-Dinitrophenol		0.054	0.098	0.137	0.168	0.170	0.174	0.134	0.996
Dibenzofuran	1.887	1.510	1.662	1.604	1.491	1.215	1.088	1.494	18.1

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-1

UR78:00087

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Calibration Date: 01/27/12

LAB FILE ID: RRF1 =01271202 RRF5 =01271203 RRF10 =01271204
RRF25 =01271201 RRF40 =01271205 RRF60 =01271206
RRF80 =01271207

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF	%RSD /R^2
4-Nitrophenol		0.084	0.118	0.129	0.134	0.114	0.110	0.115	15.2
2,4-Dinitrotoluene	0.272	0.287	0.339	0.356	0.370	0.338	0.339	0.329	11.0
Fluorene	1.424	1.183	1.321	1.323	1.272	1.046	0.939	1.215	14.1
4-Chlorophenyl-phenylether	0.655	0.529	0.593	0.610	0.612	0.534	0.501	0.576	9.6
Diethylphthalate	1.133	0.983	1.097	1.107	1.103	0.951	0.877	1.036	9.5
4-Nitroaniline	0.296	0.272	0.300	0.310	0.301	0.282	0.282	0.292	4.6
4,6-Dinitro-2-methylphenol		0.090	0.122	0.140	0.152	0.146	0.151	0.134	17.9
N-Nitrosodiphenylamine (1)	0.581	0.486	0.540	0.546	0.538	0.473	0.447	0.516	9.3
4-Bromophenyl-phenylether	0.242	0.213	0.236	0.243	0.243	0.221	0.218	0.231	5.6
Hexachlorobenzene	0.312	0.261	0.288	0.296	0.292	0.261	0.254	0.280	7.8
Pentachlorophenol		0.086	0.119	0.155	0.168	0.166	0.173	0.144	0.994
Phenanthrene	1.298	1.044	1.157	1.129	1.046	0.854	0.771	1.043	17.3
Anthracene	1.262	1.085	1.196	1.169	1.080	0.848	0.767	1.058	17.4
Carbazole	0.966	0.807	0.868	0.851	0.834	0.712	0.658	0.814	12.5
Di-n-butylphthalate	1.059	0.997	1.113	1.123	1.046	0.837	0.750	0.989	14.4
Fluoranthene	1.209	1.064	1.186	1.205	1.112	0.878	0.805	1.066	15.3
Pyrene	1.271	1.086	1.205	1.124	1.060	0.846	0.747	1.048	18.0
Butylbenzylphthalate	0.359	0.378	0.438	0.459	0.467	0.416	0.402	0.417	9.7
Benzo(a)anthracene	1.118	0.989	1.090	1.084	1.041	0.842	0.792	0.994	12.9
3,3'-Dichlorobenzidine	0.363	0.326	0.365	0.372	0.339	0.289	0.265	0.331	12.3
Chrysene	1.179	0.948	1.048	1.030	0.969	0.792	0.712	0.954	16.6
bis(2-Ethylhexyl)phthalate	0.501	0.486	0.567	0.580	0.575	0.497	0.473	0.526	8.8
Di-n-octylphthalate	1.131	0.911	1.006	0.995	0.942	0.771	0.698	0.922	15.9
Benzo(b)fluoranthene	0.994	0.959	1.098	1.095	1.038	0.890		1.012	8.0
Benzo(k)fluoranthene	1.333	1.080	1.186	1.210	1.129	0.805		1.124	15.9
Benzo(a)pyrene	0.951	0.848	0.976	1.009	0.969	0.788	0.716	0.894	12.4
Indeno(1,2,3-cd)pyrene	1.368	1.186	1.362	1.416	1.465	1.267	1.216	1.326	7.9
Dibenzo(a,h)anthracene	1.077	0.971	1.128	1.169	1.195	0.996	0.932	1.067	9.6
Benzo(g,h,i)perylene	1.274	1.053	1.194	1.213	1.265	1.095	1.048	1.163	8.3
N-Nitrosodimethylamine	0.758	0.647	0.736	0.751	0.770	0.701	0.715	0.725	5.8
Aniline	2.153	1.804	2.089	2.130	1.969	1.760	1.699	1.943	9.7
Benzidine		0.348	0.335	0.265	0.255	0.243	0.237	0.280	17.3
Pyridine	1.285	1.110	1.287	1.318	1.337	1.203	1.219	1.251	6.3
1-methylnaphthalene	0.590	0.443	0.481	0.487	0.464	0.409	0.386	0.466	14.2
Azobenzene (1,2-DP-Hydrazine	1.074	0.934	1.040	1.039	1.020	0.865	0.795	0.967	10.8
2,3,4,6-Tetrachlorophenol	0.180	0.217	0.272	0.300	0.315	0.294	0.296	0.268	18.7
1,2,4,5-Tetrachlorobenzene	0.583	0.459	0.502	0.496	0.499	0.446	0.429	0.488	10.4

(1) Cannot be seperated from Diphenylamine

<- Outside QC limits: %RSD <20% or R^2 > 0.990

UR78:00088

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Calibration Date: 01/27/12

LAB FILE ID: RRF1 =01271202 RRF5 =01271203 RRF10 =01271204
RRF25 =01271201 RRF40 =01271205 RRF60 =01271206
RRF80 =01271207

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Total Benzofluoranthenes	1.104	0.962	1.084	1.092	1.022	0.794	0.686	0.963	17.0
2-Fluorophenol	1.250	1.209	1.182	1.311	1.269	1.150		1.228	4.8
Phenol-d5	1.560	1.446	1.455	1.560	1.498	1.356		1.479	5.3
2-Chlorophenol-d4	1.385	1.289	1.293	1.396	1.333	1.205		1.317	5.4
1,2-Dichlorobenzene-d4	1.076	0.927	0.913	1.001	0.950	0.834		0.950	8.6
Nitrobenzene-d5	0.372	0.350	0.337	0.363	0.350	0.320		0.349	5.3
2-Fluorobiphenyl	1.373	1.233	1.188	1.222	1.140	0.962		1.186	11.3
2,4,6-Tribromophenol	0.178	0.201	0.210	0.242	0.243	0.228		0.217	11.9
Terphenyl-d14	0.729	0.701	0.695	0.726	0.690	0.591		0.689	7.3

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-3

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Cont. Calib. Date: 05/02/12

Init. Calib. Date: 01/27/12 Cont. Calib. Time: 1147

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Phenol	1.490	1.630	0.800	AVRG	9.4
Bis(2-Chloroethyl)ether	1.142	1.187	0.700	AVRG	3.9
2-Chlorophenol	1.349	1.465	0.800	AVRG	8.6
1,3-Dichlorobenzene	1.473	1.591	0.010	AVRG	8.0
1,4-Dichlorobenzene	1.466	1.601	0.010	AVRG	9.2
1,2-Dichlorobenzene	1.396	1.543	0.010	AVRG	10.5
Benzyl alcohol	0.936	1.018	0.010	AVRG	8.8
2,2'-oxybis(1-Chloropropane)	1.327	1.274	0.010	AVRG	-4.0
2-Methylphenol	1.184	1.264	0.700	AVRG	6.8
Hexachloroethane	0.546	0.562	0.300	AVRG	2.9
N-Nitroso-di-n-propylamine	0.792	0.809	0.500	AVRG	2.1
4-Methylphenol	1.212	1.320	0.600	AVRG	8.9
Nitrobenzene	0.332	0.329	0.200	AVRG	-0.9
Isophorone	0.490	0.497	0.400	AVRG	1.4
2-Nitrophenol	0.197	0.223	0.100	AVRG	13.2
2,4-Dimethylphenol	0.313	0.336	0.200	AVRG	7.3
Bis(2-Chloroethoxy)methane	0.371	0.371	0.300	AVRG	0.0
2,4-Dichlorophenol	0.292	0.338	0.200	AVRG	15.8
1,2,4-Trichlorobenzene	0.329	0.370	0.010	AVRG	12.5
Naphthalene	1.037	1.085	0.700	AVRG	4.6
Benzoic acid	50.00	46.46	0.010	2ORDR	-7.1
4-Chloroaniline	0.450	0.468	0.010	AVRG	4.0
Hexachlorobutadiene	0.190	0.221	0.010	AVRG	16.3
4-Chloro-3-methylphenol	0.263	0.288	0.200	AVRG	9.5
2-Methylnaphthalene	0.587	0.670	0.400	AVRG	14.1
Hexachlorocyclopentadiene	0.303	0.322	0.050	AVRG	6.3
2,4,6-Trichlorophenol	0.340	0.390	0.200	AVRG	14.7
2,4,5-Trichlorophenol	0.362	0.422	0.200	AVRG	16.6
2-Chloronaphthalene	0.987	1.066	0.800	AVRG	8.0
2-Nitroaniline	0.286	0.278	0.010	AVRG	-2.8
Acenaphthylene	1.640	1.783	0.900	AVRG	8.7
Dimethylphthalate	1.042	1.112	0.010	AVRG	6.7
2,6-Dinitrotoluene	0.256	0.279	0.200	AVRG	9.0
Acenaphthene	1.067	1.126	0.900	AVRG	5.5
3-Nitroaniline	0.298	0.331	0.010	AVRG	11.1
2,4-Dinitrophenol	50.00	49.78	0.010	2ORDR	-0.4
Dibenzofuran	1.494	1.679	0.800	AVRG	12.4

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII SV-1

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Cont. Calib. Date: 05/02/12

Init. Calib. Date: 01/27/12 Cont. Calib. Time: 1147

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
4-Nitrophenol	0.115	0.106	0.010	AVRG	-7.8	
2,4-Dinitrotoluene	0.329	0.370	0.200	AVRG	12.5	
Fluorene	1.215	1.359	0.900	AVRG	11.8	
4-Chlorophenyl-phenylether	0.576	0.643	0.400	AVRG	11.6	
Diethylphthalate	1.036	1.073	0.010	AVRG	3.6	
4-Nitroaniline	0.292	0.277	0.010	AVRG	-5.1	
4,6-Dinitro-2-methylphenol	0.134	0.154	0.010	AVRG	14.9	
N-Nitrosodiphenylamine(1)	0.516	0.548	0.010	AVRG	6.2	
4-Bromophenyl-phenylether	0.231	0.262	0.100	AVRG	13.4	
Hexachlorobenzene	0.280	0.329	0.100	AVRG	17.5	
Pentachlorophenol	25.00	23.47	0.050	LINR	-6.1	
Phenanthrene	1.043	1.140	0.700	AVRG	9.3	
Anthracene	1.058	1.150	0.700	AVRG	8.7	
Carbazole	0.814	0.832	0.010	AVRG	2.2	
Di-n-butylphthalate	0.989	1.058	0.010	AVRG	7.0	
Fluoranthene	1.066	1.213	0.600	AVRG	13.8	
Pyrene	1.048	1.162	0.600	AVRG	10.9	
Butylbenzylphthalate	0.417	0.419	0.010	AVRG	0.5	
Benzo(a)anthracene	0.994	1.088	0.800	AVRG	9.4	
3,3'-Dichlorobenzidine	0.331	0.392	0.010	AVRG	18.4	
Chrysene	0.954	1.038	0.700	AVRG	8.8	
bis(2-Ethylhexyl)phthalate	0.526	0.598	0.010	AVRG	13.7	
Di-n-octylphthalate	0.922	0.999	0.010	AVRG	8.4	
Benzo(b)fluoranthene	1.012	1.099	0.700	AVRG	8.6	
Benzo(k)fluoranthene	1.124	1.269	0.700	AVRG	12.9	
Benzo(a)pyrene	0.894	1.017	0.700	AVRG	13.8	
Indeno(1,2,3-cd)pyrene	1.326	1.486	0.500	AVRG	12.1	
Dibenzo(a,h)anthracene	1.067	1.244	0.400	AVRG	16.6	
Benzo(g,h,i)perylene	1.163	1.252	0.500	AVRG	7.6	
N-Nitrosodimethylamine	0.725	0.702	0.010	AVRG	-3.2	
Aniline	1.943	1.606	0.010	AVRG	-17.3	
Benzidine	0.280		0.010	AVRG		
Pyridine	1.251	1.136	0.010	AVRG	-9.2	
1-methylnaphthalene	0.466	0.507	0.010	AVRG	8.8	
Azobenzene (1,2-DP-Hydrazine	0.967	0.933	0.010	AVRG	-3.5	
2,3,4,6-Tetrachlorophenol	0.268	0.332	0.010	AVRG	23.9	<-

(1) Cannot be separated from Diphenylamine

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-2

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: NT6 Cont. Calib. Date: 05/02/12

Init. Calib. Date: 01/27/12 Cont. Calib. Time: 1147

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
1,2,4,5-Tetrachlorobenzene	0.488		0.010	AVRG		
Total Benzofluoranthenes	0.963	1.114	0.010	AVRG	15.7	
2-Fluorophenol	1.228	1.218	0.010	AVRG	-0.8	
Phenol-d5	1.479	1.439	0.010	AVRG	-2.7	
2-Chlorophenol-d4	1.317	1.382	0.010	AVRG	4.9	
1,2-Dichlorobenzene-d4	0.950	0.992	0.010	AVRG	4.4	
Nitrobenzene-d5	0.349	0.319	0.010	AVRG	-8.6	
2-Fluorobiphenyl	1.186	1.191	0.010	AVRG	0.4	
2,4,6-Tribromophenol	0.217	0.288	0.010	AVRG	32.7	<-
Terphenyl-d14	0.689	0.732	0.010	AVRG	6.2	

<- Exceeds QC limit of 20% D
* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 01271201 Ical Date: 01/27/12

Instrument ID: NT6 Cont. Cal Date: 05/02/12

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	648397	8.11	2416646	10.16	1478694	13.04
	UPPER LIMIT	1296794		4833292		2957388	
	LOWER LIMIT	324198		1208323		739347	
	CCAL	653319	7.43	2434524	9.49	1612163	12.35
	UPPER LIMIT		7.93		9.99		12.85
	LOWER LIMIT		6.93		8.99		11.85
01	UR78MBW1	629931	7.43	2296985	9.49	1497859	12.35
02	UR78LCSW1	692592	7.43	2583664	9.49	1705438	12.35
03	MW-1S-042512	650347	7.43	2361312	9.49	1516334	12.35
04	MW-1D-042512	695014	7.43	2547638	9.49	1623179	12.35
05	MW-17-042512	717235	7.42	2580945	9.49	1633670	12.34
06	MW-4S-042512	705100	7.43	2553312	9.49	1656223	12.35
07	MW-22-042512	673331	7.43	2469431	9.49	1576919	12.35
08	MW-22-042512	695700	7.43	2622937	9.49	1738253	12.35
09	MW-22-042512	703397	7.43	2617530	9.49	1718429	12.35
10	MW-23-042512	673119	7.42	2410458	9.49	1521259	12.34
11	DUP-042512-1	669321	7.43	2412563	9.49	1556479	12.35
12	MW-24-042512	703216	7.43	2549027	9.48	1644040	12.34
13	MW-2D-042612	677763	7.43	2487499	9.49	1616271	12.34
14	MW-2S-042612	692001	7.43	2480919	9.49	1603052	12.35
15	MW-21-042612	698783	7.42	2510988	9.49	1592019	12.34
16	MW-6S-042612	680121	7.43	2440175	9.49	1543840	12.35
17	MW-20-042612	681899	7.43	2487075	9.49	1596920	12.35
18							
19							
20							
21							
22							
23							
24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 01271201 Ical Date: 01/27/12

Instrument ID: NT6 Cont. Cal Date: 05/02/12

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	2269302	15.44	2503780	19.79	2570598	21.96
	UPPER LIMIT	4538604		5007560		5141196	
	LOWER LIMIT	1134651		1251890		1285299	
	CCAL	2584191	14.71	2793020	19.01	2720814	21.15
	UPPER LIMIT		15.21		19.51		21.65
	LOWER LIMIT		14.21		18.51		20.65
01	UR78MBW1	2487762	14.70	3000367	19.00	3158710	21.15
02	UR78LCSW1	2717036	14.71	3003195	19.00	2872903	21.15
03	MW-1S-042512	2465718	14.70	2716149	19.00	2770850	21.15
04	MW-1D-042512	2596217	14.70	2770210	19.00	2800846	21.14
05	MW-17-042512	2602813	14.71	2693451	19.00	2679058	21.15
06	MW-4S-042512	2708141	14.71	3045549	19.00	3055642	21.14
07	MW-22-042512	2619277	14.70	2982535	19.00	3038444	21.15
08	MW-22-042512	2747579	14.71	3036331	19.00	3023085	21.15
09	MW-22-042512	2679710	14.71	2884536	19.00	2832745	21.15
10	MW-23-042512	2370978	14.71	2420172	19.00	2431940	21.14
11	DUP-042512-1	2552249	14.71	2943308	19.00	2970926	21.15
12	MW-24-042512	2697097	14.70	2975042	19.00	3008165	21.15
13	MW-2D-042612	2636385	14.70	2871206	19.00	2976702	21.15
14	MW-2S-042612	2610253	14.71	2881023	19.00	2893256	21.15
15	MW-21-042612	2571373	14.71	2804841	19.00	2868141	21.15
16	MW-6S-042612	2493855	14.71	2652890	19.00	2641570	21.15
17	MW-20-042612	2578324	14.71	2856050	19.00	2947257	21.15
18							
19							
20							
21							
22							
23							
24							
25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

UR78:00094

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No: UR78 Project: RG SPRING GW SAMPLING

Ical Midpoint ID: 01271201 Ical Date: 01/27/12

Instrument ID: NT6 Cont. Cal Date: 05/02/12

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	2675258	20.94				
	UPPER LIMIT	5350516					
	LOWER LIMIT	1337629					
	CCAL	2609915	20.22				
	UPPER LIMIT		20.72				
	LOWER LIMIT		19.72				
01	UR78MBW1	2786322	20.21				
02	UR78LCSW1	2737543	20.22				
03	MW-1S-042512	2599772	20.21				
04	MW-1D-042512	2714291	20.21				
05	MW-17-042512	2553257	20.21				
06	MW-4S-042512	2952713	20.21				
07	MW-22-042512	2915952	20.21				
08	MW-22-042512	2902576	20.22				
09	MW-22-042512	2754208	20.22				
10	MW-23-042512	2348062	20.21				
11	DUP-042512-1	2870070	20.21				
12	MW-24-042512	2891766	20.21				
13	MW-2D-042612	2870049	20.21				
14	MW-2S-042612	2850973	20.21				
15	MW-21-042612	2699983	20.21				
16	MW-6S-042612	2479589	20.21				
17	MW-20-042612	2810008	20.21				
18							
19							
20							
21							
22							
23							
24							
25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-3

PCP/Chlorophenols Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-1S-042512
SAMPLE

Lab Sample ID: UR78A
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/02/12 22:15
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	76.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-1D-042512
SAMPLE

Lab Sample ID: UR78B
LIMS ID: 12-7340
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/02/12 22:51
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	60.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-17-042512
SAMPLE

Lab Sample ID: UR78C
LIMS ID: 12-7341
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/02/12 23:27
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	69.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-4S-042512
SAMPLE

Lab Sample ID: UR78D
LIMS ID: 12-7342
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 00:03
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	77.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-22-042512
SAMPLE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 00:38
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	77.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-23-042512
SAMPLE

Lab Sample ID: UR78F
LIMS ID: 12-7344
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 03:38
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	79.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: DUP-042512-1
SAMPLE

Lab Sample ID: UR78G
LIMS ID: 12-7345
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 04:14
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	78.0%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	TBP	TOT OUT
MW-1S-042512	76.4%	0
MW-1D-042512	60.8%	0
MW-17-042512	69.6%	0
MW-4S-042512	77.6%	0
MB-050112	89.6%	0
LCS-050112	85.4%	0
MW-22-042512	77.6%	0
MW-22-042512 MS	72.6%	0
MW-22-042512 MSD	74.6%	0
MW-23-042512	79.2%	0
DUP-042512-1	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(41-98)	(26-113)

Prep Method: SW3510C
Log Number Range: 12-7339 to 12-7345

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-24-042512
SAMPLE

Lab Sample ID: US02A
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 04:50
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	84.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-2D-042612
SAMPLE

Lab Sample ID: US02B
LIMS ID: 12-7560
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 05:26
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	79.6%

UR78:00105

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-2S-042612
SAMPLE

Lab Sample ID: US02C
LIMS ID: 12-7561
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 06:01
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	83.6%

UR78 : 00107

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-21-042612
SAMPLE

Lab Sample ID: US02D
LIMS ID: 12-7562
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 06:37
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	90.8%

UR78:00108

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-6S-042612
SAMPLE

Lab Sample ID: US02E
LIMS ID: 12-7563
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 07:13
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	86.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
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Sample ID: MW-20-042612
SAMPLE

Lab Sample ID: US02F
LIMS ID: 12-7564
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 07:49
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	82.8%

UR75:0016

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	TBP	TOT OUT
MB-050112	89.6%	0
LCS-050112	85.4%	0
MW-24-042512	84.8%	0
MW-2D-042612	79.6%	0
MW-2S-042612	83.6%	0
MW-21-042612	90.8%	0
MW-6S-042612	86.4%	0
MW-20-042612	82.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(41-98)	(26-113)

Prep Method: SW3510C
Log Number Range: 12-7559 to 12-7564

UR78:00111

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
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Sample ID: MW-22-042512
MS/MSD

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted MS/MSD: 05/01/12

Date Analyzed MS: 05/03/12 01:14
MSD: 05/03/12 01:50
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 50 mL
MSD: 50 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	< 0.25 U	2.47	2.50	98.8%	2.42	2.50	96.8%	2.0%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-22-042512
MATRIX SPIKE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 01:14
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	72.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MW-22-042512
MATRIX SPIKE DUP

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/03/12 01:50
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	---

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	74.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-050112
LAB CONTROL

Lab Sample ID: LCS-050112
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted: 05/01/12
Date Analyzed: 05/02/12 21:03
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	2.45	2.50	98.0%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	85.4%

Results reported in µg/L

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

UR78MBW1

Lab Name: ANALYTICAL RESOURCES INC — Client: ERM-WEST

ARI Job No.: UR78 — Project: RG SPRING GW SAMPLING

Lab Sample ID: UR78MBW1 — Lab File ID: 05020016

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 05/01/12

Date Analyzed (1): 05/02/12 — Date Analyzed (2): 05/02/12

Time Analyzed (1): 2027 — Time Analyzed (2): 2027

Instrument ID (1): ECD1 — Instrument ID (2): ECD1

GC Column (1): STX CLP1 ID: 0.53(mm) — GC Column (2): STX CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	UR78LCSW1	UR78LCSW1	05/02/12	05/02/12
02	MW-1S-042512	UR78A	05/02/12	05/02/12
03	MW-1D-042512	UR78B	05/02/12	05/02/12
04	MW-17-042512	UR78C	05/02/12	05/02/12
05	MW-4S-042512	UR78D	05/03/12	05/03/12
06	MW-22-042512	UR78E	05/03/12	05/03/12
07	MW-22-042512	UR78EMS	05/03/12	05/03/12
08	MW-22-042512	UR78EMSD	05/03/12	05/03/12
09	MW-23-042512	UR78F	05/03/12	05/03/12
10	DUP-042512-1	UR78G	05/03/12	05/03/12
11	MW-24-042512	US02A	05/03/12	05/03/12
12	MW-2D-042612	US02B	05/03/12	05/03/12
13	MW-2S-042612	US02C	05/03/12	05/03/12
14	MW-21-042612	US02D	05/03/12	05/03/12
15	MW-6S-042612	US02E	05/03/12	05/03/12
16	MW-20-042612	US02F	05/03/12	05/03/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
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Sample ID: MB-050112
METHOD BLANK

Lab Sample ID: MB-050112
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/04/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Date Extracted: 05/01/12
Date Analyzed: 05/02/12 20:27
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	89.6%

FORM I

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol	21.11	21.11	21.11	21.10	21.10	21.10	21.10	21.04	21.18
2,4,6-Trichloropheno	13.21	13.20	13.20	13.20	13.20	13.20	13.20	13.13	13.28
2,3,6-Trichloropheno	14.20	14.20	14.20	14.20	14.20	14.20	14.20	14.13	14.27
2,4,5-Trichloropheno	15.97	15.96	15.96	15.95	15.95	15.95	15.96	15.90	16.04
2,3,4-Trichloropheno	17.48	17.47	17.46	17.46	17.46	17.45	17.47	17.41	17.55
2,3,5,6-Tetrachlorop	17.27	17.26	17.26	17.26	17.26	17.25	17.26	17.20	17.34
2,3,4,5-Tetrachlorop	20.28	20.27	20.27	20.26	20.26	20.26	20.27	20.21	20.35
2,4-Dichlorophenol	12.66	12.66	12.66	12.66	12.65	12.65	12.66	12.59	12.73
2,4,6-Tribromophenol	18.72	18.71	18.71	18.71	18.70	18.70	18.71	18.65	18.79

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol	22.85	22.84	22.84	22.84	22.83	22.83	22.84	22.77	22.91
2,4,6-Trichloropheno	14.22	14.21	14.21	14.21	14.21	14.21	14.21	14.14	14.28
2,3,6-Trichloropheno	15.46	15.46	15.46	15.45	15.45	15.45	15.46	15.38	15.53
2,4,5-Trichloropheno	17.38	17.38	17.37	17.37	17.37	17.36	17.37	17.30	17.44
2,3,4-Trichloropheno	18.93	18.92	18.92	18.91	18.91	18.91	18.92	18.84	18.98
2,3,5,6-Tetrachlorop	18.71	18.70	18.70	18.70	18.70	18.69	18.70	18.63	18.77
2,3,4,5-Tetrachlorop	21.97	21.97	21.96	21.96	21.96	21.95	21.96	21.89	22.03
2,4-Dichlorophenol	13.73	13.73	13.73	13.73	13.72	13.72	13.73	13.66	13.80
2,4,6-Tribromophenol	20.82	20.82	20.82	20.81	20.81	20.81	20.82	20.75	20.89

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	71748	66396	59963	53589	48840	40802	0.9998	Q
2,4,6-Trichlorophenol	36826	37371	34059	30102	26170	22270	19.5	A
2,3,6-Trichlorophenol	35698	33430	35377	29468	25822	21477	18.9	A
2,4,5-Trichlorophenol	20232	21532	22437	19278	15518	12168	0.9998	Q
2,3,4-Trichlorophenol	30789	28670	26135	22318	19586	15750	0.9998	Q
2,3,5,6-Tetrachloroph	53340	50922	48164	43544	39008	33581	16.8	A
2,3,4,5-Tetrachloroph	46968	41050	38658	33500	31676	24932	0.9986	Q
2,4-Dichlorophenol	2598	2225	1924	1689	1428	1202	0.9997	Q
2,4,6-Tribromophenol	54635	51354	49292	43188	39839	33195	17.7	A
						AVE RSD	20.8	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A007.d
LVL 2: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A008.d
LVL 3: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A009.d
LVL 4: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A006.d
LVL 5: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A010.d
LVL 6: /chem2/ecd1.i/PCP20120323.b/ical-1.b/0323A011.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 03/23/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	42831	39424	36711	32522	29273	25788	18.6	A
2,4,6-Trichlorophenol	30382	25103	23028	23892	19998	16464	0.9995	Q
2,3,6-Trichlorophenol	26568	24380	23061	20113	17782	14386	0.9998	Q
2,4,5-Trichlorophenol	14270	12029	12379	12236	10871	7648	19.1	A
2,3,4-Trichlorophenol	22416	19090	16404	15938	12846	9204	0.9966	Q
2,3,5,6-Tetrachloroph	33860	31358	29200	27814	25374	21354	15.7	A
2,3,4,5-Tetrachloroph	27646	25163	22972	20080	18218	15133	0.9998	Q
2,4-Dichlorophenol	1384	1147	1030	1060	879	691	0.9992	Q
2,4,6-Tribromophenol	35777	33525	30723	28406	27585	22686	15.6	A

AVE RSD | 20.5

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A007.d
LVL 2: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A008.d
LVL 3: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A009.d
LVL 4: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A006.d
LVL 5: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A010.d
LVL 6: /chem2/ecd1.i/PCP20120323.b/ical-2.b/0323A011.d

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/02/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1351

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	20.6	25.0	-17.6
2,4,6-Trichlorophenol	13.21	13.13	13.28	21.0	25.0	-16.0
2,3,6-Trichlorophenol	14.21	14.13	14.27	22.2	25.0	-11.2
2,4,5-Trichlorophenol	15.97	15.90	16.04	19.6	25.0	-21.6
2,3,4-Trichlorophenol	17.48	17.41	17.55	21.5	25.0	-14.0
2,3,5,6-Tetrachlorophenol	17.27	17.20	17.34	21.1	25.0	-15.6
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	20.1	25.0	-19.6
2,4-Dichlorophenol	12.67	12.59	12.73	223	250	-10.8
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	20.9	25.0	-16.4

AVERAGE %D = 15.9

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/02/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1351

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	21.3	25.0	-14.8	
2,4,6-Trichlorophenol	14.22	14.14	14.28	20.9	25.0	-16.4	
2,3,6-Trichlorophenol	15.47	15.38	15.53	18.4	25.0	-26.4	<-
2,4,5-Trichlorophenol	17.38	17.30	17.44	21.6	25.0	-13.6	
2,3,4-Trichlorophenol	18.93	18.84	18.98	17.6	25.0	-29.6	<-
2,3,5,6-Tetrachlorophenol	18.71	18.63	18.77	20.0	25.0	-20.0	
2,3,4,5-Tetrachlorophenol	21.97	21.89	22.03	20.4	25.0	-18.4	
2,4-Dichlorophenol	13.74	13.66	13.80	198	250	-20.8	
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	20.7	25.0	-17.2	

AVERAGE %D = 19.7

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/02/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1951

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	21.6	25.0	-13.6
2,4,6-Trichlorophenol	13.21	13.13	13.28	21.9	25.0	-12.4
2,3,6-Trichlorophenol	14.21	14.13	14.27	23.4	25.0	-6.4
2,4,5-Trichlorophenol	15.97	15.90	16.04	20.6	25.0	-17.6
2,3,4-Trichlorophenol	17.48	17.41	17.55	22.5	25.0	-10.0
2,3,5,6-Tetrachlorophenol	17.27	17.20	17.34	22.1	25.0	-11.6
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	20.7	25.0	-17.2
2,4-Dichlorophenol	12.67	12.59	12.73	225	250	-10.0
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	21.4	25.0	-14.4

AVERAGE %D = 12.6

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/02/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1951

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D	
Pentachlorophenol	22.85	22.77	22.91	20.9	25.0	-16.4	
2,4,6-Trichlorophenol	14.22	14.14	14.28	19.7	25.0	-21.2	
2,3,6-Trichlorophenol	15.47	15.38	15.53	18.9	25.0	-24.4	
2,4,5-Trichlorophenol	17.38	17.30	17.44	21.2	25.0	-15.2	
2,3,4-Trichlorophenol	18.93	18.84	18.98	17.5	25.0	-30.0	<-
2,3,5,6-Tetrachlorophenol	18.71	18.63	18.77	20.5	25.0	-18.0	
2,3,4,5-Tetrachlorophenol	21.97	21.89	22.03	20.1	25.0	-19.6	
2,4-Dichlorophenol	13.74	13.66	13.80	174	250	-30.4	<-
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	20.1	25.0	-19.6	

AVERAGE %D = 21.6

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/03/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0302

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	22.6	25.0	-9.6
2,4,6-Trichlorophenol	13.21	13.13	13.28	21.7	25.0	-13.2
2,3,6-Trichlorophenol	14.21	14.13	14.27	24.1	25.0	-3.6
2,4,5-Trichlorophenol	15.97	15.90	16.04	21.4	25.0	-14.4
2,3,4-Trichlorophenol	17.48	17.41	17.55	23.6	25.0	-5.6
2,3,5,6-Tetrachlorophenol	17.27	17.20	17.34	22.7	25.0	-9.2
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	22.2	25.0	-11.2
2,4-Dichlorophenol	12.67	12.59	12.73	225	250	-10.0
2,4,6-Tribromophenol (surr	18.72	18.65	18.79	22.5	25.0	-10.0

AVERAGE %D = 9.6

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/03/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0302

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.85	22.77	22.91	21.7	25.0	-13.2
2,4,6-Trichlorophenol	14.22	14.14	14.28	23.6	25.0	-5.6
2,3,6-Trichlorophenol	15.47	15.38	15.53	20.5	25.0	-18.0
2,4,5-Trichlorophenol	17.38	17.30	17.44	23.1	25.0	-7.6
2,3,4-Trichlorophenol	18.93	18.84	18.98	19.1	25.0	-23.6
2,3,5,6-Tetrachlorophenol	18.71	18.63	18.77	21.4	25.0	-14.4
2,3,4,5-Tetrachlorophenol	21.97	21.89	22.03	20.8	25.0	-16.8
2,4-Dichlorophenol	13.74	13.66	13.80	221	250	-11.6
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	21.1	25.0	-15.6

AVERAGE %D = 14.0

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/03/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0901

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.12	21.04	21.18	23.2	25.0	-7.2
2,4,6-Trichlorophenol	13.22	13.13	13.28	22.4	25.0	-10.4
2,3,6-Trichlorophenol	14.22	14.13	14.27	25.0	25.0	0.0
2,4,5-Trichlorophenol	15.97	15.90	16.04	22.6	25.0	-9.6
2,3,4-Trichlorophenol	17.48	17.41	17.55	24.3	25.0	-2.8
2,3,5,6-Tetrachlorophenol	17.28	17.20	17.34	23.5	25.0	-6.0
2,3,4,5-Tetrachlorophenol	20.28	20.21	20.35	22.3	25.0	-10.8
2,4-Dichlorophenol	12.68	12.59	12.73	231	250	-7.6
2,4,6-Tribromophenol (surr	18.73	18.65	18.79	22.9	25.0	-8.4

AVERAGE %D = 7.0

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 03/23/12 03/23/12

Client Sample No.(PCP): Date Analyzed :05/03/12

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0901

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.85	22.77	22.91	22.6	25.0	-9.6
2,4,6-Trichlorophenol	14.23	14.14	14.28	24.6	25.0	-1.6
2,3,6-Trichlorophenol	15.47	15.38	15.53	21.4	25.0	-14.4
2,4,5-Trichlorophenol	17.39	17.30	17.44	23.6	25.0	-5.6
2,3,4-Trichlorophenol	18.93	18.84	18.98	19.9	25.0	-20.4
2,3,5,6-Tetrachlorophenol	18.72	18.63	18.77	22.5	25.0	-10.0
2,3,4,5-Tetrachlorophenol	21.98	21.89	22.03	21.7	25.0	-13.2
2,4-Dichlorophenol	13.74	13.66	13.80	230	250	-8.0
2,4,6-Tribromophenol (surr	20.83	20.75	20.89	21.9	25.0	-12.4

AVERAGE %D = 10.6

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	03/23/12	1336	18.71
02		PCP A	03/23/12	1412	18.72
03		PCP B	03/23/12	1448	18.71
04		PCP C	03/23/12	1524	18.71
05		PCP E	03/23/12	1600	18.70
06		PCP F	03/23/12	1636	18.70
07	ZZZZZ	ZZZZZ	03/23/12	1712	18.71
08	ZZZZZ	ZZZZZ	05/02/12	1315	18.72
09		PCP CCAL	05/02/12	1351	18.72
10	ZZZZZ	ZZZZZ	05/02/12	1427	18.75
11	ZZZZZ	ZZZZZ	05/02/12	1503	18.74
12	ZZZZZ	ZZZZZ	05/02/12	1539	18.74
13	ZZZZZ	ZZZZZ	05/02/12	1615	18.74
14	ZZZZZ	ZZZZZ	05/02/12	1651	18.73
15	ZZZZZ	ZZZZZ	05/02/12	1727	18.73
16	ZZZZZ	ZZZZZ	05/02/12	1803	18.73
17	ZZZZZ	ZZZZZ	05/02/12	1839	----
18	ZZZZZ	ZZZZZ	05/02/12	1915	18.72
19		PCP CCAL	05/02/12	1951	18.72
20	UR78MBW1	UR78MBW1	05/02/12	2027	18.74
21	UR78LCSW1	UR78LCSW1	05/02/12	2103	18.73
22	ZZZZZ	ZZZZZ	05/02/12	2139	18.74
23	MW-1S-042512	UR78A	05/02/12	2215	18.73
24	MW-1D-042512	UR78B	05/02/12	2251	18.73
25	MW-17-042512	UR78C	05/02/12	2327	18.73
26	MW-4S-042512	UR78D	05/03/12	0003	18.73
27	MW-22-042512	UR78E	05/03/12	0038	18.73
28	MW-22-042512	UR78EMS	05/03/12	0114	18.73
29	MW-22-042512	UR78EMSD	05/03/12	0150	18.73
30	ZZZZZ	ZZZZZ	05/03/12	0226	18.72
31		PCP CCAL	05/03/12	0302	18.72
32	MW-23-042512	UR78F	05/03/12	0338	18.73

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.72

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	DUP-042512-1	UR78G	05/03/12	0414	18.74
02	MW-24-042512	US02A	05/03/12	0450	18.74
03	MW-2D-042612	US02B	05/03/12	0526	18.73
04	MW-2S-042612	US02C	05/03/12	0601	18.74
05	MW-21-042612	US02D	05/03/12	0637	18.74
06	MW-6S-042612	US02E	05/03/12	0713	18.74
07	MW-20-042612	US02F	05/03/12	0749	18.74
08	ZZZZZ	ZZZZZ	05/03/12	0825	18.73
09		PCP CCAL	05/03/12	0901	18.73

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.82

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	03/23/12	1336	20.81
02		PCP A	03/23/12	1412	20.82
03		PCP B	03/23/12	1448	20.82
04		PCP C	03/23/12	1524	20.82
05		PCP E	03/23/12	1600	20.81
06		PCP F	03/23/12	1636	20.81
07	ZZZZZ	ZZZZZ	03/23/12	1712	20.82
08	ZZZZZ	ZZZZZ	05/02/12	1315	20.83
09		PCP CCAL	05/02/12	1351	20.83
10	ZZZZZ	ZZZZZ	05/02/12	1427	20.85
11	ZZZZZ	ZZZZZ	05/02/12	1503	20.85
12	ZZZZZ	ZZZZZ	05/02/12	1539	20.84
13	ZZZZZ	ZZZZZ	05/02/12	1615	20.84
14	ZZZZZ	ZZZZZ	05/02/12	1651	20.83
15	ZZZZZ	ZZZZZ	05/02/12	1727	20.83
16	ZZZZZ	ZZZZZ	05/02/12	1803	----
17	ZZZZZ	ZZZZZ	05/02/12	1839	----
18	ZZZZZ	ZZZZZ	05/02/12	1915	20.83
19		PCP CCAL	05/02/12	1951	20.83
20	UR78MBW1	UR78MBW1	05/02/12	2027	20.84
21	UR78LCSW1	UR78LCSW1	05/02/12	2103	20.84
22	ZZZZZ	ZZZZZ	05/02/12	2139	20.84
23	MW-1S-042512	UR78A	05/02/12	2215	20.84
24	MW-1D-042512	UR78B	05/02/12	2251	20.84
25	MW-17-042512	UR78C	05/02/12	2327	20.83
26	MW-4S-042512	UR78D	05/03/12	0003	20.83
27	MW-22-042512	UR78E	05/03/12	0038	20.83
28	MW-22-042512	UR78EMS	05/03/12	0114	20.83
29	MW-22-042512	UR78EMSD	05/03/12	0150	20.83
30	ZZZZZ	ZZZZZ	05/03/12	0226	20.83
31		PCP CCAL	05/03/12	0302	20.83
32	MW-23-042512	UR78F	05/03/12	0338	20.84

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

ARI Job No.: UR78 Project: RG SPRING GW SAMPLING

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 03/23/12 03/23/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.82

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	DUP-042512-1	UR78G	05/03/12	0414	20.84
02	MW-24-042512	US02A	05/03/12	0450	20.84
03	MW-2D-042612	US02B	05/03/12	0526	20.84
04	MW-2S-042612	US02C	05/03/12	0601	20.84
05	MW-21-042612	US02D	05/03/12	0637	20.84
06	MW-6S-042612	US02E	05/03/12	0713	20.84
07	MW-20-042612	US02F	05/03/12	0749	20.84
08	ZZZZZ	ZZZZZ	05/03/12	0825	20.83
09		PCP CCAL	05/03/12	0901	20.83

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

TPHD Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Received: 04/25/12

Data Release Authorized: MW
Reported: 05/02/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-043012	Method Blank	04/30/12	05/01/12	1.00	Diesel Range	0.10	< 0.10 U
12-7339	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		80.1%
UR78A	MW-1S-042512	04/30/12	05/01/12	1.00	Diesel Range	0.10	< 0.10 U
12-7339	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		90.7%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09

Client ID	OTER	TOT OUT
MB-043012	80.1%	0
LCS-043012	91.1%	0
MW-1S-042512	90.7%	0
MW-1S-042512 MS	86.8%	0
MW-1S-042512 MSD	90.5%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-7339 to 12-7339

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: MW-1S-042512
MS/MSD

Lab Sample ID: UR78A
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized: MW
Reported: 05/02/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Extracted MS/MSD: 04/30/12

Date Analyzed MS: 05/01/12 22:46
MSD: 05/01/12 23:09
Instrument/Analyst MS: FID4A/MH
MSD: FID4A/MH

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.10 U	2.56	3.00	85.3%	2.59	3.00	86.3%	1.2%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	86.8%	90.5%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-043012
LAB CONTROL

Lab Sample ID: LCS-043012
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/02/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Date Extracted: 04/30/12
Date Analyzed: 05/01/12 21:58
Instrument/Analyst: FID4A/MH

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.49	3.00	83.0%

TPHD Surrogate Recovery

o-Terphenyl	91.1%

Results reported in mg/L

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 04/25/12

ARI Job: UR78
Project: RG Spring GW Sampling
155129.09

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-7339-043012MB1	Method Blank	500 mL	1.00 mL	04/30/12
12-7339-043012LCS1	Lab Control	500 mL	1.00 mL	04/30/12
12-7339-UR78A	MW-1S-042512	500 mL	1.00 mL	04/30/12
12-7339-UR78AMS	MW-1S-042512	500 mL	1.00 mL	04/30/12
12-7339-UR78AMSD	MW-1S-042512	500 mL	1.00 mL	04/30/12

4

TPH METHOD BLANK SUMMARY

BLANK NO.

UR78MBW1

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: UR78 Project No.: RG SPRING GW SAMPLING

Date Extracted: 04/30/12 Matrix: LIQUID

Date Analyzed : 05/01/12 Instrument ID : FID4A

Time Analyzed : 2134

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	UR78LCSW1	UR78LCSW1	05/01/12
02	MW-1S-042512	UR78A	05/01/12
03	MW-1S-042512	UR78AMS	05/01/12
04	MW-1S-042512	UR78AMSD	05/01/12
05			

FORM IV TPH

6a

DIESEL INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-WEST

Instrument: FID4A.I Project: RG SPRING GW

Calibration Date: 08-FEB-2012 SDG No.: UR78

Diesel Range	RF1 50	RF2 100	RF3 250	RF4 500	RF5 1000	RF6 2500	Ave RF	%RSD
WA Diesel	14949	15145	15065	15164	14702	15451	15079	1.6
AK Diesel	17627	17893	17841	17989	17500	18388	17873	1.7
OR Diesel	17897	18055	17928	18068	17586	18468	18000	1.6
Cal Diesel	17603	17864	17799	17951	17467	18344	17838	1.7
o-Terph	19594	19585	19531	19489	19354	20804	19726	2.7

<- Indicates %RSD outside limits
Surrogate areas are not included in Diesel RF calculation.

Quant Ranges : WA Diesel C12-C24 (4.212-7.837)
AK Diesel C10-C25 (3.212-8.084)
OR Diesel C10-C28 (3.212-8.776)
Cal Diesel C10-C24 (3.212-7.837)

Calibration Files	Analysis Time
0208a009.d	08-FEB-2012 08:33
0208a008.d	08-FEB-2012 08:09
0208a007.d	08-FEB-2012 07:46
0208a006.d	08-FEB-2012 07:22
0208a005.d	08-FEB-2012 06:59
0208a004.d	08-FEB-2012 06:35

6a

NW MOTOR OIL RANGE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-WEST

Instrument: FID4A.I Project: RG SPRING GW SAMPLING

Calibration Date: 19-APR-2012 SDG No.: UR78

Product Range	RF1 100	RF2 250	RF3 500	RF4 1000	RF5 2500	RF6 5000	Ave RF	%RSD
WA M.Oil C24-C38	12890	11264	11615	11821	10866	11025	11580	6.3
Triac Surr	13307	14068	15103	15717	15129	*****	14665	6.57

<- Indicates %RSD outside limits
Surrogate areas are not included in Motor Oil RF calculation.

Calibration Files	Analysis Time
0419a037.d	19-APR-2012 21:02
0419a036.d	19-APR-2012 20:38
0419a035.d	19-APR-2012 20:14
0419a034.d	19-APR-2012 19:50
0419a033.d	19-APR-2012 19:26
0419a032.d	19-APR-2012 19:01

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: ERM-WEST

ICal Date: 08-FEB-2012
Project: RG SPRING GW SAMPLI

CCal Date: 01-MAY-2012
SDG No.: UR78

Analysis Time: 20:46
Lab ID: DIESEL #2

Instrument: FID4A.I
Lab File Name: 0501a016.d

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	3748346	248.6	250	-0.6
AK102 (C10-C25)	4421504	247.4	250	-1.0
Terphenyl	834635	42.3	45	-6.0

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

FORM VII-Diesel

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: ERM-WEST

ICal Date: 19-APR-2012
Project: RG SPRING GW SAMPLI

CCal Date: 01-MAY-2012
SDG No.: UR78

Analysis Time: 21:10
Lab ID: MOIL #2

Instrument: FID4A.I
Lab File Name: 0501a017.d

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	5756260	496.4	500	-0.7	
AK103 (C25-C36)	4987074	642.7	500	28.5	<-
CRUDE(Tol-C40)	6736155	891.9	500	78.4	
n-Triacontane	708460	48.3	45	7.4	

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

7a

DIESEL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-WEST

ICal Date: 08-FEB-2012 Project: RG SPRING GW SAMPLI

CCal Date: 02-MAY-2012 SDG No.: UR78

Analysis Time: 01:31 Lab ID: DIESEL #3

Instrument: FID4A.I Lab File Name: 0501a028.d

Diesel Range	Area*	CalcAmnt	NomAmnt	% D
WADies(C12-C24)	3620612	240.1	250	-4.0
AK102 (C10-C25)	4286874	239.9	250	-4.1
Terphenyl	985166	49.9	45	11.0

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA Diesel C12-C24
AK Diesel C10-C25

7a

MOTOR OIL CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: ERM-WEST

ICal Date: 19-APR-2012
Project: RG SPRING GW SAMPLI

CCal Date: 02-MAY-2012
SDG No.: UR78

Analysis Time: 01:55
Lab ID: MOIL #3

Instrument: FID4A.I
Lab File Name: 0501a029.d

M.oil Range	Area*	CalcAmnt	NomAmnt	% D	
WAMoil(C24-C38)	5550628	478.6	500	-4.3	
AK103 (C25-C36)	4788155	617.1	500	23.4	
CRUDE(Tol-C40)	6607763	874.9	500	75.0	
n-Triacontane	914783	62.4	45	38.6	<-

* Surrogate areas are subtracted from range areas
<- Indicates a %D outside QC limits

Quant Ranges : WA M.Oil C24-C38
AK M.Oil C25-C36

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: UR78 Project: RG SPRING GW SAMPLING

Instrument ID: FID4A GC Column: RTX-1

Run Date: 05/01/12

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 6.31 TRIAC: 9.18

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	ZZZZZ	ZZZZZ	05/01/12	1443	6.31	9.18
02	RT	RT	05/01/12	1507	6.31	9.18
03	IB	IB	05/01/12	1531	6.31	9.17
04	ZZZZZ	ZZZZZ	05/01/12	1555	6.27	9.18
05	ZZZZZ	ZZZZZ	05/01/12	1620	6.32	9.18
06	ZZZZZ	ZZZZZ	05/01/12	1644	6.31	9.17
07	ZZZZZ	ZZZZZ	05/01/12	1709	6.31	9.17
08	ZZZZZ	ZZZZZ	05/01/12	1733	6.31	9.17
09	ZZZZZ	ZZZZZ	05/01/12	1757	6.31	9.20
10	ZZZZZ	ZZZZZ	05/01/12	1821	6.31	9.19
11	ZZZZZ	ZZZZZ	05/01/12	1846	6.32	9.18
12	ZZZZZ	ZZZZZ	05/01/12	1910	6.31	9.18
13	ZZZZZ	ZZZZZ	05/01/12	1934	6.31	9.20
14	ZZZZZ	ZZZZZ	05/01/12	1958	6.31	9.21
15	ZZZZZ	ZZZZZ	05/01/12	2022	6.31	9.20
16	RG SPRING GW	DIESEL #2	05/01/12	2046	6.31	9.18
17	RG SPRING GW	MOIL #2	05/01/12	2110	6.32	9.18
18	UR78MBW1	UR78MBW1	05/01/12	2134	6.31	9.17
19	UR78LCSW1	UR78LCSW1	05/01/12	2158	6.32	9.17
20	MW-1S-042512	UR78A	05/01/12	2222	6.31	9.17
21	MW-1S-042512	UR78AMS	05/01/12	2246	6.32	9.17
22	MW-1S-042512	UR78AMSD	05/01/12	2309	6.32	9.17
23	ZZZZZ	ZZZZZ	05/01/12	2333	6.31	9.17
24	ZZZZZ	ZZZZZ	05/01/12	2357	6.31	9.17
25	ZZZZZ	ZZZZZ	05/02/12	0020	6.31	9.17
26	ZZZZZ	ZZZZZ	05/02/12	0044	6.31	9.18
27	ZZZZZ	ZZZZZ	05/02/12	0108	6.30	9.17
28	RG SPRING GW	DIESEL #3	05/02/12	0131	6.31	9.18
29	RG SPRING GW	MOIL #3	05/02/12	0155	6.32	9.18

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: UR78 Project: RG SPRING GW

Instrument ID: FID4A GC Column: RTX-1

Run Date: 02/08/12

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 6.38 TRIAC: 9.25

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01		RINSE	02/08/12	0525	6.38	9.25
02		RT	02/08/12	0548	6.38	9.25
03		IB	02/08/12	0612	6.38	9.25
04		DIESEL 2500	02/08/12	0635	6.43*	9.24
05		DIESEL 1000	02/08/12	0659	6.40	9.25
06		DIESEL 500	02/08/12	0722	6.39	9.24
07		DIESEL 250	02/08/12	0746	6.38	9.26
08		DIESEL 100	02/08/12	0809	6.37	9.26
09		DIESEL 50	02/08/12	0833	6.38	9.27
10		DIESEL ICV	02/08/12	0857	6.38	9.25

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

FORM VIII TPH

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: UR68 Project: RG SPRING GW

Instrument ID: FID4A GC Column: RTX-1

Run Date: 04/19/12

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 6.32 TRIAC: 9.18

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01		RINSE	04/19/12	1724	6.32	9.18
02		RT	04/19/12	1748	6.32	9.18
03		IB	04/19/12	1813	6.32	9.18
04		DIESEL #1	04/19/12	1837	6.32	9.19
05		MOIL 5000	04/19/12	1901	6.32	9.27*
06		MOIL 2500	04/19/12	1926	6.32	9.23
07		MOIL 1000	04/19/12	1950	6.32	9.20
08		MOIL 500	04/19/12	2014	6.32	9.18
09		MOIL 250	04/19/12	2038	6.32	9.17
10		MOIL 100	04/19/12	2102	6.34	9.17
11		MOIL ICV	04/19/12	2126	6.33	9.18

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

TPHG Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized:
Reported: 05/24/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-050312	Method Blank	05/03/12	1.0	Gasoline	< 0.03 U
12-7339		PID2		HC ID	---
				Trifluorotoluene	104%
				Bromobenzene	96.6%
UR78A	MW-1S-042512	05/03/12	1.0	Gasoline	< 0.03 U
12-7339		PID2		HC ID	---
				Trifluorotoluene	103%
				Bromobenzene	94.6%
UR78H	TB-042512-1	05/03/12	1.0	Gasoline	< 0.03 U
12-7346		PID2		HC ID	---
				Trifluorotoluene	101%
				Bromobenzene	90.2%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: UR78
Matrix: Water

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09

Client ID	TFT	BBZ	TOT OUT
MB-050312	104%	96.6%	0
LCS-050312	114%	101%	0
LCSD-050312	110%	99.7%	0
MW-1S-042512	103%	94.6%	0
MW-1S-042512 MS	113%	99.9%	0
MW-1S-042512 MSD	106%	97.0%	0
TB-042512-1	101%	90.2%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-7339 to 12-7346

FORM II TPHG

UR78:00152

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MW-1S-042512
MATRIX SPIKE

Lab Sample ID: UR78A
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Date Analyzed MS: 05/03/12 14:30
MSD: 05/03/12 14:58
Instrument/Analyst MS: PID2/JLW
MSD: PID2/JLW

Purge Volume: 15. mL

Dilution Factor MS: 1.0
MSD: 1.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Gasoline Range Hydrocarbons	< 0.05 U	1.12	1.00	112%	0.98	1.00	98.0%	13.3%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	MS	MSD
Trifluorotoluene	113%	106%
Bromobenzene	99.9%	97.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-050312
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050312
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/03/12 10:06
LCSD: 05/03/12 10:35
Instrument/Analyst LCS: PID2/JLW
LCSD: PID2/JLW

Purge Volume: 15. mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	1.13	1.00	113%	1.13	1.00	113%	0.0%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	114%	110%
Bromobenzene	101%	99.7%

4

BETX/GAS METHOD BLANK SUMMARY

BLANK NO.

MB0503

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: UR78 Project No.: RG SPRING GW

Date Analyzed : 05/03/12 Matrix: WATER

Time Analyzed : 1103 Instrument ID : PID2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	RT+BCAL1	RT+BCAL1	05/03/12
02	LCS0503	LCS0503	05/03/12
03	LCSD0503	LCSD0503	05/03/12
04	TB-042512-1	UR78H	05/03/12
05	MW-1S-042512	UR78A	05/03/12
06	MW-1S-042512	UR78AMS	05/03/12
07	MW-1S-042512	UR78AMSD	05/03/12
08			
09			
10			
11			
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6a
GAS INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-West

Instrument/Det: PID2.I/RTX 502-2 FID Project: RG Spring GW

Calibration Date: 01-MAY-2012 SDG No.: UR78

Gas Range	RF1 .03	RF2 0.10	RF3 0.25	RF4 1.0	RF5 2.5	RF6 5.0	Ave RF	%RSD
WA Gas	1007983	1044085	1022993	1177328	1128428	1152604	1088904	6.7
AK Gas	1899600	1909090	1877938	2056336	1948528	2008122	1949936	3.6
NW Gas	1020717	1168555	1114665	1232936	1175982	1192482	1150889	6.5
Cal Gas	2336983	2315800	2256735	2497025	2375199	2439706	2370241	3.7
8015Gas	2447150	2385070	2310928	2534321	2402639	2469214	2424887	3.2

Surrogates Rel. Rec.	RF1	RF2	RF3	RF4	RF5	RF6	Ave RF	%RSD
$TFT(Surr)	45.50000	51.68182	46.04478	43.33000	45.07519	4.10112		
	44.16000						45.69899	6.116
$BB(Surr)	25.31818	29.93182	26.58209	25.14000	26.40602	25.26404		
	24.68500						26.18959	6.828

<- Indicates %RSD outside limits
Surrogate areas are not included in RF calculation.

Quant Ranges : WA Gas Toluene - nC12
AK Gas nC6 - nC10
NW Gas Toluene - Naphthalene
Cal Gas nC6 - nC12
8015 Gas 2-Methylpentane - 1,2,4-Trimethylbenzene

Calibration Files	Analysis Time
0501a022.d	01-MAY-2012 21:15
0501a021.d	01-MAY-2012 20:47
0501a020.d	01-MAY-2012 20:19
0501a019.d	01-MAY-2012 19:50
0501a018.d	01-MAY-2012 19:22
0501a017.d	01-MAY-2012 18:54

Surr. Calibration Files	Analysis Time
0501a015.d	01-MAY-2012 17:58
0501a014.d	01-MAY-2012 17:30
0501a013.d	01-MAY-2012 17:01
0501a012.d	01-MAY-2012 16:33
0501a011.d	01-MAY-2012 16:05
0501a010.d	01-MAY-2012 15:37
0501a009.d	01-MAY-2012 15:09

UR78 : 00157

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-West

ICal Date: 01-MAY-2012 Project: RG Spring GW

CCal Date: 03-MAY-2012 SDG No.: UR78

Lab File Name: 0503a003.d Inst/Det: PID2.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	1242886	1.14	1.00	14.1
AKGas (C6-C10)	2269415	1.16	1.00	16.4
NWGas (Tol-Nap)	1286234	1.12	1.00	11.8
8015B (2MP-TMB)	2770586	1.14	1.00	14.3

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-West

ICal Date: 01-MAY-2012 Project: RG Spring GW

CCal Date: 03-MAY-2012 SDG No.: UR78

Lab File Name: 0503a003.d Inst/Det: PID2.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	69814	103.2	100.0	3.2
Bromoflrbenz	25241	91.4	100.0	-8.6

UR78:00159

7a
GAS CONTINUING CALIBRATION VERIFICATION

Lab Name: ANALYTICAL RESOURCES, INC. Client: ERM-West

ICal Date: 01-MAY-2012 Project: RG Spring GW

CCal Date: 03-MAY-2012 SDG No.: UR78

Lab File Name: 0503a014.d Inst/Det: PID2.I/RTX 502-2 FID

Gas Range	Area*	CalcAmnt	NomAmnt	%D
WAGas (Tol-C12)	1191504	1.09	1.00	9.4
AKGas (C6-C10)	2187890	1.12	1.00	12.2
NWGas (Tol-Nap)	1235162	1.07	1.00	7.3
8015B (2MP-TMB)	2667336	1.10	1.00	10.0

* Surrogate areas are subtracted from Total Area
<- Indicates an RPD outside QC limits

7b
FID SURROGATE CONTINUING CALIBRATION

Lab Name: ANALYTICAL RESOURCES, INC.
Client: ERM-West

ICal Date: 01-MAY-2012
Project: RG Spring GW

CCal Date: 03-MAY-2012
SDG No.: UR78

Lab File Name: 0503a014.d
Inst/Det: PID2.I/RTX 502-2 FID

Surrogate	Area	CalcAmnt	NomAmnt	RPD
Trifluorotol	74247	110.4	100.0	10.4
Bromoflrbenz	27399	99.0	100.0	-1.0

FORM VII-Surr

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: UR78 Project: RG SPRING GW

Instrument ID: PID2 GC Detector: RTX 502-2 FID

Run Date: 05/03/12

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 7.24 S2 : 14.85

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	S1 #	S2 RT	S2 #
01	RT+BCAL1	RT+BCAL1	05/03/12	0910	7.24		14.86	
02	RG SPRING GW	GCAL1	05/03/12	0938	7.24		14.86	
03	LCS0503	LCS0503	05/03/12	1006	7.24		14.85	
04	LCSD0503	LCSD0503	05/03/12	1035	7.24		14.85	
05	MB0503	MB0503	05/03/12	1103	7.24		14.85	
06	TB-042512-1	UR78H	05/03/12	1237	7.24		14.86	
07	MW-1S-042512	UR78A	05/03/12	1401	7.24		14.86	
08	MW-1S-042512	UR78AMS	05/03/12	1430	7.24		14.85	
09	MW-1S-042512	UR78AMSD	05/03/12	1458	7.24		14.86	
10	RG SPRING GW	GCCAL3	05/03/12	1612	7.24		14.85	

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)
S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

BETX/GAS ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ERM-WEST

SDG No.: 050112A-1 Project: RG SPRING GW

Instrument ID: PID2 GC Detector: RTX 502-2 FID

Run Date: 05/01/12

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

METHOD SURROGATE RT
S1 : 7.46 S2 : 15.08

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01		RT+BCAL1	05/01/12	1441	7.47	15.09
02		B100	05/01/12	1509	7.47	15.09
03		B50	05/01/12	1537	7.46	15.08
04		B25	05/01/12	1605	7.46	15.08
05		B5	05/01/12	1633	7.46	15.08
06		B1	05/01/12	1701	7.46	15.08
07		B0.25	05/01/12	1730	7.46	15.08
08		B0.08	05/01/12	1758	7.46	15.08
09		BICV5	05/01/12	1826	7.46	15.08
10		G5	05/01/12	1854	7.46	15.08
11		G2.5	05/01/12	1922	7.46	15.08
12		G1	05/01/12	1950	7.46	15.08
13		G0.25	05/01/12	2019	7.46	15.08
14		G0.10	05/01/12	2047	7.46	15.08
15		G0.03	05/01/12	2115	7.46	15.08
16		GICV1	05/01/12	2143	7.46	15.08

QC LIMITS

S1 = TFT(Surr) (+/- 0.07 MINUTES)
S2 = BB(Surr) (+/- 0.07 MINUTES)

* Values outside of QC limits.

UR78:00163

Metals Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-1S-042512	UR78A	12-7339	
PBW	UR78MB1	12-7339	
LCSW	UR78MB1SPK	12-7339	
MW-1D-042512	UR78B	12-7340	
MW-17-042512	UR78C	12-7341	
MW-4S-042512	UR78D	12-7342	
MW-22-042512	UR78E	12-7343	
MW-22-042512D	UR78EDUP	12-7343	
MW-22-042512S	UR78ESPK	12-7343	
MW-23-042512	UR78F	12-7344	
MW-1S-042512	UR78I	12-7347	
PBW	UR78MB2	12-7347	
LCSW	UR78MB2SPK	12-7347	
MW-1D-042512	UR78J	12-7348	
MW-17-042512	UR78K	12-7349	
MW-4S-042512	UR78L	12-7350	
MW-22-042512	UR78M	12-7351	
MW-22-042512D	UR78MDUP	12-7351	
MW-22-042512S	UR78MSPK	12-7351	
MW-23-042512	UR78N	12-7352	

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 5/7/12 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-1S-042512
SAMPLE

Lab Sample ID: UR78A
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**9.9**	
200.8	04/30/12	6020A	05/04/12	7440-47-3	Chromium	0.5	0.5	U
200.8	04/30/12	6020A	05/04/12	**7440-50-8**	**Copper**	0.5	**1.8**	
200.8	04/30/12	6020A	05/04/12	7440-22-4	Silver	0.2	0.2	U
200.8	04/30/12	6020A	05/04/12	**7440-66-6**	**Zinc**	4	**29**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-1D-042512
SAMPLE

Lab Sample ID: UR78B
LIMS ID: 12-7340
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**9.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-17-042512
SAMPLE

Lab Sample ID: UR78C
LIMS ID: 12-7341
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**121**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00168

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-4S-042512
SAMPLE

Lab Sample ID: UR78D
LIMS ID: 12-7342
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**46.4**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-22-042512
SAMPLE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**68.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-23-042512
SAMPLE

Lab Sample ID: UR78F
LIMS ID: 12-7344
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**4.7**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-22-042512
MATRIX SPIKE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6020A	68.3	97.2	25.0	116%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-22-042512
DUPLICATE

Lab Sample ID: UR78E
LIMS ID: 12-7343
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6020A	68.3	66.6	2.5%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: UR78LCS
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6020A	27.0	25.0	108%	
Chromium	6020A	24.6	25.0	98.4%	
Copper	6020A	26.0	25.0	104%	
Silver	6020A	25.8	25.0	103%	
Zinc	6020A	81.2	80.0	102%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: UR78MB
LIMS ID: 12-7339
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	04/30/12	6020A	05/04/12	7440-47-3	Chromium	0.5	0.5	U
200.8	04/30/12	6020A	05/04/12	7440-50-8	Copper	0.5	0.5	U
200.8	04/30/12	6020A	05/04/12	7440-22-4	Silver	0.2	0.2	U
200.8	04/30/12	6020A	05/04/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-1S-042512
SAMPLE

Lab Sample ID: UR78I
LIMS ID: 12-7347
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**8.2**	
200.8	04/30/12	6020A	05/04/12	7440-47-3	Chromium	0.5	0.5	U
200.8	04/30/12	6020A	05/04/12	**7440-50-8**	**Copper**	0.5	**0.9**	
200.8	04/30/12	6020A	05/04/12	7440-22-4	Silver	0.2	0.2	U
200.8	04/30/12	6020A	05/04/12	**7440-66-6**	**Zinc**	4	**22**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-1D-042512
SAMPLE

Lab Sample ID: UR78J
LIMS ID: 12-7348
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**8.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-17-042512
SAMPLE

Lab Sample ID: UR78K
LIMS ID: 12-7349
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**115**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-4S-042512
SAMPLE

Lab Sample ID: UR78L
LIMS ID: 12-7350
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**45.0**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-22-042512
SAMPLE

Lab Sample ID: UR78M
LIMS ID: 12-7351
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**61.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-23-042512
SAMPLE

Lab Sample ID: UR78N
LIMS ID: 12-7352
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	0.2	**4.6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 11

Sample ID: MW-22-042512

Lab Sample ID: UR78M
LIMS ID: 12-7351
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6020A	61.6	88.7	25.0	108%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 11

Sample ID: MW-22-042512

Lab Sample ID: UR78M
LIMS ID: 12-7351
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6020A	61.6	62.8	1.9%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: UR78LCS
LIMS ID: 12-7347
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6020A	26.4	25.0	106%	
Chromium	6020A	24.2	25.0	96.8%	
Copper	6020A	26.1	25.0	104%	
Silver	6020A	25.3	25.0	101%	
Zinc	6020A	80	80	100%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: UR78MB
LIMS ID: 12-7347
Matrix: Water
Data Release Authorized:
Reported: 05/07/12

QC Report No: UR78-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	04/30/12	6020A	05/04/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	04/30/12	6020A	05/04/12	7440-47-3	Chromium	0.5	0.5	U
200.8	04/30/12	6020A	05/04/12	7440-50-8	Copper	0.5	0.5	U
200.8	04/30/12	6020A	05/04/12	7440-22-4	Silver	0.2	0.2	U
200.8	04/30/12	6020A	05/04/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050411	50.0	50.12	100.2	50.0	49.48	99.0	49.21	98.4	50.28	100.6	49.58	99.2	49.00	98.0
Chromium	CR	PMS	MS050411	50.0	49.79	99.6	50.0	48.33	96.7	48.47	96.9	48.02	96.0	48.16	96.3	47.60	95.2
Copper	CU	PMS	MS050411	50.0	49.85	99.7	50.0	50.04	100.1	49.27	98.5	50.02	100.0	50.37	100.7	50.06	100.1
Silver	AG	PMS	MS050411	50.0	51.85	103.7	50.0	51.16	102.3	49.86	99.7	49.36	98.7	48.76	97.5	49.80	99.6
Zinc	ZN	PMS	MS050411	50.0	48.93	97.9	50.0	51.10	102.2	50.84	101.7	51.12	102.2	50.13	100.3	50.39	100.8

UR78 - 050165

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS050411	50.0	50.00	100.0										
Chromium	CR	PMS	MS050411	50.0	48.25	96.5										
Copper	CU	PMS	MS050411	50.0	50.90	101.8										
Silver	AG	PMS	MS050411	50.0	48.60	97.2										
Zinc	ZN	PMS	MS050411	50.0	49.87	99.7										

Control Limits: Mercury 80-120; Other Metals 90-110

UR78 : 09187

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: UR78

ANALYTE	EL	M	RUN	CRA/I	TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	PMS	MS050411		0.2	0.22	110.0										
Chromium	CR	PMS	MS050411		0.5	0.54	108.0										
Copper	CU	PMS	MS050411		0.5	0.56	112.0										
Silver	AG	PMS	MS050411		0.2	0.21	105.0										
Zinc	ZN	PMS	MS050411		4.0	4.39	109.8										

Control Limits: no control limits have been established by the EPA at this time.

UR78 : 050308

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050411	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chromium	CR	PMS	MS050411	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS050411	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS050411	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS050411	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

UR78:00133

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS050411	10.0	0.2	0.2	U										
Chromium	CR	PMS	MS050411	10.0	0.5	0.5	U										
Copper	CU	PMS	MS050411	25.0	0.5	0.5	B										
Silver	AG	PMS	MS050411	10.0	0.2	0.2	U										
Zinc	ZN	PMS	MS050411	20.0	4.0	4.0	U										

UR78 : 05105

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050411

SDG: UR78

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.0	0.1							
Cadmium		20	0.2	19.6	**98.0**						
Chromium		20	0.9	19.7	**98.5**						
Cobalt		20	0.0	18.6	**93.0**						
Copper		20	0.9	20.8	**104.0**						
Manganese		20	0.1	18.5	**92.5**						
Molybdenum	400	400	404.8	404.0	**101.0**						
Nickel		20	0.4	19.5	**97.5**						
Selenium			-0.4	-0.2							
Silver		20	0.0	19.5	**97.5**						
Thorium			0.2	0.1							
Vanadium			0.1	0.1							
Zinc		20	0.9	19.7	**98.5**						

UR78-SDG

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: UR78

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Arsenic	MW-22-042512L	UR78E-L	Water	MS050411	68.30		71.70		5.0	
Arsenic	MW-22-042512L	UR78M-L	Water	MS050411	61.62		64.70		5.0	

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78 UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Arsenic	AS	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Chromium	CR	PMS	NEXION 300D MS	0.00		10	0.5	4/1/2011		
Copper	CU	PMS	NEXION 300D MS	0.00		25	0.5	4/1/2011		
Silver	AG	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Zinc	ZN	PMS	NEXION 300D MS	0.00		20	4.0	4/1/2011		

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: UR78

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 4/30/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-1S-042512	UR78A	0.000	50.0	25.0
MW-1D-042512	UR78B	0.000	50.0	25.0
MW-17-042512	UR78C	0.000	50.0	25.0
MW-4S-042512	UR78D	0.000	50.0	25.0
MW-22-042512	UR78E	0.000	50.0	25.0
MW-22-042512D	UR78EDUP	0.000	50.0	25.0
MW-22-042512S	UR78ESPK	0.000	50.0	25.0
MW-23-042512	UR78F	0.000	50.0	25.0
MW-1S-042512	UR78I	0.000	50.0	25.0
MW-1D-042512	UR76J	0.000	50.0	25.0
MW-17-042512	UR76K	0.000	50.0	25.0
MW-4S-042512	UR78L	0.000	50.0	25.0
MW-22-042512	UR78M	0.000	50.0	25.0
PBW	UR78MB1	0.000	50.0	25.0
LCSW	UR78MB1SPK	0.000	50.0	25.0
PBW	UR78MB2	0.000	50.0	25.0
LCSW	UR78MB2SPK	0.000	50.0	25.0
MW-22-042512D	UR78MDUP	0.000	50.0	25.0
MW-22-042512S	UR78MSPK	0.000	50.0	25.0
MW-23-042512	UR78N	0.000	50.0	25.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/4/2012

SDG: UR78 | RUNID: MS050411 METHOD: PMS | END DATE: 5/4/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10030		X		X							X	X																		X
S1	S1	1.00	10070		X		X							X	X																		X
S2	S2	1.00	10110		X		X							X	X																		X
S3	S3	1.00	10160		X		X							X	X																		X
S4	S4	1.00	10200		X		X							X	X																		X
S5	S5	1.00	10260																														
ZZZZZZ	Rinse sampl	1.00	10310																														
S0	S0	1.00	10410		X		X							X	X																		X
ICV	MICV	1.00	10460		X		X							X	X																		X
ICB	ICB	1.00	10510		X		X							X	X																		X
CCV	MCCV1	1.00	10550		X		X							X	X																		X
CCB	CCB1	1.00	11000		X		X							X	X																		X
CRI	MCRI	1.00	11040		X		X							X	X																		X
ICSA	ICSAI	1.00	11080		X		X							X	X																		X
ICSAB	ICSABI	1.00	11140		X		X							X	X																		X
ZZZZZZ	B1	1.00	11190																														
ZZZZZZ	B2	1.00	11250																														
CCV	MCCV2	1.00	11300		X		X							X	X																		X
CCB	CCB2	1.00	11340		X		X							X	X																		X
PBW	UR78MB1	2.00	11480		X		X							X	X																		X
PBW	UR78MB2	2.00	11530																														
LCSW	UR78MB2SPK	2.00	11570		X		X							X	X																		X
LCSW	UR78MB1SPK	2.00	12010		X		X							X	X																		X
ZZZZZZ	US02L	40.00	12050																														
ZZZZZZ	US02N	20.00	12090																														
ZZZZZZ	US02O	40.00	12130																														
ZZZZZZ	US02P	20.00	12170																														
ZZZZZZ	LR200	1.00	12230																														
ZZZZZZ	B3	1.00	12290																														
CCV	MCCV3	1.00	12330		X		X							X	X																		X
CCB	CCB3	1.00	12390		X		X							X	X																		X
MW-1S-042512	UR78A	2.00	12430		X		X							X	X																		X
MW-1D-042512	UR78B	2.00	12490				X																										
MW-17-042512	UR78C	2.00	12530				X																										
MW-4S-042512	UR78D	2.00	12570				X																										

FORM XIV

UR78-090495

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/4/2012

SDG: UR78 | RUNID: MS050411 METHOD: PMS | END DATE: 5/4/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
MW-17-042512	UR78K	2.00	13010				X																										
MW-4S-042512	UR78L	2.00	13050				X																										
MW-23-042512	UR78N	2.00	13100				X																										
MW-1S-042512	UR78I	2.00	13140		X		X							X	X																		X
MW-23-042512	UR78F	2.00	13180				X																										
MW-1D-042512	UR78J	2.00	13220				X																										
CCV	MCCV4	1.00	13280		X		X							X	X																		X
CCB	CCB4	1.00	13340		X		X							X	X																		X
PBW	UR78MB2	2.00	13390		X		X							X	X																		X
CCV	MCCV5	1.00	13450		X		X							X	X																		X
CCB	CCB5	1.00	13500		X		X							X	X																		X
MW-22-042512L	UR78E-L	10.00	13550				X																										
MW-22-042512	UR78E	2.00	13590				X																										
MW-22-042512D	UR78EDUP	2.00	14030				X																										
MW-22-042512S	UR78ESPK	2.00	14070				X																										
ZZZZZZ	ZZZZZZ	2.00	14110																														
MW-22-042512L	UR78M-L	10.00	14200				X																										
MW-22-042512	UR78M	2.00	14240				X																										
MW-22-042512D	UR78MDUP	2.00	14280				X																										
MW-22-042512S	UR78MSPK	2.00	14320				X																										
ZZZZZZ	ZZZZZZ	2.00	14360																														
CCV	MCCV6	1.00	14430		X		X							X	X																		X
CCB	CCB6	1.00	14480		X		X							X	X																		X

UR78:06:05:12

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-24-042512	US02A	12-7559	
MW-24-042512D	US02ADUP	12-7559	
MW-24-042512S	US02ASPK	12-7559	
MW-2D-042612	US02B	12-7560	
MW-2S-042612	US02C	12-7561	
MW-21-042612	US02D	12-7562	
MW-6S-042612	US02E	12-7563	
MW-20-042612	US02F	12-7564	
PBW	US02MB1	12-7564	
LCSW	US02MB1SPK	12-7564	
DUP-042612-1	US02G	12-7565	
DUP-042612-2	US02H	12-7566	
MW-24-042512	US02I	12-7567	
MW-24-042512D	US02IDUP	12-7567	
MW-24-042512S	US02ISPK	12-7567	
MW-2D-042612	US02J	12-7568	
MW-2S-042612	US02K	12-7569	
MW-21-042612	US02L	12-7570	
MW-6S-042612	US02M	12-7571	
PBW	US02MB2	12-7572	
LCSW	US02MB2SPK	12-7572	

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 5/15/12 Title: Inorganics Director

UR78:00197

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
MW-20-042612	US02N	12-7572	
DUP-042612-1	US02O	12-7573	
DUP-042612-2	US02P	12-7574	
MW-24-042512	US02RA	12-7559	R
MW-24-042512D	US02RADUP	12-7559	R
MW-24-042512S	US02RASPK	12-7559	R
PBW	US02RMB1	12-7559	R
LCSW	US02RMB1SPK	12-7559	R
MW-24-042512	US02RI	12-7567	R
MW-24-042512D	US02RIDUP	12-7567	R
MW-24-042512S	US02RISPK	12-7567	R
PBW	US02RMB2	12-7567	R
LCSW	US02RMB2SPK	12-7567	R

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 5/15/12 Title: Inorganics Director

UR78:00158

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-24-042512
SAMPLE

Lab Sample ID: US02A
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/08/12	6020A	05/09/12	**7440-38-2**	**Arsenic**	0.2	**0.4**	
200.8	05/01/12	6020A	05/03/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/01/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	**7440-02-0**	**Nickel**	0.5	**1.1**	
200.8	05/01/12	6020A	05/03/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00199

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-2D-042612
SAMPLE

Lab Sample ID: US02B
LIMS ID: 12-7560
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	0.2	**35.7**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR79 00200

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-2S-042612
SAMPLE

Lab Sample ID: US02C
LIMS ID: 12-7561
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	2	**621**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00201

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-21-042612
SAMPLE

Lab Sample ID: US02D
LIMS ID: 12-7562
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	4	1,930	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00202

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-6S-042612
SAMPLE

Lab Sample ID: US02E
LIMS ID: 12-7563
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	0.2	**13.7**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 00203

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-20-042612
SAMPLE

Lab Sample ID: US02F
LIMS ID: 12-7564
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	2	**957**	
200.8	05/01/12	6020A	05/03/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	**7440-50-8**	**Copper**	0.5	**0.8**	
200.8	05/01/12	6020A	05/03/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/01/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	**7440-02-0**	**Nickel**	0.5	**2.9**	
200.8	05/01/12	6020A	05/03/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	**7440-66-6**	**Zinc**	4	**6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: DUP-042612-1
SAMPLE

Lab Sample ID: US02G
LIMS ID: 12-7565
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-38-2	Arsenic	4	1,820	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00205

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: DUP-042612-2
SAMPLE

Lab Sample ID: US02H
LIMS ID: 12-7566
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-38-2	Arsenic	2	1,020	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00206

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: MW-24-042512**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: US02A
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6020A	0.200 U	23.7	25.0	94.8%	
Arsenic	6020A	0.350	26.7	25.0	105%	
Beryllium	6020A	0.200 U	22.9	25.0	91.6%	
Cadmium	6020A	0.100 U	23.0	25.0	92.0%	
Chromium	6020A	0.500 U	22.7	25.0	90.8%	
Copper	6020A	0.500 U	25.0	25.0	100%	
Lead	6020A	0.100 U	23.7	25.0	94.8%	
Mercury	7470A	0.100 U	1.08	1.00	108%	
Nickel	6020A	1.10	25.0	25.0	95.6%	
Selenium	6020A	0.500 U	72.0	80.0	90.0%	
Silver	6020A	0.200 U	22.9	25.0	91.6%	
Thallium	6020A	0.200 U	23.4	25.0	93.6%	
Zinc	6020A	4.00 U	85.1	80.0	106%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

UR78:00207

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW-24-042512
DUPLICATE

Lab Sample ID: US02A
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Arsenic	6020A	0.4	0.4	0.0%	+/- 0.2	L
Beryllium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Copper	6020A	0.5 U	0.5	0.0%	+/- 0.5	L
Lead	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6020A	1.1	0.7	44.4%	+/- 0.5	L
Selenium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

UR78:00208

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: US02LCS
LIMS ID: 12-7564
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6020A	24.6	25.0	98.4%	
Arsenic	6020A	25.0	25.0	100%	
Beryllium	6020A	23.9	25.0	95.6%	
Cadmium	6020A	24.3	25.0	97.2%	
Chromium	6020A	25.0	25.0	100%	
Copper	6020A	25.4	25.0	102%	
Lead	6020A	24.9	25.0	99.6%	
Mercury	7470A	2.17	2.00	108%	
Nickel	6020A	24.6	25.0	98.4%	
Selenium	6020A	75.1	80.0	93.9%	
Silver	6020A	25.3	25.0	101%	
Thallium	6020A	24.2	25.0	96.8%	
Zinc	6020A	77.8	80.0	97.2%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

UR79 : 00209

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: US02LCS
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6020A	27.6	25.0	110%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

UR79:00210

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**
Page 1 of 1

Lab Sample ID: US02MB
LIMS ID: 12-7564
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	0.2	**0.6**	
200.8	05/01/12	6020A	05/03/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/01/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**
Page 1 of 1

Lab Sample ID: US02MB
LIMS ID: 12-7559
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/09/12	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00212

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-24-042512
SAMPLE

Lab Sample ID: US02I
LIMS ID: 12-7567
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/08/12	6020A	05/09/12	**7440-38-2**	**Arsenic**	0.2	**0.3**	
200.8	05/01/12	6020A	05/03/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	**7440-50-8**	**Copper**	0.5	**0.8**	
200.8	05/01/12	6020A	05/03/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/01/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	**7440-02-0**	**Nickel**	0.5	**0.7**	
200.8	05/01/12	6020A	05/03/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00213

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-2D-042612
SAMPLE

Lab Sample ID: US02J
LIMS ID: 12-7568
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	0.2	**35.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 00214

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-2S-042612
SAMPLE

Lab Sample ID: US02K
LIMS ID: 12-7569
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	2	**658**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00215

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-21-042612
SAMPLE

Lab Sample ID: US02L
LIMS ID: 12-7570
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	4	**1,920**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00216

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-6S-042612
SAMPLE

Lab Sample ID: US02M
LIMS ID: 12-7571
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	0.2	**11.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00217

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-20-042612
SAMPLE

Lab Sample ID: US02N
LIMS ID: 12-7572
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/01/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	2	**869**	
200.8	05/01/12	6020A	05/03/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	**7440-50-8**	**Copper**	0.5	**0.5**	
200.8	05/01/12	6020A	05/03/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/01/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	**7440-02-0**	**Nickel**	0.5	**1.2**	
200.8	05/01/12	6020A	05/03/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	**7440-66-6**	**Zinc**	4	**5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: DUP-042612-1
SAMPLE

Lab Sample ID: US02O
LIMS ID: 12-7573
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	4	**1,850**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00219

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: DUP-042612-2
SAMPLE

Lab Sample ID: US02P
LIMS ID: 12-7574
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/26/12
Date Received: 04/26/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/04/12	**7440-38-2**	**Arsenic**	2	**896**	

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00220

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-24-042512
MATRIX SPIKE

Lab Sample ID: US02I
LIMS ID: 12-7567
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6020A	0.200 U	24.4	25.0	97.6%	
Arsenic	6020A	0.340	26.7	25.0	105%	
Beryllium	6020A	0.200 U	22.8	25.0	91.2%	
Cadmium	6020A	0.100 U	23.4	25.0	93.6%	
Chromium	6020A	0.500 U	22.1	25.0	88.4%	
Copper	6020A	0.770	24.1	25.0	93.3%	
Lead	6020A	0.100 U	23.8	25.0	95.2%	
Mercury	7470A	0.100 U	1.05	1.00	105%	
Nickel	6020A	0.660	24.0	25.0	93.4%	
Selenium	6020A	0.500 U	70.6	80.0	88.2%	
Silver	6020A	0.200 U	23.5	25.0	94.0%	
Thallium	6020A	0.200 U	23.4	25.0	93.6%	
Zinc	6020A	4.00 U	71.6	80.0	89.5%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

UR78:00221

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW-24-042512
DUPLICATE

Lab Sample ID: US02I
LIMS ID: 12-7567
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: 04/25/12
Date Received: 04/26/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Arsenic	6020A	0.3	0.4	28.6%	+/- 0.2	L
Beryllium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Copper	6020A	0.8	0.5 U	46.2%	+/- 0.5	L
Lead	6020A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6020A	0.7	0.6	15.4%	+/- 0.5	L
Selenium	6020A	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	6020A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	6020A	4 U	4 U	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

UR78 : 00222

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: LAB CONTROL**

Lab Sample ID: US02LCS
LIMS ID: 12-7572
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6020A	24.3	25.0	97.2%	
Arsenic	6020A	25.4	25.0	102%	
Beryllium	6020A	24.2	25.0	96.8%	
Cadmium	6020A	24.6	25.0	98.4%	
Chromium	6020A	24.8	25.0	99.2%	
Copper	6020A	25.2	25.0	101%	
Lead	6020A	25.0	25.0	100%	
Mercury	7470A	2.1	2.0	105%	
Nickel	6020A	24.7	25.0	98.8%	
Selenium	6020A	75.8	80.0	94.8%	
Silver	6020A	25.6	25.0	102%	
Thallium	6020A	24.2	25.0	96.8%	
Zinc	6020A	94	80	118%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

UR78 : 00223

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: US02LCS
LIMS ID: 12-7567
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6020A	27.6	25.0	110%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

UR78:00224

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**
Page 1 of 1

Lab Sample ID: US02MB
LIMS ID: 12-7572
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/01/12	6020A	05/03/12	7440-36-0	Antimony	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	**7440-38-2**	**Arsenic**	0.2	**0.3**	
200.8	05/01/12	6020A	05/03/12	7440-41-7	Beryllium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-50-8	Copper	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/01/12	7470A	05/03/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/01/12	6020A	05/03/12	7440-02-0	Nickel	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/01/12	6020A	05/03/12	7440-22-4	Silver	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-28-0	Thallium	0.2	0.2	U
200.8	05/01/12	6020A	05/03/12	7440-66-6	Zinc	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

UR78:00225

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**
Page 1 of 1

Lab Sample ID: US02MB
LIMS ID: 12-7567
Matrix: Water
Data Release Authorized:
Reported: 05/14/12

QC Report No: US02-ERM-West
Project: RG Spring GW Sampling
155129.09
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/08/12	6020A	05/09/12	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

UR78 : 00225

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US02

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Antimony	SB	PMS	MS050311	50.0	48.76	**97.5**	50.0	49.96	**99.9**	50.86	**101.7**	50.31	**100.6**	50.27	**100.5**	50.45	**100.9**
Arsenic	AS	PMS	MS050311	50.0	49.06	**98.1**	50.0	49.48	**99.0**	48.62	**97.2**	49.13	**98.3**	49.57	**99.1**	49.32	**98.6**
Beryllium	BE	PMS	MS050311	50.0	49.79	**99.6**	50.0	50.57	**101.1**	51.11	**102.2**	51.27	**102.5**	51.79	**103.6**	51.02	**102.0**
Cadmium	CD	PMS	MS050311	50.0	49.75	**99.5**	50.0	50.49	**101.0**	50.66	**101.3**	49.71	**99.4**	50.20	**100.4**	51.61	**103.2**
Chromium	CR	PMS	MS050311	50.0	50.83	**101.7**	50.0	50.18	**100.4**	49.92	**99.8**	49.83	**99.7**	49.84	**99.7**	49.66	**99.3**
Copper	CU	PMS	MS050311	50.0	49.32	**98.6**	50.0	50.61	**101.2**	49.39	**98.8**	54.12	**108.2**	49.22	**98.4**	49.31	**98.6**
Lead	PB	PMS	MS050311	50.0	50.02	**100.0**	50.0	50.00	**100.0**	50.04	**100.1**	49.44	**98.9**	49.42	**98.8**	49.65	**99.3**
Mercury	HG	CVA	HG050302	8.0	8.63	**107.9**	4.0	4.18	**104.5**	4.10	**102.5**	4.11	**102.8**				
Nickel	NI	PMS	MS050311	50.0	49.65	**99.3**	50.0	49.76	**99.5**	49.12	**98.2**	49.55	**99.1**	49.87	**99.7**	49.45	**98.9**
Selenium	SE	PMS	MS050311	80.0	78.92	**98.7**	50.0	51.15	**102.3**	51.23	**102.5**	51.23	**102.5**	51.39	**102.8**	51.61	**103.2**
Silver	AG	PMS	MS050311	50.0	51.12	**102.2**	50.0	49.49	**99.0**	50.88	**101.8**	48.57	**97.1**	49.70	**99.4**	48.94	**97.9**
Thallium	TL	PMS	MS050311	50.0	48.86	**97.7**	50.0	48.92	**97.8**	48.67	**97.3**	48.06	**96.1**	48.60	**97.2**	48.48	**97.0**
Zinc	ZN	PMS	MS050311	50.0	47.78	**95.6**	50.0	50.01	**100.0**	49.48	**99.0**	50.61	**101.2**	49.81	**99.6**	50.07	**100.1**

US28 09222

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS:ug/L

SDG: US02

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Antimony	SB	PMS	MS050311	50.0	49.46	98.9	49.50	99.0								
Arsenic	AS	PMS	MS050311	50.0	49.08	98.2	49.13	98.3								
Beryllium	BE	PMS	MS050311	50.0	50.85	101.7	50.10	100.2								
Cadmium	CD	PMS	MS050311	50.0	49.87	99.7	49.15	98.3								
Chromium	CR	PMS	MS050311	50.0	50.11	100.2	48.42	96.8								
Copper	CU	PMS	MS050311	50.0	47.65	95.3	49.07	98.1								
Lead	PB	PMS	MS050311	50.0	49.51	99.0	49.36	98.7								
Mercury	HG	CVA	HG050302	4.0												
Nickel	NI	PMS	MS050311	50.0	49.10	98.2	48.21	96.4								
Selenium	SE	PMS	MS050311	50.0	51.20	102.4	50.99	102.0								
Silver	AG	PMS	MS050311	50.0	48.79	97.6	47.68	95.4								
Thallium	TL	PMS	MS050311	50.0	48.04	96.1	47.66	95.3								
Zinc	ZN	PMS	MS050311	50.0	50.06	100.1	49.66	99.3								

Control Limits: Mercury 80-120; Other Metals 90-110

UR725 · 052228

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050411	50.0	50.12	100.2	50.0	49.48	99.0	49.21	98.4	50.28	100.6				

Control Limits: Mercury 80-120; Other Metals 90-110

UR 7/8/05 09225

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS050911	50.0	51.06	102.1	50.0	50.96	101.9	51.16	102.3	51.19	102.4	50.35	100.7	50.19	100.4

Control Limits: Mercury 80-120; Other Metals 90-110

LR7 8 : 05/29

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US02

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Antimony	SB	PMS	MS050311	0.2	0.18	90.0										
Arsenic	AS	PMS	MS050311	0.2	0.19	95.0										
Beryllium	BE	PMS	MS050311	0.2	0.20	100.0										
Cadmium	CD	PMS	MS050311	0.1	0.11	110.0										
Chromium	CR	PMS	MS050311	0.5	0.47	94.0										
Copper	CU	PMS	MS050311	0.5	0.53	106.0										
Lead	PB	PMS	MS050311	0.1	0.11	110.0										
Mercury	HG	CVA	HG050302	0.1	0.11	110.0										
Nickel	NI	PMS	MS050311	0.5	0.52	104.0										
Selenium	SE	PMS	MS050311	0.5	0.48	96.0										
Silver	AG	PMS	MS050311	0.2	0.20	100.0										
Thallium	TL	PMS	MS050311	0.2	0.20	100.0										
Zinc	ZN	PMS	MS050311	4.0	4.14	103.5										

Control Limits: no control limits have been established by the EPA at this time.

UR76-050271

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS: ug/L

SDG: US02

ANALYTE	EL	M	RUN	CRA/I	TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Arsenic	AS	PMS	MS050411		0.2	0.22	110.0										
Arsenic	AS	PMS	MS050911		0.2	0.25	125.0										

Control Limits: no control limits have been established by the EPA at this time.

UR78 · 002282

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

UNITS:ug/L

SDG: US02

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Antimony	SB	PMS	MS050311	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS050311	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Beryllium	BE	PMS	MS050311	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	CD	PMS	MS050311	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Chromium	CR	PMS	MS050311	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS050311	25.0	0.5	0.5	U	0.5	U	0.5	U	4.2	B	0.5	U	0.5	U
Lead	PB	PMS	MS050311	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Mercury	HG	CVA	HG050302	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U				
Nickel	NI	PMS	MS050311	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Selenium	SE	PMS	MS050311	5.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS050311	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Thallium	TL	PMS	MS050311	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS050311	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

UR76 - 000253

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Antimony	SB	PMS	MS050311	60.0	0.2	0.2	U	0.2	U								
Arsenic	AS	PMS	MS050311	10.0	0.2	0.2	U	0.2	B								
Beryllium	BE	PMS	MS050311	5.0	0.2	0.2	U	0.2	U								
Cadmium	CD	PMS	MS050311	5.0	0.1	0.1	U	0.1	U								
Chromium	CR	PMS	MS050311	10.0	0.5	0.5	U	0.5	U								
Copper	CU	PMS	MS050311	25.0	0.5	0.5	U	0.5	U								
Lead	PB	PMS	MS050311	3.0	0.1	0.1	U	0.1	U								
Mercury	HG	CVA	HG050302	0.2	0.1												
Nickel	NI	PMS	MS050311	40.0	0.5	0.5	U	0.5	U								
Selenium	SE	PMS	MS050311	5.0	0.5	0.5	U	0.5	U								
Silver	AG	PMS	MS050311	10.0	0.2	0.2	U	0.2	U								
Thallium	TL	PMS	MS050311	10.0	0.2	0.2	U	0.2	U								
Zinc	ZN	PMS	MS050311	20.0	4.0	4.0	U	4.0	U								

UP76 · 005234

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050411	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U				

US_GW_000235

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS050911	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

US2S9 : 052755

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050311

SDG: US02

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Cadmium		20	0.2	19.0	95.0						
Chromium		20	0.9	20.2	101.0						
Cobalt		20	0.0	19.0	95.0						
Copper		20	1.3	20.7	103.5						
Manganese		20	0.2	19.4	97.0						
Molybdenum	400	400	388.6	400.2	100.1						
Nickel		20	0.4	19.3	96.5						
Selenium			-0.5	-0.4							
Silver		20	0.0	19.3	96.5						
Thorium			0.2	0.1							
Vanadium			0.1	0.1							
Zinc		20	0.8	19.0	95.0						

URS 00027

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050411

SDG: US02

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.0	0.1							
Cadmium		20	0.2	19.6	**98.0**						
Chromium		20	0.9	19.7	**98.5**						
Cobalt		20	0.0	18.6	**93.0**						
Copper		20	0.9	20.8	**104.0**						
Manganese		20	0.1	18.5	**92.5**						
Molybdenum	400	400	404.8	404.0	**101.0**						
Nickel		20	0.4	19.5	**97.5**						
Selenium			-0.4	-0.2							
Silver		20	0.0	19.5	**97.5**						
Thorium			0.2	0.1							
Vanadium			0.1	0.1							
Zinc		20	0.9	19.7	**98.5**						

UR78 - 002238

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

ICS SOURCE: I.V.

PROJECT: RG Spring GW Samplin

RUNID: MS050911

SDG: US02

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Cadmium		20	0.1	19.0	**95.0**						
Chromium		20	0.9	20.3	**101.5**						
Cobalt		20	0.0	19.2	**96.0**						
Copper		20	1.0	19.8	**99.0**						
Manganese		20	0.1	18.8	**94.0**						
Molybdenum	400	400	404.6	417.6	**104.4**						
Nickel		20	0.4	19.1	**95.5**						
Selenium			-0.3	-0.5							
Silver		20	0.0	19.7	**98.5**						
Thorium			0.2	0.1							
Vanadium			0.1	0.1							
Zinc		20	0.7	18.4	**92.0**						

UP7B-002239

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US02

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Antimony	MW-24-042512L	US02A-L	Water	MS050311	0.02	U	0.05	B		
Beryllium	MW-24-042512L	US02A-L	Water	MS050311	0.01	U	0.00	B		
Cadmium	MW-24-042512L	US02A-L	Water	MS050311	0.07	U	0.10	B		
Chromium	MW-24-042512L	US02A-L	Water	MS050311	0.07	U	-0.10	B		
Copper	MW-24-042512L	US02A-L	Water	MS050311	0.44	U	1.25	B		
Lead	MW-24-042512L	US02A-L	Water	MS050311	0.02	U	0.05	B		
Nickel	MW-24-042512L	US02A-L	Water	MS050311	1.10	B	1.15	B	4.5	
Selenium	MW-24-042512L	US02A-L	Water	MS050311	0.06	U	-0.40	B		
Silver	MW-24-042512L	US02A-L	Water	MS050311	0.00	U	0.00	B		
Thallium	MW-24-042512L	US02A-L	Water	MS050311	0.00	U	0.00	B		
Zinc	MW-24-042512L	US02A-L	Water	MS050311	1.21	U	3.10	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US02

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Antimony	MW-24-042512L	US02I-L	Water	MS050311	0.01	U	0.00	B		
Beryllium	MW-24-042512L	US02I-L	Water	MS050311	0.01	U	0.00	B		
Cadmium	MW-24-042512L	US02I-L	Water	MS050311	0.01	U	0.00	B		
Chromium	MW-24-042512L	US02I-L	Water	MS050311	0.10	U	-0.15	B		
Copper	MW-24-042512L	US02I-L	Water	MS050311	0.77	B	1.05	B	36.4	
Lead	MW-24-042512L	US02I-L	Water	MS050311	0.02	U	0.05	B		
Nickel	MW-24-042512L	US02I-L	Water	MS050311	0.66	B	0.80	B	21.2	
Selenium	MW-24-042512L	US02I-L	Water	MS050311	0.15	U	0.05	B		
Silver	MW-24-042512L	US02I-L	Water	MS050311	0.00	U	0.00	B		
Thallium	MW-24-042512L	US02I-L	Water	MS050311	0.00	U	0.05	B		
Zinc	MW-24-042512L	US02I-L	Water	MS050311	1.96	U	2.85	B		

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US02

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Arsenic	MW-24-042512L	US02RA-L	Water	MS050911	0.35	B	0.50	B	42.9	

UR78:00242

ICP Serial Dilutions

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

ANALYSIS METHOD: PMS

SDG: US02

UNITS: ug/L

ANALYTE	CLIENT ID	ARI ID	MATRIX	RUNID	INITIAL SAMPLE RESULT (I)	C	SERIAL DILUTION RESULT (S)	C	% DIFFERENCE	Q
Arsenic	MW-24-042512L	US02RI-L	Water	MS050911	0.34	B	0.65	B	91.2	

UR78 : 00243

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Antimony	SB	PMS	NEXION 300D MS	0.00		60	0.2	4/1/2011		
Arsenic	AS	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Beryllium	BE	PMS	NEXION 300D MS	0.00		5	0.2	4/1/2011		
Cadmium	CD	PMS	NEXION 300D MS	0.00		5	0.1	4/1/2011		
Chromium	CR	PMS	NEXION 300D MS	0.00		10	0.5	4/1/2011		
Copper	CU	PMS	NEXION 300D MS	0.00		25	0.5	4/1/2011		
Lead	PB	PMS	NEXION 300D MS	0.00		3	0.1	4/1/2011		
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2011		
Nickel	NI	PMS	NEXION 300D MS	0.00		40	0.5	4/1/2011		
Selenium	SE	PMS	NEXION 300D MS	0.00		5	0.5	4/1/2011		
Silver	AG	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Thallium	TL	PMS	NEXION 300D MS	0.00		10	0.2	4/1/2011		
Zinc	ZN	PMS	NEXION 300D MS	0.00		20	4.0	4/1/2011		

UR78:00244

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/1/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-24-042512	US02A	0.000	50.0	25.0
MW-24-042512D	US02ADUP	0.000	50.0	25.0
MW-24-042512S	US02ASPK	0.000	50.0	25.0
MW-2D-042612	US02B	0.000	50.0	25.0
MW-2S-042612	US02C	0.000	50.0	25.0
MW-21-042612	US02D	0.000	50.0	25.0
MW-6S-042612	US02E	0.000	50.0	25.0
MW-20-042612	US02F	0.000	50.0	25.0
DUP-042612-1	US02G	0.000	50.0	25.0
DUP-042612-2	US02H	0.000	50.0	25.0
MW-24-042512	US02I	0.000	50.0	25.0
MW-24-042512D	US02IDUP	0.000	50.0	25.0
MW-24-042512S	US02ISPK	0.000	50.0	25.0
MW-2D-042612	US02J	0.000	50.0	25.0
MW-2S-042612	US02K	0.000	50.0	25.0
MW-21-042612	US02L	0.000	50.0	25.0
MW-6S-042612	US02M	0.000	50.0	25.0
PBW	US02MB1	0.000	50.0	25.0
LCSW	US02MB1SPK	0.000	50.0	25.0
PBW	US02MB2	0.000	50.0	25.0
LCSW	US02MB2SPK	0.000	50.0	25.0
MW-20-042612	US02N	0.000	50.0	25.0
DUP-042612-1	US02O	0.000	50.0	25.0
DUP-042612-2	US02P	0.000	50.0	25.0

UR78:00245

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 5/8/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-24-042512	US02RA	0.000	50.0	25.0
MW-24-042512D	US02RADUP	0.000	50.0	25.0
MW-24-042512S	US02RASPK	0.000	50.0	25.0
MW-24-042512	US02RI	0.000	50.0	25.0
MW-24-042512D	US02RIDUP	0.000	50.0	25.0
MW-24-042512S	US02RISPK	0.000	50.0	25.0
PBW	US02RMB1	0.000	50.0	25.0
LCSW	US02RMB1SPK	0.000	50.0	25.0
PBW	US02RMB2	0.000	50.0	25.0
LCSW	US02RMB2SPK	0.000	50.0	25.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin

SDG: US02

ANALYSIS METHOD: CVA

ARI PREP CODE: TWM

PREPDATE: 5/1/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
MW-24-042512	US02A	0.000	20.0	20.0
MW-24-042512D	US02ADUP	0.000	20.0	20.0
MW-24-042512S	US02ASPK	0.000	20.0	20.0
MW-20-042612	US02F	0.000	20.0	20.0
MW-24-042512	US02I	0.000	20.0	20.0
MW-24-042512D	US02IDUP	0.000	20.0	20.0
MW-24-042512S	US02ISPK	0.000	20.0	20.0
PBW	US02MB1	0.000	20.0	20.0
LCSW	US02MB1SPK	0.000	20.0	20.0
PBW	US02MB2	0.000	20.0	20.0
LCSW	US02MB2SPK	0.000	20.0	20.0
MW-20-042612	US02N	0.000	20.0	20.0

UR78:00247

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/3/2012

SDG: US02 | RUNID: MS050311 METHOD: PMS | END DATE: 5/3/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10050		X		X			X		X		X	X								X	X	X	X				X			X
S1	S1	1.00	10090		X		X			X		X		X	X								X	X	X	X				X			X
S2	S2	1.00	10140		X		X			X		X		X	X								X	X	X	X				X			X
S3	S3	1.00	10180		X		X			X		X		X	X								X	X	X	X				X			X
S4	S4	1.00	10230		X		X			X		X		X	X								X	X	X	X				X			X
S5	S5	1.00	10280																														
ZZZZZZ	Rinse sampl	1.00	10330																														
S0	S0	1.00	10430		X		X			X		X		X	X								X	X	X	X				X			X
ICV	MICV	1.00	10470		X		X			X		X		X	X								X	X	X	X				X			X
ICB	ICB	1.00	10520		X		X			X		X		X	X								X	X	X	X				X			X
CCV	MCCV1	1.00	10560		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB1	1.00	11010		X		X			X		X		X	X								X	X	X	X				X			X
CRI	MCRI	1.00	11050		X		X			X		X		X	X								X	X	X	X				X			X
ICSA	ICSAI	1.00	11100		X		X			X		X		X	X								X	X	X	X				X			X
ICSAB	ICSABI	1.00	11150		X		X			X		X		X	X								X	X	X	X				X			X
ZZZZZZ	B1	1.00	11200																														
ZZZZZZ	B2	1.00	11260																														
CCV	MCCV2	1.00	11310		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB2	1.00	11370		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US02MB1	2.00	11500		X					X		X		X	X								X	X	X	X				X			X
PBW	US02MB2	2.00	11540		X					X		X		X	X									X	X	X				X			X
LCSW	US02MB2SPK	2.00	11580		X					X		X		X	X								X	X	X	X				X			X
LCSW	US02MB1SPK	2.00	12030		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512L	US02A-L	10.00	12070		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512	US02A	2.00	12110		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512D	US02ADUP	2.00	12150		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512S	US02ASPK	2.00	12190		X					X		X		X	X								X	X	X	X				X			X
ZZZZZZ	ZZZZZZ	2.00	12230																														
MW-2D-042612	US02B	2.00	12270				X																										
CCV	MCCV3	1.00	12330		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB3	1.00	12390		X		X			X		X		X	X								X	X	X	X				X			X
CCV	MCCV4	1.00	12570		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB4	1.00	13040		X		X			X		X		X	X								X	X	X	X				X			X
MW-2S-042612	US02C	2.00	13080																														
MW-21-042612	US02D	2.00	13120																														

FORM XIV

UR13-06248

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/3/2012

SDG: US02 | RUNID: MS050311 METHOD: PMS | END DATE: 5/3/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
MW-6S-042612	US02E	2.00	13160				X																										
MW-20-042612	US02F	2.00	13200		X					X		X		X	X								X	X	X	X				X			X
DUP-042612-1	US02G	2.00	13240																														
DUP-042612-2	US02H	2.00	13280																														
MW-2D-042612	US02J	2.00	13320				X																										
MW-2S-042612	US02K	2.00	13370																														
ZZZZZZ	LR200	1.00	13410																														
ZZZZZZ	AIR	1.00	13470																														
ZZZZZZ	ZZZZZZ	1.00	13530																														
CCV	MCCV5	1.00	13590		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB5	1.00	14050		X		X			X		X		X	X								X	X	X	X				X			X
PBW	US02MB1	2.00	14170																														
PBW	US02MB2	2.00	14210																				X										
MW-2S-042612	US02C	20.00	14250				X																										
MW-20-042612	US02F	20.00	14290				X																										
MW-21-042612	US02D	40.00	14330				X																										
DUP-042612-1	US02G	40.00	14380				X																										
DUP-042612-2	US02H	20.00	14420				X																										
MW-2S-042612	US02K	20.00	14460				X																										
CCV	MCCV6	1.00	14520		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB6	1.00	14580		X		X			X		X		X	X								X	X	X	X				X			X
MW-24-042512L	US02I-L	10.00	15030		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512	US02I	2.00	15070		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512D	US02IDUP	2.00	15120		X					X		X		X	X								X	X	X	X				X			X
MW-24-042512S	US02ISPK	2.00	15160		X					X		X		X	X								X	X	X	X				X			X
ZZZZZZ	ZZZZZZ	2.00	15200																														
MW-21-042612	US02L	2.00	15240																														
MW-6S-042612	US02M	2.00	15280				X																										
MW-20-042612	US02N	2.00	15320		X					X		X		X	X								X	X	X	X				X			X
DUP-042612-1	US02O	2.00	15360																														
DUP-042612-2	US02P	2.00	15400																														
CCV	MCCV7	1.00	15470		X		X			X		X		X	X								X	X	X	X				X			X
CCB	CCB7	1.00	15530		X		X			X		X		X	X								X	X	X	X				X			X

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/4/2012

SDG: US02 | RUNID: MS050411 METHOD: PMS | END DATE: 5/4/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10030				X																										
S1	S1	1.00	10070				X																										
S2	S2	1.00	10110				X																										
S3	S3	1.00	10160				X																										
S4	S4	1.00	10200				X																										
S5	S5	1.00	10260																														
ZZZZZZ	Rinse sampl	1.00	10310																														
S0	S0	1.00	10410				X																										
ICV	MICV	1.00	10460				X																										
ICB	ICB	1.00	10510				X																										
CCV	MCCV1	1.00	10550				X																										
CCB	CCB1	1.00	11000				X																										
CRI	MCRI	1.00	11040				X																										
ICSA	ICSAI	1.00	11080				X																										
ICSAB	ICSABI	1.00	11140				X																										
ZZZZZZ	B1	1.00	11190																														
ZZZZZZ	B2	1.00	11250																														
CCV	MCCV2	1.00	11300				X																										
CCB	CCB2	1.00	11340				X																										
ZZZZZZ	UR78MB1	2.00	11480																														
ZZZZZZ	UR78MB2	2.00	11530																														
ZZZZZZ	UR78MB2SPK	2.00	11570																														
ZZZZZZ	UR78MB1SPK	2.00	12010																														
MW-21-042612	US02L	40.00	12050				X																										
MW-20-042612	US02N	20.00	12090				X																										
DUP-042612-1	US02O	40.00	12130				X																										
DUP-042612-2	US02P	20.00	12170				X																										
ZZZZZZ	LR200	1.00	12230																														
ZZZZZZ	B3	1.00	12290																														
CCV	MCCV3	1.00	12330				X																										
CCB	CCB3	1.00	12390				X																										

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/9/2012

SDG: US02 | RUNID: MS050911 METHOD: PMS | END DATE: 5/9/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10580				X																										
S1	S1	1.00	11020				X																										
S2	S2	1.00	11060				X																										
S3	S3	1.00	11100				X																										
S4	S4	1.00	11150				X																										
S5	S5	1.00	11200																														
ZZZZZZ	Rinse sampl	1.00	11270																														
S0	S0	1.00	11370				X																										
ICV	MICV	1.00	11410				X																										
ICB	ICB	1.00	11460				X																										
CCV	MCCV1	1.00	11510				X																										
CCB	CCB1	1.00	11560				X																										
CRI	MCRI	1.00	12000				X																										
ICSA	ICSAI	1.00	12040				X																										
ICSAB	ICSABI	1.00	12090				X																										
ZZZZZZ	B1	1.00	12150																														
ZZZZZZ	B2	1.00	12200																														
CCV	MCCV2	1.00	12250				X																										
CCB	CCB2	1.00	12310				X																										
CCV	MCCV3	1.00	12370				X																										
CCB	CCB3	1.00	12430				X																										
ZZZZZZ	US61MB1	2.00	12490																														
ZZZZZZ	US61MB2	2.00	12530																														
ZZZZZZ	US02R	2.00	12570				X																										
PBW	US02RMB2	2.00	13010				X																										
LCSW	US02RMB2SPK	2.00	13060				X																										
LCSW	US02RMB1SPK	2.00	13100				X																										
MW-24-042512L	US02RA-L	10.00	13140				X																										
MW-24-042512	US02RA	2.00	13180				X																										
MW-24-042512D	US02RADUP	2.00	13220				X																										
MW-24-042512S	US02RASPK	2.00	13260				X																										
CCV	MCCV4	1.00	13320				X																										
CCB	CCB4	1.00	13380				X																										
MW-24-042512L	US02RI-L	2.00	13460				X																										
MW-24-042512	US02RI	2.00	13500				X																										

FORM XIV

T5296 · 6/7/12

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: NEXION 300D MS | START DATE: 5/9/2012

SDG: US02 | RUNID: MS050911 METHOD: PMS | END DATE: 5/9/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
MW-24-042512D	US02RIDUP	2.00	13540				X																										
MW-24-042512S	US02RISPK	2.00	13580				X																										
ZZZZZZ	US15D	2.00	14020																														
ZZZZZZ	US15E	2.00	14060																														
ZZZZZZ	US15J	10.00	14100																														
ZZZZZZ	US15K	2.00	14150																														
ZZZZZZ	LR200	1.00	14190																														
ZZZZZZ	B3	1.00	14260																														
CCV	MCCV5	1.00	14320				X																										
CCB	CCB5	1.00	14380				X																										

25259 : 6/7/12

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: ERM-West

PROJECT: RG Spring GW Samplin | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/3/2012

SDG: US02 | RUNID: HG050302 METHOD: CVA | END DATE: 5/3/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11161														X																
S0.1	S0.1	1.00	11174														X																
S0.5	S0.5	1.00	11192														X																
S1	S1	1.00	11210														X																
S2	S2	1.00	11223														X																
S5	S5	1.00	11241														X																
S10	S10	1.00	11255														X																
ICV	AICV	1.00	11285														X																
ICB	ICB	1.00	11303														X																
CCV	ACCV1	1.00	11320														X																
CCB	CCB1	1.00	11334														X																
CRA	CRA	1.00	11352														X																
ZZZZZZ	UR87MB2	1.00	11370																														
ZZZZZZ	UR87MB2SPK	1.00	11383																														
ZZZZZZ	UR87D	1.00	11401																														
ZZZZZZ	UR87DDUP	1.00	11414																														
ZZZZZZ	UR87DSPK	1.00	11432																														
PBW	US02MB1	1.00	11450														X																
LCSW	US02MB1SPK	1.00	11464														X																
MW-24-042512	US02A	1.00	11481														X																
MW-24-042512D	US02ADUP	1.00	11495														X																
CCV	ACCV2	1.00	11513														X																
CCB	CCB2	1.00	11531														X																
MW-24-042512S	US02ASPK	1.00	11545														X																
MW-20-042612	US02F	1.00	11562														X																
PBW	US02MB2	1.00	11580														X																
LCSW	US02MB2SPK	1.00	11594														X																
MW-24-042512	US02I	1.00	12011														X																
MW-24-042512D	US02IDUP	1.00	12025														X																
MW-24-042512S	US02ISPK	1.00	12042														X																
MW-20-042612	US02N	1.00	12060														X																
ZZZZZZ	US27MB1	1.00	12074																														
ZZZZZZ	US27MB1SPK	1.00	12092																														
CCV	ACCV3	1.00	12110														X																
CCB	CCB3	1.00	12124														X																

US278 - 05253

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 04.30.12

Final Volume 25

Final Volume (Hg):

Sample ID UR78 MBSPK, MB2SPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2927-9		
	005		
Ag	25 ✓		
Al			500
As	25 ✓		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25 ✓		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80 ✓		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

UR78 : 69251

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 04.30.12

Final Volume 25

Final Volume (Hg):

Sample ID UR78 ESPK, MSPK
UR95 MBSPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2927-9		
	0.05		
Ag	25		
Al			500
As	25 ✓		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Ti	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

SS2900 · 8/2011

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 04.30.12 Time: 0855

Matrix: Water Block ID: #12 Block Temp: 90°C Thermometer: MP35

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US03 A	5	✓	50.0	25.0			
US03 B	5	✓	50.0	25.0			
US03 C	5	✓	50.0	25.0			
US03 MB1	—	✓	50.0	25.0			
US03 MB1SPK	—	✓	50.0	25.0			
US03 D	1	—	50.0	25.0			Filtered in lab
US03 E	1	—	50.0	25.0			Filtered in lab
US03 F	1	—	50.0	25.0			Filtered in lab
US03 MB2	—	—	50.0	25.0			Filtered in lab
US03 MB2SPK	—	—	50.0	25.0			Filtered in lab
UR98 A	1	—	50.0	25.0			Filtered in lab
UR98 MB	—	—	50.0	25.0			Filtered in lab
UR98 MBSPK	—	—	50.0	25.0			Filtered in lab
UR78 A	15	✓	50.0	25.0			
UR78 B	3	✓	50.0	25.0			
UR78 C	3	✓	50.0	25.0			
UR78 D	3	✓	50.0	25.0			
UR78 E	7	✓	50.0	25.0			
UR78 EDUP	7	✓	50.0	25.0			
UR78 ESPK	7	✓	50.0	25.0			
UR78 F	3	✓	50.0	25.0			
UR78 MB1	—	✓	50.0	25.0			
UR78 MBSPK	—	✓	50.0	25.0			
				04.30.12 MJ			

Chemical/Reagent ID:

HNO_3: MP2287 HCl: — H_2O_2: J7403 Tube Lot #: 111173

All corrections by MJ 04.30.12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 04.30.12 Time: 0555

Matrix: water Block ID: #13 Block Temp: 94°C Thermometer: MP29

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
UR78 I	1	✓	50.0	25.0			
UR78 J	1	✓	50.0	25.0			
UR78 K	1	✓	50.0	25.0			
UR78 L	1	✓	50.0	25.0			
UR78 M	1	✓	50.0	25.0			
UR78 MDUP	1	✓	50.0	25.0			
UR78 MSPK	1	✓	50.0	25.0			
UR78 N	1	✓	50.0	25.0			
UR78 MBL	—	✓	50.0	25.0			
UR78 MBLSPK	—	✓	50.0	25.0			
UR97 A	10	~~✓~~ —	50.0	25.0			preserved in lab
UR97 MB	—	~~✓~~ —	50.0	25.0			
UR97 MBSPK	—	~~✓~~ —	50.0	25.0			
UR88 A	4	✓	50.0	25.0			
UR88 MB	—	✓	50.0	25.0			
UR88 MBSPK	—	✓	50.0	25.0			

04.30.12 MJ

Chemical/Reagent ID:

HNO_3: MPL257 HCl: — H_2O_2: I7403 Tube Lot #: 111173

UR78 00257

Analytical Resources,Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MT

Date: 05.08.12

Final Volume 25

Final Volume (Hg): _____

Sample ID USC2R ASPK, ISPK, MBISPK, MB2SPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2927-9		
	0.05		
Ag	25		
Al			500
As	25 ✓		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MJ

Date: 05.01.12

Final Volume 25

Final Volume (Hg): 20

Sample ID US02 ASPK, ISPK, MBISPK, MB2SPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN	REN	
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2927-9	2993-16	
	0.05	0.05	
Ag	25 ✓		
Al			500
As	25 ✓		
Ba	25		
Be	25 ✓		
Ca			500
Cd	25 ✓		
Co	25		
Cr	25 ✓		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25 ✓		
Pb	25 ✓		
Sb		25 ✓	
Se	80 ✓		
Tl	25 ✓		
U	25		
V	25		
Zn	80 ✓		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	TWM	CVA	1.0	0.02	21087
Hg MBSPK	TWM	CVA	1.0	0.04	29057
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

UP78 · 022559

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 05.01.12 Time: 0925

Matrix: Water Block ID: #13 Block Temp: 93°C Thermometer: MP29

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
UR95 A	4	✓	10.0	25.0			
UR95 MB	—	✓	50.0	25.0			
UR95 MBSPK	—	✓	50.0	25.0			
US02 A	1	✓	50.0	25.0			
US02 ADUP	1	✓	50.0	25.0			
US02 ASPK	1	✓	50.0	25.0			
US02 B	1	✓	50.0	25.0			
US02 C	1	✓	50.0	25.0			
US02 D	1	✓	50.0	25.0			
US02 E	1	✓	50.0	25.0			
US02 F	1	✓	50.0	25.0			
US02 G	1	✓	50.0	25.0			
US02 H	1	✓	50.0	25.0			
US02 MB1	—	✓	50.0	25.0			
US02 MBSPK	—	✓	50.0	25.0			
US22 A	1	✓	50.0	25.0			
US22 B	1	✓	50.0	25.0			
US22 C	1	✓	50.0	25.0			
US22 D	1	✓	50.0	25.0			
US22 MB1	—	✓	50.0	25.0			
US22 MBSPK	—	✓	50.0	25.0			

05 01.12 MJ

Chemical/Reagent ID:

HNO_3: MP2287 HCl: — H_2O_2: I7403 Tube Lot #: 111173

UR78 : 00260

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 05.01.12 Time: 0925

Matrix: Water Block ID: #13 Block Temp: 93°C Thermometer: MP29

ARI Sample ID	Btl #	pH<2	Prep Code: PEN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: PEN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US02 I	1	✓	50.0	25.0			
US02 IDUP	1	✓	50.0	25.0			
US02 ISPK	1	✓	50.0	25.0			
US02 J	1	✓	50.0	25.0			
US02 K	1	✓	50.0	25.0			
US02 L	1	✓	50.0	25.0			
US02 M	1	✓	50.0	25.0			
US02 N	1	✓	50.0	25.0			
US02 O	1	✓	50.0	25.0			
US02 P	1	✓	50.0	25.0			
US02 MB2	—	✓	50.0	25.0			
US02 MB2SPK	—	✓	50.0	25.0			
US22 E	1	—	50.0	25.0			
US22 F	1	—	50.0	25.0			
US22 G	1	—	50.0	25.0			Filtered in lab
US22 H	1	—	50.0	25.0			
US22 MB2	—	—	50.0	25.0			
US22 MB2SPK	—	—	50.0	25.0			

05.01.12 MJ

Chemical/Reagent ID:

HNO_3: MP2287 HCl: ——— H_2O_2: I7403 Tube Lot #: 111173

UR78 : 00261

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MJ Date: 05.08.12 Time: 0905

Matrix: Water Block ID: #12 Block Temp: 93°C Thermometer: MP39

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
US02R A	1	✓	50.0	25.0			
US02R ADUP	1	✓	50.0	25.0			
US02R ASPK	1	✓	50.0	25.0			
US02R MB1	—	✓	50.0	25.0			
US02R MB1SPK	—	✓	50.0	25.0			
US02R I	1	✓	50.0	25.0			
US02R IDUP	1	✓	50.0	25.0			
US02R ISPK	1	✓	50.0	25.0			
US02R MB2	—	✓	50.0	25.0			
US02R MB2SPK	—	✓	50.0	25.0			
US52 A	1	✓	50.0	25.0			
US52 ADUP	1	✓	50.0	25.0			
US52 ASPK	1	✓	50.0	25.0			
US52 B	10	✓	50.0	25.0			
US52 C	1	✓	50.0	25.0			
US52 D	1	✓	50.0	25.0			
US52 E	1	✓	50.0	25.0			
US52 F	1	✓	50.0	25.0			
US52 G	7	✓	50.0	25.0			
US52 GDUP	7	✓	50.0	25.0			
US52 GSPK	7	✓	50.0	25.0			
US52 H	2	✓	50.0	25.0			
US52 I	2	✓	50.0	25.0			
US52 MB1	—	✓	50.0	25.0			
US52 MB1SPK	—	✓	50.0	25.0			

Chemical/Reagent ID:

HNO_3: MP2287 HCl: —— H_2O_2: I7403 Tube Lot #: 111173

UR78:00252

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 92.1°C
Start Time: 1315
Matrix: water
Date: 05.01.12
End Time: 1515

ARI Sample ID	Sample Bottle #	pH<2	~~Initial Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US02 A	1	✓	20.0	20.0	05.08 1	Y	
US02 ADUP	1	✓	20.0	20.0	1	Y	
US02 ASPK	1	✓	20.0	20.0	1	Y	
US02 F	1	✓	20.0	20.0	1	Y	
US02 MB1	—	✓	20.0	20.0	1	Y	
US02 MB1SPK	—	✓	20.0	20.0	1	Y	
US02 I	1	✓	20.0	20.0	1	Y	
US02 IDUP	1	✓	20.0	20.0	1	Y	
US02 ISPK	1	✓	20.0	20.0	1	Y	
US02 N	1	✓	20.0	20.0	1	Y	
US02 MB2	—	✓	20.0	20.0	1	Y	
US02 MB2SPK	—	✓	20.0	20.0	1	Y	

05.01.12 MJ

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

UR78 : 00263

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Metals Laboratory Analyst Notes

ARI Job No.: U502 Client ID: ERM

Parameter: ICPMS Client Project:

List problems, concerns, corrective actions and any other pertinent information
Before running CV(5) the sampler went to an empty position and filled with AIR. When attempting to run CV(5) AIR was still present in the sample lines resulting in very noisy and low results.
CCV5 was immediately rerun followed by CCB5 with good results.
The run was then continued.
Note: original CV5 F'd out by analyst

Analyst Initials:		Date:	5·3·12

5048F

Revision 005
6/11/10

UR78 : 00254

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:

ARI Job No.: 0502

Unacceptable Blank: ☑

Date of Event: 5.3.12

Unacceptable Duplicate: ☐

Client ID: ERM

Unacceptable Spike: ☐

Method/Element: MS As

Unacceptable Reference: ☒

Prep Code: REN

Details of Problem/Recommended Corrective Action:

MB1 As 0.505 (A - H) rerun confirms
MB2 " 0.268 (I - P) "

< 10X MB1 A, ~~B~~, ~~E~~ dup ATDUP ASNL

< 10X MB2 I, FDUP TSNL

Samples Affected:

Corrective Action Taken:

Analyst Initials: [signature]

Date: 5.3.12

Supervisor:

Date:

5049F

Revision 007
6/11/10

UR78 : 00265

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.4.12 **Analyst:** JLP **Page:** 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BBDO			2932-3
		1			2933-5
		2			2931-4
		3			6 -5
		4			2933-4
		5			2931-7
		RinseSample			r ≥ 0.9997
		60			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		LowCheck			
		ICSA			
		ICSAB			53Cr 1268 60Ni 1233
		B1			60Ni 0.292
		B2			↓ 0.618
		CCV2			
		CCB2			
		UR78 MB1	REN	2	✓
	✓	MB2			Thermal CAF rerun OK
		MB2QK			
		MB1KQK			
		UR02 L	↓	40X	ko

UR78 : 00256

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.4.12 **Analyst:** JMB **Page:** 2 **of** 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		UR02N	REN	20	AG
		C		40	
		P		20	
		LRZ00		✓	
		BZ			
		CCV3		✓	
		CCB3		✓	
		UR7B A	REN	2	
		B			
		C			
		D			
		K			
		L			
~~CK 12541 12~~ REN		N			
		I			
		F			
		J			
		CCV4		✓	
		CCB4			CO Ni high
		UR7B MB2	REN	2	
		CCV5			
		CCB5			CO Ni high
		UR7B E-L	REN	10 ✓	
		E		2	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.4.12 **Analyst:** JMB **Page:** 3 of 3

All corrections made by analyst unless otherwise noted. 5/4/12 JMB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		URTB EDUP	REN	2	✓
		~~EQBK~~			✓
	Z	~~EPBST~~		↓	
		M-L		10	✓
		M1		2	
		MDUP			✓
		~~MSBK~~			✓
	Z	~~MRBST~~		↓	
		CCV6			^{62}Ni, Cu
		CCB6			^{62}Ni, ^{63}Cu, ^{65}Cu
		ORA/B MB2	REN	2	RE out
UR		MDUP			✓
		M			
		MSBK			✓
		A			
		B			
		D			
		E			
		F			
		G	↓	↓	
		CCV7			
		CCB7			^{62}Ni only
		Rinse/DI			
					JMB 5/7/12

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.4.12

MZ	Analyst MB 5.7	Peer MS 5.7	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see ea sample
ICB/CCB	✓	✓	see ea sample
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	—	—	

SmartTune Wizard - Details

ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/4/2012 9:36:54 AM

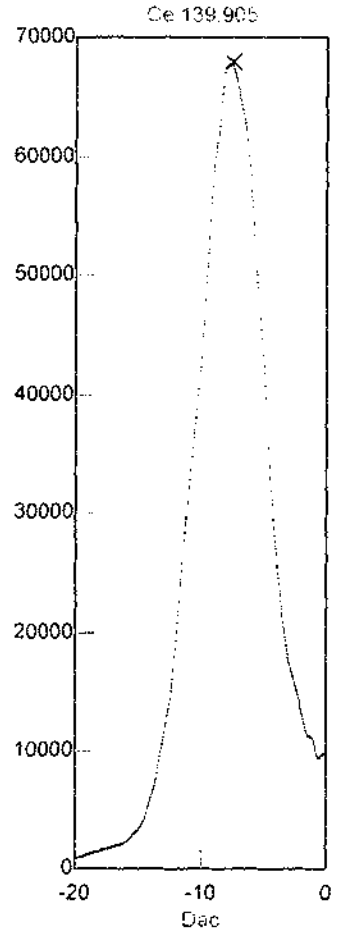
aily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

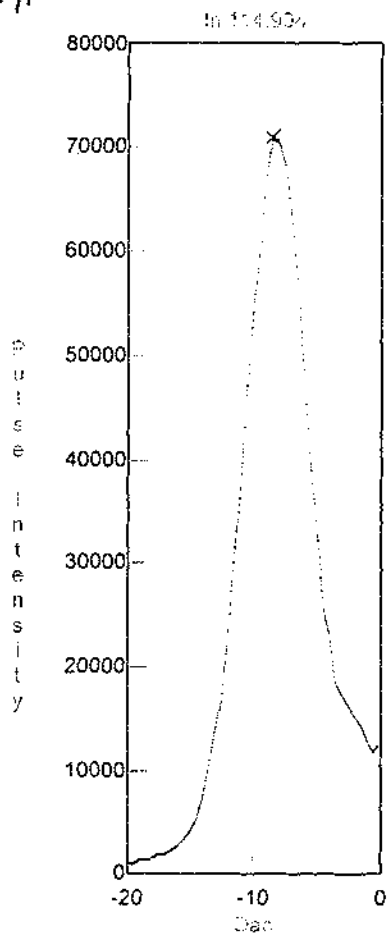
    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 5937.58
        Obtained Intensity (Mg 23.985): 48166.60
        Obtained Intensity (In 114.904): 67784.89
        Obtained Intensity (Pb 207.977): 25602.94
        Obtained Intensity (U 238.05): 47252.33
        Obtained Intensity (Bkgd 220): 0.13
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.017 (=1155.68 / 68384.66)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.013 (=884.65 / 68384.66)
Passed] Optimum value(s): N/A

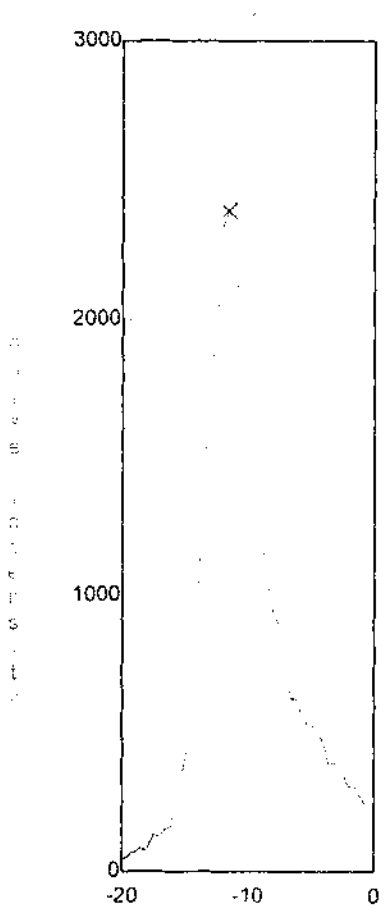
nd Time: 5/4/2012 9:39:30 AM

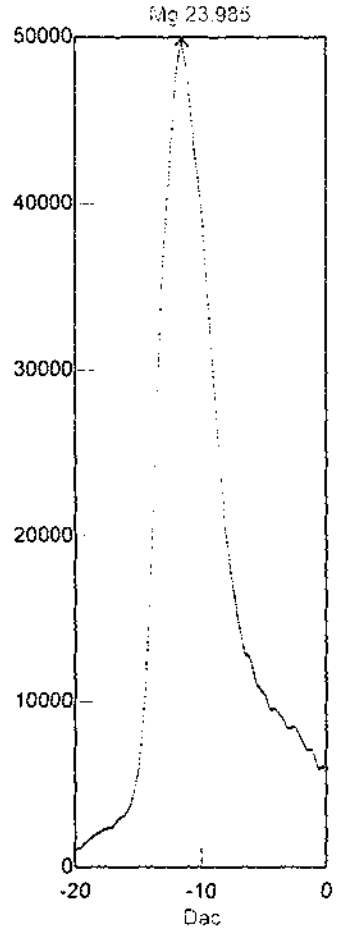
UR78 : 00270

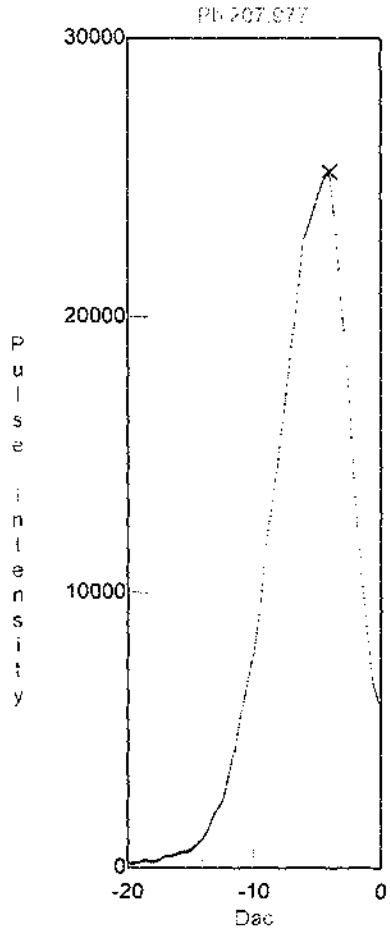
5/4/12

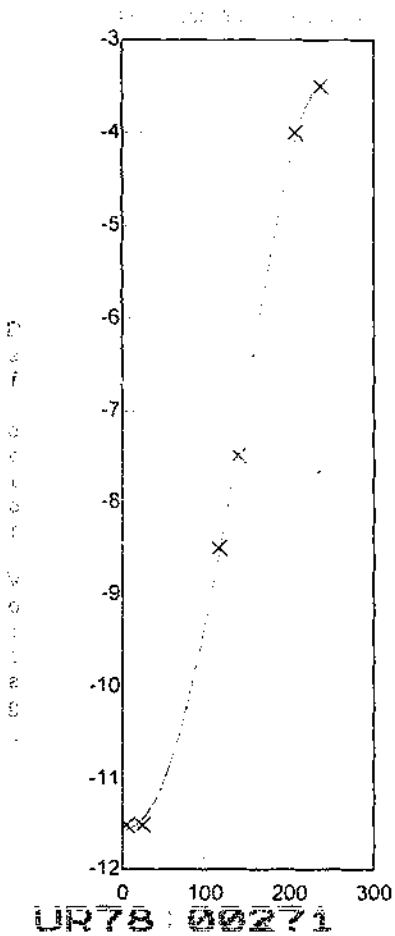

Ce 139.905
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/4/2012 9:32:22 AM
End Time: 5/4/2012 9:36:33 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.999; Intercept = -11.54

UR78 : 00272

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/4/2012 9:28:52 AM
End Time: 5/4/2012 9:31:05 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/6.975), Target/Obtained resolution (0.7/0.698)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.708)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.712)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.698)

UR78 : 00273

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/4/2012 9:28:00 AM
End Time: 5/4/2012 9:28:44 AM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
1.36 mm	-0.72 mm	68083.99

UR78 : 00274

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/4/2012 9:24:18 AM

Daily Performance Check

Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 4700.39
Obtained Intensity (Mg 23.985): 39773.09
Obtained Intensity (In 114.904): 57032.44
Obtained Intensity (Pb 207.977): 21127.22
Obtained Intensity (U 238.05): 40629.34
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.013 (=722.23 / 57587.64)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=552.62 / 57587.64)
[Passed] Optimum value(s): N/A

End Time: 5/4/2012 9:26:53 AM

UR7B : 00275

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:03:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1526172	0
	Be	9		ug/L				4	53
	C	13		ug/L				93499	0
	Cl	37		ug/L				4573829	0
>	Sc	45		ug/L				1286103	2
	V	51		ug/L				6409	2
	V-1	51		ug/L				89	7
	Cr	52		ug/L				18893	1
	Cr	53		ug/L				113	14
	Mn	55		ug/L				470	1
	Co	59		ug/L				44	5
>	Ge	72		ug/L				497689	1
	Ni	60		ug/L				27	22
	Ni	62		ug/L				144	6
	Cu	63		ug/L				128	8
	Cu	65		ug/L				27	16
	Zn	66		ug/L				185	15
	Zn	67		ug/L				33	4
	Zn	68		ug/L				182	5
	As	75		ug/L				726	1
	As-1	75		ug/L				7188	0
	Se	82		ug/L				-2	619
	Se	78		ug/L				7268	0
	Mo	98		ug/L				11	41
	Y	89		ug/L				380435	1
	Kr	83		ug/L				1054	2
>	In	115		ug/L				908583	0
	Ag	107		ug/L				15	24
	Cd	111		ug/L				70	5
	Cd	114		ug/L				20	24
	Sb	121		ug/L				32	15
	Sb	123		ug/L				25	19
	Ba	135		ug/L				39	25
	Ba	137		ug/L				80	9
>	Tb	159		ug/L				1030823	0
	Tl	205		ug/L				16	3
	Pb	208		ug/L				136	3
	Bi	209		ug/L				2148793	0
	Th	232		ug/L				41	4
	U	238		ug/L				4	70

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:07:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1531150	2
	Be	9	0.200	ug/L	0.004	1	4	869	3
	C	13		ug/L			93499	94932	2
	Cl	37		ug/L			4573829	4475199	1
>	Sc	45		ug/L			1286103	1295348	2
	V	51	0.200	ug/L	0.017	8	6409	10658	2
	V-1	51	0.200	ug/L	0.007	3	89	4255	0
	Cr	52	0.500	ug/L	0.051	10	18893	27369	1
	Cr	53	0.500	ug/L	0.023	4	113	1045	2
	Mn	55	0.500	ug/L	0.002	0	470	11925	2
	Co	59	0.200	ug/L	0.007	3	44	3108	1
>	Ge	72		ug/L			497689	488851	0
	Ni	60	0.500	ug/L	0.025	4	27	1658	5
	Ni	62	0.500	ug/L	0.044	8	144	364	4
	Cu	63	0.500	ug/L	0.010	2	128	3758	2
	Cu	65	0.500	ug/L	0.035	7	27	1586	7
	Zn	66	4.000	ug/L	0.092	2	185	10155	1
	Zn	67	4.000	ug/L	0.065	1	33	1482	1
	Zn	68	4.000	ug/L	0.103	2	182	6811	1
	As	75	0.200	ug/L	0.010	5	726	1065	2
	As-1	75	0.200	ug/L	0.041	20	7188	7544	0
	Se	82	0.500	ug/L	0.041	8	-2	97	9
	Se	78	0.500	ug/L	0.124	24	7268	7541	0
	Mo	98	0.200	ug/L	0.012	6	11	815	5
	Y	89		ug/L			380435	373828	0
	Kr	83		ug/L			1054	1060	1
>	In	115		ug/L			908583	910656	0
	Ag	107	0.200	ug/L	0.003	1	15	1560	0
	Cd	111	0.100	ug/L	0.002	1	70	477	1
	Cd	114	0.100	ug/L	0.006	6	20	1047	5
	Sb	121	0.200	ug/L	0.006	2	32	2488	2
	Sb	123	0.200	ug/L	0.002	1	25	1791	1
	Ba	135	0.500	ug/L	0.010	2	39	2132	1
	Ba	137	0.500	ug/L	0.001	0	80	3537	0
>	Tb	159		ug/L			1030823	1025051	0
	Tl	205	0.200	ug/L	0.002	1	16	5408	1
	Pb	208	0.100	ug/L	0.002	1	136	4505	1
	Bi	209		ug/L			2148793	2098771	4
	Th	232	0.200	ug/L	0.002	0	41	5691	0
	U	238	0.200	ug/L	0.000	0	4	7076	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:11:59
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1526172	1599618	1
[	Be	9	10.000	ug/L	0.148	1	4	45735	1
	C	13		ug/L			93499	97213	1
	Cl	37		ug/L			4573829	4616032	1
[>	Sc	45		ug/L			1286103	1329096	1
[	V	51	10.000	ug/L	0.153	1	6409	215470	1
[	V-1	51	10.000	ug/L	0.134	1	89	208185	1
[	Cr	52	10.000	ug/L	0.148	1	18893	190566	0
[	Cr	53	10.000	ug/L	0.094	0	113	19204	0
[	Mn	55	10.000	ug/L	0.130	1	470	231477	0
[	Co	59	10.000	ug/L	0.317	3	44	155395	1
[>	Ge	72		ug/L			497689	507290	2
[	Ni	60	9.999	ug/L	0.256	2	27	32584	1
[	Ni	62	9.999	ug/L	0.274	2	144	4620	0
[	Cu	63	9.998	ug/L	0.156	1	128	70141	2
[	Cu	65	9.999	ug/L	0.258	2	27	30594	0
[	Zn	66	9.527	ug/L	0.190	1	185	19207	0
[	Zn	67	9.735	ug/L	0.281	2	33	3172	1
[	Zn	68	9.550	ug/L	0.214	2	182	13014	2
[	As	75	9.999	ug/L	0.163	1	726	16778	0
[	As-1	75	9.997	ug/L	0.301	3	7188	22640	0
[	Se	82	9.999	ug/L	0.132	1	-2	1947	1
[	Se	78	9.976	ug/L	0.608	6	7268	11623	0
[	Mo	98	10.000	ug/L	0.191	1	11	42234	0
	Y	89		ug/L			380435	392673	1
	Kr	83		ug/L			1054	1053	2
[>	In	115		ug/L			908583	915207	1
[	Ag	107	10.000	ug/L	0.332	3	15	74904	2
[	Cd	111	10.000	ug/L	0.081	0	70	39652	0
[	Cd	114	10.000	ug/L	0.029	0	20	101374	1
[	Sb	121	10.000	ug/L	0.139	1	32	126025	0
[	Sb	123	10.000	ug/L	0.153	1	25	94135	0
[	Ba	135	9.997	ug/L	0.144	1	39	37651	1
[	Ba	137	9.998	ug/L	0.119	1	80	63399	0
[>	Tb	159		ug/L			1030823	1054545	1
[	Tl	205	10.000	ug/L	0.130	1	16	281560	0
[	Pb	208	10.000	ug/L	0.118	1	136	371283	0
[	Bi	209		ug/L			2148793	2170496	1
[	Th	232	10.000	ug/L	0.160	1	41	327249	2
[	U	238	10.000	ug/L	0.105	1	4	362302	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:16:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1593877	1
	Be	9	19.969	ug/L	0.271	1	4	90441	1
	C	13		ug/L			93499	98267	1
	Cl	37		ug/L			4573829	4755258	0
>	Sc	45		ug/L			1286103	1342356	0
	V	51	20.101	ug/L	0.276	1	6409	439442	1
	V-1	51	20.112	ug/L	0.182	0	89	432457	0
	Cr	52	19.939	ug/L	0.554	2	18893	360028	2
	Cr	53	19.976	ug/L	0.246	1	113	38449	1
	Mn	55	19.937	ug/L	0.223	1	470	459891	1
	Co	59	19.996	ug/L	0.180	0	44	313638	0
>	Ge	72		ug/L			497689	515646	0
	Ni	60	19.923	ug/L	0.394	1	27	64988	2
	Ni	62	20.063	ug/L	0.260	1	144	9393	0
	Cu	63	19.879	ug/L	0.373	1	128	138317	1
	Cu	65	19.936	ug/L	0.174	0	27	61221	0
	Zn	66	19.610	ug/L	0.358	1	185	37490	1
	Zn	67	19.699	ug/L	0.176	0	33	6174	1
	Zn	68	19.750	ug/L	0.231	1	182	26040	0
	As	75	19.932	ug/L	0.158	0	726	32821	1
	As-1	75	19.910	ug/L	0.147	0	7188	37911	0
	Se	82	20.003	ug/L	0.188	0	-2	3966	1
	Se	78	19.936	ug/L	0.147	0	7268	15991	0
	Mo	98	19.946	ug/L	0.223	1	11	84727	1
	Y	89		ug/L			380435	390171	2
	Kr	83		ug/L			1054	1068	7
>	In	115		ug/L			908583	923969	1
	Ag	107	20.062	ug/L	0.178	0	15	153645	2
	Cd	111	20.032	ug/L	0.084	0	70	80633	1
	Cd	114	19.984	ug/L	0.156	0	20	203862	1
	Sb	121	19.953	ug/L	0.190	0	32	251453	1
	Sb	123	20.001	ug/L	0.369	1	25	190100	0
	Ba	135	19.995	ug/L	0.337	1	39	75901	0
	Ba	137	20.032	ug/L	0.255	1	80	128984	1
>	Tb	159		ug/L			1030823	1059393	1
	Tl	205	19.965	ug/L	0.014	0	16	560875	1
	Pb	208	19.978	ug/L	0.078	0	136	741824	1
	Bi	209		ug/L			2148793	2152042	0
	Th	232	20.121	ug/L	0.300	1	41	677683	1
	U	238	20.006	ug/L	0.397	1	4	728884	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:20:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1526172	1558906	0
[	Be	9	49.923	ug/L	0.246	0	4	219459	0
	C	13		ug/L			93499	92606	0
	Cl	37		ug/L			4573829	4902252	0
[>	Sc	45		ug/L			1286103	1296533	0
[	V	51	49.920	ug/L	0.880	1	6409	1036266	1
[	V-1	51	49.925	ug/L	0.783	1	89	1028984	0
[	Cr	52	50.025	ug/L	0.544	1	18893	845726	0
[	Cr	53	50.041	ug/L	0.127	0	113	93238	0
[	Mn	55	50.026	ug/L	0.832	1	470	1116709	1
[	Co	59	49.850	ug/L	0.352	0	44	743952	0
[>	Ge	72		ug/L			497689	498237	1
[	Ni	60	50.002	ug/L	0.423	0	27	157578	1
[	Ni	62	49.857	ug/L	1.570	3	144	22021	1
[	Cu	63	49.965	ug/L	0.754	1	128	334520	0
[	Cu	65	49.873	ug/L	1.715	3	27	146044	1
[	Zn	66	49.404	ug/L	0.626	1	185	86016	1
[	Zn	67	49.874	ug/L	1.633	3	33	14866	1
[	Zn	68	49.729	ug/L	1.563	3	182	61456	1
[	As	75	49.972	ug/L	1.161	2	726	78178	0
[	As-1	75	50.018	ug/L	1.196	2	7188	81259	0
[	Se	82	49.972	ug/L	1.050	2	-2	9549	0
[	Se	78	50.161	ug/L	1.059	2	7268	28178	0
[	Mo	98	49.752	ug/L	0.865	1	11	199219	1
	Y	89		ug/L			380435	388842	2
	Kr	83		ug/L			1054	1082	3
[>	In	115		ug/L			908583	916632	0
[	Ag	107	49.505	ug/L	0.333	0	15	358321	0
[	Cd	111	49.568	ug/L	0.592	1	70	189629	0
[	Cd	114	49.631	ug/L	0.614	1	20	484318	0
[	Sb	121	49.570	ug/L	0.502	1	32	594164	0
[	Sb	123	49.439	ug/L	0.157	0	25	441448	0
[	Ba	135	49.738	ug/L	1.217	2	39	182478	1
[	Ba	137	49.868	ug/L	0.685	1	80	314302	0
[>	Tb	159		ug/L			1030823	1064332	0
[	Tl	205	49.619	ug/L	0.340	0	16	1348944	0
[	Pb	208	49.624	ug/L	0.573	1	136	1783859	0
[	Bi	209		ug/L			2148793	2066370	3
[	Th	232	49.809	ug/L	0.762	1	41	1653823	1
[	U	238	49.708	ug/L	0.271	0	4	1768205	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:26:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1540977	0
	Be	9	100.116	ug/L	0.342	0	4	436717	0
	C	13		ug/L			93499	96124	2
	Cl	37		ug/L			4573829	4930628	2
>	Sc	45		ug/L			1286103	1288277	0
	V	51	101.415	ug/L	1.940	1	6409	2188023	1
	V-1	51	101.463	ug/L	1.353	1	89	2184347	0
	Cr	52	100.248	ug/L	2.047	2	18893	1678596	1
	Cr	53	100.428	ug/L	0.473	0	113	188505	1
	Mn	55	100.739	ug/L	2.332	2	470	2290279	1
	Co	59	100.595	ug/L	1.489	1	44	1521800	0
>	Ge	72		ug/L			497689	499060	1
	Ni	60	99.758	ug/L	0.554	0	27	312367	1
	Ni	62	99.961	ug/L	1.631	1	144	44033	1
	Cu	63	99.184	ug/L	1.992	2	128	647424	1
	Cu	65	99.378	ug/L	0.724	0	27	285634	0
	Zn	66	99.123	ug/L	1.125	1	185	167820	1
	Zn	67	99.566	ug/L	1.218	1	33	29285	2
	Zn	68	98.970	ug/L	2.033	2	182	118316	1
	As	75	99.863	ug/L	0.601	0	726	155085	0
	As-1	75	99.851	ug/L	0.685	0	7188	154603	0
	Se	82	99.463	ug/L	1.621	1	-2	18707	0
	Se	78	99.375	ug/L	2.396	2	7268	47922	1
	Mo	98	100.442	ug/L	1.046	1	11	408946	2
	Y	89		ug/L			385435	382920	1
	Kr	83		ug/L			1054	1124	3
>	In	115		ug/L			908583	904995	1
	Ag	107	99.577	ug/L	0.780	0	15	701675	0
	Cd	111	99.959	ug/L	2.038	2	70	376939	1
	Cd	114	99.941	ug/L	0.680	0	20	960997	0
	Sb	121	100.734	ug/L	0.212	0	32	1222023	1
	Sb	123	100.861	ug/L	1.418	1	25	915344	0
	Ba	135	100.542	ug/L	0.506	0	39	370887	0
	Ba	137	100.527	ug/L	0.326	0	80	636714	1
>	Tb	159		ug/L			1030823	1066821	0
	Tl	205	100.968	ug/L	1.172	1	16	2843112	1
	Pb	208	99.626	ug/L	0.542	0	136	3545573	0
	Bi	209		ug/L			2148793	1951070	1
	Th	232	101.220	ug/L	0.527	0	41	3511633	0
	U	238	101.125	ug/L	0.491	0	4	3746078	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:31:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1487878	1
	Be	9	0.003	ug/L	0.002	65	4	18	49
	C	13		ug/L			93499	89082	1
	Cl	37		ug/L			4573829	4677589	0
>	Sc	45		ug/L			1286103	1257506	1
	V	51	-0.004	ug/L	0.007	175	6409	6179	2
	V-1	51	0.002	ug/L	0.002	107	89	122	32
	Cr	52	-0.016	ug/L	0.030	194	18893	18219	1
	Cr	53	0.006	ug/L	0.003	55	113	121	3
	Mn	55	0.003	ug/L	0.003	86	470	534	13
	Co	59	0.002	ug/L	0.002	103	44	69	40
>	Ge	72		ug/L			497689	483280	3
	Ni	60	0.002	ug/L	0.003	156	27	32	29
	Ni	62	0.199	ug/L	0.044	22	144	224	4
	Cu	63	0.012	ug/L	0.003	26	128	198	8
	Cu	65	0.005	ug/L	0.002	48	27	39	14
	Zn	66	-0.002	ug/L	0.003	124	185	176	1
	Zn	67	0.002	ug/L	0.012	460	33	33	6
	Zn	68	-0.004	ug/L	0.010	284	182	172	3
	As	75	0.009	ug/L	0.038	420	726	717	4
	As-1	75	0.102	ug/L	0.169	165	7188	7120	0
	Se	82	-0.006	ug/L	0.106	1710	-2	-3	529
	Se	78	0.352	ug/L	0.581	165	7268	7191	0
	Mo	98	0.038	ug/L	0.023	60	11	161	55
	Y	89		ug/L			380435	365386	0
	Kr	83		ug/L			1054	1036	4
>	In	115		ug/L			908583	869124	0
	Ag	107	0.013	ug/L	0.017	133	15	99	113
	Cd	111	0.007	ug/L	0.007	111	70	91	28
	Cd	114	0.007	ug/L	0.012	174	20	82	133
	Sb	121	0.121	ug/L	0.018	14	32	1445	14
	Sb	123	0.120	ug/L	0.017	14	25	1068	13
	Ba	135	0.007	ug/L	0.006	81	39	62	31
	Ba	137	0.005	ug/L	0.007	141	80	108	41
>	Tb	159		ug/L			1030823	1004086	1
	Tl	205	0.010	ug/L	0.004	37	16	272	35
	Pb	208	0.004	ug/L	0.004	109	136	256	53
	Bi	209		ug/L			2148793	1963475	1
	Th	232	0.163	ug/L	0.037	22	41	5350	21
	U	238	0.006	ug/L	0.003	53	4	200	52

Sample Information

Sample Date/Time: Friday, May 04, 2012 10:26:06
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9997**	0.017	0.20	10	20	50	100
V-1	51	**0.9996**	0.017	0.20	10	20	50	100
Cr	52	**1.0000**	0.013	0.50	10	20	50	100
Cr	53	**1.0000**	0.001	0.50	10	20	50	100
Mn	55	**0.9999**	0.018	0.50	10	20	50	100
Co	59	**0.9999**	0.012	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.006	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**0.9999**	0.013	0.50	10	20	50	100
Cu	65	**0.9999**	0.006	0.50	10	20	50	100
Zn	66	**0.9997**	0.003	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9997**	0.002	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9996**	0.000	0.50	10	20	50	100
Se	78	**0.9999**	0.001	0.50	10	20	50	100
Mo	98	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**0.9999**	0.008	0.20	10	20	50	100
Cd	111	**1.0000**	0.004	0.10	10	20	50	100
Cd	114	**1.0000**	0.011	0.10	10	20	50	100
Sb	121	**0.9999**	0.013	0.20	10	20	50	100
Sb	123	**0.9998**	0.010	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.026	0.20	10	20	50	100
Pb	208	**0.9999**	0.033	0.10	10	20	50	100
Bi	209							
Th	232	**0.9997**	0.033	0.20	10	20	50	100
U	238	**0.9998**	0.035	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:41:58
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1459567	0
	Be	9		ug/L				7	57
	C	13		ug/L				90291	2
	Cl	37		ug/L				4455814	0
>	Sc	45		ug/L				1230166	0
	V	51		ug/L				6065	3
	V-1	51		ug/L				81	6
	Cr	52		ug/L				18002	2
	Cr	53		ug/L				120	6
	Mn	55		ug/L				467	3
	Co	59		ug/L				45	5
>	Ge	72		ug/L				469903	1
	Ni	60		ug/L				23	34
	Ni	62		ug/L				183	2
	Cu	63		ug/L				147	10
	Cu	65		ug/L				27	2
	Zn	66		ug/L				178	1
	Zn	67		ug/L				26	11
	Zn	68		ug/L				176	2
	As	75		ug/L				704	0
	As-1	75		ug/L				6994	0
	Se	82		ug/L				-14	18
	Se	78		ug/L				7062	0
	Mo	98		ug/L				24	12
	Y	89		ug/L				357378	0
	Kr	83		ug/L				1052	1
>	In	115		ug/L				863946	1
	Ag	107		ug/L				16	9
	Cd	111		ug/L				71	8
	Cd	114		ug/L				13	37
	Sb	121		ug/L				349	12
	Sb	123		ug/L				274	20
	Ba	135		ug/L				48	21
	Ba	137		ug/L				73	16
>	Tb	159		ug/L				986512	0
	Tl	205		ug/L				64	0
	Pb	208		ug/L				132	5
	Bi	209		ug/L				1944262	2
	Th	232		ug/L				975	1
	U	238		ug/L				23	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:46:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1555638	1
[	Be	9	49.295	ug/L	0.674	1	7	217057	0
	C	13		ug/L			90291	94120	1
	Cl	37		ug/L			4455814	4926353	0
[>	Sc	45		ug/L			1230166	1285811	0
[	V	51	48.000	ug/L	1.647	3	6065	1036835	2
[	V-1	51	48.124	ug/L	1.758	3	81	1033976	2
[	Cr	52	49.794	ug/L	0.193	0	18002	841692	0
[	Cr	53	50.245	ug/L	0.972	1	120	94197	2
[	Mn	55	48.682	ug/L	0.698	1	467	1105020	1
[	Co	59	50.239	ug/L	0.694	1	45	758673	1
[>	Ge	72		ug/L			469903	502053	1
[	Ni	60	49.229	ug/L	0.559	1	23	155061	0
[	Ni	62	49.725	ug/L	0.788	1	183	22158	1
[	Cu	63	49.848	ug/L	0.978	1	147	327409	0
[	Cu	65	50.016	ug/L	0.025	0	27	144643	1
[	Zn	66	48.925	ug/L	0.472	0	178	83425	1
[	Zn	67	48.565	ug/L	1.294	2	26	14378	1
[	Zn	68	49.714	ug/L	0.654	1	176	59888	1
[	As	75	50.124	ug/L	0.366	0	704	78692	1
[	As-1	75	48.857	ug/L	0.153	0	6994	80027	1
[	Se	82	79.535	ug/L	0.980	1	-14	14555	0
[	Se	78	76.906	ug/L	1.359	1	7062	39169	1
[	Mo	98	49.530	ug/L	0.279	0	24	202872	1
	Y	89		ug/L			357378	381773	1
	Kr	83		ug/L			1052	1103	3
[>	In	115		ug/L			863946	904954	0
[	Ag	107	51.852	ug/L	0.633	1	16	365388	1
[	Cd	111	49.462	ug/L	0.833	1	71	186567	1
[	Cd	114	49.501	ug/L	0.343	0	13	475976	0
[	Sb	121	49.286	ug/L	0.321	0	349	598197	0
[	Sb	123	48.908	ug/L	0.948	1	274	444104	1
[	Ba	135	50.260	ug/L	0.234	0	48	185439	1
[	Ba	137	49.838	ug/L	0.443	0	73	315667	0
[>	Tb	159		ug/L			986512	1045156	0
[	Tl	205	49.041	ug/L	0.303	0	64	1352917	0
[	Pb	208	51.213	ug/L	0.197	0	132	1785653	0
[	Bi	209		ug/L			1944262	1967415	0
[	Th	232	49.510	ug/L	0.493	0	975	1683758	0
[	U	238	48.980	ug/L	0.290	0	23	1777574	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:51:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1477926	2
[	Be	9	0.004	ug/L	0.003	77	7	22	51
	C	13		ug/L			90291	89239	3
	Cl	37		ug/L			4455814	4685667	0
[>	Sc	45		ug/L			1230166	1224430	2
[	V	51	0.011	ug/L	0.003	27	6065	6265	2
[	V-1	51	0.003	ug/L	0.003	102	81	139	44
[	Cr	52	0.031	ug/L	0.012	39	18002	18407	1
[	Cr	53	0.001	ug/L	0.006	1109	120	121	7
[	Mn	55	0.002	ug/L	0.001	88	467	499	7
[	Co	59	0.001	ug/L	0.002	183	45	59	45
[>	Ge	72		ug/L			469903	474346	0
[	Ni	60	0.004	ug/L	0.004	118	23	34	38
[	Ni	62	-0.030	ug/L	0.018	59	183	173	3
[	Cu	63	0.002	ug/L	0.003	148	147	161	11
[	Cu	65	0.001	ug/L	0.001	54	27	31	6
[	Zn	66	0.003	ug/L	0.010	365	178	184	8
[	Zn	67	0.003	ug/L	0.008	286	26	27	7
[	Zn	68	-0.001	ug/L	0.003	279	176	176	2
[	As	75	0.011	ug/L	0.011	96	704	727	2
[	As-1	75	0.072	ug/L	0.113	155	6994	7160	1
[	Se	82	0.129	ug/L	0.118	91	-14	7	268
[	Se	78	0.261	ug/L	0.416	159	7062	7230	1
[	Mo	98	0.013	ug/L	0.003	26	24	76	16
	Y	89		ug/L			357378	365286	3
	Kr	83		ug/L			1052	1011	3
[>	In	115		ug/L			863946	857089	1
[	Ag	107	0.002	ug/L	0.000	17	16	31	9
[	Cd	111	-0.001	ug/L	0.001	84	71	67	5
[	Cd	114	0.002	ug/L	0.001	71	13	30	37
[	Sb	121	0.014	ug/L	0.006	44	349	506	15
[	Sb	123	0.015	ug/L	0.008	53	274	401	18
[	Ba	135	0.002	ug/L	0.001	48	48	53	3
[	Ba	137	0.002	ug/L	0.003	110	73	87	19
[>	Tb	159		ug/L			986512	985406	1
[	Tl	205	0.003	ug/L	0.001	29	64	150	16
[	Pb	208	0.002	ug/L	0.000	30	132	185	10
[	Bi	209		ug/L			1944262	1950002	0
[	Th	232	0.081	ug/L	0.026	32	975	3573	22
[	U	238	0.002	ug/L	0.001	36	23	107	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:55:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			1459567	1555551	0
⌊	Be	9	48.752	ug/L	1.007	2	7	214657	1
	C	13		ug/L			90291	89863	1
	Cl	37		ug/L			4455814	4887910	2
⌈>	Sc	45		ug/L			1230166	1306172	0
|	V	51	46.488	ug/L	0.194	0	6065	1020477	0
|	V-1	51	46.271	ug/L	0.326	0	81	1010110	1
|	Cr	52	48.325	ug/L	0.768	1	18002	830339	1
|	Cr	53	47.523	ug/L	0.262	0	120	90513	0
|	Mn	55	47.107	ug/L	0.764	1	467	1086240	1
⌊	Co	59	48.145	ug/L	0.792	1	45	738497	1
⌈>	Ge	72		ug/L			469903	495497	1
|	Ni	60	50.421	ug/L	2.511	4	23	156694	3
|	Ni	62	48.686	ug/L	1.293	2	183	21414	1
|	Cu	63	50.039	ug/L	0.710	1	147	324384	0
|	Cu	65	49.561	ug/L	0.415	0	27	141443	0
|	Zn	66	51.097	ug/L	1.903	3	178	85957	2
|	Zn	67	49.038	ug/L	0.435	0	26	14331	2
|	Zn	68	50.664	ug/L	0.851	1	176	60233	1
|	As	75	49.480	ug/L	0.575	1	704	76673	0
|	As-1	75	49.302	ug/L	0.829	1	6994	79626	0
|	Se	82	51.978	ug/L	0.237	0	-14	9383	1
|	Se	78	49.727	ug/L	0.949	1	7062	27627	0
⌊	Mo	98	48.616	ug/L	1.157	2	24	196496	1
	Y	89		ug/L			357378	381924	1
	Kr	83		ug/L			1052	1076	2
⌈>	In	115		ug/L			863946	901050	1
|	Ag	107	51.158	ug/L	1.334	2	16	358861	1
|	Cd	111	49.960	ug/L	0.435	0	71	187637	1
|	Cd	114	50.275	ug/L	0.864	1	13	481295	1
|	Sb	121	48.537	ug/L	0.622	1	349	586514	0
|	Sb	123	48.277	ug/L	1.210	2	274	436432	1
|	Ba	135	48.696	ug/L	0.369	0	48	178877	0
⌊	Ba	137	48.744	ug/L	1.082	2	73	307353	0
⌈>	Tb	159		ug/L			986512	1046598	0
|	Tl	205	48.252	ug/L	0.494	1	64	1332958	0
|	Pb	208	50.491	ug/L	0.532	1	132	1762820	0
|	Bi	209		ug/L			1944262	2030268	4
|	Th	232	48.313	ug/L	0.394	0	975	1645410	1
⌊	U	238	48.021	ug/L	0.577	1	23	1745092	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:00:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1497454	1
	Be	9	0.002	ug/L	0.001	35	7	16	19
	C	13		ug/L			90291	89708	1
	Cl	37		ug/L			4455814	4682571	1
>	Sc	45		ug/L			1230166	1224607	0
	V	51	0.007	ug/L	0.003	39	6065	6185	1
	V-1	51	0.001	ug/L	0.001	96	81	96	14
	Cr	52	0.020	ug/L	0.018	88	18002	18236	1
	Cr	53	-0.004	ug/L	0.005	138	120	113	8
	Mn	55	0.000	ug/L	0.001	281	467	471	3
	Co	59	0.001	ug/L	0.000	20	45	57	4
>	Ge	72		ug/L			469903	476446	2
	Ni	60	0.001	ug/L	0.001	127	23	26	14
	Ni	62	-0.019	ug/L	0.044	234	183	178	8
	Cu	63	0.003	ug/L	0.002	68	147	166	4
	Cu	65	0.002	ug/L	0.002	83	27	33	12
	Zn	66	-0.004	ug/L	0.005	137	178	174	2
	Zn	67	-0.026	ug/L	0.001	5	26	19	2
	Zn	68	-0.007	ug/L	0.010	139	176	170	5
	As	75	0.017	ug/L	0.020	115	704	739	1
	As-1	75	0.037	ug/L	0.134	363	6994	7140	0
	Se	82	0.104	ug/L	0.023	22	-14	3	122
	Se	78	0.157	ug/L	0.508	323	7062	7219	0
	Mo	98	0.018	ug/L	0.007	38	24	95	25
	Y	89		ug/L			357378	362999	0
	Kr	83		ug/L			1052	1051	3
>	In	115		ug/L			863946	869120	0
	Ag	107	0.002	ug/L	0.001	50	16	27	19
	Cd	111	-0.001	ug/L	0.003	191	71	67	15
	Cd	114	0.000	ug/L	0.000	77	13	16	13
	Sb	121	0.094	ug/L	0.002	2	349	1440	1
	Sb	123	0.090	ug/L	0.004	4	274	1060	3
	Ba	135	0.000	ug/L	0.001	352	48	49	9
	Ba	137	-0.002	ug/L	0.002	146	73	64	21
>	Tb	159		ug/L			986512	990293	0
	Tl	205	0.003	ug/L	0.001	30	64	151	17
	Pb	208	0.001	ug/L	0.001	81	132	170	17
	Bi	209		ug/L			1944262	1949346	1
	Th	232	0.112	ug/L	0.040	35	975	4594	27
	U	238	0.003	ug/L	0.001	17	23	128	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:04:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1455211	1
	Be	9	0.211	ug/L	0.003	1	7	875	0
	C	13		ug/L			90291	90254	1
	Cl	37		ug/L			4455814	4405121	2
>	Sc	45		ug/L			1230166	1228482	2
	V	51	0.200	ug/L	0.002	1	6065	10167	3
	V-1	51	0.194	ug/L	0.005	2	81	4061	5
	Cr	52	0.543	ug/L	0.033	6	18002	26546	1
	Cr	53	0.518	ug/L	0.028	5	120	1047	3
	Mn	55	0.506	ug/L	0.009	1	467	11433	2
	Co	59	0.205	ug/L	0.006	2	45	3008	3
>	Ge	72		ug/L			469903	477109	0
	Ni	60	0.528	ug/L	0.015	2	23	1602	3
	Ni	62	0.538	ug/L	0.057	10	183	412	4
	Cu	63	0.556	ug/L	0.012	2	147	3621	1
	Cu	65	0.545	ug/L	0.018	3	27	1525	4
	Zn	66	4.385	ug/L	0.192	4	178	7269	3
	Zn	67	3.808	ug/L	0.040	1	26	1096	0
	Zn	68	4.149	ug/L	0.137	3	176	4913	2
	As	75	0.222	ug/L	0.006	2	704	1043	1
	As-1	75	0.158	ug/L	0.070	44	6994	7323	0
	Se	82	0.572	ug/L	0.057	9	-14	84	12
	Se	78	0.385	ug/L	0.218	56	7062	7321	0
	Mo	98	0.200	ug/L	0.007	3	24	802	3
	Y	89		ug/L			357378	361633	2
	Kr	83		ug/L			1052	1072	1
>	In	115		ug/L			863946	858469	1
	Ag	107	0.214	ug/L	0.001	0	16	1447	1
	Cd	111	0.110	ug/L	0.002	1	71	465	2
	Cd	114	0.114	ug/L	0.006	4	13	1049	5
	Sb	121	0.216	ug/L	0.022	10	349	2829	9
	Sb	123	0.218	ug/L	0.020	9	274	2151	8
	Ba	135	0.543	ug/L	0.020	3	48	1948	4
	Ba	137	0.526	ug/L	0.005	0	73	3230	1
>	Tb	159		ug/L			986512	999178	1
	Tl	205	0.210	ug/L	0.011	5	64	5596	6
	Pb	208	0.120	ug/L	0.009	7	132	4125	7
	Bi	209		ug/L			1944262	1937703	1
	Th	232	0.196	ug/L	0.015	7	975	7343	5
	U	238	0.201	ug/L	0.006	2	23	6983	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:08:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1611239	1
	Be	9	0.001	ug/L	0.001	101	7	12	36
	C	13		ug/L			90291	186940	2
	Cl	37		ug/L			4455814	12700382	0
>	Sc	45		ug/L			1230166	1356882	2
	V	51	0.133	ug/L	0.034	25	6065	9688	5
	V-1	51	1.504	ug/L	0.037	2	81	34215	5
	Cr	52	0.868	ug/L	0.060	6	18002	34985	1
	Cr	53	5.900	ug/L	0.207	3	120	11797	6
	Mn	55	0.110	ug/L	0.010	9	467	3155	10
	Co	59	0.017	ug/L	0.000	2	45	316	3
>	Ge	72		ug/L			469903	493165	3
	Ni	60	0.393	ug/L	0.015	3	23	1240	0
	Ni	62	6.327	ug/L	0.878	13	183	2945	15
	Cu	63	0.872	ug/L	0.051	5	147	5784	8
	Cu	65	0.413	ug/L	0.020	4	27	1201	3
	Zn	66	0.863	ug/L	0.040	4	178	1628	5
	Zn	67	3.204	ug/L	0.148	4	26	958	6
	Zn	68	0.179	ug/L	0.025	14	176	395	4
	As	75	-0.029	ug/L	0.077	266	704	692	13
	As-1	75	0.203	ug/L	0.061	29	6994	7634	2
	Se	82	-0.368	ug/L	0.048	12	-14	-81	13
	Se	78	0.925	ug/L	0.105	11	7062	7786	3
	Mo	98	404.763	ug/L	8.582	2	24	1627688	1
	Y	89		ug/L			357378	382601	1
	Kr	83		ug/L			1052	1360	2
>	In	115		ug/L			863946	903783	3
	Ag	107	0.024	ug/L	0.002	9	16	184	11
	Cd	111	0.246	ug/L	0.019	7	71	1003	8
	Cd	114	0.313	ug/L	0.007	2	13	3023	1
	Sb	121	0.041	ug/L	0.001	3	349	863	4
	Sb	123	0.039	ug/L	0.002	4	274	644	5
	Ba	135	0.036	ug/L	0.003	7	48	183	4
	Ba	137	0.030	ug/L	0.004	13	73	267	6
>	Tb	159		ug/L			986512	1054685	0
	Tl	205	0.004	ug/L	0.003	67	64	177	40
	Pb	208	0.042	ug/L	0.002	3	132	1623	2
	Bi	209		ug/L			1944262	1885448	1
	Th	232	0.209	ug/L	0.092	44	975	8184	37
	U	238	0.001	ug/L	0.000	11	23	75	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:14:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1641417	1
[	Be	9	0.001	ug/L	0.001	176	7	10	46
	C	13		ug/L			90291	197822	1
	Cl	37		ug/L			4455814	12783343	3
[>	Sc	45		ug/L			1230166	1373819	1
[	V	51	0.059	ug/L	0.166	281	6065	8093	45
[	V-1	51	1.571	ug/L	0.035	2	81	36164	2
[	Cr	52	19.737	ug/L	0.595	3	18002	368524	1
[	Cr	53	25.236	ug/L	0.391	1	120	50620	2
[	Mn	55	18.538	ug/L	0.097	0	467	449919	1
[	Co	59	18.577	ug/L	0.276	1	45	299742	1
[>	Ge	72		ug/L			469903	496927	2
[	Ni	60	19.462	ug/L	0.311	1	23	60683	0
[	Ni	62	26.530	ug/L	1.163	4	183	11797	5
[	Cu	63	20.779	ug/L	0.239	1	147	135216	2
[	Cu	65	20.371	ug/L	0.384	1	27	58311	0
[	Zn	66	19.746	ug/L	0.126	0	178	33436	1
[	Zn	67	19.022	ug/L	0.291	1	26	5590	0
[	Zn	68	18.046	ug/L	0.238	1	176	21637	2
[	As	75	18.524	ug/L	0.299	1	704	29250	0
[	As-1	75	19.741	ug/L	0.347	1	6994	36406	0
[	Se	82	-0.202	ug/L	0.104	51	-14	-51	35
[	Se	78	1.404	ug/L	0.102	7	7062	8040	1
[	Mo	98	404.004	ug/L	5.545	1	24	1637577	1
	Y	89		ug/L			357378	385499	0
	Kr	83		ug/L			1052	1315	6
[>	In	115		ug/L			863946	919417	1
[	Ag	107	19.453	ug/L	0.143	0	16	139289	1
[	Cd	111	19.584	ug/L	0.237	1	71	75107	2
[	Cd	114	19.619	ug/L	0.126	0	13	191671	1
[	Sb	121	0.050	ug/L	0.001	2	349	982	1
[	Sb	123	0.046	ug/L	0.003	5	274	712	4
[	Ba	135	0.034	ug/L	0.003	8	48	179	6
[	Ba	137	0.028	ug/L	0.002	6	73	256	5
[>	Tb	159		ug/L			986512	1070561	1
[	Tl	205	0.001	ug/L	0.000	23	64	111	8
[	Pb	208	0.041	ug/L	0.000	0	132	1621	1
[	Bi	209		ug/L			1944262	1908905	0
[	Th	232	0.065	ug/L	0.018	27	975	3320	17
[	U	238	0.001	ug/L	0.000	38	23	72	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:19:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1521427	2
	Be	9	0.000	ug/L	0.001	379	7	8	33
	C	13		ug/L			90291	98343	2
	Cl	37		ug/L			4455814	4694585	1
>	Sc	45		ug/L			1230166	1259315	0
	V	51	0.019	ug/L	0.009	46	6065	6614	2
	V-1	51	0.102	ug/L	0.015	14	81	2225	14
	Cr	52	0.059	ug/L	0.022	38	18002	19378	1
	Cr	53	0.361	ug/L	0.062	17	120	786	14
	Mn	55	0.028	ug/L	0.002	6	467	1094	4
	Co	59	0.000	ug/L	0.001	149	45	52	17
>	Ge	72		ug/L			469903	486049	1
	Ni	60	0.023	ug/L	0.002	10	23	93	9
	Ni	62	0.797	ug/L	0.126	15	183	530	8
	Cu	63	0.098	ug/L	0.004	3	147	773	1
	Cu	65	0.063	ug/L	0.007	11	27	204	8
	Zn	66	0.836	ug/L	0.024	2	178	1560	2
	Zn	67	0.711	ug/L	0.045	6	26	230	6
	Zn	68	0.769	ug/L	0.047	6	176	1076	5
	As	75	0.037	ug/L	0.024	64	704	783	3
	As-1	75	0.059	ug/L	0.100	168	6994	7318	0
	Se	82	0.064	ug/L	0.050	78	-14	-3	229
	Se	78	0.211	ug/L	0.339	160	7062	7388	0
	Mo	98	0.078	ug/L	0.007	9	24	335	8
	Y	89		ug/L			357378	372980	2
	Kr	83		ug/L			1052	1120	2
>	In	115		ug/L			863946	901149	0
	Ag	107	0.001	ug/L	0.001	110	16	21	20
	Cd	111	-0.002	ug/L	0.002	116	71	67	12
	Cd	114	0.002	ug/L	0.001	58	13	31	32
	Sb	121	-0.020	ug/L	0.002	9	349	121	19
	Sb	123	-0.021	ug/L	0.002	10	274	98	20
	Ba	135	0.013	ug/L	0.002	18	48	96	8
	Ba	137	0.011	ug/L	0.002	22	73	145	11
>	Tb	159		ug/L			986512	1006113	0
	Tl	205	-0.000	ug/L	0.000	171	64	61	10
	Pb	208	0.022	ug/L	0.002	7	132	875	5
	Bi	209		ug/L			1944262	1955147	1
	Th	232	-0.024	ug/L	0.000	1	975	224	7
	U	238	-0.000	ug/L	0.000	27	23	11	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:25:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1533257	0
[	Be	9	0.000	ug/L	0.001	276	7	9	59
	C	13		ug/L			90291	96684	2
	Cl	37		ug/L			4455814	4486652	3
[>	Sc	45		ug/L			1230166	1246070	2
[	V	51	0.012	ug/L	0.014	115	6065	6383	2
[	V-1	51	0.051	ug/L	0.007	13	81	1144	9
[	Cr	52	0.031	ug/L	0.040	127	18002	18721	0
[	Cr	53	0.175	ug/L	0.025	14	120	440	8
[	Mn	55	0.018	ug/L	0.001	5	467	880	3
[	Co	59	0.001	ug/L	0.001	44	45	67	12
[>	Ge	72		ug/L			469903	471497	1
[	Ni	60	0.025	ug/L	0.005	18	23	95	13
[	Ni	62	0.510	ug/L	0.061	12	183	395	5
[	Cu	63	0.074	ug/L	0.002	2	147	603	0
[	Cu	65	0.060	ug/L	0.002	3	27	191	4
[	Zn	66	0.791	ug/L	0.036	4	178	1442	5
[	Zn	67	0.700	ug/L	0.067	9	26	220	8
[	Zn	68	0.751	ug/L	0.009	1	176	1023	1
[	As	75	0.040	ug/L	0.030	74	704	765	4
[	As-1	75	0.043	ug/L	0.085	199	6994	7077	1
[	Se	82	0.038	ug/L	0.043	112	-14	-8	90
[	Se	78	0.187	ug/L	0.313	167	7062	7158	1
[	Mo	98	0.045	ug/L	0.046	101	24	197	88
	Y	89		ug/L			357378	363918	0
	Kr	83		ug/L			1052	1124	2
[>	In	115		ug/L			863946	907972	1
[	Ag	107	0.001	ug/L	0.002	142	16	24	43
[	Cd	111	-0.001	ug/L	0.003	201	71	70	13
[	Cd	114	0.001	ug/L	0.001	79	13	26	36
[	Sb	121	-0.022	ug/L	0.001	6	349	103	14
[	Sb	123	-0.024	ug/L	0.002	8	274	71	24
[	Ba	135	0.009	ug/L	0.004	46	48	83	18
[	Ba	137	0.010	ug/L	0.002	25	73	139	10
[>	Tb	159		ug/L			986512	1002643	0
[	Tl	205	-0.001	ug/L	0.000	42	64	49	13
[	Pb	208	0.018	ug/L	0.000	1	132	720	1
[	Bi	209		ug/L			1944262	1946133	0
[	Th	232	-0.026	ug/L	0.001	2	975	135	14
[	U	238	-0.000	ug/L	0.000	8	23	6	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:30:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1600397	1
	Be	9	49.915	ug/L	1.039	2	7	226092	0
	C	13		ug/L			90291	94710	1
	Cl	37		ug/L			4455814	4917671	2
>	Sc	45		ug/L			1230166	1316243	0
	V	51	46.013	ug/L	1.338	2	6065	1017850	2
	V-1	51	45.966	ug/L	1.312	2	81	1011131	2
	Cr	52	48.472	ug/L	0.678	1	18002	839223	0
	Cr	53	48.293	ug/L	0.743	1	120	92683	1
	Mn	55	48.353	ug/L	0.168	0	467	1123535	0
	Co	59	47.549	ug/L	0.569	1	45	734983	0
>	Ge	72		ug/L			469903	494561	1
	Ni	60	49.187	ug/L	0.452	0	23	152626	1
	Ni	62	49.927	ug/L	0.354	0	183	21916	1
	Cu	63	49.267	ug/L	0.900	1	147	318776	1
	Cu	65	50.180	ug/L	0.831	1	27	142928	0
	Zn	66	50.839	ug/L	1.198	2	178	85369	1
	Zn	67	49.680	ug/L	1.579	3	26	14485	1
	Zn	68	50.434	ug/L	1.034	2	176	59846	2
	As	75	49.208	ug/L	0.705	1	704	76109	0
	As-1	75	49.009	ug/L	0.748	1	6994	79044	0
	Se	82	51.540	ug/L	0.628	1	-14	9285	0
	Se	78	49.309	ug/L	1.180	2	7062	27403	0
	Mo	98	47.982	ug/L	1.191	2	24	193547	0
	Y	89		ug/L			357378	380685	0
	Kr	83		ug/L			1052	1131	1
>	In	115		ug/L			863946	921048	0
	Ag	107	49.857	ug/L	0.246	0	16	357575	0
	Cd	111	50.760	ug/L	0.109	0	71	194879	0
	Cd	114	50.499	ug/L	0.552	1	13	494198	0
	Sb	121	48.770	ug/L	0.503	1	349	602461	0
	Sb	123	48.973	ug/L	0.874	1	274	452626	1
	Ba	135	48.954	ug/L	0.761	1	48	183813	0
	Ba	137	47.697	ug/L	0.324	0	73	307487	0
>	Tb	159		ug/L			986512	1055449	1
	Tl	205	47.483	ug/L	0.438	0	64	1322796	0
	Pb	208	49.725	ug/L	0.514	1	132	1750719	0
	Bi	209		ug/L			1944262	1962698	0
	Th	232	46.845	ug/L	0.647	1	975	1608860	1
	U	238	47.817	ug/L	0.304	0	23	1752412	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:34:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1519184	0
	Be	9	0.004	ug/L	0.007	162	7	26	116
	C	13		ug/L			90291	94089	0
	Cl	37		ug/L			4455814	4642786	1
>	Sc	45		ug/L			1230166	1259438	1
	V	51	-0.002	ug/L	0.007	392	6065	6170	2
	V-1	51	0.022	ug/L	0.003	13	81	543	12
	Cr	52	-0.021	ug/L	0.033	152	18002	18080	2
	Cr	53	0.066	ug/L	0.006	9	120	243	4
	Mn	55	0.004	ug/L	0.003	65	467	578	12
	Co	59	0.002	ug/L	0.003	120	45	79	51
>	Ge	72		ug/L			469903	465149	2
	Ni	60	0.004	ug/L	0.003	72	23	35	25
	Ni	62	0.264	ug/L	0.070	26	183	289	7
	Cu	63	0.014	ug/L	0.005	37	147	228	13
	Cu	65	0.005	ug/L	0.003	70	27	40	22
	Zn	66	0.001	ug/L	0.006	595	178	177	5
	Zn	67	0.015	ug/L	0.015	97	26	30	14
	Zn	68	0.008	ug/L	0.005	66	176	183	3
	As	75	0.051	ug/L	0.022	43	704	770	2
	As-1	75	0.103	ug/L	0.164	159	6994	7060	1
	Se	82	0.145	ug/L	0.080	55	-14	10	134
	Se	78	0.403	ug/L	0.619	153	7062	7140	1
	Mo	98	0.029	ug/L	0.006	21	24	135	15
	Y	89		ug/L			357378	355736	2
	Kr	83		ug/L			1052	1071	3
>	In	115		ug/L			863946	892009	0
	Ag	107	0.004	ug/L	0.002	40	16	44	24
	Cd	111	0.001	ug/L	0.003	318	71	77	13
	Cd	114	0.002	ug/L	0.001	54	13	37	33
	Sb	121	0.140	ug/L	0.014	10	349	2036	7
	Sb	123	0.138	ug/L	0.008	5	274	1513	4
	Ba	135	-0.001	ug/L	0.001	99	48	44	11
	Ba	137	-0.002	ug/L	0.002	83	73	62	18
>	Tb	159		ug/L			986512	996515	2
	Tl	205	0.005	ug/L	0.005	103	64	189	69
	Pb	208	0.006	ug/L	0.008	139	132	337	85
	Bi	209		ug/L			1944262	1928193	1
	Th	232	0.111	ug/L	0.047	41	975	4564	31
	U	238	0.007	ug/L	0.006	76	23	283	71

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 11:48:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1583008	1
[	Be	9	0.001	ug/L	0.001	67	7	12	27
	C	13		ug/L			90291	109102	0
	Cl	37		ug/L			4455814	4503825	1
[>	Sc	45		ug/L			1230166	1287238	1
[	V	51	0.017	ug/L	0.013	79	6065	6708	4
[	V-1	51	0.020	ug/L	0.002	9	81	512	7
[	Cr	52	U 0.035	ug/L	0.038	108	18002	19408	3
[	Cr	53	0.046	ug/L	0.012	27	120	211	9
[	Mn	55	0.087	ug/L	0.003	3	467	2465	1
[	Co	59	0.000	ug/L	0.001	313	45	50	18
[>	Ge	72		ug/L			469903	487513	2
[	Ni	60	0.026	ug/L	0.003	11	23	104	7
[	Ni	62	0.134	ug/L	0.056	41	183	247	7
[	Cu	63	U 0.116	ug/L	0.007	5	147	895	4
[	Cu	65	0.114	ug/L	0.006	5	27	349	2
[	Zn	66	U 1.071	ug/L	0.044	4	178	1955	5
[	Zn	67	0.893	ug/L	0.010	1	26	283	1
[	Zn	68	1.017	ug/L	0.050	4	176	1368	4
[	As	75	U 0.021	ug/L	0.022	107	704	762	5
[	As-1	75	-0.093	ug/L	0.078	83	6994	7120	0
[	Se	82	0.076	ug/L	0.089	117	-14	-1	825
[	Se	78	-0.341	ug/L	0.344	101	7062	7189	0
[	Mo	98	0.016	ug/L	0.005	31	24	88	19
	Y	89		ug/L			357378	376356	2
	Kr	83		ug/L			1052	1084	4
[>	In	115		ug/L			863946	920399	1
[	Ag	107	U 0.001	ug/L	0.001	74	16	22	16
[	Cd	111	-0.004	ug/L	0.003	70	71	62	14
[	Cd	114	0.001	ug/L	0.000	34	13	28	16
[	Sb	121	-0.001	ug/L	0.004	366	349	358	15
[	Sb	123	-0.002	ug/L	0.005	216	274	271	17
[	Ba	135	0.005	ug/L	0.004	80	48	70	21
[	Ba	137	0.007	ug/L	0.003	35	73	126	12
[>	Tb	159		ug/L			986512	1027743	1
[	Tl	205	0.000	ug/L	0.001	187	64	78	26
[	Pb	208	0.009	ug/L	0.001	12	132	432	9
[	Bi	209		ug/L			1944262	1964226	1
[	Th	232	0.027	ug/L	0.009	31	975	1933	13
[	U	238	-0.000	ug/L	0.000	1443	23	24	22

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 11:53:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

DEL
Rerun ok
5/4/12

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1559646	1
	Be	9	0.005	ug/L	0.007	150	7	27	110
	C	13		ug/L			90291	111747	0
	Cl	37		ug/L			4455814	4391235	1
>	Sc	45		ug/L			1230166	1300414	2
	V	51	0.032	ug/L	0.005	16	6065	7101	0
	V-1	51	0.029	ug/L	0.004	14	81	714	12
	Cr	52	U 0.075	ug/L	0.025	34	18002	20271	1
	Cr	53	0.064	ug/L	0.003	4	120	248	0
	Mn	55	0.056	ug/L	0.005	9	467	1787	6
	Co	59	0.004	ug/L	0.004	98	45	111	56
>	Ge	72		ug/L			469903	494233	1
	Ni	60	0.033	ug/L	0.005	14	23	125	11
	Ni	62	0.104	ug/L	0.010	9	183	238	1
	Cu	63	U 0.196	ug/L	0.011	5	147	1421	4
	Cu	65	0.201	ug/L	0.003	1	27	601	2
	Zn	66	73.786	ug/L	2.838	3	178	123715	2
	Zn	67	62.628	ug/L	0.905	1	26	18247	2
	Zn	68	70.688	ug/L	2.126	3	176	83729	1
	As	75	U 0.049	ug/L	0.016	32	704	816	4
	As-1	75	-0.097	ug/L	0.067	68	6994	7213	1
	Se	82	0.135	ug/L	0.091	67	-14	9	180
	Se	78	-0.382	ug/L	0.221	57	7062	7272	1
	Mo	98	0.011	ug/L	0.003	28	24	71	18
	Y	89		ug/L			357378	380962	0
	Kr	83		ug/L			1052	1106	1
>	In	115		ug/L			863946	933829	2
	Ag	107	U -0.000	ug/L	0.001	9698	16	17	29
	Cd	111	-0.003	ug/L	0.001	25	71	66	6
	Cd	114	0.001	ug/L	0.001	47	13	27	23
	Sb	121	-0.011	ug/L	0.001	9	349	244	6
	Sb	123	-0.013	ug/L	0.002	15	274	178	11
	Ba	135	0.097	ug/L	0.011	11	48	422	10
	Ba	137	0.104	ug/L	0.008	7	73	759	6
>	Tb	159		ug/L			986512	1038049	0
	Tl	205	-0.000	ug/L	0.000	114	64	61	10
	Pb	208	0.034	ug/L	0.002	5	132	1300	4
	Bi	209		ug/L			1944262	1975206	1
	Th	232	0.004	ug/L	0.006	173	975	1147	17
	U	238	0.004	ug/L	0.008	177	23	179	153

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 11:57:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1572684	0
	Be	9	24.347	ug/L	0.354	1	7	108403	1
	C	13		ug/L			90291	115436	3
	Cl	37		ug/L			4455814	4495216	3
>	Sc	45		ug/L			1230166	1303567	1
	V	51	23.302	ug/L	0.589	2	6065	513539	0
	V-1	51	23.310	ug/L	0.615	2	81	507724	0
	Cr	52	24.212	ug/L	0.607	2	18002	424589	0
	Cr	53	24.239	ug/L	0.715	2	120	46118	1
	Mn	55	23.809	ug/L	0.426	1	467	548034	0
	Co	59	24.090	ug/L	0.795	3	45	368682	1
>	Ge	72		ug/L			469903	488349	0
	Ni	60	25.387	ug/L	0.433	1	23	77803	2
	Ni	62	25.063	ug/L	0.389	1	183	10959	1
	Cu	63	26.112	ug/L	0.536	2	147	166934	2
	Cu	65	25.948	ug/L	0.369	1	27	73008	1
	Zn	66	80.391	ug/L	2.459	3	178	133233	3
	Zn	67	69.790	ug/L	0.955	1	26	20090	1
	Zn	68	77.661	ug/L	2.210	2	176	90911	3
	As	75	26.367	ug/L	0.133	0	704	40614	0
	As-1	75	24.316	ug/L	0.375	1	6994	42396	1
	Se	82	76.763	ug/L	1.010	1	-14	13666	1
	Se	78	75.082	ug/L	1.852	2	7062	37375	2
	Mo	98	0.011	ug/L	0.001	4	24	70	2
	Y	89		ug/L			357378	374684	0
	Kr	83		ug/L			1052	1127	1
>	In	115		ug/L			863946	929790	1
	Ag	107	25.320	ug/L	0.839	3	16	183281	2
	Cd	111	24.747	ug/L	0.156	0	71	95944	0
	Cd	114	24.587	ug/L	0.216	0	13	242904	0
	Sb	121	-0.019	ug/L	0.002	10	349	140	18
	Sb	123	-0.018	ug/L	0.001	6	274	127	9
	Ba	135	24.042	ug/L	0.331	1	48	91172	2
	Ba	137	23.747	ug/L	0.080	0	73	154589	1
>	Tb	159		ug/L			986512	1031426	1
	Tl	205	24.243	ug/L	0.211	0	64	659997	0
	Pb	208	25.529	ug/L	0.084	0	132	878471	1
	Bi	209		ug/L			1944262	2029204	4
	Th	232	23.600	ug/L	0.389	1	975	792736	3
	U	238	24.219	ug/L	0.121	0	23	867375	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 12:01:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1583973	0
	Be	9	24.318	ug/L	0.394	1	7	109055	2
	C	13		ug/L			90291	111178	0
	Cl	37		ug/L			4455814	4608307	0
>	Sc	45		ug/L			1230166	1305636	0
	V	51	23.628	ug/L	0.346	1	6065	521614	1
	V-1	51	23.496	ug/L	0.337	1	81	512760	1
	Cr	52	24.631	ug/L	0.190	0	18002	432420	0
	Cr	53	24.145	ug/L	0.333	1	120	46032	1
	Mn	55	23.978	ug/L	0.447	1	467	552913	1
	Co	59	24.622	ug/L	0.079	0	45	377564	0
>	Ge	72		ug/L			469903	485486	0
	Ni	60	25.941	ug/L	0.390	1	23	79026	0
	Ni	62	25.546	ug/L	0.369	1	183	11101	1
	Cu	63	26.036	ug/L	0.119	0	147	165462	0
	Cu	65	26.011	ug/L	0.498	1	27	72746	1
	Zn	66	81.221	ug/L	1.025	1	178	133803	1
	Zn	67	70.936	ug/L	0.430	0	26	20299	1
	Zn	68	77.993	ug/L	1.084	1	176	90751	0
	As	75	27.025	ug/L	0.582	2	704	41361	1
	As-1	75	24.754	ug/L	0.689	2	6994	42768	1
	Se	82	78.312	ug/L	1.009	1	-14	13859	0
	Se	78	75.926	ug/L	1.490	1	7062	37487	0
	Mo	98	0.008	ug/L	0.003	35	24	56	19
	Y	89		ug/L			357378	374252	0
	Kr	83		ug/L			1052	1121	3
>	In	115		ug/L			863946	922717	0
	Ag	107	25.842	ug/L	0.371	1	16	185683	1
	Cd	111	24.994	ug/L	0.477	1	71	96164	1
	Cd	114	24.963	ug/L	0.189	0	13	244748	0
	Sb	121	-0.018	ug/L	0.002	8	349	146	13
	Sb	123	-0.021	ug/L	0.001	5	274	96	11
	Ba	135	24.495	ug/L	0.276	1	48	92171	0
	Ba	137	24.105	ug/L	0.247	1	73	155717	0
>	Tb	159		ug/L			986512	1040359	0
	Tl	205	24.460	ug/L	0.110	0	64	671727	0
	Pb	208	25.724	ug/L	0.035	0	132	892877	0
	Bi	209		ug/L			1944262	2091863	4
	Th	232	23.796	ug/L	0.099	0	975	806081	0
	U	238	24.135	ug/L	0.123	0	23	871888	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 L REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Friday, May 04, 2012 12:05:28
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

AM

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1512956	1
[	Be	9	0.001	ug/L	0.000	40	7	10	11
	C	13		ug/L			90291	96605	2
	Cl	37		ug/L			4455814	4558336	1
[>	Sc	45		ug/L			1230166	1277200	1
[	V	51	0.047	ug/L	0.011	23	6065	7290	3
[	V-1	51	0.057	ug/L	0.001	1	81	1304	0
[	Cr	52	0.017	ug/L	0.043	253	18002	18965	3
[	Cr	53	0.056	ug/L	0.010	18	120	228	6
[	Mn	55	16.642	ug/L	0.543	3	467	375410	1
[	Co	59	0.008	ug/L	0.001	6	45	167	3
[>	Ge	72		ug/L			469903	481748	0
[	Ni	60	0.071	ug/L	0.007	10	23	237	8
[	Ni	62	0.031	ug/L	0.037	118	183	201	7
[	Cu	63	0.075	ug/L	0.005	7	147	624	4
[	Cu	65	0.060	ug/L	0.007	11	27	193	10
[	Zn	66	1.255	ug/L	0.045	3	178	2230	3
[	Zn	67	1.120	ug/L	0.081	7	26	344	5
[	Zn	68	1.266	ug/L	0.051	4	176	1639	4
[	As	75	96.248	ug/L	1.529	1	704	144324	0
[	As-1	75	100.632	ug/L	1.680	1	6994	150558	0
[	Se	82	0.066	ug/L	0.071	107	-14	-3	362
[	Se	78	-0.458	ug/L	0.294	64	7062	7059	0
[	Mo	98	0.403	ug/L	0.015	3	24	1610	2
	Y	89		ug/L			357378	371788	1
	Kr	83		ug/L			1052	1082	3
[>	In	115		ug/L			863946	925586	1
[	Ag	107	0.002	ug/L	0.002	66	16	35	34
[	Cd	111	-0.002	ug/L	0.002	137	71	70	13
[	Cd	114	0.003	ug/L	0.002	66	13	45	45
[	Sb	121	-0.022	ug/L	0.002	9	349	99	27
[	Sb	123	-0.023	ug/L	0.001	5	274	75	16
[	Ba	135	0.143	ug/L	0.002	1	48	592	2
[	Ba	137	0.147	ug/L	0.002	1	73	1033	2
[>	Tb	159		ug/L			986512	1030509	0
[	Tl	205	0.000	ug/L	0.000	121	64	73	10
[	Pb	208	0.010	ug/L	0.000	4	132	470	3
[	Bi	209		ug/L			1944262	1968933	1
[	Th	232	0.116	ug/L	0.036	31	975	4912	24
[	U	238	0.003	ug/L	0.000	3	23	130	3

UR78 : 05300

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 N REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 04, 2012 12:09:35
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1553638	1
	Be	9	0.001	ug/L	0.001	74	7	10	23
	C	13		ug/L			90291	96114	0
	Cl	37		ug/L			4455814	4543890	1
>	Sc	45		ug/L			1230166	1316269	2
	V	51	0.190	ug/L	0.008	4	6065	10672	3
	V-1	51	0.216	ug/L	0.004	1	81	4840	3
	Cr	52	0.014	ug/L	0.023	163	18002	19506	3
	Cr	53	0.110	ug/L	0.005	4	120	339	4
	Mn	55	78.880	ug/L	0.967	1	467	1832259	1
	Co	59	0.047	ug/L	0.001	1	45	773	3
>	Ge	72		ug/L			469903	487551	1
	Ni	60	0.183	ug/L	0.005	2	23	583	4
	Ni	62	0.053	ug/L	0.024	45	183	213	4
	Cu	63	0.135	ug/L	0.007	5	147	1013	3
	Cu	65	0.097	ug/L	0.005	4	27	302	6
	Zn	66	1.675	ug/L	0.039	2	178	2951	3
	Zn	67	1.480	ug/L	0.029	1	26	452	2
	Zn	68	1.685	ug/L	0.021	1	176	2147	1
	As	75	86.875	ug/L	0.936	1	704	131907	1
	As-1	75	90.754	ug/L	1.028	1	6994	138123	1
	Se	82	0.143	ug/L	0.131	91	14	10	226
	Se	78	-0.649	ug/L	0.460	70	7062	7067	1
	Mo	98	0.083	ug/L	0.013	15	24	353	12
	Y	89		ug/L			357378	373161	3
	Kr	83		ug/L			1052	1068	5
>	In	115		ug/L			863946	917746	1
	Ag	107	0.000	ug/L	0.001	242	16	19	28
	Cd	111	-0.000	ug/L	0.001	423	71	75	4
	Cd	114	0.001	ug/L	0.000	35	13	27	16
	Sb	121	-0.012	ug/L	0.002	14	349	226	8
	Sb	123	-0.013	ug/L	0.002	13	274	174	7
	Ba	135	1.065	ug/L	0.004	0	48	4035	1
	Ba	137	1.033	ug/L	0.025	2	73	6711	0
>	Tb	159		ug/L			986512	1040367	0
	Tl	205	0.000	ug/L	0.000	373	64	71	18
	Pb	208	0.010	ug/L	0.001	6	132	503	4
	Bi	209		ug/L			1944262	1974045	0
	Th	232	0.041	ug/L	0.009	21	975	2419	12
	U	238	0.022	ug/L	0.000	2	23	821	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 O REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Friday, May 04, 2012 12:13:43
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

AC1

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1548717	1
	Be	9	0.001	ug/L	0.001	57	7	11	21
	C	13		ug/L			90291	95998	2
	Cl	37		ug/L			4455814	4423488	3
>	Sc	45		ug/L			1230166	1295192	0
	V	51	0.039	ug/L	0.007	17	6065	7219	1
	V-1	51	0.055	ug/L	0.002	2	81	1279	3
	Cr	52	0.006	ug/L	0.031	481	18002	19057	1
	Cr	53	0.067	ug/L	0.001	1	120	254	1
	Mn	55	16.380	ug/L	0.197	1	467	374838	0
	Co	59	0.006	ug/L	0.001	11	45	144	7
>	Ge	72		ug/L			469903	480447	1
	Ni	60	0.066	ug/L	0.009	13	23	223	13
	Ni	62	-0.009	ug/L	0.047	504	183	184	11
	Cu	63	0.084	ug/L	0.006	6	147	678	5
	Cu	65	0.062	ug/L	0.007	11	27	198	11
	Zn	66	1.221	ug/L	0.017	1	178	2169	2
	Zn	67	1.073	ug/L	0.137	12	26	330	12
	Zn	68	1.190	ug/L	0.041	3	176	1547	1
	As	75	92.427	ug/L	1.769	1	704	138264	2
	As-1	75	96.595	ug/L	1.894	1	6994	144432	2
	Se	82	0.128	ug/L	0.140	109	-14	7	331
	Se	78	-0.520	ug/L	0.139	26	7062	7016	0
	Mo	98	0.371	ug/L	0.011	2	24	1481	1
	Y	89		ug/L			357378	368548	2
	Kr	83		ug/L			1052	1075	0
>	In	115		ug/L			863946	907938	0
	Ag	107	-0.001	ug/L	0.001	76	16	12	33
	Cd	111	-0.005	ug/L	0.002	36	71	58	10
	Cd	114	0.001	ug/L	0.001	70	13	24	29
	Sb	121	-0.023	ug/L	0.000	2	349	83	7
	Sb	123	-0.025	ug/L	0.001	4	274	63	17
	Ba	135	0.147	ug/L	0.006	3	48	593	2
	Ba	137	0.143	ug/L	0.009	5	73	984	5
>	Tb	159		ug/L			986512	1031365	1
	Tl	205	-0.001	ug/L	0.000	29	64	39	20
	Pb	208	0.010	ug/L	0.000	3	132	485	1
	Bi	209		ug/L			1944262	2039872	5
	Th	232	-0.003	ug/L	0.004	140	975	929	14
	U	238	0.001	ug/L	0.000	29	23	55	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 P REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 04, 2012 12:17:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1557600	0
	Be	9	0.001	ug/L	0.000	20	7	12	8
	C	13		ug/L			90291	97534	0
	Cl	37		ug/L			4455814	4595144	1
>	Sc	45		ug/L			1230166	1284013	2
	V	51	0.183	ug/L	0.016	8	6065	10245	1
	V-1	51	0.216	ug/L	0.004	2	81	4718	0
	Cr	52	0.008	ug/L	0.043	560	18002	18906	1
	Cr	53	0.130	ug/L	0.004	3	120	369	2
	Mn	55	79.074	ug/L	1.116	1	467	1791710	0
	Co	59	0.046	ug/L	0.002	4	45	745	2
>	Ge	72		ug/L			469903	484327	0
	Ni	60	0.170	ug/L	0.008	4	23	541	4
	Ni	62	0.056	ug/L	0.013	23	183	213	1
	Cu	63	0.136	ug/L	0.008	5	147	1015	5
	Cu	65	0.093	ug/L	0.007	7	27	288	6
	Zn	66	1.578	ug/L	0.022	1	178	2773	2
	Zn	67	1.458	ug/L	0.033	2	26	442	1
	Zn	68	1.690	ug/L	0.022	1	176	2139	0
	As	75	89.648	ug/L	0.355	0	704	135206	0
	As-1	75	93.675	ug/L	0.404	0	6994	141409	0
	Se	82	0.066	ug/L	0.052	78	-14	-3	280
	Se	78	-0.596	ug/L	0.172	28	7062	7043	0
	Mo	98	0.080	ug/L	0.007	8	24	343	8
	Y	89		ug/L			357378	369678	1
	Kr	83		ug/L			1052	1099	2
>	In	115		ug/L			863946	913567	1
	Ag	107	0.000	ug/L	0.001	377	16	19	40
	Cd	111	-0.003	ug/L	0.001	41	71	63	7
	Cd	114	0.002	ug/L	0.002	91	13	30	47
	Sb	121	-0.012	ug/L	0.000	3	349	218	1
	Sb	123	-0.015	ug/L	0.001	5	274	151	4
	Ba	135	1.034	ug/L	0.008	0	48	3902	0
	Ba	137	1.005	ug/L	0.019	1	73	6505	1
>	Tb	159		ug/L			986512	1042362	0
	Tl	205	-0.000	ug/L	0.000	93	64	60	11
	Pb	208	0.010	ug/L	0.000	3	132	489	2
	Bi	209		ug/L			1944262	1975733	1
	Th	232	-0.001	ug/L	0.004	684	975	1011	12
	U	238	0.021	ug/L	0.001	2	23	776	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:23:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1504512	0
	Be	9	193.403	ug/L	0.702	0	7	823698	0
	C	13		ug/L			90291	95199	0
	Cl	37		ug/L			4455814	4819616	2
>	Sc	45		ug/L			1230166	1253117	0
	V	51	192.254	ug/L	7.033	3	6065	4028840	3
	V-1	51	190.333	ug/L	7.827	4	81	3985302	3
	Cr	52	195.236	ug/L	1.508	0	18002	3162589	0
	Cr	53	188.177	ug/L	3.784	2	120	343449	1
	Mn	55	188.686	ug/L	1.780	0	467	4172953	1
	Co	59	190.128	ug/L	4.131	2	45	2797543	1
>	Ge	72		ug/L			469903	459781	0
	Ni	60	192.992	ug/L	3.220	1	23	556693	1
	Ni	62	195.704	ug/L	1.556	0	183	79347	0
	Cu	63	191.012	ug/L	1.154	0	147	1148757	0
	Cu	65	190.882	ug/L	2.264	1	27	505459	1
	Zn	66	187.841	ug/L	4.462	2	178	292845	2
	Zn	67	187.008	ug/L	3.826	2	26	50639	2
	Zn	68	188.452	ug/L	0.475	0	176	207440	0
	As	75	195.716	ug/L	1.728	0	704	279408	0
	As-1	75	196.377	ug/L	1.615	0	6994	273923	0
	Se	82	197.847	ug/L	3.300	1	-14	33184	1
	Se	78	193.590	ug/L	2.792	1	7062	79819	1
	Mo	98	196.833	ug/L	3.150	1	24	738278	1
	Y	89		ug/L			357378	358075	0
	Kr	83		ug/L			1052	1273	7
>	In	115		ug/L			863946	857949	1
	Ag	107	190.814	ug/L	3.100	1	16	1274625	0
	Cd	111	194.477	ug/L	3.086	1	71	695259	1
	Cd	114	195.547	ug/L	1.124	0	13	1782595	0
	Sb	121	206.204	ug/L	1.164	0	349	2371625	0
	Sb	123	197.305	ug/L	1.173	0	274	1697870	0
	Ba	135	198.480	ug/L	3.544	1	48	694037	1
	Ba	137	197.937	ug/L	1.091	0	73	1188403	0
>	Tb	159		ug/L			986512	1014749	0
	Tl	205	194.794	ug/L	2.434	1	64	5217191	0
	Pb	208	198.075	ug/L	0.161	0	132	6704994	0
	Bi	209		ug/L			1944262	1816732	0
	Th	232	199.669	ug/L	1.154	0	975	6589946	1
	U	238	198.333	ug/L	2.171	1	23	6988289	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:29:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1500543	1
	Be	9	0.006	ug/L	0.003	55	7	33	43
	C	13		ug/L			90291	94362	0
	Cl	37		ug/L			4455814	4608160	0
>	Sc	45		ug/L			1230166	1211017	2
	V	51	0.028	ug/L	0.033	117	6065	6544	12
	V-1	51	0.026	ug/L	0.033	129	81	613	113
	Cr	52	0.048	ug/L	0.048	100	18002	18473	6
	Cr	53	0.040	ug/L	0.050	125	120	190	49
	Mn	55	0.060	ug/L	0.074	124	467	1763	93
	Co	59	0.035	ug/L	0.053	150	45	551	139
>	Ge	72		ug/L			469903	453804	2
	Ni	60	0.043	ug/L	0.040	92	23	144	76
	Ni	62	0.359	ug/L	0.121	33	183	320	13
	Cu	63	0.086	ug/L	0.039	45	147	648	33
	Cu	65	0.067	ug/L	0.048	72	27	200	60
	Zn	66	0.900	ug/L	0.070	7	178	1553	5
	Zn	67	0.755	ug/L	0.025	3	26	227	0
	Zn	68	0.869	ug/L	0.140	16	176	1111	11
	As	75	0.064	ug/L	0.066	102	704	769	10
	As-1	75	0.063	ug/L	0.113	180	6994	6835	0
	Se	82	0.104	ug/L	0.123	118	-14	2	690
	Se	78	0.154	ug/L	0.360	233	7062	6876	0
	Mo	98	0.035	ug/L	0.005	13	24	153	10
	Y	89		ug/L			357378	345324	1
	Kr	83		ug/L			1052	1041	0
>	In	115		ug/L			863946	867260	0
	Ag	107	0.007	ug/L	0.004	59	16	61	43
	Cd	111	0.005	ug/L	0.004	81	71	90	16
	Cd	114	0.006	ug/L	0.004	77	13	64	60
	Sb	121	0.232	ug/L	0.012	5	349	3051	4
	Sb	123	0.219	ug/L	0.012	5	274	2181	4
	Ba	135	0.013	ug/L	0.005	39	48	95	19
	Ba	137	0.016	ug/L	0.003	17	73	172	9
>	Tb	159		ug/L			986512	975900	0
	Tl	205	0.008	ug/L	0.005	60	64	259	44
	Pb	208	0.015	ug/L	0.004	29	132	609	22
	Bi	209		ug/L			1944262	1903287	1
	Th	232	0.102	ug/L	0.021	20	975	4215	15
	U	238	0.008	ug/L	0.003	35	23	297	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:33:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1529456	2
[	Be	9	50.461	ug/L	1.327	2	7	218405	1
	C	13		ug/L			90291	91189	0
	Cl	37		ug/L			4455814	4760992	1
[>	Sc	45		ug/L			1230166	1270632	0
[	V	51	46.107	ug/L	0.403	0	6065	984591	0
[	V-1	51	46.195	ug/L	0.554	1	81	980939	0
[	Cr	52	48.018	ug/L	0.424	0	18002	802790	1
[	Cr	53	48.333	ug/L	0.550	1	120	89547	1
[	Mn	55	46.746	ug/L	0.568	1	467	1048606	1
[	Co	59	46.865	ug/L	0.665	1	45	699345	1
[>	Ge	72		ug/L			469903	470855	2
[	Ni	60	49.842	ug/L	1.430	2	23	147188	1
[	Ni	62	49.239	ug/L	1.754	3	183	20570	1
[	Cu	63	50.019	ug/L	1.381	2	147	308034	0
[	Cu	65	49.445	ug/L	1.357	2	27	134044	0
[	Zn	66	51.116	ug/L	1.117	2	178	81708	0
[	Zn	67	49.268	ug/L	1.939	3	26	13675	2
[	Zn	68	51.136	ug/L	1.904	3	176	57737	1
[	As	75	50.284	ug/L	1.539	3	704	74004	1
[	As-1	75	50.245	ug/L	1.563	3	6994	76954	1
[	Se	82	52.229	ug/L	1.473	2	-14	8956	0
[	Se	78	50.544	ug/L	1.548	3	7062	26561	0
[	Mo	98	48.797	ug/L	0.660	1	24	187417	1
	Y	89		ug/L			357378	356136	0
	Kr	83		ug/L			1052	1107	1
[>	In	115		ug/L			863946	887072	1
[	Ag	107	49.358	ug/L	1.010	2	16	340887	0
[	Cd	111	50.350	ug/L	0.985	1	71	186155	1
[	Cd	114	50.566	ug/L	0.863	1	13	476559	0
[	Sb	121	49.731	ug/L	0.899	1	349	591596	0
[	Sb	123	49.683	ug/L	1.149	2	274	442186	0
[	Ba	135	49.265	ug/L	1.431	2	48	178126	1
[	Ba	137	48.764	ug/L	1.103	2	73	302714	0
[>	Tb	159		ug/L			986512	1020031	1
[	Tl	205	48.180	ug/L	0.384	0	64	1297167	0
[	Pb	208	50.358	ug/L	0.671	1	132	1713447	0
[	Bi	209		ug/L			1944262	1909550	0
[	Th	232	48.102	ug/L	0.562	1	975	1596424	0
[	U	238	48.231	ug/L	0.230	0	23	1708280	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:39:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1454166	1
	Be	9	0.001	ug/L	0.001	55	7	12	25
	C	13		ug/L			90291	89904	0
	Cl	37		ug/L			4455814	4513171	4
>	Sc	45		ug/L			1230166	1191810	2
	V	51	0.002	ug/L	0.001	59	6065	5922	2
	V-1	51	0.003	ug/L	0.001	20	81	130	8
	Cr	52	-0.001	ug/L	0.008	1041	18002	17430	2
	Cr	53	0.000	ug/L	0.003	1653	120	117	6
	Mn	55	0.004	ug/L	0.005	122	467	530	15
	Co	59	0.002	ug/L	0.000	27	45	67	10
>	Ge	72		ug/L			469903	456144	1
	Ni	60	0.000	ug/L	0.001	553	23	23	15
	Ni	62	0.167	ug/L	0.045	26	183	245	6
	Cu	63	0.011	ug/L	0.005	50	147	206	13
	Cu	65	0.001	ug/L	0.003	376	27	29	28
	Zn	66	-0.005	ug/L	0.001	27	178	165	2
	Zn	67	-0.001	ug/L	0.023	2037	26	25	26
	Zn	68	-0.007	ug/L	0.002	30	176	162	1
	As	75	0.050	ug/L	0.023	46	704	753	3
	As-1	75	0.026	ug/L	0.049	188	6994	6823	1
	Se	82	0.089	ug/L	0.051	57	-14	0	1148
	Se	78	0.117	ug/L	0.175	149	7062	6899	0
	Mo	98	0.014	ug/L	0.004	32	24	74	20
	Y	89		ug/L			357378	347247	2
	Kr	83		ug/L			1052	1072	4
>	In	115		ug/L			863946	854838	1
	Ag	107	0.002	ug/L	0.000	11	16	31	3
	Cd	111	-0.000	ug/L	0.001	580	71	70	5
	Cd	114	0.001	ug/L	0.000	11	13	20	2
	Sb	121	0.106	ug/L	0.005	4	349	1561	5
	Sb	123	0.100	ug/L	0.004	3	274	1128	3
	Ba	135	-0.002	ug/L	0.002	86	48	40	15
	Ba	137	-0.002	ug/L	0.002	116	73	63	17
>	Tb	159		ug/L			986512	959345	1
	Tl	205	0.002	ug/L	0.000	21	64	111	9
	Pb	208	0.000	ug/L	0.001	427	132	135	18
	Bi	209		ug/L			1944262	1866169	0
	Th	232	0.080	ug/L	0.018	22	975	3430	15
	U	238	0.002	ug/L	0.000	19	23	96	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 12:43:36
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1527931	0
	Be	9	0.006	ug/L	0.002	38	7	31	30
	C	13		ug/L			90291	101801	0
	Cl	37		ug/L			4455814	4772239	2
>	Sc	45		ug/L			1230166	1337578	1
	V	51	3.412	ug/L	0.076	2	6065	82831	3
	V-1	51	3.444	ug/L	0.079	2	81	77081	3
	Cr	52	0.136	ug/L	0.014	10	18002	21914	0
	Cr	53	0.260	ug/L	0.005	1	120	637	1
	Mn	55	25.839	ug/L	0.636	2	467	610264	1
	Co	59	0.344	ug/L	0.007	1	45	5456	1
>	Ge	72		ug/L			469903	471783	1
	Ni	60	3.015	ug/L	0.088	2	23	8945	3
	Ni	62	2.809	ug/L	0.190	6	183	1349	4
	Cu	63	1.781	ug/L	0.041	2	147	11134	2
	Cu	65	1.597	ug/L	0.022	1	27	4365	1
	Zn	66	33.227	ug/L	0.854	2	178	53289	1
	Zn	67	29.150	ug/L	0.401	1	26	8121	1
	Zn	68	31.864	ug/L	0.672	2	176	36131	1
	As	75	9.890	ug/L	0.283	2	704	15156	1
	As-1	75	10.208	ug/L	0.367	3	6994	21264	1
	Se	82	0.141	ug/L	0.079	56	-14	9	142
	Se	78	-0.290	ug/L	0.318	109	7062	6978	1
	Mo	98	103.633	ug/L	1.908	1	24	398804	0
	Y	89		ug/L			357378	367845	0
	Kr	83		ug/L			1052	1096	3
>	In	115		ug/L			863946	885424	1
	Ag	107	0.024	ug/L	0.002	9	16	184	8
	Cd	111	0.204	ug/L	0.006	2	71	827	3
	Cd	114	0.220	ug/L	0.006	2	13	2086	3
	Sb	121	0.858	ug/L	0.007	0	349	10540	0
	Sb	123	0.849	ug/L	0.005	0	274	7817	1
	Ba	135	2.107	ug/L	0.055	2	48	7651	2
	Ba	137	2.077	ug/L	0.028	1	73	12944	0
>	Tb	159		ug/L			986512	1030454	0
	Tl	205	0.013	ug/L	0.004	31	64	408	26
	Pb	208	0.069	ug/L	0.003	4	132	2509	4
	Bi	209		ug/L			1944262	1872561	1
	Th	232	0.220	ug/L	0.087	39	975	8383	34
	U	238	0.061	ug/L	0.001	0	23	2205	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 12:49:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1514276	0
[	Be	9	0.227	ug/L	0.008	3	7	978	3
	C	13		ug/L			90291	138557	2
	Cl	37		ug/L			4455814	5429838	0
[>	Sc	45		ug/L			1230166	1466915	2
|	V	51	141.960	ug/L	4.651	3	6065	3483097	1
|	V-1	51	142.005	ug/L	4.659	3	81	3479547	1
|	Cr	52	21.519	ug/L	0.842	3	18002	426951	2
|	Cr	53	21.998	ug/L	0.593	2	120	47110	0
|	Mn	55	161.286	ug/L	2.729	1	467	4174238	0
[	Co	59	0.438	ug/L	0.019	4	45	7591	2
[>	Ge	72		ug/L			469903	447869	0
|	Ni	60	5.679	ug/L	0.036	0	23	15977	0
|	Ni	62	62.412	ug/L	22.740	36	183	24725	35
|	Cu	63	22.215	ug/L	1.906	8	147	130210	7
|	Cu	65	14.583	ug/L	0.424	2	27	37634	2
|	Zn	66	5.362	ug/L	0.040	0	178	8307	0
|	Zn	67	13.155	ug/L	0.567	4	26	3492	3
|	Zn	68	6.410	ug/L	0.137	2	176	7034	1
|	As	75	9.103	ug/L	0.106	1	704	13299	1
|	As-1	75	10.089	ug/L	0.424	4	6994	20029	2
|	Se	82	0.828	ug/L	0.139	16	-14	121	18
|	Se	78	3.400	ug/L	1.522	44	7062	7976	6
[	Mo	98	2.376	ug/L	0.066	2	24	8703	2
	Y	89		ug/L			357378	526034	0
	Kr	83		ug/L			1052	1215	1
[>	In	115		ug/L			863946	831656	0
|	Ag	107	0.066	ug/L	0.004	6	16	442	5
|	Cd	111	0.211	ug/L	0.038	17	71	799	16
|	Cd	114	0.085	ug/L	0.003	3	13	764	2
|	Sb	121	0.149	ug/L	0.002	1	349	1997	1
|	Sb	123	0.140	ug/L	0.006	4	274	1435	3
|	Ba	135	7.716	ug/L	0.169	2	48	26196	1
[	Ba	137	7.733	ug/L	0.028	0	73	45072	0
[>	Tb	159		ug/L			986512	1009951	1
|	Tl	205	0.004	ug/L	0.001	16	64	176	10
|	Pb	208	0.952	ug/L	0.013	1	132	32217	0
|	Bi	209		ug/L			1944262	1673150	1
|	Th	232	0.845	ug/L	0.082	9	975	28750	9
[	U	238	0.461	ug/L	0.000	0	23	16188	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 12:53:35
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1522023	0
[	Be	9	0.007	ug/L	0.001	16	7	36	13
	C	13		ug/L			90291	109590	0
	Cl	37		ug/L			4455814	4672297	1
[>	Sc	45		ug/L			1230166	1337452	1
[	V	51	0.944	ug/L	0.038	3	6065	27668	1
[	V-1	51	1.001	ug/L	0.040	4	81	22446	2
[	Cr	52	0.162	ug/L	0.022	13	18002	22352	0
[	Cr	53	0.373	ug/L	0.036	9	120	856	6
[	Mn	55	224.268	ug/L	0.643	0	467	5293399	1
[	Co	59	0.092	ug/L	0.002	2	45	1496	3
[>	Ge	72		ug/L			469903	463193	1
[	Ni	60	5.534	ug/L	0.148	2	23	16100	1
[	Ni	62	75.889	ug/L	39.419	51	183	30970	50
[	Cu	63	4.843	ug/L	2.329	48	147	29359	46
[	Cu	65	0.389	ug/L	0.054	13	27	1062	12
[	Zn	66	1.842	ug/L	0.043	2	178	3067	3
[	Zn	67	1.622	ug/L	0.077	4	26	468	3
[	Zn	68	2.464	ug/L	0.062	2	176	2903	1
[	As	75	121.027	ug/L	1.700	1	704	174318	1
[	As-1	75	127.344	ug/L	1.780	1	6994	181359	1
[	Se	82	0.151	ug/L	0.086	57	-14	11	130
[	Se	78	2.521	ug/L	1.239	49	7062	7913	4
[	Mo	98	1.192	ug/L	0.020	1	24	4526	1
	Y	89		ug/L			357378	367103	1
	Kr	83		ug/L			1052	1099	2
[>	In	115		ug/L			863946	883618	1
[	Ag	107	0.001	ug/L	0.000	27	16	24	8
[	Cd	111	0.468	ug/L	0.018	3	71	1794	2
[	Cd	114	0.457	ug/L	0.012	2	13	4299	1
[	Sb	121	0.049	ug/L	0.004	8	349	939	4
[	Sb	123	0.047	ug/L	0.006	12	274	700	6
[	Ba	135	1.886	ug/L	0.040	2	48	6841	2
[	Ba	137	1.854	ug/L	0.010	0	73	11537	0
[>	Tb	159		ug/L			986512	1033014	0
[	Tl	205	0.001	ug/L	0.000	46	64	95	13
[	Pb	208	0.030	ug/L	0.001	4	132	1188	3
[	Bi	209		ug/L			1944262	1840127	0
[	Th	232	0.024	ug/L	0.006	25	975	1811	10
[	U	238	0.001	ug/L	0.000	13	23	74	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 12:57:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1570437	1
[	Be	9	0.004	ug/L	0.001	20	7	27	12
	C	13		ug/L			90291	112558	1
	Cl	37		ug/L			4455814	4687804	0
[>	Sc	45		ug/L			1230166	1335786	1
[	V	51	1.395	ug/L	0.026	1	6065	37695	0
[	V-1	51	1.449	ug/L	0.017	1	81	32425	0
[	Cr	52	0.090	ug/L	0.033	35	18002	21094	1
[	Cr	53	0.292	ug/L	0.003	1	120	698	2
[	Mn	55	1.156	ug/L	0.028	2	467	27745	0
[	Co	59	0.235	ug/L	0.010	4	45	3731	2
[>	Ge	72		ug/L			469903	471243	1
[	Ni	60	1.345	ug/L	0.051	3	23	3998	4
[	Ni	62	8.147	ug/L	0.928	11	183	3559	9
[	Cu	63	3.450	ug/L	0.133	3	147	21408	3
[	Cu	65	2.949	ug/L	0.042	1	27	8030	1
[	Zn	66	7.269	ug/L	0.143	1	178	11785	0
[	Zn	67	6.202	ug/L	0.149	2	26	1746	2
[	Zn	68	7.190	ug/L	0.186	2	176	8280	1
[	As	75	46.375 ✓	ug/L	0.801	1	704	68387	0
[	As-1	75	48.478	ug/L	0.908	1	6994	74579	0
[	Se	82	0.313	ug/L	0.042	13	-14	39	19
[	Se	78	0.139	ug/L	0.297	213	7062	7135	0
[	Mo	98	9.197	ug/L	0.271	2	24	35373	2
	Y	89		ug/L			357378	367649	2
	Kr	83		ug/L			1052	1093	2
[>	In	115		ug/L			863946	897644	1
[	Ag	107	0.006	ug/L	0.001	22	16	56	14
[	Cd	111	0.067	ug/L	0.001	1	71	326	2
[	Cd	114	0.070	ug/L	0.002	3	13	678	4
[	Sb	121	3.225	ug/L	0.019	0	349	39170	0
[	Sb	123	3.232	ug/L	0.032	0	274	29377	1
[	Ba	135	1.184	ug/L	0.030	2	48	4381	1
[	Ba	137	1.190	ug/L	0.014	1	73	7548	0
[>	Tb	159		ug/L			986512	1041775	0
[	Tl	205	0.006	ug/L	0.000	6	64	238	4
[	Pb	208	0.017	ug/L	0.000	1	132	741	0
[	Bi	209		ug/L			1944262	1871157	1
[	Th	232	-0.009	ug/L	0.003	34	975	715	14
[	U	238	0.283	ug/L	0.006	2	23	10247	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 K REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:01:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1547404	1
	Be	9	0.005	ug/L	0.000	6	7	31	5
	C	13		ug/L			90291	116913	2
	Cl	37		ug/L			4455814	4783088	1
>	Sc	45		ug/L			1230166	1356724	1
	V	51	0.861	ug/L	0.023	2	6065	26196	1
	V-1	51	0.926	ug/L	0.012	1	81	21091	0
	Cr	52	0.136	ug/L	0.023	16	18002	22222	0
	Cr	53	0.377	ug/L	0.021	5	120	878	5
	Mn	55	207.102	ug/L	2.146	1	467	4957999	0
	Co	59	0.075	ug/L	0.002	3	45	1237	4
>	Ge	72		ug/L			469903	464191	1
	Ni	60	0.552	ug/L	0.023	4	23	1628	3
	Ni	62	6.840	ug/L	0.661	9	183	2977	10
	Cu	63	1.008	ug/L	0.039	3	147	6268	4
	Cu	65	0.231	ug/L	0.005	1	27	646	2
	Zn	66	1.277	ug/L	0.033	2	178	2184	2
	Zn	67	1.146	ug/L	0.080	7	26	339	5
	Zn	68	1.860	ug/L	0.022	1	176	2238	1
	As	75	115.038	ug/L	1.019	0	704	166085	1
	As-1	75	120.498	ug/L	1.090	0	6994	172354	1
	Se	82	0.183	ug/L	0.137	75	-14	16	139
	Se	78	0.435	ug/L	0.124	28	7062	7142	0
	Mo	98	1.160	ug/L	0.011	0	24	4418	2
	Y	89		ug/L			357378	362591	0
	Kr	83		ug/L			1052	1077	4
>	In	115		ug/L			863946	886925	0
	Ag	107	0.001	ug/L	0.001	136	16	21	30
	Cd	111	0.008	ug/L	0.003	42	71	102	11
	Cd	114	0.006	ug/L	0.001	17	13	71	14
	Sb	121	0.032	ug/L	0.002	5	349	744	3
	Sb	123	0.029	ug/L	0.004	13	274	541	7
	Ba	135	1.855	ug/L	0.045	2	48	6756	2
	Ba	137	1.853	ug/L	0.006	0	73	11576	0
>	Tb	159		ug/L			986512	1037459	0
	Tl	205	0.000	ug/L	0.000	87	64	77	11
	Pb	208	0.016	ug/L	0.001	3	132	692	2
	Bi	209		ug/L			1944262	1835657	1
	Th	232	0.009	ug/L	0.004	45	975	1316	10
	U	238	0.001	ug/L	0.000	19	23	66	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 L REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:05:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1560854	2
	Be	9	0.006	ug/L	0.001	21	7	34	15
	C	13		ug/L			90291	106908	2
	Cl	37		ug/L			4455814	4739883	2
>	Sc	45		ug/L			1230166	1315734	0
	V	51	1.344	ug/L	0.024	1	6065	36007	1
	V-1	51	1.393	ug/L	0.033	2	81	30711	2
	Cr	52	0.106	ug/L	0.027	25	18002	21037	1
	Cr	53	0.289	ug/L	0.021	7	120	683	6
	Mn	55	0.876	ug/L	0.019	2	467	20839	1
	Co	59	0.080	ug/L	0.002	2	45	1279	1
>	Ge	72		ug/L			469903	469450	2
	Ni	60	1.215	ug/L	0.030	2	23	3602	3
	Ni	62	4.859	ug/L	0.372	7	183	2190	7
	Cu	63	3.089	ug/L	0.030	0	147	19107	1
	Cu	65	2.847	ug/L	0.042	1	27	7722	1
	Zn	66	6.843	ug/L	0.165	2	178	11060	1
	Zn	67	5.988	ug/L	0.118	1	26	1680	0
	Zn	68	6.952	ug/L	0.134	1	176	7981	1
	As	75	45.047	ug/L	0.391	0	704	66201	1
	As-1	75	47.054	ug/L	0.469	0	6994	72323	1
	Se	82	0.205	ug/L	0.070	34	-14	20	57
	Se	78	-0.083	ug/L	0.428	516	7062	7022	0
	Mo	98	9.009	ug/L	0.232	2	24	34514	1
	Y	89		ug/L			357378	365510	1
	Kr	83		ug/L			1052	1099	1
>	In	115		ug/L			863946	901152	1
	Ag	107	0.001	ug/L	0.000	17	16	27	5
	Cd	111	0.042	ug/L	0.003	6	71	232	2
	Cd	114	0.044	ug/L	0.002	4	13	435	4
	Sb	121	3.185	ug/L	0.016	0	349	38838	1
	Sb	123	3.191	ug/L	0.064	2	274	29113	0
	Ba	135	1.139	ug/L	0.007	0	48	4234	1
	Ba	137	1.132	ug/L	0.019	1	73	7212	0
>	Tb	159		ug/L			986512	1042091	0
	Tl	205	0.006	ug/L	0.001	9	64	226	6
	Pb	208	0.009	ug/L	0.000	3	132	464	2
	Bi	209		ug/L			1944262	1856806	0
	Th	232	-0.017	ug/L	0.001	3	975	471	4
	U	238	0.265	ug/L	0.003	0	23	9610	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 N REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:10:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1516197	1
[	Be	9	0.006	ug/L	0.001	20	7	31	14
	C	13		ug/L			90291	109940	0
	Cl	37		ug/L			4455814	4851308	1
[>	Sc	45		ug/L			1230166	1340759	1
[	V	51	0.837	ug/L	0.029	3	6065	25354	2
[	V-1	51	0.888	ug/L	0.029	3	81	19989	2
[	Cr	52	0.143	ug/L	0.017	12	18002	22088	2
[	Cr	53	0.333	ug/L	0.020	6	120	780	3
[	Mn	55	569.043	ug/L	6.454	1	467	13463733	2
[	Co	59	0.491	ug/L	0.020	4	45	7782	4
[>	Ge	72		ug/L			469903	446402	1
[	Ni	60	1.152	ug/L	0.082	7	23	3245	5
[	Ni	62	9.101	ug/L	1.216	13	183	3748	12
[	Cu	63	1.192	ug/L	0.132	11	147	7098	10
[	Cu	65	0.302	ug/L	0.007	2	27	802	0
[	Zn	66	1.581	ug/L	0.007	0	178	2560	1
[	Zn	67	1.448	ug/L	0.165	11	26	405	9
[	Zn	68	2.409	ug/L	0.084	3	176	2739	2
[	As	75	4.633	ug/L	0.104	2	704	7074	1
[	As-1	75	4.964	ug/L	0.130	2	6994	13197	0
[	Se	82	0.167	ug/L	0.074	44	-14	13	90
[	Se	78	0.745	ug/L	0.264	35	7062	6981	0
[	Mo	98	1.125	ug/L	0.018	1	24	4121	1
	Y	89		ug/L			357378	365945	0
	Kr	83		ug/L			1052	1068	0
[>	In	115		ug/L			863946	861859	1
[	Ag	107	0.000	ug/L	0.001	390	16	17	23
[	Cd	111	0.066	ug/L	0.003	4	71	307	3
[	Cd	114	0.060	ug/L	0.004	6	13	566	5
[	Sb	121	0.046	ug/L	0.002	4	349	874	3
[	Sb	123	0.045	ug/L	0.001	1	274	658	0
[	Ba	135	4.205	ug/L	0.136	3	48	14817	2
[	Ba	137	4.231	ug/L	0.116	2	73	25587	1
[>	Tb	159		ug/L			986512	1025396	0
[	Tl	205	0.002	ug/L	0.000	10	64	113	4
[	Pb	208	0.017	ug/L	0.001	5	132	708	4
[	Bi	209		ug/L			1944262	1754011	0
[	Th	232	-0.005	ug/L	0.003	51	975	840	10
[	U	238	0.337	ug/L	0.002	0	23	12029	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:14:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1526440	2
[	Be	9	0.008	ug/L	0.002	22	7	43	16
	C	13		ug/L			90291	107718	2
	Cl	37		ug/L			4455814	4741770	1
[>	Sc	45		ug/L			1230166	1313304	2
[	V	51	2.755	ug/L	0.042	1	6065	66884	0
[	V-1	51	2.790	ug/L	0.032	1	81	61318	1
[	Cr	52	U 0.103	ug/L	0.042	40	18002	20952	1
[	Cr	53	0.240	ug/L	0.019	8	120	587	6
[	Mn	55	26.036	ug/L	0.173	0	467	603906	2
[	Co	59	0.340	ug/L	0.010	2	45	5283	2
[>	Ge	72		ug/L			469903	470643	0
[	Ni	60	1.753	ug/L	0.064	3	23	5196	3
[	Ni	62	4.901	ug/L	0.119	2	183	2213	2
[	Cu	63	0.939 ✓	ug/L	0.038	4	147	5924	3
[	Cu	65	0.607	ug/L	0.031	5	27	1672	4
[	Zn	66	21.578 ✓	ug/L	0.331	1	178	34589	1
[	Zn	67	19.050	ug/L	0.484	2	26	5303	2
[	Zn	68	21.144	ug/L	0.339	1	176	23978	0
[	As	75	8.251 ✓	ug/L	0.210	2	704	12732	1
[	As-1	75	8.484	ug/L	0.291	3	6994	18814	1
[	Se	82	0.148	ug/L	0.115	77	-14	10	184
[	Se	78	-0.280	ug/L	0.331	118	7062	6965	1
[	Mo	98	98.373	ug/L	0.898	0	24	377685	0
	Y	89		ug/L			357378	363918	1
	Kr	83		ug/L			1052	1109	1
[>	In	115		ug/L			863946	889402	0
[	Ag	107	U 0.003	ug/L	0.001	26	16	41	15
[	Cd	111	0.114	ug/L	0.007	6	71	495	6
[	Cd	114	0.126	ug/L	0.001	1	13	1205	1
[	Sb	121	0.722	ug/L	0.022	2	349	8963	3
[	Sb	123	0.723	ug/L	0.014	1	274	6732	1
[	Ba	135	2.002	ug/L	0.031	1	48	7307	0
[	Ba	137	1.970	ug/L	0.066	3	73	12338	3
[>	Tb	159		ug/L			986512	1038355	0
[	Tl	205	0.003	ug/L	0.001	22	64	146	12
[	Pb	208	0.009	ug/L	0.000	4	132	458	2
[	Bi	209		ug/L			1944262	1877072	0
[	Th	232	-0.018	ug/L	0.001	6	975	423	8
[	U	238	0.052	ug/L	0.002	3	23	1916	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:18:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1497763	2
	Be	9	0.006	ug/L	0.002	26	7	32	18
	C	13		ug/L			90291	107939	1
	Cl	37		ug/L			4455814	4910375	4
>	Sc	45		ug/L			1230166	1346368	1
	V	51	0.846	ug/L	0.018	2	6065	25646	1
	V-1	51	0.889	ug/L	0.014	1	81	20089	0
	Cr	52	0.148	ug/L	0.008	5	18002	22267	1
	Cr	53	0.310	ug/L	0.014	4	120	739	3
	Mn	55	563.637	ug/L	7.572	1	467	13388998	0
	Co	59	0.505	ug/L	0.003	0	45	8027	1
>	Ge	72		ug/L			469903	444967	3
	Ni	60	4.002	ug/L	0.095	2	23	11186	1
	Ni	62	10.324	ug/L	1.280	12	183	4226	14
	Cu	63	1.138	ug/L	0.098	8	147	6772	11
	Cu	65	0.394	ug/L	0.011	2	27	1036	0
	Zn	66	2.187	ug/L	0.117	5	178	3462	2
	Zn	67	1.918	ug/L	0.125	6	26	527	5
	Zn	68	2.997	ug/L	0.156	5	176	3352	1
	As	75	4.731	ug/L	0.139	2	704	7183	1
	As-1	75	4.999	ug/L	0.265	5	6994	13194	1
	Se	82	0.162	ug/L	0.033	20	-14	12	42
	Se	78	0.616	ug/L	0.517	83	7062	6908	0
	Mo	98	1.181	ug/L	0.050	4	24	4307	1
	Y	89		ug/L			357378	362093	1
	Kr	83		ug/L			1052	1120	2
>	In	115		ug/L			863946	862531	3
	Ag	107	0.002	ug/L	0.001	65	16	28	27
	Cd	111	0.471	ug/L	0.005	1	71	1763	2
	Cd	114	0.461	ug/L	0.008	1	13	4239	1
	Sb	121	0.052	ug/L	0.003	5	349	953	1
	Sb	123	0.049	ug/L	0.002	4	274	698	3
	Ba	135	4.268	ug/L	0.112	2	48	15044	0
	Ba	137	4.336	ug/L	0.147	3	73	26227	1
>	Tb	159		ug/L			986512	1017229	1
	Tl	205	0.002	ug/L	0.000	8	64	111	3
	Pb	208	0.038	ug/L	0.000	1	132	1434	0
	Bi	209		ug/L			1944262	1747424	0
	Th	232	-0.011	ug/L	0.001	5	975	643	2
	U	238	0.348	ug/L	0.008	2	23	12317	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:22:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1477925	1
	Be	9	0.176	ug/L	0.002	1	7	744	1
	C	13		ug/L			90291	126826	1
	Cl	37		ug/L			4455814	5035656	1
>	Sc	45		ug/L			1230166	1411122	0
	V	51	114.060	ug/L	2.016	1	6065	2694605	1
	V-1	51	114.082	ug/L	2.044	1	81	2690168	1
	Cr	52	17.272	ug/L	0.201	1	18002	333898	1
	Cr	53	17.606	ug/L	0.278	1	120	36311	0
	Mn	55	152.948	ug/L	4.512	2	467	3808585	2
	Co	59	0.363	ug/L	0.005	1	45	6070	1
>	Ge	72		ug/L			469903	443135	2
	Ni	60	0.773	ug/L	0.041	5	23	2169	3
	Ni	62	34.363	ug/L	10.531	30	183	13556	30
	Cu	63	9.837	ug/L	0.818	8	147	57133	8
	Cu	65	4.397	ug/L	0.099	2	27	11245	1
	Zn	66	2.144	ug/L	0.055	2	178	3387	1
	Zn	67	7.840	ug/L	0.150	1	26	2069	1
	Zn	68	3.149	ug/L	0.138	4	176	3502	2
	As	75	8.115	ug/L	0.287	3	704	11797	1
	As-1	75	8.930	ug/L	0.517	5	6994	18292	2
	Se	82	0.627	ug/L	0.113	18	-14	87	20
	Se	78	2.601	ug/L	0.986	37	7062	7601	3
	Mo	98	1.836	ug/L	0.067	3	24	6657	2
	Y	89		ug/L			357378	486845	1
	Kr	83		ug/L			1052	1145	4
>	In	115		ug/L			863946	830849	0
	Ag	107	0.040	ug/L	0.002	5	16	277	5
	Cd	111	0.081	ug/L	0.016	19	71	350	15
	Cd	114	0.006	ug/L	0.002	34	13	65	28
	Sb	121	0.059	ug/L	0.002	3	349	998	1
	Sb	123	0.057	ug/L	0.004	7	274	742	4
	Ba	135	4.658	ug/L	0.033	0	48	15818	0
	Ba	137	4.641	ug/L	0.038	0	73	27050	0
>	Tb	159		ug/L			986512	1010935	0
	Tl	205	0.002	ug/L	0.001	32	64	111	12
	Pb	208	0.299	ug/L	0.004	1	132	10214	1
	Bi	209		ug/L			1944262	1676061	1
	Th	232	0.346	ug/L	0.002	0	975	12364	0
	U	238	0.287	ug/L	0.004	1	23	10100	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 13:28:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1521824	2
	Be	9	48.100	ug/L	1.328	2	7	207122	1
	C	13		ug/L			90291	91575	2
	Cl	37		ug/L			4455814	4709031	2
>	Sc	45		ug/L			1230166	1244621	1
	V	51	46.203	ug/L	1.093	2	6065	966570	3
	V-1	51	46.137	ug/L	0.654	1	81	959729	2
	Cr	52	48.163	ug/L	0.866	1	18002	788812	3
	Cr	53	47.915	ug/L	1.106	2	120	86948	2
	Mn	55	47.021	ug/L	1.098	2	467	1032991	2
	Co	59	47.554	ug/L	0.515	1	45	695010	1
>	Ge	72		ug/L			469903	468196	0
	Ni	60	49.643	ug/L	1.484	2	23	145812	2
	Ni	62	58.129	ug/L	0.671	1	183	24129	2
	Cu	63	50.373	ug/L	1.698	3	147	308533	2
	Cu	65	49.586	ug/L	0.731	1	27	133717	0
	Zn	66	50.130	ug/L	1.457	2	178	79703	2
	Zn	67	49.164	ug/L	0.987	2	26	13574	1
	Zn	68	49.834	ug/L	0.389	0	176	55986	0
	As	75	49.580	ug/L	0.564	1	704	72595	0
	As-1	75	49.647	ug/L	0.663	1	6994	75720	0
	Se	82	51.579	ug/L	0.885	1	-14	8797	0
	Se	78	50.313	ug/L	1.326	2	7062	26329	0
	Mo	98	48.169	ug/L	1.433	2	24	183965	2
	Y	89		ug/L			357378	358123	2
	Kr	83		ug/L			1052	1101	2
>	In	115		ug/L			863946	879495	1
	Ag	107	48.762	ug/L	1.079	2	16	333952	2
	Cd	111	49.930	ug/L	0.308	0	71	183053	1
	Cd	114	49.969	ug/L	0.796	1	13	466926	0
	Sb	121	49.023	ug/L	1.069	2	349	578199	1
	Sb	123	48.611	ug/L	1.016	2	274	428971	1
	Ba	135	49.232	ug/L	0.382	0	48	176523	0
	Ba	137	48.579	ug/L	1.195	2	73	299016	1
>	Tb	159		ug/L			986512	1020784	0
	Tl	205	48.206	ug/L	0.095	0	64	1298893	0
	Pb	208	50.232	ug/L	0.361	0	132	1710553	0
	Bi	209		ug/L			1944262	1927958	1
	Th	232	47.879	ug/L	0.956	1	975	1590430	2
	U	238	47.995	ug/L	0.729	1	23	1701094	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 13:34:13
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1492940	2
	Be	9	0.000	ug/L	0.001	2254	7	7	69
	C	13		ug/L			90291	88831	1
	Cl	37		ug/L			4455814	4586653	0
>	Sc	45		ug/L			1230166	1199179	2
	V	51	0.003	ug/L	0.002	84	6065	5969	3
	V-1	51	0.003	ug/L	0.001	43	81	141	20
	Cr	52	0.000	ug/L	0.008	1738	18002	17553	2
	Cr	53	0.001	ug/L	0.009	573	120	120	10
	Mn	55	0.006	ug/L	0.002	32	467	582	7
	Co	59	0.000	ug/L	0.000	73	45	50	11
>	Ge	72		ug/L			469903	452020	0
	Ni	60	0.001	ug/L	0.001	86	23	25	12
	Ni	62	6.645	ug/L	0.206	3	183	2819	3
	Cu	63	8.366	ug/L	0.010	2	147	2305	3
	Cu	65	0.005	ug/L	0.003	62	27	38	20
	Zn	66	-0.003	ug/L	0.006	188	178	166	4
	Zn	67	0.020	ug/L	0.018	89	26	30	16
	Zn	68	-0.019	ug/L	0.015	78	176	148	11
	As	75	0.062	ug/L	0.016	26	704	763	2
	As-1	75	0.063	ug/L	0.022	35	6994	6812	0
	Se	82	0.057	ug/L	0.061	108	-14	-4	213
	Se	78	0.240	ug/L	0.056	23	7062	6883	0
	Mo	98	0.012	ug/L	0.005	43	24	69	28
	Y	89		ug/L			357378	344643	1
	Kr	83		ug/L			1052	1096	3
>	In	115		ug/L			862746	853728	1
	Ag	107	0.002	ug/L	0.001	49	16	31	22
	Cd	111	0.001	ug/L	0.004	430	71	74	17
	Cd	114	0.002	ug/L	0.002	120	13	28	61
	Sb	121	0.067	ug/L	0.005	7	349	1111	4
	Sb	123	0.060	ug/L	0.003	4	274	787	3
	Ba	135	-0.006	ug/L	0.001	23	48	26	17
	Ba	137	-0.001	ug/L	0.001	172	73	68	9
>	Tb	159		ug/L			986512	979829	0
	Tl	205	0.001	ug/L	0.001	77	64	91	22
	Pb	208	0.001	ug/L	0.000	49	132	160	8
	Bi	209		ug/L			1944262	1891803	1
	Th	232	0.055	ug/L	0.016	28	975	2728	18
	U	238	0.002	ug/L	0.001	35	23	86	25

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:39:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1526695	1
	Be	9	0.000	ug/L	0.001	525	7	8	45
	C	13		ug/L			90291	100445	1
	Cl	37		ug/L			4455814	4663659	2
>	Sc	45		ug/L			1230166	1244121	4
	V	51	0.011	ug/L	0.011	102	6065	6348	0
	V-1	51	0.011	ug/L	0.002	17	81	320	9
	Cr	52	0.018	ug/L	0.034	188	18002	18482	1
	Cr	53	0.021	ug/L	0.007	32	120	160	8
	Mn	55	0.042	ug/L	0.003	7	467	1401	1
	Co	59	0.002	ug/L	0.001	59	45	71	17
>	Ge	72		ug/L			469903	462085	1
	Ni	60	0.028	ug/L	0.002	7	23	104	7
	Ni	62	4.908	ug/L	0.375	7	183	2174	5
	Cu	63	0.420	ug/L	0.013	3	147	2680	1
	Cu	65	0.150	ug/L	0.005	3	27	426	2
	Zn	66	0.950	ug/L	0.015	1	178	1662	3
	Zn	67	0.811	ug/L	0.018	2	26	246	1
	Zn	68	0.916	ug/L	0.027	2	176	1185	0
	As	75	0.061	ug/L	0.014	22	704	779	1
	As-1	75	0.023	ug/L	0.062	262	6994	6909	1
	Se	82	0.024	ug/L	0.071	291	-14	-10	115
	Se	78	0.032	ug/L	0.188	583	7062	6956	1
	Mo	98	0.010	ug/L	0.003	31	24	62	18
	Y	89		ug/L			357378	355960	1
	Kr	83		ug/L			1052	1105	2
>	In	115		ug/L			863946	873678	1
	Ag	107	0.000	ug/L	0.001	2895	16	16	27
	Cd	111	0.000	ug/L	0.003	5991	71	72	12
	Cd	114	0.001	ug/L	0.000	20	13	21	6
	Sb	121	0.003	ug/L	0.004	124	349	392	13
	Sb	123	0.001	ug/L	0.002	311	274	283	7
	Ba	135	0.009	ug/L	0.004	40	48	80	15
	Ba	137	0.013	ug/L	0.001	9	73	153	5
>	Tb	159		ug/L			986512	1002852	1
	Tl	205	0.003	ug/L	0.002	68	64	136	34
	Pb	208	0.012	ug/L	0.001	9	132	531	5
	Bi	209		ug/L			1944262	1942393	0
	Th	232	0.032	ug/L	0.016	49	975	2028	23
	U	238	0.001	ug/L	0.000	12	23	42	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 13:45:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1523290	0
[	Be	9	48.858	ug/L	0.403	0	7	210679	0
	C	13		ug/L			90291	89806	2
	Cl	37		ug/L			4455814	4644422	0
[>	Sc	45		ug/L			1230166	1226710	0
[	V	51	47.184	ug/L	0.734	1	6065	972552	0
[	V-1	51	47.574	ug/L	0.698	1	81	975278	0
[	Cr	52	47.600	ug/L	0.387	0	18002	768422	1
[	Cr	53	49.032	ug/L	0.125	0	120	87703	1
[	Mn	55	47.592	ug/L	0.782	1	467	1030541	0
[	Co	59	47.749	ug/L	1.265	2	45	687932	3
[>	Ge	72		ug/L			469903	469866	1
[	Ni	60	48.361	ug/L	0.918	1	23	142553	1
[	Ni	62	51.685	ug/L	1.010	1	183	21546	1
[	Cu	63	50.057	ug/L	1.455	2	147	307689	2
[	Cu	65	48.510	ug/L	0.946	1	27	131261	0
[	Zn	66	50.385	ug/L	1.803	3	178	80365	1
[	Zn	67	48.337	ug/L	1.278	2	26	13391	1
[	Zn	68	49.776	ug/L	1.255	2	176	56104	0
[	As	75	48.998	ug/L	1.067	2	704	71997	1
[	As-1	75	48.913	ug/L	1.125	2	6994	74960	1
[	Se	82	50.595	ug/L	1.064	2	-14	8659	0
[	Se	78	48.792	ug/L	1.245	2	7062	25835	0
[	Mo	98	47.615	ug/L	1.325	2	24	182469	1
	Y	89		ug/L			357378	352984	1
	Kr	83		ug/L			1052	1124	3
[>	In	115		ug/L			863946	873271	1
[	Ag	107	49.803	ug/L	1.169	2	16	338600	1
[	Cd	111	49.760	ug/L	0.750	1	71	181110	0
[	Cd	114	50.389	ug/L	0.140	0	13	467559	0
[	Sb	121	48.527	ug/L	0.512	1	349	568352	0
[	Sb	123	48.858	ug/L	0.940	1	274	428157	2
[	Ba	135	49.756	ug/L	0.553	1	48	177132	0
[	Ba	137	49.215	ug/L	0.531	1	73	300794	0
[>	Tb	159		ug/L			986512	1024550	0
[	Tl	205	47.887	ug/L	0.689	1	64	1294978	0
[	Pb	208	50.247	ug/L	0.101	0	132	1717415	0
[	Bi	209		ug/L			1944262	1921786	0
[	Th	232	47.561	ug/L	0.833	1	975	1585510	1
[	U	238	48.016	ug/L	0.418	0	23	1708204	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 13:50:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1482980	1
	Be	9	-0.000	ug/L	0.000	83	7	6	9
	C	13		ug/L			90291	89348	1
	Cl	37		ug/L			4455814	4535326	2
>	Sc	45		ug/L			1230166	1203951	1
	V	51	-0.006	ug/L	0.012	194	6065	5812	3
	V-1	51	0.001	ug/L	0.001	68	81	98	12
	Cr	52	-0.024	ug/L	0.038	154	18002	17237	2
	Cr	53	0.001	ug/L	0.005	335	120	120	7
	Mn	55	-0.000	ug/L	0.000	526	467	456	0
	Co	59	0.000	ug/L	0.000	100	45	47	5
>	Ge	72		ug/L			469903	444608	0
	Ni	60	-0.000	ug/L	0.001	281	23	20	14
	Ni	62	3.242	ug/L	0.090	2	183	1442	3
	Cu	63	0.184	ug/L	0.001	0	147	1211	1
	Cu	65	0.004	ug/L	0.001	32	27	36	8
	Zn	66	-0.012	ug/L	0.010	84	178	150	9
	Zn	67	0.007	ug/L	0.019	288	26	26	18
	Zn	68	-0.010	ug/L	0.019	184	176	155	11
	As	75	0.075	ug/L	0.019	24	704	770	3
	As-1	75	0.080	ug/L	0.095	118	6994	6722	1
	Se	82	0.058	ug/L	0.114	197	-14	-4	428
	Se	78	0.299	ug/L	0.328	109	7062	6791	1
	Mo	98	0.012	ug/L	0.003	21	24	67	14
	Y	89		ug/L			357378	346255	1
	Kr	83		ug/L			1052	1100	3
>	In	115		ug/L			863946	850841	1
	Ag	107	0.001	ug/L	0.001	58	16	23	17
	Cd	111	-0.002	ug/L	0.001	68	71	64	8
	Cd	114	0.001	ug/L	0.001	126	13	19	37
	Sb	121	0.072	ug/L	0.006	8	349	1167	7
	Sb	123	0.070	ug/L	0.006	8	274	867	6
	Ba	135	-0.004	ug/L	0.003	78	48	33	35
	Ba	137	-0.004	ug/L	0.002	40	73	47	22
>	Tb	159		ug/L			986512	965590	0
	Tl	205	0.001	ug/L	0.000	65	64	80	14
	Pb	208	0.000	ug/L	0.001	602	132	132	12
	Bi	209		ug/L			1944262	1896116	1
	Th	232	0.069	ug/L	0.020	29	975	3104	20
	U	238	0.002	ug/L	0.000	15	23	74	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 E-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, May 04, 2012 13:55:05
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1500737	0
	Be	9	0.002	ug/L	0.003	126	7	15	68
	C	13		ug/L			90291	93590	0
	Cl	37		ug/L			4455814	4648048	4
>	Sc	45		ug/L			1230166	1268498	0
	V	51	0.213	ug/L	0.007	3	6065	10758	0
	V-1	51	0.252	ug/L	0.006	2	81	5424	1
	Cr	52	0.016	ug/L	0.005	33	18002	18824	1
	Cr	53	0.161	ug/L	0.023	14	120	421	10
	Mn	55	45.744	ug/L	1.627	3	467	1024239	2
	Co	59	0.049	ug/L	0.004	7	45	780	7
>	Ge	72		ug/L			469903	457855	3
	Ni	60	0.374	ug/L	0.016	4	23	1095	1
	Ni	62	3.666	ug/L	0.091	2	183	1656	4
	Cu	63	0.825	ug/L	0.033	4	147	5081	2
	Cu	65	0.455	ug/L	0.007	1	27	1225	3
	Zn	66	1.386	ug/L	0.072	5	178	2322	3
	Zn	67	1.141	ug/L	0.066	5	26	333	5
	Zn	68	1.472	ug/L	0.076	5	176	1783	4
	As	75	14.336	ug/L	0.249	1	704	21009	1
	As-1	75	14.952	ug/L	0.358	2	6994	27055	1
	Se	82	0.046	ug/L	0.094	205	-14	-6	241
	Se	78	0.014	ug/L	0.377	2642	7062	6884	1
	Mo	98	18.796	ug/L	0.276	1	24	70204	1
	Y	89		ug/L			357378	349392	4
	Kr	83		ug/L			1052	1107	1
>	In	115		ug/L			863946	870906	2
	Ag	107	0.013	ug/L	0.014	104	16	104	86
	Cd	111	0.368	ug/L	0.033	9	71	1405	6
	Cd	114	0.368	ug/L	0.015	4	13	3421	2
	Sb	121	0.249	ug/L	0.005	2	349	3259	2
	Sb	123	0.255	ug/L	0.010	4	274	2503	2
	Ba	135	0.445	ug/L	0.020	4	48	1626	3
	Ba	137	0.444	ug/L	0.029	6	73	2775	4
>	Tb	159		ug/L			986512	1003756	2
	Tl	205	0.007	ug/L	0.008	110	64	258	79
	Pb	208	0.027	ug/L	0.006	20	132	1033	15
	Bi	209		ug/L			1944262	1892514	2
	Th	232	0.085	ug/L	0.031	36	975	3748	24
	U	238	0.417	ug/L	0.009	2	23	14563	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 13:59:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1539123	0
[	Be	9	0.005	ug/L	0.001	24	7	31	17
	C	13		ug/L			90291	104724	2
	Cl	37		ug/L			4455814	4767552	1
[>	Sc	45		ug/L			1230166	1344163	1
[	V	51	1.034	ug/L	0.030	2	6065	29825	2
[	V-1	51	1.141	ug/L	0.034	3	81	25711	2
[	Cr	52	0.272	ug/L	0.032	11	18002	24367	0
[	Cr	53	0.668	ug/L	0.053	7	120	1438	5
[	Mn	55	217.417	ug/L	2.917	1	467	5157386	2
[	Co	59	0.216	ug/L	0.014	6	45	3460	4
[>	Ge	72		ug/L			469903	451917	1
[	Ni	60	1.818	ug/L	0.027	1	23	5174	0
[	Ni	62	15.031	ug/L	3.770	25	183	6166	25
[	Cu	63	4.043	ug/L	0.228	5	147	24047	6
[	Cu	65	2.060	ug/L	0.018	0	27	5388	1
[	Zn	66	1.781	ug/L	0.050	2	178	2897	2
[	Zn	67	1.669	ug/L	0.036	2	26	469	2
[	Zn	68	2.606	ug/L	0.065	2	176	2985	1
[	As	75	68.295	ug/L	0.679	0	704	96268	1
[	As-1	75	71.615	ug/L	0.731	1	6994	102455	1
[	Se	82	0.280	ug/L	0.109	38	-14	32	54
[	Se	78	0.877	ug/L	0.095	10	7062	7117	1
[	Mo	98	95.655	ug/L	2.061	2	24	352590	0
	Y	89		ug/L			357378	360244	0
	Kr	83		ug/L			1052	1100	3
[>	In	115		ug/L			863946	858875	1
[	Ag	107	0.024	ug/L	0.002	10	16	175	8
[	Cd	111	1.652	ug/L	0.053	3	71	5983	2
[	Cd	114	1.663	ug/L	0.029	1	13	15189	0
[	Sb	121	1.163	ug/L	0.016	1	349	13730	0
[	Sb	123	1.172	ug/L	0.009	0	274	10370	1
[	Ba	135	2.202	ug/L	0.027	1	48	7757	1
[	Ba	137	2.193	ug/L	0.031	1	73	13252	0
[>	Tb	159		ug/L			986512	1023104	1
[	Tl	205	0.002	ug/L	0.000	20	64	126	9
[	Pb	208	0.065	ug/L	0.002	2	132	2361	3
[	Bi	209		ug/L			1944262	1768450	1
[	Th	232	0.128	ug/L	0.066	51	975	5252	40
[	U	238	2.035	ug/L	0.038	1	23	72316	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 EDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 14:03:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1499663	2
[	Be	9	0.012	ug/L	0.002	19	7	57	16
	C	13		ug/L			90291	109987	2
	Cl	37		ug/L			4455814	4638143	2
[>	Sc	45		ug/L			1230166	1330433	0
|	V	51	1.025	ug/L	0.016	1	6065	29329	1
|	V-1	51	1.129	ug/L	0.018	1	81	25190	1
|	Cr	52	0.265	ug/L	0.016	6	18002	23997	1
|	Cr	53	0.649	ug/L	0.028	4	120	1388	4
|	Mn	55	215.569	ug/L	2.877	1	467	5061576	2
[	Co	59	0.222	ug/L	0.003	1	45	3517	1
[>	Ge	72		ug/L			469903	457335	1
|	Ni	60	1.309	ug/L	0.016	1	23	3778	2
|	Ni	62	24.867	ug/L	4.528	18	183	10196	18
|	Cu	63	4.712	ug/L	0.285	6	147	28340	7
|	Cu	65	2.064	ug/L	0.033	1	27	5464	2
|	Zn	66	1.848	ug/L	0.022	1	178	3037	2
|	Zn	67	1.689	ug/L	0.024	1	26	480	1
|	Zn	68	2.623	ug/L	0.118	4	176	3040	3
|	As	75	66.620	ug/L	0.559	0	704	95059	2
|	As-1	75	69.968	ug/L	0.539	0	6994	101463	2
|	Se	82	0.230	ug/L	0.059	25	-14	24	40
|	Se	78	1.249	ug/L	0.263	21	7062	7340	0
[	Mo	98	91.409	ug/L	1.093	1	24	340996	0
	Y	89		ug/L			357378	359880	0
	Kr	83		ug/L			1052	1135	4
[>	In	115		ug/L			863946	848769	0
|	Ag	107	0.041	ug/L	0.004	10	16	286	9
|	Cd	111	1.658	ug/L	0.026	1	71	5934	1
|	Cd	114	1.659	ug/L	0.011	0	13	14977	0
|	Sb	121	1.162	ug/L	0.035	3	349	13559	2
|	Sb	123	1.179	ug/L	0.013	1	274	10308	0
|	Ba	135	2.156	ug/L	0.033	1	48	7507	2
[	Ba	137	2.149	ug/L	0.041	1	73	12837	2
[>	Tb	159		ug/L			986512	1006928	1
|	Tl	205	0.006	ug/L	0.000	3	64	231	4
|	Pb	208	0.072	ug/L	0.001	0	132	2561	1
|	Bi	209		ug/L			1944262	1771078	1
|	Th	232	0.043	ug/L	0.013	28	975	2410	17
[	U	238	2.021	ug/L	0.027	1	23	70674	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 ESPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 14:07:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1509592	0
[	Be	9	23.620	ug/L	0.111	0	7	100942	1
	C	13		ug/L			90291	105400	1
	Cl	37		ug/L			4455814	4831482	2
[>	Sc	45		ug/L			1230166	1327190	1
[	V	51	23.847	ug/L	0.439	1	6065	535031	1
[	V-1	51	23.893	ug/L	0.376	1	81	529967	1
[	Cr	52	23.263	ug/L	0.240	1	18002	416216	0
[	Cr	53	23.432	ug/L	0.040	0	120	45413	1
[	Mn	55	256.260	ug/L	6.656	2	467	6000760	1
[	Co	59	22.796	ug/L	0.198	0	45	355342	1
[>	Ge	72		ug/L			469903	451868	1
[	Ni	60	26.319	ug/L	1.083	4	23	74600	2
[	Ni	62	64.903	ug/L	8.226	12	183	25967	12
[	Cu	63	30.676	ug/L	1.029	3	147	181388	2
[	Cu	65	27.184	ug/L	0.366	1	27	70759	1
[	Zn	66	74.887	ug/L	1.363	1	178	114825	1
[	Zn	67	67.671	ug/L	1.324	1	26	18022	1
[	Zn	68	73.818	ug/L	3.157	4	176	79922	2
[	As	75	97.190	ug/L	1.547	1	704	136678	0
[	As-1	75	99.057	ug/L	1.737	1	6994	139102	0
[	Se	82	75.018	ug/L	1.382	1	-14	12354	0
[	Se	78	75.335	ug/L	2.098	2	7062	34668	1
[	Mo	98	97.526	ug/L	2.342	2	24	359423	1
	Y	89		ug/L			357378	359230	2
	Kr	83		ug/L			1052	1106	0
[>	In	115		ug/L			863946	861945	0
[	Ag	107	22.237	ug/L	0.309	1	16	149263	1
[	Cd	111	25.702	ug/L	0.296	1	71	92374	0
[	Cd	114	25.538	ug/L	0.321	1	13	233886	0
[	Sb	121	1.206	ug/L	0.011	0	349	14280	1
[	Sb	123	1.200	ug/L	0.009	0	274	10649	1
[	Ba	135	27.671	ug/L	0.411	1	48	97264	1
[	Ba	137	27.480	ug/L	0.396	1	73	165807	0
[>	Tb	159		ug/L			986512	1011095	1
[	Tl	205	24.076	ug/L	0.601	2	64	642406	0
[	Pb	208	25.012	ug/L	0.360	1	132	843614	0
[	Bi	209		ug/L			1944262	1772187	0
[	Th	232	24.557	ug/L	0.218	0	975	808366	1
[	U	238	27.422	ug/L	0.313	1	23	962718	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~UR78 EPOST REN~~ 222222
Sample Dil Factor: 2
Comments: 5/4/12 JR
Sample Date/Time: Friday, May 04, 2012 14:11:35
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1508364	0
[	Be	9	23.695	ug/L	0.353	1	7	101175	1
	C	13		ug/L			90291	104027	4
	Cl	37		ug/L			4455814	4707439	2
[>	Sc	45		ug/L			1230166	1329255	1
[	V	51	24.160	ug/L	0.389	1	6065	542768	0
[	V-1	51	24.195	ug/L	0.318	1	81	537472	0
[	Cr	52	23.789	ug/L	0.583	2	18002	425750	0
[	Cr	53	23.917	ug/L	0.438	1	120	46416	1
[	Mn	55	239.247	ug/L	3.858	1	467	5611164	0
[	Co	59	23.495	ug/L	0.792	3	45	366673	1
[>	Ge	72		ug/L			469903	452664	1
[	Ni	60	27.111	ug/L	0.113	0	23	77010	1
[	Ni	62	73.400	ug/L	5.949	8	183	29422	8
[	Cu	63	31.283	ug/L	0.472	1	147	185319	0
[	Cu	65	27.559	ug/L	0.827	3	27	71855	2
[	Zn	66	76.283	ug/L	1.225	1	178	117172	0
[	Zn	67	67.599	ug/L	0.439	0	26	18038	1
[	Zn	68	74.052	ug/L	0.674	0	176	80348	0
[	As	75	95.557	ug/L	1.444	1	704	134637	0
[	As-1	75	97.482	ug/L	1.462	1	6994	137248	0
[	Se	82	76.455	ug/L	0.651	0	-14	12615	0
[	Se	78	77.538	ug/L	0.630	0	7062	35551	0
[	Mo	98	92.118	ug/L	0.655	0	24	340180	1
	Y	89		ug/L			357378	353131	0
	Kr	83		ug/L			1052	1151	2
[>	In	115		ug/L			863946	851145	0
[	Ag	107	24.457	ug/L	0.315	1	16	162100	0
[	Cd	111	26.666	ug/L	0.022	0	71	94640	0
[	Cd	114	26.411	ug/L	0.261	0	13	238875	1
[	Sb	121	1.163	ug/L	0.015	1	349	13613	1
[	Sb	123	1.170	ug/L	0.007	0	274	10253	0
[	Ba	135	28.540	ug/L	0.302	1	48	99054	0
[	Ba	137	28.126	ug/L	0.066	0	73	167589	0
[>	Tb	159		ug/L			986512	1009310	0
[	Tl	205	24.695	ug/L	0.173	0	64	657928	0
[	Pb	208	25.337	ug/L	0.176	0	132	853191	0
[	Bi	209		ug/L			1944262	1756730	1
[	Th	232	25.873	ug/L	0.355	1	975	850172	1
[	U	238	27.560	ug/L	0.454	1	23	965956	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 M-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, May 04, 2012 14:20:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1501644	1
	Be	9	0.002	ug/L	0.001	34	7	16	19
	C	13		ug/L			90291	92644	2
	Cl	37		ug/L			4455814	4382627	2
>	Sc	45		ug/L			1230166	1230740	1
	V	51	0.193	ug/L	0.005	2	6065	10031	1
	V-1	51	0.233	ug/L	0.005	1	81	4881	0
	Cr	52	-0.007	ug/L	0.005	73	18002	17894	1
	Cr	53	0.142	ug/L	0.012	8	120	375	5
	Mn	55	46.953	ug/L	0.456	0	467	1020214	1
	Co	59	0.048	ug/L	0.001	2	45	741	2
>	Ge	72		ug/L			469903	457823	1
	Ni	60	0.142	ug/L	0.016	11	23	430	9
	Ni	62	8.905	ug/L	0.072	0	183	3766	1
	Cu	63	0.885	ug/L	0.015	1	147	5444	0
	Cu	65	0.179	ug/L	0.012	6	27	499	5
	Zn	66	1.085	ug/L	0.059	5	178	1856	4
	Zn	67	0.946	ug/L	0.082	8	26	280	8
	Zn	68	1.166	ug/L	0.082	7	176	1447	5
	As	75	12.943	ug/L	0.246	1	704	19038	1
	As-1	75	13.472	ug/L	0.304	2	6994	25055	0
	Se	82	0.110	ug/L	0.162	147	14	3	680
	Se	78	-0.049	ug/L	0.366	747	7062	6862	0
	Mo	98	16.624	ug/L	0.287	1	24	62102	0
	Y	89		ug/L			357378	354004	0
	Kr	83		ug/L			1052	1081	3
>	In	115		ug/L			863946	867241	1
	Ag	107	0.001	ug/L	0.001	113	16	23	32
	Cd	111	0.035	ug/L	0.002	5	71	197	2
	Cd	114	0.041	ug/L	0.003	6	13	395	6
	Sb	121	0.175	ug/L	0.006	3	349	2382	2
	Sb	123	0.177	ug/L	0.009	4	274	1818	5
	Ba	135	0.431	ug/L	0.007	1	48	1570	2
	Ba	137	0.428	ug/L	0.011	2	73	2670	2
>	Tb	159		ug/L			986512	1008364	1
	Tl	205	0.000	ug/L	0.000	16	64	75	1
	Pb	208	0.012	ug/L	0.001	6	132	554	6
	Bi	209		ug/L			1944262	1900970	1
	Th	232	0.020	ug/L	0.007	33	975	1663	12
	U	238	0.356	ug/L	0.001	0	23	12499	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 M REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 14:24:30
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1511890	1
[	Be	9	0.009	ug/L	0.001	14	7	45	11
	C	13		ug/L			90291	108172	2
	Cl	37		ug/L			4455814	4824672	2
[>	Sc	45		ug/L			1230166	1312366	1
[	V	51	0.935	ug/L	0.012	1	6065	26958	0
[	V-1	51	1.035	ug/L	0.017	1	81	22789	1
[	Cr	52	0.215	ug/L	0.009	4	18002	22831	1
[	Cr	53	0.585	ug/L	0.038	6	120	1246	6
[	Mn	55	229.485	ug/L	1.833	0	467	5314414	0
[	Co	59	0.217	ug/L	0.006	2	45	3391	1
[>	Ge	72		ug/L			469903	451034	2
[	Ni	60	0.594	ug/L	0.015	2	23	1703	2
[	Ni	62	31.351	ug/L	5.368	17	183	12638	18
[	Cu	63	3.847	ug/L	0.365	9	147	22845	10
[	Cu	65	0.775	ug/L	0.036	4	27	2038	3
[	Zn	66	1.260	ug/L	0.028	2	178	2096	0
[	Zn	67	1.227	ug/L	0.088	7	26	350	5
[	Zn	68	2.101	ug/L	0.104	4	176	2433	2
[	As	75	61.621	ug/L	1.740	2	704	86721	1
[	As-1	75	64.727	ug/L	1.902	2	6994	93029	1
[	Se	82	0.274	ug/L	0.022	8	-14	31	11
[	Se	78	1.169	ug/L	0.370	31	7062	7209	1
[	Mo	98	83.360	ug/L	1.561	1	24	306636	1
	Y	89		ug/L			357378	355818	1
	Kr	83		ug/L			1052	1067	0
[>	In	115		ug/L			863946	849339	1
[	Ag	107	0.005	ug/L	0.001	24	16	47	15
[	Cd	111	0.163	ug/L	0.010	5	71	647	4
[	Cd	114	0.182	ug/L	0.005	2	13	1657	3
[	Sb	121	0.911	ug/L	0.005	0	349	10710	0
[	Sb	123	0.921	ug/L	0.017	1	274	8111	1
[	Ba	135	2.146	ug/L	0.071	3	48	7475	2
[	Ba	137	2.151	ug/L	0.027	1	73	12853	1
[>	Tb	159		ug/L			986512	1004637	1
[	Tl	205	0.000	ug/L	0.000	370	64	67	11
[	Pb	208	0.022	ug/L	0.001	5	132	885	4
[	Bi	209		ug/L			1944262	1766133	0
[	Th	232	0.068	ug/L	0.036	52	975	3229	37
[	U	238	1.795	ug/L	0.037	2	23	62618	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 14:28:38
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1512644	0
	Be	9	0.005	ug/L	0.001	18	7	29	13
	C	13		ug/L			90291	109791	0
	Cl	37		ug/L			4455814	4671177	1
>	Sc	45		ug/L			1230166	1283782	0
	V	51	0.981	ug/L	0.024	2	6065	27351	1
	V-1	51	1.081	ug/L	0.022	2	81	23275	1
	Cr	52	0.246	ug/L	0.021	8	18002	22848	0
	Cr	53	0.617	ug/L	0.017	2	120	1278	1
	Mn	55	231.651	ug/L	3.386	1	467	5247947	1
	Co	59	0.214	ug/L	0.003	1	45	3274	1
>	Ge	72		ug/L			469903	442664	1
	Ni	60	0.599	ug/L	0.022	3	23	1686	3
	Ni	62	39.830	ug/L	4.818	12	183	15699	13
	Cu	63	4.418	ug/L	0.300	6	147	25729	7
	Cu	65	0.782	ug/L	0.046	5	27	2018	5
	Zn	66	3.278	ug/L	0.138	4	178	5083	2
	Zn	67	2.863	ug/L	0.068	2	26	770	1
	Zn	68	3.939	ug/L	0.102	2	176	4336	1
	As	75	62.750	ug/L	1.167	1	704	86686	0
	As-1	75	66.142	ug/L	1.227	1	6994	93182	0
	Se	82	0.187	ug/L	0.126	67	-14	16	122
	Se	78	2.075	ug/L	0.019	0	7062	7406	1
	Mo	98	85.114	ug/L	1.072	1	24	307367	1
	Y	89		ug/L			357378	348036	0
	Kr	83		ug/L			1052	1125	3
>	In	115		ug/L			863946	847821	0
	Ag	107	0.004	ug/L	0.001	31	16	42	20
	Cd	111	0.161	ug/L	0.011	7	71	639	6
	Cd	114	0.185	ug/L	0.004	1	13	1676	1
	Sb	121	0.919	ug/L	0.013	1	349	10787	0
	Sb	123	0.921	ug/L	0.012	1	274	8096	0
	Ba	135	2.145	ug/L	0.021	0	48	7459	0
	Ba	137	2.134	ug/L	0.024	1	73	12732	2
>	Tb	159		ug/L			986512	1017488	0
	Tl	205	0.000	ug/L	0.000	15	64	77	2
	Pb	208	0.023	ug/L	0.001	2	132	916	1
	Bi	209		ug/L			1944262	1752366	1
	Th	232	0.014	ug/L	0.009	62	975	1475	19
	U	238	1.761	ug/L	0.015	0	23	62228	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 14:32:45
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1505778	1
[	Be	9	22.922	ug/L	0.414	1	7	97703	1
	C	13		ug/L			90291	104379	2
	Cl	37		ug/L			4455814	4771134	1
[>	Sc	45		ug/L			1230166	1295597	2
[	V	51	23.590	ug/L	0.401	1	6065	516677	1
[	V-1	51	23.623	ug/L	0.363	1	81	511448	1
[	Cr	52	22.852	ug/L	0.645	2	18002	399325	0
[	Cr	53	22.975	ug/L	0.627	2	120	43451	0
[	Mn	55	254.169	ug/L	10.339	4	467	5807604	1
[	Co	59	21.883	ug/L	0.602	2	45	332844	0
[>	Ge	72		ug/L			469903	442992	1
[	Ni	60	24.806	ug/L	0.111	0	23	68962	2
[	Ni	62	69.202	ug/L	5.237	7	183	27158	8
[	Cu	63	28.935	ug/L	0.379	1	147	167804	3
[	Cu	65	25.622	ug/L	0.452	1	27	65394	2
[	Zn	66	75.185	ug/L	1.944	2	178	112997	0
[	Zn	67	65.338	ug/L	0.625	0	26	17060	0
[	Zn	68	71.959	ug/L	1.136	1	176	76419	2
[	As	75	88.705	ug/L	1.212	1	704	122360	1
[	As-1	75	90.346	ug/L	1.146	1	6994	124966	1
[	Se	82	73.707	ug/L	0.640	0	-14	11901	0
[	Se	78	74.562	ug/L	0.231	0	7062	33713	1
[	Mo	98	83.128	ug/L	1.578	1	24	300353	0
	Y	89		ug/L			357378	349750	2
	Kr	83		ug/L			1052	1125	5
[>	In	115		ug/L			863946	842112	0
[	Ag	107	23.102	ug/L	0.464	2	16	151496	1
[	Cd	111	24.145	ug/L	0.444	1	71	84790	1
[	Cd	114	23.900	ug/L	0.194	0	13	213859	0
[	Sb	121	0.934	ug/L	0.011	1	349	10881	1
[	Sb	123	0.918	ug/L	0.015	1	274	8022	1
[	Ba	135	27.612	ug/L	0.378	1	48	94820	1
[	Ba	137	27.429	ug/L	0.073	0	73	161708	0
[>	Tb	159		ug/L			986512	1003152	0
[	Tl	205	23.545	ug/L	0.259	1	64	623448	0
[	Pb	208	24.414	ug/L	0.229	0	132	817065	0
[	Bi	209		ug/L			1944262	1741664	1
[	Th	232	24.537	ug/L	0.264	1	975	801394	0
[	U	238	26.108	ug/L	0.227	0	23	909455	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~UR78 MPOST REN~~ 2222477

Sample Dil Factor: 2

5/9/12 JB

Comments:

Sample Date/Time: Friday, May 04, 2012 14:36:53

Number of Replicates: 3

Method File: C:\NexION Data\Method\200.8nomin.mth

Tuning File: C:\NexION Data\MassCal\default.tun

Optimization File: C:\NexION Data\Conditions\default.dac

Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1482760	2
	Be	9	24.642	ug/L	0.993	4	7	103362	1
	C	13		ug/L			90291	109184	2
	Cl	37		ug/L			4455814	4665192	1
>	Sc	45		ug/L			1230166	1295139	1
	V	51	24.213	ug/L	0.574	2	6065	529959	1
	V-1	51	24.224	ug/L	0.586	2	81	524272	1
	Cr	52	24.118	ug/L	0.110	0	18002	420413	1
	Cr	53	24.159	ug/L	0.471	1	120	45687	2
	Mn	55	254.114	ug/L	4.779	1	467	5807114	1
	Co	59	23.948	ug/L	0.419	1	45	364216	0
>	Ge	72		ug/L			469903	445632	0
	Ni	60	26.111	ug/L	0.225	0	23	73018	0
	Ni	62	72.138	ug/L	5.363	7	183	28459	7
	Cu	63	30.079	ug/L	0.985	3	147	175449	3
	Cu	65	26.199	ug/L	0.201	0	27	67263	0
	Zn	66	76.975	ug/L	0.735	0	178	116411	1
	Zn	67	68.949	ug/L	0.474	0	26	18111	0
	Zn	68	74.516	ug/L	1.343	1	176	79601	1
	As	75	89.003	ug/L	1.277	1	704	123518	1
	As-1	75	90.408	ug/L	1.315	1	6994	125807	1
	Se	82	76.687	ug/L	0.780	1	-14	12458	1
	Se	78	77.001	ug/L	0.970	1	7062	34805	1
	Mo	98	82.481	ug/L	1.165	1	24	299861	1
	Y	89		ug/L			357378	349600	1
	Kr	83		ug/L			1052	1117	1
>	In	115		ug/L			863946	847015	0
	Ag	107	23.872	ug/L	0.625	2	16	157449	2
	Cd	111	25.064	ug/L	0.113	0	71	88527	0
	Cd	114	24.872	ug/L	0.072	0	13	223856	0
	Sb	121	0.904	ug/L	0.008	0	349	10606	0
	Sb	123	0.924	ug/L	0.011	1	274	8115	1
	Ba	135	28.417	ug/L	0.229	0	48	98150	0
	Ba	137	28.559	ug/L	0.238	0	73	169343	0
>	Tb	159		ug/L			986512	1014026	1
	Tl	205	24.397	ug/L	0.337	1	64	653000	0
	Pb	208	25.113	ug/L	0.366	1	132	849542	0
	Bi	209		ug/L			1944262	1742063	0
	Th	232	25.403	ug/L	0.257	1	975	838655	0
	U	238	27.074	ug/L	0.302	1	23	953243	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 14:43:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1500322	1
[	Be	9	48.882	ug/L	1.164	2	7	207574	1
	C	13		ug/L			90291	90247	0
	Cl	37		ug/L			4455814	4502513	0
[>	Sc	45		ug/L			1230166	1205811	1
[	V	51	46.087	ug/L	0.884	1	6065	933890	1
[	V-1	51	45.691	ug/L	1.306	2	81	920606	1
[	Cr	52	48.254	ug/L	0.393	0	18002	765507	1
[	Cr	53	46.794	ug/L	1.689	3	120	82254	2
[	Mn	55	46.882	ug/L	1.383	2	467	997738	1
[	Co	59	46.766	ug/L	1.168	2	45	662180	1
[>	Ge	72		ug/L			469903	448250	0
[	Ni	60	49.008	ug/L	0.355	0	23	137836	0
[	Ni	62	60.172	ug/L	1.016	1	183	23906	1
[	Cu	63	50.895	ug/L	0.424	0	147	298512	0
[	Cu	65	49.923	ug/L	1.073	2	27	128898	2
[	Zn	66	49.872	ug/L	0.346	0	178	75924	0
[	Zn	67	49.385	ug/L	0.850	1	26	13055	1
[	Zn	68	50.584	ug/L	0.940	1	176	54406	1
[	As	75	50.003	ug/L	0.905	1	704	70093	1
[	As-1	75	49.933	ug/L	0.998	1	6994	72878	1
[	Se	82	52.106	ug/L	0.818	1	-14	8509	1
[	Se	78	50.514	ug/L	1.060	2	7062	25284	1
[	Mo	98	47.793	ug/L	0.320	0	24	174783	0
	Y	89		ug/L			357378	342074	0
	Kr	83		ug/L			1052	1132	1
[>	In	115		ug/L			863946	843598	0
[	Ag	107	48.604	ug/L	1.085	2	16	319240	1
[	Cd	111	50.635	ug/L	0.824	1	71	178037	1
[	Cd	114	50.525	ug/L	0.841	1	13	452862	0
[	Sb	121	48.879	ug/L	0.909	1	349	553008	1
[	Sb	123	49.431	ug/L	1.075	2	274	418406	1
[	Ba	135	48.956	ug/L	0.538	1	48	168368	0
[	Ba	137	49.427	ug/L	0.724	1	73	291828	0
[>	Tb	159		ug/L			986512	975407	0
[	Tl	205	48.523	ug/L	0.220	0	64	1249312	0
[	Pb	208	50.787	ug/L	0.272	0	132	1652608	0
[	Bi	209		ug/L			1944262	1858923	0
[	Th	232	48.250	ug/L	0.532	1	975	1531416	0
[	U	238	48.025	ug/L	0.332	0	23	1626641	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 14:48:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1391855	2
	Be	9	-0.000	ug/L	0.000	41	7	5	10
	C	13		ug/L			90291	87130	3
	Cl	37		ug/L			4455814	4393004	2
>	Sc	45		ug/L			1230166	1111910	1
	V	51	0.002	ug/L	0.003	184	6065	5511	2
	V-1	51	0.003	ug/L	0.000	11	81	126	3
	Cr	52	-0.000	ug/L	0.009	3318	18002	16268	2
	Cr	53	0.004	ug/L	0.004	79	120	116	6
	Mn	55	0.005	ug/L	0.001	11	467	515	2
	Co	59	0.000	ug/L	0.000	147	45	44	11
>	Ge	72		ug/L			469903	427242	2
	Ni	60	-0.000	ug/L	0.002	1642	23	20	20
	Ni	62	9.792	ug/L	0.529	5	183	3847	5
	Cu	63	0.520	ug/L	0.037	7	147	3039	6
	Cu	65	0.010	ug/L	0.005	48	27	49	26
	Zn	66	-0.004	ug/L	0.003	77	178	156	4
	Zn	67	0.012	ug/L	0.010	78	26	27	6
	Zn	68	-0.002	ug/L	0.009	390	176	157	4
	As	75	0.110	ug/L	0.012	10	704	785	1
	As-1	75	0.240	ug/L	0.079	33	6994	6660	1
	Se	82	0.114	ug/L	0.061	53	-14	4	209
	Se	78	0.837	ug/L	0.337	40	7062	6712	1
	Mo	98	0.017	ug/L	0.002	14	24	81	9
	Y	89		ug/L			357378	321234	0
	Kr	83		ug/L			1052	1069	4
>	In	115		ug/L			863946	804970	2
	Ag	107	0.001	ug/L	0.000	31	16	24	11
	Cd	111	0.001	ug/L	0.001	89	71	71	6
	Cd	114	0.001	ug/L	0.001	128	13	20	48
	Sb	121	0.074	ug/L	0.003	3	349	1122	1
	Sb	123	0.067	ug/L	0.002	2	274	793	0
	Ba	135	-0.004	ug/L	0.002	41	48	32	17
	Ba	137	-0.003	ug/L	0.000	13	73	53	1
>	Tb	159		ug/L			986512	916476	0
	Tl	205	0.001	ug/L	0.000	35	64	85	10
	Pb	208	-0.000	ug/L	0.001	453	132	119	13
	Bi	209		ug/L			1944262	1811987	1
	Th	232	0.074	ug/L	0.023	30	975	3114	22
	U	238	0.002	ug/L	0.000	2	23	86	2

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.3.12 **Analyst:** JB **Page:** 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			2931-3
		1			2921-7
		2			2931-4
		3			-5
		4			-6
		↓ 5			↓ -7
		RinseSample			^{62}Ni 0.702 r≥0.9998 cal A.
		STD0			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		LowCheck			
		ICSA			
		ICSAB			^{59}Co RR% ^{62}Ni Mod%
		B1			^{62}Ni 2.2
		B2			0.767
		CCV2			
		CCB2			
		V602 MB1	REN	2	As 0.085
		MB2			As 0.268
		MB2dpk			✓
		MB4dpk			✓
		↓ A-L	↓	10	

UR78:00335

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.3.12 **Analyst:** JPP **Page:** 2 of 3

All corrections made by analyst unless otherwise noted. 5.3.12 JA

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VK102 A	REN	2	
		ADUP		↓	
		AMS			
Z		~~ZZZZZZ~~			
		B	↓	↓	
		CCV3			60Ni high
		CCB3			60Ni high UM Ce hi
		CCV4			↓ of 60Ni high 5/3/12 JA
	5.3.12 JA ✓	VS02 C	REN	2	rr 20x
	✓	D			50x or 40x
		E			
	OK	F			rr 20x AS
	✓	G			rr 40x
	✓	H			rr 20x
		J			
	✓	K	↓	↓	rr 20x
		LR200			60Ni high
AIR		~~BLK~~			Air tube in wrong position
Z		~~CCV5~~			Air C.O. reran dil noisy
		~~CCB5~~ CCV5			60Ni high A.N.
		CCB5			60Ni high
	✓	VL1 02 MB1	REN	2	As confirming
	✓	MB2	↓	↓	↓ ↓
		↓ C		20	

UR78 : 00335

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.3.12 **Analyst:** JLB **Page:** 3 of 3

All corrections made by analyst unless otherwise noted. 5.4.12 JLB

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VG02 F	REN	2.0	As only
		D		40	
		G		↓	
		H		20	
		K		2.0	
		CCV 6			
		CCB 6			62Ni high
		VG02 I-L	REN	10	
		I		2	
		IDUP			
		~~IPRE~~			
		~~IPOST~~			
Z					
	✓	L			rr HOX As
		M			
	ok 5/3/12	N			rr 20X As (rr Acetone)
	✓	O			rr HOX As
	✓	P			rr 20X As
		CCV 7			
		CCB 7			62Ni high, As2 high
		~~RINSE / DI~~			
					JLB 5.3.12

UR78 : 00337

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.3.12

MZ	Analyst AB 5.7	Peer AMS-7	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	see log A.N.
Internal Standards	✓	✓	↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	see log CAF
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	CAF, A.N.

SmartTune Wizard - Details

)ptimization Details

;martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

)ptimization Status

;tart Time: 5/3/2012 9:26:49 AM

)aily Performance Check
Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 5296.48
Obtained Intensity (Mg 23.985): 43957.51
Obtained Intensity (In 114.904): 62838.50
Obtained Intensity (Pb 207.977): 22578.21
Obtained Intensity (U 238.05): 43298.86
Obtained Intensity (Bkgd 220): 0.13
Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=1177.62 / 62801.89)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=614.76 / 62801.89)
Passed] Optimum value(s): N/A

nd Time: 5/3/2012 9:29:24 AM

UR78:00339

Target/Obtained mass (7.016/7.075), Target/Obtained resolution (0.7/0.693) - <Target not achieved>
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.700)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.706)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.698)
[Failed]

Retry 2

Target/Obtained mass (7.016/6.975), Target/Obtained resolution (0.7/0.704)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.690)

[Passed] Optimum value(s): N/A

AutoLens STD/DRC

Optimization Settings:

Method: AutoLens Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.
Criteria:
Min.Correlation Coefficient: 0.985
Min.Intercept: -20.00

Optimization Results:

Initial Try

[Passed] Optimum value(s): Correlation Coefficient = 0.991; Intercept = -11.66

Analyte	Mass	Points	DAC	MaxIntensity
Li	7.016	41	-11.5	2492.37
Mg	23.985	41	-11.5	49031.8
In	114.904	41	-7.5	75706.3
Ce	139.905	41	-7.5	70806.5
Pb	207.977	41	-4.5	25827
U	238.05	41	-3.5	47094.7

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

Obtained Intensity (Be 9.0122): 6969.11
Obtained Intensity (Mg 23.985): 56058.35
Obtained Intensity (In 114.904): 74644.23
Obtained Intensity (Pb 207.977): 25605.55
Obtained Intensity (U 238.05): 48044.97
Obtained Intensity (Bkgd 220): 0.03
Obtained Formula (CeO 155.9 / Ce 139.905): 0.037 (=2600.14 / 69490.13) - <Target not achieved>
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.014 (=1000.39 / 69490.13)
[Failed]

[Failed]

UR78 : 00340

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/3/2012 9:07:19 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 5605.69
        Obtained Intensity (Mg 23.985): 39553.71
        Obtained Intensity (In 114.904): 58905.40
        Obtained Intensity (Pb 207.977): 21627.03
        Obtained Intensity (U 238.05): 40028.84
        Obtained Intensity (Bkgd 220): 0.03
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.022 (=1356.38 / 60563.62)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.011 (=645.09 / 60563.62)
[Passed] Optimum value(s): N/A

Torch Alignment
    Optimization Settings:
        Method: Torch Alignment.mth.
        Intensity Criterion: In 114.904 Maximum

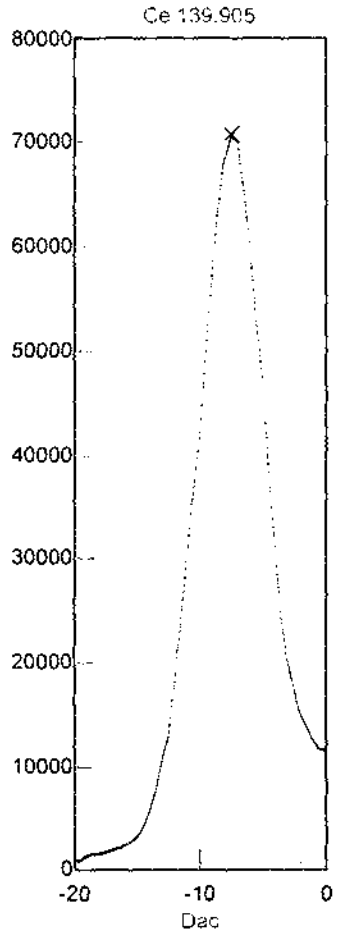
    Optimization Results:
        Error: optimum could not be found. ok x -0.84 y 1.33 5/3/12 JB
        [Failed]
[Failed]

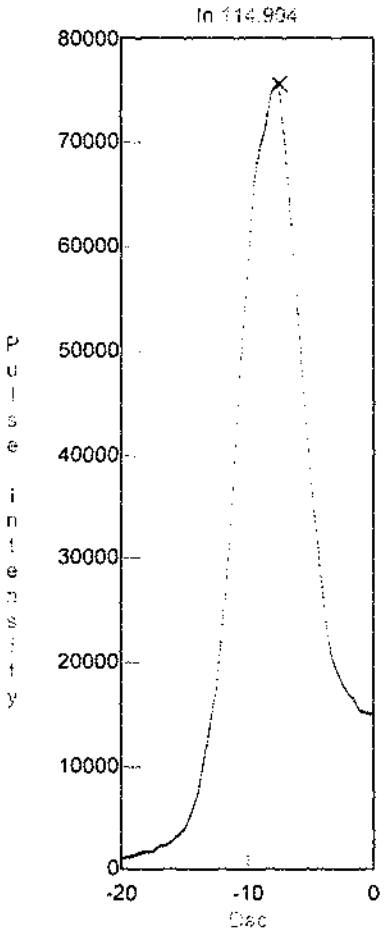
Mass Calibration and Resolution
    Optimization Settings:
        Method: Tuning.mth.
        MassCal File: Default.tun
        Iterations: 6
        Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
        Peak height (%) for Res. Opt.: 10

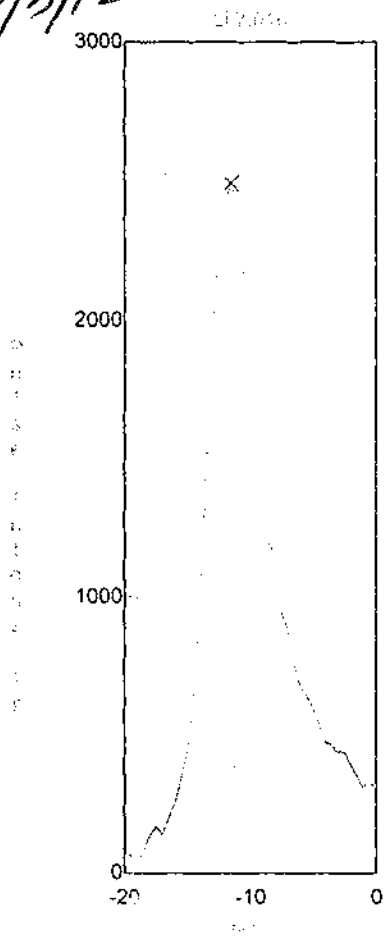
    Optimization Results:
    Initial Try
        Target/Obtained mass (7.016/6.925), Target/Obtained resolution (0.7/0.706) - <Target not achieved>
        Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.709)
        Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.709)
        Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.690)
        [Failed]
    Retry 1

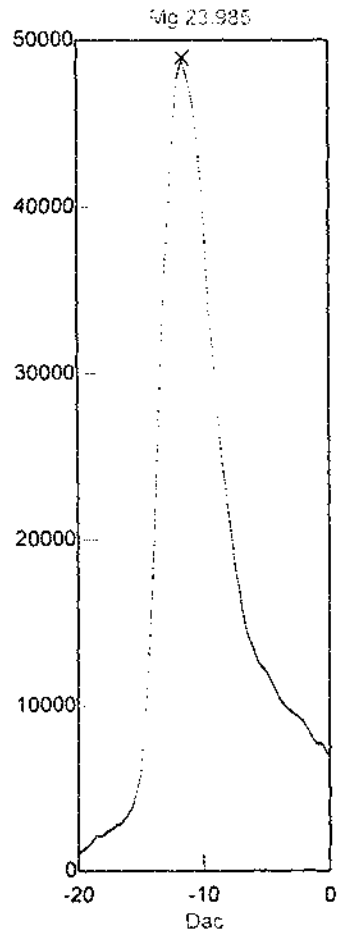
UR78 : 00341

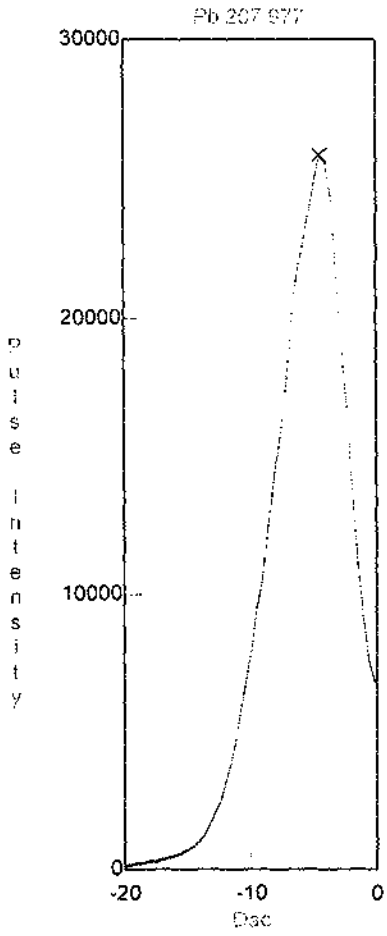
5/3/12

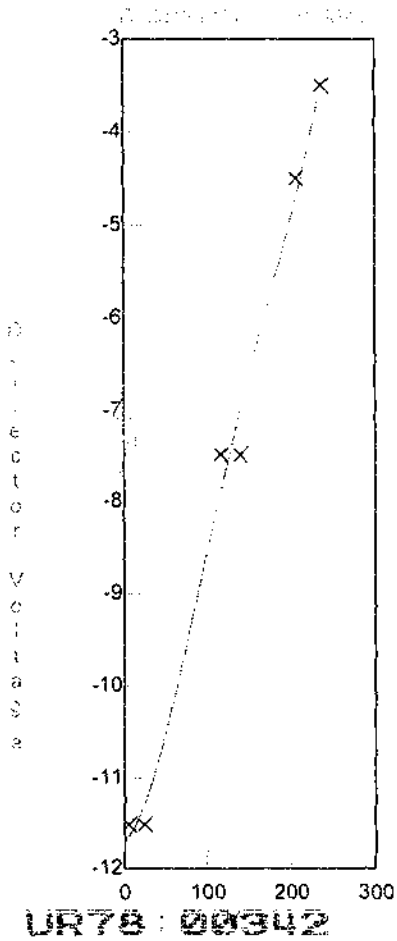

Ce 139.905
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
30000
20000
10000
0
-20
-10
0
Dac
Pulse intensity


-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
0
100
200
300

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:05:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1102461	1
	Be	9		ug/L				6	56
	C	13		ug/L				80323	1
	Cl	37		ug/L				3806161	1
>	Sc	45		ug/L				1014584	3
	V	51		ug/L				5129	2
	V-1	51		ug/L				80	12
	Cr	52		ug/L				15132	2
	Cr	53		ug/L				95	3
	Mn	55		ug/L				379	4
	Co	59		ug/L				39	8
>	Ge	72		ug/L				430448	0
	Ni	60		ug/L				18	25
	Ni	62		ug/L				113	10
	Cu	63		ug/L				105	9
	Cu	65		ug/L				29	30
	Zn	66		ug/L				151	5
	Zn	67		ug/L				26	9
	Zn	68		ug/L				129	9
	As	75		ug/L				634	1
	As-1	75		ug/L				6473	0
	Se	82		ug/L				9	84
	Se	78		ug/L				6538	0
	Mo	98		ug/L				10	23
	Y	89		ug/L				303862	1
	Kr	83		ug/L				881	3
>	In	115		ug/L				772094	0
	Ag	107		ug/L				11	33
	Cd	111		ug/L				47	5
	Cd	114		ug/L				10	24
	Sb	121		ug/L				23	33
	Sb	123		ug/L				18	52
	Ba	135		ug/L				34	15
	Ba	137		ug/L				48	11
>	Tb	159		ug/L				855486	1
	Tl	205		ug/L				11	30
	Pb	208		ug/L				97	18
	Bi	209		ug/L				1728081	0
	Th	232		ug/L				35	23
	U	238		ug/L				5	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:09:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1102461	1133625	0
	Be	9	0.200	ug/L	0.013	6	6	755	6
	C	13		ug/L			80323	85413	0
	Cl	37		ug/L			3806161	3779244	1
>	Sc	45		ug/L			1014584	1039363	0
	V	51	0.200	ug/L	0.014	7	5129	8958	2
	V-1	51	0.200	ug/L	0.005	2	80	3775	2
	Cr	52	0.500	ug/L	0.024	4	15132	22940	0
	Cr	53	0.500	ug/L	0.021	4	95	935	4
	Mn	55	0.500	ug/L	0.010	1	379	10230	0
	Co	59	0.200	ug/L	0.002	0	39	2824	0
>	Ge	72		ug/L			430448	439253	1
	Ni	60	0.500	ug/L	0.027	5	18	1521	4
	Ni	62	0.500	ug/L	0.020	3	113	298	2
	Cu	63	0.500	ug/L	0.013	2	105	3267	1
	Cu	65	0.500	ug/L	0.008	1	29	1477	0
	Zn	66	4.000	ug/L	0.149	3	151	6675	2
	Zn	67	4.000	ug/L	0.073	1	26	1046	0
	Zn	68	4.000	ug/L	0.165	4	129	4661	2
	As	75	0.200	ug/L	0.038	19	634	919	4
	As-1	75	0.200	ug/L	0.105	52	6473	6878	0
	Se	82	0.500	ug/L	0.147	29	9	68	25
	Se	78	0.500	ug/L	0.316	63	6538	6849	0
	Mo	98	0.200	ug/L	0.006	2	10	706	3
	Y	89		ug/L			303862	314233	0
	Kr	83		ug/L			881	932	2
>	In	115		ug/L			772094	786247	2
	Ag	107	0.200	ug/L	0.003	1	11	1367	3
	Cd	111	0.100	ug/L	0.006	5	47	438	5
	Cd	114	0.100	ug/L	0.004	4	10	1021	1
	Sb	121	0.200	ug/L	0.006	3	23	2432	1
	Sb	123	0.200	ug/L	0.004	1	18	1767	1
	Ba	135	0.500	ug/L	0.015	2	34	1880	3
	Ba	137	0.500	ug/L	0.015	2	48	3329	0
>	Tb	159		ug/L			855486	857928	0
	Tl	205	0.200	ug/L	0.002	1	11	4872	1
	Pb	208	0.100	ug/L	0.002	2	97	3568	1
	Bi	209		ug/L			1728081	1744842	1
	Th	232	0.200	ug/L	0.003	1	35	5674	0
	U	238	0.200	ug/L	0.005	2	5	6995	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:14:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1102461	1100488	2
	Be	9	10.000	ug/L	0.249	2	6	34861	2
	C	13		ug/L			80323	77241	1
	Cl	37		ug/L			3806161	3873541	4
>	Sc	45		ug/L			1014584	1031511	1
	V	51	10.000	ug/L	0.107	1	5129	182748	2
	V-1	51	10.000	ug/L	0.095	0	80	177328	2
	Cr	52	10.000	ug/L	0.189	1	15132	160869	0
	Cr	53	10.000	ug/L	0.136	1	95	16444	0
	Mn	55	10.000	ug/L	0.126	1	379	194360	1
	Co	59	10.000	ug/L	0.097	0	39	134152	1
>	Ge	72		ug/L			430448	429421	2
	Ni	60	9.999	ug/L	0.344	3	18	28487	1
	Ni	62	10.002	ug/L	0.321	3	113	4042	0
	Cu	63	9.999	ug/L	0.493	4	105	60522	3
	Cu	65	9.999	ug/L	0.390	3	29	27049	1
	Zn	66	10.025	ug/L	0.468	4	151	16381	3
	Zn	67	10.092	ug/L	0.186	1	26	2693	1
	Zn	68	10.042	ug/L	0.215	2	129	11551	1
	As	75	10.000	ug/L	0.084	0	634	14858	2
	As-1	75	10.000	ug/L	0.192	1	6473	20294	1
	Se	82	10.007	ug/L	0.223	2	9	1641	0
	Se	78	10.002	ug/L	0.579	5	6538	10322	0
	Mo	98	10.000	ug/L	0.093	0	10	35390	1
	Y	89		ug/L			303862	309165	1
	Kr	83		ug/L			881	929	4
>	In	115		ug/L			772094	789966	0
	Ag	107	10.000	ug/L	0.229	2	11	63972	1
	Cd	111	10.000	ug/L	0.151	1	47	37000	0
	Cd	114	10.000	ug/L	0.074	0	10	93117	1
	Sb	121	10.000	ug/L	0.083	0	23	117286	0
	Sb	123	10.000	ug/L	0.082	0	18	87266	1
	Ba	135	9.998	ug/L	0.098	0	34	34319	0
	Ba	137	9.997	ug/L	0.095	0	48	58437	0
>	Tb	159		ug/L			855486	865061	0
	Tl	205	10.000	ug/L	0.083	0	11	243255	1
	Pb	208	10.000	ug/L	0.087	0	97	323468	0
	Bi	209		ug/L			1728081	1735163	0
	Th	232	10.000	ug/L	0.146	1	35	308278	1
	U	238	10.000	ug/L	0.070	0	5	343641	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:18:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1102461	1142442	1
	Be	9	19.985	ug/L	0.481	2	6	72098	1
	C	13		ug/L			80323	79233	1
	Cl	37		ug/L			3806161	4085748	0
>	Sc	45		ug/L			1014584	1030601	1
	V	51	20.134	ug/L	0.585	2	5129	372074	1
	V-1	51	20.134	ug/L	0.454	2	80	366326	0
	Cr	52	20.092	ug/L	0.373	1	15132	312889	1
	Cr	53	20.090	ug/L	0.348	1	95	33518	2
	Mn	55	19.978	ug/L	0.150	0	379	385839	0
	Co	59	20.071	ug/L	0.485	2	39	272789	1
>	Ge	72		ug/L			430448	434175	0
	Ni	60	19.955	ug/L	0.083	0	18	56974	0
	Ni	62	20.067	ug/L	0.830	4	113	8197	3
	Cu	63	19.986	ug/L	0.153	0	105	121927	0
	Cu	65	19.942	ug/L	0.175	0	29	53925	1
	Zn	66	20.077	ug/L	0.148	0	151	33473	0
	Zn	67	20.091	ug/L	0.910	4	26	5482	4
	Zn	68	20.030	ug/L	0.164	0	129	23290	0
	As	75	20.075	ug/L	0.134	0	634	29951	0
	As-1	75	20.072	ug/L	0.152	0	6473	35027	0
	Se	82	20.146	ug/L	0.141	0	9	3432	0
	Se	78	20.109	ug/L	0.163	0	6538	14497	0
	Mo	98	20.128	ug/L	0.229	1	10	73902	1
	Y	89		ug/L			303862	316575	0
	Kr	83		ug/L			881	911	2
>	In	115		ug/L			772094	778682	1
	Ag	107	20.203	ug/L	0.397	1	11	132779	0
	Cd	111	20.096	ug/L	0.382	1	47	74677	2
	Cd	114	20.106	ug/L	0.305	1	10	188493	0
	Sb	121	20.124	ug/L	0.319	1	23	238561	1
	Sb	123	20.148	ug/L	0.458	2	18	178534	1
	Ba	135	20.129	ug/L	0.243	1	34	69864	0
	Ba	137	20.098	ug/L	0.163	0	48	118076	0
>	Tb	159		ug/L			855486	868725	1
	Tl	205	20.026	ug/L	0.159	0	11	491655	0
	Pb	208	20.039	ug/L	0.131	0	97	655987	1
	Bi	209		ug/L			1728081	1740126	1
	Th	232	20.160	ug/L	0.332	1	35	644640	0
	U	238	20.063	ug/L	0.156	0	5	701129	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:23:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1102461	1107383	2
	Be	9	50.018	ug/L	0.913	1	6	175223	0
	C	13		ug/L			80323	78844	2
	Cl	37		ug/L			3806161	4138535	1
>	Sc	45		ug/L			1014584	1032207	1
	V	51	49.923	ug/L	0.890	1	5129	909496	0
	V-1	51	49.885	ug/L	1.088	2	80	898649	1
	Cr	52	49.751	ug/L	0.859	1	15132	735273	0
	Cr	53	49.608	ug/L	1.561	3	95	79616	2
	Mn	55	49.948	ug/L	0.647	1	379	960615	1
	Co	59	49.761	ug/L	1.599	3	39	661561	2
>	Ge	72		ug/L			430448	427929	1
	Ni	60	49.962	ug/L	1.049	2	18	140029	2
	Ni	62	49.975	ug/L	0.601	1	113	19904	1
	Cu	63	49.825	ug/L	1.949	3	105	294173	2
	Cu	65	49.732	ug/L	0.690	1	29	129032	1
	Zn	66	49.656	ug/L	0.839	1	151	78745	0
	Zn	67	49.744	ug/L	1.052	2	26	13016	2
	Zn	68	49.909	ug/L	1.202	2	129	56499	1
	As	75	49.925	ug/L	0.471	0	634	71937	0
	As-1	75	49.926	ug/L	0.756	1	6473	75773	0
	Se	82	49.945	ug/L	0.358	0	9	8329	1
	Se	78	49.922	ug/L	1.361	2	6538	25681	0
	Mo	98	49.967	ug/L	1.995	3	10	180144	2
	Y	89		ug/L			303862	305068	1
	Kr	83		ug/L			881	892	1
>	In	115		ug/L			772094	773678	0
	Ag	107	49.632	ug/L	0.748	1	11	312644	1
	Cd	111	49.757	ug/L	0.547	1	47	179300	1
	Cd	114	49.684	ug/L	0.376	0	10	448660	1
	Sb	121	49.901	ug/L	0.497	0	23	581963	0
	Sb	123	49.910	ug/L	0.642	1	18	435496	0
	Ba	135	49.862	ug/L	0.192	0	34	169566	0
	Ba	137	49.915	ug/L	0.274	0	48	288863	1
>	Tb	159		ug/L			855486	864547	1
	Tl	205	49.909	ug/L	0.429	0	11	1208432	1
	Pb	208	49.855	ug/L	0.253	0	97	1600871	0
	Bi	209		ug/L			1728081	1686763	1
	Th	232	50.072	ug/L	0.899	1	35	1604827	0
	U	238	49.851	ug/L	0.410	0	5	1708342	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:28:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1102461	1107871	1
[	Be	9	99.845	ug/L	1.699	1	6	348162	1
	C	13		ug/L			80323	78373	1
	Cl	37		ug/L			3806161	4303322	1
[>	Sc	45		ug/L			1014584	1008164	2
[	V	51	100.513	ug/L	2.161	2	5129	1813878	0
[	V-1	51	100.616	ug/L	2.806	2	80	1806802	0
[	Cr	52	100.049	ug/L	1.413	1	15132	1431303	1
[	Cr	53	100.418	ug/L	3.999	3	95	159474	1
[	Mn	55	100.317	ug/L	3.112	3	379	1903245	1
[	Co	59	99.923	ug/L	3.301	3	39	1293747	1
[>	Ge	72		ug/L			430448	417035	1
[	Ni	60	99.928	ug/L	2.595	2	18	272214	1
[	Ni	62	100.764	ug/L	3.707	3	113	40011	3
[	Cu	63	100.301	ug/L	2.286	2	105	582962	1
[	Cu	65	100.352	ug/L	2.389	2	29	256714	2
[	Zn	66	99.751	ug/L	2.281	2	151	152742	1
[	Zn	67	100.052	ug/L	0.265	0	26	25534	1
[	Zn	68	99.173	ug/L	3.325	3	129	106368	2
[	As	75	100.388	ug/L	1.650	1	634	142169	0
[	As-1	75	100.443	ug/L	1.600	1	6473	144258	0
[	Se	82	99.971	ug/L	2.483	2	9	16219	1
[	Se	78	100.182	ug/L	2.274	2	6538	44078	0
[	Mo	98	100.524	ug/L	3.576	3	10	359515	2
	Y	89		ug/L			303862	303324	0
	Kr	83		ug/L			881	1016	1
[>	In	115		ug/L			772094	748764	1
[	Ag	107	100.418	ug/L	1.149	1	11	620745	0
[	Cd	111	100.470	ug/L	0.417	0	47	355898	1
[	Cd	114	100.387	ug/L	0.597	0	10	888757	0
[	Sb	121	100.111	ug/L	1.111	1	23	1134076	0
[	Sb	123	100.368	ug/L	1.027	1	18	858060	0
[	Ba	135	100.621	ug/L	1.595	1	34	338087	0
[	Ba	137	100.595	ug/L	0.446	0	48	574735	0
[>	Tb	159		ug/L			855486	849259	0
[	Tl	205	100.835	ug/L	0.690	0	11	2467052	0
[	Pb	208	100.099	ug/L	0.526	0	97	3167855	0
[	Bi	209		ug/L			1728081	1656731	0
[	Th	232	101.007	ug/L	1.545	1	35	3290898	1
[	U	238	101.007	ug/L	0.527	0	5	3518522	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:33:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120502c.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1102461	1123926	0
	Be	9	0.000	ug/L	0.000	103	6	8	18
	C	13		ug/L			80323	78237	1
	Cl	37		ug/L			3806161	4064153	3
>	Sc	45		ug/L			1014584	1016891	1
	V	51	-0.006	ug/L	0.005	70	5129	5024	1
	V-1	51	0.001	ug/L	0.000	46	80	91	6
	Cr	52	-0.028	ug/L	0.020	72	15132	14768	2
	Cr	53	-0.003	ug/L	0.004	160	95	91	6
	Mn	55	-0.000	ug/L	0.002	413	379	372	9
	Co	59	0.000	ug/L	0.001	161	39	44	16
>	Ge	72		ug/L			430448	424009	0
	Ni	60	0.002	ug/L	0.002	108	18	22	20
	Ni	62	0.702	ug/L	0.467	66	113	394	47
	Cu	63	0.051	ug/L	0.034	65	105	406	48
	Cu	65	0.002	ug/L	0.003	143	29	33	21
	Zn	66	-0.003	ug/L	0.008	271	151	145	8
	Zn	67	-0.019	ug/L	0.008	40	26	21	9
	Zn	68	0.025	ug/L	0.008	30	129	154	5
	As	75	0.016	ug/L	0.020	131	634	647	4
	As-1	75	0.112	ug/L	0.037	33	6473	6532	0
	Se	82	-0.073	ug/L	0.078	105	9	-3	411
	Se	78	0.376	ug/L	0.123	32	6538	6584	0
	Mo	98	0.030	ug/L	0.004	12	10	118	11
	Y	89		ug/L			303862	312347	2
	Kr	83		ug/L			881	920	0
>	In	115		ug/L			772094	770621	0
	Ag	107	0.002	ug/L	0.002	64	11	26	36
	Cd	111	0.003	ug/L	0.003	89	47	57	15
	Cd	114	0.001	ug/L	0.001	72	10	18	31
	Sb	121	0.108	ug/L	0.017	15	23	1284	15
	Sb	123	0.109	ug/L	0.012	10	18	974	11
	Ba	135	0.001	ug/L	0.003	314	34	37	25
	Ba	137	0.002	ug/L	0.000	16	48	60	2
>	Tb	159		ug/L			855486	841687	0
	Tl	205	0.009	ug/L	0.000	4	11	238	3
	Pb	208	0.001	ug/L	0.000	24	97	123	6
	Bi	209		ug/L			1728081	1706287	0
	Th	232	0.149	ug/L	0.032	21	35	4834	21
	U	238	0.004	ug/L	0.000	6	5	158	6

Sample Information

Sample Date/Time: Thursday, May 03, 2012 10:28:15
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**1.0000**	0.018	0.20	10	20	50	100
V-1	51	**0.9999**	0.018	0.20	10	20	50	100
Cr	52	**1.0000**	0.014	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**1.0000**	0.019	0.50	10	20	50	100
Co	59	**1.0000**	0.013	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.007	0.50	10	20	50	100
Ni	62	**0.9999**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.014	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**1.0000**	0.004	4.00	10	20	50	100
Zn	67	**1.0000**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9998**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**1.0000**	0.009	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**0.9999**	0.008	0.20	10	20	50	100
Cd	111	**0.9999**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**1.0000**	0.015	0.20	10	20	50	100
Sb	123	**1.0000**	0.011	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.008	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9999**	0.029	0.20	10	20	50	100
Pb	208	**1.0000**	0.037	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.038	0.20	10	20	50	100
U	238	**0.9998**	0.041	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:43:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1101187	0
	Be	9		ug/L				10	32
	C	13		ug/L				79541	1
	Cl	37		ug/L				3943707	1
>	Sc	45		ug/L				998438	1
	V	51		ug/L				5141	2
	V-1	51		ug/L				75	22
	Cr	52		ug/L				15214	0
	Cr	53		ug/L				99	23
	Mn	55		ug/L				362	2
	Co	59		ug/L				43	21
>	Ge	72		ug/L				420257	3
	Ni	60		ug/L				16	22
	Ni	62		ug/L				150	1
	Cu	63		ug/L				156	9
	Cu	65		ug/L				26	13
	Zn	66		ug/L				150	2
	Zn	67		ug/L				23	38
	Zn	68		ug/L				148	13
	As	75		ug/L				645	6
	As-1	75		ug/L				6520	0
	Se	82		ug/L				-1	1332
	Se	78		ug/L				6575	0
	Mo	98		ug/L				27	24
	Y	89		ug/L				300262	2
	Kr	83		ug/L				915	2
>	In	115		ug/L				761183	0
	Ag	107		ug/L				19	22
	Cd	111		ug/L				46	16
	Cd	114		ug/L				14	28
	Sb	121		ug/L				335	18
	Sb	123		ug/L				242	22
	Ba	135		ug/L				32	17
	Ba	137		ug/L				48	26
>	Tb	159		ug/L				829582	0
	Tl	205		ug/L				81	14
	Pb	208		ug/L				95	7
	Bi	209		ug/L				1681351	0
	Th	232		ug/L				1043	4
	U	238		ug/L				24	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:47:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1131850	1
	Be	9	49.791	ug/L	0.308	0	10	177401	1
	C	13		ug/L			79541	80786	1
	Cl	37		ug/L			3943707	4282626	1
>	Sc	45		ug/L			998438	1021009	0
	V	51	49.107	ug/L	0.370	0	5141	900509	0
	V-1	51	49.295	ug/L	0.588	1	75	896923	1
	Cr	52	50.825	ug/L	0.655	1	15214	744297	1
	Cr	53	51.517	ug/L	0.198	0	99	82958	0
	Mn	55	50.237	ug/L	0.434	0	362	965889	0
	Co	59	51.128	ug/L	0.697	1	43	670771	1
>	Ge	72		ug/L			420257	429951	1
	Ni	60	49.654	ug/L	0.882	1	16	139475	0
	Ni	62	49.264	ug/L	1.723	3	150	20264	2
	Cu	63	49.315	ug/L	1.057	2	156	295623	1
	Cu	65	49.647	ug/L	0.912	1	26	130954	1
	Zn	66	47.784	ug/L	0.262	0	150	75532	1
	Zn	67	48.483	ug/L	0.477	0	23	12767	0
	Zn	68	49.188	ug/L	0.339	0	148	54487	0
	As	75	49.056	ug/L	0.815	1	645	71977	0
	As-1	75	48.068	ug/L	0.555	1	6520	74756	0
	Se	82	78.923	ug/L	2.125	2	-1	12752	1
	Se	78	75.204	ug/L	0.796	1	6575	35930	0
	Mo	98	48.572	ug/L	0.775	1	27	179140	0
	Y	89		ug/L			300262	311015	1
	Kr	83		ug/L			915	977	1
>	In	115		ug/L			761183	768656	0
	Ag	107	51.123	ug/L	0.999	1	19	324429	1
	Cd	111	49.750	ug/L	0.948	1	46	180921	1
	Cd	114	49.321	ug/L	1.031	2	14	448249	1
	Sb	121	48.760	ug/L	0.314	0	335	567390	0
	Sb	123	48.293	ug/L	0.474	0	242	424072	0
	Ba	135	49.783	ug/L	0.831	1	32	171741	1
	Ba	137	49.836	ug/L	0.539	1	48	292313	0
>	Tb	159		ug/L			829582	851795	0
	Tl	205	48.859	ug/L	0.079	0	81	1199056	0
	Pb	208	50.020	ug/L	0.164	0	95	1587756	0
	Bi	209		ug/L			1681351	1696484	1
	Th	232	49.158	ug/L	0.474	0	1043	1607401	0
	U	238	49.381	ug/L	0.367	0	24	1725284	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:52:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1113100	0
[	Be	9	-0.001	ug/L	0.001	81	10	7	32
	C	13		ug/L			79541	79426	2
	Cl	37		ug/L			3943707	4058257	0
[>	Sc	45		ug/L			998438	1007623	1
|	V	51	-0.004	ug/L	0.007	160	5141	5113	1
|	V-1	51	0.000	ug/L	0.001	805	75	78	16
|	Cr	52	-0.014	ug/L	0.028	196	15214	15147	1
|	Cr	53	0.001	ug/L	0.007	969	99	101	9
|	Mn	55	0.000	ug/L	0.002	430	362	372	6
[	Co	59	0.001	ug/L	0.000	31	43	50	4
[>	Ge	72		ug/L			420257	425865	2
|	Ni	60	0.002	ug/L	0.001	68	16	21	14
|	Ni	62	0.161	ug/L	0.186	115	150	216	32
|	Cu	63	0.013	ug/L	0.016	121	156	233	37
|	Cu	65	0.000	ug/L	0.002	581	26	27	20
|	Zn	66	-0.011	ug/L	0.010	89	150	135	9
|	Zn	67	-0.010	ug/L	0.024	240	23	21	26
|	Zn	68	0.007	ug/L	0.010	158	148	157	5
|	As	75	0.009	ug/L	0.009	102	645	666	1
|	As-1	75	-0.093	ug/L	0.096	103	6520	6475	0
|	Se	82	0.020	ug/L	0.052	253	-1	2	349
|	Se	78	-0.334	ug/L	0.346	103	6575	6533	0
[	Mo	98	0.010	ug/L	0.007	63	27	65	34
	Y	89		ug/L			300262	303231	1
	Kr	83		ug/L			915	933	2
[>	In	115		ug/L			761183	758340	1
|	Ag	107	0.001	ug/L	0.001	70	19	25	17
|	Cd	111	0.003	ug/L	0.001	24	46	56	4
|	Cd	114	0.001	ug/L	0.001	73	14	22	27
|	Sb	121	0.015	ug/L	0.007	50	335	501	15
|	Sb	123	0.016	ug/L	0.010	63	242	379	21
|	Ba	135	0.002	ug/L	0.002	102	32	39	18
[	Ba	137	0.002	ug/L	0.001	44	48	59	7
[>	Tb	159		ug/L			829582	836153	1
|	Tl	205	0.001	ug/L	0.000	65	81	97	9
|	Pb	208	0.001	ug/L	0.001	140	95	121	28
|	Bi	209		ug/L			1681351	1698249	0
|	Th	232	0.062	ug/L	0.007	10	1043	3053	7
[	U	238	0.002	ug/L	0.000	18	24	95	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 10:56:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1089450	0
	Be	9	50.569	ug/L	0.585	1	10	173430	1
	C	13		ug/L			79541	77237	1
	Cl	37		ug/L			3943707	4273265	1
>	Sc	45		ug/L			998438	1027976	1
	V	51	49.615	ug/L	1.379	2	5141	915665	0
	V-1	51	49.306	ug/L	1.391	2	75	902921	0
	Cr	52	50.176	ug/L	1.497	2	15214	739718	1
	Cr	53	49.060	ug/L	1.592	3	99	79512	1
	Mn	55	49.336	ug/L	1.406	2	362	954717	0
	Co	59	50.438	ug/L	1.606	3	43	665978	1
>	Ge	72		ug/L			420257	424152	0
	Ni	60	49.764	ug/L	0.652	1	16	137924	2
	Ni	62	50.357	ug/L	1.500	2	150	20433	2
	Cu	63	50.608	ug/L	0.745	1	156	299331	1
	Cu	65	49.768	ug/L	0.174	0	26	129514	0
	Zn	66	50.011	ug/L	1.080	2	150	77971	1
	Zn	67	50.282	ug/L	0.762	1	23	13061	1
	Zn	68	50.724	ug/L	0.883	1	148	55429	1
	As	75	49.477	ug/L	0.708	1	645	71613	0
	As-1	75	49.660	ug/L	0.664	1	6520	75972	0
	Se	82	51.154	ug/L	0.606	1	-1	8155	1
	Se	78	50.098	ug/L	0.136	0	6575	25829	0
	Mo	98	50.765	ug/L	0.548	1	27	184713	0
	Y	89		ug/L			300262	307828	0
	Kr	83		ug/L			915	977	2
>	In	115		ug/L			761183	763197	0
	Ag	107	49.486	ug/L	0.399	0	19	311838	0
	Cd	111	50.494	ug/L	0.404	0	46	182340	0
	Cd	114	50.280	ug/L	0.877	1	14	453751	1
	Sb	121	49.962	ug/L	0.020	0	335	577258	0
	Sb	123	49.774	ug/L	0.456	0	242	433991	0
	Ba	135	49.486	ug/L	0.156	0	32	169513	0
	Ba	137	49.497	ug/L	0.038	0	48	288277	0
>	Tb	159		ug/L			829582	845299	1
	Tl	205	48.921	ug/L	1.086	2	81	1191199	1
	Pb	208	50.000	ug/L	0.852	1	95	1574897	1
	Bi	209		ug/L			1681351	1670201	0
	Th	232	48.876	ug/L	0.479	0	1043	1585953	0
	U	238	49.119	ug/L	0.915	1	24	1702931	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:01:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1090457	1
	Be	9	0.000	ug/L	0.002	724	10	11	68
	C	13		ug/L			79541	77434	1
	Cl	37		ug/L			3943707	4091984	1
>	Sc	45		ug/L			998438	989617	1
	V	51	-0.000	ug/L	0.003	60830	5141	5095	1
	V-1	51	0.001	ug/L	0.002	150	75	94	30
	Cr	52	-0.002	ug/L	0.007	300	15214	15049	1
	Cr	53	0.002	ug/L	0.010	563	99	101	16
	Mn	55	0.001	ug/L	0.003	294	362	378	14
	Co	59	0.001	ug/L	0.001	114	43	50	17
>	Ge	72		ug/L			420257	419156	1
	Ni	60	0.004	ug/L	0.004	99	16	26	38
	Ni	62	0.299	ug/L	0.258	86	150	268	36
	Cu	63	0.022	ug/L	0.015	67	156	286	28
	Cu	65	0.005	ug/L	0.003	61	26	38	18
	Zn	66	0.002	ug/L	0.018	730	150	153	15
	Zn	67	0.021	ug/L	0.014	66	23	28	14
	Zn	68	-0.009	ug/L	0.013	140	148	137	10
	As	75	0.023	ug/L	0.023	98	645	676	3
	As-1	75	0.001	ug/L	0.085	5970	6520	6504	1
	Se	82	0.020	ug/L	0.074	381	-1	1	606
	Se	78	-0.019	ug/L	0.268	1415	6575	6550	0
	Mo	98	0.019	ug/L	0.005	25	27	95	16
	Y	89		ug/L			300262	305258	1
	Kr	83		ug/L			915	932	2
>	In	115		ug/L			761183	752255	0
	Ag	107	0.003	ug/L	0.002	92	19	35	43
	Cd	111	0.003	ug/L	0.004	130	46	57	26
	Cd	114	0.002	ug/L	0.001	49	14	34	30
	Sb	121	0.032	ug/L	0.007	21	335	693	10
	Sb	123	0.035	ug/L	0.009	26	242	542	14
	Ba	135	0.004	ug/L	0.003	64	32	46	20
	Ba	137	0.003	ug/L	0.002	59	48	66	17
>	Tb	159		ug/L			829582	818751	0
	Tl	205	0.009	ug/L	0.000	2	81	285	1
	Pb	208	0.002	ug/L	0.001	97	95	140	32
	Bi	209		ug/L			1681351	1658408	0
	Th	232	0.104	ug/L	0.010	9	1043	4292	7
	U	238	0.004	ug/L	0.002	62	24	142	51

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:05:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1118365	0
	Be	9	0.199	ug/L	0.016	8	10	712	8
	C	13		ug/L			79541	79039	2
	Cl	37		ug/L			3943707	4079660	1
>	Sc	45		ug/L			998438	1025067	1
	V	51	0.188	ug/L	0.013	6	5141	8717	1
	V-1	51	0.198	ug/L	0.003	1	75	3692	0
	Cr	52	0.469	ug/L	0.048	10	15214	22368	2
	Cr	53	0.507	ug/L	0.011	2	99	920	0
	Mn	55	0.509	ug/L	0.008	1	362	10198	0
	Co	59	0.201	ug/L	0.010	4	43	2689	4
>	Ge	72		ug/L			420257	432427	1
	Ni	60	0.519	ug/L	0.023	4	16	1483	3
	Ni	62	0.505	ug/L	0.054	10	150	362	5
	Cu	63	0.528	ug/L	0.027	5	156	3344	3
	Cu	65	0.545	ug/L	0.006	1	26	1472	2
	Zn	66	4.144	ug/L	0.141	3	150	6728	2
	Zn	67	3.656	ug/L	0.194	5	23	990	4
	Zn	68	4.032	ug/L	0.176	4	148	4631	3
	As	75	0.186	ug/L	0.037	19	645	936	6
	As-1	75	0.037	ug/L	0.040	109	6520	6761	0
	Se	82	0.483	ug/L	0.106	21	-1	77	22
	Se	78	-0.068	ug/L	0.154	225	6575	6739	0
	Mo	98	0.188	ug/L	0.007	3	27	725	2
	Y	89		ug/L			300262	312338	1
	Kr	83		ug/L			915	933	3
>	In	115		ug/L			761183	763968	0
	Ag	107	0.201	ug/L	0.004	1	19	1286	0
	Cd	111	0.106	ug/L	0.006	5	46	428	3
	Cd	114	0.107	ug/L	0.003	2	14	984	1
	Sb	121	0.181	ug/L	0.003	1	335	2423	1
	Sb	123	0.184	ug/L	0.010	5	242	1849	5
	Ba	135	0.505	ug/L	0.005	1	32	1762	0
	Ba	137	0.510	ug/L	0.019	3	48	3022	4
>	Tb	159		ug/L			829582	838319	1
	Tl	205	0.200	ug/L	0.005	2	81	4900	1
	Pb	208	0.111	ug/L	0.003	2	95	3556	0
	Bi	209		ug/L			1681351	1704437	1
	Th	232	0.193	ug/L	0.008	3	1043	7262	2
	U	238	0.198	ug/L	0.003	1	24	6819	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:10:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1207727	1
	Be	9	-0.001	ug/L	0.000	39	10	7	19
	C	13		ug/L			79541	164333	1
	Cl	37		ug/L			3943707	11133117	0
>	Sc	45		ug/L			998438	1039288	1
	V	51	0.136	ug/L	0.047	34	5141	7863	9
	V-1	51	1.394	ug/L	0.033	2	75	25901	3
	Cr	52	0.873	ug/L	0.024	2	15214	28584	2
	Cr	53	5.431	ug/L	0.293	5	99	8998	6
	Mn	55	0.172	ug/L	0.009	4	362	3742	3
	Co	59	0.015	ug/L	0.002	13	43	242	9
>	Ge	72		ug/L			420257	423331	2
	Ni	60	0.359	ug/L	0.009	2	16	1008	2
	Ni	62	12.790	ug/L	2.182	17	150	5304	18
	Cu	63	1.336	ug/L	0.153	11	156	8050	12
	Cu	65	0.355	ug/L	0.026	7	26	946	4
	Zn	66	0.780	ug/L	0.045	5	150	1362	5
	Zn	67	3.174	ug/L	0.215	6	23	844	5
	Zn	68	0.195	ug/L	0.031	15	148	361	8
	As	75	0.039	ug/L	0.006	15	645	706	1
	As-1	75	0.633	ug/L	0.030	4	6520	7450	1
	Se	82	-0.461	ug/L	0.055	11	-1	-74	12
	Se	78	2.301	ug/L	0.160	6	6575	7503	1
	Mo	98	388.637	ug/L	11.619	2	27	1411129	3
	Y	89		ug/L			300262	308712	1
	Kr	83		ug/L			915	1227	3
>	In	115		ug/L			761183	776811	2
	Ag	107	0.022	ug/L	0.004	16	19	163	16
	Cd	111	0.168	ug/L	0.013	7	46	662	5
	Cd	114	0.234	ug/L	0.001	0	14	2160	2
	Sb	121	0.032	ug/L	0.004	11	335	721	8
	Sb	123	0.034	ug/L	0.004	10	242	551	5
	Ba	135	0.039	ug/L	0.003	7	32	168	7
	Ba	137	0.035	ug/L	0.004	12	48	257	7
>	Tb	159		ug/L			829582	888930	1
	Tl	205	0.005	ug/L	0.003	64	81	208	36
	Pb	208	0.041	ug/L	0.003	6	95	1458	4
	Bi	209		ug/L			1681351	1656396	2
	Th	232	0.209	ug/L	0.094	44	1043	8208	37
	U	238	0.001	ug/L	0.000	15	24	73	9

UR78 : 00357

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample *Dil* Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:15:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1204201	0
	Be	9	-0.001	ug/L	0.000	46	10	8	18
	C	13		ug/L			79541	173244	2
	Cl	37		ug/L			3943707	11065428	5
>	Sc	45		ug/L			998438	1066623	1
	V	51	0.055	ug/L	0.105	191	5141	6525	29
	V-1	51	1.473	ug/L	0.010	0	75	28072	1
	Cr	52	20.151	ug/L	0.660	3	15214	318005	2
	Cr	53	25.427	ug/L	0.256	1	99	42825	0
	Mn	55	19.399	ug/L	0.497	2	362	389807	1
	Co	59	19.043	ug/L	0.493	2	43	260983	1
>	Ge	72		ug/L			420257	422917	0
	Ni	60	19.333	ug/L	0.168	0	16	53431	0
	Ni	62	33.195	ug/L	1.872	5	150	13480	4
	Cu	63	20.692	ug/L	0.090	0	156	122123	1
	Cu	65	19.902	ug/L	0.211	1	26	51652	0
	Zn	66	19.031	ug/L	0.346	1	150	29683	2
	Zn	67	19.687	ug/L	0.196	0	23	5113	0
	Zn	68	17.578	ug/L	0.337	1	148	19247	0
	As	75	18.421	ug/L	0.062	0	645	26994	0
	As-1	75	19.592	ug/L	0.091	0	6520	33859	1
	Se	82	-0.424	ug/L	0.042	9	-1	-68	10
	Se	78	2.707	ug/L	0.066	2	6575	7651	0
	Mo	98	400.169	ug/L	5.821	1	27	1451555	0
	Y	89		ug/L			300262	309299	0
	Kr	83		ug/L			915	1243	1
>	In	115		ug/L			761183	787206	1
	Ag	107	19.273	ug/L	0.430	2	19	125254	0
	Cd	111	19.015	ug/L	0.294	1	46	70847	0
	Cd	114	19.299	ug/L	0.387	2	14	179616	0
	Sb	121	0.040	ug/L	0.003	7	335	819	2
	Sb	123	0.042	ug/L	0.006	13	242	627	6
	Ba	135	0.035	ug/L	0.001	3	32	159	4
	Ba	137	0.032	ug/L	0.001	3	48	243	4
>	Tb	159		ug/L			829582	900956	0
	Tl	205	0.000	ug/L	0.000	75	81	95	5
	Pb	208	0.045	ug/L	0.006	12	95	1603	11
	Bi	209		ug/L			1681351	1682365	0
	Th	232	0.061	ug/L	0.017	27	1043	3253	17
	U	238	0.001	ug/L	0.000	10	24	56	5

UR78 : 00358

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:20:56
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1151965	1
	Be	9	-0.002	ug/L	0.001	41	10	4	66
	C	13		ug/L			79541	83001	1
	Cl	37		ug/L			3943707	4111486	1
>	Sc	45		ug/L			998438	1020955	0
	V	51	0.002	ug/L	0.002	128	5141	5286	0
	V-1	51	0.076	ug/L	0.013	17	75	1457	16
	Cr	52	-0.015	ug/L	0.021	136	15214	15338	1
	Cr	53	0.253	ug/L	0.061	23	99	508	19
	Mn	55	0.011	ug/L	0.002	17	362	589	6
	Co	59	0.001	ug/L	0.002	117	43	62	34
>	Ge	72		ug/L			420257	430413	0
	Ni	60	0.009	ug/L	0.002	27	16	41	15
	Ni	62	2.194	ug/L	0.895	40	150	1048	33
	Cu	63	0.134	ug/L	0.056	41	156	964	33
	Cu	65	0.016	ug/L	0.006	36	26	70	22
	Zn	66	0.317	ug/L	0.037	11	150	654	8
	Zn	67	0.301	ug/L	0.048	15	23	103	11
	Zn	68	0.253	ug/L	0.016	6	148	431	3
	As	75	0.004	ug/L	0.020	471	645	667	5
	As-1	75	-0.062	ug/L	0.054	86	6520	6589	0
	Se	82	-0.097	ug/L	0.051	52	-1	-16	47
	Se	78	-0.248	ug/L	0.223	89	6575	6637	0
	Mo	98	0.076	ug/L	0.017	21	27	308	18
	Y	89		ug/L			300262	305834	0
	Kr	83		ug/L			915	984	0
>	In	115		ug/L			761183	771879	0
	Ag	107	0.000	ug/L	0.000	144	19	21	12
	Cd	111	-0.000	ug/L	0.004	2285	46	46	30
	Cd	114	0.001	ug/L	0.000	20	14	26	9
	Sb	121	-0.021	ug/L	0.002	9	335	97	24
	Sb	123	-0.020	ug/L	0.002	8	242	68	23
	Ba	135	0.008	ug/L	0.001	11	32	60	6
	Ba	137	0.008	ug/L	0.002	24	48	93	11
>	Tb	159		ug/L			829582	862743	0
	Tl	205	-0.001	ug/L	0.000	43	81	55	22
	Pb	208	0.007	ug/L	0.001	9	95	318	6
	Bi	209		ug/L			1681351	1743503	0
	Th	232	-0.027	ug/L	0.001	2	1043	199	12
	U	238	-0.000	ug/L	0.000	25	24	10	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:26:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1142769	0
[	Be	9	-0.002	ug/L	0.000	22	10	4	35
	C	13		ug/L			79541	84218	2
	Cl	37		ug/L			3943707	4027463	1
[>	Sc	45		ug/L			998438	992081	0
[	V	51	0.005	ug/L	0.007	146	5141	5194	1
[	V-1	51	0.037	ug/L	0.004	10	75	724	8
[	Cr	52	-0.004	ug/L	0.002	37	15214	15056	0
[	Cr	53	0.111	ug/L	0.015	13	99	272	9
[	Mn	55	0.012	ug/L	0.001	11	362	582	4
[	Co	59	0.001	ug/L	0.000	30	43	56	7
[>	Ge	72		ug/L			420257	428362	1
[	Ni	60	0.021	ug/L	0.002	7	16	74	7
[	Ni	62	0.562	ug/L	0.034	6	150	382	3
[	Cu	63	0.040	ug/L	0.011	27	156	398	15
[	Cu	65	0.020	ug/L	0.005	22	26	80	15
[	Zn	66	0.432	ug/L	0.033	7	150	831	5
[	Zn	67	0.409	ug/L	0.045	11	23	131	8
[	Zn	68	0.377	ug/L	0.023	6	148	566	4
[	As	75	-0.007	ug/L	0.026	380	645	648	6
[	As-1	75	-0.093	ug/L	0.072	77	6520	6514	0
[	Se	82	-0.028	ug/L	0.163	585	-1	-5	484
[	Se	78	-0.316	ug/L	0.289	91	6575	6579	0
[	Mo	98	0.016	ug/L	0.002	11	27	86	7
	Y	89		ug/L			300262	302168	1
	Kr	83		ug/L			915	944	2
[>	In	115		ug/L			761183	776973	0
[	Ag	107	-0.000	ug/L	0.001	637	19	18	47
[	Cd	111	-0.000	ug/L	0.001	2449	46	47	8
[	Cd	114	0.001	ug/L	0.001	80	14	21	26
[	Sb	121	-0.022	ug/L	0.001	5	335	89	15
[	Sb	123	-0.021	ug/L	0.002	8	242	60	23
[	Ba	135	0.012	ug/L	0.002	17	32	74	8
[	Ba	137	0.013	ug/L	0.001	6	48	127	3
[>	Tb	159		ug/L			829582	851658	0
[	Tl	205	-0.002	ug/L	0.000	18	81	40	19
[	Pb	208	0.009	ug/L	0.001	9	95	378	6
[	Bi	209		ug/L			1681351	1726742	0
[	Th	232	-0.027	ug/L	0.001	3	1043	187	16
[	U	238	-0.000	ug/L	0.000	94	24	17	40

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:31:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1169678	2
[	Be	9	51.107	ug/L	1.286	2	10	188137	1
	C	13		ug/L			79541	84302	0
	Cl	37		ug/L			3943707	4315129	0
[>	Sc	45		ug/L			998438	1031519	2
[	V	51	49.842	ug/L	1.161	2	5141	923072	1
[	V-1	51	49.771	ug/L	1.136	2	75	914721	2
[	Cr	52	49.921	ug/L	1.462	2	15214	738522	0
[	Cr	53	49.662	ug/L	1.026	2	99	80782	2
[	Mn	55	50.222	ug/L	0.886	1	362	975277	0
[	Co	59	50.546	ug/L	1.371	2	43	669690	0
[>	Ge	72		ug/L			420257	430283	0
[	Ni	60	49.115	ug/L	0.289	0	16	138085	0
[	Ni	62	48.984	ug/L	0.701	1	150	20169	0
[	Cu	63	49.390	ug/L	0.267	0	156	296343	0
[	Cu	65	49.092	ug/L	0.458	0	26	129606	1
[	Zn	66	49.479	ug/L	1.043	2	150	78265	2
[	Zn	67	49.153	ug/L	0.623	1	23	12954	1
[	Zn	68	48.910	ug/L	0.683	1	148	54229	2
[	As	75	48.618	ug/L	0.048	0	645	71404	0
[	As-1	75	48.248	ug/L	0.323	0	6520	75071	0
[	Se	82	51.232	ug/L	0.523	1	-1	8285	1
[	Se	78	48.256	ug/L	1.313	2	6575	25484	1
[	Mo	98	49.529	ug/L	0.748	1	27	182815	0
	Y	89		ug/L			300262	307304	0
	Kr	83		ug/L			915	993	2
[>	In	115		ug/L			761183	774510	2
[	Ag	107	50.880	ug/L	0.476	0	19	325338	1
[	Cd	111	50.664	ug/L	0.860	1	46	185621	0
[	Cd	114	50.765	ug/L	0.662	1	14	464866	1
[	Sb	121	50.862	ug/L	0.274	0	335	596368	2
[	Sb	123	50.377	ug/L	0.639	1	242	445683	0
[	Ba	135	48.666	ug/L	0.429	0	32	169155	1
[	Ba	137	49.477	ug/L	0.858	1	48	292367	0
[>	Tb	159		ug/L			829582	868183	1
[	Tl	205	48.668	ug/L	0.729	1	81	1217247	1
[	Pb	208	50.040	ug/L	0.848	1	95	1618618	0
[	Bi	209		ug/L			1681351	1713469	1
[	Th	232	47.955	ug/L	1.566	3	1043	1597699	1
[	U	238	48.172	ug/L	0.988	2	24	1715060	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:37:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1153735	2
	Be	9	-0.001	ug/L	0.001	65	10	7	37
	C	13		ug/L			79541	78240	2
	Cl	37		ug/L			3943707	4094254	3
>	Sc	45		ug/L			998438	1009907	0
	V	51	-0.020	ug/L	0.010	48	5141	4839	3
	V-1	51	0.013	ug/L	0.001	10	75	310	8
	Cr	52	-0.079	ug/L	0.033	41	15214	14266	2
	Cr	53	0.040	ug/L	0.007	18	99	163	7
	Mn	55	0.001	ug/L	0.001	115	362	389	7
	Co	59	0.000	ug/L	0.001	232	43	47	19
>	Ge	72		ug/L			420257	411798	1
	Ni	60	0.002	ug/L	0.003	154	16	20	34
	Ni	62	0.354	ug/L	0.067	18	150	286	10
	Cu	63	0.015	ug/L	0.006	43	156	237	16
	Cu	65	0.003	ug/L	0.003	106	26	33	24
	Zn	66	-0.005	ug/L	0.003	57	150	140	3
	Zn	67	0.014	ug/L	0.012	88	23	26	10
	Zn	68	-0.008	ug/L	0.008	105	148	136	6
	As	75	0.031	ug/L	0.014	44	645	675	2
	As-1	75	0.014	ug/L	0.054	371	6520	6408	0
	Se	82	-0.017	ug/L	0.103	607	-1	-3	450
	Se	78	0.069	ug/L	0.181	264	6575	6468	0
	Mo	98	0.013	ug/L	0.002	12	27	74	6
	Y	89		ug/L			300262	302903	0
	Kr	83		ug/L			915	966	3
>	In	115		ug/L			761183	763133	0
	Ag	107	0.001	ug/L	0.000	28	19	26	7
	Cd	111	-0.000	ug/L	0.002	1383	46	45	19
	Cd	114	0.001	ug/L	0.001	61	14	22	22
	Sb	121	0.016	ug/L	0.005	34	335	518	11
	Sb	123	0.018	ug/L	0.007	40	242	399	15
	Ba	135	-0.004	ug/L	0.002	54	32	19	35
	Ba	137	0.000	ug/L	0.002	457	48	50	19
>	Tb	159		ug/L			829582	841554	0
	Tl	205	0.005	ug/L	0.000	8	81	199	5
	Pb	208	0.000	ug/L	0.000	289	95	99	9
	Bi	209		ug/L			1681351	1705071	2
	Th	232	0.060	ug/L	0.015	25	1043	2999	16
	U	238	0.001	ug/L	0.000	31	24	60	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:50:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1194000	0
	Be	9	U -0.001	ug/L	0.001	49	10	7	28
	C	13		ug/L			79541	90230	0
	Cl	37		ug/L			3943707	3995004	1
>	Sc	45		ug/L			998438	1040099	2
	V	51	0.001	ug/L	0.013	1076	5141	5374	2
	V-1	51	0.017	ug/L	0.001	6	75	386	3
	Cr	52	U -0.005	ug/L	0.042	813	15214	15766	1
	Cr	53	0.051	ug/L	0.005	10	99	186	5
	Mn	55	0.503	ug/L	0.018	3	362	10227	1
	Co	59	0.000	ug/L	0.000	64	43	50	4
>	Ge	72		ug/L			420257	423447	1
	Ni	60	U 0.025	ug/L	0.001	5	16	84	5
	Ni	62	0.082	ug/L	0.006	7	150	184	1
	Cu	63	U 0.122	ug/L	0.004	2	156	877	2
	Cu	65	0.125	ug/L	0.007	5	26	352	5
	Zn	66	U 0.499	ug/L	0.020	4	150	926	3
	Zn	67	0.432	ug/L	0.012	2	23	135	1
	Zn	68	0.465	ug/L	0.034	7	148	655	5
	As	75	0.585	ug/L	0.025	4	645	1487	1
	As-1	75	0.566	ug/L	0.064	11	6520	7358	0
	Se	82	U -0.022	ug/L	0.074	333	-1	-4	259
	Se	78	-0.009	ug/L	0.182	2023	6575	6621	0
	Mo	98	0.015	ug/L	0.006	41	27	80	26
	Y	89		ug/L			300262	306672	0
	Kr	83		ug/L			915	989	4
>	In	115		ug/L			761183	791381	1
	Ag	107	U -0.000	ug/L	0.000	125	19	17	14
	Cd	111	-0.001	ug/L	0.003	287	46	43	28
	Cd	114	U 0.000	ug/L	0.001	179	14	19	40
	Sb	121	U -0.012	ug/L	0.004	34	335	204	25
	Sb	123	-0.012	ug/L	0.004	29	242	139	24
	Ba	135	0.011	ug/L	0.003	22	32	74	12
	Ba	137	0.015	ug/L	0.001	6	48	138	3
>	Tb	159		ug/L			829582	867067	0
	Tl	205	U 0.006	ug/L	0.002	34	81	244	22
	Pb	208	U 0.006	ug/L	0.000	7	95	308	4
	Bi	209		ug/L			1681351	1705206	0
	Th	232	0.027	ug/L	0.007	26	1043	1975	11
	U	238	-0.000	ug/L	0.000	945	24	24	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:54:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1205016	2
[	Be	9	-0.000	ug/L	0.001	920	10	11	28
	C	13		ug/L			79541	89486	1
	Cl	37		ug/L			3943707	4023793	0
[>	Sc	45		ug/L			998438	1040982	1
|	V	51	0.002	ug/L	0.003	229	5141	5388	2
|	V-1	51	0.016	ug/L	0.000	2	75	375	1
|	Cr	52	-0.011	ug/L	0.007	68	15214	15706	1
|	Cr	53	0.042	ug/L	0.005	11	99	171	3
|	Mn	55	0.240	ug/L	0.008	3	362	5077	2
[	Co	59	0.001	ug/L	0.001	130	43	52	19
[>	Ge	72		ug/L			420257	426417	1
|	Ni	60	0.009	ug/L	0.001	11	16	42	8
|	Ni	62	0.048	ug/L	0.003	6	150	172	0
|	Cu	63	0.127	ug/L	0.001	0	156	911	1
|	Cu	65	0.125	ug/L	0.007	5	26	353	6
|	Zn	66	0.472	ug/L	0.018	3	150	891	4
|	Zn	67	0.481	ug/L	0.055	11	23	149	9
|	Zn	68	0.466	ug/L	0.027	5	148	661	5
|	As	75	0.268	ug/L	0.017	6	645	1041	1
|	As-1	75	0.185	ug/L	0.055	29	6520	6875	0
|	Se	82	-0.044	ug/L	0.045	101	-1	-8	88
|	Se	78	-0.188	ug/L	0.193	102	6575	6599	0
[	Mo	98	0.008	ug/L	0.001	12	27	55	6
	Y	89		ug/L			300262	311581	2
	Kr	83		ug/L			915	1018	3
[>	In	115		ug/L			761183	792357	1
|	Ag	107	0.006	ug/L	0.002	32	19	56	22
|	Cd	111	-0.000	ug/L	0.002	446	46	46	14
|	Cd	114	0.000	ug/L	0.000	123	14	18	22
|	Sb	121	-0.020	ug/L	0.003	14	335	113	29
|	Sb	123	-0.019	ug/L	0.002	8	242	79	18
|	Ba	135	0.004	ug/L	0.003	79	32	47	20
[	Ba	137	0.004	ug/L	0.001	14	48	75	4
[>	Tb	159		ug/L			829582	862420	0
|	Tl	205	0.000	ug/L	0.001	267	81	92	24
|	Pb	208	0.008	ug/L	0.001	8	95	355	5
|	Bi	209		ug/L			1681351	1735030	1
|	Th	232	0.000	ug/L	0.006	5817	1043	1088	19
[	U	238	-0.000	ug/L	0.000	34	24	13	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 11:58:59
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1161939	1
	Be	9	24.191	ug/L	0.156	0	10	88488	0
	C	13		ug/L			79541	91144	1
	Cl	37		ug/L			3943707	3961410	1
>	Sc	45		ug/L			998438	1024357	2
	V	51	24.322	ug/L	0.860	3	5141	449978	2
	V-1	51	24.468	ug/L	0.762	3	75	446522	1
	Cr	52	24.825	ug/L	0.618	2	15214	372592	0
	Cr	53	25.356	ug/L	0.974	3	99	40997	2
	Mn	55	25.263	ug/L	0.804	3	362	487283	1
	Co	59	25.290	ug/L	0.798	3	43	332749	1
>	Ge	72		ug/L			420257	426805	1
	Ni	60	24.677	ug/L	0.789	3	16	68808	1
	Ni	62	23.664	ug/L	0.460	1	150	9744	1
	Cu	63	25.184	ug/L	0.853	3	156	149924	2
	Cu	65	25.375	ug/L	0.586	2	26	66450	1
	Zn	66	93.633	ug/L	1.887	2	150	146762	1
	Zn	67	86.706	ug/L	1.998	2	23	22644	1
	Zn	68	92.477	ug/L	0.824	0	148	101558	0
	As	75	25.405	ug/L	0.443	1	645	37318	0
	As-1	75	24.158	ug/L	0.517	2	6520	40588	1
	Se	82	75.788	ug/L	1.095	1	-1	12157	0
	Se	78	73.296	ug/L	1.120	1	6575	34930	0
	Mo	98	24.150	ug/L	0.546	2	27	88433	2
	Y	89		ug/L			300262	305663	1
	Kr	83		ug/L			915	1006	1
>	In	115		ug/L			761183	785466	0
	Ag	107	25.568	ug/L	0.105	0	19	165829	0
	Cd	111	24.641	ug/L	0.245	0	46	91599	0
	Cd	114	24.298	ug/L	0.398	1	14	225681	1
	Sb	121	24.319	ug/L	0.139	0	335	289349	0
	Sb	123	24.209	ug/L	0.425	1	242	217370	1
	Ba	135	24.508	ug/L	0.090	0	32	86418	0
	Ba	137	24.365	ug/L	0.255	1	48	146071	0
>	Tb	159		ug/L			829582	861685	1
	Tl	205	24.159	ug/L	0.364	1	81	599733	0
	Pb	208	25.044	ug/L	0.447	1	95	804106	0
	Bi	209		ug/L			1681351	1716727	0
	Th	232	23.405	ug/L	0.494	2	1043	774661	1
	U	238	23.936	ug/L	0.367	1	24	845936	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:03:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1160539	0
	Be	9	23.941	ug/L	0.301	1	10	87476	1
	C	13		ug/L			79541	89979	1
	Cl	37		ug/L			3943707	4102582	0
>	Sc	45		ug/L			998438	1019891	1
	V	51	24.302	ug/L	0.588	2	5141	447698	1
	V-1	51	24.341	ug/L	0.594	2	75	442328	0
	Cr	52	25.054	ug/L	0.873	3	15214	374312	3
	Cr	53	25.203	ug/L	0.644	2	99	40579	1
	Mn	55	24.833	ug/L	0.658	2	362	477052	2
	Co	59	25.186	ug/L	0.640	2	43	329994	0
>	Ge	72		ug/L			420257	432931	3
	Ni	60	24.618	ug/L	0.901	3	16	69586	0
	Ni	62	23.372	ug/L	1.360	5	150	9751	2
	Cu	63	25.413	ug/L	1.420	5	156	153316	2
	Cu	65	25.837	ug/L	0.962	3	26	68583	1
	Zn	66	77.842	ug/L	3.627	4	150	123664	1
	Zn	67	70.959	ug/L	2.757	3	23	18788	1
	Zn	68	75.396	ug/L	2.621	3	148	83953	0
	As	75	25.046	ug/L	0.852	3	645	37304	0
	As-1	75	22.952	ug/L	0.790	3	6520	39427	0
	Se	82	75.088	ug/L	2.997	3	-1	12208	0
	Se	78	69.449	ug/L	2.857	4	6575	33904	0
	Mo	98	23.823	ug/L	0.880	3	27	88423	1
	Y	89		ug/L			300262	305404	1
	Kr	83		ug/L			915	990	2
>	In	115		ug/L			761183	777391	0
	Ag	107	25.255	ug/L	0.210	0	19	162110	0
	Cd	111	24.342	ug/L	0.200	0	46	89557	0
	Cd	114	24.472	ug/L	0.236	0	14	224956	0
	Sb	121	24.568	ug/L	0.262	1	335	289297	0
	Sb	123	24.699	ug/L	0.338	1	242	219468	0
	Ba	135	24.135	ug/L	0.339	1	32	84225	0
	Ba	137	24.183	ug/L	0.344	1	48	143483	1
>	Tb	159		ug/L			829582	859224	1
	Tl	205	24.158	ug/L	0.115	0	81	598045	0
	Pb	208	24.929	ug/L	0.255	1	95	798199	0
	Bi	209		ug/L			1681351	1717394	1
	Th	232	23.545	ug/L	0.518	2	1043	777093	1
	U	238	23.840	ug/L	0.205	0	24	840202	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:07:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1120530	1
	Be	9	U 0.002	ug/L	0.001	62	10	17	22
	C	13		ug/L			79541	80593	3
	Cl	37		ug/L			3943707	4082859	3
>	Sc	45		ug/L			998438	1015035	2
	V	51	0.180	ug/L	0.007	3	5141	8486	3
	V-1	51	0.230	ug/L	0.004	1	75	4232	0
	Cr	52	U -0.021	ug/L	0.022	102	15214	15168	4
	Cr	53	0.158	ug/L	0.016	10	99	353	4
	Mn	55	104.156	ug/L	4.881	4	362	1991270	6
	Co	59	0.013	ug/L	0.002	17	43	219	14
>	Ge	72		ug/L			420257	422966	1
	Ni	60	U 0.233	ug/L	0.016	6	16	660	7
	Ni	62	1.085	ug/L	0.590	54	150	585	39
	Cu	63	U 0.245	ug/L	0.031	12	156	1600	10
	Cu	65	0.114	ug/L	0.006	5	26	322	6
	Zn	66	U 0.621	ug/L	0.011	1	150	1114	0
	Zn	67	0.622	ug/L	0.032	5	23	184	3
	Zn	68	0.787	ug/L	0.029	3	148	1004	3
	As	75	U 0.080	ug/L	0.010	12	645	764	2
	As-1	75	-0.034	ug/L	0.051	150	6520	6514	1
	Se	82	U -0.079	ug/L	0.035	44	-1	-13	41
	Se	78	-0.336	ug/L	0.169	50	6575	6489	1
	Mo	98	0.003	ug/L	0.000	11	27	37	4
	Y	89		ug/L			300262	301122	1
	Kr	83		ug/L			915	1003	3
>	In	115		ug/L			761183	753985	1
	Ag	107	U 0.004	ug/L	0.002	40	19	43	22
	Cd	111	U 0.017	ug/L	0.002	14	46	106	6
	Cd	114	0.014	ug/L	0.002	13	14	136	11
	Sb	121	U 0.010	ug/L	0.007	65	335	449	16
	Sb	123	0.010	ug/L	0.006	63	242	325	15
	Ba	135	0.838	ug/L	0.015	1	32	2868	3
	Ba	137	0.837	ug/L	0.007	0	48	4862	1
>	Tb	159		ug/L			829582	838031	1
	Tl	205	U 0.003	ug/L	0.002	63	81	145	28
	Pb	208	U 0.012	ug/L	0.001	4	95	473	2
	Bi	209		ug/L			1681351	1651310	0
	Th	232	0.185	ug/L	0.062	33	1043	7018	29
	U	238	0.008	ug/L	0.001	14	24	307	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:11:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1120584	0
	Be	9	U 0.010	ug/L	0.002	15	10	45	11
	C	13		ug/L			79541	91631	1
	Cl	37		ug/L			3943707	4452173	1
>	Sc	45		ug/L			998438	1090197	0
	V	51	0.865	ug/L	0.027	3	5141	22453	1
	V-1	51	0.950	ug/L	0.013	1	75	18545	0
	Cr	52	U 0.072	ug/L	0.045	62	15214	17717	3
	Cr	53	0.375	ug/L	0.007	1	99	752	1
	Mn	55	486.438	ug/L	9.611	1	362	9982644	1
	Co	59	0.061	ug/L	0.003	4	43	901	4
>	Ge	72		ug/L			420257	407392	1
	Ni	60	1.097	ug/L	0.004	0	16	2935	1
	Ni	62	18.519	ug/L	5.187	28	150	7321	28
	Cu	63	2.142	ug/L	0.405	18	156	12327	19
	Cu	65	U 0.436	ug/L	0.034	7	26	1113	6
	Zn	66	U 1.207	ug/L	0.009	0	150	1949	1
	Zn	67	1.181	ug/L	0.030	2	23	316	1
	Zn	68	2.104	ug/L	0.048	2	148	2345	2
	As	75	0.360	ug/L	0.025	6	645	1120	1
	As-1	75	0.771	ug/L	0.036	4	6520	7356	1
	Se	82	U 0.059	ug/L	0.122	208	-1	8	231
	Se	78	1.842	ug/L	0.091	4	6575	7052	1
	Mo	98	0.016	ug/L	0.004	26	27	83	17
	Y	89		ug/L			300262	302511	0
	Kr	83		ug/L			915	1034	5
>	In	115		ug/L			761183	750821	1
	Ag	107	U 0.003	ug/L	0.001	25	19	35	13
	Cd	111	U 0.065	ug/L	0.005	8	46	277	5
	Cd	114	0.059	ug/L	0.003	5	14	537	6
	Sb	121	U 0.022	ug/L	0.003	14	335	584	7
	Sb	123	0.021	ug/L	0.003	12	242	418	6
	Ba	135	4.259	ug/L	0.016	0	32	14383	1
	Ba	137	4.317	ug/L	0.049	1	48	24777	1
>	Tb	159		ug/L			829582	859347	1
	Tl	205	U 0.002	ug/L	0.001	32	81	126	10
	Pb	208	U 0.020	ug/L	0.000	1	95	749	0
	Bi	209		ug/L			1681351	1589568	0
	Th	232	0.178	ug/L	0.071	40	1043	6938	33
	U	238	0.027	ug/L	0.001	3	24	975	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:15:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1131732	0
[	Be	9	U 0.014	ug/L	0.003	19	10	62	15
	C	13		ug/L			79541	93707	3
	Cl	37		ug/L			3943707	4431271	1
[>	Sc	45		ug/L			998438	1096949	1
	V	51	0.874	ug/L	0.015	1	5141	22757	0
	V-1	51	0.944	ug/L	0.003	0	75	18533	1
	Cr	52	U 0.099	ug/L	0.025	25	15214	18243	0
	Cr	53	0.348	ug/L	0.021	5	99	710	6
	Mn	55	486.612	ug/L	13.571	2	362	10045773	1
[	Co	59	0.061	ug/L	0.004	6	43	910	7
[>	Ge	72		ug/L			420257	407078	2
	Ni	60	0.702	ug/L	0.016	2	16	1882	0
	Ni	62	18.237	ug/L	1.465	8	150	7188	5
	Cu	63	2.151	ug/L	0.120	5	156	12346	3
	Cu	65	0.524	ug/L	0.007	1	26	1332	3
	Zn	66	U 1.082	ug/L	0.030	2	150	1760	0
	Zn	67	1.074	ug/L	0.058	5	23	290	5
	Zn	68	1.947	ug/L	0.021	1	148	2179	3
	As	75	0.351	ug/L	0.035	10	645	1107	2
	As-1	75	0.768	ug/L	0.103	13	6520	7344	0
	Se	82	U -0.037	ug/L	0.095	260	-1	-6	215
	Se	78	1.699	ug/L	0.328	19	6575	6992	0
[	Mo	98	0.023	ug/L	0.005	21	27	106	18
	Y	89		ug/L			300262	302803	1
	Kr	83		ug/L			915	1004	3
[>	In	115		ug/L			761183	746496	0
	Ag	107	U 0.016	ug/L	0.003	18	19	119	15
	Cd	111	U 0.071	ug/L	0.004	5	46	294	3
	Cd	114	U 0.066	ug/L	0.002	3	14	597	4
	Sb	121	U 0.020	ug/L	0.005	24	335	553	9
	Sb	123	0.019	ug/L	0.001	7	242	403	2
	Ba	135	4.340	ug/L	0.063	1	32	14569	1
[	Ba	137	4.403	ug/L	0.017	0	48	25125	0
[>	Tb	159		ug/L			829582	859075	0
	Tl	205	U 0.004	ug/L	0.001	12	81	190	6
	Pb	208	U 0.022	ug/L	0.001	3	95	796	3
	Bi	209		ug/L			1681351	1599521	0
	Th	232	0.063	ug/L	0.014	21	1043	3147	14
[	U	238	0.031	ug/L	0.001	3	24	1109	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:19:37
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1127567	1
	Be	9	22.866	ug/L	0.419	1	10	81174	2
	C	13		ug/L			79541	91868	1
	Cl	37		ug/L			3943707	4458202	4
>	Sc	45		ug/L			998438	1072076	1
	V	51	23.387	ug/L	0.334	1	5141	453168	1
	V-1	51	23.547	ug/L	0.490	2	75	449864	1
	Cr	52	22.680	ug/L	0.234	1	15214	357776	0
	Cr	53	23.257	ug/L	0.872	3	99	39372	2
	Mn	55	512.805	ug/L	11.598	2	362	10347370	1
	Co	59	22.662	ug/L	0.656	2	43	312147	1
>	Ge	72		ug/L			420257	404293	0
	Ni	60	24.986	ug/L	0.245	0	16	66013	1
	Ni	62	43.028	ug/L	1.234	2	150	16663	2
	Cu	63	26.404	ug/L	0.198	0	156	148935	1
	Cu	65	24.950	ug/L	0.666	2	26	61904	2
	Zn	66	85.064	ug/L	0.037	0	150	126323	0
	Zn	67	77.259	ug/L	0.527	0	23	19118	1
	Zn	68	82.854	ug/L	0.546	0	148	86209	0
	As	75	25.465	ug/L	0.101	0	645	35437	0
	As-1	75	24.550	ug/L	0.191	0	6520	38973	0
	Se	82	71.990	ug/L	0.173	0	-1	10940	0
	Se	78	70.578	ug/L	0.658	0	6575	32097	0
	Mo	98	25.153	ug/L	0.161	0	27	87253	0
	Y	89		ug/L			300262	304309	1
	Kr	83		ug/L			915	997	1
>	In	115		ug/L			761183	752259	1
	Ag	107	22.915	ug/L	0.182	0	19	142333	0
	Cd	111	22.992	ug/L	0.440	1	46	81853	1
	Cd	114	23.112	ug/L	0.326	1	14	205592	2
	Sb	121	23.658	ug/L	0.191	0	335	269591	0
	Sb	123	23.571	ug/L	0.210	0	242	202690	0
	Ba	135	28.393	ug/L	0.457	1	32	95875	1
	Ba	137	29.027	ug/L	0.093	0	48	166654	1
>	Tb	159		ug/L			829582	861063	0
	Tl	205	23.405	ug/L	0.189	0	81	580682	0
	Pb	208	23.743	ug/L	0.363	1	95	761894	1
	Bi	209		ug/L			1681351	1588480	0
	Th	232	23.291	ug/L	0.297	1	1043	770433	0
	U	238	23.751	ug/L	0.103	0	24	838865	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US02 APOST REN~~ 22-2277 5/23/12 JB
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:23:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1104695	2
	Be	9	24.522	ug/L	0.287	1	10	85297	3
	C	13		ug/L			79541	91511	2
	Cl	37		ug/L			3943707	4311326	2
>	Sc	45		ug/L			998438	1081594	1
	V	51	24.649	ug/L	0.205	0	5141	481585	1
	V-1	51	24.699	ug/L	0.141	0	75	476119	1
	Cr	52	23.256	ug/L	0.287	1	15214	369666	0
	Cr	53	23.425	ug/L	0.350	1	99	40024	2
	Mn	55	489.852	ug/L	3.076	0	362	9974210	2
	Co	59	22.877	ug/L	0.197	0	43	317992	2
>	Ge	72		ug/L			420257	405611	2
	Ni	60	25.797	ug/L	0.608	2	16	68346	1
	Ni	62	44.333	ug/L	1.634	3	150	17210	0
	Cu	63	25.889	ug/L	0.695	2	156	146426	0
	Cu	65	24.516	ug/L	0.724	2	26	60999	2
	Zn	66	73.502	ug/L	1.692	2	150	109497	2
	Zn	67	67.102	ug/L	1.470	2	23	16655	1
	Zn	68	71.994	ug/L	2.200	3	148	75154	3
	As	75	25.870	ug/L	0.996	3	645	36086	2
	As-1	75	25.168	ug/L	0.866	3	6520	39905	1
	Se	82	73.479	ug/L	3.241	4	-1	11195	2
	Se	78	72.877	ug/L	3.010	4	6575	33025	1
	Mo	98	24.514	ug/L	0.651	2	27	85277	1
	Y	89		ug/L			300262	297448	1
	Kr	83		ug/L			915	995	4
>	In	115		ug/L			761183	738218	1
	Ag	107	23.912	ug/L	0.893	3	19	145819	5
	Cd	111	24.092	ug/L	0.184	0	46	84177	2
	Cd	114	24.072	ug/L	0.546	2	14	210118	2
	Sb	121	24.618	ug/L	0.210	0	335	275299	2
	Sb	123	24.511	ug/L	0.269	1	242	206844	2
	Ba	135	29.714	ug/L	0.449	1	32	98460	1
	Ba	137	29.684	ug/L	0.414	1	48	167237	1
>	Tb	159		ug/L			829582	859122	1
	Tl	205	23.934	ug/L	0.252	1	81	592429	1
	Pb	208	24.306	ug/L	0.249	1	95	778203	1
	Bi	209		ug/L			1681351	1578721	0
	Th	232	24.635	ug/L	0.173	0	1043	813044	1
	U	238	24.315	ug/L	0.154	0	24	856795	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:27:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1051927	0
[	Be	9	0.245	ug/L	0.010	3	10	820	4
	C	13		ug/L			79541	121996	2
	Cl	37		ug/L			3943707	6300161	1
[>	Sc	45		ug/L			998438	1150780	0
[	V	51	128.552	ug/L	2.053	1	5141	2647482	1
[	V-1	51	128.894	ug/L	1.967	1	75	2643287	1
[	Cr	52	21.059	ug/L	0.291	1	15214	357865	1
[	Cr	53	21.504	ug/L	0.288	1	99	39097	1
[	Mn	55	344.711	ug/L	5.007	1	362	7467846	1
[	Co	59	0.744	ug/L	0.027	3	43	11047	3
[>	Ge	72		ug/L			420257	382356	1
[	Ni	60	1.577	ug/L	0.033	2	16	3954	1
[	Ni	62	182.077	ug/L	25.553	14	150	66314	15
[	Cu	63	26.591	ug/L	1.569	5	156	141876	6
[	Cu	65	9.112	ug/L	0.143	1	26	21395	2
[	Zn	66	U 2.976	ug/L	0.031	1	150	4311	2
[	Zn	67	9.201	ug/L	0.284	3	23	2172	4
[	Zn	68	3.823	ug/L	0.052	1	148	3891	3
[	As	75	35.676	ug/L	0.128	0	645	46716	1
[	As-1	75	37.640	ug/L	0.170	0	6520	53347	1
[	Se	82	0.915	ug/L	0.058	6	-1	130	7
[	Se	78	5.399	ug/L	0.207	3	6575	7846	1
[	Mo	98	0.962	ug/L	0.010	1	27	3180	1
	Y	89		ug/L			300262	422174	1
	Kr	83		ug/L			915	1146	3
[>	In	115		ug/L			761183	700909	0
[	Ag	107	U 0.053	ug/L	0.010	18	19	324	17
[	Cd	111	0.127	ug/L	0.012	9	46	464	8
[	Cd	114	U 0.058	ug/L	0.003	5	14	494	5
[	Sb	121	U 0.133	ug/L	0.003	2	335	1718	1
[	Sb	123	0.128	ug/L	0.005	3	242	1245	2
[	Ba	135	6.380	ug/L	0.100	1	32	20097	2
[	Ba	137	6.424	ug/L	0.134	2	48	34398	2
[>	Tb	159		ug/L			829582	832749	0
[	Tl	205	U 0.004	ug/L	0.002	47	81	188	27
[	Pb	208	0.487	ug/L	0.007	1	95	15196	1
[	Bi	209		ug/L			1681351	1439778	0
[	Th	232	0.810	ug/L	0.115	14	1043	26939	13
[	U	238	0.427	ug/L	0.003	0	24	14620	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:33:45
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1088477	0
	Be	9	51.265	ug/L	0.582	1	10	175664	0
	C	13		ug/L			79541	77233	3
	Cl	37		ug/L			3943707	4248339	0
>	Sc	45		ug/L			998438	994281	1
	V	51	49.491	ug/L	0.485	0	5141	883729	0
	V-1	51	49.567	ug/L	0.523	1	75	878228	0
	Cr	52	49.832	ug/L	0.936	1	15214	710851	0
	Cr	53	50.109	ug/L	1.240	2	99	78567	1
	Mn	55	49.345	ug/L	0.595	1	362	923835	0
	Co	59	49.990	ug/L	0.995	1	43	638623	1
>	Ge	72		ug/L			420257	408012	0
	Ni	60	49.546	ug/L	0.319	0	16	132089	1
	Ni	62	136.752	ug/L	9.266	6	150	53132	6
	Cu	63	54.119	ug/L	1.471	2	156	307893	2
	Cu	65	49.605	ug/L	1.290	2	26	124167	2
	Zn	66	50.613	ug/L	0.523	1	150	75910	0
	Zn	67	49.831	ug/L	0.675	1	23	12452	1
	Zn	68	49.532	ug/L	0.534	1	148	52071	1
	As	75	49.133	ug/L	0.437	0	645	68419	0
	As-1	75	49.180	ug/L	0.433	0	6520	72441	1
	Se	82	51.232	ug/L	0.819	1	-1	7856	1
	Se	78	49.768	ug/L	0.408	0	6575	24725	0
	Mo	98	49.261	ug/L	0.219	0	27	172429	0
	Y	89		ug/L			300262	295800	2
	Kr	83		ug/L			915	964	2
>	In	115		ug/L			761183	753558	0
	Ag	107	48.570	ug/L	0.398	0	19	302204	1
	Cd	111	49.706	ug/L	0.080	0	46	177227	0
	Cd	114	50.306	ug/L	0.197	0	14	448248	1
	Sb	121	50.306	ug/L	0.406	0	335	573869	0
	Sb	123	49.239	ug/L	0.275	0	242	423893	0
	Ba	135	49.001	ug/L	0.482	0	32	165724	0
	Ba	137	49.423	ug/L	0.538	1	48	284222	1
>	Tb	159		ug/L			829582	845808	0
	Tl	205	48.062	ug/L	0.521	1	81	1171255	1
	Pb	208	49.435	ug/L	0.319	0	95	1558178	0
	Bi	209		ug/L			1681351	1659948	1
	Th	232	47.999	ug/L	0.501	1	1043	1558549	1
	U	238	48.195	ug/L	0.262	0	24	1672028	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:39:58
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1075215	2
	Be	9	-0.001	ug/L	0.001	116	10	7	37
	C	13		ug/L			79541	75843	2
	Cl	37		ug/L			3943707	3987943	2
>	Sc	45		ug/L			998438	940169	3
	V	51	-0.004	ug/L	0.007	197	5141	4778	2
	V-1	51	0.008	ug/L	0.001	13	75	197	6
	Cr	52	-0.026	ug/L	0.029	110	15214	13976	3
	Cr	53	0.014	ug/L	0.004	28	99	114	7
	Mn	55	0.009	ug/L	0.004	44	362	491	10
	Co	59	0.001	ug/L	0.000	35	43	55	9
>	Ge	72		ug/L			420257	392443	1
	Ni	60	0.002	ug/L	0.001	58	16	20	15
	Ni	62	75.400	ug/L	21.525	28	150	28324	29
	Cu	63	4.154	ug/L	1.198	28	156	22932	30
	Cu	65	0.183	ug/L	0.049	26	26	467	26
	Zn	66	-0.001	ug/L	0.006	568	150	139	7
	Zn	67	-0.020	ug/L	0.012	61	23	17	17
	Zn	68	-0.004	ug/L	0.017	415	148	134	13
	As	75	0.042	ug/L	0.026	61	645	658	3
	As-1	75	0.193	ug/L	0.055	28	6520	6337	0
	Se	82	-0.093	ug/L	0.033	36	-1	-14	34
	Se	78	0.678	ug/L	0.152	22	6575	6380	0
	Mo	98	0.007	ug/L	0.002	27	27	49	13
	Y	89		ug/L			300262	279935	1
	Kr	83		ug/L			915	958	0
>	In	115		ug/L			761183	729515	2
	Ag	107	0.002	ug/L	0.002	102	19	29	37
	Cd	111	0.004	ug/L	0.004	103	46	57	22
	Cd	114	0.002	ug/L	0.003	137	14	31	77
	Sb	121	0.015	ug/L	0.013	81	335	490	26
	Sb	123	0.021	ug/L	0.010	48	242	404	18
	Ba	135	0.001	ug/L	0.002	254	32	34	22
	Ba	137	0.002	ug/L	0.002	79	48	58	15
>	Tb	159		ug/L			829582	797468	1
	Tl	205	0.007	ug/L	0.002	24	81	238	14
	Pb	208	0.001	ug/L	0.001	129	95	117	26
	Bi	209		ug/L			1681351	1634891	2
	Th	232	0.045	ug/L	0.011	25	1043	2382	16
	U	238	0.002	ug/L	0.001	28	24	93	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 12:57:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1083053	2
	Be	9	51.785	ug/L	1.024	1	10	176517	1
	C	13		ug/L			79541	78023	1
	Cl	37		ug/L			3943707	4184231	1
>	Sc	45		ug/L			998438	968231	0
	V	51	49.840	ug/L	1.459	2	5141	866480	2
	V-1	51	49.999	ug/L	1.516	3	75	862559	2
	Cr	52	49.843	ug/L	0.156	0	15214	692449	0
	Cr	53	50.418	ug/L	0.373	0	99	76993	1
	Mn	55	50.329	ug/L	0.126	0	362	917622	0
	Co	59	49.937	ug/L	1.421	2	43	621175	1
>	Ge	72		ug/L			420257	401779	0
	Ni	60	49.871	ug/L	0.635	1	16	130922	1
	Ni	62	51.568	ug/L	0.519	1	150	19820	1
	Cu	63	49.221	ug/L	0.675	1	156	275769	1
	Cu	65	49.649	ug/L	0.411	0	26	122388	0
	Zn	66	49.813	ug/L	0.184	0	150	73573	0
	Zn	67	49.905	ug/L	0.907	1	23	12280	1
	Zn	68	49.885	ug/L	0.490	0	148	51640	0
	As	75	49.565	ug/L	0.345	0	645	67961	0
	As-1	75	49.485	ug/L	0.344	0	6520	71737	0
	Se	82	51.391	ug/L	0.735	1	-1	7760	1
	Se	78	49.493	ug/L	0.579	1	6575	24247	0
	Mo	98	49.201	ug/L	0.545	1	27	169588	1
	Y	89		ug/L			300262	290874	0
	Kr	83		ug/L			915	977	6
>	In	115		ug/L			761183	739401	0
	Ag	107	49.700	ug/L	2.291	4	19	303353	3
	Cd	111	50.196	ug/L	0.544	1	46	175602	0
	Cd	114	50.424	ug/L	0.945	1	14	440899	2
	Sb	121	50.271	ug/L	0.824	1	335	562697	1
	Sb	123	50.107	ug/L	0.317	0	242	423279	1
	Ba	135	48.937	ug/L	0.620	1	32	162416	1
	Ba	137	50.191	ug/L	0.740	1	48	283226	2
>	Tb	159		ug/L			829582	833035	0
	Tl	205	48.600	ug/L	0.129	0	81	1166423	0
	Pb	208	49.415	ug/L	0.378	0	95	1534038	1
	Bi	209		ug/L			1681351	1615056	1
	Th	232	47.836	ug/L	1.293	2	1043	1529698	2
	U	238	48.074	ug/L	0.191	0	24	1642654	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:04:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1096438	1
[	Be	9	0.000	ug/L	0.002	9301	10	10	54
	C	13		ug/L			79541	77090	2
	Cl	37		ug/L			3943707	3929290	2
[>	Sc	45		ug/L			998438	943862	2
[	V	51	-0.006	ug/L	0.004	69	5141	4750	1
[	V-1	51	0.005	ug/L	0.002	42	75	154	23
[	Cr	52	-0.038	ug/L	0.013	33	15214	13875	1
[	Cr	53	0.003	ug/L	0.001	26	99	98	2
[	Mn	55	0.012	ug/L	0.011	94	362	556	37
[	Co	59	0.002	ug/L	0.001	59	43	62	22
[>	Ge	72		ug/L			420257	400265	1
[	Ni	60	0.003	ug/L	0.003	95	16	23	32
[	Ni	62	3.523	ug/L	0.292	8	150	1481	6
[	Cu	63	0.164	ug/L	0.017	10	156	1064	8
[	Cu	65	0.009	ug/L	0.001	12	26	46	5
[	Zn	66	0.000	ug/L	0.021	73421	150	143	21
[	Zn	67	0.005	ug/L	0.031	677	23	23	32
[	Zn	68	-0.004	ug/L	0.018	487	148	137	12
[	As	75	0.075	ug/L	0.017	22	645	716	2
[	As-1	75	-0.033	ug/L	0.073	219	6520	6165	1
[	Se	82	0.176	ug/L	0.107	60	-1	25	62
[	Se	78	-0.124	ug/L	0.233	187	6575	6217	1
[	Mo	98	0.013	ug/L	0.004	33	27	69	20
	Y	89		ug/L			300262	282025	1
	Kr	83		ug/L			915	914	4
[>	In	115		ug/L			76[illegible]83	716849	1
[	Ag	107	0.003	ug/L	0.003	94	19	37	48
[	Cd	111	0.003	ug/L	0.003	136	46	52	21
[	Cd	114	0.002	ug/L	0.002	82	14	34	49
[	Sb	121	0.024	ug/L	0.007	29	335	572	13
[	Sb	123	0.019	ug/L	0.006	31	242	380	12
[	Ba	135	0.000	ug/L	0.003	1834	32	31	34
[	Ba	137	0.001	ug/L	0.002	132	48	52	16
[>	Tb	159		ug/L			829582	800023	1
[	Tl	205	0.008	ug/L	0.001	15	81	263	9
[	Pb	208	0.001	ug/L	0.001	70	95	136	23
[	Bi	209		ug/L			1681351	1619406	1
[	Th	232	0.057	ug/L	0.012	21	1043	2751	13
[	U	238	0.003	ug/L	0.001	45	24	127	38

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:08:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

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	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1098101	0
[	Be	9	0.002	ug/L	0.001	42	10	18	17
	C	13		ug/L			79541	86163	1
	Cl	37		ug/L			3943707	4262121	1
[>	Sc	45		ug/L			998438	1069329	0
[	V	51	1.210	ug/L	0.019	1	5141	28602	1
[	V-1	51	1.354	ug/L	0.031	2	75	25886	1
[	Cr	52	0.228	ug/L	0.044	19	15214	19725	3
[	Cr	53	0.745	ug/L	0.075	10	99	1360	8
[	Mn	55	54.997	ug/L	0.885	1	362	1107460	2
[	Co	59	0.536	ug/L	0.007	1	43	7407	0
[>	Ge	72		ug/L			420257	394638	1
[	Ni	60	2.832	ug/L	0.124	4	16	7314	3
[	Ni	62	4.976	ug/L	0.437	8	150	2007	9
[	Cu	63	1.681	ug/L	0.037	2	156	9389	0
[	Cu	65	0.975	ug/L	0.028	2	26	2383	1
[	Zn	66	1.467	ug/L	0.022	1	150	2264	2
[	Zn	67	1.810	ug/L	0.101	5	23	458	6
[	Zn	68	3.100	ug/L	0.169	5	148	3281	4
[	As	75	583.136	ug/L	15.234	2	645	778664	1
[	As-1	75	598.619	ug/L	15.651	2	6520	784275	1
[	Se	82	-0.104	ug/L	0.159	153	-1	-16	142
[	Se	78	0.521	ug/L	0.217	41	6575	6360	0
[	Mo	98	13.050	ug/L	0.254	1	27	44197	1
	Y	89		ug/L			300262	291046	1
	Kr	83		ug/L			915	1024	2
[>	In	115		ug/L			761183	733430	0
[	Ag	107	0.001	ug/L	0.001	58	19	26	17
[	Cd	111	0.211	ug/L	0.010	4	46	775	4
[	Cd	114	0.209	ug/L	0.003	1	14	1825	1
[	Sb	121	0.429	ug/L	0.006	1	335	5079	0
[	Sb	123	0.417	ug/L	0.006	1	242	3722	1
[	Ba	135	7.321	ug/L	0.161	2	32	24124	1
[	Ba	137	7.458	ug/L	0.063	0	48	41781	0
[>	Tb	159		ug/L			829582	836378	0
[	Tl	205	0.011	ug/L	0.008	67	81	350	51
[	Pb	208	0.141	ug/L	0.002	1	95	4476	1
[	Bi	209		ug/L			1681351	1558107	0
[	Th	232	0.194	ug/L	0.092	47	1043	7262	40
[	U	238	0.422	ug/L	0.009	2	24	14512	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:12:18
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1113810	1
[	Be	9	0.005	ug/L	0.001	17	10	27	11
	C	13		ug/L			79541	90273	2
	Cl	37		ug/L			3943707	4266720	3
[>	Sc	45		ug/L			998438	1053974	0
[	V	51	0.860	ug/L	0.009	1	5141	21612	1
[	V-1	51	0.985	ug/L	0.014	1	75	18586	2
[	Cr	52	0.239	ug/L	0.012	5	15214	19601	0
[	Cr	53	0.688	ug/L	0.027	3	99	1247	3
[	Mn	55	320.367	ug/L	4.925	1	362	6356708	2
[	Co	59	0.136	ug/L	0.003	2	43	1884	1
[>	Ge	72		ug/L			420257	403790	1
[	Ni	60	0.683	ug/L	0.018	2	16	1816	1
[	Ni	62	4.842	ug/L	0.957	19	150	2003	19
[	Cu	63	1.144	ug/L	0.053	4	156	6587	5
[	Cu	65	0.564	ug/L	0.014	2	26	1420	2
[	Zn	66	9.472	ug/L	0.176	1	150	14175	1
[	Zn	67	8.590	ug/L	0.117	1	23	2142	2
[	Zn	68	10.033	ug/L	0.219	2	148	10550	1
[	As	75	1756.200	ug/L	37.132	2	645	2398237	0
[	As-1	75	1802.589	ug/L	38.158	2	6520	2403851	0
[	Se	82	0.127	ug/L	0.051	40	-1	18	43
[	Se	78	0.255	ug/L	0.220	86	6575	6410	0
[	Mo	98	7.821	ug/L	0.038	0	27	27114	1
	Y	89		ug/L			300262	288816	1
	Kr	83		ug/L			915	972	1
[>	In	115		ug/L			761183	733807	0
[	Ag	107	0.000	ug/L	0.001	35906	19	18	42
[	Cd	111	0.099	ug/L	0.007	6	46	387	6
[	Cd	114	0.103	ug/L	0.002	1	14	909	1
[	Sb	121	0.035	ug/L	0.004	10	335	711	6
[	Sb	123	0.036	ug/L	0.003	7	242	537	3
[	Ba	135	2.909	ug/L	0.052	1	32	9609	1
[	Ba	137	2.986	ug/L	0.023	0	48	16763	0
[>	Tb	159		ug/L			829582	841152	0
[	Tl	205	0.001	ug/L	0.000	55	81	100	9
[	Pb	208	0.030	ug/L	0.000	1	95	1043	1
[	Bi	209		ug/L			1681351	1586260	0
[	Th	232	0.075	ug/L	0.027	35	1043	3485	23
[	U	238	0.019	ug/L	0.000	2	24	681	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:16:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1113358	1
	Be	9	0.002	ug/L	0.001	50	10	17	17
	C	13		ug/L			79541	91096	1
	Cl	37		ug/L			3943707	4060040	0
>	Sc	45		ug/L			998438	1010354	2
	V	51	0.438	ug/L	0.014	3	5141	13103	1
	V-1	51	0.493	ug/L	0.005	1	75	8948	1
	Cr	52	1.347	ug/L	0.050	3	15214	34496	0
	Cr	53	1.551	ug/L	0.017	1	99	2569	1
	Mn	55	11.474	ug/L	0.149	1	362	218572	2
	Co	59	0.182	ug/L	0.008	4	43	2402	2
>	Ge	72		ug/L			420257	391254	0
	Ni	60	4.537	ug/L	0.122	2	16	11612	2
	Ni	62	8.717	ug/L	0.289	3	150	3379	3
	Cu	63	1.420	ug/L	0.044	3	156	7885	2
	Cu	65	0.813	ug/L	0.018	2	26	1975	1
	Zn	66	13.453	ug/L	0.357	2	150	19448	1
	Zn	67	12.503	ug/L	0.586	4	23	3011	3
	Zn	68	13.682	ug/L	0.512	3	148	13888	2
	As	75	13.710	ug/L	0.624	4	645	18735	3
	As-1	75	14.108	ug/L	0.666	4	6520	24251	2
	Se	82	0.088	ug/L	0.074	84	-1	11	90
	Se	78	0.459	ug/L	0.203	44	6575	6283	0
	Mo	98	10.722	ug/L	0.276	2	27	36004	1
	Y	89		ug/L			300262	288504	1
	Kr	83		ug/L			915	956	0
>	In	115		ug/L			761183	727001	1
	Ag	107	0.062	ug/L	0.004	6	19	391	4
	Cd	111	0.116	ug/L	0.004	3	46	444	3
	Cd	114	0.109	ug/L	0.002	1	14	949	2
	Sb	121	0.528	ug/L	0.015	2	335	6121	1
	Sb	123	0.528	ug/L	0.012	2	242	4612	1
	Ba	135	10.187	ug/L	0.127	1	32	33261	1
	Ba	137	10.217	ug/L	0.090	0	48	56716	1
>	Tb	159		ug/L			829582	839090	0
	Tl	205	0.002	ug/L	0.001	43	81	123	14
	Pb	208	0.112	ug/L	0.002	1	95	3597	1
	Bi	209		ug/L			1681351	1561748	0
	Th	232	0.007	ug/L	0.005	70	1043	1293	12
	U	238	3.519	ug/L	0.035	0	24	121140	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:20:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

rr 20X AS

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6			ug/L			1101187	1097654	0
	Be	9	0.006		ug/L	0.003	50	10	29	32
	C	13			ug/L			79541	91993	1
	Cl	37			ug/L			3943707	4459279	0
>	Sc	45			ug/L			998438	1065440	0
	V	51	1.823		ug/L	0.023	1	5141	40167	0
	V-1	51	2.006		ug/L	0.028	1	75	38158	0
	Cr	52	0.319	U	ug/L	0.023	7	15214	21016	2
	Cr	53	0.969		ug/L	0.020	2	99	1732	1
	Mn	55	750.978		ug/L	10.136	1	362	15061134	0
	Co	59	0.404		ug/L	0.010	2	43	5574	1
>	Ge	72			ug/L			420257	390364	1
	Ni	60	2.879	✓	ug/L	0.039	1	16	7357	2
	Ni	62	7.611		ug/L	0.130	1	150	2960	0
	Cu	63	1.467		ug/L	0.018	1	156	8126	2
	Cu	65	0.834	✓	ug/L	0.024	2	26	2020	1
	Zn	66	5.929	✓	ug/L	0.164	2	150	8628	1
	Zn	67	5.737		ug/L	0.091	1	23	1390	1
	Zn	68	6.862		ug/L	0.122	1	148	7018	0
	As	75	887.854		ug/L	21.187	2	645	1172374	0
	As-1	75	911.432		ug/L	21.925	2	6520	1177976	0
	Se	82	0.178	U	ug/L	0.110	61	-1	25	64
	Se	78	0.865		ug/L	0.592	68	6575	6411	1
	Mo	98	0.841		ug/L	0.038	4	27	2838	2
	Y	89			ug/L			300262	288782	0
	Kr	83			ug/L			915	966	0
>	In	115			ug/L			761183	725378	0
	Ag	107	0.001	U	ug/L	0.001	126	19	24	31
	Cd	111	0.060	U	ug/L	0.000	0	46	249	0
	Cd	114	0.058	U	ug/L	0.001	2	14	515	2
	Sb	121	0.097	U	ug/L	0.003	2	335	1387	2
	Sb	123	0.094		ug/L	0.002	2	242	1005	1
	Ba	135	10.545		ug/L	0.293	2	32	34351	2
	Ba	137	10.560		ug/L	0.225	2	48	58489	1
>	Tb	159			ug/L			829582	840443	1
	Tl	205	0.001	U	ug/L	0.001	63	81	116	19
	Pb	208	0.040	U	ug/L	0.000	0	95	1359	0
	Bi	209			ug/L			1681351	1551789	0
	Th	232	0.019		ug/L	0.008	40	1043	1683	15
	U	238	0.195		ug/L	0.001	0	24	6747	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:24:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1098463	0
[	Be	9	0.006	ug/L	0.001	14	10	30	10
	C	13		ug/L			79541	89893	1
	Cl	37		ug/L			3943707	4402954	2
[>	Sc	45		ug/L			998438	1039490	1
[	V	51	0.875	ug/L	0.032	3	5141	21585	1
[	V-1	51	0.997	ug/L	0.028	2	75	18548	1
[	Cr	52	0.240	ug/L	0.022	8	15214	19336	0
[	Cr	53	0.678	ug/L	0.029	4	99	1213	3
[	Mn	55	325.360	ug/L	3.681	1	362	6366651	1
[	Co	59	0.132	ug/L	0.007	5	43	1809	4
[>	Ge	72		ug/L			420257	392399	1
[	Ni	60	0.967	ug/L	0.035	3	16	2494	2
[	Ni	62	6.077	ug/L	0.469	7	150	2406	8
[	Cu	63	1.149	ug/L	0.032	2	156	6429	2
[	Cu	65	0.521	ug/L	0.008	1	26	1277	2
[	Zn	66	10.039	ug/L	0.104	1	150	14591	0
[	Zn	67	8.889	ug/L	0.536	6	23	2153	5
[	Zn	68	10.504	ug/L	0.098	0	148	10728	0
[	As	75	1762.531	ug/L	32.310	1	645	2339000	0
[	As-1	75	1809.255	ug/L	33.166	1	6520	2344673	0
[	Se	82	0.133	ug/L	0.127	95	-1	18	100
[	Se	78	0.927	ug/L	0.119	12	6575	6468	1
[	Mo	98	7.759	ug/L	0.181	2	27	26137	1
	Y	89		ug/L			300262	289440	3
	Kr	83		ug/L			915	971	3
[>	In	115		ug/L			761183	730659	1
[	Ag	107	0.004	ug/L	0.000	5	19	42	2
[	Cd	111	0.105	ug/L	0.007	6	46	408	5
[	Cd	114	0.102	ug/L	0.006	5	14	895	4
[	Sb	121	0.027	ug/L	0.003	10	335	622	6
[	Sb	123	0.024	ug/L	0.004	17	242	431	9
[	Ba	135	2.897	ug/L	0.034	1	32	9528	0
[	Ba	137	2.906	ug/L	0.048	1	48	16242	0
[>	Tb	159		ug/L			829582	848314	0
[	Tl	205	0.001	ug/L	0.000	34	81	112	8
[	Pb	208	0.028	ug/L	0.001	2	95	974	1
[	Bi	209		ug/L			1681351	1590364	0
[	Th	232	0.000	ug/L	0.003	6560	1043	1068	8
[	U	238	0.020	ug/L	0.001	4	24	729	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:28:47
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

DEL 11 20+

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1105384	1
[	Be	9	0.006	ug/L	0.002	28	10	32	18
	C	13		ug/L			79541	92177	0
	Cl	37		ug/L			3943707	4498754	1
[>	Sc	45		ug/L			998438	1063497	1
[	V	51	1.846	ug/L	0.022	1	5141	40528	0
[	V-1	51	1.987	ug/L	0.024	1	75	37725	0
[	Cr	52	0.289	ug/L	0.034	11	15214	20511	1
[	Cr	53	0.786	ug/L	0.026	3	99	1421	1
[	Mn	55	744.221	ug/L	22.223	2	362	14896569	2
[	Co	59	0.392	ug/L	0.007	1	43	5396	0
[>	Ge	72		ug/L			420257	387788	1
[	Ni	60	2.623	ug/L	0.065	2	16	6658	1
[	Ni	62	7.037	ug/L	0.190	2	150	2730	1
[	Cu	63	1.451	ug/L	0.009	0	156	7987	1
[	Cu	65	0.898	ug/L	0.011	1	26	2160	1
[	Zn	66	5.250	ug/L	0.086	1	150	7607	2
[	Zn	67	5.268	ug/L	0.109	2	23	1270	3
[	Zn	68	6.331	ug/L	0.356	5	148	6440	3
[	As	75	946.567	ug/L	24.832	2	645	1241513	0
[	As-1	75	971.765	ug/L	25.586	2	6520	1247166	0
[	Se	82	0.076	ug/L	0.122	160	-1	10	174
[	Se	78	1.067	ug/L	0.399	37	6575	6439	0
[	Mo	98	0.837	ug/L	0.019	2	27	2809	0
	Y	89		ug/L			300262	290902	1
	Kr	83		ug/L			915	986	5
[>	In	115		ug/L			761183	730680	0
[	Ag	107	-0.000	ug/L	0.001	158	19	15	25
[	Cd	111	0.067	ug/L	0.003	4	46	277	3
[	Cd	114	0.067	ug/L	0.003	3	14	588	4
[	Sb	121	0.090	ug/L	0.004	4	335	1316	2
[	Sb	123	0.087	ug/L	0.005	6	242	960	4
[	Ba	135	10.446	ug/L	0.142	1	32	34281	1
[	Ba	137	10.585	ug/L	0.019	0	48	59060	0
[>	Tb	159		ug/L			829582	845420	0
[	Tl	205	0.001	ug/L	0.000	16	81	111	4
[	Pb	208	0.035	ug/L	0.002	5	95	1192	4
[	Bi	209		ug/L			1681351	1564524	0
[	Th	232	-0.003	ug/L	0.003	109	1043	967	10
[	U	238	0.181	ug/L	0.001	0	24	6304	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:32:55
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			1101187	1048260	0
⌊	Be	9	0.168	ug/L	0.008	4	10	564	4
	C	13		ug/L			79541	105238	1
	Cl	37		ug/L			3943707	6303875	0
⌈>	Sc	45		ug/L			998438	1093713	0
⌈	V	51	80.487	ug/L	0.928	1	5141	1577472	1
⌊	V-1	51	80.959	ug/L	0.908	1	75	1577929	1
⌈	Cr	52	14.659	ug/L	0.172	1	15214	241804	0
⌊	Cr	53	15.882	ug/L	0.259	1	99	27470	1
⌈	Mn	55	354.950	ug/L	3.378	0	362	7308119	0
⌊	Co	59	0.703	ug/L	0.016	2	43	9921	2
⌈>	Ge	72		ug/L			420257	373052	1
⌈	Ni	60	0.963	ug/L	0.029	2	16	2361	1
⌊	Ni	62	44.631	ug/L	21.735	48	150	15964	48
⌈	Cu	63	7.996	ug/L	1.599	19	156	41728	20
⌊	Cu	65	1.956	ug/L	0.153	7	26	4500	8
⌈	Zn	66	1.484	ug/L	0.081	5	150	2163	3
⌊	Zn	67	5.555	ug/L	0.305	5	23	1286	3
⌊	Zn	68	2.471	ug/L	0.138	5	148	2498	4
⌈	As	75	35.272	ug/L	0.711	2	645	45063	1
⌊	As-1	75	36.825	ug/L	0.559	1	6520	51041	0
⌈	Se	82	0.925	ug/L	0.185	19	-1	128	18
⌊	Se	78	3.833	ug/L	0.991	25	6575	7128	4
⌊	Mo	98	0.469	ug/L	0.006	1	27	1524	1
	Y	89		ug/L			300262	361919	0
	Kr	83		ug/L			915	1067	4
⌈>	In	115		ug/L			761183	689502	1
⌈	Ag	107	0.023	ug/L	0.002	7	19	149	7
⌈	Cd	111	0.048	ug/L	0.008	16	46	199	13
⌊	Cd	114	0.007	ug/L	0.001	13	14	70	10
⌈	Sb	121	0.052	ug/L	0.004	7	335	846	3
⌊	Sb	123	0.049	ug/L	0.004	8	242	604	5
⌈	Ba	135	4.518	ug/L	0.074	1	32	14006	0
⌊	Ba	137	4.568	ug/L	0.036	0	48	24071	0
⌈>	Tb	159		ug/L			829582	815313	0
⌈	Tl	205	0.001	ug/L	0.000	15	81	96	3
⌊	Pb	208	0.107	ug/L	0.002	2	95	3347	2
⌈	Bi	209		ug/L			1681351	1426567	0
⌊	Th	232	0.200	ug/L	0.005	2	1043	7286	2
⌊	U	238	0.193	ug/L	0.004	1	24	6493	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 K REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:37:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

DEL 11 20f

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1099446	2
	Be	9	0.001	ug/L	0.001	106	10	13	22
	C	13		ug/L			79541	88792	2
	Cl	37		ug/L			3943707	4251773	1
>	Sc	45		ug/L			998438	1087556	0
	V	51	1.083	ug/L	0.020	1	5141	26628	2
	V-1	51	1.197	ug/L	0.024	1	75	23279	2
	Cr	52	0.161	ug/L	0.023	14	15214	19036	2
	Cr	53	0.567	ug/L	0.032	5	99	1080	5
	Mn	55	57.037	ug/L	0.403	0	362	1168050	0
	Co	59	0.887	ug/L	0.009	1	43	12440	1
>	Ge	72		ug/L			420257	385218	2
	Ni	60	1.776	ug/L	0.011	0	16	4484	1
	Ni	62	42.414	ug/L	6.577	15	150	15661	15
	Cu	63	3.772	ug/L	0.560	14	156	20404	15
	Cu	65	0.499	ug/L	0.021	4	26	1202	3
	Zn	66	1.560	ug/L	0.060	3	150	2340	1
	Zn	67	1.898	ug/L	0.060	3	23	468	5
	Zn	68	3.219	ug/L	0.057	1	148	3322	2
	As	75	622.119	ug/L	17.309	2	645	810680	0
	As-1	75	638.956	ug/L	17.842	2	6520	816567	0
	Se	82	-0.044	ug/L	0.167	376	-1	-7	314
	Se	78	1.724	ug/L	0.567	32	6575	6625	2
	Mo	98	12.348	ug/L	0.269	2	27	40812	1
	Y	89		ug/L			300262	285991	1
	Kr	83		ug/L			915	984	5
>	In	115		ug/L			761183	723740	1
	Ag	107	-0.001	ug/L	0.001	47	19	11	26
	Cd	111	0.027	ug/L	0.002	9	46	135	4
	Cd	114	0.026	ug/L	0.001	2	14	235	2
	Sb	121	0.347	ug/L	0.004	1	335	4119	2
	Sb	123	0.341	ug/L	0.013	3	242	3052	3
	Ba	135	7.339	ug/L	0.114	1	32	23862	0
	Ba	137	7.436	ug/L	0.062	0	48	41106	1
>	Tb	159		ug/L			829582	837439	0
	Tl	205	0.000	ug/L	0.000	15	81	93	1
	Pb	208	0.023	ug/L	0.001	4	95	812	4
	Bi	209		ug/L			1681351	1576723	0
	Th	232	-0.020	ug/L	0.001	3	1043	400	4
	U	238	0.380	ug/L	0.006	1	24	13070	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:41:11
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1088159	0
	Be	9	193.306	ug/L	2.722	1	10	662167	1
	C	13		ug/L			79541	81454	1
	Cl	37		ug/L			3943707	4326214	2
>	Sc	45		ug/L			998438	933737	0
	V	51	206.787	ug/L	2.270	1	5141	3452407	1
	V-1	51	205.034	ug/L	1.728	0	75	3411549	1
	Cr	52	204.679	ug/L	1.410	0	15214	2698014	0
	Cr	53	198.320	ug/L	3.884	1	99	291809	2
	Mn	55	202.586	ug/L	0.635	0	362	3561091	0
	Co	59	204.790	ug/L	1.816	0	43	2457036	1
>	Ge	72		ug/L			420257	381124	1
	Ni	60	190.033	ug/L	4.482	2	16	473103	1
	Ni	62	249.587	ug/L	7.121	2	150	90454	2
	Cu	63	195.785	ug/L	3.885	1	156	1039905	0
	Cu	65	192.517	ug/L	0.791	0	26	450093	1
	Zn	66	187.953	ug/L	3.641	1	150	262940	2
	Zn	67	187.606	ug/L	3.257	1	23	43737	2
	Zn	68	188.488	ug/L	2.985	1	148	184708	1
	As	75	192.149	ug/L	4.307	2	645	248196	1
	As-1	75	192.854	ug/L	3.378	1	6520	248040	1
	Se	82	196.117	ug/L	5.524	2	-1	28089	1
	Se	78	192.096	ug/L	3.629	1	6575	72077	0
	Mo	98	198.859	ug/L	5.344	2	27	649986	1
	Y	89		ug/L			300262	278035	1
	Kr	83		ug/L			915	1127	4
>	In	115		ug/L			761183	708028	0
	Ag	107	188.147	ug/L	2.904	1	19	1099814	1
	Cd	111	193.468	ug/L	1.424	0	46	647994	0
	Cd	114	194.391	ug/L	2.622	1	14	1627385	1
	Sb	121	208.999	ug/L	2.662	1	335	2239156	1
	Sb	123	200.542	ug/L	3.162	1	242	1621512	1
	Ba	135	199.189	ug/L	4.440	2	32	632920	2
	Ba	137	202.601	ug/L	3.947	1	48	1094526	1
>	Tb	159		ug/L			829582	824359	1
	Tl	205	196.111	ug/L	2.116	1	81	4657391	1
	Pb	208	197.323	ug/L	1.841	0	95	6061193	0
	Bi	209		ug/L			1681351	1544575	1
	Th	232	199.140	ug/L	1.356	0	1043	6298878	1
	U	238	197.112	ug/L	3.001	1	24	6664443	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLK
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:47:04
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1176301	100
[	Be	9	0.001	ug/L	0.004	317	10	8	78
	C	13		ug/L			79541	51918	23
	Cl	37		ug/L			3943707	1978921	46
[>	Sc	45		ug/L			998438	1129135	98
[	V	51	-0.031	ug/L	0.269	873	5141	2059	49
[	V-1	51	0.020	ug/L	0.027	138	75	176	49
[	Cr	52	-0.085	ug/L	1.065	1252	15214	6110	47
[	Cr	53	0.097	ug/L	0.197	204	99	88	34
[	Mn	55	0.072	ug/L	0.101	140	362	654	51
[	Co	59	0.010	ug/L	0.015	155	43	65	40
[>	Ge	72		ug/L			420257	458372	95
[	Ni	60	0.008	ug/L	0.011	144	16	21	58
[	Ni	62	91.395	ug/L	131.702	144	150	9502	15
[	Cu	63	4.088	ug/L	5.778	141	156	6649	13
[	Cu	65	0.109	ug/L	0.151	137	26	110	32
[	Zn	66	0.017	ug/L	0.055	332	150	143	86
[	Zn	67	0.013	ug/L	0.044	331	23	21	70
[	Zn	68	0.114	ug/L	0.211	185	148	151	54
[	As	75	0.761	ug/L	1.282	168	645	712	47
[	As-1	75	6.047	ug/L	13.559	224	6520	4995	17
[	Se	82	-0.079	ug/L	0.091	114	-1	-9	169
[	Se	78	21.684	ug/L	49.188	226	6575	4965	17
[	Mo	98	0.055	ug/L	0.037	67	27	180	94
	Y	89		ug/L			300262	332156	93
	Kr	83		ug/L			915	912	51
[>	In	115		ug/L			761183	903018	92
[	Ag	107	0.003	ug/L	0.003	91	19	33	77
[	Cd	111	0.001	ug/L	0.004	485	46	48	83
[	Cd	114	0.002	ug/L	0.001	32	14	34	90
[	Sb	121	0.050	ug/L	0.030	60	335	941	98
[	Sb	123	0.045	ug/L	0.021	46	242	704	102
[	Ba	135	-0.004	ug/L	0.000	3	32	22	93
[	Ba	137	-0.003	ug/L	0.001	50	48	44	105
[>	Tb	159		ug/L			829582	1081604	93
[	Tl	205	0.021	ug/L	0.008	36	81	626	81
[	Pb	208	0.003	ug/L	0.001	40	95	202	82
[	Bi	209		ug/L			1681351	2238972	92
[	Th	232	0.679	ug/L	0.221	32	1043	30898	115
[	U	238	0.006	ug/L	0.001	19	24	293	93

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~CCV5~~ 222222
Sample Dil Factor:
Comments: 5/3/12 JB
Sample Date/Time: Thursday, May 03, 2012 13:53:37
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

Air in Sample Loop - rerun

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1103561	5
[	Be	9	42.207	ug/L	13.362	31	10	145026	27
	C	13		ug/L			79541	72970	10
	Cl	37		ug/L			3943707	3990331	13
[>	Sc	45		ug/L			998438	1008163	6
[	V	51	41.019	ug/L	13.860	33	5141	732585	26
[	V-1	51	41.048	ug/L	13.617	33	75	726691	28
[	Cr	52	41.399	ug/L	14.492	35	15214	592317	29
[	Cr	53	41.507	ug/L	13.643	32	99	65047	27
[	Mn	55	41.767	ug/L	13.769	32	362	781265	27
[	Co	59	41.507	ug/L	14.175	34	43	529554	29
[>	Ge	72		ug/L			420257	396380	1
[	Ni	60	42.922	ug/L	12.700	29	16	110902	28
[	Ni	62	54.695	ug/L	12.046	22	150	20694	20
[	Cu	63	42.992	ug/L	11.863	27	156	237118	26
[	Cu	65	43.474	ug/L	13.069	30	26	105477	29
[	Zn	66	43.481	ug/L	13.409	30	150	63224	29
[	Zn	67	43.472	ug/L	13.462	30	23	10530	29
[	Zn	68	43.320	ug/L	12.245	28	148	44160	27
[	As	75	42.973	ug/L	12.280	28	645	58078	27
[	As-1	75	42.526	ug/L	12.527	29	6520	61553	25
[	Se	82	45.000	ug/L	12.941	28	-1	6688	27
[	Se	78	41.966	ug/L	13.532	32	6575	21187	21
[	Mo	98	43.094	ug/L	12.057	27	27	146214	27
	Y	89		ug/L			300262	289013	7
	Kr	83		ug/L			915	929	5
[>	In	115		ug/L			761183	738745	4
[	Ag	107	41.105	ug/L	13.208	32	19	248090	28
[	Cd	111	42.713	ug/L	12.776	29	46	147837	26
[	Cd	114	43.246	ug/L	12.736	29	14	374111	25
[	Sb	121	43.273	ug/L	13.087	30	335	479160	26
[	Sb	123	43.108	ug/L	12.942	30	242	360246	26
[	Ba	135	42.760	ug/L	12.396	28	32	140437	25
[	Ba	137	43.057	ug/L	12.178	28	48	240477	24
[>	Tb	159		ug/L			829582	819337	2
[	Tl	205	41.511	ug/L	11.736	28	81	975702	26
[	Pb	208	43.284	ug/L	11.610	26	95	1316189	24
[	Bi	209		ug/L			1681351	1703483	10
[	Th	232	41.291	ug/L	12.882	31	1043	1292795	29
[	U	238	41.982	ug/L	11.719	27	24	1404922	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 13:59:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1079081	0
	Be	9	51.019	ug/L	0.824	1	10	173297	0
	C	13		ug/L			79541	74851	1
	Cl	37		ug/L			3943707	4266396	2
>	Sc	45		ug/L			998438	951268	1
	V	51	49.565	ug/L	0.601	1	5141	846701	0
	V-1	51	49.752	ug/L	0.868	1	75	843302	0
	Cr	52	49.661	ug/L	0.364	0	15214	677860	0
	Cr	53	50.338	ug/L	1.323	2	99	75511	1
	Mn	55	50.154	ug/L	0.882	1	362	898367	1
	Co	59	50.339	ug/L	0.943	1	43	615252	1
>	Ge	72		ug/L			420257	395064	1
	Ni	60	49.445	ug/L	0.585	1	16	127645	2
	Ni	62	57.209	ug/L	1.208	2	150	21606	2
	Cu	63	49.309	ug/L	1.070	2	156	271609	1
	Cu	65	49.059	ug/L	0.264	0	26	118909	0
	Zn	66	50.071	ug/L	1.113	2	150	72707	1
	Zn	67	50.455	ug/L	0.653	1	23	12208	1
	Zn	68	49.254	ug/L	0.596	1	148	50138	1
	As	75	49.317	ug/L	0.391	0	645	66493	1
	As-1	75	49.110	ug/L	0.407	0	6520	70047	0
	Se	82	51.614	ug/L	0.798	1	-1	7664	2
	Se	78	49.373	ug/L	1.104	2	6575	23797	1
	Mo	98	48.464	ug/L	0.918	1	27	164235	0
	Y	89		ug/L			300262	284133	0
	Kr	83		ug/L			915	997	3
>	In	115		ug/L			761183	719628	0
	Ag	107	48.941	ug/L	0.524	1	19	290787	0
	Cd	111	51.614	ug/L	0.491	0	46	175740	0
	Cd	114	51.026	ug/L	0.212	0	14	434190	0
	Sb	121	50.447	ug/L	0.241	0	335	549585	0
	Sb	123	51.159	ug/L	0.289	0	242	420600	0
	Ba	135	49.546	ug/L	0.262	0	32	160029	0
	Ba	137	49.743	ug/L	0.602	1	48	273159	0
>	Tb	159		ug/L			829582	813782	1
	Tl	205	48.477	ug/L	0.747	1	81	1136425	0
	Pb	208	49.653	ug/L	0.543	1	95	1505618	0
	Bi	209		ug/L			1681351	1600180	0
	Th	232	47.800	ug/L	1.029	2	1043	1493017	0
	U	238	48.365	ug/L	1.021	2	24	1614106	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:05:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1050582	0
[	Be	9	-0.000	ug/L	0.002	559	10	9	69
	C	13		ug/L			79541	72979	2
	Cl	37		ug/L			3943707	4114891	2
[>	Sc	45		ug/L			998438	929741	0
[	V	51	-0.008	ug/L	0.010	126	5141	4652	4
[	V-1	51	0.004	ug/L	0.002	49	75	138	24
[	Cr	52	-0.039	ug/L	0.036	91	15214	13664	4
[	Cr	53	0.005	ug/L	0.003	53	99	100	4
[	Mn	55	0.006	ug/L	0.004	59	362	449	15
[	Co	59	0.001	ug/L	0.001	65	43	54	17
[>	Ge	72		ug/L			420257	381452	0
[	Ni	60	0.003	ug/L	0.004	104	16	23	38
[	Ni	62	8.707	ug/L	0.577	6	150	3290	6
[	Cu	63	0.483	ug/L	0.038	7	156	2706	7
[	Cu	65	0.016	ug/L	0.002	15	26	60	9
[	Zn	66	0.000	ug/L	0.011	7138	150	136	11
[	Zn	67	0.008	ug/L	0.007	91	23	23	7
[	Zn	68	-0.005	ug/L	0.005	112	148	129	3
[	As	75	0.103	ug/L	0.022	20	645	719	4
[	As-1	75	0.184	ug/L	0.008	4	6520	6150	0
[	Se	82	0.035	ug/L	0.109	307	-1	4	375
[	Se	78	0.624	ug/L	0.061	9	6575	6183	0
[	Mo	98	0.018	ug/L	0.003	17	27	83	12
	Y	89		ug/L			300262	272227	0
	Kr	83		ug/L			915	962	3
[>	In	115		ug/L			761183	696886	0
[	Ag	107	0.001	ug/L	0.000	22	19	24	6
[	Cd	111	0.003	ug/L	0.001	41	46	53	8
[	Cd	114	0.001	ug/L	0.001	45	14	24	20
[	Sb	121	0.036	ug/L	0.012	32	335	688	17
[	Sb	123	0.038	ug/L	0.013	34	242	526	19
[	Ba	135	-0.001	ug/L	0.001	89	32	26	11
[	Ba	137	0.000	ug/L	0.001	1623	48	44	14
[>	Tb	159		ug/L			829582	773584	0
[	Tl	205	0.012	ug/L	0.000	2	81	346	2
[	Pb	208	0.001	ug/L	0.000	46	95	112	9
[	Bi	209		ug/L			1681351	1564935	1
[	Th	232	0.080	ug/L	0.021	25	1043	3356	18
[	U	238	0.003	ug/L	0.000	10	24	104	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:17:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

DEL confirms

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1089895	1
[	Be	9	-0.000	ug/L	0.000	85	10	9	12
	C	13		ug/L			79541	82134	3
	Cl	37		ug/L			3943707	3991437	2
[>	Sc	45		ug/L			998438	947403	2
	V	51	0.007	ug/L	0.004	62	5141	4996	2
	V-1	51	0.014	ug/L	0.003	22	75	301	15
	Cr	52	0.005	ug/L	0.014	310	15214	14499	2
	Cr	53	0.029	ug/L	0.009	30	99	137	8
	Mn	55	0.504	ug/L	0.012	2	362	9324	0
[	Co	59	0.002	ug/L	0.001	47	43	60	13
[>	Ge	72		ug/L			420257	381231	1
	Ni	60	0.017	ug/L	0.001	7	16	57	4
	Ni	62	4.418	ug/L	0.280	6	150	1735	4
	Cu	63	0.371	ug/L	0.014	3	156	2111	2
	Cu	65	0.145	ug/L	0.007	4	26	361	4
	Zn	66	0.337	ug/L	0.020	6	150	607	4
	Zn	67	0.275	ug/L	0.031	11	23	85	7
	Zn	68	0.350	ug/L	0.038	10	148	477	6
	As	75	0.694	ug/L	0.018	2	645	1479	0
	As-1	75	0.819	ug/L	0.079	9	6520	6943	0
	Se	82	0.131	ug/L	0.102	77	-1	17	81
	Se	78	0.834	ug/L	0.319	38	6575	6251	0
[	Mo	98	0.006	ug/L	0.003	45	27	43	20
	Y	89		ug/L			300262	280236	1
	Kr	83		ug/L			915	962	3
[>	In	115		ug/L			761183	723300	1
	Ag	107	-0.001	ug/L	0.000	42	19	13	15
	Cd	111	0.002	ug/L	0.002	127	46	50	14
	Cd	114	0.001	ug/L	0.000	18	14	21	8
	Sb	121	-0.002	ug/L	0.007	339	335	296	23
	Sb	123	-0.000	ug/L	0.010	2054	242	225	33
	Ba	135	0.011	ug/L	0.003	29	32	67	14
[	Ba	137	0.011	ug/L	0.004	35	48	107	19
[>	Tb	159		ug/L			829582	785676	0
	Tl	205	0.022	ug/L	0.008	35	81	574	30
	Pb	208	0.005	ug/L	0.001	21	95	247	13
	Bi	209		ug/L			1681351	1570890	0
	Th	232	0.035	ug/L	0.008	22	1043	2028	11
[	U	238	0.001	ug/L	0.001	107	24	45	53

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:21:32
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

DEL Confirm

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1061105	0
	Be	9	-0.001	ug/L	0.001	42	10	6	28
	C	13		ug/L			79541	82908	1
	Cl	37		ug/L			3943707	3875000	3
>	Sc	45		ug/L			998438	968278	1
	V	51	-0.004	ug/L	0.007	148	5141	4907	1
	V-1	51	0.011	ug/L	0.001	11	75	260	7
	Cr	52	-0.019	ug/L	0.016	82	15214	14494	0
	Cr	53	0.036	ug/L	0.007	20	99	151	8
	Mn	55	0.233	ug/L	0.008	3	362	4592	1
	Co	59	0.001	ug/L	0.001	58	43	56	15
>	Ge	72		ug/L			420257	383955	2
	Ni	60	0.009	ug/L	0.002	24	16	36	15
	Ni	62	3.622	ug/L	0.261	7	150	1457	4
	Cu	63	0.333	ug/L	0.026	7	156	1923	5
	Cu	65	0.144	ug/L	0.002	1	26	363	3
	Zn	66	0.343	ug/L	0.018	5	150	619	2
	Zn	67	0.296	ug/L	0.032	10	23	90	6
	Zn	68	0.335	ug/L	0.032	9	148	465	8
	As	75	0.311	ug/L	0.016	5	645	993	3
	As-1	75	0.490	ug/L	0.038	7	6520	6576	1
	Se	82	-0.072	ug/L	0.081	112	-1	-11	101
	Se	78	0.880	ug/L	0.162	18	6575	6312	1
	Mo	98	0.004	ug/L	0.001	23	27	39	7
	Y	89		ug/L			300262	281460	1
	Kr	83		ug/L			915	983	2
>	In	115		ug/L			761183	716621	1
	Ag	107	0.007	ug/L	0.000	7	19	57	5
	Cd	111	0.001	ug/L	0.002	239	46	46	16
	Cd	114	0.001	ug/L	0.000	38	14	20	14
	Sb	121	-0.014	ug/L	0.004	27	335	163	25
	Sb	123	-0.013	ug/L	0.005	38	242	118	34
	Ba	135	0.005	ug/L	0.003	56	32	47	18
	Ba	137	0.005	ug/L	0.001	20	48	75	8
>	Tb	159		ug/L			829582	786012	0
	Tl	205	0.006	ug/L	0.002	32	81	212	20
	Pb	208	0.006	ug/L	0.000	7	95	273	4
	Bi	209		ug/L			1681351	1582839	0
	Th	232	0.004	ug/L	0.006	151	1043	1098	15
	U	238	-0.000	ug/L	0.000	319	24	21	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 C REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:25:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1065878	0
	Be	9	-0.001	ug/L	0.001	155	10	8	45
	C	13		ug/L			79541	75056	1
	Cl	37		ug/L			3943707	3982711	0
>	Sc	45		ug/L			998438	943357	1
	V	51	0.140	ug/L	0.012	8	5141	7214	1
	V-1	51	0.167	ug/L	0.003	1	75	2883	0
	Cr	52	0.022	ug/L	0.033	148	15214	14668	1
	Cr	53	0.120	ug/L	0.004	2	99	272	2
	Mn	55	6.414	ug/L	0.157	2	362	114226	2
	Co	59	0.064	ug/L	0.001	1	43	820	0
>	Ge	72		ug/L			420257	393185	1
	Ni	60	0.346	ug/L	0.009	2	16	904	2
	Ni	62	2.719	ug/L	0.135	4	150	1155	3
	Cu	63	0.318	ug/L	0.018	5	156	1885	3
	Cu	65	0.128	ug/L	0.005	4	26	334	2
	Zn	66	0.348	ug/L	0.026	7	150	642	5
	Zn	67	0.359	ug/L	0.050	13	23	108	12
	Zn	68	0.496	ug/L	0.015	3	148	639	1
	As	75	62.125	ug/L	0.988	1	645	83194	0
	As-1	75	63.765	ug/L	1.096	1	6520	88688	0
	Se	82	0.025	ug/L	0.029	113	-1	2	153
	Se	78	0.288	ug/L	0.293	101	6575	6253	0
	Mo	98	1.271	ug/L	0.049	3	27	4313	5
	Y	89		ug/L			300262	280876	1
	Kr	83		ug/L			915	975	2
>	In	115		ug/L			761183	724542	0
	Ag	107	-0.001	ug/L	0.001	287	19	15	59
	Cd	111	0.024	ug/L	0.006	25	46	125	16
	Cd	114	0.024	ug/L	0.003	12	14	219	12
	Sb	121	0.026	ug/L	0.002	8	335	600	3
	Sb	123	0.023	ug/L	0.005	21	242	422	9
	Ba	135	0.756	ug/L	0.005	0	32	2488	1
	Ba	137	0.740	ug/L	0.010	1	48	4136	2
>	Tb	159		ug/L			820582	799438	0
	Tl	205	0.005	ug/L	0.002	47	81	199	28
	Pb	208	0.022	ug/L	0.002	8	95	744	6
	Bi	209		ug/L			1681351	1590472	1
	Th	232	-0.017	ug/L	0.002	12	1043	474	14
	U	238	0.043	ug/L	0.002	3	24	1447	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 F REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:29:47
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

As only

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1066521	1
[	Be	9	-0.001	ug/L	0.000	43	10	6	22
	C	13		ug/L			79541	76539	0
	Cl	37		ug/L			3943707	3963135	1
[>	Sc	45		ug/L			998438	964661	1
[	V	51	0.206	ug/L	0.009	4	5141	8523	2
[	V-1	51	0.233	ug/L	0.005	1	75	4083	2
[	Cr	52	0.037	ug/L	0.016	43	15214	15206	2
[	Cr	53	0.133	ug/L	0.010	7	99	298	6
[	Mn	55	83.155	ug/L	2.239	2	362	1509905	1
[	Co	59	0.048	ug/L	0.001	2	43	637	2
[>	Ge	72		ug/L			420257	398293	0
[	Ni	60	0.342	ug/L	0.011	3	16	904	3
[	Ni	62	2.440	ug/L	0.107	4	150	1065	3
[	Cu	63	0.251	ug/L	0.003	1	156	1541	1
[	Cu	65	0.107	ug/L	0.009	8	26	287	7
[	Zn	66	0.880	ug/L	0.032	3	150	1427	3
[	Zn	67	0.897	ug/L	0.030	3	23	240	3
[	Zn	68	0.934	ug/L	0.008	0	148	1095	1
[	As	75	95.684	ug/L	0.680	0	645	129483	0
[	As-1	75	98.189	ug/L	0.737	0	6520	135021	0
[	Se	82	0.010	ug/L	0.033	314	-1	0	817
[	Se	78	0.150	ug/L	0.164	109	6575	6285	0
[	Mo	98	0.076	ug/L	0.006	7	27	285	7
	Y	89		ug/L			300262	286696	1
	Kr	83		ug/L			915	968	0
[>	In	115		ug/L			761183	724055	0
[	Ag	107	-0.000	ug/L	0.000	25	19	15	3
[	Cd	111	0.003	ug/L	0.002	50	46	54	8
[	Cd	114	0.007	ug/L	0.000	5	14	70	3
[	Sb	121	-0.010	ug/L	0.002	18	335	205	9
[	Sb	123	-0.010	ug/L	0.004	38	242	149	19
[	Ba	135	1.040	ug/L	0.024	2	32	3411	3
[	Ba	137	1.069	ug/L	0.003	0	48	5952	1
[>	Tb	159		ug/L			829582	803680	1
[	Tl	205	0.002	ug/L	0.001	34	81	124	13
[	Pb	208	0.009	ug/L	0.000	3	95	367	4
[	Bi	209		ug/L			1681351	1600467	0
[	Th	232	-0.014	ug/L	0.002	14	1043	591	10
[	U	238	0.020	ug/L	0.000	1	24	675	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 D REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:33:54
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1065768	0
	Be	9	-0.001	ug/L	0.000	16	10	6	8
	C	13		ug/L			79541	75498	0
	Cl	37		ug/L			3943707	3822759	1
>	Sc	45		ug/L			998438	945468	0
	V	51	0.045	ug/L	0.001	1	5141	5627	1
	V-1	51	0.058	ug/L	0.003	5	75	1052	5
	Cr	52	0.006	ug/L	0.008	138	15214	14486	1
	Cr	53	0.054	ug/L	0.009	16	99	174	6
	Mn	55	17.746	ug/L	0.202	1	362	316203	2
	Co	59	0.008	ug/L	0.001	8	43	136	7
>	Ge	72		ug/L			420257	393634	0
	Ni	60	0.060	ug/L	0.004	7	16	169	5
	Ni	62	2.265	ug/L	0.122	5	150	987	4
	Cu	63	0.172	ug/L	0.007	3	156	1088	2
	Cu	65	0.056	ug/L	0.005	8	26	160	6
	Zn	66	0.832	ug/L	0.028	3	150	1342	3
	Zn	67	0.731	ug/L	0.038	5	23	197	4
	Zn	68	0.813	ug/L	0.027	3	148	961	3
	As	75	96.313	ug/L	0.685	0	645	128810	0
	As-1	75	98.883	ug/L	0.719	0	6520	134345	0
	Se	82	0.042	ug/L	0.032	76	-1	5	90
	Se	78	0.477	ug/L	0.259	54	6575	6328	0
	Mo	98	0.388	ug/L	0.005	1	27	1335	1
	Y	89		ug/L			300262	281752	2
	Kr	83		ug/L			915	1010	1
>	In	115		ug/L			761183	722408	1
	Ag	107	-0.001	ug/L	0.001	93	19	12	39
	Cd	111	0.004	ug/L	0.003	70	46	58	16
	Cd	114	0.006	ug/L	0.000	8	14	61	7
	Sb	121	-0.020	ug/L	0.003	15	335	104	31
	Sb	123	-0.019	ug/L	0.003	15	242	71	33
	Ba	135	0.146	ug/L	0.004	2	32	504	3
	Ba	137	0.146	ug/L	0.006	4	48	848	3
>	Tb	159		ug/L			829582	792217	0
	Tl	205	-0.001	ug/L	0.000	3	81	49	2
	Pb	208	0.007	ug/L	0.001	8	95	304	5
	Bi	209		ug/L			1681351	1580163	1
	Th	232	-0.023	ug/L	0.001	3	1043	288	6
	U	238	0.001	ug/L	0.000	7	24	41	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 G REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:38:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1085318	4
	Be	9	-0.001	ug/L	0.001	45	10	5	36
	C	13		ug/L			79541	74528	2
	Cl	37		ug/L			3943707	3912117	0
>	Sc	45		ug/L			998438	956755	0
	V	51	0.034	ug/L	0.010	29	5141	5514	3
	V-1	51	0.059	ug/L	0.004	6	75	1081	5
	Cr	52	-0.036	ug/L	0.033	91	15214	14103	3
	Cr	53	0.054	ug/L	0.001	1	99	176	0
	Mn	55	17.297	ug/L	0.111	0	362	311872	0
	Co	59	0.007	ug/L	0.001	6	43	132	4
>	Ge	72		ug/L			420257	400297	1
	Ni	60	0.083	ug/L	0.007	7	16	232	7
	Ni	62	1.925	ug/L	0.065	3	150	875	4
	Cu	63	0.165	ug/L	0.010	6	156	1071	3
	Cu	65	0.059	ug/L	0.003	5	26	169	6
	Zn	66	0.985	ug/L	0.019	1	150	1588	0
	Zn	67	0.828	ug/L	0.046	5	23	225	6
	Zn	68	0.932	ug/L	0.021	2	148	1099	2
	As	75	91.112	ug/L	2.186	2	645	123916	0
	As-1	75	93.455	ug/L	2.338	2	6520	129425	0
	Se	82	-0.015	ug/L	0.032	214	-1	-3	152
	Se	78	-0.011	ug/L	0.369	3267	6575	6258	0
	Mo	98	0.352	ug/L	0.005	1	27	1236	2
	Y	89		ug/L			300262	281709	1
	Kr	83		ug/L			915	981	0
>	In	115		ug/L			761183	723515	0
	Ag	107	-0.001	ug/L	0.000	40	19	12	16
	Cd	111	0.005	ug/L	0.003	49	46	62	15
	Cd	114	0.007	ug/L	0.001	13	14	69	11
	Sb	121	-0.022	ug/L	0.002	8	335	79	27
	Sb	123	-0.020	ug/L	0.002	8	242	64	21
	Ba	135	0.151	ug/L	0.007	4	32	520	4
	Ba	137	0.137	ug/L	0.004	3	48	804	2
>	Tb	159		ug/L			829582	789491	1
	Tl	205	-0.001	ug/L	0.000	15	81	51	7
	Pb	208	0.009	ug/L	0.001	6	95	346	5
	Bi	209		ug/L			1681351	1617145	1
	Th	232	-0.025	ug/L	0.001	3	1043	238	9
	U	238	0.001	ug/L	0.000	22	24	44	10

UR78 : 00395

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 H REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:42:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

A3

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1067543	0
	Be	9	-0.001	ug/L	0.001	79	10	6	43
	C	13		ug/L			79541	75618	0
	Cl	37		ug/L			3943707	3912043	3
>	Sc	45		ug/L			998438	959170	1
	V	51	0.205	ug/L	0.009	4	5141	8442	1
	V-1	51	0.242	ug/L	0.007	2	75	4201	1
	Cr	52	-0.004	ug/L	0.015	366	15214	14560	1
	Cr	53	0.128	ug/L	0.003	2	99	289	0
	Mn	55	83.428	ug/L	0.267	0	362	1506696	1
	Co	59	0.047	ug/L	0.001	2	43	623	3
>	Ge	72		ug/L			420257	399110	1
	Ni	60	0.307	ug/L	0.014	4	16	814	3
	Ni	62	1.873	ug/L	0.033	1	150	853	0
	Cu	63	0.230	ug/L	0.005	2	156	1430	0
	Cu	65	0.133	ug/L	0.002	1	26	351	1
	Zn	66	0.941	ug/L	0.040	4	150	1520	4
	Zn	67	0.875	ug/L	0.031	3	23	235	2
	Zn	68	1.009	ug/L	0.019	1	148	1175	1
	As	75	102.119	ug/L	2.101	2	645	138419	0
	As-1	75	104.713	ug/L	2.225	2	6520	143860	0
	Se	82	-0.015	ug/L	0.105	702	-1	-3	504
	Se	78	-0.028	ug/L	0.182	658	6575	6234	0
	Mo	98	0.074	ug/L	0.006	8	27	279	7
	Y	89		ug/L			300262	280811	0
	Kr	83		ug/L			915	1037	5
>	In	115		ug/L			761183	719905	1
	Ag	107	-0.002	ug/L	0.001	66	19	9	67
	Cd	111	0.007	ug/L	0.001	9	46	68	2
	Cd	114	0.008	ug/L	0.001	10	14	77	9
	Sb	121	-0.012	ug/L	0.002	12	335	181	9
	Sb	123	-0.011	ug/L	0.004	31	242	138	21
	Ba	135	1.086	ug/L	0.025	2	32	3538	2
	Ba	137	1.069	ug/L	0.016	1	48	5914	0
>	Tb	159		ug/L			829582	792798	0
	Tl	205	-0.000	ug/L	0.000	228	81	73	13
	Pb	208	0.010	ug/L	0.001	5	95	390	3
	Bi	209		ug/L			1681351	1589697	0
	Th	232	-0.022	ug/L	0.000	2	1043	328	3
	U	238	0.019	ug/L	0.002	8	24	632	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 K REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:46:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

AG

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1060133	0
	Be	9	-0.002	ug/L	0.000	11	10	4	12
	C	13		ug/L			79541	76724	1
	Cl	37		ug/L			3943707	3925192	1
>	Sc	45		ug/L			998438	973656	1
	V	51	0.127	ug/L	0.005	4	5141	7220	0
	V-1	51	0.154	ug/L	0.002	1	75	2750	1
	Cr	52	0.022	ug/L	0.019	87	15214	15138	1
	Cr	53	0.120	ug/L	0.014	11	99	281	8
	Mn	55	6.527	ug/L	0.146	2	362	119963	1
	Co	59	0.100	ug/L	0.000	0	43	1296	1
>	Ge	72		ug/L			420257	396003	1
	Ni	60	0.230	ug/L	0.003	1	16	609	2
	Ni	62	1.780	ug/L	0.200	11	150	810	7
	Cu	63	0.198	ug/L	0.013	6	156	1240	4
	Cu	65	0.079	ug/L	0.006	7	26	217	6
	Zn	66	0.972	ug/L	0.047	4	150	1553	3
	Zn	67	0.910	ug/L	0.050	5	23	242	4
	Zn	68	1.104	ug/L	0.016	1	148	1262	1
	As	75	65.850	ug/L	1.004	1	645	88782	0
	As-1	75	67.524	ug/L	1.128	1	6520	94229	0
	Se	82	-0.044	ug/L	0.106	240	-1	-7	212
	Se	78	0.159	ug/L	0.418	262	6575	6251	0
	Mo	98	1.214	ug/L	0.023	1	27	4148	0
	Y	89		ug/L			300262	287513	1
	Kr	83		ug/L			915	1064	2
>	In	115		ug/L			761183	721573	0
	Ag	107	-0.002	ug/L	0.000	26	19	8	30
	Cd	111	0.002	ug/L	0.002	162	46	49	17
	Cd	114	0.003	ug/L	0.000	13	14	42	9
	Sb	121	0.012	ug/L	0.002	14	335	451	4
	Sb	123	0.015	ug/L	0.004	24	242	354	8
	Ba	135	0.744	ug/L	0.017	2	32	2440	2
	Ba	137	0.743	ug/L	0.003	0	48	4138	0
>	Tb	159		ug/L			829582	794806	0
	Tl	205	-0.001	ug/L	0.000	38	81	60	10
	Pb	208	0.010	ug/L	0.000	3	95	381	2
	Bi	209		ug/L			1681351	1589042	0
	Th	232	-0.025	ug/L	0.001	3	1043	231	11
	U	238	0.040	ug/L	0.001	1	24	1317	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:52:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1060349	0
	Be	9	50.845	ug/L	0.346	0	10	169720	0
	C	13		ug/L			79541	74019	4
	Cl	37		ug/L			3943707	4185219	1
>	Sc	45		ug/L			998438	950819	1
	V	51	49.084	ug/L	0.457	0	5141	838249	2
	V-1	51	49.149	ug/L	0.390	0	75	832764	1
	Cr	52	50.108	ug/L	0.659	1	15214	683615	2
	Cr	53	50.351	ug/L	1.219	2	99	75494	1
	Mn	55	49.954	ug/L	0.446	0	362	894360	0
	Co	59	49.723	ug/L	1.500	3	43	607335	1
>	Ge	72		ug/L			420257	398203	1
	Ni	60	49.103	ug/L	0.561	1	16	127746	0
	Ni	62	47.935	ug/L	1.295	2	150	18265	1
	Cu	63	47.652	ug/L	1.057	2	156	264555	1
	Cu	65	49.051	ug/L	1.084	2	26	119813	0
	Zn	66	50.056	ug/L	0.696	1	150	73268	1
	Zn	67	49.381	ug/L	0.739	1	23	12042	0
	Zn	68	49.292	ug/L	1.524	3	148	50558	1
	As	75	49.075	ug/L	0.669	1	645	66687	0
	As-1	75	48.760	ug/L	0.798	1	6520	70138	0
	Se	82	51.204	ug/L	0.635	1	-1	7663	0
	Se	78	48.716	ug/L	0.907	1	6575	23749	0
	Mo	98	47.820	ug/L	0.577	1	27	163365	2
	Y	89		ug/L			300262	287914	1
	Kr	83		ug/L			915	1071	1
>	In	115		ug/L			761183	715414	1
	Ag	107	48.785	ug/L	0.290	0	19	288187	1
	Cd	111	49.869	ug/L	0.301	0	46	168800	1
	Cd	114	50.013	ug/L	0.224	0	14	423063	0
	Sb	121	49.462	ug/L	0.556	1	335	535650	0
	Sb	123	48.876	ug/L	0.523	1	242	399442	0
	Ba	135	48.808	ug/L	0.586	1	32	156715	1
	Ba	137	49.078	ug/L	0.546	1	48	267919	0
>	Tb	159		ug/L			829582	793368	0
	Tl	205	48.043	ug/L	0.284	0	81	1098110	0
	Pb	208	49.508	ug/L	0.144	0	95	1463718	0
	Bi	209		ug/L			1681351	1572583	1
	Th	232	47.850	ug/L	1.109	2	1043	1457205	1
	U	238	48.234	ug/L	0.361	0	24	1569588	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 14:58:23
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1028407	1
	Be	9	-0.001	ug/L	0.001	190	10	7	58
	C	13		ug/L			79541	73766	1
	Cl	37		ug/L			3943707	3989123	2
>	Sc	45		ug/L			998438	907022	1
	V	51	-0.005	ug/L	0.010	210	5141	4588	2
	V-1	51	0.002	ug/L	0.001	31	75	105	11
	Cr	52	-0.014	ug/L	0.032	223	15214	13637	1
	Cr	53	0.012	ug/L	0.013	107	99	107	17
	Mn	55	0.002	ug/L	0.003	144	362	364	13
	Co	59	0.001	ug/L	0.001	68	43	50	14
>	Ge	72		ug/L			420257	378585	1
	Ni	60	0.001	ug/L	0.002	145	16	18	29
	Ni	62	1.389	ug/L	0.091	6	150	635	6
	Cu	63	0.066	ug/L	0.002	2	156	487	0
	Cu	65	0.004	ug/L	0.003	78	26	32	23
	Zn	66	-0.007	ug/L	0.004	52	150	125	3
	Zn	67	0.007	ug/L	0.029	411	23	22	30
	Zn	68	-0.011	ug/L	0.011	107	148	123	7
	As	75	0.156	ug/L	0.033	20	645	780	4
	As-1	75	0.228	ug/L	0.082	35	6520	6157	1
	Se	82	0.006	ug/L	0.104	1615	-1	0	11421
	Se	78	0.763	ug/L	0.294	38	6575	6184	1
	Mo	98	0.009	ug/L	0.002	20	27	53	12
	Y	89		ug/L			300262	267126	1
	Kr	83		ug/L			915	1044	5
>	In	115		ug/L			761183	684030	1
	Ag	107	0.001	ug/L	0.001	99	19	20	13
	Cd	111	0.002	ug/L	0.001	82	46	47	10
	Cd	114	0.001	ug/L	0.001	79	14	21	30
	Sb	121	0.050	ug/L	0.009	18	335	821	11
	Sb	123	0.051	ug/L	0.005	10	242	618	7
	Ba	135	-0.002	ug/L	0.002	102	32	24	18
	Ba	137	-0.001	ug/L	0.001	186	48	40	15
>	Tb	159		ug/L			829582	752510	0
	Tl	205	0.001	ug/L	0.000	55	81	92	11
	Pb	208	0.000	ug/L	0.000	180	95	92	11
	Bi	209		ug/L			1681351	1516145	1
	Th	232	0.043	ug/L	0.007	15	1043	2193	8
	U	238	0.002	ug/L	0.001	33	24	77	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 I-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:03:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1063044	1
[	Be	9	U 0.002	ug/L	0.003	183	10	15	62
	C	13		ug/L			79541	77636	2
	Cl	37		ug/L			3943707	4146112	2
[>	Sc	45		ug/L			998438	962173	1
[	V	51	0.169	ug/L	0.003	1	5141	7860	1
[	V-1	51	0.235	ug/L	0.004	1	75	4094	2
[	Cr	52	U -0.028	ug/L	0.006	21	15214	14282	1
[	Cr	53	0.207	ug/L	0.011	5	99	409	4
[	Mn	55	103.564	ug/L	1.064	1	362	1875929	0
[	Co	59	0.013	ug/L	0.001	9	43	196	7
[>	Ge	72		ug/L			420257	393075	1
[	Ni	60	U 0.155	ug/L	0.002	1	16	412	2
[	Ni	62	1.220	ug/L	0.071	5	150	596	3
[	Cu	63	U 0.207	ug/L	0.005	2	156	1280	0
[	Cu	65	U 0.092	ug/L	0.004	3	26	245	3
[	Zn	66	U 0.567	ug/L	0.020	3	150	958	4
[	Zn	67	U 0.486	ug/L	0.015	3	23	138	1
[	Zn	68	0.667	ug/L	0.049	7	148	812	4
[	As	75	U 0.122	ug/L	0.014	11	645	766	2
[	As-1	75	0.091	ug/L	0.014	15	6520	6216	1
[	Se	82	U 0.012	ug/L	0.028	229	-1	0	482
[	Se	78	U 0.094	ug/L	0.056	59	6575	6184	1
[	Mo	98	0.002	ug/L	0.002	87	27	31	18
	Y	89		ug/L			300262	283479	1
	Kr	83		ug/L			915	948	3
[>	In	115		ug/L			761183	706532	0
[	Ag	107	U -0.001	ug/L	0.001	112	19	12	43
[	Cd	111	U 0.004	ug/L	0.002	66	46	55	14
[	Cd	114	U 0.002	ug/L	0.000	17	14	32	9
[	Sb	121	U 0.001	ug/L	0.003	268	335	321	8
[	Sb	123	U 0.002	ug/L	0.006	254	242	242	18
[	Ba	135	0.862	ug/L	0.022	2	32	2763	2
[	Ba	137	0.854	ug/L	0.009	1	48	4649	1
[>	Tb	159		ug/L			829582	783865	0
[	Tl	205	U 0.007	ug/L	0.005	68	81	240	46
[	Pb	208	U 0.008	ug/L	0.001	8	95	322	6
[	Bi	209		ug/L			1681351	1556839	1
[	Th	232	0.058	ug/L	0.017	30	1043	2721	19
[	U	238	0.006	ug/L	0.002	34	24	211	30

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:07:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1046538	1
[	Be	9	U 0.011	ug/L	0.002	18	10	45	16
	C	13		ug/L			79541	91897	0
	Cl	37		ug/L			3943707	4333127	0
[>	Sc	45		ug/L			998438	1003808	2
[	V	51	0.865	ug/L	0.010	1	5141	20672	1
[	V-1	51	0.952	ug/L	0.015	1	75	17104	0
[	Cr	52	U 0.097	ug/L	0.027	27	15214	16669	2
[	Cr	53	0.407	ug/L	0.041	10	99	742	7
[	Mn	55	487.176	ug/L	15.475	3	362	9202661	1
[	Co	59	0.059	ug/L	0.001	1	43	799	2
[>	Ge	72		ug/L			420257	380351	1
[	Ni	60	0.657	ug/L	0.012	1	16	1646	2
[	Ni	62	4.679	ug/L	1.522	32	150	1826	29
[	Cu	63	1.405	ug/L	0.125	8	156	7589	8
[	Cu	65	0.773	ug/L	0.025	3	26	1827	3
[	Zn	66	U 1.956	ug/L	0.064	3	150	2864	1
[	Zn	67	1.850	ug/L	0.034	1	23	451	3
[	Zn	68	2.785	ug/L	0.185	6	148	2854	4
[	As	75	0.404	ug/L	0.038	9	645	1103	2
[	As-1	75	0.560	ug/L	0.096	17	6520	6601	0
[	Se	82	U 0.153	ug/L	0.191	124	-1	20	129
[	Se	78	0.949	ug/L	0.278	29	6575	6276	0
[	Mo	98	0.012	ug/L	0.001	7	27	63	6
	Y	89		ug/L			300262	281371	1
	Kr	83		ug/L			915	940	6
[>	In	115		ug/L			761183	700635	1
[	Ag	107	U -0.000	ug/L	0.001	257	19	15	35
[	Cd	111	U 0.011	ug/L	0.003	23	46	80	10
[	Cd	114	0.008	ug/L	0.002	18	14	80	16
[	Sb	121	U 0.012	ug/L	0.000	2	335	434	1
[	Sb	123	0.015	ug/L	0.005	34	242	341	11
[	Ba	135	4.248	ug/L	0.077	1	32	13384	1
[	Ba	137	4.294	ug/L	0.069	1	48	22999	2
[>	Tb	159		ug/L			829582	796430	0
[	Tl	205	U 0.002	ug/L	0.001	40	81	133	16
[	Pb	208	U 0.015	ug/L	0.001	4	95	540	3
[	Bi	209		ug/L			1681351	1462495	1
[	Th	232	0.106	ug/L	0.045	42	1043	4237	32
[	U	238	0.024	ug/L	0.001	4	24	817	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 IDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:12:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1065225	1
	Be	9	U 0.009	ug/L	0.002	26	10	41	20
	C	13		ug/L			79541	91348	1
	Cl	37		ug/L			3943707	4278631	1
>	Sc	45		ug/L			998438	1040968	1
	V	51	0.820	ug/L	0.002	0	5141	20610	1
	V-1	51	0.906	ug/L	0.007	0	75	16875	1
	Cr	52	U 0.068	ug/L	0.032	46	15214	16868	4
	Cr	53	0.371	ug/L	0.006	1	99	711	1
	Mn	55	476.987	ug/L	6.226	1	362	9347816	2
	Co	59	0.054	ug/L	0.002	3	43	768	1
>	Ge	72		ug/L			420257	380127	0
	Ni	60	0.596	ug/L	0.027	4	16	1494	4
	Ni	62	6.763	ug/L	1.060	15	150	2577	14
	Cu	63	1.235	ug/L	0.082	6	156	6685	6
	Cu	65	U 0.492	ug/L	0.003	0	26	1170	0
	Zn	66	0.893	ug/L	0.046	5	150	1381	4
	Zn	67	U 0.882	ug/L	0.073	8	23	226	7
	Zn	68	1.738	ug/L	0.034	1	148	1831	2
	As	75	0.578	ug/L	0.025	4	645	1327	2
	As-1	75	0.811	ug/L	0.054	6	6520	6913	0
	Se	82	U 0.165	ug/L	0.108	65	-1	22	68
	Se	78	1.274	ug/L	0.185	14	6575	6385	0
	Mo	98	0.013	ug/L	0.002	15	27	67	9
	Y	89		ug/L			300262	285693	1
	Kr	83		ug/L			915	962	2
>	In	115		ug/L			761183	703005	1
	Ag	107	U 0.001	ug/L	0.001	158	19	21	25
	Cd	111	U 0.012	ug/L	0.003	22	46	82	9
	Cd	114	0.009	ug/L	0.000	2	14	86	0
	Sb	121	U 0.009	ug/L	0.005	49	335	408	10
	Sb	123	0.010	ug/L	0.001	11	242	306	2
	Ba	135	4.227	ug/L	0.065	1	32	13364	1
	Ba	137	4.259	ug/L	0.070	1	48	22886	0
>	Tb	159		ug/L			829582	802109	0
	Tl	205	U 0.001	ug/L	0.000	26	81	107	6
	Pb	208	U 0.011	ug/L	0.001	10	95	407	7
	Bi	209		ug/L			1681351	1472728	0
	Th	232	0.029	ug/L	0.009	31	1043	1917	15
	U	238	0.024	ug/L	0.000	1	24	824	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 ISPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:16:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1080401	0
	Be	9	22.817	ug/L	0.585	2	10	77613	2
	C	13		ug/L			79541	90655	1
	Cl	37		ug/L			3943707	4315866	2
>	Sc	45		ug/L			998438	1033417	1
	V	51	23.481	ug/L	0.248	1	5141	438638	2
	V-1	51	23.682	ug/L	0.362	1	75	436241	2
	Cr	52	22.135	ug/L	0.702	3	15214	336894	1
	Cr	53	22.853	ug/L	0.186	0	99	37302	0
	Mn	55	504.576	ug/L	4.063	0	362	9815417	0
	Co	59	21.813	ug/L	0.669	3	43	289607	2
>	Ge	72		ug/L			420257	384482	3
	Ni	60	23.988	ug/L	0.880	3	16	60233	2
	Ni	62	32.286	ug/L	1.156	3	150	11929	5
	Cu	63	24.774	ug/L	0.696	2	156	132821	0
	Cu	65	24.064	ug/L	0.996	4	26	56733	1
	Zn	66	71.571	ug/L	3.402	4	150	101010	2
	Zn	67	65.638	ug/L	1.190	1	23	15444	1
	Zn	68	68.568	ug/L	2.338	3	148	67830	1
	As	75	25.232	ug/L	0.672	2	645	33379	0
	As-1	75	24.421	ug/L	0.459	1	6520	36891	2
	Se	82	70.627	ug/L	3.043	4	-1	10198	1
	Se	78	69.633	ug/L	2.130	3	6575	30183	1
	Mo	98	24.688	ug/L	0.618	2	27	81403	0
	Y	89		ug/L			300262	279954	1
	Kr	83		ug/L			915	988	1
>	In	115		ug/L			761183	701341	0
	Ag	107	23.508	ug/L	0.468	1	19	136127	1
	Cd	111	23.395	ug/L	0.203	0	46	77654	0
	Cd	114	23.268	ug/L	0.551	2	14	192961	2
	Sb	121	24.420	ug/L	0.499	2	335	259408	1
	Sb	123	24.128	ug/L	0.491	2	242	193426	1
	Ba	135	29.036	ug/L	0.326	1	32	91408	0
	Ba	137	29.128	ug/L	0.530	1	48	155903	1
>	Tb	159		ug/L			829582	805667	0
	Tl	205	23.382	ug/L	0.099	0	81	542792	1
	Pb	208	23.825	ug/L	0.131	0	95	715329	0
	Bi	209		ug/L			1681351	1492832	0
	Th	232	23.951	ug/L	0.078	0	1043	741314	1
	U	238	23.852	ug/L	0.011	0	24	788229	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~US02 1POST REN~~ 222222

Sample Dil Factor: 2

Comments: 5/4/12 MB

Sample Date/Time: Thursday, May 03, 2012 15:20:18

Number of Replicates: 3

Method File: C:\NexION Data\Method\200.8nomin.mth

Tuning File: C:\NexION Data\MassCal\default.tun

Optimization File: C:\NexION Data\Conditions\default.dac

Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1056873	1
	Be	9	24.512	ug/L	0.956	3	10	81541	3
	C	13		ug/L			79541	95082	1
	Cl	37		ug/L			3943707	4252083	1
>	Sc	45		ug/L			998438	1002787	1
	V	51	24.305	ug/L	0.847	3	5141	440207	2
	V-1	51	24.263	ug/L	0.839	3	75	433479	2
	Cr	52	23.827	ug/L	0.934	3	15214	350679	2
	Cr	53	23.672	ug/L	0.982	4	99	37475	2
	Mn	55	504.436	ug/L	8.093	1	362	9520661	0
	Co	59	23.453	ug/L	1.505	6	43	302042	5
>	Ge	72		ug/L			420257	375197	3
	Ni	60	25.534	ug/L	0.594	2	16	62613	4
	Ni	62	36.754	ug/L	2.819	7	150	13210	4
	Cu	63	25.388	ug/L	0.251	0	156	132884	2
	Cu	65	24.512	ug/L	0.586	2	26	56425	3
	Zn	66	73.026	ug/L	1.476	2	150	100682	4
	Zn	67	67.598	ug/L	1.129	1	23	15524	3
	Zn	68	73.040	ug/L	0.258	0	148	70546	3
	As	75	26.032	ug/L	0.145	0	645	33601	2
	As-1	75	25.045	ug/L	0.462	1	6520	36768	1
	Se	82	74.656	ug/L	0.536	0	-1	10527	2
	Se	78	73.161	ug/L	1.912	2	6575	30650	1
	Mo	98	25.192	ug/L	0.129	0	27	81101	3
	Y	89		ug/L			300262	279080	1
	Kr	83		ug/L			915	958	3
>	In	115		ug/L			761183	697053	1
	Ag	107	24.290	ug/L	0.631	2	19	139848	4
	Cd	111	24.203	ug/L	0.580	2	46	79862	3
	Cd	114	24.176	ug/L	0.677	2	14	199258	2
	Sb	121	24.944	ug/L	0.706	2	335	263357	3
	Sb	123	24.667	ug/L	0.586	2	242	196544	2
	Ba	135	29.468	ug/L	0.493	1	32	92194	1
	Ba	137	29.562	ug/L	0.979	3	48	157287	4
>	Tb	159		ug/L			829582	799701	0
	Tl	205	24.282	ug/L	0.976	4	81	559508	4
	Pb	208	24.438	ug/L	0.709	2	95	728348	2
	Bi	209		ug/L			1681351	1495471	0
	Th	232	24.797	ug/L	0.717	2	1043	761781	2
	U	238	24.729	ug/L	0.587	2	24	811194	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 L REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:24:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

DEL
rv 4/04

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1070337	3
[	Be	9	0.004	ug/L	0.001	25	10	25	12
	C	13		ug/L			79541	92099	1
	Cl	37		ug/L			3943707	4194063	1
[>	Sc	45		ug/L			998438	1009123	2
[	V	51	0.790	ug/L	0.020	2	5141	19429	0
[	V-1	51	0.886	ug/L	0.015	1	75	16003	0
[	Cr	52	0.209	ug/L	0.053	25	15214	18339	3
[	Cr	53	0.551	ug/L	0.020	3	99	976	3
[	Mn	55	328.859	ug/L	7.345	2	362	6245085	0
[	Co	59	0.128	ug/L	0.001	0	43	1699	1
[>	Ge	72		ug/L			420257	385930	0
[	Ni	60	0.532	ug/L	0.009	1	16	1355	0
[	Ni	62	8.954	ug/L	0.524	5	150	3420	6
[	Cu	63	1.147	ug/L	0.024	2	156	6310	1
[	Cu	65	0.287	ug/L	0.007	2	26	702	2
[	Zn	66	2.476	ug/L	0.071	2	150	3643	2
[	Zn	67	2.297	ug/L	0.097	4	23	563	4
[	Zn	68	3.201	ug/L	0.124	3	148	3309	3
[	As	75	1785.240	ug/L	17.912	1	645	2330407	0
[	As-1	75	1832.639	ug/L	18.345	1	6520	2336081	0
[	Se	82	0.064	ug/L	0.117	182	-1	8	203
[	Se	78	1.205	ug/L	0.064	5	6575	6459	1
[	Mo	98	7.922	ug/L	0.214	2	27	26244	1
	Y	89		ug/L			300262	285377	0
	Kr	83		ug/L			915	990	2
[>	In	115		ug/L			761183	711786	0
[	Ag	107	0.003	ug/L	0.002	47	19	36	24
[	Cd	111	0.016	ug/L	0.001	7	46	97	3
[	Cd	114	0.016	ug/L	0.002	10	14	149	8
[	Sb	121	0.038	ug/L	0.006	15	335	723	9
[	Sb	123	0.038	ug/L	0.006	16	242	531	10
[	Ba	135	2.742	ug/L	0.019	0	32	8789	0
[	Ba	137	2.796	ug/L	0.077	2	48	15229	2
[>	Tb	159		ug/L			829582	815619	1
[	Tl	205	0.000	ug/L	0.000	135	81	87	14
[	Pb	208	0.024	ug/L	0.001	4	95	815	3
[	Bi	209		ug/L			1681351	1516329	1
[	Th	232	0.149	ug/L	0.091	60	1043	5676	49
[	U	238	0.022	ug/L	0.001	6	24	754	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 M REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:28:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1078568	0
	Be	9	0.002	ug/L	0.002	105	10	16	39
	C	13		ug/L			79541	92239	0
	Cl	37		ug/L			3943707	3963828	0
>	Sc	45		ug/L			998438	972394	1
	V	51	0.324	ug/L	0.008	2	5141	10640	2
	V-1	51	0.388	ug/L	0.014	3	75	6789	3
	Cr	52	1.111	ug/L	0.035	3	15214	29988	2
	Cr	53	1.345	ug/L	0.036	2	99	2157	1
	Mn	55	10.958	ug/L	0.202	1	362	200903	0
	Co	59	0.164	ug/L	0.007	4	43	2090	4
>	Ge	72		ug/L			420257	367932	2
	Ni	60	2.076	ug/L	0.040	1	16	5003	1
	Ni	62	10.560	ug/L	0.621	5	150	3817	3
	Cu	63	1.389	ug/L	0.002	0	156	7258	2
	Cu	65	0.516	ug/L	0.010	1	26	1188	3
	Zn	66	8.795	ug/L	0.138	1	150	12002	2
	Zn	67	8.114	ug/L	0.176	2	23	1844	1
	Zn	68	9.030	ug/L	0.253	2	148	8662	1
	As	75	11.791	ug/L	0.243	2	645	15230	1
	As-1	75	12.285	ug/L	0.343	2	6520	20592	1
	Se	82	0.142	ug/L	0.091	63	-1	18	63
	Se	78	1.153	ug/L	0.498	43	6575	6137	0
	Mo	98	10.377	ug/L	0.206	1	27	32763	1
	Y	89		ug/L			300262	271196	1
	Kr	83		ug/L			915	944	1
>	In	115		ug/L			761183	697368	1
	Ag	107	0.008	ug/L	0.007	85	19	62	62
	Cd	111	0.017	ug/L	0.012	72	46	98	41
	Cd	114	0.017	ug/L	0.007	39	14	155	37
	Sb	121	0.407	ug/L	0.017	4	335	4604	3
	Sb	123	0.396	ug/L	0.005	1	242	3373	0
	Ba	135	10.007	ug/L	0.192	1	32	31341	1
	Ba	137	10.090	ug/L	0.208	2	48	53726	1
>	Tb	159		ug/L			829582	807954	0
	Tl	205	0.003	ug/L	0.004	138	81	142	61
	Pb	208	0.020	ug/L	0.003	12	95	704	11
	Bi	209		ug/L			1681351	1488600	0
	Th	232	0.012	ug/L	0.010	81	1043	1384	21
	U	238	3.128	ug/L	0.030	0	24	103695	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 N REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:32:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1076937	2
[	Be	9	0.004	ug/L	0.001	21	10	22	10
	C	13		ug/L			79541	97254	1
	Cl	37		ug/L			3943707	4339628	0
[>	Sc	45		ug/L			998438	1011464	1
[	V	51	1.755	ug/L	0.007	0	5141	36896	0
[	V-1	51	1.927	ug/L	0.026	1	75	34796	0
[	Cr	52	0.239	ug/L	0.020	8	15214	18812	2
[	Cr	53	0.850	ug/L	0.049	5	99	1454	4
[	Mn	55	739.253	ug/L	18.156	2	362	14075072	2
[	Co	59	0.428	ug/L	0.006	1	43	5604	1
[>	Ge	72		ug/L			420257	371906	1
[	Ni	60	1.203	ug/L	0.062	5	16	2938	5
[	Ni	62	8.081	ug/L	0.051	0	150	2987	1
[	Cu	63	1.267	ug/L	0.009	0	156	6706	1
[	Cu	65	0.528	ug/L	0.003	0	26	1228	1
[	Zn	66	5.314	ug/L	0.123	2	150	7381	1
[	Zn	67	5.170	ug/L	0.064	1	23	1196	1
[	Zn	68	6.314	ug/L	0.051	0	148	6163	1
[	As	75	807.463	ug/L	6.968	0	645	1016001	0
[	As-1	75	829.003	ug/L	7.148	0	6520	1021446	1
[	Se	82	0.102	ug/L	0.025	24	-1	13	28
[	Se	78	1.250	ug/L	0.191	15	6575	6238	1
[	Mo	98	0.805	ug/L	0.032	3	27	2590	3
	Y	89		ug/L			300262	274932	1
	Kr	83		ug/L			915	985	2
[>	In	115		ug/L			761183	695086	0
[	Ag	107	0.000	ug/L	0.001	613	19	18	22
[	Cd	111	0.007	ug/L	0.002	24	46	66	9
[	Cd	114	0.006	ug/L	0.000	5	14	60	3
[	Sb	121	0.115	ug/L	0.008	6	335	1516	6
[	Sb	123	0.116	ug/L	0.002	2	242	1140	1
[	Ba	135	10.359	ug/L	0.151	1	32	32340	0
[	Ba	137	10.525	ug/L	0.142	1	48	55865	1
[>	Tb	159		ug/L			829582	807823	0
[	Tl	205	0.001	ug/L	0.000	32	81	92	5
[	Pb	208	0.024	ug/L	0.001	2	95	801	2
[	Bi	209		ug/L			1681351	1494509	0
[	Th	232	0.018	ug/L	0.010	54	1043	1572	19
[	U	238	0.210	ug/L	0.005	2	24	6978	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 O REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:36:48
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1077557	1
[	Be	9	0.006	ug/L	0.001	23	10	30	14
	C	13		ug/L			79541	92146	1
	Cl	37		ug/L			3943707	4284719	2
[>	Sc	45		ug/L			998438	1033271	0
[	V	51	0.788	ug/L	0.009	1	5141	19863	0
[	V-1	51	0.911	ug/L	0.005	0	75	16847	1
[	Cr	52	0.185	ug/L	0.035	19	15214	18421	2
[	Cr	53	0.623	ug/L	0.003	0	99	1117	0
[	Mn	55	321.929	ug/L	4.620	1	362	6261594	0
[	Co	59	0.118	ug/L	0.002	1	43	1615	1
[>	Ge	72		ug/L			420257	373177	0
[	Ni	60	0.545	ug/L	0.008	1	16	1343	1
[	Ni	62	7.687	ug/L	0.704	9	150	2857	8
[	Cu	63	1.197	ug/L	0.042	3	156	6363	3
[	Cu	65	0.423	ug/L	0.020	4	26	990	4
[	Zn	66	2.701	ug/L	0.074	2	150	3831	2
[	Zn	67	2.658	ug/L	0.093	3	23	627	3
[	Zn	68	3.482	ug/L	0.209	6	148	3469	5
[	As	75	1780.573	ug/L	7.932	0	645	2247602	0
[	As-1	75	1827.889	ug/L	8.099	0	6520	2253139	0
[	Se	82	-0.014	ug/L	0.029	207	-1	-2	142
[	Se	78	1.324	ug/L	0.191	14	6575	6285	1
[	Mo	98	7.669	ug/L	0.127	1	27	24572	1
	Y	89		ug/L			300262	279409	1
	Kr	83		ug/L			915	979	2
[>	In	115		ug/L			761183	700180	0
[	Ag	107	-0.000	ug/L	0.000	243	19	16	17
[	Cd	111	0.009	ug/L	0.004	40	46	71	16
[	Cd	114	0.009	ug/L	0.001	8	14	85	7
[	Sb	121	0.012	ug/L	0.004	30	335	434	8
[	Sb	123	0.015	ug/L	0.003	16	242	344	5
[	Ba	135	2.782	ug/L	0.049	1	32	8769	0
[	Ba	137	2.822	ug/L	0.061	2	48	15117	1
[>	Tb	159		ug/L			829582	816801	0
[	Tl	205	0.000	ug/L	0.001	335	81	89	37
[	Pb	208	0.022	ug/L	0.002	10	95	756	9
[	Bi	209		ug/L			1681351	1531627	0
[	Th	232	-0.004	ug/L	0.002	60	1043	899	8
[	U	238	0.020	ug/L	0.002	9	24	693	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 P REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:40:55
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

DEL 11 MAY 2012

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1101187	1060626	2
[	Be	9	0.003	ug/L	0.001	27	10	20	15
	C	13		ug/L			79541	93785	2
	Cl	37		ug/L			3943707	4328101	2
[>	Sc	45		ug/L			998438	1010538	1
[	V	51	1.715	ug/L	0.065	3	5141	36135	1
[	V-1	51	1.843	ug/L	0.055	3	75	33246	1
[	Cr	52	0.260	ug/L	0.051	19	15214	19085	1
[	Cr	53	0.711	ug/L	0.017	2	99	1232	1
[	Mn	55	745.846	ug/L	12.382	1	362	14185175	0
[	Co	59	0.407	ug/L	0.011	2	43	5327	0
[>	Ge	72		ug/L			420257	370168	1
[	Ni	60	1.174	ug/L	0.034	2	16	2852	2
[	Ni	62	7.649	ug/L	0.352	4	150	2821	4
[	Cu	63	1.228	ug/L	0.051	4	156	6472	3
[	Cu	65	0.501	ug/L	0.018	3	26	1161	1
[	Zn	66	4.686	ug/L	0.212	4	150	6494	3
[	Zn	67	4.673	ug/L	0.247	5	23	1077	3
[	Zn	68	5.570	ug/L	0.245	4	148	5425	2
[	As	75	829.971	ug/L	15.536	1	645	1039314	0
[	As-1	75	852.113	ug/L	16.046	1	6520	1044741	0
[	Se	82	0.098	ug/L	0.068	69	-1	12	73
[	Se	78	1.280	ug/L	0.424	33	6575	6218	0
[	Mo	98	0.786	ug/L	0.020	2	27	2520	0
	Y	89		ug/L			300262	272980	1
	Kr	83		ug/L			915	983	2
[>	In	115		ug/L			761183	693388	1
[	Ag	107	-0.000	ug/L	0.001	225	19	15	22
[	Cd	111	0.010	ug/L	0.001	8	46	73	3
[	Cd	114	0.006	ug/L	0.001	9	14	66	8
[	Sb	121	0.098	ug/L	0.004	3	335	1337	1
[	Sb	123	0.100	ug/L	0.004	3	242	1014	1
[	Ba	135	10.082	ug/L	0.185	1	32	31398	1
[	Ba	137	10.095	ug/L	0.162	1	48	53445	0
[>	Tb	159		ug/L			829582	810389	0
[	Tl	205	0.000	ug/L	0.000	21	81	90	3
[	Pb	208	0.014	ug/L	0.001	5	95	512	4
[	Bi	209		ug/L			1681351	1477688	1
[	Th	232	-0.008	ug/L	0.004	42	1043	755	14
[	U	238	0.193	ug/L	0.001	0	24	6423	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:47:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1063693	0
	Be	9	50.098	ug/L	0.617	1	10	167768	2
	C	13		ug/L			79541	74575	1
	Cl	37		ug/L			3943707	4183376	2
>	Sc	45		ug/L			998438	923297	0
	V	51	48.318	ug/L	1.120	2	5141	801395	2
	V-1	51	48.844	ug/L	0.961	1	75	803740	2
	Cr	52	48.417	ug/L	0.415	0	15214	641858	1
	Cr	53	50.321	ug/L	0.347	0	99	73279	0
	Mn	55	48.206	ug/L	1.069	2	362	838244	2
	Co	59	49.511	ug/L	0.253	0	43	587412	1
>	Ge	72		ug/L			420257	377360	1
	Ni	60	48.208	ug/L	0.616	1	16	118858	1
	Ni	62	52.794	ug/L	1.140	2	150	19052	1
	Cu	63	49.068	ug/L	1.210	2	156	258143	1
	Cu	65	48.860	ug/L	0.573	1	26	113125	1
	Zn	66	49.655	ug/L	2.033	4	150	68866	3
	Zn	67	48.892	ug/L	1.640	3	23	11297	2
	Zn	68	49.358	ug/L	1.571	3	148	47994	3
	As	75	49.134	ug/L	1.132	2	645	63269	1
	As-1	75	49.150	ug/L	1.364	2	6520	66948	1
	Se	82	50.992	ug/L	0.950	1	-1	7231	0
	Se	78	49.581	ug/L	1.710	3	6575	22799	1
	Mo	98	48.525	ug/L	2.217	4	27	157029	3
	Y	89		ug/L			300262	272148	1
	Kr	83		ug/L			915	970	2
>	In	115		ug/L			761183	703814	0
	Ag	107	47.675	ug/L	0.942	1	19	277044	1
	Cd	111	49.153	ug/L	0.972	1	46	163682	1
	Cd	114	49.869	ug/L	0.876	1	14	415012	1
	Sb	121	49.495	ug/L	0.409	0	335	527356	0
	Sb	123	49.544	ug/L	0.842	1	242	398359	1
	Ba	135	48.774	ug/L	0.389	0	32	154072	0
	Ba	137	48.749	ug/L	0.343	0	48	261828	0
>	Tb	159		ug/L			829582	790776	1
	Tl	205	47.664	ug/L	0.671	1	81	1085766	0
	Pb	208	49.363	ug/L	1.106	2	95	1454345	1
	Bi	209		ug/L			1681351	1559261	1
	Th	232	47.381	ug/L	1.476	3	1043	1437969	1
	U	238	47.566	ug/L	1.266	2	24	1542383	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 03, 2012 15:53:00
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1101187	1011502	1
	Be	9	-0.002	ug/L	0.000	17	10	3	34
	C	13		ug/L			79541	73680	1
	Cl	37		ug/L			3943707	4056355	0
>	Sc	45		ug/L			998438	873272	1
	V	51	-0.007	ug/L	0.002	30	5141	4380	1
	V-1	51	0.004	ug/L	0.001	25	75	126	12
	Cr	52	-0.030	ug/L	0.010	33	15214	12940	1
	Cr	53	0.011	ug/L	0.009	82	99	101	13
	Mn	55	0.128	ug/L	0.197	153	362	2448	134
	Co	59	0.011	ug/L	0.013	122	43	158	94
>	Ge	72		ug/L			420257	358614	1
	Ni	60	0.011	ug/L	0.014	127	16	39	83
	Ni	62	6.384	ug/L	0.401	6	150	2301	4
	Cu	63	0.360	ug/L	0.013	3	156	1933	2
	Cu	65	0.018	ug/L	0.013	71	26	62	46
	Zn	66	0.009	ug/L	0.019	219	150	140	18
	Zn	67	0.006	ug/L	0.012	187	23	21	13
	Zn	68	-0.012	ug/L	0.020	166	148	115	15
	As	75	0.229	ug/L	0.208	90	645	829	31
	As-1	75	0.542	ug/L	0.189	34	6520	6204	3
	Se	82	-0.033	ug/L	0.122	368	-1	-5	313
	Se	78	1.526	ug/L	0.220	14	6575	6104	0
	Mo	98	0.010	ug/L	0.004	42	27	54	25
	Y	89		ug/L			300262	258581	1
	Kr	83		ug/L			915	963	6
>	In	115		ug/L			761183	669630	1
	Ag	107	0.001	ug/L	0.003	410	19	20	72
	Cd	111	0.003	ug/L	0.001	36	46	49	5
	Cd	114	0.001	ug/L	0.000	44	14	20	18
	Sb	121	0.047	ug/L	0.002	4	335	774	2
	Sb	123	0.047	ug/L	0.006	13	242	576	8
	Ba	135	0.000	ug/L	0.002	2305	32	29	19
	Ba	137	-0.001	ug/L	0.002	354	48	40	24
>	Tb	159		ug/L			829582	736972	0
	Tl	205	0.001	ug/L	0.001	67	81	98	18
	Pb	208	0.001	ug/L	0.001	97	95	99	14
	Bi	209		ug/L			1681351	1482551	0
	Th	232	0.066	ug/L	0.020	30	1043	2797	20
	U	238	0.002	ug/L	0.001	35	24	67	24

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.4.12 **Analyst:** JD **Page:** 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			2932-3
		1			2933-5
		2			2929, 1-4
		3			6 -5
		4			2927-4
		5			2931-7
		Rinse Sample			r ≥ 0.9997
		60			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		Low Check			
		ICSA			
		ICSAB			SB Cr 1280 Ni 1337
		B1			Ni 0.297
		B2			↓ 0.516
		CCV2			
		CCB2			
		UR78 MB1	REN	2	✓
✓		MB2			~~Zn Mn Cd~~ revin OK ✓
		MB2QK			
		MB5QK			
		UR02 L		40X	lm

UR78 : 00412

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5/4/12 **Analyst:** JMB **Page:** 2 **of** 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		UR02N	REN	20	AG
		C		40	
		P		20	
		LR200		✓	
		BB			
		CCV3		✓	
		CCB3		✓	
		UR78 A	REN	2	
		B			
		C			
		D			
		K			
		L			
OK JMB 5/4/12 REN		N			
		I			
		F			
		J			
		CCV4		✓	
		CCB4			60 Ni high
		UR78 MB2	REN	2	
		CCV5			
		CCB5			60 Ni high
		UR78 E-L	REN	10 ✓	
		E		2	

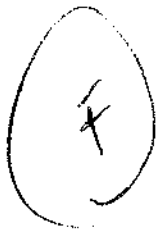
ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ~~ICP-MS~~ GFA CVA **Analysis Date:** 5.4.12

MZ	Analyst MB 5.7	Peer 5-7	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see ea sec log
ICB/CCB	✓	✓	see log
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	—	—	

SmartTune Wizard - Details



ptimization Details

martTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

ptimization Status

tart Time: 5/4/2012 9:36:54 AM

aily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

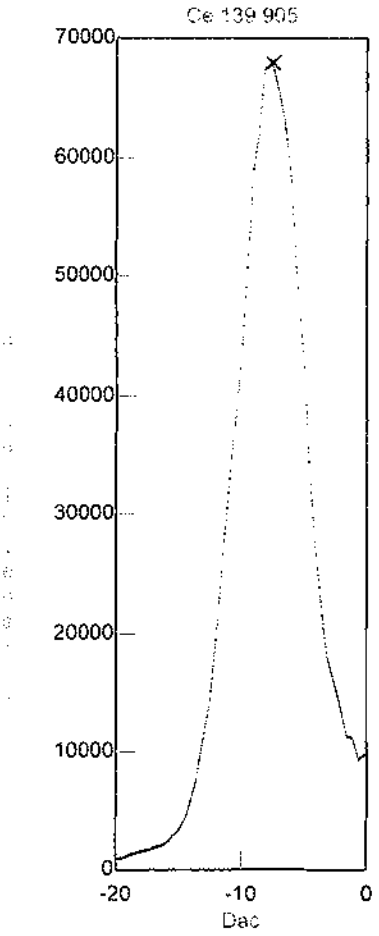
Initial Try
Obtained Intensity (Be 9.0122): 5937.58
Obtained Intensity (Mg 23.985): 48166.60
Obtained Intensity (In 114.904): 67784.89
Obtained Intensity (Pb 207.977): 25602.94
Obtained Intensity (U 238.05): 47252.33
Obtained Intensity (Bkgd 220): 0.13
Obtained Formula (CeO 155.9 / Ce 139.905): 0.017 (=1155.68 / 68384.66)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.013 (=884.65 / 68384.66)

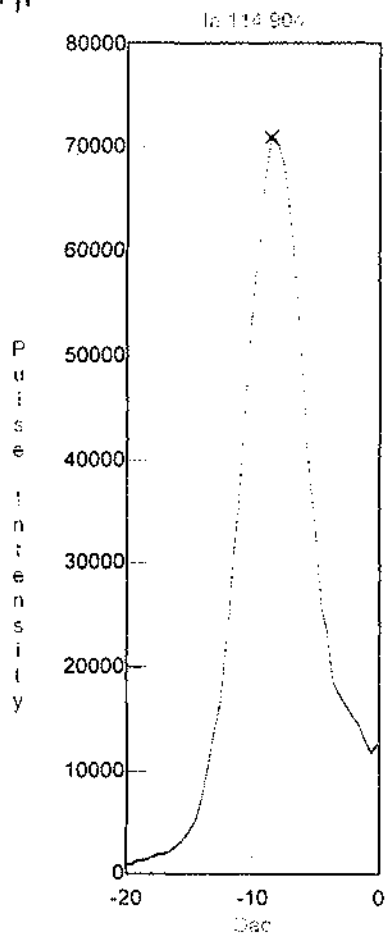
Passed] Optimum value(s): N/A

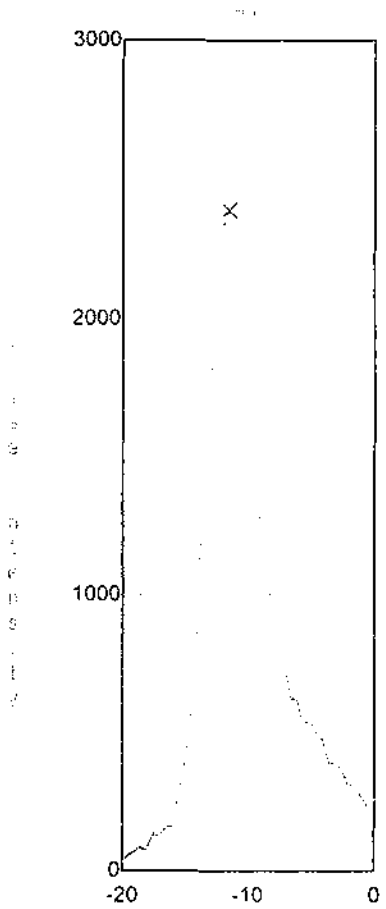
nd Time: 5/4/2012 9:39:30 AM

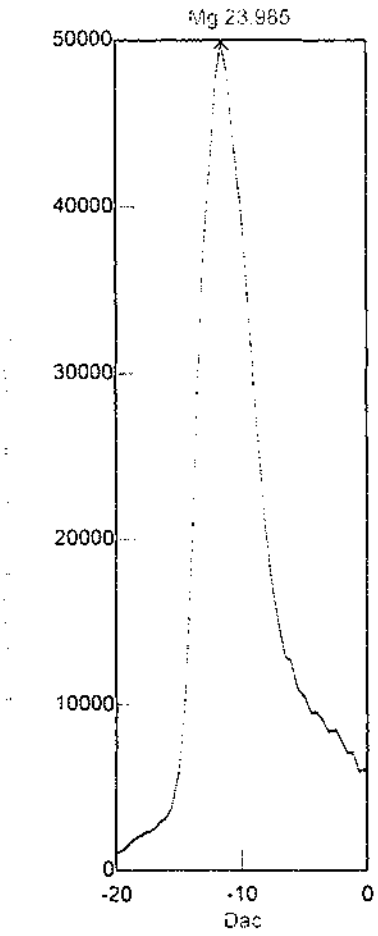
UR78 : 00415

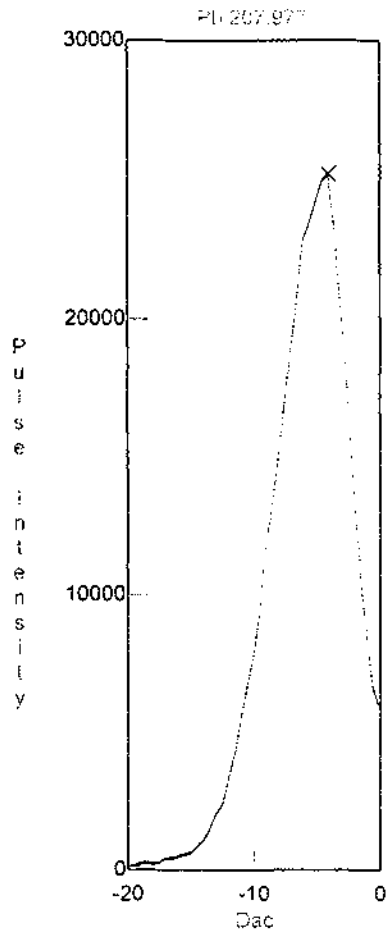
5/4/12

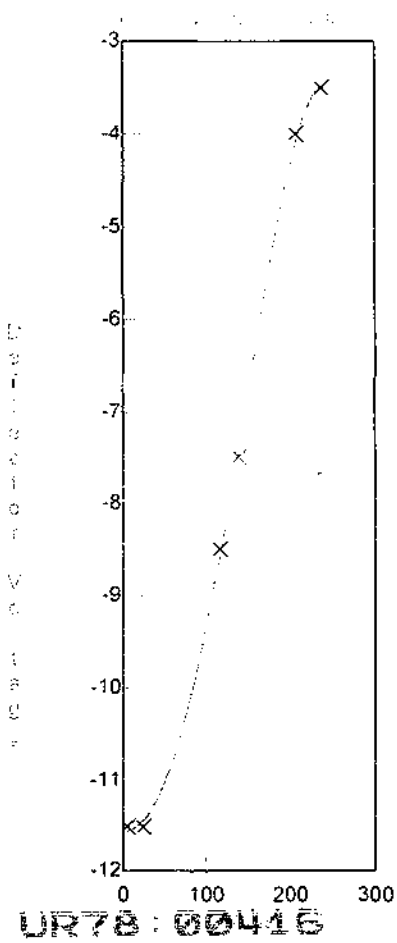












UR78 : 00416

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/4/2012 9:32:22 AM
End Time: 5/4/2012 9:36:33 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.999; Intercept = -11.54

UR78 : 00417

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NeXIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/4/2012 9:28:52 AM
End Time: 5/4/2012 9:31:05 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/6.975), Target/Obtained resolution (0.7/0.698)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.708)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.712)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.698)

UR78 : 00418

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/4/2012 9:28:00 AM
End Time: 5/4/2012 9:28:44 AM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
1.36 mm	-0.72 mm	68083.99

UR78 : 00419

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/4/2012 9:24:18 AM

Daily Performance Check

Optimization Settings:
Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:
Initial Try
Obtained Intensity (Be 9.0122): 4700.39
Obtained Intensity (Mg 23.985): 39773.09
Obtained Intensity (In 114.904): 57032.44
Obtained Intensity (Pb 207.977): 21127.22
Obtained Intensity (U 238.05): 40629.34
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.013 (=722.23 / 57587.64)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=552.62 / 57587.64)
[Passed] Optimum value(s): N/A

End Time: 5/4/2012 9:26:53 AM

UR7B : 00120

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:03:40
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1526172	0
	Be	9		ug/L				4	53
	C	13		ug/L				93499	0
	Cl	37		ug/L				4573829	0
>	Sc	45		ug/L				1286103	2
	V	51		ug/L				6409	2
	V-1	51		ug/L				89	7
	Cr	52		ug/L				18893	1
	Cr	53		ug/L				113	14
	Mn	55		ug/L				470	1
	Co	59		ug/L				44	5
>	Ge	72		ug/L				497689	1
	Ni	60		ug/L				27	22
	Ni	62		ug/L				144	6
	Cu	63		ug/L				128	8
	Cu	65		ug/L				27	16
	Zn	66		ug/L				185	15
	Zn	67		ug/L				33	4
	Zn	68		ug/L				182	5
	As	75		ug/L				726	1
	As-1	75		ug/L				7188	0
	Se	82		ug/L				-2	619
	Se	78		ug/L				7268	0
	Mo	98		ug/L				11	41
	Y	89		ug/L				380435	1
	Kr	83		ug/L				1054	2
>	In	115		ug/L				908583	0
	Ag	107		ug/L				15	24
	Cd	111		ug/L				70	5
	Cd	114		ug/L				20	24
	Sb	121		ug/L				32	15
	Sb	123		ug/L				25	19
	Ba	135		ug/L				39	25
	Ba	137		ug/L				80	9
>	Tb	159		ug/L				1030823	0
	Tl	205		ug/L				16	3
	Pb	208		ug/L				136	3
	Bi	209		ug/L				2148793	0
	Th	232		ug/L				41	4
	U	238		ug/L				4	70

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:07:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1531150	2
	Be	9	0.200	ug/L	0.004	1	4	869	3
	C	13		ug/L			93499	94932	2
	Cl	37		ug/L			4573829	4475199	1
>	Sc	45		ug/L			1286103	1295348	2
	V	51	0.200	ug/L	0.017	8	6409	10658	2
	V-1	51	0.200	ug/L	0.007	3	89	4255	0
	Cr	52	0.500	ug/L	0.051	10	18893	27369	1
	Cr	53	0.500	ug/L	0.023	4	113	1045	2
	Mn	55	0.500	ug/L	0.002	0	470	11925	2
	Co	59	0.200	ug/L	0.007	3	44	3108	1
>	Ge	72		ug/L			497689	488851	0
	Ni	60	0.500	ug/L	0.025	4	27	1658	5
	Ni	62	0.500	ug/L	0.044	8	144	364	4
	Cu	63	0.500	ug/L	0.010	2	128	3758	2
	Cu	65	0.500	ug/L	0.035	7	27	1586	7
	Zn	66	4.000	ug/L	0.092	2	185	10155	1
	Zn	67	4.000	ug/L	0.065	1	33	1482	1
	Zn	68	4.000	ug/L	0.103	2	182	6811	1
	As	75	0.200	ug/L	0.010	5	726	1065	2
	As-1	75	0.200	ug/L	0.041	20	7188	7544	0
	Se	82	0.500	ug/L	0.041	8	-2	97	9
	Se	78	0.500	ug/L	0.124	24	7268	7541	0
	Mo	98	0.200	ug/L	0.012	6	11	815	5
	Y	89		ug/L			380435	373828	0
	Kr	83		ug/L			1054	1060	1
>	In	115		ug/L			908583	910656	0
	Ag	107	0.200	ug/L	0.003	1	15	1560	0
	Cd	111	0.100	ug/L	0.002	1	70	477	1
	Cd	114	0.100	ug/L	0.006	6	20	1047	5
	Sb	121	0.200	ug/L	0.006	2	32	2488	2
	Sb	123	0.200	ug/L	0.002	1	25	1791	1
	Ba	135	0.500	ug/L	0.010	2	39	2132	1
	Ba	137	0.500	ug/L	0.001	0	80	3537	0
>	Tb	159		ug/L			1030823	1025051	0
	Tl	205	0.200	ug/L	0.002	1	16	5408	1
	Pb	208	0.100	ug/L	0.002	1	136	4505	1
	Bi	209		ug/L			2148793	2098771	4
	Th	232	0.200	ug/L	0.002	0	41	5691	0
	U	238	0.200	ug/L	0.000	0	4	7076	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:11:59
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1526172	1599618	1
[	Be	9	10.000	ug/L	0.148	1	4	45735	1
	C	13		ug/L			93499	97213	1
	Cl	37		ug/L			4573829	4616032	1
[>	Sc	45		ug/L			1286103	1329096	1
[	V	51	10.000	ug/L	0.153	1	6409	215470	1
[	V-1	51	10.000	ug/L	0.134	1	89	208185	1
[	Cr	52	10.000	ug/L	0.148	1	18893	190566	0
[	Cr	53	10.000	ug/L	0.094	0	113	19204	0
[	Mn	55	10.000	ug/L	0.130	1	470	231477	0
[	Co	59	10.000	ug/L	0.317	3	44	155395	1
[>	Ge	72		ug/L			497689	507290	2
[	Ni	60	9.999	ug/L	0.256	2	27	32584	1
[	Ni	62	9.999	ug/L	0.274	2	144	4620	0
[	Cu	63	9.998	ug/L	0.156	1	128	70141	2
[	Cu	65	9.999	ug/L	0.258	2	27	30594	0
[	Zn	66	9.527	ug/L	0.190	1	185	19207	0
[	Zn	67	9.735	ug/L	0.281	2	33	3172	1
[	Zn	68	9.550	ug/L	0.214	2	182	13014	2
[	As	75	9.999	ug/L	0.163	1	726	16778	0
[	As-1	75	9.997	ug/L	0.301	3	7188	22640	0
[	Se	82	9.999	ug/L	0.132	1	-2	1947	1
[	Se	78	9.976	ug/L	0.608	6	7268	11623	0
[	Mo	98	10.000	ug/L	0.191	1	11	42234	0
	Y	89		ug/L			380435	392673	1
	Kr	83		ug/L			1054	1053	2
[>	In	115		ug/L			908583	915207	1
[	Ag	107	10.000	ug/L	0.332	3	15	74904	2
[	Cd	111	10.000	ug/L	0.081	0	70	39652	0
[	Cd	114	10.000	ug/L	0.029	0	20	101374	1
[	Sb	121	10.000	ug/L	0.139	1	32	126025	0
[	Sb	123	10.000	ug/L	0.153	1	25	94135	0
[	Ba	135	9.997	ug/L	0.144	1	39	37651	1
[	Ba	137	9.998	ug/L	0.119	1	80	63399	0
[>	Tb	159		ug/L			1030823	1054545	1
[	Tl	205	10.000	ug/L	0.130	1	16	281560	0
[	Pb	208	10.000	ug/L	0.118	1	136	371283	0
[	Bi	209		ug/L			2148793	2170496	1
[	Th	232	10.000	ug/L	0.160	1	41	327249	2
[	U	238	10.000	ug/L	0.105	1	4	362302	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:16:21
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1593877	1
	Be	9	19.969	ug/L	0.271	1	4	90441	1
	C	13		ug/L			93499	98267	1
	Cl	37		ug/L			4573829	4755258	0
>	Sc	45		ug/L			1286103	1342356	0
	V	51	20.101	ug/L	0.276	1	6409	439442	1
	V-1	51	20.112	ug/L	0.182	0	89	432457	0
	Cr	52	19.939	ug/L	0.554	2	18893	360028	2
	Cr	53	19.976	ug/L	0.246	1	113	38449	1
	Mn	55	19.937	ug/L	0.223	1	470	459891	1
	Co	59	19.996	ug/L	0.180	0	44	313638	0
>	Ge	72		ug/L			497689	515646	0
	Ni	60	19.923	ug/L	0.394	1	27	64988	2
	Ni	62	20.063	ug/L	0.260	1	144	9393	0
	Cu	63	19.879	ug/L	0.373	1	128	138317	1
	Cu	65	19.936	ug/L	0.174	0	27	61221	0
	Zn	66	19.610	ug/L	0.358	1	185	37490	1
	Zn	67	19.699	ug/L	0.176	0	33	6174	1
	Zn	68	19.750	ug/L	0.231	1	182	26040	0
	As	75	19.932	ug/L	0.158	0	726	32821	1
	As-1	75	19.910	ug/L	0.147	0	7188	37911	0
	Se	82	20.003	ug/L	0.188	0	-2	3966	1
	Se	78	19.936	ug/L	0.147	0	7268	15991	0
	Mo	98	19.946	ug/L	0.223	1	11	84727	1
	Y	89		ug/L			380435	390171	2
	Kr	83		ug/L			1054	1068	7
>	In	115		ug/L			908583	923969	1
	Ag	107	20.062	ug/L	0.178	0	15	153645	2
	Cd	111	20.032	ug/L	0.084	0	70	80633	1
	Cd	114	19.984	ug/L	0.156	0	20	203862	1
	Sb	121	19.953	ug/L	0.190	0	32	251453	1
	Sb	123	20.001	ug/L	0.369	1	25	190100	0
	Ba	135	19.995	ug/L	0.337	1	39	75901	0
	Ba	137	20.032	ug/L	0.255	1	80	128984	1
>	Tb	159		ug/L			1030823	1059393	1
	Tl	205	19.965	ug/L	0.014	0	16	560875	1
	Pb	208	19.978	ug/L	0.078	0	136	741824	1
	Bi	209		ug/L			2148793	2152042	0
	Th	232	20.121	ug/L	0.300	1	41	677683	1
	U	238	20.006	ug/L	0.397	1	4	728884	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:20:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1526172	1558906	0
[	Be	9	49.923	ug/L	0.246	0	4	219459	0
	C	13		ug/L			93499	92606	0
	Cl	37		ug/L			4573829	4902252	0
[>	Sc	45		ug/L			1286103	1296533	0
[	V	51	49.920	ug/L	0.880	1	6409	1036266	1
[	V-1	51	49.925	ug/L	0.783	1	89	1028984	0
[	Cr	52	50.025	ug/L	0.544	1	18893	845726	0
[	Cr	53	50.041	ug/L	0.127	0	113	93238	0
[	Mn	55	50.026	ug/L	0.832	1	470	1116709	1
[	Co	59	49.850	ug/L	0.352	0	44	743952	0
[>	Ge	72		ug/L			497689	498237	1
[	Ni	60	50.002	ug/L	0.423	0	27	157578	1
[	Ni	62	49.857	ug/L	1.570	3	144	22021	1
[	Cu	63	49.965	ug/L	0.754	1	128	334520	0
[	Cu	65	49.873	ug/L	1.715	3	27	146044	1
[	Zn	66	49.404	ug/L	0.626	1	185	86016	1
[	Zn	67	49.874	ug/L	1.633	3	33	14866	1
[	Zn	68	49.729	ug/L	1.563	3	182	61456	1
[	As	75	49.972	ug/L	1.161	2	726	78178	0
[	As-1	75	50.018	ug/L	1.196	2	7188	81259	0
[	Se	82	49.972	ug/L	1.050	2	-2	9549	0
[	Se	78	50.161	ug/L	1.059	2	7268	28178	0
[	Mo	98	49.752	ug/L	0.865	1	11	199219	1
	Y	89		ug/L			380435	388842	2
	Kr	83		ug/L			1054	1082	3
[>	In	115		ug/L			908583	916632	0
[	Ag	107	49.505	ug/L	0.333	0	15	358321	0
[	Cd	111	49.568	ug/L	0.592	1	70	189629	0
[	Cd	114	49.631	ug/L	0.614	1	20	484318	0
[	Sb	121	49.570	ug/L	0.502	1	32	594164	0
[	Sb	123	49.439	ug/L	0.157	0	25	441448	0
[	Ba	135	49.738	ug/L	1.217	2	39	182478	1
[	Ba	137	49.868	ug/L	0.685	1	80	314302	0
[>	Tb	159		ug/L			1030823	1064332	0
[	Tl	205	49.619	ug/L	0.340	0	16	1348944	0
[	Pb	208	49.624	ug/L	0.573	1	136	1783859	0
[	Bi	209		ug/L			2148793	2066370	3
[	Th	232	49.809	ug/L	0.762	1	41	1653823	1
[	U	238	49.708	ug/L	0.271	0	4	1768205	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:26:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1540977	0
	Be	9	100.116	ug/L	0.342	0	4	436717	0
	C	13		ug/L			93499	96124	2
	Cl	37		ug/L			4573829	4930628	2
>	Sc	45		ug/L			1286103	1288277	0
	V	51	101.415	ug/L	1.940	1	6409	2188023	1
	V-1	51	101.463	ug/L	1.353	1	89	2184347	0
	Cr	52	100.248	ug/L	2.047	2	18893	1678596	1
	Cr	53	100.428	ug/L	0.473	0	113	188505	1
	Mn	55	100.739	ug/L	2.332	2	470	2290279	1
	Co	59	100.595	ug/L	1.489	1	44	1521800	0
>	Ge	72		ug/L			497689	499060	1
	Ni	60	99.758	ug/L	0.554	0	27	312367	1
	Ni	62	99.961	ug/L	1.631	1	144	44033	1
	Cu	63	99.184	ug/L	1.992	2	128	647424	1
	Cu	65	99.378	ug/L	0.724	0	27	285634	0
	Zn	66	99.123	ug/L	1.125	1	185	167820	1
	Zn	67	99.566	ug/L	1.218	1	33	29285	2
	Zn	68	98.970	ug/L	2.033	2	182	118316	1
	As	75	99.863	ug/L	0.601	0	726	155085	0
	As-1	75	99.851	ug/L	0.685	0	7188	154603	0
	Se	82	99.463	ug/L	1.621	1	-2	18707	0
	Se	78	99.375	ug/L	2.396	2	7268	47922	1
	Mo	98	100.442	ug/L	1.046	1	11	408946	2
	Y	89		ug/L			380435	382920	1
	Kr	83		ug/L			1054	1124	3
>	In	115		ug/L			908583	904995	1
	Ag	107	99.577	ug/L	0.780	0	15	701675	0
	Cd	111	99.959	ug/L	2.038	2	70	376939	1
	Cd	114	99.941	ug/L	0.680	0	20	960997	0
	Sb	121	100.734	ug/L	0.212	0	32	1222023	1
	Sb	123	100.861	ug/L	1.418	1	25	915344	0
	Ba	135	100.542	ug/L	0.506	0	39	370887	0
	Ba	137	100.527	ug/L	0.326	0	80	636714	1
>	Tb	159		ug/L			1030823	1066821	0
	Tl	205	100.968	ug/L	1.172	1	16	2843112	1
	Pb	208	99.626	ug/L	0.542	0	136	3545573	0
	Bi	209		ug/L			2148793	1951070	1
	Th	232	101.220	ug/L	0.527	0	41	3511633	0
	U	238	101.125	ug/L	0.491	0	4	3746078	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:31:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120503A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1526172	1487878	1
	Be	9	0.003	ug/L	0.002	65	4	18	49
	C	13		ug/L			93499	89082	1
	Cl	37		ug/L			4573829	4677589	0
>	Sc	45		ug/L			1286103	1257506	1
	V	51	-0.004	ug/L	0.007	175	6409	6179	2
	V-1	51	0.002	ug/L	0.002	107	89	122	32
	Cr	52	-0.016	ug/L	0.030	194	18893	18219	1
	Cr	53	0.006	ug/L	0.003	55	113	121	3
	Mn	55	0.003	ug/L	0.003	86	470	534	13
	Co	59	0.002	ug/L	0.002	103	44	69	40
>	Ge	72		ug/L			497689	483280	3
	Ni	60	0.002	ug/L	0.003	156	27	32	29
	Ni	62	0.199	ug/L	0.044	22	144	224	4
	Cu	63	0.012	ug/L	0.003	26	128	198	8
	Cu	65	0.005	ug/L	0.002	48	27	39	14
	Zn	66	-0.002	ug/L	0.003	124	185	176	1
	Zn	67	0.002	ug/L	0.012	460	33	33	6
	Zn	68	-0.004	ug/L	0.010	284	182	172	3
	As	75	0.009	ug/L	0.038	420	726	717	4
	As-1	75	0.102	ug/L	0.169	165	7188	7120	0
	Se	82	-0.006	ug/L	0.106	1710	-2	-3	529
	Se	78	0.352	ug/L	0.581	165	7268	7191	0
	Mo	98	0.038	ug/L	0.023	60	11	161	55
	Y	89		ug/L			380435	365386	0
	Kr	83		ug/L			1054	1036	4
>	In	115		ug/L			908583	869124	0
	Ag	107	0.013	ug/L	0.017	133	15	99	113
	Cd	111	0.007	ug/L	0.007	111	70	91	28
	Cd	114	0.007	ug/L	0.012	174	20	82	133
	Sb	121	0.121	ug/L	0.018	14	32	1445	14
	Sb	123	0.120	ug/L	0.017	14	25	1068	13
	Ba	135	0.007	ug/L	0.006	81	39	62	31
	Ba	137	0.005	ug/L	0.007	141	80	108	41
>	Tb	159		ug/L			1030823	1004086	1
	Tl	205	0.010	ug/L	0.004	37	16	272	35
	Pb	208	0.004	ug/L	0.004	109	136	256	53
	Bi	209		ug/L			2148793	1963475	1
	Th	232	0.163	ug/L	0.037	22	41	5350	21
	U	238	0.006	ug/L	0.003	53	4	200	52

Sample Information

Sample Date/Time: Friday, May 04, 2012 10:26:06
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9997**	0.017	0.20	10	20	50	100
V-1	51	**0.9996**	0.017	0.20	10	20	50	100
Cr	52	**1.0000**	0.013	0.50	10	20	50	100
Cr	53	**1.0000**	0.001	0.50	10	20	50	100
Mn	55	**0.9999**	0.018	0.50	10	20	50	100
Co	59	**0.9999**	0.012	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.006	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**0.9999**	0.013	0.50	10	20	50	100
Cu	65	**0.9999**	0.006	0.50	10	20	50	100
Zn	66	**0.9997**	0.003	4.00	10	20	50	100
Zn	67	**0.9999**	0.001	4.00	10	20	50	100
Zn	68	**0.9997**	0.002	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9996**	0.000	0.50	10	20	50	100
Se	78	**0.9999**	0.001	0.50	10	20	50	100
Mo	98	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**0.9999**	0.008	0.20	10	20	50	100
Cd	111	**1.0000**	0.004	0.10	10	20	50	100
Cd	114	**1.0000**	0.011	0.10	10	20	50	100
Sb	121	**0.9999**	0.013	0.20	10	20	50	100
Sb	123	**0.9998**	0.010	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**0.9999**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.026	0.20	10	20	50	100
Pb	208	**0.9999**	0.033	0.10	10	20	50	100
Bi	209							
Th	232	**0.9997**	0.033	0.20	10	20	50	100
U	238	**0.9998**	0.035	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:41:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1459567	0
	Be	9		ug/L				7	57
	C	13		ug/L				90291	2
	Cl	37		ug/L				4455814	0
>	Sc	45		ug/L				1230166	0
	V	51		ug/L				6065	3
	V-1	51		ug/L				81	6
	Cr	52		ug/L				18002	2
	Cr	53		ug/L				120	6
	Mn	55		ug/L				467	3
	Co	59		ug/L				45	5
>	Ge	72		ug/L				469903	1
	Ni	60		ug/L				23	34
	Ni	62		ug/L				183	2
	Cu	63		ug/L				147	10
	Cu	65		ug/L				27	2
	Zn	66		ug/L				178	1
	Zn	67		ug/L				26	11
	Zn	68		ug/L				176	2
	As	75		ug/L				704	0
	As-1	75		ug/L				6994	0
	Se	82		ug/L				-14	18
	Se	78		ug/L				7062	0
	Mo	98		ug/L				24	12
	Y	89		ug/L				357378	0
	Kr	83		ug/L				1052	1
>	In	115		ug/L				863946	1
	Ag	107		ug/L				16	9
	Cd	111		ug/L				71	8
	Cd	114		ug/L				13	37
	Sb	121		ug/L				349	12
	Sb	123		ug/L				274	20
	Ba	135		ug/L				48	21
	Ba	137		ug/L				73	16
>	Tb	159		ug/L				986512	0
	Tl	205		ug/L				64	0
	Pb	208		ug/L				132	5
	Bi	209		ug/L				1944262	2
	Th	232		ug/L				975	1
	U	238		ug/L				23	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:46:07
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1555638	1
	Be	9	49.295	ug/L	0.674	1	7	217057	0
	C	13		ug/L			90291	94120	1
	Cl	37		ug/L			4455814	4926353	0
>	Sc	45		ug/L			1230166	1285811	0
	V	51	48.000	ug/L	1.647	3	6065	1036835	2
	V-1	51	48.124	ug/L	1.758	3	81	1033976	2
	Cr	52	49.794	ug/L	0.193	0	18002	841692	0
	Cr	53	50.245	ug/L	0.972	1	120	94197	2
	Mn	55	48.682	ug/L	0.698	1	467	1105020	1
	Co	59	50.239	ug/L	0.694	1	45	758673	1
>	Ge	72		ug/L			469903	502053	1
	Ni	60	49.229	ug/L	0.559	1	23	155061	0
	Ni	62	49.725	ug/L	0.788	1	183	22158	1
	Cu	63	49.848	ug/L	0.978	1	147	327409	0
	Cu	65	50.016	ug/L	0.025	0	27	144643	1
	Zn	66	48.925	ug/L	0.472	0	178	83425	1
	Zn	67	48.565	ug/L	1.294	2	26	14378	1
	Zn	68	49.714	ug/L	0.654	1	176	59888	1
	As	75	50.124	ug/L	0.366	0	704	78692	1
	As-1	75	48.857	ug/L	0.153	0	6994	80027	1
	Se	82	79.535	ug/L	0.980	1	-14	14555	0
	Se	78	76.906	ug/L	1.359	1	7062	39169	1
	Mo	98	49.530	ug/L	0.279	0	24	202872	1
	Y	89		ug/L			357378	381773	1
	Kr	83		ug/L			1052	1103	3
>	In	115		ug/L			863946	904954	0
	Ag	107	51.852	ug/L	0.633	1	16	365388	1
	Cd	111	49.462	ug/L	0.833	1	71	186567	1
	Cd	114	49.501	ug/L	0.343	0	13	475976	0
	Sb	121	49.286	ug/L	0.321	0	349	598197	0
	Sb	123	48.908	ug/L	0.948	1	274	444104	1
	Ba	135	50.260	ug/L	0.234	0	48	185439	1
	Ba	137	49.838	ug/L	0.443	0	73	315667	0
>	Tb	159		ug/L			986512	1045156	0
	Tl	205	49.041	ug/L	0.303	0	64	1352917	0
	Pb	208	51.213	ug/L	0.197	0	132	1785653	0
	Bi	209		ug/L			1944262	1967415	0
	Th	232	49.510	ug/L	0.493	0	975	1683758	0
	U	238	48.980	ug/L	0.290	0	23	1777574	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:51:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			1459567	1477926	2
⌊	Be	9	0.004	ug/L	0.003	77	7	22	51
	C	13		ug/L			90291	89239	3
	Cl	37		ug/L			4455814	4685667	0
⌈>	Sc	45		ug/L			1230166	1224430	2
⌈	V	51	0.011	ug/L	0.003	27	6065	6265	2
⌊	V-1	51	0.003	ug/L	0.003	102	81	139	44
⌈	Cr	52	0.031	ug/L	0.012	39	18002	18407	1
⌊	Cr	53	0.001	ug/L	0.006	1109	120	121	7
⌈	Mn	55	0.002	ug/L	0.001	88	467	499	7
⌊	Co	59	0.001	ug/L	0.002	183	45	59	45
⌈>	Ge	72		ug/L			469903	474346	0
⌈	Ni	60	0.004	ug/L	0.004	118	23	34	38
⌊	Ni	62	-0.030	ug/L	0.018	59	183	173	3
⌈	Cu	63	0.002	ug/L	0.003	148	147	161	11
⌊	Cu	65	0.001	ug/L	0.001	54	27	31	6
⌈	Zn	66	0.003	ug/L	0.010	365	178	184	8
⌊	Zn	67	0.003	ug/L	0.008	286	26	27	7
⌈	Zn	68	-0.001	ug/L	0.003	279	176	176	2
⌈	As	75	0.011	ug/L	0.011	96	704	727	2
⌊	As-1	75	0.072	ug/L	0.113	155	6994	7160	1
⌈	Se	82	0.129	ug/L	0.118	91	-14	7	268
⌊	Se	78	0.261	ug/L	0.416	159	7062	7230	1
⌊	Mo	98	0.013	ug/L	0.003	26	24	76	16
	Y	89		ug/L			357378	365286	3
	Kr	83		ug/L			1052	1011	3
⌈>	In	115		ug/L			863946	857089	1
⌈	Ag	107	0.002	ug/L	0.000	17	16	31	9
⌈	Cd	111	-0.001	ug/L	0.001	84	71	67	5
⌊	Cd	114	0.002	ug/L	0.001	71	13	30	37
⌈	Sb	121	0.014	ug/L	0.006	44	349	506	15
⌊	Sb	123	0.015	ug/L	0.008	53	274	401	18
⌈	Ba	135	0.002	ug/L	0.001	48	48	53	3
⌊	Ba	137	0.002	ug/L	0.003	110	73	87	19
⌈>	Tb	159		ug/L			986512	985406	1
⌈	Tl	205	0.003	ug/L	0.001	29	64	150	16
⌈	Pb	208	0.002	ug/L	0.000	30	132	185	10
⌈	Bi	209		ug/L			1944262	1950002	0
⌈	Th	232	0.081	ug/L	0.026	32	975	3573	22
⌊	U	238	0.002	ug/L	0.001	36	23	107	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 10:55:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1555551	0
	Be	9	48.752	ug/L	1.007	2	7	214657	1
	C	13		ug/L			90291	89863	1
	Cl	37		ug/L			4455814	4887910	2
>	Sc	45		ug/L			1230166	1306172	0
	V	51	46.488	ug/L	0.194	0	6065	1020477	0
	V-1	51	46.271	ug/L	0.326	0	81	1010110	1
	Cr	52	48.325	ug/L	0.768	1	18002	830339	1
	Cr	53	47.523	ug/L	0.262	0	120	90513	0
	Mn	55	47.107	ug/L	0.764	1	467	1086240	1
	Co	59	48.145	ug/L	0.792	1	45	738497	1
>	Ge	72		ug/L			469903	495497	1
	Ni	60	50.421	ug/L	2.511	4	23	156694	3
	Ni	62	48.686	ug/L	1.293	2	183	21414	1
	Cu	63	50.039	ug/L	0.710	1	147	324384	0
	Cu	65	49.561	ug/L	0.415	0	27	141443	0
	Zn	66	51.097	ug/L	1.903	3	178	85957	2
	Zn	67	49.038	ug/L	0.435	0	26	14331	2
	Zn	68	50.664	ug/L	0.851	1	176	60233	1
	As	75	49.480	ug/L	0.575	1	704	76673	0
	As-1	75	49.302	ug/L	0.829	1	6994	79626	0
	Se	82	51.978	ug/L	0.237	0	-14	9383	1
	Se	78	49.727	ug/L	0.949	1	7062	27627	0
	Mo	98	48.616	ug/L	1.157	2	24	196496	1
	Y	89		ug/L			357378	381924	1
	Kr	83		ug/L			1052	1076	2
>	In	115		ug/L			863946	901050	1
	Ag	107	51.158	ug/L	1.334	2	16	358861	1
	Cd	111	49.960	ug/L	0.435	0	71	187637	1
	Cd	114	50.275	ug/L	0.864	1	13	481295	1
	Sb	121	48.537	ug/L	0.622	1	349	586514	0
	Sb	123	48.277	ug/L	1.210	2	274	436432	1
	Ba	135	48.696	ug/L	0.369	0	48	178877	0
	Ba	137	48.744	ug/L	1.082	2	73	307353	0
>	Tb	159		ug/L			986512	1046598	0
	Tl	205	48.252	ug/L	0.494	1	64	1332958	0
	Pb	208	50.491	ug/L	0.532	1	132	1762820	0
	Bi	209		ug/L			1944262	2030268	4
	Th	232	48.313	ug/L	0.394	0	975	1645410	1
	U	238	48.021	ug/L	0.577	1	23	1745092	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:00:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1497454	1
[	Be	9	0.002	ug/L	0.001	35	7	16	19
	C	13		ug/L			90291	89708	1
	Cl	37		ug/L			4455814	4682571	1
[>	Sc	45		ug/L			1230166	1224607	0
|	V	51	0.007	ug/L	0.003	39	6065	6185	1
|	V-1	51	0.001	ug/L	0.001	96	81	96	14
|	Cr	52	0.020	ug/L	0.018	88	18002	18236	1
|	Cr	53	-0.004	ug/L	0.005	138	120	113	8
|	Mn	55	0.000	ug/L	0.001	281	467	471	3
[	Co	59	0.001	ug/L	0.000	20	45	57	4
[>	Ge	72		ug/L			469903	476446	2
|	Ni	60	0.001	ug/L	0.001	127	23	26	14
|	Ni	62	-0.019	ug/L	0.044	234	183	178	8
|	Cu	63	0.003	ug/L	0.002	68	147	166	4
|	Cu	65	0.002	ug/L	0.002	83	27	33	12
|	Zn	66	-0.004	ug/L	0.005	137	178	174	2
|	Zn	67	-0.026	ug/L	0.001	5	26	19	2
|	Zn	68	-0.007	ug/L	0.010	139	176	170	5
|	As	75	0.017	ug/L	0.020	115	704	739	1
|	As-1	75	0.037	ug/L	0.134	363	6994	7140	0
|	Se	82	0.104	ug/L	0.023	22	-14	3	122
|	Se	78	0.157	ug/L	0.508	323	7062	7219	0
[	Mo	98	0.018	ug/L	0.007	38	24	95	25
	Y	89		ug/L			357378	362999	0
	Kr	83		ug/L			1052	1051	3
[>	In	115		ug/L			863946	869120	0
|	Ag	107	0.002	ug/L	0.001	50	16	27	19
|	Cd	111	-0.001	ug/L	0.003	191	71	67	15
|	Cd	114	0.000	ug/L	0.000	77	13	16	13
|	Sb	121	0.094	ug/L	0.002	2	349	1440	1
|	Sb	123	0.090	ug/L	0.004	4	274	1060	3
|	Ba	135	0.000	ug/L	0.001	352	48	49	9
[	Ba	137	-0.002	ug/L	0.002	146	73	64	21
[>	Tb	159		ug/L			986512	990293	0
|	Tl	205	0.003	ug/L	0.001	30	64	151	17
|	Pb	208	0.001	ug/L	0.001	81	132	170	17
|	Bi	209		ug/L			1944262	1949346	1
|	Th	232	0.112	ug/L	0.040	35	975	4594	27
[	U	238	0.003	ug/L	0.001	17	23	128	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:04:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1455211	1
	Be	9	0.211	ug/L	0.003	1	7	875	0
	C	13		ug/L			90291	90254	1
	Cl	37		ug/L			4455814	4405121	2
>	Sc	45		ug/L			1230166	1228482	2
	V	51	0.200	ug/L	0.002	1	6065	10167	3
	V-1	51	0.194	ug/L	0.005	2	81	4061	5
	Cr	52	0.543	ug/L	0.033	6	18002	26546	1
	Cr	53	0.518	ug/L	0.028	5	120	1047	3
	Mn	55	0.506	ug/L	0.009	1	467	11433	2
	Co	59	0.205	ug/L	0.006	2	45	3008	3
>	Ge	72		ug/L			469903	477109	0
	Ni	60	0.528	ug/L	0.015	2	23	1602	3
	Ni	62	0.538	ug/L	0.057	10	183	412	4
	Cu	63	0.556	ug/L	0.012	2	147	3621	1
	Cu	65	0.545	ug/L	0.018	3	27	1525	4
	Zn	66	4.385	ug/L	0.192	4	178	7269	3
	Zn	67	3.808	ug/L	0.040	1	26	1096	0
	Zn	68	4.149	ug/L	0.137	3	176	4913	2
	As	75	0.222	ug/L	0.006	2	704	1043	1
	As-1	75	0.158	ug/L	0.070	44	6994	7323	0
	Se	82	0.572	ug/L	0.057	9	-14	84	12
	Se	78	0.385	ug/L	0.218	56	7062	7321	0
	Mo	98	0.200	ug/L	0.007	3	24	802	3
	Y	89		ug/L			357378	361633	2
	Kr	83		ug/L			1052	1072	1
>	In	115		ug/L			863946	858469	1
	Ag	107	0.214	ug/L	0.001	0	16	1447	1
	Cd	111	0.110	ug/L	0.002	1	71	465	2
	Cd	114	0.114	ug/L	0.006	4	13	1049	5
	Sb	121	0.216	ug/L	0.022	10	349	2829	9
	Sb	123	0.218	ug/L	0.020	9	274	2151	8
	Ba	135	0.543	ug/L	0.020	3	48	1948	4
	Ba	137	0.526	ug/L	0.005	0	73	3230	1
>	Tb	159		ug/L			986512	999178	1
	Tl	205	0.210	ug/L	0.011	5	64	5596	6
	Pb	208	0.120	ug/L	0.009	7	132	4125	7
	Bi	209		ug/L			1944262	1937703	1
	Th	232	0.196	ug/L	0.015	7	975	7343	5
	U	238	0.201	ug/L	0.006	2	23	6983	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:08:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1611239	1
	Be	9	0.001	ug/L	0.001	101	7	12	36
	C	13		ug/L			90291	186940	2
	Cl	37		ug/L			4455814	12700382	0
>	Sc	45		ug/L			1230166	1356882	2
	V	51	0.133	ug/L	0.034	25	6065	9688	5
	V-1	51	1.504	ug/L	0.037	2	81	34215	5
	Cr	52	0.868	ug/L	0.060	6	18002	34985	1
	Cr	53	5.900	ug/L	0.207	3	120	11797	6
	Mn	55	0.110	ug/L	0.010	9	467	3155	10
	Co	59	0.017	ug/L	0.000	2	45	316	3
>	Ge	72		ug/L			469903	493165	3
	Ni	60	0.393	ug/L	0.015	3	23	1240	0
	Ni	62	6.327	ug/L	0.878	13	183	2945	15
	Cu	63	0.872	ug/L	0.051	5	147	5784	8
	Cu	65	0.413	ug/L	0.020	4	27	1201	3
	Zn	66	0.863	ug/L	0.040	4	178	1628	5
	Zn	67	3.204	ug/L	0.148	4	26	958	6
	Zn	68	0.179	ug/L	0.025	14	176	395	4
	As	75	-0.029	ug/L	0.077	266	704	692	13
	As-1	75	0.203	ug/L	0.061	29	6994	7634	2
	Se	82	-0.368	ug/L	0.048	12	-14	-81	13
	Se	78	0.925	ug/L	0.105	11	7062	7786	3
	Mo	98	404.763	ug/L	8.582	2	24	1627688	1
	Y	89		ug/L			357378	382601	1
	Kr	83		ug/L			1052	1360	2
>	In	115		ug/L			863946	903783	3
	Ag	107	0.024	ug/L	0.002	9	16	184	11
	Cd	111	0.246	ug/L	0.019	7	71	1003	8
	Cd	114	0.313	ug/L	0.007	2	13	3023	1
	Sb	121	0.041	ug/L	0.001	3	349	863	4
	Sb	123	0.039	ug/L	0.002	4	274	644	5
	Ba	135	0.036	ug/L	0.003	7	48	183	4
	Ba	137	0.030	ug/L	0.004	13	73	267	6
>	Tb	159		ug/L			986512	1054685	0
	Tl	205	0.004	ug/L	0.003	67	64	177	40
	Pb	208	0.042	ug/L	0.002	3	132	1623	2
	Bi	209		ug/L			1944262	1885448	1
	Th	232	0.209	ug/L	0.092	44	975	8184	37
	U	238	0.001	ug/L	0.000	11	23	75	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:14:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1641417	1
	Be	9	0.001	ug/L	0.001	176	7	10	46
	C	13		ug/L			90291	197822	1
	Cl	37		ug/L			4455814	12783343	3
>	Sc	45		ug/L			1230166	1373819	1
	V	51	0.059	ug/L	0.166	281	6065	8093	45
	V-1	51	1.571	ug/L	0.035	2	81	36164	2
	Cr	52	19.737	ug/L	0.595	3	18002	368524	1
	Cr	53	25.236	ug/L	0.391	1	120	50620	2
	Mn	55	18.538	ug/L	0.097	0	467	449919	1
	Co	59	18.577	ug/L	0.276	1	45	299742	1
>	Ge	72		ug/L			469903	496927	2
	Ni	60	19.462	ug/L	0.311	1	23	60683	0
	Ni	62	26.530	ug/L	1.163	4	183	11797	5
	Cu	63	20.779	ug/L	0.239	1	147	135216	2
	Cu	65	20.371	ug/L	0.384	1	27	58311	0
	Zn	66	19.746	ug/L	0.126	0	178	33436	1
	Zn	67	19.022	ug/L	0.291	1	26	5590	0
	Zn	68	18.046	ug/L	0.238	1	176	21637	2
	As	75	18.524	ug/L	0.299	1	704	29250	0
	As-1	75	19.741	ug/L	0.347	1	6994	36406	0
	Se	82	-0.202	ug/L	0.104	51	-14	-51	35
	Se	78	1.404	ug/L	0.102	7	7062	8040	1
	Mo	98	404.004	ug/L	5.545	1	24	1637577	1
	Y	89		ug/L			357378	385499	0
	Kr	83		ug/L			1052	1315	6
>	In	115		ug/L			863946	919417	1
	Ag	107	19.453	ug/L	0.143	0	16	139289	1
	Cd	111	19.584	ug/L	0.237	1	71	75107	2
	Cd	114	19.619	ug/L	0.126	0	13	191671	1
	Sb	121	0.050	ug/L	0.001	2	349	982	1
	Sb	123	0.046	ug/L	0.003	5	274	712	4
	Ba	135	0.034	ug/L	0.003	8	48	179	6
	Ba	137	0.028	ug/L	0.002	6	73	256	5
>	Tb	159		ug/L			986512	1070561	1
	Tl	205	0.001	ug/L	0.000	23	64	111	8
	Pb	208	0.041	ug/L	0.000	0	132	1621	1
	Bi	209		ug/L			1944262	1908905	0
	Th	232	0.065	ug/L	0.018	27	975	3320	17
	U	238	0.001	ug/L	0.000	38	23	72	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:19:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1521427	2
	Be	9	0.000	ug/L	0.001	379	7	8	33
	C	13		ug/L			90291	98343	2
	Cl	37		ug/L			4455814	4694585	1
>	Sc	45		ug/L			1230166	1259315	0
	V	51	0.019	ug/L	0.009	46	6065	6614	2
	V-1	51	0.102	ug/L	0.015	14	81	2225	14
	Cr	52	0.059	ug/L	0.022	38	18002	19378	1
	Cr	53	0.361	ug/L	0.062	17	120	786	14
	Mn	55	0.028	ug/L	0.002	6	467	1094	4
	Co	59	0.000	ug/L	0.001	149	45	52	17
>	Ge	72		ug/L			469903	486049	1
	Ni	60	0.023	ug/L	0.002	10	23	93	9
	Ni	62	0.797	ug/L	0.126	15	183	530	8
	Cu	63	0.098	ug/L	0.004	3	147	773	1
	Cu	65	0.063	ug/L	0.007	11	27	204	8
	Zn	66	0.836	ug/L	0.024	2	178	1560	2
	Zn	67	0.711	ug/L	0.045	6	26	230	6
	Zn	68	0.769	ug/L	0.047	6	176	1076	5
	As	75	0.037	ug/L	0.024	64	704	783	3
	As-1	75	0.059	ug/L	0.100	168	6994	7318	0
	Se	82	0.064	ug/L	0.050	78	-14	-3	229
	Se	78	0.211	ug/L	0.339	160	7062	7388	0
	Mo	98	0.078	ug/L	0.007	9	24	335	8
	Y	89		ug/L			357378	372980	2
	Kr	83		ug/L			1052	1120	2
>	In	115		ug/L			863946	901149	0
	Ag	107	0.001	ug/L	0.001	110	16	21	20
	Cd	111	-0.002	ug/L	0.002	116	71	67	12
	Cd	114	0.002	ug/L	0.001	58	13	31	32
	Sb	121	-0.020	ug/L	0.002	9	349	121	19
	Sb	123	-0.021	ug/L	0.002	10	274	98	20
	Ba	135	0.013	ug/L	0.002	18	48	96	8
	Ba	137	0.011	ug/L	0.002	22	73	145	11
>	Tb	159		ug/L			986512	1006113	0
	Tl	205	-0.000	ug/L	0.000	171	64	61	10
	Pb	208	0.022	ug/L	0.002	7	132	875	5
	Bi	209		ug/L			1944262	1955147	1
	Th	232	-0.024	ug/L	0.000	1	975	224	7
	U	238	-0.000	ug/L	0.000	27	23	11	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:25:03
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1533257	0
	Be	9	0.000	ug/L	0.001	276	7	9	59
	C	13		ug/L			90291	96684	2
	Cl	37		ug/L			4455814	4486652	3
>	Sc	45		ug/L			1230166	1246070	2
	V	51	0.012	ug/L	0.014	115	6065	6383	2
	V-1	51	0.051	ug/L	0.007	13	81	1144	9
	Cr	52	0.031	ug/L	0.040	127	18002	18721	0
	Cr	53	0.175	ug/L	0.025	14	120	440	8
	Mn	55	0.018	ug/L	0.001	5	467	880	3
	Co	59	0.001	ug/L	0.001	44	45	67	12
>	Ge	72		ug/L			469903	471497	1
	Ni	60	0.025	ug/L	0.005	18	23	95	13
	Ni	62	0.510	ug/L	0.061	12	183	395	5
	Cu	63	0.074	ug/L	0.002	2	147	603	0
	Cu	65	0.060	ug/L	0.002	3	27	191	4
	Zn	66	0.791	ug/L	0.036	4	178	1442	5
	Zn	67	0.700	ug/L	0.067	9	26	220	8
	Zn	68	0.751	ug/L	0.009	1	176	1023	1
	As	75	0.040	ug/L	0.030	74	704	765	4
	As-1	75	0.043	ug/L	0.085	199	6994	7077	1
	Se	82	0.038	ug/L	0.043	112	-14	-8	90
	Se	78	0.187	ug/L	0.313	167	7062	7158	1
	Mo	98	0.045	ug/L	0.046	101	24	197	88
	Y	89		ug/L			357378	363918	0
	Kr	83		ug/L			1052	1124	2
>	In	115		ug/L			863946	907972	1
	Ag	107	0.001	ug/L	0.002	142	16	24	43
	Cd	111	-0.001	ug/L	0.003	201	71	70	13
	Cd	114	0.001	ug/L	0.001	79	13	26	36
	Sb	121	-0.022	ug/L	0.001	6	349	103	14
	Sb	123	-0.024	ug/L	0.002	8	274	71	24
	Ba	135	0.009	ug/L	0.004	46	48	83	18
	Ba	137	0.010	ug/L	0.002	25	73	139	10
>	Tb	159		ug/L			986512	1002643	0
	Tl	205	-0.001	ug/L	0.000	42	64	49	13
	Pb	208	0.018	ug/L	0.000	1	132	720	1
	Bi	209		ug/L			1944262	1946133	0
	Th	232	-0.026	ug/L	0.001	2	975	135	14
	U	238	-0.000	ug/L	0.000	8	23	6	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:30:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1600397	1
	Be	9	49.915	ug/L	1.039	2	7	226092	0
	C	13		ug/L			90291	94710	1
	Cl	37		ug/L			4455814	4917671	2
>	Sc	45		ug/L			1230166	1316243	0
	V	51	46.013	ug/L	1.338	2	6065	1017850	2
	V-1	51	45.966	ug/L	1.312	2	81	1011131	2
	Cr	52	48.472	ug/L	0.678	1	18002	839223	0
	Cr	53	48.293	ug/L	0.743	1	120	92683	1
	Mn	55	48.353	ug/L	0.168	0	467	1123535	0
	Co	59	47.549	ug/L	0.569	1	45	734983	0
>	Ge	72		ug/L			469903	494561	1
	Ni	60	49.187	ug/L	0.452	0	23	152626	1
	Ni	62	49.927	ug/L	0.354	0	183	21916	1
	Cu	63	49.267	ug/L	0.900	1	147	318776	1
	Cu	65	50.180	ug/L	0.831	1	27	142928	0
	Zn	66	50.839	ug/L	1.198	2	178	85369	1
	Zn	67	49.680	ug/L	1.579	3	26	14485	1
	Zn	68	50.434	ug/L	1.034	2	176	59846	2
	As	75	49.208	ug/L	0.705	1	704	76109	0
	As-1	75	49.009	ug/L	0.748	1	6994	79044	0
	Se	82	51.540	ug/L	0.628	1	-14	9285	0
	Se	78	49.309	ug/L	1.180	2	7062	27403	0
	Mo	98	47.982	ug/L	1.191	2	24	193547	0
	Y	89		ug/L			357378	380685	0
	Kr	83		ug/L			1052	1131	1
>	In	115		ug/L			863946	921048	0
	Ag	107	49.857	ug/L	0.246	0	16	357575	0
	Cd	111	50.760	ug/L	0.109	0	71	194879	0
	Cd	114	50.499	ug/L	0.552	1	13	494198	0
	Sb	121	48.770	ug/L	0.503	1	349	602461	0
	Sb	123	48.973	ug/L	0.874	1	274	452626	1
	Ba	135	48.954	ug/L	0.761	1	48	183813	0
	Ba	137	47.697	ug/L	0.324	0	73	307487	0
>	Tb	159		ug/L			986512	1055449	1
	Tl	205	47.483	ug/L	0.438	0	64	1322796	0
	Pb	208	49.725	ug/L	0.514	1	132	1750719	0
	Bi	209		ug/L			1944262	1962698	0
	Th	232	46.845	ug/L	0.647	1	975	1608860	1
	U	238	47.817	ug/L	0.304	0	23	1752412	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 11:34:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1519184	0
	Be	9	0.004	ug/L	0.007	162	7	26	116
	C	13		ug/L			90291	94089	0
	Cl	37		ug/L			4455814	4642786	1
>	Sc	45		ug/L			1230166	1259438	1
	V	51	-0.002	ug/L	0.007	392	6065	6170	2
	V-1	51	0.022	ug/L	0.003	13	81	543	12
	Cr	52	-0.021	ug/L	0.033	152	18002	18080	2
	Cr	53	0.066	ug/L	0.006	9	120	243	4
	Mn	55	0.004	ug/L	0.003	65	467	578	12
	Co	59	0.002	ug/L	0.003	120	45	79	51
>	Ge	72		ug/L			469903	465149	2
	Ni	60	0.004	ug/L	0.003	72	23	35	25
	Ni	62	0.264	ug/L	0.070	26	183	289	7
	Cu	63	0.014	ug/L	0.005	37	147	228	13
	Cu	65	0.005	ug/L	0.003	70	27	40	22
	Zn	66	0.001	ug/L	0.006	595	178	177	5
	Zn	67	0.015	ug/L	0.015	97	26	30	14
	Zn	68	0.008	ug/L	0.005	66	176	183	3
	As	75	0.051	ug/L	0.022	43	704	770	2
	As-1	75	0.103	ug/L	0.164	159	6994	7060	1
	Se	82	0.145	ug/L	0.080	55	-14	10	134
	Se	78	0.403	ug/L	0.619	153	7062	7140	1
	Mo	98	0.029	ug/L	0.006	21	24	135	15
	Y	89		ug/L			357378	355736	2
	Kr	83		ug/L			1052	1071	3
>	In	115		ug/L			863946	892009	0
	Ag	107	0.004	ug/L	0.002	40	16	44	24
	Cd	111	0.001	ug/L	0.003	318	71	77	13
	Cd	114	0.002	ug/L	0.001	54	13	37	33
	Sb	121	0.140	ug/L	0.014	10	349	2036	7
	Sb	123	0.138	ug/L	0.008	5	274	1513	4
	Ba	135	-0.001	ug/L	0.001	99	48	44	11
	Ba	137	-0.002	ug/L	0.002	83	73	62	18
>	Tb	159		ug/L			986512	996515	2
	Tl	205	0.005	ug/L	0.005	103	64	189	69
	Pb	208	0.006	ug/L	0.008	139	132	337	85
	Bi	209		ug/L			1944262	1928193	1
	Th	232	0.111	ug/L	0.047	41	975	4564	31
	U	238	0.007	ug/L	0.006	76	23	283	71

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 11:48:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			1459567	1583008	1
[	Be	9	0.001		ug/L	0.001	67	7	12	27
	C	13			ug/L			90291	109102	0
	Cl	37			ug/L			4455814	4503825	1
[>	Sc	45			ug/L			1230166	1287238	1
[	V	51	0.017		ug/L	0.013	79	6065	6708	4
[	V-1	51	0.020		ug/L	0.002	9	81	512	7
[	Cr	52	0.035	U	ug/L	0.038	108	18002	19408	3
[	Cr	53	0.046		ug/L	0.012	27	120	211	9
[	Mn	55	0.087		ug/L	0.003	3	467	2465	1
[	Co	59	0.000		ug/L	0.001	313	45	50	18
[>	Ge	72			ug/L			469903	487513	2
[	Ni	60	0.026		ug/L	0.003	11	23	104	7
[	Ni	62	0.134		ug/L	0.056	41	183	247	7
[	Cu	63	0.116	U	ug/L	0.007	5	147	895	4
[	Cu	65	0.114		ug/L	0.006	5	27	349	2
[	Zn	66	1.071	U	ug/L	0.044	4	178	1955	5
[	Zn	67	0.893		ug/L	0.010	1	26	283	1
[	Zn	68	1.017		ug/L	0.050	4	176	1368	4
[	As	75	0.021	U	ug/L	0.022	107	704	762	5
[	As-1	75	-0.093		ug/L	0.078	83	6994	7120	0
[	Se	82	0.076		ug/L	0.089	117	-14	-1	825
[	Se	78	-0.341		ug/L	0.344	101	7062	7189	0
[	Mo	98	0.016		ug/L	0.005	31	24	88	19
	Y	89			ug/L			357378	376356	2
	Kr	83			ug/L			1052	1084	4
[>	In	115			ug/L			863946	920399	1
[	Ag	107	0.001	U	ug/L	0.001	74	16	22	16
[	Cd	111	-0.004		ug/L	0.003	70	71	62	14
[	Cd	114	0.001		ug/L	0.000	34	13	28	16
[	Sb	121	-0.001		ug/L	0.004	366	349	358	15
[	Sb	123	-0.002		ug/L	0.005	216	274	271	17
[	Ba	135	0.005		ug/L	0.004	80	48	70	21
[	Ba	137	0.007		ug/L	0.003	35	73	126	12
[>	Tb	159			ug/L			986512	1027743	1
[	Tl	205	0.000		ug/L	0.001	187	64	78	26
[	Pb	208	0.009		ug/L	0.001	12	132	432	9
[	Bi	209			ug/L			1944262	1964226	1
[	Th	232	0.027		ug/L	0.009	31	975	1933	13
[	U	238	-0.000		ug/L	0.000	1443	23	24	22

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 11:53:05
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

DEL remark ok 5/4/12

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1559646	1
[	Be	9	0.005	ug/L	0.007	150	7	27	110
	C	13		ug/L			90291	111747	0
	Cl	37		ug/L			4455814	4391235	1
[>	Sc	45		ug/L			1230166	1300414	2
[	V	51	0.032	ug/L	0.005	16	6065	7101	0
[	V-1	51	0.029	ug/L	0.004	14	81	714	12
[	Cr	52	U 0.075	ug/L	0.025	34	18002	20271	1
[	Cr	53	0.064	ug/L	0.003	4	120	248	0
[	Mn	55	0.056	ug/L	0.005	9	467	1787	6
[	Co	59	0.004	ug/L	0.004	98	45	111	56
[>	Ge	72		ug/L			469903	494233	1
[	Ni	60	0.033	ug/L	0.005	14	23	125	11
[	Ni	62	0.104	ug/L	0.010	9	183	238	1
[	Cu	63	U 0.196	ug/L	0.011	5	147	1421	4
[	Cu	65	0.201	ug/L	0.003	1	27	601	2
[	Zn	66	73.786	ug/L	2.838	3	178	123715	2
[	Zn	67	62.628	ug/L	0.905	1	26	18247	2
[	Zn	68	70.688	ug/L	2.126	3	176	83729	1
[	As	75	U 0.049	ug/L	0.016	32	704	816	4
[	As-1	75	-0.097	ug/L	0.067	68	6994	7213	1
[	Se	82	0.135	ug/L	0.091	67	-14	9	180
[	Se	78	-0.382	ug/L	0.221	57	7062	7272	1
[	Mo	98	0.011	ug/L	0.003	28	24	71	18
	Y	89		ug/L			357378	380962	0
	Kr	83		ug/L			1052	1106	1
[>	In	115		ug/L			863946	933829	2
[	Ag	107	U -0.000	ug/L	0.001	9698	16	17	29
[	Cd	111	-0.003	ug/L	0.001	25	71	66	6
[	Cd	114	0.001	ug/L	0.001	47	13	27	23
[	Sb	121	-0.011	ug/L	0.001	9	349	244	6
[	Sb	123	-0.013	ug/L	0.002	15	274	178	11
[	Ba	135	0.097	ug/L	0.011	11	48	422	10
[	Ba	137	0.104	ug/L	0.008	7	73	759	6
[>	Tb	159		ug/L			986512	1038049	0
[	Tl	205	-0.000	ug/L	0.000	114	64	61	10
[	Pb	208	0.034	ug/L	0.002	5	132	1300	4
[	Bi	209		ug/L			1944262	1975206	1
[	Th	232	0.004	ug/L	0.006	173	975	1147	17
[	U	238	0.004	ug/L	0.008	177	23	179	153

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 11:57:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1572684	0
[	Be	9	24.347	ug/L	0.354	1	7	108403	1
	C	13		ug/L			90291	115436	3
	Cl	37		ug/L			4455814	4495216	3
[>	Sc	45		ug/L			1230166	1303567	1
[	V	51	23.302	ug/L	0.589	2	6065	513539	0
[	V-1	51	23.310	ug/L	0.615	2	81	507724	0
[	Cr	52	24.212	ug/L	0.607	2	18002	424589	0
[	Cr	53	24.239	ug/L	0.715	2	120	46118	1
[	Mn	55	23.809	ug/L	0.426	1	467	548034	0
[	Co	59	24.090	ug/L	0.795	3	45	368682	1
[>	Ge	72		ug/L			469903	488349	0
[	Ni	60	25.387	ug/L	0.433	1	23	77803	2
[	Ni	62	25.063	ug/L	0.389	1	183	10959	1
[	Cu	63	26.112	ug/L	0.536	2	147	166934	2
[	Cu	65	25.948	ug/L	0.369	1	27	73008	1
[	Zn	66	80.391	ug/L	2.459	3	178	133233	3
[	Zn	67	69.790	ug/L	0.955	1	26	20090	1
[	Zn	68	77.661	ug/L	2.210	2	176	90911	3
[	As	75	26.367	ug/L	0.133	0	704	40614	0
[	As-1	75	24.316	ug/L	0.375	1	6994	42396	1
[	Se	82	76.763	ug/L	1.010	1	-14	13666	1
[	Se	78	75.082	ug/L	1.852	2	7062	37375	2
[	Mo	98	0.011	ug/L	0.001	4	24	70	2
	Y	89		ug/L			357378	374684	0
	Kr	83		ug/L			1052	1127	1
[>	In	115		ug/L			863946	929790	1
[	Ag	107	25.320	ug/L	0.839	3	16	183281	2
[	Cd	111	24.747	ug/L	0.156	0	71	95944	0
[	Cd	114	24.587	ug/L	0.216	0	13	242904	0
[	Sb	121	-0.019	ug/L	0.002	10	349	140	18
[	Sb	123	-0.018	ug/L	0.001	6	274	127	9
[	Ba	135	24.042	ug/L	0.331	1	48	91172	2
[	Ba	137	23.747	ug/L	0.080	0	73	154589	1
[>	Tb	159		ug/L			986512	1031426	1
[	Tl	205	24.243	ug/L	0.211	0	64	659997	0
[	Pb	208	25.529	ug/L	0.084	0	132	878471	1
[	Bi	209		ug/L			1944262	2029204	4
[	Th	232	23.600	ug/L	0.389	1	975	792736	3
[	U	238	24.219	ug/L	0.121	0	23	867375	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: UR78 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 04, 2012 12:01:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1583973	0
[	Be	9	24.318	ug/L	0.394	1	7	109055	2
	C	13		ug/L			90291	111178	0
	Cl	37		ug/L			4455814	4608307	0
[>	Sc	45		ug/L			1230166	1305636	0
[	V	51	23.628	ug/L	0.346	1	6065	521614	1
[	V-1	51	23.496	ug/L	0.337	1	81	512760	1
[	Cr	52	24.631	ug/L	0.190	0	18002	432420	0
[	Cr	53	24.145	ug/L	0.333	1	120	46032	1
[	Mn	55	23.978	ug/L	0.447	1	467	552913	1
[	Co	59	24.622	ug/L	0.079	0	45	377564	0
[>	Ge	72		ug/L			469903	485486	0
[	Ni	60	25.941	ug/L	0.390	1	23	79026	0
[	Ni	62	25.546	ug/L	0.369	1	183	11101	1
[	Cu	63	26.036	ug/L	0.119	0	147	165462	0
[	Cu	65	26.011	ug/L	0.498	1	27	72746	1
[	Zn	66	81.221	ug/L	1.025	1	178	133803	1
[	Zn	67	70.936	ug/L	0.430	0	26	20299	1
[	Zn	68	77.993	ug/L	1.084	1	176	90751	0
[	As	75	27.025	ug/L	0.582	2	704	41361	1
[	As-1	75	24.754	ug/L	0.689	2	6994	42768	1
[	Se	82	78.312	ug/L	1.009	1	-14	13859	0
[	Se	78	75.926	ug/L	1.490	1	7062	37487	0
[	Mo	98	0.008	ug/L	0.003	35	24	56	19
	Y	89		ug/L			357378	374252	0
	Kr	83		ug/L			1052	1121	3
[>	In	115		ug/L			863946	922717	0
[	Ag	107	25.842	ug/L	0.371	1	16	185683	1
[	Cd	111	24.994	ug/L	0.477	1	71	96164	1
[	Cd	114	24.963	ug/L	0.189	0	13	244748	0
[	Sb	121	-0.018	ug/L	0.002	8	349	146	13
[	Sb	123	-0.021	ug/L	0.001	5	274	96	11
[	Ba	135	24.495	ug/L	0.276	1	48	92171	0
[	Ba	137	24.105	ug/L	0.247	1	73	155717	0
[>	Tb	159		ug/L			986512	1040359	0
[	Tl	205	24.460	ug/L	0.110	0	64	671727	0
[	Pb	208	25.724	ug/L	0.035	0	132	892877	0
[	Bi	209		ug/L			1944262	2091863	4
[	Th	232	23.796	ug/L	0.099	0	975	806081	0
[	U	238	24.135	ug/L	0.123	0	23	871888	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 L REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Friday, May 04, 2012 12:05:28
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

AG1

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1512956	1
[	Be	9	0.001	ug/L	0.000	40	7	10	11
	C	13		ug/L			90291	96605	2
	Cl	37		ug/L			4455814	4558336	1
[>	Sc	45		ug/L			1230166	1277200	1
[	V	51	0.047	ug/L	0.011	23	6065	7290	3
[	V-1	51	0.057	ug/L	0.001	1	81	1304	0
[	Cr	52	0.017	ug/L	0.043	253	18002	18965	3
[	Cr	53	0.056	ug/L	0.010	18	120	228	6
[	Mn	55	16.642	ug/L	0.543	3	467	375410	1
[	Co	59	0.008	ug/L	0.001	6	45	167	3
[>	Ge	72		ug/L			469903	481748	0
[	Ni	60	0.071	ug/L	0.007	10	23	237	8
[	Ni	62	0.031	ug/L	0.037	118	183	201	7
[	Cu	63	0.075	ug/L	0.005	7	147	624	4
[	Cu	65	0.060	ug/L	0.007	11	27	193	10
[	Zn	66	1.255	ug/L	0.045	3	178	2230	3
[	Zn	67	1.120	ug/L	0.081	7	26	344	5
[	Zn	68	1.266	ug/L	0.051	4	176	1639	4
[	As	75	96.248	ug/L	1.529	1	704	144324	0
[	As-1	75	100.632	ug/L	1.680	1	6994	150558	0
[	Se	82	0.066	ug/L	0.071	107	-14	-3	362
[	Se	78	-0.458	ug/L	0.294	64	7062	7059	0
[	Mo	98	0.403	ug/L	0.015	3	24	1610	2
	Y	89		ug/L			357378	371788	1
	Kr	83		ug/L			1052	1082	3
[>	In	115		ug/L			863946	925586	1
[	Ag	107	0.002	ug/L	0.002	66	16	35	34
[	Cd	111	-0.002	ug/L	0.002	137	71	70	13
[	Cd	114	0.003	ug/L	0.002	66	13	45	45
[	Sb	121	-0.022	ug/L	0.002	9	349	99	27
[	Sb	123	-0.023	ug/L	0.001	5	274	75	16
[	Ba	135	0.143	ug/L	0.002	1	48	592	2
[	Ba	137	0.147	ug/L	0.002	1	73	1033	2
[>	Tb	159		ug/L			986512	1030509	0
[	Tl	205	0.000	ug/L	0.000	121	64	73	10
[	Pb	208	0.010	ug/L	0.000	4	132	470	3
[	Bi	209		ug/L			1944262	1968933	1
[	Th	232	0.116	ug/L	0.036	31	975	4912	24
[	U	238	0.003	ug/L	0.000	3	23	130	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 N REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 04, 2012 12:09:35
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1553638	1
	Be	9	0.001	ug/L	0.001	74	7	10	23
	C	13		ug/L			90291	96114	0
	Cl	37		ug/L			4455814	4543890	1
>	Sc	45		ug/L			1230166	1316269	2
	V	51	0.190	ug/L	0.008	4	6065	10672	3
	V-1	51	0.216	ug/L	0.004	1	81	4840	3
	Cr	52	0.014	ug/L	0.023	163	18002	19506	3
	Cr	53	0.110	ug/L	0.005	4	120	339	4
	Mn	55	78.880	ug/L	0.967	1	467	1832259	1
	Co	59	0.047	ug/L	0.001	1	45	773	3
>	Ge	72		ug/L			469903	487551	1
	Ni	60	0.183	ug/L	0.005	2	23	583	4
	Ni	62	0.053	ug/L	0.024	45	183	213	4
	Cu	63	0.135	ug/L	0.007	5	147	1013	3
	Cu	65	0.097	ug/L	0.005	4	27	302	6
	Zn	66	1.675	ug/L	0.039	2	178	2951	3
	Zn	67	1.480	ug/L	0.029	1	26	452	2
	Zn	68	1.685	ug/L	0.021	1	176	2147	1
	As	75	86.875	ug/L	0.936	1	704	131907	1
	As-1	75	90.754	ug/L	1.028	1	6994	138123	1
	Se	82	0.143	ug/L	0.131	91	14	10	226
	Se	78	-0.649	ug/L	0.460	70	7062	7067	1
	Mo	98	0.083	ug/L	0.013	15	24	353	12
	Y	89		ug/L			357378	373161	3
	Kr	83		ug/L			1052	1068	5
>	In	115		ug/L			863946	917746	1
	Ag	107	0.000	ug/L	0.001	242	16	19	28
	Cd	111	-0.000	ug/L	0.001	423	71	75	4
	Cd	114	0.001	ug/L	0.000	35	13	27	16
	Sb	121	-0.012	ug/L	0.002	14	349	226	8
	Sb	123	-0.013	ug/L	0.002	13	274	174	7
	Ba	135	1.065	ug/L	0.004	0	48	4035	1
	Ba	137	1.033	ug/L	0.025	2	73	6711	0
>	Tb	159		ug/L			986512	1040367	0
	Tl	205	0.000	ug/L	0.000	373	64	71	18
	Pb	208	0.010	ug/L	0.001	6	132	503	4
	Bi	209		ug/L			1944262	1974045	0
	Th	232	0.041	ug/L	0.009	21	975	2419	12
	U	238	0.022	ug/L	0.000	2	23	821	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 O REN
Sample Dil Factor: 40
Comments:
Sample Date/Time: Friday, May 04, 2012 12:13:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1548717	1
	Be	9	0.001	ug/L	0.001	57	7	11	21
	C	13		ug/L			90291	95998	2
	Cl	37		ug/L			4455814	4423488	3
>	Sc	45		ug/L			1230166	1295192	0
	V	51	0.039	ug/L	0.007	17	6065	7219	1
	V-1	51	0.055	ug/L	0.002	2	81	1279	3
	Cr	52	0.006	ug/L	0.031	481	18002	19057	1
	Cr	53	0.067	ug/L	0.001	1	120	254	1
	Mn	55	16.380	ug/L	0.197	1	467	374838	0
	Co	59	0.006	ug/L	0.001	11	45	144	7
>	Ge	72		ug/L			469903	480447	1
	Ni	60	0.066	ug/L	0.009	13	23	223	13
	Ni	62	-0.009	ug/L	0.047	504	183	184	11
	Cu	63	0.084	ug/L	0.006	6	147	678	5
	Cu	65	0.062	ug/L	0.007	11	27	198	11
	Zn	66	1.221	ug/L	0.017	1	178	2169	2
	Zn	67	1.073	ug/L	0.137	12	26	330	12
	Zn	68	1.190	ug/L	0.041	3	176	1547	1
	As	75	92.427	ug/L	1.769	1	704	138264	2
	As-1	75	96.595	ug/L	1.894	1	6994	144432	2
	Se	82	0.128	ug/L	0.140	109	-14	7	331
	Se	78	-0.520	ug/L	0.139	26	7062	7016	0
	Mo	98	0.371	ug/L	0.011	2	24	1481	1
	Y	89		ug/L			357378	368548	2
	Kr	83		ug/L			1052	1075	0
>	In	115		ug/L			863946	907938	0
	Ag	107	-0.001	ug/L	0.001	76	16	12	33
	Cd	111	-0.005	ug/L	0.002	36	71	58	10
	Cd	114	0.001	ug/L	0.001	70	13	24	29
	Sb	121	-0.023	ug/L	0.000	2	349	83	7
	Sb	123	-0.025	ug/L	0.001	4	274	63	17
	Ba	135	0.147	ug/L	0.006	3	48	593	2
	Ba	137	0.143	ug/L	0.009	5	73	984	5
>	Tb	159		ug/L			986512	1031365	1
	Tl	205	-0.001	ug/L	0.000	29	64	39	20
	Pb	208	0.010	ug/L	0.000	3	132	485	1
	Bi	209		ug/L			1944262	2039872	5
	Th	232	-0.003	ug/L	0.004	140	975	929	14
	U	238	0.001	ug/L	0.000	29	23	55	16

UR78 : 00447

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 P REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 04, 2012 12:17:50
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

AC1

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1459567	1557600	0
[	Be	9	0.001	ug/L	0.000	20	7	12	8
	C	13		ug/L			90291	97534	0
	Cl	37		ug/L			4455814	4595144	1
[>	Sc	45		ug/L			1230166	1284013	2
[	V	51	0.183	ug/L	0.016	8	6065	10245	1
[	V-1	51	0.216	ug/L	0.004	2	81	4718	0
[	Cr	52	0.008	ug/L	0.043	560	18002	18906	1
[	Cr	53	0.130	ug/L	0.004	3	120	369	2
[	Mn	55	79.074	ug/L	1.116	1	467	1791710	0
[	Co	59	0.046	ug/L	0.002	4	45	745	2
[>	Ge	72		ug/L			469903	484327	0 ✓
[	Ni	60	0.170	ug/L	0.008	4	23	541	4
[	Ni	62	0.056	ug/L	0.013	23	183	213	1
[	Cu	63	0.136	ug/L	0.008	5	147	1015	5
[	Cu	65	0.093	ug/L	0.007	7	27	288	6
[	Zn	66	1.578	ug/L	0.022	1	178	2773	2
[	Zn	67	1.458	ug/L	0.033	2	26	442	1
[	Zn	68	1.690	ug/L	0.022	1	176	2139	0
[	As	75	89.648 ✓	ug/L	0.355	0	704	135206	0
[	As-1	75	93.675	ug/L	0.404	0	6994	141409	0
[	Se	82	0.066	ug/L	0.052	78	-14	-3	280
[	Se	78	-0.596	ug/L	0.172	28	7062	7043	0
[	Mo	98	0.080	ug/L	0.007	8	24	343	8
	Y	89		ug/L			357378	369678	1
	Kr	83		ug/L			1052	1099	2
[>	In	115		ug/L			863946	913567	1
[	Ag	107	0.000	ug/L	0.001	377	16	19	40
[	Cd	111	-0.003	ug/L	0.001	41	71	63	7
[	Cd	114	0.002	ug/L	0.002	91	13	30	47
[	Sb	121	-0.012	ug/L	0.000	3	349	218	1
[	Sb	123	-0.015	ug/L	0.001	5	274	151	4
[	Ba	135	1.034	ug/L	0.008	0	48	3902	0
[	Ba	137	1.005	ug/L	0.019	1	73	6505	1
[>	Tb	159		ug/L			986512	1042362	0
[	Tl	205	-0.000	ug/L	0.000	93	64	60	11
[	Pb	208	0.010	ug/L	0.000	3	132	489	2
[	Bi	209		ug/L			1944262	1975733	1
[	Th	232	-0.001	ug/L	0.004	684	975	1011	12
[	U	238	0.021	ug/L	0.001	2	23	776	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:23:12
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1504512	0
	Be	9	193.403	ug/L	0.702	0	7	823698	0
	C	13		ug/L			90291	95199	0
	Cl	37		ug/L			4455814	4819616	2
>	Sc	45		ug/L			1230166	1253117	0
	V	51	192.254	ug/L	7.033	3	6065	4028840	3
	V-1	51	190.333	ug/L	7.827	4	81	3985302	3
	Cr	52	195.236	ug/L	1.508	0	18002	3162589	0
	Cr	53	188.177	ug/L	3.784	2	120	343449	1
	Mn	55	188.686	ug/L	1.780	0	467	4172953	1
	Co	59	190.128	ug/L	4.131	2	45	2797543	1
>	Ge	72		ug/L			469903	459781	0
	Ni	60	192.992	ug/L	3.220	1	23	556693	1
	Ni	62	195.704	ug/L	1.556	0	183	79347	0
	Cu	63	191.012	ug/L	1.154	0	147	1148757	0
	Cu	65	190.882	ug/L	2.264	1	27	505459	1
	Zn	66	187.841	ug/L	4.462	2	178	292845	2
	Zn	67	187.008	ug/L	3.826	2	26	50639	2
	Zn	68	188.452	ug/L	0.475	0	176	207440	0
	As	75	195.716	ug/L	1.728	0	704	279408	0
	As-1	75	196.377	ug/L	1.615	0	6994	273923	0
	Se	82	197.847	ug/L	3.300	1	-14	33184	1
	Se	78	193.590	ug/L	2.792	1	7062	79819	1
	Mo	98	196.833	ug/L	3.150	1	24	738278	1
	Y	89		ug/L			357378	358075	0
	Kr	83		ug/L			1052	1273	7
>	In	115		ug/L			863946	857949	1
	Ag	107	190.814	ug/L	3.100	1	16	1274625	0
	Cd	111	194.477	ug/L	3.086	1	71	695259	1
	Cd	114	195.547	ug/L	1.124	0	13	1782595	0
	Sb	121	206.204	ug/L	1.164	0	349	2371625	0
	Sb	123	197.305	ug/L	1.173	0	274	1697870	0
	Ba	135	198.480	ug/L	3.544	1	48	694037	1
	Ba	137	197.937	ug/L	1.091	0	73	1188403	0
>	Tb	159		ug/L			986512	1014749	0
	Tl	205	194.794	ug/L	2.434	1	64	5217191	0
	Pb	208	198.075	ug/L	0.161	0	132	6704994	0
	Bi	209		ug/L			1944262	1816732	0
	Th	232	199.669	ug/L	1.154	0	975	6589946	1
	U	238	198.333	ug/L	2.171	1	23	6988289	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:29:24
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1500543	1
	Be	9	0.006	ug/L	0.003	55	7	33	43
	C	13		ug/L			90291	94362	0
	Cl	37		ug/L			4455814	4608160	0
>	Sc	45		ug/L			1230166	1211017	2
	V	51	0.028	ug/L	0.033	117	6065	6544	12
	V-1	51	0.026	ug/L	0.033	129	81	613	113
	Cr	52	0.048	ug/L	0.048	100	18002	18473	6
	Cr	53	0.040	ug/L	0.050	125	120	190	49
	Mn	55	0.060	ug/L	0.074	124	467	1763	93
	Co	59	0.035	ug/L	0.053	150	45	551	139
>	Ge	72		ug/L			469903	453804	2
	Ni	60	0.043	ug/L	0.040	92	23	144	76
	Ni	62	0.359	ug/L	0.121	33	183	320	13
	Cu	63	0.086	ug/L	0.039	45	147	648	33
	Cu	65	0.067	ug/L	0.048	72	27	200	60
	Zn	66	0.900	ug/L	0.070	7	178	1553	5
	Zn	67	0.755	ug/L	0.025	3	26	227	0
	Zn	68	0.869	ug/L	0.140	16	176	1111	11
	As	75	0.064	ug/L	0.066	102	704	769	10
	As-1	75	0.063	ug/L	0.113	180	6994	6835	0
	Se	82	0.104	ug/L	0.123	118	-14	2	690
	Se	78	0.154	ug/L	0.360	233	7062	6876	0
	Mo	98	0.035	ug/L	0.005	13	24	153	10
	Y	89		ug/L			357378	345324	1
	Kr	83		ug/L			1052	1041	0
>	In	115		ug/L			863946	867260	0
	Ag	107	0.007	ug/L	0.004	59	16	61	43
	Cd	111	0.005	ug/L	0.004	81	71	90	16
	Cd	114	0.006	ug/L	0.004	77	13	64	60
	Sb	121	0.232	ug/L	0.012	5	349	3051	4
	Sb	123	0.219	ug/L	0.012	5	274	2181	4
	Ba	135	0.013	ug/L	0.005	39	48	95	19
	Ba	137	0.016	ug/L	0.003	17	73	172	9
>	Tb	159		ug/L			986512	975900	0
	Tl	205	0.008	ug/L	0.005	60	64	259	44
	Pb	208	0.015	ug/L	0.004	29	132	609	22
	Bi	209		ug/L			1944262	1903287	1
	Th	232	0.102	ug/L	0.021	20	975	4215	15
	U	238	0.008	ug/L	0.003	35	23	297	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:33:33
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1529456	2
	Be	9	50.461	ug/L	1.327	2	7	218405	1
	C	13		ug/L			90291	91189	0
	Cl	37		ug/L			4455814	4760992	1
>	Sc	45		ug/L			1230166	1270632	0
	V	51	46.107	ug/L	0.403	0	6065	984591	0
	V-1	51	46.195	ug/L	0.554	1	81	980939	0
	Cr	52	48.018	ug/L	0.424	0	18002	802790	1
	Cr	53	48.333	ug/L	0.550	1	120	89547	1
	Mn	55	46.746	ug/L	0.568	1	467	1048606	1
	Co	59	46.865	ug/L	0.665	1	45	699345	1
>	Ge	72		ug/L			469903	470855	2
	Ni	60	49.842	ug/L	1.430	2	23	147188	1
	Ni	62	49.239	ug/L	1.754	3	183	20570	1
	Cu	63	50.019	ug/L	1.381	2	147	308034	0
	Cu	65	49.445	ug/L	1.357	2	27	134044	0
	Zn	66	51.116	ug/L	1.117	2	178	81708	0
	Zn	67	49.268	ug/L	1.939	3	26	13675	2
	Zn	68	51.136	ug/L	1.904	3	176	57737	1
	As	75	50.284	ug/L	1.539	3	704	74004	1
	As-1	75	50.245	ug/L	1.563	3	6994	76954	1
	Se	82	52.229	ug/L	1.473	2	-14	8956	0
	Se	78	50.544	ug/L	1.548	3	7062	26561	0
	Mo	98	48.797	ug/L	0.660	1	24	187417	1
	Y	89		ug/L			357378	356136	0
	Kr	83		ug/L			1052	1107	1
>	In	115		ug/L			863946	887072	1
	Ag	107	49.358	ug/L	1.010	2	16	340887	0
	Cd	111	50.350	ug/L	0.985	1	71	186155	1
	Cd	114	50.566	ug/L	0.863	1	13	476559	0
	Sb	121	49.731	ug/L	0.899	1	349	591596	0
	Sb	123	49.683	ug/L	1.149	2	274	442186	0
	Ba	135	49.265	ug/L	1.431	2	48	178126	1
	Ba	137	48.764	ug/L	1.103	2	73	302714	0
>	Tb	159		ug/L			986512	1020031	1
	Tl	205	48.180	ug/L	0.384	0	64	1297167	0
	Pb	208	50.358	ug/L	0.671	1	132	1713447	0
	Bi	209		ug/L			1944262	1909550	0
	Th	232	48.102	ug/L	0.562	1	975	1596424	0
	U	238	48.231	ug/L	0.230	0	23	1708280	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 04, 2012 12:39:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120504.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1459567	1454166	1
	Be	9	0.001	ug/L	0.001	55	7	12	25
	C	13		ug/L			90291	89904	0
	Cl	37		ug/L			4455814	4513171	4
>	Sc	45		ug/L			1230166	1191810	2
	V	51	0.002	ug/L	0.001	59	6065	5922	2
	V-1	51	0.003	ug/L	0.001	20	81	130	8
	Cr	52	-0.001	ug/L	0.008	1041	18002	17430	2
	Cr	53	0.000	ug/L	0.003	1653	120	117	6
	Mn	55	0.004	ug/L	0.005	122	467	530	15
	Co	59	0.002	ug/L	0.000	27	45	67	10
>	Ge	72		ug/L			469903	456144	1
	Ni	60	0.000	ug/L	0.001	553	23	23	15
	Ni	62	0.167	ug/L	0.045	26	183	245	6
	Cu	63	0.011	ug/L	0.005	50	147	206	13
	Cu	65	0.001	ug/L	0.003	376	27	29	28
	Zn	66	-0.005	ug/L	0.001	27	178	165	2
	Zn	67	-0.001	ug/L	0.023	2037	26	25	26
	Zn	68	-0.007	ug/L	0.002	30	176	162	1
	As	75	0.050	ug/L	0.023	46	704	753	3
	As-1	75	0.026	ug/L	0.049	188	6994	6823	1
	Se	82	0.089	ug/L	0.051	57	-14	0	1148
	Se	78	0.117	ug/L	0.175	149	7062	6899	0
	Mo	98	0.014	ug/L	0.004	32	24	74	20
	Y	89		ug/L			357378	347247	2
	Kr	83		ug/L			1052	1072	4
>	In	115		ug/L			863946	854838	1
	Ag	107	0.002	ug/L	0.000	11	16	31	3
	Cd	111	-0.000	ug/L	0.001	580	71	70	5
	Cd	114	0.001	ug/L	0.000	11	13	20	2
	Sb	121	0.106	ug/L	0.005	4	349	1561	5
	Sb	123	0.100	ug/L	0.004	3	274	1128	3
	Ba	135	-0.002	ug/L	0.002	86	48	40	15
	Ba	137	-0.002	ug/L	0.002	116	73	63	17
>	Tb	159		ug/L			986512	959345	1
	Tl	205	0.002	ug/L	0.000	21	64	111	9
	Pb	208	0.000	ug/L	0.001	427	132	135	18
	Bi	209		ug/L			1944262	1866169	0
	Th	232	0.080	ug/L	0.018	22	975	3430	15
	U	238	0.002	ug/L	0.000	19	23	96	13

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.9.12 **Analyst:** JLB **Page:** 1 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		TDO			2934-5
		1			2933-5
		2			2931-4
		3			↓ -5
		4			2934-9
		↓ 5			2931-7
		Rinse Sample			r ≥ 0.999700
		SO			
		ICV			2930-2
		ICB			
		CCV1			
		CCB1			
		LowCheck		✓	
		ICSA			
		ICSAB			
		B1			
		B2			
		CCV2			Ce Ba high
		CCB2			
		CCV3			Ce Ba high
		CCB3			
		USGI MB1	REN	2 ✓	Ce only
		↓ MB2	↓	↓ ✓	↓ ↓
		USO2R MB1	↓	↓ ✓	As only

UR78 : 00453

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 5.9.12 Analyst: JW Page: 2 of 3

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		V502R MB2	REN	2	Acronly
		MB2spk			
		MB1spk			
		A-L		10	
		A		2	
		ADUP			
		Aspk			
		CCV4			Aglow 82Se high
		CCB4			
		V502R I-L	REN	10	Acronly
		I		2	
		IDUP			
		Ispk			
		V515 D			
		E			
		J			
		K			
		LR200			Aglow
		BZ			
		CCV5			Aglow
		CCB5			
		LR300			Aglow
		BK			
		CCV6			Aglow

UR78 : 00454

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5.9.12

MZ	Analyst RBS 4.12	Peer MSH	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	see log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	see log
Internal Standards	✓	✓	↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analytes Notes and GAF's	—	—	

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/9/2012 10:25:58 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

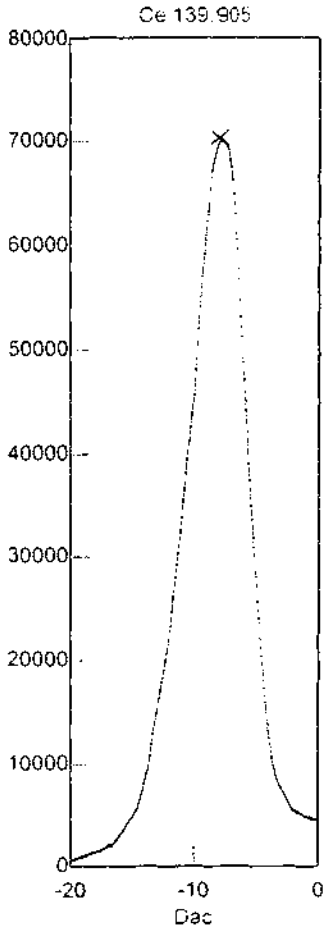
Obtained Intensity (Be 9.0122): 7366.92
Obtained Intensity (Mg 23.985): 44969.22
Obtained Intensity (In 114.904): 74663.93
Obtained Intensity (Pb 207.977): 27940.63
Obtained Intensity (U 238.05): 52902.72
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=1019.53 / 69357.97)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=814.51 / 69357.97)

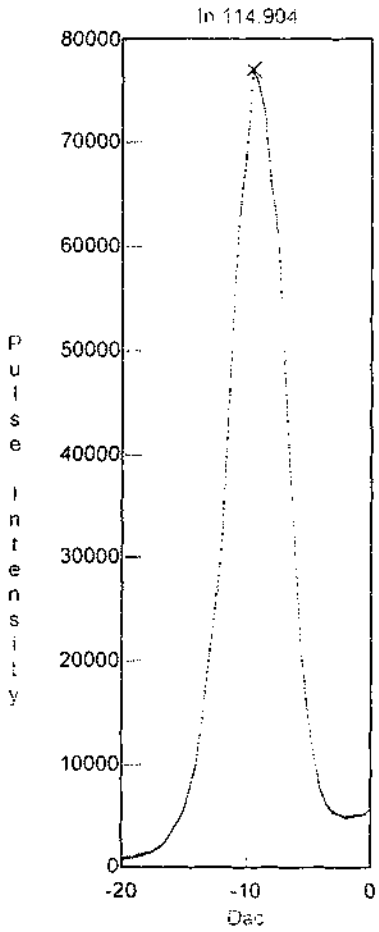
[Passed] Optimum value(s): N/A

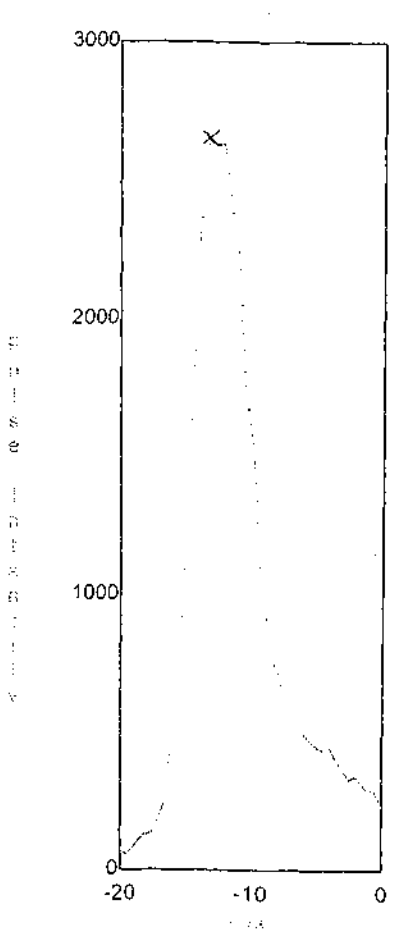
End Time: 5/9/2012 10:28:34 AM

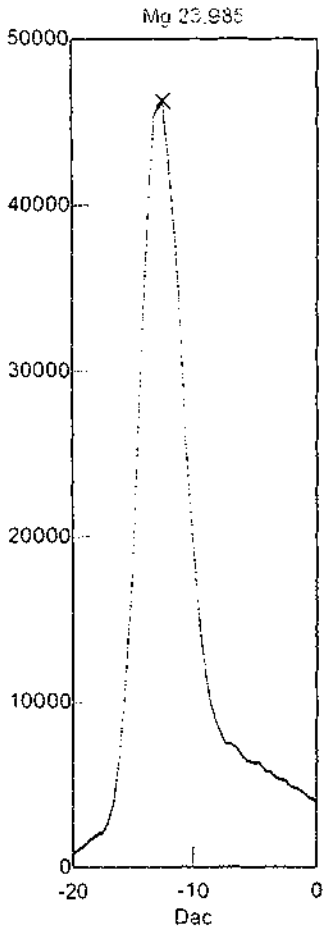
UR78 : 00456

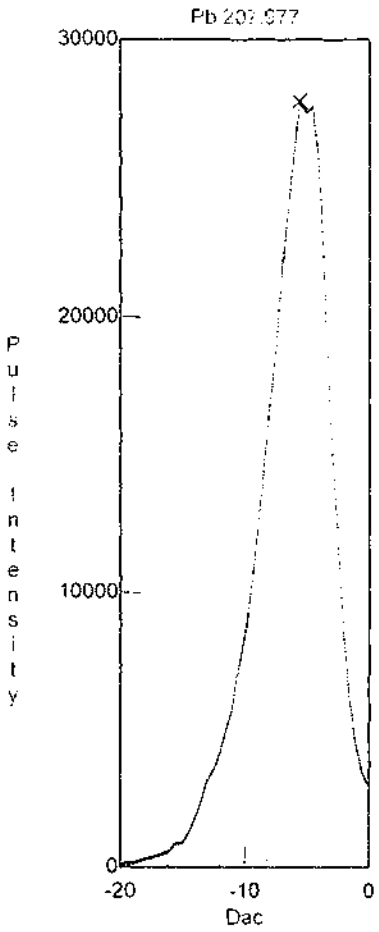
5/9/12

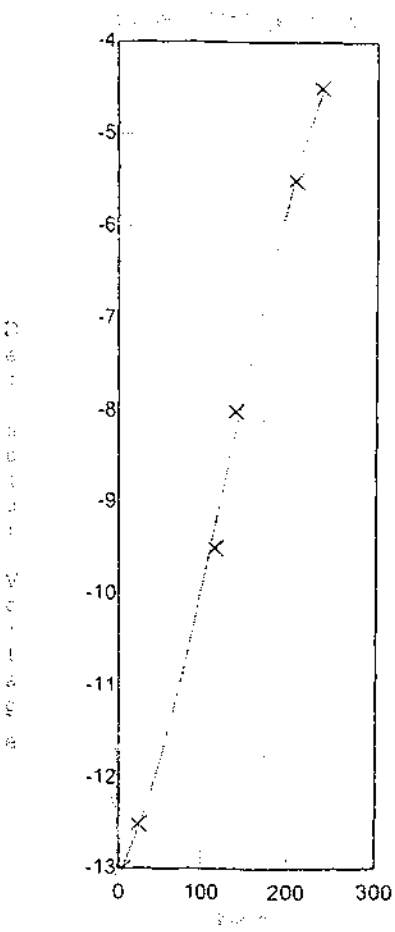

Ce 139.905
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


In 114.904
80000
70000
60000
50000
40000
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


3000
2000
1000
0
-20
-10
0


Mg 23.985
50000
40000
30000
20000
10000
0
-20
-10
0
Dac


Pb 207.977
30000
20000
10000
0
-20
-10
0
Dac
Pulse Intensity


-4
-5
-6
-7
-8
-9
-10
-11
-12
-13
0
100
200
300

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/9/2012 10:21:22 AM
End Time: 5/9/2012 10:25:33 AM

AutoLens STD/DRC - [Passed] Optimum value(s): Correlation Coefficient = 0.998; Intercept = -13.08

UR78 : 00458

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Start Time: 5/9/2012 10:14:39 AM
End Time: 5/9/2012 10:21:14 AM

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.708)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.710)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.711)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.700)

UR78 : 00459

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/9/2012 10:13:39 AM

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.

Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	1.51 mm	-0.74 mm	75710.37

End Time: 5/9/2012 10:14:29 AM

UR78 : 00460

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

Optimization Status

Start Time: 5/9/2012 10:10:25 AM

Daily Performance Check
    Optimization Settings:
        Method: C:\NexIONData\Method\Daily Performancenew.mth.
        Intensity Criterion: Be 9.0122 > 3000
        Intensity Criterion: Mg 23.985 > 20000
        Intensity Criterion: In 114.904 > 50000
        Intensity Criterion: Pb 207.977 > 20000
        Intensity Criterion: U 238.05 > 40000
        Intensity Criterion: Bkgd 220 <= 5
        Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
        Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

    Optimization Results:
    Initial Try
        Obtained Intensity (Be 9.0122): 5945.39
        Obtained Intensity (Mg 23.985): 30179.96
        Obtained Intensity (In 114.904): 59244.40
        Obtained Intensity (Pb 207.977): 22988.40
        Obtained Intensity (U 238.05): 41742.82
        Obtained Intensity (Bkgd 220): 0.03
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.011 (=645.03 / 57446.20)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=578.42 / 57446.20)
[Passed] Optimum value(s): N/A

End Time: 5/9/2012 10:13:29 AM

UR78 : 00451

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 10:58:06
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1543122	0
	Be	9		ug/L				6	24
	C	13		ug/L				127129	1
	Cl	37		ug/L				5050176	1
>	Sc	45		ug/L				1120759	1
	V	51		ug/L				6334	2
	V-1	51		ug/L				56	10
	Cr	52		ug/L				18698	1
	Cr	53		ug/L				105	21
	Mn	55		ug/L				526	4
	Co	59		ug/L				70	9
>	Ge	72		ug/L				431510	1
	Ni	60		ug/L				551	83
	Ni	62		ug/L				118	45
	Cu	63		ug/L				111	11
	Cu	65		ug/L				40	27
	Zn	66		ug/L				238	4
	Zn	67		ug/L				33	29
	Zn	68		ug/L				573	4
	As	75		ug/L				1303	3
	As-1	75		ug/L				6451	0
	Se	82		ug/L				2	1210
	Se	78		ug/L				6569	0
	Mo	98		ug/L				12	40
	Y	89		ug/L				329245	1
	Kr	83		ug/L				1812	2
>	In	115		ug/L				907813	0
	Ag	107		ug/L				14	21
	Cd	111		ug/L				73	11
	Cd	114		ug/L				29	7
	Sb	121		ug/L				48	21
	Sb	123		ug/L				36	43
	Ba	135		ug/L				27	11
	Ba	137		ug/L				35	23
>	Tb	159		ug/L				916474	0
	Tl	205		ug/L				18	15
	Pb	208		ug/L				126	4
	Bi	209		ug/L				2081983	4
	Th	232		ug/L				13	22
	U	238		ug/L				4	44

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:02:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1532677	1
	Be	9	0.200	ug/L	0.001	0	6	1189	1
	C	13		ug/L			127129	126738	2
	Cl	37		ug/L			5050176	4925808	3
>	Sc	45		ug/L			1120759	1137813	3
	V	51	0.200	ug/L	0.013	6	6334	10378	0
	V-1	51	0.200	ug/L	0.008	4	56	4224	1
	Cr	52	0.500	ug/L	0.017	3	18698	26857	2
	Cr	53	0.500	ug/L	0.004	0	105	1067	3
	Mn	55	0.500	ug/L	0.022	4	526	11545	1
	Co	59	0.200	ug/L	0.005	2	70	3116	0
>	Ge	72		ug/L			431510	442114	1
	Ni	60	0.500	ug/L	0.037	7	551	1746	3
	Ni	62	0.500	ug/L	0.041	8	118	294	3
	Cu	63	0.500	ug/L	0.027	5	111	3729	4
	Cu	65	0.500	ug/L	0.005	1	40	1629	2
	Zn	66	4.000	ug/L	0.015	0	238	9323	1
	Zn	67	4.000	ug/L	0.053	1	33	1372	2
	Zn	68	4.000	ug/L	0.128	3	573	6746	1
	As	75	0.200	ug/L	0.033	16	1303	1633	1
	As-1	75	0.200	ug/L	0.154	77	6451	6816	1
	Se	82	0.500	ug/L	0.019	3	2	81	4
	Se	78	0.500	ug/L	0.804	160	6569	6815	1
	Mo	98	0.200	ug/L	0.011	5	12	805	4
	Y	89		ug/L			329245	325901	2
	Kr	83		ug/L			1812	1823	0
>	In	115		ug/L			907813	912104	1
	Ag	107	0.200	ug/L	0.003	1	14	1943	1
	Cd	111	0.100	ug/L	0.003	2	73	559	3
	Cd	114	0.100	ug/L	0.006	5	29	1211	4
	Sb	121	0.200	ug/L	0.001	0	48	2919	1
	Sb	123	0.200	ug/L	0.004	1	36	2239	1
	Ba	135	0.500	ug/L	0.009	1	27	2360	1
	Ba	137	0.500	ug/L	0.005	1	35	4160	1
>	Tb	159		ug/L			916474	922203	1
	Tl	205	0.200	ug/L	0.006	3	18	6070	1
	Pb	208	0.100	ug/L	0.001	1	126	5036	0
	Bi	209		ug/L			2081983	2102555	4
	Th	232	0.200	ug/L	0.003	1	13	6515	1
	U	238	0.200	ug/L	0.004	1	4	8365	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:06:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1543122	1550487	1
[	Be	9	10.000	ug/L	0.185	1	6	55933	1
	C	13		ug/L			127129	130307	1
	Cl	37		ug/L			5050176	5044707	1
[>	Sc	45		ug/L			1120759	1135590	0
[	V	51	10.000	ug/L	0.016	0	6334	207726	0
[	V-1	51	10.000	ug/L	0.064	0	56	200761	1
[	Cr	52	10.001	ug/L	0.169	1	18698	182752	0
[	Cr	53	9.999	ug/L	0.105	1	105	18423	1
[	Mn	55	10.000	ug/L	0.193	1	526	216815	2
[	Co	59	10.000	ug/L	0.242	2	70	149447	2
[>	Ge	72		ug/L			431510	445703	0
[	Ni	60	10.005	ug/L	0.100	1	551	31070	0
[	Ni	62	10.005	ug/L	0.065	0	118	4408	1
[	Cu	63	9.998	ug/L	0.251	2	111	66667	1
[	Cu	65	9.998	ug/L	0.159	1	40	29398	0
[	Zn	66	9.607	ug/L	0.397	4	238	17895	3
[	Zn	67	9.759	ug/L	0.101	1	33	2892	0
[	Zn	68	9.678	ug/L	0.347	3	573	13097	3
[	As	75	10.000	ug/L	0.101	1	1303	16687	0
[	As-1	75	10.001	ug/L	0.059	0	6451	21278	0
[	Se	82	10.003	ug/L	0.102	1	2	1857	0
[	Se	78	10.014	ug/L	0.070	0	6569	10763	1
[	Mo	98	10.000	ug/L	0.122	1	12	41150	0
	Y	89		ug/L			329245	332725	0
	Kr	83		ug/L			1812	1858	0
[>	In	115		ug/L			907813	930188	1
[	Ag	107	10.000	ug/L	0.274	2	14	92971	0
[	Cd	111	10.000	ug/L	0.215	2	73	45893	1
[	Cd	114	10.000	ug/L	0.306	3	29	114963	1
[	Sb	121	10.000	ug/L	0.222	2	48	149521	0
[	Sb	123	10.000	ug/L	0.251	2	36	113151	0
[	Ba	135	9.995	ug/L	0.146	1	27	39281	0
[	Ba	137	9.994	ug/L	0.156	1	35	67609	1
[>	Tb	159		ug/L			916474	944025	0
[	Tl	205	10.000	ug/L	0.022	0	18	306087	0
[	Pb	208	10.000	ug/L	0.034	0	126	409870	0
[	Bi	209		ug/L			2081983	2163198	0
[	Th	232	10.000	ug/L	0.179	1	13	380118	1
[	U	238	10.000	ug/L	0.106	1	4	417191	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:10:47
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1517339	0
	Be	9	20.077	ug/L	0.281	1	6	111632	1
	C	13		ug/L			127129	125038	2
	Cl	37		ug/L			5050176	5195283	2
>	Sc	45		ug/L			1120759	1132476	2
	V	51	20.080	ug/L	0.983	4	6334	415724	2
	V-1	51	20.101	ug/L	1.103	5	56	410276	2
	Cr	52	19.907	ug/L	0.362	1	18698	338115	1
	Cr	53	19.983	ug/L	0.829	4	105	36464	2
	Mn	55	20.069	ug/L	0.621	3	526	439205	1
	Co	59	19.947	ug/L	0.465	2	70	293984	1
>	Ge	72		ug/L			431510	439549	1
	Ni	60	20.126	ug/L	0.664	3	551	62611	1
	Ni	62	20.061	ug/L	0.499	2	118	8698	1
	Cu	63	19.986	ug/L	0.636	3	111	130936	1
	Cu	65	19.956	ug/L	0.102	0	40	57335	1
	Zn	66	19.944	ug/L	0.494	2	238	36031	1
	Zn	67	20.254	ug/L	0.318	1	33	6152	0
	Zn	68	19.896	ug/L	0.371	1	573	25484	0
	As	75	20.040	ug/L	0.485	2	1303	31887	0
	As-1	75	20.074	ug/L	0.630	3	6451	35927	1
	Se	82	20.084	ug/L	0.460	2	2	3737	0
	Se	78	20.225	ug/L	0.901	4	6569	14983	1
	Mo	98	20.112	ug/L	0.726	3	12	83458	2
	Y	89		ug/L			329245	336112	2
	Kr	83		ug/L			1812	1854	1
>	In	115		ug/L			907813	938384	0
	Ag	107	19.892	ug/L	0.538	2	14	182665	1
	Cd	111	20.067	ug/L	0.222	1	73	94094	0
	Cd	114	20.042	ug/L	0.257	1	29	234456	0
	Sb	121	20.014	ug/L	0.226	1	48	302777	0
	Sb	123	20.016	ug/L	0.241	1	36	229222	0
	Ba	135	20.014	ug/L	0.480	2	27	79550	1
	Ba	137	20.007	ug/L	0.357	1	35	136712	0
>	Tb	159		ug/L			916474	949863	0
	Tl	205	20.007	ug/L	0.167	0	18	617011	0
	Pb	208	20.010	ug/L	0.160	0	126	826669	0
	Bi	209		ug/L			2081983	2185025	0
	Th	232	20.121	ug/L	0.184	0	13	788641	1
	U	238	20.015	ug/L	0.209	1	4	842687	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:15:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1496537	2
	Be	9	49.655	ug/L	1.230	2	6	263099	1
	C	13		ug/L			127129	116379	3
	Cl	37		ug/L			5050176	5146433	0
>	Sc	45		ug/L			1120759	1135441	2
	V	51	49.712	ug/L	2.316	4	6334	994095	2
	V-1	51	49.695	ug/L	2.036	4	56	987063	1
	Cr	52	49.864	ug/L	1.422	2	18698	809668	0
	Cr	53	49.802	ug/L	0.554	1	105	89243	1
	Mn	55	49.741	ug/L	1.309	2	526	1063248	0
	Co	59	49.679	ug/L	2.076	4	70	710970	2
>	Ge	72		ug/L			431510	429263	0
	Ni	60	49.601	ug/L	1.442	2	551	144245	3
	Ni	62	49.878	ug/L	0.581	1	118	20699	0
	Cu	63	49.738	ug/L	1.096	2	111	310007	1
	Cu	65	49.808	ug/L	1.535	3	40	137034	2
	Zn	66	49.437	ug/L	0.811	1	238	82406	0
	Zn	67	49.548	ug/L	1.185	2	33	14037	2
	Zn	68	49.512	ug/L	1.321	2	573	58356	1
	As	75	49.996	ug/L	0.819	1	1303	75733	0
	As-1	75	50.078	ug/L	0.697	1	6451	78518	0
	Se	82	49.792	ug/L	1.213	2	2	8861	1
	Se	78	50.069	ug/L	0.237	0	6569	26728	0
	Mo	98	49.788	ug/L	1.153	2	12	197615	1
	Y	89		ug/L			329245	324860	2
	Kr	83		ug/L			1812	1828	1
>	In	115		ug/L			907813	932393	0
	Ag	107	49.750	ug/L	0.796	1	14	442845	0
	Cd	111	49.702	ug/L	0.687	1	73	224761	0
	Cd	114	49.694	ug/L	1.031	2	29	560453	1
	Sb	121	49.615	ug/L	0.666	1	48	718100	0
	Sb	123	49.536	ug/L	0.823	1	36	538647	1
	Ba	135	49.782	ug/L	0.260	0	27	192400	0
	Ba	137	49.866	ug/L	0.492	0	35	334055	1
>	Tb	159		ug/L			916474	958889	1
	Tl	205	49.761	ug/L	0.117	0	18	1513048	0
	Pb	208	49.730	ug/L	0.454	0	126	2019387	0
	Bi	209		ug/L			2081983	2149841	0
	Th	232	49.978	ug/L	0.665	1	13	1972836	0
	U	238	50.161	ug/L	0.269	0	4	2166744	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:20:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1543122	1473506	1
[	Be	9	99.271	ug/L	2.103	2	6	505881	3
	C	13		ug/L			127129	120656	3
	Cl	37		ug/L			5050176	5171433	2
[>	Sc	45		ug/L			1120759	1137935	0
[	V	51	100.154	ug/L	3.628	3	6334	2012372	3
[	V-1	51	100.119	ug/L	4.312	4	56	2002146	4
[	Cr	52	99.529	ug/L	1.230	1	18698	1576933	1
[	Cr	53	99.398	ug/L	1.608	1	105	174923	2
[	Mn	55	100.738	ug/L	1.194	1	526	2212621	0
[	Co	59	99.882	ug/L	2.561	2	70	1427580	1
[>	Ge	72		ug/L			431510	422649	1
[	Ni	60	100.417	ug/L	1.466	1	551	290911	0
[	Ni	62	99.781	ug/L	2.526	2	118	40355	1
[	Cu	63	100.220	ug/L	1.111	1	111	619536	1
[	Cu	65	100.151	ug/L	3.494	3	40	272595	2
[	Zn	66	99.722	ug/L	1.614	1	238	161923	0
[	Zn	67	99.195	ug/L	2.863	2	33	26914	1
[	Zn	68	99.453	ug/L	1.062	1	573	112828	1
[	As	75	99.671	ug/L	1.626	1	1303	145793	0
[	As-1	75	99.739	ug/L	1.305	1	6451	146476	0
[	Se	82	99.450	ug/L	1.920	1	2	17110	1
[	Se	78	99.693	ug/L	0.870	0	6569	45619	1
[	Mo	98	100.895	ug/L	0.614	0	12	406457	1
	Y	89		ug/L			329245	316562	1
	Kr	83		ug/L			1812	1874	1
[>	In	115		ug/L			907813	924165	0
[	Ag	107	98.769	ug/L	3.667	3	14	837072	3
[	Cd	111	99.695	ug/L	1.383	1	73	442317	1
[	Cd	114	100.244	ug/L	0.627	0	29	1129802	0
[	Sb	121	100.783	ug/L	0.646	0	48	1484600	0
[	Sb	123	100.965	ug/L	1.198	1	36	1124384	1
[	Ba	135	100.809	ug/L	0.810	0	27	396855	0
[	Ba	137	100.358	ug/L	1.499	1	35	674410	1
[>	Tb	159		ug/L			916474	962214	0
[	Tl	205	101.088	ug/L	0.423	0	18	3200385	0
[	Pb	208	100.586	ug/L	0.350	0	126	4180370	0
[	Bi	209		ug/L			2081983	2086589	4
[	Th	232	101.362	ug/L	1.077	1	13	4206350	1
[	U	238	100.142	ug/L	1.064	1	4	4361518	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:27:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120508.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1543122	1494322	0
	Be	9	0.003	ug/L	0.000	4	6	22	2
	C	13		ug/L			127129	120252	3
	Cl	37		ug/L			5050176	5289492	1
>	Sc	45		ug/L			1120759	1166767	0
	V	51	-0.000	ug/L	0.007	4768	6334	6592	2
	V-1	51	0.001	ug/L	0.000	14	56	77	3
	Cr	52	0.002	ug/L	0.022	1378	18698	19492	2
	Cr	53	0.006	ug/L	0.005	92	105	119	7
	Mn	55	-0.001	ug/L	0.001	62	526	516	4
	Co	59	0.000	ug/L	0.001	2266	70	74	12
>	Ge	72		ug/L			431510	434429	1
	Ni	60	-0.161	ug/L	0.003	2	551	77	13
	Ni	62	-0.136	ug/L	0.010	7	118	62	5
	Cu	63	-0.002	ug/L	0.002	112	111	100	12
	Cu	65	0.000	ug/L	0.002	451	40	41	10
	Zn	66	-0.015	ug/L	0.013	83	238	215	9
	Zn	67	0.026	ug/L	0.029	112	33	41	18
	Zn	68	0.040	ug/L	0.028	70	573	623	4
	As	75	-0.026	ug/L	0.031	118	1303	1273	2
	As-1	75	0.051	ug/L	0.051	101	6451	6567	0
	Se	82	-0.091	ug/L	0.063	69	2	-13	81
	Se	78	0.157	ug/L	0.143	91	6569	6676	0
	Mo	98	0.019	ug/L	0.002	9	12	92	8
	Y	89		ug/L			329245	330907	1
	Kr	83		ug/L			1812	1815	1
>	In	115		ug/L			907813	950666	1
	Ag	107	0.003	ug/L	0.000	13	14	42	8
	Cd	111	0.002	ug/L	0.002	69	73	87	7
	Cd	114	0.001	ug/L	0.001	111	29	40	26
	Sb	121	0.087	ug/L	0.012	13	48	1360	12
	Sb	123	0.088	ug/L	0.015	17	36	1043	15
	Ba	135	-0.001	ug/L	0.001	256	27	26	21
	Ba	137	0.001	ug/L	0.001	130	35	44	20
>	Tb	159		ug/L			916474	921825	2
	Tl	205	0.007	ug/L	0.000	7	18	223	5
	Pb	208	0.001	ug/L	0.000	45	126	164	10
	Bi	209		ug/L			2081983	2205575	0
	Th	232	0.131	ug/L	0.020	15	13	5221	17
	U	238	0.003	ug/L	0.001	19	4	143	20

Sample Information

Sample Date/Time: Wednesday, May 09, 2012 11:20:52
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\default.tun
Conditions File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**0.9999**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**1.0000**	0.018	0.20	10	20	50	100
V-1	51	**1.0000**	0.018	0.20	10	20	50	100
Cr	52	**1.0000**	0.014	0.50	10	20	50	100
Cr	53	**0.9999**	0.002	0.50	10	20	50	100
Mn	55	**0.9999**	0.019	0.50	10	20	50	100
Co	59	**1.0000**	0.013	0.20	10	20	50	100
Ge	72							
Ni	60	**0.9999**	0.007	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**1.0000**	0.015	0.50	10	20	50	100
Cu	65	**1.0000**	0.006	0.50	10	20	50	100
Zn	66	**0.9999**	0.004	4.00	10	20	50	100
Zn	67	**0.9998**	0.001	4.00	10	20	50	100
Zn	68	**0.9999**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9990**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**0.9999**	0.010	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**0.9997**	0.009	0.20	10	20	50	100
Cd	111	**1.0000**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**0.9999**	0.016	0.20	10	20	50	100
Sb	123	**0.9998**	0.012	0.20	10	20	50	100
Ba	135	**0.9999**	0.004	0.50	10	20	50	100
Ba	137	**1.0000**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9998**	0.033	0.20	10	20	50	100
Pb	208	**0.9999**	0.043	0.10	10	20	50	100
Bi	209							
Th	232	**0.9997**	0.043	0.20	10	20	50	100
U	238	**1.0000**	0.045	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:37:31
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				1469308	0
	Be	9		ug/L				18	14
	C	13		ug/L				115227	0
	Cl	37		ug/L				5056971	0
>	Sc	45		ug/L				1150108	1
	V	51		ug/L				6633	2
	V-1	51		ug/L				59	21
	Cr	52		ug/L				19531	1
	Cr	53		ug/L				104	7
	Mn	55		ug/L				477	3
	Co	59		ug/L				69	17
>	Ge	72		ug/L				432270	1
	Ni	60		ug/L				81	20
	Ni	62		ug/L				65	9
	Cu	63		ug/L				73	14
	Cu	65		ug/L				32	23
	Zn	66		ug/L				220	8
	Zn	67		ug/L				39	20
	Zn	68		ug/L				626	6
	As	75		ug/L				1266	2
	As-1	75		ug/L				6603	0
	Se	82		ug/L				-10	201
	Se	78		ug/L				6721	0
	Mo	98		ug/L				26	4
	Y	89		ug/L				327238	1
	Kr	83		ug/L				1809	3
>	In	115		ug/L				929401	0
	Ag	107		ug/L				20	21
	Cd	111		ug/L				75	18
	Cd	114		ug/L				31	22
	Sb	121		ug/L				417	15
	Sb	123		ug/L				326	25
	Ba	135		ug/L				23	24
	Ba	137		ug/L				45	18
>	Tb	159		ug/L				920152	1
	Tl	205		ug/L				78	12
	Pb	208		ug/L				146	2
	Bi	209		ug/L				2152313	0
	Th	232		ug/L				1253	0
	U	238		ug/L				35	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:41:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1480678	1
	Be	9	51.349	ug/L	1.520	2	18	262869	2
	C	13		ug/L			115227	123955	3
	Cl	37		ug/L			5056971	5345079	2
>	Sc	45		ug/L			1150108	1159769	0
	V	51	50.364	ug/L	0.946	1	6633	1034823	2
	V-1	51	50.377	ug/L	0.772	1	59	1026807	1
	Cr	52	51.034	ug/L	0.825	1	19531	833866	1
	Cr	53	51.084	ug/L	1.125	2	104	91663	1
	Mn	55	48.226	ug/L	0.197	0	477	1079834	0
	Co	59	50.763	ug/L	1.626	3	69	739550	2
>	Ge	72		ug/L			432270	431429	0
	Ni	60	51.850	ug/L	1.026	1	81	153138	1
	Ni	62	52.157	ug/L	1.680	3	65	21538	2
	Cu	63	51.503	ug/L	0.710	1	73	325004	1
	Cu	65	50.196	ug/L	1.173	2	32	139515	2
	Zn	66	49.561	ug/L	1.158	2	220	82266	2
	Zn	67	49.982	ug/L	0.956	1	39	13869	2
	Zn	68	49.909	ug/L	0.770	1	626	58132	1
	As	75	51.056	ug/L	0.543	1	1266	76841	1
	As-1	75	49.906	ug/L	0.862	1	6603	78186	1
	Se	82	83.465	ug/L	0.817	0	-10	13795	0
	Se	78	77.610	ug/L	1.529	1	6721	37824	1
	Mo	98	50.600	ug/L	0.434	0	26	208099	1
	Y	89		ug/L			327238	331000	1
	Kr	83		ug/L			1809	1829	3
>	In	115		ug/L			929401	936782	0
	Ag	107	50.507	ug/L	0.630	1	20	433948	1
	Cd	111	50.320	ug/L	0.660	1	75	226341	1
	Cd	114	48.984	ug/L	0.397	0	31	559633	0
	Sb	121	48.593	ug/L	0.100	0	417	725988	0
	Sb	123	48.364	ug/L	0.462	0	326	546255	0
	Ba	135	50.142	ug/L	0.620	1	23	200093	0
	Ba	137	50.143	ug/L	0.869	1	45	341581	1
>	Tb	159		ug/L			920152	948427	0
	Tl	205	48.780	ug/L	0.961	1	78	1522162	1
	Pb	208	49.425	ug/L	0.585	1	146	2024634	0
	Bi	209		ug/L			2152313	2136226	0
	Th	232	51.306	ug/L	2.564	4	1253	2099545	4
	U	238	51.955	ug/L	1.038	1	35	2230259	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:46:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1476018	1
	Be	9	0.001	ug/L	0.002	195	18	24	48
	C	13		ug/L			115227	116392	1
	Cl	37		ug/L			5056971	5227374	2
>	Sc	45		ug/L			1150108	1159302	1
	V	51	-0.004	ug/L	0.016	360	6633	6596	5
	V-1	51	0.003	ug/L	0.003	95	59	117	47
	Cr	52	-0.019	ug/L	0.037	188	19531	19378	3
	Cr	53	0.007	ug/L	0.015	217	104	117	21
	Mn	55	0.004	ug/L	0.004	107	477	565	16
	Co	59	0.003	ug/L	0.006	191	69	120	79
>	Ge	72		ug/L			432270	431223	1
	Ni	60	0.002	ug/L	0.004	197	81	86	12
	Ni	62	0.008	ug/L	0.012	159	65	68	8
	Cu	63	0.006	ug/L	0.007	111	73	110	37
	Cu	65	0.002	ug/L	0.002	87	32	39	16
	Zn	66	0.009	ug/L	0.014	150	220	234	8
	Zn	67	0.026	ug/L	0.033	128	39	46	18
	Zn	68	0.004	ug/L	0.021	587	626	628	4
	As	75	-0.011	ug/L	0.026	237	1266	1247	3
	As-1	75	0.000	ug/L	0.031	14161	6603	6587	0
	Se	82	-0.067	ug/L	0.082	121	-10	-21	61
	Se	78	-0.026	ug/L	0.141	547	6721	6694	0
	Mo	98	0.011	ug/L	0.005	48	26	71	29
	Y	89		ug/L			327238	333047	1
	Kr	83		ug/L			1809	1806	2
>	In	115		ug/L			929401	940020	1
	Ag	107	0.002	ug/L	0.001	26	20	37	13
	Cd	111	0.001	ug/L	0.001	101	75	81	7
	Cd	114	0.001	ug/L	0.001	51	31	44	14
	Sb	121	0.015	ug/L	0.007	49	417	641	16
	Sb	123	0.015	ug/L	0.009	62	326	496	20
	Ba	135	0.003	ug/L	0.001	41	23	34	12
	Ba	137	-0.001	ug/L	0.001	212	45	41	18
>	Tb	159		ug/L			920152	918359	1
	Tl	205	0.001	ug/L	0.001	110	78	108	29
	Pb	208	0.001	ug/L	0.000	24	146	174	3
	Bi	209		ug/L			2152313	2151332	0
	Th	232	0.080	ug/L	0.025	31	1253	4393	21
	U	238	0.002	ug/L	0.000	23	35	118	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:51:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1447591	0
	Be	9	52.081	ug/L	0.717	1	18	260710	1
	C	13		ug/L			115227	114307	3
	Cl	37		ug/L			5056971	5079097	2
>	Sc	45		ug/L			1150108	1155721	1
	V	51	48.758	ug/L	0.794	1	6633	998321	0
	V-1	51	48.942	ug/L	1.102	2	59	993786	0
	Cr	52	49.770	ug/L	0.492	0	19531	810889	2
	Cr	53	50.447	ug/L	1.576	3	104	90180	1
	Mn	55	48.347	ug/L	1.141	2	477	1078689	2
	Co	59	50.062	ug/L	1.371	2	69	726597	1
>	Ge	72		ug/L			432270	429764	0
	Ni	60	50.169	ug/L	0.419	0	81	147613	0
	Ni	62	51.182	ug/L	0.782	1	65	21056	1
	Cu	63	50.554	ug/L	0.511	1	73	317797	1
	Cu	65	49.884	ug/L	0.130	0	32	138116	0
	Zn	66	49.545	ug/L	1.098	2	220	81915	2
	Zn	67	50.165	ug/L	0.432	0	39	13865	0
	Zn	68	50.491	ug/L	0.551	1	626	58578	1
	As	75	50.959	ug/L	0.369	0	1266	76401	0
	As-1	75	50.377	ug/L	0.296	0	6603	78557	0
	Se	82	54.799	ug/L	0.592	1	-10	9019	1
	Se	78	49.621	ug/L	0.373	0	6721	26500	0
	Mo	98	48.953	ug/L	1.218	2	26	200551	2
	Y	89		ug/L			327238	329687	0
	Kr	83		ug/L			1809	1828	2
>	In	115		ug/L			929401	941925	0
	Ag	107	49.914	ug/L	0.475	0	20	431203	1
	Cd	111	50.443	ug/L	0.665	1	75	228119	0
	Cd	114	49.129	ug/L	0.626	1	31	564328	0
	Sb	121	47.936	ug/L	0.284	0	417	720078	0
	Sb	123	47.611	ug/L	0.833	1	326	540656	0
	Ba	135	48.444	ug/L	0.626	1	23	194371	0
	Ba	137	48.465	ug/L	0.434	0	45	331955	0
>	Tb	159		ug/L			920152	940123	0
	Tl	205	48.556	ug/L	0.260	0	78	1502050	0
	Pb	208	49.590	ug/L	0.642	1	146	2013602	0
	Bi	209		ug/L			2152313	2157135	0
	Th	232	48.032	ug/L	1.180	2	1253	1948585	1
	U	238	51.291	ug/L	0.120	0	35	2182666	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 11:56:13
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1438294	0
	Be	9	0.001	ug/L	0.002	167	18	23	43
	C	13		ug/L			115227	116661	1
	Cl	37		ug/L			5056971	5126503	2
>	Sc	45		ug/L			1150108	1165714	1
	V	51	0.008	ug/L	0.004	55	6633	6886	2
	V-1	51	0.001	ug/L	0.001	77	59	76	15
	Cr	52	0.025	ug/L	0.016	63	19531	20204	2
	Cr	53	-0.000	ug/L	0.004	958	104	105	8
	Mn	55	0.001	ug/L	0.001	106	477	510	4
	Co	59	-0.000	ug/L	0.001	845	69	69	10
>	Ge	72		ug/L			432270	424778	1
	Ni	60	0.013	ug/L	0.013	97	81	117	31
	Ni	62	0.019	ug/L	0.017	85	65	72	8
	Cu	63	0.004	ug/L	0.001	32	73	94	8
	Cu	65	-0.000	ug/L	0.001	1702	32	31	4
	Zn	66	0.042	ug/L	0.013	31	220	285	8
	Zn	67	0.011	ug/L	0.015	134	39	41	10
	Zn	68	0.011	ug/L	0.031	288	626	627	4
	As	75	0.033	ug/L	0.021	64	1266	1292	1
	As-1	75	0.034	ug/L	0.067	196	6603	6536	0
	Se	82	-0.009	ug/L	0.093	985	-10	-12	124
	Se	78	0.124	ug/L	0.177	142	6721	6653	0
	Mo	98	0.014	ug/L	0.006	42	26	83	28
	Y	89		ug/L			327238	320952	1
	Kr	83		ug/L			1809	1844	3
>	In	115		ug/L			929401	932633	0
	Ag	107	0.002	ug/L	0.003	109	20	41	56
	Cd	111	0.001	ug/L	0.002	176	75	80	9
	Cd	114	0.002	ug/L	0.003	157	31	51	60
	Sb	121	0.086	ug/L	0.006	7	417	1693	5
	Sb	123	0.083	ug/L	0.004	5	326	1256	3
	Ba	135	0.002	ug/L	0.002	83	23	31	20
	Ba	137	0.000	ug/L	0.003	2309	45	46	39
>	Tb	159		ug/L			920152	915440	1
	Tl	205	0.001	ug/L	0.002	120	78	117	40
	Pb	208	0.001	ug/L	0.001	69	146	174	12
	Bi	209		ug/L			2152313	2177121	0
	Th	232	0.097	ug/L	0.023	23	1253	5098	18
	U	238	0.003	ug/L	0.001	43	35	141	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:00:21
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1424055	1
	Be	9	0.213	ug/L	0.007	3	18	1068	2
	C	13		ug/L			115227	120479	0
	Cl	37		ug/L			5056971	5162692	1
>	Sc	45		ug/L			1150108	1149984	1
	V	51	0.207	ug/L	0.012	5	6633	10830	1
	V-1	51	0.201	ug/L	0.004	2	59	4118	1
	Cr	52	0.555	ug/L	0.021	3	19531	28301	1
	Cr	53	0.533	ug/L	0.009	1	104	1051	2
	Mn	55	0.495	ug/L	0.006	1	477	11474	2
	Co	59	0.201	ug/L	0.004	2	69	2969	0
>	Ge	72		ug/L			432270	426570	1
	Ni	60	0.502	ug/L	0.003	0	81	1544	1
	Ni	62	0.526	ug/L	0.028	5	65	278	2
	Cu	63	0.552	ug/L	0.007	1	73	3514	1
	Cu	65	0.535	ug/L	0.023	4	32	1500	3
	Zn	66	4.152	ug/L	0.100	2	220	7012	1
	Zn	67	3.642	ug/L	0.137	3	39	1035	4
	Zn	68	4.020	ug/L	0.137	3	626	5195	1
	As	75	0.247	ug/L	0.012	4	1266	1612	2
	As-1	75	0.213	ug/L	0.079	37	6603	6817	0
	Se	82	0.652	ug/L	0.107	16	-10	96	19
	Se	78	0.520	ug/L	0.302	58	6721	6838	0
	Mo	98	0.204	ug/L	0.007	3	26	855	2
	Y	89		ug/L			327238	330663	2
	Kr	83		ug/L			1809	1778	2
>	In	115		ug/L			929401	930227	0
	Ag	107	0.209	ug/L	0.007	3	20	1799	3
	Cd	111	0.104	ug/L	0.003	2	75	541	2
	Cd	114	0.107	ug/L	0.000	0	31	1243	0
	Sb	121	0.203	ug/L	0.001	0	417	3420	0
	Sb	123	0.197	ug/L	0.003	1	326	2536	1
	Ba	135	0.484	ug/L	0.014	2	23	1940	2
	Ba	137	0.502	ug/L	0.006	1	45	3438	1
>	Tb	159		ug/L			920152	898137	1
	Tl	205	0.206	ug/L	0.005	2	78	6159	0
	Pb	208	0.109	ug/L	0.002	1	146	4385	0
	Bi	209		ug/L			2152313	2097916	5
	Th	232	0.200	ug/L	0.007	3	1253	8953	2
	U	238	0.205	ug/L	0.009	4	35	8366	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:04:29
Number of Replicates: 3
Method File: C:\NexIONData\Method\200.8nomin.mth
Tuning File: C:\NexIONData\MassCal\default.tun
Optimization File: C:\NexIONData\Conditions\default.dac
Calibration File: C:\NexIONData\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1444274	0
	Be	9	0.000	ug/L	0.002	2486	18	18	41
	C	13		ug/L			115227	249821	2
	Cl	37		ug/L			5056971	13112754	1
>	Sc	45		ug/L			1150108	1087598	1
	V	51	0.109	ug/L	0.028	25	6633	8359	5
	V-1	51	0.461	ug/L	0.009	2	59	8875	1
	Cr	52	0.941	ug/L	0.077	8	19531	32544	2
	Cr	53	2.227	ug/L	0.020	0	104	3842	0
	Mn	55	0.099	ug/L	0.002	1	477	2527	0
	Co	59	0.019	ug/L	0.002	12	69	322	9
>	Ge	72		ug/L			432270	404728	2
	Ni	60	0.394	ug/L	0.025	6	81	1166	4
	Ni	62	1.644	ug/L	0.135	8	65	695	5
	Cu	63	0.998	ug/L	0.031	3	73	5970	1
	Cu	65	0.377	ug/L	0.022	5	32	1013	5
	Zn	66	0.715	ug/L	0.030	4	220	1317	6
	Zn	67	6.447	ug/L	0.097	1	39	1709	1
	Zn	68	0.177	ug/L	0.023	12	626	777	5
	As	75	0.063	ug/L	0.024	37	1266	1273	2
	As-1	75	0.169	ug/L	0.164	97	6603	6406	2
	Se	82	-0.301	ug/L	0.047	15	-10	-56	14
	Se	78	0.586	ug/L	0.469	80	6721	6511	1
	Mo	98	404.562	ug/L	9.517	2	26	1560069	1
	Y	89		ug/L			327238	313771	1
	Kr	83		ug/L			1809	1947	3
>	In	115		ug/L			929401	924127	1
	Ag	107	0.022	ug/L	0.001	5	20	209	3
	Cd	111	0.112	ug/L	0.014	12	75	571	11
	Cd	114	0.183	ug/L	0.013	7	31	2093	5
	Sb	121	0.043	ug/L	0.002	4	417	1045	3
	Sb	123	0.039	ug/L	0.004	10	326	762	7
	Ba	135	0.044	ug/L	0.001	2	23	198	1
	Ba	137	0.038	ug/L	0.002	4	45	297	5
>	Tb	159		ug/L			920152	979650	2
	Tl	205	0.003	ug/L	0.002	65	78	171	31
	Pb	208	0.038	ug/L	0.001	3	146	1753	0
	Bi	209		ug/L			2152313	2006904	5
	Th	232	0.214	ug/L	0.097	45	1253	10286	36
	U	238	0.001	ug/L	0.000	3	35	85	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:09:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1448633	0
	Be	9	0.000	ug/L	0.002	2812	18	18	43
	C	13		ug/L			115227	231349	0
	Cl	37		ug/L			5056971	13052907	2
>	Sc	45		ug/L			1150108	1085631	2
	V	51	0.130	ug/L	0.107	82	6633	8777	25
	V-1	51	0.530	ug/L	0.014	2	59	10165	2
	Cr	52	20.320	ug/L	0.560	2	19531	321749	0
	Cr	53	21.891	ug/L	0.955	4	104	36801	1
	Mn	55	18.807	ug/L	0.465	2	477	394334	1
	Co	59	19.157	ug/L	0.732	3	69	261172	2
>	Ge	72		ug/L			432270	393144	0
	Ni	60	19.149	ug/L	0.205	1	81	51592	2
	Ni	62	21.079	ug/L	0.079	0	65	7968	0
	Cu	63	19.815	ug/L	0.241	1	73	113978	0
	Cu	65	19.684	ug/L	1.092	5	32	49856	4
	Zn	66	18.398	ug/L	0.486	2	220	27948	1
	Zn	67	22.689	ug/L	0.293	1	39	5755	1
	Zn	68	17.997	ug/L	0.551	3	626	19463	2
	As	75	18.240	ug/L	0.226	1	1266	25754	0
	As-1	75	18.902	ug/L	0.281	1	6603	30714	0
	Se	82	-0.469	ug/L	0.037	7	-10	-80	6
	Se	78	0.481	ug/L	0.187	38	6721	6288	0
	Mo	98	417.557	ug/L	6.780	1	26	1564485	0
	Y	89		ug/L			327238	305086	1
	Kr	83		ug/L			1809	1960	0
>	In	115		ug/L			929401	951261	0
	Ag	107	19.681	ug/L	0.415	2	20	171701	1
	Cd	111	18.957	ug/L	0.430	2	75	86625	1
	Cd	114	18.915	ug/L	0.138	0	31	219455	0
	Sb	121	0.046	ug/L	0.003	7	417	1128	4
	Sb	123	0.044	ug/L	0.003	7	326	841	4
	Ba	135	0.046	ug/L	0.005	10	23	211	8
	Ba	137	0.039	ug/L	0.003	7	45	316	6
>	Tb	159		ug/L			920152	1010847	1
	Tl	205	0.001	ug/L	0.000	7	78	127	3
	Pb	208	0.039	ug/L	0.001	1	146	1872	0
	Bi	209		ug/L			2152313	2193768	0
	Th	232	0.066	ug/L	0.017	25	1253	4232	17
	U	238	0.001	ug/L	0.000	12	35	83	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:15:12
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1475707	3
	Be	9	-0.000	ug/L	0.000	41	18	15	3
	C	13		ug/L			115227	118340	7
	Cl	37		ug/L			5056971	5278731	4
>	Sc	45		ug/L			1150108	1146443	0
	V	51	0.002	ug/L	0.014	855	6633	6644	4
	V-1	51	0.020	ug/L	0.003	13	59	470	11
	Cr	52	-0.001	ug/L	0.046	3655	19531	19449	3
	Cr	53	0.067	ug/L	0.008	11	104	223	5
	Mn	55	0.025	ug/L	0.003	11	477	1021	5
	Co	59	-0.000	ug/L	0.001	132	69	62	15
>	Ge	72		ug/L			432270	408513	0
	Ni	60	0.015	ug/L	0.003	22	81	117	7
	Ni	62	0.151	ug/L	0.026	17	65	120	7
	Cu	63	0.111	ug/L	0.001	1	73	735	1
	Cu	65	0.106	ug/L	0.006	5	32	308	4
	Zn	66	1.382	ug/L	0.070	5	220	2373	3
	Zn	67	1.293	ug/L	0.065	4	39	375	5
	Zn	68	1.375	ug/L	0.078	5	626	2090	3
	As	75	0.022	ug/L	0.042	189	1266	1228	4
	As-1	75	0.053	ug/L	0.050	93	6603	6312	0
	Se	82	0.027	ug/L	0.232	861	-10	-6	602
	Se	78	0.154	ug/L	0.202	130	6721	6410	0
	Mo	98	0.068	ug/L	0.016	23	326	288	21
	Y	89		ug/L			327238	316487	2
	Kr	83		ug/L			1809	1718	3
>	In	115		ug/L			929401	997621	1
	Ag	107	0.001	ug/L	0.001	161	20	27	36
	Cd	111	-0.000	ug/L	0.001	754	75	80	6
	Cd	114	0.001	ug/L	0.000	39	31	41	5
	Sb	121	-0.017	ug/L	0.001	7	417	174	12
	Sb	123	-0.018	ug/L	0.001	6	326	133	11
	Ba	135	0.021	ug/L	0.003	15	23	115	11
	Ba	137	0.019	ug/L	0.002	9	45	183	7
>	Tb	159		ug/L			920152	985325	0
	Tl	205	0.000	ug/L	0.001	227	78	92	21
	Pb	208	0.017	ug/L	0.001	4	146	871	4
	Bi	209		ug/L			2152313	2366508	0
	Th	232	-0.026	ug/L	0.000	1	1253	237	5
	U	238	-0.000	ug/L	0.000	13	35	22	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:20:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1521340	1
	Be	9	-0.000	ug/L	0.001	321	18	17	26
	C	13		ug/L			115227	124728	3
	Cl	37		ug/L			5056971	5208683	2
>	Sc	45		ug/L			1150108	1178281	2
	V	51	-0.004	ug/L	0.011	243	6633	6703	2
	V-1	51	0.012	ug/L	0.001	8	59	311	6
	Cr	52	-0.022	ug/L	0.041	187	19531	19652	2
	Cr	53	0.038	ug/L	0.001	1	104	176	2
	Mn	55	0.030	ug/L	0.001	4	477	1165	1
	Co	59	0.000	ug/L	0.001	201	69	78	17
>	Ge	72		ug/L			432270	412728	1
	Ni	60	0.009	ug/L	0.005	59	81	103	13
	Ni	62	0.017	ug/L	0.023	134	65	69	11
	Cu	63	0.148	ug/L	0.009	6	73	965	5
	Cu	65	0.145	ug/L	0.008	5	32	415	4
	Zn	66	2.092	ug/L	0.102	4	220	3522	3
	Zn	67	1.833	ug/L	0.123	6	39	522	4
	Zn	68	2.026	ug/L	0.045	2	626	2830	0
	As	75	0.015	ug/L	0.007	48	1266	1230	1
	As-1	75	0.110	ug/L	0.093	84	6603	6454	0
	Se	82	-0.078	ug/L	0.109	140	-10	-22	75
	Se	78	0.371	ug/L	0.350	94	6721	6558	0
	Mo	98	0.018	ug/L	0.005	30	26	95	23
	Y	89		ug/L			327238	323321	1
	Kr	83		ug/L			1809	1782	1
>	In	115		ug/L			929401	1019903	1
	Ag	107	0.000	ug/L	0.001	591	20	24	56
	Cd	111	0.001	ug/L	0.004	537	75	87	26
	Cd	114	0.005	ug/L	0.007	138	31	102	92
	Sb	121	-0.017	ug/L	0.003	19	417	185	30
	Sb	123	-0.017	ug/L	0.003	15	326	145	23
	Ba	135	0.019	ug/L	0.002	12	23	107	10
	Ba	137	0.020	ug/L	0.002	9	45	199	8
>	Tb	159		ug/L			920152	1009693	1
	Tl	205	0.000	ug/L	0.002	591	78	97	66
	Pb	208	0.020	ug/L	0.001	6	146	1034	6
	Bi	209		ug/L			2152313	2378812	1
	Th	232	-0.027	ug/L	0.001	4	1253	211	28
	U	238	-0.000	ug/L	0.001	2735	35	38	104

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:25:57
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1558214	2
	Be	9	49.781	ug/L	1.131	2	18	268145	0
	C	13		ug/L			115227	125327	0
	Cl	37		ug/L			5056971	5329852	3
>	Sc	45		ug/L			1150108	1171567	2
	V	51	47.413	ug/L	0.344	0	6633	984323	2
	V-1	51	47.553	ug/L	0.870	1	59	978748	1
	Cr	52	48.114	ug/L	0.568	1	19531	795134	1
	Cr	53	48.626	ug/L	2.771	5	104	88067	3
	Mn	55	47.967	ug/L	0.798	1	477	1084667	1
	Co	59	46.877	ug/L	1.447	3	69	689513	0
>	Ge	72		ug/L			432270	412906	3
	Ni	60	50.729	ug/L	1.146	2	81	143346	2
	Ni	62	51.102	ug/L	1.087	2	65	20190	2
	Cu	63	50.857	ug/L	2.997	5	73	306728	2
	Cu	65	49.407	ug/L	1.893	3	32	131307	0
	Zn	66	48.738	ug/L	1.746	3	220	77357	0
	Zn	67	51.112	ug/L	1.788	3	39	13561	0
	Zn	68	50.975	ug/L	2.116	4	626	56765	2
	As	75	51.163	ug/L	2.606	5	1266	73604	1
	As-1	75	50.441	ug/L	2.194	4	6603	75493	1
	Se	82	56.187	ug/L	3.023	5	-10	8873	1
	Se	78	50.585	ug/L	1.583	3	6721	25816	1
	Mo	98	50.467	ug/L	2.479	4	26	198397	1
	Y	89		ug/L			327238	335306	1
	Kr	83		ug/L			1809	1768	2
>	In	115		ug/L			929401	1021759	1
	Ag	107	48.703	ug/L	1.059	2	20	456323	1
	Cd	111	48.957	ug/L	0.463	0	75	240174	1
	Cd	114	49.012	ug/L	0.769	1	31	610688	1
	Sb	121	47.963	ug/L	0.462	0	417	781504	0
	Sb	123	47.332	ug/L	0.769	1	326	583003	0
	Ba	135	48.472	ug/L	0.886	1	23	210938	0
	Ba	137	49.124	ug/L	0.116	0	45	364991	1
>	Tb	159		ug/L			920152	1046748	1
	Tl	205	48.239	ug/L	1.238	2	78	1661051	1
	Pb	208	49.128	ug/L	0.593	1	146	2220940	0
	Bi	209		ug/L			2152313	2369460	1
	Th	232	49.627	ug/L	1.745	3	1253	2240934	1
	U	238	50.117	ug/L	1.242	2	35	2373973	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:31:53
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1550667	0
	Be	9	-0.000	ug/L	0.001	137	18	17	15
	C	13		ug/L			115227	126697	2
	Cl	37		ug/L			5056971	5305426	3
>	Sc	45		ug/L			1150108	1178786	0
	V	51	0.001	ug/L	0.006	502	6633	6822	1
	V-1	51	0.007	ug/L	0.001	13	59	202	8
	Cr	52	-0.002	ug/L	0.019	832	19531	19981	1
	Cr	53	0.018	ug/L	0.004	23	104	141	6
	Mn	55	-0.000	ug/L	0.004	8908	477	488	16
	Co	59	0.003	ug/L	0.005	170	69	113	62
>	Ge	72		ug/L			432270	417215	0
	Ni	60	-0.003	ug/L	0.010	393	81	71	39
	Ni	62	0.005	ug/L	0.032	639	65	65	18
	Cu	63	0.014	ug/L	0.009	66	73	153	35
	Cu	65	0.007	ug/L	0.011	150	32	50	57
	Zn	66	-0.008	ug/L	0.013	164	220	200	9
	Zn	67	-0.010	ug/L	0.022	221	39	35	15
	Zn	68	0.035	ug/L	0.010	29	626	643	2
	As	75	0.032	ug/L	0.017	53	1266	1268	1
	As-1	75	0.034	ug/L	0.024	70	6603	6420	0
	Se	82	-0.001	ug/L	0.112	7538	-10	-10	167
	Se	78	0.099	ug/L	0.089	89	6721	6526	0
	Mo	98	0.015	ug/L	0.002	13	26	86	8
	Y	89		ug/L			327238	330647	1
	Kr	83		ug/L			1809	1794	2
>	In	115		ug/L			929401	1019736	0
	Ag	107	0.002	ug/L	0.002	128	20	37	52
	Cd	111	0.000	ug/L	0.001	258	75	85	5
	Cd	114	0.001	ug/L	0.001	115	31	51	36
	Sb	121	0.062	ug/L	0.007	11	417	1458	7
	Sb	123	0.060	ug/L	0.004	6	326	1099	4
	Ba	135	0.002	ug/L	0.001	59	23	33	13
	Ba	137	0.000	ug/L	0.001	191	45	53	13
>	Tb	159		ug/L			920152	1000008	0
	Tl	205	-0.000	ug/L	0.001	3474	78	84	20
	Pb	208	0.000	ug/L	0.000	86	146	176	8
	Bi	209		ug/L			2152313	2385116	0
	Th	232	0.042	ug/L	0.008	18	1253	3193	10
	U	238	0.001	ug/L	0.000	35	35	98	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:37:23
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1556311	0
	Be	9	49.548	ug/L	1.315	2	18	266675	2
	C	13		ug/L			115227	121053	3
	Cl	37		ug/L			5056971	5532935	3
>	Sc	45		ug/L			1150108	1189285	3
	V	51	47.160	ug/L	1.610	3	6633	993202	1
	V-1	51	47.263	ug/L	1.491	3	59	987111	1
	Cr	52	47.999	ug/L	2.568	5	19531	804374	1
	Cr	53	48.376	ug/L	1.806	3	104	88946	1
	Mn	55	45.906	ug/L	1.666	3	477	1053114	0
	Co	59	45.827	ug/L	2.126	4	69	683869	0
>	Ge	72		ug/L			432270	413104	0
	Ni	60	50.025	ug/L	1.080	2	81	141485	2
	Ni	62	49.480	ug/L	1.475	2	65	19568	2
	Cu	63	50.494	ug/L	0.667	1	73	305111	1
	Cu	65	49.144	ug/L	1.429	2	32	130782	2
	Zn	66	49.684	ug/L	0.802	1	220	78959	1
	Zn	67	49.878	ug/L	1.429	2	39	13251	2
	Zn	68	50.570	ug/L	2.187	4	626	56385	3
	As	75	51.186	ug/L	0.445	0	1266	73759	0
	As-1	75	50.570	ug/L	0.992	1	6603	75773	1
	Se	82	56.255	ug/L	0.733	1	-10	8900	1
	Se	78	51.017	ug/L	1.573	3	6721	26007	1
	Mo	98	51.238	ug/L	0.762	1	26	201764	1
	Y	89		ug/L			327238	329473	2
	Kr	83		ug/L			1809	1766	1
>	In	115		ug/L			929401	1016027	1
	Ag	107	46.715	ug/L	0.700	1	20	435242	0
	Cd	111	48.801	ug/L	0.936	1	75	238047	1
	Cd	114	49.306	ug/L	0.350	0	31	610923	1
	Sb	121	48.260	ug/L	0.768	1	417	781869	0
	Sb	123	47.645	ug/L	0.500	1	326	583614	0
	Ba	135	48.287	ug/L	0.629	1	23	208973	0
	Ba	137	49.113	ug/L	0.549	1	45	362832	0
>	Tb	159		ug/L			920152	1029473	2
	Tl	205	48.531	ug/L	1.463	3	78	1643139	0
	Pb	208	49.455	ug/L	1.194	2	146	2198246	0
	Bi	209		ug/L			2152313	2345645	0
	Th	232	50.266	ug/L	1.740	3	1253	2231980	1
	U	238	50.744	ug/L	1.532	3	35	2363425	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:43:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1510313	1
	Be	9	0.001	ug/L	0.001	132	18	22	24
	C	13		ug/L			115227	122990	0
	Cl	37		ug/L			5056971	5386220	2
>	Sc	45		ug/L			1150108	1177933	1
	V	51	-0.010	ug/L	0.003	29	6633	6584	1
	V-1	51	0.005	ug/L	0.001	12	59	167	9
	Cr	52	-0.033	ug/L	0.007	21	19531	19461	0
	Cr	53	0.022	ug/L	0.008	34	104	147	9
	Mn	55	-0.001	ug/L	0.001	44	477	459	2
	Co	59	-0.001	ug/L	0.001	159	69	62	23
>	Ge	72		ug/L			432270	414659	1
	Ni	60	-0.013	ug/L	0.002	14	81	41	14
	Ni	62	0.018	ug/L	0.042	236	65	69	23
	Cu	63	0.003	ug/L	0.002	75	73	87	15
	Cu	65	0.000	ug/L	0.001	249	32	31	6
	Zn	66	-0.006	ug/L	0.010	176	220	202	8
	Zn	67	-0.015	ug/L	0.020	131	39	33	15
	Zn	68	-0.002	ug/L	0.020	835	626	597	2
	As	75	0.052	ug/L	0.021	41	1266	1289	1
	As-1	75	0.069	ug/L	0.097	140	6603	6427	0
	Se	82	0.001	ug/L	0.212	27450	-10	-10	331
	Se	78	0.188	ug/L	0.359	191	6721	6518	0
	Mo	98	0.014	ug/L	0.003	23	26	79	15
	Y	89		ug/L			327238	322461	1
	Kr	83		ug/L			1809	1799	3
>	In	115		ug/L			92[illegible]401	1001866	0
	Ag	107	0.001	ug/L	0.000	36	20	29	10
	Cd	111	0.000	ug/L	0.001	109	75	84	3
	Cd	114	0.001	ug/L	0.000	40	31	42	8
	Sb	121	0.068	ug/L	0.002	3	417	1542	1
	Sb	123	0.067	ug/L	0.007	9	326	1160	6
	Ba	135	-0.000	ug/L	0.001	218	23	23	12
	Ba	137	-0.001	ug/L	0.001	73	45	43	8
>	Tb	159		ug/L			920152	997995	1
	Ti	205	-0.000	ug/L	0.000	139	78	75	18
	Pb	208	-0.000	ug/L	0.000	359	146	153	11
	Bi	209		ug/L			2152313	2363894	1
	Th	232	0.067	ug/L	0.014	21	1253	4227	14
	U	238	0.001	ug/L	0.000	20	35	92	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:49:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1595382	1
	Be	9	0.001	ug/L	0.001	79	18	24	15
	C	13		ug/L			115227	140198	1
	Cl	37		ug/L			5056971	5228259	1
>	Sc	45		ug/L			1150108	1206917	2
	V	51	0.002	ug/L	0.011	661	6633	6992	1
	V-1	51	0.010	ug/L	0.001	12	59	275	7
	Cr	52	0.104	ug/L	0.051	49	19531	22219	2
	Cr	53	0.136	ug/L	0.018	13	104	362	7
	Mn	55	0.017	ug/L	0.001	7	477	890	2
	Co	59	0.001	ug/L	0.001	210	69	81	19
>	Ge	72		ug/L			432270	424626	1
	Ni	60	-0.004	ug/L	0.003	76	81	67	14
	Ni	62	0.011	ug/L	0.013	113	65	68	7
	Cu	63	U 0.177	ug/L	0.009	4	73	1171	3
	Cu	65	0.157	ug/L	0.012	7	32	462	6
	Zn	66	1.357	ug/L	0.027	1	220	2426	0
	Zn	67	1.199	ug/L	0.084	7	39	364	5
	Zn	68	1.290	ug/L	0.103	7	626	2077	5
	As	75	0.012	ug/L	0.026	205	1266	1262	2
	As-1	75	0.005	ug/L	0.028	586	6603	6493	1
	Se	82	-0.095	ug/L	0.174	182	-10	-26	108
	Se	78	-0.000	ug/L	0.113	41413	6721	6602	1
	Mo	98	0.014	ug/L	0.004	28	26	82	19
	Y	89		ug/L			327238	334824	0
	Kr	83		ug/L			1809	1840	3
>	In	115		ug/L			929401	1034247	1
	Ag	107	-0.000	ug/L	0.000	160	20	20	13
	Cd	111	-0.001	ug/L	0.003	579	75	81	19
	Cd	114	0.001	ug/L	0.000	29	31	42	4
	Sb	121	0.004	ug/L	0.002	68	417	524	8
	Sb	123	0.003	ug/L	0.002	85	326	395	7
	Ba	135	0.009	ug/L	0.002	20	23	66	11
	Ba	137	0.008	ug/L	0.001	11	45	111	5
>	Tb	159		ug/L			920152	1017037	1
	Tl	205	0.001	ug/L	0.001	131	78	119	35
	Pb	208	0.015	ug/L	0.001	3	146	815	1
	Bi	209		ug/L			2152313	2387354	0
	Th	232	0.066	ug/L	0.019	28	1253	4294	18
	U	238	0.000	ug/L	0.000	2353	35	39	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US61 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:53:41
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1594024	1
	Be	9	0.003	ug/L	0.001	41	18	37	19
	C	13		ug/L			115227	139679	0
	Cl	37		ug/L			5056971	5374840	1
>	Sc	45		ug/L			1150108	1220068	0
	V	51	0.004	ug/L	0.004	112	6633	7121	0
	V-1	51	0.012	ug/L	0.001	10	59	319	7
	Cr	52	0.104	ug/L	0.006	6	19531	22471	1
	Cr	53	0.134	ug/L	0.013	9	104	364	7
	Mn	55	0.064	ug/L	0.003	4	477	2014	2
	Co	59	0.001	ug/L	0.001	81	69	85	10
>	Ge	72		ug/L			432270	424589	0
	Ni	60	-0.004	ug/L	0.005	124	81	68	21
	Ni	62	-0.000	ug/L	0.023	5906	65	64	14
	Cu	63	0.300	ug/L	0.007	2	73	1933	1
	Cu	65	0.294	ug/L	0.011	3	32	836	3
	Zn	66	1.378	ug/L	0.027	1	220	2461	1
	Zn	67	1.195	ug/L	0.173	14	39	363	12
	Zn	68	1.333	ug/L	0.042	3	626	2126	2
	As	75	0.028	ug/L	0.008	29	1266	1285	0
	As-1	75	0.107	ug/L	0.063	59	6603	6636	0
	Se	82	-0.035	ug/L	0.013	36	-10	-16	12
	Se	78	0.371	ug/L	0.232	62	6721	6748	0
	Mo	98	0.005	ug/L	0.001	19	26	48	9
	Y	89		ug/L			327238	341409	2
	Kr	83		ug/L			1809	1841	0
>	In	115		ug/L			929401	1041025	1
	Ag	107	-0.000	ug/L	0.000	96	20	18	25
	Cd	111	-0.001	ug/L	0.001	67	75	78	4
	Cd	114	-0.000	ug/L	0.000	98	31	34	5
	Sb	121	-0.011	ug/L	0.003	23	417	277	16
	Sb	123	-0.012	ug/L	0.003	25	326	214	18
	Ba	135	0.014	ug/L	0.003	19	23	87	13
	Ba	137	0.014	ug/L	0.001	8	45	154	4
>	Tb	159		ug/L			920152	1020284	0
	Tl	205	0.001	ug/L	0.000	38	78	112	8
	Pb	208	0.017	ug/L	0.001	6	146	933	5
	Bi	209		ug/L			2152313	2366896	0
	Th	232	0.018	ug/L	0.007	36	1253	2196	13
	U	238	0.001	ug/L	0.002	161	35	82	84

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB1 RCN 5/14/12 JVP
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 12:57:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1631876	0
	Be	9	0.001	ug/L	0.001	43	18	28	12
	C	13		ug/L			115227	135779	1
	Cl	37		ug/L			5056971	5329100	7
>	Sc	45		ug/L			1150108	1292751	5
	V	51	-0.014	ug/L	0.009	67	6633	7129	2
	V-1	51	0.011	ug/L	0.001	8	59	304	3
	Cr	52	0.043	ug/L	0.043	99	19531	22697	1
	Cr	53	0.133	ug/L	0.012	9	104	382	2
	Mn	55	0.028	ug/L	0.003	10	477	1223	2
	Co	59	-0.000	ug/L	0.001	1623	69	77	14
>	Ge	72		ug/L			432270	425062	2
	Ni	60	-0.006	ug/L	0.001	15	81	62	2
	Ni	62	-0.001	ug/L	0.002	133	65	63	0
	Cu	63	0.180	ug/L	0.007	3	73	1190	5
	Cu	65	0.184	ug/L	0.006	3	32	534	4
	Zn	66	1.178	ug/L	0.042	3	220	2138	5
	Zn	67	1.103	ug/L	0.084	7	39	339	8
	Zn	68	1.134	ug/L	0.041	3	626	1903	2
	As	75	0.073	ug/L	0.018	25	1266	1351	3
	As-1	75	0.079	ug/L	0.061	77	6603	6604	1
	Se	82	0.126	ug/L	0.166	131	-10	10	260
	Se	78	0.204	ug/L	0.178	86	6721	6689	1
	Mo	98	0.005	ug/L	0.003	59	26	46	27
	Y	89		ug/L			327238	345823	2
	Kr	83		ug/L			1809	1806	1
>	In	115		ug/L			929401	1049072	3
	Ag	107	0.000	ug/L	0.001	193	20	26	25
	Cd	111	-0.002	ug/L	0.001	62	75	77	9
	Cd	114	0.001	ug/L	0.000	36	31	52	10
	Sb	121	-0.014	ug/L	0.002	17	417	234	16
	Sb	123	-0.016	ug/L	0.002	10	326	167	10
	Ba	135	0.013	ug/L	0.002	18	23	83	12
	Ba	137	0.013	ug/L	0.002	13	45	152	7
>	Tb	159		ug/L			920152	1024343	1
	Tl	205	-0.000	ug/L	0.000	103	78	72	20
	Pb	208	0.020	ug/L	0.002	10	146	1041	7
	Bi	209		ug/L			2152313	2451897	5
	Th	232	0.008	ug/L	0.013	179	1253	1731	35
	U	238	0.001	ug/L	0.001	161	35	63	60

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:01:57
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1587766	1
	Be	9	0.003	ug/L	0.001	34	18	36	15
	C	13		ug/L			115227	136051	1
	Cl	37		ug/L			5056971	5324619	3
>	Sc	45		ug/L			1150108	1227301	0
	V	51	0.003	ug/L	0.004	132	6633	7148	1
	V-1	51	0.011	ug/L	0.001	9	59	301	7
	Cr	52	0.116	ug/L	0.011	9	19531	22805	0
	Cr	53	0.145	ug/L	0.009	6	104	387	4
	Mn	55	0.035	ug/L	0.001	1	477	1336	1
	Co	59	0.000	ug/L	0.001	239	69	79	14
>	Ge	72		ug/L			432270	425482	1
	Ni	60	-0.001	ug/L	0.003	324	81	77	10
	Ni	62	-0.003	ug/L	0.035	1200	65	63	20
	Cu	63	0.288	ug/L	0.011	3	73	1862	2
	Cu	65	0.277	ug/L	0.013	4	32	789	3
	Zn	66	1.352	ug/L	0.070	5	220	2423	3
	Zn	67	1.207	ug/L	0.106	8	39	368	9
	Zn	68	1.349	ug/L	0.068	5	626	2148	2
	As	75	0.030	ug/L	0.003	9	1266	1290	1
	As-1	75	0.128	ug/L	0.056	43	6603	6680	0
	Se	82	-0.086	ug/L	0.028	32	-10	-24	19
	Se	78	0.417	ug/L	0.188	45	6721	6780	0
	Mo	98	0.003	ug/L	0.001	53	26	37	14
	Y	89		ug/L			327238	348387	0
	Kr	83		ug/L			1809	1860	2
>	In	115		ug/L			929401	1041103	0
	Ag	107	-0.001	ug/L	0.000	41	20	15	18
	Cd	111	-0.002	ug/L	0.002	137	75	76	15
	Cd	114	0.002	ug/L	0.001	40	31	57	15
	Sb	121	-0.018	ug/L	0.002	9	417	162	18
	Sb	123	-0.019	ug/L	0.001	6	326	127	12
	Ba	135	0.017	ug/L	0.004	22	23	99	15
	Ba	137	0.018	ug/L	0.001	6	45	184	4
>	Tb	159		ug/L			920152	1021165	0
	Tl	205	-0.001	ug/L	0.000	9	78	44	9
	Pb	208	0.028	ug/L	0.001	2	146	1411	1
	Bi	209		ug/L			2152313	2390515	0
	Th	232	-0.008	ug/L	0.003	35	1253	1036	12
	U	238	-0.000	ug/L	0.000	9	35	21	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:06:04
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1613178	1
	Be	9	24.396	ug/L	0.294	1	18	136104	1
	C	13		ug/L			115227	142720	1
	Cl	37		ug/L			5056971	5392102	3
>	Sc	45		ug/L			1150108	1237621	1
	V	51	23.469	ug/L	0.177	0	6633	518404	1
	V-1	51	23.531	ug/L	0.072	0	59	511845	1
	Cr	52	24.077	ug/L	0.762	3	19531	430891	2
	Cr	53	24.305	ug/L	0.687	2	104	46593	2
	Mn	55	23.968	ug/L	1.052	4	477	573030	4
	Co	59	23.858	ug/L	0.545	2	69	370900	1
>	Ge	72		ug/L			432270	425919	1
	Ni	60	25.878	ug/L	0.275	1	81	75507	2
	Ni	62	26.100	ug/L	0.845	3	65	10674	4
	Cu	63	26.878	ug/L	0.633	2	73	167440	1
	Cu	65	26.200	ug/L	0.590	2	32	71888	0
	Zn	66	79.195	ug/L	2.009	2	220	129607	1
	Zn	67	74.231	ug/L	3.682	4	39	20304	3
	Zn	68	78.138	ug/L	1.704	2	626	89482	0
	As	75	27.626	ug/L	0.547	1	1266	41619	2
	As-1	75	24.833	ug/L	0.486	1	6603	41677	2
	Se	82	84.154	ug/L	1.032	1	-10	13730	0
	Se	78	75.228	ug/L	0.695	0	6721	36396	1
	Mo	98	0.008	ug/L	0.002	30	26	56	15
	Y	89		ug/L			327238	341166	2
	Kr	83		ug/L			1809	1854	1
>	In	115		ug/L			929401	1038272	1
	Ag	107	24.242	ug/L	0.077	0	20	230856	1
	Cd	111	24.202	ug/L	0.280	1	75	120694	1
	Cd	114	24.298	ug/L	0.934	3	31	307540	1
	Sb	121	-0.017	ug/L	0.002	9	117	185	13
	Sb	123	-0.017	ug/L	0.002	13	326	145	18
	Ba	135	24.384	ug/L	0.229	0	23	107853	1
	Ba	137	24.593	ug/L	0.742	3	45	185646	1
>	Tb	159		ug/L			920152	1021429	0
	Tl	205	25.098	ug/L	0.417	1	78	843536	1
	Pb	208	25.510	ug/L	0.274	1	146	1125508	0
	Bi	209		ug/L			2152313	2409532	0
	Th	232	23.894	ug/L	0.238	0	1253	1054035	1
	U	238	24.597	ug/L	0.277	1	35	1137226	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:10:12
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	Li	6		ug/L			1469308	1616311	1
	Be	9	24.641	ug/L	0.812	3	18	137700	2
	C	13		ug/L			115227	142057	4
	Cl	37		ug/L			5056971	5303451	2
>	Sc	45		ug/L			1150108	1216434	1
	V	51	24.341	ug/L	0.736	3	6633	528010	1
	V-1	51	24.293	ug/L	0.720	2	59	519200	1
	Cr	52	25.072	ug/L	0.722	2	19531	440080	1
	Cr	53	24.901	ug/L	0.674	2	104	46911	1
	Mn	55	24.368	ug/L	0.859	3	477	572452	3
	Co	59	24.025	ug/L	0.690	2	69	367107	2
>	Ge	72		ug/L			432270	434400	1
	Ni	60	25.800	ug/L	0.593	2	81	76768	2
	Ni	62	26.108	ug/L	0.634	2	65	10889	2
	Cu	63	26.190	ug/L	0.185	0	73	166437	0
	Cu	65	25.781	ug/L	0.278	1	32	72158	0
	Zn	66	78.915	ug/L	2.830	3	220	131706	2
	Zn	67	70.743	ug/L	1.238	1	39	19745	1
	Zn	68	77.504	ug/L	3.077	3	626	90534	3
	As	75	27.648	ug/L	0.420	1	1266	42475	0
	As-1	75	24.898	ug/L	0.247	0	6603	42597	0
	Se	82	83.178	ug/L	2.083	2	-10	13839	1
	Se	78	74.328	ug/L	1.590	2	6721	36755	0
	Mo	98	0.006	ug/L	0.000	5	26	49	2
	Y	89		ug/L			327238	343067	2
	Kr	83		ug/L			1809	1876	1
>	In	115		ug/L			929401	1033613	1
	Ag	107	24.672	ug/L	0.679	2	20	233848	2
	Cd	111	24.798	ug/L	0.376	1	75	123094	0
	Cd	114	24.841	ug/L	0.399	1	31	313123	1
	Sb	121	-0.018	ug/L	0.002	8	417	165	16
	Sb	123	-0.019	ug/L	0.001	7	326	129	14
	Ba	135	24.443	ug/L	0.387	1	23	107622	0
	Ba	137	24.814	ug/L	0.393	1	45	186506	0
>	Tb	159		ug/L			920152	1019124	0
	Tl	205	25.242	ug/L	0.248	0	78	846565	1
	Pb	208	25.751	ug/L	0.252	0	146	1133586	0
	Bi	209		ug/L			2152313	2391295	1
	Th	232	24.458	ug/L	0.517	2	1253	1076279	1
	U	238	24.641	ug/L	0.087	0	35	1136722	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R A-L REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:14:19
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1584312	3
	Be	9	0.004	ug/L	0.001	23	18	43	10
	C	13		ug/L			115227	130888	2
	Cl	37		ug/L			5056971	5480841	3
>	Sc	45		ug/L			1150108	1233061	1
	V	51	0.206	ug/L	0.002	0	6633	11581	2
	V-1	51	0.217	ug/L	0.003	1	59	4762	2
	Cr	52	0.227	ug/L	0.019	8	19531	24790	0
	Cr	53	0.267	ug/L	0.023	8	104	620	5
	Mn	55	102.021	ug/L	3.012	2	477	2427513	1
	Co	59	0.015	ug/L	0.003	17	69	300	14
>	Ge	72		ug/L			432270	420676	1
	Ni	60	0.177	ug/L	0.016	9	81	587	7
	Ni	62	0.096	ug/L	0.032	32	65	102	13
	Cu	63	0.378	ug/L	0.007	1	73	2398	1
	Cu	65	0.192	ug/L	0.005	2	32	553	3
	Zn	66	2.327	ug/L	0.057	2	220	3969	2
	Zn	67	1.945	ug/L	0.061	3	39	562	1
	Zn	68	2.510	ug/L	0.022	0	626	3429	1
	As	75	U 0.104	ug/L	0.034	32	1266	1383	3
	As-1	75	0.144	ug/L	0.077	53	6603	6627	0
	Se	82	-0.003	ug/L	0.213	7548	-10	-11	311
	Se	78	0.283	ug/L	0.332	117	6721	6651	0
	Mo	98	0.001	ug/L	0.001	53	26	29	6
	Y	89		ug/L			327238	338801	1
	Kr	83		ug/L			1809	1837	3
>	In	115		ug/L			929401	1023244	0
	Ag	107	0.002	ug/L	0.000	26	20	39	11
	Cd	111	0.014	ug/L	0.002	14	75	153	7
	Cd	114	0.015	ug/L	0.000	3	31	219	2
	Sb	121	-0.013	ug/L	0.002	14	417	240	13
	Sb	123	-0.015	ug/L	0.001	9	326	168	10
	Ba	135	0.892	ug/L	0.006	0	23	3915	0
	Ba	137	0.905	ug/L	0.012	1	45	6785	0
>	Tb	159		ug/L			920152	1030447	0
	Tl	205	0.001	ug/L	0.000	39	78	126	11
	Pb	208	0.028	ug/L	0.001	2	146	1398	2
	Bi	209		ug/L			2152313	2340472	0
	Th	232	0.221	ug/L	0.077	34	1053	11209	29
	U	238	0.008	ug/L	0.001	10	35	403	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:18:27
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1494903	1
	Be	9	0.010	ug/L	0.001	5	18	69	5
	C	13		ug/L			115227	138670	3
	Cl	37		ug/L			5056971	5836152	2
>	Sc	45		ug/L			1150108	1231004	2
	V	51	0.917	ug/L	0.040	4	6633	26962	1
	V-1	51	0.944	ug/L	0.051	5	59	20475	3
	Cr	52	0.292	ug/L	0.013	4	19531	25857	3
	Cr	53	0.387	ug/L	0.031	7	104	847	4
	Mn	55	475.589	ug/L	13.011	2	477	11293844	1
	Co	59	0.065	ug/L	0.005	7	69	1079	5
>	Ge	72		ug/L			432270	395251	1
	Ni	60	0.833	ug/L	0.025	2	81	2327	3
	Ni	62	1.362	ug/L	0.286	21	65	572	17
	Cu	63	1.552	ug/L	0.056	3	73	9032	1
	Cu	65	0.506	ug/L	0.012	2	32	1318	0
	Zn	66	1.970	ug/L	0.045	2	220	3188	0
	Zn	67	1.723	ug/L	0.130	7	39	472	7
	Zn	68	3.461	ug/L	0.170	4	626	4224	2
	As	75	0.352	ug/L	0.024	6	1266	1636	3
	As-1	75	0.537	ug/L	0.020	3	6603	6743	1
	Se	82	0.126	ug/L	0.109	86	-10	9	179
	Se	78	0.979	ug/L	0.114	11	6721	6505	1
	Mo	98	0.017	ug/L	0.003	16	26	87	12
	Y	89		ug/L			327238	323653	0
	Kr	83		ug/L			1809	1760	1
>	In	115		ug/L			929401	999255	0
	Ag	107	0.001	ug/L	0.000	55	20	29	15
	Cd	111	0.059	ug/L	0.005	8	75	363	6
	Cd	114	0.064	ug/L	0.001	2	31	809	2
	Sb	121	0.016	ug/L	0.002	14	417	708	5
	Sb	123	0.016	ug/L	0.002	13	326	547	5
	Ba	135	4.407	ug/L	0.014	0	23	18783	1
	Ba	137	4.481	ug/L	0.034	0	45	32607	1
>	Tb	159		ug/L			920152	1043449	0
	Tl	205	0.001	ug/L	0.000	10	78	117	2
	Pb	208	0.028	ug/L	0.000	1	146	1447	2
	Bi	209		ug/L			2152313	2213457	0
	Th	232	0.197	ug/L	0.086	43	1253	10254	37
	U	238	0.027	ug/L	0.001	4	35	1310	3

JVM 5/9/12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:22:34
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1473808	1
	Be	9	0.008	ug/L	0.003	32	18	59	21
	C	13		ug/L			115227	133460	2
	Cl	37		ug/L			5056971	5648885	1
>	Sc	45		ug/L			1,150,108	1,246,137	2
	V	51	0.880	ug/L	0.030	3	6633	26484	0
	V-1	51	0.916	ug/L	0.028	3	59	20111	0
	Cr	52	0.258	ug/L	0.021	8	19531	25572	2
	Cr	53	0.384	ug/L	0.011	2	104	851	1
	Mn	55	473.706	ug/L	25.543	5	477	11381701	3
	Co	59	0.069	ug/L	0.004	5	69	1154	2
>	Ge	72		ug/L			432270	384566	0
	Ni	60	0.832	ug/L	0.024	2	81	2261	2
	Ni	62	1.788	ug/L	0.184	10	65	714	9
	Cu	63	1.620	ug/L	0.014	0	73	9176	0
	Cu	65	0.524	ug/L	0.010	1	32	1326	2
	Zn	66	2.279	ug/L	0.075	3	220	3558	2
	Zn	67	2.041	ug/L	0.035	1	39	538	2
	Zn	68	3.818	ug/L	0.138	3	626	4478	2
	As	75	0.419	ug/L	0.030	7	1266	1679	1
	As-1	75	0.616	ug/L	0.070	11	6603	6662	0
	Se	82	0.265	ug/L	0.035	13	-10	29	16
	Se	78	1.209	ug/L	0.275	22	6721	6411	0
	Mo	98	0.017	ug/L	0.003	19	26	85	13
	Y	89		ug/L			327238	322131	0
	Kr	83		ug/L			1809	1733	2
>	In	115		ug/L			929401	1004495	0
	Ag	107	0.002	ug/L	0.002	98	20	36	40
	Cd	111	0.064	ug/L	0.005	7	75	391	5
	Cd	114	0.059	ug/L	0.001	2	31	761	2
	Sb	121	0.016	ug/L	0.001	3	417	709	1
	Sb	123	0.015	ug/L	0.002	11	326	534	3
	Ba	135	4.530	ug/L	0.056	1	23	19410	1
	Ba	137	4.542	ug/L	0.077	1	45	33215	0
>	Tb	159		ug/L			920152	1039822	1
	Tl	205	0.002	ug/L	0.000	26	78	145	8
	Pb	208	0.030	ug/L	0.001	3	146	1493	4
	Bi	209		ug/L			2152313	2248499	0
	Th	232	0.061	ug/L	0.017	27	1253	4128	16
	U	238	0.028	ug/L	0.001	2	35	1366	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:26:42
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1457769	0
	Be	9	21.475	ug/L	0.409	1	18	108254	1
	C	13		ug/L			115227	129879	0
	Cl	37		ug/L			5056971	5715602	3
>	Sc	45		ug/L			1150108	1240586	0
	V	51	22.159	ug/L	0.696	3	6633	491008	3
	V-1	51	22.501	ug/L	0.712	3	59	490610	3
	Cr	52	21.219	ug/L	0.239	1	19531	383174	0
	Cr	53	22.458	ug/L	0.234	1	104	43171	1
	Mn	55	470.615	ug/L	17.641	3	477	11269568	4
	Co	59	21.060	ug/L	0.549	2	69	328231	2
>	Ge	72		ug/L			432270	374463	3
	Ni	60	26.067	ug/L	0.723	2	81	66831	2
	Ni	62	27.738	ug/L	1.286	4	65	9960	2
	Cu	63	25.928	ug/L	0.770	2	73	141950	0
	Cu	65	25.338	ug/L	0.273	1	32	61128	2
	Zn	66	71.779	ug/L	2.289	3	220	103247	1
	Zn	67	67.166	ug/L	1.899	2	39	16161	3
	Zn	68	73.433	ug/L	2.520	3	626	73926	0
	As	75	26.739	ug/L	1.119	4	1266	35418	0
	As-1	75	24.775	ug/L	0.944	3	6603	36543	1
	Se	82	78.648	ug/L	2.944	3	-10	11272	0
	Se	78	72.669	ug/L	2.404	3	6721	31093	1
	Mo	98	0.026	ug/L	0.003	13	26	114	7
	Y	89		ug/L			327238	314516	2
	Kr	83		ug/L			1809	1698	4
>	In	115		ug/L			929401	1004607	2
	Ag	107	20.967	ug/L	0.813	3	20	193075	1
	Cd	111	22.357	ug/L	0.480	2	75	107864	1
	Cd	114	22.962	ug/L	0.293	1	31	281286	1
	Sb	121	0.018	ug/L	0.001	4	417	739	2
	Sb	123	0.018	ug/L	0.002	10	326	573	1
	Ba	135	29.693	ug/L	0.900	3	23	127032	1
	Ba	137	29.677	ug/L	1.299	4	45	216669	1
>	Tb	159		ug/L			920152	1050725	1
	Tl	205	24.024	ug/L	0.281	1	78	830563	0
	Pb	208	24.124	ug/L	0.283	1	146	1094890	0
	Bi	209		ug/L			2152313	2248808	1
	Th	232	24.362	ug/L	0.280	1	1253	1105414	1
	U	238	24.410	ug/L	0.458	1	35	1160857	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:32:15
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1461177	2
	Be	9	48.083	ug/L	1.718	3	18	242839	1
	C	13		ug/L			115227	112614	1
	Cl	37		ug/L			5056971	5259258	1
>	Sc	45		ug/L			1150108	1147290	1
	V	51	48.125	ug/L	0.358	0	6633	978500	2
	V-1	51	48.047	ug/L	0.087	0	59	968758	1
	Cr	52	48.311	ug/L	0.706	1	19531	781948	2
	Cr	53	48.026	ug/L	0.860	1	104	85244	0
	Mn	55	46.959	ug/L	0.579	1	477	1040136	1
	Co	59	46.235	ug/L	0.740	1	69	666370	2
>	Ge	72		ug/L			432270	395082	1
	Ni	60	51.102	ug/L	0.554	1	81	138231	2
	Ni	62	51.692	ug/L	1.009	1	65	19549	2
	Cu	63	51.498	ug/L	0.489	0	73	297580	0
	Cu	65	50.816	ug/L	0.980	1	32	129322	0
	Zn	66	48.850	ug/L	1.881	3	220	74231	2
	Zn	67	50.147	ug/L	1.182	2	39	12741	2
	Zn	68	52.052	ug/L	1.304	2	626	55490	1
	As	75	50.354	ug/L	0.860	1	1266	69406	0
	As-1	75	49.662	ug/L	0.839	1	6603	71268	0
	Se	82	56.196	ug/L	0.792	1	-10	8501	0
	Se	78	50.845	ug/L	0.486	0	6721	24810	0
	Mo	98	50.838	ug/L	0.107	0	26	191459	1
	Y	89		ug/L			327238	317504	0
	Kr	83		ug/L			1809	1721	3
>	In	115		ug/L			929401	1017689	1
	Ag	107	42.554	ug/L	0.428	1	20	397186	1
	Cd	111	48.557	ug/L	0.970	1	75	237232	0
	Cd	114	49.455	ug/L	0.628	1	31	613778	1
	Sb	121	47.751	ug/L	0.830	1	417	774915	0
	Sb	123	47.774	ug/L	0.638	1	326	586153	1
	Ba	135	50.257	ug/L	0.205	0	23	217873	1
	Ba	137	50.552	ug/L	0.677	1	45	374069	0
>	Tb	159		ug/L			920152	1019985	0
	Tl	205	50.067	ug/L	0.584	1	78	1680278	0
	Pb	208	51.084	ug/L	0.280	0	146	2250570	0
	Bi	209		ug/L			2152313	2386870	0
	Th	232	52.709	ug/L	1.134	2	1253	2319770	1
	U	238	52.283	ug/L	0.378	0	35	2413793	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:38:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1445567	1
	Be	9	-0.000	ug/L	0.001	267	18	16	18
	C	13		ug/L			115227	113664	0
	Cl	37		ug/L			5056971	5211999	2
>	Sc	45		ug/L			1150108	1163357	3
	V	51	0.006	ug/L	0.015	243	6633	6827	2
	V-1	51	0.004	ug/L	0.000	9	59	132	3
	Cr	52	0.019	ug/L	0.058	298	19531	20048	1
	Cr	53	0.010	ug/L	0.011	107	104	124	13
	Mn	55	0.004	ug/L	0.001	25	477	575	2
	Co	59	-0.001	ug/L	0.000	83	69	62	11
>	Ge	72		ug/L			432270	392565	0
	Ni	60	-0.013	ug/L	0.003	20	81	37	19
	Ni	62	0.813	ug/L	0.015	1	65	364	1
	Cu	63	0.072	ug/L	0.003	3	73	480	3
	Cu	65	0.001	ug/L	0.001	46	32	33	5
	Zn	66	0.032	ug/L	0.009	28	220	248	5
	Zn	67	0.031	ug/L	0.019	59	39	43	10
	Zn	68	0.085	ug/L	0.011	12	626	657	1
	As	75	0.018	ug/L	0.006	32	1266	1175	0
	As-1	75	0.303	ug/L	0.096	31	6603	6393	2
	Se	82	-0.041	ug/L	0.142	345	-10	-15	133
	Se	78	1.157	ug/L	0.329	28	6721	6526	1
	Mo	98	0.007	ug/L	0.002	32	26	52	17
	Y	89		ug/L			327238	319787	2
	Kr	83		ug/L			1809	1728	4
>	In	115		ug/L			929401	1015307	0
	Ag	107	0.000	ug/L	0.001	185	20	25	25
	Cd	111	-0.001	ug/L	0.000	32	75	76	2
	Cd	114	0.000	ug/L	0.000	881	31	35	8
	Sb	121	0.056	ug/L	0.004	7	417	1354	4
	Sb	123	0.057	ug/L	0.008	13	326	1049	8
	Ba	135	0.002	ug/L	0.001	47	23	33	10
	Ba	137	-0.000	ug/L	0.000	258	45	48	4
>	Tb	159		ug/L			920152	973092	1
	Tl	205	-0.000	ug/L	0.000	92	78	72	13
	Pb	208	0.000	ug/L	0.000	237	146	159	7
	Bi	209		ug/L			2152313	2384661	0
	Th	232	0.046	ug/L	0.008	16	1253	3244	10
	U	238	0.001	ug/L	0.000	6	35	83	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R I-L REN
Sample Dil Factor: 2 10 5/11/12 JW
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:46:13
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1475293	1
	Be	9	0.001	ug/L	0.001	86	18	22	16
	C	13		ug/L			115227	125105	2
	Cl	37		ug/L			5056971	5528011	1
>	Sc	45		ug/L			1150108	1169342	0
	V	51	0.199	ug/L	0.009	4	6633	10846	1
	V-1	51	0.204	ug/L	0.006	3	59	4248	3
	Cr	52	0.274	ug/L	0.036	13	19531	24262	2
	Cr	53	0.291	ug/L	0.016	5	104	631	5
	Mn	55	102.613	ug/L	1.312	1	477	2316145	1
	Co	59	0.013	ug/L	0.002	13	69	267	10
>	Ge	72		ug/L			432270	400340	2
	Ni	60	0.156	ug/L	0.006	3	81	502	4
	Ni	62	0.466	ug/L	0.011	2	65	238	2
	Cu	63	0.394	ug/L	0.019	4	73	2374	2
	Cu	65	0.194	ug/L	0.015	7	32	531	10
	Zn	66	2.008	ug/L	0.145	7	220	3284	4
	Zn	67	1.900	ug/L	0.189	9	39	523	7
	Zn	68	2.323	ug/L	0.101	4	626	3061	0
	As	75	U 0.126	ug/L	0.034	26	1266	1346	0
	As-1	75	0.280	ug/L	0.154	54	6603	6484	0
	Se	82	0.125	ug/L	0.043	34	-10	9	71
	Se	78	0.818	ug/L	0.561	68	6721	6525	0
	Mo	98	0.003	ug/L	0.001	24	26	37	11
	Y	89		ug/L			327238	323164	1
	Kr	83		ug/L			1809	1746	0
>	In	115		ug/L			929401	1023332	0
	Ag	107	0.001	ug/L	0.001	160	20	27	31
	Cd	111	0.000	ug/L	0.003	802	75	85	18
	Cd	114	0.002	ug/L	0.000	12	31	60	5
	Sb	121	0.001	ug/L	0.003	276	417	479	11
	Sb	123	-0.001	ug/L	0.003	381	326	350	9
	Ba	135	0.870	ug/L	0.020	2	23	3817	2
	Ba	137	0.885	ug/L	0.018	2	45	6631	1
>	Tb	159		ug/L			920152	1012323	1
	Tl	205	0.002	ug/L	0.001	64	78	147	26
	Pb	208	0.024	ug/L	0.000	0	146	1232	1
	Bi	209		ug/L			2152313	2356483	0
	Th	232	0.052	ug/L	0.010	19	1253	3663	11
	U	238	0.005	ug/L	0.000	6	35	290	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:50:20
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			1469308	1442308	3
Be	9	0.012	ug/L	0.001	9	18	79	4
C	13		ug/L			115227	140450	5
Cl	37		ug/L			5056971	5707893	7
Sc	45		ug/L			1150108	1246385	2
V	51	0.847	ug/L	0.009	1	6633	25769	1
V-1	51	0.888	ug/L	0.016	1	59	19502	2
Cr	52	0.255	ug/L	0.063	24	19531	25518	2
Cr	53	0.398	ug/L	0.053	13	104	879	10
Mn	55	448.985	ug/L	7.889	1	477	10797698	0
Co	59	0.068	ug/L	0.004	5	69	1146	7
Ge	72		ug/L			432270	395637	2
Ni	60	0.722	ug/L	0.022	3	81	2028	5
Ni	62	1.780	ug/L	0.251	14	65	731	12
Cu	63	1.584	ug/L	0.013	0	73	9230	2
Cu	65	0.501	ug/L	0.032	6	32	1305	6
Zn	66	1.818	ug/L	0.043	2	220	2960	2
Zn	67	1.597	ug/L	0.098	6	39	441	6
Zn	68	3.332	ug/L	0.170	5	626	4091	3
As	75	0.342	ug/L	0.032	9	1266	1623	1
As-1	75	0.554	ug/L	0.111	20	6603	6771	0
Se	82	0.089	ug/L	0.207	232	-10	3	878
Se	78	1.109	ug/L	0.424	38	6721	6557	0
Mo	98	0.014	ug/L	0.004	30	26	76	19
Y	89		ug/L			327238	322608	1
Kr	83		ug/L			1809	1793	2
In	115		ug/L			929401	1014697	0
Ag	107	0.003	ug/L	0.001	17	20	49	9
Cd	111	0.010	ug/L	0.003	29	75	130	10
Cd	114	0.010	ug/L	0.001	8	31	157	6
Sb	121	0.011	ug/L	0.003	30	417	632	8
Sb	123	0.009	ug/L	0.001	15	326	460	4
Ba	135	4.320	ug/L	0.121	2	23	18694	2
Ba	137	4.363	ug/L	0.009	0	45	32239	0
Tb	159		ug/L			920152	1045200	2
Tl	205	0.003	ug/L	0.000	13	78	197	5
Pb	208	0.021	ug/L	0.001	2	146	1096	3
Bi	209		ug/L			2152313	2238838	1
Th	232	0.115	ug/L	0.047	41	1253	6591	29
U	238	0.028	ug/L	0.001	3	35	1348	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02R IDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:54:28
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1469308	1454297	2
	Be	9	0.007	ug/L	0.001	7	18	55	3
	C	13		ug/L			115227	137103	1
	Cl	37		ug/L			5056971	5706094	1
>	Sc	45		ug/L			1150108	1261170	3
	V	51	0.893	ug/L	0.018	1	6633	27077	1
	V-1	51	0.924	ug/L	0.014	1	59	20527	1
	Cr	52	0.258	ug/L	0.037	14	19531	25874	1
	Cr	53	0.367	ug/L	0.019	5	104	829	1
	Mn	55	469.127	ug/L	5.257	1	477	11420421	4
	Co	59	0.064	ug/L	0.004	5	69	1092	2
>	Ge	72		ug/L			432270	372411	2
	Ni	60	0.832	ug/L	0.024	2	81	2189	3
	Ni	62	2.322	ug/L	0.234	10	65	880	7
	Cu	63	1.685	ug/L	0.066	3	73	9234	2
	Cu	65	0.445	ug/L	0.029	6	32	1095	4
	Zn	66	1.877	ug/L	0.069	3	220	2870	1
	Zn	67	1.505	ug/L	0.143	9	39	393	9
	Zn	68	3.601	ug/L	0.146	4	626	4119	1
	As	75	0.419	ug/L	0.041	9	1266	1626	1
	As-1	75	0.815	ug/L	0.091	11	6603	6696	1
	Se	82	0.272	ug/L	0.029	10	-10	29	12
	Se	78	1.944	ug/L	0.303	15	6721	6462	1
	Mo	98	0.015	ug/L	0.004	25	26	74	18
	Y	89		ug/L			327238	313812	1
	Kr	83		ug/L			1809	1687	1
>	In	115		ug/L			929401	1003192	0
	Ag	107	-0.000	ug/L	0.001	1940	20	21	24
	Cd	111	0.008	ug/L	0.002	24	75	120	8
	Cd	114	0.009	ug/L	0.000	0	31	146	1
	Sb	121	0.010	ug/L	0.001	9	417	608	1
	Sb	123	0.008	ug/L	0.002	25	326	445	5
	Ba	135	4.607	ug/L	0.082	1	23	19710	1
	Ba	137	4.742	ug/L	0.109	2	45	34637	2
>	Tb	159		ug/L			920152	1048396	1
	Tl	205	0.001	ug/L	0.001	78	78	120	21
	Pb	208	0.019	ug/L	0.000	2	146	1036	1
	Bi	209		ug/L			2152313	2246420	0
	Th	232	0.038	ug/L	0.011	29	1253	3166	16
	U	238	0.026	ug/L	0.001	4	35	1257	3

6/14/12 JBy

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US02 ISPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 13:58:36
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1428340	2
	Be	9	21.844	ug/L	0.524	2	18	107886	2
	C	13		ug/L			115227	132214	5
	Cl	37		ug/L			5056971	5612299	2
>	Sc	45		ug/L			1150108	1264721	1
	V	51	22.559	ug/L	0.140	0	6633	509450	0
	V-1	51	22.458	ug/L	0.076	0	59	499192	1
	Cr	52	21.667	ug/L	0.700	3	19531	398339	1
	Cr	53	21.293	ug/L	0.409	1	104	41731	1
	Mn	55	473.994	ug/L	8.658	1	477	11567814	1
	Co	59	20.419	ug/L	0.492	2	69	324396	1
>	Ge	72		ug/L			432270	379866	2
	Ni	60	25.952	ug/L	0.158	0	81	67528	2
	Ni	62	27.137	ug/L	0.178	0	65	9894	1
	Cu	63	26.241	ug/L	0.530	2	73	145787	0
	Cu	65	24.748	ug/L	0.553	2	32	60558	0
	Zn	66	71.839	ug/L	2.875	4	220	104839	2
	Zn	67	67.842	ug/L	4.445	6	39	16545	4
	Zn	68	73.834	ug/L	3.278	4	626	75408	2
	As	75	26.665	ug/L	0.979	3	1266	35848	1
	As-1	75	24.489	ug/L	0.892	3	6603	36718	0
	Se	82	78.381	ug/L	2.888	3	10	11400	1
	Se	78	71.579	ug/L	3.017	4	6721	31160	1
	Mo	98	0.018	ug/L	0.003	17	26	87	12
	Y	89		ug/L			327238	310476	2
	Kr	83		ug/L			1809	1694	3
>	In	115		ug/L			929401	1016179	1
	Ag	107	20.091	ug/L	0.686	3	20	187224	2
	Cd	111	22.743	ug/L	0.127	0	75	111015	1
	Cd	114	23.234	ug/L	0.459	1	31	287924	1
	Sb	121	0.008	ug/L	0.001	11	417	585	2
	Sb	123	0.007	ug/L	0.002	34	326	437	5
	Ba	135	30.351	ug/L	0.347	1	23	131383	0
	Ba	137	30.746	ug/L	0.666	2	45	227186	1
>	Tb	159		ug/L			920152	1047889	1
	Tl	205	24.631	ug/L	0.318	1	78	849230	0
	Pb	208	24.943	ug/L	0.547	2	146	1128814	0
	Bi	209		ug/L			2152313	2268301	0
	Th	232	25.255	ug/L	0.271	1	1253	1142694	0
	U	238	25.119	ug/L	0.450	1	35	1191294	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:02:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

~~Cr, Ti, Zn~~, As only 5/9/12 JHB

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			1469308	1518870	1
[	Be	9	0.003	ug/L	0.000	15	18	35	7
	C	13		ug/L			115227	127883	4
	Cl	37		ug/L			5056971	5389552	1
[>	Sc	45		ug/L			1150108	1178097	0
	V	51	6.301	ug/L	0.220	3	6633	137430	2
	V-1	51	6.343	ug/L	0.211	3	59	131355	2
	Cr	52	U 0.279	ug/L	0.057	20	19531	24520	3
	Cr	53	0.396	ug/L	0.009	2	104	828	1
	Mn	55	87.212	ug/L	1.043	1	477	1983248	1
[	Co	59	0.322	ug/L	0.007	2	69	4835	2
[>	Ge	72		ug/L			432270	363482	4
	Ni	60	8.043	ug/L	0.287	3	81	20066	4
	Ni	62	8.920	ug/L	0.803	9	65	3141	4
	Cu	63	1.536	ug/L	0.042	2	73	8221	2
	Cu	65	0.810 ✓	ug/L	0.033	4	32	1921	0
	Zn	66	U 2.148	ug/L	0.102	4	220	3177	0
	Zn	67	2.647	ug/L	0.168	6	39	649	3
	Zn	68	3.231	ug/L	0.196	6	626	3659	3
	As	75	24.384 ✓	ug/L	0.875	3	1266	31445	0
	As-1	75	25.420	ug/L	1.033	4	6603	36242	0
	Se	82	0.218	ug/L	0.227	104	-10	21	144
	Se	78	1.493	ug/L	0.519	34	6721	6151	1
[	Mo	98	5.492	ug/L	0.119	2	26	19035	1
	Y	89		ug/L			32[illegible]38	310618	2
	Kr	83		ug/L			1809	1664	2
[>	In	115		ug/L			929401	1021890	1
	Ag	107	0.017	ug/L	0.002	13	20	184	12
	Cd	111	0.009	ug/L	0.001	14	75	125	6
	Cd	114	0.013	ug/L	0.002	17	31	192	13
	Sb	121	0.160	ug/L	0.007	4	417	3063	2
	Sb	123	0.157	ug/L	0.004	2	326	2297	2
	Ba	135	13.254	ug/L	0.235	1	23	57715	1
[	Ba	137	13.484	ug/L	0.149	1	45	100231	0
[>	Tb	159		ug/L			920152	1065926	0
	Tl	205	0.002	ug/L	0.000	4	78	151	2
	Pb	208	0.061	ug/L	0.001	1	146	2959	0
	Bi	209		ug/L			2152313	2352033	0
	Th	232	0.110	ug/L	0.062	56	1253	6506	43
[	U	238	0.600	ug/L	0.009	1	35	28971	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:06:51
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

JLR 5/9/12
Cr, Co, Zn, As only

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1545082	1
	Be	9	0.001	ug/L	0.001	63	18	25	17
	C	13		ug/L			115227	140464	1
	Cl	37		ug/L			5056971	5657715	2
>	Sc	45		ug/L			1150108	1209683	2
	V	51	1.080	ug/L	0.037	3	6633	29949	0
	V-1	51	1.102	ug/L	0.034	3	59	23476	1
	Cr	52	0.352	ug/L	0.046	13	19531	26389	0
	Cr	53	0.429	ug/L	0.047	10	104	912	8
	Mn	55	31.349	ug/L	1.266	4	477	731939	2
	Co	59	0.255	ug/L	0.006	2	69	3942	1
>	Ge	72		ug/L			432270	366429	0
	Ni	60	1.614	ug/L	0.025	1	81	4114	1
	Ni	62	1.768	ug/L	0.083	4	65	673	3
	Cu	63	2.041	ug/L	0.051	2	73	10997	2
	Cu	65	1.756	ug/L	0.008	0	32	4171	0
	Zn	66	1.067	ug/L	0.045	4	220	1686	4
	Zn	67	1.679	ug/L	0.075	4	39	427	3
	Zn	68	2.264	ug/L	0.052	2	626	2746	1
	As	75	9.971	ug/L	0.129	1	1266	13609	1
	As-1	75	10.541	ug/L	0.104	0	6603	18441	0
	Se	82	0.171	ug/L	0.149	87	-10	14	141
	Se	78	1.386	ug/L	0.147	10	6721	6169	0
	Mo	98	8.205	ug/L	0.253	3	26	28675	2
	Y	89		ug/L			327238	312926	1
	Kr	83		ug/L			1809	1665	0
>	In	115		ug/L			929401	1026058	1
	Ag	107	0.003	ug/L	0.001	27	20	53	15
	Cd	111	0.013	ug/L	0.003	23	75	148	11
	Cd	114	0.018	ug/L	0.001	3	31	266	2
	Sb	121	0.580	ug/L	0.004	0	417	9947	1
	Sb	123	0.584	ug/L	0.022	3	326	7572	2
	Ba	135	12.770	ug/L	0.170	1	23	55832	1
	Ba	137	12.962	ug/L	0.160	1	45	96739	0
>	Tb	159		ug/L			920152	1054281	0
	Tl	205	0.003	ug/L	0.000	7	78	183	3
	Pb	208	0.094	ug/L	0.002	1	146	4469	0
	Bi	209		ug/L			2152313	2394477	0
	Th	232	0.009	ug/L	0.007	75	1253	1853	17
	U	238	0.563	ug/L	0.009	1	35	26903	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 J REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:10:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1484745	2
	Be	9	0.006	ug/L	0.002	23	18	51	17
	C	13		ug/L			115227	133629	2
	Cl	37		ug/L			5056971	5586591	3
>	Sc	45		ug/L			1150108	1187629	2
	V	51	5.367	ug/L	0.290	5	6633	118947	3
	V-1	51	5.404	ug/L	0.293	5	59	112744	3
	Cr	52	0.212	ug/L	0.018	8	19531	23625	2
	Cr	53	0.315	ug/L	0.006	1	104	685	1
	Mn	55	83.718	ug/L	2.650	3	477	1918229	1
	Co	59	0.305	ug/L	0.004	1	69	4619	2
>	Ge	72		ug/L			432270	369744	1
	Ni	60	5.908	ug/L	0.138	2	81	15013	1
	Ni	62	5.653	ug/L	0.195	3	65	2049	1
	Cu	63	1.040	ug/L	0.024	2	73	5687	1
	Cu	65	0.498	ug/L	0.013	2	32	1214	4
	Zn	66	1.008	ug/L	0.006	0	220	1618	2
	Zn	67	1.678	ug/L	0.138	8	39	431	9
	Zn	68	2.137	ug/L	0.084	3	626	2645	1
	As	75	23.296	ug/L	0.066	0	1266	30637	1
	As-1	75	24.255	ug/L	0.117	0	6603	35468	1
	Se	82	0.018	ug/L	0.119	663	-10	-6	256
	Se	78	1.183	ug/L	0.171	14	6721	6155	0
	Mo	98	5.300	ug/L	0.161	3	26	18693	1
	Y	89		ug/L			327238	314146	2
	Kr	83		ug/L			1809	1716	1
>	In	115		ug/L			929401	1009788	0
	Ag	107	0.005	ug/L	0.001	16	20	72	11
	Cd	111	0.004	ug/L	0.003	66	75	103	13
	Cd	114	0.007	ug/L	0.001	12	31	122	8
	Sb	121	0.129	ug/L	0.005	4	417	2536	3
	Sb	123	0.128	ug/L	0.001	1	326	1916	0
	Ba	135	12.604	ug/L	0.213	1	23	54236	1
	Ba	137	12.665	ug/L	0.168	1	45	98031	0
>	Tb	159		ug/L			920152	1038276	0
	Tl	205	0.005	ug/L	0.001	15	78	260	9
	Pb	208	0.016	ug/L	0.001	4	146	871	3
	Bi	209		ug/L			2152313	2323020	1
	Th	232	-0.005	ug/L	0.002	49	1253	1191	9
	U	238	0.578	ug/L	0.007	1	35	27220	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: US15 K REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:15:06
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1508235	2
	Be	9	0.003	ug/L	0.001	26	18	36	14
	C	13		ug/L			115227	146236	4
	Cl	37		ug/L			5056971	5686342	2
>	Sc	45		ug/L			1150108	1156829	3
	V	51	1.095	ug/L	0.055	5	6633	28948	0
	V-1	51	1.095	ug/L	0.055	5	59	22290	1
	Cr	52	0.405	ug/L	0.044	10	19531	26097	4
	Cr	53	0.400	ug/L	0.012	3	104	820	3
	Mn	55	34.415	ug/L	1.177	3	477	768543	3
	Co	59	0.292	ug/L	0.005	1	69	4308	1
>	Ge	72		ug/L			432270	372382	0
	Ni	60	1.557	ug/L	0.066	4	81	4036	3
	Ni	62	0.863	ug/L	0.055	6	65	363	4
	Cu	63	1.520	ug/L	0.041	2	73	8340	2
	Cu	65	1.230	ug/L	0.024	1	32	2978	2
	Zn	66	1.107	ug/L	0.044	3	220	1771	2
	Zn	67	1.774	ug/L	0.067	3	39	457	3
	Zn	68	2.313	ug/L	0.051	2	626	2839	2
	As	75	10.115	ug/L	0.043	0	1266	14014	0
	As-1	75	10.710	ug/L	0.031	0	6603	18949	0
	Se	82	0.420	ug/L	0.069	16	-10	50	20
	Se	78	1.604	ug/L	0.222	13	6721	6345	0
	Mo	98	7.736	ug/L	0.178	2	26	27483	2
	Y	89		ug/L			327238	316267	1
	Kr	83		ug/L			1809	1641	3
>	In	115		ug/L			929401	1000698	0
	Ag	107	0.004	ug/L	0.000	1	20	55	1
	Cd	111	0.009	ug/L	0.003	33	75	123	11
	Cd	114	0.009	ug/L	0.001	12	31	138	8
	Sb	121	0.581	ug/L	0.008	1	417	9711	1
	Sb	123	0.581	ug/L	0.019	3	326	7360	2
	Ba	135	13.310	ug/L	0.265	1	23	56754	1
	Ba	137	13.430	ug/L	0.131	0	45	97766	1
>	Tb	159		ug/L			920152	1036086	0
	Tl	205	0.006	ug/L	0.001	14	78	290	9
	Pb	208	0.025	ug/L	0.001	2	146	1283	2
	Bi	209		ug/L			2152313	2347590	1
	Th	232	-0.014	ug/L	0.002	12	1253	804	9
	U	238	0.577	ug/L	0.013	2	35	27110	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:19:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\default.tun
Optimization File: C:\NexION Data\Conditions\default.dac
Calibration File: C:\NexION Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1402313	0
	Be	9	176.687	ug/L	5.497	3	18	856805	3
	C	13		ug/L			115227	119764	2
	Cl	37		ug/L			5056971	5651141	1
>	Sc	45		ug/L			1150108	1093483	0
	V	51	200.236	ug/L	5.192	2	6633	3860054	2
	V-1	51	196.855	ug/L	5.279	2	59	3782783	2
	Cr	52	205.244	ug/L	2.943	1	19531	3105673	0
	Cr	53	192.977	ug/L	2.486	1	104	326230	1
	Mn	55	190.596	ug/L	3.557	1	477	4022054	1
	Co	59	192.108	ug/L	2.704	1	69	2638892	2
>	Ge	72		ug/L			432270	382025	1
	Ni	60	200.577	ug/L	2.769	1	81	524348	1
	Ni	62	201.630	ug/L	2.034	1	65	73571	1
	Cu	63	193.473	ug/L	5.877	3	73	1080643	1
	Cu	65	195.501	ug/L	5.648	2	32	480976	2
	Zn	66	189.187	ug/L	4.372	2	220	277434	0
	Zn	67	189.924	ug/L	6.240	3	39	46562	3
	Zn	68	198.121	ug/L	3.451	1	626	202673	1
	As	75	201.278	ug/L	4.093	2	1266	264889	0
	As-1	75	199.661	ug/L	3.528	1	6603	259422	0
	Se	82	211.506	ug/L	6.921	3	-10	30960	1
	Se	78	193.536	ug/L	4.949	2	6721	74632	0
	Mo	98	204.517	ug/L	8.695	4	26	744371	2
	Y	89		ug/L			327238	308169	0
	Kr	83		ug/L			1809	1833	2
>	In	115		ug/L			929401	952474	0
	Ag	107	162.953	ug/L	1.160	0	20	1423434	0
	Cd	111	187.846	ug/L	1.017	0	75	858886	1
	Cd	114	198.303	ug/L	1.448	0	31	2303454	1
	Sb	121	196.564	ug/L	1.221	0	417	2984562	0
	Sb	123	193.717	ug/L	1.676	0	326	2223626	0
	Ba	135	201.837	ug/L	3.237	1	23	818941	2
	Ba	137	203.083	ug/L	1.710	0	45	1406532	1
>	Tb	159		ug/L			920152	985619	0
	Tl	205	199.716	ug/L	0.158	0	78	6476842	1
	Pb	208	203.273	ug/L	0.920	0	146	8653667	1
	Bi	209		ug/L			2152313	2169143	0
	Th	232	209.469	ug/L	1.085	0	1253	8905120	0
	U	238	206.497	ug/L	0.316	0	35	9212545	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:26:05
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1310296	3
	Be	9	-0.001	ug/L	0.000	3	18	11	5
	C	13		ug/L			115227	108101	5
	Cl	37		ug/L			5056971	5255588	1
>	Sc	45		ug/L			1150108	1098538	1
	V	51	0.013	ug/L	0.006	50	6633	6584	2
	V-1	51	0.007	ug/L	0.001	14	59	182	9
	Cr	52	0.158	ug/L	0.029	18	19531	21040	2
	Cr	53	0.136	ug/L	0.014	10	104	330	5
	Mn	55	0.013	ug/L	0.000	3	477	734	1
	Co	59	0.001	ug/L	0.000	39	69	81	7
>	Ge	72		ug/L			432270	381287	0
	Ni	60	-0.001	ug/L	0.005	330	81	67	18
	Ni	62	0.294	ug/L	0.017	5	65	164	3
	Cu	63	0.076	ug/L	0.000	0	73	490	0
	Cu	65	0.056	ug/L	0.010	18	32	166	14
	Zn	66	1.100	ug/L	0.056	5	220	1803	4
	Zn	67	0.995	ug/L	0.061	6	39	277	5
	Zn	68	1.078	ug/L	0.040	3	626	1649	2
	As	75	0.048	ug/L	0.042	87	1266	1180	4
	As-1	75	0.486	ug/L	0.019	3	6603	6440	0
	Se	82	-0.001	ug/L	0.163	30618	-10	-9	248
	Se	78	1.744	ug/L	0.055	3	6721	6547	0
	Mo	98	0.027	ug/L	0.003	12	26	122	9
	Y	89		ug/L			327238	302820	1
	Kr	83		ug/L			1809	1681	1
>	In	115		ug/L			929401	937229	0
	Ag	107	0.003	ug/L	0.001	51	20	42	27
	Cd	111	0.001	ug/L	0.001	90	75	82	5
	Cd	114	0.001	ug/L	0.000	19	31	47	7
	Sb	121	0.188	ug/L	0.013	6	417	3227	5
	Sb	123	0.191	ug/L	0.017	8	326	2486	7
	Ba	135	0.011	ug/L	0.001	12	23	67	9
	Ba	137	0.010	ug/L	0.001	11	45	115	7
>	Tb	159		ug/L			920152	909063	0
	Tl	205	0.008	ug/L	0.001	17	78	330	12
	Pb	208	0.016	ug/L	0.001	4	146	755	3
	Bi	209		ug/L			2152313	2233105	0
	Th	232	0.093	ug/L	0.019	19	1253	4887	13
	U	238	0.003	ug/L	0.000	15	35	168	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:32:38
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1346626	1
	Be	9	48.465	ug/L	1.536	3	18	225606	1
	C	13		ug/L			115227	105240	1
	Cl	37		ug/L			5056971	5527938	0
>	Sc	45		ug/L			1150108	1151017	0
	V	51	46.275	ug/L	1.012	2	6633	944092	1
	V-1	51	46.193	ug/L	0.625	1	59	934376	1
	Cr	52	47.279	ug/L	1.908	4	19531	768126	3
	Cr	53	46.987	ug/L	0.727	1	104	83691	1
	Mn	55	45.794	ug/L	0.361	0	477	1017680	0
	Co	59	45.928	ug/L	0.419	0	69	664121	1
>	Ge	72		ug/L			432270	400589	2
	Ni	60	50.065	ug/L	1.290	2	81	137250	0
	Ni	62	49.669	ug/L	1.447	2	65	19040	0
	Cu	63	50.731	ug/L	2.773	5	73	296993	3
	Cu	65	50.210	ug/L	1.075	2	32	129541	0
	Zn	66	49.291	ug/L	1.809	3	220	75920	1
	Zn	67	49.307	ug/L	0.644	1	39	12701	1
	Zn	68	50.174	ug/L	2.203	4	626	54229	2
	As	75	50.185	ug/L	1.275	2	1266	70123	0
	As-1	75	49.803	ug/L	1.409	2	6603	72432	1
	Se	82	55.062	ug/L	1.261	2	-10	8444	0
	Se	78	50.766	ug/L	1.666	3	6721	25118	0
	Mo	98	48.943	ug/L	2.030	4	26	186764	1
	Y	89		ug/L			327238	312565	0
	Kr	83		ug/L			1809	1735	2
>	In	115		ug/L			929401	954916	2
	Ag	107	41.661	ug/L	1.495	3	20	364690	2
	Cd	111	48.911	ug/L	0.689	1	75	224249	2
	Cd	114	49.077	ug/L	1.250	2	31	571317	0
	Sb	121	46.646	ug/L	1.416	3	417	710094	1
	Sb	123	46.388	ug/L	1.145	2	326	533894	0
	Ba	135	49.744	ug/L	0.783	1	23	202306	1
	Ba	137	49.787	ug/L	0.982	1	45	345633	1
>	Tb	159		ug/L			920152	943763	1
	Tl	205	49.234	ug/L	0.715	1	78	1528700	0
	Pb	208	50.449	ug/L	0.552	1	146	2056369	0
	Bi	209		ug/L			2152313	2220760	0
	Th	232	51.768	ug/L	2.976	5	1253	2107687	5
	U	238	52.785	ug/L	1.236	2	35	2254461	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 09, 2012 14:38:51
Number of Replicates: 3
Method File: C:\NexION\Data\Method\200.8nomin.mth
Tuning File: C:\NexION\Data\MassCal\default.tun
Optimization File: C:\NexION\Data\Conditions\default.dac
Calibration File: C:\NexION\Data\System\120509.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1469308	1277391	2
	Be	9	-0.002	ug/L	0.001	51	18	8	43
	C	13		ug/L			115227	108343	1
	Cl	37		ug/L			5056971	5289005	3
>	Sc	45		ug/L			1150108	1081189	1
	V	51	0.015	ug/L	0.012	75	6633	6528	2
	V-1	51	0.001	ug/L	0.001	36	59	82	10
	Cr	52	0.061	ug/L	0.043	70	19531	19269	2
	Cr	53	0.011	ug/L	0.002	21	104	116	4
	Mn	55	0.001	ug/L	0.002	135	477	476	6
	Co	59	0.001	ug/L	0.001	192	69	72	16
>	Ge	72		ug/L			432270	388491	0
	Ni	60	-0.015	ug/L	0.002	14	81	32	17
	Ni	62	0.279	ug/L	0.027	9	65	162	6
	Cu	63	0.025	ug/L	0.003	13	73	206	8
	Cu	65	-0.000	ug/L	0.002	1451	32	28	20
	Zn	66	0.058	ug/L	0.035	60	220	283	17
	Zn	67	0.036	ug/L	0.029	81	39	44	15
	Zn	68	0.123	ug/L	0.024	19	626	690	3
	As	75	0.048	ug/L	0.037	77	1266	1202	4
	As-1	75	0.482	ug/L	0.097	20	6603	6556	0
	Se	82	-0.038	ug/L	0.254	670	-10	-15	250
	Se	78	1.691	ug/L	0.322	19	6721	6650	0
	Mo	98	0.011	ug/L	0.007	63	26	63	40
	Y	89		ug/L			327238	309388	1
	Kr	83		ug/L			1809	1711	2
>	In	115		ug/L			929401	910644	1
	Ag	107	0.002	ug/L	0.002	109	20	37	53
	Cd	111	0.002	ug/L	0.004	208	75	83	23
	Cd	114	0.002	ug/L	0.002	120	31	51	48
	Sb	121	0.081	ug/L	0.009	10	417	1577	7
	Sb	123	0.082	ug/L	0.009	11	326	1223	7
	Ba	135	0.001	ug/L	0.001	118	23	27	21
	Ba	137	0.001	ug/L	0.001	143	45	48	13
>	Tb	159		ug/L			920152	907615	1
	Tl	205	0.003	ug/L	0.001	43	78	178	25
	Pb	208	0.001	ug/L	0.001	122	146	186	28
	Bi	209		ug/L			2152313	2190486	0
	Th	232	0.074	ug/L	0.012	16	1253	4150	11
	U	238	0.002	ug/L	0.001	33	35	117	23

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 5-03-12

Page: 3 of 4

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
UR81	F	5mm	1X			
UR81	G	5mm	1X			
UR81	H	5mm	1X			
UR81	I	5mm	1X			
UR81	J	5mm	1X			
CCV6		5mm	1X	4.08	%R=104	✓
CCB6		5mm	1X	-0.00		✓
US18	B	5mm	2X	5.45		
US18	BDUP	5mm	2X	5.66	RPD=3.78 %	✓
US18	BSPK	5mm	2X	6.15	%R=70 LOW	X
CCV7		5mm	1X	4.04	%R=101	✓
CCB7		5mm	1X	-0.01	END CLP	✓
STD	0.0	Twm	1X			
STD	0.1	Twm	1X			
STD	0.5	Twm	1X			
STD	1.0	Twm	1X			
STD	2.0	Twm	1X			
STD	5.0	Twm	1X			
STD	10.0	Twm	1X			
ICV		Twm	1X	8.63	Begin CLP %R=108	✓
ICB		Twm	1X	-0.01		✓
CCV1		Twm	1X	4.18	%R=105	✓
CCB1		Twm	1X	-0.00		✓
CRA		Twm	1X	0.11		✓
UR87	MB2	Twm	1X	0.01		✓
UR87	MB2SPK	Twm	1X	2.10	%R=105	✓
UR87	D	Twm	1X	0.01		
UR87	DDUP	Twm	1X	0.01	NC RPD: Undetected	✓
UR87	DSPK	Twm	1X	1.13	%R=113	✓
UR02	MB1	Twm	1X	0.01		✓

Chemical/Reagent ID:

10% $SnCl_2$: MP2292

14% $NH_2OH/NaCl$: MP2289

Standard ID:

Standard: 2931-1 (5mm)

2932-3 (Twm)

ICV/CCV: SL-18

Mercury Analysis Log

Analyst: DM

Instrument: CETAC

Date: 5-03-12

Page: 4 of 4

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
U502	MB1SPK	TWM	1X	2.17	%R=109	✓
U502	A	TWM	1X	0.00		
U502	ADUP	TWM	1X	0.01	NO RPD: Undetected	✓
CCV2		TWM	1X	4.10	%R=103	✓
CCB2		TWM	1X	-0.00		✓
U502	ASPK	TWM	1X	1.08	%R=108	✓
U502	F	TWM	1X			
U502	MB2	TWM	1X	0.00		✓
U502	MB2SPK	TWM	1X	2.10	%R=105	✓
U502	I	TWM	1X	0.01		
U502	IDUP	TWM	1X	0.01	NO RPD: Undetected	✓
U502	ISPK	TWM	1X	1.05	%R=105	✓
U502	N	TWM	1X			
U527	MB1	TWM	1X	0.00		✓
U527	MB1SPK	TWM	1X	2.16	%R=108	✓
CCV3		TWM	1X	4.11	%R=103	✓
CCB3		TWM	1X	0.01		✓
U527	C	TWM	1X	0.01		
U527	CDUP	TWM	1X	0.01	NO RPD: Undetected	✓
U527	CSPK	TWM	1X	1.08	%R=108	✓
U527	D	TWM	1X			
U527	MB2	TWM	1X	0.01		✓
U527	MB2SPK	TWM	1X	2.14	%R=107	✓
U527	H	TWM	1X	0.01		
U527	HDUP	TWM	1X	0.01	NO RPD: Undetected	✓
U527	HSPK	TWM	1X	1.08	%R=108	✓
U527	I	TWM	1X			
CCV4		TWM	1X	4.07	%R=102	✓
CCB4		TWM	1X	0.00	END CLP	✓
			5-3-12	0m		

Chemical/Reagent ID:

10% $SnCl_2$: MP2292

14% NH_2OH/NaCl: MP2259

Standard ID:

Standard: 2032-3

ICV/CCV: 56-18

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA (CVA) **Analysis Date:** 5-03-12

	Analyst 5-3 am	Peer 5-3 pm	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	—	—	
Carry-over	—	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	—	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	✓	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	See RUN LOG
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts' Notes and CAF's	✓	✓	See CAF

CETAC Hg Analysis Report - 12050300.DB - Thursday, May 03, 2012, 12:35:46 PM

Analyst
Date Started: Thursday, May 03, 2012, 10:54:00
Worksheet: ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
UR81 E SMM	03-May-2012, 10:54	0.29	0.38	777.00	1.00	
UR81 F SMM	03-May-2012, 10:55	0.68	0.26	1830.00	1.00	
UR81 G SMM	03-May-2012, 10:57	0.13	1.33	356.00	1.00	
UR81 H SMM	03-May-2012, 10:58	0.57	0.92	1520.00	1.00	
UR81 I SMM	03-May-2012, 11:00	0.59	0.63	1570.00	1.00	
UR81 J SMM	03-May-2012, 11:02	0.54	0.36	1450.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:03	4.08	0.16	10900.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:05	-0.00	18.40	-11.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US18 B SMM	03-May-2012, 11:07	5.45	0.62	14600.00	2.00	
US18 BDUP SMM	03-May-2012, 11:09	5.66	0.69	15200.00	2.00	
US18 BSPK SMM	03-May-2012, 11:10	6.15	0.37	16500.00	2.00	- Low %R

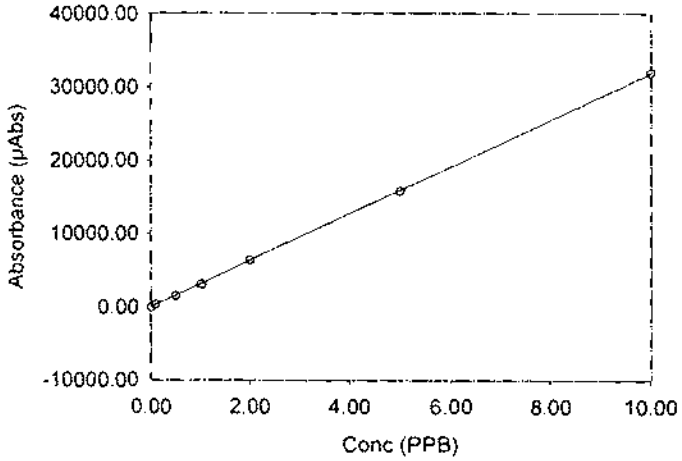
Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:12	4.04	1.38	10800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:13	-0.01	3.42	-38.40	1.00	End CLP

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	03-May-2012, 11:16	0.00	3.41	-46.50	1.00	
Standard #1	03-May-2012, 11:17	0.10	1.97	323.00	1.00	
Standard #2	03-May-2012, 11:19	0.50	0.13	1490.00	1.00	
Standard #3	03-May-2012, 11:21	1.00	0.54	3060.00	1.00	
Standard #4	03-May-2012, 11:22	2.00	0.15	6370.00	1.00	
Standard #5	03-May-2012, 11:24	5.00	0.62	15800.00	1.00	
Standard #6	03-May-2012, 11:25	10.00	1.10	32000.00	1.00	

TWM

Calibration Data



Int.	0.000
Slope	3187.983
Correlation	0.99996

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	03-May-2012, 11:28	8.63	0.53	27500.00	1.00	Begin CLP
ICB	03-May-2012, 11:30	-0.01	3.23	-37.40	1.00	

CETAC Hg Analysis Report - 12050300.DB - Thursday, May 03, 2012, 12:35:46 PM

Analyst
Date Started: Thursday, May 03, 2012, 11:32:08
Worksheet: ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:32	4.18	0.53	13300.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:33	-0.00	28.00	-12.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	03-May-2012, 11:35	0.11	1.23	356.00	1.00	
UR87 MB2 TWM	03-May-2012, 11:37	0.01	4.25	19.30	1.00	
UR87 MB2SPK TWM	03-May-2012, 11:38	2.10	0.54	6680.00	1.00	
UR87 D TWM	03-May-2012, 11:40	0.01	10.70	18.60	1.00	
UR87 DDUP TWM	03-May-2012, 11:41	0.01	12.00	22.00	1.00	
UR87 DSPK TWM	03-May-2012, 11:43	1.13	0.50	3600.00	1.00	
US02 MB1 TWM	03-May-2012, 11:45	0.01	5.49	23.00	1.00	
US02 MB1SPK TWM	03-May-2012, 11:46	2.17	0.25	6910.00	1.00	
US02 A TWM	03-May-2012, 11:48	0.00	176.00	1.01	1.00	
US02 ADUP TWM	03-May-2012, 11:49	0.01	9.13	38.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 11:51	4.10	0.27	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 11:53	-0.00	27.10	-10.30	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US02 ASPK TWM	03-May-2012, 11:54	1.08	1.37	3450.00	1.00	
US02 F TWM	03-May-2012, 11:56	0.00	23.60	10.80	1.00	
US02 MB2 TWM	03-May-2012, 11:58	0.00	16.00	11.70	1.00	
US02 MB2SPK TWM	03-May-2012, 11:59	2.10	0.59	6690.00	1.00	
US02 I TWM	03-May-2012, 12:01	0.01	3.30	26.70	1.00	
US02 IDUP TWM	03-May-2012, 12:02	0.01	6.63	33.20	1.00	
US02 ISPK TWM	03-May-2012, 12:04	1.05	1.31	3350.00	1.00	
US02 N TWM	03-May-2012, 12:06	0.01	22.10	23.10	1.00	
US27 MB1 TWM	03-May-2012, 12:07	0.00	14.60	13.40	1.00	
US27 MB1SPK TWM	03-May-2012, 12:09	2.16	0.24	6890.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 12:11	4.11	0.80	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	03-May-2012, 12:12	0.01	6.55	20.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
US27 C TWM	03-May-2012, 12:14	0.01	2.89	29.20	1.00	
US27 CDUP TWM	03-May-2012, 12:15	0.01	12.40	35.80	1.00	
US27 CSPK TWM	03-May-2012, 12:17	1.08	0.67	3450.00	1.00	
US27 D TWM	03-May-2012, 12:19	0.01	7.60	29.50	1.00	
US27 MB2 TWM	03-May-2012, 12:20	0.01	6.32	30.60	1.00	
US27 MB2SPK TWM	03-May-2012, 12:22	2.14	0.96	6820.00	1.00	
US27 H TWM	03-May-2012, 12:24	0.01	7.01	18.80	1.00	
US27 HDUP TWM	03-May-2012, 12:25	0.01	21.20	36.10	1.00	
US27 HSPK TWM	03-May-2012, 12:27	1.08	1.38	3430.00	1.00	
US27 I TWM	03-May-2012, 12:28	0.01	2.53	32.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	03-May-2012, 12:30	4.07	0.76	13000.00	1.00	

5/3/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Prep Code: SMM Instrument: CETAC
Analyst: KM Date: 4/27/12
Bath Temp: 95°C Start Time: 1450 End Time: 1520

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	——	0.00	50.0	0.0	3
STD1	2931-1	0.01	50.0	0.1	2
STD2	2931-1	0.05	50.0	0.5	2
STD3	2931-1	0.10	50.0	1.0	2
STD4	2931-1	0.20	50.0	2.0	2
STD5	2931-1	0.50	50.0	5.0	2
STD6	2931-1	1.00	50.0	10.0	2
CRA	2931-1	0.01	50.0	0.1	1
ICB/CCB	——	0.00	50.0	0.0	3
ICV/LCS	56-18	0.08	50.0	8.0	2
CCV	56-18	0.04	50.0	4.0	3

Chemical/Reagent ID:
HNO_3: I7370 H_2SO_4: I7184 HCl: ——
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

Prep Code: TWM Digested 20.0mL Instrument: CETAC
Analyst: KM Date: 4/30/12
Bath Temp: 95°C Start Time: 1600 End Time: 1800

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	——	0.00	100.0	0.0	1
STD1	2932-3	0.01	100.0	0.1	1
STD2	2932-3	0.05	100.0	0.5	1
STD3	2932-3	0.10	100.0	1.0	1
STD4	2932-3	0.20	100.0	2.0	1
STD5	2932-3	0.50	100.0	5.0	1
STD6	2932-3	1.00	100.0	10.0	1
CRA	2932-3	0.01	100.0	0.1	1
ICB/CCB	——	0.00	100.0	0.0	1
ICV/LCS	56-18	0.16	100.0	8.0	1
CCV	56-18	0.08	100.0	4.0	1

Chemical/Reagent ID:
HNO_3: I7370 H_2SO_4: I7184 HCl: ——
5% $K_2S_2O_8$: MP2272 5% $KMnO_4$: MP2273

UR78 : 00513

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM
Analyst: MJ
Bath Temp: 92°C
Start Time: 1315
Matrix: water
Date: 05.01.12
End Time: 1515

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
US02 A	1	✓	20.0	20.0	05.08 1	Y	
US02 ADUP	1	✓	20.0	20.0	1	Y	
US02 ASPK	1	✓	20.0	20.0	1	Y	
US02 F	1	✓	20.0	20.0	1	Y	
US02 MB1	—	✓	20.0	20.0	1	Y	
US02 MB1SPK	—	✓	20.0	20.0	1	Y	
US02 I	1	✓	20.0	20.0	1	Y	
US02 IDUP	1	✓	20.0	20.0	1	Y	
US02 ISPK	1	✓	20.0	20.0	1	Y	
US02 N	1	✓	20.0	20.0	1	Y	
US02 MB2	—	✓	20.0	20.0	1	Y	
US02 MB2SPK	—	✓	20.0	20.0	1	Y	

05.04.12 MJ

Chemical/Reagent ID:

HNO_3: I7370
H_2SO_4: I7184
HCl: —
5% $K_2S_2O_8$: MP2272
5% $KMnO_4$: MP2273
Digest Tube Lot: 111173

UR78 : 00514

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: UR78, US02

SAMPLE RESULTS-CONVENTIONALS
UR78-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/30/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Client ID: MW-1S-042512
ARI ID: 12-7339 UR78A

Analyte	Date Batch	Method	Units	RL	Sample
Hexavalent Chromium	04/25/12 042512#1	SW7196A	mg/L	0.010	< 0.010 U

RL Analytical reporting limit
U Undetected at reported detection limit

UR78 : 00515

MS/MSD RESULTS-CONVENTIONALS
UR78-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/30/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Analyte	Method	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: UR78A Client ID: MW-1S-042512							
Hexavalent Chromium	SW7196A	04/25/12	mg/L	< 0.010	0.105	0.627	16.7%

REPLICATE RESULTS-CONVENTIONALS
UR78-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/30/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: 04/25/12
Date Received: 04/25/12

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: UR78A Client ID: MW-1S-042512						
Hexavalent Chromium	SW7196A	04/25/12	mg/L	< 0.010	< 0.010	NA

METHOD BLANK RESULTS-CONVENTIONALS
UR78-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/30/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Hexavalent Chromium	SW7196A	04/25/12	mg/L	< 0.010 U	

STANDARD REFERENCE RESULTS-CONVENTIONALS
UR78-ERM-West

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 04/30/12

Project: RG Spring GW Sampling
Event: 155129.09
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Method	Date	Units	SRM	True Value	Recovery
Hexavalent Chromium ERA #41065	SW7196A	04/25/12	mg/L	0.613	0.630	97.3%

General Chemistry Raw Data
Analyst Notes and Raw Data

ARI Job ID: UR78, US02

4-26-12

HEXAVALENT CHROMIUM BENCHSHEET

Date / Time: 4/25/12 16:55

Diphenyl carbazide colorimetric (SW-846 7196A)

Analyst: SM / CDE

REAGENTS

	ID
Sulfuric Acid:	9242c
Acetone:	
Diphenylcarbazide:	9213c

pH METER

Meter ID: ACCUMET XL60

Electrode ID: 9154015P 18

CALIBRATION

Cr+6 Curve Standard — *ARI ID:* 00124-04 — *Date Prepared:* 2/29/2012

Stock	0.0709	*g K2Cr2O7 to*	500	*mL =*	50.1	*mg/L Cr+6*
Intermediate	5	*mL Stock to*	50	*mL =*	5.01	*mg/L Cr+6*

Standard Curve Data — *final volume of prepared standards =* **50** *mL*

TIME: — *Instrument Used:* SPEC 1

ml Intermediate	Conc (mg/l)	Absorbance @ 540 nm 1	Absorbance @ 540 nm 2	Avg Blk Corr Abs	
0.0	0.00	0.000		0.000	*= blank abs*
0.1	0.01	0.008		0.008	*E 0.01*
0.5	0.05	0.040		0.040	*0.05*
1.0	0.10	0.080		0.080	*0.10*
5.0	0.50	0.394		0.394	*0.51*
10.0	1.00	0.771		0.771	*1.00*

Regression Data

Conc = (abs-intercept)/slope

intercept =	0.0025
slope =	0.7694
r =	1.000
Comment:	Calibration OK!
maxabs =	0.771

Calibration Verification Standard

Source	*ERA # 0504093*			*Stock Conc*	1,000	*mg/L Cr+6*
DQL Int.=	0.10	*ml stock to*	10	*mL pH2 =*	10.00	*mg/L Cr+6*
DQL =	0.40	*ml DQL Int. to*	100	*mL pH2 =*	0.04	*mg/L Cr+6*
CVS =	0.05	*ml stock to*	200	*mL pH2 =*	**0.25**	***mg/L Cr+6***

Prep Check Standard

Dilution	0.50	*ml stock to*	40.00	*mL DI =*	**0.63**	***mg/L Cr+6***

SAMPLE DATA ***Sample pre-dilution assumes 40 mL of sample are pH adjusted then diluted to 50 mL***

mg/L = ((Abs - Blkabs -Bkgabs) - intercept) / slope *NOTE: enter dilution factor as mLfinal/mLsample (e.g. 1mL diluted to 5mL = 5/1 = 2.0)*

SAMPLE ID	Time of Analysis	Sample pre-dilution	Spectrophotometric Data: dilution	Background	ABS @ 540nm	(mg/L)	Corrected (mg/L)	NOTES
ICB		1.000	1		0.000	-0.003	**< 0.01**	*Blk OK*
ICV		1.000	1		0.203	0.261	**0.261**	*104.23%*
Prep Blk		1.250	1		0.000	-0.004	**< 0.01**	*Blk OK*
Prep Chk		1.250	1		0.380	0.613	**0.613**	*97.88%*
DQL		1.250	1		0.025	0.037	**0.037**	
UR78 A1		1.250	1		0.001	-0.002	**< 0.01**	
UR78 A1 dup		1.250	1		0.001	-0.002	**< 0.01**	*RPD NA*
UR78 A1 ms		1.250	1		0.067	0.105	**0.105**	*% Rec= 16.7*
Spike at	0.500	*mL stock to*		40	*mLsample=*	0.627	*mg/L*	*Error, dilute*
Format for verification spikes to pH adjusted filtrate. Spike at 0.03 mg/L or 2 times the sample concentration, whichever is greater								
UR78 A1		1.250	1		0.001	-0.002	**< 0.01**	
UR78 A1 ver		1.000	1		0.006	0.005	**< 0.01**	*#VALUE!*
desired spike =	0.03	*mg/L by adding*	0.060	*mL Intstd to 10 mL adjusted sample*		0.03	*mg/L*	*interference*
CCB		1.000	1		-0.001	-0.005	**< 0.01**	*Blk OK*
CCV		1.000	1		0.201	0.258	**0.258**	*103.19%*

UR78 : 90522

HEXAVALENT CHROMIUM BENCHSHEET

Date / Time: 4.25.12 1655

Diphenyl carbazide colorimetric (SW-846 7196A)

Analyst: CM/CBS

REAGENTS ID

Sulfuric Acid: 9242c

Acetone:

Diphenylcarbazide: 9213c

pH METER

Meter ID: ACCUMET YL60

Electrode ID: 915401SP 18

CALIBRATION

Cr+6 Curve Standard

		ARI ID: 00124-04			Date Prepared: 2-29-12	
Stock	0.0709	*g K2Cr2O7 to*	500	*mL =*	50.1	*mg/L Cr+6*
Intermediate	5	*mL Stock to*	50	*mL =*	5.01	*mg/L Cr+6*

Standard Curve Data *final volume of prepared standards =* **50** *mL*

TIME:

Instrument Used: SPEC 1

ml Intermediate	Conc (mg/l)	Absorbance @ 540 nm 1	Absorbance @ 540 nm 2	Avg Blk Corr Abs	
0.0	0.00	0.000			= blank abs
0.1	0.01	0.008			
0.5	0.05	0.040			
1.0	0.10	0.080			
5.0	0.50	0.399			
10.0	1.00	0.771			

Regression Data

Conc = (abs-intercept)/slope

intercept =

slope =

r =

Comment:

maxabs =

Calibration Verification Standard

Source	*ERA # 0504093*			*Stock Conc*	1,000	*mg/L Cr+6*
DQL Int.=	0.10	*ml stock to*	10	*mL pH2 =*	10.00	*mg/L Cr+6*
DQL =	0.40	*ml DQL Int. to*	100	*mL pH2 =*	0.04	*mg/L Cr+6*
CVS =	0.05	*ml stock to*	200	*mL pH2 =*	**0.25**	***mg/L Cr+6***

Prep Check Standard

Dilution	0.50	*ml stock to*	40.00	*mL DI =*	**0.63**	***mg/L Cr+6***

SAMPLE DATA ***Sample pre-dilution assumes 40 mL of sample are pH adjusted then diluted to 50 mL***

mg/L = ((Abs - Blkabs -Bkgabs) - intercept) / slope *NOTE: enter dilution factor as mLfinal/mLsample (e.g. 1mL diluted to 5mL = 5/1 = 2.0)*

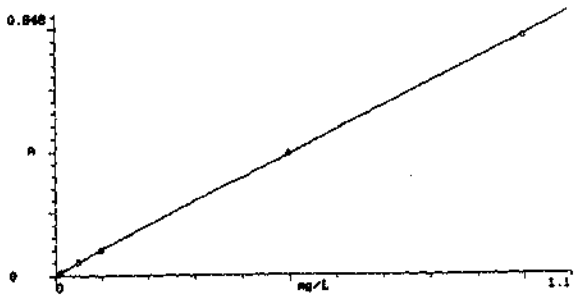
SAMPLE ID	Time of Analysis	Sample pre-dilution	Spectrophotometric Data: dilution	Background	ABS @ 540nm	(mg/L)	Corrected (mg/L)	NOTES
ICB		1.000	1		0.000			
ICV		1.000	1		0.203			
Prep Blk		1.250	1		0.000			
Prep Chk		1.250	1		0.380			
DQL		1.250	1		0.025			
UR78 A'		1.250	1		0.001			
↓ A' dup		1.250	1		0.001			
A' MS		1.250	1		0.067			
↓ A' MSD		1.250	1		0.006			0.06 DI to 10 mL pH adjusted sample
CCB		1.250	1		-0.001			
CCV		1.250	1		0.201			
		1.250	1					
CCB		1.000	1					
CCV		1.000	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
		1.250	1					
CCB		1.000	1					
CCV		1.000	1					

4-25-12 CMC

UR78 : 00523

TEST SETUP
GENESYS 10 v2.021 2G2G048006

Standard Curve	17:55 25Apr12
Test Name	CHROME 6
Date Standards Measured	25Apr12
Wavelength	540nm
Ref. Wavelength Correction	Off
Curve Fit	Linear
Number of Standards	6
Units	mg/L
ID# (0=OFF)	Off
Low/High Limits	0.000/1.000
Statistics	Off
Auto Print	On



Curve Fit	Linear
Slope	0.772
Intercept	0.00185
Std Dev	0.004
Corr Coeff	1.000

Conc. mg/L	Abs 540nm
0.000	0.000
0.010	0.008
0.050	0.040
0.100	0.080
0.500	0.394
1.000	0.771

4-25-12 JDK

TEST SETUP
GENESYS 10 v2.021 2G2G048006

Advanced A-%T-C	17:56 25Apr12
Test Name	CHROME 6[Saved]
Measurement Mode	Absorbance
Wavelength	540nm
Ref. Wavelength Correction	Off
Delay Time (min:sec)	0:00
ID# (0=OFF)	1
Low/High Limits	0.000/1.000
Statistics	Off
Auto Print	On

ID#	Abs 540nm
1	0.000
2	0.203
3	0.000
4	0.380
5	0.025
6	0.001
7	0.001
8	0.067
9	0.006
10	-0.001
11	0.201

Attachment B
September 2012
Data Assessment Review
Memorandum

Table 1
Samples with Exceeded Preservation Requirements
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Sample ID	Analysis Method	Sample Temperature (°C)	Limits (°C)	Note	ERM Qualifier
US27	MW-13-043012	VOC	8.2	2 - 6	NA	--

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
°C = Degrees Celsius
VOC = Volatile organic compounds (Method 8260C)
NA = Data not affected; samples received at the laboratory within two hours of collection

Table 2
Blank and Associated Suspect Sample Detections
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Blank ID	Associated Samples	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
US27	TB-043012-1	NA	Methylene chloride	0.6	1.0	µg/L	--
US27	MB-050112A	NA	Tetrachloroethene	0.1	0.2	µg/L	--
US27	MB-050112A	NA	Hexachlorobutadiene	0.2	0.5	µg/L	--
US27	MB-050112A	NA	1,2,4-Trichlorobenzene	0.1	0.5	µg/L	--
US27	MB-050112A	NA	1,2,3-Trichlorobenzene	0.2	0.5	µg/L	--
US52	TB-043012-2	NA	Methylene chloride	0.6	1.0	µg/L	--
US61	FB-050212-1	NA	Methylene chloride	1.9	1.0	µg/L	--
US61	FB-050212-1	See below	Acetone	11	5.0	µg/L	--
US61	FB-050212-1	MW-30S-050212	Acetone	7.0	5.0	µg/L	7.0 U
US61	FB-050212-1	MW-29S-050212	Acetone	15	5.0	µg/L	15 U
US61	FB-050212-1	NA	Chloroform	0.1	0.2	µg/L	--
US61	FB-050212-1	NA	Toluene	0.6	0.2	µg/L	--
US61	TB-050212-1	NA	Methylene chloride	0.6	1.0	µg/L	--
US61	MB-050712A	NA	Hexachlorobutadiene	0.1	0.5	µg/L	--
US61	MB-050712A	NA	1,2,4-Trichlorobenzene	0.1	0.5	µg/L	--
US61	MB-050712A	NA	Naphthalene	0.2	0.5	µg/L	--
US61	MB-050712A	NA	1,2,3-Trichlorobenzene	0.2	0.5	µg/L	--
UR78	TB-042512-1	NA	Methylene chloride	0.6	1.0	µg/L	--
UR78	MB-043012A	NA	Tetrachloroethene	0.1	0.2	µg/L	--
UR78	MB-043012A	NA	Hexachlorobutadiene	0.2	0.5	µg/L	--
UR78	MB-043012A	NA	1,2,4-Trichlorobenzene	0.1	0.5	µg/L	--
UR78	MB-043012A	NA	1,2,3-Trichlorobenzene	0.2	0.5	µg/L	--
UR78	MB-050312	NA	Arsenic, total	0.6	0.2	µg/L	--
UR78	MB-050312	NA	Arsenic, dissolved	0.3	0.2	µg/L	--
DPWG40271	Lab Blank	NA	1,2,3,4,6,7,8-HPCDD	0.751	0.500	pg/L	EMPC
DPWG40271	Lab Blank	NA	OCDD	1.95	0.500	pg/L	EMPC
DPWG40271	Lab Blank	NA	OCDF	1.21	0.500	pg/L	EMPC

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
TB = Trip blank
MB = Method blank
FB = Field blank
µg/L = Micrograms per liter
pg/L = Picograms per liter
NA = Not applicable; qualification of sample data not required
U = Nondetected
HPCDD = Heptachlorodibenzo-p-dioxin
OCDD = Octochlorodibenzo-p-dioxin
OCDF = Octochlorodibenzofuran
EMPC = Blank result identified as Estimated Maximum Possible Concentration; qualification of sample data not required

Table 3
Laboratory Control Spike Recoveries Outside of Acceptable Limits
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Spike Sample ID	Associated Sample	Compound	Recovery (%)	Limit (%)	Sample Result	ERM Qualifier
US52	LCS-050312	NA	Carbaxole	6.8	36-123	--	--

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
LCS = Laboratory control sample
NA = Not applicable; qualification of sample data not required

Table 4
Matrix Spike Recoveries Outside of Acceptable Limits
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Spike Sample ID	Associated Sample	Compound	Recovery (%)	Limit (%)	RPD	RPD Limit	Sample Result	ERM Qualifier
US15	MW-18-042612 MS	See below	Nickel, total	71.5	75-125	--	--	--	--
US15	MW-18-042612 MS	MW-18-042612	Nickel, total	--	--	--	--	9.2	J
US15	MW-18-042612 MS	MW-3S-042712	Nickel, total	--	--	--	--	0.5	J
US27	MW-14D-043012 MS	NA	Arsenic, total	128	75-125	--	--	4X	--
US27	MW-14D-043012 MS	See below	Silver, total	68.4	75-125	--	--	--	--
US27	MW-14D-043012 MS	MW-27-043012	Silver, total	--	--	--	--	< 0.2	UJ
US27	MW-14D-043012 MS	MW-26-043012	Silver, total	--	--	--	--	< 0.2	UJ
US27	MW-14D-043012 MS	MW-14D-043012	Silver, total	--	--	--	--	< 0.2	UJ
US27	MW-14D-043012 MS	NA	Sodium, total	50.0	75-125	--	--	4X	--
US27	MW-14D-043012 MS	NA	Arsenic, dissolved	48.0	75-125	--	--	4X	--
US27	MW-14D-043012 MS	See below	Silver, dissolved	52.0	75-125	--	--	--	--
US27	MW-14D-043012 MS	MW-27-043012	Silver, dissolved	--	--	--	--	< 0.2	UJ
US27	MW-14D-043012 MS	MW-26-043012	Silver, dissolved	--	--	--	--	< 0.2	UJ
US27	MW-14D-043012 MS	MW-14D-043012	Silver, dissolved	--	--	--	--	< 0.2	UJ
US52	MW-32S-050112 MS/MSD	NA	3,3;-Dichlorobenzidine	14.0/25.3	10-151	57.6	40	--	--
US52	MW-14-043012 MS	NA	Arsenic, total	1680	75-125	--	--	4X	--
US52	MW-14-043012 MS	NA	Arsenic, dissolved	760	75-125	--	--	4X	--
DPWG40271	MW-13-043012 MS/MSD	See below	1,2,3,4,6,7,8-HPCDD	178/258	70-130	36.7	20	--	--
DPWG40271	MW-13-043012 MS/MSD	MW-7S-042712	1,2,3,4,6,7,8-HPCDD	--	--	--	--	16.6	J
DPWG40271	MW-13-043012 MS/MSD	DUP-042712-1	1,2,3,4,6,7,8-HPCDD	--	--	--	--	23.7	J
DPWG40271	MW-13-043012 MS/MSD	MW-10-042712	1,2,3,4,6,7,8-HPCDD	--	--	--	--	84.8	J
DPWG40271	MW-13-043012 MS/MSD	MW-13-043012	1,2,3,4,6,7,8-HPCDD	--	--	--	--	46.5	J
DPWG40271	MW-13-043012 MS/MSD	See below	OCDD	973/1270	70-130	26.8	20	--	--
DPWG40271	MW-13-043012 MS/MSD	MW-7S-042712	OCDD	--	--	--	--	92.8	J
DPWG40271	MW-13-043012 MS/MSD	DUP-042712-1	OCDD	--	--	--	--	332	J
DPWG40271	MW-13-043012 MS/MSD	MW-10-042712	OCDD	--	--	--	--	1530	J
DPWG40271	MW-13-043012 MS/MSD	MW-13-043012	OCDD	--	--	--	--	5000	J

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
MS/MSD = Matrix spike/matrix spike duplicate
RPD = Relative percent difference
NA = Not applicable; qualification of sample data not required
J = Detected sample result qualified as estimated
UJ = Nondetected sample result qualified as estimated
4X = Concentration of unspiked sample was greater than 4 times the amount spiked; no qualification required

Table 5
Estimated Maximum Possible Concentration
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Sample ID	Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
DPWG40271	MW-7S-042712	1,2,3,6,7,8-HXCDD	0.621	0.547	pg/L	U
DPWG40271	MW-7S-042712	1,2,3,7,8,9-HXCDD	0.740	0.547	pg/L	U
DPWG40271	MW-7S-042712	1,2,3,4,6,7,8-HPCDF	0.835	0.547	pg/L	U
DPWG40271	DUP-042712-1	1,2,3,4,7,8-HXCDD	0.600	0.549	pg/L	U
DPWG40271	DUP-042712-1	1,2,3,4,6,7,8-HPCDF	0.791	0.549	pg/L	U
DPWG40271	MW-10-042712	1,2,3,7,8,9-HXCDD	0.720	0.528	pg/L	U
DPWG40271	MW-10-042712	2,3,4,7,8-PECDF	0.608	0.528	pg/L	U
DPWG40271	MW-10-042712	1,2,3,6,7,8-HXCDF	0.655	0.528	pg/L	U
DPWG40271	MW-13-043012	1,2,3,6,7,8-HXCDD	0.766	0.540	pg/L	U

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
pg/L = Picograms per liter
U = Nondetected
HXCDD = Hexachlorodibenzo-p-dioxin
HPCDF = Heptachlorodibenzofuran
PECDF = Pentachlorodibenzofuran
HXCDF = Hexachlorodibenzofuran

Table 6
Field Duplicate Results and Calculated Relative Percent Differences
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Sample/Duplicate ID	Compound	Concentration		Report Limit	Units	RPD
			Sample	Duplicate			
US15	MW-7S-042712/DUP-042712-1	2,3,4,6-Tetrachlorophenol	4.0	4.1	1.0	µg/L	2.5
US15	MW-7S-042712/DUP-042712-1	Pentachlorophenol	53	58	5.0	µg/L	9.0
US27	MW-13-043012/DUP-043012-1	2,3,4,6-Tetrachlorophenol	4.1	4.6	1.0	µg/L	11
US27	MW-13-043012/DUP-043012-1	Pentachlorophenol	58	72	5.0/12	µg/L	22
US61	MW-31S-050212/DUP-050212-1	Phenol	4.0	4.3	1.0	µg/L	7.2
US61	MW-31S-050212/DUP-050212-1	DRO	0.23	0.28	0.20	mg/L	20
US61	MW-31S-050212/DUP-050212-1	Arsenic, total	1.5	1.3	0.2	µg/L	14
US61	MW-31S-050212/DUP-050212-1	Copper, total	0.9	8.1	0.5	µg/L	160
US61	MW-31S-050212/DUP-050212-1	Nickel, total	2.0	15.6	0.5	µg/L	155
US61	MW-31S-050212/DUP-050212-1	Antimony, dissolved	0.2	0.2	0.2	µg/L	0
US61	MW-31S-050212/DUP-050212-1	Arsenic, dissolved	1.3	1.2	0.2	µg/L	8.0
US61	MW-31S-050212/DUP-050212-1	Copper, dissolved	0.5	0.9	0.5	µg/L	57
US61	MW-31S-050212/DUP-050212-1	Nickel, dissolved	1.0	1.0	0.5	µg/L	0
UR78	MW-21-042612/DUP-042612-1	Arsenic, total	1930	1820	4.0	µg/L	5.9
UR78	MW-20-042612/DUP-042612-2	Arsenic, total	957	1020	2.0	µg/L	6.4
UR78	MW-21-042612/DUP-042612-1	Arsenic, dissolved	1920	1850	4.0	µg/L	3.7
UR78	MW-20-042612/DUP-042612-2	Arsenic, dissolved	869	896	2.0	µg/L	3.1
US82	MW-36S-050312/DUP-050312-1	Arsenic, total	0.5	0.5	0.2	µg/L	0
US82	MW-36S-050312/DUP-050312-1	Copper, total	0.7	0.8	0.5	µg/L	13
US82	MW-36S-050312/DUP-050312-1	Arsenic, dissolved	0.5	0.5	0.2	µg/L	0
US82	MW-36S-050312/DUP-050312-1	Copper, dissolved	0.5	0.5	0.5	µg/L	0
DPWG40271	MW-7S-042712/DUP-042712-1	1,2,3,6,7,8-HXCDD	0.621	0.724	0.547/0.549	pg/L	15
DPWG40271	MW-7S-042712/DUP-042712-1	1,2,3,4,6,7,8-HPCDD	16.6	23.7	0.547/0.549	pg/L	35
DPWG40271	MW-7S-042712/DUP-042712-1	OCDD	92.8	332	0.547/0.549	pg/L	113
DPWG40271	MW-7S-042712/DUP-042712-1	1,2,3,4,6,7,8-HPCDF	0.835	0.791	0.547/0.549	pg/L	5.4
DPWG40271	MW-7S-042712/DUP-042712-1	OCDF	3.08	2.25	0.547/0.549	pg/L	31
DPWG40271	MW-7S-042712/DUP-042712-1	Total Hexa-Dioxins	1.57	3.05	0.547/0.549	pg/L	64
DPWG40271	MW-7S-042712/DUP-042712-1	Total Hepta-Dioxins	25.0	36.1	0.547/0.549	pg/L	36

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
RPD = Relative percent difference
µg/L = Micrograms per liter
mg/L = Milligrams per liter
pg/L = Picograms per liter
DRO = Diesel range organics
HXCDD = Hexachlorodibenzo-p-dioxin
HPCDD = Heptachlorodibenzo-p-dioxin
OCDD = Octochlorodibenzo-p-dioxin
HPCDF = Heptachlorodibenzofuran
OCDF = Octochlorodibenzofuran

Table 7
Analytical Duplicate Results and Calculated Relative Percent Differences
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Sample ID	Compound	Concentration		Report Limit	Units	RPD	ERM Qualifier
			Sample	Duplicate				
US15	MW-18-042612	Antimony, total	0.2	0.2	0.2	µg/L	0	--
US15	MW-18-042612	Arsenic, total	6.2	6.1	0.2	µg/L	1.6	--
US15	MW-18-042612	Chromium, total	0.6	0.5	0.5	µg/L	18	--
US15	MW-18-042612	Copper, total	1.9	1.9	0.5	µg/L	0	--
US15	MW-18-042612	Nickel, total	9.2	2.5	0.5	µg/L	115	J
US15	MW-18-042612	Antimony, dissolved	0.3	0.3	0.2	µg/L	0	--
US15	MW-18-042612	Arsenic, dissolved	5.9	6.0	0.2	µg/L	1.7	--
US15	MW-18-042612	Copper, dissolved	1.7	1.8	0.5	µg/L	5.7	--
US27	MW-27-043012	Arsenic, total	9.1	9.0	0.2	µg/L	1.1	--
US27	MW-27-043012	Chromium, total	0.7	0.7	0.5	µg/L	0	--
US27	MW-27-043012	Copper, total	1.0	0.9	0.5	µg/L	11	--
US27	MW-27-043012	Nickel, total	2.8	2.8	0.5	µg/L	0	--
US27	MW-14D-043012	Aluminum, total	460	460	50	µg/L	0	--
US27	MW-14D-043012	Arsenic, total	361	368	2	µg/L	1.9	--
US27	MW-14D-043012	Calcium, total	18100	17900	50	µg/L	1.1	--
US27	MW-14D-043012	Chromium, total	11.5	11.6	0.5	µg/L	0.9	--
US27	MW-14D-043012	Copper, total	3.1	3.2	0.5	µg/L	3.2	--
US27	MW-14D-043012	Iron, total	10100	10000	50	µg/L	1.0	--
US27	MW-14D-043012	Magnesium, total	12600	12500	50	µg/L	0.8	--
US27	MW-14D-043012	Manganese, total	318	313	1	µg/L	1.6	--
US27	MW-14D-043012	Potassium, total	14800	14700	500	µg/L	0.7	--
US27	MW-14D-043012	Sodium, total	170000	168000	500	µg/L	1.2	--
US27	MW-27-043012	Arsenic, dissolved	9.3	9.0	0.2	µg/L	3	--
US27	MW-27-043012	Copper, dissolved	0.6	0.6	0.2	µg/L	0	--
US27	MW-27-043012	Nickel, dissolved	2.2	2.2	0.5	µg/L	0	--
US27	MW-14D-043012	Aluminum, dissolved	250	260	50	µg/L	3.9	--
US27	MW-14D-043012	Arsenic, dissolved	361	355	2	µg/L	1.7	--
US27	MW-14D-043012	Chromium, dissolved	9.4	9.2	0.5	µg/L	2.2	--
US27	MW-14D-043012	Copper, dissolved	1.1	1.2	0.5	µg/L	8.7	--
US27	MW-14D-043012	Iron, dissolved	9840	9860	50	µg/L	0.2	--
US27	MW-14D-043012	Manganese, dissolved	316	316	1	µg/L	0	--
US52	MW-14-043012	Arsenic, total	6130	6420.0	10	µg/L	4.6	--
US52	MW-14-043012	Chromium, total	0.7	0.7	0.5	µg/L	0	--
US52	MW-14-043012	Copper, total	24.2	25.2	0.5	µg/L	4.0	--
US52	MW-14-043012	Zinc, total	35	37	4.0	µg/L	5.6	--
US52	MW-28S-050112	Arsenic, total	14.0	14.0	0.2	µg/L	0	--
US52	MW-28S-050112	Calcium, total	67100	65900	50	µg/L	1.8	--
US52	MW-28S-050112	Copper, total	0.8	0.9	0.5	µg/L	12	--
US52	MW-28S-050112	Iron, total	11900	11900	50	µg/L	0	--
US52	MW-28S-050112	Magnesium, total	6500	6430	50	µg/L	1.1	--
US52	MW-28S-050112	Manganese, total	367	365	1	µg/L	0.5	--
US52	MW-28S-050112	Nickel, total	4.0	4.0	0.5	µg/L	0	--
US52	MW-28S-050112	Potassium, total	5210	5160	500	µg/L	1.0	--
US52	MW-28S-050112	Sodium, total	11500	11300	500	µg/L	1.8	--
US52	MW-14-043012	Arsenic, dissolved	5810	6060	10	µg/L	4.2	--
US52	MW-14-043012	Chromium, dissolved	0.7	0.7	0.5	µg/L	0	--
US52	MW-14-043012	Copper, dissolved	2.3	3.0	0.5	µg/L	26	--
US52	MW-14-043012	Zinc, dissolved	35	36	4	µg/L	2.8	--
US52	MW-28S-050112	Arsenic, dissolved	13.8	14.2	0.2	µg/L	2.9	--
US52	MW-28S-050112	Copper, dissolved	0.8	1.1	0.5	µg/L	32	--
US52	MW-28S-050112	Iron, dissolved	12100	11900	50	µg/L	1.7	--
US52	MW-28S-050112	Manganese, dissolved	350	346	1	µg/L	1.1	--
US52	MW-28S-050112	Nickel, dissolved	0.9	0.9	0.5	µg/L	0	--
US61	DUP-050212-1	Antimony, total	0.2	0.2	0.2	µg/L	0	--
US61	DUP-050212-1	Arsenic, total	1.3	1.4	0.2	µg/L	7.4	--
US61	DUP-050212-1	Copper, total	8.1	6.5	0.5	µg/L	22	J
US61	DUP-050212-1	Nickel, total	15.6	12.7	0.5	µg/L	20	--
US61	MW-30S-050212	Arsenic, dissolved	9.6	9.6	0.2	µg/L	0	--
US61	MW-30S-050212	Iron, dissolved	6800	6710	50	µg/L	1.3	--
US61	MW-30S-050212	Manganese, dissolved	366	363	1	µg/L	0.8	--
US61	MW-30S-050212	Nickel, dissolved	0.5	0.5	0.5	µg/L	0	--
UR78	MW-22-042512	Arsenic, total	68.3	66.6	0.2	µg/L	2.5	--
UR78	MW-22-042512	Arsenic, dissolved	61.6	62.8	0.2	µg/L	1.9	--
UR78	MW-24-042512	Arsenic, total	0.4	0.4	0.2	µg/L	0	--
UR78	MW-24-042512	Nickel, total	1.1	0.7	0.5	µg/L	44	J
UR78	MW-24-042512	Arsenic, dissolved	0.3	0.4	0.2	µg/L	29	J
UR78	MW-24-042512	Nickel, dissolved	0.7	0.6	0.5	µg/L	15	--
US82	MW-34S-050312	Arsenic, total	2.0	2.0	0.5	µg/L	0	--
US82	MW-34S-050312	Calcium, total	39200	39100	50	µg/L	0.3	--
US82	MW-34S-050312	Copper, total	3.4	3.6	0.5	µg/L	5.7	--
US82	MW-34S-050312	Magnesium, total	1640	1640	50	µg/L	0	--
US82	MW-34S-050312	Manganese, total	1.0	1.0	1.0	µg/L	0	--
US82	MW-34S-050312	Potassium, total	1610	1590	500	µg/L	1.3	--
US82	MW-34S-050312	Sodium, total	11600	11600	500	µg/L	0	--
US82	MW-34S-050312	Arsenic, dissolved	2.0	2.0	0.2	µg/L	0	--
US82	MW-34S-050312	Copper, dissolved	3.5	3.5	0.5	µg/L	0	--
US82	MW-34S-050312	Alkalinity	121	122	1.0	mg/L	0.8	--
US82	MW-34S-050312	Bicarbonate	121	122	1.0	mg/L	0.8	--
US82	MW-34S-050312	Chloride	4.2	4.2	0.1	mg/L	0	--
US82	MW-34S-050312	N-Nitrate	0.2	0.1	0.1	mg/L	67	J
US82	MW-34S-050312	Sulfate	6.4	6.4	0.2	mg/L	0	--
US82	MW-35S-050312	Alkalinity	20.1	20.2	1.0	mg/L	0.5	--
US82	MW-35S-050312	Bicarbonate	20.1	20.2	1.0	mg/L	0.5	--
US82	MW-35S-050312	N-Ammonia	0.091	0.091	0.01	mg/L	0	--
US82	IDW-050312	pH	5.91	5.91	0.01	pH units	0	--
US82	MW-33S-050212	TSS	36.4	37.7	1.1	mg/L	3.5	--

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
RPD = Relative percent difference
µg/L = Micrograms per liter
mg/L = Milligrams per liter
J = Detected sample result qualified as estimated
TSS = Total suspended solids

Table 8
Calibration Verification Recoveries Outside of Acceptable Limits
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	CCV ID	Compound	CCV Recovery	CCV Limit	Associated Samples	Reported Concentration	Units	ERM Qualifier
US15	CCV-050812	Pentachlorophenol	26.1	20	See below	--	--	--
US15	CCV-050812	--	--	--	MW-7S-042712	53	µg/L	J
US15	CCV-050812	--	--	--	DUP-042712-1	58	µg/L	J
US15	CCV-050812	Pentachlorophenol	24.9	20	NA	--	--	--
US27	CCV-050112	Bromoform	21.3	20	NA	--	--	--
US52	CCV-050312	Trichlorofluoromethane	20.3	20	NA	--	--	--
US52	CCV-050312	Acrolein	-23.6	20	See below	--	--	--
US52	CCV-050312	--	--	--	MW-16-043012	< 5.0	µg/L	UJ
US52	CCV-050312	--	--	--	MW-28S-050112	< 5.0	µg/L	UJ
US52	CCV-050312	Carbon tetrachloride	20.6	20	NA	--	--	--
US52	CCV-050412	2,3,4,6-Tetrachlorophenol	23.5	20	See below	--	--	--
US52	CCV-050412	--	--	--	MW-16-043012	30	µg/L	J
US52	CCV-050412	2,4,6-Tribromophenol	32.7	20	NA	--	--	--
US61	CCV-051012	Benzo(a)anthracene	-23.9	20	See below	--	--	--
US61	CCV-051012	--	--	--	MW-30S-050212	< 0.10	µg/L	UJ
US61	CCV-051012	--	--	--	MW-29S-050212	< 0.10	µg/L	UJ
US61	CCV-051012	--	--	--	MW-31S-050212	< 0.10	µg/L	UJ
US61	CCV-051012	--	--	--	DUP-050212-1	< 0.10	µg/L	UJ
UR78	CCV-043012	Chloroethane	-24.0	20	MW-4S-042512	< 0.2	µg/L	UJ
UR78	CCV-043012	Acrolein	-20.4	20	MW-4S-042512	< 5.0	µg/L	UJ
UR78	CCV-043012	Acetone	28.4	20	MW-4S-042512	16	µg/L	J
UR78	CCV-043012	Hexachloro-1,3-butadiene	29.9	20	NA	--	--	--
UR78	CCV-050212	2,3,4,6-Tetrachlorophenol	23.9	20	NA	--	--	--
UR78	CCV-050212	2,4,6-Tribromophenol	32.7	20	NA	--	--	--
UR78	CCV-050112	C25 - C36	28.5	20	NA	--	--	--
UR78	CCV-050212	n-Triacontane	38.6	20	NA	--	--	--
US82	CCV-051012	Benzo(a)anthracene	-23.9	20	See below	--	--	--
US82	CCV-051012	--	--	--	MW-34S-050312	< 0.10	µg/L	UJ
US82	CCV-051012	--	--	--	MW-35S-050312	< 0.10	µg/L	UJ
US82	CCV-051012	--	--	--	MW-33S-050312	< 0.10	µg/L	UJ
US82	CCV-050912	C25 - C36	31.4	20	--	--	--	--
US82	CCV-050912	C25 - C36	26.2	20	--	--	--	--

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
CCV = Continuing calibration verification
µg/L = Micrograms per liter
NA = Not applicable; qualification of sample data not required
J = Detected sample result qualified as estimated
UJ = Nondetected sample result qualified as estimated

Table 9
TPH Results
Spring 2012 Groundwater Sampling
Reichhold-Glacier Site
Seattle, Washington

Lab Package	Sample ID	Compound	Reported Concentration	Units	ERM Qualifier	Notes
US82	MW-35S-050312	DRO	3.2	mg/L	NJ	Results of organics or additional hydrocarbons are not identifiable
US61	MW-31S-050212	DRO	0.23	mg/L	NJ	Results of organics or additional hydrocarbons are not identifiable
US61	DUP-050212-1	DRO	0.28	mg/L	NJ	Results of organics or additional hydrocarbons are not identifiable

Data packages reviewed: ARI UR78, US02, US82, US15, US27, US52, US61, UT31: Axys DPWG40271

Key:
DRO = Diesel range organics
mg/L = Milligrams per liter
NJ = Estimated value

Memorandum

Environmental Resources Management

2875 Michelle Drive
Suite 200
Irvine, CA 92606
(949) 623-4700
(949) 623-2940 (fax)

To: Shira DeGrood

From: Irene Lavigne

Date: 10 October 2012

Subject: Data Review of Reichhold-Glacier Spring 2012 Groundwater Monitoring Samples Collected April – May 2012

Project Number: 0155129

Data Packages: Analytical Resources Incorporated Data Packages UR78, US02, US82, US15, US27, US52, US61, and UT31
Axys Analytical Services Data Package DPWG40271

The data quality was assessed and any necessary qualifiers were applied following the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,* October 1999, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review,* October 2004, and the *EPA Region 10 SOP for the Validation of Polychlorinated Dibenzodioxin (PCDD) and Polychlorinated Dibenzofuran (PCDF) Data*, January 1996.

HOLDING TIME AND PRESERVATION EVALUATION

The samples were prepared and analyzed within the method-prescribed time period from the date of collection. No sample data were qualified based on the holding time evaluation.

The sample shipments were received at the laboratory within the method-prescribed preservation requirements with one exception. The temperature of one sample delivery group was recorded above the acceptable range of 2-6 degrees Celsius upon receipt at the laboratory. No data were qualified on the basis of this temperature exceedance because the samples were delivered to the laboratory within two hours of collection of the last sample; therefore, the samples did not have sufficient cooling time to reach an acceptable temperature. The sample associated with the temperature exceedance is listed in Table 1.

BLANK EVALUATION

The method blank, trip blank and field blank sample results were nondetected for each of the target analytes with a number of exceptions. Detections of acetone in a field blank required qualification of two sample results as nondetected (U) for this compound. Additional blank detections did not result in qualification of associated data. Data were not qualified if the samples were nondetected for the associated compounds, if the sample results exceeded five times the blank concentrations of organic compounds or 10 times the blank concentrations of inorganic compounds and common laboratory contaminants, or if the blank results were identified as estimated maximum possible concentrations for dioxin/furan analyses. The blank detections and associated, qualified data are presented in Table 2.

BLANK SPIKE EVALUATION

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries were within the laboratory's limits of acceptance with one exception; however, no sample data were qualified on the basis of the LCS outlier. Sample data were not qualified because the data could be verified using an associated, in-control matrix spike recovery. The outlying LCS recovery is shown in Table 3.

MATRIX SPIKE EVALUATION

The matrix spike (MS) and matrix spike duplicate (MSD) recoveries were within the laboratory's limits of acceptance with a number of exceptions. Two detected sample results for nickel were qualified as estimated (J) due to a low MS recovery for this compound. Six nondetected sample results for silver were qualified as estimated (UJ) based on two MS recoveries that were below the minimum acceptable limits for this compound. Additional outlying recoveries did not require qualification of sample data. Data were not qualified if the concentration of the unspiked samples was greater than four times the amount spiked, or if only the relative percent difference (RPD) exceeded control limits. The outlying MS recoveries and qualified sample data are listed in Table 4.

ESTIMATED MAXIMUM POSSIBLE CONCENTRATION

The laboratory identified a number of dioxin and furan results as estimated maximum possible concentrations (EMPC). An EMPC value is the maximum possible concentration of a compound that could be present in the sample. This classification is used when all of the identification criteria for a given dioxin or furan compound are not met. Sample data identified as EMPC by the laboratory were qualified as nondetected (U), as shown in Table 5.

SURROGATE SPIKE EVALUATION

The surrogate recoveries were within acceptable limits. No qualifications to the data were made. The surrogate recoveries indicate minimal matrix interference in the samples.

FIELD DUPLICATE EVALUATION

Seven samples were collected and analyzed in duplicate. ERM calculated the RPD between detected results. The USEPA has not established control criteria for field duplicate samples; therefore, sample data are not qualified on the basis of field duplicate imprecision. Detected duplicate results and calculated RPDs are presented in Table 6.

ANALYTICAL DUPLICATE EVALUATION

The laboratory prepared and analyzed a number of samples as analytical duplicates. ERM calculated the RPD between detected results. The RPDs were less than 20 percent, with few exceptions. Sample results for five duplicates were qualified as estimated (J). The analytical duplicate sample results and calculated RPDs are shown in Table 7.

CONTINUING CALIBRATION EVALUATION

The laboratory noted that 20 continuing calibration verification (CCV) recoveries exceeded acceptable control limits for various compounds. Detected and nondetected sample results were qualified as estimated, "J" or "UJ", respectively, as listed in Table 8. Not all CCV outliers resulted in qualified data. Data were not qualified if the CCV recoveries were biased high and the associated samples were nondetected for the corresponding compounds.

TPH EVALUATION

The laboratory noted that the chromatograms for three samples analyzed for diesel range organics contained additional, unidentifiable hydrocarbons. The results for these samples were qualified as tentatively identified and estimated (NJ) as presented in Table 9.

OVERALL ASSESSMENT

No data were determined to be unusable. All of the data, including qualified data, can be used for decision-making purposes; however, the limitations indicated by the applied qualifiers should be considered when using the data. The quality of the data generated during this investigation is acceptable for the preparation of technically-defensible documents.