

**LONGHORN ARMY
AMMUNITION PLANT
KARNACK, TEXAS**

**ADMINISTRATIVE
RECORD**

Volume 3

2018

Bate Stamp Numbers

00836027 - 00837876

Prepared for

**Department of the Army
Longhorn Army Ammunition Plant**

1976 – 2018

***LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX***

VOLUME 3

2018

- A. Title: Report (cont'd) – Addendum 1 to the Final Report for the In Situ Microbial Reactor Enhanced Bioremediation Field Test (Appendix D)
Author(s): U.S. Army Aberdeen Test Center
Recipient:
Date: August 2015
Bate Stamp: 00836027 – 00837876

Sample Name: CCV Acquired: 7/30/2012 16:00:22 Type: QC
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.541	.51354	F 3.2020	.51885	F 25.052	10.603	F 16.230
Stddev	3.959	.00051	3.3169	.00208	19.203	.068	5.920
%RSD	7.3945	.09938	103.59	.40152	76.654	.64393	36.474

#1	49.035	.51360	6.8836	.52071	4.3063	10.649	13.804
#2	55.123	.51300	.44685	.51924	42.205	10.525	22.977
#3	56.464	.51402	2.2756	.51660	28.644	10.636	11.908

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail
Value			10.000		10.000		10.000
Range			-10.000%		10.000%		10.000%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Ti1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2482	.41046	5.1879	1.0393	1.0536	1.0571	.52466
Stddev	.0008	.00143	.0233	.0013	.0796	.0761	.00116
%RSD	.06143	.34732	.44981	.12530	7.5587	7.1995	.22139

#1	1.2487	.41105	5.2077	1.0398	.96296	.96968	.52574
#2	1.2486	.41150	5.1937	1.0403	1.0856	1.0930	.52483
#3	1.2473	.40884	5.1622	1.0378	1.1123	1.1086	.52343


Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	1.0149	1.0290	F 1.1737
Stddev	.0068	.0008	.8665
%RSD	.67264	.08002	73.828

#1	1.0176	1.0299	2.0837
#2	1.0200	1.0289	.35834
#3	1.0071	1.0282	1.0792

Check ?	Chk Pass	Chk Pass	Chk Fail
Value			1.0000
Range			10.000%

Approved: July 31, 2012



Sample Name: CCV Acquired: 7/30/2012 16:00:22 Type: QC
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30467.	16208.
Stddev	147.	558.
%RSD	.48182	3.4418
#1	30487.	16847.
#2	30311.	15962.
#3	30602.	15816.

Approved: July 31, 2012



Sample Name: CCB Acquired: 7/30/2012 16:03:26 Type: Blank
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	-.04027	-.00047	.00123	.00103	-.00001	-.03491
Stddev	.00062	.03145	.00196	.00212	.00088	.00003	.01937
%RSD	173.84	78.084	415.59	171.95	85.097	386.60	55.468

#1	.00003	-.04915	.00116	.00343	.00198	-.00003	-.02793
#2	-.00003	-.00534	-.00265	.00107	.00087	-.00002	-.02000
#3	-.00107	-.06633	.00007	-.00080	.00024	.00003	-.05680

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.00015	.00007	-.00066	.00832	.00412	F .43792
Stddev	.00010	.00012	.00048	.00042	.01096	.00630	1.3038
%RSD	77.563	84.746	738.65	63.179	131.71	152.68	297.72

#1	-.00021	.00007	.00062	-.00110	.01710	.00734	-.96888
#2	-.00016	.00029	-.00023	-.00027	-.00397	-.00313	.67707
#3	-.00002	.00008	-.00020	-.00061	.01184	.00816	1.6056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit							.10000
Low Limit							-.10000

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .70892	F 1.0729	.25604	.00850	.01802	.00022	.00102
Stddev	.85124	.4415	.06719	.00520	.03443	.00014	.00024
%RSD	120.08	41.149	26.240	61.269	191.06	63.419	23.978

#1	-.27234	.86640	.33361	.00487	.04468	.00030	.00102
#2	1.2490	1.5798	.21628	.00615	-.02085	.00006	.00077
#3	1.1501	.77248	.21823	.01446	.03022	.00029	.00126

Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.10000					
Low Limit	-.10000	-.10000					

Approved: July 31, 2012



Sample Name: CCB Acquired: 7/30/2012 16:03:26 Type: Blank
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04352	.00164	F 8.8286	.00104	F 35.611	F -.12090	F 2.4734
Stddev	.04911	.00008	10.253	.00078	8.291	.02989	1.2539
%RSD	112.84	5.0731	116.13	75.608	23.283	24.725	50.694

#1	.09600	.00173	20.356	.00117	27.375	-.14605	2.1201
#2	.03590	.00156	5.4041	.00175	35.500	-.08785	3.8660
#3	-.00134	.00164	.72605	.00020	43.957	-.12879	1.4341

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit			.01000		.01000	.01000	.01000
Low Limit			-.01000		-.01000	-.01000	-.01000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00433	-.00104	.00846	.00049	.00045	.00026	.00245
Stddev	.00203	.00138	.00351	.00025	.00072	.00220	.00088
%RSD	46.848	132.46	41.541	50.581	160.71	833.86	36.103

#1	.00230	.00020	.00475	.00077	.00126	-.00144	.00255
#2	.00433	-.00254	.00888	.00036	.00020	-.00052	.00152
#3	.00636	-.00080	.01174	.00033	-.00012	.00275	.00328

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00026	.00015	F -.98347
Stddev	.00046	.00007	.32531
%RSD	176.43	46.561	33.078

#1	-.00027	.00007	-.61904
#2	.00046	.00018	-1.2445
#3	.00059	.00020	-1.0868

Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			.10000
Low Limit			-.10000

Approved: July 31, 2012



Sample Name: CCB Acquired: 7/30/2012 16:03:26 Type: Blank
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30311.	15984.
Stddev	121.	556.
%RSD	.39813	3.4776
#1	30175.	16584.
#2	30353.	15881.
#3	30406.	15487.

Approved: July 31, 2012



Sample Name: L1207085301 Acquired: 7/30/2012 16:06:43 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.00063	.19582	k .00193	k .05998	.03032	k .00001	39.950
Stddev	.00110	.04902	.00182	.00253	.00244	.00002	2.999
%RSD	173.45	25.034	94.383	4.2101	8.0447	233.32	7.5068

#1	.00053	.15644	.00001	.05722	.02752	.00003	36.521
#2	k -.00077	.18029	k .00363	k .06054	.03201	k .00002	41.246
#3	-.00166	.25073	.00214	.06218	.03142	-.00002	42.083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00021	k .00027	k .00041	k .00122	k .36328	.12854	1.1842
Stddev	.00012	.00027	.00032	.00220	.03068	.02550	.4271
%RSD	59.237	98.188	77.858	179.66	8.4459	19.839	36.071

#1	.00020	.00039	.00009	.00236	.33053	.14698	1.2565
#2	k .00009	k .00045	k .00073	k -.00131	k .36798	.09944	1.5705
#3	.00034	-.00003	.00042	.00263	.39135	.13921	.72548

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40502	.86906	4.2883	.01471	12.313	k .16381	.00170
Stddev	.71895	2.1688	.3211	.00117	1.026	.00464	.00016
%RSD	177.51	249.56	7.4868	7.9575	8.3357	2.8318	9.1495

#1	-.20038	2.3935	3.9302	.01399	11.163	.15851	.00188
#2	.21577	-1.6138	4.3844	.01606	12.640	k .16583	.00167
#3	1.1997	1.8275	4.5503	.01408	13.135	.16710	.00157

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: L1207085301 Acquired: 7/30/2012 16:06:43 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	30.112	^ *****	k 215.24	k .00111	F 29.906	F 369.53	F -30058.
Stddev	2.286	----	38.14	.00140	4.113	.78	58.
%RSD	7.5930	----	17.718	126.30	13.752	.21180	.19259

#1	27.502	.00356	181.82	.00059	25.663	370.20	-30034.
#2	31.070	^ ----	k 256.78	k .00269	30.182	368.67	-30016.
#3	31.763	.00325	207.11	.00004	33.875	369.71	-30124.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit					9.0000	9.0000	9.0000
Low Limit					-0.0400	-0.0400	-0.0400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Ti1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00211	-0.00195	2.7091	k .00001	.14207	k -.00203	k -.00045
Stddev	.00154	.00043	.0562	.00006	.01136	.00357	.00177
%RSD	73.197	21.885	2.0751	467.97	7.9964	176.17	396.36

#1	.00387	-0.00162	2.6653	-0.0001	.12906	-0.00396	-0.00062
#2	k .00142	-0.00180	2.7725	k .00009	.14715	k .00210	k .00140
#3	.00102	-0.00243	2.6894	-0.0003	.15000	-0.00422	-0.00213

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	k .00099	.04258	k .60684
Stddev	.00013	.06567	.28330
%RSD	13.199	154.23	46.685

#1	.00111	.00472	.55239
#2	k .00085	.11841	k .35472
#3	.00101	.00461	.91341

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Approved: July 31, 2012



Sample Name: L1207085301 Acquired: 7/30/2012 16:06:43 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30600.	16306.
Stddev	30.	532.
%RSD	.09831	3.2626
#1	30633.	16918.
#2	30574.	16047.
#3	30594.	15952.

Approved: July 31, 2012



Sample Name: L1207085302 Acquired: 7/30/2012 16:09:48 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00100	.13529	.00236	.05654	.03025	-.00004	40.268
Stddev	.00083	.01762	.00202	.00074	.00248	.00003	3.119
%RSD	82.548	13.020	85.499	1.3014	8.1884	73.200	7.7449

#1	-.00168	.15003	.00107	.05570	.02746	-.00002	36.722
#2	-.00008	.14006	.00133	.05708	.03108	-.00002	41.501
#3	-.00124	.11578	.00468	.05683	.03220	-.00006	42.582

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00037	.00025	.00109	.34912	.14406	1.4806
Stddev	.00017	.00009	.00015	.00032	.02988	.00676	.3124
%RSD	69.387	25.285	59.013	29.494	8.5583	4.6933	21.098

#1	.00024	.00029	.00012	.00143	.31766	.14218	1.1704
#2	.00007	.00047	.00041	.00105	.35258	.13844	1.4764
#3	.00041	.00036	.00021	.00079	.37712	.15156	1.7951

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49396	.63484	4.2403	.00867	12.417	.16538	.00142
Stddev	.86949	1.3002	.4474	.00196	.920	.00660	.00017
%RSD	176.02	204.81	10.551	22.624	7.4084	3.9911	12.099

#1	1.2365	1.8733	3.7291	.01093	11.387	.15779	.00142
#2	-.46251	.75065	4.4318	.00748	12.707	.16974	.00124
#3	.70787	-.71940	4.5601	.00759	13.156	.16862	.00159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: L1207085302 Acquired: 7/30/2012 16:09:48 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	30.373	.00430	192.02	.00183	F 26.043	F 369.70	F -30104.
Stddev	2.206	.00064	36.20	.00070	4.544	1.29	29.
%RSD	7.2633	14.871	18.853	38.267	17.449	.34918	.09608

#1	27.875	.00356	223.65	.00219	21.548	368.23	-30116.
#2	31.190	.00470	152.54	.00228	25.946	370.25	-30071.
#3	32.054	.00463	199.88	.00102	30.635	370.63	-30126.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit					9.0000	9.0000	9.0000
Low Limit					-0.00400	-0.00400	-0.00400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00430	-0.0269	2.6597	-0.00006	.14287	.00164	.00105
Stddev	.00034	.00178	.0342	.00019	.01094	.00361	.00097
%RSD	7.9176	66.421	1.2873	323.44	7.6549	220.29	92.721

#1	.00442	-0.0424	2.6220	-0.0027	.13046	-0.0132	.00039
#2	.00457	-0.0308	2.6682	.00006	.14702	.00567	.00217
#3	.00392	-0.0074	2.6889	.00004	.15112	.00057	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00106	.00297	.03996
Stddev	.00011	.00005	.22341
%RSD	10.727	1.5803	559.16

#1	.00118	.00296	.20329
#2	.00104	.00293	-.21464
#3	.00095	.00302	.13122

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			


Approved: July 31, 2012



Sample Name: L1207085302 Acquired: 7/30/2012 16:09:48 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30785.	16512.
Stddev	52.	628.
%RSD	.16794	3.8041
#1	30815.	17236.
#2	30725.	16114.
#3	30814.	16185.

Approved: July 31, 2012



Sample Name: L1207085303 Acquired: 7/30/2012 16:12:54 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.18076	.00201	.05198	.03046	.00003	39.723
Stddev	.00020	.04813	.00059	.00264	.00288	.00005	3.087
%RSD	165.10	26.627	29.520	5.0701	9.4471	179.29	7.7717

#1	-.00002	.13360	.00193	.05488	.02728	.00000	36.292
#2	.00001	.22980	.00146	.05135	.03122	-.00001	40.602
#3	-.00035	.17887	.00264	.04972	.03289	.00008	42.276

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00048	.00002	.00183	.41296	.14123	.98497
Stddev	.00006	.00014	.00024	.00007	.01089	.00247	.16390
%RSD	46.403	28.263	1203.6	3.5757	2.6361	1.7459	16.640

#1	.00014	.00042	.00022	.00190	.40039	.14026	1.1733
#2	.00019	.00040	.00008	.00179	.41922	.14404	.90689
#3	.00007	.00064	-.00024	.00179	.41926	.13940	.87470

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0763	.59018	4.4696	.00634	12.297	.17813	.00135
Stddev	.4485	1.2141	.3536	.00252	.960	.00790	.00032
%RSD	41.669	205.71	7.9105	39.695	7.8068	4.4325	23.932

#1	1.1453	.75132	4.0646	.00842	11.201	.16915	.00172
#2	.59736	1.7156	4.7164	.00354	12.703	.18125	.00115
#3	1.4864	-.69642	4.6280	.00707	12.987	.18399	.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: L1207085303 Acquired: 7/30/2012 16:12:54 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.583	.00422	214.68	-.00010	F 17.244	F 363.87	F -29598.
Stddev	2.253	.00069	13.06	.00171	10.736	2.98	50.
%RSD	7.6160	16.265	6.0830	1762.8	62.262	.81792	.16981

#1	27.055	.00453	202.04	.00058	8.9561	367.06	-29646.
#2	30.316	.00343	213.88	-.00204	13.403	361.17	-29545.
#3	31.378	.00470	228.13	.00118	29.373	363.37	-29602.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit					9.0000	9.0000	9.0000
Low Limit					-.00400	-.00400	-.00400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00250	.00075	2.7160	-.00028	.14145	.00839	.00252
Stddev	.00309	.00264	.0243	.00013	.01106	.00358	.00138
%RSD	123.38	350.86	.89491	46.682	7.8175	42.713	54.731

#1	-.00059	.00362	2.7441	-.00018	.12928	.01084	.00138
#2	.00558	.00021	2.7013	-.00042	.14419	.00428	.00213
#3	.00252	-.00158	2.7027	-.00023	.15088	.01005	.00405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00087	.00401	.11456
Stddev	.00036	.00004	.52036
%RSD	41.192	1.0255	454.24

#1	.00095	.00405	.08180
#2	.00048	.00397	-.38865
#3	.00118	.00402	.65052

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Approved: July 31, 2012



Sample Name: L1207085303 Acquired: 7/30/2012 16:12:54 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30919.	16525.
Stddev	96.	745.
%RSD	.31046	4.5111
#1	30821.	17379.
#2	31013.	16194.
#3	30924.	16003.

Approved: July 31, 2012



Sample Name: L1207085303MS Acquired: 7/30/2012 16:16:00 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21314	5.3394	.20642	1.1128	.55870	.02609	45.052
Stddev	.00047	.4540	.00194	.0061	.04762	.00028	3.611
%RSD	.22059	8.5028	.94041	.54656	8.5240	1.0556	8.0146

#1	.21277	4.8244	.20500	1.1065	.50429	.02581	40.935
#2	.21367	5.5125	.20864	1.1187	.57901	.02636	46.540
#3	.21299	5.6815	.20564	1.1131	.59280	.02612	47.681

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02594	.10412	.26008	.26040	2.4245	.65858	1.6846
Stddev	.00011	.00045	.00250	.00055	.2102	.00589	.3273
%RSD	.43834	.43310	.96047	.21135	8.6704	.89423	19.431

#1	.02607	.10400	.25822	.26069	2.1826	.65843	2.0393
#2	.02592	.10461	.26292	.26075	2.5286	.66454	1.3942
#3	.02584	.10374	.25910	.25977	2.5624	.65276	1.6201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2255	1.6068	30.879	.54137	17.615	.45113	.52436
Stddev	.4029	.2472	2.524	.05044	1.507	.01893	.00011
%RSD	32.872	15.384	8.1739	9.3171	8.5558	4.1960	.02013

#1	1.5832	1.8918	28.015	.48357	15.889	.42928	.52424
#2	1.3044	1.4512	31.842	.56406	18.281	.46275	.52439
#3	.78909	1.4774	32.779	.57648	18.674	.46134	.52445

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: L1207085303MS Acquired: 7/30/2012 16:16:00 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.647	.26491	214.66	.26411	F 15.699	F 382.18	F -30654.
Stddev	4.683	.00060	1.15	.00134	3.072	1.41	43.
%RSD	8.2672	.22662	.53525	.50708	19.567	.36936	.13913

#1	51.292	.26463	215.66	.26301	12.445	381.60	-30609.
#2	58.667	.26451	213.41	.26372	18.548	381.16	-30694.
#3	59.980	.26560	214.90	.26560	16.105	383.79	-30660.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit					9.0000	9.0000	9.0000
Low Limit					-.00400	-.00400	-.00400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.63286	.21023	5.5496	.54611	.66267	.52389	.26707
Stddev	.00230	.00224	.0270	.00080	.05607	.04500	.00064
%RSD	.36389	1.0641	.48619	.14694	8.4609	8.5889	.23884

#1	.63267	.20823	5.5379	.54526	.59879	.47308	.26720
#2	.63525	.20982	5.5304	.54686	.68549	.53991	.26763
#3	.63066	.21264	5.5804	.54621	.70373	.55868	.26638

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.51601	.53065	.63073
Stddev	.00336	.00050	.61323
%RSD	.65152	.09393	97.225

#1	.51397	.53039	.97013
#2	.51989	.53122	.99923
#3	.51417	.53033	-.07717

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

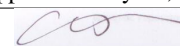
Approved: July 31, 2012



Sample Name: L1207085303MS Acquired: 7/30/2012 16:16:00 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30699.	16674.
Stddev	47.	666.
%RSD	.15319	3.9947
#1	30668.	17441.
#2	30676.	16333.
#3	30753.	16247.

Approved: July 31, 2012



Sample Name: L1207085303MSD Acquired: 7/30/2012 16:19:03 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21429	5.4229	.20830	1.1233	.56318	.02614	45.116
Stddev	.00099	.4290	.00003	.0097	.04716	.00009	3.703
%RSD	.46240	7.9118	.01406	.86582	8.3736	.34677	8.2070

#1	.21543	4.9381	.20826	1.1229	.50964	.02611	40.973
#2	.21381	5.5766	.20830	1.1332	.58138	.02624	46.273
#3	.21364	5.7539	.20832	1.1137	.59853	.02607	48.101

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02607	.10407	.26015	.26109	2.4376	.65871	1.8441
Stddev	.00008	.00023	.00191	.00088	.1953	.00189	1.0658
%RSD	.30848	.22071	.73550	.33700	8.0130	.28728	57.794

#1	.02614	.10429	.26060	.26194	2.2145	.66020	1.0619
#2	.02608	.10383	.26180	.26019	2.5208	.65658	3.0580
#3	.02598	.10410	.25805	.26115	2.5776	.65936	1.4124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45187	1.3373	31.582	.54719	17.567	.45344	.52498
Stddev	.17554	.4384	2.659	.04820	1.496	.01891	.00064
%RSD	38.847	32.785	8.4185	8.8088	8.5144	4.1711	.12281

#1	.25867	1.8430	28.612	.49300	15.866	.43168	.52466
#2	.49535	1.1038	32.393	.56327	18.159	.46275	.52572
#3	.60157	1.0650	33.740	.58529	18.676	.46590	.52456

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: L1207085303MSD Acquired: 7/30/2012 16:19:03 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.769	.26370	206.26	.26405	F 19.144	F 370.80	F -30040.
Stddev	4.700	.00055	5.17	.00125	15.955	1.29	52.
%RSD	8.2790	.20812	2.5047	.47420	83.342	.34661	.17239

#1	51.447	.26389	203.44	.26379	7.6139	370.65	-30051.
#2	58.510	.26413	203.11	.26295	12.465	372.15	-30085.
#3	60.350	.26308	212.22	.26541	37.353	369.59	-29983.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit					9.0000	9.0000	9.0000
Low Limit					-.00400	-.00400	-.00400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.63207	.20855	5.4633	.54433	.67005	.53093	.26425
Stddev	.00310	.00270	.0214	.00038	.05658	.04771	.00184
%RSD	.49072	1.2940	.39169	.06925	8.4448	8.9865	.69581

#1	.62871	.20699	5.4639	.54390	.60691	.47856	.26454
#2	.63482	.21167	5.4845	.54463	.68706	.54229	.26592
#3	.63269	.20700	5.4417	.54445	.71617	.57193	.26228

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.51809	.52967	F -.06006
Stddev	.00165	.00078	.56824
%RSD	.31833	.14766	946.14

#1	.51893	.53027	-.71598
#2	.51915	.52996	.25289
#3	.51619	.52879	.28292

Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			45.000
Low Limit			-.00400

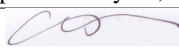
Approved: July 31, 2012



Sample Name: L1207085303MSD Acquired: 7/30/2012 16:19:03 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30709.	16574.
Stddev	44.	764.
%RSD	.14474	4.6083
#1	30745.	17442.
#2	30724.	16277.
#3	30660.	16004.

Approved: July 31, 2012



Sample Name: L1207079211SDL Acquired: 7/30/2012 16:22:08 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: 25 Custom ID2: Custom ID3:
 Comment: WG404921-02

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00088	-.00251	-.00032	.00434	.00414	.00000	7.2610
Stddev	.00122	.02367	.00113	.00029	.00067	.0000	.5635
%RSD	138.20	942.98	353.24	6.5751	16.055	1077.3	7.7599

#1	-.00201	-.02984	.00063	.00443	.00341	.00004	6.6153
#2	-.00107	.01150	-.00157	.00456	.00470	-.00003	7.5149
#3	.00042	.01081	-.00002	.00402	.00433	-.00002	7.6529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.00030	-.00060	.00034	.42194	.03890	.63174
Stddev	.00009	.00010	.00051	.00022	.03525	.00355	.11271
%RSD	127.49	35.451	85.587	63.059	8.3532	9.1313	17.842

#1	-.00016	.00040	-.00035	.00059	.38200	.03480	.76159
#2	.00002	.00019	-.00026	.00021	.44869	.04112	.55917
#3	-.00008	.00030	-.00119	.00022	.43512	.04077	.57446

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.80067	.07052	.46491	.00818	.51040	.01018	.00039
Stddev	.70323	1.6454	.07612	.00219	.04076	.00041	.00011
%RSD	87.830	2333.2	16.374	26.770	7.9849	4.0419	27.579

#1	.33804	-1.8239	.51208	.00791	.47247	.00973	.00050
#2	.45406	1.1435	.37709	.00614	.50524	.01029	.00037
#3	1.6099	.89188	.50556	.01049	.55349	.01053	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: L1207079211SDL Acquired: 7/30/2012 16:22:08 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: 25 Custom ID2: Custom ID3:
 Comment: WG404921-02

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1647	.00032	61.128	.00123	F 34.504	F 9.2731	F -125.86
Stddev	.0589	.00068	12.952	.00047	8.293	.0930	6.02
%RSD	5.0590	212.94	21.188	38.635	24.035	1.0035	4.7835

#1	1.1131	-.00046	46.830	.00089	26.382	9.3765	-131.49
#2	1.1522	.00064	64.481	.00177	34.172	9.1962	-126.56
#3	1.2289	.00078	72.074	.00103	42.958	9.2465	-119.52

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit					9.0000	9.0000	9.0000
Low Limit					-.00400	-.00400	-.00400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	-.00143	.91773	-.00033	.03248	-.00191	.00208
Stddev	.00365	.00080	.01787	.00005	.00252	.00098	.00147
%RSD	512.33	56.332	1.9475	14.048	7.7613	51.287	70.490

#1	-.00024	-.00195	.91274	-.00028	.02957	-.00122	.00120
#2	.00268	-.00183	.90288	-.00038	.03383	-.00302	.00128
#3	-.00458	-.00050	.93757	-.00034	.03403	-.00147	.00378

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00021	.00072	F -.49530
Stddev	.00046	.00007	.39486
%RSD	214.78	10.292	79.720

#1	.00074	.00079	-.54393
#2	-.00012	.00064	-.07839
#3	.00002	.00075	-.86359

Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			45.000
Low Limit			-.00400

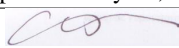
Approved: July 31, 2012



Sample Name: L1207079211SDL Acquired: 7/30/2012 16:22:08 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: 25 Custom ID2: Custom ID3:
Comment: WG404921-02

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	31316.	16465.
Stddev	17.	740.
%RSD	.05304	4.4950
#1	31299.	17315.
#2	31332.	16122.
#3	31317.	15959.

Approved: July 31, 2012



Sample Name: L1207079211SDL Acquired: 7/30/2012 16:25:15 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: 125 Custom ID2: Custom ID3:
 Comment: WG404921-02

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	-.04248	-.00107	.00015	.00154	-.00001	1.3785
Stddev	.00078	.07841	.00045	.00078	.00030	.00005	.1172
%RSD	189.26	184.59	41.611	518.93	19.406	371.99	8.5036

#1	-.00068	-.13289	-.00149	-.00072	.00182	.00004	1.2500
#2	-.00102	-.00130	-.00060	.00038	.00157	-.00001	1.4059
#3	.00046	.00676	-.00112	.00079	.00122	-.00006	1.4796

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.00027	-.00060	-.00033	.07634	.01030	.66418
Stddev	.00016	.00015	.00063	.00022	.00942	.00231	.29135
%RSD	204.77	53.790	105.37	66.939	12.346	22.428	43.866

#1	-.00001	.00018	-.00124	-.00059	.06870	.00815	.34372
#2	-.00026	.00044	-.00060	-.00017	.07346	.01274	.91309
#3	.00004	.00020	.00003	-.00024	.08687	.01000	.73574

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17680	F -.64855	.08137	.00703	.08859	.00199	.00014
Stddev	.53853	.98898	.09095	.00072	.04282	.00016	.00023
%RSD	304.60	152.49	111.78	10.287	48.338	8.2721	169.24

#1	.48245	-1.3095	.02874	.00764	.07309	.00187	.00031
#2	.49296	.48842	.18638	.00723	.05567	.00193	-.00012
#3	-.44502	-1.1245	.02897	.00623	.13700	.00218	.00022

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000					
Low Limit		-.10000					

Approved: July 31, 2012



Sample Name: L1207079211SDL Acquired: 7/30/2012 16:25:15 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: 125 Custom ID2: Custom ID3:
 Comment: WG404921-02

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22496	.00064	21.738	-.00046	F 41.735	1.5570	F -5.9699
Stddev	.00694	.00052	11.907	.00186	5.265	.0483	1.7861
%RSD	3.0860	81.351	54.775	407.23	12.616	3.1000	29.918

#1	.22588	.00066	21.119	.00116	44.261	1.5133	-7.9803
#2	.23140	.00114	33.942	-.00249	45.261	1.5488	-4.5664
#3	.21761	.00011	10.152	-.00004	35.683	1.6088	-5.3629

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit					9.0000		9.0000
Low Limit					-.00400		-.00400

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	-.00021	.17755	-.00031	.00626	-.00132	.00183
Stddev	.00246	.00341	.00365	.00017	.00074	.00128	.00073
%RSD	227.01	1621.9	2.0532	52.919	11.864	97.265	40.049

#1	.00328	.00254	.18142	-.00048	.00542	-.00065	.00245
#2	.00154	-.00402	.17704	-.00032	.00683	-.00050	.00102
#3	-.00157	.00085	.17419	-.00015	.00654	-.00280	.00203

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00002	.00082	F -.03326
Stddev	.00019	.00012	.16480
%RSD	1144.9	14.376	495.57

#1	-.00014	.00096	.14025
#2	-.00012	.00076	-.05231
#3	.00021	.00075	-.18770

Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			45.000
Low Limit			-.00400

Approved: July 31, 2012



Sample Name: L1207079211SDL Acquired: 7/30/2012 16:25:15 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: 125 Custom ID2: Custom ID3:
Comment: WG404921-02

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	31062.	16114.
Stddev	61.	602.
%RSD	.19580	3.7374
#1	31084.	16808.
#2	31109.	15728.
#3	30994.	15806.

Approved: July 31, 2012



Sample Name: CCV Acquired: 7/30/2012 16:28:26 Type: QC
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41469	10.252	.40468	.52100	1.0480	.05012	10.495
Stddev	.00303	.784	.00181	.00418	.0804	.00005	.739
%RSD	.73062	7.6487	.44782	.80258	7.6680	.10682	7.0460

#1	.41593	9.3519	.40616	.52231	.95684	.05016	9.6588
#2	.41124	10.616	.40266	.51632	1.0783	.05014	10.764
#3	.41691	10.788	.40523	.52437	1.1087	.05006	11.062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05087	.20498	.50803	.51141	4.0958	1.0272	F .83161
Stddev	.00014	.00027	.00017	.00017	.3324	.0082	.60486
%RSD	.27183	.13259	.03266	.03407	8.1157	.79862	72.734

#1	.05078	.20512	.50807	.51161	3.7210	1.0201	1.5146
#2	.05080	.20467	.50818	.51128	4.2114	1.0253	.61662
#3	.05103	.20516	.50785	.51135	4.3549	1.0362	.36360

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							1.0000
Range							-10.000%

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .18811	F .80368	53.769	1.0444	10.342	.54975	1.0293
Stddev	.52395	1.0055	3.854	.0870	.877	.01979	.0008
%RSD	278.54	125.11	7.1684	8.3307	8.4793	3.6006	.07847

#1	-.24341	.28040	49.433	.94540	9.3529	.52758	1.0295
#2	.03662	.16777	55.069	1.0793	10.648	.55602	1.0299
#3	.77112	1.9629	56.806	1.1086	11.025	.56565	1.0284

Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	1.0000	1.0000					
Range	-10.000%	-10.000%					

Approved: July 31, 2012



Sample Name: CCV Acquired: 7/30/2012 16:28:26 Type: QC
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.470	.51403	F 18.076	.51816	F 23.188	10.347	F 31.101
Stddev	4.008	.00115	5.738	.00164	1.714	.064	3.164
%RSD	7.4952	.22329	31.744	.31577	7.3934	.61623	10.172

#1	48.925	.51532	18.540	.51778	24.121	10.282	27.451
#2	54.992	.51311	12.120	.51674	21.209	10.409	32.797
#3	56.494	.51367	23.568	.51995	24.232	10.351	33.054

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail
Value			10.000		10.000		10.000
Range			10.000%		10.000%		10.000%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Ti1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2519	.41408	5.1798	1.0404	1.0542	1.0521	.52180
Stddev	.0028	.00338	.0066	.0011	.0776	.0879	.00166
%RSD	.22685	.81659	.12726	.10446	7.3571	8.3585	.31721

#1	1.2538	.41081	5.1740	1.0404	.96653	.95272	.52320
#2	1.2532	.41387	5.1870	1.0414	1.0824	1.0838	.51998
#3	1.2486	.41756	5.1783	1.0393	1.1138	1.1198	.52223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	1.0179	1.0279	F .68811
Stddev	.0037	.0002	.66526
%RSD	.35829	.02320	96.679

#1	1.0197	1.0281	.93274
#2	1.0137	1.0279	-.06483
#3	1.0203	1.0277	1.1964

Check ?	Chk Pass	Chk Pass	Chk Fail
Value			1.0000
Range			-10.000%

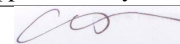
Approved: July 31, 2012



Sample Name: CCV Acquired: 7/30/2012 16:28:26 Type: QC
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30404.	16139.
Stddev	96.	559.
%RSD	.31545	3.4656
#1	30294.	16775.
#2	30472.	15918.
#3	30446.	15724.

Approved: July 31, 2012



Sample Name: CCB Acquired: 7/30/2012 16:31:28 Type: Blank
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00089	-.01956	.00043	.00167	.00129	.00000	-.02339
Stddev	.00069	.01475	.00150	.00179	.00056	.0000	.01950
%RSD	77.717	75.425	345.93	107.35	43.243	124.23	83.397

#1	-.00048	-.02960	-.00128	.00334	.00192	-.00001	-.00186
#2	-.00169	-.00262	.00151	-.00023	.00107	-.00001	-.03989
#3	-.00050	-.02646	.00107	.00191	.00087	.00000	-.02840

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00005	-.00069	.00054	-.00519	.00183	F .46308
Stddev	.00005	.00035	.00056	.00054	.00760	.00287	.49651
%RSD	207.46	658.03	80.238	99.108	146.58	156.62	107.22

#1	-.00003	-.00032	-.00031	.00071	-.00378	.00222	.35906
#2	.00003	.00011	-.00044	.00098	-.01339	.00449	1.0034
#3	.00008	.00037	-.00133	-.00006	.00162	-.00121	.02682

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit							.10000
Low Limit							-.10000

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.8165	F 1.4823	.17442	.00399	-.00283	.00017	.00108
Stddev	.4686	.8055	.04574	.00881	.03103	.00011	.00035
%RSD	25.797	54.341	26.222	221.15	1095.2	66.661	32.401

#1	1.3945	2.4001	.22401	.01383	-.00866	.00028	.00076
#2	1.7342	.89249	.13388	-.00317	-.03054	.00006	.00102
#3	2.3208	1.1544	.16539	.00130	.03070	.00016	.00145

Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.10000					
Low Limit	-.10000	-.10000					

Approved: July 31, 2012



Sample Name: CCB Acquired: 7/30/2012 16:31:28 Type: Blank
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08509	.00095	F 12.754	.00095	F 25.395	F -.27879	F 18.258
Stddev	.06307	.00043	21.315	.00228	8.320	.05081	1.261
%RSD	74.122	45.170	167.13	238.82	32.764	18.224	6.9082

#1	.15076	.00051	19.974	.00281	16.026	-.24994	18.993
#2	.07951	.00138	-11.234	.00164	28.239	-.33745	16.801
#3	.02499	.00097	29.521	-.00159	31.920	-.24897	18.979

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail
High Limit			.01000		.01000	.01000	.01000
Low Limit			-.01000		-.01000	-.01000	-.01000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00362	-.00022	.00341	.00036	.00064	-.00261	.00199
Stddev	.00153	.00180	.00101	.00023	.00089	.00249	.00036
%RSD	42.296	806.71	29.516	64.427	140.35	95.595	17.861

#1	.00498	.00091	.00287	.00060	.00164	-.00082	.00179
#2	.00196	-.00230	.00279	.00014	.00033	-.00154	.00240
#3	.00391	.00072	.00457	.00035	-.00007	-.00545	.00178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00049	-.00005	F -.79796
Stddev	.00021	.00010	.49978
%RSD	42.435	216.15	62.632

#1	.00047	-.00005	-.52680
#2	.00070	-.00015	-1.3747
#3	.00029	.00005	-.49238

Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			.10000
Low Limit			-.10000

Approved: July 31, 2012



Sample Name: CCB Acquired: 7/30/2012 16:31:28 Type: Blank
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30654.	16225.
Stddev	52.	692.
%RSD	.16965	4.2669
#1	30638.	17015.
#2	30612.	15934.
#3	30712.	15726.

Approved: July 31, 2012



Sample Name: LLCCV Acquired: 7/30/2012 16:34:43 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3082	As1890	B_2496	Ba4554	Be3131	Ca4226
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00724	.22437	.00847	.00971	.02155	.00097	.18280
Stddev	.00105	.07410	.00048	.00238	.00269	.00002	.03398
%RSD	14.470	33.025	5.6716	24.516	12.480	2.2940	18.588

#1	.00800	.14684	.00794	.00843	.01846	.00098	.16083
#2	.00767	.29448	.00888	.01246	.02284	.00095	.16564
#3	.00604	.23178	.00861	.00825	.02334	.00099	.22194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd2288	Co2286	Cr2677	Cu2247	Fe2611	Hf2322	Hf2641
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00102	.00452	.01019	.01126	.07056	.02392	.27907
Stddev	.00004	.00019	.00026	.00014	.00713	.00315	1.3308
%RSD	3.7265	4.2009	2.5196	1.2457	10.099	13.159	476.87

#1	.00103	.00430	.00993	.01117	.06234	.02064	.45660
#2	.00097	.00462	.01018	.01142	.07490	.02692	1.5122
#3	.00104	.00463	.01045	.01119	.07445	.02421	-1.1316


Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Hf2773	Hf3399	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1655	1.2081	1.1957	.02483	.18823	.01399	.02095
Stddev	.5031	1.2380	.1581	.00020	.02667	.00079	.00045
%RSD	43.169	102.48	13.221	.81111	14.168	5.6308	2.1643

#1	1.3351	2.6238	1.0786	.02477	.17773	.01309	.02136
#2	1.5619	.67252	1.1329	.02468	.16840	.01434	.02102
#3	.59948	.32804	1.3755	.02506	.21854	.01454	.02046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Approved: July 31, 2012



Sample Name: LLCCV Acquired: 7/30/2012 16:34:43 Type: Unk
 Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
 User: KHR Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Na5895	Ni2316	P_2149	Pb2203	Rb7800	S_1807	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1395	.01167	F -1.2764	.01093	F 27.437	.02922	8.9957
Stddev	.1094	.00040	12.642	.00135	19.063	.09207	2.1397
%RSD	9.5974	3.4282	990.45	12.359	69.481	315.05	23.786

#1	1.0145	.01207	12.169	.01215	6.4923	.02820	11.458
#2	1.1865	.01167	-3.0767	.01117	32.043	.12181	7.5922
#3	1.2175	.01127	-12.921	.00948	43.774	-.06233	7.9365

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			900.00		9.0000		
Low Limit			-.00400		-.00400		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3372	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02564	.00650	.10762	.02125	.02156	.02097	.01155
Stddev	.00246	.00223	.00132	.00004	.00206	.00046	.00243
%RSD	9.5968	34.276	1.2262	.19269	9.5552	2.1778	21.044

#1	.02421	.00893	.10615	.02128	.01931	.02126	.01424
#2	.02422	.00604	.10803	.02121	.02203	.02120	.01087
#3	.02848	.00455	.10869	.02127	.02335	.02044	.00953

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.02017	.02227	F -.57270
Stddev	.00048	.00008	.35492
%RSD	2.4018	.35987	61.972

#1	.01962	.02227	-.95373
#2	.02050	.02234	-.25150
#3	.02040	.02218	-.51287

Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			45.000
Low Limit			-.00400


Approved: July 31, 2012



Sample Name: LLCCV Acquired: 7/30/2012 16:34:43 Type: Unk
Method: ICP-THERMO2_6010_200.7(v2005) Mode: CONC Corr. Factor: 1.000000
User: KHR Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774
Units	Cts/S	Cts/S
Avg	30679.	16242.
Stddev	88.	708.
%RSD	.28565	4.3618
#1	30600.	17060.
#2	30773.	15822.
#3	30663.	15844.

Approved: July 31, 2012



2.2.2 Metals ICP-MS Data

2.2.2.1 Summary Data



Login Number: L12070658
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: WG404557 - Due to continuing calibration verification failure for manganese on 26-July-2012 at 14:51, all client samples were reanalyzed on a later calibration which was compliant for manganese.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG404557 - All acceptance criteria were met.

WG404831 - All acceptance criteria were met.

WG404837 - All acceptance criteria were met.

Matrix Spikes: WG404837 - Sample 02 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 04(MSD) yielded noncompliant recoveries for six analytes.

SAMPLES

Samples: WG404557 - Due to high levels of nontarget analytes, client samples 23 through 30 and 33 through 37 were analyzed at dilutions for all analytes.

WG404831 - Due to high levels of nontarget analytes, all client samples were analyzed at dilutions for all analytes.

WG404837 - Due to high levels of nontarget analytes, all client samples were analyzed at dilutions for all analytes.

Narrative ID: 50655

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".

Certificate of Analysis

Sample #: L12070658-01	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-3-1	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:13
Collect Date: 07/15/2012 10:15	Dilution: 5	File ID: NI.072912.161301
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0902		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.00793	J	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0222		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0110		0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-02	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-3-2	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:16
Collect Date: 07/15/2012 10:38	Dilution: 5	File ID: NI.072912.161612
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.217		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8	0.0445		0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.179		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Vanadium, Total	7440-62-2	0.00349	J	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-3-2MS	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:19
Collect Date: 07/15/2012 12:20	Dilution: 5	File ID: NI.072912.161920
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0778		0.00500	0.00250
Barium, Total	7440-39-3	0.294		0.0150	0.00750
Cadmium, Total	7440-43-9	0.0831		0.00300	0.00150
Chromium, Total	7440-47-3	0.0754		0.0100	0.00500
Copper, Total	7440-50-8	0.0968		0.0100	0.00500
Lead, Total	7439-92-1	0.0773		0.00500	0.00250
Manganese, Total	7439-96-5	0.255		0.0100	0.00500
Nickel, Total	7440-02-0	0.0784		0.0200	0.0100
Selenium, Total	7782-49-2	0.0884		0.00500	0.00250
Thallium, Total	7440-28-0	0.0763		0.00100	0.000500
Vanadium, Total	7440-62-2	0.0748		0.00500	0.00250
Zinc, Total	7440-66-6	0.113	J	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12070658-04	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-3-2MSD	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:22
Collect Date: 07/15/2012 12:10	Dilution: 5	File ID: NI.072912.162230
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0829		0.00500	0.00250
Barium, Total	7440-39-3	0.294		0.0150	0.00750
Cadmium, Total	7440-43-9	0.0863		0.00300	0.00150
Chromium, Total	7440-47-3	0.0766		0.0100	0.00500
Copper, Total	7440-50-8	0.0956		0.0100	0.00500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Lead, Total	7439-92-1	0.0792		0.00500	0.00250
Manganese, Total	7439-96-5	0.252		0.0100	0.00500
Nickel, Total	7440-02-0	0.0812		0.0200	0.0100
Selenium, Total	7782-49-2	0.0923		0.00500	0.00250
Thallium, Total	7440-28-0	0.0777		0.00100	0.000500
Vanadium, Total	7440-62-2	0.0769		0.00500	0.00250
Zinc, Total	7440-66-6	0.118	J	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12070658-06	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELD BLANK 15JULY2012	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:25
Collect Date: 07/15/2012 10:50	Dilution: 5	File ID: NI.072912.162539
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3		ND	0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5		ND	0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-07	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-3-1-D	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:41
Collect Date: 07/15/2012 10:30	Dilution: 5	File ID: NI.072912.164131
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Barium, Total	7440-39-3	0.0990		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.00901	J	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0236		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0114		0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-08	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-58	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:44
Collect Date: 07/15/2012 14:10	Dilution: 5	File ID: NI.072912.164442
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.108		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0363		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12070658-09	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: WW-03	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:47
Collect Date: 07/15/2012 15:10	Dilution: 5	File ID: NI.072912.164751
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0619		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0110		0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5		ND	0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-10	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW06	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:51
Collect Date: 07/16/2012 09:25	Dilution: 5	File ID: NI.072912.165101
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0835		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0693		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2	0.00435	J	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-11	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELD BLANK 16JULY2012	Prep Method: 3015	Prep Date: 07/23/2012 13:44
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404837	Analyst: JYH	Run Date: 07/29/2012 16:54
Collect Date: 07/16/2012 09:20	Dilution: 5	File ID: NI.072912.165411
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3		ND	0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5		ND	0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-12	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-3	Prep Method: 3015	Prep Date: 07/24/2012 12:43
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404831	Analyst: JYH	Run Date: 07/29/2012 09:44
Collect Date: 07/15/2012 13:25	Dilution: 5	File ID: NI.072912.094407
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.121		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0158		0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1	0.00296	J	0.00500	0.00250

Lab Report #: L12070658

Lab Project #: 3083.001

Project Name: Longhorn AAP

Lab Contact: Kathy Albertson

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.336		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00877		0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-14

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: 35B WW05

Prep Method: 3015

Prep Date: 07/24/2012 12:43

Matrix: Water

Analytical Method: 6020

Cal Date: 07/29/2012 08:49

Workgroup #: WG404831

Analyst: JYH

Run Date: 07/29/2012 10:37

Collect Date: 07/16/2012 10:45

Dilution: 5

File ID: NI.072912.103756

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.106		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.00708	J	0.0100	0.00500
Copper, Total	7440-50-8	0.00524	J	0.0100	0.00500
Lead, Total	7439-92-1	0.00379	J	0.00500	0.00250
Manganese, Total	7439-96-5	0.194		0.0100	0.00500
Nickel, Total	7440-02-0	0.0100	J	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0102		0.00500	0.00250
Zinc, Total	7440-66-6	0.195		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-15

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: MW1-1

Prep Method: 3015

Prep Date: 07/24/2012 12:43

Matrix: Water

Analytical Method: 6020

Cal Date: 07/29/2012 08:49

Workgroup #: WG404831

Analyst: JYH

Run Date: 07/29/2012 10:41

Collect Date: 07/16/2012 12:00

Dilution: 5

File ID: NI.072912.104105

Sample Tag: DL01

Units: mg/L

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0843		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0275		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2	0.0305		0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00678		0.00500	0.00250
Zinc, Total	7440-66-6	0.276		0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-16

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: MW1-2

Prep Method: 3015

Prep Date: 07/24/2012 12:43

Matrix: Water

Analytical Method: 6020

Cal Date: 07/29/2012 08:49

Workgroup #: WG404831

Analyst: JYH

Run Date: 07/29/2012 10:44

Collect Date: 07/16/2012 13:20

Dilution: 5

File ID: NI.072912.104416

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0554		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0649		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2	0.0258		0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12070658-17	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW1-3	Prep Method: 3015	Prep Date: 07/24/2012 12:43
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404831	Analyst: JYH	Run Date: 07/29/2012 10:47
Collect Date: 07/16/2012 14:00	Dilution: 5	File ID: NI.072912.104726
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.118		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0189		0.0100	0.00500
Copper, Total	7440-50-8	0.0103		0.0100	0.00500
Lead, Total	7439-92-1	0.00653		0.00500	0.00250
Manganese, Total	7439-96-5	0.183		0.0100	0.00500
Nickel, Total	7440-02-0	0.0159	J	0.0200	0.0100
Selenium, Total	7782-49-2	0.0214		0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0226		0.00500	0.00250
Zinc, Total	7440-66-6	0.336		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-18	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW08	Prep Method: 3015	Prep Date: 07/24/2012 12:43
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404831	Analyst: JYH	Run Date: 07/29/2012 10:50
Collect Date: 07/16/2012 15:00	Dilution: 5	File ID: NI.072912.105037
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0630		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0502		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2	0.0373		0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500

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Analyte	CAS #	Result	Qual	RL	MDL
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-19	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW09	Prep Method: 3015	Prep Date: 07/24/2012 12:43
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404831	Analyst: JYH	Run Date: 07/29/2012 10:53
Collect Date: 07/16/2012 15:50	Dilution: 5	File ID: NI.072912.105346
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0846		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.124		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2	0.00464	J	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-20	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-1	Prep Method: 3015	Prep Date: 07/24/2012 12:43
Matrix: Water	Analytical Method: 6020	Cal Date: 07/29/2012 08:49
Workgroup #: WG404831	Analyst: JYH	Run Date: 07/29/2012 09:34
Collect Date: 07/17/2012 08:55	Dilution: 5	File ID: NI.072912.093442
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0645		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500

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Analyte	CAS #	Result	Qual	RL	MDL
Lead, Total	7439-92-1		ND	0.00500	0.00250
Manganese, Total	7439-96-5	0.0807		0.0100	0.00500
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00424	J	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-22	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELD BLANK 17JULY2012	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:24
Collect Date: 07/17/2012 08:35	Dilution: 1	File ID: NI.072712.112425
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5		ND	0.00200	0.00100
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-22	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELD BLANK 17JULY2012	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:29
Collect Date: 07/17/2012 08:35	Dilution: 1	File ID: NI.072612.142911
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3		ND	0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3		ND	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2		ND	0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2		ND	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125

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ND	Not detected at or above the reporting limit (RL).
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Sample #: L12070658-23	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-2	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:32
Collect Date: 07/17/2012 09:45	Dilution: 5	File ID: NI.072612.143222
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.221		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0101		0.0100	0.00500
Copper, Total	7440-50-8	0.0108		0.0100	0.00500
Lead, Total	7439-92-1	0.00747		0.00500	0.00250
Nickel, Total	7440-02-0	0.0174	J	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0170		0.00500	0.00250
Zinc, Total	7440-66-6	0.383		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-23	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-2	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:27
Collect Date: 07/17/2012 09:45	Dilution: 10	File ID: NI.072712.112734
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.0634		0.0200	0.0100

Sample #: L12070658-24	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-2D	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:35
Collect Date: 07/17/2012 10:00	Dilution: 5	File ID: NI.072612.143531
Sample Tag: DL01	Units: mg/L	

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Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.209		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0141		0.0100	0.00500
Copper, Total	7440-50-8	0.0124		0.0100	0.00500
Lead, Total	7439-92-1	0.00791		0.00500	0.00250
Nickel, Total	7440-02-0	0.0204		0.0200	0.0100
Selenium, Total	7782-49-2	0.00307	J	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0212		0.00500	0.00250
Zinc, Total	7440-66-6	0.478		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-24	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-2D	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:30
Collect Date: 07/17/2012 10:00	Dilution: 10	File ID: NI.072712.113043
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.0710		0.0200	0.0100

Sample #: L12070658-25	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-3	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:38
Collect Date: 07/17/2012 10:55	Dilution: 5	File ID: NI.072612.143841
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0948		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.00669	J	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250

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Analyte	CAS #	Result	Qual	RL	MDL
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0107		0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-25	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-3	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:33
Collect Date: 07/17/2012 10:55	Dilution: 10	File ID: NI.072712.113352
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.0329		0.0200	0.0100

Sample #: L12070658-26	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW01	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:41
Collect Date: 07/17/2012 12:40	Dilution: 5	File ID: NI.072612.144152
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.224		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0205		0.0100	0.00500
Copper, Total	7440-50-8	0.0172		0.0100	0.00500
Lead, Total	7439-92-1	0.0105		0.00500	0.00250
Nickel, Total	7440-02-0	0.0188	J	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0300		0.00500	0.00250
Zinc, Total	7440-66-6	0.142		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

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Sample #: L12070658-26	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW01	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:37
Collect Date: 07/17/2012 12:40	Dilution: 10	File ID: NI.072712.113701
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.0837		0.0200	0.0100

Sample #: L12070658-27	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW04	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:45
Collect Date: 07/17/2012 13:45	Dilution: 5	File ID: NI.072612.144502
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0834		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00651		0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-27	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW04	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:40
Collect Date: 07/17/2012 13:45	Dilution: 10	File ID: NI.072712.114010
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.0112	J	0.0200	0.0100
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

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Sample #: L12070658-28	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B SW-1	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:48
Collect Date: 07/17/2012 14:30	Dilution: 5	File ID: NI.072612.144811
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0678		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8	0.00531	J	0.0100	0.00500
Lead, Total	7439-92-1	0.00474	J	0.00500	0.00250
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00430	J	0.00500	0.00250
Zinc, Total	7440-66-6	0.104	J	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-28	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B SW-1	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:43
Collect Date: 07/17/2012 14:30	Dilution: 10	File ID: NI.072712.114319
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.105		0.0200	0.0100

Sample #: L12070658-29	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B SW-2	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 14:57
Collect Date: 07/17/2012 14:45	Dilution: 5	File ID: NI.072612.145744
Sample Tag: DL01	Units: mg/L	

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Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.115		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8	0.00535	J	0.0100	0.00500
Lead, Total	7439-92-1	0.00276	J	0.00500	0.00250
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00499	J	0.00500	0.00250
Zinc, Total	7440-66-6	0.0958	J	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-29	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B SW-2	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:52
Collect Date: 07/17/2012 14:45	Dilution: 10	File ID: NI.072712.115254
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.756		0.0200	0.0100

Sample #: L12070658-30	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW-11	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 15:00
Collect Date: 07/17/2012 15:25	Dilution: 5	File ID: NI.072612.150054
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.183		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.00649	J	0.0100	0.00500
Copper, Total	7440-50-8	0.00594	J	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Nickel, Total	7440-02-0	0.0306		0.0200	0.0100
Selenium, Total	7782-49-2	0.00993		0.00500	0.00250

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Analyte	CAS #	Result	Qual	RL	MDL
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00593		0.00500	0.00250
Zinc, Total	7440-66-6	0.135		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-30	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW-11	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:56
Collect Date: 07/17/2012 15:25	Dilution: 10	File ID: NI.072712.115603
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.368		0.0200	0.0100

Sample #: L12070658-32	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELD BLANK 18JULY2012	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 15:04
Collect Date: 07/18/2012 08:30	Dilution: 1	File ID: NI.072612.150404
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3		ND	0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3		ND	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2		ND	0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2		ND	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12070658-32	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELD BLANK 18JULY2012	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 11:59
Collect Date: 07/18/2012 08:30	Dilution: 1	File ID: NI.072712.115914
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5		ND	0.00200	0.00100
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-33	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 15:07
Collect Date: 07/18/2012 08:45	Dilution: 5	File ID: NI.072612.150714
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.203		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.0105		0.0100	0.00500
Copper, Total	7440-50-8	0.00729	J	0.0100	0.00500
Lead, Total	7439-92-1	0.00405	J	0.00500	0.00250
Nickel, Total	7440-02-0	0.0153	J	0.0200	0.0100
Selenium, Total	7782-49-2	0.00302	J	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0125		0.00500	0.00250
Zinc, Total	7440-66-6	0.123	J	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-33	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 12:02
Collect Date: 07/18/2012 08:45	Dilution: 10	File ID: NI.072712.120224
Sample Tag: DL02	Units: mg/L	

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.910		0.0200	0.0100

Sample #: L12070658-34	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-2	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 15:10
Collect Date: 07/18/2012 10:45	Dilution: 5	File ID: NI.072612.151024
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.0657		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3	0.00522	J	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Nickel, Total	7440-02-0	0.0170	J	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00426	J	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-34	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-2	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 12:05
Collect Date: 07/18/2012 10:45	Dilution: 10	File ID: NI.072712.120534
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.168		0.0200	0.0100

Certificate of Analysis

Sample #: L12070658-35	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-3	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 15:13
Collect Date: 07/18/2012 13:00	Dilution: 5	File ID: NI.072612.151332
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.108		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.00312	J	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-35	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-3	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 12:08
Collect Date: 07/18/2012 13:00	Dilution: 10	File ID: NI.072712.120843
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.216		0.0200	0.0100

Sample #: L12070658-36	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW14	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/26/2012 11:58
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/26/2012 15:16
Collect Date: 07/18/2012 14:25	Dilution: 5	File ID: NI.072612.151643
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Barium, Total	7440-39-3	0.0555		0.0150	0.00750
Cadmium, Total	7440-43-9		ND	0.00300	0.00150
Chromium, Total	7440-47-3		ND	0.0100	0.00500
Copper, Total	7440-50-8		ND	0.0100	0.00500
Lead, Total	7439-92-1		ND	0.00500	0.00250
Nickel, Total	7440-02-0		ND	0.0200	0.0100
Selenium, Total	7782-49-2		ND	0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2		ND	0.00500	0.00250
Zinc, Total	7440-66-6		ND	0.125	0.0625
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-36

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: 35B WW14

Prep Method: 3015

Prep Date: 07/25/2012 06:34

Matrix: Water

Analytical Method: 6020

Cal Date: 07/27/2012 08:18

Workgroup #: WG404557

Analyst: JYH

Run Date: 07/27/2012 12:11

Collect Date: 07/18/2012 14:25

Dilution: 10

File ID: NI.072712.121152

Sample Tag: DL02

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.0636		0.0200	0.0100

Sample #: L12070658-37

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: 35B WW07

Prep Method: 3015

Prep Date: 07/25/2012 06:34

Matrix: Water

Analytical Method: 6020

Cal Date: 07/26/2012 11:58

Workgroup #: WG404557

Analyst: JYH

Run Date: 07/26/2012 15:19

Collect Date: 07/18/2012 15:40

Dilution: 5

File ID: NI.072612.151953

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00500	0.00250
Barium, Total	7440-39-3	0.299		0.0150	0.00750
Cadmium, Total	7440-43-9	0.00190	J	0.00300	0.00150
Chromium, Total	7440-47-3	0.0244		0.0100	0.00500
Copper, Total	7440-50-8	0.0183		0.0100	0.00500
Lead, Total	7439-92-1	0.00896		0.00500	0.00250
Nickel, Total	7440-02-0	0.0338		0.0200	0.0100
Selenium, Total	7782-49-2	0.00848		0.00500	0.00250
Thallium, Total	7440-28-0		ND	0.00100	0.000500
Vanadium, Total	7440-62-2	0.0296		0.00500	0.00250

Lab Report #: L12070658
Lab Project #: 3083.001
Project Name: Longhorn AAP
Lab Contact: Kathy Albertson

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Zinc, Total	7440-66-6	0.183		0.125	0.0625
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12070658-37	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35B WW07	Prep Method: 3015	Prep Date: 07/25/2012 06:34
Matrix: Water	Analytical Method: 6020	Cal Date: 07/27/2012 08:18
Workgroup #: WG404557	Analyst: JYH	Run Date: 07/27/2012 12:15
Collect Date: 07/18/2012 15:40	Dilution: 10	File ID: NI.072712.121501
Sample Tag: DL02	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.245		0.0200	0.0100

2.2.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer NexION 300X

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/L)

Example:

0.1

100

40

1

0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/kg)

Example:

0.1

200

0.5

1

40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (ug/kg)

Example:

40

80

50

50 ug/kg = 0.050 mg/kg

Perkin Elmer NexION ICP/MS

STANDARDS KEY

QC Std 1 - ICV

QC Std 2 - ICB

QC Std 3 - LLICV

QC Std 4 - ICSA

QC Std 5 - ICSAB

QC Std 6 - CCV

QC Std 7 - CCB

QC Std 8 - LLCCV

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.00005	0.05	0.1
Sb	10	0	0.00005	0.05	0.1
As	10	0	0.00005	0.05	0.1
Ba	10	0	0.00005	0.05	0.1
Be	10	0	0.00005	0.05	0.1
Ca	1000	0	0.005	5	10
Cd	10	0	0.0005	0.05	0.1
Cr	10	0	0.0005	0.05	0.1
Co	10	0	0.0005	0.05	0.1
Cu	10	0	0.0005	0.05	0.1
Fe	1000	0	0.005	5	10
Pb	10	0	0.00005	0.05	0.1
Mg	1000	0	0.005	5	10
Mn	10	0	0.00005	0.05	0.1
Ni	10	0	0.00005	0.05	0.1
K	1000	0	0.005	5	10
Se	10	0	0.00005	0.05	0.1
Ag	10	0	0.00005	0.05	0.1
Na	1000	0	0.005	5	10
Tl	10	0	0.00005	0.05	0.1
V	10	0	0.00005	0.05	0.1
U	1000	0	0.00005	0.05	0.1
Zn	10	0	0.00005	0.05	0.1

Workgroup: WG404363
Analyst: REK
Spike Analyst: REK
Run Date: 07/25/2012 06:34
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revision 13
Spike Solution: STD52132
Spike Witness: BRG
HNO3 Lot #: COA16174
MS WG# 401311 SYRINGE FICOA16241
Digestion Tubes Lot #: COA16262

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG404363-03	BLANK	1	40 mL	100 mL	202.89 g	202.886 g		
2	WG404363-04	LCS	1	40 mL	100 mL	206.365 g	206.354 g	.25 mL	
3	L12070658-22	SAMP	1	40 mL	100 mL	207.579 g	207.569 g		08/03/12
4	L12070658-23	SAMP	1	40 mL	100 mL	207.39 g	207.384 g		08/03/12
5	L12070658-24	SAMP	1	40 mL	100 mL	205.62 g	205.616 g		08/03/12
6	L12070658-25	SAMP	1	40 mL	100 mL	207.427 g	207.417 g		08/03/12
7	L12070658-26	SAMP	1	40 mL	100 mL	205.675 g	205.665 g		08/03/12
8	L12070658-27	SAMP	1	40 mL	100 mL	208.597 g	208.587 g		08/03/12
9	L12070658-28	SAMP	1	40 mL	100 mL	203.656 g	203.632 g		08/03/12
10	L12070658-29	SAMP	1	40 mL	100 mL	205.516 g	205.493 g		08/03/12
11	L12070658-30	SAMP	1	40 mL	100 mL	206.613 g	206.603 g		08/03/12
12	L12070658-32	SAMP	1	40 mL	100 mL	206.34 g	206.325 g		08/03/12
13	L12070658-33	SAMP	1	40 mL	100 mL	205.719 g	205.71 g		08/03/12
14	L12070658-34	SAMP	1	40 mL	100 mL	206.379 g	206.364 g		08/03/12
15	L12070658-35	SAMP	1	40 mL	100 mL	206.984 g	206.977 g		08/03/12
16	L12070658-36	SAMP	1	40 mL	100 mL	205.907 g	205.891 g		08/03/12
17	L12070658-37	SAMP	1	40 mL	100 mL	207.658 g	207.643 g		08/03/12
18	WG404363-01	REF	1	40 mL	100 mL	205.626 g	205.608 g		
19	L12070722-01	SAMP	1	40 mL	100 mL	205.626 g	205.608 g		07/31/12
20	WG404363-02	REF	2	40 mL	100 mL	205.646 g	205.64 g		
21	L12070728-01	SAMP	2	40 mL	100 mL	205.646 g	205.64 g		07/26/12
22	WG404363-05	MS	1	40 mL	100 mL	209.834 g	209.817 g	.25 mL	
23	WG404363-06	MSD	1	40 mL	100 mL	206.255 g	206.241 g	.25 mL	
24	WG404363-07	DUP	1	40 mL	100 mL	205.516 g	205.504 g		
25	WG404363-08	MS	1	40 mL	100 mL	206.623 g	206.608 g	.25 mL	

L12070658-23	FILTERED DIGESTATE
L12070658-24	FILTERED DIGESTATE
L12070658-26	FILTERED DIGESTATE
L12070658-28	FILTERED DIGESTATE
L12070658-29	FILTERED DIGESTATE
L12070658-30	FILTERED DIGESTATE
L12070658-33	FILTERED DIGESTATE
L12070658-37	FILTERED DIGESTATE

Analyst: *REK*

Reviewer: *Edw Potten*



Workgroup: WG404305
 Analyst: BRG
 Spike Analyst: BRG
 Run Date: 07/24/2012 12:43
 Method: 3015
 Balance: BAL016
 Instrument: MW-2

SOP: ME407 Revision 13
 Spike Solution: STD52132
 Spike Witness: REK
 HNO3 Lot #: COA16174
 Digestion Tubes Lot #: COA16255
 MS WG# 401311 SYRINGE FICOA16241

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG404305-02	BLANK	1	40 mL	100 mL	207.622 g	207.617 g		
2	WG404305-03	LCS	1	40 mL	100 mL	207.622 g	207.611 g	.25 mL	
3	L12070649-01	SAMP	1	40 mL	100 mL	206.531 g	206.509 g		07/31/12
4	L12070649-02	SAMP	1	40 mL	100 mL	207.073 g	207.056 g		07/31/12
5	L12070649-03	SAMP	1	40 mL	100 mL	208.025 g	208.017 g		07/31/12
6	L12070649-04	SAMP	1	40 mL	100 mL	207.856 g	207.842 g		07/31/12
7	L12070649-06	SAMP	1	40 mL	100 mL	206.343 g	206.325 g		07/31/12
8	L12070649-07	SAMP	1	40 mL	100 mL	206.715 g	206.712 g		07/31/12
9	L12070649-08	SAMP	1	40 mL	100 mL	205.498 g	205.485 g		07/31/12
10	L12070649-09	SAMP	1	40 mL	100 mL	206.703 g	206.702 g		07/31/12
11	L12070649-10	SAMP	1	40 mL	100 mL	208.248 g	208.238 g		07/31/12
12	L12070649-11	SAMP	1	40 mL	100 mL	206.809 g	206.798 g		07/31/12
13	L12070658-12	SAMP	1	40 mL	100 mL	206.415 g	206.4 g		08/03/12
14	L12070658-14	SAMP	1	40 mL	100 mL	207.191 g	207.181 g		08/03/12
15	L12070658-15	SAMP	1	40 mL	100 mL	207.911 g	207.901 g		08/03/12
16	L12070658-16	SAMP	1	40 mL	100 mL	206.77 g	206.76 g		08/03/12
17	L12070658-17	SAMP	1	40 mL	100 mL	209.634 g	209.62 g		08/03/12
18	L12070658-18	SAMP	1	40 mL	100 mL	206.343 g	206.334 g		08/03/12
19	L12070658-19	SAMP	1	40 mL	100 mL	207.302 g	207.301 g		08/03/12
20	WG404305-01	REF	1	40 mL	100 mL	206.487 g	206.484 g		
21	L12070658-20	SAMP	1	40 mL	100 mL	206.487 g	206.484 g		08/03/12
22	L12070666-08	SAMP	1	40 mL	100 mL	205.058 g	205.057 g		07/31/12
23	L12070666-18	SAMP	1	40 mL	100 mL	206.842 g	206.849 g		07/31/12
24	WG404305-04	MS	1	40 mL	100 mL	206.025 g	206.028 g	.25 mL	
25	WG404305-05	MSD	1	40 mL	100 mL	206.545 g	206.537 g	.25 mL	

L12070658-14	FILTERED DIGESTATE
L12070658-15	FILTERED DIGESTATE
L12070658-17	FILTERED DIGESTATE

Analyst: Brenda Gregory

Reviewer: [Signature]



Workgroup: WG404188
 Analyst: BRG
 Spike Analyst: BRG
 Run Date: 07/23/2012 13:44
 Method: 3015
 Balance: BAL016
 Instrument: MW-2

SOP: ME407 Revision 13
 Spike Solution: STD52132
 Spike Witness: ERP
 MS WG# 401311 SYRINGE FICOA16241
 HNO3 Lot #: COA16174
 Digestion Tubes Lot #: COA16262

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG404188-02	BLANK	1	40 mL	100 mL	206.758 g	206.752 g		
2	WG404188-03	LCS	1	40 mL	100 mL	208.007 g	207.993 g	.25 mL	
3	L12070643-01	SAMP	1	40 mL	100 mL	207.106 g	207.11 g		07/31/12
4	L12070643-02	SAMP	1	40 mL	100 mL	207.562 g	207.562 g		07/31/12
5	L12070643-03	SAMP	1	40 mL	100 mL	205.459 g	205.457 g		07/31/12
6	L12070643-04	SAMP	1	40 mL	100 mL	207.579 g	207.575 g		07/31/12
7	L12070643-05	SAMP	1	40 mL	100 mL	207.365 g	207.348 g		07/31/12
8	L12070643-06	SAMP	1	40 mL	100 mL	206.894 g	206.887 g		07/31/12
9	L12070643-07	SAMP	1	40 mL	100 mL	206.843 g	206.843 g		07/31/12
10	L12070643-08	SAMP	1	40 mL	100 mL	204.635 g	204.631 g		07/31/12
11	L12070643-09	SAMP	1	40 mL	100 mL	206.936 g	206.932 g		07/31/12
12	L12070643-10	SAMP	1	40 mL	100 mL	206.81 g	206.804 g		07/31/12
13	L12070643-11	SAMP	1	40 mL	100 mL	209.707 g	209.708 g		07/31/12
14	L12070643-12	SAMP	1	40 mL	100 mL	206.354 g	206.352 g		07/31/12
15	L12070658-01	SAMP	1	40 mL	100 mL	206.794 g	206.787 g		08/03/12
16	WG404188-01	REF	1	40 mL	100 mL	206.609 g	206.588 g		
17	L12070658-02	RS01	1	40 mL	100 mL	206.609 g	206.588 g		08/03/12
18	WG404188-04	MS	1	40 mL	100 mL	206.984 g	206.974 g	.25 mL	
19	L12070658-03	MS01	1	40 mL	100 mL	206.984 g	206.974 g	.25 mL	08/03/12
20	WG404188-05	MSD	1	40 mL	100 mL	207.348 g	207.338 g	.25 mL	
21	L12070658-04	SD01	1	40 mL	100 mL	207.348 g	207.338 g	.25 mL	08/03/12
22	L12070658-06	SAMP	1	40 mL	100 mL	206.926 g	206.927 g		08/03/12
23	L12070658-07	SAMP	1	40 mL	100 mL	206.144 g	206.134 g		08/03/12
24	L12070658-08	SAMP	1	40 mL	100 mL	206.998 g	206.985 g		08/03/12
25	L12070658-09	SAMP	1	40 mL	100 mL	208.113 g	208.106 g		08/03/12
26	L12070658-10	SAMP	1	40 mL	100 mL	209.11 g	209.098 g		08/03/12
27	L12070658-11	SAMP	1	40 mL	100 mL	207.447 g	207.441 g		08/03/12

Analyst: Brenda Gregory

Reviewer: [Signature]



Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072612C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42627

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17146
 CCV: STD52697 LLCCV: STD52696

404545,404557,404615

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.072612.114522	Blank	Blank		1		07/26/12 11:45
2	NI.072612.114833	WG404606-01	Calibration Point		1		07/26/12 11:48
3	NI.072612.115145	WG404606-02	Calibration Point		1		07/26/12 11:51
4	NI.072612.115455	WG404606-03	Calibration Point		1		07/26/12 11:54
5	NI.072612.115806	WG404606-04	Calibration Point		1		07/26/12 11:58
6	NI.072612.120120	WG404606-05	Initial Calibration Verification		1		07/26/12 12:01
7	NI.072612.120431	WG404606-06	Initial Calib Blank		1		07/26/12 12:04
8	NI.072612.120743	WG404606-07	Low Level Initial Calibration V		1		07/26/12 12:07
9	NI.072612.121053	WG404606-08	Interference Check		1		07/26/12 12:10
10	NI.072612.121403	WG404606-09	QC Std 5		1		07/26/12 12:14
11	NI.072612.122039	WG404606-10	Interference Check		1		07/26/12 12:20
12	NI.072612.122354	WG404606-11	CCV		1		07/26/12 12:23
13	NI.072612.122704	WG404606-12	CCB		1		07/26/12 12:27
14	NI.072612.123024	WG404463-02	Method/Prep Blank	.5/200	1		07/26/12 12:30
15	NI.072612.123333	WG404463-03	Laboratory Control S	.5/200	1		07/26/12 12:33
16	NI.072612.123643	WG404463-01	Reference Sample		5	L12070751-05	07/26/12 12:36
17	NI.072612.123958	WG404463-04	Matrix Spike	.522/200	5	L12070751-05	07/26/12 12:39
18	NI.072612.124307	WG404463-05	Matrix Spike Duplica	.53/200	5	L12070751-05	07/26/12 12:43
19	NI.072612.124615	L12070751-01	89-EW-2	.505/200	5		07/26/12 12:46
20	NI.072612.124924	L12070751-02	89-NW-2	.506/200	5		07/26/12 12:49
21	NI.072612.125233	WG404545-01	Post Digestion Spike		5	L12070751-02	07/26/12 12:52
22	NI.072612.125543	WG404545-02	Serial Dilution		25	L12070751-02	07/26/12 12:55
23	NI.072612.125855	WG404606-13	CCV		1		07/26/12 12:58
24	NI.072612.130205	WG404606-14	CCB		1		07/26/12 13:02
25	NI.072612.130517	L12070751-03	89-SW-2	.513/200	5		07/26/12 13:05
26	NI.072612.130827	L12070751-04	89-FD2	.5/200	5		07/26/12 13:08
27	NI.072612.131136	L12070751-06	89-FL2-6	.516/200	5		07/26/12 13:11
28	NI.072612.131445	L12070751-07	89-FL3-7	.53/200	5		07/26/12 13:14
29	NI.072612.131754	L12070751-08	89-FL4-8	.537/200	5		07/26/12 13:17
30	NI.072612.132449	L12070751-02	89-NW-2	.506/200	10		07/26/12 13:24
31	NI.072612.132757	WG404545-01	Post Digestion Spike		10	L12070751-02	07/26/12 13:27
32	NI.072612.133108	WG404545-02	Serial Dilution		50	L12070751-02	07/26/12 13:31
33	NI.072612.133420	WG404606-15	CCV		1		07/26/12 13:34
34	NI.072612.133730	WG404606-16	CCB		1		07/26/12 13:37

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072612C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42627

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17146
 CCV: STD52697 LLCCV: STD52696

404545,404557,404615

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.072612.134758	WG404363-03	Method/Prep Blank	40/100	1		07/26/12 13:47
36	NI.072612.135107	WG404363-04	Laboratory Control S	40/100	1		07/26/12 13:51
37	NI.072612.135417	L12060888-01	ORGANIC WASTE		10		07/26/12 13:54
38	NI.072612.135727	WG404363-02	Reference Sample		2	L12070728-01	07/26/12 13:57
39	NI.072612.140037	WG404363-07	Duplicate	40/100	2	L12070728-01	07/26/12 14:00
40	NI.072612.140347	WG404363-08	Matrix Spike	40/100	2	L12070728-01	07/26/12 14:03
41	NI.072612.140658	WG404557-01	Post Digestion Spike		2	L12070728-01	07/26/12 14:06
42	NI.072612.141008	WG404557-02	Serial Dilution		10	L12070728-01	07/26/12 14:10
43	NI.072612.141320	WG404606-17	CCV		1		07/26/12 14:13
44	NI.072612.141631	WG404606-18	CCB		1		07/26/12 14:16
45	NI.072612.141944	WG404363-01	Reference Sample		1	L12070722-01	07/26/12 14:19
46	NI.072612.142253	WG404363-05	Matrix Spike	40/100	1	L12070722-01	07/26/12 14:22
47	NI.072612.142602	WG404363-06	Matrix Spike Duplica	40/100	1	L12070722-01	07/26/12 14:26
48	NI.072612.142911	L12070658-22	FIELD BLANK 17JULY2012	40/100	1		07/26/12 14:29
49	NI.072612.143222	L12070658-23	MW2-2	40/100	5		07/26/12 14:32
50	NI.072612.143531	L12070658-24	MW2-2D	40/100	5		07/26/12 14:35
51	NI.072612.143841	L12070658-25	MW2-3	40/100	5		07/26/12 14:38
52	NI.072612.144152	L12070658-26	35B WW01	40/100	5		07/26/12 14:41
53	NI.072612.144502	L12070658-27	35B WW04	40/100	5		07/26/12 14:45
54	NI.072612.144811	L12070658-28	35B SW-1	40/100	5		07/26/12 14:48
55	NI.072612.145123	WG404606-19	CCV		1		07/26/12 14:51
56	NI.072612.145433	WG404606-20	CCB		1		07/26/12 14:54
57	NI.072612.145744	L12070658-29	35B SW-2	40/100	5		07/26/12 14:57
58	NI.072612.150054	L12070658-30	35B WW-11	40/100	5		07/26/12 15:00
59	NI.072612.150404	L12070658-32	FIELD BLANK 18JULY2012	40/100	1		07/26/12 15:04
60	NI.072612.150714	L12070658-33	MW4-1	40/100	5		07/26/12 15:07
61	NI.072612.151024	L12070658-34	MW4-2	40/100	5		07/26/12 15:10
62	NI.072612.151332	L12070658-35	MW4-3	40/100	5		07/26/12 15:13
63	NI.072612.151643	L12070658-36	35B WW14	40/100	5		07/26/12 15:16
64	NI.072612.151953	L12070658-37	35B WW07	40/100	5		07/26/12 15:19
65	NI.072612.152305	WG404606-21	CCV		1		07/26/12 15:23
66	NI.072612.152615	WG404606-22	CCB		1		07/26/12 15:26
67	NI.072612.153253	WG404606-23	CCV		1		07/26/12 15:32
68	NI.072612.153610	WG404606-24	CCB		1		07/26/12 15:36

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072612C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42627

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17146
 CCV: STD52697 LLCCV: STD52696

404545,404557,404615

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.072612.154111	WG404515-02	Method/Prep Blank	40/100	1		07/26/12 15:41
70	NI.072612.154421	WG404379-01	Fluid Blank		1		07/26/12 15:44
71	NI.072612.154731	WG404515-03	Laboratory Control S	40/100	1		07/26/12 15:47
72	NI.072612.155040	L12070673-01	MPL19-0712-1		1	WG404515-01	07/26/12 15:50
73	NI.072612.155351	WG404515-04	Matrix Spike	40/100	1	L12070673-01	07/26/12 15:53
74	NI.072612.155700	WG404515-05	Matrix Spike Duplica	40/100	1	L12070673-01	07/26/12 15:57
75	NI.072612.160011	L12070673-03	MPL20-0712-1	40/100	1		07/26/12 16:00
76	NI.072612.160320	WG404615-01	Post Digestion Spike		1	L12070673-03	07/26/12 16:03
77	NI.072612.160821	WG404615-02	Serial Dilution		5	L12070673-03	07/26/12 16:08
78	NI.072612.161133	WG404606-25	CCV		1		07/26/12 16:11
79	NI.072612.161443	WG404606-26	CCB		1		07/26/12 16:14
80	NI.072612.161755	L12070712-02	60500-C0102	40/100	1		07/26/12 16:17
81	NI.072612.162104	L12070713-02	60500-SSP0244	40/100	1		07/26/12 16:21
82	NI.072612.162414	L12070716-01	MPL28-0712-1	40/100	1		07/26/12 16:24
83	NI.072612.162746	L12070712-02	60500-C0102	40/100	50		07/26/12 16:27
84	NI.072612.164045	L12070756-36	ORG-SO1-275-14	40/100	1		07/26/12 16:40
85	NI.072612.164355	L12070756-38	ORG-SO2-275-14	40/100	1		07/26/12 16:43
86	NI.072612.164707	WG404606-27	CCV		1		07/26/12 16:47
87	NI.072612.165018	WG404606-28	CCB		1		07/26/12 16:50
88	NI.072612.165329	L12070725-01	BIF-PND-T1-W213-U	40/100	5		07/26/12 16:53
89	NI.072612.165639	L12070725-02	BIF-PND-T1-W213-F	40/100	5		07/26/12 16:56
90	NI.072612.165948	L12070725-03	BEF-BC1-T1-W213-U	40/100	5		07/26/12 16:59
91	NI.072612.170258	L12070725-04	BEF-BC1-T1-W213-F	40/100	5		07/26/12 17:02
92	NI.072612.170607	L12070725-05	BEF-BC2-T1-W213-U	40/100	5		07/26/12 17:06
93	NI.072612.170917	L12070725-01	BIF-PND-T1-W213-U		50		07/26/12 17:09
94	NI.072612.171227	L12070725-02	BIF-PND-T1-W213-F		50		07/26/12 17:12
95	NI.072612.171537	L12070725-03	BEF-BC1-T1-W213-U		50		07/26/12 17:15
96	NI.072612.171846	L12070725-04	BEF-BC1-T1-W213-F		50		07/26/12 17:18
97	NI.072612.172155	L12070725-05	BEF-BC2-T1-W213-U		50		07/26/12 17:21
98	NI.072612.172507	WG404606-29	CCV		1		07/26/12 17:25
99	NI.072612.172817	WG404606-30	CCB		1		07/26/12 17:28
100	NI.072612.173128	L12070725-06	BEF-BC2-T1-W213-F	40/100	5		07/26/12 17:31
101	NI.072612.173438	L12070725-07	BEF-BC3-T1-W213-U	40/100	5		07/26/12 17:34
102	NI.072612.173748	L12070725-08	BEF-BC3-T1-W213-F	40/100	5		07/26/12 17:37

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072612C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42627

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17146
 CCV: STD52697 LLCCV: STD52696

404545,404557,404615

Workgroups:

Comments:

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Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.072612.174057	L12070725-09	BEF-SMF-T1-W213-U	40/100	5		07/26/12 17:40
104	NI.072612.174408	L12070725-10	BEF-SMF-T1-W213-F	40/100	5		07/26/12 17:44
105	NI.072612.174718	L12070725-06	BEF-BC2-T1-W213-F		50		07/26/12 17:47
106	NI.072612.175027	L12070725-07	BEF-BC3-T1-W213-U		50		07/26/12 17:50
107	NI.072612.175336	L12070725-08	BEF-BC3-T1-W213-F		50		07/26/12 17:53
108	NI.072612.175645	L12070725-09	BEF-SMF-T1-W213-U		50		07/26/12 17:56
109	NI.072612.175954	L12070725-10	BEF-SMF-T1-W213-F		50		07/26/12 17:59
110	NI.072612.180306	WG404606-31	CCV		1		07/26/12 18:03
111	NI.072612.180616	WG404606-32	CCB		1		07/26/12 18:06
112	NI.072612.180929	L12070725-11	BEF-CBE-T1-W213-U	40/100	5		07/26/12 18:09
113	NI.072612.181238	L12070725-12	BEF-CBE-T1-W213-F	40/100	5		07/26/12 18:12
114	NI.072612.181549	L12070725-11	BEF-CBE-T1-W213-U		50		07/26/12 18:15
115	NI.072612.181900	L12070725-12	BEF-CBE-T1-W213-F		50		07/26/12 18:19
116	NI.072612.182211	WG404606-33	CCV		1		07/26/12 18:22
117	NI.072612.182522	WG404606-34	CCB		1		07/26/12 18:25
118	NI.072612.182834	WG404606-35	Low Level Continuing Calibra		1		07/26/12 18:28

Comments

Seq.	Rerun	Dil.	Reason	Analytes
10			Rerun for silver.	
65			Rerun for manganese.	

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Maren Beery



Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072712A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42639

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

403969,404557,403710,403929,404752,403863,404761,404770

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.072712.080526	Blank	Blank		1		07/27/12 08:05
2	NI.072712.080838	WG404726-01	Calibration Point		1		07/27/12 08:08
3	NI.072712.081149	WG404726-02	Calibration Point		1		07/27/12 08:11
4	NI.072712.081500	WG404726-03	Calibration Point		1		07/27/12 08:15
5	NI.072712.081812	WG404726-04	Calibration Point		1		07/27/12 08:18
6	NI.072712.082124	WG404726-05	Initial Calibration Verification		1		07/27/12 08:21
7	NI.072712.082436	WG404726-06	Initial Calib Blank		1		07/27/12 08:24
8	NI.072712.082749	WG404726-07	Low Level Initial Calibration V		1		07/27/12 08:27
9	NI.072712.083059	WG404726-08	Interference Check		1		07/27/12 08:30
10	NI.072712.083409	WG404726-09	Interference Check		1		07/27/12 08:34
11	NI.072712.083721	WG404726-10	CCV		1		07/27/12 08:37
12	NI.072712.084030	WG404726-11	CCB		1		07/27/12 08:40
13	NI.072712.084341	WG403711-02	Method/Prep Blank	40/100	1		07/27/12 08:43
14	NI.072712.084651	WG403711-04	Filter Blank		1		07/27/12 08:46
15	NI.072712.085001	WG403711-03	Laboratory Control S	40/100	1		07/27/12 08:50
16	NI.072712.085311	WG403711-01	Reference Sample		5	L12070491-06	07/27/12 08:53
17	NI.072712.085620	WG403711-05	Matrix Spike	40/100	5	L12070491-06	07/27/12 08:56
18	NI.072712.085930	WG403711-06	Matrix Spike Duplica	40/100	5	L12070491-06	07/27/12 08:59
19	NI.072712.090240	L12070459-01	PSEG-10-S	40/100	1		07/27/12 09:02
20	NI.072712.090551	L12070459-02	PSEG-11-S	40/100	1		07/27/12 09:05
21	NI.072712.090900	WG403969-01	Post Digestion Spike		1	L12070459-02	07/27/12 09:09
22	NI.072712.091210	WG403969-02	Serial Dilution		5	L12070459-02	07/27/12 09:12
23	NI.072712.091522	WG404726-12	CCV		1		07/27/12 09:15
24	NI.072712.091833	WG404726-13	CCB		1		07/27/12 09:18
25	NI.072712.092146	L12070460-01	5386-MW0028	40/100	1		07/27/12 09:21
26	NI.072712.092454	L12070460-02	5386-MW0028	40/100	1		07/27/12 09:24
27	NI.072712.092804	L12070460-03	5386-MW0028	40/100	1		07/27/12 09:28
28	NI.072712.093114	L12070460-04	5386-MW0030	40/100	1		07/27/12 09:31
29	NI.072712.093423	WG403711-07	Reference Sample		1	L12070460-05	07/27/12 09:34
30	NI.072712.093733	WG403711-08	Matrix Spike	40/100	1	L12070460-05	07/27/12 09:37
31	NI.072712.094042	WG403711-09	Duplicate	40/100	1	L12070460-05	07/27/12 09:40
32	NI.072712.094352	L12070460-06	5386-MW0030	40/100	1		07/27/12 09:43
33	NI.072712.095343	L12070460-01	5386-MW0028	40/100	50		07/27/12 09:53
34	NI.072712.095653	L12070460-02	5386-MW0028	40/100	50		07/27/12 09:56

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Instrument Run Log

Instrument: ICP-MS2 Dataset: 072712A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42639

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

403969,404557,403710,403929,404752,403863,404761,404770

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.072712.100006	WG404726-14	CCV		1		07/27/12 10:00
36	NI.072712.100316	WG404726-15	CCB		1		07/27/12 10:03
37	NI.072712.100628	L12070459-02	PSEG-11-S	40/100	10		07/27/12 10:06
38	NI.072712.100937	WG403969-01	Post Digestion Spike		10	L12070459-02	07/27/12 10:09
39	NI.072712.101247	WG403969-02	Serial Dilution		50	L12070459-02	07/27/12 10:12
40	NI.072712.101611	L12070460-03	5386-MW0028	40/100	50		07/27/12 10:16
41	NI.072712.101921	L12070460-04	5386-MW0030	40/100	50		07/27/12 10:19
42	NI.072712.102230	WG403711-07	Reference Sample		50	L12070460-05	07/27/12 10:22
43	NI.072712.102540	WG403711-08	Matrix Spike	40/100	50	L12070460-05	07/27/12 10:25
44	NI.072712.102850	WG403711-09	Duplicate	40/100	50	L12070460-05	07/27/12 10:28
45	NI.072712.103159	L12070460-06	5386-MW0030	40/100	50		07/27/12 10:31
46	NI.072712.103512	WG404726-16	CCV		1		07/27/12 10:35
47	NI.072712.103822	WG404726-17	CCB		1		07/27/12 10:38
48	NI.072712.104134	L12070491-01	BIF-PND-T1 W211 U	40/100	5		07/27/12 10:41
49	NI.072712.104443	L12070491-02	BIF-PND-T1 W211 F	40/100	5		07/27/12 10:44
50	NI.072712.104753	L12070491-03	BEF-SMF-T1 W211 U	40/100	5		07/27/12 10:47
51	NI.072712.105103	L12070491-04	BEF-SMF-T1 W211 F	40/100	5		07/27/12 10:51
52	NI.072712.105412	L12070491-05	BEF-CBE-T1 W211 U	40/100	5		07/27/12 10:54
53	NI.072712.110154	L12070491-02	BIF-PND-T1 W211 F	40/100	10		07/27/12 11:01
54	NI.072712.110520	WG404363-01	Reference Sample		5	L12070722-01	07/27/12 11:05
55	NI.072712.110833	WG404726-18	CCV		1		07/27/12 11:08
56	NI.072712.111143	WG404726-19	CCB		1		07/27/12 11:11
57	NI.072712.111454	WG404726-20	Low Level Continuing Calibra		1		07/27/12 11:14
58	NI.072712.111805	WG404363-05	Matrix Spike	40/100	5	L12070722-01	07/27/12 11:18
59	NI.072712.112114	WG404363-06	Matrix Spike Duplica	40/100	5	L12070722-01	07/27/12 11:21
60	NI.072712.112425	L12070658-22	FIELD BLANK 17JULY2012	40/100	1		07/27/12 11:24
61	NI.072712.112734	L12070658-23	MW2-2	40/100	10		07/27/12 11:27
62	NI.072712.113043	L12070658-24	MW2-2D	40/100	10		07/27/12 11:30
63	NI.072712.113352	L12070658-25	MW2-3	40/100	10		07/27/12 11:33
64	NI.072712.113701	L12070658-26	35B WW01	40/100	10		07/27/12 11:37
65	NI.072712.114010	L12070658-27	35B WW04	40/100	10		07/27/12 11:40
66	NI.072712.114319	L12070658-28	35B SW-1	40/100	10		07/27/12 11:43
67	NI.072712.114631	WG404726-21	CCV		1		07/27/12 11:46
68	NI.072712.114942	WG404726-22	CCB		1		07/27/12 11:49

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072712A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42639

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

403969,404557,403710,403929,404752,403863,404761,404770

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.072712.115254	L12070658-29	35B SW-2	40/100	10		07/27/12 11:52
70	NI.072712.115603	L12070658-30	35B WW-11	40/100	10		07/27/12 11:56
71	NI.072712.115914	L12070658-32	FIELD BLANK 18JULY2012	40/100	1		07/27/12 11:59
72	NI.072712.120224	L12070658-33	MW4-1	40/100	10		07/27/12 12:02
73	NI.072712.120534	L12070658-34	MW4-2	40/100	10		07/27/12 12:05
74	NI.072712.120843	L12070658-35	MW4-3	40/100	10		07/27/12 12:08
75	NI.072712.121152	L12070658-36	35B WW14	40/100	10		07/27/12 12:11
76	NI.072712.121501	L12070658-37	35B WW07	40/100	10		07/27/12 12:15
77	NI.072712.121814	WG404726-23	CCV		1		07/27/12 12:18
78	NI.072712.122125	WG404726-24	CCB		1		07/27/12 12:21
79	NI.072712.123920	WG403653-05	Method/Prep Blank	40/100	1		07/27/12 12:39
80	NI.072712.124230	WG403653-07	Filter Blank		1		07/27/12 12:42
81	NI.072712.124541	WG40363-06	LCSW 74 WG40363-06	40/100	1		07/27/12 12:45
82	NI.072712.124851	L12070420-01	5386-MW0025		1	WG403653-01	07/27/12 12:48
83	NI.072712.125202	WG403653-08	Matrix Spike	40/100	1	L12070420-01	07/27/12 12:52
84	NI.072712.125511	WG403653-09	Matrix Spike Duplica	40/100	1	L12070420-01	07/27/12 12:55
85	NI.072712.125820	WG403710-01	Post Digestion Spike		1	L12070420-01	07/27/12 12:58
86	NI.072712.130130	WG403710-02	Serial Dilution		5	L12070420-01	07/27/12 13:01
87	NI.072712.130442	WG404726-25	CCV		1		07/27/12 13:04
88	NI.072712.130753	WG404726-26	CCB		1		07/27/12 13:07
89	NI.072712.131105	L12070490-01	TC-GW-4	40/100	5		07/27/12 13:11
90	NI.072712.131414	L12070490-02	TC-GW-4F	40/100	5		07/27/12 13:14
91	NI.072712.131723	L12070490-03	TC-GW-05	40/100	5		07/27/12 13:17
92	NI.072712.132031	L12070490-04	TC-GW-05F	40/100	5		07/27/12 13:20
93	NI.072712.132341	L12070490-05	TC-GW-06	40/100	5		07/27/12 13:23
94	NI.072712.132651	L12070490-06	TC-GW-06F	40/100	5		07/27/12 13:26
95	NI.072712.133003	WG404726-27	CCV		1		07/27/12 13:30
96	NI.072712.133314	WG404726-28	CCB		1		07/27/12 13:33
97	NI.072712.133624	WG403458-02	Method/Prep Blank	40/100	1		07/27/12 13:36
98	NI.072712.133934	WG403458-03	Laboratory Control S	40/100	1		07/27/12 13:39
99	NI.072712.134245	WG403458-01	Reference Sample		5	L12070425-02	07/27/12 13:42
100	NI.072712.134555	WG403458-04	Matrix Spike	40/100	5	L12070425-02	07/27/12 13:45
101	NI.072712.134905	WG403458-05	Matrix Spike Duplica	40/100	5	L12070425-02	07/27/12 13:49
102	NI.072712.135216	L12070425-01	MPL29-0712-1	40/100	5		07/27/12 13:52

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072712A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42639

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

403969,404557,403710,403929,404752,403863,404761,404770

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.072712.135525	WG403929-01	Post Digestion Spike		5	L12070425-01	07/27/12 13:55
104	NI.072712.135835	WG403929-02	Serial Dilution		25	L12070425-01	07/27/12 13:58
105	NI.072712.140146	WG404726-29	CCV		1		07/27/12 14:01
106	NI.072712.140502	WG404726-30	CCB		1		07/27/12 14:05
107	NI.072712.140817	WG404283-02	Method/Prep Blank	5/50	20		07/27/12 14:08
108	NI.072712.141126	WG404216-02	TCLP Fluid Blank 1		20		07/27/12 14:11
109	NI.072712.141437	WG404216-03	TCLP Fluid Blank 2		20		07/27/12 14:14
110	NI.072712.141747	WG404283-03	Laboratory Control S	5/50	20		07/27/12 14:17
111	NI.072712.142058	WG404283-01	Reference Sample		50	L12070666-21	07/27/12 14:20
112	NI.072712.142408	WG404283-04	Matrix Spike	5/50	50	L12070666-21	07/27/12 14:24
113	NI.072712.142718	WG404283-05	Matrix Spike Duplica	5/50	50	L12070666-21	07/27/12 14:27
114	NI.072712.143028	L12070618-01	NOVELIS ORANGE	5/50	50		07/27/12 14:30
115	NI.072712.143337	WG404752-01	Post Digestion Spike		50	L12070618-01	07/27/12 14:33
116	NI.072712.143645	WG404752-02	Serial Dilution		250	L12070618-01	07/27/12 14:36
117	NI.072712.143957	WG404726-31	CCV		1		07/27/12 14:39
118	NI.072712.144307	WG404726-32	CCB		1		07/27/12 14:43
119	NI.072712.145035	WG403843-03	Method/Prep Blank	40/100	1		07/27/12 14:50
120	NI.072712.145345	WG403843-04	Laboratory Control S	40/100	1		07/27/12 14:53
121	NI.072712.145655	WG403843-01	Reference Sample		1	L12070534-02	07/27/12 14:56
122	NI.072712.150005	WG403843-05	Matrix Spike	40/100	1	L12070534-02	07/27/12 15:00
123	NI.072712.150314	WG403843-06	Matrix Spike Duplica	40/100	1	L12070534-02	07/27/12 15:03
124	NI.072712.150624	L12070515-02	OUTFALL003-120717	40/100	1		07/27/12 15:06
125	NI.072712.150934	L12070515-03	OUTFALL001-120717	40/100	1		07/27/12 15:09
126	NI.072712.151244	WG403863-03	Post Digestion Spike		1	L12070515-03	07/27/12 15:12
127	NI.072712.151554	WG403863-04	Serial Dilution		5	L12070515-03	07/27/12 15:15
128	NI.072712.151905	WG404726-33	CCV		1		07/27/12 15:19
129	NI.072712.152216	WG404726-34	CCB		1		07/27/12 15:22
130	NI.072712.152529	WG404726-35	Low Level Continuing Calibra		1		07/27/12 15:25
131	NI.072712.152839	WG404676-02	Method/Prep Blank	5/50	20		07/27/12 15:28
132	NI.072712.153625	WG404620-01	TCLP Fluid Blank 1		20		07/27/12 15:36
133	NI.072712.153936	WG404620-02	TCLP Fluid Blank 2		20		07/27/12 15:39
134	NI.072712.154246	WG404676-03	Laboratory Control S	5/50	20		07/27/12 15:42
135	NI.072712.155201	WG404676-01	Reference Sample		50	L12070774-01	07/27/12 15:52
136	NI.072712.155511	WG404676-04	Matrix Spike	5/50	50	L12070774-01	07/27/12 15:55

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072712A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42639

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

403969,404557,403710,403929,404752,403863,404761,404770

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	NI.072712.155821	WG404676-05	Matrix Spike Duplica	5/50	50	L12070774-01	07/27/12 15:58
138	NI.072712.160132	L12070746-01	REG. ORANGE	5/50	50		07/27/12 16:01
139	NI.072712.160442	WG404761-01	Post Digestion Spike		50	L12070746-01	07/27/12 16:04
140	NI.072712.160752	WG404761-02	Serial Dilution		250	L12070746-01	07/27/12 16:07
141	NI.072712.161103	WG404726-36	CCV		1		07/27/12 16:11
142	NI.072712.161413	WG404726-37	CCB		1		07/27/12 16:14
143	NI.072712.161726	L12070618-01	NOVELIS ORANGE	5/50	50		07/27/12 16:17
144	NI.072712.162035	+10 PPB	+10 PPB		50		07/27/12 16:20
145	NI.072712.162344	+20 PPB	+20 PPB		50		07/27/12 16:23
146	NI.072712.162654	+30 PPB	+30 PPB		50		07/27/12 16:26
147	NI.072712.163006	WG404726-38	CCV		1		07/27/12 16:30
148	NI.072712.163317	WG404726-39	CCB		1		07/27/12 16:33
149	NI.072712.163629	WG404144-02	Method/Prep Blank	.5/200	1		07/27/12 16:36
150	NI.072712.163940	WG404144-03	Laboratory Control S	.5/200	1		07/27/12 16:39
151	NI.072712.164250	WG404144-01	Reference Sample		5	L12070627-39	07/27/12 16:42
152	NI.072712.164600	WG404144-04	Matrix Spike	.509/200	5	L12070627-39	07/27/12 16:46
153	NI.072712.164910	WG404144-05	Matrix Spike Duplica	.505/200	5	L12070627-39	07/27/12 16:49
154	NI.072712.165221	L12070627-01	CO-93	.503/200	5		07/27/12 16:52
155	NI.072712.165530	L12070627-03	CO-84	.519/200	5		07/27/12 16:55
156	NI.072712.165839	WG404770-01	Post Digestion Spike		5	L12070627-03	07/27/12 16:58
157	NI.072712.170148	WG404770-02	Serial Dilution		25	L12070627-03	07/27/12 17:01
158	NI.072712.170501	WG404726-40	CCV		1		07/27/12 17:05
159	NI.072712.170811	WG404726-41	CCB		1		07/27/12 17:08
160	NI.072712.171123	L12070627-05	CO-92	.506/200	5		07/27/12 17:11
161	NI.072712.171432	L12070627-07	CO-91	.529/200	5		07/27/12 17:14
162	NI.072712.171741	L12070627-09	CO-90	.507/200	5		07/27/12 17:17
163	NI.072712.172050	L12070627-11	CO-89	.502/200	5		07/27/12 17:20
164	NI.072712.172401	L12070627-13	CO-61	.533/200	5		07/27/12 17:24
165	NI.072712.172711	L12070627-15	CO-60	.511/200	5		07/27/12 17:27
166	NI.072712.173022	L12070627-17	CO-59	.507/200	5		07/27/12 17:30
167	NI.072712.173332	L12070627-19	CO-58	.512/200	5		07/27/12 17:33
168	NI.072712.173641	L12070627-21	CO-71	.511/200	5		07/27/12 17:36
169	NI.072712.173951	L12070627-23	CO-72	.535/200	5		07/27/12 17:39
170	NI.072712.174303	WG404726-42	CCV		1		07/27/12 17:43

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072712A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42639

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

403969,404557,403710,403929,404752,403863,404761,404770

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
171	NI.072712.174614	WG404726-43	CCB		1		07/27/12 17:46
172	NI.072712.174927	L12070627-25	CO-70	.518/200	5		07/27/12 17:49
173	NI.072712.175237	L12070627-27	CO-69	.509/200	5		07/27/12 17:52
174	NI.072712.175547	L12070627-29	CO-102	.51/200	5		07/27/12 17:55
175	NI.072712.175856	L12070627-31	CO-103	.52/200	5		07/27/12 17:58
176	NI.072712.180204	L12070627-33	CO-136	.5/200	5		07/27/12 18:02
177	NI.072712.180515	L12070627-35	CO-123	.51/200	5		07/27/12 18:05
178	NI.072712.180825	L12070627-37	CO-129	.508/200	5		07/27/12 18:08
179	NI.072712.181138	WG404726-44	CCV		1		07/27/12 18:11
180	NI.072712.181448	WG404726-45	CCB		1		07/27/12 18:14
181	NI.072712.181759	WG404158-01	Method/Prep Blank	10/200	1		07/27/12 18:17
182	NI.072712.182109	WG404158-02	Laboratory Control S	10/200	1		07/27/12 18:21
183	NI.072712.182419	WG404158-03	Laboratory Control S	10/200	1		07/27/12 18:24
184	NI.072712.182728	L12070627-02	CO-93	0.006/200	5		07/27/12 18:27
185	NI.072712.183037	L12070627-04	CO-84	0.052/200	5		07/27/12 18:30
186	NI.072712.183346	L12070627-06	CO-92	10.02/200	5		07/27/12 18:33
187	NI.072712.183655	WG404768-01	Post Digestion Spike		5	L12070627-06	07/27/12 18:36
188	NI.072712.184005	WG404768-02	Serial Dilution		25	L12070627-06	07/27/12 18:40
189	NI.072712.184317	WG404726-46	CCV		1		07/27/12 18:43
190	NI.072712.184628	WG404726-47	CCB		1		07/27/12 18:46
191	NI.072712.184942	L12070627-08	CO-91	0.035/200	5		07/27/12 18:49
192	NI.072712.185250	L12070627-10	CO-90	0.041/200	5		07/27/12 18:52
193	NI.072712.185601	L12070627-12	CO-89	0.022/200	5		07/27/12 18:56
194	NI.072712.185910	L12070627-14	CO-61	0.047/200	5		07/27/12 18:59
195	NI.072712.190220	L12070627-16	CO-60	0.048/200	5		07/27/12 19:02
196	NI.072712.190531	L12070627-18	CO-59	0.058/200	5		07/27/12 19:05
197	NI.072712.190839	L12070627-20	CO-58	0.055/200	5		07/27/12 19:08
198	NI.072712.191149	L12070627-22	CO-71	0.081/200	5		07/27/12 19:11
199	NI.072712.191458	L12070627-24	CO-72	10.03/200	5		07/27/12 19:14
200	NI.072712.191808	L12070627-26	CO-70	0.056/200	5		07/27/12 19:18
201	NI.072712.192119	WG404726-48	CCV		1		07/27/12 19:21
202	NI.072712.192429	WG404726-49	CCB		1		07/27/12 19:24
203	NI.072712.192742	L12070627-28	CO-69	0.055/200	5		07/27/12 19:27
204	NI.072712.193051	L12070627-30	CO-102	0.027/200	5		07/27/12 19:30

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 _____ Dataset: 072712A.REP _____
 Analyst1: JYH _____ Analyst2: N/A _____
 Method: 6020 _____ SOP: ME700A _____ Rev: _____
 Maintenance Log ID: 42639 _____

Calibration Std: STD52815 _____ ICV Std: STD52584 _____ Post Spike: STD47984 _____
 ICSA: STD52753 _____ ICSAB: STD52589 _____ Int. Std: RGT17307 _____
 CCV: STD52697 _____ LLCCV: STD52696 _____

403969,404557,403710,403929,404752,403863,404761,404770 _____

Workgroups:

Comments: Additional workgroup: 404768

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
205	NI.072712.193400	L12070627-32	CO-103	0.056/200	5		07/27/12 19:34
206	NI.072712.193708	L12070627-34	CO-136	0.045/200	5		07/27/12 19:37
207	NI.072712.194018	L12070627-36	CO-123	0.045/200	5		07/27/12 19:40
208	NI.072712.194327	L12070627-38	CO-129	0.032/200	5		07/27/12 19:43
209	NI.072712.194637	L12070627-40	CO-82	10/200	5		07/27/12 19:46
210	NI.072712.194949	WG404726-50	CCV		1		07/27/12 19:49
211	NI.072712.195259	WG404726-51	CCB		1		07/27/12 19:52
212	NI.072712.195611	WG404726-52	QC Std 8		1		07/27/12 19:56

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Instrument Run Log

Instrument: ICP-MS2 Dataset: 072912A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42656

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

404831,404829,404669,404852,404853,404837

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.072912.083710	Blank	Blank		1		07/29/12 08:37
2	NI.072912.084021	WG404857-01	Calibration Point		1		07/29/12 08:40
3	NI.072912.084332	WG404857-02	Calibration Point		1		07/29/12 08:43
4	NI.072912.084642	WG404857-03	Calibration Point		1		07/29/12 08:46
5	NI.072912.084953	WG404857-04	Calibration Point		1		07/29/12 08:49
6	NI.072912.085306	WG404857-05	Initial Calibration Verification		1		07/29/12 08:53
7	NI.072912.085619	WG404857-06	Initial Calib Blank		1		07/29/12 08:56
8	NI.072912.085931	WG404857-07	Low Level Initial Calibration V		1		07/29/12 08:59
9	NI.072912.090242	WG404857-08	Interference Check		1		07/29/12 09:02
10	NI.072912.090551	WG404857-09	Interference Check		1		07/29/12 09:05
11	NI.072912.090902	WG404857-10	CCV		1		07/29/12 09:09
12	NI.072912.091212	WG404857-11	QC Std 7		1		07/29/12 09:12
13	NI.072912.091627	WG404857-12	CCB		1		07/29/12 09:16
14	NI.072912.092141	WG404305-02	Method/Prep Blank	40/100	1		07/29/12 09:21
15	NI.072912.092513	WG404305-03	Laboratory Control S	40/100	1		07/29/12 09:25
16	NI.072912.092823	L12070666-08	116-BH06-1-RB	40/100	1		07/29/12 09:28
17	NI.072912.093133	L12070666-18	125-BH04-1-RB	40/100	1		07/29/12 09:31
18	NI.072912.093442	WG404305-01	Reference Sample		5	L12070658-20	07/29/12 09:34
19	NI.072912.093751	WG404305-04	Matrix Spike	40/100	5	L12070658-20	07/29/12 09:37
20	NI.072912.094059	WG404305-05	Matrix Spike Duplica	40/100	5	L12070658-20	07/29/12 09:40
21	NI.072912.094407	L12070658-12	MW3-3	40/100	5		07/29/12 09:44
22	NI.072912.094717	WG404831-01	Post Digestion Spike		5	L12070658-12	07/29/12 09:47
23	NI.072912.095026	WG404831-02	Serial Dilution		25	L12070658-12	07/29/12 09:50
24	NI.072912.095338	WG404857-13	CCV		1		07/29/12 09:53
25	NI.072912.095648	WG404857-14	CCB		1		07/29/12 09:56
26	NI.072912.095959	L12070649-01	TC-GW-14	40/100	5		07/29/12 09:59
27	NI.072912.100309	L12070649-02	TC-GW-14F	40/100	5		07/29/12 10:03
28	NI.072912.100618	L12070649-03	TC-GW-15	40/100	5		07/29/12 10:06
29	NI.072912.100927	L12070649-04	TC-GW-15F	40/100	5		07/29/12 10:09
30	NI.072912.101236	L12070649-06	TC-GW-16	40/100	5		07/29/12 10:12
31	NI.072912.101546	L12070649-07	TC-GW-16F	40/100	5		07/29/12 10:15
32	NI.072912.101856	L12070649-08	TC-GW-17	40/100	5		07/29/12 10:18
33	NI.072912.102204	L12070649-09	TC-GW-17F	40/100	5		07/29/12 10:22
34	NI.072912.102514	L12070649-10	TC-GW-17D	40/100	5		07/29/12 10:25

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072912A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42656

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

404831,404829,404669,404852,404853,404837

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.072912.102822	L12070649-11	TC-GW-17DF	40/100	5		07/29/12 10:28
36	NI.072912.103135	WG404857-15	CCV		1		07/29/12 10:31
37	NI.072912.103445	WG404857-16	CCB		1		07/29/12 10:34
38	NI.072912.103756	L12070658-14	35B WW05	40/100	5		07/29/12 10:37
39	NI.072912.104105	L12070658-15	MW1-1	40/100	5		07/29/12 10:41
40	NI.072912.104416	L12070658-16	MW1-2	40/100	5		07/29/12 10:44
41	NI.072912.104726	L12070658-17	MW1-3	40/100	5		07/29/12 10:47
42	NI.072912.105037	L12070658-18	35B WW08	40/100	5		07/29/12 10:50
43	NI.072912.105346	L12070658-19	35B WW09	40/100	5		07/29/12 10:53
44	NI.072912.105658	WG404857-17	CCV		1		07/29/12 10:56
45	NI.072912.110008	WG404857-18	CCB		1		07/29/12 11:00
46	NI.072912.110321	WG404857-19	Low Level Continuing Calibra		1		07/29/12 11:03
47	NI.072912.111018	WG404095-03	Method/Prep Blank	40/100	1		07/29/12 11:10
48	NI.072912.111327	WG404095-04	Laboratory Control S	40/100	1		07/29/12 11:13
49	NI.072912.111637	WG404095-01	Reference Sample		1	L12070636-02	07/29/12 11:16
50	NI.072912.111947	WG404095-05	Duplicate	40/100	1	L12070636-02	07/29/12 11:19
51	NI.072912.112257	WG404095-06	Matrix Spike	40/100	1	L12070636-02	07/29/12 11:22
52	NI.072912.112606	L12070639-01	MPL24-0712-1	40/100	1		07/29/12 11:26
53	NI.072912.112916	WG404829-01	Post Digestion Spike		1	L12070639-01	07/29/12 11:29
54	NI.072912.113225	WG404829-02	Serial Dilution		5	L12070639-01	07/29/12 11:32
55	NI.072912.113537	WG404857-20	CCV		1		07/29/12 11:35
56	NI.072912.113847	WG404857-21	CCB		1		07/29/12 11:38
57	NI.072912.114200	L12070627-65	ERB 1	40/100	1		07/29/12 11:42
58	NI.072912.114509	L12070627-66	ERB 2	40/100	1		07/29/12 11:45
59	NI.072912.114817	L12070636-01	1213PWT009-EFF	40/100	1		07/29/12 11:48
60	NI.072912.115126	WG404095-02	Reference Sample		1	L12070639-02	07/29/12 11:51
61	NI.072912.115436	WG404095-07	Matrix Spike	40/100	1	L12070639-02	07/29/12 11:54
62	NI.072912.115746	WG404095-08	Matrix Spike Duplica	40/100	1	L12070639-02	07/29/12 11:57
63	NI.072912.120057	L12070639-03	SMW4-0712-1	40/100	1		07/29/12 12:00
64	NI.072912.120407	L12070640-01	MPL21-0712-1	40/100	1		07/29/12 12:04
65	NI.072912.120717	L12070640-02	MPL22-0712-1	40/100	1		07/29/12 12:07
66	NI.072912.121026	L12070640-03	MPL25-0712-1	40/100	1		07/29/12 12:10
67	NI.072912.121338	WG404857-22	CCV		1		07/29/12 12:13
68	NI.072912.121648	WG404857-23	CCB		1		07/29/12 12:16

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072912A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42656

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

404831,404829,404669,404852,404853,404837

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.072912.122105	L12070803-04	MPL1-0712-1	40/100	1		07/29/12 12:21
70	NI.072912.122414	L12070803-05	MPL2-0712-1	40/100	1		07/29/12 12:24
71	NI.072912.122724	L12070803-06	MPL3-0712-1	40/100	1		07/29/12 12:27
72	NI.072912.123033	L12070803-07	MPL3-0712-2	40/100	1		07/29/12 12:30
73	NI.072912.123343	WG404095-01	Reference Sample		1	L12070636-02	07/29/12 12:33
74	NI.072912.123652	WG404095-05	Duplicate	40/100	10	L12070636-02	07/29/12 12:36
75	NI.072912.124001	WG404095-06	Matrix Spike	40/100	10	L12070636-02	07/29/12 12:40
76	NI.072912.124312	L12070636-01	1213PWT009-EFF	40/100	10		07/29/12 12:43
77	NI.072912.124624	WG404857-24	CCV		1		07/29/12 12:46
78	NI.072912.124935	WG404857-25	CCB		1		07/29/12 12:49
79	NI.072912.130820	WG403906-02	Method/Prep Blank	40/100	1		07/29/12 13:08
80	NI.072912.131131	WG403906-03	Laboratory Control S	40/100	1		07/29/12 13:11
81	NI.072912.131442	WG403906-01	Reference Sample		5	L12070491-12	07/29/12 13:14
82	NI.072912.131751	WG403906-04	Matrix Spike	40/100	5	L12070491-12	07/29/12 13:17
83	NI.072912.132101	WG403906-05	Matrix Spike Duplica	40/100	5	L12070491-12	07/29/12 13:21
84	NI.072912.132410	L12070491-07	BEF-BC1-T1-W211-U	40/100	1		07/29/12 13:24
85	NI.072912.132719	L12070491-08	BEF-BC1-T1-W211-F	40/100	1		07/29/12 13:27
86	NI.072912.133029	WG404852-01	Post Digestion Spike		1	L12070491-08	07/29/12 13:30
87	NI.072912.133338	WG404852-02	Serial Dilution		5	L12070491-08	07/29/12 13:33
88	NI.072912.133650	WG404857-26	CCV		1		07/29/12 13:36
89	NI.072912.134000	WG404857-27	CCB		1		07/29/12 13:40
90	NI.072912.134450	L12070491-09	BEF-BC2-T1-W211-U	40/100	5		07/29/12 13:44
91	NI.072912.134759	L12070491-10	BEF-BC2-T1-W211-F	40/100	5		07/29/12 13:47
92	NI.072912.135108	L12070491-11	BEF-BC3-T1-W211-U	40/100	5		07/29/12 13:51
93	NI.072912.135419	L12070537-01	TC-GW-02	40/100	5		07/29/12 13:54
94	NI.072912.135729	L12070537-02	TC-GW-02F	40/100	5		07/29/12 13:57
95	NI.072912.140039	L12070537-03	TC-GW-03	40/100	5		07/29/12 14:00
96	NI.072912.140349	L12070537-04	TC-GW-03F	40/100	5		07/29/12 14:03
97	NI.072912.140658	L12070537-05	TC-GW01	40/100	5		07/29/12 14:06
98	NI.072912.141008	L12070537-06	TC-GW01F	40/100	5		07/29/12 14:10
99	NI.072912.141317	L12070537-07	TC-GW-07	40/100	5		07/29/12 14:13
100	NI.072912.141629	WG404857-28	CCV		1		07/29/12 14:16
101	NI.072912.141939	WG404857-29	CCB		1		07/29/12 14:19
102	NI.072912.142251	L12070537-08	TC-GW-07F	40/100	5		07/29/12 14:22

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072912A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42656

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

404831,404829,404669,404852,404853,404837

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.072912.142601	L12070537-09	TC-GW-08	40/100	5		07/29/12 14:26
104	NI.072912.142911	L12070537-10	TC-GW-08F	40/100	5		07/29/12 14:29
105	NI.072912.143220	L12070537-11	TC-GW11	40/100	5		07/29/12 14:32
106	NI.072912.143613	L12070537-12	TC-GW11F	40/100	5		07/29/12 14:36
107	NI.072912.143924	WG404857-30	CCV		1		07/29/12 14:39
108	NI.072912.144234	WG404857-31	CCB		1		07/29/12 14:42
109	NI.072912.144547	WG404857-32	Low Level Continuing Calibra		1		07/29/12 14:45
110	NI.072912.150313	WG403907-02	Method/Prep Blank	40/100	1		07/29/12 15:03
111	NI.072912.150623	WG403907-03	Laboratory Control S	40/100	1		07/29/12 15:06
112	NI.072912.150932	WG403907-01	Reference Sample		5	L12070590-13	07/29/12 15:09
113	NI.072912.151242	WG403907-04	Matrix Spike	40/100	5	L12070590-13	07/29/12 15:12
114	NI.072912.151551	WG403907-05	Matrix Spike Duplica	40/100	5	L12070590-13	07/29/12 15:15
115	NI.072912.151902	L12070590-01	TC-GW-09	40/100	5		07/29/12 15:19
116	NI.072912.152211	L12070590-02	TC-GW-09F	40/100	5		07/29/12 15:22
117	NI.072912.152527	WG404853-01	Post Digestion Spike		5	L12070590-02	07/29/12 15:25
118	NI.072912.152836	WG404853-02	Serial Dilution		25	L12070590-02	07/29/12 15:28
119	NI.072912.153148	WG404857-33	CCV		1		07/29/12 15:31
120	NI.072912.153458	WG404857-34	CCB		1		07/29/12 15:34
121	NI.072912.153810	L12070590-03	TC-GW-10	40/100	5		07/29/12 15:38
122	NI.072912.154119	L12070590-04	TC-GW-10F	40/100	5		07/29/12 15:41
123	NI.072912.154428	L12070590-05	TC-GW-10D	40/100	5		07/29/12 15:44
124	NI.072912.154738	L12070590-06	TC-GW-10DF	40/100	5		07/29/12 15:47
125	NI.072912.155049	L12070590-07	TC-GW-12	40/100	5		07/29/12 15:50
126	NI.072912.155359	L12070590-08	TC-GW-12F	40/100	5		07/29/12 15:53
127	NI.072912.155709	L12070590-12	TC-GW-13	40/100	5		07/29/12 15:57
128	NI.072912.160022	WG404857-35	CCV		1		07/29/12 16:00
129	NI.072912.160331	WG404857-36	CCB		1		07/29/12 16:03
130	NI.072912.160643	WG404188-02	Method/Prep Blank	40/100	1		07/29/12 16:06
131	NI.072912.160952	WG404188-03	Laboratory Control S	40/100	1		07/29/12 16:09
132	NI.072912.161301	L12070658-01	MW-3-1	40/100	5		07/29/12 16:13
133	NI.072912.161612	L12070658-02	MW-3-2		5	WG404188-01	07/29/12 16:16
134	NI.072912.161920	L12070658-03	MW-3-2MS	40/100	5	WG404188-04	07/29/12 16:19
135	NI.072912.162230	L12070658-04	MW-3-2MSD	40/100	5	WG404188-05	07/29/12 16:22
136	NI.072912.162539	L12070658-06	FIELD BLANK 15JULY2012	40/100	5		07/29/12 16:25

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 072912A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42656

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

404831,404829,404669,404852,404853,404837

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	NI.072912.162848	WG404837-01	Post Digestion Spike		5	L12070658-06	07/29/12 16:28
138	NI.072912.163157	WG404837-02	Serial Dilution		25	L12070658-06	07/29/12 16:31
139	NI.072912.163509	WG404857-48	CCV		1		07/29/12 16:35
140	NI.072912.163820	WG404857-49	CCB		1		07/29/12 16:38
141	NI.072912.164131	L12070658-07	MW-3-1-D	40/100	5		07/29/12 16:41
142	NI.072912.164442	L12070658-08	MW-58	40/100	5		07/29/12 16:44
143	NI.072912.164751	L12070658-09	WW-03	40/100	5		07/29/12 16:47
144	NI.072912.165101	L12070658-10	35B WW06	40/100	5		07/29/12 16:51
145	NI.072912.165411	L12070658-11	FIELD BLANK 16JULY2012	40/100	5		07/29/12 16:54
146	NI.072912.165724	WG404857-50	CCV		1		07/29/12 16:57
147	NI.072912.170035	WG404857-51	CCB		1		07/29/12 17:00
148	NI.072912.170348	L12070643-01	BIF-PND-T1-W212-U	40/100	5		07/29/12 17:03
149	NI.072912.170657	L12070643-02	BIF-PND-T1-W212-F	40/100	5		07/29/12 17:06
150	NI.072912.171006	L12070643-03	BEF-BC1-T1-W212-U	40/100	5		07/29/12 17:10
151	NI.072912.171315	L12070643-04	BEF-BC1-T1-W212-F	40/100	5		07/29/12 17:13
152	NI.072912.171624	L12070643-05	BEF-BC2-T1-W212-U	40/100	5		07/29/12 17:16
153	NI.072912.171934	L12070643-01	BIF-PND-T1-W212-U		50		07/29/12 17:19
154	NI.072912.172243	L12070643-02	BIF-PND-T1-W212-F		50		07/29/12 17:22
155	NI.072912.172554	L12070643-03	BEF-BC1-T1-W212-U		50		07/29/12 17:25
156	NI.072912.172904	L12070643-04	BEF-BC1-T1-W212-F		50		07/29/12 17:29
157	NI.072912.173213	L12070643-05	BEF-BC2-T1-W212-U		50		07/29/12 17:32
158	NI.072912.173525	WG404857-52	CCV		1		07/29/12 17:35
159	NI.072912.173835	WG404857-53	CCB		1		07/29/12 17:38
160	NI.072912.174147	L12070643-06	BEF-BC2-T1-W212-F	40/100	5		07/29/12 17:41
161	NI.072912.174457	L12070643-07	BEF-BC3-T1-W212-U	40/100	5		07/29/12 17:44
162	NI.072912.174806	L12070643-08	BEF-BC3-T1-W212-F	40/100	5		07/29/12 17:48
163	NI.072912.175115	L12070643-09	BEF-SMF-T1-W212-U	40/100	5		07/29/12 17:51
164	NI.072912.175423	L12070643-10	BEF-SMF-T1-W212-F	40/100	5		07/29/12 17:54
165	NI.072912.175732	L12070643-06	BEF-BC2-T1-W212-F		50		07/29/12 17:57
166	NI.072912.180040	L12070643-07	BEF-BC3-T1-W212-U		50		07/29/12 18:00
167	NI.072912.180348	L12070643-08	BEF-BC3-T1-W212-F		50		07/29/12 18:03
168	NI.072912.180659	L12070643-09	BEF-SMF-T1-W212-U		50		07/29/12 18:06
169	NI.072912.181008	L12070643-10	BEF-SMF-T1-W212-F		50		07/29/12 18:10
170	NI.072912.181319	WG404857-54	CCV		1		07/29/12 18:13

Page: 5 Approved: July 30, 2012

Maren Beery



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Instrument Run Log

Instrument: ICP-MS2 Dataset: 072912A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 42656

Calibration Std: STD52815 ICV Std: STD52584 Post Spike: STD47984
 ICSA: STD52753 ICSAB: STD52589 Int. Std: RGT17307
 CCV: STD52697 LLCCV: STD52696

404831,404829,404669,404852,404853,404837

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
171	NI.072912.181629	WG404857-55	CCB		1		07/29/12 18:16
172	NI.072912.181941	L12070643-11	BEF-CBE-T1-W212-U	40/100	5		07/29/12 18:19
173	NI.072912.182251	L12070643-12	BEF-CBE-T1-W212-F	40/100	5		07/29/12 18:22
174	NI.072912.182601	L12070643-11	BEF-CBE-T1-W212-U		50		07/29/12 18:26
175	NI.072912.182910	L12070643-12	BEF-CBE-T1-W212-F		50		07/29/12 18:29
176	NI.072912.183221	WG404857-56	CCV		1		07/29/12 18:32
177	NI.072912.183532	WG404857-57	CCB		1		07/29/12 18:35
178	NI.072912.183844	WG404857-58	Low Level Continuing Calibra		1		07/29/12 18:38

Page: 6 Approved: July 30, 2012

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Microbac Laboratories Inc.

Data Checklist

Date: 26-JUL-2012
 Analyst: JYH
 Analyst: NA
 Method: 6020
 Instrument: ICP-MS2
 Curve Workgroup: 404606
 Runlog ID: 48069
 Analytical Workgroups: 404545,404557,404615

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	751,728,658,722,673,712,713,716,725
Client Forms	X
Level X	
Level 3	658
Level 4	751,722,673,712,713,716,725
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	MMB
Comments	

Primary Reviewer:

J. Y. H.

Secondary Reviewer:
27-JUL-2012

Maren Beery



Microbac Laboratories Inc.

Data Checklist

Date: 27-JUL-2012
 Analyst: JYH
 Analyst: NA
 Method: 6020
 Instrument: ICP-MS2
 Curve Workgroup: 404726
 Runlog ID: 48083
 Analytical Workgroups: 403969,404557,403710,403929,404752,403863,404761,404770,404768

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	459,460,491,618,746,627
Client Forms	X
Level X	
Level 3	658
Level 4	459,460,491,490,425,515,627
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	MMB
Comments	

Primary Reviewer:

Secondary Reviewer:
29-JUL-2012



Microbac Laboratories Inc.

Data Checklist

Date: 29-JUL-2012
 Analyst: JYH
 Analyst: NA
 Method: 6020
 Instrument: ICP-MS2
 Curve Workgroup: 404857
 Runlog ID: 48117
 Analytical Workgroups: 404831,404829,404669,404852,404853,404837

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	649,658,491,537,643
Client Forms	X
Level X	
Level 3	658,636
Level 4	649,639,640,803,491,537,643
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	MMB
Comments	

Primary Reviewer:

J. Y. H.

Secondary Reviewer:
30-JUL-2012

Maren Beery



Analytical Method:6020

AAB#:WG404557

Login Number:L12070658

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
FIELD BLANK 17JULY2012	22	07/17/12					07/25/2012	7.9	180		07/27/12	10.1	180	
FIELD BLANK 17JULY2012	22	07/17/12					07/25/2012	7.9	180		07/26/12	9.2	180	
MW2-2	23	07/17/12					07/25/2012	7.9	180		07/27/12	10.1	180	
MW2-2	23	07/17/12					07/25/2012	7.9	180		07/26/12	9.2	180	
MW2-2D	24	07/17/12					07/25/2012	7.9	180		07/27/12	10.1	180	
MW2-2D	24	07/17/12					07/25/2012	7.9	180		07/26/12	9.2	180	
MW2-3	25	07/17/12					07/25/2012	7.8	180		07/27/12	10	180	
MW2-3	25	07/17/12					07/25/2012	7.8	180		07/26/12	9.2	180	
35B WW01	26	07/17/12					07/25/2012	7.7	180		07/27/12	10	180	
35B WW01	26	07/17/12					07/25/2012	7.7	180		07/26/12	9.1	180	
35B WW04	27	07/17/12					07/25/2012	7.7	180		07/26/12	9	180	
35B WW04	27	07/17/12					07/25/2012	7.7	180		07/27/12	9.9	180	
35B SW-1	28	07/17/12					07/25/2012	7.7	180		07/27/12	9.9	180	
35B SW-1	28	07/17/12					07/25/2012	7.7	180		07/26/12	9	180	
35B SW-2	29	07/17/12					07/25/2012	7.7	180		07/26/12	9	180	
35B SW-2	29	07/17/12					07/25/2012	7.7	180		07/27/12	9.9	180	
35B WW-11	30	07/17/12					07/25/2012	7.6	180		07/27/12	9.9	180	
35B WW-11	30	07/17/12					07/25/2012	7.6	180		07/26/12	9	180	
FIELD BLANK 18JULY2012	32	07/18/12					07/25/2012	6.9	180		07/27/12	9.1	180	
FIELD BLANK 18JULY2012	32	07/18/12					07/25/2012	6.9	180		07/26/12	8.3	180	
MW4-1	33	07/18/12					07/25/2012	6.9	180		07/27/12	9.1	180	
MW4-1	33	07/18/12					07/25/2012	6.9	180		07/26/12	8.3	180	
MW4-2	34	07/18/12					07/25/2012	6.8	180		07/27/12	9.1	180	
MW4-2	34	07/18/12					07/25/2012	6.8	180		07/26/12	8.2	180	
MW4-3	35	07/18/12					07/25/2012	6.7	180		07/26/12	8.1	180	
MW4-3	35	07/18/12					07/25/2012	6.7	180		07/27/12	9	180	
35B WW14	36	07/18/12					07/25/2012	6.7	180		07/27/12	8.9	180	
35B WW14	36	07/18/12					07/25/2012	6.7	180		07/26/12	8	180	
35B WW07	37	07/18/12					07/25/2012	6.6	180		07/27/12	8.9	180	
35B WW07	37	07/18/12					07/25/2012	6.6	180		07/26/12	8	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID:2519562
Report generated 07/30/2012 10:56



Analytical Method:6020
Login Number:L12070658

AAB#:WG404831

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
MW3-3	12	07/15/12					07/24/2012	9	180		07/29/12	13.8	180	
35B WW05	14	07/16/12					07/24/2012	8.1	180		07/29/12	13	180	
MW1-1	15	07/16/12					07/24/2012	8	180		07/29/12	12.9	180	
MW1-2	16	07/16/12					07/24/2012	8	180		07/29/12	12.9	180	
MW1-3	17	07/16/12					07/24/2012	7.9	180		07/29/12	12.9	180	
35B WW08	18	07/16/12					07/24/2012	7.9	180		07/29/12	12.8	180	
35B WW09	19	07/16/12					07/24/2012	7.9	180		07/29/12	12.8	180	
MW2-1	20	07/17/12					07/24/2012	7.2	180		07/29/12	12	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2519562
Report generated 07/30/2012 10:56



Analytical Method:6020
Login Number:L12070658

AAB#:WG404837

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
MW-3-1	01	07/15/12					07/23/2012	8.1	180		07/29/12	14.2	180	
MW-3-2MS	03	07/15/12					07/23/2012	8.1	180		07/29/12	14.2	180	
MW-3-2MSD	04	07/15/12					07/23/2012	8.1	180		07/29/12	14.2	180	
FIELD BLANK 15JULY2012	06	07/15/12					07/23/2012	8.1	180		07/29/12	14.2	180	
MW-3-1-D	07	07/15/12					07/23/2012	8.1	180		07/29/12	14.3	180	
MW-58	08	07/15/12					07/23/2012	8	180		07/29/12	14.1	180	
WW-03	09	07/15/12					07/23/2012	7.9	180		07/29/12	14.1	180	
35B WW06	10	07/16/12					07/23/2012	7.2	180		07/29/12	13.3	180	
FIELD BLANK 16JULY2012	11	07/16/12					07/23/2012	7.2	180		07/29/12	13.3	180	

* = SEE PROJECT QAPP REQUIREMENTS



METHOD BLANK SUMMARY

Login Number: L12070658 Work Group: WG404557
 Blank File ID: NI.072612.134758 Blank Sample ID: WG404363-03
 Prep Date: 07/25/12 06:34 Instrument ID: ICP-MS2
 Analyzed Date: 07/26/12 13:47 Method: 6020
 Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG404363-04	NI.072612.135107	07/26/12 13:51	01
DUP	WG404363-07	NI.072612.140037	07/26/12 14:00	DL01
FIELD BLANK 17JULY2012	L12070658-22	NI.072612.142911	07/26/12 14:29	01
MW2-2	L12070658-23	NI.072612.143222	07/26/12 14:32	DL01
MW2-2D	L12070658-24	NI.072612.143531	07/26/12 14:35	DL01
MW2-3	L12070658-25	NI.072612.143841	07/26/12 14:38	DL01
35B WW01	L12070658-26	NI.072612.144152	07/26/12 14:41	DL01
35B WW04	L12070658-27	NI.072612.144502	07/26/12 14:45	DL01
35B SW-1	L12070658-28	NI.072612.144811	07/26/12 14:48	DL01
35B SW-2	L12070658-29	NI.072612.145744	07/26/12 14:57	DL01
35B WW-11	L12070658-30	NI.072612.150054	07/26/12 15:00	DL01
FIELD BLANK 18JULY2012	L12070658-32	NI.072612.150404	07/26/12 15:04	01
MW4-1	L12070658-33	NI.072612.150714	07/26/12 15:07	DL01
MW4-2	L12070658-34	NI.072612.151024	07/26/12 15:10	DL01
MW4-3	L12070658-35	NI.072612.151332	07/26/12 15:13	DL01
35B WW14	L12070658-36	NI.072612.151643	07/26/12 15:16	DL01
35B WW07	L12070658-37	NI.072612.151953	07/26/12 15:19	DL01
FIELD BLANK 17JULY2012	L12070658-22	NI.072712.112425	07/27/12 11:24	02
MW2-2	L12070658-23	NI.072712.112734	07/27/12 11:27	DL02
MW2-2D	L12070658-24	NI.072712.113043	07/27/12 11:30	DL02
MW2-3	L12070658-25	NI.072712.113352	07/27/12 11:33	DL02
35B WW01	L12070658-26	NI.072712.113701	07/27/12 11:37	DL02
35B WW04	L12070658-27	NI.072712.114010	07/27/12 11:40	DL02
35B SW-1	L12070658-28	NI.072712.114319	07/27/12 11:43	DL02
35B SW-2	L12070658-29	NI.072712.115254	07/27/12 11:52	DL02
35B WW-11	L12070658-30	NI.072712.115603	07/27/12 11:56	DL02
FIELD BLANK 18JULY2012	L12070658-32	NI.072712.115914	07/27/12 11:59	02
MW4-1	L12070658-33	NI.072712.120224	07/27/12 12:02	DL02
MW4-2	L12070658-34	NI.072712.120534	07/27/12 12:05	DL02
MW4-3	L12070658-35	NI.072712.120843	07/27/12 12:08	DL02
35B WW14	L12070658-36	NI.072712.121152	07/27/12 12:11	DL02
35B WW07	L12070658-37	NI.072712.121501	07/27/12 12:15	DL02

Report Name: BLANK_SUMMARY
 PDF File ID: 2519563
 Report generated 07/30/2012 11:07



METHOD BLANK SUMMARY

Login Number: L12070658 Work Group: WG404831
 Blank File ID: NI.072912.092141 Blank Sample ID: WG404305-02
 Prep Date: 07/24/12 12:43 Instrument ID: ICP-MS2
 Analyzed Date: 07/29/12 09:21 Method: 6020
 Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG404305-03	NI.072912.092513	07/29/12 09:25	01
MW2-1	L12070658-20	NI.072912.093442	07/29/12 09:34	DL01
MW3-3	L12070658-12	NI.072912.094407	07/29/12 09:44	DL01
35B WW05	L12070658-14	NI.072912.103756	07/29/12 10:37	DL01
MW1-1	L12070658-15	NI.072912.104105	07/29/12 10:41	DL01
MW1-2	L12070658-16	NI.072912.104416	07/29/12 10:44	DL01
MW1-3	L12070658-17	NI.072912.104726	07/29/12 10:47	DL01
35B WW08	L12070658-18	NI.072912.105037	07/29/12 10:50	DL01
35B WW09	L12070658-19	NI.072912.105346	07/29/12 10:53	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2519563
 Report generated 07/30/2012 11:07



METHOD BLANK SUMMARY

Login Number: L12070658 Work Group: WG404837
 Blank File ID: NI.072912.160643 Blank Sample ID: WG404188-02
 Prep Date: 07/23/12 13:44 Instrument ID: ICP-MS2
 Analyzed Date: 07/29/12 16:06 Method: 6020
 Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG404188-03	NI.072912.160952	07/29/12 16:09	01
MW-3-1	L12070658-01	NI.072912.161301	07/29/12 16:13	DL01
MW-3-2MS	L12070658-03	NI.072912.161920	07/29/12 16:19	DL01
MW-3-2MSD	L12070658-04	NI.072912.162230	07/29/12 16:22	DL01
FIELD BLANK 15JULY2012	L12070658-06	NI.072912.162539	07/29/12 16:25	DL01
MW-3-1-D	L12070658-07	NI.072912.164131	07/29/12 16:41	DL01
MW-58	L12070658-08	NI.072912.164442	07/29/12 16:44	DL01
WW-03	L12070658-09	NI.072912.164751	07/29/12 16:47	DL01
35B WW06	L12070658-10	NI.072912.165101	07/29/12 16:51	DL01
FIELD BLANK 16JULY2012	L12070658-11	NI.072912.165411	07/29/12 16:54	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2519563
 Report generated 07/30/2012 11:07



Login Number: L12070658 Prep Date: 07/25/12 06:34 Sample ID: WG404363-03
 Instrument ID: ICP-MS2 Run Date: 07/26/12 13:47 Prep Method: 3015
 File ID: NI.072612.134758 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG404557 Matrix: Water Units: mg/L
 Contract #: _____ Cal ID: ICP-MS - 26-JUL-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Barium, Total	0.00150	0.00300	0.00150	1	U
Cadmium, Total	0.000300	0.000600	0.000300	1	U
Chromium, Total	0.00100	0.00200	0.00100	1	U
Copper, Total	0.00100	0.00200	0.00100	1	U
Lead, Total	0.000500	0.00100	0.000500	1	U
Manganese, Total	0.00100	0.00200	0.00100	1	U
Nickel, Total	0.00200	0.00400	0.00200	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U
Vanadium, Total	0.000500	0.00100	0.000500	1	U
Zinc, Total	0.0125	0.0250	0.0125	1	U

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
 PDF ID: 2519564
 30-JUL-2012 11:07



Login Number: L12070658 Prep Date: 07/24/12 12:43 Sample ID: WG404305-02
 Instrument ID: ICP-MS2 Run Date: 07/29/12 09:21 Prep Method: 3015
 File ID: NI.072912.092141 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG404831 Matrix: Water Units: mg/L
 Contract #: _____ Cal ID: ICP-MS - 29-JUL-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Barium, Total	0.00150	0.00300	0.00150	1	U
Cadmium, Total	0.000300	0.000600	0.000300	1	U
Chromium, Total	0.00100	0.00200	0.00100	1	U
Copper, Total	0.00100	0.00200	0.00100	1	U
Lead, Total	0.000500	0.00100	0.000500	1	U
Manganese, Total	0.00100	0.00200	0.00100	1	U
Nickel, Total	0.00200	0.00400	0.00200	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U
Vanadium, Total	0.000500	0.00100	0.000500	1	U
Zinc, Total	0.0125	0.0250	0.0125	1	U

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
 PDF ID: 2519564
 30-JUL-2012 11:07



Login Number: L12070658 Prep Date: 07/23/12 13:44 Sample ID: WG404188-02
 Instrument ID: ICP-MS2 Run Date: 07/29/12 16:06 Prep Method: 3015
 File ID: NI.072912.160643 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG404837 Matrix: Water Units: mg/L
 Contract #: _____ Cal ID: ICP-MS - 29-JUL-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Barium, Total	0.00150	0.00300	0.00150	1	U
Cadmium, Total	0.000300	0.000600	0.000300	1	U
Chromium, Total	0.00100	0.00200	0.00100	1	U
Copper, Total	0.00100	0.00200	0.00100	1	U
Lead, Total	0.000500	0.00100	0.000500	1	U
Manganese, Total	0.00100	0.00200	0.00100	1	U
Nickel, Total	0.00200	0.00400	0.00200	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U
Vanadium, Total	0.000500	0.00100	0.000500	1	U
Zinc, Total	0.0125	0.0250	0.0125	1	U

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
 PDF ID: 2519564
 30-JUL-2012 11:07



Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404363-04
 Instrument ID: ICP-MS2 Run Time: 13:51 Prep Method: 3015
 File ID: NI.072612.135107 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG404557 Matrix: Water Units: mg/L
 QC Key: STD Lot#: STD52132 Cal ID: ICP-MS - 26-JUL-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0587	93.8	80 - 120	
Barium, Total	0.0625	0.0614	98.3	80 - 120	
Cadmium, Total	0.0625	0.0614	98.3	80 - 120	
Chromium, Total	0.0625	0.0643	103	80 - 120	
Copper, Total	0.0625	0.0644	103	80 - 120	
Lead, Total	0.0625	0.0631	101	80 - 120	
Manganese, Total	0.0625	0.0645	103	80 - 120	
Nickel, Total	0.0625	0.0644	103	80 - 120	
Selenium, Total	0.0625	0.0572	91.6	80 - 120	
Thallium, Total	0.0625	0.0612	97.8	80 - 120	
Vanadium, Total	0.0625	0.0622	99.6	80 - 120	
Zinc, Total	0.0625	0.0633	101	80 - 120	

LCS - Modified 03/06/2008
 PDF File ID: 2519565
 Report generated: 07/30/2012 11:07



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404305-03
 Instrument ID: ICP-MS2 Run Time: 09:25 Prep Method: 3015
 File ID: NI.072912.092513 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG404831 Matrix: Water Units: mg/L
 QC Key: STD Lot#: STD52132 Cal ID: ICP-MS - 29-JUL-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0602	96.3	80 - 120	
Barium, Total	0.0625	0.0603	96.5	80 - 120	
Cadmium, Total	0.0625	0.0629	101	80 - 120	
Chromium, Total	0.0625	0.0603	96.4	80 - 120	
Copper, Total	0.0625	0.0625	100	80 - 120	
Lead, Total	0.0625	0.0614	98.2	80 - 120	
Manganese, Total	0.0625	0.0627	100	80 - 120	
Nickel, Total	0.0625	0.0618	98.9	80 - 120	
Selenium, Total	0.0625	0.0565	90.3	80 - 120	
Thallium, Total	0.0625	0.0610	97.6	80 - 120	
Vanadium, Total	0.0625	0.0596	95.3	80 - 120	
Zinc, Total	0.0625	0.0617	98.7	80 - 120	

LCS - Modified 03/06/2008
 PDF File ID: 2519565
 Report generated: 07/30/2012 11:07



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404188-03
 Instrument ID: ICP-MS2 Run Time: 16:09 Prep Method: 3015
 File ID: NI.072912.160952 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG404837 Matrix: Water Units: mg/L
 QC Key: STD Lot#: STD52132 Cal ID: ICP-MS - 29-JUL-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0600	96.0	80 - 120	
Barium, Total	0.0625	0.0625	100	80 - 120	
Cadmium, Total	0.0625	0.0621	99.4	80 - 120	
Chromium, Total	0.0625	0.0621	99.4	80 - 120	
Copper, Total	0.0625	0.0650	104	80 - 120	
Lead, Total	0.0625	0.0631	101	80 - 120	
Manganese, Total	0.0625	0.0638	102	80 - 120	
Nickel, Total	0.0625	0.0639	102	80 - 120	
Selenium, Total	0.0625	0.0602	96.3	80 - 120	
Thallium, Total	0.0625	0.0624	99.8	80 - 120	
Vanadium, Total	0.0625	0.0613	98.1	80 - 120	
Zinc, Total	0.0625	0.0683	109	80 - 120	

LCS - Modified 03/06/2008
 PDF File ID: 2519565
 Report generated: 07/30/2012 11:07



Loginnum: L12070658 Cal ID: ICP-MS2- Worknum: WG404557
 Instrument ID: ICP-MS2 Contract #: _____ Method: 6020
 Parent ID: WG404363-01 File ID: NI.072612.141944 Dil: 1 Matrix: WATER
 Sample ID: WG404363-05 MS File ID: NI.072612.142253 Dil: 1 Units: mg/L
 Sample ID: WG404363-06 MSD File ID: NI.072612.142602 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony	ND	0.0625	0.0671	107	0.0625	0.0660	106	1.68	75 - 125	20	
Barium	0.0620	0.0625	0.124	99.8	0.0625	0.121	94.3	2.77	75 - 125	20	
Cadmium	ND	0.0625	0.0705	113	0.0625	0.0698	112	1.05	75 - 125	20	
Chromium	0.0133	0.0625	0.0815	109	0.0625	0.0795	106	2.43	75 - 125	20	
Copper	0.00355	0.0625	0.0656	99.2	0.0625	0.0649	98.1	1.03	75 - 125	20	
Lead	0.00246	0.0625	0.0702	108	0.0625	0.0694	107	1.09	75 - 125	20	
Nickel	0.00956	0.0625	0.0732	102	0.0625	0.0716	99.2	2.16	75 - 125	20	
Selenium	0.00933	0.0625	0.0787	111	0.0625	0.0793	112	0.794	75 - 125	20	
Thallium	ND	0.0625	0.0666	107	0.0625	0.0660	106	0.888	75 - 125	20	
Vanadium	0.00618	0.0625	0.0764	112	0.0625	0.0750	110	1.89	75 - 125	20	
Zinc	0.0162	0.0625	0.0858	111	0.0625	0.0777	98.3	9.96	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginnum: L12070658 Cal ID: ICP-MS2- Worknum: WG404557
 Instrument ID: ICP-MS2 Contract #: _____ Method: 6020
 Parent ID: WG404363-01 File ID: NI.072712.110520 Dil: 5 Matrix: WATER
 Sample ID: WG404363-05 MS File ID: NI.072712.111805 Dil: 5 Units: mg/L
 Sample ID: WG404363-06 MSD File ID: NI.072712.112114 Dil: 5

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Manganese	0.0387	0.0625	0.112	117	0.0625	0.102	101	9.28	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginum: L12070658 Cal ID: ICP-MS2- Worknum: WG404831
 Instrument ID: ICP-MS2 Contract #: _____ Method: 6020
 Parent ID: WG404305-01 File ID: NI.072912.093442 Dil: 5 Matrix: WATER
 Sample ID: WG404305-04 MS File ID: NI.072912.093751 Dil: 5 Units: mg/L
 Sample ID: WG404305-05 MSD File ID: NI.072912.094059 Dil: 5

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	ND	0.0625	0.0707	113	0.0625	0.0715	114	1.06	75 - 125	20	
Barium, Total	0.0645	0.0625	0.137	116	0.0625	0.139	120	1.61	75 - 125	20	
Cadmium, Total	ND	0.0625	0.0799	128	0.0625	0.0813	130	1.74	75 - 125	20	*
Chromium, Total	0.00154	0.0625	0.0697	109	0.0625	0.0721	113	3.37	75 - 125	20	
Copper, Total	0.00240	0.0625	0.0739	114	0.0625	0.0766	119	3.66	75 - 125	20	
Lead, Total	0.00164	0.0625	0.0708	111	0.0625	0.0722	113	1.95	75 - 125	20	
Manganese, Total	0.0807	0.0625	0.155	119	0.0625	0.157	123	1.69	75 - 125	20	
Nickel, Total	0.00478	0.0625	0.0738	110	0.0625	0.0764	115	3.44	75 - 125	20	
Selenium, Total	0.00114	0.0625	0.0822	130	0.0625	0.0860	136	4.52	75 - 125	20	*
Thallium, Total	ND	0.0625	0.0689	110	0.0625	0.0699	112	1.48	75 - 125	20	
Vanadium, Total	0.00424	0.0625	0.0714	107	0.0625	0.0743	112	4.02	75 - 125	20	
Zinc, Total	0.0308	0.0625	0.106	120	0.0625	0.109	126	3.46	75 - 125	20	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MS/MSD REPORT

Loginnum: L12070658 Cal ID: ICP-MS2- 29-JUL-12 Worknum: WG404837
 Instrument ID: ICP-MS2 Contract #: _____ Prep Method: 3015
 Parent ID: L12070658-02 File ID: NI.072912.161612 Dil: 5 Method: 6020
 Sample ID: L12070658-03 MS File ID: NI.072912.161920 Dil: 5 Matrix: Water
 Sample ID: L12070658-04 MSD File ID: NI.072912.162230 Dil: 5 Units: mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	ND	0.0625	0.0778	124	0.0625	0.0829	133	6.34	75 - 125	20	*
Barium, Total	0.217	0.0625	0.294	122	0.0625	0.294	123	0.0966	75 - 125	20	
Cadmium, Total	ND	0.0625	0.0831	133	0.0625	0.0863	138	3.74	75 - 125	20	*
Chromium, Total	ND	0.0625	0.0754	121	0.0625	0.0766	123	1.58	75 - 125	20	
Copper, Total	0.0445	0.0625	0.0968	83.7	0.0625	0.0956	81.8	1.23	75 - 125	20	
Lead, Total	ND	0.0625	0.0773	124	0.0625	0.0792	127	2.42	75 - 125	20	*
Manganese, Total	0.179	0.0625	0.255	123	0.0625	0.252	118	1.20	75 - 125	20	
Nickel, Total	ND	0.0625	0.0784	125	0.0625	0.0812	130	3.50	75 - 125	20	*
Selenium, Total	ND	0.0625	0.0884	141	0.0625	0.0923	148	4.33	75 - 125	20	*
Thallium, Total	ND	0.0625	0.0763	122	0.0625	0.0777	124	1.87	75 - 125	20	
Vanadium, Total	0.00349	0.0625	0.0748	114	0.0625	0.0769	117	2.69	75 - 125	20	
Zinc, Total	ND	0.0625	0.113	180	0.0625	0.118	188	4.35	75 - 125	20	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12070658 **Worknum:** WG404557
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG404557-02 **File ID:** NI.072612.141008 **Dil:** 10 **Units:** ug/L
Sample: L12070728-01 **File ID:** NI.072612.135727 **Dil:** 2

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	0.775	F	2.90	F	274.00	
Barium	39.9	X	39.8	X	0.26	
Cadmium	ND	U	ND	U		
Chromium	1.66	X	ND	U		
Copper	1.54	F	ND	U		
Lead	ND	U	ND	U		
Manganese	7.55	X	10.6	X	40.60	
Nickel	2.04	F	ND	U		
Selenium	1.11	X	ND	U		
Thallium	0.645	X	0.788	F	22.20	
Vanadium	2.33	X	2.63	F	13.10	
Zinc	ND	U	ND	U		

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to RL and less than 100 times the MDL.

E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 2519560

07/30/2012 11:05



Microbac Laboratories Inc.
Serial Dilution Report

Login: L12070658 **Worknum:** WG404831
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG404831-02 **File ID:** NI.072912.095026 **Dil:** 25 **Units:** ug/L
Sample: L12070658-12 **File ID:** NI.072912.094407 **Dil:** 5

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	5.88	F	2960.00	
Barium	48.4	X	42.8	X	11.40	
Cadmium	ND	U	ND	U		
Chromium	6.30	X	ND	U		
Copper	ND	U	ND	U		
Lead	1.18	F	ND	U		
Manganese	134	X	127	X	5.25	
Nickel	ND	U	ND	U		
Selenium	ND	U	ND	U		
Thallium	ND	U	ND	U		
Vanadium	3.51	X	ND	U		
Zinc	ND	U	ND	U		

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to RL and less than 100 times the MDL.

E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 2519560

07/30/2012 11:05



Microbac Laboratories Inc.
Serial Dilution Report

Login: L12070658 **Worknum:** WG404837
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG404837-02 **File ID:** NI.072912.163157 **Dil:** 25 **Units:** ug/L
Sample: L12070658-06 **File ID:** NI.072912.162539 **Dil:** 5

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	6.06	F	3850.00	
Barium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Chromium	ND	U	ND	U		
Copper	ND	U	ND	U		
Lead	ND	U	ND	U		
Manganese	ND	U	ND	U		
Nickel	ND	U	ND	U		
Selenium	ND	U	ND	U		
Thallium	ND	U	ND	U		
Vanadium	ND	U	ND	U		
Zinc	ND	U	ND	U		

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to RL and less than 100 times the MDL.

E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 2519560

07/30/2012 11:05



Sample Login ID: L12070658

Worknum: WG404557

Instrument ID: ICP-MS2

Method: 6020

Post Spike ID: WG404557-01

File ID: NI.072612.140658

Dil: 2

Units: ug/L

Sample ID: L12070728-01

File ID: NI.072612.135727

Dil: 2

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	50.1		0.388	F	50	99.3	75 - 125	
BARIUM	68.0		20.0		50	96.1	75 - 125	
CADMIUM	51.5		0	U	50	103.1	75 - 125	
CHROMIUM	52.2		0.831		50	102.8	75 - 125	
COPPER	51.2		0.769	F	50	100.9	75 - 125	
LEAD	51.0		0	U	50	102.1	75 - 125	
MANGANESE	56.9		3.77		50	106.3	75 - 125	
NICKEL	51.4		1.02	F	50	100.7	75 - 125	
SELENIUM	49.8		0.554		50	98.4	75 - 125	
THALLIUM	50.3		0.322		50	100.0	75 - 125	
VANADIUM	53.1		1.16		50	103.9	75 - 125	
ZINC	52.4		0	U	50	104.7	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation



Sample Login ID: L12070658

Worknum: WG404831

Instrument ID: ICP-MS2

Method: 6020

Post Spike ID: WG404831-01

File ID: NI.072912.094717

Dil: 5

Units: ug/L

Sample ID: L12070658-12

File ID: NI.072912.094407

Dil: 5

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	46.0		0	U	50	91.9	75 - 125	
BARIUM	52.0		9.67		50	84.6	75 - 125	
CADMIUM	48.5		0	U	50	97.0	75 - 125	
CHROMIUM	44.7		1.26		50	86.9	75 - 125	
COPPER	45.4		0	U	50	90.8	75 - 125	
LEAD	44.9		0.237	F	50	89.2	75 - 125	
MANGANESE	71.5		26.8		50	89.3	75 - 125	
NICKEL	45.3		0	U	50	90.5	75 - 125	
SELENIUM	45.2		0	U	50	90.5	75 - 125	
THALLIUM	44.4		0	U	50	88.7	75 - 125	
VANADIUM	44.1		0.702		50	86.9	75 - 125	
ZINC	47.6		0	U	50	95.2	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation



Sample Login ID: L12070658

Worknum: WG404837

Instrument ID: ICP-MS2

Method: 6020

Post Spike ID: WG404837-01

File ID: NI.072912.162848

Dil: 5

Units: ug/L

Sample ID: L12070658-06

File ID: NI.072912.162539

Dil: 5

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	45.5		0	U	50	91.0	75 - 125	
BARIUM	46.5		0	U	50	93.0	75 - 125	
CADMIUM	46.5		0	U	50	92.9	75 - 125	
CHROMIUM	45.8		0	U	50	91.5	75 - 125	
COPPER	47.3		0	U	50	94.6	75 - 125	
LEAD	46.0		0	U	50	92.1	75 - 125	
MANGANESE	46.2		0	U	50	92.4	75 - 125	
NICKEL	46.4		0	U	50	92.8	75 - 125	
SELENIUM	46.3		0	U	50	92.5	75 - 125	
THALLIUM	45.4		0	U	50	90.9	75 - 125	
VANADIUM	44.9		0	U	50	89.9	75 - 125	
ZINC	48.1		0	U	50	96.2	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation



Microbac Laboratories Inc.
Initial Calibration Summary

00836136

Login:	<u>L12070658</u>	Workgroup (AAB#):	<u>WG404557</u>
Analytical Method:	<u>6020</u>	Instrument ID:	<u>ICP-MS2</u>
ICAL Worknum:	<u>WG404606</u>	Initial Calibration Date:	<u>26-JUL-2012 11:58</u>

	WG404606-01		WG404606-02		WG404606-03		WG404606-04		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ANTIMONY	0	390	.4	702	50	525000	100	1050000	.999872	
BARIUM	0	62.3	.4	295	50	260000	100	508000	.999996	
CADMIUM	0	106	.4	264	50	215000	100	418000	.999999	
CHROMIUM	0	10800	.4	11000	50	513000	100	997000	1	
COPPER	0	222	.4	337	50	157000	100	306000	.999987	
LEAD	0	2150	.4	5060	50	2970000	100	5560000	.999934	
MANGANESE	0	1360	.4	3340	50	898000	100	1750000	.999992	
NICKEL	0	198	.4	273	50	167000	100	327000	.999997	
SELENIUM	0	27.5	.4	29.9	50	6740	100	13300	.999997	
THALLIUM	0	668	.4	1540	50	978000	100	1920000	.999936	
VANADIUM	0	3790	.4	4230	50	616000	100	1210000	.999996	
ZINC	0	231	.4	511	50	71900	100	140000	.999997	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00836137

Login: L12070658 Workgroup (AAB#): WG404557
 Analytical Method: 6020 Instrument ID: ICP-MS2
 ICAL Worknum: WG404726 Initial Calibration Date: 27-JUL-2012 08:18

	WG404726-01		WG404726-02		WG404726-03		WG404726-04		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ANTIMONY	0	39.0	.4	529	50	559000	100	1100000	.999929	
BARIUM	0	28.3	.4	319	50	265000	100	511000	1	
CADMIUM	0	74.3	.4	317	50	229000	100	444000	.999989	
CHROMIUM	0	9700	.4	10200	50	477000	100	925000	.999963	
COPPER	0	96.0	.4	247	50	134000	100	256000	.999988	
LEAD	0	1620	.4	5000	50	3030000	100	5650000	.999959	
MANGANESE	0	1200	.4	2250	50	865000	100	1660000	.999999	
NICKEL	0	66.0	.4	220	50	144000	100	280000	.999977	
SELENIUM	0	23.5	.4	25.0	50	6040	100	11800	.99997	
THALLIUM	0	8.70	.4	1080	50	1000000	100	1930000	.999966	
VANADIUM	0	3180	.4	3730	50	582000	100	1150000	.9999	
ZINC	0	126	.4	208	50	60100	100	116000	1	

INT = Instrument intensity
 R = Coefficient of correlation
 Q = Data Qualifier
 * = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00836138

Login: L12070658 Workgroup (AAB#): WG404831
Analytical Method: 6020 Instrument ID: ICP-MS2
ICAL Worknum: WG404857 Initial Calibration Date: 29-JUL-2012 08:49

	WG404857-01		WG404857-02		WG404857-03		WG404857-04		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ANTIMONY	0	21.7	.4	404	50	416000	100	824000	.999906	
BARIUM	0	31.0	.4	266	50	216000	100	423000	.999977	
CADMIUM	0	53.3	.4	216	50	159000	100	309000	.999999	
CHROMIUM	0	8320	.4	8830	50	402000	100	779000	.999984	
COPPER	0	127	.4	254	50	109000	100	211000	.999913	
LEAD	0	1510	.4	4060	50	2470000	100	4820000	.999964	
MANGANESE	0	1080	.4	1770	50	670000	100	1290000	.999913	
NICKEL	0	65.7	.4	184	50	117000	100	230000	.999984	
SELENIUM	0	25.0	.4	29.2	50	5050	100	9840	.999976	
THALLIUM	0	5.70	.4	864	50	815000	100	1590000	.999962	
VANADIUM	0	2680	.4	3260	50	501000	100	979000	.999984	
ZINC	0	154	.4	205	50	51600	100	100000	.999948	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00836139

Login: L12070658 Workgroup (AAB#): WG404837
Analytical Method: 6020 Instrument ID: ICP-MS2
ICAL Worknum: WG404857 Initial Calibration Date: 29-JUL-2012 08:49

	WG404857-01		WG404857-02		WG404857-03		WG404857-04		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ANTIMONY	0	21.7	.4	404	50	416000	100	824000	.999906	
BARIUM	0	31.0	.4	266	50	216000	100	423000	.999977	
CADMIUM	0	53.3	.4	216	50	159000	100	309000	.999999	
CHROMIUM	0	8320	.4	8830	50	402000	100	779000	.999984	
COPPER	0	127	.4	254	50	109000	100	211000	.999913	
LEAD	0	1510	.4	4060	50	2470000	100	4820000	.999964	
MANGANESE	0	1080	.4	1770	50	670000	100	1290000	.999913	
NICKEL	0	65.7	.4	184	50	117000	100	230000	.999984	
SELENIUM	0	25.0	.4	29.2	50	5050	100	9840	.999976	
THALLIUM	0	5.70	.4	864	50	815000	100	1590000	.999962	
VANADIUM	0	2680	.4	3260	50	501000	100	979000	.999984	
ZINC	0	154	.4	205	50	51600	100	100000	.999948	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-06
 Instrument ID: ICP-MS2 Run Time: 12:04 Method: 6020
 File ID: NI.072612.120431 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS2 - 26-JUL-12
 Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
BARIIUM	.6	1.2	.6	U
CADMIUM	.12	.24	.12	U
CHROMIUM	.4	.8	.4	U
COPPER	.4	.8	.4	U
MANGANESE	.4	.8	.4	U
NICKEL	.8	1.6	.8	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.255	F
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U
VANADIUM	.2	.4	.2	U
ZINC	5	10	5	U

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-06
 Instrument ID: ICP-MS2 Run Time: 08:24 Method: 6020
 File ID: NI.072712.082436 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS2 - 27-JUL-12
 Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
BARIUM	.6	1.2	.6	U
CADMIUM	.12	.24	.12	U
CHROMIUM	.4	.8	.4	U
COPPER	.4	.8	.4	U
MANGANESE	.4	.8	.4	U
NICKEL	.8	1.6	.8	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.243	F
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U
VANADIUM	.2	.4	.2	U
ZINC	5	10	5	U

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-06
 Instrument ID: ICP-MS2 Run Time: 08:56 Method: 6020
 File ID: NI.072912.085619 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS2 - 29-JUL-12
 Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
BARIUM	.6	1.2	.6	U
CADMIUM	.12	.24	.12	U
CHROMIUM	.4	.8	.4	U
COPPER	.4	.8	.4	U
MANGANESE	.4	.8	.4	U
NICKEL	.8	1.6	.8	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.269	F
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U
VANADIUM	.2	.4	.2	U
ZINC	5	10	5	U



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-06
 Instrument ID: ICP-MS2 Run Time: 08:56 Method: 6020
 File ID: NI.072912.085619 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS2 - 29-JUL-12
 Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
BARIIUM	.6	1.2	.6	U
CADMIUM	.12	.24	.12	U
CHROMIUM	.4	.8	.4	U
COPPER	.4	.8	.4	U
MANGANESE	.4	.8	.4	U
NICKEL	.8	1.6	.8	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.269	F
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U
VANADIUM	.2	.4	.2	U
ZINC	5	10	5	U

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-12
 Instrument ID: ICP-MS2 Run Time: 12:27 Method: 6020
 File ID: NI.072612.122704 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.297	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-16
 Instrument ID: ICP-MS2 Run Time: 13:37 Method: 6020
 File ID: NI.072612.133730 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.243	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-18
 Instrument ID: ICP-MS2 Run Time: 14:16 Method: 6020
 File ID: NI.072612.141631 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.244	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-20
 Instrument ID: ICP-MS2 Run Time: 14:54 Method: 6020
 File ID: NI.072612.145433 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.257	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-22
 Instrument ID: ICP-MS2 Run Time: 15:26 Method: 6020
 File ID: NI.072612.152615 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.250	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-11
 Instrument ID: ICP-MS2 Run Time: 08:40 Method: 6020
 File ID: NI.072712.084030 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.266	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-19
 Instrument ID: ICP-MS2 Run Time: 11:11 Method: 6020
 File ID: NI.072712.111143 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.237	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-22
 Instrument ID: ICP-MS2 Run Time: 11:49 Method: 6020
 File ID: NI.072712.114942 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.221	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-24
 Instrument ID: ICP-MS2 Run Time: 12:21 Method: 6020
 File ID: NI.072712.122125 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.217	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-12
 Instrument ID: ICP-MS2 Run Time: 09:16 Method: 6020
 File ID: NI.072912.091627 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-14
 Instrument ID: ICP-MS2 Run Time: 09:56 Method: 6020
 File ID: NI.072912.095648 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.282	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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 PDF File ID: 2519576
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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-16
 Instrument ID: ICP-MS2 Run Time: 10:34 Method: 6020
 File ID: NI.072912.103445 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.255	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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 PDF File ID: 2519576
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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-18
 Instrument ID: ICP-MS2 Run Time: 11:00 Method: 6020
 File ID: NI.072912.110008 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.263	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-12
 Instrument ID: ICP-MS2 Run Time: 09:16 Method: 6020
 File ID: NI.072912.091627 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-36
 Instrument ID: ICP-MS2 Run Time: 16:03 Method: 6020
 File ID: NI.072912.160331 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.260	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-38
 Instrument ID: ICP-MS2 Run Time: 16:38 Method: 6020
 File ID: NI.072912.163820 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.289	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-40
 Instrument ID: ICP-MS2 Run Time: 17:00 Method: 6020
 File ID: NI.072912.170035 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.280	F
Barium	0.600	1.20	0.600	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Copper	0.400	0.800	0.400	U
Lead	0.200	0.400	0.200	U
Manganese	0.400	0.800	0.400	U
Nickel	0.800	1.60	0.800	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U
Vanadium	0.200	0.400	0.200	U
Zinc	5.00	10.0	5.00	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-05
 Instrument ID: ICP-MS2 Run Time: 12:01 Method: 6020
 File ID: NI.072612.120120 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Antimony	50	50.4	101	90 - 110	
Barium	50	50.8	102	90 - 110	
Cadmium	50	50.5	101	90 - 110	
Chromium	50	50.8	102	90 - 110	
Copper	50	51.2	102	90 - 110	
Lead	50	50.9	102	90 - 110	
Manganese	50	51.2	102	90 - 110	
Nickel	50	51.2	102	90 - 110	
Selenium	50	51.4	103	90 - 110	
Thallium	50	49.7	99.4	90 - 110	
Vanadium	50	51.0	102	90 - 110	
Zinc	50	52.0	104	90 - 110	

* Exceeds LIMITS Limit



Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-05
 Instrument ID: ICP-MS2 Run Time: 08:21 Method: 6020
 File ID: NI.072712.082124 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Antimony	50	50.1	100	90 - 110	
Barium	50	50.0	99.9	90 - 110	
Cadmium	50	50.2	100	90 - 110	
Chromium	50	49.1	98.1	90 - 110	
Copper	50	50.0	100	90 - 110	
Lead	50	49.8	99.6	90 - 110	
Manganese	50	49.4	98.7	90 - 110	
Nickel	50	49.4	98.8	90 - 110	
Selenium	50	49.4	98.9	90 - 110	
Thallium	50	49.4	98.9	90 - 110	
Vanadium	50	48.8	97.6	90 - 110	
Zinc	50	50.8	102	90 - 110	

* Exceeds LIMITS Limit



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-05
 Instrument ID: ICP-MS2 Run Time: 08:53 Method: 6020
 File ID: NI.072912.085306 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Antimony	50	50.0	100	90 - 110	
Barium	50	50.5	101	90 - 110	
Cadmium	50	50.6	101	90 - 110	
Chromium	50	50.0	99.9	90 - 110	
Copper	50	50.5	101	90 - 110	
Lead	50	49.8	99.5	90 - 110	
Manganese	50	50.1	100	90 - 110	
Nickel	50	50.0	100	90 - 110	
Selenium	50	50.2	100	90 - 110	
Thallium	50	49.7	99.3	90 - 110	
Vanadium	50	49.7	99.4	90 - 110	
Zinc	50	51.4	103	90 - 110	

* Exceeds LIMITS Limit



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-05
 Instrument ID: ICP-MS2 Run Time: 08:53 Method: 6020
 File ID: NI.072912.085306 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Antimony	50	50.0	100	90 - 110	
Barium	50	50.5	101	90 - 110	
Cadmium	50	50.6	101	90 - 110	
Chromium	50	50.0	99.9	90 - 110	
Copper	50	50.5	101	90 - 110	
Lead	50	49.8	99.5	90 - 110	
Manganese	50	50.1	100	90 - 110	
Nickel	50	50.0	100	90 - 110	
Selenium	50	50.2	100	90 - 110	
Thallium	50	49.7	99.3	90 - 110	
Vanadium	50	49.7	99.4	90 - 110	
Zinc	50	51.4	103	90 - 110	

* Exceeds LIMITS Limit



Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-11
Instrument ID: ICP-MS2 Run Time: 12:23 Method: 6020
File ID: NI.072612.122354 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	51.7	ug/L	103	90 - 110	
Barium	50.0	48.2	ug/L	96.4	90 - 110	
Cadmium	50.0	53.3	ug/L	107	90 - 110	
Chromium	50.0	50.9	ug/L	102	90 - 110	
Copper	50.0	50.5	ug/L	101	90 - 110	
Lead	50.0	50.5	ug/L	101	90 - 110	
Manganese	50.0	52.8	ug/L	106	90 - 110	
Nickel	50.0	50.9	ug/L	102	90 - 110	
Selenium	50.0	51.4	ug/L	103	90 - 110	
Thallium	50.0	49.2	ug/L	98.4	90 - 110	
Vanadium	50.0	50.5	ug/L	101	90 - 110	
Zinc	50.0	49.8	ug/L	99.7	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-15
 Instrument ID: ICP-MS2 Run Time: 13:34 Method: 6020
 File ID: NI.072612.133420 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.7	ug/L	101	90 - 110	
Barium	50.0	50.9	ug/L	102	90 - 110	
Cadmium	50.0	51.6	ug/L	103	90 - 110	
Chromium	50.0	51.8	ug/L	104	90 - 110	
Copper	50.0	51.6	ug/L	103	90 - 110	
Lead	50.0	51.1	ug/L	102	90 - 110	
Manganese	50.0	51.8	ug/L	104	90 - 110	
Nickel	50.0	51.8	ug/L	104	90 - 110	
Selenium	50.0	52.0	ug/L	104	90 - 110	
Thallium	50.0	50.1	ug/L	100	90 - 110	
Vanadium	50.0	51.6	ug/L	103	90 - 110	
Zinc	50.0	50.9	ug/L	102	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-17
 Instrument ID: ICP-MS2 Run Time: 14:13 Method: 6020
 File ID: NI.072612.141320 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.9	ug/L	102	90 - 110	
Barium	50.0	49.4	ug/L	98.8	90 - 110	
Cadmium	50.0	52.6	ug/L	105	90 - 110	
Chromium	50.0	53.0	ug/L	106	90 - 110	
Copper	50.0	51.2	ug/L	102	90 - 110	
Lead	50.0	51.2	ug/L	102	90 - 110	
Manganese	50.0	54.0	ug/L	108	90 - 110	
Nickel	50.0	51.6	ug/L	103	90 - 110	
Selenium	50.0	51.7	ug/L	103	90 - 110	
Thallium	50.0	50.2	ug/L	100	90 - 110	
Vanadium	50.0	53.2	ug/L	106	90 - 110	
Zinc	50.0	52.2	ug/L	104	90 - 110	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-19
Instrument ID: ICP-MS2 Run Time: 14:51 Method: 6020
File ID: NI.072612.145123 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	51.0	ug/L	102	90 - 110	
Barium	50.0	48.1	ug/L	96.2	90 - 110	
Cadmium	50.0	53.7	ug/L	107	90 - 110	
Chromium	50.0	54.3	ug/L	109	90 - 110	
Copper	50.0	51.7	ug/L	103	90 - 110	
Lead	50.0	51.5	ug/L	103	90 - 110	
Manganese	50.0	55.6	ug/L	111	90 - 110	*
Nickel	50.0	52.1	ug/L	104	90 - 110	
Selenium	50.0	53.6	ug/L	107	90 - 110	
Thallium	50.0	50.3	ug/L	101	90 - 110	
Vanadium	50.0	54.7	ug/L	109	90 - 110	
Zinc	50.0	53.1	ug/L	106	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-21
Instrument ID: ICP-MS2 Run Time: 15:23 Method: 6020
File ID: NI.072612.152305 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.5	ug/L	101	90 - 110	
Barium	50.0	47.0	ug/L	93.9	90 - 110	
Cadmium	50.0	54.2	ug/L	108	90 - 110	
Chromium	50.0	52.6	ug/L	105	90 - 110	
Copper	50.0	51.1	ug/L	102	90 - 110	
Lead	50.0	50.4	ug/L	101	90 - 110	
Manganese	50.0	55.2	ug/L	110	90 - 110	
Nickel	50.0	51.6	ug/L	103	90 - 110	
Selenium	50.0	53.1	ug/L	106	90 - 110	
Thallium	50.0	48.5	ug/L	97.0	90 - 110	
Vanadium	50.0	53.0	ug/L	106	90 - 110	
Zinc	50.0	51.1	ug/L	102	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-10
Instrument ID: ICP-MS2 Run Time: 08:37 Method: 6020
File ID: NI.072712.083721 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	49.9	ug/L	99.8	90 - 110	
Barium	50.0	47.1	ug/L	94.2	90 - 110	
Cadmium	50.0	51.3	ug/L	103	90 - 110	
Chromium	50.0	48.7	ug/L	97.3	90 - 110	
Copper	50.0	50.3	ug/L	101	90 - 110	
Lead	50.0	49.3	ug/L	98.6	90 - 110	
Manganese	50.0	49.9	ug/L	99.8	90 - 110	
Nickel	50.0	49.5	ug/L	99.0	90 - 110	
Selenium	50.0	50.6	ug/L	101	90 - 110	
Thallium	50.0	48.5	ug/L	97.0	90 - 110	
Vanadium	50.0	48.2	ug/L	96.4	90 - 110	
Zinc	50.0	49.4	ug/L	98.8	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-18
 Instrument ID: ICP-MS2 Run Time: 11:08 Method: 6020
 File ID: NI.072712.110833 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	48.3	ug/L	96.6	90 - 110	
Barium	50.0	46.9	ug/L	93.9	90 - 110	
Cadmium	50.0	50.6	ug/L	101	90 - 110	
Chromium	50.0	47.1	ug/L	94.3	90 - 110	
Copper	50.0	48.0	ug/L	95.9	90 - 110	
Lead	50.0	48.2	ug/L	96.4	90 - 110	
Manganese	50.0	48.0	ug/L	96.0	90 - 110	
Nickel	50.0	47.0	ug/L	93.9	90 - 110	
Selenium	50.0	48.5	ug/L	97.0	90 - 110	
Thallium	50.0	46.9	ug/L	93.8	90 - 110	
Vanadium	50.0	46.7	ug/L	93.3	90 - 110	
Zinc	50.0	48.2	ug/L	96.4	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-21
 Instrument ID: ICP-MS2 Run Time: 11:46 Method: 6020
 File ID: NI.072712.114631 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	47.7	ug/L	95.4	90 - 110	
Barium	50.0	49.2	ug/L	98.4	90 - 110	
Cadmium	50.0	49.2	ug/L	98.4	90 - 110	
Chromium	50.0	46.7	ug/L	93.4	90 - 110	
Copper	50.0	47.4	ug/L	94.8	90 - 110	
Lead	50.0	47.9	ug/L	95.7	90 - 110	
Manganese	50.0	47.2	ug/L	94.4	90 - 110	
Nickel	50.0	46.9	ug/L	93.9	90 - 110	
Selenium	50.0	47.9	ug/L	95.8	90 - 110	
Thallium	50.0	46.7	ug/L	93.5	90 - 110	
Vanadium	50.0	46.1	ug/L	92.2	90 - 110	
Zinc	50.0	48.6	ug/L	97.2	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-23
Instrument ID: ICP-MS2 Run Time: 12:18 Method: 6020
File ID: NI.072712.121814 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	47.0	ug/L	94.1	90 - 110	
Barium	50.0	48.8	ug/L	97.6	90 - 110	
Cadmium	50.0	48.8	ug/L	97.5	90 - 110	
Chromium	50.0	45.9	ug/L	91.9	90 - 110	
Copper	50.0	47.2	ug/L	94.4	90 - 110	
Lead	50.0	47.6	ug/L	95.2	90 - 110	
Manganese	50.0	46.6	ug/L	93.3	90 - 110	
Nickel	50.0	46.4	ug/L	92.9	90 - 110	
Selenium	50.0	47.9	ug/L	95.7	90 - 110	
Thallium	50.0	46.2	ug/L	92.5	90 - 110	
Vanadium	50.0	45.6	ug/L	91.2	90 - 110	
Zinc	50.0	48.0	ug/L	96.1	90 - 110	

* Exceeds LIMITS Criteria

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Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-10
 Instrument ID: ICP-MS2 Run Time: 09:09 Method: 6020
 File ID: NI.072912.090902 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.7	ug/L	101	90 - 110	
Barium	50.0	48.0	ug/L	95.9	90 - 110	
Cadmium	50.0	52.6	ug/L	105	90 - 110	
Chromium	50.0	48.3	ug/L	96.7	90 - 110	
Copper	50.0	50.3	ug/L	101	90 - 110	
Lead	50.0	49.4	ug/L	98.8	90 - 110	
Manganese	50.0	51.3	ug/L	103	90 - 110	
Nickel	50.0	49.9	ug/L	99.8	90 - 110	
Selenium	50.0	49.8	ug/L	99.6	90 - 110	
Thallium	50.0	49.2	ug/L	98.3	90 - 110	
Vanadium	50.0	48.5	ug/L	97.0	90 - 110	
Zinc	50.0	49.1	ug/L	98.3	90 - 110	

* Exceeds LIMITS Criteria

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 Report generated 07/30/2012 10:56



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-13
 Instrument ID: ICP-MS2 Run Time: 09:53 Method: 6020
 File ID: NI.072912.095338 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	49.7	ug/L	99.5	90 - 110	
Barium	50.0	47.4	ug/L	94.8	90 - 110	
Cadmium	50.0	52.5	ug/L	105	90 - 110	
Chromium	50.0	48.1	ug/L	96.2	90 - 110	
Copper	50.0	49.4	ug/L	98.8	90 - 110	
Lead	50.0	49.3	ug/L	98.5	90 - 110	
Manganese	50.0	50.5	ug/L	101	90 - 110	
Nickel	50.0	49.2	ug/L	98.4	90 - 110	
Selenium	50.0	49.7	ug/L	99.3	90 - 110	
Thallium	50.0	49.0	ug/L	98.0	90 - 110	
Vanadium	50.0	48.1	ug/L	96.2	90 - 110	
Zinc	50.0	49.0	ug/L	97.9	90 - 110	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-15
Instrument ID: ICP-MS2 Run Time: 10:31 Method: 6020
File ID: NI.072912.103135 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.1	ug/L	100	90 - 110	
Barium	50.0	52.2	ug/L	104	90 - 110	
Cadmium	50.0	53.2	ug/L	106	90 - 110	
Chromium	50.0	48.6	ug/L	97.1	90 - 110	
Copper	50.0	49.5	ug/L	98.9	90 - 110	
Lead	50.0	48.9	ug/L	97.9	90 - 110	
Manganese	50.0	51.0	ug/L	102	90 - 110	
Nickel	50.0	48.9	ug/L	97.7	90 - 110	
Selenium	50.0	51.2	ug/L	102	90 - 110	
Thallium	50.0	48.9	ug/L	97.7	90 - 110	
Vanadium	50.0	48.5	ug/L	96.9	90 - 110	
Zinc	50.0	49.5	ug/L	99.1	90 - 110	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-17
Instrument ID: ICP-MS2 Run Time: 10:56 Method: 6020
File ID: NI.072912.105658 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.7	ug/L	101	90 - 110	
Barium	50.0	50.7	ug/L	101	90 - 110	
Cadmium	50.0	53.3	ug/L	107	90 - 110	
Chromium	50.0	48.1	ug/L	96.1	90 - 110	
Copper	50.0	49.2	ug/L	98.4	90 - 110	
Lead	50.0	49.5	ug/L	98.9	90 - 110	
Manganese	50.0	51.6	ug/L	103	90 - 110	
Nickel	50.0	48.9	ug/L	97.7	90 - 110	
Selenium	50.0	50.9	ug/L	102	90 - 110	
Thallium	50.0	49.1	ug/L	98.2	90 - 110	
Vanadium	50.0	47.8	ug/L	95.5	90 - 110	
Zinc	50.0	49.5	ug/L	98.9	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2519575
Report generated 07/30/2012 10:56



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-10
Instrument ID: ICP-MS2 Run Time: 09:09 Method: 6020
File ID: NI.072912.090902 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	50.7	ug/L	101	90 - 110	
Barium	50.0	48.0	ug/L	95.9	90 - 110	
Cadmium	50.0	52.6	ug/L	105	90 - 110	
Chromium	50.0	48.3	ug/L	96.7	90 - 110	
Copper	50.0	50.3	ug/L	101	90 - 110	
Lead	50.0	49.4	ug/L	98.8	90 - 110	
Manganese	50.0	51.3	ug/L	103	90 - 110	
Nickel	50.0	49.9	ug/L	99.8	90 - 110	
Selenium	50.0	49.8	ug/L	99.6	90 - 110	
Thallium	50.0	49.2	ug/L	98.3	90 - 110	
Vanadium	50.0	48.5	ug/L	97.0	90 - 110	
Zinc	50.0	49.1	ug/L	98.3	90 - 110	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-35
Instrument ID: ICP-MS2 Run Time: 16:00 Method: 6020
File ID: NI.072912.160022 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	48.8	ug/L	97.6	90 - 110	
Barium	50.0	50.9	ug/L	102	90 - 110	
Cadmium	50.0	49.8	ug/L	99.5	90 - 110	
Chromium	50.0	47.6	ug/L	95.2	90 - 110	
Copper	50.0	48.4	ug/L	96.8	90 - 110	
Lead	50.0	48.1	ug/L	96.3	90 - 110	
Manganese	50.0	48.4	ug/L	96.8	90 - 110	
Nickel	50.0	48.7	ug/L	97.3	90 - 110	
Selenium	50.0	50.6	ug/L	101	90 - 110	
Thallium	50.0	47.8	ug/L	95.6	90 - 110	
Vanadium	50.0	47.4	ug/L	94.8	90 - 110	
Zinc	50.0	49.7	ug/L	99.4	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2519575
Report generated 07/30/2012 10:56



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-37
Instrument ID: ICP-MS2 Run Time: 16:35 Method: 6020
File ID: NI.072912.163509 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	49.2	ug/L	98.4	90 - 110	
Barium	50.0	50.6	ug/L	101	90 - 110	
Cadmium	50.0	49.4	ug/L	98.8	90 - 110	
Chromium	50.0	47.6	ug/L	95.2	90 - 110	
Copper	50.0	49.2	ug/L	98.4	90 - 110	
Lead	50.0	48.8	ug/L	97.7	90 - 110	
Manganese	50.0	48.3	ug/L	96.6	90 - 110	
Nickel	50.0	48.6	ug/L	97.3	90 - 110	
Selenium	50.0	49.7	ug/L	99.3	90 - 110	
Thallium	50.0	48.5	ug/L	96.9	90 - 110	
Vanadium	50.0	47.7	ug/L	95.3	90 - 110	
Zinc	50.0	49.8	ug/L	99.5	90 - 110	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-39
 Instrument ID: ICP-MS2 Run Time: 16:57 Method: 6020
 File ID: NI.072912.165724 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	48.4	ug/L	96.8	90 - 110	
Barium	50.0	50.6	ug/L	101	90 - 110	
Cadmium	50.0	48.7	ug/L	97.5	90 - 110	
Chromium	50.0	47.1	ug/L	94.2	90 - 110	
Copper	50.0	48.6	ug/L	97.1	90 - 110	
Lead	50.0	48.0	ug/L	96.0	90 - 110	
Manganese	50.0	47.5	ug/L	95.0	90 - 110	
Nickel	50.0	47.8	ug/L	95.6	90 - 110	
Selenium	50.0	49.5	ug/L	99.0	90 - 110	
Thallium	50.0	47.5	ug/L	94.9	90 - 110	
Vanadium	50.0	46.5	ug/L	92.9	90 - 110	
Zinc	50.0	49.1	ug/L	98.3	90 - 110	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-07
 Instrument ID: ICP-MS2 Run Time: 12:07 Method: 6020
 File ID: NI.072612.120743 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.436	ug/L	109	70 - 130	
Barium	0.750	0.741	ug/L	98.7	70 - 130	
Cadmium	0.240	0.255	ug/L	106	70 - 130	
Chromium	0.800	0.770	ug/L	96.2	70 - 130	
Copper	0.800	0.771	ug/L	96.4	70 - 130	
Lead	0.200	0.199	ug/L	99.6	70 - 130	
Manganese	0.500	0.421	ug/L	84.3	70 - 130	
Nickel	1.60	1.62	ug/L	101	70 - 130	
Selenium	0.400	0.400	ug/L	99.9	70 - 130	
Thallium	0.0800	0.0781	ug/L	97.6	70 - 130	
Vanadium	0.400	0.378	ug/L	94.6	70 - 130	
Zinc	6.25	6.82	ug/L	109	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/26/2012 Sample ID: WG404606-35
 Instrument ID: ICP-MS2 Run Time: 18:28 Method: 6020
 File ID: NI.072612.182834 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 26-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.440	ug/L	110	70 - 130	
Barium	0.750	0.682	ug/L	90.9	70 - 130	
Cadmium	0.240	0.291	ug/L	121	70 - 130	
Chromium	0.800	0.971	ug/L	121	70 - 130	
Copper	0.800	0.789	ug/L	98.6	70 - 130	
Lead	0.200	0.201	ug/L	101	70 - 130	
Manganese	0.500	0.536	ug/L	107	70 - 130	
Nickel	1.60	1.64	ug/L	102	70 - 130	
Selenium	0.400	0.539	ug/L	135	70 - 130	*
Thallium	0.0800	0.0607	ug/L	75.9	70 - 130	
Vanadium	0.400	0.430	ug/L	107	70 - 130	
Zinc	6.25	6.97	ug/L	112	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-07
 Instrument ID: ICP-MS2 Run Time: 08:27 Method: 6020
 File ID: NI.072712.082749 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.440	ug/L	110	70 - 130	
Barium	0.750	0.731	ug/L	97.4	70 - 130	
Cadmium	0.240	0.243	ug/L	101	70 - 130	
Chromium	0.800	0.717	ug/L	89.7	70 - 130	
Copper	0.800	0.791	ug/L	98.9	70 - 130	
Lead	0.200	0.196	ug/L	97.8	70 - 130	
Manganese	0.500	0.470	ug/L	94.0	70 - 130	
Nickel	1.60	1.64	ug/L	102	70 - 130	
Selenium	0.400	0.377	ug/L	94.2	70 - 130	
Thallium	0.0800	0.0797	ug/L	99.6	70 - 130	
Vanadium	0.400	0.384	ug/L	96.0	70 - 130	
Zinc	6.25	7.10	ug/L	114	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-20
 Instrument ID: ICP-MS2 Run Time: 11:14 Method: 6020
 File ID: NI.072712.111454 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.412	ug/L	103	70 - 130	
Barium	0.750	0.675	ug/L	90.0	70 - 130	
Cadmium	0.240	0.248	ug/L	103	70 - 130	
Chromium	0.800	0.655	ug/L	81.9	70 - 130	
Copper	0.800	0.760	ug/L	95.0	70 - 130	
Lead	0.200	0.189	ug/L	94.3	70 - 130	
Manganese	0.500	0.463	ug/L	92.7	70 - 130	
Nickel	1.60	1.56	ug/L	97.2	70 - 130	
Selenium	0.400	0.411	ug/L	103	70 - 130	
Thallium	0.0800	0.0784	ug/L	98.0	70 - 130	
Vanadium	0.400	0.339	ug/L	84.6	70 - 130	
Zinc	6.25	7.00	ug/L	112	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/27/2012 Sample ID: WG404726-35
 Instrument ID: ICP-MS2 Run Time: 15:25 Method: 6020
 File ID: NI.072712.152529 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404557 Cal ID: ICP-MS - 27-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.398	ug/L	99.4	70 - 130	
Barium	0.750	0.686	ug/L	91.4	70 - 130	
Cadmium	0.240	0.214	ug/L	89.3	70 - 130	
Chromium	0.800	0.608	ug/L	76.0	70 - 130	
Copper	0.800	0.744	ug/L	93.0	70 - 130	
Lead	0.200	0.185	ug/L	92.3	70 - 130	
Manganese	0.500	0.423	ug/L	84.5	70 - 130	
Nickel	1.60	1.46	ug/L	91.3	70 - 130	
Selenium	0.400	0.411	ug/L	103	70 - 130	
Thallium	0.0800	0.0737	ug/L	92.1	70 - 130	
Vanadium	0.400	0.325	ug/L	81.3	70 - 130	
Zinc	6.25	6.15	ug/L	98.4	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-07
 Instrument ID: ICP-MS2 Run Time: 08:59 Method: 6020
 File ID: NI.072912.085931 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.452	ug/L	113	70 - 130	
Barium	0.750	0.744	ug/L	99.2	70 - 130	
Cadmium	0.240	0.247	ug/L	103	70 - 130	
Chromium	0.800	0.699	ug/L	87.4	70 - 130	
Copper	0.800	0.752	ug/L	94.0	70 - 130	
Lead	0.200	0.195	ug/L	97.4	70 - 130	
Manganese	0.500	0.486	ug/L	97.3	70 - 130	
Nickel	1.60	1.69	ug/L	105	70 - 130	
Selenium	0.400	0.382	ug/L	95.5	70 - 130	
Thallium	0.0800	0.0816	ug/L	102	70 - 130	
Vanadium	0.400	0.372	ug/L	93.1	70 - 130	
Zinc	6.25	7.97	ug/L	128	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-19
 Instrument ID: ICP-MS2 Run Time: 11:03 Method: 6020
 File ID: NI.072912.110321 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404831 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.457	ug/L	114	70 - 130	
Barium	0.750	0.697	ug/L	92.9	70 - 130	
Cadmium	0.240	0.262	ug/L	109	70 - 130	
Chromium	0.800	0.646	ug/L	80.8	70 - 130	
Copper	0.800	0.749	ug/L	93.6	70 - 130	
Lead	0.200	0.200	ug/L	99.9	70 - 130	
Manganese	0.500	0.512	ug/L	102	70 - 130	
Nickel	1.60	1.58	ug/L	99.0	70 - 130	
Selenium	0.400	0.330	ug/L	82.5	70 - 130	
Thallium	0.0800	0.0830	ug/L	104	70 - 130	
Vanadium	0.400	0.346	ug/L	86.5	70 - 130	
Zinc	6.25	7.91	ug/L	127	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-07
 Instrument ID: ICP-MS2 Run Time: 08:59 Method: 6020
 File ID: NI.072912.085931 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.452	ug/L	113	70 - 130	
Barium	0.750	0.744	ug/L	99.2	70 - 130	
Cadmium	0.240	0.247	ug/L	103	70 - 130	
Chromium	0.800	0.699	ug/L	87.4	70 - 130	
Copper	0.800	0.752	ug/L	94.0	70 - 130	
Lead	0.200	0.195	ug/L	97.4	70 - 130	
Manganese	0.500	0.486	ug/L	97.3	70 - 130	
Nickel	1.60	1.69	ug/L	105	70 - 130	
Selenium	0.400	0.382	ug/L	95.5	70 - 130	
Thallium	0.0800	0.0816	ug/L	102	70 - 130	
Vanadium	0.400	0.372	ug/L	93.1	70 - 130	
Zinc	6.25	7.97	ug/L	128	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-19
 Instrument ID: ICP-MS2 Run Time: 11:03 Method: 6020
 File ID: NI.072912.110321 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.457	ug/L	114	70 - 130	
Barium	0.750	0.697	ug/L	92.9	70 - 130	
Cadmium	0.240	0.262	ug/L	109	70 - 130	
Chromium	0.800	0.646	ug/L	80.8	70 - 130	
Copper	0.800	0.749	ug/L	93.6	70 - 130	
Lead	0.200	0.200	ug/L	99.9	70 - 130	
Manganese	0.500	0.512	ug/L	102	70 - 130	
Nickel	1.60	1.58	ug/L	99.0	70 - 130	
Selenium	0.400	0.330	ug/L	82.5	70 - 130	
Thallium	0.0800	0.0830	ug/L	104	70 - 130	
Vanadium	0.400	0.346	ug/L	86.5	70 - 130	
Zinc	6.25	7.91	ug/L	127	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-32
 Instrument ID: ICP-MS2 Run Time: 14:45 Method: 6020
 File ID: NI.072912.144547 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.452	ug/L	113	70 - 130	
Barium	0.750	0.723	ug/L	96.4	70 - 130	
Cadmium	0.240	0.255	ug/L	106	70 - 130	
Chromium	0.800	0.650	ug/L	81.2	70 - 130	
Copper	0.800	0.745	ug/L	93.1	70 - 130	
Lead	0.200	0.190	ug/L	95.0	70 - 130	
Manganese	0.500	0.478	ug/L	95.6	70 - 130	
Nickel	1.60	1.54	ug/L	96.5	70 - 130	
Selenium	0.400	0.364	ug/L	91.0	70 - 130	
Thallium	0.0800	0.0766	ug/L	95.8	70 - 130	
Vanadium	0.400	0.337	ug/L	84.2	70 - 130	
Zinc	6.25	6.88	ug/L	110	70 - 130	

* Exceeds LIMITS Criteria



Login Number: L12070658 Run Date: 07/29/2012 Sample ID: WG404857-47
 Instrument ID: ICP-MS2 Run Time: 18:38 Method: 6020
 File ID: NI.072912.183844 Analyst: JYH QC Key: STD
 Workgroup (AAB#): WG404837 Cal ID: ICP-MS - 29-JUL-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	0.400	0.440	ug/L	110	70 - 130	
Barium	0.750	0.703	ug/L	93.8	70 - 130	
Cadmium	0.240	0.249	ug/L	104	70 - 130	
Chromium	0.800	0.665	ug/L	83.2	70 - 130	
Copper	0.800	0.764	ug/L	95.6	70 - 130	
Lead	0.200	0.194	ug/L	97.1	70 - 130	
Manganese	0.500	0.475	ug/L	95.1	70 - 130	
Nickel	1.60	1.60	ug/L	100	70 - 130	
Selenium	0.400	0.450	ug/L	113	70 - 130	
Thallium	0.0800	0.0792	ug/L	99.0	70 - 130	
Vanadium	0.400	0.346	ug/L	86.5	70 - 130	
Zinc	6.25	6.88	ug/L	110	70 - 130	

* Exceeds LIMITS Criteria



Login number: L12070658
Instrument ID: ICP-MS2
Sol. A: WG404606-08
Sol. AB: WG404606-10

File ID: NI.072612.121053
File ID: NI.072612.122039

Workgroup (AAB#): WG404557
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0555	NS	100	98.5	98.5	
Barium	NS	0.00970	NS	100	91.6	91.6	
Cadmium	NS	-0.0170	NS	100	101	101	
Chromium	NS	0.0492	NS	100	94.9	94.9	
Copper	NS	0.0569	NS	100	94.1	94.1	
Lead	NS	0.00920	NS	100	94.4	94.4	
Manganese	NS	-0.0599	NS	100	99.1	99.1	
Nickel	NS	0.357	NS	100	95.6	95.6	
Selenium	NS	0.0462	NS	100	97.8	97.8	
Thallium	NS	-0.00750	NS	100	94.2	94.2	
Vanadium	NS	0.0284	NS	100	95.9	95.9	
Zinc	NS	1.29	NS	100	95.7	95.7	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Login number: L12070658
Instrument ID: ICP-MS2
Sol. A: WG404726-08
Sol. AB: WG404726-09

File ID: NI.072712.083059
File ID: NI.072712.083409

Workgroup (AAB#): WG404557
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0702	NS	100	101	101	
Barium	NS	0.00780	NS	100	94.5	94.5	
Cadmium	NS	0.00440	NS	100	102	102	
Chromium	NS	0.00670	NS	100	95.2	95.2	
Copper	NS	0.0583	NS	100	96.4	96.4	
Lead	NS	0.00990	NS	100	97.0	97.0	
Manganese	NS	0.0161	NS	100	98.4	98.4	
Nickel	NS	0.346	NS	100	95.6	95.6	
Selenium	NS	0.0828	NS	100	99.7	99.7	
Thallium	NS	0.0116	NS	100	96.1	96.1	
Vanadium	NS	0.0276	NS	100	94.8	94.8	
Zinc	NS	1.65	NS	100	98.9	98.9	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Login number: L12070658
Instrument ID: ICP-MS2
Sol. A: WG404857-08
Sol. AB: WG404857-09

File ID: NI.072912.090242
File ID: NI.072912.090551

Workgroup (AAB#): WG404831
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0708	NS	100	103	103	
Barium	NS	0.00390	NS	100	96.0	96.0	
Cadmium	NS	-0.0449	NS	100	105	105	
Chromium	NS	-0.00400	NS	100	96.9	96.9	
Copper	NS	0.0706	NS	100	98.1	98.1	
Lead	NS	0.0144	NS	100	101	101	
Manganese	NS	0.000200	NS	100	103	103	
Nickel	NS	0.320	NS	100	97.2	97.2	
Selenium	NS	0.0389	NS	100	102	102	
Thallium	NS	0.0112	NS	100	98.0	98.0	
Vanadium	NS	0.0228	NS	100	96.6	96.6	
Zinc	NS	1.34	NS	100	99.4	99.4	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Login number: L12070658
Instrument ID: ICP-MS2
Sol. A: WG404857-08
Sol. AB: WG404857-09

File ID: NI.072912.090242
File ID: NI.072912.090551

Workgroup (AAB#): WG404837
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0708	NS	100	103	103	
Barium	NS	0.00390	NS	100	96.0	96.0	
Cadmium	NS	-0.0449	NS	100	105	105	
Chromium	NS	-0.00400	NS	100	96.9	96.9	
Copper	NS	0.0706	NS	100	98.1	98.1	
Lead	NS	0.0144	NS	100	101	101	
Manganese	NS	0.000200	NS	100	103	103	
Nickel	NS	0.320	NS	100	97.2	97.2	
Selenium	NS	0.0389	NS	100	102	102	
Thallium	NS	0.0112	NS	100	98.0	98.0	
Vanadium	NS	0.0228	NS	100	96.6	96.6	
Zinc	NS	1.34	NS	100	99.4	99.4	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



INTERNAL STANDARD REPORT

Login: L12070658 Analytical Method: 6020
 Analytical Workgroup: WG404557 Matrix: 1
 Instrument: ICP-MS2 Analyst: JYH
 ICAL Date: 26-JUL-2012 11:48

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L12070658-22	SAMP	26-JUL-2012 14:29	96.568	86.539	97.478	
L12070658-23	SAMP	26-JUL-2012 14:32	96.657	88.942	99.331	
L12070658-24	SAMP	26-JUL-2012 14:35	96.641	88.508	98.46	
L12070658-25	SAMP	26-JUL-2012 14:38	95.566	88.551	96.617	
L12070658-26	SAMP	26-JUL-2012 14:41	95.471	87.512	97.119	
L12070658-27	SAMP	26-JUL-2012 14:45	95.564	89.439	97.747	
L12070658-28	SAMP	26-JUL-2012 14:48	94.897	87.729	97.509	
L12070658-29	SAMP	26-JUL-2012 14:57	95.343	89.119	97.041	
L12070658-30	SAMP	26-JUL-2012 15:00	91.686	86.482	96.83	
L12070658-32	SAMP	26-JUL-2012 15:04	97.332	91.23	102.802	
L12070658-33	SAMP	26-JUL-2012 15:07	92.519	89.298	98.982	
L12070658-34	SAMP	26-JUL-2012 15:10	95.851	89.622	101.189	
L12070658-35	SAMP	26-JUL-2012 15:13	96.375	90.176	101.036	
L12070658-36	SAMP	26-JUL-2012 15:16	95.779	88.953	100.048	
L12070658-37	SAMP	26-JUL-2012 15:19	94.127	88.596	99.336	
WG404363-03	BLANK	26-JUL-2012 13:47	97.69	99.105	97.827	
WG404363-04	LCS	26-JUL-2012 13:51	102.658	107.692	106.192	
WG404557-01	PSPK	26-JUL-2012 14:06	99.459	102.202	107.365	
WG404557-02	SERIAL	26-JUL-2012 14:10	100.617	97.429	105.378	
WG404606-05	ICV	26-JUL-2012 12:01	95.432	98.954	96.744	
WG404606-06	ICB	26-JUL-2012 12:04	98.915	101.203	97.8	
WG404606-07	LLICV	26-JUL-2012 12:07	99.541	102.595	99.656	
WG404606-08	ICS	26-JUL-2012 12:10	87.504	87.146	86.389	
WG404606-10	ICS	26-JUL-2012 12:20	96.765	100.703	104.341	
WG404606-11	CCV	26-JUL-2012 12:23	99.51	101.814	105.702	
WG404606-12	CCB	26-JUL-2012 12:27	100.619	99.881	105.52	
WG404606-15	CCV	26-JUL-2012 13:34	95.947	99.674	98.488	
WG404606-16	CCB	26-JUL-2012 13:37	98.473	99.131	98.992	
WG404606-17	CCV	26-JUL-2012 14:13	97.984	98.415	102.65	
WG404606-18	CCB	26-JUL-2012 14:16	99.323	97.777	102.616	
WG404606-19	CCV	26-JUL-2012 14:51	97.974	95.52	106.156	
WG404606-20	CCB	26-JUL-2012 14:54	99.365	95.111	104.5	
WG404606-21	CCV	26-JUL-2012 15:23	100.062	96.542	108.496	
WG404606-22	CCB	26-JUL-2012 15:26	101.331	96.257	108.12	
WG404606-35	LLCCV	26-JUL-2012 18:28	99.979	84.376	106.953	

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
 Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
 PDF File ID: 2519570
 Report generated: 07/30/2012 11:07



INTERNAL STANDARD REPORT

Login: L12070658 Analytical Method: 6020
 Analytical Workgroup: WG404557 Matrix: 2
 Instrument: ICP-MS2 Analyst: JYH
 ICAL Date: 26-JUL-2012 11:48

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM
			% Rec	% Rec	% Rec
L12070728-01	SAMP	26-JUL-2012 13:57	100.572	104.866	107.457

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
 Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
 PDF File ID: 2519570
 Report generated: 07/30/2012 11:07



INTERNAL STANDARD REPORT

Login: L12070658 Analytical Method: 6020
 Analytical Workgroup: WG404557 Matrix: 1
 Instrument: ICP-MS2 Analyst: JYH
 ICAL Date: 27-JUL-2012 08:08

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L12070658-22	SAMP	27-JUL-2012 11:24	97.979	101.786	100.164	
L12070658-23	SAMP	27-JUL-2012 11:27	92.142	90.57	89.87	
L12070658-24	SAMP	27-JUL-2012 11:30	93.234	91.801	89.971	
L12070658-25	SAMP	27-JUL-2012 11:33	92.426	92.57	90.442	
L12070658-26	SAMP	27-JUL-2012 11:37	93.438	92.451	89.772	
L12070658-27	SAMP	27-JUL-2012 11:40	92.517	94.227	91.832	
L12070658-28	SAMP	27-JUL-2012 11:43	93.415	93.327	90.648	
L12070658-29	SAMP	27-JUL-2012 11:52	93.075	93.478	90.318	
L12070658-30	SAMP	27-JUL-2012 11:56	90.507	92.548	89.647	
L12070658-32	SAMP	27-JUL-2012 11:59	99.637	104.672	103.167	
L12070658-33	SAMP	27-JUL-2012 12:02	91.229	94.48	90.205	
L12070658-34	SAMP	27-JUL-2012 12:05	93.527	95.198	91.495	
L12070658-35	SAMP	27-JUL-2012 12:08	93.165	94.458	92.115	
L12070658-36	SAMP	27-JUL-2012 12:11	92.866	93.745	91.393	
L12070658-37	SAMP	27-JUL-2012 12:15	92.4	94.427	90.022	
WG404726-05	ICV	27-JUL-2012 08:21	95.526	101.612	97.885	
WG404726-06	ICB	27-JUL-2012 08:24	100.3	103.506	100.836	
WG404726-07	LLICV	27-JUL-2012 08:27	100.807	104.798	102.54	
WG404726-08	ICS	27-JUL-2012 08:30	89.108	89.296	86.994	
WG404726-09	ICS	27-JUL-2012 08:34	97.184	104.132	102.543	
WG404726-10	CCV	27-JUL-2012 08:37	98.923	105.061	105.737	
WG404726-11	CCB	27-JUL-2012 08:40	101.791	105.795	104.738	
WG404726-18	CCV	27-JUL-2012 11:08	96.712	100.831	100.132	
WG404726-19	CCB	27-JUL-2012 11:11	99.719	102.353	102.106	
WG404726-20	LLCCV	27-JUL-2012 11:14	98.933	103.552	102.972	
WG404726-21	CCV	27-JUL-2012 11:46	96.294	104.825	100.664	
WG404726-22	CCB	27-JUL-2012 11:49	99.021	104.582	101.212	
WG404726-23	CCV	27-JUL-2012 12:18	96.579	104.867	101.211	
WG404726-24	CCB	27-JUL-2012 12:21	98.952	103.474	101.21	
WG404726-35	LLCCV	27-JUL-2012 15:25	95.153	103.712	95.843	

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
 Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

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 Report generated: 07/30/2012 11:07



INTERNAL STANDARD REPORT

Login: L12070658 Analytical Method: 6020
 Analytical Workgroup: WG404831 Matrix: 1
 Instrument: ICP-MS2 Analyst: JYH
 ICAL Date: 29-JUL-2012 08:40

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L12070658-12	SAMP	29-JUL-2012 09:44	100.275	97.938	99.245	
L12070658-14	SAMP	29-JUL-2012 10:37	99.366	94.873	98.069	
L12070658-15	SAMP	29-JUL-2012 10:41	99.846	95.887	99.798	
L12070658-16	SAMP	29-JUL-2012 10:44	99.397	95.842	99.813	
L12070658-17	SAMP	29-JUL-2012 10:47	101.083	96.757	101.756	
L12070658-18	SAMP	29-JUL-2012 10:50	98.789	96.012	100.775	
L12070658-19	SAMP	29-JUL-2012 10:53	97.025	94.678	100.076	
L12070658-20	SAMP	29-JUL-2012 09:34	99.356	96.357	98.532	
WG404305-02	BLANK	29-JUL-2012 09:21	109.015	111.171	112.968	
WG404305-03	LCS	29-JUL-2012 09:25	111.796	116.276	117.013	
WG404305-04	MS	29-JUL-2012 09:37	99.659	97.135	98.949	
WG404305-05	MSD	29-JUL-2012 09:40	100.529	97.744	99.859	
WG404831-01	PSPK	29-JUL-2012 09:47	108.042	110.756	113.303	
WG404831-02	SERIAL	29-JUL-2012 09:50	105.991	105.161	109.278	
WG404857-05	ICV	29-JUL-2012 08:53	97.5	100.128	97.821	
WG404857-06	ICB	29-JUL-2012 08:56	101.149	101.08	99.621	
WG404857-07	LLICV	29-JUL-2012 08:59	100.971	100.663	99.857	
WG404857-08	ICS	29-JUL-2012 09:02	91.038	86.75	87.912	
WG404857-09	ICS	29-JUL-2012 09:05	98.561	99.24	102.785	
WG404857-10	CCV	29-JUL-2012 09:09	111.073	115.332	117.92	
WG404857-12	CCB	29-JUL-2012 09:16	111.822	113.253	116.904	
WG404857-13	CCV	29-JUL-2012 09:53	108.246	113.937	115.413	
WG404857-14	CCB	29-JUL-2012 09:56	106.396	105.955	109.517	
WG404857-15	CCV	29-JUL-2012 10:31	105.521	105.056	108.842	
WG404857-16	CCB	29-JUL-2012 10:34	106.006	101.968	106.824	
WG404857-17	CCV	29-JUL-2012 10:56	104.607	104.715	110.345	
WG404857-18	CCB	29-JUL-2012 11:00	104.716	102.213	109.179	
WG404857-19	LLCCV	29-JUL-2012 11:03	101.673	98.993	103.286	

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
 Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
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INTERNAL STANDARD REPORT

Login: L12070658 Analytical Method: 6020
 Analytical Workgroup: WG404837 Matrix: 1
 Instrument: ICP-MS2 Analyst: JYH
 ICAL Date: 29-JUL-2012 08:40

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L12070658-01	SAMP	29-JUL-2012 16:13	93.749	92.645	88.941	
L12070658-03	SAMP	29-JUL-2012 16:19	95.113	94.898	91.194	
L12070658-04	SAMP	29-JUL-2012 16:22	95.108	95.605	90.782	
L12070658-06	SAMP	29-JUL-2012 16:25	94.407	92.336	88.168	
L12070658-07	SAMP	29-JUL-2012 16:41	92.393	92.879	87.678	
L12070658-08	SAMP	29-JUL-2012 16:44	94.273	93.937	88.982	
L12070658-09	SAMP	29-JUL-2012 16:47	92.666	93.944	87.81	
L12070658-10	SAMP	29-JUL-2012 16:51	92.011	93.283	88.242	
L12070658-11	SAMP	29-JUL-2012 16:54	93.859	91.647	85.868	
WG404188-02	BLANK	29-JUL-2012 16:06	101.507	100.533	98.409	
WG404188-03	LCS	29-JUL-2012 16:09	105.567	109.731	105.813	
WG404837-01	PSPK	29-JUL-2012 16:28	103.151	106.044	101.5	
WG404837-02	SERIAL	29-JUL-2012 16:31	98.826	99.729	95.227	
WG404857-05	ICV	29-JUL-2012 08:53	97.5	100.128	97.821	
WG404857-06	ICB	29-JUL-2012 08:56	101.149	101.08	99.621	
WG404857-07	LLICV	29-JUL-2012 08:59	100.971	100.663	99.857	
WG404857-08	ICS	29-JUL-2012 09:02	91.038	86.75	87.912	
WG404857-09	ICS	29-JUL-2012 09:05	98.561	99.24	102.785	
WG404857-10	CCV	29-JUL-2012 09:09	111.073	115.332	117.92	
WG404857-12	CCB	29-JUL-2012 09:16	111.822	113.253	116.904	
WG404857-19	LLCCV	29-JUL-2012 11:03	101.673	98.993	103.286	
WG404857-32	LLCCV	29-JUL-2012 14:45	95.305	93.49	91.797	
WG404857-35	CCV	29-JUL-2012 16:00	101.463	104.067	99.119	
WG404857-36	CCB	29-JUL-2012 16:03	101.432	102.757	97.876	
WG404857-37	CCV	29-JUL-2012 16:35	98.273	103.245	97.091	
WG404857-38	CCB	29-JUL-2012 16:38	98.499	100.27	96.136	
WG404857-39	CCV	29-JUL-2012 16:57	100.112	104.515	97.574	
WG404857-40	CCB	29-JUL-2012 17:00	99.796	100.68	96.749	
WG404857-47	LLCCV	29-JUL-2012 18:38	104.542	105.732	104.657	

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
 Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
 PDF File ID: 2519570
 Report generated: 07/30/2012 11:07



Login Number: L12070658 Date: 06/11/2012
Instrument ID: ICP-MS2 Method: 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Uranium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:

All analytes passed acceptance criteria at the specified concentration.



2.2.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun
 MassCal File Path C:\NexIONData\MassCal\Default.tun
 Peak Search Window: 1.00

Sample Information

Sample Date/Time: Thursday, July 26, 2012 08:59:34

Mass Calibration and Resolution

Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	7.025	1335	2021	0.708
Mg	23.985	24.025	4713	2020	0.716
In	114.904	114.925	22867	2023	0.687
U	238.050	238.025	47469	2034	0.681

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	12.183
5.575	5.960
5.625	2.020
5.675	1.952
5.725	2.296
5.775	1.603
5.825	2.784
5.875	1.879
5.925	4.436
5.975	1.495
6.025	1.014
6.075	4.036
6.125	2.996
6.175	0.749
6.225	4.119
6.275	18.153
6.325	162.980
6.375	136.931
6.425	68.698
6.475	15.275
6.525	11.092
6.575	3.571
6.625	4.122
6.675	4.137
6.725	3.541
6.775	3.181
6.825	2.341
6.875	2.760

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6.925	2.225
6.975	1.316
7.025	2.547
7.075	2.112
7.125	2.233
7.175	2.890
7.225	0.871
7.275	3.613
7.325	136.931
7.375	223.607
7.425	223.607
7.475	223.607
7.525	
7.575	136.931
7.625	136.931
7.675	223.607
7.725	55.902
7.775	223.607
7.825	223.607
7.875	
7.925	
7.975	223.607
8.025	223.607
8.075	223.607
8.125	223.607
8.175	149.071
8.225	223.607
8.275	0.000
8.325	162.980
8.375	149.071
8.425	223.607
8.475	31.623
22.525	16.523
22.575	3.067
22.625	3.315
22.675	1.291
22.725	0.844
22.775	2.667
22.825	1.514
22.875	0.861
22.925	1.056
22.975	1.047
23.025	0.633
23.075	1.390
23.125	2.050
23.175	0.875
23.225	1.067

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23.275	2.042
23.325	5.455
23.375	223.607
23.425	149.071
23.475	69.722
23.525	11.619
23.575	11.291
23.625	2.758
23.675	2.478
23.725	2.845
23.775	0.786
23.825	1.835
23.875	1.695
23.925	1.152
23.975	3.149
24.025	2.703
24.075	2.894
24.125	2.634
24.175	1.841
24.225	2.586
24.275	4.071
24.325	5.892
24.375	223.607
24.425	223.607
24.475	136.931
24.525	48.591
24.575	25.742
24.625	11.945
24.675	6.259
24.725	90.102
24.775	50.661
24.825	20.027
24.875	7.549
24.925	6.001
24.975	6.569
25.025	3.281
25.075	2.542
25.125	3.149
25.175	6.048
25.225	4.009
25.275	9.214
25.325	32.086
25.375	
25.425	149.071
25.475	91.287
113.525	26.833
113.575	7.459

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113.625	8.547
113.675	4.968
113.725	2.765
113.775	3.945
113.825	2.830
113.875	4.007
113.925	1.612
113.975	2.492
114.025	1.529
114.075	2.623
114.125	3.663
114.175	3.601
114.225	6.952
114.275	10.598
114.325	8.839
114.375	30.619
114.425	23.184
114.475	2.424
114.525	4.441
114.575	3.718
114.625	1.600
114.675	0.935
114.725	2.149
114.775	0.950
114.825	0.903
114.875	1.164
114.925	1.052
114.975	1.763
115.025	0.732
115.075	1.401
115.125	2.119
115.175	1.341
115.225	2.463
115.275	3.172
115.325	14.658
115.375	122.475
115.425	136.931
115.475	65.477
115.525	19.569
115.575	5.756
115.625	9.480
115.675	4.966
115.725	8.100
115.775	5.381
115.825	5.946
115.875	4.787
115.925	3.117

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115.975	1.967
116.025	6.431
116.075	5.263
116.125	2.508
116.175	4.441
116.225	10.184
116.275	12.677
116.325	64.438
116.375	100.000
116.425	223.607
116.475	119.523
236.525	
236.575	
236.625	
236.675	
236.725	136.931
236.775	
236.825	
236.875	
236.925	223.607
236.975	
237.025	
237.075	
237.125	
237.175	
237.225	
237.275	136.931
237.325	223.607
237.375	70.711
237.425	71.261
237.475	73.193
237.525	21.651
237.575	8.354
237.625	1.386
237.675	0.878
237.725	2.701
237.775	1.812
237.825	2.202
237.875	2.142
237.925	1.421
237.975	0.939
238.025	1.315
238.075	1.126
238.125	1.917
238.175	1.120
238.225	1.871
238.275	4.089

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238.325	4.061
238.375	5.498
238.425	7.058
238.475	9.331
238.525	52.047
238.575	223.607
238.625	223.607
238.675	
238.725	
238.775	223.607
238.825	223.607
238.875	
238.925	223.607
238.975	223.607
239.025	
239.075	136.931
239.125	91.287
239.175	223.607
239.225	
239.275	
239.325	
239.375	
239.425	
239.475	223.607

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Daily Performance Report

Sample ID: Daily Performance Check

Sample Date/Time: Thursday, July 26, 2012 09:03:43

Sample Description:

Method File: C:\NexIONData\Method\ESI Daily Performance.mth

Dataset File: C:\NexIONData\DataSet\072012\Daily Performance Check.261

MassCal File: C:\NexIONData\MassCal\Default.tun

Conditions File: C:\NexIONData\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 33

Current Dead Time (ns): 33

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		2639.5		2639.497		57.687		2.2	Standard	
Mg	24.0		38461.5		38461.493		430.334		1.1	Standard	
In	114.9		87812.1		87812.065		457.029		0.5	Standard	
U	238.1		74497.6		74497.635		376.922		0.5	Standard	
[CeO	155.9		2239.6		0.019		0.000		1.1	Standard
>	Ce	139.9		120012.1		120012.089		251.839		0.2	Standard
]	Ce++	70.0		1045.6		0.009		0.000		4.3	Standard
	Bkgd	220.0		0.6		0.633		0.447		70.6	Standard

Current Conditions File Data

Current Value	Description
0.99	Nebulizer Gas Flow STD/KED [NEB]
1.00	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1975.00	Analog Stage Voltage
1300.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
3.00	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: Daily Performance Check

Report Date/Time: Thursday, July 26, 2012 09:06:01

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SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 7/26/2012 9:03:43 AM

End Time: 7/26/2012 9:06:02 AM

Daily Performance Check - [Passed] optimum value(s): N/A

Obtained Intensity (Be 9.0122): 2639.50

Obtained Intensity (Mg 23.985): 38461.49

Obtained Intensity (In 114.904): 87812.07

Obtained Intensity (U 238.05): 74497.63

Obtained Intensity (Bkgd 220): 0.63

Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=2239.57 / 120012.09)

Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.009 (=1045.64 / 120012.09)

Report Date/Time: Thursday, July 26, 2012 09:06:02

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SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 7/26/2012 9:03:43 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\ESI Daily Performance.mth.
Intensity Criterion: Be 9.0122 > 2000
Intensity Criterion: Mg 23.985 > 15000
Intensity Criterion: In 114.904 > 40000
Intensity Criterion: U 238.05 > 30000
Intensity Criterion: Bkgd 220 <= 1
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): 2639.50
Obtained Intensity (Mg 23.985): 38461.49
Obtained Intensity (In 114.904): 87812.07
Obtained Intensity (U 238.05): 74497.63
Obtained Intensity (Bkgd 220): 0.63
Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=2239.57 / 120012.09)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.009 (=1045.64 / 120012.09)

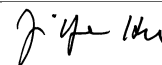
[Passed] Optimum value(s): N/A

End Time: 7/26/2012 9:06:02 AM

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Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, July 26, 2012 11:45:22

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11974.7	4.3				ug/L		Standard
|	Be	9	53.3	124.8				ug/L		Standard
|	Al	27	10095.0	7.0				ug/L		Standard
[>	Sc	45	476707.1	1.2				ug/L		Standard
[	Ti	47	149.3	85.4				ug/L		Standard
|	V	51	3747.1	1.2				ug/L		Standard
|	Cr	52	10265.5	1.3				ug/L		Standard
|	Cr	53	3075.3	5.4				ug/L		Standard
|	Mn	55	1438.4	10.3				ug/L		Standard
|	Co	59	148.0	56.1				ug/L		Standard
|	Ni	60	176.3	72.0				ug/L		Standard
|	Cu	65	186.3	69.1				ug/L		Standard
|	Zn	66	354.7	31.4				ug/L		Standard
[>	Ge	72	437919.5	1.7				ug/L		Standard
|	As	75	-222.5	37.5				ug/L		Standard
|	Se	82	28.6	25.5				ug/L		Standard
[	Se-1	77	201.3	4.3				ug/L		Standard
[>	Ga	71	985.0	4.4				mg/L		Standard
[	Rb	85	21.7	70.5				ug/L		Standard
[	Y	89	370794.8	1.8				ug/L		Standard
[>	Rh	103	498.3	7.5				ug/L		Standard
[	Mo	98	253.5	63.0				ug/L		Standard
|	Ag	107	124.0	78.5				ug/L		Standard
|	Cd	111	100.4	59.3				mg/L		Standard
|	Cd	114	307.0	39.0				ug/L		Standard
[>	In	115	1045366.6	0.6				ug/L		Standard
|	Sn	118	1663.8	23.5				ug/L		Standard
|	Sb	123	845.9	32.4				ug/L		Standard
[	Ba	135	61.0	52.8				ug/L		Standard
[	Ce	140	30.0	36.7				ug/L		Standard
[>	Tb	159	1407505.7	1.0				ug/L		Standard
[	Ho	165	13.3	35.4				ug/L		Standard
|	Tl	203	713.4	21.6				ug/L		Standard
|	Tl	205	1648.1	23.7				ug/L		Standard
|	Pb	206	594.0	18.1				ug/L		Standard
|	Pb	207	497.3	20.5				ug/L		Standard
	Pb	208	2293.4	19.9				ug/L		Standard
	U	238	300.7	167.4				ug/L		Standard
[>	Bi	209	757837.6	0.6				ug/L		Standard

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[Na	23	591.7	53.7	mg/L	Standard
	Mg	24	1565.2	147.2	mg/L	Standard
	K	39	156.7	20.5	mg/L	Standard
|	Ca	43	5.0	100.0	mg/L	Standard
|	Fe	54	717.4	7.9	mg/L	Standard
|	Fe	57	4072.2	9.0	mg/L	Standard
[>	Sc-1	45	476707.1	1.2	mg/L	Standard
|	Cl	35	29.3	26.5	ug/L	Standard
|	Kr	83	39.0	2.6	ug/L	Standard
|	Br	81	1124.2	2.3	ug/L	Standard
|	P	31	495.0	9.3	ug/L	Standard
|	S	34	6398.0	0.5	ug/L	Standard
|	Sr	88	36.7	7.9	ug/L	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Blank

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Blank

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Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, July 26, 2012 11:48:33

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11812.9	3.8				ug/L	11975	Standard
|	Be	9	68.3	160.5				ug/L	53	Standard
|	Al	27	11211.1	31.4				ug/L	10095	Standard
[>	Sc	45	468691.4	1.4				ug/L	476707	Standard
[	Ti	47	201.3	110.6				ug/L	149	Standard
|	V	51	3787.3	1.9				ug/L	3747	Standard
|	Cr	52	10772.5	2.8				ug/L	10265	Standard
|	Cr	53	2871.9	6.5				ug/L	3075	Standard
|	Mn	55	1360.4	6.0				ug/L	1438	Standard
|	Co	59	155.0	48.1				ug/L	148	Standard
|	Ni	60	197.7	105.8				ug/L	176	Standard
|	Cu	65	222.3	76.1				ug/L	186	Standard
|	Zn	66	231.0	34.4				ug/L	355	Standard
[>	Ge	72	440124.7	0.5				ug/L	437919	Standard
|	As	75	-253.4	29.3				ug/L	-222	Standard
|	Se	82	27.5	32.2				ug/L	29	Standard
[	Se-1	77	215.3	5.0				ug/L	201	Standard
[>	Ga	71	1020.0	4.3				mg/L	985	Standard
[	Rb	85	20.0	25.0				ug/L	22	Standard
[	Y	89	367910.8	1.8				ug/L	370795	Standard
[>	Rh	103	543.3	6.9				ug/L	498	Standard
[	Mo	98	187.7	103.9				ug/L	253	Standard
|	Ag	107	142.7	102.2				ug/L	124	Standard
|	Cd	111	106.2	57.4				mg/L	100	Standard
|	Cd	114	325.8	51.1				ug/L	307	Standard
[>	In	115	1035810.2	0.6				ug/L	1045367	Standard
|	Sn	118	1397.7	28.2				ug/L	1664	Standard
|	Sb	123	389.9	55.9				ug/L	846	Standard
[	Ba	135	62.3	80.2				ug/L	61	Standard
[	Ce	140	34.0	19.3				ug/L	30	Standard
[>	Tb	159	1398919.6	0.6				ug/L	1407506	Standard
[	Ho	165	15.7	16.1				ug/L	13	Standard
|	Tl	203	668.3	20.4				ug/L	713	Standard
|	Tl	205	1532.4	18.0				ug/L	1648	Standard
|	Pb	206	574.3	20.5				ug/L	594	Standard
|	Pb	207	487.3	20.3				ug/L	497	Standard
	Pb	208	2153.7	16.2				ug/L	2293	Standard
	U	238	802.1	171.2				ug/L	301	Standard
[>	Bi	209	755125.8	1.3				ug/L	757838	Standard

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Na	23	545.0	74.0	mg/L	592	Standard
Mg	24	3276.0	160.1	mg/L	1565	Standard
K	39	125.0	31.2	mg/L	157	Standard
Ca	43	5.0	100.0	mg/L	5	Standard
Fe	54	753.6	1.9	mg/L	717	Standard
Fe	57	4457.3	23.1	mg/L	4072	Standard
Sc-1	45	468691.4	1.4	mg/L	476707	Standard
Cl	35	31.7	36.6	ug/L	29	Standard
Kr	83	44.7	2.2	ug/L	39	Standard
Br	81	1213.4	4.2	ug/L	1124	Standard
P	31	467.5	14.4	ug/L	495	Standard
S	34	6470.5	0.6	ug/L	6398	Standard
Sr	88	40.0	12.5	ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 1

Report Date/Time: Thursday, July 26, 2012 11:51:04

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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, July 26, 2012 11:51:45

Number of Replicates: 3

Autosampler Position: 2

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11639.5	3.1				ug/L	11975	Standard
|	Be	9	83.3	21.1				ug/L	53	Standard
|	Al	27	14222.1	32.6				ug/L	10095	Standard
[>	Sc	45	463070.7	1.4				ug/L	476707	Standard
[	Ti	47	231.3	2.2				ug/L	149	Standard
|	V	51	4229.8	3.3				ug/L	3747	Standard
|	Cr	52	11021.3	1.1				ug/L	10265	Standard
|	Cr	53	2942.8	3.9				ug/L	3075	Standard
|	Mn	55	3338.0	1.4				ug/L	1438	Standard
|	Co	59	738.4	3.7				ug/L	148	Standard
|	Ni	60	272.7	4.6				ug/L	176	Standard
|	Cu	65	337.3	6.4				ug/L	186	Standard
|	Zn	66	511.3	5.0				ug/L	355	Standard
[>	Ge	72	442636.0	1.5				ug/L	437919	Standard
|	As	75	-204.2	15.2				ug/L	-222	Standard
|	Se	82	29.9	26.5				ug/L	29	Standard
[	Se-1	77	204.7	3.9				ug/L	201	Standard
[>	Ga	71	945.0	3.3				mg/L	985	Standard
[	Rb	85	16.7	17.3				ug/L	22	Standard
[	Y	89	376955.0	0.6				ug/L	370795	Standard
[>	Rh	103	508.3	11.0				ug/L	498	Standard
[	Mo	98	511.7	2.4				ug/L	253	Standard
|	Ag	107	477.0	6.7				ug/L	124	Standard
|	Cd	111	264.1	9.3				mg/L	100	Standard
|	Cd	114	867.0	2.7				ug/L	307	Standard
[>	In	115	1049590.9	0.3				ug/L	1045367	Standard
|	Sn	118	2698.2	5.3				ug/L	1664	Standard
|	Sb	123	701.6	10.4				ug/L	846	Standard
[	Ba	135	294.7	4.0				ug/L	61	Standard
[	Ce	140	36.3	5.7				ug/L	30	Standard
[>	Tb	159	1408482.1	1.0				ug/L	1407506	Standard
[	Ho	165	14.0	37.1				ug/L	13	Standard
|	Tl	203	1537.7	0.6				ug/L	713	Standard
|	Tl	205	3636.1	1.6				ug/L	1648	Standard
|	Pb	206	1291.4	3.5				ug/L	594	Standard
|	Pb	207	1089.0	3.1				ug/L	497	Standard
	Pb	208	5062.3	2.5				ug/L	2293	Standard
	U	238	886.7	3.6				ug/L	301	Standard
[>	Bi	209	764489.5	0.3				ug/L	757838	Standard

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[Na	23	831.7	8.7	mg/L	592	Standard
	Mg	24	3685.4	3.4	mg/L	1565	Standard
	K	39	156.7	18.4	mg/L	157	Standard
|	Ca	43	1.7	173.2	mg/L	5	Standard
|	Fe	54	765.7	9.8	mg/L	717	Standard
|	Fe	57	4370.6	5.1	mg/L	4072	Standard
[>	Sc-1	45	463070.7	1.4	mg/L	476707	Standard
|	Cl	35	29.7	25.3	ug/L	29	Standard
|	Kr	83	48.7	6.0	ug/L	39	Standard
|	Br	81	1160.0	3.4	ug/L	1124	Standard
|	P	31	435.0	4.3	ug/L	495	Standard
|	S	34	6560.6	1.4	ug/L	6398	Standard
|	Sr	88	31.7	24.1	ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Standard 2

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 2

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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Thursday, July 26, 2012 11:54:55

Number of Replicates: 3

Autosampler Position: 3

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

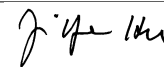
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11476.0	3.3	50.0000	35.024	70.0	ug/L	11975	Standard
|	Be	9	97527.9	0.9	50.0000	0.852	1.7	ug/L	53	Standard
|	Al	27	889798.7	1.0	50.0000	1.228	2.5	ug/L	10095	Standard
[>	Sc	45	469918.7	1.5				ug/L	476707	Standard
[	Ti	47	151887.2	0.3	100.0000	0.647	0.6	ug/L	149	Standard
|	V	51	615920.4	1.2	50.0000	0.184	0.4	ug/L	3747	Standard
|	Cr	52	513067.3	0.8	50.0000	0.115	0.2	ug/L	10265	Standard
|	Cr	53	90859.2	1.5	50.0000	0.537	1.1	ug/L	3075	Standard
|	Mn	55	898384.1	0.7	50.0000	0.090	0.2	ug/L	1438	Standard
|	Co	59	596974.1	0.8	50.0000	0.746	1.5	ug/L	148	Standard
|	Ni	60	167058.3	0.5	50.0000	0.437	0.9	ug/L	176	Standard
|	Cu	65	157056.5	0.4	50.0000	0.286	0.6	ug/L	186	Standard
|	Zn	66	71901.2	0.2	50.0000	0.432	0.9	ug/L	355	Standard
[>	Ge	72	444911.4	0.9				ug/L	437919	Standard
|	As	75	70053.3	1.6	50.0000	0.406	0.8	ug/L	-222	Standard
|	Se	82	6738.4	1.8	50.0000	0.611	1.2	ug/L	29	Standard
[	Se-1	77	5211.6	1.3	50.0000	0.818	1.6	ug/L	201	Standard
[>	Ga	71	876.7	11.4				mg/L	985	Standard
[	Rb	85	1015.0	9.2				ug/L	22	Standard
[	Y	89	370455.2	3.1				ug/L	370795	Standard
[>	Rh	103	535.0	4.1				ug/L	498	Standard
[	Mo	98	464464.7	2.4	100.0000	1.895	1.9	ug/L	253	Standard
|	Ag	107	429899.8	1.2	50.0000	0.209	0.4	ug/L	124	Standard
|	Cd	111	214552.9	1.3	50.0000	0.306	0.6	mg/L	100	Standard
|	Cd	114	627241.8	1.2	50.0000	0.195	0.4	ug/L	307	Standard
[>	In	115	1036725.1	0.8				ug/L	1045367	Standard
|	Sn	118	1453513.5	1.3	50.0000	0.293	0.6	ug/L	1664	Standard
|	Sb	123	524694.1	1.8	50.0000	0.514	1.0	ug/L	846	Standard
[	Ba	135	259923.2	1.6	50.0000	0.412	0.8	ug/L	61	Standard
[	Ce	140	1072.4	1.3				ug/L	30	Standard
[>	Tb	159	1431400.0	0.6				ug/L	1407506	Standard
[	Ho	165	25.3	31.7				ug/L	13	Standard
|	Tl	203	978124.6	1.1	50.0000	0.647	1.3	ug/L	713	Standard
|	Tl	205	2162666.6	1.3	50.0000	0.727	1.5	ug/L	1648	Standard
|	Pb	206	758330.4	0.9	50.0000	0.555	1.1	ug/L	594	Standard
|	Pb	207	640028.1	1.0	50.0000	0.582	1.2	ug/L	497	Standard
|	Pb	208	2966335.1	0.8	50.0000	0.494	1.0	ug/L	2293	Standard
	U	238	911020.3	0.2	50.0000	0.226	0.5	ug/L	301	Standard
[>	Bi	209	734949.3	0.2				ug/L	757838	Standard

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Na	23	106692.7	0.7	5.0000	0.078	1.6	mg/L	592	Standard
Mg	24	3759171.5	0.3	5.0000	0.088	1.8	mg/L	1565	Standard
K	39	7181.7	5.1	5.0000	0.219	4.4	mg/L	157	Standard
Ca	43	18.3	31.5	5.0000	1.763	35.3	mg/L	5	Standard
Fe	54	29999.2	3.8	5.0000	0.180	3.6	mg/L	717	Standard
Fe	57	598297.2	3.3	5.0000	0.136	2.7	mg/L	4072	Standard
Sc-1	45	469918.7	1.5				mg/L	476707	Standard
Cl	35	32.0	18.8				ug/L	29	Standard
Kr	83	47.3	6.0				ug/L	39	Standard
Br	81	1166.7	0.4				ug/L	1124	Standard
P	31	483.3	5.2				ug/L	495	Standard
S	34	6844.0	2.4				ug/L	6398	Standard
Sr	88	28.3	10.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 3

Report Date/Time: Thursday, July 26, 2012 11:57:26

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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Thursday, July 26, 2012 11:58:06

Number of Replicates: 3

Autosampler Position: 4

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12388.4	2.8	-210.3194	201.585	95.8	ug/L	11975	Standard
|	Be	9	194081.9	1.1	98.8019	2.253	2.3	ug/L	53	Standard
|	Al	27	1703523.4	0.9	97.2194	0.353	0.4	ug/L	10095	Standard
[>	Sc	45	478904.9	1.3				ug/L	476707	Standard
[	Ti	47	298979.7	0.2	200.1008	1.686	0.8	ug/L	149	Standard
|	V	51	1214494.2	0.5	100.2759	1.280	1.3	ug/L	3747	Standard
|	Cr	52	997408.8	0.4	99.9329	1.206	1.2	ug/L	10265	Standard
|	Cr	53	177438.1	1.4	100.4423	0.619	0.6	ug/L	3075	Standard
|	Mn	55	1750605.4	0.4	99.6015	1.144	1.1	ug/L	1438	Standard
|	Co	59	1174930.3	0.4	100.0345	1.141	1.1	ug/L	148	Standard
|	Ni	60	326771.4	1.1	99.7383	1.647	1.7	ug/L	176	Standard
|	Cu	65	305615.3	0.9	99.4914	1.430	1.4	ug/L	186	Standard
|	Zn	66	140294.2	0.4	99.7498	0.671	0.7	ug/L	355	Standard
[>	Ge	72	437566.3	0.8				ug/L	437919	Standard
|	As	75	137969.6	0.2	99.9696	0.932	0.9	ug/L	-222	Standard
|	Se	82	13296.7	0.6	100.2513	1.330	1.3	ug/L	29	Standard
[	Se-1	77	10200.8	1.9	100.7355	1.305	1.3	ug/L	201	Standard
[>	Ga	71	936.7	5.7				mg/L	985	Standard
|	Rb	85	7035.0	2.7				ug/L	22	Standard
[	Y	89	356676.0	2.5				ug/L	370795	Standard
[>	Rh	103	568.3	5.7				ug/L	498	Standard
[	Mo	98	925433.5	0.3	202.5317	0.502	0.2	ug/L	253	Standard
|	Ag	107	838257.7	0.8	100.1850	0.857	0.9	ug/L	124	Standard
|	Cd	111	417724.7	0.9	100.1131	0.971	1.0	mg/L	100	Standard
|	Cd	114	1218621.1	1.2	100.0106	1.299	1.3	ug/L	307	Standard
[>	In	115	1007087.7	0.1				ug/L	1045367	Standard
|	Sn	118	1433237.4	1.0	67.3406	0.738	1.1	ug/L	1664	Standard
|	Sb	123	1052290.5	0.2	101.5981	0.255	0.3	ug/L	846	Standard
[	Ba	135	507928.8	0.3	100.2954	0.325	0.3	ug/L	61	Standard
[	Ce	140	383.3	8.0				ug/L	30	Standard
[>	Tb	159	1420732.8	0.0				ug/L	1407506	Standard
[	Ho	165	40.0	13.2				ug/L	13	Standard
|	Tl	203	1919422.9	0.2	101.1337	0.332	0.3	ug/L	713	Standard
|	Tl	205	4184765.1	0.3	100.4353	0.724	0.7	ug/L	1648	Standard
|	Pb	206	1479694.1	0.1	100.8536	0.456	0.5	ug/L	594	Standard
|	Pb	207	1207187.1	0.5	99.1567	0.347	0.3	ug/L	497	Standard
|	Pb	208	5561246.9	0.2	98.8552	0.343	0.3	ug/L	2293	Standard
	U	238	1748492.3	0.2	100.0100	0.256	0.3	ug/L	301	Standard
[>	Bi	209	705118.4	0.4				ug/L	757838	Standard

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Na	23	127242.1	0.7	7.3877	0.083	1.1	mg/L	592	Standard
Mg	24	7327668.6	0.4	9.7765	0.093	0.9	mg/L	1565	Standard
K	39	13866.3	0.6	9.7814	0.077	0.8	mg/L	157	Standard
Ca	43	28.3	44.4	8.7935	4.226	48.1	mg/L	5	Standard
Fe	54	57805.5	1.8	9.7791	0.120	1.2	mg/L	717	Standard
Fe	57	1153536.9	5.9	9.7358	0.454	4.7	mg/L	4072	Standard
Sc-1	45	478904.9	1.3				mg/L	476707	Standard
Cl	35	33.7	24.7				ug/L	29	Standard
Kr	83	49.1	8.9				ug/L	39	Standard
Br	81	1255.1	2.7				ug/L	1124	Standard
P	31	511.7	7.4				ug/L	495	Standard
S	34	6542.2	3.6				ug/L	6398	Standard
Sr	88	45.0	33.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: Standard 4

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Corr. Coef.	Sn	118	Correlation coefficient < 0.998
Corr. Coef.	Na	23	Correlation coefficient < 0.998
Corr. Coef.	Ca	43	Correlation coefficient < 0.998

Sample ID: Standard 4

Report Date/Time: Thursday, July 26, 2012 12:00:37

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Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, July 26, 2012 12:01:20

Number of Replicates: 3

Autosampler Position: 201

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11205.8	3.0	189.9924	106.455	56.0	ug/L	11975	Standard
|	Be	9	96591.9	0.4	51.4660	2.368	4.6	ug/L	53	Standard
|	Al	27	870552.8	0.3	51.6288	2.185	4.2	ug/L	10095	Standard
[>	Sc	45	458100.1	4.3				ug/L	476707	Standard
|	Ti	47	151536.1	1.0	102.4449	3.707	3.6	ug/L	149	Standard
|	V	51	612892.8	1.5	50.9610	0.690	1.4	ug/L	3747	Standard
|	Cr	52	507492.5	1.4	50.8410	0.779	1.5	ug/L	10265	Standard
|	Cr	53	91660.6	1.3	51.6504	1.906	3.7	ug/L	3075	Standard
|	Mn	55	892052.3	0.7	51.2070	1.594	3.1	ug/L	1438	Standard
|	Co	59	591307.8	1.0	50.8429	0.906	1.8	ug/L	148	Standard
|	Ni	60	166199.9	0.6	51.2261	1.278	2.5	ug/L	176	Standard
|	Cu	65	155820.0	1.8	51.2092	1.378	2.7	ug/L	186	Standard
|	Zn	66	72574.4	0.5	51.9760	1.204	2.3	ug/L	355	Standard
[>	Ge	72	433340.8	2.7				ug/L	437919	Standard
|	As	75	69237.6	0.9	50.7687	0.951	1.9	ug/L	-222	Standard
|	Se	82	6754.1	1.2	51.3503	1.097	2.1	ug/L	29	Standard
[	Se-1	77	5175.6	1.2	50.6585	0.997	2.0	ug/L	201	Standard
[>	Ga	71	958.4	10.3				mg/L	985	Standard
|	Rb	85	1033.4	1.5				ug/L	22	Standard
|	Y	89	366061.0	2.5				ug/L	370795	Standard
[>	Rh	103	528.3	12.5				ug/L	498	Standard
|	Mo	98	463380.8	0.8	100.9961	1.244	1.2	ug/L	253	Standard
|	Ag	107	425113.0	0.4	50.6021	0.856	1.7	ug/L	124	Standard
|	Cd	111	211540.4	1.6	50.4835	0.558	1.1	mg/L	100	Standard
|	Cd	114	621153.4	0.6	50.7612	0.603	1.2	ug/L	307	Standard
[>	In	115	1011326.8	1.8				ug/L	1045367	Standard
|	Sn	118	1437654.5	0.9	67.2778	1.251	1.9	ug/L	1664	Standard
|	Sb	123	524451.8	0.6	50.4234	0.670	1.3	ug/L	846	Standard
|	Ba	135	258160.5	0.6	50.7672	0.643	1.3	ug/L	61	Standard
|	Ce	140	1032.4	5.4				ug/L	30	Standard
[>	Tb	159	1398324.9	1.5				ug/L	1407506	Standard
|	Ho	165	25.0	28.8				ug/L	13	Standard
|	Tl	203	967430.6	0.6	49.6910	0.664	1.3	ug/L	713	Standard
|	Tl	205	2162317.1	0.6	50.5897	0.905	1.8	ug/L	1648	Standard
|	Pb	206	748758.7	0.6	49.7455	0.507	1.0	ug/L	594	Standard
|	Pb	207	634168.9	0.6	50.7768	0.742	1.5	ug/L	497	Standard
|	Pb	208	2936305.3	0.6	50.8779	0.623	1.2	ug/L	2293	Standard
	U	238	902436.4	0.6	50.3332	0.694	1.4	ug/L	301	Standard
[>	Bi	209	723221.9	1.6				ug/L	757838	Standard

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Na	23	108891.6	1.3	6.6148	0.379	5.7	mg/L	592	Standard
Mg	24	3726552.3	2.5	5.2056	0.313	6.0	mg/L	1565	Standard
K	39	7091.7	2.3	5.1867	0.323	6.2	mg/L	157	Standard
Ca	43	18.3	15.7	5.7759	1.141	19.8	mg/L	5	Standard
Fe	54	29816.2	1.9	5.2200	0.270	5.2	mg/L	717	Standard
Fe	57	587517.9	1.7	5.1742	0.140	2.7	mg/L	4072	Standard
Sc-1	45	458100.1	4.3				mg/L	476707	Standard
Cl	35	23.0	11.5				ug/L	29	Standard
Kr	83	47.7	11.0				ug/L	39	Standard
Br	81	1199.2	6.1				ug/L	1124	Standard
P	31	515.8	6.9				ug/L	495	Standard
S	34	6403.0	3.5				ug/L	6398	Standard
Sr	88	50.0	26.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	102.932		
Al	27	103.258		
Sc	45			
Ti	47	102.445		
V	51	101.922		
Cr	52	101.682		
Cr	53	103.301		
Mn	55	102.414		
Co	59	101.686		
Ni	60	102.452		
Cu	65	102.418		
Zn	66	103.952		
Ge	72		98.954	
As	75	101.537		
Se	82	102.701		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	100.996		
Ag	107	101.204		

Sample ID: QC Std 1

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Cd	111	100.967	
Cd	114		
> In	115		96.744
Sn	118	134.556	
Sb	123	100.847	
Ba	135	101.534	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	99.382	
Tl	205		
Pb	206	99.491	
Pb	207	101.554	
Pb	208	101.756	
U	238	100.666	
> Bi	209		95.432
Na	23	132.297	
Mg	24	104.112	
K	39	103.735	
Ca	43	115.518	
Fe	54	104.401	
Fe	57	103.484	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Sn	118	
QC Std 1	Na	23	
QC Std 1	Ca	43	

Sample ID: QC Std 1

Report Date/Time: Thursday, July 26, 2012 12:03:50

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Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, July 26, 2012 12:04:31

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11651.1	3.3	169.3382	241.393	142.6	ug/L	11975	Standard
|	Be	9	30.0	60.1	0.0218	0.010	46.2	ug/L	53	Standard
|	Al	27	9432.9	2.4	-0.2477	0.011	4.3	ug/L	10095	Standard
[>	Sc	45	475003.6	4.0				ug/L	476707	Standard
|	Ti	47	94.0	19.4	0.0089	0.011	128.6	ug/L	149	Standard
|	V	51	3658.9	4.1	0.0029	0.016	558.0	ug/L	3747	Standard
|	Cr	52	10118.7	1.9	-0.0419	0.005	11.5	ug/L	10265	Standard
|	Cr	53	2259.3	3.6	-0.3395	0.060	17.6	ug/L	3075	Standard
|	Mn	55	1451.7	8.7	-0.0563	0.007	12.8	ug/L	1438	Standard
|	Co	59	182.7	36.3	0.0032	0.005	169.8	ug/L	148	Standard
|	Ni	60	112.0	22.8	0.0014	0.007	519.3	ug/L	176	Standard
|	Cu	65	137.3	17.5	-0.0144	0.008	54.1	ug/L	186	Standard
|	Zn	66	190.7	19.1	-0.1762	0.025	14.2	ug/L	355	Standard
[>	Ge	72	443185.9	1.5				ug/L	437919	Standard
|	As	75	-240.7	3.4	0.0242	0.008	32.2	ug/L	-222	Standard
|	Se	82	30.5	13.0	0.0539	0.033	60.4	ug/L	29	Standard
[	Se-1	77	190.0	10.0	-0.0967	0.214	221.8	ug/L	201	Standard
[>	Ga	71	1018.4	5.4				mg/L	985	Standard
|	Rb	85	18.3	87.7				ug/L	22	Standard
|	Y	89	373887.2	2.6				ug/L	370795	Standard
[>	Rh	103	505.0	13.0				ug/L	498	Standard
|	Mo	98	562.2	11.6	0.1136	0.012	10.3	ug/L	253	Standard
|	Ag	107	159.0	20.2	0.0140	0.003	24.6	ug/L	124	Standard
|	Cd	111	88.3	24.2	0.0100	0.005	46.2	mg/L	100	Standard
|	Cd	114	290.9	10.9	0.0053	0.003	51.6	ug/L	307	Standard
[>	In	115	1022371.9	2.0				ug/L	1045367	Standard
|	Sn	118	1655.8	9.4	0.0049	0.006	117.5	ug/L	1664	Standard
|	Sb	123	2838.0	10.6	0.2546	0.023	9.1	ug/L	846	Standard
|	Ba	135	98.3	36.7	0.0132	0.007	50.6	ug/L	61	Standard
|	Ce	140	36.0	29.0				ug/L	30	Standard
[>	Tb	159	1375193.1	1.4				ug/L	1407506	Standard
|	Ho	165	13.3	18.9				ug/L	13	Standard
|	Tl	203	632.3	30.1	0.0065	0.009	139.1	ug/L	713	Standard
|	Tl	205	1450.1	25.9	0.0022	0.008	373.0	ug/L	1648	Standard
|	Pb	206	604.7	18.5	0.0075	0.007	90.4	ug/L	594	Standard
|	Pb	207	498.3	16.7	0.0059	0.006	101.7	ug/L	497	Standard
|	Pb	208	2331.4	17.3	0.0059	0.006	107.8	ug/L	2293	Standard
	U	238	114.3	66.9	0.0094	0.004	43.2	ug/L	301	Standard
[>	Bi	209	749618.4	1.0				ug/L	757838	Standard

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Na	23	495.0	7.1	-0.0161	0.001	9.1	mg/L	592	Standard
Mg	24	556.7	51.2	0.0007	0.000	55.7	mg/L	1565	Standard
K	39	165.0	13.2	0.0079	0.011	143.2	mg/L	157	Standard
Ca	43	5.0	100.0	1.0990	1.618	147.2	mg/L	5	Standard
Fe	54	780.3	4.1	0.0043	0.011	260.4	mg/L	717	Standard
Fe	57	3852.2	4.4	-0.0004	0.002	477.7	mg/L	4072	Standard
Sc-1	45	475003.6	4.0				mg/L	476707	Standard
Cl	35	25.0	40.6				ug/L	29	Standard
Kr	83	43.1	3.9				ug/L	39	Standard
Br	81	1119.2	4.7				ug/L	1124	Standard
P	31	488.3	1.6				ug/L	495	Standard
S	34	6440.5	2.5				ug/L	6398	Standard
Sr	88	46.7	50.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.203	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	97.800
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.915
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 2	Ca	43	

Sample ID: QC Std 2

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Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, July 26, 2012 12:07:43

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11632.8	1.1	216.2764	177.253	82.0	ug/L	11975	Standard
|	Be	9	8.3	91.7	0.0104	0.004	37.4	ug/L	53	Standard
|	Al	27	7023.3	1.4	-0.3896	0.010	2.5	ug/L	10095	Standard
[>	Sc	45	477278.3	1.4				ug/L	476707	Standard
|	Ti	47	81.0	11.8	-0.0003	0.006	1823.2	ug/L	149	Standard
|	V	51	8364.8	1.0	0.3783	0.008	2.2	ug/L	3747	Standard
|	Cr	52	18490.6	1.6	0.7699	0.011	1.5	ug/L	10265	Standard
|	Cr	53	3612.9	4.6	0.4011	0.096	23.9	ug/L	3075	Standard
|	Mn	55	10080.7	2.4	0.4213	0.011	2.5	ug/L	1438	Standard
|	Co	59	4823.8	1.6	0.3880	0.011	2.7	ug/L	148	Standard
|	Ni	60	5542.3	2.4	1.6156	0.029	1.8	ug/L	176	Standard
|	Cu	65	2614.9	4.5	0.7710	0.039	5.1	ug/L	186	Standard
|	Zn	66	10262.8	1.7	6.8179	0.061	0.9	ug/L	355	Standard
[>	Ge	72	449283.8	1.1				ug/L	437919	Standard
|	As	75	271.7	15.4	0.3877	0.031	7.9	ug/L	-222	Standard
|	Se	82	77.9	6.6	0.3997	0.044	11.0	ug/L	29	Standard
[	Se-1	77	214.3	2.7	0.1144	0.047	41.1	ug/L	201	Standard
[>	Ga	71	980.0	7.4				mg/L	985	Standard
|	Rb	85	18.3	41.7				ug/L	22	Standard
|	Y	89	372903.2	0.6				ug/L	370795	Standard
[>	Rh	103	531.7	6.0				ug/L	498	Standard
|	Mo	98	320.6	41.1	0.0604	0.028	46.0	ug/L	253	Standard
|	Ag	107	3504.7	3.9	0.4002	0.016	3.9	ug/L	124	Standard
|	Cd	111	1145.9	2.0	0.2548	0.005	1.9	mg/L	100	Standard
|	Cd	114	3302.6	4.8	0.2438	0.012	5.1	ug/L	307	Standard
[>	In	115	1041771.9	0.3				ug/L	1045367	Standard
|	Sn	118	1409.1	11.7	-0.0077	0.007	96.4	ug/L	1664	Standard
|	Sb	123	4831.3	0.6	0.4360	0.004	0.9	ug/L	846	Standard
|	Ba	135	3909.5	0.9	0.7405	0.006	0.9	ug/L	61	Standard
|	Ce	140	30.0	8.8				ug/L	30	Standard
[>	Tb	159	1385701.3	0.9				ug/L	1407506	Standard
|	Ho	165	14.3	17.6				ug/L	13	Standard
|	Tl	203	2088.1	5.1	0.0781	0.006	7.3	ug/L	713	Standard
|	Tl	205	4824.8	5.9	0.0778	0.007	9.0	ug/L	1648	Standard
|	Pb	206	3595.8	0.6	0.1980	0.003	1.3	ug/L	594	Standard
|	Pb	207	2981.6	2.7	0.1965	0.007	3.8	ug/L	497	Standard
|	Pb	208	13967.9	0.9	0.1991	0.003	1.7	ug/L	2293	Standard
	U	238	7186.4	1.3	0.3874	0.004	1.1	ug/L	301	Standard
[>	Bi	209	754356.8	0.6				ug/L	757838	Standard

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Na	23	416.7	4.8	-0.0208	0.001	5.1	mg/L	592	Standard
Mg	24	253.3	93.5	0.0003	0.000	126.2	mg/L	1565	Standard
K	39	173.3	10.9	0.0135	0.013	93.0	mg/L	157	Standard
Ca	43	5.0	0.0	1.0940	0.024	2.2	mg/L	5	Standard
Fe	54	739.3	5.1	-0.0037	0.006	174.7	mg/L	717	Standard
Fe	57	3932.2	4.6	0.0001	0.002	1216.9	mg/L	4072	Standard
Sc-1	45	477278.3	1.4				mg/L	476707	Standard
Cl	35	23.7	9.8				ug/L	29	Standard
Kr	83	43.9	5.9				ug/L	39	Standard
Br	81	1141.7	3.9				ug/L	1124	Standard
P	31	490.0	4.9				ug/L	495	Standard
S	34	6414.7	2.1				ug/L	6398	Standard
Sr	88	23.3	53.9				ug/L	37	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	94.568		
Cr	52	96.232		
Cr	53			
Mn	55	84.259		
Co	59	96.988		
Ni	60	100.974		
Cu	65	96.375		
Zn	66	109.087		
Ge	72		102.595	
As	75	96.915		
Se	82	99.916		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	100.058		

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	Cd	111	106.154	
	Cd	114		
>	In	115		99.656
	Sn	118		
	Sb	123	109.003	
	Ba	135	98.730	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.670	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	99.573	
|	U	238	96.855	
>	Bi	209		99.541
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

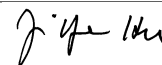
Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, July 26, 2012 12:10:53

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9596.4	1.5	268.7543	177.705	66.1	ug/L	11975	Standard
|	Be	9	6.7	43.3	0.0102	0.002	16.3	ug/L	53	Standard
|	Al	27	69945432.9	0.6	4859.2030	146.253	3.0	ug/L	10095	Standard
[>	Sc	45	396749.4	2.4				ug/L	476707	Standard
|	Ti	47	17978.0	3.0	13.7439	0.225	1.6	ug/L	149	Standard
|	V	51	3422.4	8.3	0.0284	0.023	79.3	ug/L	3747	Standard
|	Cr	52	9498.3	2.0	0.0492	0.008	15.3	ug/L	10265	Standard
|	Cr	53	3336.2	6.3	0.5764	0.116	20.1	ug/L	3075	Standard
|	Mn	55	1196.0	9.5	-0.0599	0.007	11.0	ug/L	1438	Standard
|	Co	59	310.3	5.4	0.0182	0.002	9.4	ug/L	148	Standard
|	Ni	60	1110.4	2.5	0.3565	0.015	4.1	ug/L	176	Standard
|	Cu	65	309.3	2.2	0.0569	0.002	2.9	ug/L	186	Standard
|	Zn	66	1960.1	2.0	1.2924	0.015	1.2	ug/L	355	Standard
[>	Ge	72	381629.0	1.4				ug/L	437919	Standard
|	As	75	-260.5	19.3	-0.0195	0.039	201.0	ug/L	-222	Standard
|	Se	82	25.3	22.1	0.0462	0.051	111.3	ug/L	29	Standard
[	Se-1	77	292.3	2.3	1.3886	0.110	8.0	ug/L	201	Standard
[>	Ga	71	845.0	10.1				mg/L	985	Standard
|	Rb	85	2626.9	5.7				ug/L	22	Standard
|	Y	89	306713.5	1.0				ug/L	370795	Standard
[>	Rh	103	405.0	13.7				ug/L	498	Standard
|	Mo	98	345196.8	1.6	84.2463	0.627	0.7	ug/L	253	Standard
|	Ag	107	144.7	49.3	0.0145	0.009	63.8	ug/L	124	Standard
|	Cd	111	-23.1	170.2	-0.0170	0.011	61.9	mg/L	100	Standard
|	Cd	114	1694.0	7.2	0.1367	0.009	6.9	ug/L	307	Standard
[>	In	115	903081.4	1.8				ug/L	1045367	Standard
|	Sn	118	849.7	18.7	-0.0272	0.008	29.4	ug/L	1664	Standard
|	Sb	123	656.7	26.9	0.0555	0.018	32.3	ug/L	846	Standard
|	Ba	135	70.7	41.8	0.0097	0.006	66.2	ug/L	61	Standard
|	Ce	140	1772.1	3.0				ug/L	30	Standard
[>	Tb	159	1270840.9	1.0				ug/L	1407506	Standard
|	Ho	165	15.7	14.7				ug/L	13	Standard
|	Tl	203	308.3	23.1	-0.0075	0.004	50.7	ug/L	713	Standard
|	Tl	205	663.0	32.0	-0.0136	0.005	38.3	ug/L	1648	Standard
|	Pb	206	598.0	13.1	0.0121	0.005	42.0	ug/L	594	Standard
|	Pb	207	489.3	18.3	0.0102	0.007	71.9	ug/L	497	Standard
|	Pb	208	2233.7	13.1	0.0092	0.005	54.9	ug/L	2293	Standard
	U	238	32.3	146.6	0.0052	0.003	55.0	ug/L	301	Standard
[>	Bi	209	663141.8	1.6				ug/L	757838	Standard

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Na	23	129652.4	0.7	9.0988	0.173	1.9	mg/L	592	Standard
Mg	24	3107135.7	1.1	5.0048	0.088	1.8	mg/L	1565	Standard
K	39	5754.4	3.0	4.8483	0.257	5.3	mg/L	157	Standard
Ca	43	23.3	53.9	8.7756	5.087	58.0	mg/L	5	Standard
Fe	54	16512.5	2.6	3.2862	0.029	0.9	mg/L	717	Standard
Fe	57	308576.4	2.1	3.1225	0.019	0.6	mg/L	4072	Standard
Sc-1	45	396749.4	2.4				mg/L	476707	Standard
Cl	35	266.0	5.1				ug/L	29	Standard
Kr	83	42.8	2.2				ug/L	39	Standard
Br	81	950.9	12.0				ug/L	1124	Standard
P	31	27971.6	1.5				ug/L	495	Standard
S	34	13601.9	2.6				ug/L	6398	Standard
Sr	88	36.7	15.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.184		
Sc	45			
Ti	47	13.744		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.146	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	84.246		
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	86.389	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.504	
|	Na	23	72.790	
|	Mg	24	100.096	
|	K	39	96.966	
|	Ca	43	58.504	
|	Fe	54	26.289	
|	Fe	57	24.980	
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	
QC Std 4	Na	23	
QC Std 4	Ca	43	
QC Std 4	Fe	54	
QC Std 4	Fe	57	

Sample ID: QC Std 4

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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, July 26, 2012 12:14:03

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12283.3	2.5	-55.3064	136.075	246.0	ug/L	11975	Standard
|	Be	9	194607.4	2.7	97.8052	1.776	1.8	ug/L	53	Standard
|	Al	27	88530344.3	1.1	5029.2978	31.376	0.6	ug/L	10095	Standard
[>	Sc	45	484979.1	1.6				ug/L	476707	Standard
[	Ti	47	167995.6	0.4	110.5882	1.187	1.1	ug/L	149	Standard
|	V	51	1211516.4	1.0	98.4034	1.762	1.8	ug/L	3747	Standard
|	Cr	52	989915.0	0.7	97.5492	1.485	1.5	ug/L	10265	Standard
|	Cr	53	180618.5	0.5	100.5962	1.430	1.4	ug/L	3075	Standard
|	Mn	55	1792365.7	0.9	100.3224	1.325	1.3	ug/L	1438	Standard
|	Co	59	1203667.7	0.6	100.8154	0.896	0.9	ug/L	148	Standard
|	Ni	60	329085.9	0.8	98.8070	0.228	0.2	ug/L	176	Standard
|	Cu	65	303200.8	0.7	97.0971	0.494	0.5	ug/L	186	Standard
|	Zn	66	144535.1	0.7	101.0996	0.562	0.6	ug/L	355	Standard
[>	Ge	72	444790.6	0.9				ug/L	437919	Standard
|	As	75	140937.0	0.7	100.4568	0.243	0.2	ug/L	-222	Standard
|	Se	82	13589.5	0.7	100.7908	0.445	0.4	ug/L	29	Standard
[	Se-1	77	10349.5	0.3	100.5499	0.694	0.7	ug/L	201	Standard
[>	Ga	71	1188.4	1.7				mg/L	985	Standard
[	Rb	85	3773.8	6.0				ug/L	22	Standard
[	Y	89	370259.5	0.4				ug/L	370795	Standard
[>	Rh	103	575.0	12.0				ug/L	498	Standard
[	Mo	98	480575.3	1.5	97.7984	2.971	3.0	ug/L	253	Standard
|	Ag	107	706364.5	1.2	78.4922	1.618	2.1	ug/L	124	Standard
|	Cd	111	457005.9	2.3	101.8092	0.656	0.6	mg/L	100	Standard
|	Cd	114	1278372.9	1.5	97.5341	1.163	1.2	ug/L	307	Standard
[>	In	115	1083356.5	1.7				ug/L	1045367	Standard
|	Sn	118	2142.5	32.5	0.0216	0.029	132.6	ug/L	1664	Standard
|	Sb	123	1118229.8	1.7	100.3666	0.896	0.9	ug/L	846	Standard
[	Ba	135	514091.5	0.4	94.3821	1.481	1.6	ug/L	61	Standard
[	Ce	140	2314.5	0.3				ug/L	30	Standard
[>	Tb	159	1467456.9	0.9				ug/L	1407506	Standard
[	Ho	165	27.0	24.3				ug/L	13	Standard
|	Tl	203	1916516.4	1.1	96.8552	0.278	0.3	ug/L	713	Standard
|	Tl	205	4236986.3	0.5	97.5376	0.640	0.7	ug/L	1648	Standard
|	Pb	206	1486733.7	0.6	97.1982	0.845	0.9	ug/L	594	Standard
|	Pb	207	1261697.0	0.5	99.4072	0.816	0.8	ug/L	497	Standard
|	Pb	208	5708330.0	0.7	97.3283	0.627	0.6	ug/L	2293	Standard
	U	238	1851935.1	1.3	101.6009	0.715	0.7	ug/L	301	Standard
[>	Bi	209	735135.5	1.1				ug/L	757838	Standard

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Na	23	136749.4	0.7	7.8432	0.082	1.0	mg/L	592	Standard
Mg	24	3674799.1	3.0	4.8435	0.225	4.6	mg/L	1565	Standard
K	39	6584.8	4.2	4.5265	0.122	2.7	mg/L	157	Standard
Ca	43	48.3	29.9	15.1514	4.609	30.4	mg/L	5	Standard
Fe	54	74132.1	2.7	12.4175	0.144	1.2	mg/L	717	Standard
Fe	57	1560045.2	1.6	13.0213	0.357	2.7	mg/L	4072	Standard
Sc-1	45	484979.1	1.6				mg/L	476707	Standard
Cl	35	307.3	6.5				ug/L	29	Standard
Kr	83	51.7	11.3				ug/L	39	Standard
Br	81	1460.1	0.9				ug/L	1124	Standard
P	31	79947.0	1.0				ug/L	495	Standard
S	34	14592.9	1.2				ug/L	6398	Standard
Sr	88	36.7	20.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	100.586		
Sc	45			
Ti	47	110.588		
V	51	98.403		
Cr	52	97.549		
Cr	53			
Mn	55	100.322		
Co	59	100.815		
Ni	60	98.807		
Cu	65	97.097		
Zn	66	101.100		
Ge	72		101.569	
As	75	100.457		
Se	82	100.791		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	97.798		
Ag	107	78.492		

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	Cd	111	101.809	
	Cd	114		
>	In	115		103.634
	Sn	118		
	Sb	123	100.367	
	Ba	135	94.382	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.855	
|	Tl	205		
|	Pb	206	97.198	
|	Pb	207	99.407	
|	Pb	208	97.328	
|	U	238	101.601	
>	Bi	209		97.004
|	Na	23	62.746	
|	Mg	24	96.870	
|	K	39	90.530	
|	Ca	43	101.009	
|	Fe	54	99.340	
|	Fe	57	104.170	
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ag	107	
QC Std 5	Na	23	
QC Std 5	Ca	43	

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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, July 26, 2012 12:20:39

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

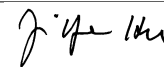
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12253.3	2.7	-95.8961	230.602	240.5	ug/L	11975	Standard
|	Be	9	193021.7	4.6	97.7380	2.456	2.5	ug/L	53	Standard
|	Al	27	85110117.8	3.4	4872.8404	145.958	3.0	ug/L	10095	Standard
[>	Sc	45	481216.2	2.1				ug/L	476707	Standard
[	Ti	47	160120.9	2.3	106.2959	1.200	1.1	ug/L	149	Standard
|	V	51	1170792.6	2.9	95.8954	2.334	2.4	ug/L	3747	Standard
|	Cr	52	955019.1	1.9	94.8830	1.229	1.3	ug/L	10265	Standard
|	Cr	53	173550.1	1.5	97.4314	0.099	0.1	ug/L	3075	Standard
|	Mn	55	1755062.4	2.2	99.0660	0.978	1.0	ug/L	1438	Standard
|	Co	59	1165228.8	1.7	98.4424	2.057	2.1	ug/L	148	Standard
|	Ni	60	315663.3	1.3	95.5934	0.766	0.8	ug/L	176	Standard
|	Cu	65	291528.3	2.4	94.1496	0.872	0.9	ug/L	186	Standard
|	Zn	66	135654.1	2.1	95.6791	0.722	0.8	ug/L	355	Standard
[>	Ge	72	440998.7	1.5				ug/L	437919	Standard
|	As	75	134976.3	1.9	97.0369	0.395	0.4	ug/L	-222	Standard
|	Se	82	13069.0	2.4	97.7539	1.690	1.7	ug/L	29	Standard
[	Se-1	77	9838.2	2.3	96.3117	1.001	1.0	ug/L	201	Standard
[>	Ga	71	1266.7	4.1				mg/L	985	Standard
|	Rb	85	3572.1	1.1				ug/L	22	Standard
[	Y	89	369075.8	2.2				ug/L	370795	Standard
[>	Rh	103	623.3	13.2				ug/L	498	Standard
[	Mo	98	458328.5	2.8	92.6134	2.657	2.9	ug/L	253	Standard
|	Ag	107	834242.2	1.6	92.0563	0.832	0.9	ug/L	124	Standard
|	Cd	111	456330.0	2.3	100.9757	1.937	1.9	mg/L	100	Standard
|	Cd	114	1261210.9	1.8	95.5691	1.713	1.8	ug/L	307	Standard
[>	In	115	1090747.3	1.2				ug/L	1045367	Standard
|	Sn	118	1907.8	8.4	0.0111	0.007	62.0	ug/L	1664	Standard
|	Sb	123	1105031.7	1.6	98.5123	1.691	1.7	ug/L	846	Standard
[	Ba	135	502553.5	1.4	91.6237	0.919	1.0	ug/L	61	Standard
[	Ce	140	2169.2	3.7				ug/L	30	Standard
[>	Tb	159	1481608.9	1.1				ug/L	1407506	Standard
[	Ho	165	24.3	15.6				ug/L	13	Standard
|	Tl	203	1858567.2	1.2	94.1592	0.840	0.9	ug/L	713	Standard
|	Tl	205	4150612.9	1.0	95.7860	1.242	1.3	ug/L	1648	Standard
|	Pb	206	1426700.0	1.5	93.4956	0.657	0.7	ug/L	594	Standard
|	Pb	207	1214656.8	1.2	95.9310	0.479	0.5	ug/L	497	Standard
|	Pb	208	5523595.5	1.2	94.4069	0.651	0.7	ug/L	2293	Standard
	U	238	1827977.8	2.5	100.5281	1.818	1.8	ug/L	301	Standard
[>	Bi	209	733318.5	0.9				ug/L	757838	Standard

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Na	23	138025.9	1.5	7.9793	0.091	1.1	mg/L	592	Standard
Mg	24	3541816.6	2.2	4.7025	0.053	1.1	mg/L	1565	Standard
K	39	6338.0	3.4	4.3883	0.081	1.8	mg/L	157	Standard
Ca	43	35.0	51.5	10.9554	5.952	54.3	mg/L	5	Standard
Fe	54	69189.1	2.5	11.6744	0.208	1.8	mg/L	717	Standard
Fe	57	1541149.4	4.4	12.9566	0.296	2.3	mg/L	4072	Standard
Sc-1	45	481216.2	2.1				mg/L	476707	Standard
Cl	35	312.7	12.4				ug/L	29	Standard
Kr	83	52.8	4.1				ug/L	39	Standard
Br	81	1552.6	3.5				ug/L	1124	Standard
P	31	76995.2	1.2				ug/L	495	Standard
S	34	14209.2	1.0				ug/L	6398	Standard
Sr	88	33.3	8.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.457		
Sc	45			
Ti	47	106.296		
V	51	95.895		
Cr	52	94.883		
Cr	53			
Mn	55	99.066		
Co	59	98.442		
Ni	60	95.593		
Cu	65	94.150		
Zn	66	95.679		
Ge	72		100.703	
As	75	97.037		
Se	82	97.754		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	92.613		
Ag	107	92.056		

Sample ID: QC Std 5

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Cd	111	100.976	
Cd	114		
> In	115		104.341
Sn	118		
Sb	123	98.512	
Ba	135	91.624	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	94.159	
Tl	205		
Pb	206	93.496	
Pb	207	95.931	
Pb	208	94.407	
U	238	100.528	
> Bi	209		96.765
Na	23	63.834	
Mg	24	94.050	
K	39	87.766	
Ca	43	73.036	
Fe	54	93.395	
Fe	57	103.653	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Na	23	
QC Std 5	Ca	43	

Sample ID: QC Std 5

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 12:23:54

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

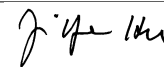
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12411.8	2.4	-7.3938	324.456	4388.2	ug/L	11975	Standard
|	Be	9	99213.8	1.4	49.0004	0.462	0.9	ug/L	53	Standard
|	Al	27	879263.3	0.4	48.3014	1.198	2.5	ug/L	10095	Standard
[>	Sc	45	493642.1	2.3				ug/L	476707	Standard
[	Ti	47	155953.2	0.8	102.4030	0.563	0.5	ug/L	149	Standard
|	V	51	625412.5	1.6	50.5284	0.940	1.9	ug/L	3747	Standard
|	Cr	52	522430.0	0.6	50.8555	0.461	0.9	ug/L	10265	Standard
|	Cr	53	93059.9	0.3	50.9124	0.251	0.5	ug/L	3075	Standard
|	Mn	55	947511.7	1.0	52.8378	0.481	0.9	ug/L	1438	Standard
|	Co	59	626276.2	1.1	52.3216	0.676	1.3	ug/L	148	Standard
|	Ni	60	169863.2	0.8	50.8629	0.507	1.0	ug/L	176	Standard
|	Cu	65	158305.1	1.3	50.5447	0.635	1.3	ug/L	186	Standard
|	Zn	66	71651.7	0.3	49.8405	0.062	0.1	ug/L	355	Standard
[>	Ge	72	445863.1	0.3				ug/L	437919	Standard
|	As	75	71106.2	0.2	50.6583	0.267	0.5	ug/L	-222	Standard
|	Se	82	6959.9	1.0	51.4093	0.346	0.7	ug/L	29	Standard
[	Se-1	77	5356.3	1.3	50.9514	0.854	1.7	ug/L	201	Standard
[>	Ga	71	1006.7	7.2				mg/L	985	Standard
[	Rb	85	1048.4	7.9				ug/L	22	Standard
[	Y	89	371786.4	1.0				ug/L	370795	Standard
[>	Rh	103	570.0	1.8				ug/L	498	Standard
[	Mo	98	474846.1	0.6	94.7699	3.178	3.4	ug/L	253	Standard
|	Ag	107	470141.2	0.6	51.2304	1.132	2.2	ug/L	124	Standard
|	Cd	111	243883.4	0.5	53.2943	1.505	2.8	mg/L	100	Standard
|	Cd	114	673859.6	1.0	50.4200	1.480	2.9	ug/L	307	Standard
[>	In	115	1104968.5	2.8				ug/L	1045367	Standard
|	Sn	118	1592590.9	0.6	68.2302	1.658	2.4	ug/L	1664	Standard
|	Sb	123	587512.6	1.0	51.7088	0.918	1.8	ug/L	846	Standard
[	Ba	135	267645.9	0.3	48.1919	1.466	3.0	ug/L	61	Standard
[	Ce	140	1105.4	5.2				ug/L	30	Standard
[>	Tb	159	1456431.5	1.6				ug/L	1407506	Standard
[	Ho	165	23.7	24.4				ug/L	13	Standard
|	Tl	203	998415.0	0.5	49.1765	0.329	0.7	ug/L	713	Standard
|	Tl	205	2250894.2	0.4	50.4991	0.613	1.2	ug/L	1648	Standard
|	Pb	206	774992.1	0.3	49.3772	0.633	1.3	ug/L	594	Standard
|	Pb	207	659346.2	0.3	50.6246	0.340	0.7	ug/L	497	Standard
|	Pb	208	3040882.7	0.4	50.5267	0.310	0.6	ug/L	2293	Standard
	U	238	974048.8	0.7	52.0951	0.118	0.2	ug/L	301	Standard
[>	Bi	209	754121.1	0.9				ug/L	757838	Standard

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Na	23	113849.5	0.7	6.4084	0.145	2.3	mg/L	592	Standard
Mg	24	3695801.7	1.0	4.7857	0.155	3.2	mg/L	1565	Standard
K	39	6636.5	3.6	4.4813	0.058	1.3	mg/L	157	Standard
Ca	43	10.0	50.0	2.6131	1.525	58.3	mg/L	5	Standard
Fe	54	30416.2	3.2	4.9278	0.104	2.1	mg/L	717	Standard
Fe	57	660521.8	2.7	5.3956	0.062	1.1	mg/L	4072	Standard
Sc-1	45	493642.1	2.3				mg/L	476707	Standard
Cl	35	21.3	24.1				ug/L	29	Standard
Kr	83	46.4	8.7				ug/L	39	Standard
Br	81	1545.9	5.2				ug/L	1124	Standard
P	31	471.7	0.6				ug/L	495	Standard
S	34	6450.5	1.3				ug/L	6398	Standard
Sr	88	35.0	24.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.603		
Sc	45			
Ti	47	102.403		
V	51	101.057		
Cr	52	101.711		
Cr	53			
Mn	55	105.676		
Co	59	104.643		
Ni	60	101.726		
Cu	65	101.089		
Zn	66	99.681		
Ge	72		101.814	
As	75	101.317		
Se	82	102.819		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	94.770		
Ag	107	102.461		

Sample ID: QC Std 6

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Cd	111	106.589	
Cd	114		
> In	115		105.702
Sn	118	136.460	
Sb	123	103.418	
Ba	135	96.384	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	98.353	
Tl	205		
Pb	206	98.754	
Pb	207	101.249	
Pb	208	101.053	
U	238	104.190	
> Bi	209		99.510
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 12:26:24

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 12:27:04

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12363.4	6.8	-251.6149	289.588	115.1	ug/L	11975	Standard
|	Be	9	28.3	66.8	0.0208	0.010	48.2	ug/L	53	Standard
|	Al	27	9674.8	2.8	-0.2334	0.026	11.2	ug/L	10095	Standard
[>	Sc	45	474934.7	3.0				ug/L	476707	Standard
|	Ti	47	85.3	20.2	0.0039	0.011	279.8	ug/L	149	Standard
|	V	51	3485.9	0.2	-0.0076	0.003	40.8	ug/L	3747	Standard
|	Cr	52	10060.7	1.2	-0.0343	0.012	35.6	ug/L	10265	Standard
|	Cr	53	1982.6	5.9	-0.4826	0.059	12.1	ug/L	3075	Standard
|	Mn	55	1418.7	2.1	-0.0571	0.002	4.1	ug/L	1438	Standard
|	Co	59	135.0	12.9	-0.0006	0.001	212.9	ug/L	148	Standard
|	Ni	60	111.0	10.4	0.0016	0.004	220.8	ug/L	176	Standard
|	Cu	65	135.0	7.7	-0.0146	0.003	20.4	ug/L	186	Standard
|	Zn	66	186.0	11.9	-0.1776	0.016	9.3	ug/L	355	Standard
[>	Ge	72	437397.3	0.9				ug/L	437919	Standard
|	As	75	-230.4	12.8	0.0295	0.021	70.7	ug/L	-222	Standard
|	Se	82	38.1	16.8	0.1145	0.049	43.2	ug/L	29	Standard
[	Se-1	77	175.7	7.1	-0.2178	0.129	59.4	ug/L	201	Standard
[>	Ga	71	943.4	16.4				mg/L	985	Standard
|	Rb	85	28.3	10.2				ug/L	22	Standard
|	Y	89	365973.5	2.2				ug/L	370795	Standard
[>	Rh	103	471.7	15.0				ug/L	498	Standard
|	Mo	98	577.0	16.4	0.1078	0.019	17.4	ug/L	253	Standard
|	Ag	107	196.7	13.3	0.0168	0.003	17.3	ug/L	124	Standard
|	Cd	111	93.6	17.0	0.0097	0.003	34.9	mg/L	100	Standard
|	Cd	114	264.3	5.6	0.0015	0.001	77.7	ug/L	307	Standard
[>	In	115	1103072.7	0.7				ug/L	1045367	Standard
|	Sn	118	1491.1	6.2	-0.0077	0.004	48.3	ug/L	1664	Standard
|	Sb	123	3538.0	9.2	0.2969	0.028	9.6	ug/L	846	Standard
|	Ba	135	72.0	15.5	0.0071	0.002	27.1	ug/L	61	Standard
[	Ce	140	33.7	15.2				ug/L	30	Standard
[>	Tb	159	1419021.3	0.9				ug/L	1407506	Standard
|	Ho	165	16.7	29.6				ug/L	13	Standard
|	Tl	203	454.0	5.6	-0.0026	0.001	44.1	ug/L	713	Standard
|	Tl	205	1049.7	6.1	-0.0072	0.001	19.0	ug/L	1648	Standard
|	Pb	206	556.7	7.7	0.0039	0.003	68.5	ug/L	594	Standard
|	Pb	207	462.3	2.9	0.0026	0.001	38.7	ug/L	497	Standard
|	Pb	208	2171.7	2.5	0.0027	0.001	28.1	ug/L	2293	Standard
	U	238	84.3	20.2	0.0077	0.001	11.5	ug/L	301	Standard
[>	Bi	209	762525.7	0.5				ug/L	757838	Standard

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Na	23	590.0	7.2	-0.0104	0.003	32.6	mg/L	592	Standard
Mg	24	356.7	10.5	0.0004	0.000	13.6	mg/L	1565	Standard
K	39	146.7	16.1	-0.0050	0.017	331.1	mg/L	157	Standard
Ca	43	8.3	34.6	2.2299	1.025	46.0	mg/L	5	Standard
Fe	54	743.0	16.6	-0.0020	0.025	1262.2	mg/L	717	Standard
Fe	57	4175.6	2.6	0.0024	0.000	7.1	mg/L	4072	Standard
Sc-1	45	474934.7	3.0				mg/L	476707	Standard
Cl	35	14.0	25.8				ug/L	29	Standard
Kr	83	44.4	3.0				ug/L	39	Standard
Br	81	1380.9	8.4				ug/L	1124	Standard
P	31	478.3	11.4				ug/L	495	Standard
S	34	6415.5	3.5				ug/L	6398	Standard
Sr	88	41.7	27.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.881	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	105.520
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.619
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: PBS 89 WG404463-02

Sample Date/Time: Thursday, July 26, 2012 12:30:24

Number of Replicates: 3

Autosampler Position: 205

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12111.5	3.2	-22.8220	179.371	786.0	ug/L	11975	Standard
|	Be	9	20.0	75.0	0.0162	0.007	45.8	ug/L	53	Standard
|	Al	27	13445.2	48.7	-0.0280	0.359	1280.1	ug/L	10095	Standard
[>	Sc	45	480345.7	2.0				ug/L	476707	Standard
|	Ti	47	92.3	27.9	0.0082	0.017	206.2	ug/L	149	Standard
|	V	51	3573.7	5.9	-0.0025	0.019	732.6	ug/L	3747	Standard
|	Cr	52	10405.9	2.7	-0.0076	0.026	347.7	ug/L	10265	Standard
|	Cr	53	1824.3	3.5	-0.5812	0.048	8.2	ug/L	3075	Standard
|	Mn	55	1500.4	18.2	-0.0532	0.015	27.7	ug/L	1438	Standard
|	Co	59	202.3	70.7	0.0049	0.012	242.4	ug/L	148	Standard
|	Ni	60	293.0	15.5	0.0564	0.013	22.9	ug/L	176	Standard
|	Cu	65	143.3	22.8	-0.0123	0.010	82.3	ug/L	186	Standard
|	Zn	66	1742.8	2.0	0.9235	0.033	3.5	ug/L	355	Standard
[>	Ge	72	440856.8	1.6				ug/L	437919	Standard
|	As	75	-250.0	4.9	0.0168	0.006	36.2	ug/L	-222	Standard
|	Se	82	35.7	55.2	0.0935	0.145	155.5	ug/L	29	Standard
[	Se-1	77	192.3	7.3	-0.0663	0.114	171.8	ug/L	201	Standard
[>	Ga	71	965.0	2.1				mg/L	985	Standard
|	Rb	85	23.3	44.6				ug/L	22	Standard
|	Y	89	362553.7	1.5				ug/L	370795	Standard
[>	Rh	103	531.7	8.5				ug/L	498	Standard
|	Mo	98	503.6	88.8	0.0935	0.089	95.1	ug/L	253	Standard
|	Ag	107	307.7	127.4	0.0289	0.043	147.6	ug/L	124	Standard
|	Cd	111	173.5	111.9	0.0273	0.042	155.1	mg/L	100	Standard
|	Cd	114	528.3	98.8	0.0214	0.039	181.8	ug/L	307	Standard
[>	In	115	1095106.5	0.8				ug/L	1045367	Standard
|	Sn	118	1354.7	31.7	-0.0133	0.018	136.1	ug/L	1664	Standard
|	Sb	123	1238.6	29.4	0.0948	0.031	33.2	ug/L	846	Standard
|	Ba	135	121.3	123.5	0.0161	0.027	167.7	ug/L	61	Standard
|	Ce	140	34.0	10.6				ug/L	30	Standard
[>	Tb	159	1412769.3	1.0				ug/L	1407506	Standard
|	Ho	165	17.7	19.9				ug/L	13	Standard
|	Tl	203	623.7	59.3	0.0057	0.018	309.6	ug/L	713	Standard
|	Tl	205	1438.4	57.6	0.0015	0.018	1220.3	ug/L	1648	Standard
|	Pb	206	665.3	41.9	0.0109	0.017	156.7	ug/L	594	Standard
|	Pb	207	547.3	39.4	0.0092	0.016	172.2	ug/L	497	Standard
|	Pb	208	2562.8	37.0	0.0093	0.015	162.5	ug/L	2293	Standard
	U	238	128.7	151.0	0.0100	0.010	102.0	ug/L	301	Standard
[>	Bi	209	757661.9	1.6				ug/L	757838	Standard

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Na	23	510.0	16.7	-0.0156	0.004	28.3	mg/L	592	Standard
Mg	24	643.4	103.6	0.0008	0.001	113.6	mg/L	1565	Standard
K	39	146.7	25.1	-0.0065	0.024	375.6	mg/L	157	Standard
Ca	43	5.0	100.0	1.1061	1.678	151.7	mg/L	5	Standard
Fe	54	720.7	8.1	-0.0075	0.012	165.9	mg/L	717	Standard
Fe	57	4242.3	5.4	0.0025	0.001	59.5	mg/L	4072	Standard
Sc-1	45	480345.7	2.0				mg/L	476707	Standard
Cl	35	20.7	2.8				ug/L	29	Standard
Kr	83	41.2	7.5				ug/L	39	Standard
Br	81	1347.6	7.5				ug/L	1124	Standard
P	31	482.5	10.0				ug/L	495	Standard
S	34	6469.7	0.7				ug/L	6398	Standard
Sr	88	36.7	28.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.671	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBS 89 WG404463-02

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	Cd	111	
	Cd	114	
>	In	115	104.758
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.977
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBS 89 WG404463-02
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Method 6020 - Summary Report

Sample ID: LCSS 89 WG404463-03

Sample Date/Time: Thursday, July 26, 2012 12:33:33

Number of Replicates: 3

Autosampler Position: 206

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13726.2	0.3	-163.9434	255.525	155.9	ug/L	11975	Standard
|	Be	9	51845.2	0.6	23.6743	0.906	3.8	ug/L	53	Standard
|	Al	27	547910.8	1.6	27.4680	0.460	1.7	ug/L	10095	Standard
[>	Sc	45	534341.6	3.2				ug/L	476707	Standard
|	Ti	47	176.7	37.7	0.0530	0.039	73.3	ug/L	149	Standard
|	V	51	338793.6	0.8	24.9497	0.084	0.3	ug/L	3747	Standard
|	Cr	52	288094.4	1.2	25.1962	0.387	1.5	ug/L	10265	Standard
|	Cr	53	52066.0	3.0	25.3272	0.641	2.5	ug/L	3075	Standard
|	Mn	55	512521.4	1.5	26.1376	0.181	0.7	ug/L	1438	Standard
|	Co	59	335688.3	1.3	25.7099	0.277	1.1	ug/L	148	Standard
|	Ni	60	93023.8	2.0	25.5233	0.236	0.9	ug/L	176	Standard
|	Cu	65	86393.9	0.2	25.2668	0.305	1.2	ug/L	186	Standard
|	Zn	66	39117.1	1.3	24.7967	0.384	1.6	ug/L	355	Standard
[>	Ge	72	486238.5	1.1				ug/L	437919	Standard
|	As	75	35101.1	0.5	23.0390	0.185	0.8	ug/L	-222	Standard
|	Se	82	3311.7	0.9	22.3368	0.441	2.0	ug/L	29	Standard
[	Se-1	77	2630.6	1.6	21.8545	0.510	2.3	ug/L	201	Standard
[>	Ga	71	1110.0	7.0				mg/L	985	Standard
|	Rb	85	80.0	16.5				ug/L	22	Standard
|	Y	89	414835.6	0.4				ug/L	370795	Standard
[>	Rh	103	631.7	7.8				ug/L	498	Standard
|	Mo	98	255.2	32.0	0.0398	0.015	37.2	ug/L	253	Standard
|	Ag	107	250116.2	0.3	25.3172	0.315	1.2	ug/L	124	Standard
|	Cd	111	120829.0	1.2	24.5186	0.088	0.4	mg/L	100	Standard
|	Cd	114	333120.1	0.6	23.1418	0.094	0.4	ug/L	307	Standard
[>	In	115	1189028.0	1.0				ug/L	1045367	Standard
|	Sn	118	1745.4	15.2	-0.0023	0.010	436.4	ug/L	1664	Standard
|	Sb	123	287742.5	0.6	23.5196	0.128	0.5	ug/L	846	Standard
|	Ba	135	142897.4	0.8	23.8947	0.042	0.2	ug/L	61	Standard
[	Ce	140	364.0	1.4				ug/L	30	Standard
[>	Tb	159	1527135.2	1.7				ug/L	1407506	Standard
|	Ho	165	19.3	33.7				ug/L	13	Standard
|	Tl	203	524342.3	0.4	24.5284	0.272	1.1	ug/L	713	Standard
|	Tl	205	1214616.1	0.8	25.8767	0.097	0.4	ug/L	1648	Standard
|	Pb	206	405519.4	0.3	24.5342	0.264	1.1	ug/L	594	Standard
|	Pb	207	344640.4	0.7	25.1268	0.106	0.4	ug/L	497	Standard
|	Pb	208	1592381.8	0.8	25.1239	0.077	0.3	ug/L	2293	Standard
	U	238	483051.1	0.9	24.5512	0.299	1.2	ug/L	301	Standard
[>	Bi	209	793650.0	1.1				ug/L	757838	Standard

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Na	23	836.7	6.0	-0.0014	0.004	286.3	mg/L	592	Standard
Mg	24	1583.4	9.3	0.0018	0.000	12.1	mg/L	1565	Standard
K	39	158.3	23.7	-0.0097	0.021	220.0	mg/L	157	Standard
Ca	43	8.3	91.7	1.9467	2.324	119.4	mg/L	5	Standard
Fe	54	1171.9	1.8	0.0494	0.009	18.2	mg/L	717	Standard
Fe	57	5109.2	2.2	0.0055	0.000	7.3	mg/L	4072	Standard
Sc-1	45	534341.6	3.2				mg/L	476707	Standard
Cl	35	24.7	33.8				ug/L	29	Standard
Kr	83	50.7	14.9				ug/L	39	Standard
Br	81	1651.8	4.3				ug/L	1124	Standard
P	31	749.2	8.5				ug/L	495	Standard
S	34	6814.0	1.9				ug/L	6398	Standard
Sr	88	25.0	69.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.034	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSS 89 WG404463-03

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	Cd	111	
	Cd	114	
>	In	115	113.743
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.726
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSS 89 WG404463-03

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Method 6020 - Summary Report

Sample ID: L1207075105 WG404463-01
 Sample Date/Time: Thursday, July 26, 2012 12:36:43
 Number of Replicates: 3
 Autosampler Position: 207
 Sample Description: 5
 Method File: C:\NexIONData\Method\6020a.mth
 Aliquot Volume (mL):
 Diluted to Volume (mL):
 User Name: JYH user
 Cumulative Autodilution Factor: 1
 Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	148341.1	1.7	-90426.7385	2015.511	2.2	ug/L	11975	Standard
|	Be	9	410.0	6.1	0.2359	0.017	7.1	ug/L	53	Standard
|	Al	27	32427105.7	3.0	2052.9592	66.945	3.3	ug/L	10095	Standard
[>	Sc	45	435110.0	1.5				ug/L	476707	Standard
[	Ti	47	2962.6	1.2	2.1536	0.041	1.9	ug/L	149	Standard
|	V	51	62664.8	2.1	5.4769	0.123	2.2	ug/L	3747	Standard
|	Cr	52	23628.4	2.2	1.6084	0.068	4.2	ug/L	10265	Standard
|	Cr	53	4064.7	2.5	0.9791	0.104	10.6	ug/L	3075	Standard
|	Mn	55	507401.1	2.5	32.0260	0.886	2.8	ug/L	1438	Standard
|	Co	59	9913.6	2.6	0.9272	0.032	3.5	ug/L	148	Standard
|	Ni	60	7105.7	3.0	2.3820	0.099	4.1	ug/L	176	Standard
|	Cu	65	2501.9	5.7	0.8478	0.043	5.1	ug/L	186	Standard
|	Zn	66	9962.9	2.8	7.5955	0.233	3.1	ug/L	355	Standard
[>	Ge	72	393349.9	2.3				ug/L	437919	Standard
|	As	75	2070.6	2.1	1.8619	0.023	1.3	ug/L	-222	Standard
|	Se	82	405.7	4.0	3.2349	0.133	4.1	ug/L	29	Standard
[	Se-1	77	186.3	15.5	0.1041	0.357	343.3	ug/L	201	Standard
[>	Ga	71	4774.1	1.7				mg/L	985	Standard
[	Rb	85	41043.9	2.5				ug/L	22	Standard
[	Y	89	369896.4	2.8				ug/L	370795	Standard
[>	Rh	103	436.7	9.3				ug/L	498	Standard
[	Mo	98	254.9	14.1	0.0513	0.008	15.5	ug/L	253	Standard
|	Ag	107	471.7	7.1	0.0546	0.004	7.3	ug/L	124	Standard
|	Cd	111	117.7	12.4	0.0189	0.003	18.5	mg/L	100	Standard
|	Cd	114	319.6	1.7	0.0093	0.000	5.0	ug/L	307	Standard
[>	In	115	956615.9	0.7				ug/L	1045367	Standard
|	Sn	118	898.4	10.5	-0.0273	0.004	16.0	ug/L	1664	Standard
|	Sb	123	777.0	20.1	0.0639	0.015	24.2	ug/L	846	Standard
[	Ba	135	109729.3	1.6	22.8050	0.231	1.0	ug/L	61	Standard
[	Ce	140	575499.4	2.3				ug/L	30	Standard
[>	Tb	159	1338951.2	0.6				ug/L	1407506	Standard
[	Ho	165	7829.4	0.7				ug/L	13	Standard
|	Tl	203	1033.4	4.0	0.0297	0.002	6.5	ug/L	713	Standard
|	Tl	205	2344.2	1.4	0.0257	0.001	3.9	ug/L	1648	Standard
|	Pb	206	32389.3	2.4	2.1755	0.061	2.8	ug/L	594	Standard
|	Pb	207	26371.9	2.3	2.1329	0.059	2.8	ug/L	497	Standard
|	Pb	208	123835.0	2.2	2.1674	0.057	2.6	ug/L	2293	Standard
	U	238	3806.8	2.3	0.2208	0.006	2.7	ug/L	301	Standard
[>	Bi	209	705650.8	0.5				ug/L	757838	Standard

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Na	23	16163.6	3.8	0.9938	0.030	3.0	mg/L	592	Standard
Mg	24	1104394.7	0.9	1.6218	0.022	1.4	mg/L	1565	Standard
K	39	1155.0	5.7	0.7968	0.060	7.5	mg/L	157	Standard
Ca	43	45.0	11.1	15.7772	2.052	13.0	mg/L	5	Standard
Fe	54	10340.5	1.3	1.8208	0.051	2.8	mg/L	717	Standard
Fe	57	198736.8	1.8	1.8201	0.042	2.3	mg/L	4072	Standard
Sc-1	45	435110.0	1.5				mg/L	476707	Standard
Cl	35	19.0	19.0				ug/L	29	Standard
Kr	83	49.1	0.8				ug/L	39	Standard
Br	81	22673.6	3.9				ug/L	1124	Standard
P	31	1005.9	8.9				ug/L	495	Standard
S	34	8098.8	3.9				ug/L	6398	Standard
Sr	88	256.7	13.8				ug/L	37	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.822	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075105 WG404463-01

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	Cd	111	
	Cd	114	
>	In	115	91.510
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.114
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075105 WG404463-01

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Method 6020 - Summary Report

Sample ID: L1207075109S WG404463-04

Sample Date/Time: Thursday, July 26, 2012 12:39:58

Number of Replicates: 3

Autosampler Position: 208

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	116965.0	3.2	-70626.0208	2631.976	3.7	ug/L	11975	Standard
|	Be	9	10922.3	3.9	6.1933	0.274	4.4	ug/L	53	Standard
|	Al	27	41309487.1	1.8	2644.0663	34.379	1.3	ug/L	10095	Standard
>	Sc	45	430360.4	1.4				ug/L	476707	Standard
[	Ti	47	6278.3	3.1	4.5848	0.200	4.4	ug/L	149	Standard
|	V	51	133786.3	2.5	11.9279	0.445	3.7	ug/L	3747	Standard
|	Cr	52	75195.1	1.2	7.3466	0.207	2.8	ug/L	10265	Standard
|	Cr	53	13174.1	2.4	6.7386	0.277	4.1	ug/L	3075	Standard
|	Mn	55	751283.1	1.1	47.0839	0.871	1.8	ug/L	1438	Standard
|	Co	59	53763.9	1.4	5.0389	0.133	2.6	ug/L	148	Standard
|	Ni	60	21429.8	2.3	7.1863	0.219	3.1	ug/L	176	Standard
|	Cu	65	11820.6	2.0	4.1894	0.116	2.8	ug/L	186	Standard
|	Zn	66	17656.3	3.5	13.5858	0.646	4.8	ug/L	355	Standard
>	Ge	72	396656.2	1.3				ug/L	437919	Standard
|	As	75	9744.0	3.2	7.9714	0.331	4.2	ug/L	-222	Standard
|	Se	82	1127.8	2.0	9.2250	0.304	3.3	ug/L	29	Standard
[	Se-1	77	768.7	3.0	6.5512	0.198	3.0	ug/L	201	Standard
>	Ga	71	5771.1	0.9				mg/L	985	Standard
[	Rb	85	54262.1	3.2				ug/L	22	Standard
[	Y	89	382732.1	0.5				ug/L	370795	Standard
>	Rh	103	490.0	4.1				ug/L	498	Standard
[	Mo	98	342.0	11.7	0.0716	0.009	12.6	ug/L	253	Standard
|	Ag	107	4161.2	5.5	0.5207	0.028	5.3	ug/L	124	Standard
|	Cd	111	23157.9	1.1	5.8532	0.046	0.8	mg/L	100	Standard
|	Cd	114	65577.8	2.4	5.6686	0.142	2.5	ug/L	307	Standard
>	In	115	953306.2	1.2				ug/L	1045367	Standard
|	Sn	118	880.0	11.2	-0.0281	0.004	15.8	ug/L	1664	Standard
|	Sb	123	1636.7	6.0	0.1519	0.009	6.1	ug/L	846	Standard
[	Ba	135	285421.0	1.4	59.5356	0.345	0.6	ug/L	61	Standard
[	Ce	140	664742.9	1.5				ug/L	30	Standard
>	Tb	159	1326941.0	0.2				ug/L	1407506	Standard
[	Ho	165	8040.1	2.1				ug/L	13	Standard
|	Tl	203	100000.3	1.0	5.2955	0.046	0.9	ug/L	713	Standard
|	Tl	205	231559.6	1.4	5.5810	0.028	0.5	ug/L	1648	Standard
|	Pb	206	109065.5	1.6	7.4748	0.050	0.7	ug/L	594	Standard
|	Pb	207	91423.3	0.8	7.5505	0.016	0.2	ug/L	497	Standard
|	Pb	208	424963.6	1.6	7.5946	0.051	0.7	ug/L	2293	Standard
	U	238	92512.3	1.1	5.3446	0.018	0.3	ug/L	301	Standard
>	Bi	209	698509.0	1.0				ug/L	757838	Standard

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Na	23	14465.2	5.7	0.8954	0.061	6.8	mg/L	592	Standard
Mg	24	1087554.3	0.1	1.6147	0.022	1.3	mg/L	1565	Standard
K	39	1288.4	4.7	0.9127	0.060	6.5	mg/L	157	Standard
Ca	43	41.7	6.9	14.7221	1.175	8.0	mg/L	5	Standard
Fe	54	13484.0	1.8	2.4422	0.074	3.0	mg/L	717	Standard
Fe	57	258268.5	2.6	2.4024	0.093	3.9	mg/L	4072	Standard
Sc-1	45	430360.4	1.4				mg/L	476707	Standard
Cl	35	16.3	18.7				ug/L	29	Standard
Kr	83	52.6	9.2				ug/L	39	Standard
Br	81	18160.0	2.1				ug/L	1124	Standard
P	31	1020.9	4.0				ug/L	495	Standard
S	34	7452.7	3.2				ug/L	6398	Standard
Sr	88	225.0	6.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.577	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075109S WG404463-04

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	Cd	111	
	Cd	114	
>	In	115	91.193
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.171
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207075110SD WG404463-05

Sample Date/Time: Thursday, July 26, 2012 12:43:07

Number of Replicates: 3

Autosampler Position: 209

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

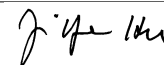
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	131641.9	4.8	-80967.0787	5652.278	7.0	ug/L	11975	Standard
|	Be	9	13075.6	1.7	7.4579	0.217	2.9	ug/L	53	Standard
|	Al	27	38893066.2	2.5	2505.3134	102.980	4.1	ug/L	10095	Standard
[>	Sc	45	427803.1	1.6				ug/L	476707	Standard
[	Ti	47	4786.1	2.3	3.5023	0.109	3.1	ug/L	149	Standard
|	V	51	150742.5	1.1	13.5541	0.237	1.7	ug/L	3747	Standard
|	Cr	52	84453.7	1.1	8.4343	0.162	1.9	ug/L	10265	Standard
|	Cr	53	14465.2	4.4	7.6114	0.475	6.2	ug/L	3075	Standard
|	Mn	55	999064.2	1.5	63.0196	1.293	2.1	ug/L	1438	Standard
|	Co	59	54687.2	1.7	5.1549	0.121	2.3	ug/L	148	Standard
|	Ni	60	23415.1	3.6	7.9010	0.343	4.3	ug/L	176	Standard
|	Cu	65	11118.7	3.8	3.9607	0.188	4.7	ug/L	186	Standard
|	Zn	66	21900.5	2.4	17.0182	0.271	1.6	ug/L	355	Standard
[>	Ge	72	394372.1	0.9				ug/L	437919	Standard
|	As	75	11680.1	2.4	9.5687	0.286	3.0	ug/L	-222	Standard
|	Se	82	1380.0	2.9	11.3915	0.396	3.5	ug/L	29	Standard
[	Se-1	77	838.0	4.0	7.3759	0.354	4.8	ug/L	201	Standard
[>	Ga	71	5636.0	3.1				mg/L	985	Standard
[	Rb	85	48766.9	6.2				ug/L	22	Standard
[	Y	89	392470.2	1.2				ug/L	370795	Standard
[>	Rh	103	511.7	24.0				ug/L	498	Standard
[	Mo	98	338.2	11.2	0.0717	0.010	13.8	ug/L	253	Standard
|	Ag	107	25983.3	5.6	3.3134	0.234	7.0	ug/L	124	Standard
|	Cd	111	25962.8	1.5	6.6353	0.189	2.8	mg/L	100	Standard
|	Cd	114	75300.8	2.0	6.5833	0.227	3.4	ug/L	307	Standard
[>	In	115	943225.0	1.5				ug/L	1045367	Standard
|	Sn	118	894.0	4.1	-0.0269	0.002	8.5	ug/L	1664	Standard
|	Sb	123	2328.9	3.3	0.2252	0.012	5.1	ug/L	846	Standard
[	Ba	135	253508.3	2.4	53.4639	2.049	3.8	ug/L	61	Standard
[	Ce	140	752862.4	2.1				ug/L	30	Standard
[>	Tb	159	1319820.9	1.1				ug/L	1407506	Standard
[	Ho	165	10177.1	2.1				ug/L	13	Standard
|	Tl	203	117863.2	2.6	6.2459	0.199	3.2	ug/L	713	Standard
|	Tl	205	273600.4	2.3	6.6002	0.193	2.9	ug/L	1648	Standard
|	Pb	206	133865.2	1.8	9.1820	0.224	2.4	ug/L	594	Standard
|	Pb	207	112353.2	2.2	9.2866	0.259	2.8	ug/L	497	Standard
|	Pb	208	522550.9	1.7	9.3467	0.219	2.3	ug/L	2293	Standard
|	U	238	109701.8	1.6	6.3370	0.136	2.1	ug/L	301	Standard
[>	Bi	209	698568.8	0.6				ug/L	757838	Standard

Sample ID: L1207075110SD WG404463-05

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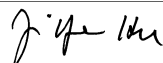
Na	23	18576.4	4.4	1.1702	0.071	6.1	mg/L	592	Standard
Mg	24	1222882.9	1.6	1.8268	0.056	3.1	mg/L	1565	Standard
K	39	1250.1	8.5	0.8885	0.096	10.8	mg/L	157	Standard
Ca	43	56.7	39.8	20.4325	8.675	42.5	mg/L	5	Standard
Fe	54	12304.9	0.8	2.2311	0.047	2.1	mg/L	717	Standard
Fe	57	236222.3	3.8	2.2079	0.108	4.9	mg/L	4072	Standard
Sc-1	45	427803.1	1.6				mg/L	476707	Standard
Cl	35	11.7	9.9				ug/L	29	Standard
Kr	83	51.8	8.6				ug/L	39	Standard
Br	81	24755.2	0.9				ug/L	1124	Standard
P	31	1322.6	4.3				ug/L	495	Standard
S	34	8617.5	2.2				ug/L	6398	Standard
Sr	88	318.3	7.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.056	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075110SD WG404463-05
 Report Date/Time: Thursday, July 26, 2012 12:45:37
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	Cd	111	
	Cd	114	
>	In	115	90.229
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.179
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075110SD WG404463-05
 Report Date/Time: Thursday, July 26, 2012 12:45:37
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Method 6020 - Summary Report

Sample ID: L1207075101

Sample Date/Time: Thursday, July 26, 2012 12:46:15

Number of Replicates: 3

Autosampler Position: 210

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

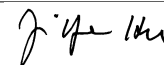
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	58178.2	2.5	-31151.5247	886.156	2.8	ug/L	11975	Standard
|	Be	9	373.3	5.1	0.2157	0.011	5.2	ug/L	53	Standard
|	Al	27	32065834.4	2.4	2033.4834	58.043	2.9	ug/L	10095	Standard
[>	Sc	45	434358.2	0.6				ug/L	476707	Standard
[	Ti	47	6562.4	8.5	4.7859	0.398	8.3	ug/L	149	Standard
|	V	51	55030.5	2.5	4.7245	0.150	3.2	ug/L	3747	Standard
|	Cr	52	25755.2	0.9	1.8197	0.046	2.5	ug/L	10265	Standard
|	Cr	53	4086.4	1.8	0.9676	0.099	10.2	ug/L	3075	Standard
|	Mn	55	564019.0	1.5	35.2633	0.462	1.3	ug/L	1438	Standard
|	Co	59	10087.0	4.1	0.9340	0.034	3.6	ug/L	148	Standard
|	Ni	60	7125.3	1.7	2.3645	0.046	2.0	ug/L	176	Standard
|	Cu	65	4571.7	2.1	1.5818	0.012	0.7	ug/L	186	Standard
|	Zn	66	12286.0	2.0	9.3426	0.109	1.2	ug/L	355	Standard
[>	Ge	72	397210.9	2.0				ug/L	437919	Standard
|	As	75	1786.5	1.1	1.6195	0.013	0.8	ug/L	-222	Standard
|	Se	82	87.9	4.1	0.5586	0.044	8.0	ug/L	29	Standard
[	Se-1	77	184.3	11.8	0.0557	0.216	387.0	ug/L	201	Standard
[>	Ga	71	4734.1	7.8				mg/L	985	Standard
[	Rb	85	44458.6	4.5				ug/L	22	Standard
[	Y	89	374633.1	3.2				ug/L	370795	Standard
[>	Rh	103	548.3	9.6				ug/L	498	Standard
[	Mo	98	224.2	17.8	0.0448	0.009	20.6	ug/L	253	Standard
|	Ag	107	328.7	4.2	0.0372	0.002	4.6	ug/L	124	Standard
|	Cd	111	169.8	5.1	0.0326	0.002	6.6	mg/L	100	Standard
|	Cd	114	514.8	5.9	0.0268	0.003	9.7	ug/L	307	Standard
[>	In	115	944755.5	0.2				ug/L	1045367	Standard
|	Sn	118	827.7	9.8	-0.0303	0.004	13.3	ug/L	1664	Standard
|	Sb	123	286.9	67.1	0.0145	0.020	136.1	ug/L	846	Standard
[	Ba	135	248301.5	1.9	52.2606	0.924	1.8	ug/L	61	Standard
[	Ce	140	596471.4	1.7				ug/L	30	Standard
[>	Tb	159	1316655.2	0.7				ug/L	1407506	Standard
[	Ho	165	6772.5	1.4				ug/L	13	Standard
|	Tl	203	1001.4	26.2	0.0279	0.014	50.1	ug/L	713	Standard
|	Tl	205	2310.5	26.0	0.0248	0.015	58.7	ug/L	1648	Standard
|	Pb	206	37374.4	2.0	2.5088	0.057	2.3	ug/L	594	Standard
|	Pb	207	30575.5	2.8	2.4717	0.074	3.0	ug/L	497	Standard
|	Pb	208	144300.8	2.4	2.5247	0.065	2.6	ug/L	2293	Standard
	U	238	2640.2	5.2	0.1538	0.008	5.4	ug/L	301	Standard
[>	Bi	209	707405.5	0.5				ug/L	757838	Standard

Sample ID: L1207075101

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Na	23	6244.6	3.2	0.3570	0.014	3.9	mg/L	592	Standard
Mg	24	633466.4	2.5	0.9318	0.028	3.0	mg/L	1565	Standard
K	39	1210.0	1.2	0.8413	0.016	1.9	mg/L	157	Standard
Ca	43	46.7	40.6	16.4163	6.946	42.3	mg/L	5	Standard
Fe	54	11551.5	2.9	2.0529	0.075	3.6	mg/L	717	Standard
Fe	57	217546.0	4.5	1.9990	0.097	4.8	mg/L	4072	Standard
Sc-1	45	434358.2	0.6				mg/L	476707	Standard
Cl	35	15.0	11.5				ug/L	29	Standard
Kr	83	49.0	1.8				ug/L	39	Standard
Br	81	3380.4	1.8				ug/L	1124	Standard
P	31	1456.7	4.7				ug/L	495	Standard
S	34	7362.6	1.5				ug/L	6398	Standard
Sr	88	193.3	4.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.704	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075101

Report Date/Time: Thursday, July 26, 2012 12:48:47

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	Cd	111	
	Cd	114	
>	In	115	90.376
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.345
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075101

Report Date/Time: Thursday, July 26, 2012 12:48:47

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Method 6020 - Summary Report

Sample ID: L1207075102

Sample Date/Time: Thursday, July 26, 2012 12:49:24

Number of Replicates: 3

Autosampler Position: 211

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	46910.9	2.1	-23591.4848	928.662	3.9	ug/L	11975	Standard
|	Be	9	401.7	20.1	0.2303	0.043	18.6	ug/L	53	Standard
|	Al	27	35698295.4	1.8	2253.7016	48.489	2.2	ug/L	10095	Standard
[>	Sc	45	436327.2	1.0				ug/L	476707	Standard
|	Ti	47	8595.8	4.2	6.2870	0.261	4.1	ug/L	149	Standard
|	V	51	55595.8	3.3	4.7764	0.178	3.7	ug/L	3747	Standard
|	Cr	52	27970.8	3.9	2.0671	0.128	6.2	ug/L	10265	Standard
|	Cr	53	4329.0	3.5	1.1204	0.084	7.5	ug/L	3075	Standard
|	Mn	55	606935.2	1.3	37.9615	0.507	1.3	ug/L	1438	Standard
|	Co	59	11371.6	8.0	1.0549	0.089	8.4	ug/L	148	Standard
|	Ni	60	7300.4	3.2	2.4235	0.077	3.2	ug/L	176	Standard
|	Cu	65	6816.9	3.3	2.3881	0.089	3.7	ug/L	186	Standard
|	Zn	66	22332.8	1.5	17.2387	0.160	0.9	ug/L	355	Standard
[>	Ge	72	397131.2	1.0				ug/L	437919	Standard
|	As	75	3993.1	3.7	3.3778	0.118	3.5	ug/L	-222	Standard
|	Se	82	605.5	7.5	4.8643	0.363	7.5	ug/L	29	Standard
[	Se-1	77	161.7	13.7	-0.1952	0.230	118.0	ug/L	201	Standard
[>	Ga	71	4949.1	3.1				mg/L	985	Standard
|	Rb	85	48352.1	2.7				ug/L	22	Standard
|	Y	89	370102.9	1.4				ug/L	370795	Standard
[>	Rh	103	473.3	8.5				ug/L	498	Standard
|	Mo	98	841.3	14.0	0.1896	0.028	14.8	ug/L	253	Standard
|	Ag	107	2817.6	5.3	0.3556	0.020	5.7	ug/L	124	Standard
|	Cd	111	200.6	26.4	0.0407	0.014	33.8	mg/L	100	Standard
|	Cd	114	593.4	22.0	0.0339	0.012	34.4	ug/L	307	Standard
[>	In	115	941338.3	0.3				ug/L	1045367	Standard
|	Sn	118	1167.7	13.4	-0.0130	0.008	61.9	ug/L	1664	Standard
|	Sb	123	521.9	18.3	0.0389	0.010	25.9	ug/L	846	Standard
|	Ba	135	229991.8	1.8	48.5848	0.998	2.1	ug/L	61	Standard
|	Ce	140	556437.3	1.8				ug/L	30	Standard
[>	Tb	159	1307413.6	0.3				ug/L	1407506	Standard
|	Ho	165	6230.3	1.7				ug/L	13	Standard
|	Tl	203	905.7	22.2	0.0234	0.010	43.6	ug/L	713	Standard
|	Tl	205	2235.2	37.1	0.0235	0.019	82.7	ug/L	1648	Standard
|	Pb	206	46669.8	2.3	3.1811	0.053	1.7	ug/L	594	Standard
|	Pb	207	38281.7	4.4	3.1425	0.114	3.6	ug/L	497	Standard
|	Pb	208	179778.6	3.4	3.1940	0.087	2.7	ug/L	2293	Standard
	U	238	3117.7	27.4	0.1830	0.047	25.9	ug/L	301	Standard
[>	Bi	209	698415.2	1.0				ug/L	757838	Standard

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Na	23	19891.4	5.5	1.2296	0.058	4.7	mg/L	592	Standard
Mg	24	692367.5	2.2	1.0137	0.018	1.8	mg/L	1565	Standard
K	39	1676.8	4.0	1.2027	0.065	5.4	mg/L	157	Standard
Ca	43	43.3	17.6	15.0923	2.613	17.3	mg/L	5	Standard
Fe	54	13361.8	2.7	2.3831	0.046	1.9	mg/L	717	Standard
Fe	57	245044.3	5.3	2.2460	0.138	6.1	mg/L	4072	Standard
Sc-1	45	436327.2	1.0				mg/L	476707	Standard
Cl	35	11.7	32.5				ug/L	29	Standard
Kr	83	46.2	4.8				ug/L	39	Standard
Br	81	27515.0	4.6				ug/L	1124	Standard
P	31	1336.7	5.8				ug/L	495	Standard
S	34	7370.1	2.7				ug/L	6398	Standard
Sr	88	175.0	20.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.686	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075102

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	Cd	111	
	Cd	114	
>	In	115	90.049
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.159
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207075102PS WG404545-01

Sample Date/Time: Thursday, July 26, 2012 12:52:33

Number of Replicates: 3

Autosampler Position: 212

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	44291.3	0.4	-22289.2971	585.663	2.6	ug/L	11975	Standard
|	Be	9	106478.1	3.6	60.3231	1.028	1.7	ug/L	53	Standard
|	Al	27	34568972.5	2.2	2213.3338	17.236	0.8	ug/L	10095	Standard
[>	Sc	45	430181.1	1.9				ug/L	476707	Standard
[	Ti	47	8062.1	1.9	5.8695	0.134	2.3	ug/L	149	Standard
|	V	51	641438.0	2.6	57.9910	1.743	3.0	ug/L	3747	Standard
|	Cr	52	508443.9	1.6	55.4351	1.088	2.0	ug/L	10265	Standard
|	Cr	53	88156.7	2.8	54.0269	1.757	3.3	ug/L	3075	Standard
|	Mn	55	1434989.4	1.4	89.5742	1.530	1.7	ug/L	1438	Standard
|	Co	59	581831.4	1.0	54.3517	0.753	1.4	ug/L	148	Standard
|	Ni	60	165637.7	3.0	55.4618	1.821	3.3	ug/L	176	Standard
|	Cu	65	156660.2	1.7	55.9372	1.177	2.1	ug/L	186	Standard
|	Zn	66	98988.1	2.6	77.1624	2.207	2.9	ug/L	355	Standard
[>	Ge	72	398758.8	0.4				ug/L	437919	Standard
|	As	75	78082.3	2.4	62.1576	1.668	2.7	ug/L	-222	Standard
|	Se	82	8447.9	3.0	69.8405	2.381	3.4	ug/L	29	Standard
[	Se-1	77	5949.2	4.0	63.7612	2.875	4.5	ug/L	201	Standard
[>	Ga	71	4614.0	2.6				mg/L	985	Standard
[	Rb	85	46785.6	4.9				ug/L	22	Standard
[	Y	89	362826.9	1.6				ug/L	370795	Standard
[>	Rh	103	526.7	12.2				ug/L	498	Standard
[	Mo	98	844.1	6.2	0.1897	0.011	5.6	ug/L	253	Standard
|	Ag	107	430987.0	2.7	54.9782	1.099	2.0	ug/L	124	Standard
|	Cd	111	227004.1	1.5	58.0687	0.410	0.7	mg/L	100	Standard
|	Cd	114	655679.4	1.6	57.4318	0.561	1.0	ug/L	307	Standard
[>	In	115	943425.5	0.8				ug/L	1045367	Standard
|	Sn	118	1333.4	2.5	-0.0048	0.001	24.9	ug/L	1664	Standard
|	Sb	123	547207.0	2.8	56.3869	1.247	2.2	ug/L	846	Standard
[	Ba	135	479130.9	2.2	100.9871	1.608	1.6	ug/L	61	Standard
[	Ce	140	538430.5	2.4				ug/L	30	Standard
[>	Tb	159	1313558.5	0.6				ug/L	1407506	Standard
[	Ho	165	6033.5	3.0				ug/L	13	Standard
|	Tl	203	976038.5	1.8	51.8945	1.054	2.0	ug/L	713	Standard
|	Tl	205	2201579.7	1.7	53.3153	0.970	1.8	ug/L	1648	Standard
|	Pb	206	795961.3	1.5	54.7426	0.937	1.7	ug/L	594	Standard
|	Pb	207	672093.9	1.4	55.7052	0.908	1.6	ug/L	497	Standard
|	Pb	208	3120192.1	1.4	55.9667	0.941	1.7	ug/L	2293	Standard
	U	238	892235.2	2.4	51.5122	1.383	2.7	ug/L	301	Standard
[>	Bi	209	698624.5	0.5				ug/L	757838	Standard

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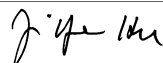
Na	23	18397.8	1.7	1.1516	0.041	3.5	mg/L	592	Standard
Mg	24	672756.4	2.3	0.9990	0.006	0.6	mg/L	1565	Standard
K	39	1631.8	3.9	1.1850	0.026	2.2	mg/L	157	Standard
Ca	43	25.0	69.3	8.6178	6.373	73.9	mg/L	5	Standard
Fe	54	12796.9	2.7	2.3123	0.093	4.0	mg/L	717	Standard
Fe	57	240042.1	2.1	2.2307	0.027	1.2	mg/L	4072	Standard
Sc-1	45	430181.1	1.9				mg/L	476707	Standard
Cl	35	10.0	10.0				ug/L	29	Standard
Kr	83	54.6	9.3				ug/L	39	Standard
Br	81	27015.8	5.7				ug/L	1124	Standard
P	31	1358.4	4.3				ug/L	495	Standard
S	34	7491.0	1.8				ug/L	6398	Standard
Sr	88	151.7	26.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.058	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075102PS WG404545-01
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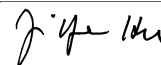
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	Ba	135	
	Ce	140	
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	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.187
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1207075102PS WG404545-01
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Method 6020 - Summary Report

Sample ID: L1207075102SDL WG404545-02

Sample Date/Time: Thursday, July 26, 2012 12:55:43

Number of Replicates: 3

Autosampler Position: 213

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17349.9	2.9	-3472.3556	365.376	10.5	ug/L	11975	Standard
|	Be	9	63.3	19.9	0.0393	0.007	17.8	ug/L	53	Standard
|	Al	27	5227612.6	1.6	308.5318	5.547	1.8	ug/L	10095	Standard
[>	Sc	45	465747.5	2.3				ug/L	476707	Standard
[	Ti	47	1343.4	4.8	0.8536	0.043	5.1	ug/L	149	Standard
|	V	51	11484.4	0.7	0.6626	0.019	2.9	ug/L	3747	Standard
|	Cr	52	13479.3	0.6	0.3228	0.014	4.3	ug/L	10265	Standard
|	Cr	53	1760.9	3.0	-0.6017	0.036	6.1	ug/L	3075	Standard
|	Mn	55	98374.7	0.6	5.5132	0.054	1.0	ug/L	1438	Standard
|	Co	59	1775.4	4.4	0.1404	0.009	6.4	ug/L	148	Standard
|	Ni	60	1481.1	4.6	0.4236	0.020	4.8	ug/L	176	Standard
|	Cu	65	1242.7	2.1	0.3497	0.014	4.1	ug/L	186	Standard
|	Zn	66	8063.5	1.3	5.4881	0.058	1.0	ug/L	355	Standard
[>	Ge	72	433994.8	1.6				ug/L	437919	Standard
|	As	75	366.8	2.6	0.4637	0.011	2.3	ug/L	-222	Standard
|	Se	82	112.9	9.0	0.6873	0.091	13.3	ug/L	29	Standard
[	Se-1	77	161.0	11.5	-0.3547	0.163	46.0	ug/L	201	Standard
[>	Ga	71	1585.1	4.9				mg/L	985	Standard
[	Rb	85	7690.3	5.0				ug/L	22	Standard
[	Y	89	364548.8	1.1				ug/L	370795	Standard
[>	Rh	103	481.7	9.6				ug/L	498	Standard
[	Mo	98	198.7	10.5	0.0350	0.005	13.6	ug/L	253	Standard
|	Ag	107	561.3	2.7	0.0608	0.002	3.4	ug/L	124	Standard
|	Cd	111	96.5	10.9	0.0118	0.002	19.5	mg/L	100	Standard
|	Cd	114	291.4	9.6	0.0050	0.002	41.2	ug/L	307	Standard
[>	In	115	1032151.1	0.7				ug/L	1045367	Standard
|	Sn	118	1253.4	8.8	-0.0142	0.005	38.4	ug/L	1664	Standard
|	Sb	123	4241.8	3.8	0.3847	0.018	4.7	ug/L	846	Standard
[	Ba	135	34284.1	1.4	6.6004	0.127	1.9	ug/L	61	Standard
[	Ce	140	82022.4	1.2				ug/L	30	Standard
[>	Tb	159	1382665.8	1.0				ug/L	1407506	Standard
[	Ho	165	913.0	2.0				ug/L	13	Standard
|	Tl	203	345.0	7.4	-0.0076	0.001	17.4	ug/L	713	Standard
|	Tl	205	837.4	9.3	-0.0115	0.002	15.6	ug/L	1648	Standard
|	Pb	206	7550.9	0.8	0.4550	0.005	1.0	ug/L	594	Standard
|	Pb	207	6194.3	1.5	0.4481	0.008	1.8	ug/L	497	Standard
|	Pb	208	29210.7	0.1	0.4575	0.002	0.4	ug/L	2293	Standard
	U	238	494.3	15.1	0.0299	0.004	13.9	ug/L	301	Standard
[>	Bi	209	746633.9	0.5				ug/L	757838	Standard

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Na	23	4078.9	4.2	0.1997	0.005	2.3	mg/L	592	Standard
Mg	24	113787.5	2.1	0.1561	0.007	4.3	mg/L	1565	Standard
K	39	395.0	5.5	0.1793	0.017	9.3	mg/L	157	Standard
Ca	43	10.0	100.0	2.8820	3.466	120.3	mg/L	5	Standard
Fe	54	2722.7	9.0	0.3494	0.046	13.3	mg/L	717	Standard
Fe	57	43545.9	4.1	0.3461	0.016	4.6	mg/L	4072	Standard
Sc-1	45	465747.5	2.3				mg/L	476707	Standard
Cl	35	7.7	37.7				ug/L	29	Standard
Kr	83	42.9	11.2				ug/L	39	Standard
Br	81	5512.7	3.7				ug/L	1124	Standard
P	31	565.0	6.6				ug/L	495	Standard
S	34	7530.2	3.2				ug/L	6398	Standard
Sr	88	38.3	74.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.104	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075102SDL WG404545-02
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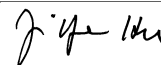
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	Pb	206	
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	Pb	208	
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075102SDL WG404545-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 12:58:55

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11913.0	0.7	15.9428	206.491	1295.2	ug/L	11975	Standard
|	Be	9	100247.5	3.7	51.4101	0.743	1.4	ug/L	53	Standard
|	Al	27	885487.3	3.9	50.5328	0.853	1.7	ug/L	10095	Standard
[>	Sc	45	475240.8	2.4				ug/L	476707	Standard
|	Ti	47	153265.3	0.9	102.0548	1.300	1.3	ug/L	149	Standard
|	V	51	616243.5	0.4	50.4937	1.158	2.3	ug/L	3747	Standard
|	Cr	52	516717.2	0.4	51.0150	1.066	2.1	ug/L	10265	Standard
|	Cr	53	91602.9	2.6	50.8116	1.103	2.2	ug/L	3075	Standard
|	Mn	55	906957.7	0.4	51.2883	0.946	1.8	ug/L	1438	Standard
|	Co	59	597700.7	1.1	50.6338	0.515	1.0	ug/L	148	Standard
|	Ni	60	167394.2	2.0	50.8354	1.551	3.1	ug/L	176	Standard
|	Cu	65	156164.4	0.9	50.5653	0.903	1.8	ug/L	186	Standard
|	Zn	66	72030.1	0.7	50.8204	1.107	2.2	ug/L	355	Standard
[>	Ge	72	439752.1	2.1				ug/L	437919	Standard
|	As	75	70039.9	0.7	50.6030	0.869	1.7	ug/L	-222	Standard
|	Se	82	6873.9	0.2	51.4947	0.997	1.9	ug/L	29	Standard
[	Se-1	77	5243.9	1.6	50.5805	1.680	3.3	ug/L	201	Standard
[>	Ga	71	956.7	2.4				mg/L	985	Standard
|	Rb	85	1048.4	9.8				ug/L	22	Standard
|	Y	89	362321.3	2.7				ug/L	370795	Standard
[>	Rh	103	533.3	20.2				ug/L	498	Standard
|	Mo	98	464892.8	0.3	98.3948	0.481	0.5	ug/L	253	Standard
|	Ag	107	432042.4	0.8	49.9362	0.375	0.8	ug/L	124	Standard
|	Cd	111	220399.5	0.9	51.0795	0.417	0.8	mg/L	100	Standard
|	Cd	114	633726.0	0.5	50.2900	0.243	0.5	ug/L	307	Standard
[>	In	115	1041316.2	0.3				ug/L	1045367	Standard
|	Sn	118	1479327.4	1.0	67.2202	0.468	0.7	ug/L	1664	Standard
|	Sb	123	540787.2	0.8	50.4885	0.309	0.6	ug/L	846	Standard
|	Ba	135	262357.3	0.2	50.0996	0.241	0.5	ug/L	61	Standard
|	Ce	140	1086.0	2.1				ug/L	30	Standard
[>	Tb	159	1412939.9	0.4				ug/L	1407506	Standard
|	Ho	165	20.7	10.1				ug/L	13	Standard
|	Tl	203	974058.3	0.1	49.6592	0.343	0.7	ug/L	713	Standard
|	Tl	205	2197711.0	0.3	51.0326	0.248	0.5	ug/L	1648	Standard
|	Pb	206	754422.1	1.4	49.7473	0.455	0.9	ug/L	594	Standard
|	Pb	207	638428.9	0.8	50.7354	0.205	0.4	ug/L	497	Standard
|	Pb	208	2955135.6	0.7	50.8224	0.148	0.3	ug/L	2293	Standard
	U	238	914203.4	1.1	50.6073	0.162	0.3	ug/L	301	Standard
[>	Bi	209	728576.3	0.8				ug/L	757838	Standard

Sample ID: QC Std 6

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Na	23	109395.2	1.3	6.3977	0.236	3.7	mg/L	592	Standard
Mg	24	3760634.5	0.9	5.0582	0.160	3.2	mg/L	1565	Standard
K	39	6873.2	5.7	4.8321	0.311	6.4	mg/L	157	Standard
Ca	43	23.3	24.7	7.1620	1.725	24.1	mg/L	5	Standard
Fe	54	29644.5	2.1	4.9908	0.019	0.4	mg/L	717	Standard
Fe	57	582055.5	1.3	4.9386	0.174	3.5	mg/L	4072	Standard
Sc-1	45	475240.8	2.4				mg/L	476707	Standard
Cl	35	8.7	17.6				ug/L	29	Standard
Kr	83	43.9	0.4				ug/L	39	Standard
Br	81	1275.9	5.2				ug/L	1124	Standard
P	31	595.0	10.5				ug/L	495	Standard
S	34	7515.2	1.8				ug/L	6398	Standard
Sr	88	45.0	48.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	101.066		
Sc	45			
Ti	47	102.055		
V	51	100.987		
Cr	52	102.030		
Cr	53			
Mn	55	102.577		
Co	59	101.268		
Ni	60	101.671		
Cu	65	101.131		
Zn	66	101.641		
Ge	72		100.418	
As	75	101.206		
Se	82	102.989		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	98.395		
Ag	107	99.872		

Sample ID: QC Std 6

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	Cd	111	102.159	
	Cd	114		
>	In	115		99.613
	Sn	118	134.440	
	Sb	123	100.977	
	Ba	135	100.199	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	99.318	
|	Tl	205		
|	Pb	206	99.495	
|	Pb	207	101.471	
|	Pb	208	101.645	
|	U	238	101.215	
>	Bi	209		96.139
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 13:01:25

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 13:02:05

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11929.7	4.1	-102.6974	420.473	409.4	ug/L	11975	Standard
|	Be	9	8.3	34.6	0.0105	0.001	14.1	ug/L	53	Standard
|	Al	27	9828.2	2.7	-0.2167	0.016	7.4	ug/L	10095	Standard
[>	Sc	45	468292.1	2.1				ug/L	476707	Standard
|	Ti	47	74.0	6.8	-0.0030	0.003	109.1	ug/L	149	Standard
|	V	51	3460.5	3.8	-0.0061	0.013	211.5	ug/L	3747	Standard
|	Cr	52	10306.8	1.8	0.0035	0.014	414.2	ug/L	10265	Standard
|	Cr	53	1265.1	6.6	-0.8859	0.055	6.2	ug/L	3075	Standard
|	Mn	55	1381.4	4.7	-0.0583	0.004	7.6	ug/L	1438	Standard
|	Co	59	148.3	21.9	0.0007	0.003	433.0	ug/L	148	Standard
|	Ni	60	97.7	8.9	-0.0021	0.003	141.1	ug/L	176	Standard
|	Cu	65	124.0	6.4	-0.0177	0.002	13.5	ug/L	186	Standard
|	Zn	66	193.7	1.6	-0.1705	0.001	0.7	ug/L	355	Standard
[>	Ge	72	432066.5	0.9				ug/L	437919	Standard
|	As	75	-223.4	5.8	0.0325	0.011	33.7	ug/L	-222	Standard
|	Se	82	32.5	16.7	0.0752	0.044	58.2	ug/L	29	Standard
[	Se-1	77	164.7	5.6	-0.3081	0.098	31.8	ug/L	201	Standard
[>	Ga	71	916.7	2.7				mg/L	985	Standard
|	Rb	85	21.7	48.0				ug/L	22	Standard
|	Y	89	365120.7	1.2				ug/L	370795	Standard
[>	Rh	103	463.3	15.4				ug/L	498	Standard
|	Mo	98	414.9	2.7	0.0804	0.002	3.0	ug/L	253	Standard
|	Ag	107	152.3	4.5	0.0129	0.001	6.4	ug/L	124	Standard
|	Cd	111	83.3	4.8	0.0086	0.001	12.1	mg/L	100	Standard
|	Cd	114	258.0	6.7	0.0022	0.001	65.8	ug/L	307	Standard
[>	In	115	1040624.1	0.8				ug/L	1045367	Standard
|	Sn	118	1368.7	2.5	-0.0095	0.001	11.0	ug/L	1664	Standard
|	Sb	123	2889.0	3.0	0.2550	0.007	2.6	ug/L	846	Standard
|	Ba	135	71.0	11.5	0.0077	0.002	20.8	ug/L	61	Standard
|	Ce	140	46.3	6.2				ug/L	30	Standard
[>	Tb	159	1381286.7	1.1				ug/L	1407506	Standard
|	Ho	165	11.7	52.4				ug/L	13	Standard
|	Tl	203	276.7	11.1	-0.0109	0.002	16.4	ug/L	713	Standard
|	Tl	205	654.3	15.3	-0.0156	0.003	16.9	ug/L	1648	Standard
|	Pb	206	556.7	8.7	0.0048	0.004	79.0	ug/L	594	Standard
|	Pb	207	425.3	8.9	0.0006	0.004	572.1	ug/L	497	Standard
|	Pb	208	2079.1	6.5	0.0020	0.003	140.1	ug/L	2293	Standard
	U	238	70.3	39.9	0.0071	0.002	23.0	ug/L	301	Standard
[>	Bi	209	744086.1	2.4				ug/L	757838	Standard

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Na	23	405.0	23.8	-0.0210	0.006	29.4	mg/L	592	Standard
Mg	24	463.3	14.7	0.0005	0.000	17.8	mg/L	1565	Standard
K	39	190.0	9.1	0.0283	0.015	51.8	mg/L	157	Standard
Ca	43	1.7	173.2	-0.0109	0.949	8708.1	mg/L	5	Standard
Fe	54	785.2	2.0	0.0068	0.003	42.9	mg/L	717	Standard
Fe	57	3948.8	1.4	0.0009	0.000	29.8	mg/L	4072	Standard
Sc-1	45	468292.1	2.1				mg/L	476707	Standard
Cl	35	12.0	16.7				ug/L	29	Standard
Kr	83	46.2	2.2				ug/L	39	Standard
Br	81	1188.4	4.2				ug/L	1124	Standard
P	31	492.5	7.3				ug/L	495	Standard
S	34	7102.5	0.2				ug/L	6398	Standard
Sr	88	45.0	29.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.663	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	99.546
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.185
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207075103

Sample Date/Time: Thursday, July 26, 2012 13:05:17

Number of Replicates: 3

Autosampler Position: 214

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

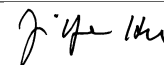
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	43860.1	3.8	-22370.3490	1040.991	4.7	ug/L	11975	Standard
|	Be	9	320.0	18.9	0.1895	0.032	16.8	ug/L	53	Standard
|	Al	27	26907250.3	2.5	1744.7626	33.348	1.9	ug/L	10095	Standard
[>	Sc	45	424738.8	1.7				ug/L	476707	Standard
[	Ti	47	5229.9	3.1	3.7628	0.074	2.0	ug/L	149	Standard
|	V	51	42973.5	3.4	3.5820	0.079	2.2	ug/L	3747	Standard
|	Cr	52	23054.9	2.5	1.4908	0.029	1.9	ug/L	10265	Standard
|	Cr	53	3635.4	1.3	0.6566	0.024	3.7	ug/L	3075	Standard
|	Mn	55	537614.6	2.6	33.2465	0.501	1.5	ug/L	1438	Standard
|	Co	59	8787.2	4.6	0.8032	0.026	3.3	ug/L	148	Standard
|	Ni	60	5523.3	7.1	1.8049	0.104	5.7	ug/L	176	Standard
|	Cu	65	4629.0	3.3	1.5847	0.032	2.0	ug/L	186	Standard
|	Zn	66	53112.4	3.8	40.9714	0.980	2.4	ug/L	355	Standard
[>	Ge	72	401409.2	1.5				ug/L	437919	Standard
|	As	75	1203.9	6.5	1.1446	0.048	4.2	ug/L	-222	Standard
|	Se	82	40.2	10.4	0.1567	0.030	19.0	ug/L	29	Standard
[	Se-1	77	173.3	7.0	-0.0856	0.113	131.4	ug/L	201	Standard
[>	Ga	71	4133.9	4.5				mg/L	985	Standard
[	Rb	85	37185.6	3.6				ug/L	22	Standard
[	Y	89	362106.4	1.3				ug/L	370795	Standard
[>	Rh	103	485.0	18.9				ug/L	498	Standard
[	Mo	98	295.5	21.7	0.0613	0.015	23.9	ug/L	253	Standard
|	Ag	107	200.7	24.0	0.0208	0.006	28.9	ug/L	124	Standard
|	Cd	111	297.0	10.9	0.0650	0.008	12.2	mg/L	100	Standard
|	Cd	114	838.4	7.0	0.0549	0.005	8.7	ug/L	307	Standard
[>	In	115	946363.0	0.5				ug/L	1045367	Standard
|	Sn	118	904.0	11.4	-0.0265	0.005	18.7	ug/L	1664	Standard
|	Sb	123	611.4	24.1	0.0478	0.015	31.3	ug/L	846	Standard
[	Ba	135	187431.4	1.8	39.3804	0.615	1.6	ug/L	61	Standard
[	Ce	140	537544.9	1.8				ug/L	30	Standard
[>	Tb	159	1308924.1	0.5				ug/L	1407506	Standard
[	Ho	165	5823.8	2.7				ug/L	13	Standard
|	Tl	203	767.4	11.5	0.0152	0.005	29.8	ug/L	713	Standard
|	Tl	205	1812.8	11.5	0.0125	0.005	38.3	ug/L	1648	Standard
|	Pb	206	36900.6	2.6	2.4562	0.066	2.7	ug/L	594	Standard
|	Pb	207	30028.7	2.1	2.4069	0.051	2.1	ug/L	497	Standard
|	Pb	208	141584.2	2.5	2.4562	0.064	2.6	ug/L	2293	Standard
	U	238	2072.5	6.7	0.1204	0.008	6.4	ug/L	301	Standard
[>	Bi	209	713173.6	0.4				ug/L	757838	Standard

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Na	23	2380.2	14.1	0.1114	0.020	18.1	mg/L	592	Standard
Mg	24	437268.7	2.3	0.6577	0.009	1.4	mg/L	1565	Standard
K	39	700.0	9.9	0.4527	0.056	12.5	mg/L	157	Standard
Ca	43	16.7	62.4	5.6751	3.951	69.6	mg/L	5	Standard
Fe	54	10057.1	1.1	1.8135	0.034	1.9	mg/L	717	Standard
Fe	57	182155.3	1.8	1.7069	0.027	1.6	mg/L	4072	Standard
Sc-1	45	424738.8	1.7				mg/L	476707	Standard
Cl	35	12.3	59.8				ug/L	29	Standard
Kr	83	46.2	14.1				ug/L	39	Standard
Br	81	1050.0	3.0				ug/L	1124	Standard
P	31	1233.4	10.5				ug/L	495	Standard
S	34	6859.9	3.8				ug/L	6398	Standard
Sr	88	128.3	15.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.663	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075103

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	Cd	111	
	Cd	114	
>	In	115	90.529
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.106
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075103

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Method 6020 - Summary Report

Sample ID: L1207075104

Sample Date/Time: Thursday, July 26, 2012 13:08:27

Number of Replicates: 3

Autosampler Position: 215

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	53858.9	1.9	-28250.7768	612.404	2.2	ug/L	11975	Standard
|	Be	9	293.3	17.5	0.1708	0.032	18.5	ug/L	53	Standard
|	Al	27	26908371.0	4.0	1703.3341	58.295	3.4	ug/L	10095	Standard
[>	Sc	45	435065.9	1.8				ug/L	476707	Standard
[	Ti	47	4168.6	2.2	3.0047	0.037	1.2	ug/L	149	Standard
|	V	51	57536.1	2.7	4.9241	0.091	1.8	ug/L	3747	Standard
|	Cr	52	23549.6	3.3	1.5591	0.059	3.8	ug/L	10265	Standard
|	Cr	53	3516.2	1.3	0.5934	0.016	2.7	ug/L	3075	Standard
|	Mn	55	559554.4	3.1	34.7919	0.771	2.2	ug/L	1438	Standard
|	Co	59	9725.1	2.4	0.8952	0.013	1.4	ug/L	148	Standard
|	Ni	60	7295.1	2.4	2.4082	0.038	1.6	ug/L	176	Standard
|	Cu	65	4206.6	3.6	1.4428	0.044	3.1	ug/L	186	Standard
|	Zn	66	10863.6	4.8	8.1777	0.313	3.8	ug/L	355	Standard
[>	Ge	72	399292.4	1.2				ug/L	437919	Standard
|	As	75	2008.6	1.9	1.7877	0.012	0.7	ug/L	-222	Standard
|	Se	82	94.8	4.4	0.6115	0.038	6.3	ug/L	29	Standard
[	Se-1	77	168.3	1.9	-0.1299	0.038	28.9	ug/L	201	Standard
[>	Ga	71	4028.9	5.6				mg/L	985	Standard
[	Rb	85	34881.8	0.9				ug/L	22	Standard
[	Y	89	376363.3	2.0				ug/L	370795	Standard
[>	Rh	103	473.3	1.6				ug/L	498	Standard
[	Mo	98	181.6	20.8	0.0352	0.009	24.7	ug/L	253	Standard
|	Ag	107	317.0	12.1	0.0360	0.005	13.9	ug/L	124	Standard
|	Cd	111	176.2	2.5	0.0346	0.002	4.4	mg/L	100	Standard
|	Cd	114	554.6	2.7	0.0306	0.001	4.1	ug/L	307	Standard
[>	In	115	937238.9	1.0				ug/L	1045367	Standard
|	Sn	118	859.7	8.7	-0.0283	0.003	11.9	ug/L	1664	Standard
|	Sb	123	403.2	26.3	0.0268	0.011	39.8	ug/L	846	Standard
[	Ba	135	447415.2	3.2	94.9162	2.094	2.2	ug/L	61	Standard
[	Ce	140	592469.9	2.4				ug/L	30	Standard
[>	Tb	159	1310517.6	0.4				ug/L	1407506	Standard
[	Ho	165	6816.9	3.5				ug/L	13	Standard
|	Tl	203	829.0	27.3	0.0194	0.012	61.2	ug/L	713	Standard
|	Tl	205	1866.5	27.5	0.0148	0.012	83.0	ug/L	1648	Standard
|	Pb	206	44928.5	2.0	3.0684	0.072	2.4	ug/L	594	Standard
|	Pb	207	36645.3	2.8	3.0142	0.090	3.0	ug/L	497	Standard
|	Pb	208	172548.5	2.2	3.0716	0.074	2.4	ug/L	2293	Standard
	U	238	2321.8	1.5	0.1376	0.002	1.6	ug/L	301	Standard
[>	Bi	209	696861.3	0.4				ug/L	757838	Standard

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Na	23	6969.9	3.4	0.4029	0.012	3.0	mg/L	592	Standard
Mg	24	678979.7	2.2	0.9971	0.019	1.9	mg/L	1565	Standard
K	39	1038.4	1.9	0.7051	0.027	3.8	mg/L	157	Standard
Ca	43	71.7	34.4	25.4391	9.004	35.4	mg/L	5	Standard
Fe	54	9071.3	5.1	1.5804	0.059	3.8	mg/L	717	Standard
Fe	57	166039.1	4.1	1.5149	0.046	3.0	mg/L	4072	Standard
Sc-1	45	435065.9	1.8				mg/L	476707	Standard
Cl	35	8.7	29.0				ug/L	29	Standard
Kr	83	49.3	4.1				ug/L	39	Standard
Br	81	3495.4	2.2				ug/L	1124	Standard
P	31	1454.2	4.0				ug/L	495	Standard
S	34	7561.1	3.6				ug/L	6398	Standard
Sr	88	185.0	24.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.179	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075104

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	Cd	111	
	Cd	114	
>	In	115	89.656
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.954
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075104

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Method 6020 - Summary Report

Sample ID: L1207075106

Sample Date/Time: Thursday, July 26, 2012 13:11:36

Number of Replicates: 3

Autosampler Position: 216

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

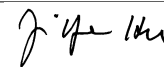
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	112583.6	2.8	-66827.8580	4140.372	6.2	ug/L	11975	Standard
|	Be	9	433.3	13.9	0.2479	0.027	10.8	ug/L	53	Standard
|	Al	27	45090712.2	0.6	2851.0543	91.248	3.2	ug/L	10095	Standard
[>	Sc	45	435915.1	2.9				ug/L	476707	Standard
|	Ti	47	8145.9	2.0	5.9102	0.079	1.3	ug/L	149	Standard
|	V	51	88691.3	1.8	7.7351	0.107	1.4	ug/L	3747	Standard
|	Cr	52	29417.5	2.1	2.2038	0.060	2.7	ug/L	10265	Standard
|	Cr	53	4484.8	0.9	1.1984	0.043	3.6	ug/L	3075	Standard
|	Mn	55	731859.4	1.1	45.4602	0.271	0.6	ug/L	1438	Standard
|	Co	59	14128.3	3.8	1.3033	0.042	3.2	ug/L	148	Standard
|	Ni	60	8899.9	0.7	2.9394	0.038	1.3	ug/L	176	Standard
|	Cu	65	3826.5	1.6	1.3044	0.018	1.4	ug/L	186	Standard
|	Zn	66	12553.2	0.5	9.4810	0.064	0.7	ug/L	355	Standard
[>	Ge	72	400103.4	0.8				ug/L	437919	Standard
|	As	75	2521.1	1.8	2.1898	0.028	1.3	ug/L	-222	Standard
|	Se	82	255.0	4.1	1.9320	0.076	3.9	ug/L	29	Standard
[	Se-1	77	182.3	10.6	0.0212	0.223	1051.9	ug/L	201	Standard
[>	Ga	71	6266.3	1.4				mg/L	985	Standard
|	Rb	85	57176.0	2.2				ug/L	22	Standard
|	Y	89	387689.0	0.1				ug/L	370795	Standard
[>	Rh	103	495.0	4.4				ug/L	498	Standard
|	Mo	98	322.9	12.8	0.0694	0.010	15.0	ug/L	253	Standard
|	Ag	107	228.0	30.6	0.0249	0.009	37.2	ug/L	124	Standard
|	Cd	111	185.9	19.7	0.0377	0.010	26.3	mg/L	100	Standard
|	Cd	114	500.7	15.8	0.0264	0.007	28.1	ug/L	307	Standard
[>	In	115	926676.8	0.8				ug/L	1045367	Standard
|	Sn	118	770.0	12.3	-0.0324	0.005	15.8	ug/L	1664	Standard
|	Sb	123	304.8	38.7	0.0170	0.013	74.2	ug/L	846	Standard
|	Ba	135	398069.1	1.5	85.4202	0.848	1.0	ug/L	61	Standard
|	Ce	140	665336.2	0.5				ug/L	30	Standard
[>	Tb	159	1322345.6	0.4				ug/L	1407506	Standard
|	Ho	165	8179.9	0.2				ug/L	13	Standard
|	Tl	203	1680.1	79.8	0.0644	0.071	110.8	ug/L	713	Standard
|	Tl	205	3932.4	79.4	0.0646	0.076	117.3	ug/L	1648	Standard
|	Pb	206	34463.2	3.4	2.3337	0.084	3.6	ug/L	594	Standard
|	Pb	207	27839.3	4.4	2.2698	0.107	4.7	ug/L	497	Standard
|	Pb	208	131973.4	3.7	2.3289	0.092	4.0	ug/L	2293	Standard
	U	238	4881.5	12.8	0.2843	0.037	12.9	ug/L	301	Standard
[>	Bi	209	700628.9	1.1				ug/L	757838	Standard

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Na	23	9611.4	4.3	0.5719	0.032	5.7	mg/L	592	Standard
Mg	24	1116464.9	0.5	1.6371	0.045	2.8	mg/L	1565	Standard
K	39	1123.4	3.2	0.7705	0.041	5.3	mg/L	157	Standard
Ca	43	56.7	13.5	19.9864	3.064	15.3	mg/L	5	Standard
Fe	54	14308.7	1.6	2.5664	0.118	4.6	mg/L	717	Standard
Fe	57	255592.2	2.8	2.3468	0.089	3.8	mg/L	4072	Standard
Sc-1	45	435915.1	2.9				mg/L	476707	Standard
Cl	35	6.3	24.1				ug/L	29	Standard
Kr	83	50.4	7.3				ug/L	39	Standard
Br	81	10532.8	4.0				ug/L	1124	Standard
P	31	1241.7	0.4				ug/L	495	Standard
S	34	7586.1	2.6				ug/L	6398	Standard
Sr	88	198.3	5.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.365	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075106

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	Cd	111	
	Cd	114	
>	In	115	88.646
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.451
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075106

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Method 6020 - Summary Report

Sample ID: L1207075107

Sample Date/Time: Thursday, July 26, 2012 13:14:45

Number of Replicates: 3

Autosampler Position: 217

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

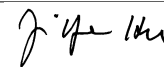
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	108242.3	4.0	-64077.9133	3935.005	6.1	ug/L	11975	Standard
|	Be	9	541.7	7.7	0.3097	0.025	8.1	ug/L	53	Standard
|	Al	27	42438279.9	2.4	2688.0256	103.182	3.8	ug/L	10095	Standard
[>	Sc	45	435051.7	1.5				ug/L	476707	Standard
|	Ti	47	3920.5	8.4	2.8592	0.267	9.3	ug/L	149	Standard
|	V	51	73027.0	1.2	6.4113	0.121	1.9	ug/L	3747	Standard
|	Cr	52	27299.2	0.5	2.0124	0.029	1.4	ug/L	10265	Standard
|	Cr	53	4033.0	2.8	0.9505	0.090	9.4	ug/L	3075	Standard
|	Mn	55	864698.8	1.4	54.5088	1.230	2.3	ug/L	1438	Standard
|	Co	59	14211.0	1.9	1.3301	0.036	2.7	ug/L	148	Standard
|	Ni	60	10152.4	1.7	3.4060	0.086	2.5	ug/L	176	Standard
|	Cu	65	3034.0	1.1	1.0375	0.014	1.4	ug/L	186	Standard
|	Zn	66	11649.5	1.6	8.9058	0.201	2.3	ug/L	355	Standard
[>	Ge	72	394503.8	0.8				ug/L	437919	Standard
|	As	75	2681.5	1.0	2.3470	0.034	1.5	ug/L	-222	Standard
|	Se	82	478.6	1.7	3.8360	0.099	2.6	ug/L	29	Standard
[	Se-1	77	180.3	8.3	0.0273	0.178	654.1	ug/L	201	Standard
[>	Ga	71	5492.7	2.6				mg/L	985	Standard
|	Rb	85	50574.3	2.5				ug/L	22	Standard
|	Y	89	401630.2	0.3				ug/L	370795	Standard
[>	Rh	103	516.7	3.4				ug/L	498	Standard
|	Mo	98	191.2	12.9	0.0385	0.006	14.6	ug/L	253	Standard
|	Ag	107	510.3	3.6	0.0623	0.003	4.1	ug/L	124	Standard
|	Cd	111	216.2	7.1	0.0462	0.004	9.6	mg/L	100	Standard
|	Cd	114	632.8	3.9	0.0388	0.002	4.7	ug/L	307	Standard
[>	In	115	917048.3	0.8				ug/L	1045367	Standard
|	Sn	118	742.7	9.1	-0.0334	0.003	9.8	ug/L	1664	Standard
|	Sb	123	199.5	15.6	0.0062	0.003	52.5	ug/L	846	Standard
|	Ba	135	379658.1	1.0	82.3270	0.557	0.7	ug/L	61	Standard
|	Ce	140	761315.1	1.5				ug/L	30	Standard
[>	Tb	159	1322675.5	1.0				ug/L	1407506	Standard
|	Ho	165	10878.9	1.2				ug/L	13	Standard
|	Tl	203	928.4	2.8	0.0256	0.001	4.9	ug/L	713	Standard
|	Tl	205	2135.5	0.1	0.0222	0.000	0.7	ug/L	1648	Standard
|	Pb	206	40276.1	1.0	2.7922	0.025	0.9	ug/L	594	Standard
|	Pb	207	32357.5	2.5	2.7011	0.069	2.6	ug/L	497	Standard
|	Pb	208	153300.5	1.8	2.7698	0.051	1.8	ug/L	2293	Standard
	U	238	5739.8	1.3	0.3408	0.006	1.6	ug/L	301	Standard
[>	Bi	209	685778.6	0.3				ug/L	757838	Standard

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Na	23	17071.3	2.4	1.0526	0.032	3.0	mg/L	592	Standard
Mg	24	1308360.9	0.9	1.9216	0.028	1.5	mg/L	1565	Standard
K	39	1108.4	2.6	0.7602	0.034	4.5	mg/L	157	Standard
Ca	43	63.3	19.9	22.3822	4.386	19.6	mg/L	5	Standard
Fe	54	12558.2	2.4	2.2400	0.089	4.0	mg/L	717	Standard
Fe	57	226426.6	2.3	2.0785	0.049	2.4	mg/L	4072	Standard
Sc-1	45	435051.7	1.5				mg/L	476707	Standard
Cl	35	10.3	11.2				ug/L	29	Standard
Kr	83	54.6	9.3				ug/L	39	Standard
Br	81	21315.0	3.3				ug/L	1124	Standard
P	31	1495.9	3.7				ug/L	495	Standard
S	34	7676.1	2.3				ug/L	6398	Standard
Sr	88	300.0	24.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.086	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075107

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	Cd	111	
	Cd	114	
>	In	115	87.725
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.492
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075107

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Method 6020 - Summary Report

Sample ID: L1207075108

Sample Date/Time: Thursday, July 26, 2012 13:17:54

Number of Replicates: 3

Autosampler Position: 218

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

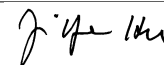
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	104997.6	1.2	-63809.2992	481.517	0.8	ug/L	11975	Standard
|	Be	9	365.0	3.6	0.2163	0.007	3.2	ug/L	53	Standard
|	Al	27	27318846.7	1.4	1777.1663	21.199	1.2	ug/L	10095	Standard
[>	Sc	45	423365.1	0.5				ug/L	476707	Standard
|	Ti	47	2296.5	0.4	1.6519	0.023	1.4	ug/L	149	Standard
|	V	51	50243.2	2.2	4.3184	0.146	3.4	ug/L	3747	Standard
|	Cr	52	21581.7	2.3	1.3704	0.081	5.9	ug/L	10265	Standard
|	Cr	53	3039.5	5.5	0.3156	0.100	31.7	ug/L	3075	Standard
|	Mn	55	500188.8	1.4	31.4694	0.751	2.4	ug/L	1438	Standard
|	Co	59	8479.0	1.6	0.7886	0.018	2.3	ug/L	148	Standard
|	Ni	60	6467.7	0.1	2.1577	0.021	1.0	ug/L	176	Standard
|	Cu	65	1975.5	3.3	0.6551	0.028	4.3	ug/L	186	Standard
|	Zn	66	7658.6	0.8	5.7474	0.078	1.4	ug/L	355	Standard
[>	Ge	72	394560.4	1.0				ug/L	437919	Standard
|	As	75	1835.4	3.1	1.6685	0.061	3.7	ug/L	-222	Standard
|	Se	82	321.8	5.7	2.5228	0.175	6.9	ug/L	29	Standard
[	Se-1	77	171.0	2.9	-0.0775	0.074	95.0	ug/L	201	Standard
[>	Ga	71	3852.2	5.2				mg/L	985	Standard
|	Rb	85	30231.8	2.8				ug/L	22	Standard
|	Y	89	371943.5	0.9				ug/L	370795	Standard
[>	Rh	103	530.0	5.9				ug/L	498	Standard
|	Mo	98	184.9	13.0	0.0369	0.006	17.1	ug/L	253	Standard
|	Ag	107	396.0	2.8	0.0471	0.002	4.0	ug/L	124	Standard
|	Cd	111	128.6	6.8	0.0230	0.002	8.6	mg/L	100	Standard
|	Cd	114	338.0	4.2	0.0121	0.002	13.3	ug/L	307	Standard
[>	In	115	919982.2	1.1				ug/L	1045367	Standard
|	Sn	118	919.0	5.1	-0.0244	0.003	12.0	ug/L	1664	Standard
|	Sb	123	200.6	31.0	0.0063	0.007	109.3	ug/L	846	Standard
|	Ba	135	248827.0	0.9	53.7908	1.094	2.0	ug/L	61	Standard
|	Ce	140	641825.3	1.0				ug/L	30	Standard
[>	Tb	159	1309202.7	0.5				ug/L	1407506	Standard
|	Ho	165	7913.1	0.8				ug/L	13	Standard
|	Tl	203	699.0	7.3	0.0125	0.003	21.1	ug/L	713	Standard
|	Tl	205	1655.8	1.5	0.0097	0.000	4.0	ug/L	1648	Standard
|	Pb	206	33832.7	0.1	2.3011	0.022	1.0	ug/L	594	Standard
|	Pb	207	27161.0	0.4	2.2239	0.022	1.0	ug/L	497	Standard
|	Pb	208	129076.7	0.6	2.2877	0.031	1.3	ug/L	2293	Standard
	U	238	3545.1	0.5	0.2082	0.002	1.1	ug/L	301	Standard
[>	Bi	209	697418.9	1.0				ug/L	757838	Standard

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Na	23	15846.6	7.7	1.0017	0.079	7.9	mg/L	592	Standard
Mg	24	968312.1	1.0	1.4612	0.016	1.1	mg/L	1565	Standard
K	39	733.4	2.8	0.4812	0.014	2.8	mg/L	157	Standard
Ca	43	31.7	36.5	11.2542	4.365	38.8	mg/L	5	Standard
Fe	54	7532.1	6.5	1.3296	0.090	6.7	mg/L	717	Standard
Fe	57	136340.4	5.9	1.2735	0.080	6.3	mg/L	4072	Standard
Sc-1	45	423365.1	0.5				mg/L	476707	Standard
Cl	35	12.3	20.4				ug/L	29	Standard
Kr	83	49.6	10.7				ug/L	39	Standard
Br	81	13190.8	6.8				ug/L	1124	Standard
P	31	1117.5	1.0				ug/L	495	Standard
S	34	7528.5	1.3				ug/L	6398	Standard
Sr	88	200.0	10.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.099	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075108

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	Cd	111	
	Cd	114	
>	In	115	88.006
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.027
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075108

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Method 6020 - Summary Report

Sample ID: L1207075102

Sample Date/Time: Thursday, July 26, 2012 13:24:49

Number of Replicates: 3

Autosampler Position: 211

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	29311.7	2.4	-9864.3083	379.249	3.8	ug/L	11975	Standard
|	Be	9	165.0	36.7	0.0878	0.030	34.1	ug/L	53	Standard
|	Al	27	16588961.5	0.7	928.4983	14.455	1.6	ug/L	10095	Standard
>	Sc	45	491915.0	1.1				ug/L	476707	Standard
[	Ti	47	3975.2	1.9	2.5780	0.013	0.5	ug/L	149	Standard
|	V	51	27680.5	1.8	1.9707	0.072	3.7	ug/L	3747	Standard
|	Cr	52	19664.8	1.7	0.9159	0.062	6.7	ug/L	10265	Standard
|	Cr	53	2553.5	0.3	-0.1705	0.022	12.7	ug/L	3075	Standard
|	Mn	55	287123.1	1.5	16.0387	0.346	2.2	ug/L	1438	Standard
|	Co	59	5439.3	5.3	0.4461	0.031	6.9	ug/L	148	Standard
|	Ni	60	3668.4	1.9	1.0753	0.028	2.6	ug/L	176	Standard
|	Cu	65	3529.4	1.4	1.0783	0.021	2.0	ug/L	186	Standard
|	Zn	66	11022.3	1.6	7.4625	0.025	0.3	ug/L	355	Standard
>	Ge	72	442526.9	1.5				ug/L	437919	Standard
|	As	75	1492.9	5.5	1.2632	0.043	3.4	ug/L	-222	Standard
|	Se	82	284.0	3.6	1.9466	0.055	2.8	ug/L	29	Standard
[	Se-1	77	169.0	13.6	-0.3035	0.244	80.3	ug/L	201	Standard
>	Ga	71	2865.3	9.1				mg/L	985	Standard
[	Rb	85	23057.5	3.0				ug/L	22	Standard
[	Y	89	394425.5	1.7				ug/L	370795	Standard
>	Rh	103	505.0	3.6				ug/L	498	Standard
[	Mo	98	408.3	4.1	0.0783	0.004	5.2	ug/L	253	Standard
|	Ag	107	1335.4	0.9	0.1485	0.002	1.6	ug/L	124	Standard
|	Cd	111	139.4	10.6	0.0213	0.004	17.9	mg/L	100	Standard
|	Cd	114	423.0	4.9	0.0151	0.002	13.8	ug/L	307	Standard
>	In	115	1049470.4	1.3				ug/L	1045367	Standard
|	Sn	118	1564.4	9.9	-0.0012	0.006	539.2	ug/L	1664	Standard
|	Sb	123	535.0	10.1	0.0345	0.004	12.9	ug/L	846	Standard
[	Ba	135	103744.7	1.2	19.6535	0.021	0.1	ug/L	61	Standard
[	Ce	140	248816.8	0.7				ug/L	30	Standard
>	Tb	159	1436297.9	0.7				ug/L	1407506	Standard
[	Ho	165	2807.9	2.7				ug/L	13	Standard
|	Tl	203	395.3	13.6	-0.0052	0.003	53.1	ug/L	713	Standard
|	Tl	205	931.0	9.3	-0.0095	0.002	21.1	ug/L	1648	Standard
|	Pb	206	21092.3	0.7	1.3205	0.005	0.4	ug/L	594	Standard
|	Pb	207	17218.8	0.7	1.2973	0.012	0.9	ug/L	497	Standard
|	Pb	208	81245.9	0.9	1.3249	0.011	0.8	ug/L	2293	Standard
	U	238	1405.4	26.0	0.0788	0.020	25.0	ug/L	301	Standard
>	Bi	209	750167.1	0.7				ug/L	757838	Standard

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Na	23	10281.8	1.5	0.5396	0.015	2.8	mg/L	592	Standard
Mg	24	329334.5	1.4	0.4277	0.010	2.4	mg/L	1565	Standard
K	39	913.4	15.1	0.5242	0.100	19.1	mg/L	157	Standard
Ca	43	16.7	34.6	4.7849	1.847	38.6	mg/L	5	Standard
Fe	54	6695.8	1.7	0.9867	0.019	1.9	mg/L	717	Standard
Fe	57	124300.0	3.9	0.9921	0.044	4.5	mg/L	4072	Standard
Sc-1	45	491915.0	1.1				mg/L	476707	Standard
Cl	35	13.7	15.2				ug/L	29	Standard
Kr	83	50.4	11.9				ug/L	39	Standard
Br	81	13082.3	3.7				ug/L	1124	Standard
P	31	1001.7	4.7				ug/L	495	Standard
S	34	8090.5	1.4				ug/L	6398	Standard
Sr	88	86.7	26.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.052	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075102

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	Cd	111		
	Cd	114		
>	In	115	100.393	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.988	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075102

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Method 6020 - Summary Report

Sample ID: L1207075102PS WG404545-01

Sample Date/Time: Thursday, July 26, 2012 13:27:57

Number of Replicates: 3

Autosampler Position: 212

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

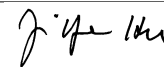
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	29926.2	2.4	-9978.1100	394.759	4.0	ug/L	11975	Standard
|	Be	9	98549.5	1.4	48.1519	0.405	0.8	ug/L	53	Standard
|	Al	27	17458617.3	2.5	963.3860	19.256	2.0	ug/L	10095	Standard
[>	Sc	45	498892.4	0.7				ug/L	476707	Standard
|	Ti	47	4045.2	2.8	2.5988	0.073	2.8	ug/L	149	Standard
|	V	51	619159.2	1.2	49.9107	0.477	1.0	ug/L	3747	Standard
|	Cr	52	505211.2	1.2	49.0360	0.529	1.1	ug/L	10265	Standard
|	Cr	53	88915.2	1.2	48.4651	0.590	1.2	ug/L	3075	Standard
|	Mn	55	1145819.3	0.9	63.7889	0.520	0.8	ug/L	1438	Standard
|	Co	59	573417.4	1.3	47.8008	0.556	1.2	ug/L	148	Standard
|	Ni	60	162145.7	0.7	48.4457	0.238	0.5	ug/L	176	Standard
|	Cu	65	152332.9	2.2	48.5300	0.962	2.0	ug/L	186	Standard
|	Zn	66	77038.4	0.7	53.4955	0.335	0.6	ug/L	355	Standard
[>	Ge	72	446816.2	0.3				ug/L	437919	Standard
|	As	75	67618.7	1.1	48.0798	0.412	0.9	ug/L	-222	Standard
|	Se	82	6697.9	1.3	49.3617	0.538	1.1	ug/L	29	Standard
[	Se-1	77	4945.1	2.7	46.7799	1.205	2.6	ug/L	201	Standard
[>	Ga	71	2913.6	8.1				mg/L	985	Standard
|	Rb	85	23109.3	2.5				ug/L	22	Standard
|	Y	89	398588.3	3.3				ug/L	370795	Standard
[>	Rh	103	535.0	7.1				ug/L	498	Standard
|	Mo	98	499.1	9.4	0.0961	0.009	9.8	ug/L	253	Standard
|	Ag	107	414475.2	1.0	46.9816	0.459	1.0	ug/L	124	Standard
|	Cd	111	207516.7	1.1	47.1658	0.509	1.1	mg/L	100	Standard
|	Cd	114	595469.0	0.8	46.3407	0.200	0.4	ug/L	307	Standard
[>	In	115	1061796.1	0.3				ug/L	1045367	Standard
|	Sn	118	1674.4	8.3	0.0029	0.006	205.3	ug/L	1664	Standard
|	Sb	123	502972.8	0.4	46.0514	0.102	0.2	ug/L	846	Standard
|	Ba	135	354930.3	0.9	66.4731	0.813	1.2	ug/L	61	Standard
|	Ce	140	252112.3	0.7				ug/L	30	Standard
[>	Tb	159	1452225.9	0.4				ug/L	1407506	Standard
|	Ho	165	2858.9	2.4				ug/L	13	Standard
|	Tl	203	940772.3	0.8	46.0351	0.382	0.8	ug/L	713	Standard
|	Tl	205	2123856.3	1.3	47.3362	0.621	1.3	ug/L	1648	Standard
|	Pb	206	739919.0	0.6	46.8335	0.403	0.9	ug/L	594	Standard
|	Pb	207	628375.6	0.7	47.9318	0.401	0.8	ug/L	497	Standard
|	Pb	208	2913414.5	0.8	48.0932	0.455	0.9	ug/L	2293	Standard
|	U	238	864590.2	1.0	45.9422	0.449	1.0	ug/L	301	Standard
[>	Bi	209	759023.4	0.4				ug/L	757838	Standard

Sample ID: L1207075102PS WG404545-01

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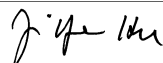
Na	23	10018.3	6.0	0.5164	0.030	5.8	mg/L	592	Standard
Mg	24	334655.5	0.5	0.4285	0.005	1.1	mg/L	1565	Standard
K	39	916.7	6.8	0.5173	0.045	8.7	mg/L	157	Standard
Ca	43	28.3	44.4	8.4145	4.030	47.9	mg/L	5	Standard
Fe	54	7004.2	2.3	1.0219	0.032	3.2	mg/L	717	Standard
Fe	57	121589.4	2.4	0.9555	0.017	1.8	mg/L	4072	Standard
Sc-1	45	498892.4	0.7				mg/L	476707	Standard
Cl	35	11.3	35.7				ug/L	29	Standard
Kr	83	53.4	2.5				ug/L	39	Standard
Br	81	14034.8	6.4				ug/L	1124	Standard
P	31	971.7	6.7				ug/L	495	Standard
S	34	7948.8	3.3				ug/L	6398	Standard
Sr	88	105.0	12.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.032	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075102PS WG404545-01
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	Cd	111	
	Cd	114	
>	In	115	101.572
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.156
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075102PS WG404545-01
 Report Date/Time: Thursday, July 26, 2012 13:30:29
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Method 6020 - Summary Report

Sample ID: L1207075102SDL WG404545-02

Sample Date/Time: Thursday, July 26, 2012 13:31:08

Number of Replicates: 3

Autosampler Position: 213

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15759.9	1.4	-2165.0514	145.042	6.7	ug/L	11975	Standard
|	Be	9	40.0	37.5	0.0264	0.008	28.7	ug/L	53	Standard
|	Al	27	3265298.5	1.1	185.8851	4.231	2.3	ug/L	10095	Standard
[>	Sc	45	482038.5	1.2				ug/L	476707	Standard
[	Ti	47	846.7	1.7	0.5115	0.012	2.3	ug/L	149	Standard
|	V	51	8289.2	0.4	0.3875	0.003	0.7	ug/L	3747	Standard
|	Cr	52	12647.6	1.3	0.2223	0.013	5.9	ug/L	10265	Standard
|	Cr	53	1388.4	2.5	-0.8276	0.016	2.0	ug/L	3075	Standard
|	Mn	55	60727.1	1.1	3.3087	0.039	1.2	ug/L	1438	Standard
|	Co	59	1137.4	2.7	0.0844	0.003	3.5	ug/L	148	Standard
|	Ni	60	1370.1	3.4	0.3844	0.014	3.5	ug/L	176	Standard
|	Cu	65	1066.4	4.0	0.2874	0.012	4.3	ug/L	186	Standard
|	Zn	66	4906.5	2.5	3.1756	0.082	2.6	ug/L	355	Standard
[>	Ge	72	439221.3	0.4				ug/L	437919	Standard
|	As	75	101.3	35.3	0.2692	0.026	9.7	ug/L	-222	Standard
|	Se	82	84.6	6.9	0.4628	0.047	10.2	ug/L	29	Standard
[	Se-1	77	160.0	8.6	-0.3828	0.132	34.4	ug/L	201	Standard
[>	Ga	71	1913.5	4.4				mg/L	985	Standard
[	Rb	85	4577.4	1.6				ug/L	22	Standard
[	Y	89	379471.7	0.8				ug/L	370795	Standard
[>	Rh	103	500.0	13.9				ug/L	498	Standard
[	Mo	98	127.0	19.3	0.0191	0.005	25.5	ug/L	253	Standard
|	Ag	107	404.7	4.7	0.0415	0.002	4.7	ug/L	124	Standard
|	Cd	111	89.4	9.6	0.0097	0.002	21.9	mg/L	100	Standard
|	Cd	114	307.7	8.6	0.0059	0.002	38.2	ug/L	307	Standard
[>	In	115	1054110.3	1.8				ug/L	1045367	Standard
|	Sn	118	1180.4	7.7	-0.0187	0.004	22.6	ug/L	1664	Standard
|	Sb	123	2525.1	6.9	0.2179	0.014	6.5	ug/L	846	Standard
[	Ba	135	20844.0	0.8	3.9279	0.104	2.7	ug/L	61	Standard
[	Ce	140	49957.6	1.0				ug/L	30	Standard
[>	Tb	159	1429345.2	0.5				ug/L	1407506	Standard
[	Ho	165	581.0	2.5				ug/L	13	Standard
|	Tl	203	288.3	7.3	-0.0106	0.001	10.7	ug/L	713	Standard
|	Tl	205	687.0	10.5	-0.0151	0.002	11.3	ug/L	1648	Standard
|	Pb	206	4816.4	0.8	0.2746	0.002	0.7	ug/L	594	Standard
|	Pb	207	3880.5	0.8	0.2644	0.005	1.9	ug/L	497	Standard
|	Pb	208	18361.0	0.0	0.2710	0.002	0.9	ug/L	2293	Standard
|	U	238	311.3	6.2	0.0198	0.001	5.9	ug/L	301	Standard
[>	Bi	209	757253.1	0.8				ug/L	757838	Standard

Sample ID: L1207075102SDL WG404545-02

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Na	23	3140.3	7.8	0.1371	0.016	11.9	mg/L	592	Standard
Mg	24	70034.9	2.8	0.0927	0.002	2.3	mg/L	1565	Standard
K	39	285.0	11.0	0.0917	0.024	26.2	mg/L	157	Standard
Ca	43	1.7	173.2	-0.0162	0.940	5785.4	mg/L	5	Standard
Fe	54	1961.3	4.4	0.2033	0.018	8.8	mg/L	717	Standard
Fe	57	27763.8	1.5	0.2004	0.004	2.1	mg/L	4072	Standard
Sc-1	45	482038.5	1.2				mg/L	476707	Standard
Cl	35	8.3	18.3				ug/L	29	Standard
Kr	83	41.1	1.2				ug/L	39	Standard
Br	81	3882.2	1.2				ug/L	1124	Standard
P	31	594.2	7.4				ug/L	495	Standard
S	34	7688.6	3.8				ug/L	6398	Standard
Sr	88	45.0	29.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.297	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075102SDL WG404545-02
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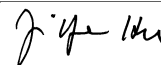
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	Cd	114		
>	In	115	100.836	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	99.923	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075102SDL WG404545-02
 Report Date/Time: Thursday, July 26, 2012 13:33:39
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 13:34:20

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11621.1	4.7	219.3514	257.509	117.4	ug/L	11975	Standard
|	Be	9	100787.5	1.7	51.5357	1.102	2.1	ug/L	53	Standard
|	Al	27	913380.6	0.5	51.9947	0.600	1.2	ug/L	10095	Standard
[>	Sc	45	476775.8	1.1				ug/L	476707	Standard
|	Ti	47	155871.7	1.0	104.5513	0.670	0.6	ug/L	149	Standard
|	V	51	625427.1	0.1	51.6235	0.515	1.0	ug/L	3747	Standard
|	Cr	52	520838.8	0.4	51.8121	0.618	1.2	ug/L	10265	Standard
|	Cr	53	91784.7	0.5	51.3102	0.752	1.5	ug/L	3075	Standard
|	Mn	55	908849.9	1.2	51.7705	0.693	1.3	ug/L	1438	Standard
|	Co	59	609103.0	0.9	51.9832	0.776	1.5	ug/L	148	Standard
|	Ni	60	169438.2	1.1	51.8259	0.365	0.7	ug/L	176	Standard
|	Cu	65	158114.1	0.9	51.5700	0.257	0.5	ug/L	186	Standard
|	Zn	66	71599.1	0.6	50.8838	0.618	1.2	ug/L	355	Standard
[>	Ge	72	436489.8	1.1				ug/L	437919	Standard
|	As	75	70200.0	1.0	51.0918	1.026	2.0	ug/L	-222	Standard
|	Se	82	6887.6	0.5	51.9768	0.829	1.6	ug/L	29	Standard
[	Se-1	77	5136.9	1.5	49.8781	1.130	2.3	ug/L	201	Standard
[>	Ga	71	933.4	7.8				mg/L	985	Standard
|	Rb	85	988.4	8.7				ug/L	22	Standard
|	Y	89	358269.9	1.0				ug/L	370795	Standard
[>	Rh	103	591.7	15.2				ug/L	498	Standard
|	Mo	98	463792.3	0.5	99.2835	0.842	0.8	ug/L	253	Standard
|	Ag	107	435211.5	0.6	50.8778	0.497	1.0	ug/L	124	Standard
|	Cd	111	220240.1	0.6	51.6267	0.495	1.0	mg/L	100	Standard
|	Cd	114	633192.1	0.7	50.8212	0.265	0.5	ug/L	307	Standard
[>	In	115	1029565.8	0.4				ug/L	1045367	Standard
|	Sn	118	1468827.5	0.3	67.5066	0.302	0.4	ug/L	1664	Standard
|	Sb	123	537205.0	0.8	50.7270	0.355	0.7	ug/L	846	Standard
|	Ba	135	263715.3	0.9	50.9346	0.601	1.2	ug/L	61	Standard
|	Ce	140	1157.7	4.0				ug/L	30	Standard
[>	Tb	159	1432038.1	0.3				ug/L	1407506	Standard
|	Ho	165	28.0	7.1				ug/L	13	Standard
|	Tl	203	980726.8	0.4	50.0974	0.221	0.4	ug/L	713	Standard
|	Tl	205	2214994.7	0.7	51.5356	0.402	0.8	ug/L	1648	Standard
|	Pb	206	756474.1	0.1	49.9832	0.056	0.1	ug/L	594	Standard
|	Pb	207	640532.8	0.3	51.0041	0.113	0.2	ug/L	497	Standard
|	Pb	208	2962878.3	0.2	51.0569	0.158	0.3	ug/L	2293	Standard
	U	238	915443.3	0.8	50.7779	0.390	0.8	ug/L	301	Standard
[>	Bi	209	727125.3	0.1				ug/L	757838	Standard

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Na	23	111278.9	2.2	6.4847	0.187	2.9	mg/L	592	Standard
Mg	24	3900728.9	0.4	5.2274	0.042	0.8	mg/L	1565	Standard
K	39	7250.1	2.4	5.0855	0.180	3.5	mg/L	157	Standard
Ca	43	20.0	25.0	6.0696	1.721	28.4	mg/L	5	Standard
Fe	54	30252.0	2.1	5.0783	0.059	1.2	mg/L	717	Standard
Fe	57	589251.9	0.9	4.9818	0.089	1.8	mg/L	4072	Standard
Sc-1	45	476775.8	1.1				mg/L	476707	Standard
Cl	35	11.3	45.3				ug/L	29	Standard
Kr	83	47.0	14.9				ug/L	39	Standard
Br	81	1259.2	2.2				ug/L	1124	Standard
P	31	574.2	10.1				ug/L	495	Standard
S	34	7505.2	1.6				ug/L	6398	Standard
Sr	88	33.3	43.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	103.989		
Sc	45			
Ti	47	104.551		
V	51	103.247		
Cr	52	103.624		
Cr	53			
Mn	55	103.541		
Co	59	103.966		
Ni	60	103.652		
Cu	65	103.140		
Zn	66	101.768		
Ge	72		99.674	
As	75	102.184		
Se	82	103.954		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	99.284		
Ag	107	101.756		

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	Cd	111	103.253	
	Cd	114		
>	In	115		98.488
	Sn	118	135.013	
	Sb	123	101.454	
	Ba	135	101.869	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	100.195	
|	Tl	205		
|	Pb	206	99.966	
|	Pb	207	102.008	
|	Pb	208	102.114	
|	U	238	101.556	
>	Bi	209		95.947
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sn	118	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 13:37:30

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12111.5	1.9	-228.4773	32.727	14.3	ug/L	11975	Standard
|	Be	9	21.7	113.8	0.0175	0.013	73.8	ug/L	53	Standard
|	Al	27	10658.8	6.7	-0.1663	0.038	23.1	ug/L	10095	Standard
[>	Sc	45	467022.8	1.5				ug/L	476707	Standard
|	Ti	47	87.0	3.4	0.0056	0.002	34.7	ug/L	149	Standard
|	V	51	3438.3	2.5	-0.0093	0.010	102.4	ug/L	3747	Standard
|	Cr	52	10390.9	1.9	0.0071	0.016	228.5	ug/L	10265	Standard
|	Cr	53	1106.7	1.9	-0.9815	0.009	0.9	ug/L	3075	Standard
|	Mn	55	1495.7	4.0	-0.0521	0.004	7.0	ug/L	1438	Standard
|	Co	59	161.0	14.6	0.0017	0.002	120.1	ug/L	148	Standard
|	Ni	60	102.3	17.9	-0.0008	0.006	721.1	ug/L	176	Standard
|	Cu	65	129.0	13.6	-0.0162	0.006	36.7	ug/L	186	Standard
|	Zn	66	190.3	11.1	-0.1735	0.016	9.1	ug/L	355	Standard
[>	Ge	72	434112.4	0.8				ug/L	437919	Standard
|	As	75	-247.0	8.5	0.0161	0.015	93.7	ug/L	-222	Standard
|	Se	82	34.4	10.8	0.0886	0.030	33.5	ug/L	29	Standard
[	Se-1	77	154.7	7.8	-0.4181	0.116	27.8	ug/L	201	Standard
[>	Ga	71	931.7	9.5				mg/L	985	Standard
|	Rb	85	16.7	17.3				ug/L	22	Standard
|	Y	89	362373.5	4.1				ug/L	370795	Standard
[>	Rh	103	530.0	16.8				ug/L	498	Standard
|	Mo	98	419.4	11.2	0.0818	0.009	11.2	ug/L	253	Standard
|	Ag	107	153.7	15.7	0.0132	0.003	21.7	ug/L	124	Standard
|	Cd	111	79.7	10.1	0.0078	0.002	23.5	mg/L	100	Standard
|	Cd	114	279.7	14.0	0.0041	0.003	73.5	ug/L	307	Standard
[>	In	115	1034824.6	1.1				ug/L	1045367	Standard
|	Sn	118	1503.1	5.5	-0.0030	0.003	103.4	ug/L	1664	Standard
|	Sb	123	2740.5	4.8	0.2426	0.013	5.3	ug/L	846	Standard
|	Ba	135	86.3	19.9	0.0108	0.003	30.6	ug/L	61	Standard
|	Ce	140	39.3	6.4				ug/L	30	Standard
[>	Tb	159	1403363.8	0.5				ug/L	1407506	Standard
|	Ho	165	18.7	21.7				ug/L	13	Standard
|	Tl	203	264.0	14.4	-0.0116	0.002	16.2	ug/L	713	Standard
|	Tl	205	604.3	7.6	-0.0168	0.001	6.2	ug/L	1648	Standard
|	Pb	206	573.7	7.7	0.0057	0.003	47.8	ug/L	594	Standard
|	Pb	207	441.3	6.9	0.0017	0.002	132.0	ug/L	497	Standard
|	Pb	208	2157.1	7.2	0.0032	0.003	80.1	ug/L	2293	Standard
	U	238	88.0	51.7	0.0080	0.002	30.9	ug/L	301	Standard
[>	Bi	209	746263.2	1.1				ug/L	757838	Standard

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Na	23	401.7	6.9	-0.0212	0.001	6.1	mg/L	592	Standard
Mg	24	551.7	38.8	0.0007	0.000	44.1	mg/L	1565	Standard
K	39	168.3	17.4	0.0125	0.020	159.1	mg/L	157	Standard
Ca	43	3.3	173.2	0.5680	1.952	343.7	mg/L	5	Standard
Fe	54	757.0	12.2	0.0023	0.018	761.5	mg/L	717	Standard
Fe	57	3945.5	8.8	0.0010	0.003	273.9	mg/L	4072	Standard
Sc-1	45	467022.8	1.5				mg/L	476707	Standard
Cl	35	11.7	19.8				ug/L	29	Standard
Kr	83	38.6	3.9				ug/L	39	Standard
Br	81	1099.2	7.3				ug/L	1124	Standard
P	31	490.8	11.6				ug/L	495	Standard
S	34	7422.7	0.9				ug/L	6398	Standard
Sr	88	40.0					ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.131	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	98.992
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.473
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: PBW 6B WG404363-03

Sample Date/Time: Thursday, July 26, 2012 13:47:58

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11894.7	1.1	-87.5873	215.397	245.9	ug/L	11975	Standard
|	Be	9	6.7	114.6	0.0096	0.004	42.2	ug/L	53	Standard
|	Al	27	9421.3	8.1	-0.2404	0.037	15.2	ug/L	10095	Standard
[>	Sc	45	467719.2	1.8				ug/L	476707	Standard
[	Ti	47	71.3	15.6	-0.0048	0.009	182.7	ug/L	149	Standard
|	V	51	3493.9	4.7	-0.0043	0.021	494.1	ug/L	3747	Standard
|	Cr	52	10686.1	0.6	0.0379	0.024	62.7	ug/L	10265	Standard
|	Cr	53	1068.4	4.1	-1.0035	0.022	2.2	ug/L	3075	Standard
|	Mn	55	1386.7	2.2	-0.0583	0.003	5.3	ug/L	1438	Standard
|	Co	59	96.3	20.3	-0.0039	0.002	45.1	ug/L	148	Standard
|	Ni	60	866.0	3.6	0.2343	0.007	2.8	ug/L	176	Standard
|	Cu	65	122.7	11.9	-0.0182	0.006	30.9	ug/L	186	Standard
|	Zn	66	2175.2	0.2	1.2543	0.038	3.0	ug/L	355	Standard
[>	Ge	72	434000.9	2.6				ug/L	437919	Standard
|	As	75	-269.4	9.2	-0.0001	0.014	16806.5	ug/L	-222	Standard
|	Se	82	25.4	2.4	0.0203	0.006	31.1	ug/L	29	Standard
[	Se-1	77	158.3	9.0	-0.3780	0.173	45.7	ug/L	201	Standard
[>	Ga	71	925.0	8.9				mg/L	985	Standard
[	Rb	85	25.0	69.3				ug/L	22	Standard
[	Y	89	362538.0	1.1				ug/L	370795	Standard
[>	Rh	103	485.0	2.7				ug/L	498	Standard
[	Mo	98	135.8	48.7	0.0216	0.014	63.9	ug/L	253	Standard
|	Ag	107	68.7	15.2	0.0034	0.001	37.2	ug/L	124	Standard
|	Cd	111	70.0	14.8	0.0058	0.003	48.3	mg/L	100	Standard
|	Cd	114	215.1	2.3	-0.0009	0.000	17.8	ug/L	307	Standard
[>	In	115	1022647.0	2.0				ug/L	1045367	Standard
|	Sn	118	1240.1	21.8	-0.0145	0.012	79.9	ug/L	1664	Standard
|	Sb	123	794.1	33.0	0.0602	0.024	39.3	ug/L	846	Standard
[	Ba	135	38.0	13.9	0.0015	0.001	57.8	ug/L	61	Standard
[	Ce	140	37.3	9.4				ug/L	30	Standard
[>	Tb	159	1392484.8	1.0				ug/L	1407506	Standard
[	Ho	165	16.0	18.8				ug/L	13	Standard
|	Tl	203	201.3	1.0	-0.0146	0.000	1.6	ug/L	713	Standard
|	Tl	205	432.0	2.8	-0.0206	0.000	1.6	ug/L	1648	Standard
|	Pb	206	493.3	6.6	0.0008	0.002	210.6	ug/L	594	Standard
|	Pb	207	415.0	9.7	-0.0001	0.003	3304.5	ug/L	497	Standard
|	Pb	208	1887.0	1.5	-0.0011	0.000	12.5	ug/L	2293	Standard
	U	238	8.7	29.0	0.0037	0.000	3.8	ug/L	301	Standard
[>	Bi	209	740329.7	1.6				ug/L	757838	Standard

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Na	23	448.3	12.0	-0.0184	0.004	19.9	mg/L	592	Standard
Mg	24	271.7	6.5	0.0003	0.000	9.5	mg/L	1565	Standard
K	39	155.0	8.5	0.0029	0.012	407.7	mg/L	157	Standard
Ca	43	1.7	173.2	-0.0067	0.956	14181.3	mg/L	5	Standard
Fe	54	815.0	2.9	0.0122	0.003	28.3	mg/L	717	Standard
Fe	57	3965.5	2.7	0.0011	0.001	55.9	mg/L	4072	Standard
Sc-1	45	467719.2	1.8				mg/L	476707	Standard
Cl	35	9.7	66.5				ug/L	29	Standard
Kr	83	45.0	6.5				ug/L	39	Standard
Br	81	1178.4	3.9				ug/L	1124	Standard
P	31	508.3	10.1				ug/L	495	Standard
S	34	7223.4	3.0				ug/L	6398	Standard
Sr	88	30.0	33.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.105	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 6B WG404363-03

Report Date/Time: Thursday, July 26, 2012 13:50:28

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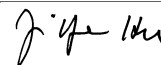
	Cd	111	
	Cd	114	
>	In	115	97.827
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.690
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: LCSW 6B WG404363-04

Sample Date/Time: Thursday, July 26, 2012 13:51:07

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13018.9	1.1	-81.1512	124.941	154.0	ug/L	11975	Standard
|	Be	9	51691.4	1.6	24.6062	0.635	2.6	ug/L	53	Standard
|	Al	27	573139.7	1.9	30.0341	0.498	1.7	ug/L	10095	Standard
[>	Sc	45	512256.4	1.3				ug/L	476707	Standard
|	Ti	47	157.3	13.4	0.0445	0.013	28.5	ug/L	149	Standard
|	V	51	327948.2	0.7	24.8998	0.174	0.7	ug/L	3747	Standard
|	Cr	52	285047.8	0.9	25.7243	0.382	1.5	ug/L	10265	Standard
|	Cr	53	50403.7	2.2	25.2777	0.522	2.1	ug/L	3075	Standard
|	Mn	55	490750.6	1.4	25.8025	0.287	1.1	ug/L	1438	Standard
|	Co	59	321000.6	0.9	25.3482	0.306	1.2	ug/L	148	Standard
|	Ni	60	91092.7	0.9	25.7712	0.138	0.5	ug/L	176	Standard
|	Cu	65	85465.7	1.1	25.7697	0.142	0.6	ug/L	186	Standard
|	Zn	66	38702.4	0.9	25.3001	0.185	0.7	ug/L	355	Standard
[>	Ge	72	471605.8	0.8				ug/L	437919	Standard
|	As	75	34671.9	0.5	23.4602	0.302	1.3	ug/L	-222	Standard
|	Se	82	3291.0	1.3	22.8891	0.462	2.0	ug/L	29	Standard
[	Se-1	77	2627.9	0.7	22.5671	0.142	0.6	ug/L	201	Standard
[>	Ga	71	996.7	3.9				mg/L	985	Standard
|	Rb	85	113.3	27.0				ug/L	22	Standard
|	Y	89	397959.2	1.4				ug/L	370795	Standard
[>	Rh	103	503.3	8.9				ug/L	498	Standard
|	Mo	98	103.2	37.4	0.0130	0.008	58.0	ug/L	253	Standard
|	Ag	107	236024.2	0.8	25.5881	0.238	0.9	ug/L	124	Standard
|	Cd	111	113059.8	2.2	24.5717	0.339	1.4	mg/L	100	Standard
|	Cd	114	322028.5	1.3	23.9613	0.126	0.5	ug/L	307	Standard
[>	In	115	1110100.6	0.8				ug/L	1045367	Standard
|	Sn	118	1677.4	10.9	-0.0002	0.007	3098.0	ug/L	1664	Standard
|	Sb	123	267995.5	1.0	23.4620	0.049	0.2	ug/L	846	Standard
|	Ba	135	137235.7	0.8	24.5794	0.006	0.0	ug/L	61	Standard
|	Ce	140	225.0	2.9				ug/L	30	Standard
[>	Tb	159	1482578.5	0.9				ug/L	1407506	Standard
|	Ho	165	17.7	8.6				ug/L	13	Standard
|	Tl	203	512650.3	1.4	24.4621	0.110	0.4	ug/L	713	Standard
|	Tl	205	1189326.7	1.4	25.8472	0.074	0.3	ug/L	1648	Standard
|	Pb	206	398234.4	0.6	24.5779	0.125	0.5	ug/L	594	Standard
|	Pb	207	339303.9	0.6	25.2363	0.112	0.4	ug/L	497	Standard
|	Pb	208	1568581.5	0.9	25.2470	0.080	0.3	ug/L	2293	Standard
	U	238	461974.8	0.8	23.9526	0.207	0.9	ug/L	301	Standard
[>	Bi	209	777977.3	1.1				ug/L	757838	Standard

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Na	23	750.0	13.0	-0.0042	0.006	139.1	mg/L	592	Standard
Mg	24	2658.6	2.0	0.0032	0.000	1.8	mg/L	1565	Standard
K	39	153.3	13.6	-0.0081	0.015	182.1	mg/L	157	Standard
Ca	43	6.7	114.6	1.5148	2.386	157.5	mg/L	5	Standard
Fe	54	1120.5	7.6	0.0488	0.016	32.7	mg/L	717	Standard
Fe	57	4650.7	2.8	0.0035	0.001	21.2	mg/L	4072	Standard
Sc-1	45	512256.4	1.3				mg/L	476707	Standard
Cl	35	12.0	22.0				ug/L	29	Standard
Kr	83	47.2	3.6				ug/L	39	Standard
Br	81	1350.9	8.5				ug/L	1124	Standard
P	31	740.0	1.8				ug/L	495	Standard
S	34	7313.4	2.7				ug/L	6398	Standard
Sr	88	28.3	62.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.692	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 6B WG404363-04

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	Cd	111	
	Cd	114	
>	In	115	106.192
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	102.658
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 6B WG404363-04

Report Date/Time: Thursday, July 26, 2012 13:53:37

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Method 6020 - Summary Report

Sample ID: L1206088801

Sample Date/Time: Thursday, July 26, 2012 13:54:17

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13803.0	0.5	-276.0509	39.911	14.5	ug/L	11975	Standard
|	Be	9	56.7	31.0	0.0322	0.008	24.5	ug/L	53	Standard
|	Al	27	365349.0	5.9	18.2326	0.953	5.2	ug/L	10095	Standard
[>	Sc	45	528893.2	0.9				ug/L	476707	Standard
|	Ti	47	438.0	6.7	0.2107	0.017	8.1	ug/L	149	Standard
|	V	51	24019.1	8.8	1.4938	0.166	11.1	ug/L	3747	Standard
|	Cr	52	77259.3	7.9	5.9876	0.601	10.0	ug/L	10265	Standard
|	Cr	53	5663.6	4.2	1.3088	0.138	10.5	ug/L	3075	Standard
|	Mn	55	24990.9	3.7	1.1431	0.047	4.1	ug/L	1438	Standard
|	Co	59	479.3	34.4	0.0245	0.012	50.6	ug/L	148	Standard
|	Ni	60	1491.7	8.8	0.3773	0.031	8.3	ug/L	176	Standard
|	Cu	65	1521.4	9.3	0.3870	0.037	9.5	ug/L	186	Standard
|	Zn	66	9075.7	0.6	5.5139	0.033	0.6	ug/L	355	Standard
[>	Ge	72	486302.2	1.2				ug/L	437919	Standard
|	As	75	-195.2	23.0	0.0689	0.030	44.1	ug/L	-222	Standard
|	Se	82	38.1	4.0	0.0856	0.012	14.2	ug/L	29	Standard
[	Se-1	77	265.7	3.0	0.4196	0.069	16.4	ug/L	201	Standard
[>	Ga	71	1113.4	10.4				mg/L	985	Standard
|	Rb	85	493.3	21.7				ug/L	22	Standard
|	Y	89	408245.2	0.5				ug/L	370795	Standard
[>	Rh	103	565.0	2.7				ug/L	498	Standard
|	Mo	98	842.5	8.9	0.1502	0.013	9.0	ug/L	253	Standard
|	Ag	107	382.3	54.5	0.0344	0.022	62.6	ug/L	124	Standard
|	Cd	111	302.6	30.7	0.0513	0.019	37.4	mg/L	100	Standard
|	Cd	114	923.8	30.7	0.0466	0.020	43.1	ug/L	307	Standard
[>	In	115	1177603.5	1.5				ug/L	1045367	Standard
|	Sn	118	6568.4	5.1	0.1924	0.010	5.1	ug/L	1664	Standard
|	Sb	123	1880.3	8.1	0.1402	0.011	8.0	ug/L	846	Standard
|	Ba	135	2114.1	12.2	0.3509	0.039	11.1	ug/L	61	Standard
|	Ce	140	3373.7	15.1				ug/L	30	Standard
[>	Tb	159	1536144.0	1.2				ug/L	1407506	Standard
|	Ho	165	48.0	5.5				ug/L	13	Standard
|	Tl	203	677.7	34.8	0.0063	0.011	171.2	ug/L	713	Standard
|	Tl	205	1526.4	36.7	0.0014	0.012	842.1	ug/L	1648	Standard
|	Pb	206	4308.9	4.4	0.2245	0.011	4.8	ug/L	594	Standard
|	Pb	207	3511.4	6.0	0.2186	0.015	6.8	ug/L	497	Standard
|	Pb	208	16560.5	4.9	0.2232	0.012	5.6	ug/L	2293	Standard
	U	238	257.3	62.3	0.0160	0.008	49.5	ug/L	301	Standard
[>	Bi	209	810201.9	0.6				ug/L	757838	Standard

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Na	23	1480.1	3.5	0.0330	0.002	6.5	mg/L	592	Standard
Mg	24	6549.8	9.8	0.0078	0.001	9.0	mg/L	1565	Standard
K	39	170.0	17.6	-0.0007	0.019	2546.1	mg/L	157	Standard
Ca	43	0.0		-0.5589	0.000	0.0	mg/L	5	Standard
Fe	54	1158.3	6.9	0.0489	0.012	24.3	mg/L	717	Standard
Fe	57	12083.2	3.6	0.0594	0.003	4.5	mg/L	4072	Standard
Sc-1	45	528893.2	0.9				mg/L	476707	Standard
Cl	35	101.7	4.9				ug/L	29	Standard
Kr	83	43.1	22.6				ug/L	39	Standard
Br	81	1500.9	4.5				ug/L	1124	Standard
P	31	604.2	7.7				ug/L	495	Standard
S	34	7666.1	2.5				ug/L	6398	Standard
Sr	88	38.3	32.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.048	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1206088801

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	Cd	111	
	Cd	114	
>	In	115	112.650
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	106.910
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1206088801

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Method 6020 - Summary Report

Sample ID: L1207072801 WG404363-02

Sample Date/Time: Thursday, July 26, 2012 13:57:27

Number of Replicates: 3

Autosampler Position: 304

Sample Description: 2

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

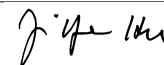
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	178851.2	1.4	-93523.4574	269.549	0.3	ug/L	11975	Standard
|	Be	9	28.3	50.9	0.0198	0.007	36.0	ug/L	53	Standard
|	Al	27	479749.3	4.7	25.2149	1.450	5.8	ug/L	10095	Standard
[>	Sc	45	508413.7	1.4				ug/L	476707	Standard
|	Ti	47	726.7	7.7	0.4104	0.037	8.9	ug/L	149	Standard
|	V	51	18509.5	2.0	1.1639	0.013	1.2	ug/L	3747	Standard
|	Cr	52	19543.4	11.4	0.8306	0.193	23.2	ug/L	10265	Standard
|	Cr	53	2326.0	4.9	-0.3478	0.075	21.6	ug/L	3075	Standard
|	Mn	55	72068.0	0.7	3.7744	0.052	1.4	ug/L	1438	Standard
|	Co	59	1575.4	2.3	0.1157	0.003	2.2	ug/L	148	Standard
|	Ni	60	3616.8	2.0	1.0200	0.029	2.9	ug/L	176	Standard
|	Cu	65	2665.9	3.8	0.7689	0.035	4.5	ug/L	186	Standard
|	Zn	66	5335.3	2.5	3.3149	0.060	1.8	ug/L	355	Standard
[>	Ge	72	459227.4	1.1				ug/L	437919	Standard
|	As	75	7354.1	2.2	5.2628	0.055	1.0	ug/L	-222	Standard
|	Se	82	101.1	1.7	0.5542	0.005	0.9	ug/L	29	Standard
[	Se-1	77	214.0	6.4	0.0658	0.133	201.4	ug/L	201	Standard
[>	Ga	71	3888.8	3.8				mg/L	985	Standard
|	Rb	85	18958.5	3.3				ug/L	22	Standard
|	Y	89	385333.7	1.0				ug/L	370795	Standard
[>	Rh	103	568.3	4.3				ug/L	498	Standard
|	Mo	98	40364.9	0.9	7.9129	0.059	0.7	ug/L	253	Standard
|	Ag	107	102.3	31.9	0.0062	0.003	53.9	ug/L	124	Standard
|	Cd	111	190.5	18.2	0.0301	0.007	23.2	mg/L	100	Standard
|	Cd	114	778.6	9.3	0.0390	0.005	12.3	ug/L	307	Standard
[>	In	115	1123318.2	1.1				ug/L	1045367	Standard
|	Sn	118	1493.1	8.8	-0.0088	0.005	54.8	ug/L	1664	Standard
|	Sb	123	4649.8	2.8	0.3875	0.007	1.9	ug/L	846	Standard
|	Ba	135	112851.1	1.1	19.9739	0.217	1.1	ug/L	61	Standard
|	Ce	140	2609.2	1.6				ug/L	30	Standard
[>	Tb	159	1492332.7	0.5				ug/L	1407506	Standard
|	Ho	165	79.7	13.3				ug/L	13	Standard
|	Tl	203	7117.7	2.5	0.3223	0.007	2.0	ug/L	713	Standard
|	Tl	205	16337.1	2.7	0.3323	0.007	2.0	ug/L	1648	Standard
|	Pb	206	1112.0	4.2	0.0389	0.003	7.4	ug/L	594	Standard
|	Pb	207	891.4	0.6	0.0352	0.001	3.4	ug/L	497	Standard
|	Pb	208	4237.9	0.9	0.0367	0.000	1.2	ug/L	2293	Standard
	U	238	2217.5	2.1	0.1206	0.003	2.6	ug/L	301	Standard
[>	Bi	209	762172.4	1.2				ug/L	757838	Standard

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Na	23	128536.3	0.9	7.0282	0.145	2.1	mg/L	592	Standard
Mg	24	1440309.4	1.8	1.8105	0.058	3.2	mg/L	1565	Standard
K	39	1471.7	6.7	0.8784	0.065	7.4	mg/L	157	Standard
Ca	43	30.0	33.3	8.7427	3.090	35.3	mg/L	5	Standard
Fe	54	1074.5	6.5	0.0428	0.013	31.0	mg/L	717	Standard
Fe	57	9833.2	1.5	0.0452	0.001	2.0	mg/L	4072	Standard
Sc-1	45	508413.7	1.4				mg/L	476707	Standard
Cl	35	47.7	25.2				ug/L	29	Standard
Kr	83	44.2	8.3				ug/L	39	Standard
Br	81	3346.2	6.1				ug/L	1124	Standard
P	31	621.7	6.9				ug/L	495	Standard
S	34	21932.5	0.2				ug/L	6398	Standard
Sr	88	330.0	5.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.866	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072801 WG404363-02

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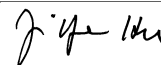
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	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
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	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.572
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072801DP WG404363-07

Sample Date/Time: Thursday, July 26, 2012 14:00:37

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 2

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	181413.1	1.5	-94438.7643	2030.974	2.2	ug/L	11975	Standard
|	Be	9	23.3	12.4	0.0173	0.001	7.6	ug/L	53	Standard
|	Al	27	337927.4	1.5	17.4241	0.317	1.8	ug/L	10095	Standard
[>	Sc	45	511085.5	0.7				ug/L	476707	Standard
|	Ti	47	733.4	36.4	0.4195	0.165	39.3	ug/L	149	Standard
|	V	51	17467.5	1.3	1.1008	0.027	2.4	ug/L	3747	Standard
|	Cr	52	17423.3	0.9	0.6508	0.042	6.4	ug/L	10265	Standard
|	Cr	53	2391.9	1.2	-0.2941	0.031	10.5	ug/L	3075	Standard
|	Mn	55	68686.7	1.1	3.6423	0.098	2.7	ug/L	1438	Standard
|	Co	59	1493.4	0.8	0.1107	0.002	2.2	ug/L	148	Standard
|	Ni	60	3640.8	1.2	1.0413	0.014	1.4	ug/L	176	Standard
|	Cu	65	2419.2	0.5	0.7026	0.015	2.1	ug/L	186	Standard
|	Zn	66	4524.0	0.6	2.8064	0.067	2.4	ug/L	355	Standard
[>	Ge	72	453060.6	1.5				ug/L	437919	Standard
|	As	75	6965.6	0.9	5.0620	0.117	2.3	ug/L	-222	Standard
|	Se	82	83.7	4.5	0.4366	0.021	4.8	ug/L	29	Standard
[	Se-1	77	217.7	9.1	0.1312	0.216	164.9	ug/L	201	Standard
[>	Ga	71	3765.5	4.7				mg/L	985	Standard
|	Rb	85	18232.6	2.2				ug/L	22	Standard
|	Y	89	378795.2	1.1				ug/L	370795	Standard
[>	Rh	103	545.0	10.8				ug/L	498	Standard
|	Mo	98	38214.1	1.5	7.5116	0.144	1.9	ug/L	253	Standard
|	Ag	107	64.0	15.4	0.0022	0.001	50.4	ug/L	124	Standard
|	Cd	111	196.3	14.8	0.0316	0.006	20.3	mg/L	100	Standard
|	Cd	114	716.1	4.3	0.0346	0.002	5.8	ug/L	307	Standard
[>	In	115	1120253.5	0.6				ug/L	1045367	Standard
|	Sn	118	1997.1	12.2	0.0127	0.011	84.5	ug/L	1664	Standard
|	Sb	123	4331.3	4.2	0.3611	0.018	5.0	ug/L	846	Standard
|	Ba	135	107347.0	1.2	19.0519	0.339	1.8	ug/L	61	Standard
|	Ce	140	1288.7	3.7				ug/L	30	Standard
[>	Tb	159	1482774.4	0.2				ug/L	1407506	Standard
|	Ho	165	67.3	4.8				ug/L	13	Standard
|	Tl	203	7092.7	2.5	0.3256	0.007	2.3	ug/L	713	Standard
|	Tl	205	16417.9	1.7	0.3390	0.005	1.4	ug/L	1648	Standard
|	Pb	206	829.4	2.1	0.0218	0.001	4.1	ug/L	594	Standard
|	Pb	207	683.0	2.8	0.0201	0.001	6.3	ug/L	497	Standard
|	Pb	208	3221.8	1.4	0.0207	0.001	2.6	ug/L	2293	Standard
|	U	238	2110.5	2.4	0.1164	0.003	2.3	ug/L	301	Standard
[>	Bi	209	752183.7	0.4				ug/L	757838	Standard

Sample ID: L1207072801DP WG404363-07

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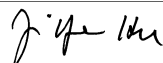
Na	23	127311.0	0.2	6.9231	0.042	0.6	mg/L	592	Standard
Mg	24	1397354.0	0.7	1.7467	0.002	0.1	mg/L	1565	Standard
K	39	1485.1	5.3	0.8820	0.046	5.2	mg/L	157	Standard
Ca	43	16.7	17.3	4.5842	0.874	19.1	mg/L	5	Standard
Fe	54	913.5	5.4	0.0159	0.008	48.2	mg/L	717	Standard
Fe	57	8926.0	2.7	0.0376	0.002	6.4	mg/L	4072	Standard
Sc-1	45	511085.5	0.7				mg/L	476707	Standard
Cl	35	37.3	17.2				ug/L	29	Standard
Kr	83	48.3	18.4				ug/L	39	Standard
Br	81	2980.3	2.7				ug/L	1124	Standard
P	31	670.0	2.6				ug/L	495	Standard
S	34	21911.7	0.9				ug/L	6398	Standard
Sr	88	276.7	10.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.458	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072801DP WG404363-07
 Report Date/Time: Thursday, July 26, 2012 14:03:08
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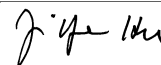
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	U	238	
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
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	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072801DP WG404363-07
 Report Date/Time: Thursday, July 26, 2012 14:03:08
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Method 6020 - Summary Report

Sample ID: L1207072801S WG404363-08

Sample Date/Time: Thursday, July 26, 2012 14:03:47

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 2

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	190663.9	1.2	-98761.7285	942.569	1.0	ug/L	11975	Standard
|	Be	9	28870.8	2.4	13.6652	0.342	2.5	ug/L	53	Standard
|	Al	27	748117.9	0.2	39.2167	0.211	0.5	ug/L	10095	Standard
[>	Sc	45	515189.2	0.4				ug/L	476707	Standard
|	Ti	47	1208.4	31.6	0.7237	0.246	34.0	ug/L	149	Standard
|	V	51	186796.6	1.4	14.5550	0.286	2.0	ug/L	3747	Standard
|	Cr	52	154684.6	0.8	13.9825	0.108	0.8	ug/L	10265	Standard
|	Cr	53	27161.0	2.0	13.3780	0.346	2.6	ug/L	3075	Standard
|	Mn	55	319645.0	2.3	17.3448	0.327	1.9	ug/L	1438	Standard
|	Co	59	164921.8	0.8	13.4699	0.082	0.6	ug/L	148	Standard
|	Ni	60	48394.2	0.5	14.1531	0.102	0.7	ug/L	176	Standard
|	Cu	65	44068.7	1.6	13.7239	0.319	2.3	ug/L	186	Standard
|	Zn	66	24276.1	0.9	16.3126	0.159	1.0	ug/L	355	Standard
[>	Ge	72	455759.0	0.8				ug/L	437919	Standard
|	As	75	25962.7	0.4	18.2214	0.085	0.5	ug/L	-222	Standard
|	Se	82	1860.7	4.0	13.3195	0.601	4.5	ug/L	29	Standard
[	Se-1	77	1526.4	3.1	12.7720	0.509	4.0	ug/L	201	Standard
[>	Ga	71	3967.2	3.7				mg/L	985	Standard
|	Rb	85	19392.4	3.6				ug/L	22	Standard
|	Y	89	387041.5	1.1				ug/L	370795	Standard
[>	Rh	103	563.3	6.7				ug/L	498	Standard
|	Mo	98	40817.0	1.4	7.9011	0.052	0.7	ug/L	253	Standard
|	Ag	107	121491.9	1.7	12.8505	0.129	1.0	ug/L	124	Standard
|	Cd	111	62421.5	2.0	13.2345	0.153	1.2	mg/L	100	Standard
|	Cd	114	172538.1	1.1	12.5204	0.134	1.1	ug/L	307	Standard
[>	In	115	1137536.2	1.0				ug/L	1045367	Standard
|	Sn	118	1551.7	9.4	-0.0072	0.005	76.0	ug/L	1664	Standard
|	Sb	123	152435.4	0.8	13.0169	0.045	0.3	ug/L	846	Standard
|	Ba	135	184987.2	1.0	32.3361	0.385	1.2	ug/L	61	Standard
|	Ce	140	1974.5	3.1				ug/L	30	Standard
[>	Tb	159	1501260.0	0.4				ug/L	1407506	Standard
|	Ho	165	86.3	9.6				ug/L	13	Standard
|	Tl	203	271397.2	0.7	13.1827	0.068	0.5	ug/L	713	Standard
|	Tl	205	630319.3	1.5	13.9428	0.241	1.7	ug/L	1648	Standard
|	Pb	206	205439.5	1.2	12.9022	0.122	0.9	ug/L	594	Standard
|	Pb	207	173616.6	1.6	13.1398	0.206	1.6	ug/L	497	Standard
|	Pb	208	807413.9	1.4	13.2240	0.154	1.2	ug/L	2293	Standard
|	U	238	252991.1	0.7	13.3651	0.146	1.1	ug/L	301	Standard
[>	Bi	209	763620.9	0.5				ug/L	757838	Standard

Sample ID: L1207072801S WG404363-08

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Na	23	129060.7	0.6	6.9623	0.019	0.3	mg/L	592	Standard
Mg	24	1475295.3	1.7	1.8295	0.031	1.7	mg/L	1565	Standard
K	39	1435.1	3.2	0.8411	0.031	3.7	mg/L	157	Standard
Ca	43	35.0	14.3	10.1551	1.489	14.7	mg/L	5	Standard
Fe	54	1027.8	7.8	0.0329	0.012	36.8	mg/L	717	Standard
Fe	57	9666.4	2.5	0.0428	0.002	4.7	mg/L	4072	Standard
Sc-1	45	515189.2	0.4				mg/L	476707	Standard
Cl	35	53.0	3.3				ug/L	29	Standard
Kr	83	46.3	9.7				ug/L	39	Standard
Br	81	3661.3	6.8				ug/L	1124	Standard
P	31	646.7	9.5				ug/L	495	Standard
S	34	22636.1	1.6				ug/L	6398	Standard
Sr	88	266.7	7.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.074	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072801S WG404363-08

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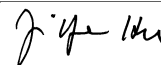
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072801PS WG404557-01

Sample Date/Time: Thursday, July 26, 2012 14:06:58

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 2

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	191146.5	0.4	-100785.5910	2125.993	2.1	ug/L	11975	Standard
|	Be	9	110255.0	3.2	53.0370	2.258	4.3	ug/L	53	Standard
|	Al	27	1393433.4	1.9	74.9441	0.808	1.1	ug/L	10095	Standard
>	Sc	45	506927.1	1.6				ug/L	476707	Standard
[	Ti	47	831.0	28.5	0.4909	0.155	31.7	ug/L	149	Standard
|	V	51	659596.9	1.5	53.1044	1.037	2.0	ug/L	3747	Standard
|	Cr	52	538276.9	1.2	52.2270	0.736	1.4	ug/L	10265	Standard
|	Cr	53	94690.8	1.1	51.6288	0.372	0.7	ug/L	3075	Standard
|	Mn	55	1024228.9	1.4	56.9102	0.784	1.4	ug/L	1438	Standard
|	Co	59	618066.0	1.0	51.4388	0.514	1.0	ug/L	148	Standard
|	Ni	60	172157.2	0.6	51.3547	0.458	0.9	ug/L	176	Standard
|	Cu	65	161097.3	1.1	51.2407	0.324	0.6	ug/L	186	Standard
|	Zn	66	75526.5	1.3	52.3505	0.432	0.8	ug/L	355	Standard
>	Ge	72	447561.8	0.4				ug/L	437919	Standard
|	As	75	77271.4	0.4	54.8248	0.060	0.1	ug/L	-222	Standard
|	Se	82	6763.4	1.3	49.7651	0.767	1.5	ug/L	29	Standard
[	Se-1	77	5170.9	1.5	48.9257	0.959	2.0	ug/L	201	Standard
>	Ga	71	3800.5	3.0				mg/L	985	Standard
[	Rb	85	18711.6	4.3				ug/L	22	Standard
[	Y	89	375904.8	1.4				ug/L	370795	Standard
>	Rh	103	660.0	7.9				ug/L	498	Standard
[	Mo	98	39888.7	0.3	7.8260	0.023	0.3	ug/L	253	Standard
|	Ag	107	456959.8	0.4	49.0028	0.210	0.4	ug/L	124	Standard
|	Cd	111	239622.8	1.0	51.5270	0.691	1.3	mg/L	100	Standard
|	Cd	114	662507.0	0.7	48.7786	0.510	1.0	ug/L	307	Standard
>	In	115	1122353.8	0.4				ug/L	1045367	Standard
|	Sn	118	2478.5	8.3	0.0328	0.009	27.0	ug/L	1664	Standard
|	Sb	123	577885.2	0.9	50.0570	0.443	0.9	ug/L	846	Standard
[	Ba	135	384054.2	1.1	68.0459	0.807	1.2	ug/L	61	Standard
[	Ce	140	2645.2	3.2				ug/L	30	Standard
>	Tb	159	1502770.0	0.5				ug/L	1407506	Standard
[	Ho	165	86.7	9.3				ug/L	13	Standard
|	Tl	203	1020634.5	0.6	50.2983	0.454	0.9	ug/L	713	Standard
|	Tl	205	2308710.9	1.2	51.8251	0.930	1.8	ug/L	1648	Standard
|	Pb	206	785736.8	0.9	50.0905	0.954	1.9	ug/L	594	Standard
|	Pb	207	662564.5	1.4	50.9015	1.027	2.0	ug/L	497	Standard
|	Pb	208	3070354.5	0.7	51.0453	0.697	1.4	ug/L	2293	Standard
	U	238	988371.3	1.0	52.8922	0.822	1.6	ug/L	301	Standard
>	Bi	209	753735.7	1.1				ug/L	757838	Standard

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Na	23	129427.1	0.4	7.0981	0.124	1.7	mg/L	592	Standard
Mg	24	1434806.7	0.2	1.8086	0.027	1.5	mg/L	1565	Standard
K	39	1440.1	12.5	0.8598	0.120	13.9	mg/L	157	Standard
Ca	43	31.7	32.9	9.3307	3.361	36.0	mg/L	5	Standard
Fe	54	1069.4	3.2	0.0423	0.006	13.1	mg/L	717	Standard
Fe	57	9751.5	2.8	0.0448	0.002	5.0	mg/L	4072	Standard
Sc-1	45	506927.1	1.6				mg/L	476707	Standard
Cl	35	36.0	16.9				ug/L	29	Standard
Kr	83	46.3	7.9				ug/L	39	Standard
Br	81	3128.7	4.9				ug/L	1124	Standard
P	31	620.8	5.0				ug/L	495	Standard
S	34	22676.1	1.0				ug/L	6398	Standard
Sr	88	330.0	6.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.202	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072801PS WG404557-01
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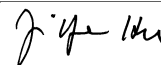
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	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072801PS WG404557-01
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Method 6020 - Summary Report

Sample ID: L1207072801SDL WG404557-02

Sample Date/Time: Thursday, July 26, 2012 14:10:08

Number of Replicates: 3

Autosampler Position: 308

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	46927.6	0.7	-20993.1494	979.757	4.7	ug/L	11975	Standard
|	Be	9	26.7	28.6	0.0197	0.004	18.9	ug/L	53	Standard
|	Al	27	118740.7	4.4	6.0743	0.501	8.2	ug/L	10095	Standard
[>	Sc	45	476939.1	2.8				ug/L	476707	Standard
|	Ti	47	254.0	10.6	0.1211	0.016	13.5	ug/L	149	Standard
|	V	51	6590.2	3.0	0.2633	0.015	5.6	ug/L	3747	Standard
|	Cr	52	12769.4	1.7	0.2728	0.026	9.7	ug/L	10265	Standard
|	Cr	53	1490.1	4.5	-0.7436	0.051	6.8	ug/L	3075	Standard
|	Mn	55	20530.9	1.7	1.0617	0.020	1.9	ug/L	1438	Standard
|	Co	59	502.0	33.1	0.0316	0.014	44.5	ug/L	148	Standard
|	Ni	60	1101.4	4.9	0.3124	0.011	3.5	ug/L	176	Standard
|	Cu	65	705.0	5.9	0.1768	0.010	5.6	ug/L	186	Standard
|	Zn	66	4967.8	0.9	3.3236	0.037	1.1	ug/L	355	Standard
[>	Ge	72	426661.5	1.8				ug/L	437919	Standard
|	As	75	1133.4	2.9	1.0366	0.010	1.0	ug/L	-222	Standard
|	Se	82	39.5	11.9	0.1320	0.032	24.2	ug/L	29	Standard
[	Se-1	77	168.0	5.4	-0.2532	0.068	26.9	ug/L	201	Standard
[>	Ga	71	1461.7	7.2				mg/L	985	Standard
|	Rb	85	3542.1	4.6				ug/L	22	Standard
|	Y	89	362381.4	1.6				ug/L	370795	Standard
[>	Rh	103	536.7	10.6				ug/L	498	Standard
|	Mo	98	7552.0	1.4	1.5036	0.021	1.4	ug/L	253	Standard
|	Ag	107	155.0	9.3	0.0122	0.002	12.8	ug/L	124	Standard
|	Cd	111	127.5	7.7	0.0172	0.002	12.4	mg/L	100	Standard
|	Cd	114	364.1	8.6	0.0090	0.002	25.7	ug/L	307	Standard
[>	In	115	1101588.8	0.1				ug/L	1045367	Standard
|	Sn	118	1501.1	7.9	-0.0072	0.005	71.9	ug/L	1664	Standard
|	Sb	123	3450.8	7.1	0.2896	0.022	7.5	ug/L	846	Standard
|	Ba	135	22102.1	1.0	3.9843	0.042	1.0	ug/L	61	Standard
|	Ce	140	537.0	1.4				ug/L	30	Standard
[>	Tb	159	1452200.2	0.9				ug/L	1407506	Standard
|	Ho	165	31.3	22.6				ug/L	13	Standard
|	Tl	203	2126.5	22.2	0.0788	0.022	28.2	ug/L	713	Standard
|	Tl	205	4682.4	21.4	0.0733	0.021	29.2	ug/L	1648	Standard
|	Pb	206	978.7	33.2	0.0304	0.020	65.8	ug/L	594	Standard
|	Pb	207	796.7	30.4	0.0279	0.018	64.1	ug/L	497	Standard
|	Pb	208	3754.2	29.8	0.0286	0.018	62.6	ug/L	2293	Standard
|	U	238	629.0	31.3	0.0364	0.010	27.9	ug/L	301	Standard
[>	Bi	209	762514.8	0.7				ug/L	757838	Standard

Sample ID: L1207072801SDL WG404557-02

Report Date/Time: Thursday, July 26, 2012 14:12:39

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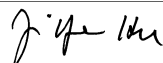
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Mg	24	334898.0	1.6	0.4488	0.016	3.5	mg/L	1565	Standard
K	39	413.3	11.6	0.1863	0.043	22.8	mg/L	157	Standard
Ca	43	6.7	43.3	1.6361	0.907	55.4	mg/L	5	Standard
Fe	54	869.0	5.8	0.0187	0.008	40.4	mg/L	717	Standard
Fe	57	5189.2	1.1	0.0109	0.002	16.4	mg/L	4072	Standard
Sc-1	45	476939.1	2.8				mg/L	476707	Standard
Cl	35	16.3	33.7				ug/L	29	Standard
Kr	83	45.1	8.1				ug/L	39	Standard
Br	81	1374.2	3.4				ug/L	1124	Standard
P	31	504.2	5.6				ug/L	495	Standard
S	34	10859.7	2.1				ug/L	6398	Standard
Sr	88	76.7	26.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.429	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072801SDL WG404557-02
 Report Date/Time: Thursday, July 26, 2012 14:12:39
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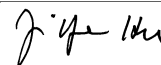
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	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.617
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 14:13:20

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12640.3	1.9	-397.2765	244.594	61.6	ug/L	11975	Standard
|	Be	9	104843.3	2.3	53.6126	1.267	2.4	ug/L	53	Standard
|	Al	27	898920.9	2.2	51.1719	1.668	3.3	ug/L	10095	Standard
>	Sc	45	476738.4	1.5				ug/L	476707	Standard
[	Ti	47	153981.3	1.4	104.6023	1.460	1.4	ug/L	149	Standard
|	V	51	636655.6	0.5	53.2287	0.454	0.9	ug/L	3747	Standard
|	Cr	52	525409.0	0.9	52.9554	0.686	1.3	ug/L	10265	Standard
|	Cr	53	91860.2	1.7	52.0270	0.970	1.9	ug/L	3075	Standard
|	Mn	55	936068.1	1.1	54.0087	0.867	1.6	ug/L	1438	Standard
|	Co	59	611931.4	1.0	52.8890	0.631	1.2	ug/L	148	Standard
|	Ni	60	166585.5	1.4	51.6020	0.400	0.8	ug/L	176	Standard
|	Cu	65	154988.4	1.1	51.1971	0.729	1.4	ug/L	186	Standard
|	Zn	66	72516.5	0.9	52.1983	0.320	0.6	ug/L	355	Standard
>	Ge	72	430980.4	0.6				ug/L	437919	Standard
|	As	75	69201.6	1.5	51.0026	0.793	1.6	ug/L	-222	Standard
|	Se	82	6769.4	1.0	51.7302	0.340	0.7	ug/L	29	Standard
[	Se-1	77	5112.2	2.4	50.2828	1.284	2.6	ug/L	201	Standard
>	Ga	71	931.7	10.5				mg/L	985	Standard
[	Rb	85	1028.4	3.9				ug/L	22	Standard
[	Y	89	357053.5	2.8				ug/L	370795	Standard
>	Rh	103	545.0	13.5				ug/L	498	Standard
[	Mo	98	461817.9	1.0	94.8537	1.203	1.3	ug/L	253	Standard
|	Ag	107	442417.1	0.7	49.6239	0.555	1.1	ug/L	124	Standard
|	Cd	111	234038.3	0.5	52.6368	0.294	0.6	mg/L	100	Standard
|	Cd	114	661731.9	1.2	50.9601	0.694	1.4	ug/L	307	Standard
>	In	115	1073069.2	0.6				ug/L	1045367	Standard
|	Sn	118	1541149.3	0.4	67.9615	0.680	1.0	ug/L	1664	Standard
|	Sb	123	561567.3	0.6	50.8778	0.049	0.1	ug/L	846	Standard
[	Ba	135	266530.5	0.4	49.3909	0.278	0.6	ug/L	61	Standard
[	Ce	140	1101.4	2.7				ug/L	30	Standard
>	Tb	159	1463264.6	0.6				ug/L	1407506	Standard
[	Ho	165	26.7	16.9				ug/L	13	Standard
|	Tl	203	1003673.1	1.1	50.2027	0.304	0.6	ug/L	713	Standard
|	Tl	205	2272474.2	1.0	51.7730	0.292	0.6	ug/L	1648	Standard
|	Pb	206	772736.9	1.0	49.9957	0.303	0.6	ug/L	594	Standard
|	Pb	207	657388.3	1.8	51.2562	0.671	1.3	ug/L	497	Standard
|	Pb	208	3037006.9	1.2	51.2451	0.382	0.7	ug/L	2293	Standard
	U	238	963009.7	1.8	52.3034	0.666	1.3	ug/L	301	Standard
>	Bi	209	742563.3	0.5				ug/L	757838	Standard

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Na	23	113055.3	1.5	6.5894	0.141	2.1	mg/L	592	Standard
Mg	24	3865705.3	1.2	5.1819	0.137	2.6	mg/L	1565	Standard
K	39	6903.2	3.6	4.8378	0.223	4.6	mg/L	157	Standard
Ca	43	11.7	65.5	3.3049	2.517	76.2	mg/L	5	Standard
Fe	54	29752.4	1.7	4.9943	0.150	3.0	mg/L	717	Standard
Fe	57	623216.8	1.9	5.2724	0.180	3.4	mg/L	4072	Standard
Sc-1	45	476738.4	1.5				mg/L	476707	Standard
Cl	35	11.7	43.1				ug/L	29	Standard
Kr	83	48.8	7.6				ug/L	39	Standard
Br	81	1223.4	8.8				ug/L	1124	Standard
P	31	540.0	6.1				ug/L	495	Standard
S	34	7575.2	2.8				ug/L	6398	Standard
Sr	88	28.3	50.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	102.344		
Sc	45			
Ti	47	104.602		
V	51	106.457		
Cr	52	105.911		
Cr	53			
Mn	55	108.017		
Co	59	105.778		
Ni	60	103.204		
Cu	65	102.394		
Zn	66	104.397		
Ge	72		98.415	
As	75	102.005		
Se	82	103.460		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	94.854		
Ag	107	99.248		

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	Cd	111	105.274	
	Cd	114		
>	In	115		102.650
	Sn	118	135.923	
	Sb	123	101.756	
	Ba	135	98.782	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	100.405	
|	Tl	205		
|	Pb	206	99.991	
|	Pb	207	102.512	
|	Pb	208	102.490	
|	U	238	104.607	
>	Bi	209		97.984
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 14:15:51

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 14:16:31

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12041.5	1.3	-105.5700	265.750	251.7	ug/L	11975	Standard
|	Be	9	20.0	66.1	0.0164	0.007	40.9	ug/L	53	Standard
|	Al	27	10190.1	2.0	-0.2007	0.004	1.8	ug/L	10095	Standard
[>	Sc	45	472426.4	2.4				ug/L	476707	Standard
[	Ti	47	75.0	9.6	-0.0018	0.005	285.5	ug/L	149	Standard
|	V	51	3515.7	3.1	0.0012	0.009	741.6	ug/L	3747	Standard
|	Cr	52	10479.3	0.8	0.0311	0.020	64.5	ug/L	10265	Standard
|	Cr	53	902.5	4.7	-1.0925	0.027	2.4	ug/L	3075	Standard
|	Mn	55	1548.7	1.7	-0.0478	0.002	3.5	ug/L	1438	Standard
|	Co	59	134.7	21.1	-0.0004	0.003	617.3	ug/L	148	Standard
|	Ni	60	99.0	8.8	-0.0014	0.003	184.1	ug/L	176	Standard
|	Cu	65	137.3	9.2	-0.0129	0.004	32.6	ug/L	186	Standard
|	Zn	66	207.0	5.2	-0.1595	0.010	6.0	ug/L	355	Standard
[>	Ge	72	428184.0	1.4				ug/L	437919	Standard
|	As	75	-252.5	18.5	0.0094	0.035	373.7	ug/L	-222	Standard
|	Se	82	25.4	31.6	0.0221	0.060	272.0	ug/L	29	Standard
[	Se-1	77	151.0	7.0	-0.4340	0.101	23.3	ug/L	201	Standard
[>	Ga	71	968.4	6.4				mg/L	985	Standard
[	Rb	85	30.0	16.7				ug/L	22	Standard
[	Y	89	350201.4	1.4				ug/L	370795	Standard
[>	Rh	103	486.7	11.5				ug/L	498	Standard
[	Mo	98	433.1	4.5	0.0815	0.004	4.8	ug/L	253	Standard
|	Ag	107	140.7	3.5	0.0111	0.001	5.2	ug/L	124	Standard
|	Cd	111	92.0	1.1	0.0099	0.000	2.6	mg/L	100	Standard
|	Cd	114	271.3	3.0	0.0026	0.001	24.0	ug/L	307	Standard
[>	In	115	1072710.0	0.2				ug/L	1045367	Standard
|	Sn	118	1641.4	8.1	0.0007	0.006	817.6	ug/L	1664	Standard
|	Sb	123	2851.3	5.6	0.2435	0.014	5.7	ug/L	846	Standard
[	Ba	135	80.3	18.7	0.0091	0.003	31.0	ug/L	61	Standard
[	Ce	140	43.7	9.3				ug/L	30	Standard
[>	Tb	159	1405746.4	1.1				ug/L	1407506	Standard
[	Ho	165	17.3	14.5				ug/L	13	Standard
|	Tl	203	234.7	10.0	-0.0132	0.001	9.1	ug/L	713	Standard
|	Tl	205	526.3	12.1	-0.0187	0.002	8.1	ug/L	1648	Standard
|	Pb	206	547.0	2.2	0.0037	0.001	19.3	ug/L	594	Standard
|	Pb	207	441.7	9.0	0.0015	0.003	195.8	ug/L	497	Standard
|	Pb	208	2086.4	1.6	0.0017	0.000	20.0	ug/L	2293	Standard
	U	238	70.7	21.9	0.0070	0.001	12.0	ug/L	301	Standard
[>	Bi	209	752708.3	1.1				ug/L	757838	Standard

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Na	23	430.0	10.1	-0.0198	0.002	9.9	mg/L	592	Standard
Mg	24	508.3	8.2	0.0006	0.000	10.8	mg/L	1565	Standard
K	39	163.3	17.9	0.0080	0.024	294.8	mg/L	157	Standard
Ca	43	5.0	100.0	1.1355	1.698	149.5	mg/L	5	Standard
Fe	54	746.9	7.8	-0.0010	0.012	1199.4	mg/L	717	Standard
Fe	57	3995.5	8.3	0.0010	0.002	205.5	mg/L	4072	Standard
Sc-1	45	472426.4	2.4				mg/L	476707	Standard
Cl	35	12.3	18.7				ug/L	29	Standard
Kr	83	44.3	5.3				ug/L	39	Standard
Br	81	1211.7	4.4				ug/L	1124	Standard
P	31	572.5	12.2				ug/L	495	Standard
S	34	7351.8	0.9				ug/L	6398	Standard
Sr	88	23.3	12.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.777	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.616
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.323
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207072201 WG404363-01

Sample Date/Time: Thursday, July 26, 2012 14:19:44

Number of Replicates: 3

Autosampler Position: 309

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	408681.1	6.4	-233627.1028	13082.789	5.6	ug/L	11975	Standard
|	Be	9	83.3	64.2	0.0483	0.028	58.0	ug/L	53	Standard
|	Al	27	3919176.1	1.5	221.5796	5.327	2.4	ug/L	10095	Standard
[>	Sc	45	485879.2	3.6				ug/L	476707	Standard
[	Ti	47	7034.0	6.1	5.1767	0.261	5.0	ug/L	149	Standard
|	V	51	30101.1	0.8	2.4733	0.044	1.8	ug/L	3747	Standard
|	Cr	52	56487.8	0.8	5.3013	0.069	1.3	ug/L	10265	Standard
|	Cr	53	13477.7	2.2	6.9922	0.248	3.6	ug/L	3075	Standard
|	Mn	55	238806.7	1.1	14.9807	0.327	2.2	ug/L	1438	Standard
|	Co	59	3643.4	1.0	0.3326	0.003	0.9	ug/L	148	Standard
|	Ni	60	11368.3	0.1	3.8243	0.046	1.2	ug/L	176	Standard
|	Cu	65	4090.2	1.3	1.4217	0.020	1.4	ug/L	186	Standard
|	Zn	66	8565.8	1.1	6.4784	0.153	2.4	ug/L	355	Standard
[>	Ge	72	393821.2	1.1				ug/L	437919	Standard
|	As	75	1386.8	2.6	1.3105	0.037	2.8	ug/L	-222	Standard
|	Se	82	465.0	5.3	3.7300	0.240	6.4	ug/L	29	Standard
[	Se-1	77	483.3	10.1	3.4204	0.537	15.7	ug/L	201	Standard
[>	Ga	71	1400.1	4.1				mg/L	985	Standard
[	Rb	85	18419.5	3.0				ug/L	22	Standard
[	Y	89	347899.2	1.2				ug/L	370795	Standard
[>	Rh	103	753.4	6.2				ug/L	498	Standard
[	Mo	98	6254.3	1.9	1.3222	0.020	1.5	ug/L	253	Standard
|	Ag	107	128.7	30.6	0.0102	0.005	45.6	ug/L	124	Standard
|	Cd	111	222.6	7.2	0.0411	0.004	10.1	mg/L	100	Standard
|	Cd	114	615.7	5.6	0.0308	0.003	9.4	ug/L	307	Standard
[>	In	115	1036705.8	1.0				ug/L	1045367	Standard
|	Sn	118	3567.1	3.3	0.0912	0.004	4.4	ug/L	1664	Standard
|	Sb	123	1960.3	8.8	0.1688	0.015	9.0	ug/L	846	Standard
[	Ba	135	129308.1	1.0	24.7994	0.081	0.3	ug/L	61	Standard
[	Ce	140	43946.0	0.8				ug/L	30	Standard
[>	Tb	159	1401742.9	1.6				ug/L	1407506	Standard
[	Ho	165	612.0	13.7				ug/L	13	Standard
|	Tl	203	609.7	16.7	0.0112	0.006	53.7	ug/L	713	Standard
|	Tl	205	1459.1	11.8	0.0087	0.005	54.3	ug/L	1648	Standard
|	Pb	206	13275.8	0.8	0.9808	0.006	0.6	ug/L	594	Standard
|	Pb	207	10972.6	0.2	0.9755	0.008	0.8	ug/L	497	Standard
|	Pb	208	51115.6	0.6	0.9832	0.002	0.2	ug/L	2293	Standard
	U	238	70749.2	1.7	4.5276	0.062	1.4	ug/L	301	Standard
[>	Bi	209	630639.8	0.7				ug/L	757838	Standard

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Na	23	474020.8	0.2	27.2674	0.918	3.4	mg/L	592	Standard
Mg	24	4654576.5	0.8	6.1258	0.229	3.7	mg/L	1565	Standard
K	39	1725.1	8.2	1.1058	0.140	12.7	mg/L	157	Standard
Ca	43	41.7	25.0	12.9209	3.049	23.6	mg/L	5	Standard
Fe	54	1816.1	1.8	0.1762	0.010	5.9	mg/L	717	Standard
Fe	57	35800.6	4.1	0.2658	0.013	5.1	mg/L	4072	Standard
Sc-1	45	485879.2	3.6				mg/L	476707	Standard
Cl	35	412.3	6.1				ug/L	29	Standard
Kr	83	93.1	14.9				ug/L	39	Standard
Br	81	29270.9	9.0				ug/L	1124	Standard
P	31	1557.6	2.3				ug/L	495	Standard
S	34	81791.0	0.7				ug/L	6398	Standard
Sr	88	1345.1	5.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.930	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072201 WG404363-01

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	Cd	111	
	Cd	114	
>	In	115	99.172
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	83.216
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072201S WG404363-05

Sample Date/Time: Thursday, July 26, 2012 14:22:53

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	424719.0	2.2	-244275.4088	2446.122	1.0	ug/L	11975	Standard
|	Be	9	53388.9	1.0	26.9261	0.743	2.8	ug/L	53	Standard
|	Al	27	7095319.1	0.9	403.6003	8.106	2.0	ug/L	10095	Standard
[>	Sc	45	483546.3	1.8				ug/L	476707	Standard
|	Ti	47	9519.1	18.6	7.0672	1.295	18.3	ug/L	149	Standard
|	V	51	333422.1	1.3	30.5679	0.306	1.0	ug/L	3747	Standard
|	Cr	52	297240.0	0.3	32.5897	0.284	0.9	ug/L	10265	Standard
|	Cr	53	56661.6	1.4	34.8171	0.758	2.2	ug/L	3075	Standard
|	Mn	55	702368.3	0.9	44.5957	0.421	0.9	ug/L	1438	Standard
|	Co	59	298621.1	0.2	28.4132	0.163	0.6	ug/L	148	Standard
|	Ni	60	85824.4	1.1	29.2600	0.333	1.1	ug/L	176	Standard
|	Cu	65	72181.2	1.4	26.2239	0.257	1.0	ug/L	186	Standard
|	Zn	66	43434.2	1.5	34.3183	0.339	1.0	ug/L	355	Standard
[>	Ge	72	391413.8	0.7				ug/L	437919	Standard
|	As	75	34821.4	0.9	28.3451	0.079	0.3	ug/L	-222	Standard
|	Se	82	3748.0	1.4	31.4723	0.662	2.1	ug/L	29	Standard
[	Se-1	77	2892.3	2.3	30.5742	0.734	2.4	ug/L	201	Standard
[>	Ga	71	1561.7	5.1				mg/L	985	Standard
|	Rb	85	21700.5	1.7				ug/L	22	Standard
|	Y	89	353636.6	1.5				ug/L	370795	Standard
[>	Rh	103	790.0	9.6				ug/L	498	Standard
|	Mo	98	6453.0	2.1	1.3622	0.042	3.1	ug/L	253	Standard
|	Ag	107	223350.9	0.8	25.8826	0.474	1.8	ug/L	124	Standard
|	Cd	111	121409.8	0.7	28.2084	0.449	1.6	mg/L	100	Standard
|	Cd	114	320826.5	0.5	25.5170	0.165	0.6	ug/L	307	Standard
[>	In	115	1038652.4	1.1				ug/L	1045367	Standard
|	Sn	118	3909.5	5.3	0.1066	0.012	10.8	ug/L	1664	Standard
|	Sb	123	286786.7	0.6	26.8398	0.442	1.6	ug/L	846	Standard
|	Ba	135	259783.9	0.8	49.7419	0.936	1.9	ug/L	61	Standard
|	Ce	140	48336.0	0.9				ug/L	30	Standard
[>	Tb	159	1414562.9	1.0				ug/L	1407506	Standard
|	Ho	165	648.0	1.4				ug/L	13	Standard
|	Tl	203	452825.7	0.2	26.6381	0.179	0.7	ug/L	713	Standard
|	Tl	205	1044966.0	0.4	27.9976	0.281	1.0	ug/L	1648	Standard
|	Pb	206	360520.1	0.3	27.4306	0.226	0.8	ug/L	594	Standard
|	Pb	207	305787.6	0.4	28.0387	0.272	1.0	ug/L	497	Standard
|	Pb	208	1415239.8	0.6	28.0830	0.327	1.2	ug/L	2293	Standard
|	U	238	544328.2	0.8	34.7872	0.443	1.3	ug/L	301	Standard
[>	Bi	209	631137.8	0.6				ug/L	757838	Standard

Sample ID: L1207072201S WG404363-05

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Na	23	479511.2	0.3	27.6995	0.420	1.5	mg/L	592	Standard
Mg	24	4743917.1	0.5	6.2695	0.131	2.1	mg/L	1565	Standard
K	39	1703.4	3.2	1.0937	0.060	5.5	mg/L	157	Standard
Ca	43	41.7	27.7	13.0189	3.650	28.0	mg/L	5	Standard
Fe	54	2180.1	5.7	0.2393	0.020	8.2	mg/L	717	Standard
Fe	57	43117.9	1.3	0.3285	0.002	0.6	mg/L	4072	Standard
Sc-1	45	483546.3	1.8				mg/L	476707	Standard
Cl	35	424.7	8.1				ug/L	29	Standard
Kr	83	101.0	12.1				ug/L	39	Standard
Br	81	27024.1	1.5				ug/L	1124	Standard
P	31	1515.9	4.2				ug/L	495	Standard
S	34	81003.5	1.7				ug/L	6398	Standard
Sr	88	1241.7	6.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.380	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	99.358	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	83.281	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072201S WG404363-05
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Method 6020 - Summary Report

Sample ID: L1207072201SD WG404363-06

Sample Date/Time: Thursday, July 26, 2012 14:26:02

Number of Replicates: 3

Autosampler Position: 311

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

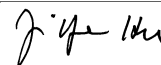
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	424620.3	4.4	-240148.0344	10741.534	4.5	ug/L	11975	Standard
|	Be	9	53688.3	2.6	26.6290	0.604	2.3	ug/L	53	Standard
|	Al	27	6266129.3	0.6	350.5024	4.463	1.3	ug/L	10095	Standard
[>	Sc	45	491505.0	0.7				ug/L	476707	Standard
|	Ti	47	9722.9	19.8	7.2567	1.493	20.6	ug/L	149	Standard
|	V	51	325992.7	0.9	29.9964	0.280	0.9	ug/L	3747	Standard
|	Cr	52	289235.9	2.0	31.8074	0.559	1.8	ug/L	10265	Standard
|	Cr	53	54548.1	3.9	33.5848	1.157	3.4	ug/L	3075	Standard
|	Mn	55	679758.9	1.7	43.3218	0.763	1.8	ug/L	1438	Standard
|	Co	59	296752.1	2.2	28.3433	0.621	2.2	ug/L	148	Standard
|	Ni	60	83674.8	2.2	28.6347	0.570	2.0	ug/L	176	Standard
|	Cu	65	71171.8	2.7	25.9557	0.662	2.5	ug/L	186	Standard
|	Zn	66	39200.0	2.4	31.0628	0.686	2.2	ug/L	355	Standard
[>	Ge	72	389922.1	0.8				ug/L	437919	Standard
|	As	75	34475.8	1.7	28.1729	0.452	1.6	ug/L	-222	Standard
|	Se	82	3763.6	0.8	31.7233	0.188	0.6	ug/L	29	Standard
[	Se-1	77	2819.3	3.9	29.8703	1.113	3.7	ug/L	201	Standard
[>	Ga	71	1528.4	7.7				mg/L	985	Standard
|	Rb	85	20245.2	1.7				ug/L	22	Standard
|	Y	89	347722.0	2.9				ug/L	370795	Standard
[>	Rh	103	856.7	5.3				ug/L	498	Standard
|	Mo	98	6464.8	4.4	1.3513	0.042	3.1	ug/L	253	Standard
|	Ag	107	224958.9	2.7	25.8187	0.256	1.0	ug/L	124	Standard
|	Cd	111	121297.3	2.0	27.9148	0.063	0.2	mg/L	100	Standard
|	Cd	114	317989.1	1.3	25.0548	0.156	0.6	ug/L	307	Standard
[>	In	115	1048468.8	1.8				ug/L	1045367	Standard
|	Sn	118	3685.8	10.7	0.0946	0.016	16.4	ug/L	1664	Standard
|	Sb	123	284703.0	1.8	26.3927	0.197	0.7	ug/L	846	Standard
|	Ba	135	255077.4	1.0	48.3815	0.403	0.8	ug/L	61	Standard
|	Ce	140	45689.5	1.5				ug/L	30	Standard
[>	Tb	159	1410759.0	1.9				ug/L	1407506	Standard
|	Ho	165	593.7	4.0				ug/L	13	Standard
|	Tl	203	445774.0	0.6	26.4025	0.374	1.4	ug/L	713	Standard
|	Tl	205	1032223.1	1.7	27.8410	0.198	0.7	ug/L	1648	Standard
|	Pb	206	355860.8	1.1	27.2588	0.198	0.7	ug/L	594	Standard
|	Pb	207	299765.4	1.5	27.6701	0.087	0.3	ug/L	497	Standard
|	Pb	208	1390604.8	1.0	27.7798	0.107	0.4	ug/L	2293	Standard
|	U	238	540323.9	1.3	34.7630	0.031	0.1	ug/L	301	Standard
[>	Bi	209	626901.2	1.2				ug/L	757838	Standard

Sample ID: L1207072201SD WG404363-06

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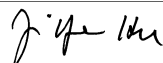
Na	23	472384.7	1.0	26.8416	0.447	1.7	mg/L	592	Standard
Mg	24	4567596.9	2.5	5.9370	0.125	2.1	mg/L	1565	Standard
K	39	1641.8	5.5	1.0304	0.056	5.4	mg/L	157	Standard
Ca	43	36.7	43.8	11.1892	5.066	45.3	mg/L	5	Standard
Fe	54	2041.7	2.8	0.2101	0.008	3.6	mg/L	717	Standard
Fe	57	40721.3	2.3	0.3029	0.009	2.9	mg/L	4072	Standard
Sc-1	45	491505.0	0.7				mg/L	476707	Standard
Cl	35	393.0	2.6				ug/L	29	Standard
Kr	83	95.7	12.4				ug/L	39	Standard
Br	81	26334.6	5.5				ug/L	1124	Standard
P	31	1532.6	4.7				ug/L	495	Standard
S	34	80193.4	1.4				ug/L	6398	Standard
Sr	88	1361.7	9.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.040	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072201SD WG404363-06
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	Cd	111	
	Cd	114	
>	In	115	100.297
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	82.722
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072201SD WG404363-06
 Report Date/Time: Thursday, July 26, 2012 14:28:32
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Method 6020 - Summary Report

Sample ID: L1207065822

Sample Date/Time: Thursday, July 26, 2012 14:29:11

Number of Replicates: 3

Autosampler Position: 312

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12209.9	0.7	-1100.7194	21.686	2.0	ug/L	11975	Standard
|	Be	9	11.7	107.9	0.0129	0.007	56.3	ug/L	53	Standard
|	Al	27	25673.4	1.3	0.8838	0.012	1.3	ug/L	10095	Standard
[>	Sc	45	421336.4	0.6				ug/L	476707	Standard
|	Ti	47	98.7	16.7	0.0231	0.013	55.5	ug/L	149	Standard
|	V	51	3636.2	4.6	0.0513	0.016	30.8	ug/L	3747	Standard
|	Cr	52	10995.7	2.1	0.2321	0.028	12.2	ug/L	10265	Standard
|	Cr	53	1149.2	4.2	-0.8598	0.035	4.1	ug/L	3075	Standard
|	Mn	55	1526.7	10.2	-0.0376	0.011	28.6	ug/L	1438	Standard
|	Co	59	162.7	32.2	0.0039	0.005	135.1	ug/L	148	Standard
|	Ni	60	372.0	6.1	0.0988	0.008	8.0	ug/L	176	Standard
|	Cu	65	265.7	9.7	0.0413	0.009	22.3	ug/L	186	Standard
|	Zn	66	2234.8	3.2	1.5300	0.064	4.2	ug/L	355	Standard
[>	Ge	72	378973.0	0.5				ug/L	437919	Standard
|	As	75	-221.9	8.5	0.0109	0.015	138.0	ug/L	-222	Standard
|	Se	82	35.8	17.5	0.1385	0.054	38.7	ug/L	29	Standard
[	Se-1	77	152.0	6.5	-0.2206	0.107	48.4	ug/L	201	Standard
[>	Ga	71	805.0	6.6				mg/L	985	Standard
|	Rb	85	36.7	41.7				ug/L	22	Standard
|	Y	89	316573.1	0.6				ug/L	370795	Standard
[>	Rh	103	441.7	10.1				ug/L	498	Standard
|	Mo	98	81.2	42.3	0.0101	0.007	73.6	ug/L	253	Standard
|	Ag	107	120.3	9.5	0.0095	0.001	14.9	ug/L	124	Standard
|	Cd	111	54.8	12.0	0.0022	0.002	72.4	mg/L	100	Standard
|	Cd	114	157.5	19.0	-0.0055	0.002	45.3	ug/L	307	Standard
[>	In	115	1019000.1	0.5				ug/L	1045367	Standard
|	Sn	118	776.4	4.4	-0.0357	0.002	4.4	ug/L	1664	Standard
|	Sb	123	209.6	32.6	0.0050	0.007	131.1	ug/L	846	Standard
|	Ba	135	101.7	13.4	0.0140	0.003	18.7	ug/L	61	Standard
|	Ce	140	101.7	8.2				ug/L	30	Standard
[>	Tb	159	1348061.3	1.0				ug/L	1407506	Standard
|	Ho	165	15.7	18.4				ug/L	13	Standard
|	Tl	203	561.3	25.0	0.0038	0.007	191.5	ug/L	713	Standard
|	Tl	205	1344.1	28.6	0.0006	0.009	1517.4	ug/L	1648	Standard
|	Pb	206	615.3	25.1	0.0093	0.010	112.8	ug/L	594	Standard
|	Pb	207	496.7	16.9	0.0068	0.007	101.3	ug/L	497	Standard
|	Pb	208	2357.7	20.0	0.0074	0.008	113.0	ug/L	2293	Standard
	U	238	92.7	94.7	0.0083	0.005	58.5	ug/L	301	Standard
[>	Bi	209	731825.0	0.8				ug/L	757838	Standard

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Na	23	3508.8	54.7	0.1876	0.127	67.6	mg/L	592	Standard
Mg	24	1140.1	64.0	0.0016	0.001	67.0	mg/L	1565	Standard
K	39	168.3	4.5	0.0260	0.006	24.0	mg/L	157	Standard
Ca	43	1.7	173.2	0.0695	1.088	1566.3	mg/L	5	Standard
Fe	54	366.6	15.6	-0.0595	0.011	18.1	mg/L	717	Standard
Fe	57	3662.1	5.4	0.0020	0.002	86.6	mg/L	4072	Standard
Sc-1	45	421336.4	0.6				mg/L	476707	Standard
Cl	35	8.7	26.6				ug/L	29	Standard
Kr	83	44.8	8.4				ug/L	39	Standard
Br	81	1340.9	17.5				ug/L	1124	Standard
P	31	185.8	16.2				ug/L	495	Standard
S	34	7235.9	4.8				ug/L	6398	Standard
Sr	88	26.7	28.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.539	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065822

Report Date/Time: Thursday, July 26, 2012 14:31:42

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	Cd	111	
	Cd	114	
>	In	115	97.478
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.568
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065822

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Method 6020 - Summary Report

Sample ID: L1207065823

Sample Date/Time: Thursday, July 26, 2012 14:32:22

Number of Replicates: 3

Autosampler Position: 313

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	38542.3	1.1	-17016.6900	943.508	5.5	ug/L	11975	Standard
|	Be	9	115.0	26.1	0.0678	0.017	24.8	ug/L	53	Standard
|	Al	27	6494901.6	0.9	391.7345	8.113	2.1	ug/L	10095	Standard
[>	Sc	45	456098.6	3.0				ug/L	476707	Standard
[	Ti	47	6746.5	9.1	5.0210	0.471	9.4	ug/L	149	Standard
|	V	51	17792.7	1.6	1.3588	0.029	2.1	ug/L	3747	Standard
|	Cr	52	16332.5	1.4	0.8044	0.030	3.7	ug/L	10265	Standard
|	Cr	53	2236.0	0.9	-0.1782	0.013	7.4	ug/L	3075	Standard
|	Mn	55	114819.3	2.6	7.2109	0.200	2.8	ug/L	1438	Standard
|	Co	59	5847.8	4.4	0.5473	0.025	4.6	ug/L	148	Standard
|	Ni	60	4147.6	2.8	1.3903	0.042	3.0	ug/L	176	Standard
|	Cu	65	2519.2	1.9	0.8632	0.018	2.1	ug/L	186	Standard
|	Zn	66	38652.3	3.2	30.6591	1.008	3.3	ug/L	355	Standard
[>	Ge	72	389493.4	0.2				ug/L	437919	Standard
|	As	75	-39.8	36.0	0.1638	0.012	7.1	ug/L	-222	Standard
|	Se	82	38.4	5.9	0.1523	0.020	13.1	ug/L	29	Standard
[	Se-1	77	163.0	13.3	-0.1440	0.240	166.9	ug/L	201	Standard
[>	Ga	71	1761.8	11.2				mg/L	985	Standard
[	Rb	85	12541.9	1.9				ug/L	22	Standard
[	Y	89	345345.9	4.2				ug/L	370795	Standard
[>	Rh	103	456.7	7.1				ug/L	498	Standard
[	Mo	98	259.1	4.7	0.0475	0.002	4.6	ug/L	253	Standard
|	Ag	107	79.3	4.1	0.0045	0.000	6.6	ug/L	124	Standard
|	Cd	111	438.4	3.1	0.0911	0.002	2.3	mg/L	100	Standard
|	Cd	114	1257.6	2.1	0.0818	0.001	1.3	ug/L	307	Standard
[>	In	115	1038376.8	1.1				ug/L	1045367	Standard
|	Sn	118	1372.4	4.2	-0.0092	0.002	24.4	ug/L	1664	Standard
|	Sb	123	536.7	10.8	0.0352	0.005	13.9	ug/L	846	Standard
[	Ba	135	92260.5	2.1	17.6626	0.194	1.1	ug/L	61	Standard
[	Ce	140	247862.1	2.0				ug/L	30	Standard
[>	Tb	159	1369911.0	0.8				ug/L	1407506	Standard
[	Ho	165	3015.0	4.1				ug/L	13	Standard
|	Tl	203	570.0	2.8	0.0042	0.001	23.1	ug/L	713	Standard
|	Tl	205	1298.1	1.5	-0.0005	0.000	49.4	ug/L	1648	Standard
|	Pb	206	9714.8	2.2	0.6064	0.019	3.1	ug/L	594	Standard
|	Pb	207	7759.3	2.1	0.5813	0.017	2.9	ug/L	497	Standard
|	Pb	208	36837.8	2.0	0.5976	0.017	2.8	ug/L	2293	Standard
	U	238	1471.4	2.4	0.0842	0.002	2.9	ug/L	301	Standard
[>	Bi	209	732503.8	0.7				ug/L	757838	Standard

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Na	23	115896.6	1.4	7.0688	0.303	4.3	mg/L	592	Standard
Mg	24	192900.2	0.8	0.2703	0.008	3.0	mg/L	1565	Standard
K	39	333.3	23.8	0.1393	0.060	42.9	mg/L	157	Standard
Ca	43	3.3	173.2	0.5600	1.938	346.1	mg/L	5	Standard
Fe	54	3014.3	3.7	0.4120	0.025	6.1	mg/L	717	Standard
Fe	57	57269.9	5.3	0.4762	0.025	5.3	mg/L	4072	Standard
Sc-1	45	456098.6	3.0				mg/L	476707	Standard
Cl	35	10.7	32.9				ug/L	29	Standard
Kr	83	52.1	2.6				ug/L	39	Standard
Br	81	1562.6	0.7				ug/L	1124	Standard
P	31	447.5	12.5				ug/L	495	Standard
S	34	9123.6	1.4				ug/L	6398	Standard
Sr	88	100.0	10.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.942	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065823

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	Cd	111	
	Cd	114	
>	In	115	99.331
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.657
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065824

Sample Date/Time: Thursday, July 26, 2012 14:35:31

Number of Replicates: 3

Autosampler Position: 314

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35367.9	2.3	-14970.0067	524.983	3.5	ug/L	11975	Standard
|	Be	9	141.7	15.9	0.0817	0.012	14.4	ug/L	53	Standard
|	Al	27	8043862.5	2.1	484.3776	11.103	2.3	ug/L	10095	Standard
[>	Sc	45	456838.2	0.3				ug/L	476707	Standard
|	Ti	47	9643.4	0.9	7.2347	0.067	0.9	ug/L	149	Standard
|	V	51	21276.7	1.6	1.6926	0.032	1.9	ug/L	3747	Standard
|	Cr	52	19087.7	1.3	1.1283	0.027	2.4	ug/L	10265	Standard
|	Cr	53	2709.4	0.6	0.1363	0.009	6.7	ug/L	3075	Standard
|	Mn	55	112632.9	2.2	7.1061	0.156	2.2	ug/L	1438	Standard
|	Co	59	6415.0	1.4	0.6045	0.009	1.4	ug/L	148	Standard
|	Ni	60	4825.8	3.5	1.6310	0.059	3.6	ug/L	176	Standard
|	Cu	65	2864.9	5.1	0.9949	0.054	5.4	ug/L	186	Standard
|	Zn	66	47900.6	1.0	38.2566	0.396	1.0	ug/L	355	Standard
[>	Ge	72	387594.3	0.1				ug/L	437919	Standard
|	As	75	128.8	32.8	0.3013	0.034	11.4	ug/L	-222	Standard
|	Se	82	49.2	7.2	0.2457	0.030	12.4	ug/L	29	Standard
[	Se-1	77	158.3	3.5	-0.1876	0.062	33.2	ug/L	201	Standard
[>	Ga	71	1985.1	3.8				mg/L	985	Standard
|	Rb	85	13642.8	4.7				ug/L	22	Standard
|	Y	89	342191.3	1.1				ug/L	370795	Standard
[>	Rh	103	516.7	8.8				ug/L	498	Standard
|	Mo	98	265.7	6.2	0.0494	0.003	7.0	ug/L	253	Standard
|	Ag	107	70.0	1.4	0.0035	0.000	1.4	ug/L	124	Standard
|	Cd	111	376.0	3.8	0.0774	0.003	4.2	mg/L	100	Standard
|	Cd	114	1151.5	3.8	0.0742	0.003	4.4	ug/L	307	Standard
[>	In	115	1029269.0	0.8				ug/L	1045367	Standard
|	Sn	118	1298.7	3.9	-0.0120	0.003	21.0	ug/L	1664	Standard
|	Sb	123	614.0	10.9	0.0430	0.006	15.0	ug/L	846	Standard
|	Ba	135	86555.2	1.4	16.7191	0.301	1.8	ug/L	61	Standard
[	Ce	140	230373.0	1.2				ug/L	30	Standard
[>	Tb	159	1358895.9	1.2				ug/L	1407506	Standard
|	Ho	165	2840.9	2.1				ug/L	13	Standard
|	Tl	203	509.7	5.0	0.0011	0.001	121.8	ug/L	713	Standard
|	Tl	205	1215.0	5.2	-0.0024	0.002	63.2	ug/L	1648	Standard
|	Pb	206	10204.4	0.3	0.6386	0.004	0.7	ug/L	594	Standard
|	Pb	207	8159.5	2.5	0.6130	0.019	3.2	ug/L	497	Standard
|	Pb	208	38900.2	0.8	0.6330	0.009	1.4	ug/L	2293	Standard
	U	238	1355.4	4.3	0.0779	0.004	4.6	ug/L	301	Standard
[>	Bi	209	732385.5	0.6				ug/L	757838	Standard

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Na	23	111861.4	0.9	6.8044	0.078	1.1	mg/L	592	Standard
Mg	24	179262.7	1.5	0.2506	0.004	1.7	mg/L	1565	Standard
K	39	351.7	10.7	0.1525	0.028	18.1	mg/L	157	Standard
Ca	43	1.7	173.2	0.0150	0.994	6639.4	mg/L	5	Standard
Fe	54	4231.0	1.2	0.6295	0.009	1.5	mg/L	717	Standard
Fe	57	83394.0	2.3	0.7074	0.018	2.5	mg/L	4072	Standard
Sc-1	45	456838.2	0.3				mg/L	476707	Standard
Cl	35	13.3	33.8				ug/L	29	Standard
Kr	83	43.2	6.2				ug/L	39	Standard
Br	81	1555.9	4.6				ug/L	1124	Standard
P	31	483.3	4.8				ug/L	495	Standard
S	34	8554.1	1.6				ug/L	6398	Standard
Sr	88	98.3	36.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.508	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065824

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	Cd	111		
	Cd	114		
>	In	115	98.460	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	96.641	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065824

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Method 6020 - Summary Report

Sample ID: L1207065825

Sample Date/Time: Thursday, July 26, 2012 14:38:41

Number of Replicates: 3

Autosampler Position: 315

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	45775.8	3.9	-22251.8834	814.741	3.7	ug/L	11975	Standard
|	Be	9	48.3	46.6	0.0327	0.013	38.7	ug/L	53	Standard
|	Al	27	4867976.9	5.0	300.6165	13.796	4.6	ug/L	10095	Standard
[>	Sc	45	444977.0	1.4				ug/L	476707	Standard
|	Ti	47	8007.5	10.0	5.9927	0.556	9.3	ug/L	149	Standard
|	V	51	12342.5	5.0	0.8566	0.046	5.4	ug/L	3747	Standard
|	Cr	52	13904.4	3.0	0.5350	0.035	6.6	ug/L	10265	Standard
|	Cr	53	1772.6	5.0	-0.4729	0.047	10.0	ug/L	3075	Standard
|	Mn	55	59590.4	3.5	3.6922	0.102	2.8	ug/L	1438	Standard
|	Co	59	2550.5	4.4	0.2329	0.010	4.2	ug/L	148	Standard
|	Ni	60	1782.1	5.6	0.5814	0.028	4.8	ug/L	176	Standard
|	Cu	65	967.4	2.3	0.2970	0.011	3.6	ug/L	186	Standard
|	Zn	66	5068.2	2.8	3.7681	0.099	2.6	ug/L	355	Standard
[>	Ge	72	387782.0	1.0				ug/L	437919	Standard
|	As	75	-56.5	43.4	0.1500	0.020	13.5	ug/L	-222	Standard
|	Se	82	36.3	12.2	0.1353	0.035	26.2	ug/L	29	Standard
[	Se-1	77	158.7	5.3	-0.1849	0.087	46.9	ug/L	201	Standard
[>	Ga	71	1473.4	3.5				mg/L	985	Standard
|	Rb	85	6759.8	5.1				ug/L	22	Standard
|	Y	89	327695.4	2.3				ug/L	370795	Standard
[>	Rh	103	446.7	16.2				ug/L	498	Standard
|	Mo	98	175.3	4.7	0.0308	0.002	5.9	ug/L	253	Standard
|	Ag	107	67.0	12.9	0.0033	0.001	30.3	ug/L	124	Standard
|	Cd	111	374.6	4.7	0.0788	0.004	5.6	mg/L	100	Standard
|	Cd	114	1044.6	5.0	0.0672	0.004	6.0	ug/L	307	Standard
[>	In	115	1009998.9	0.5				ug/L	1045367	Standard
|	Sn	118	1070.7	6.9	-0.0216	0.003	15.0	ug/L	1664	Standard
|	Sb	123	348.9	14.4	0.0186	0.005	25.1	ug/L	846	Standard
|	Ba	135	38552.0	2.9	7.5847	0.191	2.5	ug/L	61	Standard
|	Ce	140	57586.7	4.1				ug/L	30	Standard
[>	Tb	159	1336604.1	1.2				ug/L	1407506	Standard
|	Ho	165	723.7	1.7				ug/L	13	Standard
|	Tl	203	523.0	7.7	0.0021	0.002	108.1	ug/L	713	Standard
|	Tl	205	1243.7	7.0	-0.0014	0.002	156.0	ug/L	1648	Standard
|	Pb	206	3341.4	3.0	0.1906	0.009	4.6	ug/L	594	Standard
|	Pb	207	2650.2	1.2	0.1795	0.002	1.4	ug/L	497	Standard
|	Pb	208	12814.1	3.1	0.1889	0.009	4.7	ug/L	2293	Standard
	U	238	233.0	5.2	0.0162	0.001	3.7	ug/L	301	Standard
[>	Bi	209	724232.8	0.9				ug/L	757838	Standard

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Na	23	94456.9	1.6	5.8940	0.161	2.7	mg/L	592	Standard
Mg	24	76094.0	2.8	0.1092	0.004	3.7	mg/L	1565	Standard
K	39	270.0	19.5	0.0967	0.040	41.5	mg/L	157	Standard
Ca	43	6.7	114.6	1.8139	2.741	151.1	mg/L	5	Standard
Fe	54	2066.0	11.4	0.2504	0.045	17.8	mg/L	717	Standard
Fe	57	40245.2	6.0	0.3337	0.023	7.0	mg/L	4072	Standard
Sc-1	45	444977.0	1.4				mg/L	476707	Standard
Cl	35	16.0	21.7				ug/L	29	Standard
Kr	83	42.3	6.2				ug/L	39	Standard
Br	81	1534.2	2.2				ug/L	1124	Standard
P	31	327.5	9.3				ug/L	495	Standard
S	34	5962.0	1.1				ug/L	6398	Standard
Sr	88	45.0	19.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.551	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	96.617
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.566
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065825

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Method 6020 - Summary Report

Sample ID: L1207065826

Sample Date/Time: Thursday, July 26, 2012 14:41:52

Number of Replicates: 3

Autosampler Position: 316

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

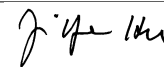
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25907.1	1.7	-9066.7474	235.181	2.6	ug/L	11975	Standard
|	Be	9	283.3	18.7	0.1575	0.028	17.6	ug/L	53	Standard
|	Al	27	17981298.3	2.9	1085.6170	35.790	3.3	ug/L	10095	Standard
[>	Sc	45	456093.1	0.7				ug/L	476707	Standard
[	Ti	47	7551.2	3.2	5.7178	0.122	2.1	ug/L	149	Standard
|	V	51	28525.7	2.6	2.4006	0.054	2.3	ug/L	3747	Standard
|	Cr	52	23309.9	2.2	1.6412	0.039	2.4	ug/L	10265	Standard
|	Cr	53	3230.3	1.1	0.4987	0.028	5.7	ug/L	3075	Standard
|	Mn	55	127615.6	1.9	8.1630	0.068	0.8	ug/L	1438	Standard
|	Co	59	8048.5	2.7	0.7703	0.016	2.1	ug/L	148	Standard
|	Ni	60	4416.0	2.7	1.5069	0.026	1.8	ug/L	176	Standard
|	Cu	65	3847.2	0.8	1.3724	0.027	1.9	ug/L	186	Standard
|	Zn	66	14296.7	1.9	11.3316	0.135	1.2	ug/L	355	Standard
[>	Ge	72	383231.8	1.5				ug/L	437919	Standard
|	As	75	165.2	14.6	0.3324	0.018	5.6	ug/L	-222	Standard
|	Se	82	41.3	18.4	0.1833	0.069	37.7	ug/L	29	Standard
[	Se-1	77	164.0	9.1	-0.1033	0.144	139.2	ug/L	201	Standard
[>	Ga	71	3097.0	2.6				mg/L	985	Standard
[	Rb	85	26337.9	4.0				ug/L	22	Standard
[	Y	89	357583.8	0.7				ug/L	370795	Standard
[>	Rh	103	443.3	7.5				ug/L	498	Standard
[	Mo	98	227.2	10.9	0.0419	0.006	13.6	ug/L	253	Standard
|	Ag	107	97.7	4.1	0.0069	0.001	8.2	ug/L	124	Standard
|	Cd	111	324.8	7.2	0.0665	0.006	8.9	mg/L	100	Standard
|	Cd	114	956.7	7.5	0.0596	0.005	9.2	ug/L	307	Standard
[>	In	115	1015248.3	0.8				ug/L	1045367	Standard
|	Sn	118	2820.3	9.8	0.0599	0.014	22.8	ug/L	1664	Standard
|	Sb	123	213.7	16.0	0.0055	0.003	56.8	ug/L	846	Standard
[	Ba	135	91365.3	1.1	17.8913	0.178	1.0	ug/L	61	Standard
[	Ce	140	624958.8	2.3				ug/L	30	Standard
[>	Tb	159	1343967.3	0.7				ug/L	1407506	Standard
[	Ho	165	6002.5	0.7				ug/L	13	Standard
|	Tl	203	625.3	5.3	0.0074	0.002	23.6	ug/L	713	Standard
|	Tl	205	1478.4	4.0	0.0041	0.002	37.9	ug/L	1648	Standard
|	Pb	206	13285.8	0.9	0.8517	0.015	1.8	ug/L	594	Standard
|	Pb	207	10559.3	1.7	0.8131	0.018	2.2	ug/L	497	Standard
|	Pb	208	50224.8	1.7	0.8375	0.022	2.7	ug/L	2293	Standard
	U	238	2427.5	2.4	0.1386	0.005	3.4	ug/L	301	Standard
[>	Bi	209	723511.9	1.1				ug/L	757838	Standard

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Na	23	75427.3	0.8	4.5812	0.072	1.6	mg/L	592	Standard
Mg	24	115364.3	1.5	0.1615	0.003	1.9	mg/L	1565	Standard
K	39	248.3	15.4	0.0757	0.030	39.5	mg/L	157	Standard
Ca	43	5.0	173.2	1.1600	2.977	256.7	mg/L	5	Standard
Fe	54	4530.5	1.7	0.6847	0.012	1.7	mg/L	717	Standard
Fe	57	90047.0	3.3	0.7676	0.021	2.8	mg/L	4072	Standard
Sc-1	45	456093.1	0.7				mg/L	476707	Standard
Cl	35	7.3	7.9				ug/L	29	Standard
Kr	83	45.0	4.6				ug/L	39	Standard
Br	81	1403.4	8.9				ug/L	1124	Standard
P	31	446.7	6.5				ug/L	495	Standard
S	34	6566.4	4.8				ug/L	6398	Standard
Sr	88	65.0	27.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.512	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065826

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	Cd	111	
	Cd	114	
>	In	115	97.119
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.471
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065827

Sample Date/Time: Thursday, July 26, 2012 14:45:02

Number of Replicates: 3

Autosampler Position: 317

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	58799.0	3.8	-30792.2831	968.330	3.1	ug/L	11975	Standard
|	Be	9	28.3	50.9	0.0216	0.008	35.3	ug/L	53	Standard
|	Al	27	2036703.3	8.6	125.7764	8.866	7.0	ug/L	10095	Standard
[>	Sc	45	443095.6	2.0				ug/L	476707	Standard
[	Ti	47	4068.9	5.3	2.9919	0.203	6.8	ug/L	149	Standard
|	V	51	8833.9	3.1	0.5207	0.011	2.1	ug/L	3747	Standard
|	Cr	52	12154.2	0.7	0.3216	0.020	6.2	ug/L	10265	Standard
|	Cr	53	1302.6	2.8	-0.7857	0.037	4.7	ug/L	3075	Standard
|	Mn	55	18100.5	2.3	1.0140	0.012	1.2	ug/L	1438	Standard
|	Co	59	1617.4	5.8	0.1416	0.006	4.3	ug/L	148	Standard
|	Ni	60	1188.4	2.9	0.3730	0.004	1.2	ug/L	176	Standard
|	Cu	65	594.0	4.2	0.1575	0.006	3.6	ug/L	186	Standard
|	Zn	66	3477.7	5.7	2.4593	0.107	4.4	ug/L	355	Standard
[>	Ge	72	391669.5	1.8				ug/L	437919	Standard
|	As	75	-94.1	8.1	0.1200	0.007	5.8	ug/L	-222	Standard
|	Se	82	35.8	6.3	0.1287	0.019	14.6	ug/L	29	Standard
[	Se-1	77	151.3	8.8	-0.2860	0.132	46.0	ug/L	201	Standard
[>	Ga	71	1013.4	5.7				mg/L	985	Standard
[	Rb	85	3017.0	1.3				ug/L	22	Standard
[	Y	89	334158.9	1.9				ug/L	370795	Standard
[>	Rh	103	490.0	8.9				ug/L	498	Standard
[	Mo	98	204.8	5.2	0.0367	0.002	6.0	ug/L	253	Standard
|	Ag	107	68.0	25.9	0.0033	0.002	60.8	ug/L	124	Standard
|	Cd	111	159.5	9.8	0.0269	0.003	12.4	mg/L	100	Standard
|	Cd	114	482.3	7.3	0.0207	0.003	12.1	ug/L	307	Standard
[>	In	115	1021812.8	1.0				ug/L	1045367	Standard
|	Sn	118	995.4	8.9	-0.0257	0.004	14.2	ug/L	1664	Standard
|	Sb	123	212.7	30.5	0.0052	0.006	114.4	ug/L	846	Standard
[	Ba	135	34327.2	1.9	6.6748	0.072	1.1	ug/L	61	Standard
[	Ce	140	40274.8	3.2				ug/L	30	Standard
[>	Tb	159	1331410.6	0.8				ug/L	1407506	Standard
[	Ho	165	579.0	8.9				ug/L	13	Standard
|	Tl	203	423.0	39.4	-0.0031	0.008	273.0	ug/L	713	Standard
|	Tl	205	990.0	38.2	-0.0074	0.009	117.3	ug/L	1648	Standard
|	Pb	206	2325.2	7.0	0.1231	0.010	8.0	ug/L	594	Standard
|	Pb	207	1879.1	4.7	0.1178	0.006	5.2	ug/L	497	Standard
|	Pb	208	8929.7	6.2	0.1215	0.009	7.0	ug/L	2293	Standard
	U	238	352.3	26.7	0.0228	0.005	22.4	ug/L	301	Standard
[>	Bi	209	724219.5	0.7				ug/L	757838	Standard

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Na	23	119858.9	0.4	7.5233	0.123	1.6	mg/L	592	Standard
Mg	24	275434.2	4.5	0.3969	0.010	2.6	mg/L	1565	Standard
K	39	256.7	4.9	0.0876	0.013	14.8	mg/L	157	Standard
Ca	43	6.7	43.3	1.8047	0.982	54.4	mg/L	5	Standard
Fe	54	1654.3	12.1	0.1753	0.031	18.0	mg/L	717	Standard
Fe	57	28343.2	5.0	0.2261	0.008	3.5	mg/L	4072	Standard
Sc-1	45	443095.6	2.0				mg/L	476707	Standard
Cl	35	9.7	29.9				ug/L	29	Standard
Kr	83	43.4	7.1				ug/L	39	Standard
Br	81	1585.9	6.6				ug/L	1124	Standard
P	31	367.5	3.0				ug/L	495	Standard
S	34	8117.2	0.9				ug/L	6398	Standard
Sr	88	110.0	7.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.439	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065827

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	Cd	111	
	Cd	114	
>	In	115	97.747
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.564
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065828

Sample Date/Time: Thursday, July 26, 2012 14:48:11

Number of Replicates: 3

Autosampler Position: 318

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

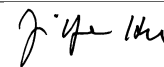
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13619.5	7.0	-1966.1335	117.654	6.0	ug/L	11975	Standard
|	Be	9	21.7	74.2	0.0185	0.009	48.1	ug/L	53	Standard
|	Al	27	1719004.8	5.0	110.5963	1.773	1.6	ug/L	10095	Standard
[>	Sc	45	425378.0	5.8				ug/L	476707	Standard
[	Ti	47	1949.8	4.3	1.4330	0.033	2.3	ug/L	149	Standard
|	V	51	6793.9	3.3	0.3443	0.011	3.3	ug/L	3747	Standard
|	Cr	52	10952.3	3.0	0.2095	0.019	9.2	ug/L	10265	Standard
|	Cr	53	1095.9	2.6	-0.9049	0.029	3.2	ug/L	3075	Standard
|	Mn	55	144081.4	2.2	9.2112	0.071	0.8	ug/L	1438	Standard
|	Co	59	925.4	2.4	0.0777	0.004	5.3	ug/L	148	Standard
|	Ni	60	1316.4	3.6	0.4255	0.018	4.2	ug/L	176	Standard
|	Cu	65	1303.1	4.5	0.4247	0.012	2.7	ug/L	186	Standard
|	Zn	66	10600.0	4.0	8.2998	0.274	3.3	ug/L	355	Standard
[>	Ge	72	384180.8	2.1				ug/L	437919	Standard
|	As	75	24.2	76.1	0.2161	0.015	7.0	ug/L	-222	Standard
|	Se	82	32.0	20.9	0.1022	0.064	62.6	ug/L	29	Standard
[	Se-1	77	152.0	4.6	-0.2441	0.076	31.0	ug/L	201	Standard
[>	Ga	71	965.0	17.4				mg/L	985	Standard
[	Rb	85	5951.2	5.9				ug/L	22	Standard
[	Y	89	326836.1	1.1				ug/L	370795	Standard
[>	Rh	103	485.0	16.1				ug/L	498	Standard
[	Mo	98	160.3	4.2	0.0272	0.002	5.9	ug/L	253	Standard
|	Ag	107	73.0	6.3	0.0039	0.001	15.9	ug/L	124	Standard
|	Cd	111	64.3	11.0	0.0045	0.002	36.6	mg/L	100	Standard
|	Cd	114	174.7	4.3	-0.0041	0.001	12.5	ug/L	307	Standard
[>	In	115	1019326.9	0.9				ug/L	1045367	Standard
|	Sn	118	905.7	3.4	-0.0297	0.001	4.3	ug/L	1664	Standard
|	Sb	123	249.4	10.1	0.0088	0.002	25.7	ug/L	846	Standard
[	Ba	135	27813.2	2.4	5.4203	0.103	1.9	ug/L	61	Standard
[	Ce	140	29846.7	1.9				ug/L	30	Standard
[>	Tb	159	1321872.0	1.6				ug/L	1407506	Standard
[	Ho	165	583.0	5.6				ug/L	13	Standard
|	Tl	203	276.0	8.5	-0.0105	0.001	7.3	ug/L	713	Standard
|	Tl	205	660.7	3.0	-0.0149	0.001	5.5	ug/L	1648	Standard
|	Pb	206	6148.9	1.1	0.3801	0.012	3.3	ug/L	594	Standard
|	Pb	207	5005.5	2.4	0.3708	0.004	1.2	ug/L	497	Standard
|	Pb	208	23632.9	1.4	0.3792	0.011	2.8	ug/L	2293	Standard
	U	238	323.3	5.6	0.0213	0.000	2.2	ug/L	301	Standard
[>	Bi	209	719168.6	3.2				ug/L	757838	Standard

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Na	23	35783.9	4.2	2.3154	0.209	9.0	mg/L	592	Standard
Mg	24	113028.5	2.2	0.1701	0.011	6.4	mg/L	1565	Standard
K	39	620.0	0.8	0.3887	0.034	8.7	mg/L	157	Standard
Ca	43	8.3	91.7	2.5426	2.771	109.0	mg/L	5	Standard
Fe	54	1105.2	10.8	0.0820	0.012	14.7	mg/L	717	Standard
Fe	57	19958.1	2.2	0.1573	0.007	4.5	mg/L	4072	Standard
Sc-1	45	425378.0	5.8				mg/L	476707	Standard
Cl	35	7.0	37.8				ug/L	29	Standard
Kr	83	44.3	12.8				ug/L	39	Standard
Br	81	1195.9	2.4				ug/L	1124	Standard
P	31	491.7	11.6				ug/L	495	Standard
S	34	6227.9	5.3				ug/L	6398	Standard
Sr	88	61.7	24.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.729	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065828

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	Cd	111	
	Cd	114	
>	In	115	97.509
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.897
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065828

Report Date/Time: Thursday, July 26, 2012 14:50:41

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 14:51:23

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12845.4	4.0	-525.2104	201.594	38.4	ug/L	11975	Standard
|	Be	9	106070.1	2.3	54.2928	0.326	0.6	ug/L	53	Standard
|	Al	27	863210.2	3.7	49.1517	1.620	3.3	ug/L	10095	Standard
[>	Sc	45	476202.3	1.7				ug/L	476707	Standard
|	Ti	47	153534.4	1.3	107.4734	1.038	1.0	ug/L	149	Standard
|	V	51	634997.7	1.1	54.7183	1.049	1.9	ug/L	3747	Standard
|	Cr	52	522588.6	1.2	54.3011	0.833	1.5	ug/L	10265	Standard
|	Cr	53	91130.8	2.0	53.2140	0.289	0.5	ug/L	3075	Standard
|	Mn	55	934900.1	1.7	55.5806	0.435	0.8	ug/L	1438	Standard
|	Co	59	615524.2	1.6	54.8203	0.998	1.8	ug/L	148	Standard
|	Ni	60	163223.2	1.2	52.1013	0.468	0.9	ug/L	176	Standard
|	Cu	65	152032.6	2.5	51.7388	0.234	0.5	ug/L	186	Standard
|	Zn	66	71620.2	2.0	53.1224	0.264	0.5	ug/L	355	Standard
[>	Ge	72	418299.0	2.0				ug/L	437919	Standard
|	As	75	67696.8	2.2	51.4026	0.102	0.2	ug/L	-222	Standard
|	Se	82	6812.1	2.7	53.6368	0.390	0.7	ug/L	29	Standard
[	Se-1	77	5098.9	1.2	51.7318	0.427	0.8	ug/L	201	Standard
[>	Ga	71	936.7	11.4				mg/L	985	Standard
|	Rb	85	1023.4	2.5				ug/L	22	Standard
|	Y	89	352547.2	2.1				ug/L	370795	Standard
[>	Rh	103	553.3	2.9				ug/L	498	Standard
|	Mo	98	460887.9	1.2	91.5405	1.288	1.4	ug/L	253	Standard
|	Ag	107	460373.5	0.4	49.9367	0.647	1.3	ug/L	124	Standard
|	Cd	111	247020.9	1.1	53.7239	0.446	0.8	mg/L	100	Standard
|	Cd	114	683280.4	1.2	50.8854	0.790	1.6	ug/L	307	Standard
[>	In	115	1109716.1	1.4				ug/L	1045367	Standard
|	Sn	118	1601303.1	1.0	68.2824	0.293	0.4	ug/L	1664	Standard
|	Sb	123	582098.9	1.5	51.0014	0.945	1.9	ug/L	846	Standard
|	Ba	135	268470.3	1.5	48.1057	0.123	0.3	ug/L	61	Standard
|	Ce	140	1310.4	29.4				ug/L	30	Standard
[>	Tb	159	1438883.0	0.5				ug/L	1407506	Standard
|	Ho	165	26.3	15.8				ug/L	13	Standard
|	Tl	203	1004540.4	0.7	50.2533	0.354	0.7	ug/L	713	Standard
|	Tl	205	2273411.6	0.4	51.8015	0.211	0.4	ug/L	1648	Standard
|	Pb	206	775098.7	0.6	50.1555	0.366	0.7	ug/L	594	Standard
|	Pb	207	661652.6	0.7	51.5971	0.294	0.6	ug/L	497	Standard
|	Pb	208	3054324.6	0.6	51.5453	0.352	0.7	ug/L	2293	Standard
	U	238	980812.3	0.3	53.2801	0.419	0.8	ug/L	301	Standard
[>	Bi	209	742484.9	0.7				ug/L	757838	Standard

Sample ID: QC Std 6

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Na	23	116383.6	0.2	6.7928	0.126	1.9	mg/L	592	Standard
Mg	24	3713675.6	0.5	4.9836	0.104	2.1	mg/L	1565	Standard
K	39	6369.7	1.2	4.4598	0.092	2.1	mg/L	157	Standard
Ca	43	13.3	43.3	3.8418	1.838	47.8	mg/L	5	Standard
Fe	54	29445.5	2.4	4.9455	0.041	0.8	mg/L	717	Standard
Fe	57	626201.6	0.3	5.3031	0.092	1.7	mg/L	4072	Standard
Sc-1	45	476202.3	1.7				mg/L	476707	Standard
Cl	35	6.3	18.2				ug/L	29	Standard
Kr	83	46.4	4.1				ug/L	39	Standard
Br	81	1400.1	7.5				ug/L	1124	Standard
P	31	479.2	4.7				ug/L	495	Standard
S	34	7271.7	1.8				ug/L	6398	Standard
Sr	88	26.7	28.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.303		
Sc	45			
Ti	47	107.473		
V	51	109.437		
Cr	52	108.602		
Cr	53			
Mn	55	111.161		
Co	59	109.641		
Ni	60	104.203		
Cu	65	103.478		
Zn	66	106.245		
Ge	72		95.520	
As	75	102.805		
Se	82	107.274		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	91.541		
Ag	107	99.873		

Sample ID: QC Std 6

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	Cd	111	107.448	
	Cd	114		
>	In	115		106.156
	Sn	118	136.565	
	Sb	123	102.003	
	Ba	135	96.211	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	100.507	
|	Tl	205		
|	Pb	206	100.311	
|	Pb	207	103.194	
|	Pb	208	103.091	
|	U	238	106.560	
>	Bi	209		97.974
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

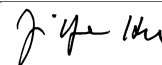
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 14:53:53

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 14:54:33

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12255.0	4.5	-283.0633	278.894	98.5	ug/L	11975	Standard
|	Be	9	58.3	100.4	0.0361	0.030	82.0	ug/L	53	Standard
|	Al	27	12220.0	10.1	-0.0777	0.065	83.8	ug/L	10095	Standard
[>	Sc	45	469080.5	1.9				ug/L	476707	Standard
|	Ti	47	136.3	63.5	0.0424	0.060	140.9	ug/L	149	Standard
|	V	51	3422.0	0.8	0.0014	0.003	245.1	ug/L	3747	Standard
|	Cr	52	10417.9	1.4	0.0547	0.006	11.0	ug/L	10265	Standard
|	Cr	53	913.4	10.3	-1.0714	0.053	4.9	ug/L	3075	Standard
|	Mn	55	1688.4	3.9	-0.0369	0.005	13.7	ug/L	1438	Standard
|	Co	59	153.3	26.4	0.0016	0.004	233.9	ug/L	148	Standard
|	Ni	60	228.3	57.5	0.0410	0.043	103.7	ug/L	176	Standard
|	Cu	65	341.0	69.0	0.0585	0.082	139.9	ug/L	186	Standard
|	Zn	66	325.0	39.1	-0.0664	0.098	146.8	ug/L	355	Standard
[>	Ge	72	416511.8	1.1				ug/L	437919	Standard
|	As	75	-212.6	44.4	0.0350	0.071	203.2	ug/L	-222	Standard
|	Se	82	33.2	25.6	0.0899	0.070	77.9	ug/L	29	Standard
[	Se-1	77	149.3	7.2	-0.4069	0.131	32.1	ug/L	201	Standard
[>	Ga	71	856.7	4.7				mg/L	985	Standard
[	Rb	85	40.0	25.0				ug/L	22	Standard
[	Y	89	357309.7	1.5				ug/L	370795	Standard
[>	Rh	103	508.3	3.0				ug/L	498	Standard
[	Mo	98	523.8	23.2	0.0983	0.025	25.3	ug/L	253	Standard
|	Ag	107	254.0	50.9	0.0233	0.014	61.6	ug/L	124	Standard
|	Cd	111	134.1	50.0	0.0189	0.015	79.0	mg/L	100	Standard
|	Cd	114	385.4	37.5	0.0109	0.011	101.2	ug/L	307	Standard
[>	In	115	1092406.9	0.9				ug/L	1045367	Standard
|	Sn	118	1762.8	9.8	0.0046	0.007	155.7	ug/L	1664	Standard
|	Sb	123	3057.5	2.4	0.2572	0.009	3.3	ug/L	846	Standard
[	Ba	135	138.7	49.7	0.0194	0.013	65.2	ug/L	61	Standard
[	Ce	140	73.3	68.1				ug/L	30	Standard
[>	Tb	159	1401680.0	0.7				ug/L	1407506	Standard
[	Ho	165	17.3	26.6				ug/L	13	Standard
|	Tl	203	240.0	47.6	-0.0129	0.006	44.2	ug/L	713	Standard
|	Tl	205	536.0	39.2	-0.0185	0.005	25.9	ug/L	1648	Standard
|	Pb	206	617.3	12.8	0.0082	0.005	63.7	ug/L	594	Standard
|	Pb	207	466.3	7.3	0.0034	0.003	82.2	ug/L	497	Standard
|	Pb	208	2307.7	10.4	0.0054	0.004	76.9	ug/L	2293	Standard
	U	238	312.7	106.7	0.0199	0.018	89.1	ug/L	301	Standard
[>	Bi	209	753021.7	0.6				ug/L	757838	Standard

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Na	23	916.7	25.7	0.0093	0.013	139.2	mg/L	592	Standard
Mg	24	1803.5	111.4	0.0023	0.003	113.9	mg/L	1565	Standard
K	39	143.3	7.3	-0.0060	0.008	135.7	mg/L	157	Standard
Ca	43	3.3	86.6	0.5554	0.965	173.8	mg/L	5	Standard
Fe	54	722.3	7.4	-0.0045	0.008	171.0	mg/L	717	Standard
Fe	57	4630.7	8.1	0.0067	0.002	36.7	mg/L	4072	Standard
Sc-1	45	469080.5	1.9				mg/L	476707	Standard
Cl	35	8.3	25.0				ug/L	29	Standard
Kr	83	44.6	3.7				ug/L	39	Standard
Br	81	1374.2	4.9				ug/L	1124	Standard
P	31	453.3	8.8				ug/L	495	Standard
S	34	7003.3	4.2				ug/L	6398	Standard
Sr	88	43.3	17.6				ug/L	37	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.111	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	104.500
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.365
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207065829

Sample Date/Time: Thursday, July 26, 2012 14:57:44

Number of Replicates: 3

Autosampler Position: 319

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

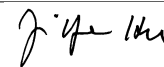
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13959.8	4.3	-1922.6800	294.246	15.3	ug/L	11975	Standard
|	Be	9	40.0	33.1	0.0283	0.007	25.3	ug/L	53	Standard
|	Al	27	2076434.3	8.4	129.7348	10.144	7.8	ug/L	10095	Standard
[>	Sc	45	438196.7	1.1				ug/L	476707	Standard
|	Ti	47	2719.9	12.5	1.9887	0.259	13.0	ug/L	149	Standard
|	V	51	7496.1	5.7	0.3995	0.036	8.9	ug/L	3747	Standard
|	Cr	52	11565.8	4.3	0.2594	0.049	18.8	ug/L	10265	Standard
|	Cr	53	1210.9	0.3	-0.8421	0.013	1.5	ug/L	3075	Standard
|	Mn	55	1200381.5	3.8	76.5497	3.273	4.3	ug/L	1438	Standard
|	Co	59	6060.2	2.7	0.5666	0.022	3.9	ug/L	148	Standard
|	Ni	60	1829.1	4.8	0.5938	0.029	4.8	ug/L	176	Standard
|	Cu	65	1332.1	4.5	0.4279	0.022	5.1	ug/L	186	Standard
|	Zn	66	9967.6	3.7	7.6624	0.368	4.8	ug/L	355	Standard
[>	Ge	72	390268.6	1.4				ug/L	437919	Standard
|	As	75	101.3	11.0	0.2782	0.009	3.2	ug/L	-222	Standard
|	Se	82	35.3	4.5	0.1252	0.016	12.9	ug/L	29	Standard
[	Se-1	77	143.7	2.6	-0.3651	0.061	16.8	ug/L	201	Standard
[>	Ga	71	1093.4	8.8				mg/L	985	Standard
[	Rb	85	7325.1	0.6				ug/L	22	Standard
[	Y	89	330117.1	2.4				ug/L	370795	Standard
[>	Rh	103	518.3	15.6				ug/L	498	Standard
[	Mo	98	251.2	25.4	0.0472	0.014	30.6	ug/L	253	Standard
|	Ag	107	92.3	14.8	0.0063	0.002	27.8	ug/L	124	Standard
|	Cd	111	90.7	22.5	0.0109	0.005	46.9	mg/L	100	Standard
|	Cd	114	281.5	13.5	0.0047	0.003	70.7	ug/L	307	Standard
[>	In	115	1014431.1	1.0				ug/L	1045367	Standard
|	Sn	118	1075.7	13.7	-0.0215	0.007	34.5	ug/L	1664	Standard
|	Sb	123	697.7	20.8	0.0520	0.015	28.1	ug/L	846	Standard
[	Ba	135	46771.4	2.6	9.1656	0.330	3.6	ug/L	61	Standard
[	Ce	140	55092.0	2.5				ug/L	30	Standard
[>	Tb	159	1335273.5	0.9				ug/L	1407506	Standard
[	Ho	165	842.0	4.3				ug/L	13	Standard
|	Tl	203	273.7	21.4	-0.0107	0.003	27.8	ug/L	713	Standard
|	Tl	205	660.3	14.3	-0.0150	0.002	14.4	ug/L	1648	Standard
|	Pb	206	3811.5	3.7	0.2224	0.008	3.5	ug/L	594	Standard
|	Pb	207	3091.6	1.6	0.2154	0.002	0.7	ug/L	497	Standard
|	Pb	208	14647.1	3.2	0.2211	0.006	2.8	ug/L	2293	Standard
	U	238	401.3	7.4	0.0256	0.002	6.1	ug/L	301	Standard
[>	Bi	209	722542.3	1.3				ug/L	757838	Standard

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Na	23	37224.0	1.0	2.3311	0.010	0.4	mg/L	592	Standard
Mg	24	148385.0	2.4	0.2162	0.003	1.4	mg/L	1565	Standard
K	39	651.7	12.8	0.3981	0.070	17.7	mg/L	157	Standard
Ca	43	5.0	0.0	1.2414	0.020	1.6	mg/L	5	Standard
Fe	54	1783.7	8.3	0.2032	0.024	12.0	mg/L	717	Standard
Fe	57	33789.3	3.8	0.2795	0.010	3.4	mg/L	4072	Standard
Sc-1	45	438196.7	1.1				mg/L	476707	Standard
Cl	35	4.0	43.3				ug/L	29	Standard
Kr	83	42.3	1.6				ug/L	39	Standard
Br	81	1240.1	5.9				ug/L	1124	Standard
P	31	492.5	10.2				ug/L	495	Standard
S	34	6594.8	1.0				ug/L	6398	Standard
Sr	88	26.7	71.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.119	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	97.041
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.343
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065829

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Method 6020 - Summary Report

Sample ID: L1207065830

Sample Date/Time: Thursday, July 26, 2012 15:00:54

Number of Replicates: 3

Autosampler Position: 320

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	169643.1	5.7	-101327.4892	6633.566	6.5	ug/L	11975	Standard
|	Be	9	58.3	24.7	0.0379	0.008	21.5	ug/L	53	Standard
|	Al	27	629120.0	4.0	37.9376	1.783	4.7	ug/L	10095	Standard
[>	Sc	45	447640.0	0.9				ug/L	476707	Standard
[	Ti	47	3061.3	4.5	2.3170	0.158	6.8	ug/L	149	Standard
|	V	51	8049.2	2.0	0.4743	0.033	7.0	ug/L	3747	Standard
|	Cr	52	13436.6	1.8	0.5193	0.058	11.1	ug/L	10265	Standard
|	Cr	53	2498.5	0.9	0.0383	0.055	144.3	ug/L	3075	Standard
|	Mn	55	694521.3	3.6	45.6227	2.783	6.1	ug/L	1438	Standard
|	Co	59	16386.2	4.6	1.6017	0.114	7.1	ug/L	148	Standard
|	Ni	60	7021.0	2.5	2.4462	0.120	4.9	ug/L	176	Standard
|	Cu	65	1417.4	4.2	0.4754	0.036	7.6	ug/L	186	Standard
|	Zn	66	13457.6	3.3	10.7876	0.596	5.5	ug/L	355	Standard
[>	Ge	72	378721.6	2.5				ug/L	437919	Standard
|	As	75	2381.5	4.5	2.1876	0.129	5.9	ug/L	-222	Standard
|	Se	82	110.8	14.9	0.7941	0.150	18.9	ug/L	29	Standard
[	Se-1	77	194.3	13.2	0.2783	0.346	124.2	ug/L	201	Standard
[>	Ga	71	961.7	3.0				mg/L	985	Standard
[	Rb	85	3797.1	4.7				ug/L	22	Standard
[	Y	89	323528.3	1.8				ug/L	370795	Standard
[>	Rh	103	613.3	6.9				ug/L	498	Standard
[	Mo	98	319.2	9.4	0.0621	0.007	11.3	ug/L	253	Standard
|	Ag	107	79.7	6.2	0.0048	0.001	11.0	ug/L	124	Standard
|	Cd	111	502.9	5.5	0.1092	0.008	7.3	mg/L	100	Standard
|	Cd	114	1388.8	3.0	0.0951	0.003	3.2	ug/L	307	Standard
[>	In	115	1012231.9	1.3				ug/L	1045367	Standard
|	Sn	118	1922.1	6.3	0.0182	0.006	34.1	ug/L	1664	Standard
|	Sb	123	388.1	14.0	0.0223	0.005	24.3	ug/L	846	Standard
[	Ba	135	74632.1	3.1	14.6595	0.544	3.7	ug/L	61	Standard
[	Ce	140	38950.4	3.9				ug/L	30	Standard
[>	Tb	159	1342670.9	0.9				ug/L	1407506	Standard
[	Ho	165	742.0	0.7				ug/L	13	Standard
|	Tl	203	781.7	4.8	0.0170	0.002	9.7	ug/L	713	Standard
|	Tl	205	1776.1	2.3	0.0128	0.001	4.3	ug/L	1648	Standard
|	Pb	206	1527.4	4.7	0.0745	0.004	5.6	ug/L	594	Standard
|	Pb	207	1298.7	4.7	0.0757	0.004	5.9	ug/L	497	Standard
|	Pb	208	5985.8	4.8	0.0750	0.004	5.9	ug/L	2293	Standard
	U	238	896.7	5.1	0.0553	0.002	4.0	ug/L	301	Standard
[>	Bi	209	694827.2	1.0				ug/L	757838	Standard

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Na	23	155387.9	1.8	9.6657	0.211	2.2	mg/L	592	Standard
Mg	24	3802610.6	4.0	5.4282	0.240	4.4	mg/L	1565	Standard
K	39	556.7	10.4	0.3145	0.046	14.6	mg/L	157	Standard
Ca	43	15.0	33.3	4.7341	1.798	38.0	mg/L	5	Standard
Fe	54	8377.0	3.2	1.4059	0.061	4.3	mg/L	717	Standard
Fe	57	176994.0	6.5	1.5713	0.112	7.1	mg/L	4072	Standard
Sc-1	45	447640.0	0.9				mg/L	476707	Standard
Cl	35	62.3	3.7				ug/L	29	Standard
Kr	83	47.8	2.0				ug/L	39	Standard
Br	81	6485.6	5.4				ug/L	1124	Standard
P	31	702.5	9.4				ug/L	495	Standard
S	34	28222.1	2.6				ug/L	6398	Standard
Sr	88	865.0	7.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.482	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065830

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	Cd	111		
	Cd	114		
>	In	115	96.830	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	91.686	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065830

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Method 6020 - Summary Report

Sample ID: L1207065832

Sample Date/Time: Thursday, July 26, 2012 15:04:04

Number of Replicates: 3

Autosampler Position: 321

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11879.7	1.1	-418.2779	165.730	39.6	ug/L	11975	Standard
|	Be	9	3.3	173.2	0.0079	0.003	39.3	ug/L	53	Standard
|	Al	27	44801.3	5.9	1.9685	0.171	8.7	ug/L	10095	Standard
[>	Sc	45	446751.2	1.1				ug/L	476707	Standard
|	Ti	47	89.3	17.1	0.0125	0.012	97.1	ug/L	149	Standard
|	V	51	3763.4	0.5	0.0450	0.004	8.2	ug/L	3747	Standard
|	Cr	52	12964.2	1.5	0.3843	0.010	2.5	ug/L	10265	Standard
|	Cr	53	1283.4	2.6	-0.8146	0.018	2.2	ug/L	3075	Standard
|	Mn	55	5061.2	1.5	0.1778	0.005	2.7	ug/L	1438	Standard
|	Co	59	133.0	9.9	0.0003	0.001	444.6	ug/L	148	Standard
|	Ni	60	810.0	2.9	0.2386	0.008	3.5	ug/L	176	Standard
|	Cu	65	385.0	0.5	0.0788	0.002	3.0	ug/L	186	Standard
|	Zn	66	3150.7	1.0	2.1507	0.009	0.4	ug/L	355	Standard
[>	Ge	72	399515.0	1.4				ug/L	437919	Standard
|	As	75	-279.4	11.8	-0.0250	0.023	93.0	ug/L	-222	Standard
|	Se	82	22.9	19.4	0.0161	0.039	243.1	ug/L	29	Standard
[	Se-1	77	142.7	10.3	-0.4125	0.183	44.3	ug/L	201	Standard
[>	Ga	71	900.0	4.5				mg/L	985	Standard
|	Rb	85	85.0	20.4				ug/L	22	Standard
|	Y	89	338594.0	1.8				ug/L	370795	Standard
[>	Rh	103	533.3	10.7				ug/L	498	Standard
|	Mo	98	52.3	4.1	0.0033	0.000	11.2	ug/L	253	Standard
|	Ag	107	59.3	8.5	0.0019	0.001	26.1	ug/L	124	Standard
|	Cd	111	68.2	4.5	0.0046	0.001	11.9	mg/L	100	Standard
|	Cd	114	241.9	2.2	0.0003	0.000	141.1	ug/L	307	Standard
[>	In	115	1074662.0	1.0				ug/L	1045367	Standard
|	Sn	118	9921.6	0.9	0.3656	0.006	1.5	ug/L	1664	Standard
|	Sb	123	302.6	18.2	0.0124	0.005	38.6	ug/L	846	Standard
|	Ba	135	331.0	4.2	0.0554	0.002	4.4	ug/L	61	Standard
|	Ce	140	269.3	3.4				ug/L	30	Standard
[>	Tb	159	1359954.8	0.5				ug/L	1407506	Standard
|	Ho	165	14.7	25.8				ug/L	13	Standard
|	Tl	203	225.3	20.1	-0.0134	0.002	17.4	ug/L	713	Standard
|	Tl	205	551.0	22.6	-0.0179	0.003	16.3	ug/L	1648	Standard
|	Pb	206	589.3	3.3	0.0072	0.001	19.0	ug/L	594	Standard
|	Pb	207	498.0	1.6	0.0066	0.000	6.9	ug/L	497	Standard
|	Pb	208	2326.1	0.4	0.0065	0.000	5.2	ug/L	2293	Standard
	U	238	11.3	22.2	0.0038	0.000	3.5	ug/L	301	Standard
[>	Bi	209	737616.2	0.5				ug/L	757838	Standard

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Na	23	1618.4	13.9	0.0560	0.013	24.0	mg/L	592	Standard
Mg	24	2563.6	3.7	0.0036	0.000	4.8	mg/L	1565	Standard
K	39	163.3	10.8	0.0145	0.014	97.4	mg/L	157	Standard
Ca	43	3.3	173.2	0.6059	2.018	333.0	mg/L	5	Standard
Fe	54	603.0	7.1	-0.0201	0.008	39.6	mg/L	717	Standard
Fe	57	4420.6	1.6	0.0068	0.001	10.2	mg/L	4072	Standard
Sc-1	45	446751.2	1.1				mg/L	476707	Standard
Cl	35	8.0	45.1				ug/L	29	Standard
Kr	83	47.8	4.9				ug/L	39	Standard
Br	81	1535.9	2.1				ug/L	1124	Standard
P	31	344.2	8.2				ug/L	495	Standard
S	34	7079.2	4.6				ug/L	6398	Standard
Sr	88	31.7	24.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.230	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.802
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.332
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065833

Sample Date/Time: Thursday, July 26, 2012 15:07:14

Number of Replicates: 3

Autosampler Position: 322

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	95022.1	1.9	-54390.6627	1210.653	2.2	ug/L	11975	Standard
|	Be	9	45.0	29.4	0.0310	0.007	23.7	ug/L	53	Standard
|	Al	27	4666494.9	2.8	290.2596	7.397	2.5	ug/L	10095	Standard
[>	Sc	45	441752.3	0.3				ug/L	476707	Standard
[	Ti	47	7699.3	3.7	5.7160	0.276	4.8	ug/L	149	Standard
|	V	51	13981.0	4.0	0.9995	0.064	6.4	ug/L	3747	Standard
|	Cr	52	16738.6	3.0	0.8435	0.078	9.3	ug/L	10265	Standard
|	Cr	53	2357.7	2.8	-0.1052	0.059	55.8	ug/L	3075	Standard
|	Mn	55	1503342.5	3.4	95.7216	4.074	4.3	ug/L	1438	Standard
|	Co	59	13767.3	2.4	1.2998	0.045	3.5	ug/L	148	Standard
|	Ni	60	3667.1	4.6	1.2209	0.071	5.8	ug/L	176	Standard
|	Cu	65	1759.1	7.4	0.5829	0.054	9.3	ug/L	186	Standard
|	Zn	66	12673.6	2.2	9.8053	0.305	3.1	ug/L	355	Standard
[>	Ge	72	391052.5	1.1				ug/L	437919	Standard
|	As	75	56.5	36.6	0.2418	0.016	6.8	ug/L	-222	Standard
|	Se	82	49.1	6.6	0.2413	0.023	9.5	ug/L	29	Standard
[	Se-1	77	166.7	3.3	-0.1091	0.082	75.2	ug/L	201	Standard
[>	Ga	71	1488.4	2.2				mg/L	985	Standard
[	Rb	85	18431.2	3.2				ug/L	22	Standard
[	Y	89	334964.1	1.0				ug/L	370795	Standard
[>	Rh	103	558.3	4.9				ug/L	498	Standard
[	Mo	98	239.6	10.8	0.0436	0.005	12.0	ug/L	253	Standard
|	Ag	107	74.7	14.4	0.0040	0.001	32.6	ug/L	124	Standard
|	Cd	111	209.8	2.0	0.0382	0.001	3.0	mg/L	100	Standard
|	Cd	114	625.7	6.7	0.0317	0.003	9.6	ug/L	307	Standard
[>	In	115	1034725.3	0.6				ug/L	1045367	Standard
|	Sn	118	2348.2	5.0	0.0357	0.005	13.4	ug/L	1664	Standard
|	Sb	123	877.6	7.8	0.0675	0.006	8.9	ug/L	846	Standard
[	Ba	135	84382.5	3.0	16.2110	0.414	2.6	ug/L	61	Standard
[	Ce	140	90785.0	2.8				ug/L	30	Standard
[>	Tb	159	1365413.3	0.9				ug/L	1407506	Standard
[	Ho	165	1258.1	6.9				ug/L	13	Standard
|	Tl	203	636.3	9.1	0.0090	0.003	34.9	ug/L	713	Standard
|	Tl	205	1468.4	6.5	0.0049	0.002	47.9	ug/L	1648	Standard
|	Pb	206	5213.9	2.4	0.3263	0.009	2.8	ug/L	594	Standard
|	Pb	207	4220.3	2.4	0.3162	0.009	2.8	ug/L	497	Standard
|	Pb	208	19947.5	2.4	0.3237	0.009	2.9	ug/L	2293	Standard
	U	238	2626.9	2.0	0.1543	0.003	2.2	ug/L	301	Standard
[>	Bi	209	701146.9	0.2				ug/L	757838	Standard

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Na	23	149320.5	0.4	9.4103	0.043	0.5	mg/L	592	Standard
Mg	24	1406028.3	1.4	2.0334	0.029	1.4	mg/L	1565	Standard
K	39	921.7	14.4	0.6023	0.103	17.0	mg/L	157	Standard
Ca	43	15.0	33.3	4.8002	1.797	37.4	mg/L	5	Standard
Fe	54	2806.0	4.5	0.3906	0.024	6.1	mg/L	717	Standard
Fe	57	59001.4	4.1	0.5086	0.021	4.1	mg/L	4072	Standard
Sc-1	45	441752.3	0.3				mg/L	476707	Standard
Cl	35	17.7	14.2				ug/L	29	Standard
Kr	83	43.3	14.4				ug/L	39	Standard
Br	81	2700.2	6.2				ug/L	1124	Standard
P	31	335.0	18.2				ug/L	495	Standard
S	34	23936.4	1.5				ug/L	6398	Standard
Sr	88	753.4	15.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.298	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065833

Report Date/Time: Thursday, July 26, 2012 15:09:45

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	Cd	111		
	Cd	114		
>	In	115	98.982	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.519	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065833

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Method 6020 - Summary Report

Sample ID: L1207065834

Sample Date/Time: Thursday, July 26, 2012 15:10:24

Number of Replicates: 3

Autosampler Position: 323

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	54171.8	4.7	-27825.6260	1791.859	6.4	ug/L	11975	Standard
|	Be	9	30.0	33.3	0.0227	0.006	24.7	ug/L	53	Standard
|	Al	27	1034417.7	3.8	63.5562	2.528	4.0	ug/L	10095	Standard
[>	Sc	45	442929.3	0.5				ug/L	476707	Standard
[	Ti	47	2596.9	3.4	1.8848	0.053	2.8	ug/L	149	Standard
|	V	51	6897.8	4.0	0.3404	0.024	6.9	ug/L	3747	Standard
|	Cr	52	13028.9	2.2	0.4173	0.028	6.7	ug/L	10265	Standard
|	Cr	53	1324.2	9.0	-0.7741	0.072	9.3	ug/L	3075	Standard
|	Mn	55	263363.7	2.9	16.5886	0.382	2.3	ug/L	1438	Standard
|	Co	59	5698.4	5.4	0.5288	0.027	5.1	ug/L	148	Standard
|	Ni	60	4084.6	6.0	1.3578	0.077	5.7	ug/L	176	Standard
|	Cu	65	521.0	4.7	0.1306	0.009	6.7	ug/L	186	Standard
|	Zn	66	3997.9	3.1	2.8681	0.074	2.6	ug/L	355	Standard
[>	Ge	72	392471.0	0.7				ug/L	437919	Standard
|	As	75	4.0	222.9	0.1993	0.007	3.6	ug/L	-222	Standard
|	Se	82	33.8	14.5	0.1111	0.044	39.2	ug/L	29	Standard
[	Se-1	77	156.0	8.0	-0.2355	0.152	64.4	ug/L	201	Standard
[>	Ga	71	930.0	6.1				mg/L	985	Standard
[	Rb	85	3007.0	3.0				ug/L	22	Standard
[	Y	89	336974.1	2.5				ug/L	370795	Standard
[>	Rh	103	521.7	4.3				ug/L	498	Standard
[	Mo	98	711.5	6.2	0.1408	0.009	6.5	ug/L	253	Standard
|	Ag	107	81.7	25.1	0.0046	0.002	51.4	ug/L	124	Standard
|	Cd	111	119.3	14.0	0.0165	0.004	24.1	mg/L	100	Standard
|	Cd	114	313.0	22.5	0.0062	0.006	91.5	ug/L	307	Standard
[>	In	115	1057791.5	0.6				ug/L	1045367	Standard
|	Sn	118	1417.4	21.7	-0.0083	0.014	165.0	ug/L	1664	Standard
|	Sb	123	305.0	62.5	0.0130	0.017	133.8	ug/L	846	Standard
[	Ba	135	27988.8	3.1	5.2560	0.149	2.8	ug/L	61	Standard
[	Ce	140	31301.0	3.0				ug/L	30	Standard
[>	Tb	159	1365626.8	0.7				ug/L	1407506	Standard
[	Ho	165	430.0	5.5				ug/L	13	Standard
|	Tl	203	551.0	42.0	0.0035	0.012	345.6	ug/L	713	Standard
|	Tl	205	1239.1	39.0	-0.0016	0.012	739.0	ug/L	1648	Standard
|	Pb	206	1909.1	8.1	0.0952	0.011	12.1	ug/L	594	Standard
|	Pb	207	1524.1	12.8	0.0891	0.017	18.8	ug/L	497	Standard
|	Pb	208	7210.3	9.9	0.0915	0.014	14.8	ug/L	2293	Standard
	U	238	267.7	26.4	0.0181	0.004	22.5	ug/L	301	Standard
[>	Bi	209	726391.6	0.9				ug/L	757838	Standard

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Na	23	132328.7	0.4	8.3121	0.058	0.7	mg/L	592	Standard
Mg	24	385795.1	2.4	0.5564	0.016	2.8	mg/L	1565	Standard
K	39	275.0	8.3	0.1016	0.017	16.5	mg/L	157	Standard
Ca	43	10.0	50.0	3.0069	1.788	59.5	mg/L	5	Standard
Fe	54	986.0	7.5	0.0519	0.015	28.0	mg/L	717	Standard
Fe	57	18778.3	1.8	0.1387	0.004	2.6	mg/L	4072	Standard
Sc-1	45	442929.3	0.5				mg/L	476707	Standard
Cl	35	10.7	47.2				ug/L	29	Standard
Kr	83	47.8	8.3				ug/L	39	Standard
Br	81	2091.8	7.1				ug/L	1124	Standard
P	31	275.0	5.7				ug/L	495	Standard
S	34	10785.5	2.2				ug/L	6398	Standard
Sr	88	135.0	29.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.622	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	101.189
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.851
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065834

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Method 6020 - Summary Report

Sample ID: L1207065835

Sample Date/Time: Thursday, July 26, 2012 15:13:32

Number of Replicates: 3

Autosampler Position: 324

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	46277.2	0.9	-22469.4082	329.305	1.5	ug/L	11975	Standard
|	Be	9	41.7	18.3	0.0289	0.004	14.7	ug/L	53	Standard
|	Al	27	837194.6	2.2	50.8540	1.257	2.5	ug/L	10095	Standard
[>	Sc	45	446653.2	0.9				ug/L	476707	Standard
[	Ti	47	1897.1	8.3	1.3545	0.124	9.2	ug/L	149	Standard
|	V	51	5945.0	2.7	0.2492	0.019	7.7	ug/L	3747	Standard
|	Cr	52	11404.3	1.7	0.2260	0.013	5.7	ug/L	10265	Standard
|	Cr	53	1390.9	0.6	-0.7365	0.014	1.9	ug/L	3075	Standard
|	Mn	55	320298.8	1.8	20.0813	0.320	1.6	ug/L	1438	Standard
|	Co	59	7731.0	0.6	0.7173	0.003	0.4	ug/L	148	Standard
|	Ni	60	1994.1	4.1	0.6422	0.025	4.0	ug/L	176	Standard
|	Cu	65	463.3	3.2	0.1086	0.006	5.2	ug/L	186	Standard
|	Zn	66	4281.3	5.1	3.0726	0.163	5.3	ug/L	355	Standard
[>	Ge	72	394900.3	1.0				ug/L	437919	Standard
|	As	75	416.9	7.4	0.5302	0.025	4.6	ug/L	-222	Standard
|	Se	82	41.2	17.9	0.1712	0.058	33.9	ug/L	29	Standard
[	Se-1	77	146.0	9.9	-0.3585	0.162	45.1	ug/L	201	Standard
[>	Ga	71	955.0	12.5				mg/L	985	Standard
[	Rb	85	2496.9	5.5				ug/L	22	Standard
[	Y	89	327985.9	1.6				ug/L	370795	Standard
[>	Rh	103	488.3	8.2				ug/L	498	Standard
[	Mo	98	213.8	4.5	0.0372	0.002	5.4	ug/L	253	Standard
|	Ag	107	68.0	14.9	0.0030	0.001	38.5	ug/L	124	Standard
|	Cd	111	131.5	9.0	0.0193	0.003	14.4	mg/L	100	Standard
|	Cd	114	349.1	6.6	0.0090	0.002	19.1	ug/L	307	Standard
[>	In	115	1056200.2	0.4				ug/L	1045367	Standard
|	Sn	118	1190.4	4.8	-0.0184	0.002	13.5	ug/L	1664	Standard
|	Sb	123	166.0	14.7	0.0003	0.002	770.9	ug/L	846	Standard
[	Ba	135	45745.3	1.8	8.6072	0.122	1.4	ug/L	61	Standard
[	Ce	140	25015.0	0.7				ug/L	30	Standard
[>	Tb	159	1360574.2	0.6				ug/L	1407506	Standard
[	Ho	165	396.0	2.3				ug/L	13	Standard
|	Tl	203	596.3	7.2	0.0056	0.002	40.3	ug/L	713	Standard
|	Tl	205	1390.7	4.4	0.0017	0.001	86.2	ug/L	1648	Standard
|	Pb	206	1370.1	2.8	0.0590	0.002	4.2	ug/L	594	Standard
|	Pb	207	1102.0	3.1	0.0549	0.003	5.0	ug/L	497	Standard
|	Pb	208	5164.3	0.5	0.0556	0.000	0.6	ug/L	2293	Standard
	U	238	175.7	3.8	0.0129	0.000	2.9	ug/L	301	Standard
[>	Bi	209	730366.4	0.2				ug/L	757838	Standard

Sample ID: L1207065835

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Na	23	133571.2	1.3	8.3199	0.030	0.4	mg/L	592	Standard
Mg	24	144221.5	1.3	0.2062	0.003	1.4	mg/L	1565	Standard
K	39	306.7	19.1	0.1241	0.045	36.3	mg/L	157	Standard
Ca	43	1.7	173.2	0.0306	1.021	3334.3	mg/L	5	Standard
Fe	54	731.6	9.9	0.0037	0.015	393.2	mg/L	717	Standard
Fe	57	14496.9	3.3	0.0984	0.003	3.2	mg/L	4072	Standard
Sc-1	45	446653.2	0.9				mg/L	476707	Standard
Cl	35	17.0	20.4				ug/L	29	Standard
Kr	83	44.8	10.8				ug/L	39	Standard
Br	81	2483.5	3.4				ug/L	1124	Standard
P	31	270.0	2.8				ug/L	495	Standard
S	34	11476.8	2.3				ug/L	6398	Standard
Sr	88	68.3	23.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.176	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065835

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	Cd	111		
	Cd	114		
>	In	115	101.036	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	96.375	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065835

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Method 6020 - Summary Report

Sample ID: L1207065836

Sample Date/Time: Thursday, July 26, 2012 15:16:43

Number of Replicates: 3

Autosampler Position: 325

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

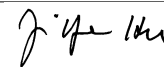
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	76745.7	3.1	-42002.6897	2195.153	5.2	ug/L	11975	Standard
|	Be	9	16.7	17.3	0.0152	0.002	11.1	ug/L	53	Standard
|	Al	27	77635.2	2.8	3.9944	0.196	4.9	ug/L	10095	Standard
[>	Sc	45	446794.3	1.3				ug/L	476707	Standard
[	Ti	47	521.7	13.2	0.3390	0.050	14.8	ug/L	149	Standard
|	V	51	5068.4	2.7	0.1751	0.015	8.6	ug/L	3747	Standard
|	Cr	52	10338.5	2.0	0.1226	0.030	24.2	ug/L	10265	Standard
|	Cr	53	1025.9	4.8	-0.9603	0.031	3.2	ug/L	3075	Standard
|	Mn	55	111203.3	1.5	6.9786	0.117	1.7	ug/L	1438	Standard
|	Co	59	1289.1	2.5	0.1112	0.004	3.2	ug/L	148	Standard
|	Ni	60	774.0	4.1	0.2332	0.012	5.3	ug/L	176	Standard
|	Cu	65	349.0	5.7	0.0691	0.007	10.3	ug/L	186	Standard
|	Zn	66	3322.7	2.3	2.3516	0.066	2.8	ug/L	355	Standard
[>	Ge	72	389540.3	0.5				ug/L	437919	Standard
|	As	75	449.5	4.7	0.5613	0.018	3.1	ug/L	-222	Standard
|	Se	82	36.4	15.0	0.1353	0.045	33.2	ug/L	29	Standard
[	Se-1	77	162.0	4.9	-0.1549	0.097	62.6	ug/L	201	Standard
[>	Ga	71	790.0	5.8				mg/L	985	Standard
[	Rb	85	1025.0	6.2				ug/L	22	Standard
[	Y	89	332252.2	1.5				ug/L	370795	Standard
[>	Rh	103	456.7	7.3				ug/L	498	Standard
[	Mo	98	350.1	8.5	0.0663	0.006	9.3	ug/L	253	Standard
|	Ag	107	60.0	13.6	0.0022	0.001	42.4	ug/L	124	Standard
|	Cd	111	114.2	4.5	0.0156	0.001	7.3	mg/L	100	Standard
|	Cd	114	355.2	3.2	0.0098	0.001	9.5	ug/L	307	Standard
[>	In	115	1045863.8	0.2				ug/L	1045367	Standard
|	Sn	118	1383.7	14.4	-0.0091	0.009	99.2	ug/L	1664	Standard
|	Sb	123	142.0	22.7	-0.0018	0.003	165.9	ug/L	846	Standard
[	Ba	135	23383.0	2.2	4.4403	0.091	2.1	ug/L	61	Standard
[	Ce	140	1155.0	0.9				ug/L	30	Standard
[>	Tb	159	1361066.2	0.9				ug/L	1407506	Standard
[	Ho	165	34.0	23.3				ug/L	13	Standard
|	Tl	203	425.7	11.9	-0.0030	0.003	89.8	ug/L	713	Standard
|	Tl	205	1038.4	5.9	-0.0063	0.002	24.1	ug/L	1648	Standard
|	Pb	206	768.7	12.2	0.0197	0.007	33.2	ug/L	594	Standard
|	Pb	207	651.3	3.7	0.0195	0.002	11.8	ug/L	497	Standard
|	Pb	208	2932.8	6.9	0.0177	0.004	21.7	ug/L	2293	Standard
	U	238	329.3	2.8	0.0215	0.000	1.8	ug/L	301	Standard
[>	Bi	209	725846.2	1.0				ug/L	757838	Standard

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Na	23	137166.4	0.6	8.5437	0.132	1.5	mg/L	592	Standard
Mg	24	487430.6	2.3	0.6972	0.025	3.6	mg/L	1565	Standard
K	39	358.3	23.6	0.1641	0.068	41.5	mg/L	157	Standard
Ca	43	8.3	91.7	2.3689	2.693	113.7	mg/L	5	Standard
Fe	54	435.4	5.4	-0.0509	0.004	8.5	mg/L	717	Standard
Fe	57	5909.5	2.9	0.0204	0.002	9.4	mg/L	4072	Standard
Sc-1	45	446794.3	1.3				mg/L	476707	Standard
Cl	35	12.0	38.2				ug/L	29	Standard
Kr	83	42.4	7.9				ug/L	39	Standard
Br	81	2199.3	2.9				ug/L	1124	Standard
P	31	337.5	3.2				ug/L	495	Standard
S	34	11079.9	1.8				ug/L	6398	Standard
Sr	88	255.0	18.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.953	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065836

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	Cd	111	
	Cd	114	
>	In	115	100.048
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.779
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065836

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Method 6020 - Summary Report

Sample ID: L1207065837

Sample Date/Time: Thursday, July 26, 2012 15:19:53

Number of Replicates: 3

Autosampler Position: 326

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	128000.0	6.8	-71544.9914	6289.174	8.8	ug/L	11975	Standard
|	Be	9	146.7	18.8	0.0830	0.015	18.2	ug/L	53	Standard
|	Al	27	13348575.6	2.6	789.3427	34.430	4.4	ug/L	10095	Standard
[>	Sc	45	465747.1	2.1				ug/L	476707	Standard
[	Ti	47	20111.0	5.1	15.1281	0.699	4.6	ug/L	149	Standard
|	V	51	28502.6	2.8	2.3652	0.057	2.4	ug/L	3747	Standard
|	Cr	52	26345.6	1.4	1.9548	0.024	1.2	ug/L	10265	Standard
|	Cr	53	4628.2	8.4	1.3789	0.241	17.5	ug/L	3075	Standard
|	Mn	55	392678.3	3.5	25.0899	0.736	2.9	ug/L	1438	Standard
|	Co	59	7336.4	2.9	0.6923	0.016	2.3	ug/L	148	Standard
|	Ni	60	7958.8	4.8	2.7076	0.117	4.3	ug/L	176	Standard
|	Cu	65	4141.9	3.3	1.4628	0.044	3.0	ug/L	186	Standard
|	Zn	66	18554.4	2.4	14.6128	0.278	1.9	ug/L	355	Standard
[>	Ge	72	387978.1	0.6				ug/L	437919	Standard
|	As	75	283.4	15.8	0.4272	0.036	8.5	ug/L	-222	Standard
|	Se	82	100.0	4.0	0.6783	0.030	4.5	ug/L	29	Standard
[	Se-1	77	183.7	10.6	0.0979	0.213	218.0	ug/L	201	Standard
[>	Ga	71	2918.6	10.6				mg/L	985	Standard
[	Rb	85	28480.1	0.9				ug/L	22	Standard
[	Y	89	352675.7	0.1				ug/L	370795	Standard
[>	Rh	103	521.7	8.0				ug/L	498	Standard
[	Mo	98	732.9	4.5	0.1481	0.007	4.9	ug/L	253	Standard
|	Ag	107	97.7	6.8	0.0066	0.001	11.8	ug/L	124	Standard
|	Cd	111	701.3	3.5	0.1523	0.007	4.7	mg/L	100	Standard
|	Cd	114	1904.9	0.8	0.1334	0.001	0.6	ug/L	307	Standard
[>	In	115	1038424.6	1.0				ug/L	1045367	Standard
|	Sn	118	2306.8	4.1	0.0335	0.005	14.8	ug/L	1664	Standard
|	Sb	123	262.9	11.6	0.0096	0.003	30.8	ug/L	846	Standard
[	Ba	135	125066.2	2.0	23.9486	0.615	2.6	ug/L	61	Standard
[	Ce	140	221664.8	3.2				ug/L	30	Standard
[>	Tb	159	1359828.6	1.3				ug/L	1407506	Standard
[	Ho	165	3730.5	3.0				ug/L	13	Standard
|	Tl	203	1015.0	1.8	0.0281	0.001	4.9	ug/L	713	Standard
|	Tl	205	2381.5	6.6	0.0260	0.004	15.1	ug/L	1648	Standard
|	Pb	206	11219.5	2.4	0.7250	0.021	2.9	ug/L	594	Standard
|	Pb	207	8926.6	2.6	0.6925	0.018	2.7	ug/L	497	Standard
|	Pb	208	42647.5	2.6	0.7167	0.023	3.2	ug/L	2293	Standard
	U	238	7641.9	2.4	0.4353	0.012	2.8	ug/L	301	Standard
[>	Bi	209	713326.1	0.8				ug/L	757838	Standard

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Na	23	147583.7	1.2	8.8215	0.223	2.5	mg/L	592	Standard
Mg	24	1557909.4	1.5	2.1381	0.077	3.6	mg/L	1565	Standard
K	39	555.0	3.2	0.2966	0.009	3.1	mg/L	157	Standard
Ca	43	10.0	50.0	2.8170	1.640	58.2	mg/L	5	Standard
Fe	54	6908.1	5.1	1.0871	0.063	5.8	mg/L	717	Standard
Fe	57	144969.7	5.0	1.2300	0.071	5.7	mg/L	4072	Standard
Sc-1	45	465747.1	2.1				mg/L	476707	Standard
Cl	35	42.0	21.2				ug/L	29	Standard
Kr	83	42.0	8.1				ug/L	39	Standard
Br	81	5271.8	8.7				ug/L	1124	Standard
P	31	1185.9	10.2				ug/L	495	Standard
S	34	11421.0	2.0				ug/L	6398	Standard
Sr	88	415.0	10.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.596	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065837

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	Cd	111	
	Cd	114	
>	In	115	99.336
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.127
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065837

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 15:23:05

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

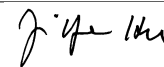
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12920.5	2.2	-278.9364	98.764	35.4	ug/L	11975	Standard
|	Be	9	106303.3	0.8	52.3679	0.382	0.7	ug/L	53	Standard
|	Al	27	852509.0	0.3	46.6775	0.532	1.1	ug/L	10095	Standard
[>	Sc	45	494859.1	1.4				ug/L	476707	Standard
|	Ti	47	152992.9	0.7	105.9468	0.504	0.5	ug/L	149	Standard
|	V	51	621482.1	1.1	52.9653	0.518	1.0	ug/L	3747	Standard
|	Cr	52	512439.6	0.4	52.6425	0.258	0.5	ug/L	10265	Standard
|	Cr	53	89968.9	1.2	51.9397	0.515	1.0	ug/L	3075	Standard
|	Mn	55	938361.4	1.2	55.1910	0.579	1.0	ug/L	1438	Standard
|	Co	59	616065.7	0.8	54.2803	0.668	1.2	ug/L	148	Standard
|	Ni	60	163378.2	0.7	51.5927	0.449	0.9	ug/L	176	Standard
|	Cu	65	151820.5	0.8	51.1212	0.157	0.3	ug/L	186	Standard
|	Zn	66	69680.9	0.6	51.1242	0.280	0.5	ug/L	355	Standard
[>	Ge	72	422777.7	0.4				ug/L	437919	Standard
|	As	75	67859.3	0.6	50.9833	0.251	0.5	ug/L	-222	Standard
|	Se	82	6821.0	1.5	53.1434	0.912	1.7	ug/L	29	Standard
[	Se-1	77	5086.9	1.5	51.0350	1.011	2.0	ug/L	201	Standard
[>	Ga	71	933.4	12.2				mg/L	985	Standard
|	Rb	85	970.0	9.2				ug/L	22	Standard
|	Y	89	366240.2	0.5				ug/L	370795	Standard
[>	Rh	103	545.0	14.1				ug/L	498	Standard
|	Mo	98	463752.3	0.4	90.1344	1.766	2.0	ug/L	253	Standard
|	Ag	107	473066.6	1.2	50.2091	0.961	1.9	ug/L	124	Standard
|	Cd	111	254610.8	1.0	54.1852	0.854	1.6	mg/L	100	Standard
|	Cd	114	685698.4	0.7	49.9657	0.709	1.4	ug/L	307	Standard
[>	In	115	1134176.4	1.6				ug/L	1045367	Standard
|	Sn	118	1560366.5	0.6	65.1076	1.155	1.8	ug/L	1664	Standard
|	Sb	123	589269.2	0.5	50.5194	0.837	1.7	ug/L	846	Standard
|	Ba	135	267839.6	0.2	46.9665	0.797	1.7	ug/L	61	Standard
|	Ce	140	1107.7	2.2				ug/L	30	Standard
[>	Tb	159	1464521.2	0.3				ug/L	1407506	Standard
|	Ho	165	17.7	27.9				ug/L	13	Standard
|	Tl	203	989808.3	0.5	48.4832	0.329	0.7	ug/L	713	Standard
|	Tl	205	2256847.3	0.4	50.3513	0.287	0.6	ug/L	1648	Standard
|	Pb	206	776090.8	0.6	49.1716	0.208	0.4	ug/L	594	Standard
|	Pb	207	657679.8	0.9	50.2182	0.612	1.2	ug/L	497	Standard
|	Pb	208	3049714.8	0.4	50.3945	0.455	0.9	ug/L	2293	Standard
	U	238	986000.2	0.6	52.4439	0.241	0.5	ug/L	301	Standard
[>	Bi	209	758303.9	0.9				ug/L	757838	Standard

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Na	23	116366.8	0.7	6.5331	0.047	0.7	mg/L	592	Standard
Mg	24	3635560.5	0.6	4.6944	0.073	1.6	mg/L	1565	Standard
K	39	6161.3	1.6	4.1429	0.037	0.9	mg/L	157	Standard
Ca	43	16.7	17.3	4.7596	0.964	20.3	mg/L	5	Standard
Fe	54	29720.2	3.9	4.8004	0.197	4.1	mg/L	717	Standard
Fe	57	645703.0	1.2	5.2614	0.089	1.7	mg/L	4072	Standard
Sc-1	45	494859.1	1.4				mg/L	476707	Standard
Cl	35	3.7	56.8				ug/L	29	Standard
Kr	83	47.3	9.2				ug/L	39	Standard
Br	81	1700.1	3.9				ug/L	1124	Standard
P	31	520.0	10.6				ug/L	495	Standard
S	34	7476.0	1.5				ug/L	6398	Standard
Sr	88	33.3	31.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	93.355		
Sc	45			
Ti	47	105.947		
V	51	105.931		
Cr	52	105.285		
Cr	53			
Mn	55	110.382		
Co	59	108.561		
Ni	60	103.185		
Cu	65	102.242		
Zn	66	102.248		
Ge	72		96.542	
As	75	101.967		
Se	82	106.287		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	90.134		
Ag	107	100.418		

Sample ID: QC Std 6

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	Cd	111	108.370	
	Cd	114		
>	In	115		108.496
	Sn	118	130.215	
	Sb	123	101.039	
	Ba	135	93.933	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.966	
|	Tl	205		
|	Pb	206	98.343	
|	Pb	207	100.436	
|	Pb	208	100.789	
|	U	238	104.888	
>	Bi	209		100.062
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 15:25:35

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 15:26:15

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12985.6	2.0	-537.0463	81.465	15.2	ug/L	11975	Standard
|	Be	9	13.3	57.3	0.0129	0.004	30.3	ug/L	53	Standard
|	Al	27	10303.5	1.3	-0.2045	0.013	6.6	ug/L	10095	Standard
[>	Sc	45	480732.8	1.0				ug/L	476707	Standard
|	Ti	47	73.0	14.4	-0.0024	0.007	299.0	ug/L	149	Standard
|	V	51	3612.6	4.3	0.0142	0.014	99.1	ug/L	3747	Standard
|	Cr	52	10764.5	1.4	0.0782	0.025	31.6	ug/L	10265	Standard
|	Cr	53	833.4	4.4	-1.1255	0.024	2.1	ug/L	3075	Standard
|	Mn	55	2220.2	3.0	-0.0067	0.003	45.7	ug/L	1438	Standard
|	Co	59	141.7	6.4	0.0004	0.001	218.9	ug/L	148	Standard
|	Ni	60	102.0	6.4	0.0000	0.002	5535.2	ug/L	176	Standard
|	Cu	65	131.7	6.5	-0.0141	0.002	17.6	ug/L	186	Standard
|	Zn	66	230.0	3.5	-0.1401	0.006	4.2	ug/L	355	Standard
[>	Ge	72	421527.5	1.3				ug/L	437919	Standard
|	As	75	-263.3	11.3	-0.0016	0.023	1457.2	ug/L	-222	Standard
|	Se	82	27.7	11.6	0.0437	0.023	53.2	ug/L	29	Standard
[	Se-1	77	149.3	9.8	-0.4252	0.171	40.2	ug/L	201	Standard
[>	Ga	71	841.7	13.7				mg/L	985	Standard
|	Rb	85	28.3	27.0				ug/L	22	Standard
|	Y	89	367390.9	3.5				ug/L	370795	Standard
[>	Rh	103	543.3	8.6				ug/L	498	Standard
|	Mo	98	423.5	15.3	0.0751	0.012	16.3	ug/L	253	Standard
|	Ag	107	152.3	12.1	0.0115	0.002	17.4	ug/L	124	Standard
|	Cd	111	103.6	22.5	0.0114	0.005	44.7	mg/L	100	Standard
|	Cd	114	302.8	5.0	0.0039	0.001	32.5	ug/L	307	Standard
[>	In	115	1130251.0	0.9				ug/L	1045367	Standard
|	Sn	118	1636.1	9.3	-0.0032	0.006	185.2	ug/L	1664	Standard
|	Sb	123	3084.6	7.1	0.2504	0.019	7.5	ug/L	846	Standard
|	Ba	135	88.7	5.1	0.0098	0.001	7.3	ug/L	61	Standard
|	Ce	140	49.3	12.2				ug/L	30	Standard
[>	Tb	159	1425814.2	0.5				ug/L	1407506	Standard
|	Ho	165	10.3	34.0				ug/L	13	Standard
|	Tl	203	150.0	22.2	-0.0175	0.002	9.4	ug/L	713	Standard
|	Tl	205	344.7	14.7	-0.0229	0.001	5.0	ug/L	1648	Standard
|	Pb	206	564.7	4.9	0.0041	0.002	44.7	ug/L	594	Standard
|	Pb	207	462.7	3.5	0.0024	0.001	53.7	ug/L	497	Standard
|	Pb	208	2127.4	4.0	0.0017	0.002	88.0	ug/L	2293	Standard
	U	238	76.0	32.6	0.0072	0.001	18.2	ug/L	301	Standard
[>	Bi	209	767922.9	0.4				ug/L	757838	Standard

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Na	23	613.3	7.4	-0.0095	0.003	30.3	mg/L	592	Standard
Mg	24	458.3	34.9	0.0005	0.000	41.2	mg/L	1565	Standard
K	39	145.0	15.8	-0.0074	0.017	230.3	mg/L	157	Standard
Ca	43	0.0		-0.5589	0.000	0.0	mg/L	5	Standard
Fe	54	705.2	8.5	-0.0105	0.009	90.1	mg/L	717	Standard
Fe	57	4614.0	4.4	0.0056	0.002	26.9	mg/L	4072	Standard
Sc-1	45	480732.8	1.0				mg/L	476707	Standard
Cl	35	6.0	16.7				ug/L	29	Standard
Kr	83	42.1	9.1				ug/L	39	Standard
Br	81	1595.9	8.5				ug/L	1124	Standard
P	31	473.3	7.9				ug/L	495	Standard
S	34	7460.2	1.0				ug/L	6398	Standard
Sr	88	28.3	44.4				ug/L	37	Standard

QC Calculated Values

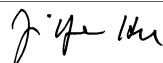
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.257	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	108.120
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.331
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 15:32:53

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13035.6	2.9	-247.8944	149.052	60.1	ug/L	11975	Standard
|	Be	9	103621.6	2.3	50.3937	1.454	2.9	ug/L	53	Standard
|	Al	27	860216.9	1.1	46.4869	0.540	1.2	ug/L	10095	Standard
[>	Sc	45	501315.8	1.1				ug/L	476707	Standard
|	Ti	47	150039.3	0.9	103.2121	0.157	0.2	ug/L	149	Standard
|	V	51	615664.8	0.6	52.1190	0.415	0.8	ug/L	3747	Standard
|	Cr	52	507771.0	1.0	51.8035	0.716	1.4	ug/L	10265	Standard
|	Cr	53	87260.7	3.1	49.9797	1.292	2.6	ug/L	3075	Standard
|	Mn	55	922960.5	0.9	53.9238	0.441	0.8	ug/L	1438	Standard
|	Co	59	607365.1	0.5	53.1587	0.341	0.6	ug/L	148	Standard
|	Ni	60	162546.0	0.9	50.9891	0.237	0.5	ug/L	176	Standard
|	Cu	65	150114.0	0.3	50.2144	0.560	1.1	ug/L	186	Standard
|	Zn	66	68806.2	1.5	50.1403	0.305	0.6	ug/L	355	Standard
[>	Ge	72	425598.6	0.9				ug/L	437919	Standard
|	As	75	67163.8	0.5	50.1331	0.628	1.3	ug/L	-222	Standard
|	Se	82	6659.1	0.5	51.5348	0.640	1.2	ug/L	29	Standard
[	Se-1	77	5045.8	0.8	50.2606	0.809	1.6	ug/L	201	Standard
[>	Ga	71	938.4	4.5				mg/L	985	Standard
|	Rb	85	991.7	12.3				ug/L	22	Standard
|	Y	89	366494.9	1.1				ug/L	370795	Standard
[>	Rh	103	545.0	8.8				ug/L	498	Standard
|	Mo	98	453921.5	0.2	88.5675	0.685	0.8	ug/L	253	Standard
|	Ag	107	458214.5	0.3	48.8243	0.376	0.8	ug/L	124	Standard
|	Cd	111	250638.1	0.2	53.5516	0.445	0.8	mg/L	100	Standard
|	Cd	114	680891.5	1.1	49.8137	0.782	1.6	ug/L	307	Standard
[>	In	115	1129594.9	1.0				ug/L	1045367	Standard
|	Sn	118	1521975.6	0.8	63.7570	1.082	1.7	ug/L	1664	Standard
|	Sb	123	578639.0	0.3	49.8029	0.342	0.7	ug/L	846	Standard
|	Ba	135	264406.5	0.5	46.5458	0.253	0.5	ug/L	61	Standard
|	Ce	140	1083.0	2.6				ug/L	30	Standard
[>	Tb	159	1470327.8	0.9				ug/L	1407506	Standard
|	Ho	165	21.7	30.7				ug/L	13	Standard
|	Tl	203	985891.5	0.9	48.8565	0.606	1.2	ug/L	713	Standard
|	Tl	205	2250063.8	0.1	50.7866	0.269	0.5	ug/L	1648	Standard
|	Pb	206	766366.4	0.1	49.1233	0.307	0.6	ug/L	594	Standard
|	Pb	207	647252.7	0.5	49.9980	0.236	0.5	ug/L	497	Standard
|	Pb	208	3004251.7	0.2	50.2226	0.361	0.7	ug/L	2293	Standard
	U	238	983479.1	0.3	52.9219	0.416	0.8	ug/L	301	Standard
[>	Bi	209	749535.6	0.5				ug/L	757838	Standard

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Na	23	116825.3	0.1	6.4742	0.078	1.2	mg/L	592	Standard
Mg	24	3643961.5	0.7	4.6443	0.053	1.1	mg/L	1565	Standard
K	39	6409.7	3.0	4.2568	0.083	2.0	mg/L	157	Standard
Ca	43	15.0	33.3	4.1555	1.537	37.0	mg/L	5	Standard
Fe	54	28621.6	1.8	4.5565	0.060	1.3	mg/L	717	Standard
Fe	57	656608.3	3.8	5.2802	0.162	3.1	mg/L	4072	Standard
Sc-1	45	501315.8	1.1				mg/L	476707	Standard
Cl	35	8.3	18.3				ug/L	29	Standard
Kr	83	46.3	6.1				ug/L	39	Standard
Br	81	1602.6	5.0				ug/L	1124	Standard
P	31	528.3	5.5				ug/L	495	Standard
S	34	7546.9	0.1				ug/L	6398	Standard
Sr	88	33.3	31.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	92.974		
Sc	45			
Ti	47	103.212		
V	51	104.238		
Cr	52	103.607		
Cr	53			
Mn	55	107.848		
Co	59	106.317		
Ni	60	101.978		
Cu	65	100.429		
Zn	66	100.281		
Ge	72		97.187	
As	75	100.266		
Se	82	103.070		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	88.567		
Ag	107	97.649		

Sample ID: QC Std 6

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	Cd	111	107.103	
	Cd	114		
>	In	115		108.057
	Sn	118	127.514	
	Sb	123	99.606	
	Ba	135	93.092	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.713	
|	Tl	205		
|	Pb	206	98.247	
|	Pb	207	99.996	
|	Pb	208	100.445	
|	U	238	105.844	
>	Bi	209		98.905
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	
QC Std 6	Sn	118	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 15:36:10

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12820.4	3.0	-314.8560	270.545	85.9	ug/L	11975	Standard
|	Be	9	13.3	57.3	0.0128	0.004	29.9	ug/L	53	Standard
|	Al	27	9366.2	6.8	-0.2672	0.033	12.2	ug/L	10095	Standard
[>	Sc	45	488766.9	0.6				ug/L	476707	Standard
|	Ti	47	67.3	11.2	-0.0063	0.005	84.1	ug/L	149	Standard
|	V	51	3399.8	1.0	-0.0039	0.003	86.1	ug/L	3747	Standard
|	Cr	52	10603.4	1.2	0.0617	0.016	25.8	ug/L	10265	Standard
|	Cr	53	811.7	6.2	-1.1381	0.033	2.9	ug/L	3075	Standard
|	Mn	55	1687.8	3.4	-0.0381	0.004	10.4	ug/L	1438	Standard
|	Co	59	113.0	3.9	-0.0021	0.000	18.7	ug/L	148	Standard
|	Ni	60	101.3	1.5	-0.0002	0.000	194.6	ug/L	176	Standard
|	Cu	65	137.0	10.5	-0.0122	0.005	42.0	ug/L	186	Standard
|	Zn	66	202.3	6.7	-0.1605	0.010	6.0	ug/L	355	Standard
[>	Ge	72	421296.4	0.7				ug/L	437919	Standard
|	As	75	-245.6	27.6	0.0119	0.050	416.9	ug/L	-222	Standard
|	Se	82	35.0	13.9	0.1007	0.039	38.8	ug/L	29	Standard
[	Se-1	77	145.7	19.1	-0.4629	0.299	64.6	ug/L	201	Standard
[>	Ga	71	860.0	10.1				mg/L	985	Standard
|	Rb	85	23.3	32.7				ug/L	22	Standard
|	Y	89	363054.8	2.4				ug/L	370795	Standard
[>	Rh	103	503.3	4.0				ug/L	498	Standard
|	Mo	98	404.8	12.6	0.0713	0.009	12.9	ug/L	253	Standard
|	Ag	107	120.7	2.9	0.0081	0.000	3.8	ug/L	124	Standard
|	Cd	111	92.7	11.6	0.0090	0.002	24.5	mg/L	100	Standard
|	Cd	114	259.7	9.8	0.0007	0.002	256.7	ug/L	307	Standard
[>	In	115	1131758.5	1.3				ug/L	1045367	Standard
|	Sn	118	1587.8	7.4	-0.0053	0.004	83.3	ug/L	1664	Standard
|	Sb	123	2802.8	8.1	0.2257	0.017	7.6	ug/L	846	Standard
|	Ba	135	61.0	14.0	0.0049	0.002	32.1	ug/L	61	Standard
|	Ce	140	39.3	21.2				ug/L	30	Standard
[>	Tb	159	1438617.4	0.3				ug/L	1407506	Standard
|	Ho	165	15.0	23.1				ug/L	13	Standard
|	Tl	203	137.7	13.0	-0.0181	0.001	4.5	ug/L	713	Standard
|	Tl	205	312.7	16.3	-0.0237	0.001	4.6	ug/L	1648	Standard
|	Pb	206	540.0	1.6	0.0024	0.000	13.6	ug/L	594	Standard
|	Pb	207	461.7	8.5	0.0021	0.003	128.9	ug/L	497	Standard
|	Pb	208	2093.7	4.8	0.0010	0.001	153.7	ug/L	2293	Standard
	U	238	46.0	43.4	0.0056	0.001	18.4	ug/L	301	Standard
[>	Bi	209	772347.7	0.8				ug/L	757838	Standard

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Na	23	553.3	7.7	-0.0136	0.003	18.6	mg/L	592	Standard
Mg	24	340.0	16.7	0.0004	0.000	21.3	mg/L	1565	Standard
K	39	156.7	20.5	-0.0009	0.023	2627.1	mg/L	157	Standard
Ca	43	0.0		-0.5589	0.000	0.0	mg/L	5	Standard
Fe	54	698.6	17.8	-0.0136	0.021	151.5	mg/L	717	Standard
Fe	57	4595.7	2.7	0.0048	0.001	18.4	mg/L	4072	Standard
Sc-1	45	488766.9	0.6				mg/L	476707	Standard
Cl	35	5.0	20.0				ug/L	29	Standard
Kr	83	38.2	5.6				ug/L	39	Standard
Br	81	1625.9	6.9				ug/L	1124	Standard
P	31	533.3	12.0				ug/L	495	Standard
S	34	7626.1	3.6				ug/L	6398	Standard
Sr	88	43.3	24.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.204	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	108.264
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.915
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: PBW 71 WG404515-02

Sample Date/Time: Thursday, July 26, 2012 15:41:11

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12466.8	3.8	-249.3304	261.948	105.1	ug/L	11975	Standard
|	Be	9	10.0	100.0	0.0112	0.005	45.4	ug/L	53	Standard
|	Al	27	8125.5	3.2	-0.3280	0.016	5.0	ug/L	10095	Standard
[>	Sc	45	479363.3	0.3				ug/L	476707	Standard
[	Ti	47	61.3	7.7	-0.0104	0.003	31.2	ug/L	149	Standard
|	V	51	3467.6	0.1	0.0028	0.003	119.3	ug/L	3747	Standard
|	Cr	52	10581.4	0.6	0.0630	0.016	25.6	ug/L	10265	Standard
|	Cr	53	849.2	2.1	-1.1141	0.015	1.3	ug/L	3075	Standard
|	Mn	55	1384.1	1.8	-0.0559	0.001	2.6	ug/L	1438	Standard
|	Co	59	88.7	11.3	-0.0043	0.001	21.9	ug/L	148	Standard
|	Ni	60	212.7	5.4	0.0353	0.003	8.6	ug/L	176	Standard
|	Cu	65	112.0	8.5	-0.0206	0.004	17.7	ug/L	186	Standard
|	Zn	66	2232.5	4.8	1.3491	0.095	7.1	ug/L	355	Standard
[>	Ge	72	419982.7	1.2				ug/L	437919	Standard
|	As	75	-281.6	4.6	-0.0159	0.007	44.6	ug/L	-222	Standard
|	Se	82	19.8	31.1	-0.0177	0.050	281.4	ug/L	29	Standard
[	Se-1	77	145.7	1.4	-0.4592	0.031	6.8	ug/L	201	Standard
[>	Ga	71	870.0	7.5				mg/L	985	Standard
[	Rb	85	16.7	34.6				ug/L	22	Standard
[	Y	89	358509.9	2.2				ug/L	370795	Standard
[>	Rh	103	473.3	11.3				ug/L	498	Standard
[	Mo	98	133.0	43.6	0.0189	0.012	61.0	ug/L	253	Standard
|	Ag	107	69.7	13.6	0.0028	0.001	36.0	ug/L	124	Standard
|	Cd	111	83.0	10.3	0.0072	0.002	23.4	mg/L	100	Standard
|	Cd	114	246.9	2.1	0.0001	0.001	755.5	ug/L	307	Standard
[>	In	115	1112767.3	0.9				ug/L	1045367	Standard
|	Sn	118	1257.1	15.2	-0.0183	0.008	44.0	ug/L	1664	Standard
|	Sb	123	730.9	27.4	0.0489	0.017	35.7	ug/L	846	Standard
[	Ba	135	36.3	19.5	0.0007	0.001	193.0	ug/L	61	Standard
[	Ce	140	34.3	3.4				ug/L	30	Standard
[>	Tb	159	1403009.6	0.8				ug/L	1407506	Standard
[	Ho	165	18.3	33.3				ug/L	13	Standard
|	Tl	203	117.0	8.9	-0.0189	0.001	3.1	ug/L	713	Standard
|	Tl	205	279.0	5.1	-0.0242	0.000	1.6	ug/L	1648	Standard
|	Pb	206	469.7	3.6	-0.0011	0.001	102.4	ug/L	594	Standard
|	Pb	207	410.0	6.8	-0.0008	0.002	234.7	ug/L	497	Standard
|	Pb	208	1879.4	0.8	-0.0016	0.001	35.4	ug/L	2293	Standard
	U	238	6.3	32.9	0.0036	0.000	3.2	ug/L	301	Standard
[>	Bi	209	749207.6	1.2				ug/L	757838	Standard

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Na	23	463.3	12.6	-0.0182	0.003	19.1	mg/L	592	Standard
Mg	24	215.0	12.9	0.0002	0.000	18.3	mg/L	1565	Standard
K	39	146.7	24.2	-0.0060	0.025	421.5	mg/L	157	Standard
Ca	43	1.7	173.2	-0.0106	0.950	9000.9	mg/L	5	Standard
Fe	54	760.0	4.9	-0.0007	0.006	874.7	mg/L	717	Standard
Fe	57	4509.0	2.8	0.0049	0.001	21.7	mg/L	4072	Standard
Sc-1	45	479363.3	0.3				mg/L	476707	Standard
Cl	35	9.3	24.7				ug/L	29	Standard
Kr	83	53.0	6.0				ug/L	39	Standard
Br	81	1532.6	4.5				ug/L	1124	Standard
P	31	505.0	2.2				ug/L	495	Standard
S	34	7391.0	3.0				ug/L	6398	Standard
Sr	88	31.7	36.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.904	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 71 WG404515-02

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	Cd	111	
	Cd	114	
>	In	115	106.448
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.861
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 71 WG404515-02

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Method 6020 - Summary Report

Sample ID: F BLANK WG404379-01

Sample Date/Time: Thursday, July 26, 2012 15:44:21

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

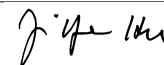
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12355.0	3.3	-369.0557	67.296	18.2	ug/L	11975	Standard
|	Be	9	10.0	100.0	0.0113	0.005	45.3	ug/L	53	Standard
|	Al	27	8298.9	0.8	-0.3057	0.016	5.3	ug/L	10095	Standard
[>	Sc	45	467526.6	2.5				ug/L	476707	Standard
[	Ti	47	63.7	31.5	-0.0080	0.014	180.0	ug/L	149	Standard
|	V	51	3533.2	2.8	0.0128	0.006	47.9	ug/L	3747	Standard
|	Cr	52	10726.1	1.4	0.0942	0.007	7.8	ug/L	10265	Standard
|	Cr	53	825.0	1.4	-1.1216	0.011	1.0	ug/L	3075	Standard
|	Mn	55	1363.4	2.1	-0.0559	0.001	2.0	ug/L	1438	Standard
|	Co	59	98.7	15.7	-0.0033	0.001	42.1	ug/L	148	Standard
|	Ni	60	174.7	6.9	0.0240	0.003	14.2	ug/L	176	Standard
|	Cu	65	102.3	8.9	-0.0234	0.003	12.9	ug/L	186	Standard
|	Zn	66	2079.5	1.8	1.2566	0.018	1.5	ug/L	355	Standard
[>	Ge	72	414103.9	0.9				ug/L	437919	Standard
|	As	75	-268.3	9.2	-0.0088	0.019	210.1	ug/L	-222	Standard
|	Se	82	27.6	29.5	0.0470	0.065	139.1	ug/L	29	Standard
[	Se-1	77	144.7	3.8	-0.4485	0.046	10.2	ug/L	201	Standard
[>	Ga	71	848.4	2.5				mg/L	985	Standard
[	Rb	85	23.3	12.4				ug/L	22	Standard
[	Y	89	355159.7	1.2				ug/L	370795	Standard
[>	Rh	103	463.3	4.4				ug/L	498	Standard
[	Mo	98	72.6	31.7	0.0069	0.004	64.6	ug/L	253	Standard
|	Ag	107	68.3	5.9	0.0027	0.000	16.9	ug/L	124	Standard
|	Cd	111	88.2	16.2	0.0084	0.003	35.4	mg/L	100	Standard
|	Cd	114	229.3	6.9	-0.0012	0.001	108.1	ug/L	307	Standard
[>	In	115	1113269.9	1.0				ug/L	1045367	Standard
|	Sn	118	1043.4	11.9	-0.0274	0.005	18.0	ug/L	1664	Standard
|	Sb	123	351.5	33.1	0.0157	0.010	63.6	ug/L	846	Standard
[	Ba	135	32.7	3.5	-0.0000	0.000	1003955.8	ug/L	61	Standard
[	Ce	140	32.3	12.9				ug/L	30	Standard
[>	Tb	159	1417282.8	0.8				ug/L	1407506	Standard
[	Ho	165	13.3	30.3				ug/L	13	Standard
|	Tl	203	106.7	8.9	-0.0195	0.000	2.3	ug/L	713	Standard
|	Tl	205	272.0	4.8	-0.0244	0.000	1.3	ug/L	1648	Standard
|	Pb	206	510.3	3.3	0.0013	0.001	68.8	ug/L	594	Standard
|	Pb	207	398.3	3.6	-0.0019	0.001	56.1	ug/L	497	Standard
|	Pb	208	1917.0	0.9	-0.0011	0.000	19.1	ug/L	2293	Standard
	U	238	4.3	35.3	0.0035	0.000	2.4	ug/L	301	Standard
[>	Bi	209	754014.7	0.6				ug/L	757838	Standard

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Na	23	436.7	15.2	-0.0192	0.003	17.6	mg/L	592	Standard
Mg	24	225.0	30.9	0.0002	0.000	40.9	mg/L	1565	Standard
K	39	131.7	28.5	-0.0138	0.030	216.5	mg/L	157	Standard
Ca	43	3.3	86.6	0.5749	0.983	170.9	mg/L	5	Standard
Fe	54	692.1	9.3	-0.0092	0.012	132.0	mg/L	717	Standard
Fe	57	4510.7	1.2	0.0059	0.001	25.1	mg/L	4072	Standard
Sc-1	45	467526.6	2.5				mg/L	476707	Standard
Cl	35	6.7	34.6				ug/L	29	Standard
Kr	83	44.3	8.9				ug/L	39	Standard
Br	81	1491.7	2.3				ug/L	1124	Standard
P	31	430.8	1.9				ug/L	495	Standard
S	34	7194.2	0.4				ug/L	6398	Standard
Sr	88	33.3	48.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.562	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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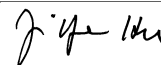
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	Cd	114	
>	In	115	106.496
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.496
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG404379-01
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Method 6020 - Summary Report

Sample ID: LCSW 71 WG404515-03

Sample Date/Time: Thursday, July 26, 2012 15:47:31

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14008.2	5.4	-326.4639	251.115	76.9	ug/L	11975	Standard
|	Be	9	53808.7	2.4	24.6187	0.420	1.7	ug/L	53	Standard
|	Al	27	489369.4	2.0	24.5128	0.563	2.3	ug/L	10095	Standard
[>	Sc	45	532929.3	2.6				ug/L	476707	Standard
[	Ti	47	93.3	20.4	0.0066	0.012	180.0	ug/L	149	Standard
|	V	51	329308.9	1.9	25.7834	0.315	1.2	ug/L	3747	Standard
|	Cr	52	278390.0	1.6	25.9036	0.227	0.9	ug/L	10265	Standard
|	Cr	53	47547.0	3.2	24.5337	0.652	2.7	ug/L	3075	Standard
|	Mn	55	499546.6	1.7	27.0815	0.252	0.9	ug/L	1438	Standard
|	Co	59	324264.5	2.5	26.3935	0.464	1.8	ug/L	148	Standard
|	Ni	60	86967.6	2.0	25.3617	0.328	1.3	ug/L	176	Standard
|	Cu	65	81846.5	1.8	25.4390	0.361	1.4	ug/L	186	Standard
|	Zn	66	37238.7	1.9	25.0905	0.300	1.2	ug/L	355	Standard
[>	Ge	72	457480.7	0.8				ug/L	437919	Standard
|	As	75	33943.6	1.7	23.6719	0.212	0.9	ug/L	-222	Standard
|	Se	82	3261.7	1.9	23.3856	0.285	1.2	ug/L	29	Standard
[	Se-1	77	2542.9	2.3	22.5050	0.456	2.0	ug/L	201	Standard
[>	Ga	71	1048.4	12.1				mg/L	985	Standard
[	Rb	85	55.0	9.1				ug/L	22	Standard
[	Y	89	398751.9	2.0				ug/L	370795	Standard
[>	Rh	103	626.7	6.8				ug/L	498	Standard
[	Mo	98	111.0	41.3	0.0128	0.008	64.6	ug/L	253	Standard
|	Ag	107	250080.1	1.9	24.9491	0.148	0.6	ug/L	124	Standard
|	Cd	111	128964.3	1.5	25.7973	0.253	1.0	mg/L	100	Standard
|	Cd	114	344325.3	1.5	23.5785	0.155	0.7	ug/L	307	Standard
[>	In	115	1206274.9	1.6				ug/L	1045367	Standard
|	Sn	118	1974.5	9.0	0.0057	0.007	115.1	ug/L	1664	Standard
|	Sb	123	296649.8	1.4	23.9011	0.065	0.3	ug/L	846	Standard
[	Ba	135	139852.6	1.6	23.0514	0.204	0.9	ug/L	61	Standard
[	Ce	140	209.0	24.5				ug/L	30	Standard
[>	Tb	159	1520959.3	0.5				ug/L	1407506	Standard
[	Ho	165	15.3	19.9				ug/L	13	Standard
|	Tl	203	516353.4	1.6	23.9567	0.122	0.5	ug/L	713	Standard
|	Tl	205	1204055.3	0.8	25.4442	0.098	0.4	ug/L	1648	Standard
|	Pb	206	403972.3	1.4	24.2408	0.131	0.5	ug/L	594	Standard
|	Pb	207	344593.7	0.9	24.9200	0.059	0.2	ug/L	497	Standard
|	Pb	208	1588403.7	1.4	24.8575	0.066	0.3	ug/L	2293	Standard
	U	238	499467.7	1.8	25.1781	0.244	1.0	ug/L	301	Standard
[>	Bi	209	800108.2	1.1				ug/L	757838	Standard

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Na	23	985.0	27.8	0.0064	0.014	214.1	mg/L	592	Standard
Mg	24	1836.8	40.9	0.0021	0.001	41.2	mg/L	1565	Standard
K	39	136.7	22.4	-0.0229	0.019	83.3	mg/L	157	Standard
Ca	43	1.7	173.2	-0.0724	0.843	1164.1	mg/L	5	Standard
Fe	54	1049.0	2.9	0.0309	0.009	28.8	mg/L	717	Standard
Fe	57	5212.6	6.0	0.0064	0.002	25.1	mg/L	4072	Standard
Sc-1	45	532929.3	2.6				mg/L	476707	Standard
Cl	35	8.0	33.1				ug/L	29	Standard
Kr	83	49.1	10.8				ug/L	39	Standard
Br	81	1705.1	4.4				ug/L	1124	Standard
P	31	631.7	1.8				ug/L	495	Standard
S	34	7412.6	3.3				ug/L	6398	Standard
Sr	88	23.3	44.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.467	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 71 WG404515-03

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	Cd	111	
	Cd	114	
>	In	115	115.393
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	105.578
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 71 WG404515-03

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Method 6020 - Summary Report

Sample ID: L1207067301 WG404515-01
 Sample Date/Time: Thursday, July 26, 2012 15:50:40
 Number of Replicates: 3
 Autosampler Position: 304
 Sample Description: 1
 Method File: C:\NexIONData\Method\6020a.mth
 Aliquot Volume (mL):
 Diluted to Volume (mL):
 User Name: JYH user
 Cumulative Autodilution Factor: 1
 Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	69897.5	0.6	-30494.7783	423.718	1.4	ug/L	11975	Standard
|	Be	9	21.7	13.3	0.0161	0.001	8.0	ug/L	53	Standard
|	Al	27	139073.7	6.4	6.4203	0.424	6.6	ug/L	10095	Standard
[>	Sc	45	530980.7	0.5				ug/L	476707	Standard
|	Ti	47	1688.4	11.6	1.1040	0.134	12.1	ug/L	149	Standard
|	V	51	37329.8	1.0	2.8681	0.009	0.3	ug/L	3747	Standard
|	Cr	52	24039.7	1.2	1.4383	0.018	1.2	ug/L	10265	Standard
|	Cr	53	3477.9	1.4	0.4251	0.042	9.9	ug/L	3075	Standard
|	Mn	55	13172.4	3.4	0.6302	0.021	3.3	ug/L	1438	Standard
|	Co	59	496.7	33.7	0.0311	0.014	45.8	ug/L	148	Standard
|	Ni	60	1605.8	2.7	0.4695	0.011	2.2	ug/L	176	Standard
|	Cu	65	579.3	8.2	0.1345	0.014	10.6	ug/L	186	Standard
|	Zn	66	7724.6	2.1	5.3292	0.074	1.4	ug/L	355	Standard
[>	Ge	72	427417.7	0.8				ug/L	437919	Standard
|	As	75	742.8	2.9	0.7461	0.017	2.2	ug/L	-222	Standard
|	Se	82	151.5	3.6	0.9977	0.034	3.4	ug/L	29	Standard
[	Se-1	77	212.7	10.3	0.2057	0.239	116.1	ug/L	201	Standard
[>	Ga	71	928.4	0.3				mg/L	985	Standard
|	Rb	85	11259.2	0.5				ug/L	22	Standard
|	Y	89	366850.2	1.4				ug/L	370795	Standard
[>	Rh	103	641.7	11.4				ug/L	498	Standard
|	Mo	98	6800.8	0.3	1.2966	0.012	1.0	ug/L	253	Standard
|	Ag	107	147.0	31.6	0.0107	0.005	44.7	ug/L	124	Standard
|	Cd	111	118.7	11.2	0.0142	0.003	18.6	mg/L	100	Standard
|	Cd	114	377.6	3.8	0.0089	0.001	10.0	ug/L	307	Standard
[>	In	115	1149492.9	0.8				ug/L	1045367	Standard
|	Sn	118	1616.4	6.6	-0.0052	0.004	76.1	ug/L	1664	Standard
|	Sb	123	523.7	14.3	0.0293	0.006	20.6	ug/L	846	Standard
|	Ba	135	174990.1	0.4	30.2706	0.362	1.2	ug/L	61	Standard
|	Ce	140	1398.4	2.4				ug/L	30	Standard
[>	Tb	159	1477059.0	0.3				ug/L	1407506	Standard
|	Ho	165	34.0	22.2				ug/L	13	Standard
|	Tl	203	853.4	53.2	0.0176	0.022	126.9	ug/L	713	Standard
|	Tl	205	2084.5	50.4	0.0166	0.023	141.7	ug/L	1648	Standard
|	Pb	206	1914.1	20.4	0.0917	0.024	26.6	ug/L	594	Standard
|	Pb	207	1567.1	16.3	0.0887	0.019	21.5	ug/L	497	Standard
|	Pb	208	7297.0	16.4	0.0892	0.019	21.8	ug/L	2293	Standard
	U	238	5424.6	4.0	0.2956	0.010	3.5	ug/L	301	Standard
[>	Bi	209	748259.5	0.5				ug/L	757838	Standard

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Na	23	133361.0	1.0	6.9809	0.106	1.5	mg/L	592	Standard
Mg	24	1212250.4	0.5	1.4586	0.003	0.2	mg/L	1565	Standard
K	39	1113.4	10.4	0.6061	0.077	12.8	mg/L	157	Standard
Ca	43	45.0	61.9	12.7822	8.214	64.3	mg/L	5	Standard
Fe	54	780.3	4.3	-0.0102	0.005	49.6	mg/L	717	Standard
Fe	57	11034.0	5.6	0.0510	0.005	9.1	mg/L	4072	Standard
Sc-1	45	530980.7	0.5				mg/L	476707	Standard
Cl	35	22.7	34.3				ug/L	29	Standard
Kr	83	50.4	6.3				ug/L	39	Standard
Br	81	6328.0	6.2				ug/L	1124	Standard
P	31	455.0	5.3				ug/L	495	Standard
S	34	17678.6	0.8				ug/L	6398	Standard
Sr	88	576.7	6.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.602	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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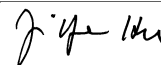
	Cd	111		
	Cd	114		
>	In	115	109.961	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.736	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207067301S WG404515-04

Sample Date/Time: Thursday, July 26, 2012 15:53:51

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	70448.4	1.5	-32015.9890	1113.184	3.5	ug/L	11975	Standard
|	Be	9	54599.9	1.2	25.8836	0.962	3.7	ug/L	53	Standard
|	Al	27	848008.3	2.2	44.6349	1.676	3.8	ug/L	10095	Standard
[>	Sc	45	514790.8	4.2				ug/L	476707	Standard
|	Ti	47	1617.1	10.5	1.0781	0.098	9.1	ug/L	149	Standard
|	V	51	348389.9	1.1	29.9060	1.560	5.2	ug/L	3747	Standard
|	Cr	52	276271.4	0.7	28.2489	1.987	7.0	ug/L	10265	Standard
|	Cr	53	47786.9	1.1	27.1723	1.917	7.1	ug/L	3075	Standard
|	Mn	55	496547.6	0.7	29.4858	1.713	5.8	ug/L	1438	Standard
|	Co	59	311576.0	1.2	27.7743	1.755	6.3	ug/L	148	Standard
|	Ni	60	84484.9	1.1	26.9844	1.733	6.4	ug/L	176	Standard
|	Cu	65	77464.5	0.9	26.3652	1.577	6.0	ug/L	186	Standard
|	Zn	66	48522.2	1.2	35.9338	2.258	6.3	ug/L	355	Standard
[>	Ge	72	418787.5	5.9				ug/L	437919	Standard
|	As	75	35995.0	0.7	27.4599	1.746	6.4	ug/L	-222	Standard
|	Se	82	3612.1	1.3	28.3820	1.376	4.8	ug/L	29	Standard
[	Se-1	77	2669.6	1.5	26.1544	1.358	5.2	ug/L	201	Standard
[>	Ga	71	973.4	13.8				mg/L	985	Standard
|	Rb	85	11836.3	3.3				ug/L	22	Standard
|	Y	89	368318.3	2.6				ug/L	370795	Standard
[>	Rh	103	595.0	9.4				ug/L	498	Standard
|	Mo	98	6977.2	1.2	1.3461	0.068	5.1	ug/L	253	Standard
|	Ag	107	254371.7	1.2	26.9508	1.545	5.7	ug/L	124	Standard
|	Cd	111	134762.5	1.7	28.6389	1.956	6.8	mg/L	100	Standard
|	Cd	114	353624.5	1.2	25.7153	1.429	5.6	ug/L	307	Standard
[>	In	115	1138036.4	5.0				ug/L	1045367	Standard
|	Sn	118	1739.8	11.2	0.0010	0.011	1153.2	ug/L	1664	Standard
|	Sb	123	306933.3	1.3	26.2649	1.564	6.0	ug/L	846	Standard
|	Ba	135	313609.5	1.0	54.8895	2.797	5.1	ug/L	61	Standard
|	Ce	140	3803.1	0.9				ug/L	30	Standard
[>	Tb	159	1457855.2	5.2				ug/L	1407506	Standard
|	Ho	165	79.3	6.5				ug/L	13	Standard
|	Tl	203	508312.0	0.9	25.9162	1.748	6.7	ug/L	713	Standard
|	Tl	205	1183483.6	0.5	27.4787	1.768	6.4	ug/L	1648	Standard
|	Pb	206	393304.9	0.8	25.9315	1.671	6.4	ug/L	594	Standard
|	Pb	207	332589.1	0.7	26.4242	1.649	6.2	ug/L	497	Standard
|	Pb	208	1545504.2	1.0	26.5755	1.732	6.5	ug/L	2293	Standard
	U	238	505901.9	1.4	28.0265	1.999	7.1	ug/L	301	Standard
[>	Bi	209	730111.4	5.9				ug/L	757838	Standard

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Na	23	133707.4	1.0	7.2310	0.382	5.3	mg/L	592	Standard
Mg	24	1203458.9	0.8	1.4952	0.061	4.1	mg/L	1565	Standard
K	39	1145.0	6.6	0.6516	0.081	12.4	mg/L	157	Standard
Ca	43	36.7	47.9	10.8212	5.903	54.6	mg/L	5	Standard
Fe	54	901.0	8.6	0.0129	0.011	86.2	mg/L	717	Standard
Fe	57	12551.9	2.3	0.0657	0.004	5.4	mg/L	4072	Standard
Sc-1	45	514790.8	4.2				mg/L	476707	Standard
Cl	35	23.0	15.7				ug/L	29	Standard
Kr	83	50.2	6.2				ug/L	39	Standard
Br	81	6804.0	7.5				ug/L	1124	Standard
P	31	465.8	5.2				ug/L	495	Standard
S	34	17337.4	1.1				ug/L	6398	Standard
Sr	88	578.3	4.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.631	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	108.865	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	96.341	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207067301SD WG404515-05

Sample Date/Time: Thursday, July 26, 2012 15:57:00

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	70036.6	2.4	-30636.8214	297.722	1.0	ug/L	11975	Standard
|	Be	9	55613.6	1.8	25.5950	0.993	3.9	ug/L	53	Standard
|	Al	27	576114.0	1.7	29.1656	0.875	3.0	ug/L	10095	Standard
[>	Sc	45	530001.1	2.0				ug/L	476707	Standard
|	Ti	47	1542.4	6.1	1.0039	0.062	6.2	ug/L	149	Standard
|	V	51	349149.4	0.6	29.3044	0.037	0.1	ug/L	3747	Standard
|	Cr	52	276612.9	0.9	27.6197	0.196	0.7	ug/L	10265	Standard
|	Cr	53	48113.0	2.1	26.7119	0.466	1.7	ug/L	3075	Standard
|	Mn	55	486594.7	0.7	28.2450	0.123	0.4	ug/L	1438	Standard
|	Co	59	313834.6	1.3	27.3464	0.217	0.8	ug/L	148	Standard
|	Ni	60	83554.4	0.8	26.0865	0.336	1.3	ug/L	176	Standard
|	Cu	65	77208.2	1.0	25.6898	0.284	1.1	ug/L	186	Standard
|	Zn	66	42348.4	1.5	30.6129	0.460	1.5	ug/L	355	Standard
[>	Ge	72	427373.7	0.7				ug/L	437919	Standard
|	As	75	36175.9	1.3	26.9788	0.189	0.7	ug/L	-222	Standard
|	Se	82	3677.7	1.0	28.2627	0.107	0.4	ug/L	29	Standard
[	Se-1	77	2676.6	2.0	25.6126	0.713	2.8	ug/L	201	Standard
[>	Ga	71	920.0	4.9				mg/L	985	Standard
|	Rb	85	11504.4	2.7				ug/L	22	Standard
|	Y	89	376261.9	1.4				ug/L	370795	Standard
[>	Rh	103	656.7	10.1				ug/L	498	Standard
|	Mo	98	7063.5	2.3	1.3253	0.032	2.4	ug/L	253	Standard
|	Ag	107	254394.7	1.2	26.2084	0.294	1.1	ug/L	124	Standard
|	Cd	111	134666.4	1.4	27.8163	0.370	1.3	mg/L	100	Standard
|	Cd	114	351807.7	0.8	24.8771	0.095	0.4	ug/L	307	Standard
[>	In	115	1168159.0	0.4				ug/L	1045367	Standard
|	Sn	118	1637.4	4.3	-0.0054	0.003	47.5	ug/L	1664	Standard
|	Sb	123	305034.3	1.0	25.3788	0.225	0.9	ug/L	846	Standard
|	Ba	135	311273.6	0.3	52.9867	0.183	0.3	ug/L	61	Standard
|	Ce	140	1412.1	4.4				ug/L	30	Standard
[>	Tb	159	1484877.0	0.9				ug/L	1407506	Standard
|	Ho	165	34.7	31.8				ug/L	13	Standard
|	Tl	203	509022.3	1.2	25.0271	0.175	0.7	ug/L	713	Standard
|	Tl	205	1182445.0	1.0	26.4793	0.233	0.9	ug/L	1648	Standard
|	Pb	206	394225.1	1.0	25.0691	0.215	0.9	ug/L	594	Standard
|	Pb	207	334343.0	1.2	25.6229	0.359	1.4	ug/L	497	Standard
|	Pb	208	1545557.8	1.1	25.6322	0.288	1.1	ug/L	2293	Standard
	U	238	509793.1	1.1	27.2332	0.313	1.2	ug/L	301	Standard
[>	Bi	209	755052.9	0.6				ug/L	757838	Standard

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Na	23	134257.2	0.3	7.0429	0.159	2.3	mg/L	592	Standard
Mg	24	1179355.2	0.5	1.4220	0.031	2.2	mg/L	1565	Standard
K	39	1063.4	4.8	0.5747	0.019	3.3	mg/L	157	Standard
Ca	43	51.7	31.1	14.8900	5.149	34.6	mg/L	5	Standard
Fe	54	803.3	2.2	-0.0064	0.005	73.2	mg/L	717	Standard
Fe	57	10653.7	2.1	0.0483	0.003	5.6	mg/L	4072	Standard
Sc-1	45	530001.1	2.0				mg/L	476707	Standard
Cl	35	21.7	13.3				ug/L	29	Standard
Kr	83	49.4	5.1				ug/L	39	Standard
Br	81	5198.4	5.9				ug/L	1124	Standard
P	31	436.7	5.4				ug/L	495	Standard
S	34	17646.9	1.3				ug/L	6398	Standard
Sr	88	560.0	5.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.592	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207067301SD WG404515-05
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	Cd	111	
	Cd	114	
>	In	115	111.746
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.633
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207067303

Sample Date/Time: Thursday, July 26, 2012 16:00:11

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	71109.9	2.3	-30351.4081	917.686	3.0	ug/L	11975	Standard
|	Be	9	15.0	33.3	0.0129	0.002	16.7	ug/L	53	Standard
|	Al	27	164006.2	0.8	7.5408	0.235	3.1	ug/L	10095	Standard
[>	Sc	45	542322.8	2.1				ug/L	476707	Standard
[	Ti	47	1566.4	3.2	1.0501	0.034	3.3	ug/L	149	Standard
|	V	51	21809.1	2.1	1.6039	0.050	3.1	ug/L	3747	Standard
|	Cr	52	18579.1	1.2	0.9259	0.037	4.0	ug/L	10265	Standard
|	Cr	53	4214.8	1.5	0.9277	0.033	3.5	ug/L	3075	Standard
|	Mn	55	22759.1	5.7	1.2263	0.079	6.4	ug/L	1438	Standard
|	Co	59	737.4	5.9	0.0539	0.004	8.0	ug/L	148	Standard
|	Ni	60	4760.7	0.8	1.4970	0.015	1.0	ug/L	176	Standard
|	Cu	65	2203.5	4.0	0.6965	0.028	4.0	ug/L	186	Standard
|	Zn	66	12108.2	2.1	8.7753	0.179	2.0	ug/L	355	Standard
[>	Ge	72	415882.5	0.7				ug/L	437919	Standard
|	As	75	1386.2	3.8	1.2509	0.043	3.5	ug/L	-222	Standard
|	Se	82	808.3	3.4	6.2496	0.243	3.9	ug/L	29	Standard
[	Se-1	77	299.7	1.8	1.1878	0.076	6.4	ug/L	201	Standard
[>	Ga	71	896.7	3.3				mg/L	985	Standard
[	Rb	85	27767.1	1.7				ug/L	22	Standard
[	Y	89	368770.5	0.5				ug/L	370795	Standard
[>	Rh	103	676.7	6.0				ug/L	498	Standard
[	Mo	98	2903.9	3.1	0.5499	0.018	3.3	ug/L	253	Standard
|	Ag	107	205.3	41.6	0.0168	0.009	53.7	ug/L	124	Standard
|	Cd	111	140.0	3.2	0.0187	0.001	4.3	mg/L	100	Standard
|	Cd	114	431.4	4.9	0.0128	0.002	12.6	ug/L	307	Standard
[>	In	115	1148400.0	0.5				ug/L	1045367	Standard
|	Sn	118	1575.7	12.5	-0.0068	0.008	121.1	ug/L	1664	Standard
|	Sb	123	2203.5	9.0	0.1716	0.017	9.9	ug/L	846	Standard
[	Ba	135	150831.4	0.4	26.1140	0.047	0.2	ug/L	61	Standard
[	Ce	140	1373.7	2.8				ug/L	30	Standard
[>	Tb	159	1468103.3	0.9				ug/L	1407506	Standard
[	Ho	165	32.3	26.3				ug/L	13	Standard
|	Tl	203	1138.4	1.4	0.0331	0.001	3.0	ug/L	713	Standard
|	Tl	205	2632.6	3.2	0.0304	0.002	7.1	ug/L	1648	Standard
|	Pb	206	1407.7	2.6	0.0613	0.002	3.3	ug/L	594	Standard
|	Pb	207	1184.0	4.7	0.0612	0.004	7.3	ug/L	497	Standard
|	Pb	208	5516.7	1.6	0.0615	0.002	2.9	ug/L	2293	Standard
	U	238	4674.4	1.6	0.2609	0.005	2.0	ug/L	301	Standard
[>	Bi	209	731709.3	0.6				ug/L	757838	Standard

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Na	23	146994.6	0.3	7.5393	0.181	2.4	mg/L	592	Standard
Mg	24	3530040.6	0.6	4.1602	0.110	2.6	mg/L	1565	Standard
K	39	1400.1	6.1	0.7713	0.045	5.9	mg/L	157	Standard
Ca	43	75.0	17.6	21.2221	3.444	16.2	mg/L	5	Standard
Fe	54	1094.7	4.7	0.0348	0.004	12.3	mg/L	717	Standard
Fe	57	22785.5	0.6	0.1372	0.003	1.9	mg/L	4072	Standard
Sc-1	45	542322.8	2.1				mg/L	476707	Standard
Cl	35	85.3	1.8				ug/L	29	Standard
Kr	83	50.9	8.1				ug/L	39	Standard
Br	81	54338.4	7.0				ug/L	1124	Standard
P	31	455.0	4.8				ug/L	495	Standard
S	34	29353.4	0.7				ug/L	6398	Standard
Sr	88	1026.7	9.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.968	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207067303

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	Cd	111	
	Cd	114	
>	In	115	109.856
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.552
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207067303

Report Date/Time: Thursday, July 26, 2012 16:02:41

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Method 6020 - Summary Report

Sample ID: L1207067303PS WG404615-01

Sample Date/Time: Thursday, July 26, 2012 16:03:20

Number of Replicates: 3

Autosampler Position: 308

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

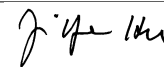
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	76795.9	2.4	-30909.1713	863.703	2.8	ug/L	11975	Standard
|	Be	9	115329.0	1.7	48.7241	0.938	1.9	ug/L	53	Standard
|	Al	27	1025904.5	0.9	48.1955	0.556	1.2	ug/L	10095	Standard
[>	Sc	45	577008.4	0.2				ug/L	476707	Standard
|	Ti	47	1947.8	19.2	1.2483	0.252	20.2	ug/L	149	Standard
|	V	51	683926.5	0.9	56.2175	0.580	1.0	ug/L	3747	Standard
|	Cr	52	553381.7	0.7	54.8557	0.527	1.0	ug/L	10265	Standard
|	Cr	53	99053.6	1.3	55.2381	0.911	1.6	ug/L	3075	Standard
|	Mn	55	1004479.7	1.4	56.9694	0.941	1.7	ug/L	1438	Standard
|	Co	59	642597.0	1.0	54.5888	0.693	1.3	ug/L	148	Standard
|	Ni	60	172371.0	0.6	52.4819	0.215	0.4	ug/L	176	Standard
|	Cu	65	157483.6	0.8	51.1289	0.396	0.8	ug/L	186	Standard
|	Zn	66	76688.6	0.7	54.2699	0.582	1.1	ug/L	355	Standard
[>	Ge	72	438488.2	0.3				ug/L	437919	Standard
|	As	75	71808.9	0.4	52.0142	0.384	0.7	ug/L	-222	Standard
|	Se	82	7694.8	0.5	57.8176	0.480	0.8	ug/L	29	Standard
[	Se-1	77	5132.5	1.2	49.5931	0.796	1.6	ug/L	201	Standard
[>	Ga	71	1206.7	7.1				mg/L	985	Standard
|	Rb	85	29802.6	0.3				ug/L	22	Standard
|	Y	89	390281.1	0.6				ug/L	370795	Standard
[>	Rh	103	720.0	6.1				ug/L	498	Standard
|	Mo	98	3194.3	0.8	0.5688	0.008	1.4	ug/L	253	Standard
|	Ag	107	495974.6	2.0	48.8490	0.701	1.4	ug/L	124	Standard
|	Cd	111	275393.4	0.5	54.3916	0.267	0.5	mg/L	100	Standard
|	Cd	114	711954.6	0.9	48.1454	0.335	0.7	ug/L	307	Standard
[>	In	115	1221968.1	0.9				ug/L	1045367	Standard
|	Sn	118	1888.5	6.9	0.0014	0.004	317.1	ug/L	1664	Standard
|	Sb	123	633389.8	0.5	50.3934	0.191	0.4	ug/L	846	Standard
|	Ba	135	441339.7	0.7	71.8274	1.136	1.6	ug/L	61	Standard
[	Ce	140	1422.7	3.2				ug/L	30	Standard
[>	Tb	159	1546948.2	1.0				ug/L	1407506	Standard
|	Ho	165	34.0	20.6				ug/L	13	Standard
|	Tl	203	1023604.2	0.9	50.5019	0.566	1.1	ug/L	713	Standard
|	Tl	205	2332802.9	0.5	52.4232	0.427	0.8	ug/L	1648	Standard
|	Pb	206	785821.9	1.3	50.1493	0.777	1.5	ug/L	594	Standard
|	Pb	207	666365.7	1.0	51.2497	0.698	1.4	ug/L	497	Standard
|	Pb	208	3090557.0	0.6	51.4384	0.482	0.9	ug/L	2293	Standard
	U	238	1105025.9	0.6	59.2003	0.621	1.0	ug/L	301	Standard
[>	Bi	209	752855.0	0.5				ug/L	757838	Standard

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Na	23	148840.9	0.7	7.1705	0.039	0.5	mg/L	592	Standard
Mg	24	3723525.1	2.0	4.1230	0.093	2.3	mg/L	1565	Standard
K	39	1508.4	4.3	0.7826	0.038	4.9	mg/L	157	Standard
Ca	43	65.0	48.0	17.2069	8.514	49.5	mg/L	5	Standard
Fe	54	1366.7	4.1	0.0636	0.008	13.1	mg/L	717	Standard
Fe	57	26087.5	5.1	0.1501	0.010	6.5	mg/L	4072	Standard
Sc-1	45	577008.4	0.2				mg/L	476707	Standard
Cl	35	81.3	10.2				ug/L	29	Standard
Kr	83	54.7	7.3				ug/L	39	Standard
Br	81	61589.2	4.2				ug/L	1124	Standard
P	31	618.3	3.3				ug/L	495	Standard
S	34	29215.6	0.9				ug/L	6398	Standard
Sr	88	955.0	4.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.130	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207067303PS WG404615-01
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	Cd	111	
	Cd	114	
>	In	115	116.894
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.343
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207067303PS WG404615-01
 Report Date/Time: Thursday, July 26, 2012 16:05:50
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Approved: July 27, 2012



Method 6020 - Summary Report

Sample ID: L1207067303SDL WG404615-02

Sample Date/Time: Thursday, July 26, 2012 16:08:21

Number of Replicates: 3

Autosampler Position: 309

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21460.2	2.1	-6992.2530	409.095	5.9	ug/L	11975	Standard
|	Be	9	8.3	69.3	0.0108	0.003	30.5	ug/L	53	Standard
|	Al	27	37157.2	1.7	1.5687	0.033	2.1	ug/L	10095	Standard
[>	Sc	45	433118.7	1.1				ug/L	476707	Standard
|	Ti	47	356.7	5.9	0.2260	0.013	5.9	ug/L	149	Standard
|	V	51	6217.2	1.2	0.3058	0.009	2.9	ug/L	3747	Standard
|	Cr	52	10508.3	0.1	0.1911	0.014	7.6	ug/L	10265	Standard
|	Cr	53	1472.6	7.0	-0.6329	0.058	9.1	ug/L	3075	Standard
|	Mn	55	4648.4	1.5	0.1718	0.008	4.5	ug/L	1438	Standard
|	Co	59	220.0	5.9	0.0098	0.001	14.5	ug/L	148	Standard
|	Ni	60	894.7	4.2	0.2872	0.015	5.2	ug/L	176	Standard
|	Cu	65	499.3	3.7	0.1316	0.005	4.1	ug/L	186	Standard
|	Zn	66	4358.6	3.0	3.3258	0.131	3.9	ug/L	355	Standard
[>	Ge	72	374132.9	1.1				ug/L	437919	Standard
|	As	75	63.0	66.1	0.2492	0.035	14.0	ug/L	-222	Standard
|	Se	82	167.2	4.8	1.3030	0.061	4.6	ug/L	29	Standard
[	Se-1	77	171.7	7.8	0.0332	0.134	402.2	ug/L	201	Standard
[>	Ga	71	823.4	8.8				mg/L	985	Standard
|	Rb	85	4634.0	1.5				ug/L	22	Standard
|	Y	89	316622.5	0.9				ug/L	370795	Standard
[>	Rh	103	451.7	13.5				ug/L	498	Standard
|	Mo	98	508.2	6.4	0.1018	0.007	6.8	ug/L	253	Standard
|	Ag	107	92.7	7.6	0.0062	0.001	13.9	ug/L	124	Standard
|	Cd	111	48.1	19.0	0.0006	0.002	371.4	mg/L	100	Standard
|	Cd	114	155.0	8.6	-0.0058	0.001	19.5	ug/L	307	Standard
[>	In	115	1024779.6	0.4				ug/L	1045367	Standard
|	Sn	118	795.7	7.5	-0.0350	0.003	8.0	ug/L	1664	Standard
|	Sb	123	583.4	21.9	0.0404	0.012	29.9	ug/L	846	Standard
|	Ba	135	27846.9	0.8	5.3982	0.050	0.9	ug/L	61	Standard
|	Ce	140	277.3	3.5				ug/L	30	Standard
[>	Tb	159	1340836.2	0.7				ug/L	1407506	Standard
|	Ho	165	19.7	24.0				ug/L	13	Standard
|	Tl	203	708.0	6.7	0.0118	0.002	19.4	ug/L	713	Standard
|	Tl	205	1665.4	7.1	0.0086	0.003	29.8	ug/L	1648	Standard
|	Pb	206	652.3	4.8	0.0123	0.002	15.8	ug/L	594	Standard
|	Pb	207	546.3	3.6	0.0114	0.001	11.1	ug/L	497	Standard
|	Pb	208	2532.7	1.9	0.0111	0.001	6.6	ug/L	2293	Standard
	U	238	858.0	5.4	0.0512	0.002	4.4	ug/L	301	Standard
[>	Bi	209	720381.2	0.7				ug/L	757838	Standard

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Na	23	89364.4	0.7	5.7268	0.060	1.0	mg/L	592	Standard
Mg	24	555587.2	2.0	0.8195	0.011	1.4	mg/L	1565	Standard
K	39	398.3	1.9	0.2038	0.008	4.2	mg/L	157	Standard
Ca	43	10.0	50.0	3.0780	1.794	58.3	mg/L	5	Standard
Fe	54	375.6	5.4	-0.0597	0.004	7.3	mg/L	717	Standard
Fe	57	6491.4	3.6	0.0275	0.002	7.0	mg/L	4072	Standard
Sc-1	45	433118.7	1.1				mg/L	476707	Standard
Cl	35	18.0	33.8				ug/L	29	Standard
Kr	83	43.6	9.8				ug/L	39	Standard
Br	81	8914.3	2.1				ug/L	1124	Standard
P	31	192.5	7.9				ug/L	495	Standard
S	34	11501.9	2.3				ug/L	6398	Standard
Sr	88	181.7	4.2				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.434	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207067303SDL WG404615-02
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	Cd	111		
	Cd	114		
>	In	115	98.031	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	95.057	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207067303SDL WG404615-02
 Report Date/Time: Thursday, July 26, 2012 16:10:51
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Approved: July 27, 2012



Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 16:11:33

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13165.7	2.1	-702.8380	257.915	36.7	ug/L	11975	Standard
|	Be	9	103970.5	0.6	53.0991	0.425	0.8	ug/L	53	Standard
|	Al	27	818453.1	2.8	46.4644	1.869	4.0	ug/L	10095	Standard
[>	Sc	45	477331.3	1.2				ug/L	476707	Standard
[	Ti	47	146304.7	0.9	104.5675	1.418	1.4	ug/L	149	Standard
|	V	51	599414.0	1.3	52.7251	1.033	2.0	ug/L	3747	Standard
|	Cr	52	493094.0	1.0	52.2749	0.870	1.7	ug/L	10265	Standard
|	Cr	53	85700.1	1.5	51.0334	0.602	1.2	ug/L	3075	Standard
|	Mn	55	902260.6	0.4	54.7693	0.357	0.7	ug/L	1438	Standard
|	Co	59	586776.1	0.4	53.3572	0.579	1.1	ug/L	148	Standard
|	Ni	60	155845.9	1.9	50.7922	1.042	2.1	ug/L	176	Standard
|	Cu	65	143782.0	0.6	49.9661	0.293	0.6	ug/L	186	Standard
|	Zn	66	65896.7	0.8	49.8930	0.733	1.5	ug/L	355	Standard
[>	Ge	72	409647.4	0.7				ug/L	437919	Standard
|	As	75	64745.6	0.4	50.2080	0.500	1.0	ug/L	-222	Standard
|	Se	82	6551.8	1.3	52.6816	0.934	1.8	ug/L	29	Standard
[	Se-1	77	4881.8	0.3	50.5276	0.482	1.0	ug/L	201	Standard
[>	Ga	71	838.4	3.8				mg/L	985	Standard
|	Rb	85	1030.0	8.6				ug/L	22	Standard
[	Y	89	357280.2	0.7				ug/L	370795	Standard
[>	Rh	103	510.0	5.2				ug/L	498	Standard
[	Mo	98	448472.9	1.1	88.6866	1.162	1.3	ug/L	253	Standard
|	Ag	107	460110.9	1.7	49.6909	1.045	2.1	ug/L	124	Standard
|	Cd	111	247726.3	0.9	53.6457	0.769	1.4	mg/L	100	Standard
|	Cd	114	670906.4	0.5	49.7453	0.471	0.9	ug/L	307	Standard
[>	In	115	1114518.5	0.7				ug/L	1045367	Standard
|	Sn	118	1514923.8	1.5	64.3136	0.755	1.2	ug/L	1664	Standard
|	Sb	123	574811.5	0.8	50.1418	0.439	0.9	ug/L	846	Standard
[	Ba	135	258854.9	0.6	46.1841	0.312	0.7	ug/L	61	Standard
[	Ce	140	1065.0	1.1				ug/L	30	Standard
[>	Tb	159	1436197.5	0.8				ug/L	1407506	Standard
[	Ho	165	22.0	7.9				ug/L	13	Standard
|	Tl	203	966816.3	0.6	48.5794	0.460	0.9	ug/L	713	Standard
|	Tl	205	2223665.4	0.5	50.8910	0.201	0.4	ug/L	1648	Standard
|	Pb	206	751729.8	0.5	48.8580	0.462	0.9	ug/L	594	Standard
|	Pb	207	639794.5	0.6	50.1120	0.338	0.7	ug/L	497	Standard
|	Pb	208	2949744.8	0.5	49.9998	0.464	0.9	ug/L	2293	Standard
	U	238	973128.9	0.9	53.0960	0.614	1.2	ug/L	301	Standard
[>	Bi	209	739214.6	0.4				ug/L	757838	Standard

Sample ID: QC Std 6

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Na	23	116541.6	1.9	6.7849	0.137	2.0	mg/L	592	Standard
Mg	24	3527288.6	0.5	4.7214	0.034	0.7	mg/L	1565	Standard
K	39	6036.2	3.6	4.2087	0.103	2.5	mg/L	157	Standard
Ca	43	13.3	21.7	3.8556	0.998	25.9	mg/L	5	Standard
Fe	54	27837.9	2.5	4.6570	0.076	1.6	mg/L	717	Standard
Fe	57	624711.6	2.8	5.2780	0.194	3.7	mg/L	4072	Standard
Sc-1	45	477331.3	1.2				mg/L	476707	Standard
Cl	35	10.7	28.6				ug/L	29	Standard
Kr	83	49.4	6.8				ug/L	39	Standard
Br	81	1733.4	2.2				ug/L	1124	Standard
P	31	559.2	6.3				ug/L	495	Standard
S	34	7773.7	0.8				ug/L	6398	Standard
Sr	88	30.0	33.3				ug/L	37	Standard

QC Calculated Values

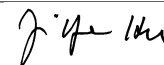
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	92.929		
Sc	45			
Ti	47	104.567		
V	51	105.450		
Cr	52	104.550		
Cr	53			
Mn	55	109.539		
Co	59	106.714		
Ni	60	101.584		
Cu	65	99.932		
Zn	66	99.786		
Ge	72		93.544	
As	75	100.416		
Se	82	105.363		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	88.687		
Ag	107	99.382		

Sample ID: QC Std 6

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	Cd	111	107.291	
	Cd	114		
>	In	115		106.615
	Sn	118	128.627	
	Sb	123	100.284	
	Ba	135	92.368	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.159	
|	Tl	205		
|	Pb	206	97.716	
|	Pb	207	100.224	
|	Pb	208	100.000	
|	U	238	106.192	
>	Bi	209		97.543
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 16:14:03

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Approved: July 27, 2012



Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 16:14:43

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13023.9	2.0	-733.1404	99.186	13.5	ug/L	11975	Standard
|	Be	9	28.3	100.3	0.0207	0.014	69.8	ug/L	53	Standard
|	Al	27	9583.0	1.9	-0.2334	0.019	8.3	ug/L	10095	Standard
[>	Sc	45	470271.4	1.8				ug/L	476707	Standard
[	Ti	47	101.7	32.3	0.0206	0.023	113.0	ug/L	149	Standard
|	V	51	3460.0	4.4	0.0145	0.015	103.6	ug/L	3747	Standard
|	Cr	52	10338.2	2.3	0.0822	0.039	46.9	ug/L	10265	Standard
|	Cr	53	750.0	8.1	-1.1550	0.041	3.6	ug/L	3075	Standard
|	Mn	55	1858.4	5.4	-0.0231	0.008	32.9	ug/L	1438	Standard
|	Co	59	223.3	38.6	0.0085	0.008	93.9	ug/L	148	Standard
|	Ni	60	172.0	71.7	0.0245	0.040	164.1	ug/L	176	Standard
|	Cu	65	226.0	64.8	0.0209	0.051	242.0	ug/L	186	Standard
|	Zn	66	248.7	28.8	-0.1183	0.054	45.3	ug/L	355	Standard
[>	Ge	72	403434.3	1.5				ug/L	437919	Standard
|	As	75	-224.0	28.5	0.0203	0.051	249.6	ug/L	-222	Standard
|	Se	82	29.8	7.2	0.0704	0.014	20.1	ug/L	29	Standard
[	Se-1	77	142.3	13.4	-0.4308	0.231	53.7	ug/L	201	Standard
[>	Ga	71	831.7	5.0				mg/L	985	Standard
[	Rb	85	26.7	28.6				ug/L	22	Standard
[	Y	89	351596.4	1.2				ug/L	370795	Standard
[>	Rh	103	506.7	9.3				ug/L	498	Standard
[	Mo	98	562.1	40.6	0.1048	0.047	44.6	ug/L	253	Standard
|	Ag	107	380.7	51.8	0.0368	0.022	59.5	ug/L	124	Standard
|	Cd	111	208.7	46.5	0.0349	0.022	61.9	mg/L	100	Standard
|	Cd	114	518.3	49.8	0.0205	0.020	95.7	ug/L	307	Standard
[>	In	115	1106052.2	1.2				ug/L	1045367	Standard
|	Sn	118	1965.8	22.5	0.0125	0.020	157.2	ug/L	1664	Standard
|	Sb	123	3112.7	8.5	0.2587	0.024	9.4	ug/L	846	Standard
[	Ba	135	161.0	54.5	0.0232	0.016	68.9	ug/L	61	Standard
[	Ce	140	30.0	10.0				ug/L	30	Standard
[>	Tb	159	1398175.4	0.8				ug/L	1407506	Standard
[	Ho	165	15.3	35.9				ug/L	13	Standard
|	Tl	203	339.3	47.2	-0.0080	0.008	98.5	ug/L	713	Standard
|	Tl	205	791.4	43.4	-0.0127	0.008	60.4	ug/L	1648	Standard
|	Pb	206	691.3	18.5	0.0129	0.008	62.6	ug/L	594	Standard
|	Pb	207	543.3	18.1	0.0092	0.008	81.7	ug/L	497	Standard
|	Pb	208	2618.4	17.4	0.0105	0.008	71.2	ug/L	2293	Standard
	U	238	214.7	50.9	0.0147	0.006	39.6	ug/L	301	Standard
[>	Bi	209	753345.0	0.4				ug/L	757838	Standard

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Na	23	688.3	16.2	-0.0043	0.007	154.7	mg/L	592	Standard
Mg	24	975.0	45.5	0.0012	0.001	48.9	mg/L	1565	Standard
K	39	155.0	28.1	0.0025	0.033	1337.9	mg/L	157	Standard
Ca	43	5.0	0.0	1.1188	0.029	2.6	mg/L	5	Standard
Fe	54	702.4	5.3	-0.0083	0.006	71.1	mg/L	717	Standard
Fe	57	4345.6	1.3	0.0042	0.001	27.2	mg/L	4072	Standard
Sc-1	45	470271.4	1.8				mg/L	476707	Standard
Cl	35	7.3	31.5				ug/L	29	Standard
Kr	83	48.7	0.7				ug/L	39	Standard
Br	81	1640.1	3.3				ug/L	1124	Standard
P	31	530.8	9.9				ug/L	495	Standard
S	34	7407.6	3.0				ug/L	6398	Standard
Sr	88	41.7	6.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.125	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111		
	Cd	114		
>	In	115	105.805	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	99.407	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207071202

Sample Date/Time: Thursday, July 26, 2012 16:17:55

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14144.9	2.7	-974.2150	258.758	26.6	ug/L	11975	Standard
|	Be	9	18.3	41.7	0.0151	0.004	24.6	ug/L	53	Standard
|	Al	27	4158594.9	1.5	230.3628	4.117	1.8	ug/L	10095	Standard
[>	Sc	45	495717.2	0.5				ug/L	476707	Standard
[	Ti	47	1192.4	2.4	0.8286	0.019	2.3	ug/L	149	Standard
|	V	51	96775.4	2.3	8.5559	0.171	2.0	ug/L	3747	Standard
|	Cr	52	22880.9	2.5	1.5057	0.057	3.8	ug/L	10265	Standard
|	Cr	53	2492.7	3.1	-0.0392	0.044	113.0	ug/L	3075	Standard
|	Mn	55	45031.2	1.8	2.6960	0.040	1.5	ug/L	1438	Standard
|	Co	59	12409.8	3.8	1.1551	0.040	3.5	ug/L	148	Standard
|	Ni	60	19993.9	0.9	6.7110	0.041	0.6	ug/L	176	Standard
|	Cu	65	634032.8	1.2	228.0774	1.884	0.8	ug/L	186	Standard
|	Zn	66	32923.0	16.0	25.6366	4.224	16.5	ug/L	355	Standard
[>	Ge	72	396090.2	0.3				ug/L	437919	Standard
|	As	75	1310.7	3.2	1.2431	0.031	2.5	ug/L	-222	Standard
|	Se	82	140.9	1.6	1.0021	0.016	1.6	ug/L	29	Standard
[	Se-1	77	190.7	7.3	0.1334	0.152	113.8	ug/L	201	Standard
[>	Ga	71	2856.9	1.1				mg/L	985	Standard
[	Rb	85	8820.9	2.6				ug/L	22	Standard
[	Y	89	360271.4	2.5				ug/L	370795	Standard
[>	Rh	103	740.0	2.9				ug/L	498	Standard
[	Mo	98	39074.2	4.0	7.7523	0.144	1.9	ug/L	253	Standard
|	Ag	107	139.0	6.9	0.0104	0.001	12.6	ug/L	124	Standard
|	Cd	111	149.9	10.5	0.0218	0.003	13.6	mg/L	100	Standard
|	Cd	114	584.2	4.6	0.0253	0.002	9.3	ug/L	307	Standard
[>	In	115	1109589.2	2.3				ug/L	1045367	Standard
|	Sn	118	1970.5	8.0	0.0123	0.005	39.3	ug/L	1664	Standard
|	Sb	123	6394.3	4.1	0.5453	0.010	1.9	ug/L	846	Standard
[	Ba	135	90936.1	2.0	16.2932	0.045	0.3	ug/L	61	Standard
[	Ce	140	5677.4	0.9				ug/L	30	Standard
[>	Tb	159	1434580.5	0.9				ug/L	1407506	Standard
[	Ho	165	46.0	5.8				ug/L	13	Standard
|	Tl	203	318.7	8.9	-0.0081	0.001	16.0	ug/L	713	Standard
|	Tl	205	770.7	7.9	-0.0122	0.001	10.7	ug/L	1648	Standard
|	Pb	206	7817.3	1.0	0.4975	0.003	0.6	ug/L	594	Standard
|	Pb	207	6552.4	3.3	0.5014	0.010	2.0	ug/L	497	Standard
|	Pb	208	30488.3	2.5	0.5047	0.006	1.3	ug/L	2293	Standard
	U	238	293.7	47.3	0.0198	0.008	38.9	ug/L	301	Standard
[>	Bi	209	710809.1	1.5				ug/L	757838	Standard

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Na	23	121481.9	2.5	6.8106	0.201	2.9	mg/L	592	Standard
Mg	24	33665.7	2.4	0.0433	0.001	2.4	mg/L	1565	Standard
K	39	2326.8	5.2	1.4928	0.075	5.0	mg/L	157	Standard
Ca	43	186.7	9.4	58.8463	5.544	9.4	mg/L	5	Standard
Fe	54	761.4	8.4	-0.0047	0.011	237.0	mg/L	717	Standard
Fe	57	40238.4	2.9	0.2961	0.011	3.7	mg/L	4072	Standard
Sc-1	45	495717.2	0.5				mg/L	476707	Standard
Cl	35	11.0	15.7				ug/L	29	Standard
Kr	83	53.7	10.4				ug/L	39	Standard
Br	81	3177.8	4.9				ug/L	1124	Standard
P	31	1640.9	3.0				ug/L	495	Standard
S	34	93434.7	0.3				ug/L	6398	Standard
Sr	88	598.3	10.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.448	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	106.144
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.794
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cu 65 Upper, S, EEE	Cu	65	

Sample ID: L1207071202

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Method 6020 - Summary Report

Sample ID: L1207071302

Sample Date/Time: Thursday, July 26, 2012 16:21:04

Number of Replicates: 3

Autosampler Position: 311

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22117.8	0.7	-5143.4660	310.104	6.0	ug/L	11975	Standard
|	Be	9	93.3	21.7	0.0507	0.011	21.7	ug/L	53	Standard
|	Al	27	8374451.1	2.3	448.6909	4.536	1.0	ug/L	10095	Standard
[>	Sc	45	513446.6	3.1				ug/L	476707	Standard
[	Ti	47	12838.8	0.8	9.0064	0.173	1.9	ug/L	149	Standard
|	V	51	29123.2	1.7	2.2463	0.093	4.2	ug/L	3747	Standard
|	Cr	52	21705.9	1.6	1.2638	0.087	6.8	ug/L	10265	Standard
|	Cr	53	2795.3	1.4	0.0716	0.029	39.9	ug/L	3075	Standard
|	Mn	55	975593.6	1.8	58.4495	1.465	2.5	ug/L	1438	Standard
|	Co	59	1778.1	2.3	0.1474	0.003	2.1	ug/L	148	Standard
|	Ni	60	2079.1	2.5	0.6368	0.018	2.8	ug/L	176	Standard
|	Cu	65	16157.6	2.4	5.4873	0.027	0.5	ug/L	186	Standard
|	Zn	66	24583.6	1.1	18.1700	0.295	1.6	ug/L	355	Standard
[>	Ge	72	415249.2	2.6				ug/L	437919	Standard
|	As	75	8777.9	1.5	6.8861	0.078	1.1	ug/L	-222	Standard
|	Se	82	77.7	5.2	0.4444	0.016	3.5	ug/L	29	Standard
[	Se-1	77	177.0	4.8	-0.1087	0.099	91.2	ug/L	201	Standard
[>	Ga	71	1855.1	3.1				mg/L	985	Standard
[	Rb	85	21089.7	2.5				ug/L	22	Standard
[	Y	89	364538.3	3.5				ug/L	370795	Standard
[>	Rh	103	580.0	9.7				ug/L	498	Standard
[	Mo	98	2713.4	0.3	0.5073	0.008	1.7	ug/L	253	Standard
|	Ag	107	339.7	5.1	0.0305	0.001	4.2	ug/L	124	Standard
|	Cd	111	420.5	3.0	0.0766	0.003	3.6	mg/L	100	Standard
|	Cd	114	1082.0	2.6	0.0587	0.003	5.5	ug/L	307	Standard
[>	In	115	1162027.4	1.9				ug/L	1045367	Standard
|	Sn	118	3493.4	4.8	0.0706	0.005	7.1	ug/L	1664	Standard
|	Sb	123	3621.9	3.1	0.2881	0.005	1.8	ug/L	846	Standard
[	Ba	135	43493.0	0.7	7.4390	0.123	1.7	ug/L	61	Standard
[	Ce	140	54734.0	0.5				ug/L	30	Standard
[>	Tb	159	1481279.6	0.8				ug/L	1407506	Standard
[	Ho	165	839.4	4.6				ug/L	13	Standard
|	Tl	203	650.0	0.8	0.0066	0.000	1.0	ug/L	713	Standard
|	Tl	205	1511.1	0.9	0.0027	0.001	22.2	ug/L	1648	Standard
|	Pb	206	126290.8	0.6	7.8493	0.093	1.2	ug/L	594	Standard
|	Pb	207	108326.2	0.4	8.1135	0.048	0.6	ug/L	497	Standard
|	Pb	208	502046.2	0.3	8.1375	0.097	1.2	ug/L	2293	Standard
	U	238	884.7	3.5	0.0495	0.002	3.2	ug/L	301	Standard
[>	Bi	209	770469.0	1.0				ug/L	757838	Standard

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Na	23	139793.6	0.2	7.5760	0.248	3.3	mg/L	592	Standard
Mg	24	331473.7	1.3	0.4125	0.008	1.8	mg/L	1565	Standard
K	39	1548.4	7.5	0.9197	0.069	7.5	mg/L	157	Standard
Ca	43	20.0	25.0	5.6045	1.606	28.7	mg/L	5	Standard
Fe	54	2211.0	5.0	0.2233	0.028	12.8	mg/L	717	Standard
Fe	57	43375.3	1.9	0.3097	0.013	4.2	mg/L	4072	Standard
Sc-1	45	513446.6	3.1				mg/L	476707	Standard
Cl	35	10.3	24.4				ug/L	29	Standard
Kr	83	47.6	14.8				ug/L	39	Standard
Br	81	2328.5	1.5				ug/L	1124	Standard
P	31	2020.1	2.1				ug/L	495	Standard
S	34	9405.4	1.9				ug/L	6398	Standard
Sr	88	115.0	8.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.823	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207071302

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	Cd	111	
	Cd	114	
>	In	115	111.160
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.667
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207071302

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Method 6020 - Summary Report

Sample ID: L1207071601

Sample Date/Time: Thursday, July 26, 2012 16:24:14

Number of Replicates: 3

Autosampler Position: 312

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	74966.7	1.1	-33583.7784	1357.695	4.0	ug/L	11975	Standard
|	Be	9	21.7	35.3	0.0161	0.003	20.8	ug/L	53	Standard
|	Al	27	510195.5	1.5	25.9044	0.317	1.2	ug/L	10095	Standard
[>	Sc	45	526596.0	2.3				ug/L	476707	Standard
|	Ti	47	2524.2	2.9	1.8121	0.049	2.7	ug/L	149	Standard
|	V	51	21277.7	1.8	1.6486	0.036	2.2	ug/L	3747	Standard
|	Cr	52	21364.7	2.4	1.3343	0.051	3.8	ug/L	10265	Standard
|	Cr	53	4384.0	4.3	1.1604	0.113	9.8	ug/L	3075	Standard
|	Mn	55	16255.0	1.5	0.8842	0.013	1.4	ug/L	1438	Standard
|	Co	59	975.4	8.8	0.0795	0.008	9.9	ug/L	148	Standard
|	Ni	60	3623.4	1.0	1.1889	0.015	1.3	ug/L	176	Standard
|	Cu	65	1370.7	1.6	0.4343	0.009	2.0	ug/L	186	Standard
|	Zn	66	10545.0	0.7	7.9915	0.039	0.5	ug/L	355	Standard
[>	Ge	72	396387.5	0.3				ug/L	437919	Standard
|	As	75	1992.7	9.6	1.7866	0.148	8.3	ug/L	-222	Standard
|	Se	82	1054.1	5.9	8.6136	0.492	5.7	ug/L	29	Standard
[	Se-1	77	275.3	6.6	1.0735	0.211	19.6	ug/L	201	Standard
[>	Ga	71	910.0	4.1				mg/L	985	Standard
|	Rb	85	20235.2	2.0				ug/L	22	Standard
|	Y	89	355072.1	2.3				ug/L	370795	Standard
[>	Rh	103	641.7	2.4				ug/L	498	Standard
|	Mo	98	2805.9	0.3	0.5417	0.007	1.3	ug/L	253	Standard
|	Ag	107	399.0	20.7	0.0378	0.008	21.3	ug/L	124	Standard
|	Cd	111	177.9	21.5	0.0273	0.008	27.9	mg/L	100	Standard
|	Cd	114	499.8	21.2	0.0183	0.007	39.0	ug/L	307	Standard
[>	In	115	1126403.2	1.6				ug/L	1045367	Standard
|	Sn	118	1873.4	9.4	0.0070	0.008	107.0	ug/L	1664	Standard
|	Sb	123	669.1	15.7	0.0427	0.009	20.5	ug/L	846	Standard
|	Ba	135	164370.9	1.1	29.0172	0.360	1.2	ug/L	61	Standard
[	Ce	140	5496.0	3.1				ug/L	30	Standard
[>	Tb	159	1440518.7	0.5				ug/L	1407506	Standard
|	Ho	165	99.0	7.1				ug/L	13	Standard
|	Tl	203	1156.7	10.1	0.0350	0.006	16.3	ug/L	713	Standard
|	Tl	205	2700.9	5.9	0.0331	0.004	10.7	ug/L	1648	Standard
|	Pb	206	1651.4	7.0	0.0792	0.008	9.8	ug/L	594	Standard
|	Pb	207	1345.4	5.4	0.0759	0.006	7.6	ug/L	497	Standard
|	Pb	208	6321.2	4.9	0.0772	0.005	6.7	ug/L	2293	Standard
	U	238	9140.1	1.6	0.5158	0.008	1.6	ug/L	301	Standard
[>	Bi	209	719178.8	0.8				ug/L	757838	Standard

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Na	23	150328.7	0.2	7.9429	0.171	2.2	mg/L	592	Standard
Mg	24	4395520.6	1.2	5.3338	0.063	1.2	mg/L	1565	Standard
K	39	1423.4	8.1	0.8143	0.095	11.7	mg/L	157	Standard
Ca	43	53.3	28.6	15.3988	4.485	29.1	mg/L	5	Standard
Fe	54	1348.5	5.0	0.0793	0.006	7.2	mg/L	717	Standard
Fe	57	29613.9	3.1	0.1948	0.002	1.0	mg/L	4072	Standard
Sc-1	45	526596.0	2.3				mg/L	476707	Standard
Cl	35	78.0	10.0				ug/L	29	Standard
Kr	83	51.7	7.1				ug/L	39	Standard
Br	81	70588.5	5.3				ug/L	1124	Standard
P	31	540.0	7.2				ug/L	495	Standard
S	34	34338.0	1.6				ug/L	6398	Standard
Sr	88	1043.4	6.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.516	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207071601

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	Cd	111	
	Cd	114	
>	In	115	107.752
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.899
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207071601

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Method 6020 - Summary Report

Sample ID: L1207071202

Sample Date/Time: Thursday, July 26, 2012 16:27:46

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11664.5	7.5	-1006.9942	222.993	22.1	ug/L	11975	Standard
|	Be	9	13.3	21.7	0.0142	0.002	14.5	ug/L	53	Standard
|	Al	27	76868.4	6.9	4.4092	0.164	3.7	ug/L	10095	Standard
[>	Sc	45	406765.7	4.7				ug/L	476707	Standard
[	Ti	47	128.7	81.7	0.0494	0.079	160.7	ug/L	149	Standard
|	V	51	4804.1	7.1	0.1872	0.016	8.8	ug/L	3747	Standard
|	Cr	52	9424.6	6.8	0.1065	0.030	28.5	ug/L	10265	Standard
|	Cr	53	725.9	10.2	-1.1141	0.065	5.9	ug/L	3075	Standard
|	Mn	55	3452.7	3.3	0.1013	0.003	3.2	ug/L	1438	Standard
|	Co	59	281.0	5.2	0.0170	0.000	2.9	ug/L	148	Standard
|	Ni	60	409.7	8.0	0.1197	0.006	4.7	ug/L	176	Standard
|	Cu	65	12060.5	4.2	4.7197	0.009	0.2	ug/L	186	Standard
|	Zn	66	337.0	6.0	-0.0182	0.005	27.2	ug/L	355	Standard
[>	Ge	72	359750.3	4.4				ug/L	437919	Standard
|	As	75	-190.4	6.7	0.0284	0.014	50.4	ug/L	-222	Standard
|	Se	82	27.0	12.3	0.0757	0.041	54.0	ug/L	29	Standard
[	Se-1	77	126.0	12.8	-0.4471	0.143	32.0	ug/L	201	Standard
[>	Ga	71	836.7	11.0				mg/L	985	Standard
[	Rb	85	198.3	12.4				ug/L	22	Standard
[	Y	89	303910.0	5.4				ug/L	370795	Standard
[>	Rh	103	431.7	14.8				ug/L	498	Standard
[	Mo	98	586.8	3.4	0.1191	0.002	1.6	ug/L	253	Standard
|	Ag	107	76.7	5.3	0.0043	0.000	7.1	ug/L	124	Standard
|	Cd	111	31.9	26.8	-0.0032	0.002	72.7	mg/L	100	Standard
|	Cd	114	87.5	8.9	-0.0112	0.001	7.6	ug/L	307	Standard
[>	In	115	1021870.6	3.7				ug/L	1045367	Standard
|	Sn	118	702.7	11.5	-0.0392	0.003	7.2	ug/L	1664	Standard
|	Sb	123	232.2	18.8	0.0070	0.003	48.8	ug/L	846	Standard
[	Ba	135	1684.1	3.0	0.3220	0.005	1.5	ug/L	61	Standard
[	Ce	140	119.3	13.8				ug/L	30	Standard
[>	Tb	159	1316112.4	2.4				ug/L	1407506	Standard
[	Ho	165	18.7	3.1				ug/L	13	Standard
|	Tl	203	199.7	14.9	-0.0144	0.002	13.6	ug/L	713	Standard
|	Tl	205	438.3	14.5	-0.0201	0.002	9.6	ug/L	1648	Standard
|	Pb	206	597.7	5.7	0.0087	0.001	11.9	ug/L	594	Standard
|	Pb	207	523.7	4.5	0.0097	0.004	36.9	ug/L	497	Standard
|	Pb	208	2387.1	4.2	0.0086	0.000	2.4	ug/L	2293	Standard
	U	238	9.7	6.0	0.0038	0.000	1.5	ug/L	301	Standard
[>	Bi	209	719648.2	4.4				ug/L	757838	Standard

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Na	23	7975.4	2.1	0.5037	0.014	2.9	mg/L	592	Standard
Mg	24	820.0	6.2	0.0012	0.000	11.0	mg/L	1565	Standard
K	39	190.0	23.4	0.0483	0.030	61.9	mg/L	157	Standard
Ca	43	8.3	91.7	2.6224	2.855	108.9	mg/L	5	Standard
Fe	54	215.5	17.4	-0.0873	0.008	9.6	mg/L	717	Standard
Fe	57	4128.9	10.0	0.0078	0.002	27.1	mg/L	4072	Standard
Sc-1	45	406765.7	4.7				mg/L	476707	Standard
Cl	35	3.7	68.6				ug/L	29	Standard
Kr	83	42.2	1.6				ug/L	39	Standard
Br	81	1489.2	13.0				ug/L	1124	Standard
P	31	160.8	16.6				ug/L	495	Standard
S	34	8916.0	5.8				ug/L	6398	Standard
Sr	88	41.7	42.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.150	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207071202

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	Cd	111	
	Cd	114	
>	In	115	97.752
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.961
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207071202

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Method 6020 - Summary Report

Sample ID: L1207075636

Sample Date/Time: Thursday, July 26, 2012 16:40:45

Number of Replicates: 3

Autosampler Position: 313

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15236.0	3.1	-1391.4224	294.614	21.2	ug/L	11975	Standard
|	Be	9	20.0	66.1	0.0157	0.006	40.2	ug/L	53	Standard
|	Al	27	37509.8	4.7	1.2390	0.080	6.5	ug/L	10095	Standard
[>	Sc	45	508045.4	1.7				ug/L	476707	Standard
|	Ti	47	146.0	16.5	0.0466	0.018	38.3	ug/L	149	Standard
|	V	51	4071.0	1.5	0.0473	0.010	20.5	ug/L	3747	Standard
|	Cr	52	12763.4	0.5	0.2638	0.028	10.5	ug/L	10265	Standard
|	Cr	53	1024.2	6.5	-1.0223	0.047	4.6	ug/L	3075	Standard
|	Mn	55	3215.3	5.4	0.0486	0.009	18.3	ug/L	1438	Standard
|	Co	59	129.7	6.0	-0.0009	0.001	59.0	ug/L	148	Standard
|	Ni	60	459.0	4.3	0.1105	0.006	5.9	ug/L	176	Standard
|	Cu	65	512.7	4.6	0.1116	0.009	8.4	ug/L	186	Standard
|	Zn	66	3568.1	2.3	2.2827	0.029	1.3	ug/L	355	Standard
[>	Ge	72	429393.0	1.8				ug/L	437919	Standard
|	As	75	-264.3	9.9	0.0013	0.021	1711.2	ug/L	-222	Standard
|	Se	82	29.2	12.9	0.0513	0.028	54.3	ug/L	29	Standard
[	Se-1	77	140.3	10.9	-0.5482	0.146	26.7	ug/L	201	Standard
[>	Ga	71	956.7	11.2				mg/L	985	Standard
|	Rb	85	141.7	8.9				ug/L	22	Standard
|	Y	89	375893.2	2.9				ug/L	370795	Standard
[>	Rh	103	535.0	7.3				ug/L	498	Standard
|	Mo	98	121.0	33.7	0.0147	0.007	48.7	ug/L	253	Standard
|	Ag	107	118.0	12.8	0.0071	0.001	19.5	ug/L	124	Standard
|	Cd	111	105.7	9.0	0.0105	0.002	17.1	mg/L	100	Standard
|	Cd	114	311.3	4.0	0.0032	0.000	13.8	ug/L	307	Standard
[>	In	115	1198435.9	2.0				ug/L	1045367	Standard
|	Sn	118	1618.1	16.8	-0.0079	0.010	121.0	ug/L	1664	Standard
|	Sb	123	336.7	31.3	0.0122	0.008	66.3	ug/L	846	Standard
|	Ba	135	2033.5	0.4	0.3317	0.005	1.7	ug/L	61	Standard
|	Ce	140	156.3	5.8				ug/L	30	Standard
[>	Tb	159	1501797.5	1.2				ug/L	1407506	Standard
|	Ho	165	19.0	27.9				ug/L	13	Standard
|	Tl	203	163.7	12.0	-0.0171	0.001	4.8	ug/L	713	Standard
|	Tl	205	385.7	11.4	-0.0223	0.001	3.8	ug/L	1648	Standard
|	Pb	206	643.0	6.0	0.0078	0.002	26.8	ug/L	594	Standard
|	Pb	207	528.0	7.6	0.0061	0.002	41.2	ug/L	497	Standard
|	Pb	208	2504.4	5.5	0.0066	0.002	27.8	ug/L	2293	Standard
	U	238	18.0	72.9	0.0041	0.001	15.9	ug/L	301	Standard
[>	Bi	209	792426.6	1.4				ug/L	757838	Standard

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Na	23	29652.3	0.7	1.5879	0.038	2.4	mg/L	592	Standard
Mg	24	8887.6	5.1	0.0111	0.001	4.8	mg/L	1565	Standard
K	39	166.7	12.5	0.0015	0.013	841.8	mg/L	157	Standard
Ca	43	3.3	86.6	0.4776	0.898	188.0	mg/L	5	Standard
Fe	54	774.4	6.1	-0.0056	0.010	173.7	mg/L	717	Standard
Fe	57	4734.1	4.5	0.0045	0.002	44.6	mg/L	4072	Standard
Sc-1	45	508045.4	1.7				mg/L	476707	Standard
Cl	35	14.3	14.5				ug/L	29	Standard
Kr	83	47.8	5.9				ug/L	39	Standard
Br	81	2076.0	2.2				ug/L	1124	Standard
P	31	541.7	3.3				ug/L	495	Standard
S	34	8278.1	1.6				ug/L	6398	Standard
Sr	88	30.0	60.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.053	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075636

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	Cd	111	
	Cd	114	
>	In	115	114.643
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.564
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075636

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Method 6020 - Summary Report

Sample ID: L1207075638

Sample Date/Time: Thursday, July 26, 2012 16:43:55

Number of Replicates: 3

Autosampler Position: 314

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15437.9	1.3	-1358.0853	257.757	19.0	ug/L	11975	Standard
|	Be	9	15.0	66.7	0.0131	0.004	34.1	ug/L	53	Standard
|	Al	27	376622.6	1.7	19.3006	1.050	5.4	ug/L	10095	Standard
[>	Sc	45	517053.4	3.6				ug/L	476707	Standard
[	Ti	47	1071.0	3.1	0.6768	0.032	4.7	ug/L	149	Standard
|	V	51	4419.8	0.4	0.0762	0.005	6.3	ug/L	3747	Standard
|	Cr	52	12766.4	1.3	0.2621	0.009	3.4	ug/L	10265	Standard
|	Cr	53	1172.5	0.6	-0.9367	0.007	0.8	ug/L	3075	Standard
|	Mn	55	7535.5	0.7	0.2989	0.005	1.6	ug/L	1438	Standard
|	Co	59	168.0	11.9	0.0024	0.002	65.8	ug/L	148	Standard
|	Ni	60	960.7	1.0	0.2662	0.002	0.9	ug/L	176	Standard
|	Cu	65	2320.5	30.9	0.7087	0.228	32.2	ug/L	186	Standard
|	Zn	66	7064.7	7.0	4.8147	0.286	5.9	ug/L	355	Standard
[>	Ge	72	429957.8	1.6				ug/L	437919	Standard
|	As	75	-280.6	4.0	-0.0103	0.007	71.2	ug/L	-222	Standard
|	Se	82	35.8	6.4	0.1017	0.019	18.4	ug/L	29	Standard
[	Se-1	77	165.7	5.1	-0.2905	0.060	20.5	ug/L	201	Standard
[>	Ga	71	1018.4	11.6				mg/L	985	Standard
[	Rb	85	880.0	11.9				ug/L	22	Standard
[	Y	89	380843.7	2.4				ug/L	370795	Standard
[>	Rh	103	568.3	6.2				ug/L	498	Standard
[	Mo	98	73.9	39.3	0.0059	0.005	87.0	ug/L	253	Standard
|	Ag	107	112.3	16.3	0.0064	0.002	27.2	ug/L	124	Standard
|	Cd	111	180.5	5.0	0.0251	0.002	8.5	mg/L	100	Standard
|	Cd	114	445.7	1.2	0.0120	0.000	1.1	ug/L	307	Standard
[>	In	115	1215297.0	1.2				ug/L	1045367	Standard
|	Sn	118	1590.8	7.8	-0.0098	0.004	43.2	ug/L	1664	Standard
|	Sb	123	222.4	22.6	0.0028	0.004	138.7	ug/L	846	Standard
[	Ba	135	2290.8	1.3	0.3691	0.005	1.4	ug/L	61	Standard
[	Ce	140	3684.4	1.8				ug/L	30	Standard
[>	Tb	159	1518548.9	0.5				ug/L	1407506	Standard
[	Ho	165	44.3	4.7				ug/L	13	Standard
|	Tl	203	270.7	10.9	-0.0123	0.001	10.4	ug/L	713	Standard
|	Tl	205	632.7	5.0	-0.0172	0.001	3.0	ug/L	1648	Standard
|	Pb	206	1175.0	3.5	0.0389	0.002	5.0	ug/L	594	Standard
|	Pb	207	985.7	7.4	0.0384	0.005	12.0	ug/L	497	Standard
|	Pb	208	4526.9	4.2	0.0375	0.002	5.7	ug/L	2293	Standard
	U	238	27.7	7.5	0.0046	0.000	2.2	ug/L	301	Standard
[>	Bi	209	805104.2	1.2				ug/L	757838	Standard

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Na	23	30472.3	2.0	1.6042	0.039	2.4	mg/L	592	Standard
Mg	24	30333.7	1.1	0.0374	0.002	4.6	mg/L	1565	Standard
K	39	213.3	18.8	0.0301	0.022	74.2	mg/L	157	Standard
Ca	43	3.3	86.6	0.4797	0.900	187.5	mg/L	5	Standard
Fe	54	824.6	9.2	0.0004	0.016	3760.0	mg/L	717	Standard
Fe	57	7340.1	6.0	0.0243	0.002	9.5	mg/L	4072	Standard
Sc-1	45	517053.4	3.6				mg/L	476707	Standard
Cl	35	10.0					ug/L	29	Standard
Kr	83	45.3	8.5				ug/L	39	Standard
Br	81	1851.8	1.7				ug/L	1124	Standard
P	31	523.3	6.9				ug/L	495	Standard
S	34	8176.4	2.1				ug/L	6398	Standard
Sr	88	31.7	9.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.182	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207075638

Report Date/Time: Thursday, July 26, 2012 16:46:25

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	Cd	111	
	Cd	114	
>	In	115	116.256
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	106.237
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207075638

Report Date/Time: Thursday, July 26, 2012 16:46:25

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 16:47:07

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

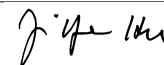
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14248.4	0.9	-723.6322	157.712	21.8	ug/L	11975	Standard
|	Be	9	114798.3	0.8	54.3277	1.058	1.9	ug/L	53	Standard
|	Al	27	890113.8	2.1	46.8110	0.714	1.5	ug/L	10095	Standard
[>	Sc	45	515167.4	1.1				ug/L	476707	Standard
|	Ti	47	157458.7	1.0	105.6386	1.805	1.7	ug/L	149	Standard
|	V	51	635208.2	1.0	52.4397	0.385	0.7	ug/L	3747	Standard
|	Cr	52	527851.6	0.7	52.5286	0.407	0.8	ug/L	10265	Standard
|	Cr	53	91312.7	1.7	51.0391	0.645	1.3	ug/L	3075	Standard
|	Mn	55	964573.8	0.4	54.9599	0.349	0.6	ug/L	1438	Standard
|	Co	59	633224.9	0.6	54.0461	0.165	0.3	ug/L	148	Standard
|	Ni	60	166306.4	0.6	50.8755	0.417	0.8	ug/L	176	Standard
|	Cu	65	153196.9	0.5	49.9734	0.562	1.1	ug/L	186	Standard
|	Zn	66	70507.7	0.7	50.1084	0.468	0.9	ug/L	355	Standard
[>	Ge	72	436427.2	0.9				ug/L	437919	Standard
|	As	75	68548.1	0.6	49.8967	0.540	1.1	ug/L	-222	Standard
|	Se	82	6871.6	0.4	51.8607	0.672	1.3	ug/L	29	Standard
[	Se-1	77	5113.2	0.4	49.6418	0.421	0.8	ug/L	201	Standard
[>	Ga	71	991.7	10.0				mg/L	985	Standard
|	Rb	85	966.7	3.9				ug/L	22	Standard
|	Y	89	378342.5	1.0				ug/L	370795	Standard
[>	Rh	103	601.7	14.6				ug/L	498	Standard
|	Mo	98	480137.9	1.0	88.1733	0.656	0.7	ug/L	253	Standard
|	Ag	107	508986.4	0.9	51.0445	0.099	0.2	ug/L	124	Standard
|	Cd	111	269191.6	0.6	54.1333	0.091	0.2	mg/L	100	Standard
|	Cd	114	725463.3	0.4	49.9550	0.616	1.2	ug/L	307	Standard
[>	In	115	1200125.4	0.8				ug/L	1045367	Standard
|	Sn	118	1640257.8	0.7	64.6693	0.409	0.6	ug/L	1664	Standard
|	Sb	123	617802.3	0.8	50.0467	0.026	0.1	ug/L	846	Standard
|	Ba	135	275569.3	1.1	45.6602	0.632	1.4	ug/L	61	Standard
|	Ce	140	1146.0	1.6				ug/L	30	Standard
[>	Tb	159	1541459.8	0.2				ug/L	1407506	Standard
|	Ho	165	28.3	23.5				ug/L	13	Standard
|	Tl	203	1031876.4	0.9	48.9522	0.355	0.7	ug/L	713	Standard
|	Tl	205	2351287.1	0.4	50.8081	0.464	0.9	ug/L	1648	Standard
|	Pb	206	802481.2	0.9	49.2439	0.506	1.0	ug/L	594	Standard
|	Pb	207	681200.3	0.7	50.3766	0.469	0.9	ug/L	497	Standard
|	Pb	208	3146559.3	0.6	50.3576	0.408	0.8	ug/L	2293	Standard
	U	238	1053185.9	1.0	54.2530	0.233	0.4	ug/L	301	Standard
[>	Bi	209	782972.8	1.3				ug/L	757838	Standard

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Na	23	119702.7	1.5	6.4545	0.057	0.9	mg/L	592	Standard
Mg	24	3782549.6	2.3	4.6916	0.129	2.8	mg/L	1565	Standard
K	39	6394.7	3.6	4.1300	0.145	3.5	mg/L	157	Standard
Ca	43	11.7	49.5	3.0212	1.784	59.1	mg/L	5	Standard
Fe	54	29284.0	2.2	4.5361	0.087	1.9	mg/L	717	Standard
Fe	57	661477.5	5.6	5.1746	0.235	4.5	mg/L	4072	Standard
Sc-1	45	515167.4	1.1				mg/L	476707	Standard
Cl	35	5.7	27.0				ug/L	29	Standard
Kr	83	49.4	9.5				ug/L	39	Standard
Br	81	1670.1	2.1				ug/L	1124	Standard
P	31	603.3	4.8				ug/L	495	Standard
S	34	8104.7	2.3				ug/L	6398	Standard
Sr	88	43.3	40.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	93.622		
Sc	45			
Ti	47	105.639		
V	51	104.879		
Cr	52	105.057		
Cr	53			
Mn	55	109.920		
Co	59	108.092		
Ni	60	101.751		
Cu	65	99.947		
Zn	66	100.217		
Ge	72		99.659	
As	75	99.793		
Se	82	103.721		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	88.173		
Ag	107	102.089		

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	Cd	111	108.267	
	Cd	114		
>	In	115		114.804
	Sn	118	129.339	
	Sb	123	100.093	
	Ba	135	91.320	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.904	
|	Tl	205		
|	Pb	206	98.488	
|	Pb	207	100.753	
|	Pb	208	100.715	
|	U	238	108.506	
>	Bi	209		103.317
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	
QC Std 6	Sn	118	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 16:49:38

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 16:50:18

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13559.4	2.1	-592.7606	263.429	44.4	ug/L	11975	Standard
|	Be	9	25.0	52.9	0.0184	0.007	35.5	ug/L	53	Standard
|	Al	27	10618.7	3.6	-0.2078	0.033	15.8	ug/L	10095	Standard
[>	Sc	45	498612.2	2.1				ug/L	476707	Standard
|	Ti	47	90.0	18.6	0.0085	0.012	136.6	ug/L	149	Standard
|	V	51	3453.5	1.0	-0.0040	0.002	54.2	ug/L	3747	Standard
|	Cr	52	10541.0	1.2	0.0378	0.012	31.4	ug/L	10265	Standard
|	Cr	53	685.8	6.5	-1.2198	0.028	2.3	ug/L	3075	Standard
|	Mn	55	2380.9	4.1	0.0007	0.006	921.6	ug/L	1438	Standard
|	Co	59	149.7	28.4	0.0009	0.004	413.7	ug/L	148	Standard
|	Ni	60	155.3	42.0	0.0162	0.021	126.8	ug/L	176	Standard
|	Cu	65	255.0	66.2	0.0265	0.057	214.1	ug/L	186	Standard
|	Zn	66	290.0	19.3	-0.0989	0.042	42.0	ug/L	355	Standard
[>	Ge	72	427986.6	0.4				ug/L	437919	Standard
|	As	75	-234.3	22.0	0.0230	0.037	163.0	ug/L	-222	Standard
|	Se	82	25.8	5.8	0.0260	0.011	42.5	ug/L	29	Standard
[	Se-1	77	141.7	3.9	-0.5292	0.053	10.1	ug/L	201	Standard
[>	Ga	71	885.0	8.3				mg/L	985	Standard
|	Rb	85	26.7	28.6				ug/L	22	Standard
|	Y	89	371371.3	0.7				ug/L	370795	Standard
[>	Rh	103	560.0	8.2				ug/L	498	Standard
|	Mo	98	498.1	16.9	0.0848	0.016	18.7	ug/L	253	Standard
|	Ag	107	209.3	38.0	0.0165	0.008	49.4	ug/L	124	Standard
|	Cd	111	122.5	31.9	0.0141	0.008	57.1	mg/L	100	Standard
|	Cd	114	350.4	32.5	0.0061	0.008	131.8	ug/L	307	Standard
[>	In	115	1189854.6	0.9				ug/L	1045367	Standard
|	Sn	118	1886.1	5.9	0.0033	0.004	134.4	ug/L	1664	Standard
|	Sb	123	2971.5	3.5	0.2278	0.006	2.8	ug/L	846	Standard
|	Ba	135	91.3	37.8	0.0094	0.006	61.7	ug/L	61	Standard
|	Ce	140	44.3	11.1				ug/L	30	Standard
[>	Tb	159	1483812.9	0.4				ug/L	1407506	Standard
|	Ho	165	20.3	12.4				ug/L	13	Standard
|	Tl	203	178.7	57.7	-0.0164	0.005	29.9	ug/L	713	Standard
|	Tl	205	445.3	50.0	-0.0210	0.005	23.0	ug/L	1648	Standard
|	Pb	206	616.3	19.1	0.0063	0.007	116.8	ug/L	594	Standard
|	Pb	207	493.0	11.0	0.0036	0.004	114.4	ug/L	497	Standard
|	Pb	208	2377.1	12.0	0.0047	0.005	98.9	ug/L	2293	Standard
	U	238	111.7	71.4	0.0089	0.004	46.1	ug/L	301	Standard
[>	Bi	209	791078.9	1.3				ug/L	757838	Standard

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Na	23	531.7	25.9	-0.0153	0.008	54.5	mg/L	592	Standard
Mg	24	625.0	70.6	0.0007	0.001	80.7	mg/L	1565	Standard
K	39	160.0	11.3	-0.0010	0.010	1097.1	mg/L	157	Standard
Ca	43	3.3	86.6	0.4945	0.913	184.6	mg/L	5	Standard
Fe	54	766.3	2.1	-0.0047	0.003	70.9	mg/L	717	Standard
Fe	57	4545.7	3.1	0.0037	0.001	18.3	mg/L	4072	Standard
Sc-1	45	498612.2	2.1				mg/L	476707	Standard
Cl	35	6.0	50.0				ug/L	29	Standard
Kr	83	52.7	0.6				ug/L	39	Standard
Br	81	1726.8	2.4				ug/L	1124	Standard
P	31	575.0	11.7				ug/L	495	Standard
S	34	7887.1	1.4				ug/L	6398	Standard
Sr	88	35.0	42.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.732	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	113.822
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.386
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207072501

Sample Date/Time: Thursday, July 26, 2012 16:53:29

Number of Replicates: 3

Autosampler Position: 315

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

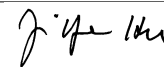
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21146.4	4.8	-5757.8442	390.885	6.8	ug/L	11975	Standard
|	Be	9	16.7	75.5	0.0147	0.006	43.7	ug/L	53	Standard
|	Al	27	247506.6	6.0	13.7960	0.672	4.9	ug/L	10095	Standard
[>	Sc	45	467261.9	2.5				ug/L	476707	Standard
|	Ti	47	885.0	4.0	0.6193	0.025	4.1	ug/L	149	Standard
|	V	51	11033.7	1.4	0.7408	0.016	2.2	ug/L	3747	Standard
|	Cr	52	13420.9	1.4	0.4890	0.017	3.4	ug/L	10265	Standard
|	Cr	53	964.2	4.8	-0.9936	0.030	3.1	ug/L	3075	Standard
|	Mn	55	171834.4	2.9	10.9738	0.284	2.6	ug/L	1438	Standard
|	Co	59	1061.4	4.1	0.0904	0.004	4.3	ug/L	148	Standard
|	Ni	60	216472.7	3.6	74.9818	2.449	3.3	ug/L	176	Standard
|	Cu	65	802.7	9.7	0.2381	0.028	11.7	ug/L	186	Standard
|	Zn	66	179641.2	2.7	145.1141	3.469	2.4	ug/L	355	Standard
[>	Ge	72	385478.0	0.4				ug/L	437919	Standard
|	As	75	-884.7	42.3	-0.5305	0.308	58.1	ug/L	-222	Standard
|	Se	82	7066.7	3.0	60.4031	1.621	2.7	ug/L	29	Standard
[	Se-1	77	5114.9	3.9	56.4786	2.127	3.8	ug/L	201	Standard
[>	Ga	71	868.4	4.3				mg/L	985	Standard
|	Rb	85	8772.5	3.1				ug/L	22	Standard
|	Y	89	338591.1	2.4				ug/L	370795	Standard
[>	Rh	103	550.0	5.5				ug/L	498	Standard
|	Mo	98	27916.9	3.3	5.6331	0.130	2.3	ug/L	253	Standard
|	Ag	107	99.0	8.6	0.0062	0.001	16.3	ug/L	124	Standard
|	Cd	111	2745.9	1.7	0.5969	0.008	1.4	mg/L	100	Standard
|	Cd	114	7239.9	2.6	0.5304	0.008	1.6	ug/L	307	Standard
[>	In	115	1090721.5	1.0				ug/L	1045367	Standard
|	Sn	118	1161.7	14.4	-0.0214	0.007	31.6	ug/L	1664	Standard
|	Sb	123	1673.0	8.9	0.1341	0.012	8.8	ug/L	846	Standard
|	Ba	135	6057.2	1.7	1.0986	0.015	1.4	ug/L	61	Standard
|	Ce	140	2340.2	3.1				ug/L	30	Standard
[>	Tb	159	1433470.1	1.2				ug/L	1407506	Standard
|	Ho	165	86.3	12.4				ug/L	13	Standard
|	Tl	203	470.7	6.1	-0.0008	0.002	202.7	ug/L	713	Standard
|	Tl	205	1065.0	3.5	-0.0058	0.001	18.0	ug/L	1648	Standard
|	Pb	206	714.7	2.7	0.0158	0.001	7.2	ug/L	594	Standard
|	Pb	207	603.7	0.5	0.0153	0.000	1.0	ug/L	497	Standard
|	Pb	208	2750.1	1.4	0.0142	0.001	3.7	ug/L	2293	Standard
	U	238	89142.7	4.1	4.9247	0.231	4.7	ug/L	301	Standard
[>	Bi	209	730648.9	0.8				ug/L	757838	Standard

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Na	23	65782.6	2.9	3.8926	0.016	0.4	mg/L	592	Standard
Mg	24	8693444.4	3.5	11.8848	0.121	1.0	mg/L	1565	Standard
K	39	543.3	5.4	0.2871	0.029	10.0	mg/L	157	Standard
Ca	43	125.0	24.3	41.5742	9.644	23.2	mg/L	5	Standard
Fe	54	522.9	4.9	-0.0390	0.003	8.8	mg/L	717	Standard
Fe	57	26546.6	7.1	0.1970	0.011	5.6	mg/L	4072	Standard
Sc-1	45	467261.9	2.5				mg/L	476707	Standard
Cl	35	5.3	60.3				ug/L	29	Standard
Kr	83	50.7	14.4				ug/L	39	Standard
Br	81	2018.5	6.5				ug/L	1124	Standard
P	31	539.2	3.6				ug/L	495	Standard
S	34	93138.8	1.7				ug/L	6398	Standard
Sr	88	473.3	5.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.025	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072501

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	Cd	111	
	Cd	114	
>	In	115	104.339
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.412
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

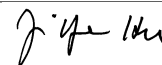
Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	
As 75 Lower	As	75	

Sample ID: L1207072501

Report Date/Time: Thursday, July 26, 2012 16:55:59

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Method 6020 - Summary Report

Sample ID: L1207072502

Sample Date/Time: Thursday, July 26, 2012 16:56:39

Number of Replicates: 3

Autosampler Position: 316

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20034.9	0.8	-5334.7264	335.800	6.3	ug/L	11975	Standard
|	Be	9	15.0	88.2	0.0140	0.007	49.4	ug/L	53	Standard
|	Al	27	28854.1	1.7	0.9412	0.018	1.9	ug/L	10095	Standard
[>	Sc	45	457969.7	2.7				ug/L	476707	Standard
[	Ti	47	251.0	4.8	0.1375	0.011	8.3	ug/L	149	Standard
|	V	51	8821.5	1.8	0.5321	0.012	2.2	ug/L	3747	Standard
|	Cr	52	11733.2	1.9	0.2940	0.024	8.1	ug/L	10265	Standard
|	Cr	53	748.4	2.3	-1.1349	0.009	0.8	ug/L	3075	Standard
|	Mn	55	130031.9	2.9	8.2633	0.184	2.2	ug/L	1438	Standard
|	Co	59	1597.8	9.3	0.1420	0.011	7.7	ug/L	148	Standard
|	Ni	60	174239.5	2.3	60.3040	1.424	2.4	ug/L	176	Standard
|	Cu	65	623.3	4.0	0.1716	0.004	2.5	ug/L	186	Standard
|	Zn	66	77827.1	2.3	62.6498	1.721	2.7	ug/L	355	Standard
[>	Ge	72	385843.6	2.1				ug/L	437919	Standard
|	As	75	-876.1	6.6	-0.5219	0.033	6.3	ug/L	-222	Standard
|	Se	82	6005.6	1.6	51.2722	1.097	2.1	ug/L	29	Standard
[	Se-1	77	4250.9	2.9	46.5613	1.001	2.1	ug/L	201	Standard
[>	Ga	71	841.7	14.1				mg/L	985	Standard
[	Rb	85	6674.8	1.3				ug/L	22	Standard
[	Y	89	338445.3	2.9				ug/L	370795	Standard
[>	Rh	103	516.7	5.3				ug/L	498	Standard
[	Mo	98	23236.4	4.5	4.5905	0.200	4.4	ug/L	253	Standard
|	Ag	107	80.3	15.2	0.0040	0.001	32.1	ug/L	124	Standard
|	Cd	111	61.2	25.9	0.0025	0.003	134.4	mg/L	100	Standard
|	Cd	114	246.8	14.7	0.0000	0.003	9285.8	ug/L	307	Standard
[>	In	115	1113820.9	0.6				ug/L	1045367	Standard
|	Sn	118	927.7	9.7	-0.0323	0.004	11.9	ug/L	1664	Standard
|	Sb	123	1279.6	6.9	0.0967	0.008	7.9	ug/L	846	Standard
[	Ba	135	4577.7	4.2	0.8115	0.032	4.0	ug/L	61	Standard
[	Ce	140	157.3	5.7				ug/L	30	Standard
[>	Tb	159	1418899.8	0.1				ug/L	1407506	Standard
[	Ho	165	17.0	27.0				ug/L	13	Standard
|	Tl	203	375.3	8.3	-0.0060	0.001	21.7	ug/L	713	Standard
|	Tl	205	905.4	3.4	-0.0099	0.000	4.3	ug/L	1648	Standard
|	Pb	206	548.3	5.4	0.0042	0.002	57.2	ug/L	594	Standard
|	Pb	207	454.0	3.1	0.0028	0.001	31.8	ug/L	497	Standard
|	Pb	208	2190.4	1.6	0.0039	0.001	15.0	ug/L	2293	Standard
	U	238	74124.6	2.5	4.0197	0.050	1.3	ug/L	301	Standard
[>	Bi	209	744217.8	1.4				ug/L	757838	Standard

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Na	23	58673.4	0.8	3.5408	0.123	3.5	mg/L	592	Standard
Mg	24	7189008.1	1.7	10.0308	0.096	1.0	mg/L	1565	Standard
K	39	495.0	19.7	0.2577	0.062	24.2	mg/L	157	Standard
Ca	43	108.3	23.7	36.8948	9.469	25.7	mg/L	5	Standard
Fe	54	327.0	17.0	-0.0721	0.011	15.8	mg/L	717	Standard
Fe	57	21869.1	3.0	0.1604	0.002	1.4	mg/L	4072	Standard
Sc-1	45	457969.7	2.7				mg/L	476707	Standard
Cl	35	10.0	36.1				ug/L	29	Standard
Kr	83	52.0	2.9				ug/L	39	Standard
Br	81	1814.3	2.1				ug/L	1124	Standard
P	31	360.0	9.7				ug/L	495	Standard
S	34	78033.8	1.9				ug/L	6398	Standard
Sr	88	391.7	12.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.108	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072502

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	Cd	111	
	Cd	114	
>	In	115	106.548
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.203
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
As 75 Lower	As	75	

Sample ID: L1207072502

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Method 6020 - Summary Report

Sample ID: L1207072503

Sample Date/Time: Thursday, July 26, 2012 16:59:48

Number of Replicates: 3

Autosampler Position: 317

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23807.0	4.1	-7349.2092	509.311	6.9	ug/L	11975	Standard
|	Be	9	16.7	75.5	0.0149	0.007	45.3	ug/L	53	Standard
|	Al	27	87922.7	1.6	4.3773	0.192	4.4	ug/L	10095	Standard
[>	Sc	45	468624.2	2.3				ug/L	476707	Standard
|	Ti	47	991.4	1.8	0.7025	0.015	2.2	ug/L	149	Standard
|	V	51	4327.3	3.8	0.1117	0.019	16.9	ug/L	3747	Standard
|	Cr	52	11508.7	2.6	0.2736	0.043	15.8	ug/L	10265	Standard
|	Cr	53	736.7	9.0	-1.1409	0.039	3.4	ug/L	3075	Standard
|	Mn	55	296108.1	3.3	19.0693	0.602	3.2	ug/L	1438	Standard
|	Co	59	920.7	8.4	0.0771	0.008	10.2	ug/L	148	Standard
|	Ni	60	9296.5	2.1	3.1997	0.092	2.9	ug/L	176	Standard
|	Cu	65	796.4	6.6	0.2369	0.022	9.3	ug/L	186	Standard
|	Zn	66	8124.5	1.6	6.2873	0.124	2.0	ug/L	355	Standard
[>	Ge	72	384309.8	0.9				ug/L	437919	Standard
|	As	75	-181.9	40.0	0.0461	0.061	132.6	ug/L	-222	Standard
|	Se	82	482.1	4.7	3.9714	0.170	4.3	ug/L	29	Standard
[	Se-1	77	438.7	2.4	3.0424	0.126	4.1	ug/L	201	Standard
[>	Ga	71	898.4	7.2				mg/L	985	Standard
|	Rb	85	8083.8	3.6				ug/L	22	Standard
|	Y	89	341001.2	2.5				ug/L	370795	Standard
[>	Rh	103	596.7	16.2				ug/L	498	Standard
|	Mo	98	1399.9	9.2	0.2721	0.026	9.6	ug/L	253	Standard
|	Ag	107	77.0	10.3	0.0037	0.001	23.1	ug/L	124	Standard
|	Cd	111	120.6	7.7	0.0156	0.002	13.4	mg/L	100	Standard
|	Cd	114	302.8	6.1	0.0044	0.001	28.5	ug/L	307	Standard
[>	In	115	1103702.2	0.6				ug/L	1045367	Standard
|	Sn	118	1275.7	9.5	-0.0170	0.005	31.6	ug/L	1664	Standard
|	Sb	123	325.7	24.1	0.0137	0.007	51.2	ug/L	846	Standard
|	Ba	135	39563.9	1.3	7.1232	0.106	1.5	ug/L	61	Standard
|	Ce	140	348.7	5.4				ug/L	30	Standard
[>	Tb	159	1422416.3	0.8				ug/L	1407506	Standard
|	Ho	165	20.0	8.7				ug/L	13	Standard
|	Tl	203	367.7	13.5	-0.0061	0.003	42.7	ug/L	713	Standard
|	Tl	205	873.0	15.3	-0.0104	0.003	29.8	ug/L	1648	Standard
|	Pb	206	578.3	7.0	0.0066	0.003	43.5	ug/L	594	Standard
|	Pb	207	494.3	4.8	0.0065	0.002	33.1	ug/L	497	Standard
|	Pb	208	2281.4	5.3	0.0059	0.003	43.4	ug/L	2293	Standard
	U	238	16805.3	4.1	0.9257	0.038	4.1	ug/L	301	Standard
[>	Bi	209	734777.4	1.3				ug/L	757838	Standard

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Na	23	78526.5	3.4	4.6441	0.201	4.3	mg/L	592	Standard
Mg	24	9967504.2	3.3	13.5903	0.374	2.7	mg/L	1565	Standard
K	39	791.7	9.8	0.4674	0.065	13.9	mg/L	157	Standard
Ca	43	125.0	14.4	41.6318	6.996	16.8	mg/L	5	Standard
Fe	54	391.7	8.9	-0.0623	0.005	7.4	mg/L	717	Standard
Fe	57	24551.5	2.2	0.1793	0.004	2.1	mg/L	4072	Standard
Sc-1	45	468624.2	2.3				mg/L	476707	Standard
Cl	35	8.7	29.0				ug/L	29	Standard
Kr	83	53.9	9.0				ug/L	39	Standard
Br	81	1870.9	7.7				ug/L	1124	Standard
P	31	2485.2	1.3				ug/L	495	Standard
S	34	102423.4	1.0				ug/L	6398	Standard
Sr	88	636.7	11.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.758	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072503

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	Cd	111	
	Cd	114	
>	In	115	105.580
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.957
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072503

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Method 6020 - Summary Report

Sample ID: L1207072504

Sample Date/Time: Thursday, July 26, 2012 17:02:58

Number of Replicates: 3

Autosampler Position: 318

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23489.9	2.7	-7285.6134	262.230	3.6	ug/L	11975	Standard
|	Be	9	23.3	86.6	0.0183	0.010	56.8	ug/L	53	Standard
|	Al	27	28905.9	1.8	0.9200	0.012	1.3	ug/L	10095	Standard
[>	Sc	45	464371.3	1.4				ug/L	476707	Standard
|	Ti	47	749.0	7.8	0.5314	0.043	8.1	ug/L	149	Standard
|	V	51	3950.0	2.8	0.0850	0.011	12.7	ug/L	3747	Standard
|	Cr	52	10867.9	0.8	0.2297	0.005	2.2	ug/L	10265	Standard
|	Cr	53	663.3	7.5	-1.1784	0.031	2.6	ug/L	3075	Standard
|	Mn	55	282720.9	2.3	18.6439	0.456	2.4	ug/L	1438	Standard
|	Co	59	3181.0	3.1	0.3037	0.009	3.0	ug/L	148	Standard
|	Ni	60	5472.0	3.2	1.9157	0.063	3.3	ug/L	176	Standard
|	Cu	65	701.7	2.0	0.2079	0.007	3.3	ug/L	186	Standard
|	Zn	66	2969.3	4.0	2.1591	0.107	4.9	ug/L	355	Standard
[>	Ge	72	375260.7	0.7				ug/L	437919	Standard
|	As	75	-161.4	3.1	0.0601	0.004	7.1	ug/L	-222	Standard
|	Se	82	354.5	2.5	2.9483	0.057	1.9	ug/L	29	Standard
[	Se-1	77	347.3	1.3	2.0913	0.077	3.7	ug/L	201	Standard
[>	Ga	71	821.7	5.3				mg/L	985	Standard
|	Rb	85	7862.0	2.3				ug/L	22	Standard
|	Y	89	343723.8	1.1				ug/L	370795	Standard
[>	Rh	103	620.0	6.3				ug/L	498	Standard
|	Mo	98	796.5	6.7	0.1504	0.010	6.7	ug/L	253	Standard
|	Ag	107	78.7	36.7	0.0038	0.003	80.2	ug/L	124	Standard
|	Cd	111	52.8	15.7	0.0007	0.002	244.2	mg/L	100	Standard
|	Cd	114	157.5	14.6	-0.0066	0.002	24.3	ug/L	307	Standard
[>	In	115	1112246.4	0.9				ug/L	1045367	Standard
|	Sn	118	973.7	10.3	-0.0303	0.004	13.7	ug/L	1664	Standard
|	Sb	123	331.3	14.1	0.0140	0.004	28.9	ug/L	846	Standard
|	Ba	135	37679.1	1.8	6.7323	0.180	2.7	ug/L	61	Standard
|	Ce	140	101.0	7.7				ug/L	30	Standard
[>	Tb	159	1411657.1	0.6				ug/L	1407506	Standard
|	Ho	165	17.7	11.8				ug/L	13	Standard
|	Tl	203	308.3	17.7	-0.0091	0.003	30.2	ug/L	713	Standard
|	Tl	205	766.0	11.1	-0.0128	0.002	15.2	ug/L	1648	Standard
|	Pb	206	528.7	6.4	0.0035	0.002	62.8	ug/L	594	Standard
|	Pb	207	455.7	7.3	0.0035	0.003	73.8	ug/L	497	Standard
|	Pb	208	2082.7	2.8	0.0027	0.001	36.6	ug/L	2293	Standard
	U	238	16188.0	2.9	0.8953	0.025	2.8	ug/L	301	Standard
[>	Bi	209	731797.4	0.1				ug/L	757838	Standard

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Na	23	78067.3	0.2	4.6581	0.068	1.5	mg/L	592	Standard
Mg	24	9554738.4	2.2	13.1449	0.107	0.8	mg/L	1565	Standard
K	39	698.3	15.0	0.4029	0.074	18.3	mg/L	157	Standard
Ca	43	103.3	5.6	34.5344	1.472	4.3	mg/L	5	Standard
Fe	54	347.7	10.8	-0.0694	0.007	10.4	mg/L	717	Standard
Fe	57	23049.2	6.4	0.1681	0.013	7.6	mg/L	4072	Standard
Sc-1	45	464371.3	1.4				mg/L	476707	Standard
Cl	35	10.3	29.6				ug/L	29	Standard
Kr	83	48.6	7.6				ug/L	39	Standard
Br	81	1806.8	1.9				ug/L	1124	Standard
P	31	2076.0	3.6				ug/L	495	Standard
S	34	96993.8	2.5				ug/L	6398	Standard
Sr	88	548.3	1.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.692	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072504

Report Date/Time: Thursday, July 26, 2012 17:05:28

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	Cd	111	
	Cd	114	
>	In	115	106.398
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.564
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072504

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Method 6020 - Summary Report

Sample ID: L1207072505

Sample Date/Time: Thursday, July 26, 2012 17:06:07

Number of Replicates: 3

Autosampler Position: 319

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22566.8	2.3	-6957.4936	112.723	1.6	ug/L	11975	Standard
|	Be	9	11.7	49.5	0.0123	0.003	24.3	ug/L	53	Standard
|	Al	27	151363.1	3.9	8.3467	0.497	6.0	ug/L	10095	Standard
[>	Sc	45	456495.2	2.2				ug/L	476707	Standard
[	Ti	47	1255.1	15.2	0.9302	0.136	14.6	ug/L	149	Standard
|	V	51	4140.9	3.7	0.1056	0.020	19.2	ug/L	3747	Standard
|	Cr	52	11481.3	1.5	0.3093	0.041	13.3	ug/L	10265	Standard
|	Cr	53	710.9	1.7	-1.1440	0.005	0.4	ug/L	3075	Standard
|	Mn	55	231618.2	1.7	15.3293	0.451	2.9	ug/L	1438	Standard
|	Co	59	1265.7	4.4	0.1142	0.006	4.9	ug/L	148	Standard
|	Ni	60	5876.8	2.4	2.0707	0.069	3.3	ug/L	176	Standard
|	Cu	65	768.4	2.4	0.2347	0.006	2.7	ug/L	186	Standard
|	Zn	66	4253.6	4.5	3.2456	0.183	5.6	ug/L	355	Standard
[>	Ge	72	373400.5	1.5				ug/L	437919	Standard
|	As	75	-52.4	99.9	0.1513	0.045	29.7	ug/L	-222	Standard
|	Se	82	217.6	1.5	1.7524	0.004	0.2	ug/L	29	Standard
[	Se-1	77	236.3	2.6	0.8014	0.067	8.3	ug/L	201	Standard
[>	Ga	71	938.4	12.6				mg/L	985	Standard
[	Rb	85	6814.9	1.8				ug/L	22	Standard
[	Y	89	340171.0	2.4				ug/L	370795	Standard
[>	Rh	103	640.0	2.1				ug/L	498	Standard
[	Mo	98	1042.1	6.3	0.2030	0.016	7.8	ug/L	253	Standard
|	Ag	107	70.3	24.8	0.0030	0.002	56.0	ug/L	124	Standard
|	Cd	111	91.8	7.5	0.0096	0.002	18.4	mg/L	100	Standard
|	Cd	114	262.9	5.6	0.0017	0.002	112.1	ug/L	307	Standard
[>	In	115	1092377.9	3.7				ug/L	1045367	Standard
|	Sn	118	911.7	8.5	-0.0322	0.003	10.6	ug/L	1664	Standard
|	Sb	123	370.8	15.2	0.0180	0.005	27.9	ug/L	846	Standard
[	Ba	135	64218.8	1.4	11.6975	0.514	4.4	ug/L	61	Standard
[	Ce	140	1411.7	3.0				ug/L	30	Standard
[>	Tb	159	1390475.9	2.2				ug/L	1407506	Standard
[	Ho	165	39.0	22.4				ug/L	13	Standard
|	Tl	203	375.3	9.5	-0.0056	0.002	35.4	ug/L	713	Standard
|	Tl	205	847.0	7.3	-0.0108	0.002	15.8	ug/L	1648	Standard
|	Pb	206	713.4	4.2	0.0158	0.002	15.1	ug/L	594	Standard
|	Pb	207	579.7	2.9	0.0135	0.000	3.4	ug/L	497	Standard
|	Pb	208	2714.1	1.0	0.0136	0.001	8.5	ug/L	2293	Standard
	U	238	8049.1	1.5	0.4482	0.011	2.5	ug/L	301	Standard
[>	Bi	209	729797.6	2.0				ug/L	757838	Standard

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Na	23	76338.5	0.9	4.6337	0.080	1.7	mg/L	592	Standard
Mg	24	9049199.1	2.9	12.6653	0.252	2.0	mg/L	1565	Standard
K	39	581.7	7.5	0.3246	0.027	8.2	mg/L	157	Standard
Ca	43	121.7	16.6	41.5030	7.037	17.0	mg/L	5	Standard
Fe	54	448.4	7.9	-0.0503	0.006	11.2	mg/L	717	Standard
Fe	57	23958.9	2.8	0.1797	0.009	5.0	mg/L	4072	Standard
Sc-1	45	456495.2	2.2				mg/L	476707	Standard
Cl	35	9.3	22.3				ug/L	29	Standard
Kr	83	53.2	8.8				ug/L	39	Standard
Br	81	2096.8	7.3				ug/L	1124	Standard
P	31	2024.3	0.8				ug/L	495	Standard
S	34	93729.1	2.4				ug/L	6398	Standard
Sr	88	598.3	5.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.267	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	104.497	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	96.300	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072501

Sample Date/Time: Thursday, July 26, 2012 17:09:17

Number of Replicates: 3

Autosampler Position: 320

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13526.0	1.8	-1893.5119	143.700	7.6	ug/L	11975	Standard
|	Be	9	5.0	100.0	0.0090	0.003	32.6	ug/L	53	Standard
|	Al	27	19063.7	5.7	0.4371	0.047	10.8	ug/L	10095	Standard
[>	Sc	45	426128.4	2.6				ug/L	476707	Standard
[	Ti	47	102.7	3.1	0.0292	0.003	9.3	ug/L	149	Standard
|	V	51	3782.1	4.8	0.0788	0.015	19.0	ug/L	3747	Standard
|	Cr	52	10076.0	2.6	0.1689	0.024	14.3	ug/L	10265	Standard
|	Cr	53	593.3	2.4	-1.2142	0.011	0.9	ug/L	3075	Standard
|	Mn	55	11506.4	2.4	0.6475	0.019	2.9	ug/L	1438	Standard
|	Co	59	147.3	5.4	0.0029	0.001	32.6	ug/L	148	Standard
|	Ni	60	13732.9	4.0	4.9909	0.180	3.6	ug/L	176	Standard
|	Cu	65	183.7	10.2	0.0131	0.008	61.6	ug/L	186	Standard
|	Zn	66	13918.1	3.7	11.5822	0.376	3.2	ug/L	355	Standard
[>	Ge	72	365193.0	1.2				ug/L	437919	Standard
|	As	75	-290.8	12.0	-0.0560	0.032	56.8	ug/L	-222	Standard
|	Se	82	495.1	2.4	4.3059	0.056	1.3	ug/L	29	Standard
[	Se-1	77	452.7	0.8	3.4751	0.098	2.8	ug/L	201	Standard
[>	Ga	71	766.7	2.7				mg/L	985	Standard
[	Rb	85	560.0	6.2				ug/L	22	Standard
[	Y	89	322612.0	1.0				ug/L	370795	Standard
[>	Rh	103	455.0	5.7				ug/L	498	Standard
[	Mo	98	1520.5	1.5	0.3033	0.004	1.2	ug/L	253	Standard
|	Ag	107	63.0	13.8	0.0023	0.001	42.0	ug/L	124	Standard
|	Cd	111	224.0	8.8	0.0394	0.005	12.2	mg/L	100	Standard
|	Cd	114	575.8	2.6	0.0259	0.002	6.0	ug/L	307	Standard
[>	In	115	1078247.7	1.0				ug/L	1045367	Standard
|	Sn	118	703.0	2.1	-0.0409	0.001	2.3	ug/L	1664	Standard
|	Sb	123	150.0	6.2	-0.0015	0.001	64.2	ug/L	846	Standard
[	Ba	135	408.7	4.3	0.0695	0.003	4.4	ug/L	61	Standard
[	Ce	140	168.3	8.6				ug/L	30	Standard
[>	Tb	159	1355194.5	1.6				ug/L	1407506	Standard
[	Ho	165	20.3	18.6				ug/L	13	Standard
|	Tl	203	137.7	11.7	-0.0180	0.001	4.2	ug/L	713	Standard
|	Tl	205	320.0	7.3	-0.0233	0.000	2.1	ug/L	1648	Standard
|	Pb	206	487.3	3.5	-0.0002	0.001	507.7	ug/L	594	Standard
|	Pb	207	397.7	0.8	-0.0021	0.000	5.2	ug/L	497	Standard
|	Pb	208	1906.7	2.0	-0.0014	0.001	55.1	ug/L	2293	Standard
	U	238	5716.1	2.5	0.3081	0.006	1.8	ug/L	301	Standard
[>	Bi	209	756158.0	0.7				ug/L	757838	Standard

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Na	23	6946.6	7.2	0.4104	0.022	5.3	mg/L	592	Standard
Mg	24	465949.9	3.9	0.6984	0.012	1.7	mg/L	1565	Standard
K	39	150.0	26.7	0.0097	0.031	319.8	mg/L	157	Standard
Ca	43	11.7	89.2	3.7951	3.926	103.4	mg/L	5	Standard
Fe	54	232.0	4.3	-0.0862	0.002	2.9	mg/L	717	Standard
Fe	57	6404.7	2.0	0.0277	0.001	4.4	mg/L	4072	Standard
Sc-1	45	426128.4	2.6				mg/L	476707	Standard
Cl	35	3.7	56.8				ug/L	29	Standard
Kr	83	46.6	14.6				ug/L	39	Standard
Br	81	1200.9	2.9				ug/L	1124	Standard
P	31	168.3	11.1				ug/L	495	Standard
S	34	13007.3	3.0				ug/L	6398	Standard
Sr	88	75.0	17.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.393	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	103.145
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.778
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

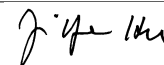
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072501

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Method 6020 - Summary Report

Sample ID: L1207072502

Sample Date/Time: Thursday, July 26, 2012 17:12:27

Number of Replicates: 3

Autosampler Position: 321

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12875.5	3.1	-1522.6532	238.576	15.7	ug/L	11975	Standard
|	Be	9	3.3	86.6	0.0080	0.002	20.6	ug/L	53	Standard
|	Al	27	6576.4	0.5	-0.3665	0.004	1.0	ug/L	10095	Standard
[>	Sc	45	422773.9	0.4				ug/L	476707	Standard
[	Ti	47	67.0	14.4	0.0008	0.007	864.2	ug/L	149	Standard
|	V	51	3736.4	2.7	0.0762	0.008	10.3	ug/L	3747	Standard
|	Cr	52	9890.6	2.7	0.1524	0.020	13.2	ug/L	10265	Standard
|	Cr	53	552.5	3.9	-1.2403	0.018	1.5	ug/L	3075	Standard
|	Mn	55	10961.6	2.0	0.6140	0.004	0.6	ug/L	1438	Standard
|	Co	59	203.7	3.3	0.0087	0.001	7.1	ug/L	148	Standard
|	Ni	60	14020.5	1.8	5.1223	0.075	1.5	ug/L	176	Standard
|	Cu	65	150.7	1.4	0.0005	0.001	262.4	ug/L	186	Standard
|	Zn	66	7871.0	1.6	6.4501	0.127	2.0	ug/L	355	Standard
[>	Ge	72	363377.6	1.7				ug/L	437919	Standard
|	As	75	-318.4	13.2	-0.0815	0.041	49.8	ug/L	-222	Standard
|	Se	82	514.1	5.2	4.5003	0.164	3.6	ug/L	29	Standard
[	Se-1	77	469.3	8.4	3.7054	0.498	13.4	ug/L	201	Standard
[>	Ga	71	828.4	8.5				mg/L	985	Standard
[	Rb	85	578.3	3.5				ug/L	22	Standard
[	Y	89	316573.6	1.6				ug/L	370795	Standard
[>	Rh	103	500.0	7.0				ug/L	498	Standard
[	Mo	98	1726.4	4.2	0.3471	0.018	5.1	ug/L	253	Standard
|	Ag	107	68.3	5.9	0.0029	0.000	12.6	ug/L	124	Standard
|	Cd	111	29.5	18.3	-0.0041	0.001	31.4	mg/L	100	Standard
|	Cd	114	99.3	19.5	-0.0106	0.002	14.8	ug/L	307	Standard
[>	In	115	1073469.8	1.1				ug/L	1045367	Standard
|	Sn	118	649.0	3.8	-0.0431	0.001	2.0	ug/L	1664	Standard
|	Sb	123	172.5	10.1	0.0006	0.001	230.0	ug/L	846	Standard
[	Ba	135	396.7	0.8	0.0677	0.001	0.9	ug/L	61	Standard
[	Ce	140	33.0	9.1				ug/L	30	Standard
[>	Tb	159	1339952.3	0.9				ug/L	1407506	Standard
[	Ho	165	17.0	41.2				ug/L	13	Standard
|	Tl	203	135.0	5.9	-0.0181	0.001	2.8	ug/L	713	Standard
|	Tl	205	322.7	10.3	-0.0232	0.001	3.7	ug/L	1648	Standard
|	Pb	206	470.0	6.2	-0.0011	0.002	147.1	ug/L	594	Standard
|	Pb	207	382.0	3.3	-0.0031	0.001	46.3	ug/L	497	Standard
|	Pb	208	1835.0	2.4	-0.0024	0.001	33.0	ug/L	2293	Standard
	U	238	5814.8	1.4	0.3153	0.005	1.6	ug/L	301	Standard
[>	Bi	209	751421.5	1.6				ug/L	757838	Standard

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Na	23	7000.0	6.9	0.4179	0.031	7.4	mg/L	592	Standard
Mg	24	485895.9	1.5	0.7342	0.013	1.7	mg/L	1565	Standard
K	39	128.3	8.1	-0.0068	0.008	117.6	mg/L	157	Standard
Ca	43	16.7	17.3	5.6634	1.104	19.5	mg/L	5	Standard
Fe	54	227.3	17.4	-0.0868	0.007	8.6	mg/L	717	Standard
Fe	57	5886.1	7.8	0.0232	0.005	19.6	mg/L	4072	Standard
Sc-1	45	422773.9	0.4				mg/L	476707	Standard
Cl	35	4.7	32.7				ug/L	29	Standard
Kr	83	47.6	8.1				ug/L	39	Standard
Br	81	1122.5	8.0				ug/L	1124	Standard
P	31	142.5	16.1				ug/L	495	Standard
S	34	13437.6	2.7				ug/L	6398	Standard
Sr	88	68.3	27.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.978	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.688
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.153
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072503

Sample Date/Time: Thursday, July 26, 2012 17:15:37

Number of Replicates: 3

Autosampler Position: 322

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13462.6	2.4	-2003.4683	76.038	3.8	ug/L	11975	Standard
|	Be	9	10.0	50.0	0.0119	0.003	23.6	ug/L	53	Standard
|	Al	27	10922.3	4.3	-0.0769	0.022	29.2	ug/L	10095	Standard
[>	Sc	45	418943.9	1.6				ug/L	476707	Standard
|	Ti	47	104.0	6.0	0.0316	0.006	19.9	ug/L	149	Standard
|	V	51	3338.2	3.5	0.0398	0.007	16.4	ug/L	3747	Standard
|	Cr	52	9906.2	3.1	0.1665	0.021	12.4	ug/L	10265	Standard
|	Cr	53	514.2	5.2	-1.2631	0.024	1.9	ug/L	3075	Standard
|	Mn	55	18498.3	3.8	1.1437	0.030	2.6	ug/L	1438	Standard
|	Co	59	125.7	10.8	0.0009	0.001	139.4	ug/L	148	Standard
|	Ni	60	794.0	8.9	0.2624	0.022	8.4	ug/L	176	Standard
|	Cu	65	251.3	7.8	0.0409	0.006	15.3	ug/L	186	Standard
|	Zn	66	6489.1	13.8	5.3122	0.689	13.0	ug/L	355	Standard
[>	Ge	72	359709.1	1.6				ug/L	437919	Standard
|	As	75	-223.2	10.7	-0.0003	0.022	7608.3	ug/L	-222	Standard
|	Se	82	53.0	7.2	0.3138	0.035	11.1	ug/L	29	Standard
[	Se-1	77	132.0	13.9	-0.3686	0.247	67.0	ug/L	201	Standard
[>	Ga	71	743.4	5.6				mg/L	985	Standard
|	Rb	85	436.7	8.3				ug/L	22	Standard
|	Y	89	309459.0	3.4				ug/L	370795	Standard
[>	Rh	103	475.0	15.6				ug/L	498	Standard
|	Mo	98	168.4	20.7	0.0275	0.007	25.0	ug/L	253	Standard
|	Ag	107	59.3	4.2	0.0020	0.000	18.6	ug/L	124	Standard
|	Cd	111	38.9	7.7	-0.0019	0.001	28.8	mg/L	100	Standard
|	Cd	114	105.7	12.9	-0.0100	0.001	10.9	ug/L	307	Standard
[>	In	115	1061547.3	1.5				ug/L	1045367	Standard
|	Sn	118	680.3	5.1	-0.0414	0.002	4.1	ug/L	1664	Standard
|	Sb	123	76.6	33.2	-0.0080	0.002	27.9	ug/L	846	Standard
|	Ba	135	2255.8	1.1	0.4168	0.006	1.5	ug/L	61	Standard
|	Ce	140	47.0	5.6				ug/L	30	Standard
[>	Tb	159	1332192.6	0.6				ug/L	1407506	Standard
|	Ho	165	14.7	32.2				ug/L	13	Standard
|	Tl	203	107.7	7.1	-0.0194	0.000	1.6	ug/L	713	Standard
|	Tl	205	249.3	8.3	-0.0249	0.000	1.5	ug/L	1648	Standard
|	Pb	206	495.0	1.2	0.0006	0.001	178.0	ug/L	594	Standard
|	Pb	207	433.7	6.4	0.0010	0.003	253.3	ug/L	497	Standard
|	Pb	208	1921.4	2.6	-0.0008	0.001	112.0	ug/L	2293	Standard
	U	238	902.0	3.6	0.0518	0.001	1.1	ug/L	301	Standard
[>	Bi	209	748897.6	2.4				ug/L	757838	Standard

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Na	23	7962.1	7.1	0.4863	0.035	7.3	mg/L	592	Standard
Mg	24	494913.6	3.3	0.7548	0.027	3.6	mg/L	1565	Standard
K	39	185.0	8.1	0.0403	0.010	25.0	mg/L	157	Standard
Ca	43	10.0	86.6	3.2277	3.315	102.7	mg/L	5	Standard
Fe	54	218.9	11.9	-0.0880	0.004	5.0	mg/L	717	Standard
Fe	57	5677.7	3.6	0.0217	0.003	12.8	mg/L	4072	Standard
Sc-1	45	418943.9	1.6				mg/L	476707	Standard
Cl	35	3.3	17.3				ug/L	29	Standard
Kr	83	44.0	5.9				ug/L	39	Standard
Br	81	1110.0	3.8				ug/L	1124	Standard
P	31	299.2	7.9				ug/L	495	Standard
S	34	13559.4	2.3				ug/L	6398	Standard
Sr	88	60.0	30.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.140	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072503

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	Cd	111	
	Cd	114	
>	In	115	101.548
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.820
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072503

Report Date/Time: Thursday, July 26, 2012 17:18:07

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Method 6020 - Summary Report

Sample ID: L1207072504

Sample Date/Time: Thursday, July 26, 2012 17:18:46

Number of Replicates: 3

Autosampler Position: 323

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12947.2	1.3	-1869.5007	98.479	5.3	ug/L	11975	Standard
|	Be	9	6.7	43.3	0.0101	0.002	16.8	ug/L	53	Standard
|	Al	27	6681.5	1.9	-0.3448	0.009	2.7	ug/L	10095	Standard
[>	Sc	45	408906.5	1.3				ug/L	476707	Standard
[	Ti	47	87.3	23.2	0.0194	0.017	88.0	ug/L	149	Standard
|	V	51	3269.2	1.6	0.0393	0.007	18.0	ug/L	3747	Standard
|	Cr	52	9733.5	0.9	0.1686	0.014	8.3	ug/L	10265	Standard
|	Cr	53	518.3	2.7	-1.2535	0.007	0.6	ug/L	3075	Standard
|	Mn	55	15237.3	1.7	0.9382	0.002	0.2	ug/L	1438	Standard
|	Co	59	203.0	5.3	0.0093	0.001	15.3	ug/L	148	Standard
|	Ni	60	528.0	8.1	0.1675	0.015	8.8	ug/L	176	Standard
|	Cu	65	182.0	12.4	0.0149	0.009	59.8	ug/L	186	Standard
|	Zn	66	2637.2	0.4	2.0217	0.026	1.3	ug/L	355	Standard
[>	Ge	72	352935.9	1.5				ug/L	437919	Standard
|	As	75	-229.3	4.7	-0.0095	0.012	127.2	ug/L	-222	Standard
|	Se	82	39.8	2.8	0.1992	0.011	5.6	ug/L	29	Standard
[	Se-1	77	142.7	8.7	-0.2047	0.183	89.3	ug/L	201	Standard
[>	Ga	71	713.4	9.1				mg/L	985	Standard
[	Rb	85	400.0	7.0				ug/L	22	Standard
[	Y	89	306049.5	2.4				ug/L	370795	Standard
[>	Rh	103	463.3	4.9				ug/L	498	Standard
[	Mo	98	111.4	10.0	0.0161	0.002	13.1	ug/L	253	Standard
|	Ag	107	60.7	6.2	0.0023	0.000	18.5	ug/L	124	Standard
|	Cd	111	24.1	10.4	-0.0052	0.001	10.6	mg/L	100	Standard
|	Cd	114	90.2	21.8	-0.0111	0.002	14.1	ug/L	307	Standard
[>	In	115	1042898.4	1.2				ug/L	1045367	Standard
|	Sn	118	640.0	5.2	-0.0427	0.002	3.6	ug/L	1664	Standard
|	Sb	123	67.9	5.5	-0.0087	0.000	3.4	ug/L	846	Standard
[	Ba	135	1927.1	1.5	0.3617	0.009	2.5	ug/L	61	Standard
[	Ce	140	39.7	21.4				ug/L	30	Standard
[>	Tb	159	1318020.4	1.0				ug/L	1407506	Standard
[	Ho	165	11.7	35.7				ug/L	13	Standard
|	Tl	203	84.0	17.3	-0.0205	0.001	3.1	ug/L	713	Standard
|	Tl	205	203.3	13.1	-0.0259	0.001	2.2	ug/L	1648	Standard
|	Pb	206	491.7	4.9	0.0007	0.002	315.7	ug/L	594	Standard
|	Pb	207	394.7	5.7	-0.0017	0.001	79.5	ug/L	497	Standard
|	Pb	208	1898.0	2.9	-0.0009	0.001	133.6	ug/L	2293	Standard
	U	238	791.7	2.3	0.0463	0.002	4.3	ug/L	301	Standard
[>	Bi	209	741034.4	2.5				ug/L	757838	Standard

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Na	23	7373.5	5.9	0.4590	0.025	5.4	mg/L	592	Standard
Mg	24	437285.6	2.1	0.6831	0.006	0.8	mg/L	1565	Standard
K	39	163.3	7.1	0.0260	0.011	41.1	mg/L	157	Standard
Ca	43	8.3	91.7	2.6595	2.933	110.3	mg/L	5	Standard
Fe	54	218.0	21.8	-0.0871	0.010	11.0	mg/L	717	Standard
Fe	57	5259.2	4.7	0.0189	0.003	15.0	mg/L	4072	Standard
Sc-1	45	408906.5	1.3				mg/L	476707	Standard
Cl	35	5.0	40.0				ug/L	29	Standard
Kr	83	47.6	5.9				ug/L	39	Standard
Br	81	1028.4	11.4				ug/L	1124	Standard
P	31	227.5	4.8				ug/L	495	Standard
S	34	12635.3	2.1				ug/L	6398	Standard
Sr	88	60.0	14.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		80.594	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072504

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	Cd	111	
	Cd	114	
>	In	115	99.764
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.783
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072504

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Method 6020 - Summary Report

Sample ID: L1207072505

Sample Date/Time: Thursday, July 26, 2012 17:21:55

Number of Replicates: 3

Autosampler Position: 324

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12867.1	3.9	-1747.2728	276.120	15.8	ug/L	11975	Standard
|	Be	9	10.0	86.6	0.0121	0.005	42.7	ug/L	53	Standard
|	Al	27	13677.8	2.4	0.1203	0.037	30.9	ug/L	10095	Standard
[>	Sc	45	411875.9	1.7				ug/L	476707	Standard
[	Ti	47	125.7	13.2	0.0519	0.014	27.1	ug/L	149	Standard
|	V	51	3381.0	3.3	0.0531	0.012	22.4	ug/L	3747	Standard
|	Cr	52	9797.2	2.4	0.1844	0.009	5.0	ug/L	10265	Standard
|	Cr	53	514.2	6.5	-1.2541	0.021	1.7	ug/L	3075	Standard
|	Mn	55	13023.3	2.7	0.7878	0.012	1.5	ug/L	1438	Standard
|	Co	59	164.0	2.4	0.0053	0.001	13.3	ug/L	148	Standard
|	Ni	60	493.0	6.8	0.1555	0.011	6.8	ug/L	176	Standard
|	Cu	65	154.0	1.7	0.0040	0.002	43.8	ug/L	186	Standard
|	Zn	66	1821.8	3.5	1.3109	0.042	3.2	ug/L	355	Standard
[>	Ge	72	350641.0	1.7				ug/L	437919	Standard
|	As	75	-200.1	11.2	0.0155	0.020	131.3	ug/L	-222	Standard
|	Se	82	32.5	9.0	0.1322	0.023	17.3	ug/L	29	Standard
[	Se-1	77	137.0	7.9	-0.2645	0.159	60.2	ug/L	201	Standard
[>	Ga	71	715.0	8.5				mg/L	985	Standard
[	Rb	85	403.3	5.6				ug/L	22	Standard
[	Y	89	305917.8	1.2				ug/L	370795	Standard
[>	Rh	103	505.0	6.5				ug/L	498	Standard
[	Mo	98	87.6	6.6	0.0111	0.001	10.9	ug/L	253	Standard
|	Ag	107	63.0	13.8	0.0026	0.001	37.3	ug/L	124	Standard
|	Cd	111	37.5	13.4	-0.0021	0.001	54.1	mg/L	100	Standard
|	Cd	114	99.9	7.6	-0.0103	0.001	5.4	ug/L	307	Standard
[>	In	115	1040578.3	0.8				ug/L	1045367	Standard
|	Sn	118	636.0	3.4	-0.0428	0.001	2.0	ug/L	1664	Standard
|	Sb	123	76.2	26.3	-0.0079	0.002	24.4	ug/L	846	Standard
[	Ba	135	3619.8	3.5	0.6861	0.028	4.1	ug/L	61	Standard
[	Ce	140	98.3	10.9				ug/L	30	Standard
[>	Tb	159	1307568.6	0.4				ug/L	1407506	Standard
[	Ho	165	13.3	15.6				ug/L	13	Standard
|	Tl	203	97.0	8.1	-0.0199	0.000	1.7	ug/L	713	Standard
|	Tl	205	206.0	5.1	-0.0258	0.000	0.7	ug/L	1648	Standard
|	Pb	206	486.0	4.1	0.0003	0.002	563.1	ug/L	594	Standard
|	Pb	207	405.0	4.7	-0.0009	0.001	149.8	ug/L	497	Standard
|	Pb	208	1875.7	2.4	-0.0013	0.001	105.0	ug/L	2293	Standard
	U	238	413.3	4.3	0.0257	0.001	2.3	ug/L	301	Standard
[>	Bi	209	741408.9	1.8				ug/L	757838	Standard

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Na	23	7213.4	2.1	0.4448	0.012	2.8	mg/L	592	Standard
Mg	24	444983.7	1.2	0.6903	0.014	2.0	mg/L	1565	Standard
K	39	168.3	11.2	0.0293	0.018	62.0	mg/L	157	Standard
Ca	43	10.0		3.2722	0.067	2.0	mg/L	5	Standard
Fe	54	247.2	10.1	-0.0816	0.005	5.5	mg/L	717	Standard
Fe	57	5497.7	4.6	0.0209	0.003	13.0	mg/L	4072	Standard
Sc-1	45	411875.9	1.7				mg/L	476707	Standard
Cl	35	4.3	35.3				ug/L	29	Standard
Kr	83	40.3	3.6				ug/L	39	Standard
Br	81	963.4	5.2				ug/L	1124	Standard
P	31	282.5	4.7				ug/L	495	Standard
S	34	12983.1	2.6				ug/L	6398	Standard
Sr	88	73.3	3.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		80.070	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072505

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	Cd	111		
	Cd	114		
>	In	115	99.542	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	97.832	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072505

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 17:25:07

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

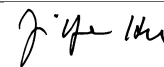
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13811.3	1.5	-920.9134	179.950	19.5	ug/L	11975	Standard
|	Be	9	114875.5	0.3	57.4790	0.678	1.2	ug/L	53	Standard
|	Al	27	798164.4	1.4	44.3539	1.228	2.8	ug/L	10095	Standard
[>	Sc	45	487227.5	1.4				ug/L	476707	Standard
|	Ti	47	148117.5	0.6	105.9114	0.963	0.9	ug/L	149	Standard
|	V	51	599801.6	1.9	52.7785	0.820	1.6	ug/L	3747	Standard
|	Cr	52	492645.2	1.8	52.2505	1.107	2.1	ug/L	10265	Standard
|	Cr	53	85627.1	0.5	51.0207	0.989	1.9	ug/L	3075	Standard
|	Mn	55	909197.6	1.4	55.2133	0.208	0.4	ug/L	1438	Standard
|	Co	59	584728.6	1.3	53.1937	0.630	1.2	ug/L	148	Standard
|	Ni	60	152776.1	0.8	49.8134	0.408	0.8	ug/L	176	Standard
|	Cu	65	140856.8	1.0	48.9713	0.490	1.0	ug/L	186	Standard
|	Zn	66	64969.4	1.7	49.2032	0.254	0.5	ug/L	355	Standard
[>	Ge	72	409480.3	1.5				ug/L	437919	Standard
|	As	75	64017.6	1.1	49.6663	0.306	0.6	ug/L	-222	Standard
|	Se	82	6539.2	0.6	52.6030	0.482	0.9	ug/L	29	Standard
[	Se-1	77	4722.1	0.8	48.8335	0.617	1.3	ug/L	201	Standard
[>	Ga	71	915.0	3.6				mg/L	985	Standard
|	Rb	85	973.4	2.6				ug/L	22	Standard
|	Y	89	370133.9	1.7				ug/L	370795	Standard
[>	Rh	103	550.0	2.4				ug/L	498	Standard
|	Mo	98	459319.5	0.4	85.1820	0.946	1.1	ug/L	253	Standard
|	Ag	107	496212.8	1.6	50.2501	0.409	0.8	ug/L	124	Standard
|	Cd	111	263306.6	1.8	53.4647	0.329	0.6	mg/L	100	Standard
|	Cd	114	694196.9	1.1	48.2667	0.185	0.4	ug/L	307	Standard
[>	In	115	1188513.8	1.4				ug/L	1045367	Standard
|	Sn	118	1597307.0	0.3	63.5957	0.734	1.2	ug/L	1664	Standard
|	Sb	123	606832.9	0.7	49.6416	0.390	0.8	ug/L	846	Standard
|	Ba	135	264262.4	0.8	44.2150	0.324	0.7	ug/L	61	Standard
|	Ce	140	1059.4	1.9				ug/L	30	Standard
[>	Tb	159	1488454.6	1.3				ug/L	1407506	Standard
|	Ho	165	19.7	10.6				ug/L	13	Standard
|	Tl	203	1004240.3	0.2	47.6019	0.506	1.1	ug/L	713	Standard
|	Tl	205	2300624.0	1.3	49.6698	0.742	1.5	ug/L	1648	Standard
|	Pb	206	782732.7	1.0	47.9890	0.389	0.8	ug/L	594	Standard
|	Pb	207	666197.2	1.0	49.2256	0.734	1.5	ug/L	497	Standard
|	Pb	208	3087825.5	1.0	49.3743	0.503	1.0	ug/L	2293	Standard
	U	238	1040728.0	0.7	53.5667	0.382	0.7	ug/L	301	Standard
[>	Bi	209	783634.6	1.2				ug/L	757838	Standard

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Na	23	122291.6	0.7	6.9766	0.093	1.3	mg/L	592	Standard
Mg	24	3548609.8	1.1	4.6543	0.115	2.5	mg/L	1565	Standard
K	39	5779.4	2.4	3.9428	0.140	3.5	mg/L	157	Standard
Ca	43	6.7	86.6	1.5959	1.867	117.0	mg/L	5	Standard
Fe	54	26676.7	1.5	4.3651	0.101	2.3	mg/L	717	Standard
Fe	57	606089.3	1.3	5.0150	0.134	2.7	mg/L	4072	Standard
Sc-1	45	487227.5	1.4				mg/L	476707	Standard
Cl	35	4.0	0.0				ug/L	29	Standard
Kr	83	44.9	8.8				ug/L	39	Standard
Br	81	1565.1	5.3				ug/L	1124	Standard
P	31	514.2	3.2				ug/L	495	Standard
S	34	7451.8	3.7				ug/L	6398	Standard
Sr	88	58.3	35.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	88.708		
Sc	45			
Ti	47	105.911		
V	51	105.557		
Cr	52	104.501		
Cr	53			
Mn	55	110.427		
Co	59	106.387		
Ni	60	99.627		
Cu	65	97.943		
Zn	66	98.406		
Ge	72		93.506	
As	75	99.333		
Se	82	105.206		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	85.182		
Ag	107	100.500		

Sample ID: QC Std 6

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Cd	111	106.929	
Cd	114		
> In	115		113.693
Sn	118	127.191	
Sb	123	99.283	
Ba	135	88.430	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	95.204	
Tl	205		
Pb	206	95.978	
Pb	207	98.451	
Pb	208	98.749	
U	238	107.133	
> Bi	209		103.404
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

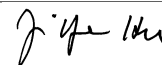
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	
QC Std 6	Mn	55	
QC Std 6	Mo	98	
QC Std 6	Sn	118	
QC Std 6	Ba	135	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 17:28:17

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12943.9	1.5	-551.2261	59.100	10.7	ug/L	11975	Standard
|	Be	9	15.0	33.3	0.0138	0.003	18.4	ug/L	53	Standard
|	Al	27	9884.9	4.9	-0.2259	0.021	9.2	ug/L	10095	Standard
[>	Sc	45	478346.0	1.3				ug/L	476707	Standard
|	Ti	47	59.7	20.5	-0.0088	0.009	101.8	ug/L	149	Standard
|	V	51	3338.6	5.1	0.0106	0.012	110.8	ug/L	3747	Standard
|	Cr	52	10487.6	1.6	0.1258	0.007	5.7	ug/L	10265	Standard
|	Cr	53	599.2	7.2	-1.2406	0.024	1.9	ug/L	3075	Standard
|	Mn	55	2274.8	4.9	0.0059	0.006	96.7	ug/L	1438	Standard
|	Co	59	137.3	23.8	0.0008	0.003	356.9	ug/L	148	Standard
|	Ni	60	118.7	37.8	0.0079	0.015	189.5	ug/L	176	Standard
|	Cu	65	188.0	18.5	0.0094	0.012	129.3	ug/L	186	Standard
|	Zn	66	331.7	21.7	-0.0478	0.056	116.4	ug/L	355	Standard
[>	Ge	72	394026.6	1.3				ug/L	437919	Standard
|	As	75	-260.4	9.3	-0.0129	0.017	135.3	ug/L	-222	Standard
|	Se	82	25.2	10.6	0.0382	0.025	64.9	ug/L	29	Standard
[	Se-1	77	147.3	0.8	-0.3398	0.030	9.0	ug/L	201	Standard
[>	Ga	71	808.4	5.5				mg/L	985	Standard
|	Rb	85	20.0	25.0				ug/L	22	Standard
|	Y	89	356958.2	1.5				ug/L	370795	Standard
[>	Rh	103	508.3	12.3				ug/L	498	Standard
|	Mo	98	490.4	24.9	0.0856	0.023	26.9	ug/L	253	Standard
|	Ag	107	215.7	46.0	0.0176	0.010	58.1	ug/L	124	Standard
|	Cd	111	104.2	37.8	0.0109	0.008	74.8	mg/L	100	Standard
|	Cd	114	356.3	31.6	0.0071	0.008	113.2	ug/L	307	Standard
[>	In	115	1161386.2	0.7				ug/L	1045367	Standard
|	Sn	118	1842.1	16.4	0.0033	0.012	365.0	ug/L	1664	Standard
|	Sb	123	2947.3	4.6	0.2318	0.010	4.3	ug/L	846	Standard
|	Ba	135	80.0	48.4	0.0079	0.007	84.2	ug/L	61	Standard
|	Ce	140	35.3	7.1				ug/L	30	Standard
[>	Tb	159	1433836.1	1.0				ug/L	1407506	Standard
|	Ho	165	16.0	43.3				ug/L	13	Standard
|	Tl	203	135.0	55.6	-0.0184	0.003	18.9	ug/L	713	Standard
|	Tl	205	299.3	62.3	-0.0241	0.004	16.3	ug/L	1648	Standard
|	Pb	206	591.0	12.9	0.0051	0.004	85.4	ug/L	594	Standard
|	Pb	207	492.7	13.4	0.0039	0.004	110.6	ug/L	497	Standard
|	Pb	208	2286.4	11.2	0.0036	0.004	102.9	ug/L	2293	Standard
	U	238	94.0	39.7	0.0081	0.002	23.2	ug/L	301	Standard
[>	Bi	209	782071.1	1.9				ug/L	757838	Standard

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Na	23	476.7	17.6	-0.0173	0.005	30.1	mg/L	592	Standard
Mg	24	976.7	106.8	0.0012	0.001	114.3	mg/L	1565	Standard
K	39	146.7	15.4	-0.0057	0.017	295.2	mg/L	157	Standard
Ca	43	0.0		-0.5589	0.000	0.0	mg/L	5	Standard
Fe	54	712.7	9.3	-0.0086	0.011	125.8	mg/L	717	Standard
Fe	57	4350.6	3.9	0.0036	0.002	43.3	mg/L	4072	Standard
Sc-1	45	478346.0	1.3				mg/L	476707	Standard
Cl	35	5.0	20.0				ug/L	29	Standard
Kr	83	50.0	7.6				ug/L	39	Standard
Br	81	1645.9	7.1				ug/L	1124	Standard
P	31	475.8	12.1				ug/L	495	Standard
S	34	7089.2	0.9				ug/L	6398	Standard
Sr	88	25.0	20.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.977	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	111.098
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.198
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207072506

Sample Date/Time: Thursday, July 26, 2012 17:31:28

Number of Replicates: 3

Autosampler Position: 325

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

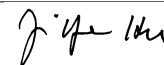
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20422.1	2.7	-6166.0906	497.564	8.1	ug/L	11975	Standard
|	Be	9	11.7	89.2	0.0126	0.006	45.8	ug/L	53	Standard
|	Al	27	37197.3	2.9	1.5473	0.096	6.2	ug/L	10095	Standard
[>	Sc	45	437703.2	1.5				ug/L	476707	Standard
|	Ti	47	610.0	5.4	0.4359	0.027	6.2	ug/L	149	Standard
|	V	51	3604.2	2.7	0.0611	0.011	18.5	ug/L	3747	Standard
|	Cr	52	10761.5	1.5	0.2514	0.016	6.3	ug/L	10265	Standard
|	Cr	53	712.5	4.7	-1.1323	0.023	2.0	ug/L	3075	Standard
|	Mn	55	186721.6	1.4	12.6021	0.258	2.0	ug/L	1438	Standard
|	Co	59	1754.8	3.2	0.1668	0.006	3.8	ug/L	148	Standard
|	Ni	60	3925.8	2.7	1.4031	0.043	3.1	ug/L	176	Standard
|	Cu	65	541.0	4.0	0.1525	0.010	6.4	ug/L	186	Standard
|	Zn	66	8976.1	21.1	7.3608	1.656	22.5	ug/L	355	Standard
[>	Ge	72	365389.4	0.6				ug/L	437919	Standard
|	As	75	-115.4	28.7	0.0963	0.028	29.3	ug/L	-222	Standard
|	Se	82	151.3	3.6	1.1954	0.058	4.8	ug/L	29	Standard
[	Se-1	77	208.3	6.1	0.5249	0.155	29.5	ug/L	201	Standard
[>	Ga	71	920.0	4.9				mg/L	985	Standard
|	Rb	85	4915.8	3.8				ug/L	22	Standard
|	Y	89	324318.7	2.2				ug/L	370795	Standard
[>	Rh	103	596.7	11.6				ug/L	498	Standard
|	Mo	98	745.5	10.6	0.1459	0.015	10.0	ug/L	253	Standard
|	Ag	107	78.0	20.6	0.0040	0.002	42.5	ug/L	124	Standard
|	Cd	111	44.9	10.4	-0.0006	0.001	159.6	mg/L	100	Standard
|	Cd	114	144.0	6.7	-0.0072	0.001	11.7	ug/L	307	Standard
[>	In	115	1070596.1	1.2				ug/L	1045367	Standard
|	Sn	118	943.7	7.7	-0.0300	0.003	9.5	ug/L	1664	Standard
|	Sb	123	638.3	13.3	0.0429	0.007	16.8	ug/L	846	Standard
|	Ba	135	50946.8	0.8	9.4584	0.086	0.9	ug/L	61	Standard
|	Ce	140	245.3	1.4				ug/L	30	Standard
[>	Tb	159	1382084.1	0.4				ug/L	1407506	Standard
|	Ho	165	20.7	23.9				ug/L	13	Standard
|	Tl	203	242.3	19.9	-0.0123	0.002	19.1	ug/L	713	Standard
|	Tl	205	613.7	8.7	-0.0162	0.001	6.9	ug/L	1648	Standard
|	Pb	206	526.0	7.1	0.0037	0.003	75.7	ug/L	594	Standard
|	Pb	207	435.7	8.5	0.0023	0.003	123.5	ug/L	497	Standard
|	Pb	208	2042.1	1.9	0.0023	0.001	27.6	ug/L	2293	Standard
	U	238	6513.7	2.8	0.3654	0.009	2.3	ug/L	301	Standard
[>	Bi	209	725217.6	0.9				ug/L	757838	Standard

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Na	23	67034.7	2.5	4.2393	0.115	2.7	mg/L	592	Standard
Mg	24	7552700.3	1.2	11.0273	0.290	2.6	mg/L	1565	Standard
K	39	546.7	6.9	0.3160	0.025	7.8	mg/L	157	Standard
Ca	43	86.7	24.0	30.6798	7.443	24.3	mg/L	5	Standard
Fe	54	338.8	4.4	-0.0673	0.004	5.5	mg/L	717	Standard
Fe	57	18314.4	4.0	0.1365	0.008	5.6	mg/L	4072	Standard
Sc-1	45	437703.2	1.5				mg/L	476707	Standard
Cl	35	5.7	36.7				ug/L	29	Standard
Kr	83	47.8	6.3				ug/L	39	Standard
Br	81	1697.6	2.8				ug/L	1124	Standard
P	31	1575.1	4.3				ug/L	495	Standard
S	34	80707.7	1.0				ug/L	6398	Standard
Sr	88	468.3	2.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.438	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072506

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	Cd	111	
	Cd	114	
>	In	115	102.413
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.696
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072506

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Method 6020 - Summary Report

Sample ID: L1207072507

Sample Date/Time: Thursday, July 26, 2012 17:34:38

Number of Replicates: 3

Autosampler Position: 326

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

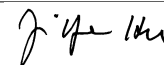
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22084.4	2.1	-7105.2821	70.391	1.0	ug/L	11975	Standard
|	Be	9	16.7	96.4	0.0153	0.009	57.0	ug/L	53	Standard
|	Al	27	62595.0	10.5	3.1060	0.400	12.9	ug/L	10095	Standard
[>	Sc	45	442096.6	1.7				ug/L	476707	Standard
|	Ti	47	1052.0	1.7	0.8026	0.019	2.4	ug/L	149	Standard
|	V	51	12513.8	1.3	0.9629	0.030	3.2	ug/L	3747	Standard
|	Cr	52	10820.2	1.3	0.2779	0.030	10.7	ug/L	10265	Standard
|	Cr	53	609.2	7.1	-1.1973	0.033	2.7	ug/L	3075	Standard
|	Mn	55	203950.8	0.5	13.9807	0.189	1.4	ug/L	1438	Standard
|	Co	59	2848.9	1.5	0.2827	0.008	2.8	ug/L	148	Standard
|	Ni	60	6891.6	2.5	2.5246	0.087	3.4	ug/L	176	Standard
|	Cu	65	888.7	2.8	0.2932	0.012	4.0	ug/L	186	Standard
|	Zn	66	3915.5	3.7	3.0836	0.159	5.2	ug/L	355	Standard
[>	Ge	72	360138.5	1.1				ug/L	437919	Standard
|	As	75	61.0	32.8	0.2497	0.017	6.8	ug/L	-222	Standard
|	Se	82	80.4	9.7	0.5648	0.076	13.5	ug/L	29	Standard
[	Se-1	77	141.7	10.0	-0.2530	0.193	76.4	ug/L	201	Standard
[>	Ga	71	905.0	4.0				mg/L	985	Standard
|	Rb	85	6978.3	5.5				ug/L	22	Standard
|	Y	89	327225.8	0.5				ug/L	370795	Standard
[>	Rh	103	555.0	17.5				ug/L	498	Standard
|	Mo	98	6380.8	2.0	1.3038	0.029	2.2	ug/L	253	Standard
|	Ag	107	77.7	8.2	0.0040	0.001	17.4	ug/L	124	Standard
|	Cd	111	101.4	5.1	0.0121	0.001	9.4	mg/L	100	Standard
|	Cd	114	325.9	2.9	0.0068	0.001	10.3	ug/L	307	Standard
[>	In	115	1072573.4	0.2				ug/L	1045367	Standard
|	Sn	118	886.4	8.8	-0.0326	0.004	10.8	ug/L	1664	Standard
|	Sb	123	1020.1	6.5	0.0775	0.006	7.9	ug/L	846	Standard
|	Ba	135	53918.1	0.4	9.9914	0.060	0.6	ug/L	61	Standard
|	Ce	140	491.0	2.0				ug/L	30	Standard
[>	Tb	159	1367579.8	0.6				ug/L	1407506	Standard
|	Ho	165	30.0	12.0				ug/L	13	Standard
|	Tl	203	359.0	4.8	-0.0063	0.001	13.6	ug/L	713	Standard
|	Tl	205	789.4	6.3	-0.0120	0.001	9.2	ug/L	1648	Standard
|	Pb	206	575.7	2.6	0.0071	0.001	15.0	ug/L	594	Standard
|	Pb	207	460.0	6.2	0.0044	0.002	53.7	ug/L	497	Standard
|	Pb	208	2233.7	3.5	0.0057	0.001	25.7	ug/L	2293	Standard
	U	238	11070.0	1.0	0.6211	0.004	0.6	ug/L	301	Standard
[>	Bi	209	722496.1	0.4				ug/L	757838	Standard

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Na	23	72543.3	0.8	4.5459	0.098	2.1	mg/L	592	Standard
Mg	24	8584998.7	2.0	12.4102	0.386	3.1	mg/L	1565	Standard
K	39	688.3	6.9	0.4214	0.036	8.4	mg/L	157	Standard
Ca	43	111.7	11.3	39.3471	5.172	13.1	mg/L	5	Standard
Fe	54	446.6	17.4	-0.0481	0.013	27.5	mg/L	717	Standard
Fe	57	20957.8	2.0	0.1591	0.005	3.1	mg/L	4072	Standard
Sc-1	45	442096.6	1.7				mg/L	476707	Standard
Cl	35	5.7	56.7				ug/L	29	Standard
Kr	83	51.9	4.8				ug/L	39	Standard
Br	81	1852.6	8.3				ug/L	1124	Standard
P	31	2026.8	0.7				ug/L	495	Standard
S	34	87301.6	0.7				ug/L	6398	Standard
Sr	88	518.3	8.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.239	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072507

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	Cd	111	
	Cd	114	
>	In	115	102.603
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.337
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072507

Report Date/Time: Thursday, July 26, 2012 17:37:08

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Method 6020 - Summary Report

Sample ID: L1207072508

Sample Date/Time: Thursday, July 26, 2012 17:37:48

Number of Replicates: 3

Autosampler Position: 327

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

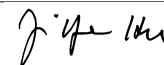
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23000.8	0.7	-7606.4057	495.652	6.5	ug/L	11975	Standard
|	Be	9	13.3	94.4	0.0133	0.007	51.5	ug/L	53	Standard
|	Al	27	33196.3	0.7	1.2608	0.062	4.9	ug/L	10095	Standard
[>	Sc	45	445197.1	3.3				ug/L	476707	Standard
|	Ti	47	866.7	3.8	0.6511	0.012	1.8	ug/L	149	Standard
|	V	51	12709.3	1.7	0.9818	0.037	3.8	ug/L	3747	Standard
|	Cr	52	10489.6	0.8	0.2365	0.028	12.0	ug/L	10265	Standard
|	Cr	53	655.8	10.1	-1.1656	0.037	3.2	ug/L	3075	Standard
|	Mn	55	221057.5	2.3	15.1563	0.461	3.0	ug/L	1438	Standard
|	Co	59	4466.0	0.8	0.4497	0.011	2.4	ug/L	148	Standard
|	Ni	60	6845.2	3.8	2.5053	0.096	3.8	ug/L	176	Standard
|	Cu	65	613.3	0.8	0.1840	0.004	2.3	ug/L	186	Standard
|	Zn	66	3562.8	1.9	2.7748	0.042	1.5	ug/L	355	Standard
[>	Ge	72	360408.1	2.2				ug/L	437919	Standard
|	As	75	123.4	4.8	0.3044	0.004	1.3	ug/L	-222	Standard
|	Se	82	61.5	5.2	0.3910	0.041	10.5	ug/L	29	Standard
[	Se-1	77	137.3	6.6	-0.3084	0.112	36.2	ug/L	201	Standard
[>	Ga	71	950.0	3.8				mg/L	985	Standard
|	Rb	85	7930.4	5.2				ug/L	22	Standard
|	Y	89	332405.1	0.6				ug/L	370795	Standard
[>	Rh	103	598.3	7.0				ug/L	498	Standard
|	Mo	98	7008.9	2.1	1.4183	0.030	2.1	ug/L	253	Standard
|	Ag	107	136.0	66.9	0.0104	0.010	97.6	ug/L	124	Standard
|	Cd	111	78.5	52.5	0.0068	0.009	137.0	mg/L	100	Standard
|	Cd	114	225.6	45.5	-0.0011	0.008	748.3	ug/L	307	Standard
[>	In	115	1083491.9	0.5				ug/L	1045367	Standard
|	Sn	118	958.4	10.4	-0.0299	0.004	15.0	ug/L	1664	Standard
|	Sb	123	811.3	4.8	0.0578	0.004	6.7	ug/L	846	Standard
|	Ba	135	58430.5	1.9	10.7194	0.242	2.3	ug/L	61	Standard
|	Ce	140	190.0	4.6				ug/L	30	Standard
[>	Tb	159	1374531.9	1.4				ug/L	1407506	Standard
|	Ho	165	18.3	12.6				ug/L	13	Standard
|	Tl	203	415.3	4.6	-0.0033	0.001	29.2	ug/L	713	Standard
|	Tl	205	967.4	9.8	-0.0078	0.002	27.4	ug/L	1648	Standard
|	Pb	206	521.7	7.7	0.0036	0.002	69.5	ug/L	594	Standard
|	Pb	207	447.0	13.2	0.0034	0.005	136.6	ug/L	497	Standard
|	Pb	208	2038.4	7.5	0.0024	0.002	103.2	ug/L	2293	Standard
	U	238	12264.6	1.6	0.6892	0.015	2.2	ug/L	301	Standard
[>	Bi	209	721133.0	0.7				ug/L	757838	Standard

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Na	23	75722.1	2.1	4.7165	0.199	4.2	mg/L	592	Standard
Mg	24	9111497.1	1.7	13.0850	0.464	3.5	mg/L	1565	Standard
K	39	618.3	7.5	0.3643	0.038	10.5	mg/L	157	Standard
Ca	43	105.0	33.3	36.9360	13.750	37.2	mg/L	5	Standard
Fe	54	430.1	8.7	-0.0516	0.006	11.5	mg/L	717	Standard
Fe	57	22944.0	4.0	0.1759	0.010	5.9	mg/L	4072	Standard
Sc-1	45	445197.1	3.3				mg/L	476707	Standard
Cl	35	9.0	29.4				ug/L	29	Standard
Kr	83	51.6	5.2				ug/L	39	Standard
Br	81	2323.5	10.0				ug/L	1124	Standard
P	31	2031.0	3.7				ug/L	495	Standard
S	34	92434.5	1.2				ug/L	6398	Standard
Sr	88	561.7	5.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.300	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	103.647
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.157
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072509

Sample Date/Time: Thursday, July 26, 2012 17:40:57

Number of Replicates: 3

Autosampler Position: 328

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

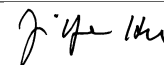
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22890.6	3.7	-7674.3225	764.584	10.0	ug/L	11975	Standard
|	Be	9	16.7	91.7	0.0154	0.009	55.1	ug/L	53	Standard
|	Al	27	120478.8	1.2	6.7366	0.260	3.9	ug/L	10095	Standard
[>	Sc	45	440987.6	2.3				ug/L	476707	Standard
|	Ti	47	880.0	6.5	0.6764	0.046	6.7	ug/L	149	Standard
|	V	51	4809.7	1.3	0.1969	0.005	2.6	ug/L	3747	Standard
|	Cr	52	10922.6	0.8	0.3163	0.012	3.8	ug/L	10265	Standard
|	Cr	53	700.0	0.9	-1.1244	0.006	0.5	ug/L	3075	Standard
|	Mn	55	250141.1	1.2	17.5114	0.172	1.0	ug/L	1438	Standard
|	Co	59	967.4	1.0	0.0899	0.001	1.3	ug/L	148	Standard
|	Ni	60	6131.9	0.7	2.2863	0.012	0.5	ug/L	176	Standard
|	Cu	65	766.4	2.3	0.2506	0.007	2.7	ug/L	186	Standard
|	Zn	66	3596.4	1.7	2.8663	0.056	2.0	ug/L	355	Standard
[>	Ge	72	353302.4	0.3				ug/L	437919	Standard
|	As	75	-25.7	76.8	0.1732	0.018	10.2	ug/L	-222	Standard
|	Se	82	290.6	1.5	2.5442	0.039	1.5	ug/L	29	Standard
[	Se-1	77	286.7	4.6	1.5881	0.178	11.2	ug/L	201	Standard
[>	Ga	71	698.3	8.4				mg/L	985	Standard
|	Rb	85	10021.6	2.1				ug/L	22	Standard
|	Y	89	332519.3	0.8				ug/L	370795	Standard
[>	Rh	103	560.0	9.4				ug/L	498	Standard
|	Mo	98	994.9	6.0	0.1978	0.012	5.9	ug/L	253	Standard
|	Ag	107	99.7	57.1	0.0065	0.006	97.7	ug/L	124	Standard
|	Cd	111	90.3	44.9	0.0096	0.009	94.1	mg/L	100	Standard
|	Cd	114	234.9	31.2	-0.0001	0.006	5011.7	ug/L	307	Standard
[>	In	115	1068136.5	0.5				ug/L	1045367	Standard
|	Sn	118	934.7	12.9	-0.0303	0.005	17.2	ug/L	1664	Standard
|	Sb	123	392.3	11.2	0.0207	0.004	19.3	ug/L	846	Standard
|	Ba	135	52709.5	1.0	9.8082	0.123	1.3	ug/L	61	Standard
|	Ce	140	2349.5	0.9				ug/L	30	Standard
[>	Tb	159	1360134.4	0.7				ug/L	1407506	Standard
|	Ho	165	53.3	7.1				ug/L	13	Standard
|	Tl	203	329.7	9.3	-0.0077	0.002	19.6	ug/L	713	Standard
|	Tl	205	765.0	4.1	-0.0125	0.001	6.4	ug/L	1648	Standard
|	Pb	206	847.4	3.2	0.0254	0.002	8.2	ug/L	594	Standard
|	Pb	207	696.7	4.0	0.0236	0.002	10.2	ug/L	497	Standard
|	Pb	208	3215.1	2.4	0.0230	0.002	7.1	ug/L	2293	Standard
	U	238	10682.1	1.0	0.6021	0.009	1.4	ug/L	301	Standard
[>	Bi	209	719426.3	0.6				ug/L	757838	Standard

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Na	23	78387.3	2.5	4.9306	0.231	4.7	mg/L	592	Standard
Mg	24	9204212.6	1.9	13.3421	0.497	3.7	mg/L	1565	Standard
K	39	615.0	2.4	0.3663	0.022	6.1	mg/L	157	Standard
Ca	43	85.0	17.6	29.7811	4.679	15.7	mg/L	5	Standard
Fe	54	416.7	2.5	-0.0532	0.004	6.8	mg/L	717	Standard
Fe	57	22867.3	5.8	0.1770	0.007	4.2	mg/L	4072	Standard
Sc-1	45	440987.6	2.3				mg/L	476707	Standard
Cl	35	8.0	12.5				ug/L	29	Standard
Kr	83	53.3	10.8				ug/L	39	Standard
Br	81	1680.9	6.0				ug/L	1124	Standard
P	31	2492.7	4.3				ug/L	495	Standard
S	34	94479.5	0.3				ug/L	6398	Standard
Sr	88	546.7	3.8				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		80.677	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072509

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	Cd	111	
	Cd	114	
>	In	115	102.178
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.931
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072509

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Method 6020 - Summary Report

Sample ID: L1207072510

Sample Date/Time: Thursday, July 26, 2012 17:44:08

Number of Replicates: 3

Autosampler Position: 329

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21456.9	1.2	-6926.4710	66.406	1.0	ug/L	11975	Standard
|	Be	9	15.0	57.7	0.0145	0.005	32.8	ug/L	53	Standard
|	Al	27	48723.3	3.4	2.2909	0.087	3.8	ug/L	10095	Standard
[>	Sc	45	435000.0	1.2				ug/L	476707	Standard
|	Ti	47	820.4	7.2	0.6255	0.048	7.7	ug/L	149	Standard
|	V	51	4476.5	2.7	0.1618	0.016	9.6	ug/L	3747	Standard
|	Cr	52	10444.6	1.8	0.2535	0.029	11.6	ug/L	10265	Standard
|	Cr	53	608.3	13.3	-1.1904	0.061	5.1	ug/L	3075	Standard
|	Mn	55	226226.0	1.7	15.7901	0.374	2.4	ug/L	1438	Standard
|	Co	59	1653.1	3.5	0.1618	0.007	4.2	ug/L	148	Standard
|	Ni	60	4119.6	3.6	1.5220	0.059	3.9	ug/L	176	Standard
|	Cu	65	586.7	3.2	0.1775	0.007	4.2	ug/L	186	Standard
|	Zn	66	2830.9	2.6	2.1848	0.077	3.5	ug/L	355	Standard
[>	Ge	72	354098.5	0.8				ug/L	437919	Standard
|	As	75	-85.5	44.8	0.1195	0.035	29.0	ug/L	-222	Standard
|	Se	82	176.0	9.0	1.4680	0.135	9.2	ug/L	29	Standard
[	Se-1	77	206.7	4.4	0.5845	0.123	21.0	ug/L	201	Standard
[>	Ga	71	796.7	6.2				mg/L	985	Standard
|	Rb	85	8175.5	1.9				ug/L	22	Standard
|	Y	89	328225.6	1.0				ug/L	370795	Standard
[>	Rh	103	606.7	8.8				ug/L	498	Standard
|	Mo	98	509.5	1.4	0.0972	0.001	1.2	ug/L	253	Standard
|	Ag	107	79.0	10.4	0.0041	0.001	22.0	ug/L	124	Standard
|	Cd	111	50.4	10.9	0.0006	0.001	203.4	mg/L	100	Standard
|	Cd	114	145.3	16.8	-0.0071	0.002	25.9	ug/L	307	Standard
[>	In	115	1073515.1	0.4				ug/L	1045367	Standard
|	Sn	118	798.4	10.8	-0.0366	0.004	10.0	ug/L	1664	Standard
|	Sb	123	399.8	12.7	0.0212	0.004	21.1	ug/L	846	Standard
|	Ba	135	46926.9	1.3	8.6877	0.133	1.5	ug/L	61	Standard
|	Ce	140	569.3	2.8				ug/L	30	Standard
[>	Tb	159	1363928.7	1.0				ug/L	1407506	Standard
|	Ho	165	25.7	12.5				ug/L	13	Standard
|	Tl	203	362.0	42.3	-0.0061	0.008	128.5	ug/L	713	Standard
|	Tl	205	856.0	37.7	-0.0104	0.007	71.9	ug/L	1648	Standard
|	Pb	206	781.7	13.9	0.0211	0.007	33.0	ug/L	594	Standard
|	Pb	207	635.7	11.4	0.0187	0.006	30.6	ug/L	497	Standard
|	Pb	208	2991.1	10.9	0.0191	0.005	28.4	ug/L	2293	Standard
	U	238	9355.2	1.9	0.5283	0.014	2.6	ug/L	301	Standard
[>	Bi	209	718684.8	1.5				ug/L	757838	Standard

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Na	23	74650.2	2.4	4.7552	0.097	2.0	mg/L	592	Standard
Mg	24	8514676.3	2.3	12.5068	0.305	2.4	mg/L	1565	Standard
K	39	658.3	6.4	0.4063	0.027	6.7	mg/L	157	Standard
Ca	43	73.3	33.6	25.9688	8.683	33.4	mg/L	5	Standard
Fe	54	344.5	20.0	-0.0659	0.013	19.6	mg/L	717	Standard
Fe	57	19310.6	2.6	0.1468	0.003	2.3	mg/L	4072	Standard
Sc-1	45	435000.0	1.2				mg/L	476707	Standard
Cl	35	6.3	24.1				ug/L	29	Standard
Kr	83	56.9	9.1				ug/L	39	Standard
Br	81	1792.6	7.6				ug/L	1124	Standard
P	31	1927.6	2.8				ug/L	495	Standard
S	34	85044.7	1.1				ug/L	6398	Standard
Sr	88	466.7	7.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		80.859	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.693
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.834
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072506

Sample Date/Time: Thursday, July 26, 2012 17:47:18

Number of Replicates: 3

Autosampler Position: 330

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

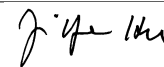
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12740.4	1.9	-2142.6968	207.276	9.7	ug/L	11975	Standard
|	Be	9	10.0	50.0	0.0124	0.003	26.1	ug/L	53	Standard
|	Al	27	6784.9	1.2	-0.3162	0.021	6.5	ug/L	10095	Standard
[>	Sc	45	390790.1	3.8				ug/L	476707	Standard
|	Ti	47	87.0	15.2	0.0237	0.012	50.2	ug/L	149	Standard
|	V	51	3152.5	0.6	0.0479	0.003	6.6	ug/L	3747	Standard
|	Cr	52	9400.9	2.4	0.2017	0.034	16.8	ug/L	10265	Standard
|	Cr	53	464.2	11.2	-1.2710	0.040	3.2	ug/L	3075	Standard
|	Mn	55	14263.7	0.8	0.9335	0.011	1.2	ug/L	1438	Standard
|	Co	59	212.7	1.9	0.0117	0.000	4.0	ug/L	148	Standard
|	Ni	60	446.3	3.9	0.1474	0.007	4.4	ug/L	176	Standard
|	Cu	65	157.3	12.9	0.0090	0.008	94.7	ug/L	186	Standard
|	Zn	66	1598.1	2.0	1.1924	0.033	2.7	ug/L	355	Standard
[>	Ge	72	331856.2	0.3				ug/L	437919	Standard
|	As	75	-192.5	5.4	0.0126	0.010	78.3	ug/L	-222	Standard
|	Se	82	30.4	13.6	0.1288	0.042	32.6	ug/L	29	Standard
[	Se-1	77	113.7	3.6	-0.4784	0.054	11.4	ug/L	201	Standard
[>	Ga	71	700.0	11.2				mg/L	985	Standard
|	Rb	85	370.0	9.5				ug/L	22	Standard
|	Y	89	298153.8	1.6				ug/L	370795	Standard
[>	Rh	103	498.3	9.8				ug/L	498	Standard
|	Mo	98	81.6	18.5	0.0103	0.003	31.4	ug/L	253	Standard
|	Ag	107	59.0	18.9	0.0023	0.001	56.4	ug/L	124	Standard
|	Cd	111	30.8	5.5	-0.0034	0.000	11.2	mg/L	100	Standard
|	Cd	114	90.3	16.4	-0.0109	0.001	11.0	ug/L	307	Standard
[>	In	115	1009490.8	0.4				ug/L	1045367	Standard
|	Sn	118	634.0	3.2	-0.0420	0.001	2.2	ug/L	1664	Standard
|	Sb	123	93.5	5.5	-0.0060	0.000	7.7	ug/L	846	Standard
|	Ba	135	3741.8	2.3	0.7314	0.020	2.7	ug/L	61	Standard
|	Ce	140	48.7	14.6				ug/L	30	Standard
[>	Tb	159	1274983.0	0.7				ug/L	1407506	Standard
|	Ho	165	18.7	11.2				ug/L	13	Standard
|	Tl	203	94.0	5.9	-0.0199	0.000	1.0	ug/L	713	Standard
|	Tl	205	229.0	4.2	-0.0251	0.000	0.5	ug/L	1648	Standard
|	Pb	206	448.7	2.4	-0.0012	0.001	99.1	ug/L	594	Standard
|	Pb	207	399.7	2.6	-0.0004	0.001	285.4	ug/L	497	Standard
|	Pb	208	1784.4	1.3	-0.0019	0.000	13.9	ug/L	2293	Standard
	U	238	492.7	3.7	0.0308	0.001	1.7	ug/L	301	Standard
[>	Bi	209	719762.8	1.7				ug/L	757838	Standard

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Na	23	7755.3	4.1	0.5104	0.029	5.7	mg/L	592	Standard
Mg	24	469447.2	1.1	0.7680	0.024	3.1	mg/L	1565	Standard
K	39	173.3	24.2	0.0409	0.035	86.4	mg/L	157	Standard
Ca	43	15.0	57.7	5.4755	3.465	63.3	mg/L	5	Standard
Fe	54	242.1	23.7	-0.0801	0.012	14.4	mg/L	717	Standard
Fe	57	5561.0	1.4	0.0245	0.003	11.1	mg/L	4072	Standard
Sc-1	45	390790.1	3.8				mg/L	476707	Standard
Cl	35	5.0	20.0				ug/L	29	Standard
Kr	83	42.0	6.2				ug/L	39	Standard
Br	81	1130.9	9.2				ug/L	1124	Standard
P	31	235.0	11.3				ug/L	495	Standard
S	34	12351.7	3.7				ug/L	6398	Standard
Sr	88	68.3	22.4				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		75.780	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	96.568	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.976	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072506

Report Date/Time: Thursday, July 26, 2012 17:49:48

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Method 6020 - Summary Report

Sample ID: L1207072507

Sample Date/Time: Thursday, July 26, 2012 17:50:27

Number of Replicates: 3

Autosampler Position: 331

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12752.0	2.6	-2068.8919	143.275	6.9	ug/L	11975	Standard
|	Be	9	6.7	43.3	0.0102	0.002	17.0	ug/L	53	Standard
|	Al	27	9833.3	22.0	-0.1084	0.143	131.6	ug/L	10095	Standard
[>	Sc	45	394061.8	2.1				ug/L	476707	Standard
[	Ti	47	115.7	18.2	0.0474	0.018	37.1	ug/L	149	Standard
|	V	51	3828.7	2.8	0.1154	0.001	1.1	ug/L	3747	Standard
|	Cr	52	9309.9	2.3	0.1709	0.003	1.8	ug/L	10265	Standard
|	Cr	53	470.8	2.6	-1.2713	0.010	0.8	ug/L	3075	Standard
|	Mn	55	15076.5	1.0	0.9778	0.021	2.1	ug/L	1438	Standard
|	Co	59	275.0	2.0	0.0183	0.001	5.8	ug/L	148	Standard
|	Ni	60	645.7	6.1	0.2236	0.010	4.4	ug/L	176	Standard
|	Cu	65	198.7	13.2	0.0254	0.010	39.7	ug/L	186	Standard
|	Zn	66	1813.1	0.9	1.3695	0.028	2.1	ug/L	355	Standard
[>	Ge	72	336913.9	2.6				ug/L	437919	Standard
|	As	75	-184.2	21.3	0.0237	0.033	139.5	ug/L	-222	Standard
|	Se	82	28.1	4.6	0.1025	0.019	18.3	ug/L	29	Standard
[	Se-1	77	104.3	6.8	-0.6210	0.128	20.6	ug/L	201	Standard
[>	Ga	71	731.7	12.9				mg/L	985	Standard
[	Rb	85	521.7	11.4				ug/L	22	Standard
[	Y	89	303885.0	2.5				ug/L	370795	Standard
[>	Rh	103	456.7	7.9				ug/L	498	Standard
[	Mo	98	401.2	7.4	0.0783	0.006	7.6	ug/L	253	Standard
|	Ag	107	69.3	0.8	0.0034	0.000	2.2	ug/L	124	Standard
|	Cd	111	34.0	14.5	-0.0028	0.001	37.3	mg/L	100	Standard
|	Cd	114	112.3	6.5	-0.0093	0.001	6.5	ug/L	307	Standard
[>	In	115	1030459.4	1.7				ug/L	1045367	Standard
|	Sn	118	647.3	5.6	-0.0420	0.002	4.8	ug/L	1664	Standard
|	Sb	123	114.7	9.7	-0.0042	0.001	24.7	ug/L	846	Standard
[	Ba	135	3838.2	2.2	0.7349	0.007	0.9	ug/L	61	Standard
[	Ce	140	56.3	19.6				ug/L	30	Standard
[>	Tb	159	1293434.2	0.6				ug/L	1407506	Standard
[	Ho	165	14.0	14.3				ug/L	13	Standard
|	Tl	203	90.3	14.3	-0.0202	0.001	2.8	ug/L	713	Standard
|	Tl	205	223.7	7.5	-0.0253	0.000	1.4	ug/L	1648	Standard
|	Pb	206	502.3	1.7	0.0018	0.001	29.9	ug/L	594	Standard
|	Pb	207	416.3	4.4	0.0004	0.001	258.3	ug/L	497	Standard
|	Pb	208	1888.7	2.2	-0.0007	0.001	177.0	ug/L	2293	Standard
	U	238	758.7	4.0	0.0450	0.001	2.2	ug/L	301	Standard
[>	Bi	209	732098.6	2.2				ug/L	757838	Standard

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Na	23	8635.8	5.6	0.5677	0.028	4.9	mg/L	592	Standard
Mg	24	528574.1	2.0	0.8570	0.008	0.9	mg/L	1565	Standard
K	39	176.7	14.5	0.0426	0.021	49.4	mg/L	157	Standard
Ca	43	3.3	173.2	0.8088	2.369	292.9	mg/L	5	Standard
Fe	54	259.3	17.4	-0.0770	0.008	10.8	mg/L	717	Standard
Fe	57	5446.0	5.0	0.0227	0.002	7.3	mg/L	4072	Standard
Sc-1	45	394061.8	2.1				mg/L	476707	Standard
Cl	35	4.0	66.1				ug/L	29	Standard
Kr	83	41.7	1.6				ug/L	39	Standard
Br	81	1069.2	3.0				ug/L	1124	Standard
P	31	281.7	11.5				ug/L	495	Standard
S	34	13203.3	2.2				ug/L	6398	Standard
Sr	88	50.0	17.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		76.935	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072507

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	Cd	111	
	Cd	114	
>	In	115	98.574
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.604
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072507

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Method 6020 - Summary Report

Sample ID: L1207072508

Sample Date/Time: Thursday, July 26, 2012 17:53:36

Number of Replicates: 3

Autosampler Position: 332

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12561.9	4.2	-2073.1927	287.933	13.9	ug/L	11975	Standard
|	Be	9	15.0	88.2	0.0155	0.008	53.2	ug/L	53	Standard
|	Al	27	7840.4	3.7	-0.2383	0.017	7.0	ug/L	10095	Standard
[>	Sc	45	387918.5	1.2				ug/L	476707	Standard
|	Ti	47	107.0	11.3	0.0414	0.011	27.6	ug/L	149	Standard
|	V	51	3669.5	1.8	0.1045	0.002	1.7	ug/L	3747	Standard
|	Cr	52	9316.5	2.2	0.1910	0.024	12.3	ug/L	10265	Standard
|	Cr	53	499.2	9.8	-1.2440	0.042	3.3	ug/L	3075	Standard
|	Mn	55	14707.8	1.5	0.9673	0.004	0.4	ug/L	1438	Standard
|	Co	59	357.0	4.6	0.0280	0.001	4.9	ug/L	148	Standard
|	Ni	60	656.3	1.0	0.2321	0.005	2.3	ug/L	176	Standard
|	Cu	65	148.3	4.7	0.0052	0.004	68.4	ug/L	186	Standard
|	Zn	66	5030.8	2.1	4.4226	0.062	1.4	ug/L	355	Standard
[>	Ge	72	331698.0	1.4				ug/L	437919	Standard
|	As	75	-196.2	3.0	0.0090	0.003	34.9	ug/L	-222	Standard
|	Se	82	22.2	7.3	0.0477	0.013	27.3	ug/L	29	Standard
[	Se-1	77	124.7	5.3	-0.3311	0.096	28.9	ug/L	201	Standard
[>	Ga	71	733.4	8.9				mg/L	985	Standard
|	Rb	85	476.7	10.6				ug/L	22	Standard
|	Y	89	299831.6	1.8				ug/L	370795	Standard
[>	Rh	103	391.7	7.5				ug/L	498	Standard
|	Mo	98	415.4	6.0	0.0836	0.006	6.8	ug/L	253	Standard
|	Ag	107	58.0	13.5	0.0022	0.001	38.7	ug/L	124	Standard
|	Cd	111	28.0	14.3	-0.0040	0.001	26.0	mg/L	100	Standard
|	Cd	114	95.5	9.6	-0.0104	0.001	6.4	ug/L	307	Standard
[>	In	115	1005088.1	1.3				ug/L	1045367	Standard
|	Sn	118	627.3	5.6	-0.0422	0.001	3.5	ug/L	1664	Standard
|	Sb	123	106.5	23.0	-0.0047	0.002	47.5	ug/L	846	Standard
|	Ba	135	3908.5	5.1	0.7673	0.030	3.9	ug/L	61	Standard
|	Ce	140	38.0	20.6				ug/L	30	Standard
[>	Tb	159	1271858.9	0.8				ug/L	1407506	Standard
|	Ho	165	12.0	22.0				ug/L	13	Standard
|	Tl	203	94.3	19.1	-0.0199	0.001	4.2	ug/L	713	Standard
|	Tl	205	219.7	9.6	-0.0253	0.000	1.6	ug/L	1648	Standard
|	Pb	206	458.0	2.3	-0.0006	0.001	234.8	ug/L	594	Standard
|	Pb	207	391.7	3.9	-0.0010	0.002	182.1	ug/L	497	Standard
|	Pb	208	1788.4	1.4	-0.0018	0.001	68.5	ug/L	2293	Standard
	U	238	802.0	4.3	0.0482	0.001	2.3	ug/L	301	Standard
[>	Bi	209	719524.2	2.6				ug/L	757838	Standard

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Na	23	8962.7	6.2	0.6009	0.036	6.0	mg/L	592	Standard
Mg	24	530694.1	1.7	0.8740	0.014	1.6	mg/L	1565	Standard
K	39	178.3	14.4	0.0464	0.021	45.4	mg/L	157	Standard
Ca	43	8.3	34.6	2.8339	1.187	41.9	mg/L	5	Standard
Fe	54	253.9	16.8	-0.0772	0.009	11.3	mg/L	717	Standard
Fe	57	5285.9	4.0	0.0220	0.002	8.6	mg/L	4072	Standard
Sc-1	45	387918.5	1.2				mg/L	476707	Standard
Cl	35	4.7	53.9				ug/L	29	Standard
Kr	83	45.6	11.4				ug/L	39	Standard
Br	81	1051.7	7.3				ug/L	1124	Standard
P	31	246.7	5.2				ug/L	495	Standard
S	34	13358.4	2.3				ug/L	6398	Standard
Sr	88	71.7	14.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		75.744	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072508

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	Cd	111	
	Cd	114	
>	In	115	96.147
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.944
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072508

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Method 6020 - Summary Report

Sample ID: L1207072509

Sample Date/Time: Thursday, July 26, 2012 17:56:45

Number of Replicates: 3

Autosampler Position: 333

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12523.5	5.2	-1888.6336	336.145	17.8	ug/L	11975	Standard
|	Be	9	13.3	43.3	0.0144	0.004	24.5	ug/L	53	Standard
|	Al	27	12913.8	3.0	0.1069	0.028	25.9	ug/L	10095	Standard
[>	Sc	45	394889.6	5.5				ug/L	476707	Standard
|	Ti	47	104.3	14.4	0.0391	0.011	29.3	ug/L	149	Standard
|	V	51	3135.0	5.1	0.0470	0.009	20.0	ug/L	3747	Standard
|	Cr	52	9198.1	4.3	0.1786	0.024	13.2	ug/L	10265	Standard
|	Cr	53	493.3	4.2	-1.2472	0.026	2.1	ug/L	3075	Standard
|	Mn	55	15104.5	4.7	1.0004	0.031	3.1	ug/L	1438	Standard
|	Co	59	170.7	31.7	0.0071	0.006	82.6	ug/L	148	Standard
|	Ni	60	566.7	9.8	0.1964	0.017	8.8	ug/L	176	Standard
|	Cu	65	150.0	6.1	0.0060	0.003	46.7	ug/L	186	Standard
|	Zn	66	1475.1	5.1	1.0813	0.047	4.3	ug/L	355	Standard
[>	Ge	72	330673.7	2.6				ug/L	437919	Standard
|	As	75	-187.2	7.4	0.0172	0.009	54.5	ug/L	-222	Standard
|	Se	82	36.6	4.7	0.1918	0.016	8.5	ug/L	29	Standard
[	Se-1	77	119.7	7.9	-0.3942	0.093	23.6	ug/L	201	Standard
[>	Ga	71	650.0	15.0				mg/L	985	Standard
|	Rb	85	516.7	13.1				ug/L	22	Standard
|	Y	89	290302.6	2.6				ug/L	370795	Standard
[>	Rh	103	423.3	3.6				ug/L	498	Standard
|	Mo	98	80.5	28.1	0.0100	0.004	44.3	ug/L	253	Standard
|	Ag	107	60.7	27.2	0.0025	0.002	71.4	ug/L	124	Standard
|	Cd	111	28.1	14.6	-0.0041	0.001	19.9	mg/L	100	Standard
|	Cd	114	113.0	27.2	-0.0091	0.002	25.4	ug/L	307	Standard
[>	In	115	1012863.4	3.3				ug/L	1045367	Standard
|	Sn	118	771.0	32.9	-0.0358	0.011	30.7	ug/L	1664	Standard
|	Sb	123	159.6	93.5	0.0001	0.014	11816.3	ug/L	846	Standard
|	Ba	135	3098.0	10.4	0.6018	0.048	8.0	ug/L	61	Standard
|	Ce	140	174.3	6.0				ug/L	30	Standard
[>	Tb	159	1277938.2	1.9				ug/L	1407506	Standard
|	Ho	165	14.3	8.1				ug/L	13	Standard
|	Tl	203	180.3	96.8	-0.0155	0.009	57.2	ug/L	713	Standard
|	Tl	205	383.7	101.4	-0.0216	0.009	41.8	ug/L	1648	Standard
|	Pb	206	565.7	18.9	0.0065	0.007	102.5	ug/L	594	Standard
|	Pb	207	473.3	25.2	0.0055	0.009	167.3	ug/L	497	Standard
|	Pb	208	2200.1	21.0	0.0052	0.008	145.3	ug/L	2293	Standard
	U	238	606.3	16.5	0.0371	0.005	14.0	ug/L	301	Standard
[>	Bi	209	720466.1	3.0				ug/L	757838	Standard

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Na	23	8237.2	5.5	0.5384	0.013	2.5	mg/L	592	Standard
Mg	24	467989.2	4.7	0.7582	0.043	5.7	mg/L	1565	Standard
K	39	151.7	22.4	0.0219	0.037	167.4	mg/L	157	Standard
Ca	43	8.3	124.9	2.6812	3.922	146.3	mg/L	5	Standard
Fe	54	219.4	12.6	-0.0853	0.005	5.8	mg/L	717	Standard
Fe	57	4939.1	4.4	0.0175	0.002	13.6	mg/L	4072	Standard
Sc-1	45	394889.6	5.5				mg/L	476707	Standard
Cl	35	4.3	70.5				ug/L	29	Standard
Kr	83	43.3	3.5				ug/L	39	Standard
Br	81	955.9	4.5				ug/L	1124	Standard
P	31	245.0	11.5				ug/L	495	Standard
S	34	12532.7	3.9				ug/L	6398	Standard
Sr	88	78.3	26.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		75.510	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072509

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	Cd	111		
	Cd	114		
>	In	115	96.891	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	95.069	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072510

Sample Date/Time: Thursday, July 26, 2012 17:59:54

Number of Replicates: 3

Autosampler Position: 334

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12528.5	1.8	-2386.9457	320.842	13.4	ug/L	11975	Standard
|	Be	9	8.3	91.7	0.0116	0.005	42.6	ug/L	53	Standard
|	Al	27	10842.2	3.6	0.0027	0.024	883.1	ug/L	10095	Standard
[>	Sc	45	374469.2	2.2				ug/L	476707	Standard
|	Ti	47	93.7	5.3	0.0319	0.004	14.0	ug/L	149	Standard
|	V	51	3111.7	1.1	0.0533	0.003	5.1	ug/L	3747	Standard
|	Cr	52	9138.1	1.9	0.2021	0.021	10.5	ug/L	10265	Standard
|	Cr	53	503.3	7.9	-1.2303	0.030	2.4	ug/L	3075	Standard
|	Mn	55	13783.9	1.9	0.9276	0.020	2.1	ug/L	1438	Standard
|	Co	59	170.0	6.8	0.0075	0.001	18.7	ug/L	148	Standard
|	Ni	60	386.7	4.6	0.1279	0.007	5.2	ug/L	176	Standard
|	Cu	65	154.0	3.4	0.0095	0.002	22.1	ug/L	186	Standard
|	Zn	66	1648.4	2.0	1.2848	0.026	2.0	ug/L	355	Standard
[>	Ge	72	322466.7	0.4				ug/L	437919	Standard
|	As	75	-201.6	7.7	-0.0016	0.014	874.7	ug/L	-222	Standard
|	Se	82	32.4	5.5	0.1582	0.017	10.8	ug/L	29	Standard
[	Se-1	77	115.3	16.3	-0.4124	0.249	60.5	ug/L	201	Standard
[>	Ga	71	666.7	8.7				mg/L	985	Standard
|	Rb	85	438.3	9.7				ug/L	22	Standard
|	Y	89	287823.1	0.7				ug/L	370795	Standard
[>	Rh	103	445.0	4.9				ug/L	498	Standard
|	Mo	98	51.3	10.0	0.0041	0.001	30.9	ug/L	253	Standard
|	Ag	107	63.3	12.0	0.0030	0.001	29.2	ug/L	124	Standard
|	Cd	111	25.9	11.5	-0.0044	0.001	17.9	mg/L	100	Standard
|	Cd	114	80.0	15.8	-0.0115	0.001	9.0	ug/L	307	Standard
[>	In	115	981970.0	0.9				ug/L	1045367	Standard
|	Sn	118	620.3	1.9	-0.0418	0.001	1.9	ug/L	1664	Standard
|	Sb	123	65.7	23.8	-0.0085	0.002	18.8	ug/L	846	Standard
|	Ba	135	2785.9	2.8	0.5583	0.012	2.1	ug/L	61	Standard
|	Ce	140	65.7	16.8				ug/L	30	Standard
[>	Tb	159	1244689.4	1.5				ug/L	1407506	Standard
|	Ho	165	14.0	31.1				ug/L	13	Standard
|	Tl	203	72.0	4.2	-0.0210	0.000	0.7	ug/L	713	Standard
|	Tl	205	173.0	8.6	-0.0264	0.000	1.3	ug/L	1648	Standard
|	Pb	206	451.0	5.7	-0.0005	0.002	354.8	ug/L	594	Standard
|	Pb	207	404.0	5.6	0.0006	0.002	291.0	ug/L	497	Standard
|	Pb	208	1819.0	1.1	-0.0007	0.000	53.8	ug/L	2293	Standard
	U	238	506.0	5.2	0.0322	0.001	4.7	ug/L	301	Standard
[>	Bi	209	705450.9	0.2				ug/L	757838	Standard

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Na	23	7388.5	1.2	0.5068	0.009	1.8	mg/L	592	Standard
Mg	24	439509.4	1.5	0.7499	0.014	1.9	mg/L	1565	Standard
K	39	140.0	21.7	0.0171	0.026	152.3	mg/L	157	Standard
Ca	43	6.7	86.6	2.2735	2.454	107.9	mg/L	5	Standard
Fe	54	187.5	13.9	-0.0897	0.006	7.0	mg/L	717	Standard
Fe	57	4714.1	2.6	0.0178	0.000	2.2	mg/L	4072	Standard
Sc-1	45	374469.2	2.2				mg/L	476707	Standard
Cl	35	4.3	35.3				ug/L	29	Standard
Kr	83	42.3	7.2				ug/L	39	Standard
Br	81	912.5	7.0				ug/L	1124	Standard
P	31	255.0	12.5				ug/L	495	Standard
S	34	12306.7	1.4				ug/L	6398	Standard
Sr	88	61.7	18.7				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		73.636	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072510

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	Cd	111	
	Cd	114	
>	In	115	93.935
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.087
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072510

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 18:03:06

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

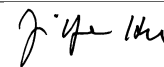
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13853.0	4.4	-1129.4259	230.475	20.4	ug/L	11975	Standard
|	Be	9	112180.5	1.6	57.4217	0.671	1.2	ug/L	53	Standard
|	Al	27	770573.3	2.5	43.7877	0.878	2.0	ug/L	10095	Standard
[>	Sc	45	476247.0	1.7				ug/L	476707	Standard
|	Ti	47	140979.4	2.2	106.2922	0.839	0.8	ug/L	149	Standard
|	V	51	576197.9	1.7	53.4695	0.255	0.5	ug/L	3747	Standard
|	Cr	52	470116.6	1.7	52.5819	0.300	0.6	ug/L	10265	Standard
|	Cr	53	81896.7	2.9	51.4610	0.998	1.9	ug/L	3075	Standard
|	Mn	55	884252.1	2.2	56.6271	0.334	0.6	ug/L	1438	Standard
|	Co	59	559900.1	2.0	53.7082	0.246	0.5	ug/L	148	Standard
|	Ni	60	145466.5	2.0	50.0119	0.143	0.3	ug/L	176	Standard
|	Cu	65	135050.6	1.3	49.5144	0.463	0.9	ug/L	186	Standard
|	Zn	66	62511.0	1.2	49.9331	0.501	1.0	ug/L	355	Standard
[>	Ge	72	388321.7	2.2				ug/L	437919	Standard
|	As	75	61204.2	2.1	50.0674	0.224	0.4	ug/L	-222	Standard
|	Se	82	6410.5	2.1	54.3794	0.101	0.2	ug/L	29	Standard
[	Se-1	77	4509.3	2.3	49.1835	0.433	0.9	ug/L	201	Standard
[>	Ga	71	866.7	10.9				mg/L	985	Standard
|	Rb	85	965.0	6.3				ug/L	22	Standard
|	Y	89	354911.6	2.2				ug/L	370795	Standard
[>	Rh	103	541.7	2.8				ug/L	498	Standard
|	Mo	98	452285.1	2.2	86.0202	0.997	1.2	ug/L	253	Standard
|	Ag	107	500824.3	2.9	52.0117	0.609	1.2	ug/L	124	Standard
|	Cd	111	261678.9	1.9	54.4993	0.305	0.6	mg/L	100	Standard
|	Cd	114	683149.4	2.7	48.7121	0.610	1.3	ug/L	307	Standard
[>	In	115	1158777.1	1.7				ug/L	1045367	Standard
|	Sn	118	1576864.7	2.6	64.3818	0.778	1.2	ug/L	1664	Standard
|	Sb	123	605295.0	1.5	50.7848	0.206	0.4	ug/L	846	Standard
|	Ba	135	260380.7	1.7	44.6818	0.278	0.6	ug/L	61	Standard
|	Ce	140	1048.7	1.8				ug/L	30	Standard
[>	Tb	159	1456850.7	0.9				ug/L	1407506	Standard
|	Ho	165	25.7	19.2				ug/L	13	Standard
|	Tl	203	991047.5	2.1	47.6276	0.930	2.0	ug/L	713	Standard
|	Tl	205	2268428.7	1.7	49.6555	0.837	1.7	ug/L	1648	Standard
|	Pb	206	771624.6	1.5	47.9672	0.744	1.6	ug/L	594	Standard
|	Pb	207	656515.2	0.9	49.1837	0.519	1.1	ug/L	497	Standard
|	Pb	208	3032885.2	1.6	49.1704	0.769	1.6	ug/L	2293	Standard
|	U	238	1037396.7	1.8	54.1386	0.996	1.8	ug/L	301	Standard
[>	Bi	209	772844.9	0.4				ug/L	757838	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 18:05:36

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Na	23	124407.0	0.5	7.2635	0.133	1.8	mg/L	592	Standard
Mg	24	3404228.0	2.3	4.5673	0.104	2.3	mg/L	1565	Standard
K	39	5401.0	3.2	3.7641	0.125	3.3	mg/L	157	Standard
Ca	43	10.0	132.3	2.8039	4.476	159.6	mg/L	5	Standard
Fe	54	25168.5	1.0	4.2090	0.098	2.3	mg/L	717	Standard
Fe	57	576562.1	2.8	4.8781	0.059	1.2	mg/L	4072	Standard
Sc-1	45	476247.0	1.7				mg/L	476707	Standard
Cl	35	7.0	24.7				ug/L	29	Standard
Kr	83	47.7	4.2				ug/L	39	Standard
Br	81	1473.4	6.3				ug/L	1124	Standard
P	31	452.5	4.5				ug/L	495	Standard
S	34	7131.7	2.5				ug/L	6398	Standard
Sr	88	25.0	20.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	87.575		
Sc	45			
Ti	47	106.292		
V	51	106.939		
Cr	52	105.164		
Cr	53			
Mn	55	113.254		
Co	59	107.416		
Ni	60	100.024		
Cu	65	99.029		
Zn	66	99.866		
Ge	72		88.674	
As	75	100.135		
Se	82	108.759		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	86.020		
Ag	107	104.023		

Sample ID: QC Std 6

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	Cd	111	108.999	
	Cd	114		
>	In	115		110.849
	Sn	118	128.764	
	Sb	123	101.570	
	Ba	135	89.364	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	95.255	
|	Tl	205		
|	Pb	206	95.934	
|	Pb	207	98.367	
|	Pb	208	98.341	
|	U	238	108.277	
>	Bi	209		101.980
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

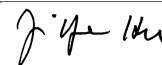
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	
QC Std 6	Mn	55	
QC Std 6	Mo	98	
QC Std 6	Sn	118	
QC Std 6	Ba	135	

Sample ID: QC Std 6

Report Date/Time: Thursday, July 26, 2012 18:05:36

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 18:06:16

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12645.3	3.2	-908.1886	197.174	21.7	ug/L	11975	Standard
|	Be	9	31.7	118.5	0.0233	0.020	86.9	ug/L	53	Standard
|	Al	27	8770.9	6.9	-0.2542	0.033	13.1	ug/L	10095	Standard
[>	Sc	45	446670.3	0.8				ug/L	476707	Standard
[	Ti	47	81.0	28.2	0.0111	0.017	156.7	ug/L	149	Standard
|	V	51	3307.5	7.1	0.0288	0.020	69.5	ug/L	3747	Standard
|	Cr	52	9787.2	3.1	0.1234	0.025	20.4	ug/L	10265	Standard
|	Cr	53	535.0	3.6	-1.2577	0.010	0.8	ug/L	3075	Standard
|	Mn	55	2121.8	2.8	0.0055	0.003	56.0	ug/L	1438	Standard
|	Co	59	174.0	68.5	0.0054	0.012	219.4	ug/L	148	Standard
|	Ni	60	111.7	23.5	0.0081	0.009	111.8	ug/L	176	Standard
|	Cu	65	150.0	15.8	-0.0006	0.009	1382.7	ug/L	186	Standard
|	Zn	66	265.0	3.9	-0.0859	0.010	11.2	ug/L	355	Standard
[>	Ge	72	368420.7	1.0				ug/L	437919	Standard
|	As	75	-284.3	4.4	-0.0481	0.012	25.6	ug/L	-222	Standard
|	Se	82	26.0	6.6	0.0592	0.014	23.3	ug/L	29	Standard
[	Se-1	77	132.0	4.0	-0.4084	0.077	18.9	ug/L	201	Standard
[>	Ga	71	798.4	7.3				mg/L	985	Standard
[	Rb	85	18.3	15.7				ug/L	22	Standard
[	Y	89	334431.0	1.3				ug/L	370795	Standard
[>	Rh	103	553.3	14.7				ug/L	498	Standard
[	Mo	98	384.9	19.6	0.0694	0.015	21.6	ug/L	253	Standard
|	Ag	107	154.7	13.5	0.0121	0.002	17.5	ug/L	124	Standard
|	Cd	111	103.4	15.1	0.0118	0.003	27.2	mg/L	100	Standard
|	Cd	114	289.9	14.7	0.0034	0.003	88.1	ug/L	307	Standard
[>	In	115	1103724.7	0.9				ug/L	1045367	Standard
|	Sn	118	1695.1	6.2	0.0010	0.004	453.1	ug/L	1664	Standard
|	Sb	123	2946.0	9.4	0.2446	0.024	9.9	ug/L	846	Standard
[	Ba	135	58.0	17.2	0.0046	0.002	38.3	ug/L	61	Standard
[	Ce	140	31.0	3.2				ug/L	30	Standard
[>	Tb	159	1366998.5	1.1				ug/L	1407506	Standard
[	Ho	165	13.3	8.7				ug/L	13	Standard
|	Tl	203	84.7	24.6	-0.0205	0.001	4.9	ug/L	713	Standard
|	Tl	205	190.0	29.2	-0.0262	0.001	4.7	ug/L	1648	Standard
|	Pb	206	552.0	6.1	0.0043	0.002	47.9	ug/L	594	Standard
|	Pb	207	446.3	3.6	0.0020	0.001	46.3	ug/L	497	Standard
|	Pb	208	2084.1	3.4	0.0019	0.001	47.3	ug/L	2293	Standard
	U	238	266.3	139.8	0.0175	0.020	113.9	ug/L	301	Standard
[>	Bi	209	747930.7	0.8				ug/L	757838	Standard

Sample ID: QC Std 7

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Na	23	450.0	31.8	-0.0171	0.009	50.9	mg/L	592	Standard
Mg	24	1215.1	116.2	0.0016	0.002	121.6	mg/L	1565	Standard
K	39	116.7	20.3	-0.0213	0.017	81.8	mg/L	157	Standard
Ca	43	3.3	173.2	0.6272	2.054	327.6	mg/L	5	Standard
Fe	54	667.1	10.7	-0.0083	0.012	147.5	mg/L	717	Standard
Fe	57	4237.3	5.8	0.0052	0.002	39.2	mg/L	4072	Standard
Sc-1	45	446670.3	0.8				mg/L	476707	Standard
Cl	35	2.3	173.2				ug/L	29	Standard
Kr	83	51.0	7.8				ug/L	39	Standard
Br	81	1448.4	3.9				ug/L	1124	Standard
P	31	438.3	6.4				ug/L	495	Standard
S	34	6603.1	0.6				ug/L	6398	Standard
Sr	88	40.0	54.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		84.130	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	105.583
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.693
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207072511

Sample Date/Time: Thursday, July 26, 2012 18:09:29

Number of Replicates: 3

Autosampler Position: 335

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19711.2	5.7	-6217.8846	345.518	5.6	ug/L	11975	Standard
|	Be	9	5.0	100.0	0.0091	0.003	33.1	ug/L	53	Standard
|	Al	27	98019.6	3.0	5.6320	0.275	4.9	ug/L	10095	Standard
[>	Sc	45	420506.2	3.3				ug/L	476707	Standard
[	Ti	47	975.0	4.9	0.7903	0.031	3.9	ug/L	149	Standard
|	V	51	4713.8	2.9	0.2081	0.008	4.0	ug/L	3747	Standard
|	Cr	52	10045.0	2.7	0.2611	0.021	7.9	ug/L	10265	Standard
|	Cr	53	624.2	7.7	-1.1592	0.032	2.7	ug/L	3075	Standard
|	Mn	55	198706.2	2.8	14.4932	0.223	1.5	ug/L	1438	Standard
|	Co	59	1105.0	3.5	0.1095	0.003	2.4	ug/L	148	Standard
|	Ni	60	5385.0	3.8	2.0923	0.054	2.6	ug/L	176	Standard
|	Cu	65	666.7	5.9	0.2220	0.013	6.0	ug/L	186	Standard
|	Zn	66	5214.2	2.9	4.4960	0.088	2.0	ug/L	355	Standard
[>	Ge	72	338514.9	1.4				ug/L	437919	Standard
|	As	75	-101.4	17.3	0.1013	0.016	16.3	ug/L	-222	Standard
|	Se	82	224.3	6.0	2.0150	0.100	5.0	ug/L	29	Standard
[	Se-1	77	253.7	4.8	1.3155	0.183	13.9	ug/L	201	Standard
[>	Ga	71	770.0	7.5				mg/L	985	Standard
[	Rb	85	5714.4	4.4				ug/L	22	Standard
[	Y	89	316980.7	2.2				ug/L	370795	Standard
[>	Rh	103	535.0	11.2				ug/L	498	Standard
[	Mo	98	1421.7	4.0	0.2965	0.012	4.0	ug/L	253	Standard
|	Ag	107	79.7	9.6	0.0046	0.001	17.7	ug/L	124	Standard
|	Cd	111	89.3	21.3	0.0101	0.004	43.2	mg/L	100	Standard
|	Cd	114	258.7	4.2	0.0025	0.001	27.4	ug/L	307	Standard
[>	In	115	1030847.5	1.0				ug/L	1045367	Standard
|	Sn	118	931.4	5.7	-0.0290	0.002	8.5	ug/L	1664	Standard
|	Sb	123	675.6	12.8	0.0487	0.008	16.0	ug/L	846	Standard
[	Ba	135	42292.3	2.8	8.1525	0.172	2.1	ug/L	61	Standard
[	Ce	140	922.0	2.1				ug/L	30	Standard
[>	Tb	159	1339959.8	0.4				ug/L	1407506	Standard
[	Ho	165	30.7	18.5				ug/L	13	Standard
|	Tl	203	242.3	9.5	-0.0119	0.001	9.0	ug/L	713	Standard
|	Tl	205	569.3	5.1	-0.0167	0.001	3.5	ug/L	1648	Standard
|	Pb	206	661.7	2.2	0.0143	0.001	7.8	ug/L	594	Standard
|	Pb	207	558.0	3.4	0.0137	0.001	5.9	ug/L	497	Standard
|	Pb	208	2594.1	1.3	0.0135	0.000	3.3	ug/L	2293	Standard
	U	238	9541.3	2.7	0.5534	0.018	3.3	ug/L	301	Standard
[>	Bi	209	699607.2	2.3				ug/L	757838	Standard

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Na	23	67197.0	1.3	4.4282	0.158	3.6	mg/L	592	Standard
Mg	24	7782656.8	3.8	11.8237	0.117	1.0	mg/L	1565	Standard
K	39	490.0	3.7	0.2878	0.015	5.2	mg/L	157	Standard
Ca	43	85.0	15.6	31.2460	3.993	12.8	mg/L	5	Standard
Fe	54	397.3	8.0	-0.0531	0.009	16.7	mg/L	717	Standard
Fe	57	17153.1	6.1	0.1321	0.005	3.6	mg/L	4072	Standard
Sc-1	45	420506.2	3.3				mg/L	476707	Standard
Cl	35	6.7	37.7				ug/L	29	Standard
Kr	83	50.4	3.8				ug/L	39	Standard
Br	81	1477.6	3.2				ug/L	1124	Standard
P	31	1949.3	2.3				ug/L	495	Standard
S	34	80572.0	1.0				ug/L	6398	Standard
Sr	88	495.0	3.5				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		77.301	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	98.611
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.316
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072512

Sample Date/Time: Thursday, July 26, 2012 18:12:38

Number of Replicates: 3

Autosampler Position: 336

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20141.7	2.6	-6400.0404	449.335	7.0	ug/L	11975	Standard
|	Be	9	10.0	100.0	0.0119	0.006	48.1	ug/L	53	Standard
|	Al	27	28329.8	2.4	1.0450	0.042	4.0	ug/L	10095	Standard
[>	Sc	45	424213.5	0.7				ug/L	476707	Standard
[	Ti	47	597.7	1.1	0.4570	0.006	1.4	ug/L	149	Standard
|	V	51	4528.6	1.7	0.1819	0.015	8.1	ug/L	3747	Standard
|	Cr	52	9971.6	0.6	0.2339	0.013	5.3	ug/L	10265	Standard
|	Cr	53	558.3	6.9	-1.2139	0.023	1.9	ug/L	3075	Standard
|	Mn	55	206226.1	2.8	14.8401	0.303	2.0	ug/L	1438	Standard
|	Co	59	1862.8	1.6	0.1901	0.003	1.6	ug/L	148	Standard
|	Ni	60	4227.6	1.8	1.6133	0.021	1.3	ug/L	176	Standard
|	Cu	65	590.7	2.1	0.1868	0.009	4.6	ug/L	186	Standard
|	Zn	66	2308.2	3.8	1.7879	0.052	2.9	ug/L	355	Standard
[>	Ge	72	343205.4	1.5				ug/L	437919	Standard
|	As	75	-81.6	25.6	0.1208	0.020	16.3	ug/L	-222	Standard
|	Se	82	171.8	2.9	1.4804	0.025	1.7	ug/L	29	Standard
[	Se-1	77	200.0	5.7	0.5792	0.111	19.2	ug/L	201	Standard
[>	Ga	71	761.7	4.7				mg/L	985	Standard
[	Rb	85	5999.5	6.8				ug/L	22	Standard
[	Y	89	319512.4	1.3				ug/L	370795	Standard
[>	Rh	103	633.3	13.3				ug/L	498	Standard
[	Mo	98	1192.6	4.5	0.2430	0.012	4.8	ug/L	253	Standard
|	Ag	107	81.0	27.2	0.0046	0.003	55.8	ug/L	124	Standard
|	Cd	111	50.8	8.2	0.0009	0.001	113.8	mg/L	100	Standard
|	Cd	114	158.7	15.5	-0.0058	0.002	33.9	ug/L	307	Standard
[>	In	115	1049708.0	1.0				ug/L	1045367	Standard
|	Sn	118	942.7	24.9	-0.0292	0.011	37.5	ug/L	1664	Standard
|	Sb	123	595.5	20.1	0.0402	0.012	28.6	ug/L	846	Standard
[	Ba	135	43506.4	1.2	8.2366	0.060	0.7	ug/L	61	Standard
[	Ce	140	108.7	5.1				ug/L	30	Standard
[>	Tb	159	1344370.1	0.1				ug/L	1407506	Standard
[	Ho	165	16.0	16.5				ug/L	13	Standard
|	Tl	203	403.3	58.3	-0.0036	0.013	348.8	ug/L	713	Standard
|	Tl	205	872.4	54.0	-0.0097	0.011	118.6	ug/L	1648	Standard
|	Pb	206	592.0	26.6	0.0088	0.011	126.1	ug/L	594	Standard
|	Pb	207	496.7	27.8	0.0080	0.012	147.4	ug/L	497	Standard
|	Pb	208	2265.4	25.3	0.0069	0.011	152.7	ug/L	2293	Standard
	U	238	10172.1	0.6	0.5795	0.006	1.1	ug/L	301	Standard
[>	Bi	209	711979.4	1.2				ug/L	757838	Standard

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Na	23	69059.0	5.1	4.5096	0.258	5.7	mg/L	592	Standard
Mg	24	8022549.7	2.5	12.0831	0.313	2.6	mg/L	1565	Standard
K	39	550.0	13.6	0.3322	0.057	17.3	mg/L	157	Standard
Ca	43	96.7	18.2	35.4188	6.769	19.1	mg/L	5	Standard
Fe	54	347.6	18.9	-0.0636	0.013	20.6	mg/L	717	Standard
Fe	57	17611.9	1.8	0.1352	0.004	2.7	mg/L	4072	Standard
Sc-1	45	424213.5	0.7				mg/L	476707	Standard
Cl	35	5.7	53.9				ug/L	29	Standard
Kr	83	50.9	9.2				ug/L	39	Standard
Br	81	1550.1	4.6				ug/L	1124	Standard
P	31	1705.9	1.5				ug/L	495	Standard
S	34	81019.4	0.9				ug/L	6398	Standard
Sr	88	455.0	15.3				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		78.372	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	100.415
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.949
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072511

Sample Date/Time: Thursday, July 26, 2012 18:15:49

Number of Replicates: 3

Autosampler Position: 337

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12862.1	0.4	-2245.9031	89.912	4.0	ug/L	11975	Standard
|	Be	9	6.7	43.3	0.0103	0.002	16.9	ug/L	53	Standard
|	Al	27	16299.5	35.0	0.3573	0.409	114.5	ug/L	10095	Standard
[>	Sc	45	390045.6	1.3				ug/L	476707	Standard
[	Ti	47	120.3	7.2	0.0510	0.007	13.2	ug/L	149	Standard
|	V	51	3321.3	3.5	0.0595	0.015	25.2	ug/L	3747	Standard
|	Cr	52	9357.6	2.5	0.1726	0.038	22.1	ug/L	10265	Standard
|	Cr	53	470.0	2.8	-1.2733	0.012	0.9	ug/L	3075	Standard
|	Mn	55	17507.8	1.7	1.1526	0.027	2.4	ug/L	1438	Standard
|	Co	59	160.7	9.4	0.0056	0.002	29.4	ug/L	148	Standard
|	Ni	60	626.7	2.2	0.2152	0.004	1.7	ug/L	176	Standard
|	Cu	65	158.0	5.5	0.0080	0.004	47.6	ug/L	186	Standard
|	Zn	66	1951.5	1.9	1.4904	0.041	2.8	ug/L	355	Standard
[>	Ge	72	338202.0	0.7				ug/L	437919	Standard
|	As	75	-197.2	21.2	0.0118	0.038	324.1	ug/L	-222	Standard
|	Se	82	37.9	7.9	0.1965	0.030	15.4	ug/L	29	Standard
[	Se-1	77	130.7	14.8	-0.2855	0.248	87.0	ug/L	201	Standard
[>	Ga	71	736.7	2.1				mg/L	985	Standard
[	Rb	85	488.3	5.6				ug/L	22	Standard
[	Y	89	301705.0	3.5				ug/L	370795	Standard
[>	Rh	103	435.0	9.0				ug/L	498	Standard
[	Mo	98	149.7	10.6	0.0244	0.003	12.7	ug/L	253	Standard
|	Ag	107	62.7	11.3	0.0026	0.001	29.8	ug/L	124	Standard
|	Cd	111	29.3	5.1	-0.0039	0.000	8.7	mg/L	100	Standard
|	Cd	114	114.0	17.9	-0.0092	0.002	16.6	ug/L	307	Standard
[>	In	115	1034215.4	1.1				ug/L	1045367	Standard
|	Sn	118	672.3	1.8	-0.0410	0.001	2.2	ug/L	1664	Standard
|	Sb	123	169.1	23.3	0.0009	0.004	409.9	ug/L	846	Standard
[	Ba	135	3591.4	3.5	0.6849	0.029	4.3	ug/L	61	Standard
[	Ce	140	98.3	2.9				ug/L	30	Standard
[>	Tb	159	1309854.5	0.6				ug/L	1407506	Standard
[	Ho	165	12.7	24.1				ug/L	13	Standard
|	Tl	203	93.3	9.6	-0.0200	0.000	2.5	ug/L	713	Standard
|	Tl	205	218.7	6.5	-0.0254	0.000	1.2	ug/L	1648	Standard
|	Pb	206	489.3	2.4	0.0011	0.001	64.6	ug/L	594	Standard
|	Pb	207	411.7	3.7	0.0002	0.001	645.3	ug/L	497	Standard
|	Pb	208	1876.7	0.7	-0.0007	0.000	57.1	ug/L	2293	Standard
	U	238	786.4	4.3	0.0468	0.002	3.4	ug/L	301	Standard
[>	Bi	209	728355.3	0.8				ug/L	757838	Standard

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Na	23	9044.4	4.8	0.6037	0.039	6.4	mg/L	592	Standard
Mg	24	533656.2	2.6	0.8742	0.027	3.1	mg/L	1565	Standard
K	39	153.3	16.4	0.0236	0.020	85.6	mg/L	157	Standard
Ca	43	15.0	57.7	5.5396	3.556	64.2	mg/L	5	Standard
Fe	54	209.6	7.3	-0.0868	0.003	3.2	mg/L	717	Standard
Fe	57	5309.3	3.4	0.0219	0.001	5.3	mg/L	4072	Standard
Sc-1	45	390045.6	1.3				mg/L	476707	Standard
Cl	35	6.0					ug/L	29	Standard
Kr	83	50.2	11.0				ug/L	39	Standard
Br	81	1013.4	2.2				ug/L	1124	Standard
P	31	265.8	16.6				ug/L	495	Standard
S	34	13210.8	3.6				ug/L	6398	Standard
Sr	88	70.0	7.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		77.229	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	98.933
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.110
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207072512

Sample Date/Time: Thursday, July 26, 2012 18:19:00

Number of Replicates: 3

Autosampler Position: 338

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13067.3	6.4	-2235.7775	441.805	19.8	ug/L	11975	Standard
|	Be	9	5.0	173.2	0.0092	0.005	57.6	ug/L	53	Standard
|	Al	27	7386.8	3.1	-0.2818	0.006	2.1	ug/L	10095	Standard
[>	Sc	45	396473.9	2.4				ug/L	476707	Standard
[	Ti	47	97.0	2.7	0.0305	0.002	7.0	ug/L	149	Standard
|	V	51	3201.6	2.8	0.0450	0.005	10.6	ug/L	3747	Standard
|	Cr	52	9266.8	2.5	0.1546	0.018	11.3	ug/L	10265	Standard
|	Cr	53	452.5	10.2	-1.2885	0.025	2.0	ug/L	3075	Standard
|	Mn	55	16221.4	2.9	1.0516	0.005	0.4	ug/L	1438	Standard
|	Co	59	206.3	7.4	0.0105	0.001	9.3	ug/L	148	Standard
|	Ni	60	476.7	4.1	0.1550	0.002	1.0	ug/L	176	Standard
|	Cu	65	144.7	2.4	0.0021	0.003	122.5	ug/L	186	Standard
|	Zn	66	1558.1	4.4	1.1198	0.028	2.5	ug/L	355	Standard
[>	Ge	72	339936.4	3.3				ug/L	437919	Standard
|	As	75	-217.3	2.4	-0.0063	0.010	160.6	ug/L	-222	Standard
|	Se	82	36.0	20.6	0.1765	0.074	41.7	ug/L	29	Standard
[	Se-1	77	123.3	2.5	-0.3871	0.088	22.8	ug/L	201	Standard
[>	Ga	71	708.3	8.5				mg/L	985	Standard
|	Rb	85	386.7	11.6				ug/L	22	Standard
[	Y	89	296015.2	2.8				ug/L	370795	Standard
[>	Rh	103	501.7	7.2				ug/L	498	Standard
[	Mo	98	118.7	5.3	0.0180	0.002	11.0	ug/L	253	Standard
|	Ag	107	63.0	14.1	0.0026	0.001	31.7	ug/L	124	Standard
|	Cd	111	32.4	25.8	-0.0032	0.002	56.4	mg/L	100	Standard
|	Cd	114	84.3	11.7	-0.0115	0.001	6.4	ug/L	307	Standard
[>	In	115	1028015.2	2.9				ug/L	1045367	Standard
|	Sn	118	621.3	4.6	-0.0431	0.001	1.4	ug/L	1664	Standard
|	Sb	123	126.0	22.7	-0.0031	0.002	77.8	ug/L	846	Standard
[	Ba	135	3465.1	3.9	0.6644	0.013	1.9	ug/L	61	Standard
[	Ce	140	45.0	15.6				ug/L	30	Standard
[>	Tb	159	1300596.5	2.7				ug/L	1407506	Standard
[	Ho	165	13.3	4.3				ug/L	13	Standard
|	Tl	203	73.3	13.2	-0.0210	0.000	2.0	ug/L	713	Standard
|	Tl	205	189.7	13.9	-0.0261	0.001	2.0	ug/L	1648	Standard
|	Pb	206	476.3	4.1	0.0003	0.001	384.2	ug/L	594	Standard
|	Pb	207	423.7	8.2	0.0013	0.003	225.2	ug/L	497	Standard
|	Pb	208	1879.4	4.0	-0.0006	0.001	143.8	ug/L	2293	Standard
	U	238	770.0	9.5	0.0459	0.003	6.9	ug/L	301	Standard
[>	Bi	209	726904.3	2.8				ug/L	757838	Standard

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Na	23	8610.8	2.9	0.5623	0.010	1.8	mg/L	592	Standard
Mg	24	531502.9	2.2	0.8564	0.002	0.2	mg/L	1565	Standard
K	39	163.3	12.7	0.0304	0.020	64.9	mg/L	157	Standard
Ca	43	3.3	86.6	0.7503	1.134	151.1	mg/L	5	Standard
Fe	54	236.8	16.5	-0.0819	0.007	8.8	mg/L	717	Standard
Fe	57	5247.6	6.5	0.0204	0.002	11.0	mg/L	4072	Standard
Sc-1	45	396473.9	2.4				mg/L	476707	Standard
Cl	35	6.0	16.7				ug/L	29	Standard
Kr	83	42.7	0.8				ug/L	39	Standard
Br	81	951.7	7.1				ug/L	1124	Standard
P	31	231.7	10.0				ug/L	495	Standard
S	34	13175.7	0.7				ug/L	6398	Standard
Sr	88	51.7	5.6				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		77.625	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072512

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	Cd	111		
	Cd	114		
>	In	115	98.340	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	95.918	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072512

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, July 26, 2012 18:22:11

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13813.0	4.9	-1063.8109	404.516	38.0	ug/L	11975	Standard
|	Be	9	112006.2	3.7	57.0212	1.904	3.3	ug/L	53	Standard
|	Al	27	758972.8	1.6	42.8817	0.536	1.2	ug/L	10095	Standard
[>	Sc	45	478787.2	0.4				ug/L	476707	Standard
|	Ti	47	140799.4	2.3	106.2402	1.535	1.4	ug/L	149	Standard
|	V	51	566595.8	2.1	52.6140	0.779	1.5	ug/L	3747	Standard
|	Cr	52	465992.4	0.3	52.1620	0.977	1.9	ug/L	10265	Standard
|	Cr	53	82123.6	0.7	51.6608	0.920	1.8	ug/L	3075	Standard
|	Mn	55	877296.7	0.6	56.2345	0.741	1.3	ug/L	1438	Standard
|	Co	59	561027.5	1.3	53.8620	0.402	0.7	ug/L	148	Standard
|	Ni	60	144156.4	2.3	49.5969	0.206	0.4	ug/L	176	Standard
|	Cu	65	133740.7	1.0	49.0730	0.624	1.3	ug/L	186	Standard
|	Zn	66	61989.9	2.1	49.5545	1.151	2.3	ug/L	355	Standard
[>	Ge	72	388013.6	1.9				ug/L	437919	Standard
|	As	75	61172.2	1.5	50.0834	0.417	0.8	ug/L	-222	Standard
|	Se	82	6414.9	1.0	54.4660	0.560	1.0	ug/L	29	Standard
[	Se-1	77	4396.6	4.1	47.9298	1.130	2.4	ug/L	201	Standard
[>	Ga	71	926.7	3.2				mg/L	985	Standard
|	Rb	85	970.0	6.2				ug/L	22	Standard
|	Y	89	354963.0	2.4				ug/L	370795	Standard
[>	Rh	103	601.7	3.8				ug/L	498	Standard
|	Mo	98	453615.8	1.1	85.9439	0.718	0.8	ug/L	253	Standard
|	Ag	107	509035.2	1.5	52.6664	0.278	0.5	ug/L	124	Standard
|	Cd	111	261919.9	1.0	54.3410	0.373	0.7	mg/L	100	Standard
|	Cd	114	686962.7	1.1	48.7996	0.167	0.3	ug/L	307	Standard
[>	In	115	1163290.9	1.4				ug/L	1045367	Standard
|	Sn	118	1589055.1	1.2	64.6352	0.371	0.6	ug/L	1664	Standard
|	Sb	123	607105.3	1.4	50.7390	0.414	0.8	ug/L	846	Standard
|	Ba	135	259154.4	1.1	44.3004	0.382	0.9	ug/L	61	Standard
|	Ce	140	1023.4	5.8				ug/L	30	Standard
[>	Tb	159	1467091.5	0.3				ug/L	1407506	Standard
|	Ho	165	25.0	16.0				ug/L	13	Standard
|	Tl	203	988009.3	0.2	47.7076	0.673	1.4	ug/L	713	Standard
|	Tl	205	2281140.8	0.7	50.1670	0.266	0.5	ug/L	1648	Standard
|	Pb	206	768581.8	1.1	47.9999	0.278	0.6	ug/L	594	Standard
|	Pb	207	653272.0	0.6	49.1693	0.390	0.8	ug/L	497	Standard
|	Pb	208	3036522.0	0.6	49.4604	0.472	1.0	ug/L	2293	Standard
	U	238	1046634.3	0.8	54.8748	0.325	0.6	ug/L	301	Standard
[>	Bi	209	769288.6	1.3				ug/L	757838	Standard

Sample ID: QC Std 6

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Na	23	127174.9	1.2	7.3850	0.089	1.2	mg/L	592	Standard
Mg	24	3443843.2	0.4	4.5955	0.008	0.2	mg/L	1565	Standard
K	39	5471.0	2.7	3.7933	0.116	3.1	mg/L	157	Standard
Ca	43	21.7	48.0	6.5814	3.427	52.1	mg/L	5	Standard
Fe	54	25555.0	2.4	4.2511	0.090	2.1	mg/L	717	Standard
Fe	57	567503.7	2.6	4.7757	0.112	2.4	mg/L	4072	Standard
Sc-1	45	478787.2	0.4				mg/L	476707	Standard
Cl	35	4.3	66.6				ug/L	29	Standard
Kr	83	48.0	13.2				ug/L	39	Standard
Br	81	1457.6	4.1				ug/L	1124	Standard
P	31	468.3	10.6				ug/L	495	Standard
S	34	6684.8	5.8				ug/L	6398	Standard
Sr	88	33.3	22.9				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	85.763		
Sc	45			
Ti	47	106.240		
V	51	105.228		
Cr	52	104.324		
Cr	53			
Mn	55	112.469		
Co	59	107.724		
Ni	60	99.194		
Cu	65	98.146		
Zn	66	99.109		
Ge	72		88.604	
As	75	100.167		
Se	82	108.932		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	85.944		
Ag	107	105.333		

Sample ID: QC Std 6

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Cd	111	108.682	
Cd	114		
> In	115		111.281
Sn	118	129.270	
Sb	123	101.478	
Ba	135	88.601	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	95.415	
Tl	205		
Pb	206	96.000	
Pb	207	98.339	
Pb	208	98.921	
U	238	109.750	
> Bi	209		101.511
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

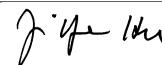
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	
QC Std 6	Mn	55	
QC Std 6	Mo	98	
QC Std 6	Sn	118	
QC Std 6	Ba	135	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, July 26, 2012 18:25:22

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13350.9	2.8	-1165.4849	204.071	17.5	ug/L	11975	Standard
|	Be	9	10.0	132.3	0.0114	0.007	61.2	ug/L	53	Standard
|	Al	27	9026.0	1.0	-0.2510	0.007	2.8	ug/L	10095	Standard
[>	Sc	45	457125.2	0.7				ug/L	476707	Standard
[	Ti	47	63.3	17.7	-0.0035	0.008	236.7	ug/L	149	Standard
|	V	51	3019.6	2.8	-0.0033	0.003	92.9	ug/L	3747	Standard
|	Cr	52	9460.0	1.8	0.0695	0.011	15.8	ug/L	10265	Standard
|	Cr	53	559.2	2.0	-1.2461	0.005	0.4	ug/L	3075	Standard
|	Mn	55	2146.8	3.0	0.0053	0.002	32.8	ug/L	1438	Standard
|	Co	59	137.3	20.5	0.0015	0.003	165.0	ug/L	148	Standard
|	Ni	60	97.7	3.0	0.0026	0.000	15.8	ug/L	176	Standard
|	Cu	65	139.3	8.3	-0.0054	0.004	71.2	ug/L	186	Standard
|	Zn	66	281.0	2.0	-0.0754	0.009	11.3	ug/L	355	Standard
[>	Ge	72	373261.4	1.8				ug/L	437919	Standard
|	As	75	-255.4	3.6	-0.0204	0.005	25.8	ug/L	-222	Standard
|	Se	82	24.8	13.1	0.0459	0.028	60.6	ug/L	29	Standard
[	Se-1	77	130.3	13.9	-0.4490	0.215	47.9	ug/L	201	Standard
[>	Ga	71	771.7	14.1				mg/L	985	Standard
[	Rb	85	18.3	15.7				ug/L	22	Standard
[	Y	89	344630.6	1.0				ug/L	370795	Standard
[>	Rh	103	551.7	9.9				ug/L	498	Standard
[	Mo	98	400.5	7.3	0.0713	0.005	7.0	ug/L	253	Standard
|	Ag	107	208.0	45.0	0.0176	0.010	55.7	ug/L	124	Standard
|	Cd	111	129.4	41.6	0.0171	0.011	66.1	mg/L	100	Standard
|	Cd	114	350.3	31.9	0.0075	0.008	105.8	ug/L	307	Standard
[>	In	115	1120298.4	1.0				ug/L	1045367	Standard
|	Sn	118	1790.1	13.9	0.0039	0.010	252.6	ug/L	1664	Standard
|	Sb	123	2897.7	3.6	0.2365	0.007	2.7	ug/L	846	Standard
[	Ba	135	86.7	55.9	0.0095	0.008	88.6	ug/L	61	Standard
[	Ce	140	30.0	12.0				ug/L	30	Standard
[>	Tb	159	1406964.3	1.1				ug/L	1407506	Standard
[	Ho	165	14.3	4.0				ug/L	13	Standard
|	Tl	203	146.0	63.2	-0.0177	0.004	24.8	ug/L	713	Standard
|	Tl	205	311.0	63.7	-0.0237	0.004	18.1	ug/L	1648	Standard
|	Pb	206	589.3	14.7	0.0057	0.005	87.4	ug/L	594	Standard
|	Pb	207	487.0	10.7	0.0043	0.004	83.7	ug/L	497	Standard
|	Pb	208	2291.1	11.1	0.0045	0.004	84.8	ug/L	2293	Standard
	U	238	104.7	49.7	0.0087	0.003	30.7	ug/L	301	Standard
[>	Bi	209	765938.2	1.5				ug/L	757838	Standard

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Na	23	441.7	12.5	-0.0182	0.003	17.5	mg/L	592	Standard
Mg	24	671.7	55.2	0.0009	0.001	60.0	mg/L	1565	Standard
K	39	126.7	33.6	-0.0157	0.032	203.4	mg/L	157	Standard
Ca	43	3.3	173.2	0.5831	1.978	339.2	mg/L	5	Standard
Fe	54	624.0	10.8	-0.0189	0.011	59.9	mg/L	717	Standard
Fe	57	3858.8	8.9	0.0009	0.003	311.8	mg/L	4072	Standard
Sc-1	45	457125.2	0.7				mg/L	476707	Standard
Cl	35	8.0	25.0				ug/L	29	Standard
Kr	83	48.1	15.3				ug/L	39	Standard
Br	81	1465.1	7.7				ug/L	1124	Standard
P	31	426.7	9.0				ug/L	495	Standard
S	34	6232.1	3.2				ug/L	6398	Standard
Sr	88	26.7	39.0				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.235	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	107.168
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.069
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, July 26, 2012 18:28:34

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12725.3	2.5	-928.6130	197.444	21.3	ug/L	11975	Standard
|	Be	9	11.7	99.0	0.0124	0.006	49.7	ug/L	53	Standard
|	Al	27	6288.0	2.3	-0.4087	0.009	2.2	ug/L	10095	Standard
[>	Sc	45	448436.6	1.1				ug/L	476707	Standard
[	Ti	47	60.3	15.7	-0.0053	0.008	145.5	ug/L	149	Standard
|	V	51	7403.1	1.9	0.4296	0.016	3.8	ug/L	3747	Standard
|	Cr	52	16883.1	1.8	0.9709	0.036	3.8	ug/L	10265	Standard
|	Cr	53	1785.1	2.1	-0.4071	0.030	7.3	ug/L	3075	Standard
|	Mn	55	9989.0	1.9	0.5359	0.012	2.2	ug/L	1438	Standard
|	Co	59	4553.4	3.2	0.4470	0.014	3.2	ug/L	148	Standard
|	Ni	60	4612.4	1.2	1.6352	0.013	0.8	ug/L	176	Standard
|	Cu	65	2197.2	0.9	0.7889	0.005	0.6	ug/L	186	Standard
|	Zn	66	8623.1	2.8	6.9721	0.175	2.5	ug/L	355	Standard
[>	Ge	72	369499.9	0.4				ug/L	437919	Standard
|	As	75	252.6	8.2	0.4124	0.018	4.4	ug/L	-222	Standard
|	Se	82	79.6	14.7	0.5387	0.104	19.2	ug/L	29	Standard
[	Se-1	77	157.7	3.1	-0.1073	0.066	61.2	ug/L	201	Standard
[>	Ga	71	808.4	3.7				mg/L	985	Standard
[	Rb	85	18.3	103.3				ug/L	22	Standard
[	Y	89	334958.9	1.0				ug/L	370795	Standard
[>	Rh	103	465.0	19.4				ug/L	498	Standard
[	Mo	98	214.0	61.0	0.0348	0.026	74.6	ug/L	253	Standard
|	Ag	107	4192.6	3.4	0.4467	0.016	3.6	ug/L	124	Standard
|	Cd	111	1398.6	5.4	0.2913	0.019	6.5	mg/L	100	Standard
|	Cd	114	3659.1	4.2	0.2523	0.013	5.1	ug/L	307	Standard
[>	In	115	1118050.2	1.1				ug/L	1045367	Standard
|	Sn	118	1303.7	26.1	-0.0165	0.015	89.0	ug/L	1664	Standard
|	Sb	123	5228.4	0.7	0.4398	0.004	0.9	ug/L	846	Standard
[	Ba	135	3866.8	2.0	0.6820	0.012	1.8	ug/L	61	Standard
[	Ce	140	27.3	37.0				ug/L	30	Standard
[>	Tb	159	1394814.4	1.0				ug/L	1407506	Standard
[	Ho	165	14.3	17.6				ug/L	13	Standard
|	Tl	203	1740.4	8.6	0.0607	0.008	13.2	ug/L	713	Standard
|	Tl	205	4005.9	8.4	0.0590	0.008	13.9	ug/L	1648	Standard
|	Pb	206	3649.8	0.6	0.2004	0.003	1.6	ug/L	594	Standard
|	Pb	207	3001.6	1.5	0.1970	0.004	2.2	ug/L	497	Standard
|	Pb	208	14149.3	1.2	0.2011	0.005	2.4	ug/L	2293	Standard
	U	238	8082.8	0.3	0.4335	0.003	0.6	ug/L	301	Standard
[>	Bi	209	757680.4	0.9				ug/L	757838	Standard

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Na	23	413.3	34.0	-0.0195	0.008	43.5	mg/L	592	Standard
Mg	24	765.0	142.1	0.0010	0.002	153.7	mg/L	1565	Standard
K	39	116.7	25.8	-0.0215	0.023	108.9	mg/L	157	Standard
Ca	43	1.7	173.2	0.0337	1.026	3047.9	mg/L	5	Standard
Fe	54	599.9	14.1	-0.0211	0.015	69.9	mg/L	717	Standard
Fe	57	3820.5	3.9	0.0013	0.002	130.9	mg/L	4072	Standard
Sc-1	45	448436.6	1.1				mg/L	476707	Standard
Cl	35	5.0	34.6				ug/L	29	Standard
Kr	83	46.3	7.5				ug/L	39	Standard
Br	81	1386.7	3.6				ug/L	1124	Standard
P	31	399.2	7.7				ug/L	495	Standard
S	34	6205.4	1.4				ug/L	6398	Standard
Sr	88	31.7	24.1				ug/L	37	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	107.406		
Cr	52	121.358		
Cr	53			
Mn	55	107.177		
Co	59	111.745		
Ni	60	102.201		
Cu	65	98.611		
Zn	66	111.553		
Ge	72		84.376	
As	75	103.107		
Se	82	134.667		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	111.675		

Sample ID: QC Std 8

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	Cd	111	121.376	
	Cd	114		
>	In	115		106.953
	Sn	118		
	Sb	123	109.948	
	Ba	135	90.930	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	75.814	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	100.571	
|	U	238	108.367	
>	Bi	209		99.979
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Se	82	
QC Std 8	Cd	111	

Sample ID: QC Std 8

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MassCal File Name

Mass Calibration File Name Default.tun
 MassCal File Path C:\NexIONData\MassCal\Default.tun
 Peak Search Window: 1.00

Sample Information

Sample Date/Time: Friday, July 27, 2012 07:45:35

Mass Calibration and Resolution

Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	6.975	1327	2021	0.703
Mg	23.985	23.975	4711	2020	0.696
In	114.904	114.925	22871	2023	0.676
U	238.050	238.075	47473	2034	0.686

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	8.677
5.575	6.427
5.625	3.012
5.675	3.545
5.725	3.140
5.775	3.271
5.825	4.204
5.875	3.062
5.925	4.887
5.975	3.122
6.025	3.878
6.075	3.087
6.125	2.603
6.175	2.595
6.225	5.768
6.275	13.556
6.325	136.931
6.375	136.931
6.425	63.191
6.475	12.861
6.525	7.494
6.575	8.057
6.625	1.927
6.675	3.076
6.725	1.930
6.775	3.199
6.825	2.311
6.875	3.410

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6.925	3.402
6.975	1.806
7.025	4.322
7.075	3.232
7.125	3.219
7.175	4.363
7.225	2.929
7.275	10.183
7.325	162.980
7.375	91.287
7.425	
7.475	
7.525	
7.575	223.607
7.625	149.071
7.675	91.287
7.725	223.607
7.775	91.287
7.825	223.607
7.875	223.607
7.925	
7.975	223.607
8.025	
8.075	223.607
8.125	223.607
8.175	
8.225	
8.275	223.607
8.325	223.607
8.375	104.583
8.425	223.607
8.475	24.786
22.525	5.412
22.575	2.544
22.625	1.549
22.675	1.725
22.725	12.343
22.775	1.711
22.825	0.799
22.875	0.560
22.925	0.838
22.975	1.175
23.025	1.167
23.075	1.465
23.125	2.718
23.175	1.636
23.225	1.416

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23.275	2.765
23.325	32.394
23.375	149.071
23.425	91.287
23.475	28.284
23.525	10.151
23.575	5.540
23.625	3.912
23.675	2.662
23.725	1.489
23.775	2.866
23.825	1.964
23.875	3.073
23.925	2.573
23.975	1.010
24.025	1.282
24.075	1.968
24.125	0.949
24.175	2.453
24.225	2.193
24.275	3.826
24.325	81.441
24.375	91.287
24.425	149.071
24.475	104.583
24.525	25.326
24.575	5.295
24.625	7.044
24.675	3.171
24.725	2.457
24.775	3.563
24.825	4.393
24.875	1.820
24.925	3.337
24.975	4.021
25.025	4.946
25.075	7.138
25.125	5.165
25.175	6.776
25.225	5.716
25.275	13.670
25.325	
25.375	100.000
25.425	91.287
25.475	139.240
113.525	11.441
113.575	9.010

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113.625	6.557
113.675	4.189
113.725	2.652
113.775	3.442
113.825	3.083
113.875	2.681
113.925	1.403
113.975	3.225
114.025	2.717
114.075	3.016
114.125	4.751
114.175	2.338
114.225	6.223
114.275	27.616
114.325	46.566
114.375	46.771
114.425	24.931
114.475	11.195
114.525	3.412
114.575	1.637
114.625	2.239
114.675	2.445
114.725	2.800
114.775	2.169
114.825	2.366
114.875	1.133
114.925	1.506
114.975	2.170
115.025	1.404
115.075	1.570
115.125	2.950
115.175	2.994
115.225	4.382
115.275	7.345
115.325	35.392
115.375	223.607
115.425	104.583
115.475	63.095
115.525	19.939
115.575	8.202
115.625	4.495
115.675	4.065
115.725	6.212
115.775	5.314
115.825	3.248
115.875	2.773
115.925	4.482

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115.975	4.497
116.025	1.993
116.075	3.440
116.125	5.536
116.175	7.925
116.225	6.688
116.275	21.789
116.325	104.583
116.375	136.931
116.425	91.287
116.475	136.931
236.525	
236.575	
236.625	
236.675	
236.725	
236.775	
236.825	
236.875	223.607
236.925	
236.975	223.607
237.025	
237.075	
237.125	
237.175	223.607
237.225	
237.275	
237.325	223.607
237.375	136.931
237.425	136.931
237.475	223.607
237.525	41.110
237.575	17.021
237.625	7.180
237.675	5.358
237.725	4.522
237.775	1.848
237.825	2.211
237.875	1.931
237.925	1.705
237.975	2.163
238.025	1.429
238.075	0.517
238.125	1.237
238.175	1.381
238.225	0.637
238.275	1.911

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238.325	2.097
238.375	1.150
238.425	3.876
238.475	8.038
238.525	23.422
238.575	70.711
238.625	
238.675	
238.725	
238.775	223.607
238.825	
238.875	223.607
238.925	
238.975	
239.025	
239.075	136.931
239.125	223.607
239.175	
239.225	136.931
239.275	136.931
239.325	
239.375	
239.425	
239.475	

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Daily Performance Report

Sample ID: Daily Performance Check

Sample Date/Time: Friday, July 27, 2012 07:49:59

Sample Description:

Method File: C:\NexIONData\Method\ESI Daily Performance.mth

Dataset File: C:\NexIONData\DataSet\072012\Daily Performance Check.433

MassCal File: C:\NexIONData\MassCal\Default.tun

Conditions File: C:\NexIONData\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 33

Current Dead Time (ns): 33

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		2907.1		2907.079		46.709		1.6	Standard	
Mg	24.0		38999.3		38999.332		434.487		1.1	Standard	
In	114.9		92634.7		92634.659		598.780		0.6	Standard	
U	238.1		77490.5		77490.525		496.282		0.6	Standard	
[CeO	155.9		2132.6		0.018		0.000		0.8	Standard
>	Ce	139.9		119910.0		119909.954		359.009		0.3	Standard
]	Ce++	70.0		908.2		0.008		0.000		1.8	Standard
	Bkgd	220.0		0.1		0.133		0.139		104.6	Standard

Current Conditions File Data

Current Value	Description
0.99	Nebulizer Gas Flow STD/KED [NEB]
1.00	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1975.00	Analog Stage Voltage
1300.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
3.00	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: Daily Performance Check

Report Date/Time: Friday, July 27, 2012 07:52:20

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SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 7/27/2012 7:49:59 AM

End Time: 7/27/2012 7:52:20 AM

Daily Performance Check - [Passed] optimum value(s): N/A

Obtained Intensity (Be 9.0122): 2907.08

Obtained Intensity (Mg 23.985): 38999.33

Obtained Intensity (In 114.904): 92634.66

Obtained Intensity (U 238.05): 77490.53

Obtained Intensity (Bkgd 220): 0.13

Obtained Formula (CeO 155.9 / Ce 139.905): 0.018 (=2132.62 / 119909.95)

Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.008 (=908.16 / 119909.95)

Report Date/Time: Friday, July 27, 2012 07:52:20

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SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 7/27/2012 7:49:59 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\ESI Daily Performance.mth.
Intensity Criterion: Be 9.0122 > 2000
Intensity Criterion: Mg 23.985 > 15000
Intensity Criterion: In 114.904 > 40000
Intensity Criterion: U 238.05 > 30000
Intensity Criterion: Bkgd 220 <= 1
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): 2907.08
Obtained Intensity (Mg 23.985): 38999.33
Obtained Intensity (In 114.904): 92634.66
Obtained Intensity (U 238.05): 77490.53
Obtained Intensity (Bkgd 220): 0.13
Obtained Formula (CeO 155.9 / Ce 139.905): 0.018 (=2132.62 / 119909.95)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.008 (=908.16 / 119909.95)

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

End Time: 7/27/2012 7:52:20 AM

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Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, July 27, 2012 08:05:26

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

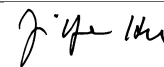
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11199.1	3.7				ug/L		Standard
|	Be	9	10.0	86.6				ug/L		Standard
|	Al	27	7920.4	4.8				ug/L		Standard
[>	Sc	45	375690.7	2.4				ug/L		Standard
[	Ti	47	70.3	5.4				ug/L		Standard
|	V	51	3171.7	3.5				ug/L		Standard
|	Cr	52	9852.2	2.3				ug/L		Standard
|	Cr	53	518.3	10.4				ug/L		Standard
|	Mn	55	1193.4	3.4				ug/L		Standard
|	Co	59	97.7	14.7				ug/L		Standard
|	Ni	60	67.0	12.2				ug/L		Standard
|	Cu	65	90.3	4.5				ug/L		Standard
|	Zn	66	148.0	5.5				ug/L		Standard
[>	Ge	72	304674.2	0.5				ug/L		Standard
|	As	75	-174.3	10.0				ug/L		Standard
|	Se	82	25.6	2.0				ug/L		Standard
[	Se-1	77	133.3	2.6				ug/L		Standard
[>	Ga	71	630.0	8.9				mg/L		Standard
[	Rb	85	11.7	24.7				ug/L		Standard
[	Y	89	271718.9	2.3				ug/L		Standard
[>	Rh	103	391.7	19.2				ug/L		Standard
[	Mo	98	7.0	9.1				ug/L		Standard
|	Ag	107	55.3	10.0				ug/L		Standard
|	Cd	111	67.3	10.7				mg/L		Standard
|	Cd	114	219.5	7.2				ug/L		Standard
[>	In	115	887392.0	2.1				ug/L		Standard
|	Sn	118	653.0	6.5				ug/L		Standard
|	Sb	123	48.0	22.3				ug/L		Standard
[	Ba	135	27.7	10.4				ug/L		Standard
[	Ce	140	34.3	13.8				ug/L		Standard
[>	Tb	159	1226141.0	1.3				ug/L		Standard
[	Ho	165	13.7	27.7				ug/L		Standard
|	Tl	203	8.7	17.6				ug/L		Standard
|	Tl	205	19.7	5.9				ug/L		Standard
|	Pb	206	419.0	6.2				ug/L		Standard
|	Pb	207	338.3	0.7				ug/L		Standard
	Pb	208	1616.0	1.5				ug/L		Standard
	U	238	2.3	24.7				ug/L		Standard
[>	Bi	209	641071.4	0.8				ug/L		Standard

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[Na	23	411.7	7.7	mg/L	Standard
	Mg	24	176.7	14.2	mg/L	Standard
	K	39	150.0	5.8	mg/L	Standard
|	Ca	43	6.7	86.6	mg/L	Standard
|	Fe	54	634.2	2.9	mg/L	Standard
|	Fe	57	2670.2	3.8	mg/L	Standard
[>	Sc-1	45	375690.7	2.4	mg/L	Standard
|	Cl	35	4.3	35.3	ug/L	Standard
|	Kr	83	39.0	13.3	ug/L	Standard
|	Br	81	639.2	2.9	ug/L	Standard
|	P	31	419.2	4.2	ug/L	Standard
|	S	34	7420.2	1.2	ug/L	Standard
|	Sr	88	35.0	42.9	ug/L	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Blank

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Blank

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Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, July 27, 2012 08:08:38

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11352.6	3.9				ug/L	11199	Standard
|	Be	9	5.0	100.0				ug/L	10	Standard
|	Al	27	8210.6	2.1				ug/L	7920	Standard
[>	Sc	45	371343.2	1.9				ug/L	375691	Standard
[	Ti	47	59.7	12.1				ug/L	70	Standard
|	V	51	3178.6	0.8				ug/L	3172	Standard
|	Cr	52	9704.1	1.1				ug/L	9852	Standard
|	Cr	53	499.2	3.3				ug/L	518	Standard
|	Mn	55	1202.4	0.6				ug/L	1193	Standard
|	Co	59	93.3	2.2				ug/L	98	Standard
|	Ni	60	66.0	12.0				ug/L	67	Standard
|	Cu	65	96.0	3.6				ug/L	90	Standard
|	Zn	66	126.3	9.2				ug/L	148	Standard
[>	Ge	72	305564.5	1.4				ug/L	304674	Standard
|	As	75	-231.2	19.9				ug/L	-174	Standard
|	Se	82	23.5	27.7				ug/L	26	Standard
[	Se-1	77	134.3	5.0				ug/L	133	Standard
[>	Ga	71	715.0	5.6				mg/L	630	Standard
[	Rb	85	26.7	10.8				ug/L	12	Standard
[	Y	89	267422.7	0.3				ug/L	271719	Standard
[>	Rh	103	398.3	13.8				ug/L	392	Standard
[	Mo	98	7.7	45.8				ug/L	7	Standard
|	Ag	107	48.0	7.5				ug/L	55	Standard
|	Cd	111	74.3	13.5				mg/L	67	Standard
|	Cd	114	212.2	7.2				ug/L	219	Standard
[>	In	115	881998.6	0.5				ug/L	887392	Standard
|	Sn	118	688.3	5.1				ug/L	653	Standard
|	Sb	123	39.0	12.2				ug/L	48	Standard
[	Ba	135	28.3	19.4				ug/L	28	Standard
[	Ce	140	31.0	29.0				ug/L	34	Standard
[>	Tb	159	1227642.7	0.4				ug/L	1226141	Standard
[	Ho	165	11.3	5.1				ug/L	14	Standard
|	Tl	203	8.7	17.6				ug/L	9	Standard
|	Tl	205	22.0	15.7				ug/L	20	Standard
|	Pb	206	400.3	3.1				ug/L	419	Standard
|	Pb	207	341.7	3.9				ug/L	338	Standard
	Pb	208	1615.4	3.0				ug/L	1616	Standard
	U	238	0.7	86.6				ug/L	2	Standard
[>	Bi	209	646007.5	0.5				ug/L	641071	Standard

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[Na	23	418.3	4.8	mg/L	412	Standard
	Mg	24	198.3	3.9	mg/L	177	Standard
	K	39	140.0	3.6	mg/L	150	Standard
|	Ca	43	6.7	43.3	mg/L	7	Standard
|	Fe	54	625.5	5.9	mg/L	634	Standard
|	Fe	57	2688.6	3.2	mg/L	2670	Standard
[>	Sc-1	45	371343.2	1.9	mg/L	375691	Standard
|	Cl	35	5.7	27.0	ug/L	4	Standard
|	Kr	83	35.7	5.2	ug/L	39	Standard
|	Br	81	667.5	2.5	ug/L	639	Standard
|	P	31	428.3	5.7	ug/L	419	Standard
|	S	34	7294.3	2.2	ug/L	7420	Standard
|	Sr	88	41.7	18.3	ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Standard 1

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 1

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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, July 27, 2012 08:11:49

Number of Replicates: 3

Autosampler Position: 2

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11365.9	2.0				ug/L	11199	Standard
|	Be	9	145.0	15.8				ug/L	10	Standard
|	Al	27	9042.7	2.4				ug/L	7920	Standard
[>	Sc	45	376669.4	2.3				ug/L	375691	Standard
[	Ti	47	217.7	12.5				ug/L	70	Standard
|	V	51	3730.0	3.3				ug/L	3172	Standard
|	Cr	52	10243.1	2.2				ug/L	9852	Standard
|	Cr	53	602.5	5.0				ug/L	518	Standard
|	Mn	55	2252.5	0.7				ug/L	1193	Standard
|	Co	59	690.7	2.6				ug/L	98	Standard
|	Ni	60	220.0	2.5				ug/L	67	Standard
|	Cu	65	247.3	4.3				ug/L	90	Standard
|	Zn	66	207.7	7.2				ug/L	148	Standard
[>	Ge	72	310371.1	1.5				ug/L	304674	Standard
|	As	75	-174.3	5.8				ug/L	-174	Standard
|	Se	82	25.0	13.9				ug/L	26	Standard
[	Se-1	77	128.3	17.8				ug/L	133	Standard
[>	Ga	71	693.3	6.0				mg/L	630	Standard
[	Rb	85	16.7	17.3				ug/L	12	Standard
[	Y	89	273788.2	3.2				ug/L	271719	Standard
[>	Rh	103	380.0	9.2				ug/L	392	Standard
[	Mo	98	452.7	2.5				ug/L	7	Standard
|	Ag	107	514.7	2.6				ug/L	55	Standard
|	Cd	111	316.9	1.7				mg/L	67	Standard
|	Cd	114	874.1	2.9				ug/L	219	Standard
[>	In	115	904356.8	0.4				ug/L	887392	Standard
|	Sn	118	1500.4	1.5				ug/L	653	Standard
|	Sb	123	529.3	4.7				ug/L	48	Standard
[	Ba	135	319.0	4.6				ug/L	28	Standard
[	Ce	140	34.0	2.9				ug/L	34	Standard
[>	Tb	159	1248298.6	0.3				ug/L	1226141	Standard
[	Ho	165	14.7	37.6				ug/L	14	Standard
|	Tl	203	1081.4	1.8				ug/L	9	Standard
|	Tl	205	2529.5	0.2				ug/L	20	Standard
|	Pb	206	1256.7	2.3				ug/L	419	Standard
|	Pb	207	1054.0	1.5				ug/L	338	Standard
	Pb	208	4998.0	2.4				ug/L	1616	Standard
	U	238	1011.4	5.5				ug/L	2	Standard
[>	Bi	209	653299.3	1.7				ug/L	641071	Standard

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[Na	23	823.4	9.1	mg/L	412	Standard
	Mg	24	3667.1	5.6	mg/L	177	Standard
	K	39	173.3	10.9	mg/L	150	Standard
|	Ca	43	3.3	173.2	mg/L	7	Standard
|	Fe	54	680.9	14.7	mg/L	634	Standard
|	Fe	57	3015.3	6.1	mg/L	2670	Standard
[>	Sc-1	45	376669.4	2.3	mg/L	375691	Standard
|	Cl	35	3.3	96.4	ug/L	4	Standard
|	Kr	83	42.8	4.0	ug/L	39	Standard
|	Br	81	681.7	3.7	ug/L	639	Standard
|	P	31	430.0	8.2	ug/L	419	Standard
|	S	34	7276.7	1.5	ug/L	7420	Standard
|	Sr	88	46.7	50.6	ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Friday, July 27, 2012 08:15:00

Number of Replicates: 3

Autosampler Position: 3

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11045.7	1.7	50.0000	22.399	44.8	ug/L	11199	Standard
|	Be	9	104333.0	1.4	50.0000	1.427	2.9	ug/L	10	Standard
|	Al	27	842687.7	3.8	50.0000	0.907	1.8	ug/L	7920	Standard
[>	Sc	45	377921.6	3.2				ug/L	375691	Standard
[	Ti	47	140930.7	0.1	100.0000	1.359	1.4	ug/L	70	Standard
|	V	51	581953.7	1.4	50.0000	0.808	1.6	ug/L	3172	Standard
|	Cr	52	476961.2	1.4	50.0000	0.548	1.1	ug/L	9852	Standard
|	Cr	53	79809.7	0.7	50.0000	1.009	2.0	ug/L	518	Standard
|	Mn	55	864683.6	1.3	50.0000	0.505	1.0	ug/L	1193	Standard
|	Co	59	554994.9	1.1	50.0000	0.203	0.4	ug/L	98	Standard
|	Ni	60	143568.1	1.9	50.0000	0.470	0.9	ug/L	67	Standard
|	Cu	65	133955.6	1.4	50.0000	0.450	0.9	ug/L	90	Standard
|	Zn	66	60133.8	1.2	50.0000	0.847	1.7	ug/L	148	Standard
[>	Ge	72	311687.6	1.3				ug/L	304674	Standard
|	As	75	60281.5	0.4	50.0000	0.533	1.1	ug/L	-174	Standard
|	Se	82	6042.8	0.8	50.0000	0.318	0.6	ug/L	26	Standard
[	Se-1	77	4440.0	1.4	50.0000	0.542	1.1	ug/L	133	Standard
[>	Ga	71	643.3	6.5				mg/L	630	Standard
[	Rb	85	900.0	4.9				ug/L	12	Standard
[	Y	89	271198.9	0.1				ug/L	271719	Standard
[>	Rh	103	398.3	21.8				ug/L	392	Standard
[	Mo	98	418312.9	1.7	100.0000	1.708	1.7	ug/L	7	Standard
|	Ag	107	414832.2	0.4	50.0000	0.251	0.5	ug/L	55	Standard
|	Cd	111	228597.0	0.9	50.0000	0.852	1.7	mg/L	67	Standard
|	Cd	114	644246.9	0.5	50.0000	0.426	0.9	ug/L	219	Standard
[>	In	115	888423.3	0.9				ug/L	887392	Standard
|	Sn	118	765480.1	0.9	50.0000	0.173	0.3	ug/L	653	Standard
|	Sb	123	558546.0	0.4	50.0000	0.415	0.8	ug/L	48	Standard
[	Ba	135	265168.9	1.3	50.0000	0.355	0.7	ug/L	28	Standard
[	Ce	140	1096.4	3.2				ug/L	34	Standard
[>	Tb	159	1251152.1	0.2				ug/L	1226141	Standard
[	Ho	165	25.3	22.4				ug/L	14	Standard
|	Tl	203	1002267.3	0.6	50.0000	0.620	1.2	ug/L	9	Standard
|	Tl	205	2258660.4	0.3	50.0000	0.577	1.2	ug/L	20	Standard
|	Pb	206	769315.2	1.0	50.0000	0.915	1.8	ug/L	419	Standard
|	Pb	207	658446.8	1.3	50.0000	0.572	1.1	ug/L	338	Standard
|	Pb	208	3033302.2	1.1	50.0000	0.472	0.9	ug/L	1616	Standard
	U	238	958560.3	1.7	50.0000	0.894	1.8	ug/L	2	Standard
[>	Bi	209	621089.0	1.2				ug/L	641071	Standard

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Na	23	117860.0	1.3	5.0000	0.170	3.4	mg/L	412	Standard
Mg	24	3626956.7	2.1	5.0000	0.075	1.5	mg/L	177	Standard
K	39	6426.4	3.0	5.0000	0.104	2.1	mg/L	150	Standard
Ca	43	8.3	91.7	5.0000	7.869	157.4	mg/L	7	Standard
Fe	54	25716.8	6.5	5.0000	0.187	3.7	mg/L	634	Standard
Fe	57	427131.1	1.5	5.0000	0.090	1.8	mg/L	2670	Standard
Sc-1	45	377921.6	3.2				mg/L	375691	Standard
Cl	35	3.7	41.7				ug/L	4	Standard
Kr	83	41.1	11.5				ug/L	39	Standard
Br	81	758.4	10.4				ug/L	639	Standard
P	31	506.7	11.7				ug/L	419	Standard
S	34	7054.1	2.7				ug/L	7420	Standard
Sr	88	43.3	6.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 3

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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Friday, July 27, 2012 08:18:12

Number of Replicates: 3

Autosampler Position: 4

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

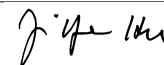
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10933.9	4.4	5.3329	97.116	1821.1	ug/L	11199	Standard
|	Be	9	202222.4	1.3	100.4766	3.651	3.6	ug/L	10	Standard
|	Al	27	1597647.2	2.6	99.6429	4.833	4.8	ug/L	7920	Standard
[>	Sc	45	362905.6	3.0				ug/L	375691	Standard
|	Ti	47	268271.2	1.6	198.7911	3.998	2.0	ug/L	70	Standard
|	V	51	1150256.7	0.6	101.4114	2.551	2.5	ug/L	3172	Standard
|	Cr	52	925195.1	0.7	100.8612	2.569	2.5	ug/L	9852	Standard
|	Cr	53	158420.7	1.3	101.6374	0.662	0.7	ug/L	518	Standard
|	Mn	55	1660713.1	1.4	99.8717	1.844	1.8	ug/L	1193	Standard
|	Co	59	1081322.0	1.1	100.5531	1.293	1.3	ug/L	98	Standard
|	Ni	60	280354.8	1.6	100.6722	0.662	0.7	ug/L	67	Standard
|	Cu	65	255562.0	0.5	99.5204	1.570	1.6	ug/L	90	Standard
|	Zn	66	115911.7	0.6	100.0727	1.845	1.8	ug/L	148	Standard
[>	Ge	72	300369.8	1.9				ug/L	304674	Standard
|	As	75	117020.7	0.8	100.2666	1.821	1.8	ug/L	-174	Standard
|	Se	82	11806.0	0.3	100.7702	2.128	2.1	ug/L	26	Standard
[	Se-1	77	8445.0	1.0	100.0643	2.934	2.9	ug/L	133	Standard
[>	Ga	71	681.7	12.3				mg/L	630	Standard
|	Rb	85	6349.7	2.9				ug/L	12	Standard
|	Y	89	265913.2	0.6				ug/L	271719	Standard
[>	Rh	103	450.0	6.8				ug/L	392	Standard
|	Mo	98	816165.0	0.7	201.3350	2.071	1.0	ug/L	7	Standard
|	Ag	107	803297.4	0.6	100.2928	0.129	0.1	ug/L	55	Standard
|	Cd	111	444143.3	0.6	100.4609	0.822	0.8	mg/L	67	Standard
|	Cd	114	1246735.1	0.5	100.2637	0.678	0.7	ug/L	219	Standard
[>	In	115	855227.8	0.5				ug/L	887392	Standard
|	Sn	118	1476567.5	0.4	100.1187	0.509	0.5	ug/L	653	Standard
|	Sb	123	1101292.1	0.6	101.1870	0.228	0.2	ug/L	48	Standard
|	Ba	135	511398.7	0.5	100.0917	0.582	0.6	ug/L	28	Standard
|	Ce	140	387.0	5.3				ug/L	34	Standard
[>	Tb	159	1228093.3	0.2				ug/L	1226141	Standard
|	Ho	165	41.0	19.4				ug/L	14	Standard
|	Tl	203	1932092.6	0.3	100.8232	0.875	0.9	ug/L	9	Standard
|	Tl	205	4297972.7	0.2	100.1768	1.114	1.1	ug/L	20	Standard
|	Pb	206	1484706.7	1.8	100.8868	1.056	1.0	ug/L	419	Standard
|	Pb	207	1223022.3	0.6	98.9817	1.006	1.0	ug/L	338	Standard
|	Pb	208	5646811.7	1.2	99.0926	0.784	0.8	ug/L	1616	Standard
	U	238	1834726.4	0.4	100.4687	1.184	1.2	ug/L	2	Standard
[>	Bi	209	588854.0	1.0				ug/L	641071	Standard

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Na	23	138458.1	0.3	7.5960	0.213	2.8	mg/L	412	Standard
Mg	24	7220772.7	1.1	10.1816	0.338	3.3	mg/L	177	Standard
K	39	12888.8	2.7	10.2863	0.241	2.3	mg/L	150	Standard
Ca	43	20.0	50.0	12.7750	7.683	60.1	mg/L	7	Standard
Fe	54	49029.0	1.9	10.0328	0.170	1.7	mg/L	634	Standard
Fe	57	875388.4	3.9	10.3458	0.717	6.9	mg/L	2670	Standard
Sc-1	45	362905.6	3.0				mg/L	375691	Standard
Cl	35	4.7	53.9				ug/L	4	Standard
Kr	83	41.2	14.6				ug/L	39	Standard
Br	81	795.0	5.9				ug/L	639	Standard
P	31	470.8	6.1				ug/L	419	Standard
S	34	6656.5	0.8				ug/L	7420	Standard
Sr	88	26.7	65.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Corr. Coef.	Na	23	Correlation coefficient < 0.998
Corr. Coef.	Ca	43	Correlation coefficient < 0.998

Sample ID: Standard 4

Report Date/Time: Friday, July 27, 2012 08:20:42

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Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, July 27, 2012 08:21:24

Number of Replicates: 3

Autosampler Position: 201

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

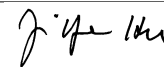
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10385.2	2.4	242.0483	65.525	27.1	ug/L	11199	Standard
|	Be	9	101660.1	2.5	49.0745	0.358	0.7	ug/L	10	Standard
|	Al	27	806071.3	0.3	48.6069	0.765	1.6	ug/L	7920	Standard
[>	Sc	45	373158.5	1.8				ug/L	375691	Standard
[	Ti	47	138155.5	1.8	99.2795	1.213	1.2	ug/L	70	Standard
|	V	51	572069.2	1.0	48.7798	0.057	0.1	ug/L	3172	Standard
|	Cr	52	468899.5	1.0	49.0525	0.506	1.0	ug/L	9852	Standard
|	Cr	53	79617.8	1.2	49.3972	1.158	2.3	ug/L	518	Standard
|	Mn	55	847016.6	0.8	49.3739	0.417	0.8	ug/L	1193	Standard
|	Co	59	549054.4	1.4	49.5256	0.641	1.3	ug/L	98	Standard
|	Ni	60	141805.2	1.0	49.3918	0.642	1.3	ug/L	67	Standard
|	Cu	65	132361.6	0.5	49.9806	0.335	0.7	ug/L	90	Standard
|	Zn	66	60678.6	0.7	50.7578	0.429	0.8	ug/L	148	Standard
[>	Ge	72	309585.1	1.1				ug/L	304674	Standard
|	As	75	59633.0	0.3	49.6661	0.610	1.2	ug/L	-174	Standard
|	Se	82	5981.5	0.9	49.4433	0.197	0.4	ug/L	26	Standard
[	Se-1	77	4360.0	1.4	49.3903	1.160	2.3	ug/L	133	Standard
[>	Ga	71	665.0	11.7				mg/L	630	Standard
[	Rb	85	901.7	13.0				ug/L	12	Standard
[	Y	89	269930.1	1.0				ug/L	271719	Standard
[>	Rh	103	418.3	5.9				ug/L	392	Standard
[	Mo	98	417570.3	1.1	101.4210	1.725	1.7	ug/L	7	Standard
|	Ag	107	410314.8	0.8	50.4365	0.724	1.4	ug/L	55	Standard
|	Cd	111	225615.8	1.0	50.2383	0.761	1.5	mg/L	67	Standard
|	Cd	114	633290.8	0.8	50.1353	0.032	0.1	ug/L	219	Standard
[>	In	115	868627.0	0.8				ug/L	887392	Standard
|	Sn	118	749790.6	1.4	50.0362	0.985	2.0	ug/L	653	Standard
|	Sb	123	554280.1	0.8	50.1476	0.736	1.5	ug/L	48	Standard
[	Ba	135	259229.5	0.7	49.9530	0.737	1.5	ug/L	28	Standard
[	Ce	140	1007.4	2.5				ug/L	34	Standard
[>	Tb	159	1227549.1	0.7				ug/L	1226141	Standard
[	Ho	165	18.0	14.7				ug/L	14	Standard
|	Tl	203	985083.5	0.5	49.4287	0.530	1.1	ug/L	9	Standard
|	Tl	205	2237532.6	0.2	50.1451	0.474	0.9	ug/L	20	Standard
|	Pb	206	754043.1	0.4	49.2585	0.447	0.9	ug/L	419	Standard
|	Pb	207	633953.0	0.5	49.3202	0.299	0.6	ug/L	338	Standard
|	Pb	208	2953216.5	0.3	49.8194	0.370	0.7	ug/L	1616	Standard
	U	238	935709.5	0.2	49.2691	0.523	1.1	ug/L	2	Standard
[>	Bi	209	612390.5	0.9				ug/L	641071	Standard

Sample ID: QC Std 1

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Na	23	118778.8	1.0	6.3282	0.087	1.4	mg/L	412	Standard
Mg	24	3541816.6	1.5	4.8557	0.159	3.3	mg/L	177	Standard
K	39	6364.7	1.4	4.8728	0.144	3.0	mg/L	150	Standard
Ca	43	11.7	137.8	5.9973	11.604	193.5	mg/L	7	Standard
Fe	54	25957.4	1.0	5.1016	0.085	1.7	mg/L	634	Standard
Fe	57	421013.9	1.9	4.8187	0.168	3.5	mg/L	2670	Standard
Sc-1	45	373158.5	1.8				mg/L	375691	Standard
Cl	35	2.7	21.7				ug/L	4	Standard
Kr	83	41.3	3.7				ug/L	39	Standard
Br	81	726.7	9.6				ug/L	639	Standard
P	31	490.8	3.2				ug/L	419	Standard
S	34	6635.6	3.9				ug/L	7420	Standard
Sr	88	31.7	39.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	98.149		
Al	27	97.214		
Sc	45			
Ti	47	99.280		
V	51	97.560		
Cr	52	98.105		
Cr	53	98.794		
Mn	55	98.748		
Co	59	99.051		
Ni	60	98.784		
Cu	65	99.961		
Zn	66	101.516		
Ge	72		101.612	
As	75	99.332		
Se	82	98.887		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	101.421		
Ag	107	100.873		

Sample ID: QC Std 1

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Cd	111	100.477	
Cd	114		
> In	115		97.885
Sn	118	100.072	
Sb	123	100.295	
Ba	135	99.906	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	98.857	
Tl	205		
Pb	206	98.517	
Pb	207	98.640	
Pb	208	99.639	
U	238	98.538	
> Bi	209		95.526
Na	23	126.564	
Mg	24	97.114	
K	39	97.455	
Ca	43	119.946	
Fe	54	102.032	
Fe	57	96.373	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

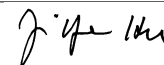
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Na	23	
QC Std 1	Ca	43	

Sample ID: QC Std 1

Report Date/Time: Friday, July 27, 2012 08:23:55

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Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, July 27, 2012 08:24:36

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10558.7	3.3	204.8433	67.052	32.7	ug/L	11199	Standard
|	Be	9	110.0	157.5	0.0335	0.084	249.4	ug/L	10	Standard
|	Al	27	7780.3	2.2	-0.0236	0.016	67.6	ug/L	7920	Standard
[>	Sc	45	374498.3	2.3				ug/L	375691	Standard
[	Ti	47	204.3	104.1	0.0878	0.150	170.8	ug/L	70	Standard
|	V	51	3077.0	7.9	-0.0101	0.020	194.8	ug/L	3172	Standard
|	Cr	52	9161.1	1.9	-0.0809	0.014	16.8	ug/L	9852	Standard
|	Cr	53	584.2	17.7	0.0326	0.063	193.7	ug/L	518	Standard
|	Mn	55	1338.7	11.5	-0.0045	0.009	196.1	ug/L	1193	Standard
|	Co	59	204.0	57.5	0.0059	0.010	176.0	ug/L	98	Standard
|	Ni	60	205.0	99.3	0.0436	0.070	159.5	ug/L	67	Standard
|	Cu	65	212.3	92.1	0.0355	0.072	203.9	ug/L	90	Standard
|	Zn	66	185.0	45.0	0.0285	0.068	239.4	ug/L	148	Standard
[>	Ge	72	315355.7	0.5				ug/L	304674	Standard
|	As	75	-172.1	44.5	0.0540	0.062	115.7	ug/L	-174	Standard
|	Se	82	31.6	22.1	0.0999	0.056	55.9	ug/L	26	Standard
[	Se-1	77	136.0	10.8	0.1113	0.168	150.6	ug/L	133	Standard
[>	Ga	71	635.0	11.6				mg/L	630	Standard
[	Rb	85	16.7	17.3				ug/L	12	Standard
[	Y	89	274129.8	1.8				ug/L	271719	Standard
[>	Rh	103	396.7	14.6				ug/L	392	Standard
[	Mo	98	546.8	26.2	0.1234	0.034	27.7	ug/L	7	Standard
|	Ag	107	241.3	61.6	0.0181	0.018	98.5	ug/L	55	Standard
|	Cd	111	148.4	41.7	0.0143	0.013	93.9	mg/L	67	Standard
|	Cd	114	416.8	56.2	0.0156	0.018	116.1	ug/L	219	Standard
[>	In	115	894815.0	1.2				ug/L	887392	Standard
|	Sn	118	1249.7	14.0	0.0348	0.011	32.3	ug/L	653	Standard
|	Sb	123	2721.7	0.8	0.2430	0.001	0.5	ug/L	48	Standard
[	Ba	135	92.0	84.0	0.0082	0.014	177.1	ug/L	28	Standard
[	Ce	140	28.3	14.3				ug/L	34	Standard
[>	Tb	159	1215567.0	0.5				ug/L	1226141	Standard
[	Ho	165	12.0	30.0				ug/L	14	Standard
|	Tl	203	256.7	102.9	0.0115	0.013	111.2	ug/L	9	Standard
|	Tl	205	539.7	100.5	0.0084	0.012	138.7	ug/L	20	Standard
|	Pb	206	560.7	30.3	0.0079	0.011	136.8	ug/L	419	Standard
|	Pb	207	476.7	28.2	0.0084	0.010	121.2	ug/L	338	Standard
|	Pb	208	2233.1	30.7	0.0068	0.011	164.8	ug/L	1616	Standard
	U	238	210.7	95.8	0.0107	0.010	95.5	ug/L	2	Standard
[>	Bi	209	642997.5	1.1				ug/L	641071	Standard

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Na	23	790.0	71.8	0.0035	0.030	867.1	mg/L	412	Standard
Mg	24	1655.2	130.4	0.0023	0.003	129.5	mg/L	177	Standard
K	39	141.7	24.8	-0.0194	0.025	128.9	mg/L	150	Standard
Ca	43	3.3	173.2	0.0204	4.339	21258.1	mg/L	7	Standard
Fe	54	648.9	4.6	-0.0005	0.007	1424.6	mg/L	634	Standard
Fe	57	2883.6	7.4	0.0037	0.003	74.4	mg/L	2670	Standard
Sc-1	45	374498.3	2.3				mg/L	375691	Standard
Cl	35	6.0	44.1				ug/L	4	Standard
Kr	83	41.1	2.5				ug/L	39	Standard
Br	81	780.0	4.5				ug/L	639	Standard
P	31	464.2	4.3				ug/L	419	Standard
S	34	6573.9	2.7				ug/L	7420	Standard
Sr	88	33.3	31.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.506	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 2

Report Date/Time: Friday, July 27, 2012 08:27:07

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	Cd	111		
	Cd	114		
>	In	115	100.836	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	100.300	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 2

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Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, July 27, 2012 08:27:49

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10775.5	2.3	173.5163	82.993	47.8	ug/L	11199	Standard
|	Be	9	21.7	93.3	-0.0093	0.009	101.4	ug/L	10	Standard
|	Al	27	7470.2	4.0	-0.0471	0.014	29.3	ug/L	7920	Standard
[>	Sc	45	378173.5	1.3				ug/L	375691	Standard
|	Ti	47	89.3	36.5	0.0058	0.022	379.5	ug/L	70	Standard
|	V	51	7855.0	1.2	0.3840	0.013	3.3	ug/L	3172	Standard
|	Cr	52	16981.5	0.3	0.7174	0.020	2.8	ug/L	9852	Standard
|	Cr	53	1763.4	2.2	0.7422	0.025	3.3	ug/L	518	Standard
|	Mn	55	9736.1	0.9	0.4700	0.002	0.5	ug/L	1193	Standard
|	Co	59	4504.7	3.2	0.3818	0.010	2.6	ug/L	98	Standard
|	Ni	60	4922.1	1.4	1.6366	0.018	1.1	ug/L	67	Standard
|	Cu	65	2278.2	3.8	0.7914	0.025	3.2	ug/L	90	Standard
|	Zn	66	8878.6	1.4	7.0951	0.118	1.7	ug/L	148	Standard
[>	Ge	72	319291.7	0.8				ug/L	304674	Standard
|	As	75	237.6	1.0	0.3853	0.001	0.3	ug/L	-174	Standard
|	Se	82	66.4	12.2	0.3768	0.063	16.7	ug/L	26	Standard
[	Se-1	77	174.7	9.9	0.5289	0.190	35.9	ug/L	133	Standard
[>	Ga	71	693.3	10.9				mg/L	630	Standard
|	Rb	85	23.3	32.7				ug/L	12	Standard
|	Y	89	282056.3	1.1				ug/L	271719	Standard
[>	Rh	103	426.7	24.4				ug/L	392	Standard
|	Mo	98	204.2	7.6	0.0417	0.003	8.2	ug/L	7	Standard
|	Ag	107	3444.4	1.9	0.3934	0.004	1.1	ug/L	55	Standard
|	Cd	111	1226.2	4.2	0.2430	0.013	5.2	mg/L	67	Standard
|	Cd	114	3519.5	3.2	0.2496	0.010	4.0	ug/L	219	Standard
[>	In	115	909932.6	0.9				ug/L	887392	Standard
|	Sn	118	991.4	6.7	0.0169	0.004	22.0	ug/L	653	Standard
|	Sb	123	5051.8	2.8	0.4403	0.016	3.6	ug/L	48	Standard
|	Ba	135	4020.5	1.1	0.7306	0.001	0.2	ug/L	28	Standard
|	Ce	140	34.3	13.8				ug/L	34	Standard
[>	Tb	159	1225411.0	0.2				ug/L	1226141	Standard
|	Ho	165	11.7	47.2				ug/L	14	Standard
|	Tl	203	1694.8	9.8	0.0797	0.007	9.2	ug/L	9	Standard
|	Tl	205	3937.5	9.7	0.0804	0.008	9.4	ug/L	20	Standard
|	Pb	206	3594.4	2.9	0.1956	0.005	2.6	ug/L	419	Standard
|	Pb	207	3034.3	1.1	0.1969	0.001	0.7	ug/L	338	Standard
|	Pb	208	14046.9	2.0	0.1956	0.004	1.8	ug/L	1616	Standard
	U	238	7657.3	2.1	0.3821	0.006	1.4	ug/L	2	Standard
[>	Bi	209	646242.0	0.7				ug/L	641071	Standard

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Na	23	401.7	10.9	-0.0175	0.002	13.2	mg/L	412	Standard
Mg	24	388.3	94.2	0.0005	0.000	90.3	mg/L	177	Standard
K	39	143.3	4.0	-0.0189	0.003	16.5	mg/L	150	Standard
Ca	43	5.0	0.0	1.1583	0.047	4.1	mg/L	7	Standard
Fe	54	662.2	4.5	0.0009	0.007	778.7	mg/L	634	Standard
Fe	57	2900.3	1.2	0.0036	0.001	18.9	mg/L	2670	Standard
Sc-1	45	378173.5	1.3				mg/L	375691	Standard
Cl	35	4.7	53.9				ug/L	4	Standard
Kr	83	42.1	18.3				ug/L	39	Standard
Br	81	799.2	3.6				ug/L	639	Standard
P	31	480.0	2.4				ug/L	419	Standard
S	34	6473.9	1.4				ug/L	7420	Standard
Sr	88	26.7	43.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	95.999		
Cr	52	89.681		
Cr	53			
Mn	55	93.994		
Co	59	95.460		
Ni	60	102.287		
Cu	65	98.929		
Zn	66	113.521		
Ge	72		104.798	
As	75	96.320		
Se	82	94.207		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	98.359		

Sample ID: QC Std 3

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	Cd	111	101.242	
	Cd	114		
>	In	115		102.540
	Sn	118		
	Sb	123	110.084	
	Ba	135	97.412	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	99.602	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	97.782	
|	U	238	95.529	
>	Bi	209		100.807
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

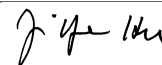
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 3

Report Date/Time: Friday, July 27, 2012 08:30:20

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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, July 27, 2012 08:30:59

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

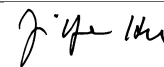
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8902.6	3.6	224.6881	136.769	60.9	ug/L	11199	Standard
|	Be	9	13.3	21.7	-0.0120	0.002	14.6	ug/L	10	Standard
|	Al	27	67579670.3	2.7	4828.6332	118.501	2.5	ug/L	7920	Standard
[>	Sc	45	318076.5	2.0				ug/L	375691	Standard
|	Ti	47	16527.3	1.8	13.4657	0.171	1.3	ug/L	70	Standard
|	V	51	3039.5	8.3	0.0276	0.026	95.4	ug/L	3172	Standard
|	Cr	52	8623.1	2.0	0.0067	0.025	374.1	ug/L	9852	Standard
|	Cr	53	2696.1	10.7	1.5899	0.202	12.7	ug/L	518	Standard
|	Mn	55	1463.7	3.5	0.0161	0.003	21.6	ug/L	1193	Standard
|	Co	59	291.3	14.3	0.0178	0.004	25.0	ug/L	98	Standard
|	Ni	60	938.0	0.7	0.3455	0.004	1.1	ug/L	67	Standard
|	Cu	65	236.0	6.6	0.0583	0.007	12.4	ug/L	90	Standard
|	Zn	66	1858.1	6.2	1.6493	0.112	6.8	ug/L	148	Standard
[>	Ge	72	272062.6	0.7				ug/L	304674	Standard
|	As	75	-198.1	44.4	0.0071	0.083	1174.6	ug/L	-174	Standard
|	Se	82	25.4	5.9	0.0828	0.014	16.7	ug/L	26	Standard
[	Se-1	77	237.0	1.5	1.6988	0.031	1.8	ug/L	133	Standard
[>	Ga	71	613.3	15.3				mg/L	630	Standard
|	Rb	85	2616.9	1.5				ug/L	12	Standard
|	Y	89	231402.9	2.7				ug/L	271719	Standard
[>	Rh	103	338.3	6.7				ug/L	392	Standard
|	Mo	98	320357.9	2.1	87.5382	0.740	0.8	ug/L	7	Standard
|	Ag	107	210.0	93.2	0.0182	0.027	147.7	ug/L	55	Standard
|	Cd	111	88.5	101.2	0.0044	0.022	511.9	mg/L	67	Standard
|	Cd	114	1800.2	18.0	0.1438	0.028	19.5	ug/L	219	Standard
[>	In	115	771979.1	1.4				ug/L	887392	Standard
|	Sn	118	618.7	35.2	0.0002	0.016	9034.3	ug/L	653	Standard
|	Sb	123	650.9	28.6	0.0702	0.018	26.3	ug/L	48	Standard
|	Ba	135	77.7	69.5	0.0078	0.012	149.8	ug/L	28	Standard
|	Ce	140	1817.8	3.0				ug/L	34	Standard
[>	Tb	159	1113611.4	0.8				ug/L	1226141	Standard
|	Ho	165	15.7	46.2				ug/L	14	Standard
|	Tl	203	232.3	71.4	0.0116	0.009	76.1	ug/L	9	Standard
|	Tl	205	502.0	67.2	0.0089	0.008	90.2	ug/L	20	Standard
|	Pb	206	584.0	20.2	0.0139	0.008	57.7	ug/L	419	Standard
|	Pb	207	454.7	15.0	0.0110	0.005	49.6	ug/L	338	Standard
|	Pb	208	2158.4	17.9	0.0099	0.007	67.8	ug/L	1616	Standard
	U	238	58.0	140.4	0.0034	0.005	136.0	ug/L	2	Standard
[>	Bi	209	571243.9	0.6				ug/L	641071	Standard

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Na	23	142549.2	1.3	8.9255	0.111	1.2	mg/L	412	Standard
Mg	24	3019171.1	2.0	4.8552	0.133	2.7	mg/L	177	Standard
K	39	5084.2	4.2	4.5605	0.286	6.3	mg/L	150	Standard
Ca	43	30.0	44.1	23.5328	11.615	49.4	mg/L	7	Standard
Fe	54	14905.6	3.7	3.3931	0.082	2.4	mg/L	634	Standard
Fe	57	239994.3	3.9	3.2107	0.061	1.9	mg/L	2670	Standard
Sc-1	45	318076.5	2.0				mg/L	375691	Standard
Cl	35	229.3	2.1				ug/L	4	Standard
Kr	83	43.2	9.8				ug/L	39	Standard
Br	81	711.7	2.1				ug/L	639	Standard
P	31	28141.9	1.5				ug/L	419	Standard
S	34	13501.0	1.9				ug/L	7420	Standard
Sr	88	38.3	32.8				ug/L	35	Standard

QC Calculated Values

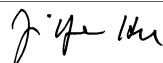
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.573		
Sc	45			
Ti	47	13.466		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.296	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	87.538		
Ag	107			

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Cd	111		
Cd	114		
> In	115		86.994
Sn	118		
Sb	123		
Ba	135		
Ce	140		
> Tb	159		
Ho	165		
Tl	203		
Tl	205		
Pb	206		
Pb	207		
Pb	208		
U	238		
> Bi	209		89.108
Na	23	71.404	
Mg	24	97.105	
K	39	91.210	
Ca	43	156.886	
Fe	54	27.145	
Fe	57	25.686	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

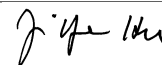
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	
QC Std 4	Na	23	
QC Std 4	Ca	43	
QC Std 4	Fe	54	
QC Std 4	Fe	57	

Sample ID: QC Std 4

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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, July 27, 2012 08:34:09

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

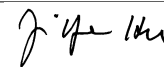
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10915.6	0.8	216.0794	92.705	42.9	ug/L	11199	Standard
|	Be	9	210161.0	1.5	97.4015	1.495	1.5	ug/L	10	Standard
|	Al	27	78681988.2	0.1	4599.8743	109.607	2.4	ug/L	7920	Standard
[>	Sc	45	388860.3	2.4				ug/L	375691	Standard
[	Ti	47	144766.4	1.4	101.5369	2.604	2.6	ug/L	70	Standard
|	V	51	1136558.8	0.7	94.8338	1.703	1.8	ug/L	3172	Standard
|	Cr	52	922742.6	0.6	95.1573	1.165	1.2	ug/L	9852	Standard
|	Cr	53	163328.1	0.5	99.1969	0.782	0.8	ug/L	518	Standard
|	Mn	55	1729328.0	1.9	98.4406	1.265	1.3	ug/L	1193	Standard
|	Co	59	1111321.2	0.3	97.8343	0.989	1.0	ug/L	98	Standard
|	Ni	60	281180.7	1.4	95.6079	2.542	2.7	ug/L	67	Standard
|	Cu	65	261479.0	0.2	96.3920	1.162	1.2	ug/L	90	Standard
|	Zn	66	121028.5	0.3	98.9163	1.591	1.6	ug/L	148	Standard
[>	Ge	72	317263.6	1.3				ug/L	304674	Standard
|	As	75	122411.5	0.5	99.2899	1.104	1.1	ug/L	-174	Standard
|	Se	82	12340.2	0.5	99.7032	1.263	1.3	ug/L	26	Standard
[	Se-1	77	8780.9	2.6	98.4763	3.826	3.9	ug/L	133	Standard
[>	Ga	71	886.7	5.7				mg/L	630	Standard
|	Rb	85	3218.7	2.4				ug/L	12	Standard
[	Y	89	279978.8	2.1				ug/L	271719	Standard
[>	Rh	103	441.7	17.6				ug/L	392	Standard
[	Mo	98	417491.0	1.3	96.7907	0.963	1.0	ug/L	7	Standard
|	Ag	107	852871.5	3.2	100.0633	2.021	2.0	ug/L	55	Standard
|	Cd	111	481009.2	1.7	102.2496	0.517	0.5	mg/L	67	Standard
|	Cd	114	1299079.7	1.3	98.1888	0.820	0.8	ug/L	219	Standard
[>	In	115	909960.0	1.2				ug/L	887392	Standard
|	Sn	118	1647.1	27.2	0.0588	0.029	49.3	ug/L	653	Standard
|	Sb	123	1164349.9	1.9	100.5408	0.757	0.8	ug/L	48	Standard
[	Ba	135	513939.1	0.9	94.5408	0.665	0.7	ug/L	28	Standard
[	Ce	140	2235.8	1.6				ug/L	34	Standard
[>	Tb	159	1263512.0	0.5				ug/L	1226141	Standard
|	Ho	165	24.3	13.2				ug/L	14	Standard
|	Tl	203	1948469.1	0.8	96.0996	1.001	1.0	ug/L	9	Standard
|	Tl	205	4452934.4	0.3	98.0957	1.122	1.1	ug/L	20	Standard
|	Pb	206	1499422.4	0.7	96.3025	0.442	0.5	ug/L	419	Standard
|	Pb	207	1279783.7	0.6	97.8959	1.262	1.3	ug/L	338	Standard
|	Pb	208	5848875.5	0.2	97.0114	0.609	0.6	ug/L	1616	Standard
	U	238	1953160.6	0.6	101.0891	1.446	1.4	ug/L	2	Standard
[>	Bi	209	623019.9	0.8				ug/L	641071	Standard

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Na	23	148583.3	0.3	7.6059	0.172	2.3	mg/L	412	Standard
Mg	24	3375302.4	3.1	4.4419	0.219	4.9	mg/L	177	Standard
K	39	5614.4	1.3	4.1045	0.073	1.8	mg/L	150	Standard
Ca	43	33.3	34.6	21.2407	8.539	40.2	mg/L	7	Standard
Fe	54	58610.8	2.5	11.2065	0.259	2.3	mg/L	634	Standard
Fe	57	1139919.5	0.1	12.5670	0.313	2.5	mg/L	2670	Standard
Sc-1	45	388860.3	2.4				mg/L	375691	Standard
Cl	35	257.7	5.4				ug/L	4	Standard
Kr	83	49.1	6.7				ug/L	39	Standard
Br	81	984.2	5.9				ug/L	639	Standard
P	31	72938.5	1.3				ug/L	419	Standard
S	34	13858.0	2.2				ug/L	7420	Standard
Sr	88	48.3	21.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	91.997		
Sc	45			
Ti	47	101.537		
V	51	94.834		
Cr	52	95.157		
Cr	53			
Mn	55	98.441		
Co	59	97.834		
Ni	60	95.608		
Cu	65	96.392		
Zn	66	98.916		
Ge	72		104.132	
As	75	99.290		
Se	82	99.703		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.791		
Ag	107	100.063		

Sample ID: QC Std 5

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	Cd	111	102.250	
	Cd	114		
>	In	115		102.543
	Sn	118		
	Sb	123	100.541	
	Ba	135	94.541	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.100	
|	Tl	205		
|	Pb	206	96.303	
|	Pb	207	97.896	
|	Pb	208	97.011	
|	U	238	101.089	
>	Bi	209		97.184
|	Na	23	60.847	
|	Mg	24	88.838	
|	K	39	82.090	
|	Ca	43	141.605	
|	Fe	54	89.652	
|	Fe	57	100.536	
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Na	23	
QC Std 5	Ca	43	

Sample ID: QC Std 5

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 08:37:21

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

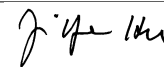
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10828.9	5.2	235.1360	93.825	39.9	ug/L	11199	Standard
|	Be	9	106368.9	2.6	49.4227	2.243	4.5	ug/L	10	Standard
|	Al	27	823570.0	1.8	47.7900	2.381	5.0	ug/L	7920	Standard
>	Sc	45	388037.6	3.1				ug/L	375691	Standard
[	Ti	47	142411.5	1.3	98.9783	0.363	0.4	ug/L	70	Standard
|	V	51	584435.4	1.5	48.1933	0.246	0.5	ug/L	3172	Standard
|	Cr	52	481155.6	0.7	48.6738	0.234	0.5	ug/L	9852	Standard
|	Cr	53	83033.7	3.2	49.8165	1.371	2.8	ug/L	518	Standard
|	Mn	55	885019.9	1.0	49.8949	0.216	0.4	ug/L	1193	Standard
|	Co	59	566049.4	1.0	49.3819	0.386	0.8	ug/L	98	Standard
|	Ni	60	146894.7	2.9	49.4757	0.943	1.9	ug/L	67	Standard
|	Cu	65	137857.7	0.9	50.3455	0.193	0.4	ug/L	90	Standard
|	Zn	66	61042.4	0.7	49.3822	0.413	0.8	ug/L	148	Standard
>	Ge	72	320093.0	1.0				ug/L	304674	Standard
|	As	75	61951.2	0.9	49.9005	0.589	1.2	ug/L	-174	Standard
|	Se	82	6323.1	0.9	50.5546	0.217	0.4	ug/L	26	Standard
[	Se-1	77	4582.0	1.7	50.2165	0.512	1.0	ug/L	133	Standard
>	Ga	71	740.0	9.4				mg/L	630	Standard
[	Rb	85	921.7	9.9				ug/L	12	Standard
[	Y	89	288723.6	3.3				ug/L	271719	Standard
>	Rh	103	508.3	12.0				ug/L	392	Standard
[	Mo	98	444205.8	1.6	99.8762	1.840	1.8	ug/L	7	Standard
|	Ag	107	459085.6	1.5	52.2419	1.032	2.0	ug/L	55	Standard
|	Cd	111	248906.7	1.4	51.3092	0.915	1.8	mg/L	67	Standard
|	Cd	114	667055.4	1.3	48.8902	0.891	1.8	ug/L	219	Standard
>	In	115	938301.8	0.8				ug/L	887392	Standard
|	Sn	118	804239.3	1.1	49.6815	0.648	1.3	ug/L	653	Standard
|	Sb	123	595762.4	0.9	49.8969	0.625	1.3	ug/L	48	Standard
[	Ba	135	264100.9	0.8	47.1116	0.667	1.4	ug/L	28	Standard
[	Ce	140	1054.4	3.0				ug/L	34	Standard
>	Tb	159	1266789.2	1.1				ug/L	1226141	Standard
[	Ho	165	23.0	11.5				ug/L	14	Standard
|	Tl	203	1001089.5	0.9	48.5044	0.417	0.9	ug/L	9	Standard
|	Tl	205	2309734.6	1.5	49.9844	0.856	1.7	ug/L	20	Standard
|	Pb	206	769035.6	0.9	48.5104	0.455	0.9	ug/L	419	Standard
|	Pb	207	655776.5	0.3	49.2651	0.239	0.5	ug/L	338	Standard
|	Pb	208	3025323.3	0.7	49.2812	0.323	0.7	ug/L	1616	Standard
	U	238	991048.9	1.2	50.3895	0.761	1.5	ug/L	2	Standard
>	Bi	209	634168.3	0.4				ug/L	641071	Standard

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Na	23	122042.9	0.5	6.2560	0.220	3.5	mg/L	412	Standard
Mg	24	3574667.5	1.6	4.7129	0.104	2.2	mg/L	177	Standard
K	39	6152.9	0.8	4.5224	0.148	3.3	mg/L	150	Standard
Ca	43	13.3	21.7	7.0252	2.280	32.5	mg/L	7	Standard
Fe	54	25717.7	1.8	4.8587	0.242	5.0	mg/L	634	Standard
Fe	57	501177.8	2.0	5.5203	0.123	2.2	mg/L	2670	Standard
Sc-1	45	388037.6	3.1				mg/L	375691	Standard
Cl	35	6.0	60.1				ug/L	4	Standard
Kr	83	47.0	14.1				ug/L	39	Standard
Br	81	987.5	2.0				ug/L	639	Standard
P	31	457.5	2.4				ug/L	419	Standard
S	34	6080.4	2.5				ug/L	7420	Standard
Sr	88	23.3	65.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	95.580		
Sc	45			
Ti	47	98.978		
V	51	96.387		
Cr	52	97.348		
Cr	53			
Mn	55	99.790		
Co	59	98.764		
Ni	60	98.951		
Cu	65	100.691		
Zn	66	98.764		
Ge	72		105.061	
As	75	99.801		
Se	82	101.109		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	99.876		
Ag	107	104.484		

Sample ID: QC Std 6

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	Cd	111	102.618	
	Cd	114		
>	In	115		105.737
	Sn	118	99.363	
	Sb	123	99.794	
	Ba	135	94.223	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.009	
|	Tl	205		
|	Pb	206	97.021	
|	Pb	207	98.530	
|	Pb	208	98.562	
|	U	238	100.779	
>	Bi	209		98.923
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 08:39:51

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 08:40:30

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10752.2	4.7	230.0596	90.253	39.2	ug/L	11199	Standard
|	Be	9	108.3	137.4	0.0304	0.068	224.3	ug/L	10	Standard
|	Al	27	27388.3	115.4	1.1022	1.824	165.5	ug/L	7920	Standard
[>	Sc	45	384585.7	1.7				ug/L	375691	Standard
|	Ti	47	143.7	79.5	0.0428	0.079	184.1	ug/L	70	Standard
|	V	51	3000.6	4.6	-0.0220	0.011	50.8	ug/L	3172	Standard
|	Cr	52	9206.1	1.0	-0.0970	0.010	10.8	ug/L	9852	Standard
|	Cr	53	655.8	10.7	0.0678	0.041	60.7	ug/L	518	Standard
|	Mn	55	1316.1	13.9	-0.0074	0.010	137.6	ug/L	1193	Standard
|	Co	59	195.7	49.4	0.0048	0.008	175.4	ug/L	98	Standard
|	Ni	60	179.7	80.8	0.0336	0.049	144.4	ug/L	67	Standard
|	Cu	65	195.0	70.9	0.0275	0.050	182.2	ug/L	90	Standard
|	Zn	66	183.7	31.3	0.0242	0.046	191.1	ug/L	148	Standard
[>	Ge	72	322328.5	0.6				ug/L	304674	Standard
|	As	75	-193.8	18.4	0.0398	0.028	71.4	ug/L	-174	Standard
|	Se	82	29.2	7.6	0.0755	0.016	21.8	ug/L	26	Standard
[	Se-1	77	131.0	4.0	0.0219	0.065	299.3	ug/L	133	Standard
[>	Ga	71	685.0	6.7				mg/L	630	Standard
|	Rb	85	28.3	53.9				ug/L	12	Standard
|	Y	89	287119.1	2.2				ug/L	271719	Standard
[>	Rh	103	413.3	17.0				ug/L	392	Standard
|	Mo	98	620.4	5.4	0.1352	0.007	5.3	ug/L	7	Standard
|	Ag	107	248.7	49.0	0.0177	0.014	77.5	ug/L	55	Standard
|	Cd	111	126.8	53.1	0.0085	0.014	161.5	mg/L	67	Standard
|	Cd	114	380.9	42.0	0.0116	0.012	99.6	ug/L	219	Standard
[>	In	115	929433.4	1.0				ug/L	887392	Standard
|	Sn	118	984.0	8.3	0.0152	0.005	31.5	ug/L	653	Standard
|	Sb	123	3103.8	3.3	0.2664	0.008	3.1	ug/L	48	Standard
|	Ba	135	89.0	57.4	0.0069	0.009	130.8	ug/L	28	Standard
|	Ce	140	33.3	12.5				ug/L	34	Standard
[>	Tb	159	1231399.9	1.2				ug/L	1226141	Standard
|	Ho	165	14.3	10.7				ug/L	14	Standard
|	Tl	203	221.0	91.9	0.0095	0.009	99.7	ug/L	9	Standard
|	Tl	205	517.0	93.4	0.0077	0.010	130.9	ug/L	20	Standard
|	Pb	206	582.0	30.9	0.0087	0.011	125.4	ug/L	419	Standard
|	Pb	207	470.0	31.6	0.0074	0.011	144.8	ug/L	338	Standard
|	Pb	208	2225.4	28.9	0.0061	0.010	163.6	ug/L	1616	Standard
	U	238	625.0	151.8	0.0308	0.047	151.1	ug/L	2	Standard
[>	Bi	209	652553.4	0.9				ug/L	641071	Standard

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Na	23	815.0	79.2	0.0033	0.033	989.3	mg/L	412	Standard
Mg	24	2242.1	146.0	0.0029	0.004	144.5	mg/L	177	Standard
K	39	151.7	8.3	-0.0144	0.008	56.0	mg/L	150	Standard
Ca	43	1.7	173.2	-1.3133	2.029	154.5	mg/L	7	Standard
Fe	54	643.9	5.3	-0.0049	0.005	99.2	mg/L	634	Standard
Fe	57	3392.1	16.3	0.0085	0.006	65.4	mg/L	2670	Standard
Sc-1	45	384585.7	1.7				mg/L	375691	Standard
Cl	35	5.7	27.0				ug/L	4	Standard
Kr	83	40.4	8.6				ug/L	39	Standard
Br	81	939.2	5.9				ug/L	639	Standard
P	31	460.8	14.2				ug/L	419	Standard
S	34	6223.8	2.6				ug/L	7420	Standard
Sr	88	23.3	12.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.795	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 08:43:01

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	Cd	111	
	Cd	114	
>	In	115	104.738
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.791
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 08:43:01

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Method 6020 - Summary Report

Sample ID: PBW E3 WG403711-02

Sample Date/Time: Friday, July 27, 2012 08:43:41

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10742.1	5.8	207.9865	149.675	72.0	ug/L	11199	Standard
|	Be	9	8.3	34.6	-0.0156	0.001	8.6	ug/L	10	Standard
|	Al	27	13047.3	2.4	0.2816	0.016	5.9	ug/L	7920	Standard
[>	Sc	45	381335.9	0.6				ug/L	375691	Standard
[	Ti	47	70.7	14.9	-0.0078	0.008	96.7	ug/L	70	Standard
|	V	51	2946.6	0.4	-0.0278	0.002	7.9	ug/L	3172	Standard
|	Cr	52	9095.7	1.6	-0.1138	0.020	17.6	ug/L	9852	Standard
|	Cr	53	542.5	4.0	-0.0020	0.015	759.4	ug/L	518	Standard
|	Mn	55	1563.7	2.5	0.0060	0.003	45.8	ug/L	1193	Standard
|	Co	59	104.3	6.4	-0.0032	0.001	17.9	ug/L	98	Standard
|	Ni	60	297.3	4.7	0.0724	0.004	6.1	ug/L	67	Standard
|	Cu	65	133.7	9.0	0.0050	0.005	89.9	ug/L	90	Standard
|	Zn	66	5970.5	5.1	4.6571	0.265	5.7	ug/L	148	Standard
[>	Ge	72	324246.2	0.7				ug/L	304674	Standard
|	As	75	-249.8	11.4	-0.0038	0.023	618.8	ug/L	-174	Standard
|	Se	82	17.2	35.0	-0.0211	0.047	221.6	ug/L	26	Standard
[	Se-1	77	129.7	11.2	-0.0012	0.168	13642.1	ug/L	133	Standard
[>	Ga	71	761.7	11.2				mg/L	630	Standard
|	Rb	85	11.7	65.5				ug/L	12	Standard
[	Y	89	286967.2	0.8				ug/L	271719	Standard
[>	Rh	103	396.7	12.0				ug/L	392	Standard
[	Mo	98	267.9	30.4	0.0555	0.018	32.1	ug/L	7	Standard
|	Ag	107	72.0	12.3	-0.0024	0.001	46.8	ug/L	55	Standard
|	Cd	111	81.0	5.4	-0.0008	0.001	110.2	mg/L	67	Standard
|	Cd	114	215.2	2.4	-0.0004	0.001	136.5	ug/L	219	Standard
[>	In	115	921934.9	1.4				ug/L	887392	Standard
|	Sn	118	826.7	10.2	0.0057	0.005	80.2	ug/L	653	Standard
|	Sb	123	915.0	22.3	0.0818	0.016	19.8	ug/L	48	Standard
[	Ba	135	73.3	8.0	0.0043	0.001	21.2	ug/L	28	Standard
[	Ce	140	43.0	4.0				ug/L	34	Standard
[>	Tb	159	1213302.0	1.0				ug/L	1226141	Standard
[	Ho	165	12.3	28.5				ug/L	14	Standard
|	Tl	203	44.0	25.6	0.0012	0.001	45.4	ug/L	9	Standard
|	Tl	205	93.7	11.0	-0.0011	0.000	20.9	ug/L	20	Standard
|	Pb	206	799.7	4.2	0.0230	0.003	11.4	ug/L	419	Standard
|	Pb	207	661.7	4.0	0.0223	0.002	8.9	ug/L	338	Standard
|	Pb	208	3012.4	3.3	0.0195	0.002	10.8	ug/L	1616	Standard
	U	238	17.3	58.9	0.0010	0.001	54.0	ug/L	2	Standard
[>	Bi	209	640722.5	1.1				ug/L	641071	Standard

Sample ID: PBW E3 WG403711-02

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Na	23	521.7	14.4	-0.0114	0.004	36.2	mg/L	412	Standard
Mg	24	410.0	5.6	0.0006	0.000	5.2	mg/L	177	Standard
K	39	125.0	18.3	-0.0339	0.017	50.0	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0676	2.093	3095.4	mg/L	7	Standard
Fe	54	619.6	9.8	-0.0086	0.012	144.7	mg/L	634	Standard
Fe	57	3010.3	8.0	0.0045	0.003	63.0	mg/L	2670	Standard
Sc-1	45	381335.9	0.6				mg/L	375691	Standard
Cl	35	7.0	51.5				ug/L	4	Standard
Kr	83	44.9	3.1				ug/L	39	Standard
Br	81	843.4	1.5				ug/L	639	Standard
P	31	423.3	4.5				ug/L	419	Standard
S	34	6067.9	3.1				ug/L	7420	Standard
Sr	88	46.7	16.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.424	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW E3 WG403711-02

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	Cd	111	
	Cd	114	
>	In	115	103.893
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.946
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW E3 WG403711-02

Report Date/Time: Friday, July 27, 2012 08:46:12

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Method 6020 - Summary Report

Sample ID: F BLANK WG403711-04

Sample Date/Time: Friday, July 27, 2012 08:46:51

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11027.3	1.5	194.4221	61.349	31.6	ug/L	11199	Standard
|	Be	9	8.3	124.9	-0.0157	0.005	31.0	ug/L	10	Standard
|	Al	27	10385.2	2.9	0.1098	0.025	22.6	ug/L	7920	Standard
[>	Sc	45	389778.9	1.3				ug/L	375691	Standard
[	Ti	47	57.7	23.5	-0.0169	0.009	55.1	ug/L	70	Standard
|	V	51	2993.0	2.0	-0.0250	0.007	27.0	ug/L	3172	Standard
|	Cr	52	9178.4	1.2	-0.1092	0.006	5.3	ug/L	9852	Standard
|	Cr	53	532.5	5.5	-0.0093	0.015	158.3	ug/L	518	Standard
|	Mn	55	1438.1	1.4	-0.0013	0.001	45.1	ug/L	1193	Standard
|	Co	59	97.3	4.2	-0.0038	0.000	7.2	ug/L	98	Standard
|	Ni	60	177.3	10.6	0.0323	0.006	17.9	ug/L	67	Standard
|	Cu	65	128.3	14.1	0.0029	0.006	212.3	ug/L	90	Standard
|	Zn	66	2365.2	2.9	1.7621	0.037	2.1	ug/L	148	Standard
[>	Ge	72	325535.1	0.9				ug/L	304674	Standard
|	As	75	-242.6	16.5	0.0026	0.033	1274.9	ug/L	-174	Standard
|	Se	82	21.0	20.6	0.0090	0.033	368.7	ug/L	26	Standard
[	Se-1	77	133.0	4.5	0.0293	0.062	210.7	ug/L	133	Standard
[>	Ga	71	658.3	3.6				mg/L	630	Standard
[	Rb	85	20.0	50.0				ug/L	12	Standard
[	Y	89	285413.1	3.1				ug/L	271719	Standard
[>	Rh	103	408.3	11.4				ug/L	392	Standard
[	Mo	98	185.0	31.4	0.0367	0.014	37.1	ug/L	7	Standard
|	Ag	107	56.0	8.2	-0.0043	0.001	12.6	mg/L	55	Standard
|	Cd	111	69.2	12.7	-0.0033	0.002	51.4	mg/L	67	Standard
|	Cd	114	212.9	2.8	-0.0007	0.001	85.9	ug/L	219	Standard
[>	In	115	925395.7	1.1				ug/L	887392	Standard
|	Sn	118	825.0	5.8	0.0055	0.004	64.4	ug/L	653	Standard
|	Sb	123	538.8	27.6	0.0499	0.013	26.2	ug/L	48	Standard
[	Ba	135	87.7	24.1	0.0068	0.004	57.0	ug/L	28	Standard
[	Ce	140	39.0	15.6				ug/L	34	Standard
[>	Tb	159	1233996.2	0.4				ug/L	1226141	Standard
[	Ho	165	17.3	36.6				ug/L	14	Standard
|	Tl	203	29.7	12.8	0.0005	0.000	33.7	ug/L	9	Standard
|	Tl	205	69.3	8.7	-0.0017	0.000	6.4	ug/L	20	Standard
|	Pb	206	821.0	0.6	0.0233	0.001	4.2	ug/L	419	Standard
|	Pb	207	670.7	3.7	0.0220	0.001	5.9	ug/L	338	Standard
|	Pb	208	3165.5	1.0	0.0210	0.001	5.4	ug/L	1616	Standard
	U	238	9.0	40.1	0.0005	0.000	32.0	ug/L	2	Standard
[>	Bi	209	653546.0	1.3				ug/L	641071	Standard

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Na	23	435.0	11.0	-0.0164	0.003	15.3	mg/L	412	Standard
Mg	24	265.0	14.2	0.0004	0.000	14.5	mg/L	177	Standard
K	39	123.3	19.2	-0.0373	0.016	44.0	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	684.0	12.3	0.0013	0.018	1358.3	mg/L	634	Standard
Fe	57	3067.0	8.9	0.0044	0.003	61.6	mg/L	2670	Standard
Sc-1	45	389778.9	1.3				mg/L	375691	Standard
Cl	35	4.7	53.9				ug/L	4	Standard
Kr	83	41.8	11.3				ug/L	39	Standard
Br	81	844.2	5.5				ug/L	639	Standard
P	31	419.2	6.5				ug/L	419	Standard
S	34	6090.4	1.9				ug/L	7420	Standard
Sr	88	43.3	24.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.847	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: F BLANK WG403711-04

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	Cd	111	
	Cd	114	
>	In	115	104.283
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.946
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG403711-04

Report Date/Time: Friday, July 27, 2012 08:49:22

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Method 6020 - Summary Report

Sample ID: LCSW E3 WG403711-03

Sample Date/Time: Friday, July 27, 2012 08:50:01

Number of Replicates: 3

Autosampler Position: 403

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12206.6	3.1	122.3117	30.527	25.0	ug/L	11199	Standard
|	Be	9	59170.4	2.6	25.3271	1.080	4.3	ug/L	10	Standard
|	Al	27	557785.5	1.0	29.6330	0.937	3.2	ug/L	7920	Standard
[>	Sc	45	420945.9	2.2				ug/L	375691	Standard
|	Ti	47	112.3	16.7	0.0159	0.012	73.0	ug/L	70	Standard
|	V	51	335768.7	0.9	25.4956	0.060	0.2	ug/L	3172	Standard
|	Cr	52	285555.4	1.2	26.2629	0.559	2.1	ug/L	9852	Standard
|	Cr	53	48734.9	1.5	26.9119	0.597	2.2	ug/L	518	Standard
|	Mn	55	509347.5	1.1	26.5345	0.350	1.3	ug/L	1193	Standard
|	Co	59	325472.5	0.9	26.2681	0.142	0.5	ug/L	98	Standard
|	Ni	60	85597.8	1.1	26.6689	0.178	0.7	ug/L	67	Standard
|	Cu	65	80138.7	1.5	27.0611	0.285	1.1	ug/L	90	Standard
|	Zn	66	35905.8	0.8	26.8218	0.217	0.8	ug/L	148	Standard
[>	Ge	72	345917.7	0.8				ug/L	304674	Standard
|	As	75	33136.2	1.0	24.7945	0.086	0.3	ug/L	-174	Standard
|	Se	82	3233.0	0.9	23.8358	0.064	0.3	ug/L	26	Standard
[	Se-1	77	2380.5	0.5	23.3923	0.094	0.4	ug/L	133	Standard
[>	Ga	71	771.7	2.1				mg/L	630	Standard
|	Rb	85	45.0	19.2				ug/L	12	Standard
|	Y	89	313457.0	2.3				ug/L	271719	Standard
[>	Rh	103	510.0	8.0				ug/L	392	Standard
|	Mo	98	214.6	36.4	0.0396	0.016	40.2	ug/L	7	Standard
|	Ag	107	257381.4	0.7	27.5608	0.399	1.4	ug/L	55	Standard
|	Cd	111	134296.0	0.6	26.0484	0.529	2.0	mg/L	67	Standard
|	Cd	114	361138.6	0.5	24.9043	0.416	1.7	ug/L	219	Standard
[>	In	115	997002.2	1.5				ug/L	887392	Standard
|	Sn	118	1081.7	10.1	0.0166	0.005	32.8	ug/L	653	Standard
|	Sb	123	319894.5	0.9	25.2197	0.472	1.9	ug/L	48	Standard
|	Ba	135	149941.9	0.4	25.1713	0.470	1.9	ug/L	28	Standard
|	Ce	140	435.3	9.4				ug/L	34	Standard
[>	Tb	159	1296345.3	1.9				ug/L	1226141	Standard
|	Ho	165	18.0	11.1				ug/L	14	Standard
|	Tl	203	559487.9	1.0	25.4353	0.280	1.1	ug/L	9	Standard
|	Tl	205	1306242.6	1.0	26.5213	0.194	0.7	ug/L	20	Standard
|	Pb	206	431914.0	1.0	25.5506	0.192	0.8	ug/L	419	Standard
|	Pb	207	371967.6	1.2	26.2058	0.081	0.3	ug/L	338	Standard
|	Pb	208	1705785.6	0.9	26.0577	0.100	0.4	ug/L	1616	Standard
	U	238	534347.6	0.5	25.4919	0.193	0.8	ug/L	2	Standard
[>	Bi	209	675887.8	0.9				ug/L	641071	Standard

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Na	23	855.0	16.3	0.0020	0.008	378.2	mg/L	412	Standard
Mg	24	1506.8	46.3	0.0019	0.001	48.4	mg/L	177	Standard
K	39	118.3	9.8	-0.0475	0.009	19.1	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	956.9	14.3	0.0400	0.022	55.2	mg/L	634	Standard
Fe	57	3812.1	5.7	0.0096	0.003	32.4	mg/L	2670	Standard
Sc-1	45	420945.9	2.2				mg/L	375691	Standard
Cl	35	4.3	26.6				ug/L	4	Standard
Kr	83	45.6	3.4				ug/L	39	Standard
Br	81	1203.4	2.0				ug/L	639	Standard
P	31	598.3	7.6				ug/L	419	Standard
S	34	6354.7	1.8				ug/L	7420	Standard
Sr	88	30.0	16.7				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		113.537	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW E3 WG403711-03

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	Cd	111	
	Cd	114	
>	In	115	112.352
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	105.431
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW E3 WG403711-03

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Method 6020 - Summary Report

Sample ID: L1207049106 WG403711-01

Sample Date/Time: Friday, July 27, 2012 08:53:11

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16517.4	5.7	-1818.9390	285.202	15.7	ug/L	11199	Standard
|	Be	9	25.0	20.0	-0.0065	0.002	37.4	ug/L	10	Standard
|	Al	27	37556.5	0.7	1.9755	0.049	2.5	ug/L	7920	Standard
[>	Sc	45	345423.5	1.3				ug/L	375691	Standard
|	Ti	47	542.0	1.7	0.3691	0.006	1.8	ug/L	70	Standard
|	V	51	5318.5	2.3	0.2288	0.013	5.8	ug/L	3172	Standard
|	Cr	52	10087.7	2.3	0.1351	0.043	31.9	ug/L	9852	Standard
|	Cr	53	547.5	7.2	0.0480	0.031	64.6	ug/L	518	Standard
|	Mn	55	273498.1	0.6	17.3517	0.219	1.3	ug/L	1193	Standard
|	Co	59	4386.6	2.7	0.4198	0.010	2.4	ug/L	98	Standard
|	Ni	60	4341.6	2.1	1.6252	0.034	2.1	ug/L	67	Standard
|	Cu	65	463.0	2.8	0.1478	0.003	2.0	ug/L	90	Standard
|	Zn	66	3309.7	1.1	2.9058	0.022	0.8	ug/L	148	Standard
[>	Ge	72	283603.3	1.3				ug/L	304674	Standard
|	As	75	-39.3	61.0	0.1587	0.021	13.4	ug/L	-174	Standard
|	Se	82	164.9	4.6	1.3358	0.076	5.7	ug/L	26	Standard
[	Se-1	77	206.3	6.9	1.1812	0.188	15.9	ug/L	133	Standard
[>	Ga	71	611.7	7.9				mg/L	630	Standard
|	Rb	85	4292.3	1.4				ug/L	12	Standard
|	Y	89	251897.4	2.3				ug/L	271719	Standard
[>	Rh	103	451.7	10.9				ug/L	392	Standard
|	Mo	98	1880.4	0.9	0.4722	0.009	2.0	ug/L	7	Standard
|	Ag	107	113.7	16.0	0.0039	0.002	64.2	ug/L	55	Standard
|	Cd	111	50.2	8.4	-0.0061	0.001	14.3	mg/L	67	Standard
|	Cd	114	144.2	16.6	-0.0046	0.002	39.8	ug/L	219	Standard
[>	In	115	830453.5	1.8				ug/L	887392	Standard
|	Sn	118	888.7	5.5	0.0158	0.003	20.8	ug/L	653	Standard
|	Sb	123	546.3	10.4	0.0557	0.005	8.7	ug/L	48	Standard
|	Ba	135	36436.8	0.9	7.3365	0.067	0.9	ug/L	28	Standard
|	Ce	140	156.7	1.8				ug/L	34	Standard
[>	Tb	159	1154965.1	0.8				ug/L	1226141	Standard
|	Ho	165	13.7	16.9				ug/L	14	Standard
|	Tl	203	223.7	16.2	0.0109	0.002	16.2	ug/L	9	Standard
|	Tl	205	497.3	7.1	0.0085	0.001	7.2	ug/L	20	Standard
|	Pb	206	459.7	3.0	0.0045	0.001	22.8	ug/L	419	Standard
|	Pb	207	416.7	4.5	0.0070	0.001	13.7	ug/L	338	Standard
|	Pb	208	1889.7	0.5	0.0043	0.001	13.0	ug/L	1616	Standard
	U	238	6794.2	1.2	0.3749	0.004	1.2	ug/L	2	Standard
[>	Bi	209	584576.3	1.8				ug/L	641071	Standard

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Na	23	63355.6	3.0	3.6301	0.129	3.6	mg/L	412	Standard
Mg	24	6922637.5	1.5	10.2504	0.243	2.4	mg/L	177	Standard
K	39	583.3	6.4	0.3654	0.035	9.5	mg/L	150	Standard
Ca	43	96.7	15.8	74.7310	13.123	17.6	mg/L	7	Standard
Fe	54	277.2	6.4	-0.0704	0.005	6.6	mg/L	634	Standard
Fe	57	12194.9	5.1	0.1223	0.008	6.2	mg/L	2670	Standard
Sc-1	45	345423.5	1.3				mg/L	375691	Standard
Cl	35	6.3	32.9				ug/L	4	Standard
Kr	83	40.8	7.4				ug/L	39	Standard
Br	81	852.5	7.1				ug/L	639	Standard
P	31	1805.9	2.1				ug/L	419	Standard
S	34	74220.5	0.9				ug/L	7420	Standard
Sr	88	356.7	2.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.084	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049106 WG403711-01

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	Cd	111	
	Cd	114	
>	In	115	93.584
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.187
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207049106S WG403711-05

Sample Date/Time: Friday, July 27, 2012 08:56:20

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16949.5	1.9	-1962.2961	197.027	10.0	ug/L	11199	Standard
|	Be	9	10758.8	2.1	5.6082	0.136	2.4	ug/L	10	Standard
|	Al	27	105502.4	7.6	6.4698	0.647	10.0	ug/L	7920	Standard
[>	Sc	45	344605.9	2.1				ug/L	375691	Standard
|	Ti	47	546.7	2.8	0.3805	0.010	2.6	ug/L	70	Standard
|	V	51	54800.1	1.2	4.9532	0.101	2.0	ug/L	3172	Standard
|	Cr	52	49979.3	0.6	4.8926	0.074	1.5	ug/L	9852	Standard
|	Cr	53	7416.0	2.7	4.8208	0.134	2.8	ug/L	518	Standard
|	Mn	55	254323.5	0.9	16.4223	0.256	1.6	ug/L	1193	Standard
|	Co	59	53783.3	1.5	5.3812	0.119	2.2	ug/L	98	Standard
|	Ni	60	16253.0	2.6	6.2690	0.207	3.3	ug/L	67	Standard
|	Cu	65	11763.2	1.1	4.8973	0.023	0.5	ug/L	90	Standard
|	Zn	66	8818.6	1.4	8.0949	0.164	2.0	ug/L	148	Standard
[>	Ge	72	278562.5	0.7				ug/L	304674	Standard
|	As	75	5960.6	0.9	5.6897	0.089	1.6	ug/L	-174	Standard
|	Se	82	815.0	1.4	7.3539	0.070	1.0	ug/L	26	Standard
[	Se-1	77	672.3	3.4	7.2655	0.270	3.7	ug/L	133	Standard
[>	Ga	71	605.0	4.1				mg/L	630	Standard
|	Rb	85	4063.9	2.0				ug/L	12	Standard
|	Y	89	249582.2	0.4				ug/L	271719	Standard
[>	Rh	103	420.0	6.3				ug/L	392	Standard
|	Mo	98	1826.3	2.4	0.4553	0.017	3.6	ug/L	7	Standard
|	Ag	107	40428.9	1.4	5.1531	0.116	2.3	ug/L	55	Standard
|	Cd	111	24109.8	1.5	5.5607	0.067	1.2	mg/L	67	Standard
|	Cd	114	63818.5	0.8	5.2336	0.026	0.5	ug/L	219	Standard
[>	In	115	836197.7	1.2				ug/L	887392	Standard
|	Sn	118	635.7	3.1	-0.0021	0.002	85.6	ug/L	653	Standard
|	Sb	123	53837.9	0.6	5.0633	0.035	0.7	ug/L	48	Standard
|	Ba	135	58158.4	0.8	11.6346	0.142	1.2	ug/L	28	Standard
|	Ce	140	181.0	3.9				ug/L	34	Standard
[>	Tb	159	1152420.0	2.0				ug/L	1226141	Standard
|	Ho	165	16.3	9.4				ug/L	14	Standard
|	Tl	203	91465.3	0.8	4.7899	0.028	0.6	ug/L	9	Standard
|	Tl	205	214209.4	1.0	5.0082	0.030	0.6	ug/L	20	Standard
|	Pb	206	70487.6	2.0	4.7818	0.054	1.1	ug/L	419	Standard
|	Pb	207	59657.2	1.0	4.8204	0.012	0.2	ug/L	338	Standard
|	Pb	208	276314.6	1.2	4.8393	0.014	0.3	ug/L	1616	Standard
	U	238	95731.5	0.8	5.2618	0.051	1.0	ug/L	2	Standard
[>	Bi	209	586652.2	0.9				ug/L	641071	Standard

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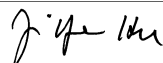
Na	23	64067.0	3.7	3.6813	0.180	4.9	mg/L	412	Standard
Mg	24	6488333.2	2.4	9.6285	0.118	1.2	mg/L	177	Standard
K	39	530.0	5.3	0.3210	0.023	7.3	mg/L	150	Standard
Ca	43	55.0	18.2	41.4903	8.051	19.4	mg/L	7	Standard
Fe	54	292.0	12.9	-0.0671	0.008	12.6	mg/L	634	Standard
Fe	57	11609.4	1.4	0.1153	0.001	1.2	mg/L	2670	Standard
Sc-1	45	344605.9	2.1				mg/L	375691	Standard
Cl	35	6.0	33.3				ug/L	4	Standard
Kr	83	45.0	10.4				ug/L	39	Standard
Br	81	907.5	4.3				ug/L	639	Standard
P	31	1695.1	3.1				ug/L	419	Standard
S	34	70605.8	1.4				ug/L	7420	Standard
Sr	88	275.0	7.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.430	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049106S WG403711-05
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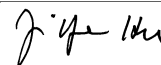
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	Ce	140	
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	Pb	206	
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	Pb	208	
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>	Bi	209	91.511
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207049906SD WG403711-06

Sample Date/Time: Friday, July 27, 2012 08:59:30

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17314.9	3.6	-2155.5362	251.405	11.7	ug/L	11199	Standard
|	Be	9	10451.9	2.0	5.5357	0.069	1.3	ug/L	10	Standard
|	Al	27	100155.0	1.1	6.2188	0.177	2.9	ug/L	7920	Standard
[>	Sc	45	339116.0	2.3				ug/L	375691	Standard
|	Ti	47	519.0	7.1	0.3631	0.025	7.0	ug/L	70	Standard
|	V	51	53567.9	1.0	4.8947	0.054	1.1	ug/L	3172	Standard
|	Cr	52	49098.8	0.6	4.8556	0.044	0.9	ug/L	9852	Standard
|	Cr	53	7355.1	2.8	4.8372	0.092	1.9	ug/L	518	Standard
|	Mn	55	253506.6	0.6	16.5595	0.089	0.5	ug/L	1193	Standard
|	Co	59	52975.1	1.3	5.3611	0.017	0.3	ug/L	98	Standard
|	Ni	60	16037.5	1.0	6.2566	0.003	0.1	ug/L	67	Standard
|	Cu	65	11771.2	0.8	4.9584	0.055	1.1	ug/L	90	Standard
|	Zn	66	8585.4	1.7	7.9713	0.221	2.8	ug/L	148	Standard
[>	Ge	72	275367.3	1.1				ug/L	304674	Standard
|	As	75	5882.0	1.7	5.6808	0.151	2.7	ug/L	-174	Standard
|	Se	82	812.9	3.3	7.4235	0.309	4.2	ug/L	26	Standard
[	Se-1	77	631.0	5.1	6.8289	0.507	7.4	ug/L	133	Standard
[>	Ga	71	621.7	3.8				mg/L	630	Standard
|	Rb	85	3985.5	3.1				ug/L	12	Standard
|	Y	89	249428.1	1.0				ug/L	271719	Standard
[>	Rh	103	400.0	15.7				ug/L	392	Standard
|	Mo	98	1863.1	2.3	0.4662	0.009	1.9	ug/L	7	Standard
|	Ag	107	40891.4	0.8	5.2313	0.060	1.1	ug/L	55	Standard
|	Cd	111	24316.0	0.8	5.6301	0.098	1.7	mg/L	67	Standard
|	Cd	114	64453.6	0.1	5.3060	0.046	0.9	ug/L	219	Standard
[>	In	115	833057.2	0.9				ug/L	887392	Standard
|	Sn	118	657.0	3.2	-0.0005	0.002	372.7	ug/L	653	Standard
|	Sb	123	54711.1	1.1	5.1644	0.009	0.2	ug/L	48	Standard
|	Ba	135	58988.3	0.5	11.8455	0.174	1.5	ug/L	28	Standard
|	Ce	140	163.0	8.7				ug/L	34	Standard
[>	Tb	159	1139014.3	1.1				ug/L	1226141	Standard
|	Ho	165	16.0	6.3				ug/L	14	Standard
|	Tl	203	91800.9	0.8	4.7765	0.068	1.4	ug/L	9	Standard
|	Tl	205	213960.3	1.4	4.9697	0.029	0.6	ug/L	20	Standard
|	Pb	206	70749.5	1.1	4.7691	0.085	1.8	ug/L	419	Standard
|	Pb	207	60060.2	1.6	4.8214	0.059	1.2	ug/L	338	Standard
|	Pb	208	279270.8	0.7	4.8597	0.041	0.8	ug/L	1616	Standard
	U	238	95704.3	0.8	5.2260	0.034	0.6	ug/L	2	Standard
[>	Bi	209	590487.7	1.0				ug/L	641071	Standard

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Na	23	63546.5	4.9	3.7088	0.157	4.2	mg/L	412	Standard
Mg	24	6390924.7	1.6	9.6385	0.067	0.7	mg/L	177	Standard
K	39	498.3	5.7	0.3008	0.017	5.6	mg/L	150	Standard
Ca	43	71.7	20.1	55.6288	10.898	19.6	mg/L	7	Standard
Fe	54	265.6	12.7	-0.0720	0.007	9.3	mg/L	634	Standard
Fe	57	11724.5	4.6	0.1191	0.004	3.2	mg/L	2670	Standard
Sc-1	45	339116.0	2.3				mg/L	375691	Standard
Cl	35	5.3	28.6				ug/L	4	Standard
Kr	83	44.2	4.3				ug/L	39	Standard
Br	81	926.7	1.8				ug/L	639	Standard
P	31	1623.4	4.0				ug/L	419	Standard
S	34	70111.0	1.7				ug/L	7420	Standard
Sr	88	335.0	17.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.381	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049906SD WG403711-06
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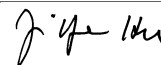
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	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049906SD WG403711-06
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Method 6020 - Summary Report

Sample ID: L1207045901

Sample Date/Time: Friday, July 27, 2012 09:02:40

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31668.1	3.3	-4701.1070	229.709	4.9	ug/L	11199	Standard
|	Be	9	26.7	39.0	-0.0080	0.005	57.5	ug/L	10	Standard
|	Al	27	32382308.4	2.3	1760.3580	18.504	1.1	ug/L	7920	Standard
[>	Sc	45	417922.6	1.3				ug/L	375691	Standard
[	Ti	47	451.7	1.7	0.2591	0.006	2.4	ug/L	70	Standard
|	V	51	55671.2	1.3	4.3667	0.076	1.7	ug/L	3172	Standard
|	Cr	52	41132.8	0.4	3.2260	0.044	1.4	ug/L	9852	Standard
|	Cr	53	5745.3	3.2	3.1581	0.091	2.9	ug/L	518	Standard
|	Mn	55	9189.1	2.0	0.4399	0.011	2.5	ug/L	1193	Standard
|	Co	59	1099.0	4.3	0.0841	0.004	5.3	ug/L	98	Standard
|	Ni	60	5100.5	2.0	1.6997	0.034	2.0	ug/L	67	Standard
|	Cu	65	1471.7	1.2	0.4970	0.009	1.8	ug/L	90	Standard
|	Zn	66	5951.5	2.4	4.7225	0.093	2.0	ug/L	148	Standard
[>	Ge	72	318775.6	0.6				ug/L	304674	Standard
|	As	75	237.1	5.7	0.3852	0.012	3.2	ug/L	-174	Standard
|	Se	82	91.6	6.7	0.5811	0.051	8.8	ug/L	26	Standard
[	Se-1	77	174.7	8.1	0.5320	0.151	28.5	ug/L	133	Standard
[>	Ga	71	7496.9	3.6				mg/L	630	Standard
[	Rb	85	38796.3	0.7				ug/L	12	Standard
[	Y	89	300937.8	1.2				ug/L	271719	Standard
[>	Rh	103	555.0	9.5				ug/L	392	Standard
[	Mo	98	15388.0	0.5	3.3766	0.014	0.4	ug/L	7	Standard
|	Ag	107	149.7	13.1	0.0059	0.002	35.9	ug/L	55	Standard
|	Cd	111	115.4	15.4	0.0054	0.003	64.1	mg/L	67	Standard
|	Cd	114	411.4	1.9	0.0130	0.001	5.2	ug/L	219	Standard
[>	In	115	959851.6	0.5				ug/L	887392	Standard
|	Sn	118	2555.9	1.3	0.1082	0.003	2.5	ug/L	653	Standard
|	Sb	123	2392.1	4.5	0.1999	0.009	4.7	ug/L	48	Standard
[	Ba	135	331751.4	0.8	57.8510	0.703	1.2	ug/L	28	Standard
[	Ce	140	1118.0	1.7				ug/L	34	Standard
[>	Tb	159	1274427.3	0.5				ug/L	1226141	Standard
[	Ho	165	32.0	8.3				ug/L	14	Standard
|	Tl	203	181.3	6.3	0.0081	0.000	6.1	ug/L	9	Standard
|	Tl	205	441.0	5.2	0.0066	0.000	7.1	ug/L	20	Standard
|	Pb	206	1038.4	1.0	0.0398	0.001	1.9	ug/L	419	Standard
|	Pb	207	851.4	6.0	0.0383	0.003	8.9	ug/L	338	Standard
|	Pb	208	3989.9	1.3	0.0372	0.001	1.5	ug/L	1616	Standard
	U	238	98.7	13.8	0.0052	0.001	12.8	ug/L	2	Standard
[>	Bi	209	621992.6	0.8				ug/L	641071	Standard

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Na	23	83050.4	2.5	3.9355	0.077	2.0	mg/L	412	Standard
Mg	24	9826.5	6.4	0.0120	0.001	7.6	mg/L	177	Standard
K	39	2245.2	5.5	1.4462	0.107	7.4	mg/L	150	Standard
Ca	43	146.7	26.0	94.3524	25.786	27.3	mg/L	7	Standard
Fe	54	911.5	7.2	0.0333	0.013	39.9	mg/L	634	Standard
Fe	57	19916.5	6.9	0.1755	0.017	9.5	mg/L	2670	Standard
Sc-1	45	417922.6	1.3				mg/L	375691	Standard
Cl	35	8.7	13.3				ug/L	4	Standard
Kr	83	46.6	13.2				ug/L	39	Standard
Br	81	1304.2	7.2				ug/L	639	Standard
P	31	617.5	9.0				ug/L	419	Standard
S	34	13639.5	0.3				ug/L	7420	Standard
Sr	88	908.4	11.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.628	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	108.165
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.024
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207045902

Sample Date/Time: Friday, July 27, 2012 09:05:51

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	33044.3	0.4	-5118.9126	110.027	2.1	ug/L	11199	Standard
|	Be	9	21.7	53.3	-0.0101	0.005	51.2	ug/L	10	Standard
|	Al	27	32509400.7	0.7	1784.2729	15.450	0.9	ug/L	7920	Standard
[>	Sc	45	414011.0	1.5				ug/L	375691	Standard
|	Ti	47	478.3	12.5	0.2820	0.038	13.6	ug/L	70	Standard
|	V	51	54433.2	1.2	4.3268	0.134	3.1	ug/L	3172	Standard
|	Cr	52	41462.0	0.4	3.3197	0.093	2.8	ug/L	9852	Standard
|	Cr	53	5917.8	2.3	3.3119	0.025	0.7	ug/L	518	Standard
|	Mn	55	5704.1	1.7	0.2467	0.004	1.7	ug/L	1193	Standard
|	Co	59	947.7	6.9	0.0721	0.007	10.0	ug/L	98	Standard
|	Ni	60	4722.7	2.7	1.5938	0.043	2.7	ug/L	67	Standard
|	Cu	65	1106.7	2.4	0.3685	0.009	2.5	ug/L	90	Standard
|	Zn	66	5211.6	1.2	4.1796	0.128	3.1	ug/L	148	Standard
[>	Ge	72	314488.2	1.7				ug/L	304674	Standard
|	As	75	233.6	3.3	0.3849	0.006	1.5	ug/L	-174	Standard
|	Se	82	90.0	5.3	0.5772	0.028	4.8	ug/L	26	Standard
[	Se-1	77	165.0	2.2	0.4487	0.043	9.6	ug/L	133	Standard
[>	Ga	71	7715.3	2.2				mg/L	630	Standard
|	Rb	85	40071.3	2.0				ug/L	12	Standard
|	Y	89	297037.0	1.3				ug/L	271719	Standard
[>	Rh	103	540.0	11.8				ug/L	392	Standard
|	Mo	98	15699.0	1.2	3.4984	0.075	2.1	ug/L	7	Standard
|	Ag	107	75.3	5.4	-0.0023	0.001	22.9	ug/L	55	Standard
|	Cd	111	109.7	14.8	0.0046	0.003	65.3	mg/L	67	Standard
|	Cd	114	387.0	3.6	0.0117	0.001	10.0	ug/L	219	Standard
[>	In	115	945356.8	1.3				ug/L	887392	Standard
|	Sn	118	2014.8	2.0	0.0774	0.002	2.6	ug/L	653	Standard
|	Sb	123	1730.5	5.2	0.1478	0.006	3.8	ug/L	48	Standard
|	Ba	135	345980.6	0.2	61.2619	0.706	1.2	ug/L	28	Standard
|	Ce	140	717.7	4.0				ug/L	34	Standard
[>	Tb	159	1280632.2	0.6				ug/L	1226141	Standard
|	Ho	165	23.3	4.9				ug/L	14	Standard
|	Tl	203	190.7	4.9	0.0087	0.000	5.6	ug/L	9	Standard
|	Tl	205	431.0	5.2	0.0065	0.001	8.0	ug/L	20	Standard
|	Pb	206	763.0	2.6	0.0227	0.001	5.5	ug/L	419	Standard
|	Pb	207	635.0	2.8	0.0223	0.001	5.6	ug/L	338	Standard
|	Pb	208	2977.4	3.6	0.0209	0.002	8.2	ug/L	1616	Standard
	U	238	83.3	10.2	0.0045	0.000	10.1	ug/L	2	Standard
[>	Bi	209	614867.3	0.3				ug/L	641071	Standard

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Na	23	79973.9	1.1	3.8248	0.036	1.0	mg/L	412	Standard
Mg	24	7245.1	2.5	0.0090	0.000	3.7	mg/L	177	Standard
K	39	2465.2	7.2	1.6165	0.135	8.3	mg/L	150	Standard
Ca	43	158.3	12.8	102.7948	12.148	11.8	mg/L	7	Standard
Fe	54	859.3	5.0	0.0253	0.008	30.9	mg/L	634	Standard
Fe	57	18601.4	1.6	0.1636	0.003	1.9	mg/L	2670	Standard
Sc-1	45	414011.0	1.5				mg/L	375691	Standard
Cl	35	4.7	53.9				ug/L	4	Standard
Kr	83	50.4	8.4				ug/L	39	Standard
Br	81	1147.5	3.9				ug/L	639	Standard
P	31	600.0	6.9				ug/L	419	Standard
S	34	12979.7	2.0				ug/L	7420	Standard
Sr	88	821.7	7.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.221	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207045902

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	Cd	111	
	Cd	114	
>	In	115	106.532
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.912
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207045902

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Method 6020 - Summary Report

Sample ID: L1207045902PS WG403969-01

Sample Date/Time: Friday, July 27, 2012 09:09:00

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

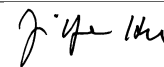
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35404.7	0.8	-5521.9941	195.768	3.5	ug/L	11199	Standard
|	Be	9	110671.3	2.9	47.1479	1.488	3.2	ug/L	10	Standard
|	Al	27	35073298.4	1.7	1884.9939	62.798	3.3	ug/L	7920	Standard
[>	Sc	45	422924.0	1.7				ug/L	375691	Standard
|	Ti	47	488.0	4.1	0.2816	0.012	4.3	ug/L	70	Standard
|	V	51	636326.1	0.3	52.2888	0.318	0.6	ug/L	3172	Standard
|	Cr	52	506692.0	0.2	51.1036	0.343	0.7	ug/L	9852	Standard
|	Cr	53	86353.8	2.0	51.6139	0.699	1.4	ug/L	518	Standard
|	Mn	55	869372.4	0.0	48.8165	0.313	0.6	ug/L	1193	Standard
|	Co	59	555751.0	0.5	48.2910	0.514	1.1	ug/L	98	Standard
|	Ni	60	143481.9	1.2	48.1388	0.479	1.0	ug/L	67	Standard
|	Cu	65	127488.1	0.2	46.3703	0.287	0.6	ug/L	90	Standard
|	Zn	66	59270.0	0.8	47.7511	0.210	0.4	ug/L	148	Standard
[>	Ge	72	321373.9	0.7				ug/L	304674	Standard
|	As	75	57591.9	0.7	46.2162	0.202	0.4	ug/L	-174	Standard
|	Se	82	5671.5	1.4	45.1464	0.499	1.1	ug/L	26	Standard
[	Se-1	77	3997.5	2.5	43.4445	0.839	1.9	ug/L	133	Standard
[>	Ga	71	8313.9	2.3				mg/L	630	Standard
|	Rb	85	42362.5	3.0				ug/L	12	Standard
|	Y	89	303632.4	1.1				ug/L	271719	Standard
[>	Rh	103	621.7	6.1				ug/L	392	Standard
|	Mo	98	16602.4	1.2	3.6457	0.014	0.4	ug/L	7	Standard
|	Ag	107	443181.6	1.4	49.3320	1.091	2.2	ug/L	55	Standard
|	Cd	111	238333.1	0.8	48.0559	0.748	1.6	mg/L	67	Standard
|	Cd	114	624825.6	0.5	44.7920	0.442	1.0	ug/L	219	Standard
[>	In	115	959257.9	0.8				ug/L	887392	Standard
|	Sn	118	2358.5	1.8	0.0964	0.001	1.5	ug/L	653	Standard
|	Sb	123	560117.4	1.2	45.8901	0.934	2.0	ug/L	48	Standard
|	Ba	135	614140.3	0.6	107.1721	1.470	1.4	ug/L	28	Standard
|	Ce	140	773.4	1.9				ug/L	34	Standard
[>	Tb	159	1302877.5	0.7				ug/L	1226141	Standard
|	Ho	165	25.3	17.8				ug/L	14	Standard
|	Tl	203	954338.2	1.0	47.3770	0.821	1.7	ug/L	9	Standard
|	Tl	205	2185850.0	1.0	48.4658	0.817	1.7	ug/L	20	Standard
|	Pb	206	727357.0	1.3	47.0094	0.933	2.0	ug/L	419	Standard
|	Pb	207	614930.3	0.6	47.3301	0.540	1.1	ug/L	338	Standard
|	Pb	208	2853117.4	0.9	47.6176	0.727	1.5	ug/L	1616	Standard
	U	238	992335.0	0.7	51.6952	0.864	1.7	ug/L	2	Standard
[>	Bi	209	619001.4	1.0				ug/L	641071	Standard

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Na	23	85835.8	1.6	4.0209	0.079	2.0	mg/L	412	Standard
Mg	24	8585.8	21.3	0.0104	0.002	22.4	mg/L	177	Standard
K	39	2543.5	6.4	1.6330	0.096	5.9	mg/L	150	Standard
Ca	43	140.0	23.4	88.7002	21.383	24.1	mg/L	7	Standard
Fe	54	883.8	5.9	0.0265	0.012	44.4	mg/L	634	Standard
Fe	57	19904.8	5.3	0.1728	0.011	6.4	mg/L	2670	Standard
Sc-1	45	422924.0	1.7				mg/L	375691	Standard
Cl	35	9.0	33.3				ug/L	4	Standard
Kr	83	51.4	9.4				ug/L	39	Standard
Br	81	1264.2	1.7				ug/L	639	Standard
P	31	715.9	4.0				ug/L	419	Standard
S	34	13229.1	2.4				ug/L	7420	Standard
Sr	88	843.4	3.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.481	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207045902PS WG403969-01

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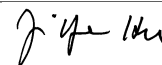
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	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
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	Ho	165	
	Tl	203	
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	Pb	206	
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1207045902SDL WG403969-02

Sample Date/Time: Friday, July 27, 2012 09:12:10

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15821.6	3.5	-1078.7121	201.178	18.6	ug/L	11199	Standard
|	Be	9	20.0	50.0	-0.0103	0.005	45.1	ug/L	10	Standard
|	Al	27	5731166.1	2.8	333.9862	9.520	2.9	ug/L	7920	Standard
[>	Sc	45	389447.1	1.3				ug/L	375691	Standard
[	Ti	47	129.7	5.4	0.0366	0.005	14.5	ug/L	70	Standard
|	V	51	11939.1	0.6	0.7513	0.013	1.7	ug/L	3172	Standard
|	Cr	52	15450.9	0.5	0.6037	0.010	1.6	ug/L	9852	Standard
|	Cr	53	1358.4	3.1	0.5201	0.031	6.0	ug/L	518	Standard
|	Mn	55	2860.3	2.7	0.0853	0.004	5.1	ug/L	1193	Standard
|	Co	59	325.0	5.1	0.0170	0.001	7.8	ug/L	98	Standard
|	Ni	60	1033.0	0.3	0.3324	0.003	1.0	ug/L	67	Standard
|	Cu	65	356.7	5.4	0.0911	0.007	7.4	ug/L	90	Standard
|	Zn	66	2831.9	1.0	2.2434	0.035	1.5	ug/L	148	Standard
[>	Ge	72	310583.0	0.6				ug/L	304674	Standard
|	As	75	-128.3	30.1	0.0880	0.032	36.0	ug/L	-174	Standard
|	Se	82	32.7	2.4	0.1135	0.007	6.0	ug/L	26	Standard
[	Se-1	77	143.7	10.1	0.2251	0.179	79.6	ug/L	133	Standard
[>	Ga	71	1890.1	8.5				mg/L	630	Standard
[	Rb	85	6868.2	1.5				ug/L	12	Standard
[	Y	89	283083.9	1.8				ug/L	271719	Standard
[>	Rh	103	398.3	11.0				ug/L	392	Standard
[	Mo	98	2707.3	2.9	0.6098	0.022	3.6	ug/L	7	Standard
|	Ag	107	159.3	16.6	0.0076	0.003	40.3	ug/L	55	Standard
|	Cd	111	109.2	21.9	0.0050	0.005	102.2	mg/L	67	Standard
|	Cd	114	311.4	19.7	0.0066	0.005	70.5	ug/L	219	Standard
[>	In	115	928287.3	0.8				ug/L	887392	Standard
|	Sn	118	930.7	6.2	0.0119	0.004	30.2	ug/L	653	Standard
|	Sb	123	2132.6	10.0	0.1845	0.018	9.9	ug/L	48	Standard
[	Ba	135	60181.6	1.2	10.8436	0.108	1.0	ug/L	28	Standard
[	Ce	140	211.7	10.7				ug/L	34	Standard
[>	Tb	159	1259726.4	0.2				ug/L	1226141	Standard
[	Ho	165	19.7	33.9				ug/L	14	Standard
|	Tl	203	169.3	50.1	0.0072	0.004	55.3	ug/L	9	Standard
|	Tl	205	402.3	49.1	0.0054	0.004	76.5	ug/L	20	Standard
|	Pb	206	753.0	12.4	0.0196	0.005	27.9	ug/L	419	Standard
|	Pb	207	621.3	9.5	0.0189	0.004	21.1	ug/L	338	Standard
|	Pb	208	2942.4	10.5	0.0179	0.005	25.6	ug/L	1616	Standard
|	U	238	138.3	38.5	0.0070	0.003	37.2	ug/L	2	Standard
[>	Bi	209	646240.8	0.8				ug/L	641071	Standard

Sample ID: L1207045902SDL WG403969-02

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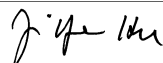
Na	23	24025.7	2.0	1.1951	0.020	1.7	mg/L	412	Standard
Mg	24	1921.8	10.1	0.0025	0.000	9.9	mg/L	177	Standard
K	39	585.0	7.3	0.3106	0.034	10.9	mg/L	150	Standard
Ca	43	25.0	34.6	15.2122	6.163	40.5	mg/L	7	Standard
Fe	54	612.3	8.8	-0.0126	0.010	75.7	mg/L	634	Standard
Fe	57	5542.7	4.1	0.0318	0.003	9.1	mg/L	2670	Standard
Sc-1	45	389447.1	1.3				mg/L	375691	Standard
Cl	35	6.0	16.7				ug/L	4	Standard
Kr	83	44.6	6.4				ug/L	39	Standard
Br	81	852.5	1.6				ug/L	639	Standard
P	31	398.3	7.2				ug/L	419	Standard
S	34	7926.2	0.6				ug/L	7420	Standard
Sr	88	201.7	5.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.939	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207045902SDL WG403969-02
 Report Date/Time: Friday, July 27, 2012 09:14:41
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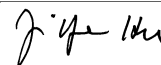
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	Ce	140	
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	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.806
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207045902SDL WG403969-02
 Report Date/Time: Friday, July 27, 2012 09:14:41
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 09:15:22

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

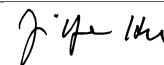
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11294.2	2.3	41.7870	63.972	153.1	ug/L	11199	Standard
|	Be	9	112120.0	1.5	53.2783	2.157	4.0	ug/L	10	Standard
|	Al	27	794676.9	1.0	47.1417	1.820	3.9	ug/L	7920	Standard
[>	Sc	45	379535.4	4.3				ug/L	375691	Standard
[	Ti	47	135904.1	0.7	98.1807	1.206	1.2	ug/L	70	Standard
|	V	51	562356.5	0.7	48.2003	0.158	0.3	ug/L	3172	Standard
|	Cr	52	459989.7	0.8	48.3571	0.297	0.6	ug/L	9852	Standard
|	Cr	53	77446.6	2.0	48.2909	1.184	2.5	ug/L	518	Standard
|	Mn	55	852849.0	0.3	49.9748	0.196	0.4	ug/L	1193	Standard
|	Co	59	547318.8	0.3	49.6286	0.414	0.8	ug/L	98	Standard
|	Ni	60	138912.6	0.7	48.6353	0.219	0.5	ug/L	67	Standard
|	Cu	65	127836.0	0.3	48.5235	0.408	0.8	ug/L	90	Standard
|	Zn	66	58261.5	1.3	48.9863	0.667	1.4	ug/L	148	Standard
[>	Ge	72	307966.4	0.6				ug/L	304674	Standard
|	As	75	58371.2	0.2	48.8703	0.193	0.4	ug/L	-174	Standard
|	Se	82	6014.2	0.9	49.9779	0.638	1.3	ug/L	26	Standard
[	Se-1	77	4272.3	0.3	48.6239	0.393	0.8	ug/L	133	Standard
[>	Ga	71	635.0	2.7				mg/L	630	Standard
[	Rb	85	863.4	3.9				ug/L	12	Standard
[	Y	89	274684.4	1.1				ug/L	271719	Standard
[>	Rh	103	435.0	6.9				ug/L	392	Standard
[	Mo	98	421159.4	0.3	97.1437	1.100	1.1	ug/L	7	Standard
|	Ag	107	432084.2	0.7	50.4410	0.814	1.6	ug/L	55	Standard
|	Cd	111	239374.5	0.7	50.6217	0.862	1.7	mg/L	67	Standard
|	Cd	114	651190.5	0.4	48.9598	0.416	0.8	ug/L	219	Standard
[>	In	115	914664.2	1.0				ug/L	887392	Standard
|	Sn	118	774076.6	0.6	49.0538	0.416	0.8	ug/L	653	Standard
|	Sb	123	566462.6	0.2	48.6708	0.588	1.2	ug/L	48	Standard
[	Ba	135	257067.9	1.0	47.0453	0.957	2.0	ug/L	28	Standard
[	Ce	140	1014.7	2.1				ug/L	34	Standard
[>	Tb	159	1250847.3	0.9				ug/L	1226141	Standard
[	Ho	165	23.7	16.0				ug/L	14	Standard
|	Tl	203	979596.2	0.2	48.2125	0.429	0.9	ug/L	9	Standard
|	Tl	205	2267655.8	0.5	49.8465	0.335	0.7	ug/L	20	Standard
|	Pb	206	752427.8	0.7	48.2116	0.496	1.0	ug/L	419	Standard
|	Pb	207	637745.2	0.9	48.6643	0.275	0.6	ug/L	338	Standard
|	Pb	208	2959777.6	0.6	48.9741	0.442	0.9	ug/L	1616	Standard
	U	238	970613.0	1.4	50.1287	0.889	1.8	ug/L	2	Standard
[>	Bi	209	624343.7	1.0				ug/L	641071	Standard

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Na	23	122345.3	1.2	6.4140	0.198	3.1	mg/L	412	Standard
Mg	24	3642860.7	3.2	4.9124	0.199	4.1	mg/L	177	Standard
K	39	6124.6	3.4	4.6080	0.275	6.0	mg/L	150	Standard
Ca	43	15.0	88.2	8.3078	9.639	116.0	mg/L	7	Standard
Fe	54	24731.6	4.0	4.7729	0.198	4.1	mg/L	634	Standard
Fe	57	444907.0	6.2	5.0170	0.472	9.4	mg/L	2670	Standard
Sc-1	45	379535.4	4.3				mg/L	375691	Standard
Cl	35	2.7	78.1				ug/L	4	Standard
Kr	83	46.2	7.4				ug/L	39	Standard
Br	81	869.2	7.3				ug/L	639	Standard
P	31	467.5	12.8				ug/L	419	Standard
S	34	6590.6	1.0				ug/L	7420	Standard
Sr	88	41.7	34.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	94.283		
Sc	45			
Ti	47	98.181		
V	51	96.401		
Cr	52	96.714		
Cr	53			
Mn	55	99.950		
Co	59	99.257		
Ni	60	97.271		
Cu	65	97.047		
Zn	66	97.973		
Ge	72		101.081	
As	75	97.741		
Se	82	99.956		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	97.144		
Ag	107	100.882		

Sample ID: QC Std 6

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	Cd	111	101.243	
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>	In	115		103.073
	Sn	118	98.108	
	Sb	123	97.342	
	Ba	135	94.091	
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203	96.425	
|	Tl	205		
|	Pb	206	96.423	
|	Pb	207	97.329	
|	Pb	208	97.948	
|	U	238	100.257	
>	Bi	209		97.391
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 09:17:53

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 09:18:33

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10847.2	5.1	162.3876	88.395	54.4	ug/L	11199	Standard
|	Be	9	30.0	76.4	-0.0053	0.011	204.5	ug/L	10	Standard
|	Al	27	8354.0	10.4	0.0050	0.052	1041.2	ug/L	7920	Standard
[>	Sc	45	379046.1	2.4				ug/L	375691	Standard
|	Ti	47	78.7	28.9	0.0005	0.017	3500.5	ug/L	70	Standard
|	V	51	2927.1	1.4	-0.0174	0.006	34.6	ug/L	3172	Standard
|	Cr	52	8875.6	1.3	-0.0907	0.017	18.5	ug/L	9852	Standard
|	Cr	53	465.8	11.0	-0.0337	0.034	100.0	ug/L	518	Standard
|	Mn	55	1234.7	4.5	-0.0089	0.003	35.6	ug/L	1193	Standard
|	Co	59	164.0	26.7	0.0027	0.004	151.6	ug/L	98	Standard
|	Ni	60	91.7	47.6	0.0056	0.015	275.6	ug/L	67	Standard
|	Cu	65	135.7	29.7	0.0082	0.016	188.7	ug/L	90	Standard
|	Zn	66	164.0	10.6	0.0144	0.016	113.0	ug/L	148	Standard
[>	Ge	72	308721.2	1.3				ug/L	304674	Standard
|	As	75	-219.5	11.9	0.0115	0.023	201.3	ug/L	-174	Standard
|	Se	82	25.1	27.2	0.0513	0.054	104.8	ug/L	26	Standard
[	Se-1	77	128.3	13.1	0.0541	0.184	339.6	ug/L	133	Standard
[>	Ga	71	626.7	4.4				mg/L	630	Standard
|	Rb	85	11.7	89.2				ug/L	12	Standard
|	Y	89	273846.9	2.5				ug/L	271719	Standard
[>	Rh	103	416.7	8.4				ug/L	392	Standard
|	Mo	98	364.7	5.5	0.0790	0.004	4.9	ug/L	7	Standard
|	Ag	107	155.7	27.0	0.0075	0.005	66.6	ug/L	55	Standard
|	Cd	111	110.8	19.9	0.0058	0.005	82.3	mg/L	67	Standard
|	Cd	114	307.2	15.5	0.0068	0.004	55.2	ug/L	219	Standard
[>	In	115	909450.3	1.0				ug/L	887392	Standard
|	Sn	118	985.7	2.6	0.0166	0.001	7.6	ug/L	653	Standard
|	Sb	123	2541.1	1.7	0.2236	0.004	1.6	ug/L	48	Standard
|	Ba	135	80.3	35.3	0.0057	0.005	92.0	ug/L	28	Standard
|	Ce	140	30.7	6.8				ug/L	34	Standard
[>	Tb	159	1219843.6	0.4				ug/L	1226141	Standard
|	Ho	165	10.3	22.3				ug/L	14	Standard
|	Tl	203	129.0	60.9	0.0053	0.004	70.3	ug/L	9	Standard
|	Tl	205	316.0	49.9	0.0036	0.003	92.2	ug/L	20	Standard
|	Pb	206	501.0	5.4	0.0044	0.002	39.3	ug/L	419	Standard
|	Pb	207	414.7	4.6	0.0040	0.001	34.5	ug/L	338	Standard
|	Pb	208	1922.4	6.5	0.0020	0.002	96.4	ug/L	1616	Standard
	U	238	143.0	55.3	0.0073	0.004	54.0	ug/L	2	Standard
[>	Bi	209	638785.8	0.8				ug/L	641071	Standard

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Na	23	446.7	24.8	-0.0151	0.006	40.6	mg/L	412	Standard
Mg	24	615.0	50.7	0.0008	0.000	50.1	mg/L	177	Standard
K	39	146.7	3.9	-0.0165	0.005	31.1	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0311	2.125	6832.1	mg/L	7	Standard
Fe	54	605.5	9.1	-0.0105	0.014	131.9	mg/L	634	Standard
Fe	57	2947.0	7.9	0.0040	0.003	67.9	mg/L	2670	Standard
Sc-1	45	379046.1	2.4				mg/L	375691	Standard
Cl	35	1.7	34.6				ug/L	4	Standard
Kr	83	42.4	7.5				ug/L	39	Standard
Br	81	807.5	4.2				ug/L	639	Standard
P	31	435.8	5.9				ug/L	419	Standard
S	34	6358.0	2.7				ug/L	7420	Standard
Sr	88	46.7	34.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.328	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 09:21:03

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	Cd	111	
	Cd	114	
>	In	115	102.486
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.643
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 09:21:03

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Method 6020 - Summary Report

Sample ID: L1207046001

Sample Date/Time: Friday, July 27, 2012 09:21:46

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	466449.8	2.1	-112024.4603	1496.292	1.3	ug/L	11199	Standard
|	Be	9	103.3	114.6	0.0254	0.052	204.4	ug/L	10	Standard
|	Al	27	122355.6	2.4	6.1628	0.224	3.6	ug/L	7920	Standard
[>	Sc	45	417706.5	0.9				ug/L	375691	Standard
[	Ti	47	944.0	10.5	0.6460	0.078	12.1	ug/L	70	Standard
|	V	51	4561.7	3.5	0.1354	0.015	11.1	ug/L	3172	Standard
|	Cr	52	12883.1	1.4	0.3820	0.038	9.9	ug/L	9852	Standard
|	Cr	53	1140.9	5.9	0.4118	0.054	13.1	ug/L	518	Standard
|	Mn	55	2808261.4	1.6	169.4886	2.371	1.4	ug/L	1193	Standard
|	Co	59	2088.1	3.4	0.1827	0.008	4.5	ug/L	98	Standard
|	Ni	60	10398.6	0.5	3.7214	0.054	1.4	ug/L	67	Standard
|	Cu	65	1749.8	5.7	0.6408	0.042	6.6	ug/L	90	Standard
|	Zn	66	3293.0	2.1	2.7325	0.088	3.2	ug/L	148	Standard
[>	Ge	72	299356.4	1.4				ug/L	304674	Standard
|	As	75	350.5	3.5	0.4949	0.015	3.0	ug/L	-174	Standard
|	Se	82	194.3	6.0	1.5091	0.097	6.4	ug/L	26	Standard
[	Se-1	77	171.3	10.0	0.6194	0.187	30.2	ug/L	133	Standard
[>	Ga	71	648.3	12.3				mg/L	630	Standard
[	Rb	85	40027.8	2.1				ug/L	12	Standard
[	Y	89	289019.0	0.9				ug/L	271719	Standard
[>	Rh	103	1230.0	4.3				ug/L	392	Standard
[	Mo	98	506.0	1.3	0.1135	0.000	0.3	ug/L	7	Standard
|	Ag	107	175.0	33.0	0.0101	0.007	70.7	ug/L	55	Standard
|	Cd	111	211.1	17.0	0.0278	0.008	28.9	mg/L	67	Standard
|	Cd	114	518.8	11.5	0.0234	0.005	22.2	ug/L	219	Standard
[>	In	115	896362.4	1.5				ug/L	887392	Standard
|	Sn	118	1410.4	6.5	0.0450	0.005	12.2	ug/L	653	Standard
|	Sb	123	1049.8	6.2	0.0960	0.004	4.6	ug/L	48	Standard
[	Ba	135	19149.4	1.1	3.5678	0.074	2.1	ug/L	28	Standard
[	Ce	140	1924.8	2.2				ug/L	34	Standard
[>	Tb	159	1251432.7	0.8				ug/L	1226141	Standard
[	Ho	165	66.7	8.8				ug/L	14	Standard
|	Tl	203	550.7	12.2	0.0333	0.004	12.3	ug/L	9	Standard
|	Tl	205	1297.1	10.4	0.0328	0.004	11.1	ug/L	20	Standard
|	Pb	206	675.3	7.7	0.0276	0.004	14.3	ug/L	419	Standard
|	Pb	207	536.7	9.8	0.0248	0.005	19.5	ug/L	338	Standard
|	Pb	208	2578.4	9.3	0.0248	0.005	19.3	ug/L	1616	Standard
	U	238	936.0	14.9	0.0611	0.009	14.4	ug/L	2	Standard
[>	Bi	209	494673.6	0.5				ug/L	641071	Standard

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Na	23	305082.6	0.4	14.5698	0.190	1.3	mg/L	412	Standard
Mg	24	30006714.3	3.8	36.7464	1.713	4.7	mg/L	177	Standard
K	39	1988.5	0.9	1.2660	0.025	2.0	mg/L	150	Standard
Ca	43	235.0	11.3	152.4677	16.640	10.9	mg/L	7	Standard
Fe	54	3860.4	4.0	0.5645	0.034	6.1	mg/L	634	Standard
Fe	57	102623.3	3.3	1.0258	0.028	2.7	mg/L	2670	Standard
Sc-1	45	417706.5	0.9				mg/L	375691	Standard
Cl	35	24.3	38.8				ug/L	4	Standard
Kr	83	57.9	2.3				ug/L	39	Standard
Br	81	8575.8	10.3				ug/L	639	Standard
P	31	533.3	5.3				ug/L	419	Standard
S	34	246079.8	0.9				ug/L	7420	Standard
Sr	88	5007.5	6.6				ug/L	35	Standard

QC Calculated Values

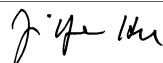
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.255	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046001

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	Cd	111	
	Cd	114	
>	In	115	101.011
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
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	Mg	24	
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	Ca	43	
	Fe	54	
	Fe	57	
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	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

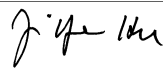
Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046001

Report Date/Time: Friday, July 27, 2012 09:24:16

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Method 6020 - Summary Report

Sample ID: L1207046002

Sample Date/Time: Friday, July 27, 2012 09:24:54

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	421758.6	1.5	-105170.5835	1551.286	1.5	ug/L	11199	Standard
|	Be	9	70.0	25.8	0.0119	0.008	68.1	ug/L	10	Standard
|	Al	27	113456.6	1.9	5.9244	0.115	1.9	ug/L	7920	Standard
[>	Sc	45	401613.1	0.1				ug/L	375691	Standard
[	Ti	47	821.7	2.7	0.5863	0.010	1.7	ug/L	70	Standard
|	V	51	4032.4	1.8	0.1071	0.011	10.6	ug/L	3172	Standard
|	Cr	52	10679.4	2.0	0.1995	0.028	14.2	ug/L	9852	Standard
|	Cr	53	774.2	9.7	0.2009	0.058	28.7	ug/L	518	Standard
|	Mn	55	2612427.0	0.6	165.8564	2.494	1.5	ug/L	1193	Standard
|	Co	59	1962.8	5.9	0.1806	0.014	7.7	ug/L	98	Standard
|	Ni	60	8227.2	3.4	3.0918	0.076	2.5	ug/L	67	Standard
|	Cu	65	1553.4	1.8	0.5955	0.015	2.6	ug/L	90	Standard
|	Zn	66	4384.6	2.4	3.8760	0.106	2.7	ug/L	148	Standard
[>	Ge	72	284598.3	1.3				ug/L	304674	Standard
|	As	75	300.9	9.0	0.4655	0.021	4.6	ug/L	-174	Standard
|	Se	82	171.9	3.9	1.3933	0.041	3.0	ug/L	26	Standard
[	Se-1	77	153.0	12.0	0.4935	0.210	42.5	ug/L	133	Standard
[>	Ga	71	573.3	0.5				mg/L	630	Standard
[	Rb	85	37843.9	3.5				ug/L	12	Standard
[	Y	89	278878.3	1.1				ug/L	271719	Standard
[>	Rh	103	1071.7	2.8				ug/L	392	Standard
[	Mo	98	434.3	29.2	0.1005	0.030	30.1	ug/L	7	Standard
|	Ag	107	191.0	83.0	0.0128	0.019	151.6	ug/L	55	Standard
|	Cd	111	191.6	50.2	0.0251	0.021	84.7	mg/L	67	Standard
|	Cd	114	486.2	38.9	0.0222	0.015	66.6	ug/L	219	Standard
[>	In	115	862088.8	0.6				ug/L	887392	Standard
|	Sn	118	1744.1	10.9	0.0711	0.013	18.3	ug/L	653	Standard
|	Sb	123	836.1	53.3	0.0802	0.041	50.9	ug/L	48	Standard
[	Ba	135	17653.3	2.9	3.4190	0.104	3.0	ug/L	28	Standard
[	Ce	140	2296.5	1.9				ug/L	34	Standard
[>	Tb	159	1202764.0	1.3				ug/L	1226141	Standard
[	Ho	165	63.7	15.4				ug/L	14	Standard
|	Tl	203	904.0	64.6	0.0565	0.037	64.7	ug/L	9	Standard
|	Tl	205	2016.5	58.6	0.0540	0.033	61.1	ug/L	20	Standard
|	Pb	206	772.0	47.3	0.0368	0.030	80.5	ug/L	419	Standard
|	Pb	207	620.0	37.8	0.0341	0.023	66.3	ug/L	338	Standard
|	Pb	208	2917.5	41.2	0.0332	0.025	75.9	ug/L	1616	Standard
	U	238	946.0	18.5	0.0632	0.011	17.8	ug/L	2	Standard
[>	Bi	209	483187.3	0.9				ug/L	641071	Standard

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Na	23	295942.3	0.2	14.6988	0.037	0.3	mg/L	412	Standard
Mg	24	27831455.7	1.2	35.4389	0.469	1.3	mg/L	177	Standard
K	39	1856.8	4.6	1.2256	0.060	4.9	mg/L	150	Standard
Ca	43	281.7	10.4	190.7429	20.002	10.5	mg/L	7	Standard
Fe	54	3744.2	3.8	0.5704	0.027	4.8	mg/L	634	Standard
Fe	57	98517.8	3.1	1.0243	0.032	3.1	mg/L	2670	Standard
Sc-1	45	401613.1	0.1				mg/L	375691	Standard
Cl	35	18.0	11.1				ug/L	4	Standard
Kr	83	57.8	5.4				ug/L	39	Standard
Br	81	8274.8	6.6				ug/L	639	Standard
P	31	422.5	4.1				ug/L	419	Standard
S	34	234699.7	0.7				ug/L	7420	Standard
Sr	88	4814.1	1.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.411	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	97.149
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.372
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046002

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Method 6020 - Summary Report

Sample ID: L1207046003

Sample Date/Time: Friday, July 27, 2012 09:28:04

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	426167.3	3.1	-109341.5536	1341.443	1.2	ug/L	11199	Standard
|	Be	9	35.0	14.3	-0.0034	0.002	69.6	ug/L	10	Standard
|	Al	27	56363.0	3.0	2.7846	0.155	5.5	ug/L	7920	Standard
[>	Sc	45	390716.9	2.2				ug/L	375691	Standard
[	Ti	47	734.0	3.7	0.5119	0.023	4.5	ug/L	70	Standard
|	V	51	3251.1	2.3	0.0310	0.007	23.0	ug/L	3172	Standard
|	Cr	52	10152.4	1.6	0.1260	0.006	5.1	ug/L	9852	Standard
|	Cr	53	775.9	8.6	0.1960	0.044	22.5	ug/L	518	Standard
|	Mn	55	2623880.5	0.3	164.8642	2.285	1.4	ug/L	1193	Standard
|	Co	59	1900.1	2.5	0.1724	0.006	3.3	ug/L	98	Standard
|	Ni	60	8827.2	1.4	3.2851	0.008	0.2	ug/L	67	Standard
|	Cu	65	1488.7	3.8	0.5625	0.023	4.1	ug/L	90	Standard
|	Zn	66	3964.2	0.6	3.4553	0.062	1.8	ug/L	148	Standard
[>	Ge	72	287562.1	1.2				ug/L	304674	Standard
|	As	75	104.0	15.2	0.2870	0.014	5.0	ug/L	-174	Standard
|	Se	82	141.1	3.6	1.1024	0.030	2.7	ug/L	26	Standard
[	Se-1	77	140.3	12.1	0.3147	0.191	60.8	ug/L	133	Standard
[>	Ga	71	590.0	11.2				mg/L	630	Standard
[	Rb	85	38051.1	2.1				ug/L	12	Standard
[	Y	89	281776.0	0.0				ug/L	271719	Standard
[>	Rh	103	1015.0	11.1				ug/L	392	Standard
[	Mo	98	348.6	13.0	0.0790	0.010	12.7	ug/L	7	Standard
|	Ag	107	77.3	16.4	-0.0012	0.002	134.5	ug/L	55	Standard
|	Cd	111	129.8	19.3	0.0112	0.006	53.3	mg/L	67	Standard
|	Cd	114	324.1	26.9	0.0092	0.007	78.4	ug/L	219	Standard
[>	In	115	868423.0	1.2				ug/L	887392	Standard
|	Sn	118	1339.4	4.4	0.0432	0.005	10.8	ug/L	653	Standard
|	Sb	123	414.9	12.0	0.0416	0.005	11.5	ug/L	48	Standard
[	Ba	135	16549.0	1.4	3.1816	0.083	2.6	ug/L	28	Standard
[	Ce	140	217.7	3.9				ug/L	34	Standard
[>	Tb	159	1208450.5	0.9				ug/L	1226141	Standard
[	Ho	165	20.3	23.2				ug/L	14	Standard
|	Tl	203	544.0	16.4	0.0336	0.006	17.5	ug/L	9	Standard
|	Tl	205	1233.1	10.1	0.0318	0.004	11.7	ug/L	20	Standard
|	Pb	206	462.7	10.9	0.0112	0.004	39.2	ug/L	419	Standard
|	Pb	207	386.3	14.0	0.0111	0.006	49.8	ug/L	338	Standard
|	Pb	208	1774.4	11.4	0.0088	0.005	51.6	ug/L	1616	Standard
	U	238	739.4	10.2	0.0493	0.005	10.7	ug/L	2	Standard
[>	Bi	209	484653.1	0.5				ug/L	641071	Standard

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Na	23	296668.1	1.1	15.1508	0.311	2.1	mg/L	412	Standard
Mg	24	27341125.2	1.1	35.7935	0.661	1.8	mg/L	177	Standard
K	39	1798.4	5.1	1.2208	0.091	7.5	mg/L	150	Standard
Ca	43	236.7	18.0	164.0710	26.642	16.2	mg/L	7	Standard
Fe	54	1160.6	4.4	0.0925	0.005	5.7	mg/L	634	Standard
Fe	57	42665.0	0.9	0.4398	0.010	2.3	mg/L	2670	Standard
Sc-1	45	390716.9	2.2				mg/L	375691	Standard
Cl	35	16.3	28.3				ug/L	4	Standard
Kr	83	56.3	11.5				ug/L	39	Standard
Br	81	6493.9	0.8				ug/L	639	Standard
P	31	415.8	9.6				ug/L	419	Standard
S	34	236162.1	0.4				ug/L	7420	Standard
Sr	88	4869.1	5.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.383	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046003

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	Cd	111	
	Cd	114	
>	In	115	97.862
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.600
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

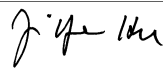
Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046003

Report Date/Time: Friday, July 27, 2012 09:30:34

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Method 6020 - Summary Report

Sample ID: L1207046004

Sample Date/Time: Friday, July 27, 2012 09:31:14

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

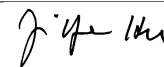
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	451131.5	1.1	-114649.5550	1840.822	1.6	ug/L	11199	Standard
|	Be	9	46.7	32.7	0.0017	0.007	403.5	ug/L	10	Standard
|	Al	27	76884.6	2.1	3.9279	0.116	2.9	ug/L	7920	Standard
[>	Sc	45	395035.5	1.1				ug/L	375691	Standard
|	Ti	47	781.0	3.2	0.5447	0.021	3.9	ug/L	70	Standard
|	V	51	4053.1	1.8	0.1028	0.006	6.1	ug/L	3172	Standard
|	Cr	52	10524.3	0.9	0.1615	0.007	4.1	ug/L	9852	Standard
|	Cr	53	827.5	3.0	0.2275	0.015	6.7	ug/L	518	Standard
|	Mn	55	2728838.4	0.4	170.4159	0.810	0.5	ug/L	1193	Standard
|	Co	59	1992.5	1.1	0.1802	0.003	1.5	ug/L	98	Standard
|	Ni	60	8923.0	2.4	3.3009	0.072	2.2	ug/L	67	Standard
|	Cu	65	1765.1	1.0	0.6706	0.007	1.1	ug/L	90	Standard
|	Zn	66	4308.6	3.2	3.7423	0.116	3.1	ug/L	148	Standard
[>	Ge	72	289297.1	0.3				ug/L	304674	Standard
|	As	75	314.9	6.3	0.4738	0.018	3.9	ug/L	-174	Standard
|	Se	82	194.5	4.4	1.5693	0.082	5.2	ug/L	26	Standard
[	Se-1	77	156.7	14.9	0.5088	0.285	56.0	ug/L	133	Standard
[>	Ga	71	636.7	10.0				mg/L	630	Standard
|	Rb	85	40093.0	1.4				ug/L	12	Standard
|	Y	89	287412.8	2.1				ug/L	271719	Standard
[>	Rh	103	1220.0	11.2				ug/L	392	Standard
|	Mo	98	338.3	4.7	0.0762	0.003	4.2	ug/L	7	Standard
|	Ag	107	86.3	7.0	-0.0002	0.001	416.2	ug/L	55	Standard
|	Cd	111	130.2	3.5	0.0111	0.001	8.3	mg/L	67	Standard
|	Cd	114	370.7	2.7	0.0127	0.001	8.0	ug/L	219	Standard
[>	In	115	872367.1	0.8				ug/L	887392	Standard
|	Sn	118	1228.0	6.1	0.0354	0.005	14.8	ug/L	653	Standard
|	Sb	123	310.3	23.5	0.0320	0.007	21.2	ug/L	48	Standard
|	Ba	135	17644.6	0.5	3.3770	0.044	1.3	ug/L	28	Standard
|	Ce	140	2049.5	3.3				ug/L	34	Standard
[>	Tb	159	1217435.3	1.1				ug/L	1226141	Standard
|	Ho	165	70.3	23.1				ug/L	14	Standard
|	Tl	203	436.7	5.1	0.0267	0.002	5.7	ug/L	9	Standard
|	Tl	205	1059.7	5.6	0.0268	0.002	6.9	ug/L	20	Standard
|	Pb	206	489.3	6.0	0.0133	0.003	19.8	ug/L	419	Standard
|	Pb	207	405.7	1.9	0.0128	0.001	4.1	ug/L	338	Standard
|	Pb	208	1941.4	0.9	0.0121	0.001	4.7	ug/L	1616	Standard
	U	238	814.7	2.6	0.0541	0.002	3.1	ug/L	2	Standard
[>	Bi	209	486532.0	0.6				ug/L	641071	Standard

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Na	23	301243.6	0.6	15.2135	0.156	1.0	mg/L	412	Standard
Mg	24	28812247.0	0.2	37.3007	0.343	0.9	mg/L	177	Standard
K	39	1958.5	5.6	1.3242	0.093	7.0	mg/L	150	Standard
Ca	43	226.7	9.2	155.5180	12.851	8.3	mg/L	7	Standard
Fe	54	3722.8	1.2	0.5780	0.010	1.8	mg/L	634	Standard
Fe	57	103254.4	4.4	1.0934	0.051	4.6	mg/L	2670	Standard
Sc-1	45	395035.5	1.1				mg/L	375691	Standard
Cl	35	16.7	12.5				ug/L	4	Standard
Kr	83	60.4	3.0				ug/L	39	Standard
Br	81	10215.9	5.4				ug/L	639	Standard
P	31	415.0	5.7				ug/L	419	Standard
S	34	242349.6	0.8				ug/L	7420	Standard
Sr	88	5130.9	0.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.953	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046004

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	Cd	111	
	Cd	114	
>	In	115	98.307
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.894
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046004

Report Date/Time: Friday, July 27, 2012 09:33:44

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Method 6020 - Summary Report

Sample ID: L1207046005 WG403711-07

Sample Date/Time: Friday, July 27, 2012 09:34:23

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	429368.6	2.0	-108075.2723	1568.014	1.5	ug/L	11199	Standard
|	Be	9	55.0	31.5	0.0053	0.008	147.3	ug/L	10	Standard
|	Al	27	74575.3	6.8	3.7597	0.261	7.0	ug/L	7920	Standard
[>	Sc	45	398165.8	0.9				ug/L	375691	Standard
[	Ti	47	762.7	1.2	0.5316	0.006	1.2	ug/L	70	Standard
|	V	51	4022.0	2.6	0.1006	0.010	9.6	ug/L	3172	Standard
|	Cr	52	11676.8	1.3	0.2958	0.020	6.9	ug/L	9852	Standard
|	Cr	53	1016.7	1.8	0.3552	0.014	4.0	ug/L	518	Standard
|	Mn	55	2684299.4	0.9	167.9463	1.894	1.1	ug/L	1193	Standard
|	Co	59	2024.1	5.2	0.1836	0.011	5.9	ug/L	98	Standard
|	Ni	60	8365.6	0.4	3.0989	0.014	0.4	ug/L	67	Standard
|	Cu	65	1545.1	3.7	0.5828	0.025	4.3	ug/L	90	Standard
|	Zn	66	4289.6	1.7	3.7327	0.079	2.1	ug/L	148	Standard
[>	Ge	72	288761.7	0.3				ug/L	304674	Standard
|	As	75	396.6	16.5	0.5470	0.059	10.8	ug/L	-174	Standard
|	Se	82	202.9	8.4	1.6469	0.157	9.5	ug/L	26	Standard
[	Se-1	77	155.0	1.1	0.4921	0.018	3.7	ug/L	133	Standard
[>	Ga	71	606.7	3.9				mg/L	630	Standard
[	Rb	85	38211.5	0.7				ug/L	12	Standard
[	Y	89	279257.2	1.9				ug/L	271719	Standard
[>	Rh	103	1120.0	3.2				ug/L	392	Standard
[	Mo	98	365.5	3.4	0.0846	0.003	3.5	ug/L	7	Standard
|	Ag	107	81.7	13.5	-0.0006	0.001	259.0	ug/L	55	Standard
|	Cd	111	134.5	5.6	0.0127	0.002	15.7	mg/L	67	Standard
|	Cd	114	366.7	7.4	0.0130	0.002	17.7	ug/L	219	Standard
[>	In	115	854339.8	0.9				ug/L	887392	Standard
|	Sn	118	1416.1	1.6	0.0499	0.001	1.9	ug/L	653	Standard
|	Sb	123	319.6	14.4	0.0334	0.004	12.0	ug/L	48	Standard
[	Ba	135	17609.9	0.6	3.4417	0.051	1.5	ug/L	28	Standard
[	Ce	140	2865.3	0.8				ug/L	34	Standard
[>	Tb	159	1194829.5	1.4				ug/L	1226141	Standard
[	Ho	165	74.7	5.1				ug/L	14	Standard
|	Tl	203	704.4	39.9	0.0438	0.017	39.7	ug/L	9	Standard
|	Tl	205	1590.1	42.1	0.0419	0.018	44.1	ug/L	20	Standard
|	Pb	206	768.7	37.3	0.0365	0.023	63.0	ug/L	419	Standard
|	Pb	207	615.7	31.5	0.0337	0.018	54.9	ug/L	338	Standard
|	Pb	208	2829.8	32.3	0.0313	0.019	60.3	ug/L	1616	Standard
	U	238	890.0	19.0	0.0594	0.011	18.0	ug/L	2	Standard
[>	Bi	209	483147.9	1.4				ug/L	641071	Standard

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Na	23	296513.3	0.5	14.8555	0.095	0.6	mg/L	412	Standard
Mg	24	28248204.7	0.4	36.2825	0.345	1.0	mg/L	177	Standard
K	39	1955.1	3.6	1.3099	0.054	4.1	mg/L	150	Standard
Ca	43	236.7	17.2	161.1288	26.888	16.7	mg/L	7	Standard
Fe	54	3887.3	2.0	0.6035	0.015	2.5	mg/L	634	Standard
Fe	57	104398.5	1.2	1.0970	0.021	1.9	mg/L	2670	Standard
Sc-1	45	398165.8	0.9				mg/L	375691	Standard
Cl	35	16.0	6.3				ug/L	4	Standard
Kr	83	58.6	6.8				ug/L	39	Standard
Br	81	9842.4	7.0				ug/L	639	Standard
P	31	427.5	5.6				ug/L	419	Standard
S	34	241647.8	1.3				ug/L	7420	Standard
Sr	88	4857.4	2.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.777	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046005 WG403711-07

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	Cd	111	
	Cd	114	
>	In	115	96.275
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.366
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046005 WG403711-07

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Method 6020 - Summary Report

Sample ID: L1207046005S WG403711-08

Sample Date/Time: Friday, July 27, 2012 09:37:33

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

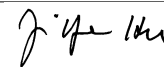
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	430088.1	2.6	-110628.7570	3094.418	2.8	ug/L	11199	Standard
|	Be	9	52293.4	1.1	24.1537	0.443	1.8	ug/L	10	Standard
|	Al	27	437727.8	2.0	25.0176	0.359	1.4	ug/L	7920	Standard
[>	Sc	45	389906.7	0.8				ug/L	375691	Standard
|	Ti	47	808.0	1.5	0.5789	0.009	1.5	ug/L	70	Standard
|	V	51	263378.9	0.9	24.4201	0.196	0.8	ug/L	3172	Standard
|	Cr	52	216007.7	1.4	24.1869	0.228	0.9	ug/L	9852	Standard
|	Cr	53	36659.3	1.4	24.7006	0.287	1.2	ug/L	518	Standard
|	Mn	55	2995997.9	0.8	191.1620	0.909	0.5	ug/L	1193	Standard
|	Co	59	261637.7	0.7	25.7960	0.177	0.7	ug/L	98	Standard
|	Ni	60	68748.3	1.5	26.1660	0.358	1.4	ug/L	67	Standard
|	Cu	65	56828.4	1.3	23.4367	0.212	0.9	ug/L	90	Standard
|	Zn	66	29434.2	0.9	26.8598	0.133	0.5	ug/L	148	Standard
[>	Ge	72	283161.5	0.5				ug/L	304674	Standard
|	As	75	29529.8	0.5	26.9763	0.189	0.7	ug/L	-174	Standard
|	Se	82	3348.6	1.2	30.2014	0.315	1.0	ug/L	26	Standard
[	Se-1	77	2228.5	2.2	26.9575	0.507	1.9	ug/L	133	Standard
[>	Ga	71	603.3	11.5				mg/L	630	Standard
|	Rb	85	36701.1	2.0				ug/L	12	Standard
|	Y	89	272873.7	1.0				ug/L	271719	Standard
[>	Rh	103	1165.0	4.1				ug/L	392	Standard
|	Mo	98	343.9	1.8	0.0799	0.002	2.1	ug/L	7	Standard
|	Ag	107	216256.7	1.7	27.1939	0.711	2.6	ug/L	55	Standard
|	Cd	111	115605.3	1.7	26.3322	0.788	3.0	mg/L	67	Standard
|	Cd	114	297542.7	1.3	24.0930	0.483	2.0	ug/L	219	Standard
[>	In	115	849054.5	1.4				ug/L	887392	Standard
|	Sn	118	928.0	5.1	0.0171	0.003	15.3	ug/L	653	Standard
|	Sb	123	269853.5	0.9	24.9817	0.490	2.0	ug/L	48	Standard
|	Ba	135	134513.5	1.4	26.5176	0.689	2.6	ug/L	28	Standard
|	Ce	140	2724.6	0.9				ug/L	34	Standard
[>	Tb	159	1193309.1	0.3				ug/L	1226141	Standard
|	Ho	165	78.3	13.5				ug/L	14	Standard
|	Tl	203	400722.5	0.8	25.4161	0.244	1.0	ug/L	9	Standard
|	Tl	205	924053.9	0.8	26.1779	0.481	1.8	ug/L	20	Standard
|	Pb	206	301872.1	1.1	24.9161	0.485	1.9	ug/L	419	Standard
|	Pb	207	254916.9	0.7	25.0581	0.439	1.8	ug/L	338	Standard
|	Pb	208	1183541.9	0.6	25.2251	0.363	1.4	ug/L	1616	Standard
	U	238	467629.7	1.2	31.1276	0.685	2.2	ug/L	2	Standard
[>	Bi	209	484459.8	1.0				ug/L	641071	Standard

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Na	23	292856.6	0.7	14.9832	0.095	0.6	mg/L	412	Standard
Mg	24	26660105.8	2.8	34.9628	0.727	2.1	mg/L	177	Standard
K	39	1890.1	3.0	1.2917	0.053	4.1	mg/L	150	Standard
Ca	43	235.0	21.0	163.4366	33.749	20.6	mg/L	7	Standard
Fe	54	3567.0	1.8	0.5572	0.009	1.6	mg/L	634	Standard
Fe	57	96613.8	2.4	1.0349	0.024	2.3	mg/L	2670	Standard
Sc-1	45	389906.7	0.8				mg/L	375691	Standard
Cl	35	23.3	10.8				ug/L	4	Standard
Kr	83	56.2	8.7				ug/L	39	Standard
Br	81	9060.2	2.9				ug/L	639	Standard
P	31	402.5	4.9				ug/L	419	Standard
S	34	234892.0	1.3				ug/L	7420	Standard
Sr	88	4554.0	4.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.939	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046005S WG403711-08

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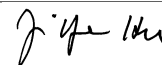
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	Cd	114	
>	In	115	95.680
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.570
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046005S WG403711-08
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Method 6020 - Summary Report

Sample ID: L1207046005DP WG403711-09

Sample Date/Time: Friday, July 27, 2012 09:40:42

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	423529.5	2.1	-110059.4445	1818.959	1.7	ug/L	11199	Standard
|	Be	9	53.3	21.7	0.0054	0.006	107.4	ug/L	10	Standard
|	Al	27	153625.0	1.5	8.5538	0.223	2.6	ug/L	7920	Standard
[>	Sc	45	385907.3	2.0				ug/L	375691	Standard
|	Ti	47	878.7	2.3	0.6301	0.021	3.4	ug/L	70	Standard
|	V	51	4349.0	1.3	0.1360	0.001	0.8	ug/L	3172	Standard
|	Cr	52	12492.8	2.4	0.4083	0.040	9.7	ug/L	9852	Standard
|	Cr	53	1006.7	5.1	0.3574	0.034	9.5	ug/L	518	Standard
|	Mn	55	2624451.6	0.9	166.3779	1.774	1.1	ug/L	1193	Standard
|	Co	59	1968.8	4.6	0.1808	0.008	4.4	ug/L	98	Standard
|	Ni	60	8241.9	1.8	3.0932	0.011	0.4	ug/L	67	Standard
|	Cu	65	1472.1	1.8	0.5611	0.002	0.4	ug/L	90	Standard
|	Zn	66	3843.8	1.9	3.3773	0.038	1.1	ug/L	148	Standard
[>	Ge	72	285002.2	1.5				ug/L	304674	Standard
|	As	75	282.1	20.9	0.4486	0.055	12.2	ug/L	-174	Standard
|	Se	82	167.9	4.5	1.3559	0.066	4.9	ug/L	26	Standard
[	Se-1	77	160.7	7.7	0.5912	0.184	31.1	ug/L	133	Standard
[>	Ga	71	643.3	4.4				mg/L	630	Standard
|	Rb	85	36483.9	1.9				ug/L	12	Standard
|	Y	89	277271.1	1.7				ug/L	271719	Standard
[>	Rh	103	1126.7	9.0				ug/L	392	Standard
|	Mo	98	319.7	3.3	0.0729	0.002	2.4	ug/L	7	Standard
|	Ag	107	169.3	9.5	0.0103	0.002	20.6	ug/L	55	Standard
|	Cd	111	132.9	3.8	0.0121	0.001	7.0	mg/L	67	Standard
|	Cd	114	383.0	6.6	0.0142	0.002	17.3	ug/L	219	Standard
[>	In	115	858721.9	1.6				ug/L	887392	Standard
|	Sn	118	2645.6	10.7	0.1327	0.021	15.9	ug/L	653	Standard
|	Sb	123	513.5	6.5	0.0510	0.003	6.3	ug/L	48	Standard
|	Ba	135	17313.6	1.1	3.3669	0.083	2.5	ug/L	28	Standard
[	Ce	140	3260.7	3.8				ug/L	34	Standard
[>	Tb	159	1194313.1	0.8				ug/L	1226141	Standard
|	Ho	165	72.3	12.5				ug/L	14	Standard
|	Tl	203	553.7	4.2	0.0344	0.002	5.2	ug/L	9	Standard
|	Tl	205	1324.1	3.0	0.0345	0.001	3.1	ug/L	20	Standard
|	Pb	206	755.4	2.4	0.0356	0.002	5.2	ug/L	419	Standard
|	Pb	207	614.7	1.5	0.0338	0.001	2.8	ug/L	338	Standard
|	Pb	208	2906.1	1.1	0.0331	0.001	1.8	ug/L	1616	Standard
	U	238	823.0	3.2	0.0551	0.002	4.3	ug/L	2	Standard
[>	Bi	209	482770.6	1.2				ug/L	641071	Standard

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Na	23	295939.1	1.1	15.3020	0.319	2.1	mg/L	412	Standard
Mg	24	28175477.9	2.7	37.3462	1.248	3.3	mg/L	177	Standard
K	39	1921.8	0.6	1.3305	0.021	1.5	mg/L	150	Standard
Ca	43	215.0	26.8	150.5626	38.155	25.3	mg/L	7	Standard
Fe	54	3741.0	7.5	0.5984	0.057	9.5	mg/L	634	Standard
Fe	57	97543.1	2.2	1.0566	0.029	2.8	mg/L	2670	Standard
Sc-1	45	385907.3	2.0				mg/L	375691	Standard
Cl	35	29.3	25.8				ug/L	4	Standard
Kr	83	56.2	0.9				ug/L	39	Standard
Br	81	7631.9	0.9				ug/L	639	Standard
P	31	408.3	7.3				ug/L	419	Standard
S	34	240674.9	1.1				ug/L	7420	Standard
Sr	88	4812.4	5.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.543	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046005DP WG403711-09
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	Cd	111	
	Cd	114	
>	In	115	96.769
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.307
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046005DP WG403711-09

Report Date/Time: Friday, July 27, 2012 09:43:13

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Method 6020 - Summary Report

Sample ID: L1207046006

Sample Date/Time: Friday, July 27, 2012 09:43:52

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	416633.4	1.8	-107547.5455	2457.655	2.3	ug/L	11199	Standard
|	Be	9	35.0	14.3	-0.0033	0.002	67.2	ug/L	10	Standard
|	Al	27	64165.6	0.8	3.2604	0.049	1.5	ug/L	7920	Standard
[>	Sc	45	388241.4	0.8				ug/L	375691	Standard
|	Ti	47	796.0	11.5	0.5597	0.066	11.9	ug/L	70	Standard
|	V	51	3480.3	0.9	0.0523	0.005	8.7	ug/L	3172	Standard
|	Cr	52	10849.6	2.1	0.2066	0.034	16.4	ug/L	9852	Standard
|	Cr	53	821.7	6.9	0.2271	0.040	17.7	ug/L	518	Standard
|	Mn	55	2550349.1	0.6	160.2606	0.479	0.3	ug/L	1193	Standard
|	Co	59	1916.8	1.8	0.1740	0.003	1.8	ug/L	98	Standard
|	Ni	60	8356.0	3.0	3.1090	0.090	2.9	ug/L	67	Standard
|	Cu	65	1681.1	3.9	0.6408	0.022	3.4	ug/L	90	Standard
|	Zn	66	4459.7	0.7	3.9031	0.029	0.8	ug/L	148	Standard
[>	Ge	72	287498.7	0.7				ug/L	304674	Standard
|	As	75	147.7	20.2	0.3261	0.027	8.2	ug/L	-174	Standard
|	Se	82	150.2	2.0	1.1840	0.029	2.4	ug/L	26	Standard
[	Se-1	77	153.3	10.9	0.4792	0.203	42.4	ug/L	133	Standard
[>	Ga	71	595.0	16.8				mg/L	630	Standard
|	Rb	85	35803.9	1.2				ug/L	12	Standard
|	Y	89	280428.5	1.8				ug/L	271719	Standard
[>	Rh	103	1065.0	5.4				ug/L	392	Standard
|	Mo	98	322.9	3.7	0.0741	0.003	3.8	ug/L	7	Standard
|	Ag	107	85.0	11.8	-0.0001	0.001	909.9	ug/L	55	Standard
|	Cd	111	109.9	8.5	0.0071	0.002	28.8	mg/L	67	Standard
|	Cd	114	336.2	4.8	0.0106	0.001	12.0	ug/L	219	Standard
[>	In	115	854345.5	0.4				ug/L	887392	Standard
|	Sn	118	1371.1	1.6	0.0468	0.001	2.7	ug/L	653	Standard
|	Sb	123	391.3	3.3	0.0400	0.001	2.9	ug/L	48	Standard
|	Ba	135	16050.5	0.5	3.1359	0.008	0.2	ug/L	28	Standard
|	Ce	140	361.7	9.2				ug/L	34	Standard
[>	Tb	159	1196737.8	0.9				ug/L	1226141	Standard
|	Ho	165	21.7	27.8				ug/L	14	Standard
|	Tl	203	481.0	3.4	0.0293	0.001	3.7	ug/L	9	Standard
|	Tl	205	1125.0	3.7	0.0284	0.001	4.5	ug/L	20	Standard
|	Pb	206	526.3	5.2	0.0161	0.002	15.1	ug/L	419	Standard
|	Pb	207	452.7	1.5	0.0172	0.000	2.6	ug/L	338	Standard
|	Pb	208	2087.4	2.8	0.0150	0.001	9.2	ug/L	1616	Standard
	U	238	732.4	4.1	0.0484	0.002	4.3	ug/L	2	Standard
[>	Bi	209	489267.2	0.5				ug/L	641071	Standard

Sample ID: L1207046006

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Na	23	292029.3	1.1	15.0047	0.098	0.7	mg/L	412	Standard
Mg	24	27758265.3	2.9	36.5633	1.052	2.9	mg/L	177	Standard
K	39	1928.5	5.9	1.3270	0.098	7.4	mg/L	150	Standard
Ca	43	258.3	26.0	180.6021	46.026	25.5	mg/L	7	Standard
Fe	54	1072.4	5.2	0.0769	0.010	13.6	mg/L	634	Standard
Fe	57	39700.3	0.9	0.4099	0.007	1.7	mg/L	2670	Standard
Sc-1	45	388241.4	0.8				mg/L	375691	Standard
Cl	35	22.7	15.5				ug/L	4	Standard
Kr	83	57.9	9.3				ug/L	39	Standard
Br	81	6566.4	1.5				ug/L	639	Standard
P	31	406.7	4.6				ug/L	419	Standard
S	34	237316.6	0.2				ug/L	7420	Standard
Sr	88	4639.0	3.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.363	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046006

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	Cd	111	
	Cd	114	
>	In	115	96.276
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	76.320
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207046006

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Method 6020 - Summary Report

Sample ID: L1207046001

Sample Date/Time: Friday, July 27, 2012 09:53:43

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19547.6	2.3	-3162.5161	174.246	5.5	ug/L	11199	Standard
|	Be	9	10.0	86.6	-0.0139	0.005	35.0	ug/L	10	Standard
|	Al	27	6426.4	4.5	-0.0414	0.019	46.8	ug/L	7920	Standard
[>	Sc	45	321260.2	0.5				ug/L	375691	Standard
|	Ti	47	73.0	14.5	0.0040	0.009	214.9	ug/L	70	Standard
|	V	51	2891.7	3.6	0.0160	0.010	61.7	ug/L	3172	Standard
|	Cr	52	8595.4	2.8	0.0140	0.027	192.7	ug/L	9852	Standard
|	Cr	53	318.3	4.8	-0.0969	0.011	11.5	ug/L	518	Standard
|	Mn	55	54096.8	3.5	3.5499	0.122	3.4	ug/L	1193	Standard
|	Co	59	151.3	19.8	0.0035	0.003	89.3	ug/L	98	Standard
|	Ni	60	386.3	3.1	0.1283	0.004	3.2	ug/L	67	Standard
|	Cu	65	141.7	13.4	0.0183	0.008	44.0	ug/L	90	Standard
|	Zn	66	1412.7	4.2	1.2380	0.051	4.1	ug/L	148	Standard
[>	Ge	72	269282.9	0.4				ug/L	304674	Standard
|	As	75	-155.3	34.9	0.0461	0.051	110.5	ug/L	-174	Standard
|	Se	82	24.2	3.7	0.0739	0.009	12.7	ug/L	26	Standard
[	Se-1	77	116.0	5.4	0.1097	0.086	78.6	ug/L	133	Standard
[>	Ga	71	501.7	5.1				mg/L	630	Standard
|	Rb	85	791.7	5.1				ug/L	12	Standard
|	Y	89	232006.3	1.1				ug/L	271719	Standard
[>	Rh	103	336.7	13.7				ug/L	392	Standard
|	Mo	98	47.9	40.8	0.0072	0.005	73.5	ug/L	7	Standard
|	Ag	107	50.7	20.3	-0.0039	0.001	34.6	ug/L	55	Standard
|	Cd	111	28.9	6.9	-0.0107	0.001	5.1	mg/L	67	Standard
|	Cd	114	90.0	20.7	-0.0086	0.002	18.7	ug/L	219	Standard
[>	In	115	788953.0	0.9				ug/L	887392	Standard
|	Sn	118	510.3	2.2	-0.0087	0.001	13.1	ug/L	653	Standard
|	Sb	123	162.7	48.4	0.0202	0.008	38.4	ug/L	48	Standard
|	Ba	135	445.3	16.8	0.0854	0.015	18.1	ug/L	28	Standard
|	Ce	140	59.3	20.3				ug/L	34	Standard
[>	Tb	159	1084717.6	0.6				ug/L	1226141	Standard
|	Ho	165	12.3	30.7				ug/L	14	Standard
|	Tl	203	92.3	81.9	0.0040	0.004	98.9	ug/L	9	Standard
|	Tl	205	225.7	79.7	0.0021	0.004	197.0	ug/L	20	Standard
|	Pb	206	422.3	8.6	0.0019	0.002	117.3	ug/L	419	Standard
|	Pb	207	346.3	8.8	0.0013	0.003	201.9	ug/L	338	Standard
|	Pb	208	1601.7	11.7	-0.0008	0.003	400.2	ug/L	1616	Standard
	U	238	37.7	78.9	0.0022	0.002	74.5	ug/L	2	Standard
[>	Bi	209	584521.3	2.5				ug/L	641071	Standard

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Na	23	79385.8	0.8	4.9035	0.054	1.1	mg/L	412	Standard
Mg	24	597868.1	4.3	0.9516	0.038	4.0	mg/L	177	Standard
K	39	225.0	12.4	0.0755	0.026	34.7	mg/L	150	Standard
Ca	43	8.3	34.6	4.6695	2.501	53.6	mg/L	7	Standard
Fe	54	252.6	10.4	-0.0717	0.006	8.2	mg/L	634	Standard
Fe	57	4489.0	5.3	0.0306	0.003	9.6	mg/L	2670	Standard
Sc-1	45	321260.2	0.5				mg/L	375691	Standard
Cl	35	3.7	41.7				ug/L	4	Standard
Kr	83	39.7	2.2				ug/L	39	Standard
Br	81	623.3	7.6				ug/L	639	Standard
P	31	120.0	5.5				ug/L	419	Standard
S	34	13209.1	2.7				ug/L	7420	Standard
Sr	88	100.0	21.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.384	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046001

Report Date/Time: Friday, July 27, 2012 09:56:15

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	Cd	111	
	Cd	114	
>	In	115	88.907
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.179
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207046001

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Method 6020 - Summary Report

Sample ID: L1207046002

Sample Date/Time: Friday, July 27, 2012 09:56:53

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19295.6	2.9	-3170.0313	204.283	6.4	ug/L	11199	Standard
|	Be	9	11.7	99.0	-0.0129	0.007	51.2	ug/L	10	Standard
|	Al	27	6801.5	1.9	-0.0079	0.011	143.7	ug/L	7920	Standard
[>	Sc	45	316738.1	0.4				ug/L	375691	Standard
|	Ti	47	66.7	7.4	-0.0005	0.004	769.5	ug/L	70	Standard
|	V	51	3050.0	3.5	0.0354	0.008	21.3	ug/L	3172	Standard
|	Cr	52	8965.3	1.7	0.0737	0.014	18.6	ug/L	9852	Standard
|	Cr	53	327.5	4.0	-0.0873	0.011	12.8	ug/L	518	Standard
|	Mn	55	49054.6	0.7	3.2543	0.051	1.6	ug/L	1193	Standard
|	Co	59	129.0	7.8	0.0014	0.001	77.0	ug/L	98	Standard
|	Ni	60	308.3	3.5	0.0987	0.006	6.0	ug/L	67	Standard
|	Cu	65	129.3	8.3	0.0137	0.005	36.3	ug/L	90	Standard
|	Zn	66	1338.1	3.8	1.1829	0.049	4.2	ug/L	148	Standard
[>	Ge	72	265856.7	1.3				ug/L	304674	Standard
|	As	75	-174.4	5.4	0.0256	0.010	40.3	ug/L	-174	Standard
|	Se	82	21.9	5.6	0.0544	0.010	18.2	ug/L	26	Standard
[	Se-1	77	126.7	2.0	0.2749	0.055	19.9	ug/L	133	Standard
[>	Ga	71	538.3	6.8				mg/L	630	Standard
|	Rb	85	716.7	3.8				ug/L	12	Standard
|	Y	89	231944.0	2.1				ug/L	271719	Standard
[>	Rh	103	330.0	5.5				ug/L	392	Standard
|	Mo	98	33.5	30.7	0.0034	0.003	77.4	ug/L	7	Standard
|	Ag	107	50.7	10.9	-0.0038	0.001	17.6	ug/L	55	Standard
|	Cd	111	26.3	15.5	-0.0113	0.001	9.7	mg/L	67	Standard
|	Cd	114	81.8	10.8	-0.0093	0.001	9.3	ug/L	219	Standard
[>	In	115	779222.3	1.3				ug/L	887392	Standard
|	Sn	118	455.7	6.2	-0.0123	0.002	15.0	ug/L	653	Standard
|	Sb	123	71.8	31.6	0.0112	0.002	19.5	ug/L	48	Standard
|	Ba	135	371.0	1.5	0.0706	0.001	1.4	ug/L	28	Standard
|	Ce	140	77.7	9.7				ug/L	34	Standard
[>	Tb	159	1076215.4	0.4				ug/L	1226141	Standard
|	Ho	165	16.7	12.5				ug/L	14	Standard
|	Tl	203	54.7	8.2	0.0020	0.000	9.5	ug/L	9	Standard
|	Tl	205	123.3	8.1	-0.0002	0.000	75.6	ug/L	20	Standard
|	Pb	206	399.3	3.6	0.0004	0.001	295.6	ug/L	419	Standard
|	Pb	207	333.0	6.5	0.0003	0.002	725.8	ug/L	338	Standard
|	Pb	208	1527.0	3.6	-0.0020	0.001	73.2	ug/L	1616	Standard
	U	238	16.3	12.7	0.0010	0.000	12.8	ug/L	2	Standard
[>	Bi	209	583307.3	2.4				ug/L	641071	Standard

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Na	23	72493.1	2.7	4.5386	0.116	2.6	mg/L	412	Standard
Mg	24	546840.2	2.9	0.8829	0.025	2.8	mg/L	177	Standard
K	39	146.7	7.1	0.0058	0.010	168.8	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	247.7	12.3	-0.0720	0.007	10.1	mg/L	634	Standard
Fe	57	4407.3	3.9	0.0304	0.002	7.2	mg/L	2670	Standard
Sc-1	45	316738.1	0.4				mg/L	375691	Standard
Cl	35	5.0	20.0				ug/L	4	Standard
Kr	83	40.0	10.1				ug/L	39	Standard
Br	81	627.5	8.6				ug/L	639	Standard
P	31	133.3	18.4				ug/L	419	Standard
S	34	13126.5	0.6				ug/L	7420	Standard
Sr	88	105.0	20.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.259	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046002

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	Cd	111		
	Cd	114		
>	In	115	87.810	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.989	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207046002

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 10:00:06

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

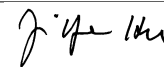
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11422.6	1.9	5.7730	99.062	1715.9	ug/L	11199	Standard
|	Be	9	107770.8	4.7	51.1833	2.090	4.1	ug/L	10	Standard
|	Al	27	775546.6	1.6	45.9789	0.798	1.7	ug/L	7920	Standard
[>	Sc	45	379315.6	2.0				ug/L	375691	Standard
[	Ti	47	133898.1	1.5	97.6029	2.010	2.1	ug/L	70	Standard
|	V	51	558073.8	2.0	48.2653	1.060	2.2	ug/L	3172	Standard
|	Cr	52	462120.6	1.0	49.0344	0.770	1.6	ug/L	9852	Standard
|	Cr	53	77502.7	1.3	48.7645	1.034	2.1	ug/L	518	Standard
|	Mn	55	834803.5	1.7	49.3585	1.056	2.1	ug/L	1193	Standard
|	Co	59	527512.9	1.8	48.2637	1.041	2.2	ug/L	98	Standard
|	Ni	60	135272.0	2.1	47.7917	1.353	2.8	ug/L	67	Standard
|	Cu	65	124664.1	1.0	47.7457	0.778	1.6	ug/L	90	Standard
|	Zn	66	56963.5	0.4	48.3236	0.280	0.6	ug/L	148	Standard
[>	Ge	72	305227.2	0.8				ug/L	304674	Standard
|	As	75	57363.5	0.9	48.4616	0.706	1.5	ug/L	-174	Standard
|	Se	82	5897.3	0.5	49.4455	0.576	1.2	ug/L	26	Standard
[	Se-1	77	4290.3	2.0	49.2912	1.380	2.8	ug/L	133	Standard
[>	Ga	71	696.7	4.1				mg/L	630	Standard
[	Rb	85	910.0	7.1				ug/L	12	Standard
[	Y	89	270885.5	1.7				ug/L	271719	Standard
[>	Rh	103	435.0	15.8				ug/L	392	Standard
[	Mo	98	410161.5	1.5	96.4683	1.227	1.3	ug/L	7	Standard
|	Ag	107	411855.3	0.4	49.0251	0.347	0.7	ug/L	55	Standard
|	Cd	111	232101.2	0.6	50.0483	0.370	0.7	mg/L	67	Standard
|	Cd	114	636746.4	0.7	48.8185	0.506	1.0	ug/L	219	Standard
[>	In	115	896944.6	0.6				ug/L	887392	Standard
|	Sn	118	750286.5	0.6	48.4843	0.461	1.0	ug/L	653	Standard
|	Sb	123	551710.1	0.4	48.3371	0.334	0.7	ug/L	48	Standard
[	Ba	135	249753.7	0.9	46.6051	0.578	1.2	ug/L	28	Standard
[	Ce	140	991.4	3.0				ug/L	34	Standard
[>	Tb	159	1198287.8	1.3				ug/L	1226141	Standard
[	Ho	165	19.3	10.8				ug/L	14	Standard
|	Tl	203	958860.9	0.9	47.3686	0.150	0.3	ug/L	9	Standard
|	Tl	205	2207150.4	0.6	48.6995	0.035	0.1	ug/L	20	Standard
|	Pb	206	742450.4	0.6	47.7520	0.399	0.8	ug/L	419	Standard
|	Pb	207	632422.2	1.6	48.4397	0.538	1.1	ug/L	338	Standard
|	Pb	208	2926749.8	0.8	48.6100	0.353	0.7	ug/L	1616	Standard
	U	238	955206.3	0.7	49.5177	0.135	0.3	ug/L	2	Standard
[>	Bi	209	621972.2	0.6				ug/L	641071	Standard

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Na	23	119953.0	0.7	6.2882	0.169	2.7	mg/L	412	Standard
Mg	24	3547842.1	1.7	4.7834	0.018	0.4	mg/L	177	Standard
K	39	5904.5	3.1	4.4349	0.141	3.2	mg/L	150	Standard
Ca	43	8.3	91.7	3.5715	5.498	153.9	mg/L	7	Standard
Fe	54	24012.4	2.2	4.6325	0.187	4.0	mg/L	634	Standard
Fe	57	440097.9	3.3	4.9577	0.266	5.4	mg/L	2670	Standard
Sc-1	45	379315.6	2.0				mg/L	375691	Standard
Cl	35	6.0	28.9				ug/L	4	Standard
Kr	83	44.3	9.1				ug/L	39	Standard
Br	81	834.2	8.9				ug/L	639	Standard
P	31	427.5	1.2				ug/L	419	Standard
S	34	6789.9	5.7				ug/L	7420	Standard
Sr	88	50.0	10.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	91.958		
Sc	45			
Ti	47	97.603		
V	51	96.531		
Cr	52	98.069		
Cr	53			
Mn	55	98.717		
Co	59	96.527		
Ni	60	95.583		
Cu	65	95.491		
Zn	66	96.647		
Ge	72		100.182	
As	75	96.923		
Se	82	98.891		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.468		
Ag	107	98.050		

Sample ID: QC Std 6

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Cd	111	100.097	
Cd	114		
> In	115		101.076
Sn	118	96.969	
Sb	123	96.674	
Ba	135	93.210	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	94.737	
Tl	205		
Pb	206	95.504	
Pb	207	96.879	
Pb	208	97.220	
U	238	99.035	
> Bi	209		97.021
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 10:02:36

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 10:03:16

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11224.2	3.2	46.0798	81.140	176.1	ug/L	11199	Standard
|	Be	9	30.0	130.2	-0.0052	0.019	355.2	ug/L	10	Standard
|	Al	27	7463.5	5.3	-0.0467	0.020	43.4	ug/L	7920	Standard
[>	Sc	45	377455.6	0.8				ug/L	375691	Standard
|	Ti	47	89.3	47.7	0.0072	0.030	420.9	ug/L	70	Standard
|	V	51	2797.3	3.4	-0.0318	0.008	23.8	ug/L	3172	Standard
|	Cr	52	9043.4	1.3	-0.0859	0.011	12.8	ug/L	9852	Standard
|	Cr	53	421.7	10.9	-0.0651	0.027	41.3	ug/L	518	Standard
|	Mn	55	1238.1	2.1	-0.0097	0.001	11.5	ug/L	1193	Standard
|	Co	59	145.0	23.3	0.0008	0.003	393.5	ug/L	98	Standard
|	Ni	60	94.0	41.2	0.0059	0.013	225.4	ug/L	67	Standard
|	Cu	65	141.0	26.4	0.0095	0.014	146.4	ug/L	90	Standard
|	Zn	66	168.3	16.3	0.0160	0.023	142.5	ug/L	148	Standard
[>	Ge	72	312928.5	0.6				ug/L	304674	Standard
|	As	75	-230.1	15.8	0.0054	0.029	545.1	ug/L	-174	Standard
|	Se	82	25.1	17.7	0.0491	0.038	76.8	ug/L	26	Standard
[	Se-1	77	142.3	3.9	0.1962	0.054	27.4	ug/L	133	Standard
[>	Ga	71	673.3	7.9				mg/L	630	Standard
|	Rb	85	13.3	21.7				ug/L	12	Standard
|	Y	89	276137.2	1.3				ug/L	271719	Standard
[>	Rh	103	401.7	10.4				ug/L	392	Standard
|	Mo	98	347.6	10.2	0.0748	0.007	10.0	ug/L	7	Standard
|	Ag	107	149.3	22.2	0.0067	0.004	57.6	ug/L	55	Standard
|	Cd	111	93.5	17.6	0.0020	0.003	166.5	mg/L	67	Standard
|	Cd	114	294.7	16.7	0.0058	0.004	66.8	ug/L	219	Standard
[>	In	115	911991.2	1.2				ug/L	887392	Standard
|	Sn	118	982.0	10.3	0.0162	0.006	37.6	ug/L	653	Standard
|	Sb	123	2529.7	4.6	0.2219	0.008	3.7	ug/L	48	Standard
|	Ba	135	52.7	28.6	0.0006	0.003	450.5	ug/L	28	Standard
|	Ce	140	29.3	16.1				ug/L	34	Standard
[>	Tb	159	1205763.3	0.1				ug/L	1226141	Standard
|	Ho	165	10.3	31.1				ug/L	14	Standard
|	Tl	203	97.7	39.3	0.0038	0.002	48.4	ug/L	9	Standard
|	Tl	205	235.3	58.1	0.0019	0.003	154.2	ug/L	20	Standard
|	Pb	206	470.0	4.2	0.0024	0.001	52.6	ug/L	419	Standard
|	Pb	207	421.3	11.4	0.0045	0.004	80.7	ug/L	338	Standard
|	Pb	208	1879.7	7.2	0.0013	0.002	170.8	ug/L	1616	Standard
	U	238	220.7	125.9	0.0112	0.014	124.9	ug/L	2	Standard
[>	Bi	209	639036.8	0.1				ug/L	641071	Standard

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Na	23	545.0	23.4	-0.0099	0.007	68.7	mg/L	412	Standard
Mg	24	1338.5	124.3	0.0018	0.002	123.1	mg/L	177	Standard
K	39	146.7	17.5	-0.0161	0.019	117.9	mg/L	150	Standard
Ca	43	5.0	100.0	1.1760	3.680	313.0	mg/L	7	Standard
Fe	54	634.2	9.7	-0.0045	0.011	253.2	mg/L	634	Standard
Fe	57	3263.7	5.4	0.0078	0.002	27.5	mg/L	2670	Standard
Sc-1	45	377455.6	0.8				mg/L	375691	Standard
Cl	35	1.7	91.7				ug/L	4	Standard
Kr	83	43.6	8.5				ug/L	39	Standard
Br	81	840.9	6.3				ug/L	639	Standard
P	31	422.5	13.4				ug/L	419	Standard
S	34	6457.2	1.1				ug/L	7420	Standard
Sr	88	46.7	16.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.709	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	102.772
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.683
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 10:05:46

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Method 6020 - Summary Report

Sample ID: L1207045902

Sample Date/Time: Friday, July 27, 2012 10:06:28

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10972.3	0.7	-378.6281	66.078	17.5	ug/L	11199	Standard
|	Be	9	31.7	91.2	-0.0019	0.016	868.8	ug/L	10	Standard
|	Al	27	2780902.8	1.2	194.5204	5.292	2.7	ug/L	7920	Standard
[>	Sc	45	324227.2	2.6				ug/L	375691	Standard
|	Ti	47	113.0	49.7	0.0348	0.046	132.0	ug/L	70	Standard
|	V	51	6773.9	3.5	0.3811	0.026	6.9	ug/L	3172	Standard
|	Cr	52	10616.7	3.9	0.2279	0.054	23.6	ug/L	9852	Standard
|	Cr	53	756.7	4.7	0.2035	0.029	14.2	ug/L	518	Standard
|	Mn	55	34326.7	13.9	2.1626	0.320	14.8	ug/L	1193	Standard
|	Co	59	216.3	20.1	0.0097	0.004	46.5	ug/L	98	Standard
|	Ni	60	1593.8	14.5	0.5953	0.093	15.6	ug/L	67	Standard
|	Cu	65	1126.7	15.0	0.4335	0.074	17.0	ug/L	90	Standard
|	Zn	66	11139.1	13.4	10.3333	1.441	13.9	ug/L	148	Standard
[>	Ge	72	276607.1	0.8				ug/L	304674	Standard
|	As	75	-127.5	5.0	0.0758	0.006	7.9	ug/L	-174	Standard
|	Se	82	32.4	8.0	0.1441	0.022	15.1	ug/L	26	Standard
[	Se-1	77	130.3	16.9	0.2551	0.284	111.2	ug/L	133	Standard
[>	Ga	71	1121.7	4.2				mg/L	630	Standard
|	Rb	85	3247.0	3.0				ug/L	12	Standard
|	Y	89	239960.5	1.4				ug/L	271719	Standard
[>	Rh	103	391.7	5.8				ug/L	392	Standard
|	Mo	98	1316.1	4.0	0.3373	0.015	4.3	ug/L	7	Standard
|	Ag	107	94.0	47.3	0.0016	0.006	361.1	ug/L	55	Standard
|	Cd	111	70.2	58.3	-0.0010	0.010	961.3	mg/L	67	Standard
|	Cd	114	192.0	37.4	-0.0002	0.006	3442.4	ug/L	219	Standard
[>	In	115	809817.3	0.3				ug/L	887392	Standard
|	Sn	118	808.0	10.0	0.0116	0.006	50.9	ug/L	653	Standard
|	Sb	123	556.8	23.0	0.0581	0.013	21.6	ug/L	48	Standard
|	Ba	135	29717.8	1.0	6.1341	0.075	1.2	ug/L	28	Standard
|	Ce	140	236.7	16.9				ug/L	34	Standard
[>	Tb	159	1106989.0	0.9				ug/L	1226141	Standard
|	Ho	165	13.3	4.3				ug/L	14	Standard
|	Tl	203	110.3	59.2	0.0048	0.003	69.4	ug/L	9	Standard
|	Tl	205	287.7	55.2	0.0035	0.004	104.8	ug/L	20	Standard
|	Pb	206	1466.1	13.9	0.0713	0.013	18.9	ug/L	419	Standard
|	Pb	207	1226.1	13.3	0.0710	0.013	18.4	ug/L	338	Standard
|	Pb	208	5716.4	11.9	0.0699	0.012	16.7	ug/L	1616	Standard
	U	238	68.0	74.8	0.0038	0.003	72.6	ug/L	2	Standard
[>	Bi	209	596931.9	0.5				ug/L	641071	Standard

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Na	23	14400.2	2.7	0.8499	0.033	3.8	mg/L	412	Standard
Mg	24	2505.2	47.4	0.0040	0.002	48.1	mg/L	177	Standard
K	39	345.0	12.6	0.1827	0.046	25.0	mg/L	150	Standard
Ca	43	16.7	45.8	11.5898	6.099	52.6	mg/L	7	Standard
Fe	54	240.3	14.5	-0.0751	0.008	10.3	mg/L	634	Standard
Fe	57	3633.8	6.5	0.0188	0.003	16.9	mg/L	2670	Standard
Sc-1	45	324227.2	2.6				mg/L	375691	Standard
Cl	35	3.3	96.4				ug/L	4	Standard
Kr	83	38.3	10.5				ug/L	39	Standard
Br	81	594.2	4.7				ug/L	639	Standard
P	31	165.0	14.9				ug/L	419	Standard
S	34	6706.5	6.5				ug/L	7420	Standard
Sr	88	103.3	26.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.788	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207045902

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	Cd	111	
	Cd	114	
>	In	115	91.258
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.115
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207045902

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Method 6020 - Summary Report

Sample ID: L1207045902PS WG403969-01

Sample Date/Time: Friday, July 27, 2012 10:09:37

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

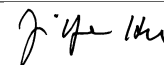
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11244.2	6.6	-383.1147	185.916	48.5	ug/L	11199	Standard
|	Be	9	104547.9	1.9	56.8043	0.570	1.0	ug/L	10	Standard
|	Al	27	3856992.9	4.4	263.8264	9.156	3.5	ug/L	7920	Standard
[>	Sc	45	331572.5	1.3				ug/L	375691	Standard
|	Ti	47	94.3	15.2	0.0188	0.011	58.8	ug/L	70	Standard
|	V	51	502209.1	2.4	47.4433	0.874	1.8	ug/L	3172	Standard
|	Cr	52	412525.9	2.6	47.7904	1.008	2.1	ug/L	9852	Standard
|	Cr	53	68252.6	1.1	46.9001	0.229	0.5	ug/L	518	Standard
|	Mn	55	743661.7	2.9	48.0291	1.149	2.4	ug/L	1193	Standard
|	Co	59	485189.7	1.4	48.4947	0.446	0.9	ug/L	98	Standard
|	Ni	60	123702.3	3.2	47.7386	1.300	2.7	ug/L	67	Standard
|	Cu	65	116789.2	4.0	48.8599	1.674	3.4	ug/L	90	Standard
|	Zn	66	64619.5	2.0	59.9163	0.894	1.5	ug/L	148	Standard
[>	Ge	72	279372.8	0.6				ug/L	304674	Standard
|	As	75	59450.5	2.5	54.8395	1.081	2.0	ug/L	-174	Standard
|	Se	82	6777.9	2.5	62.1210	1.276	2.1	ug/L	26	Standard
[	Se-1	77	4813.8	3.0	60.7406	1.747	2.9	ug/L	133	Standard
[>	Ga	71	1351.7	6.3				mg/L	630	Standard
|	Rb	85	3515.4	3.4				ug/L	12	Standard
|	Y	89	237329.3	0.4				ug/L	271719	Standard
[>	Rh	103	371.7	9.9				ug/L	392	Standard
|	Mo	98	1460.0	1.3	0.3730	0.003	0.9	ug/L	7	Standard
|	Ag	107	392246.3	3.5	51.4704	1.474	2.9	ug/L	55	Standard
|	Cd	111	230669.6	2.0	54.8352	0.693	1.3	mg/L	67	Standard
|	Cd	114	638770.1	2.4	53.9912	1.086	2.0	ug/L	219	Standard
[>	In	115	813560.7	0.8				ug/L	887392	Standard
|	Sn	118	920.4	2.7	0.0194	0.001	6.6	ug/L	653	Standard
|	Sb	123	533560.0	2.5	51.5318	0.867	1.7	ug/L	48	Standard
|	Ba	135	266860.2	3.3	54.8937	1.419	2.6	ug/L	28	Standard
|	Ce	140	117.7	15.2				ug/L	34	Standard
[>	Tb	159	1118143.3	0.4				ug/L	1226141	Standard
|	Ho	165	14.0	32.7				ug/L	14	Standard
|	Tl	203	912753.6	1.9	46.6617	0.675	1.4	ug/L	9	Standard
|	Tl	205	2131519.7	2.7	48.6676	1.086	2.2	ug/L	20	Standard
|	Pb	206	701202.2	2.7	46.6668	1.052	2.3	ug/L	419	Standard
|	Pb	207	598248.4	2.9	47.4173	1.145	2.4	ug/L	338	Standard
|	Pb	208	2763843.1	2.5	47.5014	0.978	2.1	ug/L	1616	Standard
	U	238	869043.9	3.0	46.6186	1.209	2.6	ug/L	2	Standard
[>	Bi	209	601013.9	0.5				ug/L	641071	Standard

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Na	23	13240.8	7.1	0.7601	0.059	7.7	mg/L	412	Standard
Mg	24	816.7	5.6	0.0013	0.000	6.7	mg/L	177	Standard
K	39	340.0	14.0	0.1711	0.046	26.9	mg/L	150	Standard
Ca	43	20.0	66.1	14.2199	11.101	78.1	mg/L	7	Standard
Fe	54	212.8	12.6	-0.0826	0.006	6.9	mg/L	634	Standard
Fe	57	3920.5	7.2	0.0214	0.003	14.0	mg/L	2670	Standard
Sc-1	45	331572.5	1.3				mg/L	375691	Standard
Cl	35	3.0	57.7				ug/L	4	Standard
Kr	83	41.3	10.7				ug/L	39	Standard
Br	81	605.0	7.9				ug/L	639	Standard
P	31	140.0	4.7				ug/L	419	Standard
S	34	7252.6	2.2				ug/L	7420	Standard
Sr	88	120.0	11.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.696	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207045902PS WG403969-01

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	Cd	111	
	Cd	114	
>	In	115	91.680
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.751
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207045902PS WG403969-01

Report Date/Time: Friday, July 27, 2012 10:12:08

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Method 6020 - Summary Report

Sample ID: L1207045902SDL WG403969-02

Sample Date/Time: Friday, July 27, 2012 10:12:47

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9601.4	1.3	-40.8756	124.602	304.8	ug/L	11199	Standard
|	Be	9	21.7	58.1	-0.0072	0.007	97.7	ug/L	10	Standard
|	Al	27	497510.1	1.1	35.5098	1.265	3.6	ug/L	7920	Standard
[>	Sc	45	314221.3	2.6				ug/L	375691	Standard
|	Ti	47	57.0	15.6	-0.0097	0.007	76.8	ug/L	70	Standard
|	V	51	3674.9	1.6	0.0892	0.004	4.0	ug/L	3172	Standard
|	Cr	52	8966.0	3.1	0.0475	0.027	57.5	ug/L	9852	Standard
|	Cr	53	422.5	7.8	-0.0253	0.025	99.2	ug/L	518	Standard
|	Mn	55	1756.1	4.1	0.0354	0.006	15.6	ug/L	1193	Standard
|	Co	59	147.0	14.3	0.0029	0.002	76.2	ug/L	98	Standard
|	Ni	60	312.7	6.5	0.0974	0.008	8.1	ug/L	67	Standard
|	Cu	65	291.0	13.0	0.0818	0.016	19.1	ug/L	90	Standard
|	Zn	66	2020.5	0.6	1.8031	0.021	1.2	ug/L	148	Standard
[>	Ge	72	272226.5	0.6				ug/L	304674	Standard
|	As	75	-184.8	7.6	0.0197	0.014	72.9	ug/L	-174	Standard
|	Se	82	23.2	12.4	0.0614	0.026	42.6	ug/L	26	Standard
[	Se-1	77	119.3	4.3	0.1367	0.058	42.7	ug/L	133	Standard
[>	Ga	71	641.7	10.6				mg/L	630	Standard
|	Rb	85	613.3	3.7				ug/L	12	Standard
|	Y	89	233201.0	1.0				ug/L	271719	Standard
[>	Rh	103	361.7	12.5				ug/L	392	Standard
|	Mo	98	311.5	5.2	0.0775	0.005	6.0	ug/L	7	Standard
|	Ag	107	115.3	5.9	0.0048	0.001	20.2	ug/L	55	Standard
|	Cd	111	46.3	18.5	-0.0065	0.002	32.5	mg/L	67	Standard
|	Cd	114	131.2	3.2	-0.0051	0.000	6.4	ug/L	219	Standard
[>	In	115	790652.4	0.4				ug/L	887392	Standard
|	Sn	118	464.3	0.9	-0.0122	0.000	3.2	ug/L	653	Standard
|	Sb	123	2551.7	6.3	0.2576	0.016	6.0	ug/L	48	Standard
|	Ba	135	5624.7	0.2	1.1818	0.006	0.5	ug/L	28	Standard
|	Ce	140	48.0	14.4				ug/L	34	Standard
[>	Tb	159	1075225.4	0.9				ug/L	1226141	Standard
|	Ho	165	14.0	24.7				ug/L	14	Standard
|	Tl	203	123.3	15.3	0.0056	0.001	18.0	ug/L	9	Standard
|	Tl	205	286.0	26.2	0.0035	0.002	50.2	ug/L	20	Standard
|	Pb	206	617.3	4.6	0.0149	0.002	13.5	ug/L	419	Standard
|	Pb	207	522.3	4.3	0.0153	0.002	12.7	ug/L	338	Standard
|	Pb	208	2459.4	3.3	0.0140	0.002	11.0	ug/L	1616	Standard
	U	238	257.3	73.9	0.0141	0.010	73.2	ug/L	2	Standard
[>	Bi	209	589802.5	0.3				ug/L	641071	Standard

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Na	23	2741.9	1.6	0.1358	0.002	1.6	mg/L	412	Standard
Mg	24	233.3	2.5	0.0004	0.000	2.9	mg/L	177	Standard
K	39	183.3	16.4	0.0416	0.032	77.5	mg/L	150	Standard
Ca	43	5.0	173.2	1.8633	7.531	404.2	mg/L	7	Standard
Fe	54	174.3	28.9	-0.0889	0.013	14.8	mg/L	634	Standard
Fe	57	2763.6	8.8	0.0084	0.002	28.6	mg/L	2670	Standard
Sc-1	45	314221.3	2.6				mg/L	375691	Standard
Cl	35	2.7	57.3				ug/L	4	Standard
Kr	83	37.9	11.1				ug/L	39	Standard
Br	81	583.3	12.1				ug/L	639	Standard
P	31	132.5	8.2				ug/L	419	Standard
S	34	6736.5	2.2				ug/L	7420	Standard
Sr	88	58.3	52.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.350	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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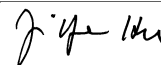
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	Cd	114		
>	In	115	89.098	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.003	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207045902SDL WG403969-02
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Method 6020 - Summary Report

Sample ID: L1207046003

Sample Date/Time: Friday, July 27, 2012 10:16:11

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17655.3	3.1	-2768.5711	39.714	1.4	ug/L	11199	Standard
|	Be	9	11.7	65.5	-0.0127	0.004	35.0	ug/L	10	Standard
|	Al	27	5257.6	3.3	-0.1097	0.019	17.3	ug/L	7920	Standard
[>	Sc	45	309581.2	3.2				ug/L	375691	Standard
[	Ti	47	59.3	15.3	-0.0079	0.008	103.9	ug/L	70	Standard
|	V	51	2820.1	4.4	0.0050	0.010	200.6	ug/L	3172	Standard
|	Cr	52	8532.1	2.3	-0.0083	0.010	125.8	ug/L	9852	Standard
|	Cr	53	311.7	3.0	-0.1047	0.010	9.8	ug/L	518	Standard
|	Mn	55	51398.1	3.1	3.3208	0.061	1.9	ug/L	1193	Standard
|	Co	59	153.3	13.1	0.0035	0.002	58.6	ug/L	98	Standard
|	Ni	60	620.3	8.5	0.2188	0.024	10.8	ug/L	67	Standard
|	Cu	65	142.0	13.4	0.0176	0.008	45.2	ug/L	90	Standard
|	Zn	66	1413.4	2.6	1.2203	0.041	3.3	ug/L	148	Standard
[>	Ge	72	273046.4	1.6				ug/L	304674	Standard
|	As	75	-214.2	14.2	-0.0074	0.030	396.7	ug/L	-174	Standard
|	Se	82	21.9	19.5	0.0488	0.038	78.7	ug/L	26	Standard
[	Se-1	77	119.7	4.9	0.1372	0.091	66.2	ug/L	133	Standard
[>	Ga	71	568.3	3.7				mg/L	630	Standard
[	Rb	85	715.0	6.7				ug/L	12	Standard
[	Y	89	233596.3	3.0				ug/L	271719	Standard
[>	Rh	103	381.7	6.5				ug/L	392	Standard
[	Mo	98	51.4	26.2	0.0081	0.003	42.6	ug/L	7	Standard
|	Ag	107	68.7	12.7	-0.0014	0.001	88.5	ug/L	55	Standard
|	Cd	111	28.5	8.0	-0.0108	0.000	4.3	mg/L	67	Standard
|	Cd	114	86.9	10.4	-0.0089	0.001	9.0	ug/L	219	Standard
[>	In	115	786244.6	1.5				ug/L	887392	Standard
|	Sn	118	449.7	8.8	-0.0131	0.003	20.5	ug/L	653	Standard
|	Sb	123	773.7	14.6	0.0812	0.010	12.8	ug/L	48	Standard
[	Ba	135	395.3	3.4	0.0752	0.004	5.4	ug/L	28	Standard
[	Ce	140	30.0	11.5				ug/L	34	Standard
[>	Tb	159	1073757.4	0.3				ug/L	1226141	Standard
[	Ho	165	8.3	25.0				ug/L	14	Standard
|	Tl	203	70.7	11.4	0.0028	0.000	14.3	ug/L	9	Standard
|	Tl	205	175.7	9.9	0.0010	0.000	43.1	ug/L	20	Standard
|	Pb	206	388.0	8.4	-0.0005	0.003	501.1	ug/L	419	Standard
|	Pb	207	337.0	2.8	0.0005	0.000	79.1	ug/L	338	Standard
|	Pb	208	1550.0	8.5	-0.0018	0.003	145.8	ug/L	1616	Standard
	U	238	53.7	46.5	0.0031	0.001	45.6	ug/L	2	Standard
[>	Bi	209	586457.4	1.7				ug/L	641071	Standard

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[Na	23	75370.4	2.1	4.8319	0.088	1.8	mg/L	412	Standard
	Mg	24	565253.4	2.0	0.9340	0.015	1.6	mg/L	177	Standard
|	K	39	165.0	5.2	0.0263	0.005	18.2	mg/L	150	Standard
|	Ca	43	8.3	34.6	4.9408	2.601	52.6	mg/L	7	Standard
|	Fe	54	195.4	3.3	-0.0833	0.002	2.5	mg/L	634	Standard
|	Fe	57	3527.1	7.0	0.0195	0.002	10.7	mg/L	2670	Standard
[>	Sc-1	45	309581.2	3.2				mg/L	375691	Standard
|	Cl	35	6.0	33.3				ug/L	4	Standard
|	Kr	83	41.1	8.3				ug/L	39	Standard
|	Br	81	616.7	12.2				ug/L	639	Standard
|	P	31	139.2	15.7				ug/L	419	Standard
|	S	34	13106.5	2.2				ug/L	7420	Standard
|	Sr	88	100.0	30.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72	89.619	
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

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	Cd	111		
	Cd	114		
>	In	115	88.602	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	91.481	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207046003

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Method 6020 - Summary Report

Sample ID: L1207046004

Sample Date/Time: Friday, July 27, 2012 10:19:21

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19754.5	1.2	-3196.5212	164.397	5.1	ug/L	11199	Standard
|	Be	9	15.0	0.0	-0.0112	0.000	1.1	ug/L	10	Standard
|	Al	27	7970.4	4.4	0.0652	0.032	49.3	ug/L	7920	Standard
[>	Sc	45	322966.3	1.5				ug/L	375691	Standard
|	Ti	47	63.0	5.5	-0.0049	0.003	61.1	ug/L	70	Standard
|	V	51	3015.2	0.4	0.0245	0.000	0.3	ug/L	3172	Standard
|	Cr	52	8762.5	1.3	0.0215	0.012	55.0	ug/L	9852	Standard
|	Cr	53	312.5	8.8	-0.1039	0.019	18.2	ug/L	518	Standard
|	Mn	55	61533.1	2.1	3.9993	0.097	2.4	ug/L	1193	Standard
|	Co	59	168.7	17.5	0.0051	0.003	59.6	ug/L	98	Standard
|	Ni	60	434.0	3.3	0.1453	0.005	3.4	ug/L	67	Standard
|	Cu	65	155.3	2.7	0.0235	0.002	8.8	ug/L	90	Standard
|	Zn	66	2360.5	6.5	2.1244	0.149	7.0	ug/L	148	Standard
[>	Ge	72	272583.8	0.4				ug/L	304674	Standard
|	As	75	-200.3	10.5	0.0054	0.019	349.8	ug/L	-174	Standard
|	Se	82	25.4	38.4	0.0822	0.093	113.0	ug/L	26	Standard
[	Se-1	77	125.3	1.7	0.2143	0.022	10.2	ug/L	133	Standard
[>	Ga	71	571.7	8.8				mg/L	630	Standard
|	Rb	85	890.0	7.6				ug/L	12	Standard
|	Y	89	231525.6	0.9				ug/L	271719	Standard
[>	Rh	103	368.3	11.5				ug/L	392	Standard
|	Mo	98	37.4	29.5	0.0044	0.003	67.3	ug/L	7	Standard
|	Ag	107	128.3	102.8	0.0066	0.018	270.2	ug/L	55	Standard
|	Cd	111	62.9	115.9	-0.0024	0.018	761.8	mg/L	67	Standard
|	Cd	114	192.5	93.5	0.0003	0.016	5091.6	ug/L	219	Standard
[>	In	115	788749.1	0.4				ug/L	887392	Standard
|	Sn	118	501.7	4.8	-0.0094	0.002	17.8	ug/L	653	Standard
|	Sb	123	448.0	15.7	0.0486	0.007	14.5	ug/L	48	Standard
|	Ba	135	481.7	3.3	0.0932	0.004	3.9	ug/L	28	Standard
|	Ce	140	83.3	24.6				ug/L	34	Standard
[>	Tb	159	1069319.2	0.7				ug/L	1226141	Standard
|	Ho	165	13.0	13.3				ug/L	14	Standard
|	Tl	203	136.0	57.5	0.0063	0.004	67.2	ug/L	9	Standard
|	Tl	205	312.3	68.7	0.0042	0.005	122.6	ug/L	20	Standard
|	Pb	206	448.7	9.2	0.0037	0.003	88.6	ug/L	419	Standard
|	Pb	207	375.7	6.7	0.0037	0.002	66.9	ug/L	338	Standard
|	Pb	208	1722.4	7.6	0.0014	0.003	204.3	ug/L	1616	Standard
	U	238	64.3	62.1	0.0037	0.002	62.0	ug/L	2	Standard
[>	Bi	209	584966.1	1.5				ug/L	641071	Standard

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Na	23	81599.2	1.0	5.0146	0.029	0.6	mg/L	412	Standard
Mg	24	651159.1	2.3	1.0312	0.028	2.7	mg/L	177	Standard
K	39	203.3	19.7	0.0546	0.036	65.5	mg/L	150	Standard
Ca	43	5.0	100.0	1.7773	4.223	237.6	mg/L	7	Standard
Fe	54	309.4	14.8	-0.0589	0.010	16.4	mg/L	634	Standard
Fe	57	4719.1	8.8	0.0334	0.005	15.1	mg/L	2670	Standard
Sc-1	45	322966.3	1.5				mg/L	375691	Standard
Cl	35	4.0	25.0				ug/L	4	Standard
Kr	83	38.7	14.3				ug/L	39	Standard
Br	81	644.2	4.5				ug/L	639	Standard
P	31	122.5	14.3				ug/L	419	Standard
S	34	14137.4	2.2				ug/L	7420	Standard
Sr	88	121.7	6.3				ug/L	35	Standard

QC Calculated Values

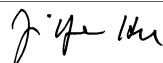
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.467	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	88.884
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.248
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207046005 WG403711-07

Sample Date/Time: Friday, July 27, 2012 10:22:30

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19859.7	2.2	-3254.0467	210.825	6.5	ug/L	11199	Standard
|	Be	9	10.0	50.0	-0.0139	0.003	20.3	ug/L	10	Standard
|	Al	27	6799.9	0.0	-0.0156	0.006	35.9	ug/L	7920	Standard
[>	Sc	45	321749.0	1.1				ug/L	375691	Standard
[	Ti	47	64.7	12.5	-0.0038	0.007	174.5	ug/L	70	Standard
|	V	51	2973.5	2.9	0.0191	0.008	40.6	ug/L	3172	Standard
|	Cr	52	8783.2	2.0	0.0191	0.022	114.3	ug/L	9852	Standard
|	Cr	53	329.2	4.3	-0.0931	0.010	10.2	ug/L	518	Standard
|	Mn	55	60129.2	3.9	3.8877	0.161	4.1	ug/L	1193	Standard
|	Co	59	155.7	3.7	0.0037	0.001	16.4	ug/L	98	Standard
|	Ni	60	389.3	8.2	0.1269	0.013	10.1	ug/L	67	Standard
|	Cu	65	135.7	2.8	0.0147	0.002	11.1	ug/L	90	Standard
|	Zn	66	1576.1	4.4	1.3703	0.066	4.8	ug/L	148	Standard
[>	Ge	72	273847.6	0.2				ug/L	304674	Standard
|	As	75	-174.4	13.5	0.0306	0.022	73.3	ug/L	-174	Standard
|	Se	82	24.9	8.8	0.0768	0.020	26.2	ug/L	26	Standard
[	Se-1	77	123.0	1.4	0.1759	0.023	13.1	ug/L	133	Standard
[>	Ga	71	511.7	18.1				mg/L	630	Standard
[	Rb	85	836.7	11.7				ug/L	12	Standard
[	Y	89	235331.8	0.4				ug/L	271719	Standard
[>	Rh	103	375.0	5.3				ug/L	392	Standard
[	Mo	98	30.7	40.7	0.0025	0.003	127.3	ug/L	7	Standard
|	Ag	107	47.7	7.9	-0.0043	0.001	11.5	ug/L	55	Standard
|	Cd	111	26.3	25.3	-0.0114	0.002	14.0	mg/L	67	Standard
|	Cd	114	76.4	23.9	-0.0099	0.002	15.9	ug/L	219	Standard
[>	In	115	792430.9	1.1				ug/L	887392	Standard
|	Sn	118	532.3	19.1	-0.0072	0.008	108.0	ug/L	653	Standard
|	Sb	123	254.3	17.8	0.0292	0.004	15.0	ug/L	48	Standard
[	Ba	135	475.7	5.8	0.0914	0.005	5.3	ug/L	28	Standard
[	Ce	140	102.7	6.8				ug/L	34	Standard
[>	Tb	159	1071157.5	1.5				ug/L	1226141	Standard
[	Ho	165	12.7	19.9				ug/L	14	Standard
|	Tl	203	59.3	24.3	0.0022	0.001	35.4	ug/L	9	Standard
|	Tl	205	147.7	22.1	0.0003	0.001	268.5	ug/L	20	Standard
|	Pb	206	376.3	6.2	-0.0015	0.001	88.3	ug/L	419	Standard
|	Pb	207	308.0	10.5	-0.0020	0.002	110.6	ug/L	338	Standard
|	Pb	208	1476.0	3.9	-0.0032	0.001	27.3	ug/L	1616	Standard
	U	238	29.0	12.4	0.0017	0.000	13.1	ug/L	2	Standard
[>	Bi	209	589509.7	1.8				ug/L	641071	Standard

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Na	23	81038.2	5.1	4.9994	0.271	5.4	mg/L	412	Standard
Mg	24	648189.4	5.7	1.0306	0.066	6.4	mg/L	177	Standard
K	39	203.3	7.1	0.0553	0.011	20.3	mg/L	150	Standard
Ca	43	3.3	86.6	0.3868	2.487	643.0	mg/L	7	Standard
Fe	54	316.4	8.7	-0.0569	0.006	10.5	mg/L	634	Standard
Fe	57	4817.4	8.3	0.0350	0.006	17.1	mg/L	2670	Standard
Sc-1	45	321749.0	1.1				mg/L	375691	Standard
Cl	35	3.7	41.7				ug/L	4	Standard
Kr	83	36.2	12.5				ug/L	39	Standard
Br	81	592.5	5.1				ug/L	639	Standard
P	31	125.0	17.3				ug/L	419	Standard
S	34	14327.6	1.7				ug/L	7420	Standard
Sr	88	108.3	41.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.882	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	89.299
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.957
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207046005 WG403711-07

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Method 6020 - Summary Report

Sample ID: L1207046005S WG403711-08

Sample Date/Time: Friday, July 27, 2012 10:25:40

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18980.2	1.8	-2907.3832	107.496	3.7	ug/L	11199	Standard
|	Be	9	1323.4	5.3	0.7136	0.026	3.7	ug/L	10	Standard
|	Al	27	15441.2	4.1	0.5829	0.019	3.3	ug/L	7920	Standard
[>	Sc	45	325267.1	3.5				ug/L	375691	Standard
[	Ti	47	68.3	16.1	-0.0003	0.009	2755.9	ug/L	70	Standard
|	V	51	9080.1	3.1	0.6184	0.025	4.0	ug/L	3172	Standard
|	Cr	52	13799.0	2.7	0.6388	0.040	6.3	ug/L	9852	Standard
|	Cr	53	1158.4	6.9	0.4990	0.056	11.2	ug/L	518	Standard
|	Mn	55	62754.1	3.3	4.0954	0.126	3.1	ug/L	1193	Standard
|	Co	59	5983.9	5.3	0.6032	0.031	5.1	ug/L	98	Standard
|	Ni	60	1785.1	4.5	0.6826	0.030	4.4	ug/L	67	Standard
|	Cu	65	1547.7	7.6	0.6235	0.049	7.9	ug/L	90	Standard
|	Zn	66	2178.8	5.4	1.9588	0.106	5.4	ug/L	148	Standard
[>	Ge	72	271569.1	0.3				ug/L	304674	Standard
|	As	75	565.3	2.5	0.7288	0.014	1.9	ug/L	-174	Standard
|	Se	82	109.4	5.9	0.8776	0.059	6.7	ug/L	26	Standard
[	Se-1	77	184.7	10.1	1.0087	0.242	24.0	ug/L	133	Standard
[>	Ga	71	603.3	2.1				mg/L	630	Standard
[	Rb	85	818.4	6.7				ug/L	12	Standard
[	Y	89	232020.3	2.4				ug/L	271719	Standard
[>	Rh	103	351.7	18.8				ug/L	392	Standard
[	Mo	98	29.0	14.6	0.0022	0.001	49.6	ug/L	7	Standard
|	Ag	107	4535.0	1.3	0.6087	0.010	1.7	ug/L	55	Standard
|	Cd	111	2891.5	2.9	0.6977	0.022	3.1	mg/L	67	Standard
|	Cd	114	7860.2	2.1	0.6750	0.013	2.0	ug/L	219	Standard
[>	In	115	781886.3	1.0				ug/L	887392	Standard
|	Sn	118	441.0	1.2	-0.0135	0.000	2.3	ug/L	653	Standard
|	Sb	123	6655.6	3.0	0.6729	0.020	3.0	ug/L	48	Standard
[	Ba	135	3332.0	3.4	0.7044	0.025	3.5	ug/L	28	Standard
[	Ce	140	80.0	18.5				ug/L	34	Standard
[>	Tb	159	1064762.2	0.8				ug/L	1226141	Standard
[	Ho	165	10.3	36.6				ug/L	14	Standard
[	Tl	203	11113.1	3.7	0.5801	0.019	3.3	ug/L	9	Standard
|	Tl	205	25919.2	3.6	0.6021	0.019	3.2	ug/L	20	Standard
|	Pb	206	9047.4	4.2	0.5891	0.024	4.0	ug/L	419	Standard
|	Pb	207	7672.3	3.7	0.5953	0.021	3.5	ug/L	338	Standard
|	Pb	208	35521.0	4.0	0.5956	0.023	3.8	ug/L	1616	Standard
	U	238	10201.1	3.5	0.5597	0.017	3.1	ug/L	2	Standard
[>	Bi	209	587713.0	0.5				ug/L	641071	Standard

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Na	23	77519.5	2.5	4.7291	0.074	1.6	mg/L	412	Standard
Mg	24	593408.3	3.6	0.9330	0.014	1.5	mg/L	177	Standard
K	39	205.0	12.2	0.0554	0.028	51.2	mg/L	150	Standard
Ca	43	6.7	114.6	3.0690	6.389	208.2	mg/L	7	Standard
Fe	54	286.6	2.9	-0.0645	0.001	1.1	mg/L	634	Standard
Fe	57	4519.0	4.5	0.0303	0.001	3.1	mg/L	2670	Standard
Sc-1	45	325267.1	3.5				mg/L	375691	Standard
Cl	35	5.0	40.0				ug/L	4	Standard
Kr	83	38.9	3.0				ug/L	39	Standard
Br	81	583.3	8.4				ug/L	639	Standard
P	31	136.7	10.6				ug/L	419	Standard
S	34	13994.0	4.0				ug/L	7420	Standard
Sr	88	108.3	26.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.134	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046005S WG403711-08

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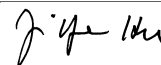
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	Cd	114	
>	In	115	88.111
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.677
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207046005DP WG403711-09

Sample Date/Time: Friday, July 27, 2012 10:28:50

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20080.0	1.2	-3353.9996	37.765	1.1	ug/L	11199	Standard
|	Be	9	8.3	34.6	-0.0149	0.002	11.3	ug/L	10	Standard
|	Al	27	8395.7	4.1	0.0998	0.018	18.5	ug/L	7920	Standard
[>	Sc	45	320231.0	1.8				ug/L	375691	Standard
|	Ti	47	62.0	14.0	-0.0061	0.007	115.8	ug/L	70	Standard
|	V	51	2985.6	1.6	0.0195	0.008	40.1	ug/L	3172	Standard
|	Cr	52	8939.3	1.5	0.0350	0.021	58.7	ug/L	9852	Standard
|	Cr	53	330.8	13.1	-0.0926	0.030	32.7	ug/L	518	Standard
|	Mn	55	57300.9	3.3	3.6908	0.146	4.0	ug/L	1193	Standard
|	Co	59	153.0	2.8	0.0034	0.001	17.8	ug/L	98	Standard
|	Ni	60	436.3	7.5	0.1449	0.013	8.7	ug/L	67	Standard
|	Cu	65	143.3	2.5	0.0178	0.001	7.7	ug/L	90	Standard
|	Zn	66	1480.1	5.3	1.2757	0.084	6.6	ug/L	148	Standard
[>	Ge	72	274633.5	1.1				ug/L	304674	Standard
|	As	75	-177.0	12.2	0.0287	0.019	65.4	ug/L	-174	Standard
|	Se	82	22.1	26.6	0.0502	0.057	114.1	ug/L	26	Standard
[	Se-1	77	122.3	2.5	0.1629	0.053	32.8	ug/L	133	Standard
[>	Ga	71	518.3	16.6				mg/L	630	Standard
|	Rb	85	785.0	8.4				ug/L	12	Standard
|	Y	89	237078.8	0.5				ug/L	271719	Standard
[>	Rh	103	361.7	9.2				ug/L	392	Standard
|	Mo	98	36.9	28.5	0.0043	0.003	65.8	ug/L	7	Standard
|	Ag	107	56.7	6.2	-0.0031	0.000	15.5	ug/L	55	Standard
|	Cd	111	23.9	4.2	-0.0119	0.000	2.1	mg/L	67	Standard
|	Cd	114	81.7	25.2	-0.0094	0.002	19.1	ug/L	219	Standard
[>	In	115	787656.9	0.2				ug/L	887392	Standard
|	Sn	118	435.0	2.4	-0.0142	0.001	5.3	ug/L	653	Standard
|	Sb	123	168.8	14.5	0.0208	0.002	11.7	ug/L	48	Standard
|	Ba	135	447.7	4.3	0.0861	0.004	4.8	ug/L	28	Standard
|	Ce	140	109.0	6.4				ug/L	34	Standard
[>	Tb	159	1075977.5	0.8				ug/L	1226141	Standard
|	Ho	165	12.3	12.4				ug/L	14	Standard
|	Tl	203	59.0	9.0	0.0022	0.000	11.1	ug/L	9	Standard
|	Tl	205	153.0	13.8	0.0004	0.000	116.9	ug/L	20	Standard
|	Pb	206	382.3	2.8	-0.0012	0.001	52.8	ug/L	419	Standard
|	Pb	207	331.3	3.5	-0.0003	0.001	282.1	ug/L	338	Standard
|	Pb	208	1521.7	1.2	-0.0026	0.000	17.5	ug/L	1616	Standard
	U	238	30.7	12.3	0.0018	0.000	12.3	ug/L	2	Standard
[>	Bi	209	592570.1	1.0				ug/L	641071	Standard

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Na	23	81418.2	1.5	5.0471	0.105	2.1	mg/L	412	Standard
Mg	24	632533.4	2.9	1.0100	0.012	1.2	mg/L	177	Standard
K	39	213.3	16.5	0.0653	0.031	46.9	mg/L	150	Standard
Ca	43	13.3	57.3	9.0281	6.709	74.3	mg/L	7	Standard
Fe	54	290.6	25.2	-0.0628	0.016	25.7	mg/L	634	Standard
Fe	57	4735.7	2.5	0.0341	0.001	1.6	mg/L	2670	Standard
Sc-1	45	320231.0	1.8				mg/L	375691	Standard
Cl	35	2.7	78.1				ug/L	4	Standard
Kr	83	37.8	1.8				ug/L	39	Standard
Br	81	551.7	5.5				ug/L	639	Standard
P	31	145.0	15.3				ug/L	419	Standard
S	34	14100.7	2.5				ug/L	7420	Standard
Sr	88	125.0	26.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.140	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046005DP WG403711-09

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	Cd	111	
	Cd	114	
>	In	115	88.761
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.434
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207046005DP WG403711-09

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Method 6020 - Summary Report

Sample ID: L1207046006

Sample Date/Time: Friday, July 27, 2012 10:31:59

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19684.5	3.0	-3208.0063	152.061	4.7	ug/L	11199	Standard
|	Be	9	15.0	66.7	-0.0112	0.005	48.8	ug/L	10	Standard
|	Al	27	10965.6	3.7	0.2799	0.018	6.5	ug/L	7920	Standard
[>	Sc	45	321165.8	2.1				ug/L	375691	Standard
[	Ti	47	63.0	5.5	-0.0047	0.002	48.6	ug/L	70	Standard
|	V	51	2940.1	2.1	0.0185	0.008	41.1	ug/L	3172	Standard
|	Cr	52	8812.2	2.0	0.0324	0.026	81.5	ug/L	9852	Standard
|	Cr	53	320.8	7.1	-0.0970	0.014	14.5	ug/L	518	Standard
|	Mn	55	55407.3	4.9	3.6084	0.152	4.2	ug/L	1193	Standard
|	Co	59	154.3	13.0	0.0037	0.002	58.4	ug/L	98	Standard
|	Ni	60	377.0	9.8	0.1233	0.014	11.4	ug/L	67	Standard
|	Cu	65	145.7	6.9	0.0196	0.004	20.8	ug/L	90	Standard
|	Zn	66	1321.7	3.2	1.1404	0.026	2.3	ug/L	148	Standard
[>	Ge	72	271398.4	1.5				ug/L	304674	Standard
|	As	75	-174.0	17.7	0.0292	0.032	107.8	ug/L	-174	Standard
|	Se	82	25.5	16.1	0.0841	0.035	41.9	ug/L	26	Standard
[	Se-1	77	111.7	7.2	0.0394	0.098	247.4	ug/L	133	Standard
[>	Ga	71	560.0	3.1				mg/L	630	Standard
[	Rb	85	765.0	5.8				ug/L	12	Standard
[	Y	89	230903.1	1.5				ug/L	271719	Standard
[>	Rh	103	350.0	11.3				ug/L	392	Standard
[	Mo	98	28.7	35.9	0.0021	0.003	128.4	ug/L	7	Standard
|	Ag	107	65.0	61.8	-0.0019	0.006	301.2	ug/L	55	Standard
|	Cd	111	23.6	56.5	-0.0119	0.003	28.3	mg/L	67	Standard
|	Cd	114	95.5	56.8	-0.0081	0.005	60.5	ug/L	219	Standard
[>	In	115	781889.7	1.0				ug/L	887392	Standard
|	Sn	118	454.7	2.6	-0.0125	0.001	6.4	ug/L	653	Standard
|	Sb	123	136.8	8.2	0.0178	0.001	7.1	ug/L	48	Standard
[	Ba	135	447.3	9.7	0.0867	0.009	9.8	ug/L	28	Standard
[	Ce	140	25.0	4.0				ug/L	34	Standard
[>	Tb	159	1070068.0	0.4				ug/L	1226141	Standard
[	Ho	165	10.0	26.5				ug/L	14	Standard
|	Tl	203	84.3	28.5	0.0036	0.001	37.1	ug/L	9	Standard
|	Tl	205	175.7	29.8	0.0010	0.001	130.1	ug/L	20	Standard
|	Pb	206	412.0	7.8	0.0012	0.003	202.5	ug/L	419	Standard
|	Pb	207	313.0	9.3	-0.0014	0.002	174.3	ug/L	338	Standard
|	Pb	208	1533.7	6.1	-0.0019	0.002	98.7	ug/L	1616	Standard
	U	238	29.7	77.3	0.0017	0.001	74.3	ug/L	2	Standard
[>	Bi	209	584030.7	1.3				ug/L	641071	Standard

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Na	23	80709.4	1.5	4.9885	0.120	2.4	mg/L	412	Standard
Mg	24	607808.0	2.0	0.9682	0.033	3.4	mg/L	177	Standard
K	39	185.0	18.9	0.0394	0.035	89.8	mg/L	150	Standard
Ca	43	11.7	65.5	7.5061	6.564	87.5	mg/L	7	Standard
Fe	54	196.0	19.2	-0.0850	0.008	9.7	mg/L	634	Standard
Fe	57	3595.4	5.9	0.0188	0.004	19.4	mg/L	2670	Standard
Sc-1	45	321165.8	2.1				mg/L	375691	Standard
Cl	35	3.7	31.5				ug/L	4	Standard
Kr	83	37.7	7.2				ug/L	39	Standard
Br	81	605.8	5.5				ug/L	639	Standard
P	31	120.0	16.5				ug/L	419	Standard
S	34	14134.9	2.7				ug/L	7420	Standard
Sr	88	121.7	23.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.078	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207046006

Report Date/Time: Friday, July 27, 2012 10:34:30

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	Cd	111	
	Cd	114	
>	In	115	88.111
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.102
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207046006

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 10:35:12

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11107.4	4.5	-16.5366	144.112	871.5	ug/L	11199	Standard
|	Be	9	106184.4	3.6	52.2519	1.833	3.5	ug/L	10	Standard
|	Al	27	785247.7	2.6	48.2581	1.592	3.3	ug/L	7920	Standard
[>	Sc	45	366128.2	1.5				ug/L	375691	Standard
[	Ti	47	133954.4	1.9	96.3605	0.602	0.6	ug/L	70	Standard
|	V	51	551853.3	0.8	47.1018	0.561	1.2	ug/L	3172	Standard
|	Cr	52	452552.3	0.8	47.3631	0.793	1.7	ug/L	9852	Standard
|	Cr	53	76769.8	1.1	47.6755	1.300	2.7	ug/L	518	Standard
|	Mn	55	812474.0	0.5	47.4131	0.740	1.6	ug/L	1193	Standard
|	Co	59	517826.2	0.5	46.7656	0.889	1.9	ug/L	98	Standard
|	Ni	60	135481.0	0.5	47.2474	1.099	2.3	ug/L	67	Standard
|	Cu	65	125129.2	0.5	47.3061	1.003	2.1	ug/L	90	Standard
|	Zn	66	57565.8	1.5	48.2044	1.019	2.1	ug/L	148	Standard
[>	Ge	72	309271.0	2.0				ug/L	304674	Standard
|	As	75	58116.1	0.7	48.4650	0.997	2.1	ug/L	-174	Standard
|	Se	82	5915.3	1.0	48.9610	1.361	2.8	ug/L	26	Standard
[	Se-1	77	4224.3	0.9	47.8622	0.944	2.0	ug/L	133	Standard
[>	Ga	71	676.7	12.6				mg/L	630	Standard
[	Rb	85	856.7	4.1				ug/L	12	Standard
[	Y	89	271599.9	1.8				ug/L	271719	Standard
[>	Rh	103	458.3	13.9				ug/L	392	Standard
[	Mo	98	408513.8	0.4	97.1360	1.230	1.3	ug/L	7	Standard
|	Ag	107	400224.3	1.0	48.1585	0.141	0.3	ug/L	55	Standard
|	Cd	111	227723.8	0.9	49.6425	0.762	1.5	mg/L	67	Standard
|	Cd	114	629616.5	1.2	48.7990	0.730	1.5	ug/L	219	Standard
[>	In	115	887272.6	0.9				ug/L	887392	Standard
|	Sn	118	739979.7	1.4	48.3430	1.015	2.1	ug/L	653	Standard
|	Sb	123	542716.5	0.5	48.0700	0.643	1.3	ug/L	48	Standard
[	Ba	135	248466.4	0.5	46.8722	0.637	1.4	ug/L	28	Standard
[	Ce	140	991.7	5.2				ug/L	34	Standard
[>	Tb	159	1187940.2	1.1				ug/L	1226141	Standard
[	Ho	165	22.3	20.7				ug/L	14	Standard
|	Tl	203	948136.8	0.6	47.3047	0.103	0.2	ug/L	9	Standard
|	Tl	205	2187572.6	0.2	48.7484	0.334	0.7	ug/L	20	Standard
|	Pb	206	731749.3	0.9	47.5303	0.344	0.7	ug/L	419	Standard
|	Pb	207	622405.8	0.5	48.1477	0.034	0.1	ug/L	338	Standard
|	Pb	208	2891843.7	0.5	48.5074	0.222	0.5	ug/L	1616	Standard
	U	238	933203.4	0.9	48.8585	0.449	0.9	ug/L	2	Standard
[>	Bi	209	615850.8	0.4				ug/L	641071	Standard

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Na	23	119773.3	1.5	6.5055	0.180	2.8	mg/L	412	Standard
Mg	24	3547740.7	2.1	4.9554	0.081	1.6	mg/L	177	Standard
K	39	6062.9	2.8	4.7256	0.115	2.4	mg/L	150	Standard
Ca	43	3.3	86.6	0.0374	2.185	5846.8	mg/L	7	Standard
Fe	54	24687.4	2.1	4.9416	0.161	3.3	mg/L	634	Standard
Fe	57	436304.8	0.9	5.0903	0.112	2.2	mg/L	2670	Standard
Sc-1	45	366128.2	1.5				mg/L	375691	Standard
Cl	35	2.0	86.6				ug/L	4	Standard
Kr	83	45.4	12.5				ug/L	39	Standard
Br	81	755.0	5.5				ug/L	639	Standard
P	31	420.8	18.5				ug/L	419	Standard
S	34	7015.8	3.9				ug/L	7420	Standard
Sr	88	30.0	16.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.516		
Sc	45			
Ti	47	96.360		
V	51	94.204		
Cr	52	94.726		
Cr	53			
Mn	55	94.826		
Co	59	93.531		
Ni	60	94.495		
Cu	65	94.612		
Zn	66	96.409		
Ge	72		101.509	
As	75	96.930		
Se	82	97.922		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	97.136		
Ag	107	96.317		

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	Cd	111	99.285	
	Cd	114		
>	In	115		99.987
	Sn	118	96.686	
	Sb	123	96.140	
	Ba	135	93.744	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	94.609	
|	Tl	205		
|	Pb	206	95.061	
|	Pb	207	96.295	
|	Pb	208	97.015	
|	U	238	97.717	
>	Bi	209		96.066
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 10:38:22

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10933.9	3.8	84.4815	81.837	96.9	ug/L	11199	Standard
|	Be	9	11.7	89.2	-0.0140	0.005	35.7	ug/L	10	Standard
|	Al	27	7301.8	4.4	-0.0504	0.014	27.3	ug/L	7920	Standard
[>	Sc	45	372352.5	1.9				ug/L	375691	Standard
|	Ti	47	63.0	27.8	-0.0112	0.012	107.3	ug/L	70	Standard
|	V	51	2957.1	3.4	-0.0162	0.008	47.1	ug/L	3172	Standard
|	Cr	52	8947.3	0.9	-0.0881	0.010	11.3	ug/L	9852	Standard
|	Cr	53	392.5	8.9	-0.0810	0.020	25.2	ug/L	518	Standard
|	Mn	55	1342.1	22.4	-0.0031	0.017	543.3	ug/L	1193	Standard
|	Co	59	192.7	73.0	0.0051	0.012	244.3	ug/L	98	Standard
|	Ni	60	77.0	33.1	0.0003	0.009	3464.2	ug/L	67	Standard
|	Cu	65	127.7	4.0	0.0049	0.002	43.7	ug/L	90	Standard
|	Zn	66	151.7	4.4	0.0032	0.006	200.8	ug/L	148	Standard
[>	Ge	72	310339.4	1.4				ug/L	304674	Standard
|	As	75	-186.6	8.7	0.0398	0.013	33.1	ug/L	-174	Standard
|	Se	82	23.3	3.5	0.0362	0.010	26.3	ug/L	26	Standard
[	Se-1	77	141.3	10.4	0.2003	0.196	97.6	ug/L	133	Standard
[>	Ga	71	693.3	3.3				mg/L	630	Standard
|	Rb	85	25.0	52.9				ug/L	12	Standard
|	Y	89	267232.8	0.8				ug/L	271719	Standard
[>	Rh	103	395.0	17.1				ug/L	392	Standard
|	Mo	98	325.3	12.4	0.0706	0.009	12.6	ug/L	7	Standard
|	Ag	107	134.0	21.2	0.0051	0.003	63.7	ug/L	55	Standard
|	Cd	111	92.6	17.2	0.0021	0.003	157.2	mg/L	67	Standard
|	Cd	114	249.5	23.2	0.0026	0.004	169.4	ug/L	219	Standard
[>	In	115	899579.3	0.8				ug/L	887392	Standard
|	Sn	118	977.0	9.6	0.0167	0.006	33.1	ug/L	653	Standard
|	Sb	123	2739.2	4.2	0.2432	0.008	3.4	ug/L	48	Standard
|	Ba	135	127.3	133.8	0.0145	0.031	216.7	ug/L	28	Standard
|	Ce	140	26.7	28.6				ug/L	34	Standard
[>	Tb	159	1193490.0	1.7				ug/L	1226141	Standard
|	Ho	165	13.0	48.0				ug/L	14	Standard
|	Tl	203	323.0	151.8	0.0146	0.023	160.6	ug/L	9	Standard
|	Tl	205	733.7	148.7	0.0125	0.023	185.7	ug/L	20	Standard
|	Pb	206	607.0	49.7	0.0109	0.019	170.8	ug/L	419	Standard
|	Pb	207	513.3	47.2	0.0113	0.018	158.1	ug/L	338	Standard
|	Pb	208	2312.1	44.9	0.0082	0.017	201.6	ug/L	1616	Standard
	U	238	137.3	123.4	0.0070	0.008	121.3	ug/L	2	Standard
[>	Bi	209	639651.4	2.0				ug/L	641071	Standard

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Na	23	510.0	14.5	-0.0114	0.004	32.5	mg/L	412	Standard
Mg	24	770.0	95.6	0.0011	0.001	93.3	mg/L	177	Standard
K	39	153.3	39.8	-0.0093	0.047	509.2	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	619.5	8.3	-0.0055	0.013	231.7	mg/L	634	Standard
Fe	57	3068.6	0.7	0.0060	0.001	12.0	mg/L	2670	Standard
Sc-1	45	372352.5	1.9				mg/L	375691	Standard
Cl	35	2.3	65.5				ug/L	4	Standard
Kr	83	40.0	5.8				ug/L	39	Standard
Br	81	775.0	2.0				ug/L	639	Standard
P	31	450.0	1.1				ug/L	419	Standard
S	34	6633.1	1.5				ug/L	7420	Standard
Sr	88	43.3	17.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.859	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 10:40:52

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	Cd	111	
	Cd	114	
>	In	115	101.373
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.778
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 10:40:52

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Method 6020 - Summary Report

Sample ID: L1207049101

Sample Date/Time: Friday, July 27, 2012 10:41:34

Number of Replicates: 3

Autosampler Position: 419

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16730.9	5.4	-2110.6785	321.423	15.2	ug/L	11199	Standard
|	Be	9	10.0	86.6	-0.0142	0.005	33.1	ug/L	10	Standard
|	Al	27	103032.5	0.8	6.5930	0.208	3.1	ug/L	7920	Standard
[>	Sc	45	330473.1	2.4				ug/L	375691	Standard
|	Ti	47	445.0	2.9	0.3089	0.010	3.4	ug/L	70	Standard
|	V	51	9354.8	3.5	0.6464	0.030	4.6	ug/L	3172	Standard
|	Cr	52	10673.1	1.8	0.2598	0.023	8.8	ug/L	9852	Standard
|	Cr	53	545.8	4.3	0.0636	0.019	29.4	ug/L	518	Standard
|	Mn	55	209376.8	2.0	13.8714	0.264	1.9	ug/L	1193	Standard
|	Co	59	876.0	2.0	0.0780	0.002	2.8	ug/L	98	Standard
|	Ni	60	158412.9	1.5	62.9785	0.646	1.0	ug/L	67	Standard
|	Cu	65	730.7	5.0	0.2719	0.014	5.2	ug/L	90	Standard
|	Zn	66	117630.6	1.7	112.4508	1.538	1.4	ug/L	148	Standard
[>	Ge	72	271238.3	0.6				ug/L	304674	Standard
|	As	75	-617.2	40.3	-0.3901	0.235	60.1	ug/L	-174	Standard
|	Se	82	5425.0	1.9	51.1867	0.867	1.7	ug/L	26	Standard
[	Se-1	77	3806.8	3.1	49.2111	1.652	3.4	ug/L	133	Standard
[>	Ga	71	543.3	12.5				mg/L	630	Standard
|	Rb	85	6864.9	0.5				ug/L	12	Standard
|	Y	89	242851.2	1.8				ug/L	271719	Standard
[>	Rh	103	416.7	13.6				ug/L	392	Standard
|	Mo	98	20742.3	0.9	5.4736	0.050	0.9	ug/L	7	Standard
|	Ag	107	71.7	9.1	-0.0012	0.001	77.0	ug/L	55	Standard
|	Cd	111	1774.7	1.2	0.4121	0.006	1.5	mg/L	67	Standard
|	Cd	114	4924.7	0.8	0.4077	0.005	1.2	ug/L	219	Standard
[>	In	115	798670.3	0.5				ug/L	887392	Standard
|	Sn	118	673.3	5.3	0.0027	0.003	104.4	ug/L	653	Standard
|	Sb	123	1307.3	8.7	0.1326	0.011	8.6	ug/L	48	Standard
|	Ba	135	5952.5	2.7	1.2386	0.037	3.0	ug/L	28	Standard
|	Ce	140	1015.4	3.5				ug/L	34	Standard
[>	Tb	159	1107872.4	0.4				ug/L	1226141	Standard
|	Ho	165	53.7	7.1				ug/L	14	Standard
|	Tl	203	324.7	4.2	0.0168	0.001	4.3	ug/L	9	Standard
|	Tl	205	764.4	4.5	0.0154	0.001	4.9	ug/L	20	Standard
|	Pb	206	567.0	2.1	0.0131	0.001	7.4	ug/L	419	Standard
|	Pb	207	465.7	1.1	0.0123	0.001	6.0	ug/L	338	Standard
|	Pb	208	2160.1	3.3	0.0104	0.001	13.1	ug/L	1616	Standard
	U	238	69976.2	1.7	3.9919	0.074	1.8	ug/L	2	Standard
[>	Bi	209	565250.2	0.9				ug/L	641071	Standard

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Na	23	58727.0	3.3	3.5185	0.200	5.7	mg/L	412	Standard
Mg	24	7434506.5	1.3	11.5092	0.341	3.0	mg/L	177	Standard
K	39	475.0	9.6	0.2913	0.036	12.3	mg/L	150	Standard
Ca	43	98.3	10.6	79.5943	9.881	12.4	mg/L	7	Standard
Fe	54	373.5	7.9	-0.0458	0.006	12.3	mg/L	634	Standard
Fe	57	15287.7	7.2	0.1695	0.017	10.1	mg/L	2670	Standard
Sc-1	45	330473.1	2.4				mg/L	375691	Standard
Cl	35	3.3	45.8				ug/L	4	Standard
Kr	83	48.0	7.3				ug/L	39	Standard
Br	81	755.0	4.2				ug/L	639	Standard
P	31	538.3	3.3				ug/L	419	Standard
S	34	81522.9	1.3				ug/L	7420	Standard
Sr	88	336.7	19.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.026	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049101

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	Cd	111		
	Cd	114		
>	In	115	90.002	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	88.173	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1207049101

Report Date/Time: Friday, July 27, 2012 10:44:04

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Method 6020 - Summary Report

Sample ID: L1207049102

Sample Date/Time: Friday, July 27, 2012 10:44:43

Number of Replicates: 3

Autosampler Position: 420

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16702.5	4.2	-2017.0113	228.899	11.3	ug/L	11199	Standard
|	Be	9	18.3	103.3	-0.0097	0.010	103.3	ug/L	10	Standard
|	Al	27	28186.2	1.5	1.4119	0.047	3.3	ug/L	7920	Standard
[>	Sc	45	335817.6	1.0				ug/L	375691	Standard
|	Ti	47	219.3	17.8	0.1222	0.033	26.8	ug/L	70	Standard
|	V	51	8770.4	2.2	0.5815	0.016	2.8	ug/L	3172	Standard
|	Cr	52	10073.7	1.3	0.1757	0.009	5.0	ug/L	9852	Standard
|	Cr	53	510.8	12.1	0.0356	0.046	129.8	ug/L	518	Standard
|	Mn	55	149668.6	2.8	9.8026	0.218	2.2	ug/L	1193	Standard
|	Co	59	1777.4	1.2	0.1692	0.003	1.9	ug/L	98	Standard
|	Ni	60	150770.3	2.1	59.4001	0.884	1.5	ug/L	67	Standard
|	Cu	65	653.0	6.4	0.2360	0.019	8.1	ug/L	90	Standard
|	Zn	66	70543.9	2.4	66.7834	1.413	2.1	ug/L	148	Standard
[>	Ge	72	273689.9	0.8				ug/L	304674	Standard
|	As	75	-640.9	19.0	-0.4071	0.113	27.9	ug/L	-174	Standard
|	Se	82	5479.6	2.5	51.2384	1.110	2.2	ug/L	26	Standard
[	Se-1	77	3865.8	4.3	49.5248	1.824	3.7	ug/L	133	Standard
[>	Ga	71	570.0	10.3				mg/L	630	Standard
|	Rb	85	6344.7	4.1				ug/L	12	Standard
|	Y	89	243499.6	1.3				ug/L	271719	Standard
[>	Rh	103	416.7	9.6				ug/L	392	Standard
|	Mo	98	20546.9	1.4	5.2695	0.109	2.1	ug/L	7	Standard
|	Ag	107	78.3	40.6	-0.0006	0.004	653.4	ug/L	55	Standard
|	Cd	111	55.4	20.4	-0.0048	0.003	53.5	mg/L	67	Standard
|	Cd	114	250.0	21.1	0.0044	0.004	95.7	ug/L	219	Standard
[>	In	115	821831.8	1.0				ug/L	887392	Standard
|	Sn	118	707.7	4.9	0.0037	0.003	68.6	ug/L	653	Standard
|	Sb	123	1270.3	3.1	0.1255	0.004	3.2	ug/L	48	Standard
|	Ba	135	5470.3	0.9	1.1053	0.018	1.6	ug/L	28	Standard
|	Ce	140	191.0	3.7				ug/L	34	Standard
[>	Tb	159	1129414.3	0.8				ug/L	1226141	Standard
|	Ho	165	16.7	19.3				ug/L	14	Standard
|	Tl	203	316.3	7.0	0.0160	0.001	8.8	ug/L	9	Standard
|	Tl	205	733.0	7.1	0.0143	0.001	10.3	ug/L	20	Standard
|	Pb	206	456.3	11.3	0.0048	0.004	84.2	ug/L	419	Standard
|	Pb	207	374.0	9.1	0.0041	0.003	77.9	ug/L	338	Standard
|	Pb	208	1748.7	9.7	0.0023	0.003	145.7	ug/L	1616	Standard
	U	238	68467.8	2.7	3.8355	0.091	2.4	ug/L	2	Standard
[>	Bi	209	575596.0	1.3				ug/L	641071	Standard

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Na	23	58773.9	4.1	3.4627	0.177	5.1	mg/L	412	Standard
Mg	24	7257882.1	2.0	11.0538	0.290	2.6	mg/L	177	Standard
K	39	496.7	5.8	0.3039	0.030	9.7	mg/L	150	Standard
Ca	43	83.3	15.1	65.9483	10.923	16.6	mg/L	7	Standard
Fe	54	295.5	8.6	-0.0647	0.005	8.1	mg/L	634	Standard
Fe	57	13574.4	3.2	0.1443	0.006	4.4	mg/L	2670	Standard
Sc-1	45	335817.6	1.0				mg/L	375691	Standard
Cl	35	4.7	75.3				ug/L	4	Standard
Kr	83	45.7	7.7				ug/L	39	Standard
Br	81	971.7	4.0				ug/L	639	Standard
P	31	305.0	5.9				ug/L	419	Standard
S	34	79524.0	0.2				ug/L	7420	Standard
Sr	88	333.3	7.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.830	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049102

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	Cd	111	
	Cd	114	
>	In	115	92.612
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.787
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
As 75 Lower	As	75	

Sample ID: L1207049102

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Method 6020 - Summary Report

Sample ID: L1207049103

Sample Date/Time: Friday, July 27, 2012 10:47:53

Number of Replicates: 3

Autosampler Position: 421

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18576.4	0.4	-2533.8206	211.817	8.4	ug/L	11199	Standard
|	Be	9	13.3	94.4	-0.0126	0.006	51.4	ug/L	10	Standard
|	Al	27	50490.7	2.6	2.8877	0.195	6.8	ug/L	7920	Standard
[>	Sc	45	339550.3	3.3				ug/L	375691	Standard
[	Ti	47	702.3	3.3	0.5101	0.016	3.2	ug/L	70	Standard
|	V	51	5221.3	2.4	0.2332	0.017	7.4	ug/L	3172	Standard
|	Cr	52	11341.6	1.6	0.3175	0.029	9.0	ug/L	9852	Standard
|	Cr	53	550.0	8.0	0.0595	0.026	43.9	ug/L	518	Standard
|	Mn	55	223006.1	1.7	14.5259	0.432	3.0	ug/L	1193	Standard
|	Co	59	1825.1	3.5	0.1726	0.009	5.1	ug/L	98	Standard
|	Ni	60	7782.0	2.7	3.0158	0.107	3.6	ug/L	67	Standard
|	Cu	65	624.0	3.4	0.2212	0.006	2.7	ug/L	90	Standard
|	Zn	66	3493.4	1.8	3.1625	0.096	3.0	ug/L	148	Standard
[>	Ge	72	276018.7	1.2				ug/L	304674	Standard
|	As	75	170.4	21.6	0.3528	0.035	9.9	ug/L	-174	Standard
|	Se	82	317.5	6.0	2.7974	0.207	7.4	ug/L	26	Standard
[	Se-1	77	317.0	6.8	2.7008	0.295	10.9	ug/L	133	Standard
[>	Ga	71	638.3	5.0				mg/L	630	Standard
[	Rb	85	5335.9	6.9				ug/L	12	Standard
[	Y	89	244466.5	0.9				ug/L	271719	Standard
[>	Rh	103	451.7	10.8				ug/L	392	Standard
[	Mo	98	3231.1	5.3	0.8206	0.055	6.7	ug/L	7	Standard
|	Ag	107	52.3	6.1	-0.0040	0.000	12.5	ug/L	55	Standard
|	Cd	111	68.6	14.0	-0.0017	0.002	133.3	mg/L	67	Standard
|	Cd	114	198.9	0.4	0.0001	0.000	298.4	ug/L	219	Standard
[>	In	115	825582.1	1.4				ug/L	887392	Standard
|	Sn	118	637.3	5.2	-0.0015	0.002	167.6	ug/L	653	Standard
|	Sb	123	813.6	5.6	0.0815	0.005	6.7	ug/L	48	Standard
[	Ba	135	43838.3	1.6	8.8821	0.252	2.8	ug/L	28	Standard
[	Ce	140	567.0	3.4				ug/L	34	Standard
[>	Tb	159	1128322.1	2.1				ug/L	1226141	Standard
[	Ho	165	29.7	27.5				ug/L	14	Standard
|	Tl	203	270.7	16.9	0.0135	0.003	19.3	ug/L	9	Standard
|	Tl	205	631.7	10.8	0.0118	0.002	15.5	ug/L	20	Standard
|	Pb	206	441.0	5.1	0.0035	0.001	39.7	ug/L	419	Standard
|	Pb	207	377.3	9.9	0.0041	0.003	62.8	ug/L	338	Standard
|	Pb	208	1730.0	4.1	0.0018	0.001	40.2	ug/L	1616	Standard
	U	238	9833.2	2.0	0.5477	0.019	3.5	ug/L	2	Standard
[>	Bi	209	579194.6	1.8				ug/L	641071	Standard

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Na	23	69463.9	0.9	4.0557	0.138	3.4	mg/L	412	Standard
Mg	24	8181560.9	0.5	12.3317	0.441	3.6	mg/L	177	Standard
K	39	665.0	1.3	0.4447	0.022	4.9	mg/L	150	Standard
Ca	43	101.7	11.4	80.2666	12.159	15.1	mg/L	7	Standard
Fe	54	907.1	4.3	0.0704	0.014	20.4	mg/L	634	Standard
Fe	57	23159.4	4.1	0.2641	0.022	8.3	mg/L	2670	Standard
Sc-1	45	339550.3	3.3				mg/L	375691	Standard
Cl	35	10.7	14.3				ug/L	4	Standard
Kr	83	44.6	4.3				ug/L	39	Standard
Br	81	886.7	3.1				ug/L	639	Standard
P	31	2361.9	2.2				ug/L	419	Standard
S	34	82633.1	0.8				ug/L	7420	Standard
Sr	88	386.7	7.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.595	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049103

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	Cd	111		
	Cd	114		
>	In	115	93.035	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.348	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049103

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Method 6020 - Summary Report

Sample ID: L1207049104

Sample Date/Time: Friday, July 27, 2012 10:51:03

Number of Replicates: 3

Autosampler Position: 422

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17952.3	2.2	-2353.7060	113.619	4.8	ug/L	11199	Standard
|	Be	9	8.3	91.7	-0.0151	0.004	26.9	ug/L	10	Standard
|	Al	27	34257.0	1.6	1.8031	0.048	2.7	ug/L	7920	Standard
[>	Sc	45	338669.9	0.5				ug/L	375691	Standard
[	Ti	47	497.3	2.7	0.3507	0.009	2.7	ug/L	70	Standard
|	V	51	4836.1	1.4	0.2029	0.006	2.8	ug/L	3172	Standard
|	Cr	52	10614.1	2.0	0.2490	0.024	9.7	ug/L	9852	Standard
|	Cr	53	418.3	10.1	-0.0281	0.031	111.2	ug/L	518	Standard
|	Mn	55	226460.5	2.5	14.9676	0.328	2.2	ug/L	1193	Standard
|	Co	59	2723.2	3.5	0.2675	0.009	3.2	ug/L	98	Standard
|	Ni	60	6034.5	2.0	2.3669	0.037	1.6	ug/L	67	Standard
|	Cu	65	485.7	7.6	0.1656	0.015	9.1	ug/L	90	Standard
|	Zn	66	1964.5	4.0	1.7510	0.066	3.8	ug/L	148	Standard
[>	Ge	72	271990.3	0.4				ug/L	304674	Standard
|	As	75	152.7	17.9	0.3384	0.026	7.8	ug/L	-174	Standard
|	Se	82	146.2	4.6	1.2230	0.070	5.7	ug/L	26	Standard
[	Se-1	77	197.7	5.1	1.1776	0.128	10.8	ug/L	133	Standard
[>	Ga	71	643.3	11.6				mg/L	630	Standard
[	Rb	85	5084.2	1.8				ug/L	12	Standard
[	Y	89	240116.7	2.4				ug/L	271719	Standard
[>	Rh	103	468.3	7.1				ug/L	392	Standard
[	Mo	98	3647.0	4.3	0.9358	0.041	4.4	ug/L	7	Standard
|	Ag	107	49.3	20.4	-0.0043	0.001	31.3	ug/L	55	Standard
|	Cd	111	37.2	26.3	-0.0090	0.002	25.4	mg/L	67	Standard
|	Cd	114	139.0	8.1	-0.0048	0.001	18.6	ug/L	219	Standard
[>	In	115	817353.6	0.5				ug/L	887392	Standard
|	Sn	118	522.3	1.1	-0.0092	0.000	2.5	ug/L	653	Standard
|	Sb	123	615.5	5.1	0.0632	0.003	4.4	ug/L	48	Standard
[	Ba	135	41426.9	2.5	8.4751	0.184	2.2	ug/L	28	Standard
[	Ce	140	272.0	7.7				ug/L	34	Standard
[>	Tb	159	1114617.6	0.6				ug/L	1226141	Standard
[	Ho	165	20.7	19.6				ug/L	14	Standard
|	Tl	203	192.7	6.3	0.0094	0.001	7.1	ug/L	9	Standard
|	Tl	205	444.7	10.2	0.0074	0.001	14.8	ug/L	20	Standard
|	Pb	206	402.7	4.0	0.0009	0.001	124.5	ug/L	419	Standard
|	Pb	207	330.0	6.4	0.0003	0.002	531.0	ug/L	338	Standard
|	Pb	208	1583.0	3.2	-0.0008	0.001	116.1	ug/L	1616	Standard
	U	238	9667.4	1.3	0.5398	0.010	1.9	ug/L	2	Standard
[>	Bi	209	577620.5	1.1				ug/L	641071	Standard

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Na	23	69457.3	3.9	4.0625	0.141	3.5	mg/L	412	Standard
Mg	24	7781150.4	2.0	11.7498	0.260	2.2	mg/L	177	Standard
K	39	576.7	4.1	0.3693	0.018	4.9	mg/L	150	Standard
Ca	43	81.7	19.7	63.9655	13.151	20.6	mg/L	7	Standard
Fe	54	1005.9	6.4	0.0926	0.015	16.5	mg/L	634	Standard
Fe	57	24493.1	1.1	0.2813	0.004	1.4	mg/L	2670	Standard
Sc-1	45	338669.9	0.5				mg/L	375691	Standard
Cl	35	7.3	56.8				ug/L	4	Standard
Kr	83	47.1	13.3				ug/L	39	Standard
Br	81	833.4	11.4				ug/L	639	Standard
P	31	1550.1	2.8				ug/L	419	Standard
S	34	79560.0	0.4				ug/L	7420	Standard
Sr	88	308.3	11.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.273	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049104

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	Cd	111	
	Cd	114	
>	In	115	92.107
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.102
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207049105

Sample Date/Time: Friday, July 27, 2012 10:54:12

Number of Replicates: 3

Autosampler Position: 423

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19000.3	4.3	-2536.2406	174.413	6.9	ug/L	11199	Standard
|	Be	9	20.0	25.0	-0.0092	0.002	26.9	ug/L	10	Standard
|	Al	27	78539.7	1.7	4.6525	0.144	3.1	ug/L	7920	Standard
[>	Sc	45	346775.5	1.2				ug/L	375691	Standard
[	Ti	47	796.7	8.1	0.5857	0.055	9.3	ug/L	70	Standard
|	V	51	5810.1	1.8	0.2892	0.012	4.2	ug/L	3172	Standard
|	Cr	52	10799.2	1.4	0.2512	0.019	7.4	ug/L	9852	Standard
|	Cr	53	448.3	9.9	-0.0117	0.032	273.3	ug/L	518	Standard
|	Mn	55	213912.1	0.3	13.9145	0.033	0.2	ug/L	1193	Standard
|	Co	59	1314.7	2.4	0.1208	0.003	2.8	ug/L	98	Standard
|	Ni	60	7142.0	1.5	2.7625	0.037	1.3	ug/L	67	Standard
|	Cu	65	641.7	3.8	0.2286	0.012	5.0	ug/L	90	Standard
|	Zn	66	4182.9	1.8	3.8069	0.087	2.3	ug/L	148	Standard
[>	Ge	72	276264.2	0.4				ug/L	304674	Standard
|	As	75	-44.9	50.0	0.1524	0.021	13.8	ug/L	-174	Standard
|	Se	82	258.9	3.4	2.2489	0.077	3.4	ug/L	26	Standard
[	Se-1	77	285.3	5.4	2.2828	0.208	9.1	ug/L	133	Standard
[>	Ga	71	668.3	10.9				mg/L	630	Standard
[	Rb	85	5302.6	7.4				ug/L	12	Standard
[	Y	89	248547.2	1.3				ug/L	271719	Standard
[>	Rh	103	415.0	3.2				ug/L	392	Standard
[	Mo	98	2442.8	0.8	0.6161	0.003	0.5	ug/L	7	Standard
|	Ag	107	51.7	5.9	-0.0041	0.000	9.3	ug/L	55	Standard
|	Cd	111	99.5	3.9	0.0054	0.001	17.5	mg/L	67	Standard
|	Cd	114	294.5	9.5	0.0079	0.002	29.5	ug/L	219	Standard
[>	In	115	828873.7	0.4				ug/L	887392	Standard
|	Sn	118	666.7	3.6	0.0004	0.001	370.7	ug/L	653	Standard
|	Sb	123	517.3	7.1	0.0530	0.003	6.2	ug/L	48	Standard
[	Ba	135	43714.0	0.8	8.8196	0.088	1.0	ug/L	28	Standard
[	Ce	140	659.0	3.2				ug/L	34	Standard
[>	Tb	159	1123410.8	1.0				ug/L	1226141	Standard
[	Ho	165	29.0	30.6				ug/L	14	Standard
|	Tl	203	274.3	8.1	0.0136	0.001	7.3	ug/L	9	Standard
|	Tl	205	597.7	12.6	0.0109	0.002	14.3	ug/L	20	Standard
|	Pb	206	499.7	4.1	0.0074	0.002	20.6	ug/L	419	Standard
|	Pb	207	404.0	5.0	0.0062	0.002	28.5	ug/L	338	Standard
|	Pb	208	1888.7	2.5	0.0045	0.001	27.6	ug/L	1616	Standard
	U	238	7867.7	2.0	0.4363	0.004	1.0	ug/L	2	Standard
[>	Bi	209	581552.9	1.5				ug/L	641071	Standard

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Na	23	69520.8	1.7	3.9707	0.043	1.1	mg/L	412	Standard
Mg	24	8130155.3	0.7	11.9899	0.068	0.6	mg/L	177	Standard
K	39	728.4	6.4	0.4862	0.046	9.5	mg/L	150	Standard
Ca	43	103.3	10.1	79.6448	8.616	10.8	mg/L	7	Standard
Fe	54	377.2	19.2	-0.0491	0.015	30.5	mg/L	634	Standard
Fe	57	14798.9	3.4	0.1540	0.008	5.2	mg/L	2670	Standard
Sc-1	45	346775.5	1.2				mg/L	375691	Standard
Cl	35	7.7	19.9				ug/L	4	Standard
Kr	83	41.4	12.5				ug/L	39	Standard
Br	81	848.4	3.1				ug/L	639	Standard
P	31	2606.9	3.2				ug/L	419	Standard
S	34	83936.0	1.0				ug/L	7420	Standard
Sr	88	370.0	5.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.675	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049105

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	Cd	111	
	Cd	114	
>	In	115	93.406
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.716
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049105

Report Date/Time: Friday, July 27, 2012 10:56:43

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Method 6020 - Summary Report

Sample ID: L1207049102

Sample Date/Time: Friday, July 27, 2012 11:01:54

Number of Replicates: 3

Autosampler Position: 424

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15242.7	3.2	-997.1459	128.137	12.9	ug/L	11199	Standard
|	Be	9	13.3	108.3	-0.0132	0.007	52.4	ug/L	10	Standard
|	Al	27	23249.5	3.9	0.8858	0.064	7.3	ug/L	7920	Standard
[>	Sc	45	382503.5	1.2				ug/L	375691	Standard
|	Ti	47	140.3	7.8	0.0444	0.008	18.5	ug/L	70	Standard
|	V	51	6256.9	1.0	0.2661	0.007	2.7	ug/L	3172	Standard
|	Cr	52	11076.0	1.2	0.1388	0.019	13.8	ug/L	9852	Standard
|	Cr	53	487.5	12.1	-0.0219	0.036	163.2	ug/L	518	Standard
|	Mn	55	75519.8	1.0	4.3176	0.064	1.5	ug/L	1193	Standard
|	Co	59	920.7	3.4	0.0707	0.003	3.9	ug/L	98	Standard
|	Ni	60	75751.3	1.8	26.3086	0.573	2.2	ug/L	67	Standard
|	Cu	65	383.3	4.8	0.1013	0.007	6.9	ug/L	90	Standard
|	Zn	66	31135.3	1.7	25.9216	0.527	2.0	ug/L	148	Standard
[>	Ge	72	310334.3	0.5				ug/L	304674	Standard
|	As	75	-446.1	47.4	-0.1749	0.174	99.6	ug/L	-174	Standard
|	Se	82	2290.4	2.4	18.7899	0.498	2.7	ug/L	26	Standard
[	Se-1	77	1700.4	3.2	18.3316	0.675	3.7	ug/L	133	Standard
[>	Ga	71	588.3	8.5				mg/L	630	Standard
|	Rb	85	3363.7	2.0				ug/L	12	Standard
|	Y	89	279291.0	1.6				ug/L	271719	Standard
[>	Rh	103	421.7	9.6				ug/L	392	Standard
|	Mo	98	10401.8	1.3	2.3833	0.024	1.0	ug/L	7	Standard
|	Ag	107	57.7	7.0	-0.0041	0.000	11.9	ug/L	55	Standard
|	Cd	111	82.0	7.8	-0.0005	0.001	262.2	mg/L	67	Standard
|	Cd	114	285.9	6.3	0.0049	0.001	25.9	ug/L	219	Standard
[>	In	115	918605.6	0.3				ug/L	887392	Standard
|	Sn	118	872.7	7.6	0.0089	0.004	46.0	ug/L	653	Standard
|	Sb	123	743.2	7.5	0.0676	0.005	6.8	ug/L	48	Standard
|	Ba	135	2662.6	1.2	0.4762	0.007	1.6	ug/L	28	Standard
|	Ce	140	112.0	5.4				ug/L	34	Standard
[>	Tb	159	1215308.0	1.3				ug/L	1226141	Standard
|	Ho	165	16.7	3.5				ug/L	14	Standard
|	Tl	203	105.7	3.6	0.0043	0.000	4.1	ug/L	9	Standard
|	Tl	205	255.3	5.1	0.0024	0.000	13.2	ug/L	20	Standard
|	Pb	206	539.7	7.2	0.0074	0.002	31.4	ug/L	419	Standard
|	Pb	207	449.3	7.5	0.0072	0.002	33.1	ug/L	338	Standard
|	Pb	208	2068.4	3.1	0.0049	0.001	17.7	ug/L	1616	Standard
	U	238	33285.2	1.3	1.7096	0.030	1.8	ug/L	2	Standard
[>	Bi	209	627828.9	0.7				ug/L	641071	Standard

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Na	23	35633.5	1.7	1.8247	0.046	2.5	mg/L	412	Standard
Mg	24	3584806.7	1.7	4.7938	0.137	2.9	mg/L	177	Standard
K	39	305.0	17.3	0.1037	0.039	37.5	mg/L	150	Standard
Ca	43	60.0	33.3	40.7307	14.286	35.1	mg/L	7	Standard
Fe	54	590.9	3.5	-0.0146	0.003	18.1	mg/L	634	Standard
Fe	57	10320.2	7.0	0.0865	0.007	8.4	mg/L	2670	Standard
Sc-1	45	382503.5	1.2				mg/L	375691	Standard
Cl	35	6.0	16.7				ug/L	4	Standard
Kr	83	48.8	11.8				ug/L	39	Standard
Br	81	929.2	11.9				ug/L	639	Standard
P	31	536.7	1.6				ug/L	419	Standard
S	34	40206.6	1.6				ug/L	7420	Standard
Sr	88	198.3	8.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.858	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049102

Report Date/Time: Friday, July 27, 2012 11:04:25

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	Cd	111	
	Cd	114	
>	In	115	103.517
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.934
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049102

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Method 6020 - Summary Report

Sample ID: L1207072201 WG404363-01

Sample Date/Time: Friday, July 27, 2012 11:05:20

Number of Replicates: 3

Autosampler Position: 425

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	97163.9	0.6	-27208.8364	1022.429	3.8	ug/L	11199	Standard
|	Be	9	15.0	33.3	-0.0114	0.003	22.1	ug/L	10	Standard
|	Al	27	778708.6	4.1	53.0706	2.968	5.6	ug/L	7920	Standard
[>	Sc	45	330632.1	2.8				ug/L	375691	Standard
[	Ti	47	1064.0	15.2	0.8171	0.116	14.2	ug/L	70	Standard
|	V	51	7985.9	3.6	0.5141	0.036	6.9	ug/L	3172	Standard
|	Cr	52	17025.9	1.2	1.0389	0.062	5.9	ug/L	9852	Standard
|	Cr	53	3570.4	4.5	2.2255	0.155	7.0	ug/L	518	Standard
|	Mn	55	47637.8	0.7	3.0996	0.036	1.1	ug/L	1193	Standard
|	Co	59	743.0	4.0	0.0645	0.002	3.2	ug/L	98	Standard
|	Ni	60	2201.2	1.0	0.8507	0.008	0.9	ug/L	67	Standard
|	Cu	65	803.7	1.7	0.3041	0.007	2.2	ug/L	90	Standard
|	Zn	66	2671.6	3.4	2.4384	0.100	4.1	ug/L	148	Standard
[>	Ge	72	270745.1	1.8				ug/L	304674	Standard
|	As	75	102.0	15.2	0.2909	0.015	5.2	ug/L	-174	Standard
|	Se	82	96.9	6.3	0.7618	0.060	7.9	ug/L	26	Standard
[	Se-1	77	208.3	8.4	1.3351	0.278	20.8	ug/L	133	Standard
[>	Ga	71	741.7	12.4				mg/L	630	Standard
[	Rb	85	3503.7	1.9				ug/L	12	Standard
[	Y	89	243521.4	0.4				ug/L	271719	Standard
[>	Rh	103	348.3	8.3				ug/L	392	Standard
[	Mo	98	1162.0	0.6	0.3047	0.002	0.7	ug/L	7	Standard
|	Ag	107	45.3	10.4	-0.0046	0.001	14.5	ug/L	55	Standard
|	Cd	111	62.2	8.9	-0.0026	0.001	49.0	mg/L	67	Standard
|	Cd	114	173.6	5.0	-0.0014	0.001	57.0	ug/L	219	Standard
[>	In	115	790118.6	0.7				ug/L	887392	Standard
|	Sn	118	972.0	7.6	0.0251	0.006	23.6	ug/L	653	Standard
|	Sb	123	347.5	13.1	0.0386	0.005	11.9	ug/L	48	Standard
[	Ba	135	27600.8	1.9	5.8389	0.125	2.1	ug/L	28	Standard
[	Ce	140	9506.6	1.5				ug/L	34	Standard
[>	Tb	159	1104243.8	0.3				ug/L	1226141	Standard
[	Ho	165	134.0	6.7				ug/L	14	Standard
|	Tl	203	459.7	8.2	0.0245	0.002	8.7	ug/L	9	Standard
|	Tl	205	1056.4	7.7	0.0228	0.002	8.4	ug/L	20	Standard
|	Pb	206	3408.4	1.1	0.2176	0.004	1.8	ug/L	419	Standard
|	Pb	207	2845.6	1.7	0.2163	0.004	2.1	ug/L	338	Standard
|	Pb	208	13208.9	0.6	0.2157	0.002	1.0	ug/L	1616	Standard
	U	238	15434.5	1.0	0.8924	0.013	1.4	ug/L	2	Standard
[>	Bi	209	557755.1	0.6				ug/L	641071	Standard

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Na	23	235514.7	0.7	14.2162	0.468	3.3	mg/L	412	Standard
Mg	24	808244.0	1.1	1.2509	0.042	3.3	mg/L	177	Standard
K	39	455.0	9.5	0.2745	0.049	17.9	mg/L	150	Standard
Ca	43	16.7	45.8	11.2942	5.916	52.4	mg/L	7	Standard
Fe	54	530.2	15.4	-0.0099	0.021	209.1	mg/L	634	Standard
Fe	57	7583.6	5.3	0.0693	0.008	11.4	mg/L	2670	Standard
Sc-1	45	330632.1	2.8				mg/L	375691	Standard
Cl	35	83.7	15.4				ug/L	4	Standard
Kr	83	41.9	12.9				ug/L	39	Standard
Br	81	3532.9	9.2				ug/L	639	Standard
P	31	473.3	6.0				ug/L	419	Standard
S	34	24862.9	1.8				ug/L	7420	Standard
Sr	88	183.3	30.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.864	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072201 WG404363-01

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	Cd	111		
	Cd	114		
>	In	115	89.038	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.004	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072201 WG404363-01

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 11:08:33

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

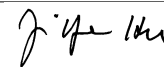
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11095.7	3.4	21.6173	122.848	568.3	ug/L	11199	Standard
|	Be	9	106340.5	3.3	51.7439	1.881	3.6	ug/L	10	Standard
|	Al	27	789983.7	0.8	47.9928	0.141	0.3	ug/L	7920	Standard
[>	Sc	45	370271.5	0.6				ug/L	375691	Standard
[	Ti	47	133114.9	1.4	96.3969	1.172	1.2	ug/L	70	Standard
|	V	51	543181.8	1.0	46.6633	0.427	0.9	ug/L	3172	Standard
|	Cr	52	447444.2	0.6	47.1291	0.365	0.8	ug/L	9852	Standard
|	Cr	53	76875.4	0.9	48.0488	0.544	1.1	ug/L	518	Standard
|	Mn	55	816933.6	0.6	47.9855	0.431	0.9	ug/L	1193	Standard
|	Co	59	521125.1	0.9	47.3693	0.537	1.1	ug/L	98	Standard
|	Ni	60	133832.1	0.3	46.9719	0.239	0.5	ug/L	67	Standard
|	Cu	65	126065.6	0.6	47.9676	0.214	0.4	ug/L	90	Standard
|	Zn	66	57167.3	1.7	48.1822	0.803	1.7	ug/L	148	Standard
[>	Ge	72	307206.2	0.3				ug/L	304674	Standard
|	As	75	57033.4	0.3	47.8718	0.208	0.4	ug/L	-174	Standard
|	Se	82	5821.4	1.0	48.4878	0.394	0.8	ug/L	26	Standard
[	Se-1	77	4206.6	1.2	47.9738	0.471	1.0	ug/L	133	Standard
[>	Ga	71	635.0	8.0				mg/L	630	Standard
[	Rb	85	815.0	5.3				ug/L	12	Standard
[	Y	89	268998.7	1.0				ug/L	271719	Standard
[>	Rh	103	405.0	15.2				ug/L	392	Standard
[	Mo	98	408331.7	0.7	96.9551	1.563	1.6	ug/L	7	Standard
|	Ag	107	406780.8	1.3	48.8807	0.847	1.7	ug/L	55	Standard
|	Cd	111	232302.2	0.4	50.5673	0.558	1.1	mg/L	67	Standard
|	Cd	114	629034.2	0.6	48.6848	0.664	1.4	ug/L	219	Standard
[>	In	115	888559.6	1.1				ug/L	887392	Standard
|	Sn	118	742138.3	0.8	48.4107	0.419	0.9	ug/L	653	Standard
|	Sb	123	546295.6	0.4	48.3180	0.692	1.4	ug/L	48	Standard
[	Ba	135	249188.0	1.3	46.9378	0.520	1.1	ug/L	28	Standard
[	Ce	140	948.0	4.0				ug/L	34	Standard
[>	Tb	159	1213749.9	0.3				ug/L	1226141	Standard
[	Ho	165	22.0	16.4				ug/L	14	Standard
|	Tl	203	945974.6	0.4	46.8822	0.104	0.2	ug/L	9	Standard
|	Tl	205	2199478.8	1.5	48.6884	0.949	1.9	ug/L	20	Standard
|	Pb	206	735926.7	0.6	47.4843	0.533	1.1	ug/L	419	Standard
|	Pb	207	626359.6	0.7	48.1321	0.575	1.2	ug/L	338	Standard
|	Pb	208	2892620.7	0.5	48.1977	0.480	1.0	ug/L	1616	Standard
	U	238	940967.9	1.1	48.9346	0.251	0.5	ug/L	2	Standard
[>	Bi	209	619991.4	0.5				ug/L	641071	Standard

Sample ID: QC Std 6

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Na	23	120821.5	0.8	6.4876	0.080	1.2	mg/L	412	Standard
Mg	24	3554229.8	1.2	4.9087	0.033	0.7	mg/L	177	Standard
K	39	6056.2	4.7	4.6662	0.232	5.0	mg/L	150	Standard
Ca	43	15.0	33.3	8.6832	3.761	43.3	mg/L	7	Standard
Fe	54	24477.1	2.5	4.8405	0.102	2.1	mg/L	634	Standard
Fe	57	452064.3	3.2	5.2142	0.140	2.7	mg/L	2670	Standard
Sc-1	45	370271.5	0.6				mg/L	375691	Standard
Cl	35	5.7	20.4				ug/L	4	Standard
Kr	83	42.6	9.9				ug/L	39	Standard
Br	81	965.9	6.1				ug/L	639	Standard
P	31	405.8	4.0				ug/L	419	Standard
S	34	6523.9	5.9				ug/L	7420	Standard
Sr	88	45.0	38.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	95.986		
Sc	45			
Ti	47	96.397		
V	51	93.327		
Cr	52	94.258		
Cr	53			
Mn	55	95.971		
Co	59	94.739		
Ni	60	93.944		
Cu	65	95.935		
Zn	66	96.364		
Ge	72		100.831	
As	75	95.744		
Se	82	96.976		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.955		
Ag	107	97.761		

Sample ID: QC Std 6

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	Cd	111	101.135	
	Cd	114		
>	In	115		100.132
	Sn	118	96.821	
	Sb	123	96.636	
	Ba	135	93.876	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.764	
|	Tl	205		
|	Pb	206	94.969	
|	Pb	207	96.264	
|	Pb	208	96.395	
|	U	238	97.869	
>	Bi	209		96.712
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 11:11:03

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 11:11:43

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11270.9	2.4	59.7031	107.832	180.6	ug/L	11199	Standard
|	Be	9	11.7	137.8	-0.0139	0.008	55.6	ug/L	10	Standard
|	Al	27	7812.0	2.7	-0.0296	0.021	71.7	ug/L	7920	Standard
[>	Sc	45	380878.9	1.8				ug/L	375691	Standard
[	Ti	47	60.0	20.3	-0.0135	0.009	67.2	ug/L	70	Standard
|	V	51	2961.0	1.0	-0.0170	0.001	7.6	ug/L	3172	Standard
|	Cr	52	8958.6	0.6	-0.0914	0.008	9.2	ug/L	9852	Standard
|	Cr	53	398.3	4.1	-0.0786	0.007	9.1	ug/L	518	Standard
|	Mn	55	1297.1	16.2	-0.0060	0.013	212.8	ug/L	1193	Standard
|	Co	59	164.0	50.2	0.0026	0.008	294.4	ug/L	98	Standard
|	Ni	60	79.0	24.7	0.0009	0.007	804.1	ug/L	67	Standard
|	Cu	65	127.0	3.6	0.0044	0.002	52.1	ug/L	90	Standard
|	Zn	66	166.0	21.1	0.0146	0.030	204.3	ug/L	148	Standard
[>	Ge	72	311843.5	1.3				ug/L	304674	Standard
|	As	75	-227.7	10.4	0.0067	0.018	265.1	ug/L	-174	Standard
|	Se	82	28.8	24.7	0.0802	0.059	73.1	ug/L	26	Standard
[	Se-1	77	146.0	12.8	0.2441	0.211	86.4	ug/L	133	Standard
[>	Ga	71	723.4	2.0				mg/L	630	Standard
[	Rb	85	15.0	33.3				ug/L	12	Standard
[	Y	89	273354.1	1.4				ug/L	271719	Standard
[>	Rh	103	413.3	9.7				ug/L	392	Standard
[	Mo	98	331.6	4.8	0.0716	0.004	6.2	ug/L	7	Standard
|	Ag	107	204.0	87.0	0.0132	0.021	156.8	ug/L	55	Standard
|	Cd	111	156.2	77.6	0.0154	0.026	165.6	mg/L	67	Standard
|	Cd	114	428.3	79.0	0.0159	0.025	159.5	ug/L	219	Standard
[>	In	115	906078.4	1.0				ug/L	887392	Standard
|	Sn	118	1243.1	32.2	0.0332	0.025	75.1	ug/L	653	Standard
|	Sb	123	2681.7	10.9	0.2365	0.024	10.3	ug/L	48	Standard
[	Ba	135	111.3	108.7	0.0114	0.022	194.2	ug/L	28	Standard
[	Ce	140	32.3	23.2				ug/L	34	Standard
[>	Tb	159	1203329.8	0.9				ug/L	1226141	Standard
[	Ho	165	16.3	3.5				ug/L	14	Standard
|	Tl	203	205.7	118.9	0.0090	0.012	130.2	ug/L	9	Standard
|	Tl	205	422.3	123.0	0.0059	0.011	188.5	ug/L	20	Standard
|	Pb	206	516.7	34.4	0.0053	0.011	206.4	ug/L	419	Standard
|	Pb	207	421.3	29.0	0.0045	0.009	200.9	ug/L	338	Standard
|	Pb	208	2004.1	29.2	0.0033	0.009	284.1	ug/L	1616	Standard
	U	238	124.7	88.0	0.0064	0.005	86.3	ug/L	2	Standard
[>	Bi	209	639272.2	0.7				ug/L	641071	Standard

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Na	23	653.4	68.0	-0.0042	0.024	579.7	mg/L	412	Standard
Mg	24	1336.8	108.9	0.0018	0.002	109.2	mg/L	177	Standard
K	39	143.3	8.8	-0.0196	0.009	46.1	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2564	2.128	169.4	mg/L	7	Standard
Fe	54	655.6	6.6	-0.0014	0.006	434.7	mg/L	634	Standard
Fe	57	3072.0	6.8	0.0053	0.003	56.2	mg/L	2670	Standard
Sc-1	45	380878.9	1.8				mg/L	375691	Standard
Cl	35	5.0	40.0				ug/L	4	Standard
Kr	83	42.0	10.5				ug/L	39	Standard
Br	81	815.9	12.4				ug/L	639	Standard
P	31	425.0	11.8				ug/L	419	Standard
S	34	6352.2	1.4				ug/L	7420	Standard
Sr	88	33.3	31.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.353	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.106
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.719
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, July 27, 2012 11:14:54

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10873.9	2.8	115.3006	65.753	57.0	ug/L	11199	Standard
|	Be	9	5.0	100.0	-0.0172	0.002	13.9	ug/L	10	Standard
|	Al	27	7593.6	3.2	-0.0346	0.018	52.6	ug/L	7920	Standard
[>	Sc	45	374126.2	0.8				ug/L	375691	Standard
|	Ti	47	58.3	2.0	-0.0152	0.001	7.7	ug/L	70	Standard
|	V	51	7220.3	1.3	0.3385	0.013	3.9	ug/L	3172	Standard
|	Cr	52	16181.0	1.0	0.6548	0.031	4.8	ug/L	9852	Standard
|	Cr	53	1599.3	0.5	0.6544	0.006	1.0	ug/L	518	Standard
|	Mn	55	9505.0	0.8	0.4634	0.006	1.2	ug/L	1193	Standard
|	Co	59	4277.3	0.4	0.3665	0.003	0.8	ug/L	98	Standard
|	Ni	60	4625.4	0.2	1.5552	0.017	1.1	ug/L	67	Standard
|	Cu	65	2164.8	2.2	0.7597	0.023	3.0	ug/L	90	Standard
|	Zn	66	8655.5	2.2	6.9974	0.087	1.2	ug/L	148	Standard
[>	Ge	72	315497.1	0.9				ug/L	304674	Standard
|	As	75	234.5	12.8	0.3849	0.023	5.9	ug/L	-174	Standard
|	Se	82	69.7	10.4	0.4106	0.059	14.5	ug/L	26	Standard
[	Se-1	77	172.0	5.2	0.5219	0.085	16.3	ug/L	133	Standard
[>	Ga	71	680.0	8.3				mg/L	630	Standard
|	Rb	85	18.3	41.7				ug/L	12	Standard
|	Y	89	274476.2	2.1				ug/L	271719	Standard
[>	Rh	103	370.0	9.5				ug/L	392	Standard
|	Mo	98	132.1	62.0	0.0249	0.019	76.4	ug/L	7	Standard
|	Ag	107	3290.7	1.9	0.3738	0.009	2.3	ug/L	55	Standard
|	Cd	111	1252.7	2.3	0.2475	0.006	2.6	mg/L	67	Standard
|	Cd	114	3306.8	1.4	0.2324	0.003	1.3	ug/L	219	Standard
[>	In	115	913761.0	0.4				ug/L	887392	Standard
|	Sn	118	816.0	9.4	0.0056	0.005	89.9	ug/L	653	Standard
|	Sb	123	4748.5	3.1	0.4124	0.014	3.4	ug/L	48	Standard
|	Ba	135	3735.8	0.6	0.6753	0.006	0.8	ug/L	28	Standard
|	Ce	140	30.7	13.2				ug/L	34	Standard
[>	Tb	159	1209898.2	0.1				ug/L	1226141	Standard
|	Ho	165	12.3	40.0				ug/L	14	Standard
|	Tl	203	1635.8	3.6	0.0784	0.003	3.6	ug/L	9	Standard
|	Tl	205	3650.4	2.0	0.0758	0.001	1.8	ug/L	20	Standard
|	Pb	206	3406.7	2.0	0.1880	0.004	2.1	ug/L	419	Standard
|	Pb	207	2842.3	1.2	0.1867	0.002	1.1	ug/L	338	Standard
|	Pb	208	13356.7	2.5	0.1886	0.005	2.6	ug/L	1616	Standard
	U	238	7365.5	1.8	0.3745	0.006	1.5	ug/L	2	Standard
[>	Bi	209	634232.2	0.3				ug/L	641071	Standard

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Na	23	398.3	1.4	-0.0174	0.000	2.3	mg/L	412	Standard
Mg	24	288.3	42.6	0.0004	0.000	41.6	mg/L	177	Standard
K	39	120.0	11.0	-0.0360	0.010	27.3	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0374	2.120	5668.8	mg/L	7	Standard
Fe	54	633.4	15.6	-0.0034	0.021	618.9	mg/L	634	Standard
Fe	57	3225.3	6.5	0.0077	0.003	34.7	mg/L	2670	Standard
Sc-1	45	374126.2	0.8				mg/L	375691	Standard
Cl	35	2.3	49.5				ug/L	4	Standard
Kr	83	42.1	18.8				ug/L	39	Standard
Br	81	825.9	5.7				ug/L	639	Standard
P	31	410.0	5.6				ug/L	419	Standard
S	34	6286.3	1.6				ug/L	7420	Standard
Sr	88	63.3	22.8				ug/L	35	Standard

QC Calculated Values

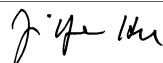
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	84.616		
Cr	52	81.845		
Cr	53			
Mn	55	92.676		
Co	59	91.627		
Ni	60	97.202		
Cu	65	94.958		
Zn	66	111.958		
Ge	72		103.552	
As	75	96.215		
Se	82	102.644		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	93.455		

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	Cd	111	103.105	
	Cd	114		
>	In	115		102.972
	Sn	118		
	Sb	123	103.092	
	Ba	135	90.046	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.974	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	94.285	
|	U	238	93.633	
>	Bi	209		98.933
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 8

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Method 6020 - Summary Report

Sample ID: L1207072201S WG404363-05

Sample Date/Time: Friday, July 27, 2012 11:18:05

Number of Replicates: 3

Autosampler Position: 426

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	94767.1	1.3	-26575.2297	550.712	2.1	ug/L	11199	Standard
|	Be	9	12652.0	6.2	6.9086	0.453	6.6	ug/L	10	Standard
|	Al	27	1265932.1	0.9	86.9153	1.452	1.7	ug/L	7920	Standard
[>	Sc	45	329182.8	1.2				ug/L	375691	Standard
[	Ti	47	1492.7	4.5	1.1308	0.049	4.4	ug/L	70	Standard
|	V	51	67434.1	1.6	6.1274	0.180	2.9	ug/L	3172	Standard
|	Cr	52	64054.5	1.3	6.5290	0.208	3.2	ug/L	9852	Standard
|	Cr	53	11664.5	4.4	7.7354	0.483	6.2	ug/L	518	Standard
|	Mn	55	139776.6	1.8	8.9467	0.220	2.5	ug/L	1193	Standard
|	Co	59	58644.3	1.1	5.8411	0.129	2.2	ug/L	98	Standard
|	Ni	60	16868.1	0.8	6.4765	0.155	2.4	ug/L	67	Standard
|	Cu	65	14784.2	0.8	6.1379	0.140	2.3	ug/L	90	Standard
|	Zn	66	10401.6	1.1	9.5250	0.216	2.3	ug/L	148	Standard
[>	Ge	72	279903.5	1.6				ug/L	304674	Standard
|	As	75	7173.0	1.8	6.7761	0.134	2.0	ug/L	-174	Standard
|	Se	82	874.1	2.1	7.8623	0.267	3.4	ug/L	26	Standard
[	Se-1	77	749.4	3.6	8.2213	0.467	5.7	ug/L	133	Standard
[>	Ga	71	688.3	11.6				mg/L	630	Standard
[	Rb	85	4110.6	3.0				ug/L	12	Standard
[	Y	89	242481.8	1.5				ug/L	271719	Standard
[>	Rh	103	390.0	14.6				ug/L	392	Standard
[	Mo	98	1251.1	8.3	0.3267	0.028	8.5	ug/L	7	Standard
|	Ag	107	45513.3	1.6	6.1085	0.113	1.8	ug/L	55	Standard
|	Cd	111	27234.8	1.4	6.6162	0.098	1.5	mg/L	67	Standard
|	Cd	114	74326.4	2.1	6.4207	0.145	2.3	ug/L	219	Standard
[>	In	115	794295.5	0.6				ug/L	887392	Standard
|	Sn	118	1082.4	6.2	0.0328	0.005	14.7	ug/L	653	Standard
|	Sb	123	65017.9	1.9	6.4360	0.123	1.9	ug/L	48	Standard
[	Ba	135	57344.7	2.3	12.0767	0.285	2.4	ug/L	28	Standard
[	Ce	140	10629.4	1.9				ug/L	34	Standard
[>	Tb	159	1118419.2	0.5				ug/L	1226141	Standard
[	Ho	165	160.7	12.0				ug/L	14	Standard
|	Tl	203	106554.8	2.1	5.8018	0.154	2.7	ug/L	9	Standard
|	Tl	205	247093.4	2.0	6.0068	0.144	2.4	ug/L	20	Standard
|	Pb	206	85497.3	1.9	6.0375	0.134	2.2	ug/L	419	Standard
|	Pb	207	72618.3	1.5	6.1075	0.111	1.8	ug/L	338	Standard
|	Pb	208	336543.5	1.6	6.1357	0.122	2.0	ug/L	1616	Standard
	U	238	118436.5	1.2	6.7677	0.119	1.8	ug/L	2	Standard
[>	Bi	209	564318.4	1.1				ug/L	641071	Standard

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Na	23	237028.5	2.0	14.3622	0.239	1.7	mg/L	412	Standard
Mg	24	821817.0	1.4	1.2768	0.020	1.6	mg/L	177	Standard
K	39	511.7	8.8	0.3258	0.039	12.0	mg/L	150	Standard
Ca	43	3.3	173.2	0.2971	4.818	1621.9	mg/L	7	Standard
Fe	54	604.4	7.6	0.0074	0.012	164.2	mg/L	634	Standard
Fe	57	8997.7	3.7	0.0880	0.004	4.8	mg/L	2670	Standard
Sc-1	45	329182.8	1.2				mg/L	375691	Standard
Cl	35	76.7	11.8				ug/L	4	Standard
Kr	83	45.4	8.1				ug/L	39	Standard
Br	81	3728.0	3.2				ug/L	639	Standard
P	31	494.2	6.7				ug/L	419	Standard
S	34	24400.5	2.0				ug/L	7420	Standard
Sr	88	223.3	10.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.870	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072201S WG404363-05

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	Cd	111	
	Cd	114	
>	In	115	89.509
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	88.027
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072201S WG404363-05

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Method 6020 - Summary Report

Sample ID: L1207072201SD WG404363-06

Sample Date/Time: Friday, July 27, 2012 11:21:14

Number of Replicates: 3

Autosampler Position: 427

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	88001.5	0.7	-24230.6008	202.164	0.8	ug/L	11199	Standard
|	Be	9	11284.2	3.4	6.1085	0.206	3.4	ug/L	10	Standard
|	Al	27	1109067.2	1.3	75.4576	0.983	1.3	ug/L	7920	Standard
[>	Sc	45	331860.0	0.0				ug/L	375691	Standard
[	Ti	47	1206.0	14.3	0.9224	0.147	15.9	ug/L	70	Standard
|	V	51	61192.2	1.4	5.6489	0.121	2.1	ug/L	3172	Standard
|	Cr	52	59123.8	1.6	6.0833	0.184	3.0	ug/L	9852	Standard
|	Cr	53	11064.0	2.6	7.4682	0.276	3.7	ug/L	518	Standard
|	Mn	55	125015.9	2.9	8.1530	0.313	3.8	ug/L	1193	Standard
|	Co	59	52870.5	2.7	5.3689	0.194	3.6	ug/L	98	Standard
|	Ni	60	14975.7	2.4	5.8602	0.179	3.1	ug/L	67	Standard
|	Cu	65	13140.4	1.4	5.5586	0.138	2.5	ug/L	90	Standard
|	Zn	66	9115.7	1.7	8.4981	0.193	2.3	ug/L	148	Standard
[>	Ge	72	274489.9	1.0				ug/L	304674	Standard
|	As	75	6574.8	2.3	6.3468	0.196	3.1	ug/L	-174	Standard
|	Se	82	819.7	3.3	7.5112	0.325	4.3	ug/L	26	Standard
[	Se-1	77	707.0	8.1	7.8567	0.843	10.7	ug/L	133	Standard
[>	Ga	71	676.7	10.0				mg/L	630	Standard
[	Rb	85	3650.4	4.3				ug/L	12	Standard
[	Y	89	241754.4	2.8				ug/L	271719	Standard
[>	Rh	103	295.0	16.2				ug/L	392	Standard
[	Mo	98	1134.8	3.1	0.2961	0.011	3.6	ug/L	7	Standard
|	Ag	107	39985.0	1.4	5.3702	0.044	0.8	ug/L	55	Standard
|	Cd	111	24497.1	1.8	5.9550	0.072	1.2	mg/L	67	Standard
|	Cd	114	66657.5	1.0	5.7621	0.046	0.8	ug/L	219	Standard
[>	In	115	793494.3	0.6				ug/L	887392	Standard
|	Sn	118	965.0	4.4	0.0243	0.003	10.9	ug/L	653	Standard
|	Sb	123	57487.2	1.4	5.6965	0.047	0.8	ug/L	48	Standard
[	Ba	135	50884.0	1.9	10.7251	0.136	1.3	ug/L	28	Standard
[	Ce	140	9262.5	2.7				ug/L	34	Standard
[>	Tb	159	1100749.6	0.7				ug/L	1226141	Standard
[	Ho	165	131.0	4.6				ug/L	14	Standard
|	Tl	203	95475.6	2.1	5.2171	0.131	2.5	ug/L	9	Standard
|	Tl	205	221869.4	2.6	5.4127	0.152	2.8	ug/L	20	Standard
|	Pb	206	76205.5	1.7	5.3980	0.113	2.1	ug/L	419	Standard
|	Pb	207	64891.0	2.0	5.4749	0.142	2.6	ug/L	338	Standard
|	Pb	208	301841.8	2.2	5.5203	0.150	2.7	ug/L	1616	Standard
	U	238	106160.6	0.9	6.0882	0.098	1.6	ug/L	2	Standard
[>	Bi	209	562276.2	0.9				ug/L	641071	Standard

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Na	23	221082.5	3.4	13.2850	0.453	3.4	mg/L	412	Standard
Mg	24	758157.6	3.2	1.1683	0.038	3.2	mg/L	177	Standard
K	39	385.0	1.3	0.2102	0.004	2.1	mg/L	150	Standard
Ca	43	11.7	137.8	7.2053	13.352	185.3	mg/L	7	Standard
Fe	54	562.5	5.5	-0.0033	0.007	208.2	mg/L	634	Standard
Fe	57	7742.0	5.5	0.0708	0.006	7.8	mg/L	2670	Standard
Sc-1	45	331860.0	0.0				mg/L	375691	Standard
Cl	35	90.7	12.7				ug/L	4	Standard
Kr	83	41.1	4.6				ug/L	39	Standard
Br	81	3097.8	2.1				ug/L	639	Standard
P	31	440.0	4.7				ug/L	419	Standard
S	34	23173.5	0.9				ug/L	7420	Standard
Sr	88	218.3	9.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.093	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207072201SD WG404363-06

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	Cd	111		
	Cd	114		
>	In	115	89.419	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.709	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207072201SD WG404363-06

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Method 6020 - Summary Report

Sample ID: L1207065822

Sample Date/Time: Friday, July 27, 2012 11:24:25

Number of Replicates: 3

Autosampler Position: 428

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

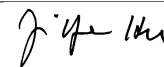
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11519.4	5.8	-15.1320	42.338	279.8	ug/L	11199	Standard
|	Be	9	28.3	112.1	-0.0063	0.015	231.3	ug/L	10	Standard
|	Al	27	46016.6	6.3	2.2611	0.187	8.3	ug/L	7920	Standard
[>	Sc	45	379686.3	4.5				ug/L	375691	Standard
|	Ti	47	110.7	17.6	0.0229	0.012	51.1	ug/L	70	Standard
|	V	51	3282.7	0.9	0.0120	0.007	59.2	ug/L	3172	Standard
|	Cr	52	12495.5	0.5	0.2916	0.034	11.7	ug/L	9852	Standard
|	Cr	53	1048.4	1.7	0.3283	0.017	5.2	ug/L	518	Standard
|	Mn	55	2195.8	2.2	0.0469	0.006	13.0	ug/L	1193	Standard
|	Co	59	175.7	16.0	0.0036	0.002	59.7	ug/L	98	Standard
|	Ni	60	728.4	14.2	0.2265	0.030	13.3	ug/L	67	Standard
|	Cu	65	482.7	7.2	0.1387	0.008	5.7	ug/L	90	Standard
|	Zn	66	2804.3	3.6	2.2237	0.053	2.4	ug/L	148	Standard
[>	Ge	72	310115.4	3.0				ug/L	304674	Standard
|	As	75	-230.4	2.8	0.0032	0.008	255.1	ug/L	-174	Standard
|	Se	82	27.1	21.2	0.0669	0.042	63.4	ug/L	26	Standard
[	Se-1	77	137.7	2.6	0.1583	0.075	47.3	ug/L	133	Standard
[>	Ga	71	655.0	16.7				mg/L	630	Standard
|	Rb	85	53.3	28.6				ug/L	12	Standard
|	Y	89	271707.8	3.1				ug/L	271719	Standard
[>	Rh	103	351.7	13.5				ug/L	392	Standard
|	Mo	98	68.6	40.1	0.0106	0.006	58.7	ug/L	7	Standard
|	Ag	107	87.3	28.4	-0.0003	0.003	890.1	ug/L	55	Standard
|	Cd	111	94.8	10.5	0.0029	0.002	76.2	mg/L	67	Standard
|	Cd	114	245.5	15.2	0.0025	0.003	103.4	ug/L	219	Standard
[>	In	115	888850.2	3.4				ug/L	887392	Standard
|	Sn	118	837.0	4.7	0.0084	0.003	31.6	ug/L	653	Standard
|	Sb	123	243.0	29.2	0.0255	0.006	24.1	ug/L	48	Standard
|	Ba	135	246.0	5.3	0.0373	0.003	7.4	ug/L	28	Standard
|	Ce	140	163.0	7.5				ug/L	34	Standard
[>	Tb	159	1181795.4	3.6				ug/L	1226141	Standard
|	Ho	165	15.3	16.4				ug/L	14	Standard
|	Tl	203	257.7	15.8	0.0117	0.002	16.1	ug/L	9	Standard
|	Tl	205	656.7	19.1	0.0112	0.002	21.8	ug/L	20	Standard
|	Pb	206	542.3	5.0	0.0075	0.001	12.7	ug/L	419	Standard
|	Pb	207	427.0	6.7	0.0055	0.002	35.8	ug/L	338	Standard
|	Pb	208	2067.1	3.8	0.0049	0.001	13.0	ug/L	1616	Standard
	U	238	232.3	146.7	0.0119	0.017	145.1	ug/L	2	Standard
[>	Bi	209	628116.1	2.7				ug/L	641071	Standard

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Na	23	2610.4	97.4	0.0967	0.129	133.8	mg/L	412	Standard
Mg	24	5223.4	116.7	0.0069	0.008	114.6	mg/L	177	Standard
K	39	136.7	16.5	-0.0243	0.017	70.8	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	696.8	8.0	0.0077	0.018	229.0	mg/L	634	Standard
Fe	57	3500.4	9.1	0.0103	0.004	35.2	mg/L	2670	Standard
Sc-1	45	379686.3	4.5				mg/L	375691	Standard
Cl	35	7.0	37.8				ug/L	4	Standard
Kr	83	40.6	9.0				ug/L	39	Standard
Br	81	797.5	2.5				ug/L	639	Standard
P	31	396.7	5.4				ug/L	419	Standard
S	34	6859.1	4.6				ug/L	7420	Standard
Sr	88	41.7	6.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.786	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065822

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	Cd	111	
	Cd	114	
>	In	115	100.164
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.979
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065822

Report Date/Time: Friday, July 27, 2012 11:26:55

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Method 6020 - Summary Report

Sample ID: L1207065823

Sample Date/Time: Friday, July 27, 2012 11:27:34

Number of Replicates: 3

Autosampler Position: 429

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19050.3	0.9	-2820.9895	134.958	4.8	ug/L	11199	Standard
|	Be	9	66.7	15.6	0.0167	0.005	32.6	ug/L	10	Standard
|	Al	27	2184083.6	8.5	149.2162	8.989	6.0	ug/L	7920	Standard
[>	Sc	45	331240.6	3.2				ug/L	375691	Standard
|	Ti	47	2118.8	6.6	1.6524	0.098	5.9	ug/L	70	Standard
|	V	51	7562.0	1.9	0.4583	0.008	1.7	ug/L	3172	Standard
|	Cr	52	10063.0	0.8	0.1645	0.001	0.6	ug/L	9852	Standard
|	Cr	53	765.9	3.8	0.2111	0.022	10.3	ug/L	518	Standard
|	Mn	55	39959.6	0.9	2.5363	0.006	0.2	ug/L	1193	Standard
|	Co	59	2010.8	2.6	0.1913	0.004	1.9	ug/L	98	Standard
|	Ni	60	1369.4	6.4	0.5089	0.034	6.6	ug/L	67	Standard
|	Cu	65	885.0	4.0	0.3319	0.012	3.5	ug/L	90	Standard
|	Zn	66	14585.4	1.7	13.5970	0.182	1.3	ug/L	148	Standard
[>	Ge	72	275942.5	0.9				ug/L	304674	Standard
|	As	75	-129.1	13.7	0.0740	0.016	21.0	ug/L	-174	Standard
|	Se	82	23.6	5.0	0.0631	0.011	17.7	ug/L	26	Standard
[	Se-1	77	126.7	6.4	0.2119	0.112	52.7	ug/L	133	Standard
[>	Ga	71	820.0	17.2				mg/L	630	Standard
|	Rb	85	4268.9	1.5				ug/L	12	Standard
|	Y	89	241904.3	1.1				ug/L	271719	Standard
[>	Rh	103	365.0	9.6				ug/L	392	Standard
|	Mo	98	117.6	10.6	0.0255	0.003	11.7	ug/L	7	Standard
|	Ag	107	48.0	11.0	-0.0043	0.001	17.9	ug/L	55	Standard
|	Cd	111	172.7	5.1	0.0241	0.002	7.2	mg/L	67	Standard
|	Cd	114	478.6	1.0	0.0248	0.001	3.2	ug/L	219	Standard
[>	In	115	797499.5	1.0				ug/L	887392	Standard
|	Sn	118	663.0	9.2	0.0019	0.004	203.3	ug/L	653	Standard
|	Sb	123	223.2	4.2	0.0260	0.001	2.7	ug/L	48	Standard
|	Ba	135	33132.9	1.5	6.9455	0.038	0.5	ug/L	28	Standard
|	Ce	140	90194.7	1.0				ug/L	34	Standard
[>	Tb	159	1091282.8	0.6				ug/L	1226141	Standard
|	Ho	165	1133.0	1.7				ug/L	14	Standard
|	Tl	203	211.7	13.7	0.0101	0.001	13.8	ug/L	9	Standard
|	Tl	205	488.0	11.1	0.0082	0.001	14.0	ug/L	20	Standard
|	Pb	206	3764.8	0.3	0.2281	0.005	2.0	ug/L	419	Standard
|	Pb	207	3046.0	2.5	0.2189	0.006	2.6	ug/L	338	Standard
|	Pb	208	14397.3	1.2	0.2228	0.001	0.5	ug/L	1616	Standard
	U	238	502.0	3.7	0.0275	0.001	4.9	ug/L	2	Standard
[>	Bi	209	590695.5	1.6				ug/L	641071	Standard

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Na	23	79735.9	0.9	4.7785	0.145	3.0	mg/L	412	Standard
Mg	24	73670.3	1.1	0.1138	0.003	2.5	mg/L	177	Standard
K	39	201.7	10.0	0.0484	0.016	32.0	mg/L	150	Standard
Ca	43	5.0	173.2	1.6809	7.215	429.2	mg/L	7	Standard
Fe	54	1095.7	12.9	0.1180	0.031	26.2	mg/L	634	Standard
Fe	57	16652.5	2.3	0.1866	0.003	1.6	mg/L	2670	Standard
Sc-1	45	331240.6	3.2				mg/L	375691	Standard
Cl	35	3.3	69.3				ug/L	4	Standard
Kr	83	41.3	5.3				ug/L	39	Standard
Br	81	666.7	9.2				ug/L	639	Standard
P	31	255.0	6.4				ug/L	419	Standard
S	34	6893.2	0.1				ug/L	7420	Standard
Sr	88	58.3	13.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.570	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	89.870
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.142
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065824

Sample Date/Time: Friday, July 27, 2012 11:30:43

Number of Replicates: 3

Autosampler Position: 430

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20322.0	5.3	-3102.3950	333.480	10.7	ug/L	11199	Standard
|	Be	9	53.3	21.7	0.0089	0.006	64.2	ug/L	10	Standard
|	Al	27	3240204.2	2.1	217.8759	3.636	1.7	ug/L	7920	Standard
[>	Sc	45	337254.8	2.1				ug/L	375691	Standard
|	Ti	47	3652.8	4.1	2.8506	0.107	3.7	ug/L	70	Standard
|	V	51	9776.7	3.4	0.6587	0.026	4.0	ug/L	3172	Standard
|	Cr	52	11255.5	3.3	0.2891	0.035	12.1	ug/L	9852	Standard
|	Cr	53	980.0	6.0	0.3519	0.040	11.5	ug/L	518	Standard
|	Mn	55	45179.0	2.7	2.8383	0.064	2.3	ug/L	1193	Standard
|	Co	59	2558.5	3.1	0.2433	0.007	3.0	ug/L	98	Standard
|	Ni	60	1714.4	3.8	0.6347	0.020	3.1	ug/L	67	Standard
|	Cu	65	1098.7	1.4	0.4164	0.005	1.2	ug/L	90	Standard
|	Zn	66	19400.1	3.3	17.8802	0.513	2.9	ug/L	148	Standard
[>	Ge	72	279694.4	0.8				ug/L	304674	Standard
|	As	75	-61.6	37.8	0.1377	0.021	15.3	ug/L	-174	Standard
|	Se	82	27.6	17.1	0.0964	0.044	45.8	ug/L	26	Standard
[	Se-1	77	119.7	4.8	0.0994	0.084	84.3	ug/L	133	Standard
[>	Ga	71	1015.0	2.7				mg/L	630	Standard
|	Rb	85	5696.1	6.8				ug/L	12	Standard
|	Y	89	250257.1	2.2				ug/L	271719	Standard
[>	Rh	103	343.3	5.9				ug/L	392	Standard
|	Mo	98	111.4	13.9	0.0238	0.004	16.1	ug/L	7	Standard
|	Ag	107	52.3	14.3	-0.0038	0.001	27.8	ug/L	55	Standard
|	Cd	111	174.7	4.0	0.0245	0.002	7.0	mg/L	67	Standard
|	Cd	114	519.6	6.9	0.0283	0.003	9.6	ug/L	219	Standard
[>	In	115	798393.7	1.1				ug/L	887392	Standard
|	Sn	118	687.0	10.0	0.0037	0.005	132.2	ug/L	653	Standard
|	Sb	123	259.0	6.5	0.0295	0.001	4.9	ug/L	48	Standard
|	Ba	135	35997.7	2.6	7.5391	0.204	2.7	ug/L	28	Standard
|	Ce	140	95717.8	1.8				ug/L	34	Standard
[>	Tb	159	1100836.7	0.6				ug/L	1226141	Standard
|	Ho	165	1220.7	3.6				ug/L	14	Standard
|	Tl	203	234.7	9.9	0.0112	0.001	10.3	ug/L	9	Standard
|	Tl	205	530.7	1.4	0.0090	0.000	2.3	ug/L	20	Standard
|	Pb	206	4522.7	3.6	0.2759	0.011	4.2	ug/L	419	Standard
|	Pb	207	3646.8	1.5	0.2639	0.003	1.3	ug/L	338	Standard
|	Pb	208	17252.8	2.1	0.2693	0.007	2.5	ug/L	1616	Standard
	U	238	593.0	2.2	0.0321	0.001	2.7	ug/L	2	Standard
[>	Bi	209	597694.1	0.6				ug/L	641071	Standard

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Na	23	80161.7	4.2	4.7174	0.254	5.4	mg/L	412	Standard
Mg	24	78239.9	1.9	0.1187	0.000	0.4	mg/L	177	Standard
K	39	183.3	22.2	0.0291	0.033	112.7	mg/L	150	Standard
Ca	43	5.0	0.0	1.6011	0.085	5.3	mg/L	7	Standard
Fe	54	1633.7	8.9	0.2341	0.040	17.0	mg/L	634	Standard
Fe	57	26890.6	7.1	0.3129	0.019	6.2	mg/L	2670	Standard
Sc-1	45	337254.8	2.1				mg/L	375691	Standard
Cl	35	5.7	36.7				ug/L	4	Standard
Kr	83	36.4	10.6				ug/L	39	Standard
Br	81	701.7	5.5				ug/L	639	Standard
P	31	284.2	5.7				ug/L	419	Standard
S	34	6549.7	3.5				ug/L	7420	Standard
Sr	88	65.0	40.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.801	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065824

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	Cd	111		
	Cd	114		
>	In	115	89.971	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	93.234	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065824

Report Date/Time: Friday, July 27, 2012 11:33:13

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Method 6020 - Summary Report

Sample ID: L1207065825

Sample Date/Time: Friday, July 27, 2012 11:33:52

Number of Replicates: 3

Autosampler Position: 431

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21340.0	2.3	-3428.6876	173.314	5.1	ug/L	11199	Standard
|	Be	9	20.0	86.6	-0.0088	0.009	106.5	ug/L	10	Standard
|	Al	27	1486844.0	2.6	99.9618	3.472	3.5	ug/L	7920	Standard
[>	Sc	45	336444.6	0.9				ug/L	375691	Standard
[	Ti	47	2334.8	8.0	1.7868	0.154	8.6	ug/L	70	Standard
|	V	51	5415.9	2.5	0.2406	0.010	4.2	ug/L	3172	Standard
|	Cr	52	9055.7	0.8	0.0203	0.007	34.1	ug/L	9852	Standard
|	Cr	53	665.8	2.9	0.1310	0.017	13.2	ug/L	518	Standard
|	Mn	55	21775.0	0.9	1.3144	0.018	1.4	ug/L	1193	Standard
|	Co	59	874.7	0.5	0.0745	0.001	1.5	ug/L	98	Standard
|	Ni	60	672.3	9.2	0.2305	0.020	8.9	ug/L	67	Standard
|	Cu	65	373.3	7.6	0.1116	0.011	10.1	ug/L	90	Standard
|	Zn	66	2303.8	0.6	1.9970	0.032	1.6	ug/L	148	Standard
[>	Ge	72	282038.1	1.2				ug/L	304674	Standard
|	As	75	-139.5	16.9	0.0669	0.023	34.1	ug/L	-174	Standard
|	Se	82	22.1	11.4	0.0445	0.021	48.2	ug/L	26	Standard
[	Se-1	77	131.7	5.3	0.2392	0.070	29.4	ug/L	133	Standard
[>	Ga	71	855.0	0.6				mg/L	630	Standard
[	Rb	85	2251.8	3.6				ug/L	12	Standard
[	Y	89	242734.0	0.7				ug/L	271719	Standard
[>	Rh	103	323.3	7.0				ug/L	392	Standard
[	Mo	98	73.2	23.2	0.0136	0.004	31.9	ug/L	7	Standard
|	Ag	107	54.7	3.8	-0.0035	0.000	6.8	ug/L	55	Standard
|	Cd	111	132.8	11.1	0.0142	0.003	23.6	mg/L	67	Standard
|	Cd	114	391.9	7.5	0.0171	0.002	13.5	ug/L	219	Standard
[>	In	115	802573.4	0.7				ug/L	887392	Standard
|	Sn	118	563.0	7.7	-0.0056	0.003	58.3	ug/L	653	Standard
|	Sb	123	167.5	11.0	0.0204	0.002	8.4	ug/L	48	Standard
[	Ba	135	13124.0	3.4	2.7281	0.080	2.9	ug/L	28	Standard
[	Ce	140	19852.7	3.0				ug/L	34	Standard
[>	Tb	159	1089710.1	0.6				ug/L	1226141	Standard
[	Ho	165	266.3	11.2				ug/L	14	Standard
|	Tl	203	237.0	10.3	0.0114	0.001	11.3	ug/L	9	Standard
|	Tl	205	537.7	19.5	0.0093	0.002	25.8	ug/L	20	Standard
|	Pb	206	1612.8	4.7	0.0819	0.005	5.8	ug/L	419	Standard
|	Pb	207	1281.7	3.6	0.0762	0.003	4.3	ug/L	338	Standard
|	Pb	208	6056.1	3.8	0.0765	0.004	5.0	ug/L	1616	Standard
	U	238	77.7	6.5	0.0043	0.000	5.8	ug/L	2	Standard
[>	Bi	209	592517.6	0.5				ug/L	641071	Standard

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Na	23	55612.2	6.6	3.2683	0.243	7.4	mg/L	412	Standard
Mg	24	27299.6	1.3	0.0415	0.001	1.4	mg/L	177	Standard
K	39	151.7	22.0	0.0020	0.028	1353.6	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	811.1	1.0	0.0505	0.002	4.8	mg/L	634	Standard
Fe	57	12286.6	1.7	0.1275	0.004	3.0	mg/L	2670	Standard
Sc-1	45	336444.6	0.9				mg/L	375691	Standard
Cl	35	8.7	24.0				ug/L	4	Standard
Kr	83	39.8	0.5				ug/L	39	Standard
Br	81	695.0	3.8				ug/L	639	Standard
P	31	191.7	2.0				ug/L	419	Standard
S	34	5601.9	3.0				ug/L	7420	Standard
Sr	88	53.3	44.3				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.570	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065825

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	Cd	111	
	Cd	114	
>	In	115	90.442
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.426
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065825

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Method 6020 - Summary Report

Sample ID: L1207065826

Sample Date/Time: Friday, July 27, 2012 11:37:01

Number of Replicates: 3

Autosampler Position: 432

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16078.5	3.1	-1812.5882	231.491	12.8	ug/L	11199	Standard
|	Be	9	115.0	34.0	0.0418	0.020	47.2	ug/L	10	Standard
|	Al	27	7768808.7	3.6	523.5799	8.910	1.7	ug/L	7920	Standard
[>	Sc	45	336835.6	2.0				ug/L	375691	Standard
[	Ti	47	3035.3	3.4	2.3419	0.048	2.1	ug/L	70	Standard
|	V	51	13026.9	3.0	0.9584	0.023	2.4	ug/L	3172	Standard
|	Cr	52	13428.6	4.0	0.5347	0.042	7.8	ug/L	9852	Standard
|	Cr	53	1301.7	4.1	0.5677	0.029	5.0	ug/L	518	Standard
|	Mn	55	53449.5	3.8	3.3479	0.086	2.6	ug/L	1193	Standard
|	Co	59	3414.1	6.3	0.3262	0.018	5.4	ug/L	98	Standard
|	Ni	60	1870.8	3.5	0.6899	0.017	2.4	ug/L	67	Standard
|	Cu	65	1613.8	3.9	0.6269	0.018	2.9	ug/L	90	Standard
|	Zn	66	6591.4	3.7	5.9495	0.145	2.4	ug/L	148	Standard
[>	Ge	72	281675.8	1.4				ug/L	304674	Standard
|	As	75	-48.2	56.2	0.1504	0.024	16.2	ug/L	-174	Standard
|	Se	82	26.8	2.2	0.0875	0.009	9.9	ug/L	26	Standard
[	Se-1	77	120.0	17.3	0.0902	0.247	274.3	ug/L	133	Standard
[>	Ga	71	1428.4	4.5				mg/L	630	Standard
[	Rb	85	10693.8	6.9				ug/L	12	Standard
[	Y	89	258188.0	1.0				ug/L	271719	Standard
[>	Rh	103	326.7	28.7				ug/L	392	Standard
[	Mo	98	95.1	14.2	0.0195	0.003	16.8	ug/L	7	Standard
|	Ag	107	55.7	21.7	-0.0033	0.002	45.5	ug/L	55	Standard
|	Cd	111	158.8	4.1	0.0208	0.002	8.2	mg/L	67	Standard
|	Cd	114	465.1	6.9	0.0237	0.003	13.2	ug/L	219	Standard
[>	In	115	796631.9	1.7				ug/L	887392	Standard
|	Sn	118	581.3	6.7	-0.0039	0.003	75.7	ug/L	653	Standard
|	Sb	123	113.1	13.5	0.0151	0.001	8.8	ug/L	48	Standard
[	Ba	135	40356.4	1.8	8.4712	0.052	0.6	ug/L	28	Standard
[	Ce	140	276779.1	2.8				ug/L	34	Standard
[>	Tb	159	1100124.3	0.2				ug/L	1226141	Standard
[	Ho	165	2672.2	3.7				ug/L	14	Standard
|	Tl	203	270.7	3.8	0.0130	0.000	2.7	ug/L	9	Standard
|	Tl	205	619.7	5.6	0.0110	0.001	5.5	ug/L	20	Standard
|	Pb	206	6093.2	3.4	0.3801	0.008	2.1	ug/L	419	Standard
|	Pb	207	4927.8	4.3	0.3651	0.011	3.1	ug/L	338	Standard
|	Pb	208	23317.7	2.8	0.3732	0.005	1.5	ug/L	1616	Standard
	U	238	1061.4	2.7	0.0572	0.001	1.8	ug/L	2	Standard
[>	Bi	209	599007.1	1.4				ug/L	641071	Standard

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Na	23	45250.8	2.1	2.6484	0.060	2.3	mg/L	412	Standard
Mg	24	51244.9	3.9	0.0778	0.002	2.1	mg/L	177	Standard
K	39	170.0	17.9	0.0178	0.024	135.1	mg/L	150	Standard
Ca	43	3.3	173.2	0.2367	4.714	1991.1	mg/L	7	Standard
Fe	54	2061.7	1.9	0.3297	0.018	5.4	mg/L	634	Standard
Fe	57	31619.7	4.6	0.3737	0.011	3.0	mg/L	2670	Standard
Sc-1	45	336835.6	2.0				mg/L	375691	Standard
Cl	35	4.0	25.0				ug/L	4	Standard
Kr	83	42.6	6.3				ug/L	39	Standard
Br	81	674.2	2.4				ug/L	639	Standard
P	31	240.8	8.8				ug/L	419	Standard
S	34	5884.5	1.6				ug/L	7420	Standard
Sr	88	45.0	44.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.451	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065826

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	Cd	111		
	Cd	114		
>	In	115	89.772	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	93.438	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065826

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Method 6020 - Summary Report

Sample ID: L1207065827

Sample Date/Time: Friday, July 27, 2012 11:40:10

Number of Replicates: 3

Autosampler Position: 433

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	32431.4	3.0	-6812.7044	298.713	4.4	ug/L	11199	Standard
|	Be	9	20.0	43.3	-0.0089	0.005	52.3	ug/L	10	Standard
|	Al	27	868519.0	1.5	58.0874	0.834	1.4	ug/L	7920	Standard
[>	Sc	45	336938.5	0.1				ug/L	375691	Standard
|	Ti	47	1782.1	11.7	1.3263	0.173	13.0	ug/L	70	Standard
|	V	51	5136.8	4.0	0.2058	0.017	8.5	ug/L	3172	Standard
|	Cr	52	8994.7	1.8	-0.0055	0.012	214.9	ug/L	9852	Standard
|	Cr	53	570.0	4.3	0.0583	0.014	23.5	ug/L	518	Standard
|	Mn	55	8396.3	3.8	0.4474	0.018	3.9	ug/L	1193	Standard
|	Co	59	736.7	4.7	0.0595	0.003	5.7	ug/L	98	Standard
|	Ni	60	537.3	2.4	0.1754	0.005	2.9	ug/L	67	Standard
|	Cu	65	290.7	10.5	0.0752	0.012	15.7	ug/L	90	Standard
|	Zn	66	4925.5	2.2	4.3298	0.074	1.7	ug/L	148	Standard
[>	Ge	72	287085.4	0.8				ug/L	304674	Standard
|	As	75	-171.8	5.3	0.0405	0.007	17.2	ug/L	-174	Standard
|	Se	82	23.8	18.9	0.0565	0.041	72.9	ug/L	26	Standard
[	Se-1	77	127.0	1.6	0.1516	0.037	24.6	ug/L	133	Standard
[>	Ga	71	710.0	16.5				mg/L	630	Standard
|	Rb	85	1350.1	2.9				ug/L	12	Standard
|	Y	89	246467.0	1.3				ug/L	271719	Standard
[>	Rh	103	345.0	4.3				ug/L	392	Standard
|	Mo	98	103.3	8.0	0.0211	0.002	8.1	ug/L	7	Standard
|	Ag	107	43.3	24.2	-0.0051	0.001	25.2	ug/L	55	Standard
|	Cd	111	89.1	16.9	0.0034	0.004	112.0	mg/L	67	Standard
|	Cd	114	251.6	19.2	0.0047	0.004	79.5	ug/L	219	Standard
[>	In	115	814913.3	1.6				ug/L	887392	Standard
|	Sn	118	622.7	6.7	-0.0019	0.003	129.2	ug/L	653	Standard
|	Sb	123	109.8	33.6	0.0146	0.003	23.7	ug/L	48	Standard
|	Ba	135	16161.0	2.3	3.3110	0.078	2.4	ug/L	28	Standard
|	Ce	140	19515.9	2.5				ug/L	34	Standard
[>	Tb	159	1084873.1	0.7				ug/L	1226141	Standard
|	Ho	165	281.3	5.7				ug/L	14	Standard
|	Tl	203	147.3	29.3	0.0068	0.002	33.5	ug/L	9	Standard
|	Tl	205	369.7	20.5	0.0054	0.002	33.0	ug/L	20	Standard
|	Pb	206	1245.1	2.9	0.0570	0.002	4.0	ug/L	419	Standard
|	Pb	207	1025.0	2.0	0.0555	0.002	3.3	ug/L	338	Standard
|	Pb	208	4827.0	0.9	0.0550	0.001	1.7	ug/L	1616	Standard
	U	238	145.0	17.1	0.0080	0.001	17.3	ug/L	2	Standard
[>	Bi	209	593102.4	0.4				ug/L	641071	Standard

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Na	23	93085.1	2.0	5.4866	0.114	2.1	mg/L	412	Standard
Mg	24	133638.5	1.2	0.2028	0.002	1.2	mg/L	177	Standard
K	39	153.3	7.5	0.0035	0.010	291.8	mg/L	150	Standard
Ca	43	3.3	173.2	0.2417	4.722	1953.8	mg/L	7	Standard
Fe	54	796.2	11.8	0.0469	0.021	44.8	mg/L	634	Standard
Fe	57	11284.2	0.3	0.1145	0.000	0.4	mg/L	2670	Standard
Sc-1	45	336938.5	0.1				mg/L	375691	Standard
Cl	35	5.7	27.0				ug/L	4	Standard
Kr	83	41.6	4.9				ug/L	39	Standard
Br	81	805.0	7.6				ug/L	639	Standard
P	31	199.2	18.0				ug/L	419	Standard
S	34	6535.6	2.7				ug/L	7420	Standard
Sr	88	63.3	9.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.227	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065827

Report Date/Time: Friday, July 27, 2012 11:42:40

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	Cd	111	
	Cd	114	
>	In	115	91.832
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.517
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065827

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Method 6020 - Summary Report

Sample ID: L1207065828

Sample Date/Time: Friday, July 27, 2012 11:43:19

Number of Replicates: 3

Autosampler Position: 434

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

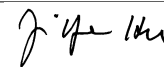
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10537.0	1.3	-121.6891	26.115	21.5	ug/L	11199	Standard
|	Be	9	20.0	0.0	-0.0088	0.000	0.6	ug/L	10	Standard
|	Al	27	781489.3	1.7	52.3656	0.748	1.4	ug/L	7920	Standard
[>	Sc	45	335984.4	0.5				ug/L	375691	Standard
[	Ti	47	844.4	2.6	0.6048	0.023	3.9	ug/L	70	Standard
|	V	51	4227.9	3.5	0.1256	0.012	9.3	ug/L	3172	Standard
|	Cr	52	8427.7	1.3	-0.0614	0.002	3.5	ug/L	9852	Standard
|	Cr	53	485.0	4.7	0.0043	0.016	369.4	ug/L	518	Standard
|	Mn	55	67431.8	2.6	4.2049	0.065	1.5	ug/L	1193	Standard
|	Co	59	452.7	7.8	0.0323	0.003	10.0	ug/L	98	Standard
|	Ni	60	700.0	9.4	0.2390	0.022	9.4	ug/L	67	Standard
|	Cu	65	626.7	4.2	0.2146	0.009	4.0	ug/L	90	Standard
|	Zn	66	5593.4	0.8	4.9830	0.052	1.0	ug/L	148	Standard
[>	Ge	72	284342.2	1.1				ug/L	304674	Standard
|	As	75	-85.5	42.4	0.1167	0.033	28.7	ug/L	-174	Standard
|	Se	82	24.4	29.2	0.0634	0.063	99.6	ug/L	26	Standard
[	Se-1	77	129.3	14.8	0.1951	0.227	116.4	ug/L	133	Standard
[>	Ga	71	711.7	12.3				mg/L	630	Standard
[	Rb	85	2635.2	2.8				ug/L	12	Standard
[	Y	89	247174.8	0.2				ug/L	271719	Standard
[>	Rh	103	345.0	7.5				ug/L	392	Standard
[	Mo	98	79.8	14.4	0.0153	0.003	18.8	ug/L	7	Standard
|	Ag	107	60.7	14.0	-0.0027	0.001	43.5	ug/L	55	Standard
|	Cd	111	39.5	16.8	-0.0083	0.002	18.3	mg/L	67	Standard
|	Cd	114	134.7	8.2	-0.0050	0.001	18.2	ug/L	219	Standard
[>	In	115	804404.1	0.8				ug/L	887392	Standard
|	Sn	118	558.7	5.4	-0.0060	0.002	31.6	ug/L	653	Standard
|	Sb	123	138.5	23.8	0.0175	0.003	17.8	ug/L	48	Standard
[	Ba	135	13127.0	3.0	2.7224	0.062	2.3	ug/L	28	Standard
[	Ce	140	14366.1	2.2				ug/L	34	Standard
[>	Tb	159	1096839.5	0.2				ug/L	1226141	Standard
[	Ho	165	295.7	2.3				ug/L	14	Standard
|	Tl	203	120.0	12.5	0.0053	0.001	14.0	ug/L	9	Standard
|	Tl	205	295.3	15.8	0.0036	0.001	28.3	ug/L	20	Standard
|	Pb	206	3176.3	3.8	0.1853	0.008	4.5	ug/L	419	Standard
|	Pb	207	2564.6	5.7	0.1772	0.010	5.9	ug/L	338	Standard
|	Pb	208	12016.5	4.4	0.1783	0.008	4.7	ug/L	1616	Standard
	U	238	180.7	3.8	0.0098	0.000	4.8	ug/L	2	Standard
[>	Bi	209	598854.0	1.2				ug/L	641071	Standard

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Na	23	20051.6	7.4	1.1546	0.082	7.1	mg/L	412	Standard
Mg	24	55598.5	2.5	0.0846	0.002	2.0	mg/L	177	Standard
K	39	340.0	15.9	0.1666	0.046	27.3	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	588.8	11.1	0.0010	0.014	1474.8	mg/L	634	Standard
Fe	57	8415.7	3.4	0.0782	0.003	3.9	mg/L	2670	Standard
Sc-1	45	335984.4	0.5				mg/L	375691	Standard
Cl	35	8.3	25.0				ug/L	4	Standard
Kr	83	38.6	14.1				ug/L	39	Standard
Br	81	650.8	2.8				ug/L	639	Standard
P	31	280.0	9.1				ug/L	419	Standard
S	34	5687.7	4.6				ug/L	7420	Standard
Sr	88	53.3	48.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.327	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	90.648
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.415
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 11:46:31

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

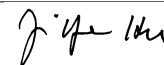
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10830.5	3.5	166.6863	113.374	68.0	ug/L	11199	Standard
|	Be	9	104705.6	0.7	49.7462	0.728	1.5	ug/L	10	Standard
|	Al	27	777763.5	1.4	46.1205	0.823	1.8	ug/L	7920	Standard
[>	Sc	45	379231.3	1.5				ug/L	375691	Standard
[	Ti	47	135695.3	1.2	94.5290	1.328	1.4	ug/L	70	Standard
|	V	51	557758.7	0.7	46.0924	0.710	1.5	ug/L	3172	Standard
|	Cr	52	460935.3	1.0	46.6924	0.320	0.7	ug/L	9852	Standard
|	Cr	53	77996.9	1.2	46.8867	0.576	1.2	ug/L	518	Standard
|	Mn	55	835353.9	1.0	47.1984	0.407	0.9	ug/L	1193	Standard
|	Co	59	527035.0	0.4	46.0859	0.696	1.5	ug/L	98	Standard
|	Ni	60	139002.2	2.2	46.9330	1.216	2.6	ug/L	67	Standard
|	Cu	65	129551.2	1.5	47.4172	0.592	1.2	ug/L	90	Standard
|	Zn	66	59929.3	1.1	48.5891	0.431	0.9	ug/L	148	Standard
[>	Ge	72	319375.3	1.4				ug/L	304674	Standard
|	As	75	58867.5	1.5	47.5317	0.584	1.2	ug/L	-174	Standard
|	Se	82	5979.6	0.8	47.9116	0.693	1.4	ug/L	26	Standard
[	Se-1	77	4339.6	1.3	47.6055	1.219	2.6	ug/L	133	Standard
[>	Ga	71	696.7	9.0				mg/L	630	Standard
[	Rb	85	930.0	4.7				ug/L	12	Standard
[	Y	89	277485.0	1.7				ug/L	271719	Standard
[>	Rh	103	401.7	9.0				ug/L	392	Standard
[	Mo	98	412957.0	0.8	97.5257	0.826	0.8	ug/L	7	Standard
|	Ag	107	404542.6	1.1	48.3526	0.705	1.5	ug/L	55	Standard
|	Cd	111	227312.4	0.3	49.2168	0.393	0.8	mg/L	67	Standard
|	Cd	114	628699.0	0.6	48.3984	0.425	0.9	ug/L	219	Standard
[>	In	115	893281.5	0.5				ug/L	887392	Standard
|	Sn	118	739740.2	0.6	47.9969	0.194	0.4	ug/L	653	Standard
|	Sb	123	542320.7	1.4	47.7079	0.609	1.3	ug/L	48	Standard
[	Ba	135	262638.2	0.8	49.2084	0.180	0.4	ug/L	28	Standard
[	Ce	140	1022.7	4.5				ug/L	34	Standard
[>	Tb	159	1205050.9	0.2				ug/L	1226141	Standard
[	Ho	165	19.3	40.2				ug/L	14	Standard
|	Tl	203	938616.6	0.4	46.7255	0.702	1.5	ug/L	9	Standard
|	Tl	205	2184850.9	0.9	48.5742	0.335	0.7	ug/L	20	Standard
|	Pb	206	728859.4	0.2	47.2365	0.648	1.4	ug/L	419	Standard
|	Pb	207	619464.7	0.7	47.8121	0.653	1.4	ug/L	338	Standard
|	Pb	208	2860381.3	0.2	47.8713	0.605	1.3	ug/L	1616	Standard
	U	238	914877.8	0.7	47.7951	1.038	2.2	ug/L	2	Standard
[>	Bi	209	617311.3	1.4				ug/L	641071	Standard

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Na	23	117920.4	0.6	6.1813	0.122	2.0	mg/L	412	Standard
Mg	24	3502230.3	1.3	4.7229	0.043	0.9	mg/L	177	Standard
K	39	6124.6	1.4	4.6064	0.112	2.4	mg/L	150	Standard
Ca	43	18.3	87.7	10.8855	11.686	107.3	mg/L	7	Standard
Fe	54	25536.0	2.4	4.9332	0.082	1.7	mg/L	634	Standard
Fe	57	468832.1	1.3	5.2809	0.025	0.5	mg/L	2670	Standard
Sc-1	45	379231.3	1.5				mg/L	375691	Standard
Cl	35	3.0	66.7				ug/L	4	Standard
Kr	83	47.3	10.6				ug/L	39	Standard
Br	81	839.2	5.1				ug/L	639	Standard
P	31	424.2	7.3				ug/L	419	Standard
S	34	6553.9	2.7				ug/L	7420	Standard
Sr	88	41.7	42.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	92.241		
Sc	45			
Ti	47	94.529		
V	51	92.185		
Cr	52	93.385		
Cr	53			
Mn	55	94.397		
Co	59	92.172		
Ni	60	93.866		
Cu	65	94.834		
Zn	66	97.178		
Ge	72		104.825	
As	75	95.063		
Se	82	95.823		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	97.526		
Ag	107	96.705		

Sample ID: QC Std 6

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	Cd	111	98.434	
	Cd	114		
>	In	115		100.664
	Sn	118	95.994	
	Sb	123	95.416	
	Ba	135	98.417	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.451	
|	Tl	205		
|	Pb	206	94.473	
|	Pb	207	95.624	
|	Pb	208	95.743	
|	U	238	95.590	
>	Bi	209		96.294
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 11:49:02

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 11:49:42

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10917.3	3.3	172.5055	150.007	87.0	ug/L	11199	Standard
|	Be	9	26.7	109.9	-0.0071	0.013	188.9	ug/L	10	Standard
|	Al	27	9086.2	29.2	0.0416	0.149	357.1	ug/L	7920	Standard
[>	Sc	45	383196.2	1.8				ug/L	375691	Standard
[	Ti	47	68.7	43.6	-0.0083	0.021	256.5	ug/L	70	Standard
|	V	51	2770.7	2.9	-0.0382	0.009	22.9	ug/L	3172	Standard
|	Cr	52	8773.5	1.3	-0.1308	0.020	15.7	ug/L	9852	Standard
|	Cr	53	350.8	6.2	-0.1126	0.014	12.3	ug/L	518	Standard
|	Mn	55	1260.4	3.2	-0.0097	0.003	27.0	ug/L	1193	Standard
|	Co	59	133.7	19.4	-0.0004	0.002	523.1	ug/L	98	Standard
|	Ni	60	81.3	25.4	0.0011	0.007	664.5	ug/L	67	Standard
|	Cu	65	130.7	19.5	0.0048	0.010	200.6	ug/L	90	Standard
|	Zn	66	155.3	8.9	0.0029	0.012	421.4	ug/L	148	Standard
[>	Ge	72	318633.1	0.9				ug/L	304674	Standard
|	As	75	-241.2	12.7	-0.0001	0.023	19904.6	ug/L	-174	Standard
|	Se	82	21.7	10.9	0.0178	0.020	112.4	ug/L	26	Standard
[	Se-1	77	124.3	12.5	-0.0358	0.186	520.5	ug/L	133	Standard
[>	Ga	71	713.4	11.9				mg/L	630	Standard
[	Rb	85	21.7	58.1				ug/L	12	Standard
[	Y	89	274911.7	0.8				ug/L	271719	Standard
[>	Rh	103	425.0	29.4				ug/L	392	Standard
[	Mo	98	353.9	13.0	0.0776	0.011	14.2	ug/L	7	Standard
|	Ag	107	124.7	35.2	0.0040	0.005	125.0	ug/L	55	Standard
|	Cd	111	91.1	7.6	0.0018	0.001	68.6	mg/L	67	Standard
|	Cd	114	260.3	28.3	0.0034	0.005	158.3	ug/L	219	Standard
[>	In	115	898151.6	1.3				ug/L	887392	Standard
|	Sn	118	933.7	3.1	0.0141	0.002	13.6	ug/L	653	Standard
|	Sb	123	2484.2	2.1	0.2214	0.006	2.8	ug/L	48	Standard
[	Ba	135	48.3	55.1	-0.0001	0.005	5738.1	ug/L	28	Standard
[	Ce	140	44.3	52.9				ug/L	34	Standard
[>	Tb	159	1187213.8	0.6				ug/L	1226141	Standard
[	Ho	165	15.7	25.8				ug/L	14	Standard
|	Tl	203	83.0	74.8	0.0031	0.003	94.9	ug/L	9	Standard
|	Tl	205	182.3	76.6	0.0008	0.003	382.3	ug/L	20	Standard
|	Pb	206	460.0	12.6	0.0020	0.004	178.4	ug/L	419	Standard
|	Pb	207	405.3	9.7	0.0035	0.003	86.1	ug/L	338	Standard
|	Pb	208	1825.4	8.5	0.0006	0.002	391.5	ug/L	1616	Standard
	U	238	126.0	113.1	0.0065	0.007	111.2	ug/L	2	Standard
[>	Bi	209	634795.6	0.6				ug/L	641071	Standard

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Na	23	516.7	34.3	-0.0118	0.009	74.2	mg/L	412	Standard
Mg	24	686.7	90.6	0.0009	0.001	87.6	mg/L	177	Standard
K	39	123.3	6.2	-0.0356	0.007	19.0	mg/L	150	Standard
Ca	43	5.0	100.0	1.0918	3.534	323.7	mg/L	7	Standard
Fe	54	631.2	11.2	-0.0068	0.016	236.8	mg/L	634	Standard
Fe	57	3240.3	5.3	0.0069	0.002	25.7	mg/L	2670	Standard
Sc-1	45	383196.2	1.8				mg/L	375691	Standard
Cl	35	2.3	49.5				ug/L	4	Standard
Kr	83	48.3	10.4				ug/L	39	Standard
Br	81	811.7	4.9				ug/L	639	Standard
P	31	407.5	8.5				ug/L	419	Standard
S	34	6277.1	1.0				ug/L	7420	Standard
Sr	88	36.7	20.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.582	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	101.212
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.021
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207065829

Sample Date/Time: Friday, July 27, 2012 11:52:54

Number of Replicates: 3

Autosampler Position: 435

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10150.1	3.1	-90.6912	96.330	106.2	ug/L	11199	Standard
|	Be	9	20.0	50.0	-0.0086	0.005	62.9	ug/L	10	Standard
|	Al	27	818354.2	3.5	56.4408	2.785	4.9	ug/L	7920	Standard
[>	Sc	45	326812.6	1.6				ug/L	375691	Standard
[	Ti	47	924.4	4.6	0.6662	0.036	5.3	ug/L	70	Standard
|	V	51	4321.8	5.0	0.1338	0.022	16.7	ug/L	3172	Standard
|	Cr	52	8433.7	3.6	-0.0622	0.037	59.5	ug/L	9852	Standard
|	Cr	53	472.5	15.6	-0.0048	0.049	1023.4	ug/L	518	Standard
|	Mn	55	477570.8	2.4	30.2295	0.779	2.6	ug/L	1193	Standard
|	Co	59	2481.5	4.7	0.2312	0.012	5.4	ug/L	98	Standard
|	Ni	60	895.0	3.1	0.3126	0.013	4.0	ug/L	67	Standard
|	Cu	65	545.7	7.8	0.1809	0.017	9.3	ug/L	90	Standard
|	Zn	66	4698.1	1.6	4.1587	0.085	2.0	ug/L	148	Standard
[>	Ge	72	284801.9	0.8				ug/L	304674	Standard
|	As	75	-59.5	68.4	0.1407	0.036	25.7	ug/L	-174	Standard
|	Se	82	24.5	27.8	0.0645	0.062	96.8	ug/L	26	Standard
[	Se-1	77	114.3	5.1	0.0039	0.077	1995.2	ug/L	133	Standard
[>	Ga	71	661.7	5.3				mg/L	630	Standard
[	Rb	85	2775.3	2.2				ug/L	12	Standard
[	Y	89	244434.5	1.4				ug/L	271719	Standard
[>	Rh	103	371.7	6.6				ug/L	392	Standard
[	Mo	98	138.2	24.7	0.0307	0.009	29.2	ug/L	7	Standard
|	Ag	107	55.0	38.9	-0.0035	0.003	79.6	ug/L	55	Standard
|	Cd	111	47.7	17.1	-0.0063	0.002	28.9	mg/L	67	Standard
|	Cd	114	158.7	23.8	-0.0029	0.003	105.6	ug/L	219	Standard
[>	In	115	801474.2	1.2				ug/L	887392	Standard
|	Sn	118	658.7	6.9	0.0014	0.003	200.8	ug/L	653	Standard
|	Sb	123	441.0	22.5	0.0472	0.009	19.8	ug/L	48	Standard
[	Ba	135	19670.4	1.1	4.0994	0.016	0.4	ug/L	28	Standard
[	Ce	140	23297.6	3.2				ug/L	34	Standard
[>	Tb	159	1091424.4	0.9				ug/L	1226141	Standard
[	Ho	165	380.3	6.8				ug/L	14	Standard
|	Tl	203	254.7	109.6	0.0122	0.014	117.0	ug/L	9	Standard
|	Tl	205	554.4	110.9	0.0096	0.014	146.9	ug/L	20	Standard
|	Pb	206	1902.8	14.7	0.1006	0.018	18.0	ug/L	419	Standard
|	Pb	207	1584.8	11.6	0.0996	0.014	14.2	ug/L	338	Standard
|	Pb	208	7324.0	12.6	0.0977	0.015	15.7	ug/L	1616	Standard
	U	238	235.3	41.1	0.0128	0.005	40.3	ug/L	2	Standard
[>	Bi	209	596677.5	0.6				ug/L	641071	Standard

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Na	23	18010.7	1.5	1.0637	0.029	2.7	mg/L	412	Standard
Mg	24	63409.1	2.3	0.0992	0.001	1.0	mg/L	177	Standard
K	39	386.7	6.6	0.2168	0.019	9.0	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	764.2	5.3	0.0450	0.007	14.6	mg/L	634	Standard
Fe	57	12395.1	7.0	0.1336	0.012	9.2	mg/L	2670	Standard
Sc-1	45	326812.6	1.6				mg/L	375691	Standard
Cl	35	2.7	108.3				ug/L	4	Standard
Kr	83	36.9	12.9				ug/L	39	Standard
Br	81	673.3	8.0				ug/L	639	Standard
P	31	245.8	8.2				ug/L	419	Standard
S	34	5766.9	0.2				ug/L	7420	Standard
Sr	88	43.3	46.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.478	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	90.318	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	93.075	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065830

Sample Date/Time: Friday, July 27, 2012 11:56:03

Number of Replicates: 3

Autosampler Position: 436

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	66418.6	1.8	-17847.5467	318.633	1.8	ug/L	11199	Standard
|	Be	9	30.0	72.6	-0.0030	0.012	409.3	ug/L	10	Standard
|	Al	27	213980.9	2.2	14.3883	0.345	2.4	ug/L	7920	Standard
[>	Sc	45	326740.5	0.5				ug/L	375691	Standard
[	Ti	47	1007.7	2.3	0.7392	0.019	2.6	ug/L	70	Standard
|	V	51	4137.3	2.3	0.1204	0.005	4.1	ug/L	3172	Standard
|	Cr	52	8980.0	2.8	0.0115	0.022	186.5	ug/L	9852	Standard
|	Cr	53	837.5	1.9	0.2487	0.007	2.8	ug/L	518	Standard
|	Mn	55	231160.3	2.3	14.7355	0.201	1.4	ug/L	1193	Standard
|	Co	59	5402.0	3.0	0.5229	0.011	2.1	ug/L	98	Standard
|	Ni	60	2250.8	1.1	0.8347	0.007	0.8	ug/L	67	Standard
|	Cu	65	519.0	4.5	0.1721	0.008	4.8	ug/L	90	Standard
|	Zn	66	5495.7	2.2	4.9358	0.100	2.0	ug/L	148	Standard
[>	Ge	72	281970.7	1.0				ug/L	304674	Standard
|	As	75	649.9	10.4	0.7858	0.058	7.4	ug/L	-174	Standard
|	Se	82	48.7	13.0	0.2865	0.054	18.7	ug/L	26	Standard
[	Se-1	77	134.3	6.9	0.2752	0.137	49.8	ug/L	133	Standard
[>	Ga	71	705.0	9.6				mg/L	630	Standard
|	Rb	85	1356.7	2.5				ug/L	12	Standard
[	Y	89	241690.8	0.5				ug/L	271719	Standard
[>	Rh	103	430.0	11.5				ug/L	392	Standard
[	Mo	98	137.6	14.9	0.0308	0.005	16.2	ug/L	7	Standard
|	Ag	107	51.0	10.4	-0.0039	0.001	17.8	ug/L	55	Standard
|	Cd	111	179.7	10.2	0.0259	0.004	15.0	mg/L	67	Standard
|	Cd	114	489.1	3.7	0.0258	0.001	4.0	ug/L	219	Standard
[>	In	115	795518.5	1.3				ug/L	887392	Standard
|	Sn	118	768.4	1.5	0.0098	0.001	8.1	ug/L	653	Standard
|	Sb	123	243.1	21.0	0.0280	0.005	17.0	ug/L	48	Standard
[	Ba	135	26667.1	2.0	5.6021	0.037	0.7	ug/L	28	Standard
[	Ce	140	13833.6	2.1				ug/L	34	Standard
[>	Tb	159	1088937.2	1.3				ug/L	1226141	Standard
[	Ho	165	263.3	4.1				ug/L	14	Standard
|	Tl	203	560.0	8.6	0.0288	0.003	9.8	ug/L	9	Standard
|	Tl	205	1291.7	6.5	0.0274	0.002	6.9	ug/L	20	Standard
|	Pb	206	826.4	2.4	0.0300	0.002	6.2	ug/L	419	Standard
|	Pb	207	665.3	3.5	0.0277	0.003	9.2	ug/L	338	Standard
|	Pb	208	3162.8	0.9	0.0273	0.001	4.0	ug/L	1616	Standard
	U	238	320.0	4.8	0.0179	0.001	5.8	ug/L	2	Standard
[>	Bi	209	580216.3	1.3				ug/L	641071	Standard

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Na	23	131568.8	1.2	8.0151	0.138	1.7	mg/L	412	Standard
Mg	24	1022465.7	1.1	1.6003	0.019	1.2	mg/L	177	Standard
K	39	260.0	5.8	0.1034	0.013	13.1	mg/L	150	Standard
Ca	43	8.3	173.2	4.5856	12.246	267.1	mg/L	7	Standard
Fe	54	2803.1	3.1	0.5144	0.020	4.0	mg/L	634	Standard
Fe	57	49305.1	2.6	0.6189	0.020	3.3	mg/L	2670	Standard
Sc-1	45	326740.5	0.5				mg/L	375691	Standard
Cl	35	19.0	27.3				ug/L	4	Standard
Kr	83	37.7	6.7				ug/L	39	Standard
Br	81	1727.6	6.7				ug/L	639	Standard
P	31	314.2	4.4				ug/L	419	Standard
S	34	13662.8	3.0				ug/L	7420	Standard
Sr	88	291.7	19.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.548	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	89.647	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.507	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

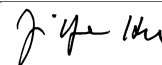
Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065832

Sample Date/Time: Friday, July 27, 2012 11:59:14

Number of Replicates: 3

Autosampler Position: 437

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

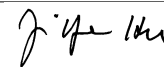
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10957.3	1.5	136.6731	97.990	71.7	ug/L	11199	Standard
|	Be	9	10.0	50.0	-0.0148	0.002	16.4	ug/L	10	Standard
|	Al	27	43288.4	0.4	2.0947	0.066	3.1	ug/L	7920	Standard
[>	Sc	45	379914.1	2.4				ug/L	375691	Standard
[	Ti	47	107.0	29.2	0.0182	0.021	114.9	ug/L	70	Standard
|	V	51	3252.6	0.3	0.0017	0.004	264.6	ug/L	3172	Standard
|	Cr	52	12612.2	0.5	0.2665	0.015	5.5	ug/L	9852	Standard
|	Cr	53	1021.7	7.1	0.2936	0.038	12.8	ug/L	518	Standard
|	Mn	55	4355.0	2.0	0.1657	0.006	3.6	ug/L	1193	Standard
|	Co	59	143.0	3.9	0.0004	0.001	163.2	ug/L	98	Standard
|	Ni	60	981.0	5.8	0.3054	0.018	5.9	ug/L	67	Standard
|	Cu	65	459.7	4.2	0.1255	0.010	7.7	ug/L	90	Standard
|	Zn	66	3546.7	2.9	2.7634	0.077	2.8	ug/L	148	Standard
[>	Ge	72	318908.0	1.4				ug/L	304674	Standard
|	As	75	-245.2	3.7	-0.0034	0.010	288.3	ug/L	-174	Standard
|	Se	82	24.1	33.6	0.0379	0.068	178.4	ug/L	26	Standard
[	Se-1	77	142.3	7.1	0.1652	0.101	60.8	ug/L	133	Standard
[>	Ga	71	678.3	4.2				mg/L	630	Standard
[	Rb	85	105.0	33.3				ug/L	12	Standard
[	Y	89	277261.7	2.7				ug/L	271719	Standard
[>	Rh	103	383.3	1.5				ug/L	392	Standard
[	Mo	98	59.7	27.7	0.0082	0.004	49.7	ug/L	7	Standard
|	Ag	107	55.7	13.2	-0.0043	0.001	17.5	ug/L	55	Standard
|	Cd	111	83.2	15.1	-0.0002	0.002	1061.5	mg/L	67	Standard
|	Cd	114	252.5	11.2	0.0025	0.002	99.2	ug/L	219	Standard
[>	In	115	915495.5	2.0				ug/L	887392	Standard
|	Sn	118	1524.1	3.3	0.0504	0.005	9.4	ug/L	653	Standard
|	Sb	123	332.5	17.3	0.0326	0.005	16.4	ug/L	48	Standard
[	Ba	135	401.7	3.7	0.0644	0.003	5.0	ug/L	28	Standard
[	Ce	140	313.7	5.2				ug/L	34	Standard
[>	Tb	159	1202093.5	1.6				ug/L	1226141	Standard
[	Ho	165	17.0	23.5				ug/L	14	Standard
|	Tl	203	143.7	15.4	0.0060	0.001	17.7	ug/L	9	Standard
|	Tl	205	347.7	11.8	0.0043	0.001	21.0	ug/L	20	Standard
|	Pb	206	561.0	2.3	0.0081	0.001	8.8	ug/L	419	Standard
|	Pb	207	501.3	3.2	0.0105	0.001	11.9	ug/L	338	Standard
|	Pb	208	2281.7	1.1	0.0078	0.000	5.4	ug/L	1616	Standard
	U	238	22.0	47.5	0.0012	0.001	43.7	ug/L	2	Standard
[>	Bi	209	638746.0	0.3				ug/L	641071	Standard

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Na	23	1568.4	2.6	0.0439	0.003	7.5	mg/L	412	Standard
Mg	24	3248.7	6.3	0.0044	0.000	4.1	mg/L	177	Standard
K	39	178.3	8.6	0.0078	0.014	177.6	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	667.3	9.0	0.0011	0.009	759.4	mg/L	634	Standard
Fe	57	3295.4	3.5	0.0079	0.001	7.5	mg/L	2670	Standard
Sc-1	45	379914.1	2.4				mg/L	375691	Standard
Cl	35	6.3	18.2				ug/L	4	Standard
Kr	83	43.1	7.3				ug/L	39	Standard
Br	81	955.0	2.7				ug/L	639	Standard
P	31	407.5	7.4				ug/L	419	Standard
S	34	6415.5	0.5				ug/L	7420	Standard
Sr	88	41.7	6.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.672	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	103.167
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.637
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065832

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Method 6020 - Summary Report

Sample ID: L1207065833

Sample Date/Time: Friday, July 27, 2012 12:02:24

Number of Replicates: 3

Autosampler Position: 438

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

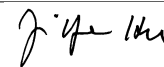
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	42506.2	2.3	-9920.4103	104.120	1.0	ug/L	11199	Standard
|	Be	9	33.3	31.2	-0.0016	0.006	374.3	ug/L	10	Standard
|	Al	27	1732510.6	0.5	116.6301	3.122	2.7	ug/L	7920	Standard
[>	Sc	45	336356.3	3.0				ug/L	375691	Standard
[	Ti	47	2807.6	4.2	2.1143	0.067	3.2	ug/L	70	Standard
|	V	51	6561.7	1.8	0.3361	0.014	4.2	ug/L	3172	Standard
|	Cr	52	10344.9	0.7	0.1470	0.015	10.1	ug/L	9852	Standard
|	Cr	53	876.7	1.7	0.2632	0.004	1.4	ug/L	518	Standard
|	Mn	55	580898.0	2.9	36.3906	0.693	1.9	ug/L	1193	Standard
|	Co	59	5197.2	3.0	0.4921	0.012	2.4	ug/L	98	Standard
|	Ni	60	1258.1	0.8	0.4450	0.002	0.5	ug/L	67	Standard
|	Cu	65	689.0	6.6	0.2367	0.016	6.9	ug/L	90	Standard
|	Zn	66	5454.3	3.3	4.7942	0.109	2.3	ug/L	148	Standard
[>	Ge	72	287855.6	1.2				ug/L	304674	Standard
|	As	75	-90.6	14.8	0.1133	0.012	11.0	ug/L	-174	Standard
|	Se	82	27.4	22.2	0.0867	0.052	59.7	ug/L	26	Standard
[	Se-1	77	124.3	6.0	0.1132	0.078	68.8	ug/L	133	Standard
[>	Ga	71	851.7	2.4				mg/L	630	Standard
[	Rb	85	7043.3	4.7				ug/L	12	Standard
[	Y	89	240712.2	1.2				ug/L	271719	Standard
[>	Rh	103	388.3	15.5				ug/L	392	Standard
[	Mo	98	115.2	17.7	0.0247	0.005	21.2	ug/L	7	Standard
|	Ag	107	56.7	20.6	-0.0032	0.002	50.1	ug/L	55	Standard
|	Cd	111	96.4	8.4	0.0055	0.002	34.4	mg/L	67	Standard
|	Cd	114	281.6	4.7	0.0077	0.001	11.1	ug/L	219	Standard
[>	In	115	800468.2	1.3				ug/L	887392	Standard
|	Sn	118	1194.4	4.3	0.0403	0.003	7.7	ug/L	653	Standard
|	Sb	123	409.7	7.0	0.0442	0.002	5.2	ug/L	48	Standard
[	Ba	135	33760.9	2.0	7.0510	0.077	1.1	ug/L	28	Standard
[	Ce	140	36800.0	3.5				ug/L	34	Standard
[>	Tb	159	1105993.5	0.8				ug/L	1226141	Standard
[	Ho	165	528.7	2.1				ug/L	14	Standard
|	Tl	203	362.3	15.8	0.0181	0.003	14.9	ug/L	9	Standard
|	Tl	205	820.7	11.4	0.0161	0.002	11.8	ug/L	20	Standard
|	Pb	206	2428.5	3.5	0.1392	0.003	2.1	ug/L	419	Standard
|	Pb	207	1942.1	0.8	0.1314	0.003	2.0	ug/L	338	Standard
|	Pb	208	9169.1	1.7	0.1330	0.001	0.9	ug/L	1616	Standard
	U	238	1022.7	3.2	0.0565	0.001	1.7	ug/L	2	Standard
[>	Bi	209	584841.5	1.8				ug/L	641071	Standard

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Na	23	129696.1	0.9	7.6777	0.245	3.2	mg/L	412	Standard
Mg	24	648004.5	2.6	0.9856	0.028	2.8	mg/L	177	Standard
K	39	456.7	4.1	0.2683	0.018	6.8	mg/L	150	Standard
Ca	43	13.3	57.3	8.5335	6.394	74.9	mg/L	7	Standard
Fe	54	1161.8	5.0	0.1291	0.016	12.0	mg/L	634	Standard
Fe	57	18961.9	3.0	0.2129	0.010	4.7	mg/L	2670	Standard
Sc-1	45	336356.3	3.0				mg/L	375691	Standard
Cl	35	7.0	37.8				ug/L	4	Standard
Kr	83	37.6	4.0				ug/L	39	Standard
Br	81	1028.4	5.7				ug/L	639	Standard
P	31	225.0	11.3				ug/L	419	Standard
S	34	12920.5	0.4				ug/L	7420	Standard
Sr	88	280.0	4.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.480	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	90.205
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.229
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065834

Sample Date/Time: Friday, July 27, 2012 12:05:34

Number of Replicates: 3

Autosampler Position: 439

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	28660.5	4.8	-5577.1415	433.061	7.8	ug/L	11199	Standard
|	Be	9	16.7	69.3	-0.0107	0.006	56.6	ug/L	10	Standard
|	Al	27	478574.2	2.0	31.4842	0.774	2.5	ug/L	7920	Standard
[>	Sc	45	340137.4	1.0				ug/L	375691	Standard
[	Ti	47	1203.4	3.7	0.8673	0.038	4.4	ug/L	70	Standard
|	V	51	4261.9	3.2	0.1210	0.015	12.2	ug/L	3172	Standard
|	Cr	52	9260.8	0.3	0.0144	0.010	72.4	ug/L	9852	Standard
|	Cr	53	545.8	4.0	0.0383	0.012	31.4	ug/L	518	Standard
|	Mn	55	109299.2	3.8	6.7316	0.308	4.6	ug/L	1193	Standard
|	Co	59	2371.5	1.6	0.2162	0.005	2.2	ug/L	98	Standard
|	Ni	60	1667.8	2.1	0.5939	0.017	2.9	ug/L	67	Standard
|	Cu	65	252.3	12.7	0.0585	0.012	20.8	ug/L	90	Standard
|	Zn	66	8193.2	11.3	7.2059	0.786	10.9	ug/L	148	Standard
[>	Ge	72	290042.9	0.7				ug/L	304674	Standard
|	As	75	-98.0	46.3	0.1075	0.040	36.8	ug/L	-174	Standard
|	Se	82	24.8	19.1	0.0624	0.043	68.7	ug/L	26	Standard
[	Se-1	77	114.3	7.4	-0.0219	0.115	525.9	ug/L	133	Standard
[>	Ga	71	673.3	9.4				mg/L	630	Standard
[	Rb	85	1240.1	11.4				ug/L	12	Standard
[	Y	89	243557.0	0.3				ug/L	271719	Standard
[>	Rh	103	391.7	10.9				ug/L	392	Standard
[	Mo	98	296.3	3.5	0.0714	0.002	3.5	ug/L	7	Standard
|	Ag	107	47.3	22.6	-0.0045	0.001	30.1	ug/L	55	Standard
|	Cd	111	52.0	15.6	-0.0054	0.002	34.5	mg/L	67	Standard
|	Cd	114	158.2	7.8	-0.0031	0.001	31.2	ug/L	219	Standard
[>	In	115	811920.1	0.5				ug/L	887392	Standard
|	Sn	118	577.0	13.8	-0.0050	0.005	108.5	ug/L	653	Standard
|	Sb	123	152.8	65.6	0.0188	0.010	51.2	ug/L	48	Standard
[	Ba	135	12061.8	2.8	2.4777	0.059	2.4	ug/L	28	Standard
[	Ce	140	13785.9	3.7				ug/L	34	Standard
[>	Tb	159	1100337.6	1.2				ug/L	1226141	Standard
[	Ho	165	176.7	5.8				ug/L	14	Standard
|	Tl	203	251.3	48.6	0.0120	0.006	52.0	ug/L	9	Standard
|	Tl	205	572.3	48.1	0.0099	0.006	63.2	ug/L	20	Standard
|	Pb	206	1021.7	9.5	0.0412	0.006	15.5	ug/L	419	Standard
|	Pb	207	860.4	8.8	0.0415	0.006	14.2	ug/L	338	Standard
|	Pb	208	3949.9	8.3	0.0390	0.006	14.2	ug/L	1616	Standard
	U	238	114.7	33.0	0.0063	0.002	32.4	ug/L	2	Standard
[>	Bi	209	599577.1	0.2				ug/L	641071	Standard

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Na	23	105410.5	1.8	6.1590	0.056	0.9	mg/L	412	Standard
Mg	24	181814.6	1.8	0.2734	0.004	1.4	mg/L	177	Standard
K	39	185.0	14.3	0.0294	0.021	72.7	mg/L	150	Standard
Ca	43	5.0	100.0	1.5904	4.095	257.5	mg/L	7	Standard
Fe	54	492.5	11.5	-0.0220	0.012	52.7	mg/L	634	Standard
Fe	57	7591.9	2.3	0.0665	0.003	4.5	mg/L	2670	Standard
Sc-1	45	340137.4	1.0				mg/L	375691	Standard
Cl	35	5.3	39.0				ug/L	4	Standard
Kr	83	38.0	13.6				ug/L	39	Standard
Br	81	850.9	3.5				ug/L	639	Standard
P	31	192.5	6.7				ug/L	419	Standard
S	34	7546.9	2.1				ug/L	7420	Standard
Sr	88	65.0	35.3				ug/L	35	Standard

QC Calculated Values

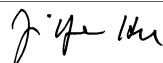
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.198	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065834

Report Date/Time: Friday, July 27, 2012 12:08:04

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	Cd	111	
	Cd	114	
>	In	115	91.495
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.527
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065834

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Method 6020 - Summary Report

Sample ID: L1207065835

Sample Date/Time: Friday, July 27, 2012 12:08:43

Number of Replicates: 3

Autosampler Position: 440

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25875.4	3.0	-4869.2379	354.494	7.3	ug/L	11199	Standard
|	Be	9	10.0	100.0	-0.0142	0.005	37.6	ug/L	10	Standard
|	Al	27	329630.0	3.6	21.8996	0.422	1.9	ug/L	7920	Standard
[>	Sc	45	334488.5	2.6				ug/L	375691	Standard
[	Ti	47	739.7	19.0	0.5159	0.110	21.3	ug/L	70	Standard
|	V	51	3703.7	1.8	0.0725	0.005	7.4	ug/L	3172	Standard
|	Cr	52	8490.7	2.3	-0.0659	0.022	33.0	ug/L	9852	Standard
|	Cr	53	622.5	4.6	0.0927	0.020	21.3	ug/L	518	Standard
|	Mn	55	138578.0	3.4	8.6220	0.279	3.2	ug/L	1193	Standard
|	Co	59	3300.4	0.8	0.3081	0.002	0.6	ug/L	98	Standard
|	Ni	60	860.4	6.8	0.2960	0.021	7.2	ug/L	67	Standard
|	Cu	65	245.3	6.2	0.0565	0.006	10.8	ug/L	90	Standard
|	Zn	66	6992.0	19.1	6.1813	1.188	19.2	ug/L	148	Standard
[>	Ge	72	287789.8	0.2				ug/L	304674	Standard
|	As	75	83.4	33.7	0.2686	0.025	9.4	ug/L	-174	Standard
|	Se	82	31.1	13.3	0.1203	0.037	31.0	ug/L	26	Standard
[	Se-1	77	137.0	5.1	0.2731	0.090	33.1	ug/L	133	Standard
[>	Ga	71	625.0	12.6				mg/L	630	Standard
[	Rb	85	1081.7	4.7				ug/L	12	Standard
[	Y	89	247672.8	3.5				ug/L	271719	Standard
[>	Rh	103	311.7	18.5				ug/L	392	Standard
[	Mo	98	105.5	11.0	0.0216	0.003	13.7	ug/L	7	Standard
|	Ag	107	49.3	4.2	-0.0043	0.000	5.9	ug/L	55	Standard
|	Cd	111	61.1	18.0	-0.0033	0.003	76.8	mg/L	67	Standard
|	Cd	114	171.9	11.2	-0.0020	0.002	74.2	ug/L	219	Standard
[>	In	115	817425.4	0.8				ug/L	887392	Standard
|	Sn	118	623.3	2.6	-0.0020	0.001	49.4	ug/L	653	Standard
|	Sb	123	112.2	26.0	0.0148	0.003	19.5	ug/L	48	Standard
[	Ba	135	20043.9	1.7	4.0960	0.085	2.1	ug/L	28	Standard
[	Ce	140	11236.5	2.7				ug/L	34	Standard
[>	Tb	159	1097925.5	0.5				ug/L	1226141	Standard
[	Ho	165	205.7	12.2				ug/L	14	Standard
|	Tl	203	338.7	11.4	0.0166	0.002	11.8	ug/L	9	Standard
|	Tl	205	839.4	17.1	0.0161	0.003	20.0	ug/L	20	Standard
|	Pb	206	889.4	2.8	0.0326	0.002	6.0	ug/L	419	Standard
|	Pb	207	723.0	4.4	0.0308	0.002	7.5	ug/L	338	Standard
|	Pb	208	3351.8	1.8	0.0289	0.001	2.8	ug/L	1616	Standard
	U	238	77.7	7.3	0.0043	0.000	7.4	ug/L	2	Standard
[>	Bi	209	597253.5	0.5				ug/L	641071	Standard

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Na	23	108074.1	1.6	6.4270	0.234	3.6	mg/L	412	Standard
Mg	24	64905.5	3.3	0.0992	0.001	1.5	mg/L	177	Standard
K	39	173.3	6.7	0.0219	0.006	28.6	mg/L	150	Standard
Ca	43	3.3	86.6	0.2200	2.342	1064.7	mg/L	7	Standard
Fe	54	439.6	8.4	-0.0319	0.009	28.9	mg/L	634	Standard
Fe	57	5864.5	3.3	0.0459	0.001	1.1	mg/L	2670	Standard
Sc-1	45	334488.5	2.6				mg/L	375691	Standard
Cl	35	7.7	27.2				ug/L	4	Standard
Kr	83	40.4	9.6				ug/L	39	Standard
Br	81	972.5	8.9				ug/L	639	Standard
P	31	174.2	8.2				ug/L	419	Standard
S	34	7967.9	1.7				ug/L	7420	Standard
Sr	88	63.3	29.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.458	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065835

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	Cd	111	
	Cd	114	
>	In	115	92.115
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.165
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065835

Report Date/Time: Friday, July 27, 2012 12:11:13

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Method 6020 - Summary Report

Sample ID: L1207065836

Sample Date/Time: Friday, July 27, 2012 12:11:52

Number of Replicates: 3

Autosampler Position: 441

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35342.9	3.1	-7581.0801	534.162	7.0	ug/L	11199	Standard
|	Be	9	20.0	66.1	-0.0089	0.007	81.7	ug/L	10	Standard
|	Al	27	28937.7	6.0	1.4341	0.147	10.3	ug/L	7920	Standard
[>	Sc	45	341043.5	2.3				ug/L	375691	Standard
|	Ti	47	186.3	11.7	0.0890	0.018	20.0	ug/L	70	Standard
|	V	51	3192.3	1.9	0.0276	0.007	25.4	ug/L	3172	Standard
|	Cr	52	7947.8	1.5	-0.1213	0.019	15.8	ug/L	9852	Standard
|	Cr	53	400.8	6.8	-0.0542	0.017	31.5	ug/L	518	Standard
|	Mn	55	41451.6	1.8	2.5423	0.061	2.4	ug/L	1193	Standard
|	Co	59	536.3	1.9	0.0403	0.001	1.8	ug/L	98	Standard
|	Ni	60	351.0	5.8	0.1061	0.007	6.6	ug/L	67	Standard
|	Cu	65	184.0	4.3	0.0322	0.003	10.4	ug/L	90	Standard
|	Zn	66	1982.5	3.6	1.6784	0.073	4.4	ug/L	148	Standard
[>	Ge	72	285615.6	0.6				ug/L	304674	Standard
|	As	75	52.2	30.4	0.2411	0.015	6.0	ug/L	-174	Standard
|	Se	82	24.7	16.9	0.0651	0.036	55.6	ug/L	26	Standard
[	Se-1	77	116.3	7.5	0.0246	0.104	422.3	ug/L	133	Standard
[>	Ga	71	576.7	20.8				mg/L	630	Standard
|	Rb	85	381.7	15.8				ug/L	12	Standard
|	Y	89	244978.4	1.8				ug/L	271719	Standard
[>	Rh	103	401.7	10.4				ug/L	392	Standard
|	Mo	98	77.3	16.4	0.0145	0.003	23.3	ug/L	7	Standard
|	Ag	107	46.0	18.8	-0.0047	0.001	23.9	ug/L	55	Standard
|	Cd	111	56.8	6.3	-0.0042	0.001	21.4	mg/L	67	Standard
|	Cd	114	163.6	23.7	-0.0026	0.003	124.4	ug/L	219	Standard
[>	In	115	811016.3	0.6				ug/L	887392	Standard
|	Sn	118	636.7	7.4	-0.0007	0.004	517.8	ug/L	653	Standard
|	Sb	123	91.5	17.6	0.0129	0.002	12.4	ug/L	48	Standard
|	Ba	135	8933.6	1.4	1.8350	0.035	1.9	ug/L	28	Standard
|	Ce	140	442.0	5.6				ug/L	34	Standard
[>	Tb	159	1092412.2	0.2				ug/L	1226141	Standard
|	Ho	165	14.7	30.7				ug/L	14	Standard
|	Tl	203	246.7	12.1	0.0119	0.001	12.3	ug/L	9	Standard
|	Tl	205	568.3	12.8	0.0099	0.002	16.0	ug/L	20	Standard
|	Pb	206	453.3	3.2	0.0035	0.001	32.6	ug/L	419	Standard
|	Pb	207	380.3	1.8	0.0035	0.000	10.6	ug/L	338	Standard
|	Pb	208	1765.0	2.7	0.0015	0.001	63.7	ug/L	1616	Standard
	U	238	138.3	7.7	0.0076	0.001	6.9	ug/L	2	Standard
[>	Bi	209	595335.0	0.7				ug/L	641071	Standard

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Na	23	107523.5	0.9	6.2697	0.194	3.1	mg/L	412	Standard
Mg	24	202612.4	0.3	0.3039	0.008	2.5	mg/L	177	Standard
K	39	161.7	4.7	0.0091	0.008	87.6	mg/L	150	Standard
Ca	43	5.0	100.0	1.4951	3.952	264.3	mg/L	7	Standard
Fe	54	256.2	12.2	-0.0743	0.007	9.3	mg/L	634	Standard
Fe	57	3115.3	2.9	0.0099	0.002	20.1	mg/L	2670	Standard
Sc-1	45	341043.5	2.3				mg/L	375691	Standard
Cl	35	4.7	32.7				ug/L	4	Standard
Kr	83	37.3	9.1				ug/L	39	Standard
Br	81	869.2	5.4				ug/L	639	Standard
P	31	164.2	10.1				ug/L	419	Standard
S	34	7596.1	1.4				ug/L	7420	Standard
Sr	88	111.7	13.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.745	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065836

Report Date/Time: Friday, July 27, 2012 12:14:22

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	Cd	111		
	Cd	114		
>	In	115	91.393	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.866	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065836

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Method 6020 - Summary Report

Sample ID: L1207065837

Sample Date/Time: Friday, July 27, 2012 12:15:01

Number of Replicates: 3

Autosampler Position: 442

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	57487.2	0.5	-14345.3439	154.847	1.1	ug/L	11199	Standard
|	Be	9	81.7	30.2	0.0238	0.013	55.8	ug/L	10	Standard
|	Al	27	5645009.2	1.5	377.3643	7.537	2.0	ug/L	7920	Standard
[>	Sc	45	339554.4	0.5				ug/L	375691	Standard
[	Ti	47	7887.7	2.9	6.0465	0.135	2.2	ug/L	70	Standard
|	V	51	12638.8	2.5	0.8969	0.011	1.2	ug/L	3172	Standard
|	Cr	52	14313.4	2.8	0.6037	0.026	4.3	ug/L	9852	Standard
|	Cr	53	1856.8	4.0	0.9218	0.030	3.2	ug/L	518	Standard
|	Mn	55	157336.6	2.0	9.8038	0.124	1.3	ug/L	1193	Standard
|	Co	59	3003.0	4.1	0.2793	0.007	2.7	ug/L	98	Standard
|	Ni	60	3093.0	3.1	1.1332	0.019	1.7	ug/L	67	Standard
|	Cu	65	1703.8	2.3	0.6496	0.006	0.9	ug/L	90	Standard
|	Zn	66	8044.5	0.9	7.1362	0.140	2.0	ug/L	148	Standard
[>	Ge	72	287694.1	1.6				ug/L	304674	Standard
|	As	75	-1.4	2666.9	0.1927	0.033	17.2	ug/L	-174	Standard
|	Se	82	45.6	22.5	0.2493	0.087	34.9	ug/L	26	Standard
[	Se-1	77	147.0	3.6	0.4000	0.095	23.7	ug/L	133	Standard
[>	Ga	71	1450.1	10.9				mg/L	630	Standard
[	Rb	85	11364.3	6.0				ug/L	12	Standard
[	Y	89	250283.9	1.5				ug/L	271719	Standard
[>	Rh	103	326.7	7.2				ug/L	392	Standard
[	Mo	98	295.8	3.9	0.0725	0.003	3.8	ug/L	7	Standard
|	Ag	107	55.7	15.3	-0.0033	0.001	35.2	ug/L	55	Standard
|	Cd	111	304.3	8.1	0.0559	0.006	10.4	mg/L	67	Standard
|	Cd	114	802.8	3.7	0.0526	0.002	4.3	ug/L	219	Standard
[>	In	115	798851.7	0.5				ug/L	887392	Standard
|	Sn	118	3213.3	11.2	0.1871	0.025	13.6	ug/L	653	Standard
|	Sb	123	134.4	12.3	0.0172	0.002	9.1	ug/L	48	Standard
[	Ba	135	52662.4	1.6	11.0260	0.127	1.2	ug/L	28	Standard
[	Ce	140	95352.2	2.1				ug/L	34	Standard
[>	Tb	159	1098260.0	0.1				ug/L	1226141	Standard
[	Ho	165	1637.1	2.9				ug/L	14	Standard
|	Tl	203	612.0	8.2	0.0309	0.002	7.1	ug/L	9	Standard
|	Tl	205	1441.4	11.4	0.0302	0.003	11.3	ug/L	20	Standard
|	Pb	206	5081.5	2.1	0.3163	0.004	1.3	ug/L	419	Standard
|	Pb	207	4085.2	3.0	0.3018	0.006	2.0	ug/L	338	Standard
|	Pb	208	19270.1	3.0	0.3071	0.006	1.9	ug/L	1616	Standard
	U	238	3224.3	1.8	0.1757	0.005	3.0	ug/L	2	Standard
[>	Bi	209	592347.4	1.3				ug/L	641071	Standard

Sample ID: L1207065837

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Na	23	126452.2	0.4	7.4093	0.017	0.2	mg/L	412	Standard
Mg	24	773789.0	1.4	1.1655	0.022	1.9	mg/L	177	Standard
K	39	320.0	11.8	0.1463	0.032	22.1	mg/L	150	Standard
Ca	43	11.7	49.5	6.9791	4.679	67.0	mg/L	7	Standard
Fe	54	2929.1	7.2	0.5181	0.050	9.7	mg/L	634	Standard
Fe	57	48637.9	1.3	0.5859	0.009	1.6	mg/L	2670	Standard
Sc-1	45	339554.4	0.5				mg/L	375691	Standard
Cl	35	24.0	40.2				ug/L	4	Standard
Kr	83	40.1	7.7				ug/L	39	Standard
Br	81	1735.1	2.7				ug/L	639	Standard
P	31	611.7	1.0				ug/L	419	Standard
S	34	7842.0	2.4				ug/L	7420	Standard
Sr	88	156.7	29.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.427	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	90.022	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.400	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 12:18:14

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

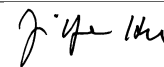
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10875.6	3.3	222.4036	105.249	47.3	ug/L	11199	Standard
|	Be	9	103544.4	1.9	48.0576	0.532	1.1	ug/L	10	Standard
|	Al	27	771892.2	0.5	44.7055	0.477	1.1	ug/L	7920	Standard
[>	Sc	45	388135.7	1.2				ug/L	375691	Standard
[	Ti	47	134904.0	1.3	93.9414	1.635	1.7	ug/L	70	Standard
|	V	51	551766.1	0.3	45.5761	0.696	1.5	ug/L	3172	Standard
|	Cr	52	453868.4	0.6	45.9443	0.622	1.4	ug/L	9852	Standard
|	Cr	53	78119.2	0.4	46.9452	0.761	1.6	ug/L	518	Standard
|	Mn	55	825846.6	0.4	46.6431	0.505	1.1	ug/L	1193	Standard
|	Co	59	524907.1	0.6	45.8798	0.588	1.3	ug/L	98	Standard
|	Ni	60	137599.7	0.7	46.4392	0.611	1.3	ug/L	67	Standard
|	Cu	65	129001.5	0.9	47.2001	0.730	1.5	ug/L	90	Standard
|	Zn	66	59283.1	1.1	48.0433	0.240	0.5	ug/L	148	Standard
[>	Ge	72	319502.2	1.2				ug/L	304674	Standard
|	As	75	58605.3	0.8	47.3046	0.650	1.4	ug/L	-174	Standard
|	Se	82	5974.5	0.6	47.8534	0.834	1.7	ug/L	26	Standard
[	Se-1	77	4360.6	3.3	47.8209	1.873	3.9	ug/L	133	Standard
[>	Ga	71	743.4	15.3				mg/L	630	Standard
[	Rb	85	900.0	7.0				ug/L	12	Standard
[	Y	89	275641.5	0.8				ug/L	271719	Standard
[>	Rh	103	411.7	11.0				ug/L	392	Standard
[	Mo	98	410187.1	0.7	96.3560	1.593	1.7	ug/L	7	Standard
|	Ag	107	402526.6	0.5	47.8534	0.663	1.4	ug/L	55	Standard
|	Cd	111	226483.0	0.5	48.7745	0.680	1.4	mg/L	67	Standard
|	Cd	114	627157.5	1.2	48.0232	0.987	2.1	ug/L	219	Standard
[>	In	115	898142.7	0.9				ug/L	887392	Standard
|	Sn	118	744450.8	1.5	48.0414	0.600	1.2	ug/L	653	Standard
|	Sb	123	537623.9	0.9	47.0394	0.202	0.4	ug/L	48	Standard
[	Ba	135	261792.1	1.0	48.7881	0.721	1.5	ug/L	28	Standard
[	Ce	140	981.0	6.1				ug/L	34	Standard
[>	Tb	159	1200521.3	0.4				ug/L	1226141	Standard
[	Ho	165	17.0	27.0				ug/L	14	Standard
|	Tl	203	931571.7	0.6	46.2318	0.344	0.7	ug/L	9	Standard
|	Tl	205	2161050.9	0.6	47.9008	0.381	0.8	ug/L	20	Standard
|	Pb	206	729286.6	0.2	47.1186	0.178	0.4	ug/L	419	Standard
|	Pb	207	614572.0	0.7	47.2883	0.250	0.5	ug/L	338	Standard
|	Pb	208	2852062.2	0.1	47.5852	0.064	0.1	ug/L	1616	Standard
	U	238	909155.5	0.5	47.3458	0.169	0.4	ug/L	2	Standard
[>	Bi	209	619141.8	0.2				ug/L	641071	Standard

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Na	23	116937.9	0.4	5.9873	0.069	1.2	mg/L	412	Standard
Mg	24	3487079.5	2.1	4.5953	0.137	3.0	mg/L	177	Standard
K	39	5954.5	6.6	4.3676	0.273	6.3	mg/L	150	Standard
Ca	43	13.3	78.1	7.0364	7.524	106.9	mg/L	7	Standard
Fe	54	25409.9	1.4	4.7935	0.114	2.4	mg/L	634	Standard
Fe	57	476167.5	2.3	5.2414	0.179	3.4	mg/L	2670	Standard
Sc-1	45	388135.7	1.2				mg/L	375691	Standard
Cl	35	3.3	62.4				ug/L	4	Standard
Kr	83	41.7	1.6				ug/L	39	Standard
Br	81	918.4	3.8				ug/L	639	Standard
P	31	450.0	10.9				ug/L	419	Standard
S	34	6704.8	2.3				ug/L	7420	Standard
Sr	88	31.7	32.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	89.411		
Sc	45			
Ti	47	93.941		
V	51	91.152		
Cr	52	91.889		
Cr	53			
Mn	55	93.286		
Co	59	91.760		
Ni	60	92.878		
Cu	65	94.400		
Zn	66	96.087		
Ge	72		104.867	
As	75	94.609		
Se	82	95.707		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.356		
Ag	107	95.707		

Sample ID: QC Std 6

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	Cd	111	97.549	
	Cd	114		
>	In	115		101.211
	Sn	118	96.083	
	Sb	123	94.079	
	Ba	135	97.576	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.464	
|	Tl	205		
|	Pb	206	94.237	
|	Pb	207	94.577	
|	Pb	208	95.170	
|	U	238	94.692	
>	Bi	209		96.579
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 12:20:45

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 12:21:25

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10687.1	1.4	151.5769	10.499	6.9	ug/L	11199	Standard
|	Be	9	21.7	74.2	-0.0090	0.008	88.0	ug/L	10	Standard
|	Al	27	8235.6	16.8	0.0075	0.090	1202.7	ug/L	7920	Standard
[>	Sc	45	372228.9	1.1				ug/L	375691	Standard
|	Ti	47	74.0	36.6	-0.0041	0.019	473.4	ug/L	70	Standard
|	V	51	2963.7	4.9	-0.0195	0.013	64.8	ug/L	3172	Standard
|	Cr	52	8849.6	1.8	-0.1132	0.018	16.1	ug/L	9852	Standard
|	Cr	53	396.7	6.3	-0.0822	0.016	18.9	ug/L	518	Standard
|	Mn	55	1511.4	29.7	0.0055	0.026	472.3	ug/L	1193	Standard
|	Co	59	236.3	84.9	0.0088	0.018	203.0	ug/L	98	Standard
|	Ni	60	95.0	30.6	0.0060	0.010	165.5	ug/L	67	Standard
|	Cu	65	141.3	20.6	0.0092	0.011	118.2	ug/L	90	Standard
|	Zn	66	1111.0	6.4	0.7911	0.057	7.2	ug/L	148	Standard
[>	Ge	72	315257.4	0.2				ug/L	304674	Standard
|	As	75	-209.9	8.2	0.0231	0.014	60.0	ug/L	-174	Standard
|	Se	82	28.0	5.5	0.0715	0.013	18.3	ug/L	26	Standard
[	Se-1	77	130.7	13.2	0.0510	0.200	392.3	ug/L	133	Standard
[>	Ga	71	736.7	11.2				mg/L	630	Standard
|	Rb	85	16.7	45.8				ug/L	12	Standard
|	Y	89	270948.2	1.5				ug/L	271719	Standard
[>	Rh	103	366.7	14.0				ug/L	392	Standard
|	Mo	98	336.5	18.4	0.0734	0.014	19.0	ug/L	7	Standard
|	Ag	107	120.3	31.6	0.0035	0.004	126.0	ug/L	55	Standard
|	Cd	111	90.5	6.0	0.0017	0.001	64.3	mg/L	67	Standard
|	Cd	114	269.5	19.4	0.0041	0.004	93.9	ug/L	219	Standard
[>	In	115	898128.7	0.7				ug/L	887392	Standard
|	Sn	118	976.7	8.0	0.0168	0.005	27.4	ug/L	653	Standard
|	Sb	123	2429.5	7.7	0.2165	0.015	6.9	ug/L	48	Standard
|	Ba	135	134.3	121.1	0.0159	0.030	189.6	ug/L	28	Standard
|	Ce	140	62.7	90.5				ug/L	34	Standard
[>	Tb	159	1189386.6	0.9				ug/L	1226141	Standard
|	Ho	165	10.7	39.0				ug/L	14	Standard
|	Tl	203	385.3	147.2	0.0178	0.027	154.2	ug/L	9	Standard
|	Tl	205	882.7	145.5	0.0159	0.028	174.2	ug/L	20	Standard
|	Pb	206	687.7	56.3	0.0163	0.024	148.8	ug/L	419	Standard
|	Pb	207	546.3	53.7	0.0141	0.022	155.6	ug/L	338	Standard
|	Pb	208	2501.8	52.3	0.0116	0.021	182.4	ug/L	1616	Standard
	U	238	186.7	121.1	0.0096	0.011	119.7	ug/L	2	Standard
[>	Bi	209	634350.4	0.4				ug/L	641071	Standard

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Na	23	590.0	56.2	-0.0069	0.018	263.3	mg/L	412	Standard
Mg	24	948.4	105.7	0.0013	0.001	105.3	mg/L	177	Standard
K	39	143.3	12.3	-0.0172	0.013	73.3	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2368	2.162	174.8	mg/L	7	Standard
Fe	54	565.6	6.2	-0.0165	0.008	50.6	mg/L	634	Standard
Fe	57	3080.3	3.9	0.0062	0.002	28.4	mg/L	2670	Standard
Sc-1	45	372228.9	1.1				mg/L	375691	Standard
Cl	35	4.0	43.3				ug/L	4	Standard
Kr	83	38.4	14.9				ug/L	39	Standard
Br	81	891.7	3.9				ug/L	639	Standard
P	31	440.0	5.6				ug/L	419	Standard
S	34	6468.0	3.8				ug/L	7420	Standard
Sr	88	40.0	21.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.474	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 12:23:55

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	Cd	111		
	Cd	114		
>	In	115	101.210	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.952	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: PBW 74 WG403653-05

Sample Date/Time: Friday, July 27, 2012 12:39:20

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10647.1	1.4	165.3800	46.089	27.9	ug/L	11199	Standard
|	Be	9	8.3	124.9	-0.0155	0.005	33.3	ug/L	10	Standard
|	Al	27	7331.8	2.8	-0.0488	0.008	16.4	ug/L	7920	Standard
[>	Sc	45	372629.2	1.9				ug/L	375691	Standard
[	Ti	47	49.7	29.3	-0.0216	0.010	45.7	ug/L	70	Standard
|	V	51	2910.9	0.8	-0.0257	0.004	17.2	ug/L	3172	Standard
|	Cr	52	9270.5	1.2	-0.0761	0.019	25.4	ug/L	9852	Standard
|	Cr	53	400.0	5.6	-0.0818	0.017	21.3	ug/L	518	Standard
|	Mn	55	1455.7	3.9	0.0017	0.004	251.8	ug/L	1193	Standard
|	Co	59	92.0	6.5	-0.0041	0.000	9.9	ug/L	98	Standard
|	Ni	60	163.3	5.0	0.0290	0.003	8.7	ug/L	67	Standard
|	Cu	65	103.7	8.2	-0.0051	0.003	51.8	ug/L	90	Standard
|	Zn	66	3643.8	5.5	2.8567	0.207	7.2	ug/L	148	Standard
[>	Ge	72	317591.0	1.7				ug/L	304674	Standard
|	As	75	-246.3	4.9	-0.0050	0.009	178.4	ug/L	-174	Standard
|	Se	82	22.9	17.1	0.0285	0.033	115.3	ug/L	26	Standard
[	Se-1	77	129.3	6.7	0.0248	0.100	401.8	ug/L	133	Standard
[>	Ga	71	705.0	5.4				mg/L	630	Standard
[	Rb	85	13.3	57.3				ug/L	12	Standard
[	Y	89	274223.3	2.1				ug/L	271719	Standard
[>	Rh	103	370.0	2.3				ug/L	392	Standard
[	Mo	98	78.5	41.8	0.0132	0.008	59.9	ug/L	7	Standard
|	Ag	107	69.3	8.7	-0.0024	0.001	29.5	ug/L	55	Standard
|	Cd	111	80.5	5.1	-0.0002	0.001	633.9	mg/L	67	Standard
|	Cd	114	221.6	2.9	0.0008	0.000	58.6	ug/L	219	Standard
[>	In	115	882328.3	0.3				ug/L	887392	Standard
|	Sn	118	798.0	12.4	0.0062	0.007	105.2	ug/L	653	Standard
|	Sb	123	560.1	29.1	0.0539	0.015	27.1	ug/L	48	Standard
[	Ba	135	23.7	24.0	-0.0046	0.001	23.9	ug/L	28	Standard
[	Ce	140	25.3	11.4				ug/L	34	Standard
[>	Tb	159	1184339.2	0.2				ug/L	1226141	Standard
[	Ho	165	12.7	35.6				ug/L	14	Standard
|	Tl	203	17.0	41.2	-0.0000	0.000	1177.6	ug/L	9	Standard
|	Tl	205	41.3	7.4	-0.0022	0.000	2.5	ug/L	20	Standard
|	Pb	206	407.0	3.9	-0.0009	0.001	105.5	ug/L	419	Standard
|	Pb	207	330.7	1.5	-0.0017	0.000	19.8	ug/L	338	Standard
|	Pb	208	1583.7	2.3	-0.0029	0.001	21.2	ug/L	1616	Standard
	U	238	3.7	41.7	0.0003	0.000	27.2	ug/L	2	Standard
[>	Bi	209	624791.0	1.3				ug/L	641071	Standard

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Na	23	385.0	13.7	-0.0181	0.003	16.4	mg/L	412	Standard
Mg	24	221.7	20.5	0.0003	0.000	19.6	mg/L	177	Standard
K	39	113.3	6.7	-0.0407	0.008	18.6	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0452	2.113	4679.1	mg/L	7	Standard
Fe	54	616.0	19.1	-0.0067	0.022	323.3	mg/L	634	Standard
Fe	57	3045.3	9.7	0.0057	0.003	57.1	mg/L	2670	Standard
Sc-1	45	372629.2	1.9				mg/L	375691	Standard
Cl	35	2.7	86.6				ug/L	4	Standard
Kr	83	40.3	9.3				ug/L	39	Standard
Br	81	886.7	3.6				ug/L	639	Standard
P	31	350.8	1.6				ug/L	419	Standard
S	34	6299.6	2.9				ug/L	7420	Standard
Sr	88	38.3	49.4				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.240	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	99.429
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.460
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 74 WG403653-05

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Method 6020 - Summary Report

Sample ID: F BLANK WG403653-07

Sample Date/Time: Friday, July 27, 2012 12:42:30

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10263.5	0.2	265.8302	32.238	12.1	ug/L	11199	Standard
|	Be	9	5.0	100.0	-0.0171	0.002	14.3	ug/L	10	Standard
|	Al	27	7558.6	2.1	-0.0339	0.015	43.2	ug/L	7920	Standard
[>	Sc	45	371868.7	1.3				ug/L	375691	Standard
|	Ti	47	56.0	13.9	-0.0170	0.005	31.6	ug/L	70	Standard
|	V	51	2920.5	0.9	-0.0244	0.001	5.7	ug/L	3172	Standard
|	Cr	52	9154.1	0.9	-0.0859	0.016	18.2	ug/L	9852	Standard
|	Cr	53	415.0	7.4	-0.0723	0.019	25.7	ug/L	518	Standard
|	Mn	55	1220.7	1.7	-0.0115	0.002	13.1	ug/L	1193	Standard
|	Co	59	90.7	12.1	-0.0042	0.001	23.0	ug/L	98	Standard
|	Ni	60	254.0	3.1	0.0600	0.003	5.6	ug/L	67	Standard
|	Cu	65	94.7	3.7	-0.0083	0.001	12.9	ug/L	90	Standard
|	Zn	66	1614.1	3.3	1.1992	0.056	4.6	ug/L	148	Standard
[>	Ge	72	316813.5	0.9				ug/L	304674	Standard
|	As	75	-234.4	11.4	0.0042	0.021	505.4	ug/L	-174	Standard
|	Se	82	18.4	15.3	-0.0081	0.023	283.3	ug/L	26	Standard
[	Se-1	77	133.3	12.4	0.0741	0.191	257.2	ug/L	133	Standard
[>	Ga	71	645.0	9.1				mg/L	630	Standard
|	Rb	85	21.7	35.3				ug/L	12	Standard
|	Y	89	276817.5	0.5				ug/L	271719	Standard
[>	Rh	103	370.0	9.5				ug/L	392	Standard
|	Mo	98	47.3	16.0	0.0056	0.002	29.3	ug/L	7	Standard
|	Ag	107	54.0	8.1	-0.0043	0.001	13.9	ug/L	55	Standard
|	Cd	111	77.9	1.3	-0.0008	0.000	8.1	mg/L	67	Standard
|	Cd	114	215.6	8.0	0.0003	0.001	550.0	ug/L	219	Standard
[>	In	115	885719.4	1.5				ug/L	887392	Standard
|	Sn	118	684.3	3.8	-0.0014	0.001	99.7	ug/L	653	Standard
|	Sb	123	202.0	22.8	0.0219	0.004	18.5	ug/L	48	Standard
|	Ba	135	24.7	23.1	-0.0044	0.001	24.4	ug/L	28	Standard
|	Ce	140	32.3	47.3				ug/L	34	Standard
[>	Tb	159	1187633.2	0.1				ug/L	1226141	Standard
|	Ho	165	13.7	18.4				ug/L	14	Standard
|	Tl	203	22.7	24.3	0.0002	0.000	114.0	ug/L	9	Standard
|	Tl	205	59.0	29.0	-0.0019	0.000	20.6	ug/L	20	Standard
|	Pb	206	395.3	2.3	-0.0018	0.000	25.8	ug/L	419	Standard
|	Pb	207	321.3	5.0	-0.0025	0.001	53.9	ug/L	338	Standard
|	Pb	208	1572.7	1.5	-0.0032	0.001	16.8	ug/L	1616	Standard
	U	238	5.7	56.7	0.0004	0.000	42.8	ug/L	2	Standard
[>	Bi	209	627846.9	0.6				ug/L	641071	Standard

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Na	23	400.0	10.8	-0.0172	0.002	14.5	mg/L	412	Standard
Mg	24	233.3	20.4	0.0003	0.000	19.6	mg/L	177	Standard
K	39	123.3	28.8	-0.0328	0.028	85.5	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0245	2.131	8685.2	mg/L	7	Standard
Fe	54	612.8	4.9	-0.0069	0.005	77.9	mg/L	634	Standard
Fe	57	3090.3	2.6	0.0063	0.001	9.7	mg/L	2670	Standard
Sc-1	45	371868.7	1.3				mg/L	375691	Standard
Cl	35	3.7	56.8				ug/L	4	Standard
Kr	83	39.8	10.1				ug/L	39	Standard
Br	81	860.9	3.8				ug/L	639	Standard
P	31	373.3	1.0				ug/L	419	Standard
S	34	6236.3	2.1				ug/L	7420	Standard
Sr	88	55.0	24.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.984	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: F BLANK WG403653-07

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	Cd	111	
	Cd	114	
>	In	115	99.812
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.937
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG403653-07

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Method 6020 - Summary Report

Sample ID: LCSW 74 WG40363-06

Sample Date/Time: Friday, July 27, 2012 12:45:41

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11677.8	3.4	138.7252	127.869	92.2	ug/L	11199	Standard
|	Be	9	54190.1	1.8	24.0925	0.599	2.5	ug/L	10	Standard
|	Al	27	533154.6	1.6	29.4202	0.691	2.3	ug/L	7920	Standard
[>	Sc	45	405092.6	1.1				ug/L	375691	Standard
|	Ti	47	90.0	5.1	0.0019	0.003	165.2	ug/L	70	Standard
|	V	51	307648.3	0.5	23.4725	0.428	1.8	ug/L	3172	Standard
|	Cr	52	260670.9	0.5	24.0223	0.396	1.6	ug/L	9852	Standard
|	Cr	53	43636.9	2.5	24.2029	0.915	3.8	ug/L	518	Standard
|	Mn	55	467500.9	0.5	24.4854	0.363	1.5	ug/L	1193	Standard
|	Co	59	294610.8	1.6	23.9133	0.647	2.7	ug/L	98	Standard
|	Ni	60	77249.8	1.6	24.2050	0.681	2.8	ug/L	67	Standard
|	Cu	65	73783.2	0.4	25.0532	0.341	1.4	ug/L	90	Standard
|	Zn	66	32778.4	0.6	24.6138	0.386	1.6	ug/L	148	Standard
[>	Ge	72	344007.8	1.3				ug/L	304674	Standard
|	As	75	30899.6	0.8	23.2650	0.433	1.9	ug/L	-174	Standard
|	Se	82	3028.0	0.4	22.4424	0.356	1.6	ug/L	26	Standard
[	Se-1	77	2212.2	3.9	21.7657	0.929	4.3	ug/L	133	Standard
[>	Ga	71	753.4	8.2				mg/L	630	Standard
|	Rb	85	23.3	49.5				ug/L	12	Standard
|	Y	89	299146.6	3.5				ug/L	271719	Standard
[>	Rh	103	441.7	17.1				ug/L	392	Standard
|	Mo	98	69.4	21.4	0.0097	0.003	33.5	ug/L	7	Standard
|	Ag	107	234630.5	1.0	26.2130	0.142	0.5	ug/L	55	Standard
|	Cd	111	121617.7	0.6	24.6096	0.160	0.6	mg/L	67	Standard
|	Cd	114	331297.6	1.1	23.8352	0.160	0.7	ug/L	219	Standard
[>	In	115	955457.3	0.7				ug/L	887392	Standard
|	Sn	118	946.7	8.8	0.0112	0.005	42.2	ug/L	653	Standard
|	Sb	123	287268.0	0.8	23.6289	0.162	0.7	ug/L	48	Standard
|	Ba	135	137360.9	0.9	24.0569	0.032	0.1	ug/L	28	Standard
|	Ce	140	419.7	3.1				ug/L	34	Standard
[>	Tb	159	1264712.4	0.1				ug/L	1226141	Standard
|	Ho	165	17.0	23.5				ug/L	14	Standard
|	Tl	203	516316.2	1.1	24.2661	0.299	1.2	ug/L	9	Standard
|	Tl	205	1192777.7	0.4	25.0366	0.085	0.3	ug/L	20	Standard
|	Pb	206	397818.8	1.3	24.3281	0.276	1.1	ug/L	419	Standard
|	Pb	207	337789.7	0.9	24.6021	0.225	0.9	ug/L	338	Standard
|	Pb	208	1569853.2	0.8	24.7910	0.186	0.8	ug/L	1616	Standard
	U	238	487453.0	0.9	24.0410	0.259	1.1	ug/L	2	Standard
[>	Bi	209	653770.4	0.5				ug/L	641071	Standard

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Na	23	855.0	9.8	0.0035	0.004	125.9	mg/L	412	Standard
Mg	24	1021.7	3.3	0.0013	0.000	3.3	mg/L	177	Standard
K	39	145.0	22.6	-0.0249	0.024	98.2	mg/L	150	Standard
Ca	43	10.0	50.0	4.3008	3.368	78.3	mg/L	7	Standard
Fe	54	922.6	3.3	0.0405	0.005	12.1	mg/L	634	Standard
Fe	57	3648.8	2.9	0.0093	0.001	15.0	mg/L	2670	Standard
Sc-1	45	405092.6	1.1				mg/L	375691	Standard
Cl	35	4.0	25.0				ug/L	4	Standard
Kr	83	43.8	14.1				ug/L	39	Standard
Br	81	1037.5	5.5				ug/L	639	Standard
P	31	568.3	2.2				ug/L	419	Standard
S	34	6331.3	2.0				ug/L	7420	Standard
Sr	88	50.0	30.0				ug/L	35	Standard

QC Calculated Values

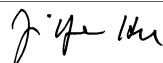
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		112.910	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	107.670
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.981
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 74 WG40363-06

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Method 6020 - Summary Report

Sample ID: L1207042001 WG403653-01

Sample Date/Time: Friday, July 27, 2012 12:48:51

Number of Replicates: 3

Autosampler Position: 304

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	453648.6	3.1	-121008.3714	3152.334	2.6	ug/L	11199	Standard
|	Be	9	36.7	28.4	-0.0021	0.005	231.3	ug/L	10	Standard
|	Al	27	150876.0	2.1	8.6027	0.088	1.0	ug/L	7920	Standard
[>	Sc	45	376846.1	1.3				ug/L	375691	Standard
[	Ti	47	645.7	4.2	0.4297	0.020	4.6	ug/L	70	Standard
|	V	51	5619.3	2.4	0.2354	0.017	7.2	ug/L	3172	Standard
|	Cr	52	11082.7	0.5	0.1979	0.009	4.6	ug/L	9852	Standard
|	Cr	53	1069.2	8.4	0.3740	0.068	18.2	ug/L	518	Standard
|	Mn	55	369665.8	1.8	22.5171	0.541	2.4	ug/L	1193	Standard
|	Co	59	1606.4	2.5	0.1395	0.002	1.4	ug/L	98	Standard
|	Ni	60	2439.5	1.4	0.8635	0.006	0.7	ug/L	67	Standard
|	Cu	65	906.0	4.4	0.3153	0.017	5.5	ug/L	90	Standard
|	Zn	66	3824.5	9.9	3.2346	0.342	10.6	ug/L	148	Standard
[>	Ge	72	295713.5	1.3				ug/L	304674	Standard
|	As	75	3114.2	0.8	2.8990	0.050	1.7	ug/L	-174	Standard
|	Se	82	107.9	17.3	0.7800	0.161	20.7	ug/L	26	Standard
[	Se-1	77	147.0	5.1	0.3498	0.111	31.9	ug/L	133	Standard
[>	Ga	71	656.7	5.4				mg/L	630	Standard
[	Rb	85	35822.3	1.9				ug/L	12	Standard
[	Y	89	267487.8	2.1				ug/L	271719	Standard
[>	Rh	103	788.4	6.6				ug/L	392	Standard
[	Mo	98	16185.5	3.2	4.0411	0.192	4.8	ug/L	7	Standard
|	Ag	107	202.0	25.7	0.0148	0.007	44.2	ug/L	55	Standard
|	Cd	111	176.2	22.1	0.0225	0.009	38.0	mg/L	67	Standard
|	Cd	114	541.0	12.1	0.0276	0.005	18.6	ug/L	219	Standard
[>	In	115	844314.9	2.3				ug/L	887392	Standard
|	Sn	118	1626.8	5.6	0.0655	0.005	6.9	ug/L	653	Standard
|	Sb	123	1241.7	3.9	0.1195	0.002	1.6	ug/L	48	Standard
[	Ba	135	37090.7	1.7	7.3475	0.217	2.9	ug/L	28	Standard
[	Ce	140	899.4	0.9				ug/L	34	Standard
[>	Tb	159	1168998.7	1.5				ug/L	1226141	Standard
[	Ho	165	48.7	9.3				ug/L	14	Standard
|	Tl	203	630.0	5.8	0.0368	0.002	6.7	ug/L	9	Standard
|	Tl	205	1421.4	7.1	0.0348	0.003	8.5	ug/L	20	Standard
|	Pb	206	822.4	11.2	0.0371	0.008	20.7	ug/L	419	Standard
|	Pb	207	648.0	6.3	0.0332	0.004	12.5	ug/L	338	Standard
|	Pb	208	3094.8	8.3	0.0332	0.006	17.0	ug/L	1616	Standard
	U	238	11918.7	3.1	0.7483	0.019	2.6	ug/L	2	Standard
[>	Bi	209	513585.6	0.7				ug/L	641071	Standard

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Na	23	392928.8	1.5	20.8170	0.414	2.0	mg/L	412	Standard
Mg	24	7242528.5	2.5	9.8296	0.292	3.0	mg/L	177	Standard
K	39	2890.3	5.7	2.1201	0.154	7.3	mg/L	150	Standard
Ca	43	56.7	45.3	38.9468	18.642	47.9	mg/L	7	Standard
Fe	54	775.4	5.5	0.0240	0.009	38.3	mg/L	634	Standard
Fe	57	11327.6	3.1	0.0998	0.005	4.9	mg/L	2670	Standard
Sc-1	45	376846.1	1.3				mg/L	375691	Standard
Cl	35	28.7	10.7				ug/L	4	Standard
Kr	83	47.0	9.3				ug/L	39	Standard
Br	81	5329.3	12.4				ug/L	639	Standard
P	31	440.8	7.0				ug/L	419	Standard
S	34	133567.8	0.8				ug/L	7420	Standard
Sr	88	2530.2	6.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.059	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	95.146
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	80.114
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042001 WG403653-01

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Method 6020 - Summary Report

Sample ID: L1207042004S WG403653-08

Sample Date/Time: Friday, July 27, 2012 12:52:02

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	477068.7	1.6	-127520.6056	1903.304	1.5	ug/L	11199	Standard
|	Be	9	50178.0	2.8	23.9941	0.566	2.4	ug/L	10	Standard
|	Al	27	511135.5	2.6	30.3509	0.581	1.9	ug/L	7920	Standard
[>	Sc	45	376562.1	0.8				ug/L	375691	Standard
|	Ti	47	694.0	4.9	0.4677	0.027	5.9	ug/L	70	Standard
|	V	51	259441.6	1.4	23.0900	0.499	2.2	ug/L	3172	Standard
|	Cr	52	210534.0	1.0	22.5756	0.345	1.5	ug/L	9852	Standard
|	Cr	53	36466.3	1.2	23.5854	0.454	1.9	ug/L	518	Standard
|	Mn	55	754182.3	0.6	46.1575	0.681	1.5	ug/L	1193	Standard
|	Co	59	252041.8	0.7	23.8672	0.441	1.8	ug/L	98	Standard
|	Ni	60	62285.4	1.3	22.7653	0.407	1.8	ug/L	67	Standard
|	Cu	65	57335.3	1.1	22.7103	0.412	1.8	ug/L	90	Standard
|	Zn	66	29272.6	0.7	25.6502	0.310	1.2	ug/L	148	Standard
[>	Ge	72	294849.2	1.2				ug/L	304674	Standard
|	As	75	31069.3	0.3	27.2583	0.379	1.4	ug/L	-174	Standard
|	Se	82	3050.1	0.8	26.4032	0.536	2.0	ug/L	26	Standard
[	Se-1	77	2149.2	2.3	24.8610	0.464	1.9	ug/L	133	Standard
[>	Ga	71	691.7	2.9				mg/L	630	Standard
|	Rb	85	36727.8	1.5				ug/L	12	Standard
|	Y	89	267563.5	0.4				ug/L	271719	Standard
[>	Rh	103	773.4	1.3				ug/L	392	Standard
|	Mo	98	15323.2	1.1	3.7252	0.060	1.6	ug/L	7	Standard
|	Ag	107	201763.6	2.3	24.8517	0.452	1.8	ug/L	55	Standard
|	Cd	111	110914.3	1.2	24.7505	0.644	2.6	mg/L	67	Standard
|	Cd	114	292043.6	0.2	23.1680	0.324	1.4	ug/L	219	Standard
[>	In	115	866607.2	1.4				ug/L	887392	Standard
|	Sn	118	1537.7	2.9	0.0567	0.002	3.9	ug/L	653	Standard
|	Sb	123	266500.9	0.6	24.1704	0.311	1.3	ug/L	48	Standard
|	Ba	135	150697.1	0.7	29.1055	0.555	1.9	ug/L	28	Standard
|	Ce	140	1014.4	2.8				ug/L	34	Standard
[>	Tb	159	1198287.9	0.7				ug/L	1226141	Standard
|	Ho	165	54.0	22.5				ug/L	14	Standard
|	Tl	203	408434.9	1.0	24.0146	0.244	1.0	ug/L	9	Standard
|	Tl	205	949535.9	0.7	24.9344	0.157	0.6	ug/L	20	Standard
|	Pb	206	310482.9	0.3	23.7534	0.080	0.3	ug/L	419	Standard
|	Pb	207	263683.4	0.5	24.0252	0.105	0.4	ug/L	338	Standard
|	Pb	208	1225685.4	0.4	24.2145	0.102	0.4	ug/L	1616	Standard
	U	238	456294.4	1.1	28.1534	0.300	1.1	ug/L	2	Standard
[>	Bi	209	522575.7	0.0				ug/L	641071	Standard

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Na	23	395515.9	0.6	20.9690	0.256	1.2	mg/L	412	Standard
Mg	24	7339285.2	2.7	9.9670	0.259	2.6	mg/L	177	Standard
K	39	2870.3	0.3	2.1051	0.025	1.2	mg/L	150	Standard
Ca	43	31.7	18.2	20.6700	4.111	19.9	mg/L	7	Standard
Fe	54	767.8	11.6	0.0225	0.017	76.9	mg/L	634	Standard
Fe	57	12016.4	2.7	0.1077	0.003	2.7	mg/L	2670	Standard
Sc-1	45	376562.1	0.8				mg/L	375691	Standard
Cl	35	50.7	3.0				ug/L	4	Standard
Kr	83	51.1	4.6				ug/L	39	Standard
Br	81	6917.4	5.2				ug/L	639	Standard
P	31	465.8	4.8				ug/L	419	Standard
S	34	135857.2	1.0				ug/L	7420	Standard
Sr	88	2581.9	3.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.775	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042004S WG403653-08

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	Cd	111	
	Cd	114	
>	In	115	97.658
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	81.516
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

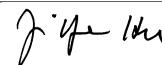
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042004S WG403653-08

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Method 6020 - Summary Report

Sample ID: L1207042007SD WG403653-09

Sample Date/Time: Friday, July 27, 2012 12:55:11

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	501732.2	1.9	-130546.2209	5954.012	4.6	ug/L	11199	Standard
|	Be	9	53022.6	1.4	24.6578	0.558	2.3	ug/L	10	Standard
|	Al	27	464681.6	0.7	26.7823	0.837	3.1	ug/L	7920	Standard
[>	Sc	45	387357.8	2.6				ug/L	375691	Standard
|	Ti	47	683.7	1.4	0.4611	0.013	2.7	ug/L	70	Standard
|	V	51	268719.2	0.9	23.9776	0.078	0.3	ug/L	3172	Standard
|	Cr	52	218541.3	1.1	23.5296	0.381	1.6	ug/L	9852	Standard
|	Cr	53	37787.9	1.8	24.5047	0.266	1.1	ug/L	518	Standard
|	Mn	55	780800.0	0.7	47.8974	0.672	1.4	ug/L	1193	Standard
|	Co	59	263528.2	1.2	25.0131	0.586	2.3	ug/L	98	Standard
|	Ni	60	65363.4	0.6	23.9461	0.352	1.5	ug/L	67	Standard
|	Cu	65	58358.2	0.8	23.1680	0.314	1.4	ug/L	90	Standard
|	Zn	66	30698.1	0.3	26.9669	0.326	1.2	ug/L	148	Standard
[>	Ge	72	294180.0	1.1				ug/L	304674	Standard
|	As	75	31825.4	0.8	27.9784	0.273	1.0	ug/L	-174	Standard
|	Se	82	3144.7	1.4	27.2887	0.593	2.2	ug/L	26	Standard
[	Se-1	77	2287.8	3.3	26.6186	0.614	2.3	ug/L	133	Standard
[>	Ga	71	633.3	7.8				mg/L	630	Standard
|	Rb	85	39743.7	1.7				ug/L	12	Standard
|	Y	89	272361.4	1.2				ug/L	271719	Standard
[>	Rh	103	893.4	8.0				ug/L	392	Standard
|	Mo	98	15792.9	0.5	3.8263	0.036	0.9	ug/L	7	Standard
|	Ag	107	213216.7	0.2	26.1757	0.181	0.7	ug/L	55	Standard
|	Cd	111	116249.6	0.4	25.8488	0.036	0.1	mg/L	67	Standard
|	Cd	114	305266.7	0.8	24.1332	0.082	0.3	ug/L	219	Standard
[>	In	115	869519.2	0.6				ug/L	887392	Standard
|	Sn	118	1266.4	1.3	0.0382	0.002	4.1	ug/L	653	Standard
|	Sb	123	273411.9	1.5	24.7105	0.225	0.9	ug/L	48	Standard
|	Ba	135	157330.7	1.0	30.2816	0.432	1.4	ug/L	28	Standard
[	Ce	140	1039.0	2.2				ug/L	34	Standard
[>	Tb	159	1213074.1	0.8				ug/L	1226141	Standard
|	Ho	165	55.0	19.2				ug/L	14	Standard
|	Tl	203	420677.5	0.6	24.9319	0.186	0.7	ug/L	9	Standard
|	Tl	205	979241.1	0.5	25.9195	0.096	0.4	ug/L	20	Standard
|	Pb	206	321802.0	0.9	24.8171	0.272	1.1	ug/L	419	Standard
|	Pb	207	273785.9	0.5	25.1457	0.067	0.3	ug/L	338	Standard
|	Pb	208	1265254.3	0.5	25.1966	0.098	0.4	ug/L	1616	Standard
|	U	238	473420.5	0.4	29.4432	0.180	0.6	ug/L	2	Standard
[>	Bi	209	518444.4	0.2				ug/L	641071	Standard

Sample ID: L1207042007SD WG403653-09

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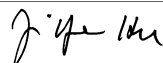
Na	23	404715.9	0.7	20.8673	0.599	2.9	mg/L	412	Standard
Mg	24	7673255.1	1.8	10.1339	0.280	2.8	mg/L	177	Standard
K	39	3037.0	0.8	2.1702	0.075	3.5	mg/L	150	Standard
Ca	43	53.3	10.8	35.5305	5.061	14.2	mg/L	7	Standard
Fe	54	775.6	8.3	0.0201	0.016	80.3	mg/L	634	Standard
Fe	57	12136.5	2.5	0.1053	0.007	6.4	mg/L	2670	Standard
Sc-1	45	387357.8	2.6				mg/L	375691	Standard
Cl	35	29.7	10.8				ug/L	4	Standard
Kr	83	49.0	15.9				ug/L	39	Standard
Br	81	5873.6	4.9				ug/L	639	Standard
P	31	445.8	11.5				ug/L	419	Standard
S	34	141038.4	0.6				ug/L	7420	Standard
Sr	88	2721.9	0.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.556	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042007SD WG403653-09
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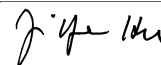
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	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
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	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042007SD WG403653-09
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Method 6020 - Summary Report

Sample ID: L1207042001PS WG403710-01

Sample Date/Time: Friday, July 27, 2012 12:58:20

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

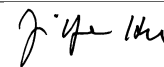
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	530012.9	3.9	-127867.4102	4985.766	3.9	ug/L	11199	Standard
|	Be	9	109208.8	0.9	47.1525	0.347	0.7	ug/L	10	Standard
|	Al	27	929537.4	2.3	50.1418	1.455	2.9	ug/L	7920	Standard
[>	Sc	45	417240.4	0.7				ug/L	375691	Standard
|	Ti	47	768.0	1.6	0.4816	0.009	1.8	ug/L	70	Standard
|	V	51	574389.9	0.7	47.7056	0.524	1.1	ug/L	3172	Standard
|	Cr	52	456746.2	0.5	46.4896	0.193	0.4	ug/L	9852	Standard
|	Cr	53	79126.1	1.3	47.8054	0.816	1.7	ug/L	518	Standard
|	Mn	55	1281297.2	1.1	72.7945	1.107	1.5	ug/L	1193	Standard
|	Co	59	555433.6	0.8	48.8035	0.472	1.0	ug/L	98	Standard
|	Ni	60	136689.1	0.5	46.3746	0.440	0.9	ug/L	67	Standard
|	Cu	65	125112.4	0.7	46.0165	0.503	1.1	ug/L	90	Standard
|	Zn	66	57947.3	0.8	47.2082	0.435	0.9	ug/L	148	Standard
[>	Ge	72	317809.5	0.4				ug/L	304674	Standard
|	As	75	62038.7	0.3	50.3266	0.383	0.8	ug/L	-174	Standard
|	Se	82	6140.8	0.9	49.4468	0.594	1.2	ug/L	26	Standard
[	Se-1	77	4213.9	0.2	46.4098	0.262	0.6	ug/L	133	Standard
[>	Ga	71	746.7	15.9				mg/L	630	Standard
|	Rb	85	41426.6	0.7				ug/L	12	Standard
|	Y	89	302553.8	2.5				ug/L	271719	Standard
[>	Rh	103	901.7	0.6				ug/L	392	Standard
|	Mo	98	18333.7	0.4	4.1261	0.039	0.9	ug/L	7	Standard
|	Ag	107	442452.8	1.7	50.4691	1.473	2.9	ug/L	55	Standard
|	Cd	111	238907.6	0.8	49.3628	1.056	2.1	mg/L	67	Standard
|	Cd	114	625847.4	0.8	45.9696	0.265	0.6	ug/L	219	Standard
[>	In	115	936223.4	1.3				ug/L	887392	Standard
|	Sn	118	2207.5	3.3	0.0906	0.006	6.2	ug/L	653	Standard
|	Sb	123	570566.5	0.8	47.8993	1.001	2.1	ug/L	48	Standard
|	Ba	135	285710.5	1.1	51.0869	1.186	2.3	ug/L	28	Standard
|	Ce	140	1070.0	3.4				ug/L	34	Standard
[>	Tb	159	1282333.0	0.8				ug/L	1226141	Standard
|	Ho	165	51.0	11.9				ug/L	14	Standard
|	Tl	203	866002.9	1.4	48.9134	0.941	1.9	ug/L	9	Standard
|	Tl	205	2023303.3	1.1	51.0414	0.852	1.7	ug/L	20	Standard
|	Pb	206	668689.3	1.1	49.1712	0.795	1.6	ug/L	419	Standard
|	Pb	207	566383.2	1.0	49.6012	0.799	1.6	ug/L	338	Standard
|	Pb	208	2609973.8	0.8	49.5612	0.698	1.4	ug/L	1616	Standard
	U	238	1005859.7	0.9	59.6164	0.856	1.4	ug/L	2	Standard
[>	Bi	209	544040.3	0.6				ug/L	641071	Standard

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Na	23	403665.1	0.8	19.3116	0.285	1.5	mg/L	412	Standard
Mg	24	7657307.7	1.2	9.3850	0.074	0.8	mg/L	177	Standard
K	39	2950.3	2.9	1.9432	0.053	2.7	mg/L	150	Standard
Ca	43	48.3	43.1	29.4405	13.808	46.9	mg/L	7	Standard
Fe	54	1065.0	0.5	0.0612	0.001	0.9	mg/L	634	Standard
Fe	57	13586.1	1.5	0.1105	0.001	1.0	mg/L	2670	Standard
Sc-1	45	417240.4	0.7				mg/L	375691	Standard
Cl	35	26.7	10.8				ug/L	4	Standard
Kr	83	49.1	8.4				ug/L	39	Standard
Br	81	6738.2	4.0				ug/L	639	Standard
P	31	570.8	18.5				ug/L	419	Standard
S	34	135880.7	0.1				ug/L	7420	Standard
Sr	88	2962.0	3.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.311	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042001PS WG403710-01
 Report Date/Time: Friday, July 27, 2012 13:00:51
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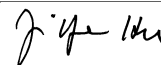
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	Sb	123	
	Ba	135	
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>	Tb	159	
	Ho	165	
	Tl	203	
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	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	84.864
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042001PS WG403710-01
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Method 6020 - Summary Report

Sample ID: L1207042001SDL WG403710-02

Sample Date/Time: Friday, July 27, 2012 13:01:30

Number of Replicates: 3

Autosampler Position: 308

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	95679.8	3.8	-25468.3740	844.045	3.3	ug/L	11199	Standard
|	Be	9	45.0	19.2	0.0040	0.005	118.1	ug/L	10	Standard
|	Al	27	43763.1	2.0	2.3856	0.010	0.4	ug/L	7920	Standard
[>	Sc	45	345180.6	2.3				ug/L	375691	Standard
|	Ti	47	179.3	11.3	0.0827	0.015	18.0	ug/L	70	Standard
|	V	51	3446.6	0.7	0.0498	0.002	4.5	ug/L	3172	Standard
|	Cr	52	9062.4	1.4	0.0030	0.019	631.4	ug/L	9852	Standard
|	Cr	53	445.8	4.8	-0.0250	0.017	68.2	ug/L	518	Standard
|	Mn	55	72060.6	1.0	4.4582	0.049	1.1	ug/L	1193	Standard
|	Co	59	465.0	11.9	0.0331	0.005	16.5	ug/L	98	Standard
|	Ni	60	1036.0	6.9	0.3629	0.025	6.8	ug/L	67	Standard
|	Cu	65	522.3	4.6	0.1698	0.011	6.2	ug/L	90	Standard
|	Zn	66	3448.7	2.3	2.9965	0.077	2.6	ug/L	148	Standard
[>	Ge	72	286939.7	0.9				ug/L	304674	Standard
|	As	75	440.0	2.7	0.5879	0.008	1.3	ug/L	-174	Standard
|	Se	82	47.0	10.7	0.2639	0.043	16.2	ug/L	26	Standard
[	Se-1	77	122.0	4.9	0.0899	0.088	97.8	ug/L	133	Standard
[>	Ga	71	525.0	8.7				mg/L	630	Standard
|	Rb	85	6533.1	2.8				ug/L	12	Standard
|	Y	89	250850.4	2.5				ug/L	271719	Standard
[>	Rh	103	400.0	8.8				ug/L	392	Standard
|	Mo	98	2805.4	1.8	0.6897	0.011	1.6	ug/L	7	Standard
|	Ag	107	154.0	9.8	0.0086	0.002	23.4	ug/L	55	Standard
|	Cd	111	79.3	15.9	0.0002	0.003	1319.5	mg/L	67	Standard
|	Cd	114	255.0	8.6	0.0041	0.002	37.9	ug/L	219	Standard
[>	In	115	851260.8	1.9				ug/L	887392	Standard
|	Sn	118	2597.6	13.1	0.1306	0.021	16.1	ug/L	653	Standard
|	Sb	123	1855.2	8.7	0.1753	0.015	8.7	ug/L	48	Standard
|	Ba	135	7182.7	1.2	1.4039	0.042	3.0	ug/L	28	Standard
|	Ce	140	253.0	3.9				ug/L	34	Standard
[>	Tb	159	1164227.3	0.4				ug/L	1226141	Standard
|	Ho	165	21.0	24.7				ug/L	14	Standard
|	Tl	203	419.0	7.4	0.0211	0.002	7.6	ug/L	9	Standard
|	Tl	205	1021.0	9.1	0.0207	0.002	10.2	ug/L	20	Standard
|	Pb	206	931.0	4.3	0.0365	0.003	7.7	ug/L	419	Standard
|	Pb	207	796.4	4.5	0.0378	0.003	8.7	ug/L	338	Standard
|	Pb	208	3685.5	3.0	0.0358	0.002	6.0	ug/L	1616	Standard
|	U	238	2425.2	2.5	0.1333	0.004	3.0	ug/L	2	Standard
[>	Bi	209	586941.1	0.7				ug/L	641071	Standard

Sample ID: L1207042001SDL WG403710-02

Report Date/Time: Friday, July 27, 2012 13:04:01

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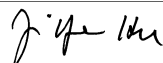
Na	23	178486.9	1.0	10.3074	0.316	3.1	mg/L	412	Standard
Mg	24	1065894.3	2.4	1.5791	0.002	0.1	mg/L	177	Standard
K	39	705.0	5.4	0.4695	0.043	9.1	mg/L	150	Standard
Ca	43	6.7	43.3	2.8460	2.340	82.2	mg/L	7	Standard
Fe	54	322.3	22.8	-0.0605	0.016	27.1	mg/L	634	Standard
Fe	57	4794.1	2.0	0.0303	0.002	8.0	mg/L	2670	Standard
Sc-1	45	345180.6	2.3				mg/L	375691	Standard
Cl	35	9.3	50.6				ug/L	4	Standard
Kr	83	42.9	17.8				ug/L	39	Standard
Br	81	1450.1	7.2				ug/L	639	Standard
P	31	169.2	7.6				ug/L	419	Standard
S	34	33413.5	1.7				ug/L	7420	Standard
Sr	88	486.7	3.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.179	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042001SDL WG403710-02
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	Cd	111		
	Cd	114		
>	In	115	95.928	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	91.556	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042001SDL WG403710-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 13:04:42

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11776.2	2.9	27.8176	108.569	390.3	ug/L	11199	Standard
|	Be	9	108787.5	1.5	49.7796	1.348	2.7	ug/L	10	Standard
|	Al	27	785954.0	1.0	44.8670	0.326	0.7	ug/L	7920	Standard
>	Sc	45	393801.2	1.7				ug/L	375691	Standard
[	Ti	47	138749.1	0.5	94.7736	0.534	0.6	ug/L	70	Standard
|	V	51	569719.3	1.2	46.1619	0.543	1.2	ug/L	3172	Standard
|	Cr	52	466063.3	0.4	46.2854	0.323	0.7	ug/L	9852	Standard
|	Cr	53	80324.9	1.6	47.3493	0.726	1.5	ug/L	518	Standard
|	Mn	55	877937.7	0.9	48.6430	0.601	1.2	ug/L	1193	Standard
|	Co	59	552962.2	1.0	47.4093	0.519	1.1	ug/L	98	Standard
|	Ni	60	140683.6	1.7	46.5752	0.961	2.1	ug/L	67	Standard
|	Cu	65	132015.3	0.9	47.3793	0.369	0.8	ug/L	90	Standard
|	Zn	66	60199.0	0.9	47.8564	0.380	0.8	ug/L	148	Standard
>	Ge	72	325695.4	0.3				ug/L	304674	Standard
|	As	75	60262.2	0.2	47.7113	0.186	0.4	ug/L	-174	Standard
|	Se	82	6111.5	0.5	48.0134	0.171	0.4	ug/L	26	Standard
[	Se-1	77	4366.3	0.8	46.9391	0.409	0.9	ug/L	133	Standard
>	Ga	71	740.0	4.4				mg/L	630	Standard
|	Rb	85	1026.7	7.4				ug/L	12	Standard
[	Y	89	294479.3	1.0				ug/L	271719	Standard
>	Rh	103	513.3	9.4				ug/L	392	Standard
[	Mo	98	431634.3	0.4	95.4665	1.013	1.1	ug/L	7	Standard
|	Ag	107	453523.7	0.7	50.7664	0.690	1.4	ug/L	55	Standard
|	Cd	111	247346.8	0.1	50.1543	0.383	0.8	mg/L	67	Standard
|	Cd	114	669113.3	0.3	48.2390	0.366	0.8	ug/L	219	Standard
>	In	115	953856.8	0.7				ug/L	887392	Standard
|	Sn	118	792647.2	0.6	48.1646	0.344	0.7	ug/L	653	Standard
|	Sb	123	580039.6	0.2	47.7878	0.431	0.9	ug/L	48	Standard
[	Ba	135	272368.3	0.6	47.7933	0.565	1.2	ug/L	28	Standard
[	Ce	140	989.7	1.0				ug/L	34	Standard
>	Tb	159	1264584.3	0.6				ug/L	1226141	Standard
[	Ho	165	26.7	18.5				ug/L	14	Standard
|	Tl	203	975259.0	0.6	46.8634	0.174	0.4	ug/L	9	Standard
|	Tl	205	2279956.7	0.3	48.9332	0.338	0.7	ug/L	20	Standard
|	Pb	206	756314.1	0.6	47.3142	0.258	0.5	ug/L	419	Standard
|	Pb	207	645188.2	0.3	48.0701	0.284	0.6	ug/L	338	Standard
|	Pb	208	2981694.3	0.3	48.1699	0.160	0.3	ug/L	1616	Standard
	U	238	982071.7	0.2	49.5213	0.354	0.7	ug/L	2	Standard
>	Bi	209	639436.8	0.5				ug/L	641071	Standard

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Na	23	122876.2	0.2	6.2030	0.112	1.8	mg/L	412	Standard
Mg	24	3664457.1	2.5	4.7590	0.115	2.4	mg/L	177	Standard
K	39	5962.8	5.1	4.3120	0.276	6.4	mg/L	150	Standard
Ca	43	10.0	100.0	4.4852	7.020	156.5	mg/L	7	Standard
Fe	54	25631.9	3.0	4.7663	0.208	4.4	mg/L	634	Standard
Fe	57	501207.6	1.3	5.4378	0.057	1.0	mg/L	2670	Standard
Sc-1	45	393801.2	1.7				mg/L	375691	Standard
Cl	35	2.3	49.5				ug/L	4	Standard
Kr	83	47.6	6.0				ug/L	39	Standard
Br	81	1082.5	8.6				ug/L	639	Standard
P	31	386.7	5.2				ug/L	419	Standard
S	34	6088.7	4.2				ug/L	7420	Standard
Sr	88	41.7	50.0				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	89.734		
Sc	45			
Ti	47	94.774		
V	51	92.324		
Cr	52	92.571		
Cr	53			
Mn	55	97.286		
Co	59	94.819		
Ni	60	93.150		
Cu	65	94.759		
Zn	66	95.713		
Ge	72		106.900	
As	75	95.423		
Se	82	96.027		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	95.466		
Ag	107	101.533		

Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 13:07:13

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	Cd	111	100.309	
	Cd	114		
>	In	115		107.490
	Sn	118	96.329	
	Sb	123	95.576	
	Ba	135	95.587	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.727	
|	Tl	205		
|	Pb	206	94.628	
|	Pb	207	96.140	
|	Pb	208	96.340	
|	U	238	99.043	
>	Bi	209		99.745
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 13:07:13

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 13:07:53

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11411.0	6.4	41.9491	196.509	468.4	ug/L	11199	Standard
|	Be	9	55.0	149.7	0.0063	0.039	612.2	ug/L	10	Standard
|	Al	27	7733.6	8.1	-0.0373	0.038	100.9	ug/L	7920	Standard
[>	Sc	45	383255.1	0.5				ug/L	375691	Standard
|	Ti	47	86.7	36.4	0.0034	0.022	650.2	ug/L	70	Standard
|	V	51	3277.4	20.5	-0.0000	0.056192811.0		ug/L	3172	Standard
|	Cr	52	9449.6	5.7	-0.0754	0.058	76.3	ug/L	9852	Standard
|	Cr	53	405.0	15.4	-0.0831	0.040	48.3	ug/L	518	Standard
|	Mn	55	2110.2	60.8	0.0369	0.072	196.0	ug/L	1193	Standard
|	Co	59	470.7	122.4	0.0286	0.050	174.9	ug/L	98	Standard
|	Ni	60	120.7	51.2	0.0138	0.021	150.7	ug/L	67	Standard
|	Cu	65	169.7	36.5	0.0182	0.023	124.8	ug/L	90	Standard
|	Zn	66	1851.8	2.4	1.3626	0.052	3.8	ug/L	148	Standard
[>	Ge	72	323515.4	1.8				ug/L	304674	Standard
|	As	75	-222.8	5.1	0.0173	0.008	47.1	ug/L	-174	Standard
|	Se	82	27.5	18.5	0.0614	0.038	62.5	ug/L	26	Standard
[	Se-1	77	127.0	7.1	-0.0284	0.097	342.9	ug/L	133	Standard
[>	Ga	71	615.0	8.0				mg/L	630	Standard
|	Rb	85	28.3	20.4				ug/L	12	Standard
|	Y	89	285724.6	2.0				ug/L	271719	Standard
[>	Rh	103	403.3	13.7				ug/L	392	Standard
|	Mo	98	351.5	12.9	0.0723	0.011	15.1	ug/L	7	Standard
|	Ag	107	179.3	37.8	0.0094	0.008	84.4	ug/L	55	Standard
|	Cd	111	110.5	38.5	0.0047	0.009	190.5	mg/L	67	Standard
|	Cd	114	338.4	32.0	0.0080	0.008	102.6	ug/L	219	Standard
[>	In	115	952180.3	1.5				ug/L	887392	Standard
|	Sn	118	1053.0	6.5	0.0179	0.004	22.9	ug/L	653	Standard
|	Sb	123	2807.8	2.8	0.2357	0.003	1.4	ug/L	48	Standard
|	Ba	135	65.3	72.5	0.0025	0.009	340.9	ug/L	28	Standard
|	Ce	140	30.0	12.0				ug/L	34	Standard
[>	Tb	159	1234468.7	0.6				ug/L	1226141	Standard
|	Ho	165	14.3	14.5				ug/L	14	Standard
|	Tl	203	262.3	118.0	0.0115	0.015	127.3	ug/L	9	Standard
|	Tl	205	1001.1	143.2	0.0179	0.030	168.7	ug/L	20	Standard
|	Pb	206	808.0	75.1	0.0224	0.037	166.9	ug/L	419	Standard
|	Pb	207	739.0	83.6	0.0268	0.045	168.3	ug/L	338	Standard
|	Pb	208	3517.6	84.0	0.0264	0.047	177.6	ug/L	1616	Standard
	U	238	546.0	146.1	0.0270	0.039	145.8	ug/L	2	Standard
[>	Bi	209	656639.6	0.5				ug/L	641071	Standard

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Na	23	3437.5	126.0	0.1408	0.226	160.7	mg/L	412	Standard
Mg	24	3709.4	146.5	0.0050	0.007	146.1	mg/L	177	Standard
K	39	146.7	9.8	-0.0178	0.011	59.8	mg/L	150	Standard
Ca	43	3.3	173.2	-0.1025	4.126	4026.4	mg/L	7	Standard
Fe	54	627.2	8.1	-0.0077	0.010	134.0	mg/L	634	Standard
Fe	57	3683.8	5.4	0.0119	0.002	19.0	mg/L	2670	Standard
Sc-1	45	383255.1	0.5				mg/L	375691	Standard
Cl	35	5.3	21.7				ug/L	4	Standard
Kr	83	43.0	11.0				ug/L	39	Standard
Br	81	980.0	3.9				ug/L	639	Standard
P	31	396.7	6.7				ug/L	419	Standard
S	34	5843.6	2.0				ug/L	7420	Standard
Sr	88	61.7	49.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.184	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	107.301
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
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	Pb	208	
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	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 13:10:23

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Method 6020 - Summary Report

Sample ID: L1207049001

Sample Date/Time: Friday, July 27, 2012 13:11:05

Number of Replicates: 3

Autosampler Position: 309

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	45289.3	1.6	-9339.6072	275.382	2.9	ug/L	11199	Standard
|	Be	9	88.3	19.9	0.0229	0.008	35.8	ug/L	10	Standard
|	Al	27	10534718.5	1.7	637.8759	12.305	1.9	ug/L	7920	Standard
[>	Sc	45	375074.2	0.8				ug/L	375691	Standard
[	Ti	47	20455.5	3.3	15.1796	0.382	2.5	ug/L	70	Standard
|	V	51	38471.8	3.1	3.1479	0.081	2.6	ug/L	3172	Standard
|	Cr	52	23741.6	2.7	1.5858	0.050	3.2	ug/L	9852	Standard
|	Cr	53	3481.2	7.9	1.9258	0.163	8.5	ug/L	518	Standard
|	Mn	55	354522.3	3.3	21.3607	0.569	2.7	ug/L	1193	Standard
|	Co	59	6343.7	1.9	0.5808	0.011	1.9	ug/L	98	Standard
|	Ni	60	6977.9	1.9	2.4927	0.036	1.4	ug/L	67	Standard
|	Cu	65	5273.9	3.5	2.0214	0.056	2.8	ug/L	90	Standard
|	Zn	66	22647.9	0.7	19.5517	0.236	1.2	ug/L	148	Standard
[>	Ge	72	298820.7	0.8				ug/L	304674	Standard
|	As	75	649.3	4.3	0.7521	0.020	2.7	ug/L	-174	Standard
|	Se	82	48.8	11.9	0.2623	0.047	17.8	ug/L	26	Standard
[	Se-1	77	150.0	11.7	0.3655	0.199	54.4	ug/L	133	Standard
[>	Ga	71	1743.4	6.3				mg/L	630	Standard
[	Rb	85	14375.2	2.2				ug/L	12	Standard
[	Y	89	269908.1	1.3				ug/L	271719	Standard
[>	Rh	103	420.0	6.0				ug/L	392	Standard
[	Mo	98	1091.7	2.4	0.2560	0.005	2.0	ug/L	7	Standard
|	Ag	107	125.0	33.3	0.0044	0.005	117.2	ug/L	55	Standard
|	Cd	111	139.0	21.4	0.0128	0.007	53.2	mg/L	67	Standard
|	Cd	114	355.7	28.0	0.0113	0.008	70.7	ug/L	219	Standard
[>	In	115	880201.0	0.8				ug/L	887392	Standard
|	Sn	118	1923.8	5.9	0.0805	0.007	8.4	ug/L	653	Standard
|	Sb	123	860.5	5.7	0.0808	0.004	4.8	ug/L	48	Standard
[	Ba	135	113241.6	3.6	21.5245	0.607	2.8	ug/L	28	Standard
[	Ce	140	85162.0	1.6				ug/L	34	Standard
[>	Tb	159	1175857.1	0.8				ug/L	1226141	Standard
[	Ho	165	1411.1	4.9				ug/L	14	Standard
|	Tl	203	726.4	4.3	0.0353	0.002	5.9	ug/L	9	Standard
|	Tl	205	1690.1	9.2	0.0345	0.004	12.0	ug/L	20	Standard
|	Pb	206	6671.5	1.8	0.4059	0.010	2.6	ug/L	419	Standard
|	Pb	207	5475.0	1.2	0.3961	0.003	0.7	ug/L	338	Standard
|	Pb	208	25796.3	1.4	0.4032	0.006	1.5	ug/L	1616	Standard
	U	238	6413.4	1.8	0.3353	0.002	0.5	ug/L	2	Standard
[>	Bi	209	616899.9	1.7				ug/L	641071	Standard

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Na	23	126184.9	0.3	6.6900	0.061	0.9	mg/L	412	Standard
Mg	24	1162500.2	1.6	1.5852	0.037	2.3	mg/L	177	Standard
K	39	421.7	14.7	0.1998	0.050	24.9	mg/L	150	Standard
Ca	43	25.0	34.6	15.8596	6.255	39.4	mg/L	7	Standard
Fe	54	4259.8	2.8	0.7234	0.025	3.5	mg/L	634	Standard
Fe	57	78368.8	1.1	0.8682	0.015	1.7	mg/L	2670	Standard
Sc-1	45	375074.2	0.8				mg/L	375691	Standard
Cl	35	24.7	12.4				ug/L	4	Standard
Kr	83	44.6	0.9				ug/L	39	Standard
Br	81	1860.1	5.4				ug/L	639	Standard
P	31	695.8	7.0				ug/L	419	Standard
S	34	8063.0	2.4				ug/L	7420	Standard
Sr	88	405.0	3.7				ug/L	35	Standard

QC Calculated Values

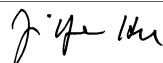
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.079	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	99.190	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	96.230	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207049002

Sample Date/Time: Friday, July 27, 2012 13:14:14

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	37424.5	3.5	-7586.3743	241.870	3.2	ug/L	11199	Standard
|	Be	9	6.7	43.3	-0.0162	0.001	8.6	ug/L	10	Standard
|	Al	27	20273.6	1.0	0.7817	0.003	0.4	ug/L	7920	Standard
[>	Sc	45	360631.8	1.3				ug/L	375691	Standard
[	Ti	47	306.7	10.4	0.1731	0.022	12.6	ug/L	70	Standard
|	V	51	18833.5	0.5	1.4120	0.006	0.4	ug/L	3172	Standard
|	Cr	52	9539.7	1.7	0.0194	0.024	123.0	ug/L	9852	Standard
|	Cr	53	1025.0	7.9	0.3407	0.049	14.5	ug/L	518	Standard
|	Mn	55	8686.8	1.3	0.4468	0.003	0.7	ug/L	1193	Standard
|	Co	59	312.3	5.1	0.0172	0.002	10.1	ug/L	98	Standard
|	Ni	60	701.7	2.6	0.2281	0.009	3.8	ug/L	67	Standard
|	Cu	65	241.0	10.0	0.0516	0.009	17.0	ug/L	90	Standard
|	Zn	66	1809.8	2.1	1.4563	0.044	3.0	ug/L	148	Standard
[>	Ge	72	297376.1	0.9				ug/L	304674	Standard
|	As	75	322.0	17.1	0.4720	0.046	9.7	ug/L	-174	Standard
|	Se	82	50.5	16.6	0.2789	0.070	25.1	ug/L	26	Standard
[	Se-1	77	147.7	12.5	0.3459	0.208	60.2	ug/L	133	Standard
[>	Ga	71	600.0	13.4				mg/L	630	Standard
[	Rb	85	450.0	5.8				ug/L	12	Standard
[	Y	89	255000.2	2.1				ug/L	271719	Standard
[>	Rh	103	410.0	18.0				ug/L	392	Standard
[	Mo	98	1047.5	0.7	0.2500	0.001	0.6	ug/L	7	Standard
|	Ag	107	62.0	16.1	-0.0031	0.001	40.3	ug/L	55	Standard
|	Cd	111	47.5	18.3	-0.0072	0.002	28.8	mg/L	67	Standard
|	Cd	114	147.3	8.8	-0.0048	0.001	23.6	ug/L	219	Standard
[>	In	115	864410.4	1.2				ug/L	887392	Standard
|	Sn	118	635.7	5.8	-0.0036	0.002	66.1	ug/L	653	Standard
|	Sb	123	411.2	13.3	0.0413	0.005	11.0	ug/L	48	Standard
[	Ba	135	56808.0	1.5	10.9930	0.185	1.7	ug/L	28	Standard
[	Ce	140	254.0	13.0				ug/L	34	Standard
[>	Tb	159	1162488.7	0.4				ug/L	1226141	Standard
[	Ho	165	14.0	12.4				ug/L	14	Standard
|	Tl	203	552.7	2.4	0.0270	0.001	2.2	ug/L	9	Standard
|	Tl	205	1229.7	5.9	0.0246	0.002	6.6	ug/L	20	Standard
|	Pb	206	473.3	7.4	0.0041	0.002	54.1	ug/L	419	Standard
|	Pb	207	403.7	1.3	0.0047	0.000	8.8	ug/L	338	Standard
|	Pb	208	1860.7	3.9	0.0025	0.001	50.8	ug/L	1616	Standard
	U	238	5710.7	2.0	0.3027	0.005	1.6	ug/L	2	Standard
[>	Bi	209	608477.0	0.4				ug/L	641071	Standard

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Na	23	122516.7	1.3	6.7563	0.112	1.7	mg/L	412	Standard
Mg	24	993843.4	2.4	1.4092	0.021	1.5	mg/L	177	Standard
K	39	280.0	7.8	0.0978	0.020	20.6	mg/L	150	Standard
Ca	43	11.7	65.5	6.4587	5.946	92.1	mg/L	7	Standard
Fe	54	339.4	1.8	-0.0600	0.001	1.2	mg/L	634	Standard
Fe	57	4657.4	0.6	0.0261	0.001	4.0	mg/L	2670	Standard
Sc-1	45	360631.8	1.3				mg/L	375691	Standard
Cl	35	18.3	17.5				ug/L	4	Standard
Kr	83	42.7	8.2				ug/L	39	Standard
Br	81	1909.3	5.0				ug/L	639	Standard
P	31	222.5	3.0				ug/L	419	Standard
S	34	8302.3	1.1				ug/L	7420	Standard
Sr	88	361.7	8.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.605	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049002

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	Cd	111	
	Cd	114	
>	In	115	97.410
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.916
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049002

Report Date/Time: Friday, July 27, 2012 13:16:44

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Method 6020 - Summary Report

Sample ID: L1207049003

Sample Date/Time: Friday, July 27, 2012 13:17:23

Number of Replicates: 3

Autosampler Position: 311

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	39678.6	0.5	-8213.7434	229.737	2.8	ug/L	11199	Standard
|	Be	9	13.3	86.6	-0.0130	0.006	44.1	ug/L	10	Standard
|	Al	27	280940.8	3.3	17.1764	0.556	3.2	ug/L	7920	Standard
[>	Sc	45	361344.4	2.2				ug/L	375691	Standard
|	Ti	47	1126.7	5.6	0.7986	0.048	6.0	ug/L	70	Standard
|	V	51	18807.3	0.2	1.4325	0.004	0.3	ug/L	3172	Standard
|	Cr	52	11185.5	0.8	0.2193	0.011	4.9	ug/L	9852	Standard
|	Cr	53	1375.9	0.4	0.5811	0.004	0.6	ug/L	518	Standard
|	Mn	55	10985.6	0.8	0.5956	0.006	0.9	ug/L	1193	Standard
|	Co	59	381.3	11.0	0.0241	0.004	16.5	ug/L	98	Standard
|	Ni	60	999.7	4.2	0.3411	0.015	4.5	ug/L	67	Standard
|	Cu	65	364.7	16.7	0.1022	0.024	23.7	ug/L	90	Standard
|	Zn	66	1975.8	2.1	1.6245	0.035	2.2	ug/L	148	Standard
[>	Ge	72	293384.9	0.1				ug/L	304674	Standard
|	As	75	269.1	21.0	0.4297	0.049	11.5	ug/L	-174	Standard
|	Se	82	45.8	30.0	0.2440	0.120	49.3	ug/L	26	Standard
[	Se-1	77	162.7	15.1	0.5559	0.302	54.3	ug/L	133	Standard
[>	Ga	71	693.3	3.6				mg/L	630	Standard
|	Rb	85	625.0	2.4				ug/L	12	Standard
|	Y	89	262543.0	2.9				ug/L	271719	Standard
[>	Rh	103	403.3	2.6				ug/L	392	Standard
|	Mo	98	1185.5	5.2	0.2861	0.014	4.8	ug/L	7	Standard
|	Ag	107	181.0	74.8	0.0117	0.017	142.4	ug/L	55	Standard
|	Cd	111	120.5	62.1	0.0094	0.017	179.0	mg/L	67	Standard
|	Cd	114	289.5	49.2	0.0067	0.011	168.3	ug/L	219	Standard
[>	In	115	857335.9	0.8				ug/L	887392	Standard
|	Sn	118	714.0	8.6	0.0021	0.004	206.5	ug/L	653	Standard
|	Sb	123	807.1	6.1	0.0780	0.005	5.8	ug/L	48	Standard
|	Ba	135	225802.5	0.7	44.0823	0.514	1.2	ug/L	28	Standard
|	Ce	140	2106.5	11.0				ug/L	34	Standard
[>	Tb	159	1148413.3	0.0				ug/L	1226141	Standard
|	Ho	165	46.3	11.1				ug/L	14	Standard
|	Tl	203	680.7	17.2	0.0337	0.006	18.0	ug/L	9	Standard
|	Tl	205	1565.4	12.8	0.0323	0.005	14.6	ug/L	20	Standard
|	Pb	206	692.3	14.2	0.0187	0.007	36.3	ug/L	419	Standard
|	Pb	207	580.3	14.2	0.0187	0.007	35.5	ug/L	338	Standard
|	Pb	208	2640.4	13.0	0.0160	0.006	38.0	ug/L	1616	Standard
	U	238	7423.8	1.4	0.3951	0.008	2.0	ug/L	2	Standard
[>	Bi	209	605993.3	0.9				ug/L	641071	Standard

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Na	23	127403.4	0.8	7.0154	0.185	2.6	mg/L	412	Standard
Mg	24	995837.6	2.0	1.4096	0.032	2.3	mg/L	177	Standard
K	39	248.3	11.1	0.0713	0.018	24.9	mg/L	150	Standard
Ca	43	18.3	78.7	11.5419	11.130	96.4	mg/L	7	Standard
Fe	54	405.0	17.6	-0.0467	0.013	27.5	mg/L	634	Standard
Fe	57	5891.1	3.4	0.0407	0.004	9.4	mg/L	2670	Standard
Sc-1	45	361344.4	2.2				mg/L	375691	Standard
Cl	35	23.7	10.6				ug/L	4	Standard
Kr	83	42.9	12.8				ug/L	39	Standard
Br	81	1562.6	2.2				ug/L	639	Standard
P	31	236.7	5.4				ug/L	419	Standard
S	34	7680.3	1.1				ug/L	7420	Standard
Sr	88	363.3	13.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.295	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049003

Report Date/Time: Friday, July 27, 2012 13:19:53

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	Cd	111	
	Cd	114	
>	In	115	96.613
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.528
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049003

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Method 6020 - Summary Report

Sample ID: L1207049004

Sample Date/Time: Friday, July 27, 2012 13:20:31

Number of Replicates: 3

Autosampler Position: 312

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	42364.1	1.2	-8904.4658	188.439	2.1	ug/L	11199	Standard
|	Be	9	8.3	69.3	-0.0154	0.003	18.9	ug/L	10	Standard
|	Al	27	26655.1	0.4	1.1706	0.024	2.0	ug/L	7920	Standard
[>	Sc	45	363546.8	1.1				ug/L	375691	Standard
[	Ti	47	367.7	8.5	0.2167	0.022	10.3	ug/L	70	Standard
|	V	51	19449.8	3.1	1.4531	0.048	3.3	ug/L	3172	Standard
|	Cr	52	11323.6	1.5	0.2077	0.013	6.3	ug/L	9852	Standard
|	Cr	53	1319.2	2.5	0.5252	0.019	3.6	ug/L	518	Standard
|	Mn	55	28627.0	1.0	1.6450	0.019	1.2	ug/L	1193	Standard
|	Co	59	230.7	9.8	0.0093	0.002	22.1	ug/L	98	Standard
|	Ni	60	746.4	2.5	0.2421	0.006	2.3	ug/L	67	Standard
|	Cu	65	263.3	9.3	0.0596	0.010	16.4	ug/L	90	Standard
|	Zn	66	2589.2	0.2	2.1186	0.012	0.6	ug/L	148	Standard
[>	Ge	72	299760.2	0.4				ug/L	304674	Standard
|	As	75	279.0	9.4	0.4331	0.021	5.0	ug/L	-174	Standard
|	Se	82	48.7	7.4	0.2602	0.029	11.2	ug/L	26	Standard
[	Se-1	77	151.3	4.2	0.3771	0.083	22.1	ug/L	133	Standard
[>	Ga	71	628.3	8.9				mg/L	630	Standard
[	Rb	85	353.3	3.6				ug/L	12	Standard
[	Y	89	261378.6	3.4				ug/L	271719	Standard
[>	Rh	103	461.7	8.2				ug/L	392	Standard
[	Mo	98	1155.5	6.4	0.2778	0.017	6.2	ug/L	7	Standard
|	Ag	107	53.0	9.4	-0.0042	0.001	13.9	ug/L	55	Standard
|	Cd	111	43.2	17.1	-0.0081	0.002	20.8	mg/L	67	Standard
|	Cd	114	127.0	4.3	-0.0063	0.000	7.2	ug/L	219	Standard
[>	In	115	859994.3	0.7				ug/L	887392	Standard
|	Sn	118	784.4	4.2	0.0066	0.002	28.7	ug/L	653	Standard
|	Sb	123	351.5	14.4	0.0361	0.005	12.9	ug/L	48	Standard
[	Ba	135	231423.3	0.4	45.0386	0.143	0.3	ug/L	28	Standard
[	Ce	140	115.7	10.5				ug/L	34	Standard
[>	Tb	159	1149455.6	0.6				ug/L	1226141	Standard
[	Ho	165	13.7	4.2				ug/L	14	Standard
|	Tl	203	521.0	5.8	0.0252	0.002	6.6	ug/L	9	Standard
|	Tl	205	1261.1	7.6	0.0250	0.002	9.1	ug/L	20	Standard
|	Pb	206	487.0	3.3	0.0047	0.001	25.9	ug/L	419	Standard
|	Pb	207	393.7	1.7	0.0036	0.001	14.9	ug/L	338	Standard
|	Pb	208	1861.7	0.3	0.0022	0.000	10.0	ug/L	1616	Standard
	U	238	7688.3	2.1	0.4034	0.011	2.6	ug/L	2	Standard
[>	Bi	209	614726.7	0.6				ug/L	641071	Standard

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Na	23	129576.8	1.2	7.0909	0.161	2.3	mg/L	412	Standard
Mg	24	1035684.1	0.9	1.4571	0.030	2.0	mg/L	177	Standard
K	39	241.7	8.4	0.0650	0.017	25.7	mg/L	150	Standard
Ca	43	25.0	20.0	16.4845	3.933	23.9	mg/L	7	Standard
Fe	54	321.2	14.1	-0.0643	0.010	15.0	mg/L	634	Standard
Fe	57	4449.0	1.4	0.0232	0.001	5.7	mg/L	2670	Standard
Sc-1	45	363546.8	1.1				mg/L	375691	Standard
Cl	35	24.3	20.3				ug/L	4	Standard
Kr	83	42.9	3.8				ug/L	39	Standard
Br	81	1683.4	2.9				ug/L	639	Standard
P	31	237.5	13.7				ug/L	419	Standard
S	34	8092.2	3.1				ug/L	7420	Standard
Sr	88	376.7	5.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.387	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	96.913
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.891
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207049005

Sample Date/Time: Friday, July 27, 2012 13:23:41

Number of Replicates: 3

Autosampler Position: 313

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	42609.8	1.6	-9363.2436	411.122	4.4	ug/L	11199	Standard
|	Be	9	16.7	45.8	-0.0111	0.004	34.8	ug/L	10	Standard
|	Al	27	91792.4	3.0	5.4277	0.246	4.5	ug/L	7920	Standard
[>	Sc	45	352342.8	2.3				ug/L	375691	Standard
[	Ti	47	640.3	42.7	0.4268	0.206	48.2	ug/L	70	Standard
|	V	51	11439.2	2.0	0.7604	0.018	2.3	ug/L	3172	Standard
|	Cr	52	13410.6	2.1	0.4622	0.034	7.4	ug/L	9852	Standard
|	Cr	53	1757.6	2.5	0.8264	0.023	2.8	ug/L	518	Standard
|	Mn	55	5674.4	1.9	0.2666	0.007	2.8	ug/L	1193	Standard
|	Co	59	249.0	12.8	0.0114	0.003	25.3	ug/L	98	Standard
|	Ni	60	940.7	4.1	0.3176	0.014	4.5	ug/L	67	Standard
|	Cu	65	487.3	5.3	0.1501	0.009	6.2	ug/L	90	Standard
|	Zn	66	1947.5	2.9	1.5902	0.044	2.8	ug/L	148	Standard
[>	Ge	72	294944.1	0.6				ug/L	304674	Standard
|	As	75	226.3	26.2	0.3912	0.051	13.1	ug/L	-174	Standard
|	Se	82	48.9	28.7	0.2689	0.122	45.2	ug/L	26	Standard
[	Se-1	77	140.0	8.4	0.2685	0.153	57.0	ug/L	133	Standard
[>	Ga	71	580.0	4.6				mg/L	630	Standard
|	Rb	85	1401.7	3.7				ug/L	12	Standard
[	Y	89	256210.0	1.4				ug/L	271719	Standard
[>	Rh	103	455.0	12.1				ug/L	392	Standard
[	Mo	98	1274.2	3.2	0.3100	0.015	4.9	ug/L	7	Standard
|	Ag	107	49.7	4.2	-0.0045	0.000	8.2	ug/L	55	Standard
|	Cd	111	43.9	10.1	-0.0078	0.001	11.0	mg/L	67	Standard
|	Cd	114	142.4	6.7	-0.0050	0.001	12.9	ug/L	219	Standard
[>	In	115	852328.3	1.9				ug/L	887392	Standard
|	Sn	118	654.3	6.7	-0.0017	0.003	168.6	ug/L	653	Standard
|	Sb	123	876.1	5.7	0.0848	0.005	6.3	ug/L	48	Standard
[	Ba	135	162091.6	1.6	31.8327	0.728	2.3	ug/L	28	Standard
[	Ce	140	470.0	4.3				ug/L	34	Standard
[>	Tb	159	1145972.0	1.3				ug/L	1226141	Standard
[	Ho	165	18.3	16.7				ug/L	14	Standard
|	Tl	203	537.0	7.9	0.0263	0.002	8.6	ug/L	9	Standard
|	Tl	205	1285.7	9.9	0.0259	0.003	11.4	ug/L	20	Standard
|	Pb	206	527.0	3.4	0.0077	0.001	10.6	ug/L	419	Standard
|	Pb	207	439.7	5.1	0.0075	0.002	29.0	ug/L	338	Standard
|	Pb	208	2063.1	0.7	0.0060	0.001	12.0	ug/L	1616	Standard
	U	238	7284.8	2.2	0.3863	0.008	2.0	ug/L	2	Standard
[>	Bi	209	608212.6	1.3				ug/L	641071	Standard

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Na	23	126961.4	1.3	7.1693	0.111	1.6	mg/L	412	Standard
Mg	24	1140954.3	2.8	1.6566	0.060	3.6	mg/L	177	Standard
K	39	371.7	13.5	0.1801	0.049	27.1	mg/L	150	Standard
Ca	43	18.3	15.7	11.8841	2.509	21.1	mg/L	7	Standard
Fe	54	291.1	23.9	-0.0684	0.016	24.0	mg/L	634	Standard
Fe	57	4772.4	5.8	0.0288	0.004	12.3	mg/L	2670	Standard
Sc-1	45	352342.8	2.3				mg/L	375691	Standard
Cl	35	30.3	10.1				ug/L	4	Standard
Kr	83	41.8	10.0				ug/L	39	Standard
Br	81	1740.9	4.4				ug/L	639	Standard
P	31	270.0	7.3				ug/L	419	Standard
S	34	7141.7	2.0				ug/L	7420	Standard
Sr	88	313.3	22.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.806	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049005

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	Cd	111		
	Cd	114		
>	In	115	96.049	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.874	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049005

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Method 6020 - Summary Report

Sample ID: L1207049006

Sample Date/Time: Friday, July 27, 2012 13:26:51

Number of Replicates: 3

Autosampler Position: 314

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	45025.2	4.4	-9688.6831	608.581	6.3	ug/L	11199	Standard
|	Be	9	15.0	33.3	-0.0121	0.002	19.9	ug/L	10	Standard
|	Al	27	82515.9	2.8	4.6754	0.194	4.1	ug/L	7920	Standard
[>	Sc	45	362736.0	1.0				ug/L	375691	Standard
[	Ti	47	345.3	3.2	0.2073	0.011	5.4	ug/L	70	Standard
|	V	51	12222.1	1.9	0.8432	0.026	3.1	ug/L	3172	Standard
|	Cr	52	13364.2	1.0	0.4738	0.031	6.5	ug/L	9852	Standard
|	Cr	53	1720.9	2.1	0.8149	0.013	1.6	ug/L	518	Standard
|	Mn	55	2880.9	2.5	0.0974	0.007	6.9	ug/L	1193	Standard
|	Co	59	452.3	3.6	0.0312	0.002	6.4	ug/L	98	Standard
|	Ni	60	819.0	0.5	0.2764	0.003	1.2	ug/L	67	Standard
|	Cu	65	351.0	7.5	0.0977	0.012	12.7	ug/L	90	Standard
|	Zn	66	1827.1	5.1	1.5026	0.091	6.1	ug/L	148	Standard
[>	Ge	72	291715.9	1.5				ug/L	304674	Standard
|	As	75	286.4	3.0	0.4463	0.007	1.5	ug/L	-174	Standard
|	Se	82	58.2	3.1	0.3551	0.015	4.3	ug/L	26	Standard
[	Se-1	77	144.0	6.7	0.3372	0.132	39.2	ug/L	133	Standard
[>	Ga	71	626.7	18.7				mg/L	630	Standard
[	Rb	85	1381.7	4.0				ug/L	12	Standard
[	Y	89	254913.9	2.3				ug/L	271719	Standard
[>	Rh	103	368.3	16.8				ug/L	392	Standard
[	Mo	98	1287.3	5.5	0.3170	0.013	4.0	ug/L	7	Standard
|	Ag	107	68.7	20.8	-0.0020	0.002	95.2	ug/L	55	Standard
|	Cd	111	39.6	29.9	-0.0087	0.003	29.6	mg/L	67	Standard
|	Cd	114	152.1	5.3	-0.0041	0.001	14.9	ug/L	219	Standard
[>	In	115	841580.5	1.5				ug/L	887392	Standard
|	Sn	118	544.7	7.3	-0.0087	0.003	31.8	ug/L	653	Standard
|	Sb	123	794.4	8.3	0.0782	0.006	7.9	ug/L	48	Standard
[	Ba	135	175424.4	3.2	34.8820	0.814	2.3	ug/L	28	Standard
[	Ce	140	99.7	11.9				ug/L	34	Standard
[>	Tb	159	1133389.9	1.0				ug/L	1226141	Standard
[	Ho	165	13.0	61.1				ug/L	14	Standard
|	Tl	203	561.7	3.4	0.0277	0.001	3.7	ug/L	9	Standard
|	Tl	205	1314.4	5.5	0.0267	0.002	6.0	ug/L	20	Standard
|	Pb	206	510.7	2.7	0.0068	0.001	14.5	ug/L	419	Standard
|	Pb	207	413.7	3.3	0.0057	0.001	21.1	ug/L	338	Standard
|	Pb	208	1953.4	2.6	0.0043	0.001	22.2	ug/L	1616	Standard
	U	238	7583.6	3.9	0.4043	0.014	3.6	ug/L	2	Standard
[>	Bi	209	604881.6	0.4				ug/L	641071	Standard

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Na	23	127500.9	1.3	6.9923	0.167	2.4	mg/L	412	Standard
Mg	24	1225093.3	2.2	1.7273	0.044	2.5	mg/L	177	Standard
K	39	358.3	7.2	0.1599	0.024	14.8	mg/L	150	Standard
Ca	43	26.7	47.2	17.7632	9.585	54.0	mg/L	7	Standard
Fe	54	323.2	6.5	-0.0638	0.004	5.8	mg/L	634	Standard
Fe	57	4322.3	5.7	0.0218	0.003	14.7	mg/L	2670	Standard
Sc-1	45	362736.0	1.0				mg/L	375691	Standard
Cl	35	31.3	10.3				ug/L	4	Standard
Kr	83	38.8	21.5				ug/L	39	Standard
Br	81	1814.3	7.8				ug/L	639	Standard
P	31	299.2	7.1				ug/L	419	Standard
S	34	7279.2	1.4				ug/L	7420	Standard
Sr	88	353.3	7.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.747	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049006

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	Cd	111	
	Cd	114	
>	In	115	94.838
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.355
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049006

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 13:30:03

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

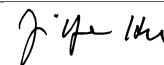
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11863.0	2.8	-8.3691	140.332	1676.8	ug/L	11199	Standard
|	Be	9	110506.6	1.9	50.7798	1.833	3.6	ug/L	10	Standard
|	Al	27	804419.9	2.5	46.1226	1.225	2.7	ug/L	7920	Standard
>	Sc	45	392216.0	1.8				ug/L	375691	Standard
[	Ti	47	139797.6	0.4	96.2760	0.588	0.6	ug/L	70	Standard
|	V	51	567237.8	0.7	46.3404	0.454	1.0	ug/L	3172	Standard
|	Cr	52	471623.5	0.7	47.2463	0.756	1.6	ug/L	9852	Standard
|	Cr	53	79906.1	2.4	47.4994	1.600	3.4	ug/L	518	Standard
|	Mn	55	854625.8	0.6	47.7390	0.497	1.0	ug/L	1193	Standard
|	Co	59	539508.0	0.8	46.6377	0.689	1.5	ug/L	98	Standard
|	Ni	60	141498.0	1.2	47.2291	0.703	1.5	ug/L	67	Standard
|	Cu	65	131695.3	1.6	47.6522	0.612	1.3	ug/L	90	Standard
|	Zn	66	60701.0	0.9	48.6550	0.545	1.1	ug/L	148	Standard
>	Ge	72	323049.8	1.0				ug/L	304674	Standard
|	As	75	60027.5	0.3	47.9158	0.380	0.8	ug/L	-174	Standard
|	Se	82	6145.9	1.4	48.6868	0.992	2.0	ug/L	26	Standard
[	Se-1	77	4498.0	0.7	48.8117	0.808	1.7	ug/L	133	Standard
>	Ga	71	700.0	0.7				mg/L	630	Standard
[	Rb	85	973.4	6.5				ug/L	12	Standard
[	Y	89	286462.8	0.8				ug/L	271719	Standard
>	Rh	103	465.0	5.4				ug/L	392	Standard
[	Mo	98	425223.1	0.4	95.4910	0.414	0.4	ug/L	7	Standard
|	Ag	107	424849.8	0.3	48.2848	0.103	0.2	ug/L	55	Standard
|	Cd	111	237829.5	0.9	48.9640	0.326	0.7	mg/L	67	Standard
|	Cd	114	651273.2	0.5	47.6734	0.200	0.4	ug/L	219	Standard
>	In	115	939403.1	0.2				ug/L	887392	Standard
|	Sn	118	771438.9	1.5	47.5962	0.739	1.6	ug/L	653	Standard
|	Sb	123	564275.4	0.4	47.2024	0.177	0.4	ug/L	48	Standard
[	Ba	135	270443.3	0.3	48.1835	0.188	0.4	ug/L	28	Standard
[	Ce	140	999.7	2.1				ug/L	34	Standard
>	Tb	159	1223006.9	0.4				ug/L	1226141	Standard
[	Ho	165	23.0	23.0				ug/L	14	Standard
|	Tl	203	967175.9	0.3	46.9689	0.504	1.1	ug/L	9	Standard
|	Tl	205	2271405.3	0.7	49.2680	0.758	1.5	ug/L	20	Standard
|	Pb	206	752018.9	0.5	47.5464	0.675	1.4	ug/L	419	Standard
|	Pb	207	636907.2	0.6	47.9583	0.761	1.6	ug/L	338	Standard
|	Pb	208	2961100.0	0.5	48.3467	0.718	1.5	ug/L	1616	Standard
	U	238	963091.8	1.0	49.0800	0.792	1.6	ug/L	2	Standard
>	Bi	209	632754.7	1.0				ug/L	641071	Standard

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Na	23	118515.2	2.1	6.0053	0.133	2.2	mg/L	412	Standard
Mg	24	3662733.5	1.1	4.7760	0.033	0.7	mg/L	177	Standard
K	39	6064.5	2.3	4.4055	0.166	3.8	mg/L	150	Standard
Ca	43	10.0	100.0	4.6093	7.088	153.8	mg/L	7	Standard
Fe	54	25768.2	1.7	4.8116	0.135	2.8	mg/L	634	Standard
Fe	57	503648.0	3.3	5.4854	0.094	1.7	mg/L	2670	Standard
Sc-1	45	392216.0	1.8				mg/L	375691	Standard
Cl	35	4.7	65.5				ug/L	4	Standard
Kr	83	44.4	12.9				ug/L	39	Standard
Br	81	927.5	2.7				ug/L	639	Standard
P	31	463.3	1.1				ug/L	419	Standard
S	34	6915.7	2.6				ug/L	7420	Standard
Sr	88	38.3	58.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	92.245		
Sc	45			
Ti	47	96.276		
V	51	92.681		
Cr	52	94.493		
Cr	53			
Mn	55	95.478		
Co	59	93.275		
Ni	60	94.458		
Cu	65	95.304		
Zn	66	97.310		
Ge	72		106.031	
As	75	95.832		
Se	82	97.374		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	95.491		
Ag	107	96.570		

Sample ID: QC Std 6

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	Cd	111	97.928	
	Cd	114		
>	In	115		105.861
	Sn	118	95.192	
	Sb	123	94.405	
	Ba	135	96.367	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.938	
|	Tl	205		
|	Pb	206	95.093	
|	Pb	207	95.917	
|	Pb	208	96.693	
|	U	238	98.160	
>	Bi	209		98.703
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 13:32:34

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 13:33:14

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11222.5	1.2	140.6915	63.708	45.3	ug/L	11199	Standard
|	Be	9	21.7	53.3	-0.0095	0.005	55.5	ug/L	10	Standard
|	Al	27	7938.7	3.0	-0.0329	0.002	6.5	ug/L	7920	Standard
[>	Sc	45	389582.2	2.6				ug/L	375691	Standard
|	Ti	47	68.3	13.6	-0.0092	0.007	74.8	ug/L	70	Standard
|	V	51	2914.5	1.0	-0.0297	0.005	16.6	ug/L	3172	Standard
|	Cr	52	8988.7	0.4	-0.1219	0.014	11.7	ug/L	9852	Standard
|	Cr	53	405.0	2.8	-0.0833	0.007	8.0	ug/L	518	Standard
|	Mn	55	1271.1	2.5	-0.0101	0.002	24.0	ug/L	1193	Standard
|	Co	59	134.7	19.2	-0.0005	0.002	444.1	ug/L	98	Standard
|	Ni	60	75.0	5.8	-0.0015	0.002	111.6	ug/L	67	Standard
|	Cu	65	120.7	7.5	0.0005	0.004	783.7	ug/L	90	Standard
|	Zn	66	1862.8	1.2	1.3721	0.002	0.1	ug/L	148	Standard
[>	Ge	72	323268.8	1.2				ug/L	304674	Standard
|	As	75	-201.7	9.7	0.0338	0.017	50.5	ug/L	-174	Standard
|	Se	82	25.5	19.5	0.0451	0.037	81.8	ug/L	26	Standard
[	Se-1	77	128.3	10.5	-0.0111	0.165	1487.1	ug/L	133	Standard
[>	Ga	71	725.0	4.8				mg/L	630	Standard
|	Rb	85	18.3	31.5				ug/L	12	Standard
|	Y	89	285346.9	0.6				ug/L	271719	Standard
[>	Rh	103	443.3	10.7				ug/L	392	Standard
|	Mo	98	325.9	7.9	0.0678	0.006	8.3	ug/L	7	Standard
|	Ag	107	124.7	12.9	0.0035	0.002	52.9	ug/L	55	Standard
|	Cd	111	89.6	13.4	0.0007	0.002	344.7	mg/L	67	Standard
|	Cd	114	260.7	9.9	0.0027	0.002	72.6	ug/L	219	Standard
[>	In	115	935918.3	0.3				ug/L	887392	Standard
|	Sn	118	1003.7	0.9	0.0160	0.001	3.7	ug/L	653	Standard
|	Sb	123	2541.5	8.5	0.2174	0.018	8.1	ug/L	48	Standard
|	Ba	135	52.7	26.6	0.0004	0.003	691.9	ug/L	28	Standard
|	Ce	140	27.7	29.2				ug/L	34	Standard
[>	Tb	159	1221858.2	2.2				ug/L	1226141	Standard
|	Ho	165	11.0	39.6				ug/L	14	Standard
|	Tl	203	64.7	33.3	0.0022	0.001	47.8	ug/L	9	Standard
|	Tl	205	171.0	46.4	0.0005	0.002	366.0	ug/L	20	Standard
|	Pb	206	485.3	5.2	0.0029	0.002	67.3	ug/L	419	Standard
|	Pb	207	383.0	5.0	0.0011	0.002	152.3	ug/L	338	Standard
|	Pb	208	1833.0	4.4	0.0000	0.002	4137.2	ug/L	1616	Standard
	U	238	71.3	49.0	0.0036	0.002	49.0	ug/L	2	Standard
[>	Bi	209	650467.8	1.2				ug/L	641071	Standard

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Na	23	473.3	13.6	-0.0145	0.003	18.7	mg/L	412	Standard
Mg	24	441.7	30.0	0.0006	0.000	31.7	mg/L	177	Standard
K	39	125.0	10.6	-0.0359	0.009	26.3	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2720	2.101	165.1	mg/L	7	Standard
Fe	54	637.7	10.3	-0.0075	0.015	196.1	mg/L	634	Standard
Fe	57	3243.7	2.8	0.0064	0.002	30.5	mg/L	2670	Standard
Sc-1	45	389582.2	2.6				mg/L	375691	Standard
Cl	35	3.7	31.5				ug/L	4	Standard
Kr	83	41.4	6.0				ug/L	39	Standard
Br	81	914.2	3.9				ug/L	639	Standard
P	31	445.8	13.3				ug/L	419	Standard
S	34	6463.9	2.4				ug/L	7420	Standard
Sr	88	38.3	30.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.103	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	105.468
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.466
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 13:35:44

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Method 6020 - Summary Report

Sample ID: PBW 64 WG403458-02

Sample Date/Time: Friday, July 27, 2012 13:36:24

Number of Replicates: 3

Autosampler Position: 315

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11344.2	3.3	60.2820	113.594	188.4	ug/L	11199	Standard
|	Be	9	13.3	57.3	-0.0133	0.004	27.3	ug/L	10	Standard
|	Al	27	9723.1	5.9	0.0806	0.038	46.6	ug/L	7920	Standard
[>	Sc	45	383347.4	0.6				ug/L	375691	Standard
|	Ti	47	58.3	22.8	-0.0165	0.009	55.3	ug/L	70	Standard
|	V	51	2905.6	1.3	-0.0326	0.003	10.2	ug/L	3172	Standard
|	Cr	52	8966.7	0.4	-0.1324	0.006	4.3	ug/L	9852	Standard
|	Cr	53	416.7	3.3	-0.0785	0.008	9.6	ug/L	518	Standard
|	Mn	55	1338.4	3.2	-0.0070	0.002	35.2	ug/L	1193	Standard
|	Co	59	108.0	9.1	-0.0029	0.001	28.0	ug/L	98	Standard
|	Ni	60	219.7	4.9	0.0462	0.003	7.4	ug/L	67	Standard
|	Cu	65	119.3	9.7	-0.0004	0.004	1019.3	ug/L	90	Standard
|	Zn	66	1692.8	2.8	1.2235	0.039	3.2	ug/L	148	Standard
[>	Ge	72	326174.5	0.3				ug/L	304674	Standard
|	As	75	-252.8	6.2	-0.0049	0.013	263.2	ug/L	-174	Standard
|	Se	82	20.6	28.0	0.0049	0.045	922.9	ug/L	26	Standard
[	Se-1	77	124.7	0.5	-0.0657	0.009	14.0	ug/L	133	Standard
[>	Ga	71	670.0	6.1				mg/L	630	Standard
|	Rb	85	11.7	107.9				ug/L	12	Standard
|	Y	89	295040.2	1.2				ug/L	271719	Standard
[>	Rh	103	403.3	2.6				ug/L	392	Standard
|	Mo	98	103.9	23.3	0.0179	0.006	31.6	ug/L	7	Standard
|	Ag	107	68.0	12.0	-0.0030	0.001	30.0	ug/L	55	Standard
|	Cd	111	81.7	22.3	-0.0009	0.004	451.3	mg/L	67	Standard
|	Cd	114	236.1	5.8	0.0009	0.001	96.1	ug/L	219	Standard
[>	In	115	935123.3	0.9				ug/L	887392	Standard
|	Sn	118	766.0	7.6	0.0013	0.004	306.9	ug/L	653	Standard
|	Sb	123	616.1	14.6	0.0558	0.008	14.3	ug/L	48	Standard
|	Ba	135	54.7	32.8	0.0007	0.003	437.9	ug/L	28	Standard
|	Ce	140	27.7	25.4				ug/L	34	Standard
[>	Tb	159	1220845.3	0.9				ug/L	1226141	Standard
|	Ho	165	11.7	4.9				ug/L	14	Standard
|	Tl	203	45.0	13.5	0.0013	0.000	23.9	ug/L	9	Standard
|	Tl	205	108.3	12.6	-0.0009	0.000	35.4	ug/L	20	Standard
|	Pb	206	474.0	5.0	0.0022	0.002	72.6	ug/L	419	Standard
|	Pb	207	386.0	2.1	0.0014	0.001	52.2	ug/L	338	Standard
|	Pb	208	1792.7	2.7	-0.0006	0.001	157.5	ug/L	1616	Standard
	U	238	25.7	26.5	0.0014	0.000	25.1	ug/L	2	Standard
[>	Bi	209	649333.4	0.6				ug/L	641071	Standard

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Na	23	591.7	8.9	-0.0079	0.003	33.1	mg/L	412	Standard
Mg	24	383.3	11.2	0.0005	0.000	10.4	mg/L	177	Standard
K	39	130.0	10.2	-0.0306	0.010	31.2	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0836	2.080	2488.5	mg/L	7	Standard
Fe	54	589.3	6.4	-0.0152	0.007	49.3	mg/L	634	Standard
Fe	57	3283.7	3.8	0.0074	0.002	20.3	mg/L	2670	Standard
Sc-1	45	383347.4	0.6				mg/L	375691	Standard
Cl	35	2.3	65.5				ug/L	4	Standard
Kr	83	45.0	7.8				ug/L	39	Standard
Br	81	969.2	3.9				ug/L	639	Standard
P	31	439.2	13.9				ug/L	419	Standard
S	34	6603.9	1.2				ug/L	7420	Standard
Sr	88	33.3	31.2				ug/L	35	Standard

QC Calculated Values

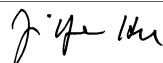
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.057	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 64 WG403458-02

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	Cd	111	
	Cd	114	
>	In	115	105.379
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.289
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 64 WG403458-02

Report Date/Time: Friday, July 27, 2012 13:38:54

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Method 6020 - Summary Report

Sample ID: LCSW 64 WG40345803

Sample Date/Time: Friday, July 27, 2012 13:39:34

Number of Replicates: 3

Autosampler Position: 316

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

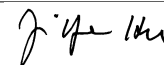
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12151.5	1.6	115.4156	110.468	95.7	ug/L	11199	Standard
|	Be	9	54029.5	0.7	23.2769	1.122	4.8	ug/L	10	Standard
|	Al	27	595772.9	1.7	31.9218	2.230	7.0	ug/L	7920	Standard
[>	Sc	45	418661.8	5.1				ug/L	375691	Standard
[	Ti	47	89.0	8.8	0.0006	0.004	744.8	ug/L	70	Standard
|	V	51	299567.2	0.5	22.5856	0.500	2.2	ug/L	3172	Standard
|	Cr	52	255356.9	0.1	23.2331	0.572	2.5	ug/L	9852	Standard
|	Cr	53	43545.8	1.6	23.8732	0.841	3.5	ug/L	518	Standard
|	Mn	55	461312.9	0.6	23.8839	0.452	1.9	ug/L	1193	Standard
|	Co	59	287753.8	0.2	23.0895	0.540	2.3	ug/L	98	Standard
|	Ni	60	77015.3	1.1	23.8513	0.335	1.4	ug/L	67	Standard
|	Cu	65	72716.4	1.6	24.4111	0.733	3.0	ug/L	90	Standard
|	Zn	66	32578.0	1.0	24.1822	0.506	2.1	ug/L	148	Standard
[>	Ge	72	348038.1	2.4				ug/L	304674	Standard
|	As	75	30115.1	0.7	22.4229	0.478	2.1	ug/L	-174	Standard
|	Se	82	2983.0	1.4	21.8587	0.835	3.8	ug/L	26	Standard
[	Se-1	77	2229.8	0.7	21.6845	0.413	1.9	ug/L	133	Standard
[>	Ga	71	798.4	5.8				mg/L	630	Standard
[	Rb	85	30.0	28.9				ug/L	12	Standard
[	Y	89	308997.3	2.9				ug/L	271719	Standard
[>	Rh	103	418.3	10.0				ug/L	392	Standard
[	Mo	98	86.6	23.0	0.0126	0.004	32.7	ug/L	7	Standard
|	Ag	107	233716.8	0.6	24.8626	0.242	1.0	ug/L	55	Standard
|	Cd	111	123681.5	0.2	23.8298	0.119	0.5	mg/L	67	Standard
|	Cd	114	330156.4	0.2	22.6170	0.121	0.5	ug/L	219	Standard
[>	In	115	1003447.4	0.7				ug/L	887392	Standard
|	Sn	118	1091.0	6.8	0.0168	0.004	24.0	ug/L	653	Standard
|	Sb	123	283129.3	0.4	22.1756	0.226	1.0	ug/L	48	Standard
[	Ba	135	135020.3	0.5	22.5168	0.255	1.1	ug/L	28	Standard
[	Ce	140	882.7	3.0				ug/L	34	Standard
[>	Tb	159	1279242.7	0.7				ug/L	1226141	Standard
[	Ho	165	20.3	5.7				ug/L	14	Standard
|	Tl	203	505079.5	0.9	23.0843	0.349	1.5	ug/L	9	Standard
|	Tl	205	1176843.5	0.1	24.0211	0.154	0.6	ug/L	20	Standard
|	Pb	206	395134.4	0.3	23.4970	0.117	0.5	ug/L	419	Standard
|	Pb	207	336222.4	0.8	23.8125	0.313	1.3	ug/L	338	Standard
|	Pb	208	1559993.0	0.6	23.9557	0.269	1.1	ug/L	1616	Standard
	U	238	488812.5	0.3	23.4429	0.096	0.4	ug/L	2	Standard
[>	Bi	209	672317.4	0.7				ug/L	641071	Standard

Sample ID: LCSW 64 WG40345803

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Na	23	795.0	10.9	-0.0008	0.003	313.1	mg/L	412	Standard
Mg	24	1510.1	2.9	0.0019	0.000	7.4	mg/L	177	Standard
K	39	113.3	14.2	-0.0503	0.014	26.9	mg/L	150	Standard
Ca	43	1.7	173.2	-1.3193	2.019	153.0	mg/L	7	Standard
Fe	54	914.2	4.8	0.0339	0.015	44.2	mg/L	634	Standard
Fe	57	3808.8	4.4	0.0098	0.004	39.0	mg/L	2670	Standard
Sc-1	45	418661.8	5.1				mg/L	375691	Standard
Cl	35	3.0	33.3				ug/L	4	Standard
Kr	83	45.0	10.9				ug/L	39	Standard
Br	81	1142.5	6.1				ug/L	639	Standard
P	31	625.8	4.8				ug/L	419	Standard
S	34	6654.8	2.9				ug/L	7420	Standard
Sr	88	45.0	33.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		114.233	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 64 WG40345803

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	Cd	111	
	Cd	114	
>	In	115	113.078
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.874
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 64 WG40345803

Report Date/Time: Friday, July 27, 2012 13:42:05

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Method 6020 - Summary Report

Sample ID: L1207042502 WG403458-01

Sample Date/Time: Friday, July 27, 2012 13:42:45

Number of Replicates: 3

Autosampler Position: 317

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20894.4	1.1	-3118.7026	78.785	2.5	ug/L	11199	Standard
|	Be	9	16.7	91.7	-0.0109	0.008	73.4	ug/L	10	Standard
|	Al	27	125849.4	4.1	7.7769	0.385	5.0	ug/L	7920	Standard
[>	Sc	45	345788.0	0.6				ug/L	375691	Standard
[	Ti	47	548.0	4.5	0.3605	0.020	5.5	ug/L	70	Standard
|	V	51	7471.6	2.5	0.4086	0.019	4.5	ug/L	3172	Standard
|	Cr	52	11059.7	3.6	0.2083	0.047	22.4	ug/L	9852	Standard
|	Cr	53	1245.9	13.9	0.4973	0.113	22.7	ug/L	518	Standard
|	Mn	55	6366.7	3.0	0.3120	0.012	4.0	ug/L	1193	Standard
|	Co	59	303.3	8.3	0.0168	0.002	14.5	ug/L	98	Standard
|	Ni	60	1108.7	2.7	0.3822	0.012	3.1	ug/L	67	Standard
|	Cu	65	707.0	3.1	0.2394	0.008	3.2	ug/L	90	Standard
|	Zn	66	2753.9	3.6	2.3193	0.094	4.0	ug/L	148	Standard
[>	Ge	72	292653.6	0.3				ug/L	304674	Standard
|	As	75	370.0	6.3	0.5188	0.020	3.8	ug/L	-174	Standard
|	Se	82	252.6	6.8	2.0591	0.144	7.0	ug/L	26	Standard
[	Se-1	77	141.0	13.8	0.2933	0.236	80.5	ug/L	133	Standard
[>	Ga	71	615.0	2.2				mg/L	630	Standard
[	Rb	85	2728.6	4.1				ug/L	12	Standard
[	Y	89	254824.1	2.4				ug/L	271719	Standard
[>	Rh	103	383.3	5.4				ug/L	392	Standard
[	Mo	98	1069.2	4.0	0.2620	0.012	4.8	ug/L	7	Standard
|	Ag	107	111.7	10.9	0.0034	0.002	46.6	ug/L	55	Standard
|	Cd	111	56.1	11.3	-0.0049	0.001	27.1	mg/L	67	Standard
|	Cd	114	225.2	13.2	0.0019	0.002	120.1	ug/L	219	Standard
[>	In	115	843241.6	1.1				ug/L	887392	Standard
|	Sn	118	1035.7	5.9	0.0250	0.004	17.1	ug/L	653	Standard
|	Sb	123	1158.8	13.6	0.1120	0.015	13.3	ug/L	48	Standard
[	Ba	135	41853.8	2.6	8.3005	0.240	2.9	ug/L	28	Standard
[	Ce	140	1517.7	2.8				ug/L	34	Standard
[>	Tb	159	1138863.8	0.8				ug/L	1226141	Standard
[	Ho	165	28.0	25.0				ug/L	14	Standard
|	Tl	203	507.0	10.6	0.0251	0.003	10.3	ug/L	9	Standard
|	Tl	205	1288.4	14.2	0.0263	0.004	15.3	ug/L	20	Standard
|	Pb	206	756.7	5.0	0.0234	0.002	8.9	ug/L	419	Standard
|	Pb	207	627.7	4.2	0.0229	0.002	8.4	ug/L	338	Standard
|	Pb	208	2915.4	1.5	0.0211	0.001	5.3	ug/L	1616	Standard
	U	238	2996.6	3.3	0.1609	0.005	2.9	ug/L	2	Standard
[>	Bi	209	600789.7	0.9				ug/L	641071	Standard

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Na	23	92784.9	1.1	5.3280	0.077	1.4	mg/L	412	Standard
Mg	24	594983.6	2.0	0.8800	0.021	2.4	mg/L	177	Standard
K	39	451.7	9.4	0.2529	0.034	13.6	mg/L	150	Standard
Ca	43	20.0	43.3	13.4529	6.906	51.3	mg/L	7	Standard
Fe	54	402.2	13.3	-0.0433	0.012	27.8	mg/L	634	Standard
Fe	57	5862.8	2.8	0.0435	0.002	5.6	mg/L	2670	Standard
Sc-1	45	345788.0	0.6				mg/L	375691	Standard
Cl	35	15.7	63.9				ug/L	4	Standard
Kr	83	39.7	2.9				ug/L	39	Standard
Br	81	12671.1	3.8				ug/L	639	Standard
P	31	204.2	10.3				ug/L	419	Standard
S	34	11027.3	1.4				ug/L	7420	Standard
Sr	88	158.3	23.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.055	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042502 WG403458-01

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	Cd	111	
	Cd	114	
>	In	115	95.025
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.717
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207042502S WG403458-04

Sample Date/Time: Friday, July 27, 2012 13:45:55

Number of Replicates: 3

Autosampler Position: 318

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

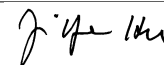
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21543.6	2.9	-3169.2381	221.684	7.0	ug/L	11199	Standard
|	Be	9	11587.8	4.4	5.8839	0.234	4.0	ug/L	10	Standard
|	Al	27	251757.2	3.0	15.6769	0.211	1.3	ug/L	7920	Standard
[>	Sc	45	353744.4	1.9				ug/L	375691	Standard
|	Ti	47	679.3	13.0	0.4534	0.062	13.7	ug/L	70	Standard
|	V	51	62737.2	3.6	5.3472	0.153	2.9	ug/L	3172	Standard
|	Cr	52	56079.0	3.4	5.2135	0.160	3.1	ug/L	9852	Standard
|	Cr	53	8995.2	1.9	5.5395	0.067	1.2	ug/L	518	Standard
|	Mn	55	90146.1	1.7	5.4150	0.086	1.6	ug/L	1193	Standard
|	Co	59	55193.4	3.2	5.1877	0.158	3.0	ug/L	98	Standard
|	Ni	60	14657.8	5.0	5.3061	0.217	4.1	ug/L	67	Standard
|	Cu	65	13951.4	4.1	5.4618	0.193	3.5	ug/L	90	Standard
|	Zn	66	8992.0	3.3	7.7486	0.183	2.4	ug/L	148	Standard
[>	Ge	72	296465.5	1.0				ug/L	304674	Standard
|	As	75	7197.4	2.1	6.4290	0.132	2.1	ug/L	-174	Standard
|	Se	82	992.7	1.2	8.4387	0.086	1.0	ug/L	26	Standard
[	Se-1	77	685.7	1.1	6.9024	0.074	1.1	ug/L	133	Standard
[>	Ga	71	623.3	9.7				mg/L	630	Standard
|	Rb	85	2831.9	7.5				ug/L	12	Standard
|	Y	89	253388.0	1.0				ug/L	271719	Standard
[>	Rh	103	343.3	21.9				ug/L	392	Standard
|	Mo	98	1094.9	7.2	0.2668	0.018	6.9	ug/L	7	Standard
|	Ag	107	15212.0	3.1	1.9051	0.042	2.2	ug/L	55	Standard
|	Cd	111	26043.4	2.4	5.9252	0.084	1.4	mg/L	67	Standard
|	Cd	114	71361.9	2.6	5.7733	0.093	1.6	ug/L	219	Standard
[>	In	115	847766.1	1.0				ug/L	887392	Standard
|	Sn	118	1005.0	4.3	0.0225	0.003	12.3	ug/L	653	Standard
|	Sb	123	61996.7	2.5	5.7497	0.093	1.6	ug/L	48	Standard
|	Ba	135	69623.0	2.1	13.7376	0.153	1.1	ug/L	28	Standard
|	Ce	140	1660.8	10.7				ug/L	34	Standard
[>	Tb	159	1126472.6	0.7				ug/L	1226141	Standard
|	Ho	165	25.3	19.9				ug/L	14	Standard
|	Tl	203	102611.7	2.0	5.1904	0.013	0.3	ug/L	9	Standard
|	Tl	205	240205.0	2.8	5.4243	0.053	1.0	ug/L	20	Standard
|	Pb	206	79418.0	2.6	5.2064	0.046	0.9	ug/L	419	Standard
|	Pb	207	67260.0	2.7	5.2515	0.057	1.1	ug/L	338	Standard
|	Pb	208	312341.9	2.6	5.2862	0.042	0.8	ug/L	1616	Standard
	U	238	99734.3	2.7	5.2944	0.062	1.2	ug/L	2	Standard
[>	Bi	209	607337.0	1.8				ug/L	641071	Standard

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Na	23	93108.7	2.7	5.2270	0.188	3.6	mg/L	412	Standard
Mg	24	595103.4	3.7	0.8602	0.020	2.3	mg/L	177	Standard
K	39	448.3	8.4	0.2421	0.038	15.6	mg/L	150	Standard
Ca	43	10.0	86.6	5.2316	6.554	125.3	mg/L	7	Standard
Fe	54	383.4	10.6	-0.0492	0.010	20.2	mg/L	634	Standard
Fe	57	6039.5	6.4	0.0439	0.004	8.2	mg/L	2670	Standard
Sc-1	45	353744.4	1.9				mg/L	375691	Standard
Cl	35	18.3	13.7				ug/L	4	Standard
Kr	83	38.8	12.1				ug/L	39	Standard
Br	81	11792.1	3.0				ug/L	639	Standard
P	31	204.2	8.2				ug/L	419	Standard
S	34	11397.6	2.8				ug/L	7420	Standard
Sr	88	180.0	9.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.306	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042502S WG403458-04

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	Cd	111	
	Cd	114	
>	In	115	95.535
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.738
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

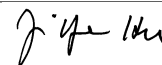
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042502S WG403458-04

Report Date/Time: Friday, July 27, 2012 13:48:26

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Method 6020 - Summary Report

Sample ID: L1207042502SD WG403458-05

Sample Date/Time: Friday, July 27, 2012 13:49:05

Number of Replicates: 3

Autosampler Position: 319

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21423.5	3.7	-3096.9736	95.482	3.1	ug/L	11199	Standard
|	Be	9	11282.5	4.0	5.6994	0.277	4.9	ug/L	10	Standard
|	Al	27	199487.8	4.2	12.2468	0.259	2.1	ug/L	7920	Standard
[>	Sc	45	355720.8	2.7				ug/L	375691	Standard
|	Ti	47	530.3	11.6	0.3422	0.039	11.5	ug/L	70	Standard
|	V	51	62458.8	1.7	5.3357	0.161	3.0	ug/L	3172	Standard
|	Cr	52	56305.4	1.8	5.2545	0.213	4.0	ug/L	9852	Standard
|	Cr	53	9021.9	3.3	5.5681	0.120	2.2	ug/L	518	Standard
|	Mn	55	89534.8	1.1	5.3903	0.158	2.9	ug/L	1193	Standard
|	Co	59	54221.5	1.8	5.1072	0.113	2.2	ug/L	98	Standard
|	Ni	60	14549.0	3.8	5.2771	0.113	2.1	ug/L	67	Standard
|	Cu	65	13732.6	1.8	5.3871	0.055	1.0	ug/L	90	Standard
|	Zn	66	8826.9	1.8	7.6206	0.039	0.5	ug/L	148	Standard
[>	Ge	72	295883.5	1.9				ug/L	304674	Standard
|	As	75	7069.7	3.1	6.3295	0.083	1.3	ug/L	-174	Standard
|	Se	82	969.3	2.0	8.2538	0.126	1.5	ug/L	26	Standard
[	Se-1	77	669.3	2.5	6.7222	0.293	4.4	ug/L	133	Standard
[>	Ga	71	635.0	6.7				mg/L	630	Standard
|	Rb	85	2643.6	6.1				ug/L	12	Standard
|	Y	89	250873.3	0.5				ug/L	271719	Standard
[>	Rh	103	358.3	9.1				ug/L	392	Standard
|	Mo	98	1086.5	13.8	0.2667	0.038	14.2	ug/L	7	Standard
|	Ag	107	9044.0	3.4	1.1363	0.040	3.6	ug/L	55	Standard
|	Cd	111	26035.1	1.7	5.9649	0.109	1.8	mg/L	67	Standard
|	Cd	114	71006.4	1.4	5.7848	0.090	1.6	ug/L	219	Standard
[>	In	115	841958.7	0.1				ug/L	887392	Standard
|	Sn	118	908.0	16.6	0.0163	0.010	64.0	ug/L	653	Standard
|	Sb	123	60721.1	1.0	5.6708	0.062	1.1	ug/L	48	Standard
[	Ba	135	68668.6	2.3	13.6440	0.332	2.4	ug/L	28	Standard
|	Ce	140	1436.1	1.0				ug/L	34	Standard
[>	Tb	159	1131601.0	0.5				ug/L	1226141	Standard
|	Ho	165	32.7	13.8				ug/L	14	Standard
|	Tl	203	100707.3	2.1	5.0579	0.052	1.0	ug/L	9	Standard
|	Tl	205	236807.8	1.3	5.3103	0.006	0.1	ug/L	20	Standard
|	Pb	206	78192.6	1.4	5.0896	0.018	0.4	ug/L	419	Standard
|	Pb	207	66651.0	1.3	5.1673	0.033	0.6	ug/L	338	Standard
|	Pb	208	308298.9	1.1	5.1809	0.026	0.5	ug/L	1616	Standard
|	U	238	97761.7	1.3	5.1540	0.091	1.8	ug/L	2	Standard
[>	Bi	209	611671.6	1.4				ug/L	641071	Standard

Sample ID: L1207042502SD WG403458-05

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Na	23	93356.9	2.6	5.2110	0.116	2.2	mg/L	412	Standard
Mg	24	588364.9	3.8	0.8458	0.022	2.6	mg/L	177	Standard
K	39	476.7	6.8	0.2634	0.035	13.2	mg/L	150	Standard
Ca	43	28.3	10.2	19.4750	2.377	12.2	mg/L	7	Standard
Fe	54	352.8	11.1	-0.0562	0.008	15.1	mg/L	634	Standard
Fe	57	5837.8	2.1	0.0411	0.001	3.0	mg/L	2670	Standard
Sc-1	45	355720.8	2.7				mg/L	375691	Standard
Cl	35	13.3	11.5				ug/L	4	Standard
Kr	83	42.4	2.5				ug/L	39	Standard
Br	81	11146.6	4.4				ug/L	639	Standard
P	31	190.0	11.7				ug/L	419	Standard
S	34	11692.0	2.5				ug/L	7420	Standard
Sr	88	148.3	5.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.115	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042502SD WG403458-05

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	Cd	111	
	Cd	114	
>	In	115	94.880
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.414
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042502SD WG403458-05

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Method 6020 - Summary Report

Sample ID: L1207042501

Sample Date/Time: Friday, July 27, 2012 13:52:16

Number of Replicates: 3

Autosampler Position: 320

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22308.1	3.0	-3445.3385	157.284	4.6	ug/L	11199	Standard
|	Be	9	18.3	31.5	-0.0101	0.003	29.7	ug/L	10	Standard
|	Al	27	98415.3	1.2	5.8810	0.073	1.2	ug/L	7920	Standard
[>	Sc	45	350757.0	0.8				ug/L	375691	Standard
[	Ti	47	454.7	3.9	0.2879	0.012	4.2	ug/L	70	Standard
|	V	51	4816.9	2.6	0.1659	0.014	8.6	ug/L	3172	Standard
|	Cr	52	9303.2	1.3	0.0050	0.021	428.2	ug/L	9852	Standard
|	Cr	53	920.9	5.9	0.2799	0.032	11.5	ug/L	518	Standard
|	Mn	55	3595.8	2.8	0.1398	0.005	3.5	ug/L	1193	Standard
|	Co	59	302.0	13.4	0.0165	0.004	23.1	ug/L	98	Standard
|	Ni	60	1028.4	4.1	0.3508	0.013	3.6	ug/L	67	Standard
|	Cu	65	299.0	5.9	0.0757	0.006	8.1	ug/L	90	Standard
|	Zn	66	1951.8	2.4	1.5996	0.043	2.7	ug/L	148	Standard
[>	Ge	72	294015.0	0.7				ug/L	304674	Standard
|	As	75	165.1	26.4	0.3384	0.038	11.3	ug/L	-174	Standard
|	Se	82	190.4	2.4	1.5057	0.030	2.0	ug/L	26	Standard
[	Se-1	77	147.0	10.9	0.3587	0.188	52.3	ug/L	133	Standard
[>	Ga	71	596.7	7.8				mg/L	630	Standard
[	Rb	85	1490.1	9.4				ug/L	12	Standard
[	Y	89	254572.8	1.5				ug/L	271719	Standard
[>	Rh	103	373.3	3.9				ug/L	392	Standard
[	Mo	98	318.6	2.6	0.0743	0.002	2.4	ug/L	7	Standard
|	Ag	107	78.3	43.9	-0.0008	0.004	527.7	ug/L	55	Standard
|	Cd	111	54.9	36.8	-0.0052	0.005	89.7	mg/L	67	Standard
|	Cd	114	163.7	50.0	-0.0031	0.007	212.4	ug/L	219	Standard
[>	In	115	841220.7	1.5				ug/L	887392	Standard
|	Sn	118	634.3	10.7	-0.0025	0.005	182.6	ug/L	653	Standard
|	Sb	123	259.3	31.2	0.0282	0.007	26.0	ug/L	48	Standard
[	Ba	135	18977.2	1.8	3.7675	0.059	1.6	ug/L	28	Standard
[	Ce	140	976.4	4.0				ug/L	34	Standard
[>	Tb	159	1109258.9	0.4				ug/L	1226141	Standard
[	Ho	165	19.0	22.9				ug/L	14	Standard
|	Tl	203	610.3	23.8	0.0300	0.007	23.7	ug/L	9	Standard
|	Tl	205	1453.4	26.5	0.0297	0.008	28.5	ug/L	20	Standard
|	Pb	206	658.7	12.8	0.0165	0.005	31.7	ug/L	419	Standard
|	Pb	207	522.0	12.9	0.0141	0.005	35.2	ug/L	338	Standard
|	Pb	208	2506.7	13.0	0.0136	0.005	38.5	ug/L	1616	Standard
	U	238	2852.6	5.5	0.1518	0.008	5.1	ug/L	2	Standard
[>	Bi	209	606115.1	0.8				ug/L	641071	Standard

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Na	23	93687.1	1.5	5.3034	0.084	1.6	mg/L	412	Standard
Mg	24	672649.6	1.1	0.9808	0.017	1.7	mg/L	177	Standard
K	39	388.3	6.4	0.1948	0.023	11.8	mg/L	150	Standard
Ca	43	15.0	57.7	9.3165	6.867	73.7	mg/L	7	Standard
Fe	54	347.1	9.0	-0.0564	0.006	10.8	mg/L	634	Standard
Fe	57	5224.2	3.9	0.0346	0.003	8.7	mg/L	2670	Standard
Sc-1	45	350757.0	0.8				mg/L	375691	Standard
Cl	35	15.7	7.4				ug/L	4	Standard
Kr	83	38.6	2.6				ug/L	39	Standard
Br	81	8459.9	1.5				ug/L	639	Standard
P	31	196.7	11.0				ug/L	419	Standard
S	34	11697.0	1.8				ug/L	7420	Standard
Sr	88	170.0	10.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.501	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042501

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	Cd	111	
	Cd	114	
>	In	115	94.797
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.547
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042501

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Method 6020 - Summary Report

Sample ID: L1207042501PS WG403929-01

Sample Date/Time: Friday, July 27, 2012 13:55:25

Number of Replicates: 3

Autosampler Position: 321

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	24788.6	2.8	-4011.5358	271.691	6.8	ug/L	11199	Standard
|	Be	9	110722.0	4.7	55.5949	3.021	5.4	ug/L	10	Standard
|	Al	27	857425.1	3.5	53.8264	2.777	5.2	ug/L	7920	Standard
[>	Sc	45	358952.0	2.3				ug/L	375691	Standard
|	Ti	47	528.7	2.8	0.3396	0.005	1.4	ug/L	70	Standard
|	V	51	539406.8	1.7	47.9131	1.286	2.7	ug/L	3172	Standard
|	Cr	52	442214.6	1.9	48.1746	1.323	2.7	ug/L	9852	Standard
|	Cr	53	75105.7	1.6	48.5337	1.338	2.8	ug/L	518	Standard
|	Mn	55	822633.9	1.6	49.9581	1.373	2.7	ug/L	1193	Standard
|	Co	59	524915.8	1.2	49.3282	1.272	2.6	ug/L	98	Standard
|	Ni	60	133712.4	0.9	48.5173	1.091	2.2	ug/L	67	Standard
|	Cu	65	129958.4	1.3	51.1264	1.387	2.7	ug/L	90	Standard
|	Zn	66	68540.7	1.2	59.7556	1.696	2.8	ug/L	148	Standard
[>	Ge	72	297229.3	1.7				ug/L	304674	Standard
|	As	75	64446.4	1.2	55.8942	1.561	2.8	ug/L	-174	Standard
|	Se	82	7239.5	1.5	62.3878	1.793	2.9	ug/L	26	Standard
[	Se-1	77	5139.9	0.7	60.9811	1.390	2.3	ug/L	133	Standard
[>	Ga	71	631.7	13.9				mg/L	630	Standard
|	Rb	85	1783.4	7.0				ug/L	12	Standard
|	Y	89	256821.8	0.9				ug/L	271719	Standard
[>	Rh	103	426.7	15.3				ug/L	392	Standard
|	Mo	98	449.4	5.3	0.1058	0.006	6.0	ug/L	7	Standard
|	Ag	107	425866.7	3.1	53.4404	1.633	3.1	ug/L	55	Standard
|	Cd	111	247869.7	0.5	56.3481	0.433	0.8	mg/L	67	Standard
|	Cd	114	680663.1	1.6	55.0133	0.741	1.3	ug/L	219	Standard
[>	In	115	850823.4	0.4				ug/L	887392	Standard
|	Sn	118	840.4	3.9	0.0110	0.002	19.6	ug/L	653	Standard
|	Sb	123	579035.0	1.8	53.4809	1.038	1.9	ug/L	48	Standard
|	Ba	135	273013.7	1.3	53.7054	0.552	1.0	ug/L	28	Standard
|	Ce	140	1133.0	3.1				ug/L	34	Standard
[>	Tb	159	1138604.0	0.9				ug/L	1226141	Standard
|	Ho	165	25.7	28.7				ug/L	14	Standard
|	Tl	203	962823.8	2.2	48.1321	1.420	3.0	ug/L	9	Standard
|	Tl	205	2249027.7	1.1	50.2124	0.886	1.8	ug/L	20	Standard
|	Pb	206	753861.8	2.0	49.0633	1.333	2.7	ug/L	419	Standard
|	Pb	207	638836.8	1.3	49.5147	1.031	2.1	ug/L	338	Standard
|	Pb	208	2966464.7	1.8	49.8566	1.259	2.5	ug/L	1616	Standard
	U	238	947303.7	1.7	49.6923	1.183	2.4	ug/L	2	Standard
[>	Bi	209	614731.3	0.7				ug/L	641071	Standard

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Na	23	101562.6	0.8	5.6218	0.120	2.1	mg/L	412	Standard
Mg	24	740913.6	1.9	1.0558	0.023	2.2	mg/L	177	Standard
K	39	418.3	11.3	0.2121	0.042	19.9	mg/L	150	Standard
Ca	43	15.0	33.3	9.0557	3.901	43.1	mg/L	7	Standard
Fe	54	377.9	11.0	-0.0517	0.007	13.3	mg/L	634	Standard
Fe	57	5601.0	4.8	0.0377	0.003	9.2	mg/L	2670	Standard
Sc-1	45	358952.0	2.3				mg/L	375691	Standard
Cl	35	15.7	41.0				ug/L	4	Standard
Kr	83	43.8	6.9				ug/L	39	Standard
Br	81	9589.7	6.2				ug/L	639	Standard
P	31	210.8	9.6				ug/L	419	Standard
S	34	12457.6	1.3				ug/L	7420	Standard
Sr	88	173.3	16.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.556	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207042501PS WG403929-01

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	Cd	111	
	Cd	114	
>	In	115	95.879
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.891
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207042501PS WG403929-01

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Method 6020 - Summary Report

Sample ID: L1207042501SDL WG403929-02

Sample Date/Time: Friday, July 27, 2012 13:58:35

Number of Replicates: 3

Autosampler Position: 322

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12074.8	2.2	-606.3989	37.681	6.2	ug/L	11199	Standard
|	Be	9	20.0	66.1	-0.0089	0.007	77.4	ug/L	10	Standard
|	Al	27	23272.9	3.9	1.0849	0.091	8.4	ug/L	7920	Standard
[>	Sc	45	334838.7	1.9				ug/L	375691	Standard
|	Ti	47	112.3	10.3	0.0300	0.008	28.1	ug/L	70	Standard
|	V	51	3072.5	2.1	0.0127	0.007	56.5	ug/L	3172	Standard
|	Cr	52	8052.1	1.2	-0.1216	0.006	4.6	ug/L	9852	Standard
|	Cr	53	455.8	11.1	-0.0209	0.035	168.5	ug/L	518	Standard
|	Mn	55	1289.7	10.2	-0.0006	0.009	1420.4	ug/L	1193	Standard
|	Co	59	176.3	39.2	0.0049	0.007	139.7	ug/L	98	Standard
|	Ni	60	521.3	10.0	0.1679	0.020	11.8	ug/L	67	Standard
|	Cu	65	144.7	7.2	0.0153	0.004	28.8	ug/L	90	Standard
|	Zn	66	1827.1	1.0	1.5151	0.027	1.8	ug/L	148	Standard
[>	Ge	72	289436.1	0.7				ug/L	304674	Standard
|	As	75	-124.6	28.4	0.0837	0.031	36.9	ug/L	-174	Standard
|	Se	82	58.7	9.2	0.3640	0.049	13.5	ug/L	26	Standard
[	Se-1	77	116.3	9.6	0.0061	0.148	2441.9	ug/L	133	Standard
[>	Ga	71	578.3	4.4				mg/L	630	Standard
|	Rb	85	298.3	1.9				ug/L	12	Standard
|	Y	89	243897.1	3.4				ug/L	271719	Standard
[>	Rh	103	331.7	7.4				ug/L	392	Standard
|	Mo	98	77.7	9.7	0.0144	0.002	14.3	ug/L	7	Standard
|	Ag	107	215.7	89.5	0.0172	0.025	144.2	ug/L	55	Standard
|	Cd	111	116.1	128.1	0.0094	0.035	369.6	mg/L	67	Standard
|	Cd	114	352.4	124.9	0.0128	0.036	284.1	ug/L	219	Standard
[>	In	115	819863.1	1.2				ug/L	887392	Standard
|	Sn	118	480.7	5.0	-0.0122	0.002	17.4	ug/L	653	Standard
|	Sb	123	2703.7	7.5	0.2630	0.016	6.2	ug/L	48	Standard
|	Ba	135	3503.7	2.5	0.7063	0.011	1.6	ug/L	28	Standard
|	Ce	140	212.3	11.1				ug/L	34	Standard
[>	Tb	159	1105105.9	0.7				ug/L	1226141	Standard
|	Ho	165	15.0	26.7				ug/L	14	Standard
|	Tl	203	452.3	64.1	0.0218	0.014	65.2	ug/L	9	Standard
|	Tl	205	1012.0	63.4	0.0196	0.014	72.0	ug/L	20	Standard
|	Pb	206	569.7	29.4	0.0104	0.010	101.0	ug/L	419	Standard
|	Pb	207	466.3	30.5	0.0095	0.011	111.8	ug/L	338	Standard
|	Pb	208	2146.4	30.9	0.0073	0.011	147.9	ug/L	1616	Standard
	U	238	630.3	24.2	0.0334	0.008	22.7	ug/L	2	Standard
[>	Bi	209	608620.4	1.3				ug/L	641071	Standard

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Na	23	32623.5	5.7	1.9117	0.147	7.7	mg/L	412	Standard
Mg	24	134686.0	0.8	0.2058	0.003	1.4	mg/L	177	Standard
K	39	168.3	12.0	0.0173	0.016	89.8	mg/L	150	Standard
Ca	43	6.7	114.6	2.9214	6.144	210.3	mg/L	7	Standard
Fe	54	196.0	10.8	-0.0867	0.005	6.2	mg/L	634	Standard
Fe	57	2816.9	5.1	0.0068	0.002	36.6	mg/L	2670	Standard
Sc-1	45	334838.7	1.9				mg/L	375691	Standard
Cl	35	5.7	53.9				ug/L	4	Standard
Kr	83	39.6	7.3				ug/L	39	Standard
Br	81	1933.5	2.6				ug/L	639	Standard
P	31	125.8	9.4				ug/L	419	Standard
S	34	7075.8	2.9				ug/L	7420	Standard
Sr	88	55.0	18.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.999	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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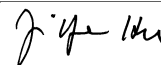
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	Cd	114		
>	In	115	92.390	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.938	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 14:01:46

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11724.5	6.7	-14.6130	210.498	1440.5	ug/L	11199	Standard
|	Be	9	104220.9	3.8	48.5733	2.408	5.0	ug/L	10	Standard
|	Al	27	785767.8	3.4	45.7173	2.490	5.4	ug/L	7920	Standard
[>	Sc	45	386733.3	2.3				ug/L	375691	Standard
[	Ti	47	136877.6	1.5	94.3431	1.216	1.3	ug/L	70	Standard
|	V	51	562053.1	1.2	45.9587	1.000	2.2	ug/L	3172	Standard
|	Cr	52	463253.1	1.0	46.4330	1.035	2.2	ug/L	9852	Standard
|	Cr	53	78092.4	1.6	46.4450	0.663	1.4	ug/L	518	Standard
|	Mn	55	848510.7	1.5	47.4346	0.408	0.9	ug/L	1193	Standard
|	Co	59	533796.4	1.6	46.1840	0.941	2.0	ug/L	98	Standard
|	Ni	60	139552.1	1.5	46.6193	0.753	1.6	ug/L	67	Standard
|	Cu	65	130266.0	1.4	47.1785	0.834	1.8	ug/L	90	Standard
|	Zn	66	59768.4	3.0	47.9483	1.519	3.2	ug/L	148	Standard
[>	Ge	72	322777.6	1.3				ug/L	304674	Standard
|	As	75	59344.3	0.9	47.4142	0.615	1.3	ug/L	-174	Standard
|	Se	82	6087.4	0.6	48.2637	0.829	1.7	ug/L	26	Standard
[	Se-1	77	4413.3	1.4	47.9125	1.273	2.7	ug/L	133	Standard
[>	Ga	71	730.0	6.3				mg/L	630	Standard
|	Rb	85	1018.4	1.1				ug/L	12	Standard
[	Y	89	286410.6	1.9				ug/L	271719	Standard
[>	Rh	103	475.0	13.7				ug/L	392	Standard
[	Mo	98	415998.2	1.3	95.3759	2.347	2.5	ug/L	7	Standard
|	Ag	107	416062.5	0.9	48.2728	0.793	1.6	ug/L	55	Standard
|	Cd	111	233059.7	0.8	48.9854	0.951	1.9	mg/L	67	Standard
|	Cd	114	643303.8	0.7	48.0734	0.810	1.7	ug/L	219	Standard
[>	In	115	920303.9	1.2				ug/L	887392	Standard
|	Sn	118	759678.1	0.7	47.8496	0.868	1.8	ug/L	653	Standard
|	Sb	123	555769.4	0.5	47.4616	0.776	1.6	ug/L	48	Standard
[	Ba	135	266707.0	0.8	48.5107	0.907	1.9	ug/L	28	Standard
[	Ce	140	997.0	3.6				ug/L	34	Standard
[>	Tb	159	1217955.6	1.1				ug/L	1226141	Standard
[	Ho	165	18.3	49.5				ug/L	14	Standard
|	Tl	203	956927.0	0.6	46.3612	1.007	2.2	ug/L	9	Standard
|	Tl	205	2232015.3	0.9	48.2959	0.972	2.0	ug/L	20	Standard
|	Pb	206	738052.0	0.5	46.5504	0.937	2.0	ug/L	419	Standard
|	Pb	207	627562.9	0.2	47.1451	1.267	2.7	ug/L	338	Standard
|	Pb	208	2908620.9	0.3	47.3789	1.214	2.6	ug/L	1616	Standard
	U	238	942070.4	1.3	47.9013	1.538	3.2	ug/L	2	Standard
[>	Bi	209	634438.5	2.5				ug/L	641071	Standard

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Na	23	117094.1	0.8	6.0182	0.098	1.6	mg/L	412	Standard
Mg	24	3525463.5	1.0	4.6635	0.125	2.7	mg/L	177	Standard
K	39	6239.6	2.0	4.6028	0.160	3.5	mg/L	150	Standard
Ca	43	11.7	24.7	5.8352	2.102	36.0	mg/L	7	Standard
Fe	54	25562.8	1.9	4.8432	0.195	4.0	mg/L	634	Standard
Fe	57	481935.1	1.0	5.3258	0.167	3.1	mg/L	2670	Standard
Sc-1	45	386733.3	2.3				mg/L	375691	Standard
Cl	35	2.3	65.5				ug/L	4	Standard
Kr	83	40.3	2.2				ug/L	39	Standard
Br	81	955.9	4.5				ug/L	639	Standard
P	31	503.3	6.6				ug/L	419	Standard
S	34	6801.5	1.9				ug/L	7420	Standard
Sr	88	38.3	32.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	91.435		
Sc	45			
Ti	47	94.343		
V	51	91.917		
Cr	52	92.866		
Cr	53			
Mn	55	94.869		
Co	59	92.368		
Ni	60	93.239		
Cu	65	94.357		
Zn	66	95.897		
Ge	72		105.942	
As	75	94.828		
Se	82	96.527		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	95.376		
Ag	107	96.546		

Sample ID: QC Std 6

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	Cd	111	97.971	
	Cd	114		
>	In	115		103.709
	Sn	118	95.699	
	Sb	123	94.923	
	Ba	135	97.021	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.722	
|	Tl	205		
|	Pb	206	93.101	
|	Pb	207	94.290	
|	Pb	208	94.758	
|	U	238	95.803	
>	Bi	209		98.965
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 14:05:02

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11345.9	3.7	110.7183	118.973	107.5	ug/L	11199	Standard
|	Be	9	10.0	50.0	-0.0149	0.002	15.4	ug/L	10	Standard
|	Al	27	7523.5	3.5	-0.0574	0.012	21.3	ug/L	7920	Standard
[>	Sc	45	389841.7	0.8				ug/L	375691	Standard
|	Ti	47	65.3	20.4	-0.0121	0.009	75.6	ug/L	70	Standard
|	V	51	2962.5	2.5	-0.0298	0.005	18.0	ug/L	3172	Standard
|	Cr	52	8918.6	1.6	-0.1442	0.009	6.3	ug/L	9852	Standard
|	Cr	53	363.3	9.0	-0.1119	0.017	15.1	ug/L	518	Standard
|	Mn	55	1295.1	3.1	-0.0100	0.001	10.7	ug/L	1193	Standard
|	Co	59	146.0	20.9	0.0002	0.002	1128.2	ug/L	98	Standard
|	Ni	60	71.0	10.2	-0.0032	0.002	61.4	ug/L	67	Standard
|	Cu	65	117.3	3.2	-0.0014	0.002	140.3	ug/L	90	Standard
|	Zn	66	1742.1	3.7	1.2529	0.072	5.8	ug/L	148	Standard
[>	Ge	72	328707.1	1.8				ug/L	304674	Standard
|	As	75	-240.4	15.7	0.0065	0.028	428.7	ug/L	-174	Standard
|	Se	82	20.2	23.6	0.0015	0.040	2639.7	ug/L	26	Standard
[	Se-1	77	121.7	11.4	-0.1097	0.144	131.7	ug/L	133	Standard
[>	Ga	71	713.4	7.5				mg/L	630	Standard
|	Rb	85	13.3	21.7				ug/L	12	Standard
|	Y	89	285907.5	1.2				ug/L	271719	Standard
[>	Rh	103	373.3	8.2				ug/L	392	Standard
|	Mo	98	294.3	5.8	0.0614	0.004	7.1	ug/L	7	Standard
|	Ag	107	157.3	9.4	0.0074	0.002	24.2	ug/L	55	Standard
|	Cd	111	86.3	20.1	0.0002	0.004	1693.1	mg/L	67	Standard
|	Cd	114	284.4	1.0	0.0046	0.000	6.5	ug/L	219	Standard
[>	In	115	927154.4	0.7				ug/L	887392	Standard
|	Sn	118	1030.7	7.9	0.0183	0.005	29.8	ug/L	653	Standard
|	Sb	123	2778.0	8.4	0.2395	0.021	8.9	ug/L	48	Standard
|	Ba	135	59.3	7.0	0.0017	0.001	46.7	ug/L	28	Standard
|	Ce	140	27.0	20.6				ug/L	34	Standard
[>	Tb	159	1202743.6	0.4				ug/L	1226141	Standard
|	Ho	165	12.7	24.1				ug/L	14	Standard
|	Tl	203	88.0	30.6	0.0033	0.001	39.9	ug/L	9	Standard
|	Tl	205	231.0	28.9	0.0018	0.001	83.1	ug/L	20	Standard
|	Pb	206	509.3	4.6	0.0047	0.002	39.1	ug/L	419	Standard
|	Pb	207	398.7	7.2	0.0026	0.002	90.6	ug/L	338	Standard
|	Pb	208	1907.0	4.0	0.0016	0.002	102.8	ug/L	1616	Standard
	U	238	103.3	36.9	0.0053	0.002	37.2	ug/L	2	Standard
[>	Bi	209	643357.0	1.2				ug/L	641071	Standard

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Na	23	500.0	12.5	-0.0131	0.003	24.7	mg/L	412	Standard
Mg	24	470.0	27.7	0.0006	0.000	27.8	mg/L	177	Standard
K	39	155.0	14.8	-0.0133	0.018	134.4	mg/L	150	Standard
Ca	43	3.3	173.2	-0.1373	4.066	2960.6	mg/L	7	Standard
Fe	54	668.1	6.6	-0.0019	0.009	486.8	mg/L	634	Standard
Fe	57	3233.7	2.3	0.0063	0.001	15.7	mg/L	2670	Standard
Sc-1	45	389841.7	0.8				mg/L	375691	Standard
Cl	35	2.0	50.0				ug/L	4	Standard
Kr	83	45.6	12.4				ug/L	39	Standard
Br	81	924.2	8.3				ug/L	639	Standard
P	31	417.5	4.2				ug/L	419	Standard
S	34	6464.7	1.0				ug/L	7420	Standard
Sr	88	35.0	51.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.888	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	104.481
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.357
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 14:07:33

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Method 6020 - Summary Report

Sample ID: PBW 4A WG404283-02

Sample Date/Time: Friday, July 27, 2012 14:08:17

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9744.8	1.1	89.7651	52.617	58.6	ug/L	11199	Standard
|	Be	9	13.3	21.7	-0.0123	0.002	12.8	ug/L	10	Standard
|	Al	27	13724.5	1.8	0.4421	0.015	3.4	ug/L	7920	Standard
[>	Sc	45	332518.0	1.5				ug/L	375691	Standard
|	Ti	47	56.7	3.7	-0.0120	0.002	16.5	ug/L	70	Standard
|	V	51	3789.8	16.3	0.0839	0.057	67.4	ug/L	3172	Standard
|	Cr	52	8272.9	5.3	-0.0813	0.042	51.9	ug/L	9852	Standard
|	Cr	53	25850.7	14.7	17.2029	2.427	14.1	ug/L	518	Standard
|	Mn	55	1353.7	3.4	0.0047	0.002	47.7	ug/L	1193	Standard
|	Co	59	97.3	9.5	-0.0026	0.001	36.2	ug/L	98	Standard
|	Ni	60	298.3	7.5	0.0865	0.008	8.7	ug/L	67	Standard
|	Cu	65	100.3	5.1	-0.0020	0.002	98.1	ug/L	90	Standard
|	Zn	66	1451.7	5.2	1.1990	0.059	4.9	ug/L	148	Standard
[>	Ge	72	284847.4	0.9				ug/L	304674	Standard
|	As	75	-335.9	17.1	-0.1089	0.054	49.5	ug/L	-174	Standard
|	Se	82	21.8	30.5	0.0404	0.062	153.2	ug/L	26	Standard
[	Se-1	77	1250.1	11.0	14.3836	1.601	11.1	ug/L	133	Standard
[>	Ga	71	558.3	19.7				mg/L	630	Standard
|	Rb	85	21.7	81.0				ug/L	12	Standard
|	Y	89	241251.2	2.3				ug/L	271719	Standard
[>	Rh	103	331.7	6.1				ug/L	392	Standard
|	Mo	98	87.3	30.3	0.0166	0.007	40.2	ug/L	7	Standard
|	Ag	107	75.0	8.3	-0.0011	0.001	71.2	ug/L	55	Standard
|	Cd	111	36.5	8.3	-0.0093	0.001	7.5	mg/L	67	Standard
|	Cd	114	110.9	20.1	-0.0073	0.002	25.5	ug/L	219	Standard
[>	In	115	830371.5	0.3				ug/L	887392	Standard
|	Sn	118	639.0	8.3	-0.0016	0.004	223.2	ug/L	653	Standard
|	Sb	123	518.9	14.4	0.0531	0.007	13.1	ug/L	48	Standard
|	Ba	135	125.7	3.8	0.0163	0.001	5.8	ug/L	28	Standard
|	Ce	140	82.7	21.8				ug/L	34	Standard
[>	Tb	159	1113195.1	0.8				ug/L	1226141	Standard
|	Ho	165	12.3	47.5				ug/L	14	Standard
|	Tl	203	61.3	21.7	0.0022	0.001	31.4	ug/L	9	Standard
|	Tl	205	146.7	21.8	0.0002	0.001	418.3	ug/L	20	Standard
|	Pb	206	594.0	16.4	0.0123	0.007	54.3	ug/L	419	Standard
|	Pb	207	461.7	12.0	0.0094	0.005	49.3	ug/L	338	Standard
|	Pb	208	2240.4	13.2	0.0092	0.005	58.3	ug/L	1616	Standard
	U	238	28.7	49.0	0.0016	0.001	46.7	ug/L	2	Standard
[>	Bi	209	605542.1	1.2				ug/L	641071	Standard

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Na	23	738.4	4.5	0.0057	0.003	45.2	mg/L	412	Standard
Mg	24	4283.9	0.7	0.0066	0.000	1.9	mg/L	177	Standard
K	39	131.7	13.3	-0.0138	0.017	122.0	mg/L	150	Standard
Ca	43	3.3	86.6	0.2966	2.409	812.2	mg/L	7	Standard
Fe	54	230.7	24.1	-0.0787	0.012	15.3	mg/L	634	Standard
Fe	57	2308.5	8.6	0.0005	0.003	626.7	mg/L	2670	Standard
Sc-1	45	332518.0	1.5				mg/L	375691	Standard
Cl	35	1486.1	7.1				ug/L	4	Standard
Kr	83	41.6	7.3				ug/L	39	Standard
Br	81	708.3	2.5				ug/L	639	Standard
P	31	127.5	9.0				ug/L	419	Standard
S	34	5924.5	3.8				ug/L	7420	Standard
Sr	88	50.0	43.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.492	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 4A WG404283-02

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	Cd	111	
	Cd	114	
>	In	115	93.574
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.458
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 4A WG404283-02

Report Date/Time: Friday, July 27, 2012 14:10:47

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Method 6020 - Summary Report

Sample ID: F BLANK WG404216-02

Sample Date/Time: Friday, July 27, 2012 14:11:26

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9961.6	4.0	147.7410	96.455	65.3	ug/L	11199	Standard
|	Be	9	8.3	91.7	-0.0152	0.004	26.4	ug/L	10	Standard
|	Al	27	34749.8	3.3	1.7838	0.081	4.5	ug/L	7920	Standard
[>	Sc	45	346459.9	0.9				ug/L	375691	Standard
|	Ti	47	123.3	6.6	0.0387	0.007	19.1	ug/L	70	Standard
|	V	51	4876.6	9.9	0.1783	0.038	21.2	ug/L	3172	Standard
|	Cr	52	9480.0	3.6	0.0427	0.024	56.7	ug/L	9852	Standard
|	Cr	53	27941.7	9.6	18.3425	1.520	8.3	ug/L	518	Standard
|	Mn	55	4399.6	0.9	0.1939	0.003	1.7	ug/L	1193	Standard
|	Co	59	140.3	24.2	0.0014	0.003	236.5	ug/L	98	Standard
|	Ni	60	231.3	2.9	0.0598	0.003	4.3	ug/L	67	Standard
|	Cu	65	227.7	14.6	0.0488	0.012	24.9	ug/L	90	Standard
|	Zn	66	1936.1	4.3	1.6145	0.060	3.7	ug/L	148	Standard
[>	Ge	72	289100.8	1.5				ug/L	304674	Standard
|	As	75	-289.4	24.2	-0.0626	0.060	96.5	ug/L	-174	Standard
|	Se	82	26.4	18.7	0.0771	0.043	56.2	ug/L	26	Standard
[	Se-1	77	1250.7	6.4	14.1617	0.798	5.6	ug/L	133	Standard
[>	Ga	71	650.0	3.5				mg/L	630	Standard
|	Rb	85	68.3	23.5				ug/L	12	Standard
|	Y	89	247679.7	0.7				ug/L	271719	Standard
[>	Rh	103	375.0	4.8				ug/L	392	Standard
|	Mo	98	113.6	89.3	0.0235	0.026	110.4	ug/L	7	Standard
|	Ag	107	122.0	82.9	0.0051	0.013	258.3	ug/L	55	Standard
|	Cd	111	61.1	65.9	-0.0034	0.009	274.8	mg/L	67	Standard
|	Cd	114	185.2	88.6	-0.0010	0.014	1359.8	ug/L	219	Standard
[>	In	115	821725.1	0.2				ug/L	887392	Standard
|	Sn	118	553.0	24.0	-0.0072	0.009	129.3	ug/L	653	Standard
|	Sb	123	363.8	37.7	0.0388	0.013	33.7	ug/L	48	Standard
|	Ba	135	196.3	20.6	0.0309	0.008	26.4	ug/L	28	Standard
|	Ce	140	239.0	12.8				ug/L	34	Standard
[>	Tb	159	1097567.4	1.0				ug/L	1226141	Standard
|	Ho	165	15.7	35.2				ug/L	14	Standard
|	Tl	203	131.7	77.3	0.0058	0.005	88.5	ug/L	9	Standard
|	Tl	205	296.3	68.8	0.0036	0.005	128.8	ug/L	20	Standard
|	Pb	206	869.0	10.2	0.0306	0.006	18.6	ug/L	419	Standard
|	Pb	207	744.7	11.6	0.0318	0.007	21.1	ug/L	338	Standard
|	Pb	208	3373.8	10.0	0.0286	0.006	19.6	ug/L	1616	Standard
	U	238	64.0	83.0	0.0035	0.003	80.4	ug/L	2	Standard
[>	Bi	209	604002.3	0.5				ug/L	641071	Standard

Sample ID: F BLANK WG404216-02

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Na	23	131550.3	1.0	7.5553	0.057	0.8	mg/L	412	Standard
Mg	24	1283.4	15.4	0.0019	0.000	15.5	mg/L	177	Standard
K	39	126.7	23.1	-0.0226	0.026	114.2	mg/L	150	Standard
Ca	43	1.7	173.2	-1.1721	2.274	194.0	mg/L	7	Standard
Fe	54	247.2	20.0	-0.0772	0.011	13.8	mg/L	634	Standard
Fe	57	2735.2	8.7	0.0045	0.003	63.8	mg/L	2670	Standard
Sc-1	45	346459.9	0.9				mg/L	375691	Standard
Cl	35	1292.4	2.4				ug/L	4	Standard
Kr	83	40.3	7.1				ug/L	39	Standard
Br	81	729.2	4.8				ug/L	639	Standard
P	31	128.3	11.1				ug/L	419	Standard
S	34	6203.8	1.2				ug/L	7420	Standard
Sr	88	41.7	6.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.889	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: F BLANK WG404216-02

Report Date/Time: Friday, July 27, 2012 14:13:57

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	Cd	111	
	Cd	114	
>	In	115	92.600
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.218
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG404216-02

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Method 6020 - Summary Report

Sample ID: F BLANK WG404216-03

Sample Date/Time: Friday, July 27, 2012 14:14:37

Number of Replicates: 3

Autosampler Position: 403

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10186.8	2.9	71.8114	20.485	28.5	ug/L	11199	Standard
|	Be	9	10.0	50.0	-0.0143	0.003	18.4	ug/L	10	Standard
|	Al	27	38574.1	3.7	2.0417	0.075	3.7	ug/L	7920	Standard
[>	Sc	45	345465.3	2.2				ug/L	375691	Standard
|	Ti	47	105.0	9.4	0.0235	0.008	33.1	ug/L	70	Standard
|	V	51	4450.6	25.5	0.1341	0.101	75.4	ug/L	3172	Standard
|	Cr	52	9901.6	3.2	0.0764	0.024	31.3	ug/L	9852	Standard
|	Cr	53	38504.0	7.0	25.0806	1.521	6.1	ug/L	518	Standard
|	Mn	55	2143.2	3.4	0.0511	0.006	11.4	ug/L	1193	Standard
|	Co	59	113.7	5.9	-0.0013	0.001	37.7	ug/L	98	Standard
|	Ni	60	149.0	8.2	0.0284	0.004	15.1	ug/L	67	Standard
|	Cu	65	187.3	0.8	0.0316	0.002	4.8	ug/L	90	Standard
|	Zn	66	1728.1	2.1	1.4081	0.025	1.8	ug/L	148	Standard
[>	Ge	72	292850.7	1.2				ug/L	304674	Standard
|	As	75	-226.0	21.4	-0.0038	0.041	1067.1	ug/L	-174	Standard
|	Se	82	22.8	15.0	0.0428	0.032	73.9	ug/L	26	Standard
[	Se-1	77	1468.7	0.8	16.6565	0.125	0.8	ug/L	133	Standard
[>	Ga	71	596.7	10.6				mg/L	630	Standard
|	Rb	85	36.7	28.4				ug/L	12	Standard
|	Y	89	248789.1	3.3				ug/L	271719	Standard
[>	Rh	103	360.0	7.7				ug/L	392	Standard
|	Mo	98	34.7	17.6	0.0032	0.002	46.7	ug/L	7	Standard
|	Ag	107	45.7	9.1	-0.0049	0.001	10.5	ug/L	55	Standard
|	Cd	111	33.2	14.2	-0.0100	0.001	11.0	mg/L	67	Standard
|	Cd	114	89.1	10.1	-0.0091	0.001	8.7	ug/L	219	Standard
[>	In	115	825737.5	0.6				ug/L	887392	Standard
|	Sn	118	468.3	8.3	-0.0134	0.003	19.3	ug/L	653	Standard
|	Sb	123	223.2	14.5	0.0252	0.003	12.3	ug/L	48	Standard
|	Ba	135	177.0	6.9	0.0268	0.002	9.1	ug/L	28	Standard
|	Ce	140	362.3	7.9				ug/L	34	Standard
[>	Tb	159	1106189.7	1.0				ug/L	1226141	Standard
|	Ho	165	13.3	26.3				ug/L	14	Standard
|	Tl	203	52.3	7.7	0.0018	0.000	12.1	ug/L	9	Standard
|	Tl	205	90.3	22.3	-0.0011	0.000	39.9	ug/L	20	Standard
|	Pb	206	534.3	4.8	0.0079	0.002	22.2	ug/L	419	Standard
|	Pb	207	464.3	2.0	0.0092	0.001	6.5	ug/L	338	Standard
|	Pb	208	2091.7	3.7	0.0062	0.001	21.0	ug/L	1616	Standard
	U	238	10.3	53.3	0.0006	0.000	45.4	ug/L	2	Standard
[>	Bi	209	612825.2	0.5				ug/L	641071	Standard

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Na	23	728.4	6.9	0.0035	0.004	109.9	mg/L	412	Standard
Mg	24	2511.9	4.5	0.0037	0.000	6.6	mg/L	177	Standard
K	39	145.0	6.9	-0.0067	0.011	166.4	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	264.4	2.9	-0.0732	0.001	2.0	mg/L	634	Standard
Fe	57	2808.6	1.0	0.0056	0.001	14.4	mg/L	2670	Standard
Sc-1	45	345465.3	2.2				mg/L	375691	Standard
Cl	35	1513.4	3.4				ug/L	4	Standard
Kr	83	42.4	7.9				ug/L	39	Standard
Br	81	690.0	4.7				ug/L	639	Standard
P	31	165.8	11.1				ug/L	419	Standard
S	34	6404.7	2.6				ug/L	7420	Standard
Sr	88	48.3	15.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.119	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	93.052
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.594
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG404216-03

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Method 6020 - Summary Report

Sample ID: LCSW 4A WG404283-03

Sample Date/Time: Friday, July 27, 2012 14:17:47

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

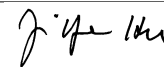
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	406416.9	5.8	-99706.2904	3747.627	3.8	ug/L	11199	Standard
|	Be	9	3165.3	2.8	1.3815	0.057	4.1	ug/L	10	Standard
|	Al	27	4936732.8	1.3	274.9799	3.873	1.4	ug/L	7920	Standard
[>	Sc	45	407361.9	2.2				ug/L	375691	Standard
[	Ti	47	37116.4	1.0	24.3256	0.155	0.6	ug/L	70	Standard
|	V	51	303585.4	2.6	23.5100	0.516	2.2	ug/L	3172	Standard
|	Cr	52	134108.8	2.6	12.0463	0.263	2.2	ug/L	9852	Standard
|	Cr	53	99359.7	6.2	56.3474	3.265	5.8	ug/L	518	Standard
|	Mn	55	224546.5	2.1	11.8964	0.245	2.1	ug/L	1193	Standard
|	Co	59	57249.6	1.1	4.7068	0.058	1.2	ug/L	98	Standard
|	Ni	60	37807.5	2.3	12.0108	0.303	2.5	ug/L	67	Standard
|	Cu	65	35307.8	2.0	12.1467	0.169	1.4	ug/L	90	Standard
|	Zn	66	33253.1	2.2	25.3500	0.501	2.0	ug/L	148	Standard
[>	Ge	72	338861.5	0.8				ug/L	304674	Standard
|	As	75	12090.9	3.5	9.3562	0.253	2.7	ug/L	-174	Standard
|	Se	82	1302.9	3.4	9.7125	0.263	2.7	ug/L	26	Standard
[	Se-1	77	3666.4	5.8	37.5981	2.040	5.4	ug/L	133	Standard
[>	Ga	71	756.7	2.8				mg/L	630	Standard
[	Rb	85	955.0	3.6				ug/L	12	Standard
[	Y	89	303545.6	1.0				ug/L	271719	Standard
[>	Rh	103	435.0	19.6				ug/L	392	Standard
[	Mo	98	110021.6	2.4	24.0580	0.380	1.6	ug/L	7	Standard
|	Ag	107	88775.4	2.3	9.8175	0.136	1.4	ug/L	55	Standard
|	Cd	111	6015.2	2.3	1.1887	0.019	1.6	mg/L	67	Standard
|	Cd	114	17289.0	1.4	1.2165	0.008	0.7	ug/L	219	Standard
[>	In	115	964513.8	1.0				ug/L	887392	Standard
|	Sn	118	767.0	6.8	-0.0001	0.003	1986.3	ug/L	653	Standard
|	Sb	123	344863.3	2.4	28.0966	0.429	1.5	ug/L	48	Standard
[	Ba	135	133497.2	0.9	23.1605	0.004	0.0	ug/L	28	Standard
[	Ce	140	119.7	7.2				ug/L	34	Standard
[>	Tb	159	1268838.8	1.3				ug/L	1226141	Standard
[	Ho	165	14.3	14.5				ug/L	14	Standard
|	Tl	203	252166.6	1.3	11.5557	0.167	1.4	ug/L	9	Standard
|	Tl	205	587882.4	1.6	12.0301	0.152	1.3	ug/L	20	Standard
|	Pb	206	189450.5	2.5	11.2820	0.254	2.3	ug/L	419	Standard
|	Pb	207	171894.3	2.3	12.1933	0.254	2.1	ug/L	338	Standard
|	Pb	208	766846.8	1.7	11.7927	0.177	1.5	ug/L	1616	Standard
	U	238	6.7	82.6	0.0004	0.000	63.4	ug/L	2	Standard
[>	Bi	209	670484.9	0.5				ug/L	641071	Standard

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Na	23	69165.9	3.1	3.3586	0.146	4.4	mg/L	412	Standard
Mg	24	185941.7	3.7	0.2334	0.005	2.0	mg/L	177	Standard
K	39	1963.5	7.5	1.2823	0.077	6.0	mg/L	150	Standard
Ca	43	5.0	100.0	0.9403	3.472	369.2	mg/L	7	Standard
Fe	54	1221.0	1.4	0.0947	0.006	6.5	mg/L	634	Standard
Fe	57	11769.6	1.6	0.0947	0.002	1.8	mg/L	2670	Standard
Sc-1	45	407361.9	2.2				mg/L	375691	Standard
Cl	35	2871.3	2.8				ug/L	4	Standard
Kr	83	43.9	15.4				ug/L	39	Standard
Br	81	809.2	2.6				ug/L	639	Standard
P	31	469.2	6.2				ug/L	419	Standard
S	34	7070.0	2.7				ug/L	7420	Standard
Sr	88	108.3	9.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.221	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 4A WG404283-03

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	Cd	111	
	Cd	114	
>	In	115	108.691
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.588
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 4A WG404283-03

Report Date/Time: Friday, July 27, 2012 14:20:19

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Method 6020 - Summary Report

Sample ID: L1207066621 WG404283-01

Sample Date/Time: Friday, July 27, 2012 14:20:58

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9653.1	1.0	40.0905	46.338	115.6	ug/L	11199	Standard
|	Be	9	5.0	100.0	-0.0168	0.003	16.4	ug/L	10	Standard
|	Al	27	17860.5	3.0	0.7566	0.030	3.9	ug/L	7920	Standard
[>	Sc	45	324050.7	1.3				ug/L	375691	Standard
[	Ti	47	94.3	22.9	0.0175	0.017	97.6	ug/L	70	Standard
|	V	51	4122.0	4.2	0.1158	0.019	16.3	ug/L	3172	Standard
|	Cr	52	8176.2	1.9	-0.0906	0.011	12.1	ug/L	9852	Standard
|	Cr	53	15859.1	5.0	10.4587	0.582	5.6	ug/L	518	Standard
|	Mn	55	3539.4	3.6	0.1438	0.006	4.3	ug/L	1193	Standard
|	Co	59	113.0	8.7	-0.0011	0.001	99.0	ug/L	98	Standard
|	Ni	60	135.0	13.7	0.0247	0.007	26.8	ug/L	67	Standard
|	Cu	65	83.0	3.2	-0.0091	0.001	11.1	ug/L	90	Standard
|	Zn	66	1699.8	1.8	1.4284	0.042	2.9	ug/L	148	Standard
[>	Ge	72	284326.4	0.9				ug/L	304674	Standard
|	As	75	-218.7	17.4	-0.0036	0.036	1004.8	ug/L	-174	Standard
|	Se	82	17.7	14.6	0.0029	0.024	821.2	ug/L	26	Standard
[	Se-1	77	652.7	6.8	6.8425	0.619	9.0	ug/L	133	Standard
[>	Ga	71	620.0	0.8				mg/L	630	Standard
[	Rb	85	130.0	23.4				ug/L	12	Standard
[	Y	89	245251.0	1.8				ug/L	271719	Standard
[>	Rh	103	381.7	6.6				ug/L	392	Standard
[	Mo	98	100.8	23.6	0.0210	0.006	30.1	ug/L	7	Standard
|	Ag	107	54.0	17.7	-0.0035	0.001	35.9	ug/L	55	Standard
|	Cd	111	26.8	21.0	-0.0113	0.001	12.0	mg/L	67	Standard
|	Cd	114	85.3	2.1	-0.0091	0.000	1.8	ug/L	219	Standard
[>	In	115	798445.1	0.1				ug/L	887392	Standard
|	Sn	118	410.3	3.7	-0.0164	0.001	6.9	ug/L	653	Standard
|	Sb	123	147.7	12.9	0.0185	0.002	10.2	ug/L	48	Standard
[	Ba	135	5310.6	1.1	1.1043	0.011	1.0	ug/L	28	Standard
[	Ce	140	383.3	10.7				ug/L	34	Standard
[>	Tb	159	1092503.7	0.7				ug/L	1226141	Standard
[	Ho	165	22.7	9.2				ug/L	14	Standard
|	Tl	203	103.0	26.2	0.0045	0.001	33.3	ug/L	9	Standard
|	Tl	205	244.3	20.1	0.0025	0.001	48.9	ug/L	20	Standard
|	Pb	206	510.3	1.3	0.0073	0.000	2.6	ug/L	419	Standard
|	Pb	207	441.3	1.2	0.0084	0.000	5.4	ug/L	338	Standard
|	Pb	208	2074.7	0.6	0.0069	0.001	10.0	ug/L	1616	Standard
	U	238	51.3	4.1	0.0029	0.000	2.4	ug/L	2	Standard
[>	Bi	209	595344.5	1.6				ug/L	641071	Standard

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Na	23	90960.6	0.7	5.5757	0.070	1.2	mg/L	412	Standard
Mg	24	12323.3	1.7	0.0195	0.000	2.5	mg/L	177	Standard
K	39	133.3	4.3	-0.0093	0.004	45.2	mg/L	150	Standard
Ca	43	3.3	173.2	0.3389	4.891	1443.3	mg/L	7	Standard
Fe	54	203.0	7.8	-0.0837	0.003	3.7	mg/L	634	Standard
Fe	57	2438.5	3.0	0.0029	0.001	28.4	mg/L	2670	Standard
Sc-1	45	324050.7	1.3				mg/L	375691	Standard
Cl	35	517.0	8.0				ug/L	4	Standard
Kr	83	43.1	4.5				ug/L	39	Standard
Br	81	598.3	9.2				ug/L	639	Standard
P	31	153.3	9.0				ug/L	419	Standard
S	34	6020.4	2.2				ug/L	7420	Standard
Sr	88	45.0	48.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.321	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L120706621 WG404283-01

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	Cd	111	
	Cd	114	
>	In	115	89.977
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.867
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L120706621 WG404283-01

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Method 6020 - Summary Report

Sample ID: L1207066621S WG404283-04

Sample Date/Time: Friday, July 27, 2012 14:24:08

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	134637.6	3.3	-38712.2558	1590.611	4.1	ug/L	11199	Standard
|	Be	9	1096.7	8.5	0.5757	0.049	8.5	ug/L	10	Standard
|	Al	27	1503015.7	5.2	102.4102	5.529	5.4	ug/L	7920	Standard
[>	Sc	45	331979.4	1.0				ug/L	375691	Standard
[	Ti	47	12442.1	3.6	9.5958	0.217	2.3	ug/L	70	Standard
|	V	51	107185.0	2.3	9.6471	0.098	1.0	ug/L	3172	Standard
|	Cr	52	49935.5	2.7	4.7143	0.073	1.5	ug/L	9852	Standard
|	Cr	53	36118.9	5.5	24.0027	1.021	4.3	ug/L	518	Standard
|	Mn	55	81514.4	2.3	5.0540	0.032	0.6	ug/L	1193	Standard
|	Co	59	20795.6	1.0	2.0126	0.019	0.9	ug/L	98	Standard
|	Ni	60	13214.1	4.1	4.9411	0.127	2.6	ug/L	67	Standard
|	Cu	65	12862.8	5.2	5.2002	0.189	3.6	ug/L	90	Standard
|	Zn	66	15322.7	2.5	13.7400	0.222	1.6	ug/L	148	Standard
[>	Ge	72	286898.6	1.7				ug/L	304674	Standard
|	As	75	4899.6	3.8	4.5792	0.114	2.5	ug/L	-174	Standard
|	Se	82	629.5	0.9	5.4761	0.046	0.8	ug/L	26	Standard
[	Se-1	77	1539.1	5.7	17.9073	0.788	4.4	ug/L	133	Standard
[>	Ga	71	590.0	0.8				mg/L	630	Standard
[	Rb	85	440.0	21.9				ug/L	12	Standard
[	Y	89	242927.3	1.7				ug/L	271719	Standard
[>	Rh	103	331.7	3.8				ug/L	392	Standard
[	Mo	98	37701.9	2.3	9.7664	0.176	1.8	ug/L	7	Standard
|	Ag	107	31586.2	2.6	4.1328	0.041	1.0	ug/L	55	Standard
|	Cd	111	2388.1	2.5	0.5498	0.006	1.1	mg/L	67	Standard
|	Cd	114	6785.4	2.5	0.5569	0.010	1.8	ug/L	219	Standard
[>	In	115	813971.3	1.6				ug/L	887392	Standard
|	Sn	118	465.7	6.3	-0.0131	0.002	11.9	ug/L	653	Standard
|	Sb	123	133430.0	3.1	12.8826	0.195	1.5	ug/L	48	Standard
[	Ba	135	54721.7	2.8	11.2437	0.170	1.5	ug/L	28	Standard
[	Ce	140	440.0	1.3				ug/L	34	Standard
[>	Tb	159	1098745.8	0.7				ug/L	1226141	Standard
[	Ho	165	30.0	8.8				ug/L	14	Standard
[	Tl	203	94197.4	2.6	4.8358	0.085	1.7	ug/L	9	Standard
|	Tl	205	219191.0	2.4	5.0239	0.079	1.6	ug/L	20	Standard
|	Pb	206	71546.0	3.1	4.7581	0.111	2.3	ug/L	419	Standard
|	Pb	207	64087.6	1.6	5.0783	0.040	0.8	ug/L	338	Standard
|	Pb	208	287777.3	2.5	4.9416	0.085	1.7	ug/L	1616	Standard
	U	238	66.0	25.0	0.0036	0.001	23.9	ug/L	2	Standard
[>	Bi	209	598365.5	0.9				ug/L	641071	Standard

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Na	23	101767.5	2.7	6.0925	0.174	2.9	mg/L	412	Standard
Mg	24	79911.9	2.5	0.1231	0.004	2.9	mg/L	177	Standard
K	39	736.7	6.7	0.5210	0.050	9.5	mg/L	150	Standard
Ca	43	3.3	86.6	0.2726	2.388	876.2	mg/L	7	Standard
Fe	54	377.3	10.2	-0.0454	0.008	18.0	mg/L	634	Standard
Fe	57	5467.7	10.4	0.0414	0.007	18.1	mg/L	2670	Standard
Sc-1	45	331979.4	1.0				mg/L	375691	Standard
Cl	35	1071.7	2.0				ug/L	4	Standard
Kr	83	42.0	10.7				ug/L	39	Standard
Br	81	630.0	2.2				ug/L	639	Standard
P	31	151.7	6.9				ug/L	419	Standard
S	34	6020.4	0.9				ug/L	7420	Standard
Sr	88	66.7	17.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.166	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207066621S WG404283-04

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	Cd	111		
	Cd	114		
>	In	115	91.726	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	93.338	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L120706621S WG404283-04

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Method 6020 - Summary Report

Sample ID: L1207066621SD WG404283-05

Sample Date/Time: Friday, July 27, 2012 14:27:18

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

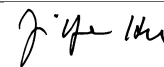
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	130286.4	2.7	-37148.2554	475.373	1.3	ug/L	11199	Standard
|	Be	9	1158.4	5.0	0.6067	0.043	7.1	ug/L	10	Standard
|	Al	27	1459336.2	0.6	98.9297	1.694	1.7	ug/L	7920	Standard
[>	Sc	45	333658.1	2.1				ug/L	375691	Standard
[	Ti	47	11928.0	0.4	9.1997	0.124	1.3	ug/L	70	Standard
|	V	51	103336.5	1.8	9.2942	0.293	3.2	ug/L	3172	Standard
|	Cr	52	48823.2	1.7	4.5878	0.152	3.3	ug/L	9852	Standard
|	Cr	53	36259.2	2.4	24.1092	0.699	2.9	ug/L	518	Standard
|	Mn	55	78374.9	0.7	4.8574	0.089	1.8	ug/L	1193	Standard
|	Co	59	19525.9	1.1	1.8890	0.026	1.4	ug/L	98	Standard
|	Ni	60	13029.6	1.0	4.8740	0.106	2.2	ug/L	67	Standard
|	Cu	65	12037.1	1.6	4.8661	0.097	2.0	ug/L	90	Standard
|	Zn	66	14983.1	1.6	13.4356	0.332	2.5	ug/L	148	Standard
[>	Ge	72	286904.4	1.8				ug/L	304674	Standard
|	As	75	4604.8	1.6	4.3172	0.121	2.8	ug/L	-174	Standard
|	Se	82	589.9	2.4	5.1241	0.216	4.2	ug/L	26	Standard
[	Se-1	77	1535.4	4.8	17.8821	1.218	6.8	ug/L	133	Standard
[>	Ga	71	646.7	4.5				mg/L	630	Standard
[	Rb	85	431.7	7.7				ug/L	12	Standard
[	Y	89	243826.3	0.9				ug/L	271719	Standard
[>	Rh	103	353.3	12.7				ug/L	392	Standard
[	Mo	98	36950.4	2.3	9.6253	0.405	4.2	ug/L	7	Standard
|	Ag	107	30108.6	2.0	3.9614	0.156	3.9	ug/L	55	Standard
|	Cd	111	2263.8	2.1	0.5233	0.020	3.8	mg/L	67	Standard
|	Cd	114	6625.1	1.3	0.5465	0.018	3.3	ug/L	219	Standard
[>	In	115	809861.6	1.9				ug/L	887392	Standard
|	Sn	118	422.7	3.6	-0.0160	0.002	10.3	ug/L	653	Standard
|	Sb	123	128603.7	1.9	12.4877	0.475	3.8	ug/L	48	Standard
[	Ba	135	52343.0	2.2	10.8160	0.442	4.1	ug/L	28	Standard
[	Ce	140	406.0	6.9				ug/L	34	Standard
[>	Tb	159	1081364.5	1.3				ug/L	1226141	Standard
[	Ho	165	23.0	19.0				ug/L	14	Standard
|	Tl	203	90559.9	1.3	4.7079	0.101	2.1	ug/L	9	Standard
|	Tl	205	210846.1	1.3	4.8936	0.104	2.1	ug/L	20	Standard
|	Pb	206	68411.4	1.4	4.6063	0.083	1.8	ug/L	419	Standard
|	Pb	207	61893.5	1.8	4.9654	0.107	2.2	ug/L	338	Standard
|	Pb	208	277465.6	1.3	4.8241	0.103	2.1	ug/L	1616	Standard
	U	238	62.3	5.6	0.0035	0.000	4.5	ug/L	2	Standard
[>	Bi	209	591021.0	1.0				ug/L	641071	Standard

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Na	23	100311.0	1.5	5.9748	0.083	1.4	mg/L	412	Standard
Mg	24	74740.7	2.9	0.1146	0.003	2.7	mg/L	177	Standard
K	39	721.7	2.4	0.5044	0.021	4.2	mg/L	150	Standard
Ca	43	3.3	86.6	0.2525	2.372	939.3	mg/L	7	Standard
Fe	54	392.7	2.7	-0.0422	0.004	9.7	mg/L	634	Standard
Fe	57	5412.6	6.7	0.0403	0.005	13.2	mg/L	2670	Standard
Sc-1	45	333658.1	2.1				mg/L	375691	Standard
Cl	35	1029.0	6.7				ug/L	4	Standard
Kr	83	38.7	7.1				ug/L	39	Standard
Br	81	614.2	8.0				ug/L	639	Standard
P	31	140.8	2.0				ug/L	419	Standard
S	34	6209.6	3.0				ug/L	7420	Standard
Sr	88	58.3	47.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.168	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207066621SD WG404283-05

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	Cd	111	
	Cd	114	
>	In	115	91.263
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.193
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L120706621SD WG404283-05

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Method 6020 - Summary Report

Sample ID: L1207061801

Sample Date/Time: Friday, July 27, 2012 14:30:28

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

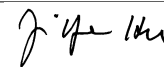
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	33149.6	2.1	-7383.0074	235.542	3.2	ug/L	11199	Standard
|	Be	9	6.7	43.3	-0.0159	0.002	10.2	ug/L	10	Standard
|	Al	27	4004439.4	2.9	278.9046	6.372	2.3	ug/L	7920	Standard
[>	Sc	45	325714.1	1.3				ug/L	375691	Standard
|	Ti	47	78.7	2.6	0.0068	0.001	14.8	ug/L	70	Standard
|	V	51	3757.5	0.8	0.0906	0.005	5.9	ug/L	3172	Standard
|	Cr	52	8280.9	1.4	-0.0541	0.009	16.0	ug/L	9852	Standard
|	Cr	53	11300.0	2.7	7.5499	0.127	1.7	ug/L	518	Standard
|	Mn	55	4191.6	1.3	0.1920	0.006	3.4	ug/L	1193	Standard
|	Co	59	149.0	18.0	0.0028	0.003	92.8	ug/L	98	Standard
|	Ni	60	298.0	1.2	0.0894	0.002	2.0	ug/L	67	Standard
|	Cu	65	203.0	3.6	0.0424	0.004	9.1	ug/L	90	Standard
|	Zn	66	1241.7	0.8	1.0386	0.015	1.4	ug/L	148	Standard
[>	Ge	72	277339.8	1.1				ug/L	304674	Standard
|	As	75	-241.8	32.9	-0.0299	0.074	249.1	ug/L	-174	Standard
|	Se	82	202.0	4.3	1.7123	0.064	3.7	ug/L	26	Standard
[	Se-1	77	784.0	4.1	8.7555	0.311	3.6	ug/L	133	Standard
[>	Ga	71	1046.7	2.7				mg/L	630	Standard
|	Rb	85	20268.6	3.4				ug/L	12	Standard
|	Y	89	238491.7	2.9				ug/L	271719	Standard
[>	Rh	103	353.3	10.0				ug/L	392	Standard
|	Mo	98	574.2	15.5	0.1485	0.025	17.1	ug/L	7	Standard
|	Ag	107	49.7	18.7	-0.0040	0.001	33.0	ug/L	55	Standard
|	Cd	111	22.0	40.9	-0.0124	0.002	18.1	mg/L	67	Standard
|	Cd	114	90.0	18.0	-0.0086	0.001	15.7	ug/L	219	Standard
[>	In	115	787029.7	1.0				ug/L	887392	Standard
|	Sn	118	408.3	9.5	-0.0161	0.003	18.4	ug/L	653	Standard
|	Sb	123	139.0	34.5	0.0179	0.005	27.2	ug/L	48	Standard
|	Ba	135	16976.2	2.9	3.6027	0.139	3.9	ug/L	28	Standard
|	Ce	140	497.0	5.7				ug/L	34	Standard
[>	Tb	159	1082288.2	0.5				ug/L	1226141	Standard
|	Ho	165	14.3	28.2				ug/L	14	Standard
|	Tl	203	279.0	7.2	0.0133	0.001	7.9	ug/L	9	Standard
|	Tl	205	581.7	3.4	0.0101	0.001	5.6	ug/L	20	Standard
|	Pb	206	756.4	5.5	0.0232	0.003	13.4	ug/L	419	Standard
|	Pb	207	640.3	7.5	0.0237	0.004	17.1	ug/L	338	Standard
|	Pb	208	2973.4	3.9	0.0219	0.002	11.0	ug/L	1616	Standard
	U	238	6.3	39.7	0.0004	0.000	31.5	ug/L	2	Standard
[>	Bi	209	603324.4	0.9				ug/L	641071	Standard

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Na	23	127679.1	0.8	7.8024	0.153	2.0	mg/L	412	Standard
Mg	24	2210.2	10.8	0.0035	0.000	9.4	mg/L	177	Standard
K	39	7628.6	2.4	6.7387	0.213	3.2	mg/L	150	Standard
Ca	43	11.7	137.8	7.4664	13.715	183.7	mg/L	7	Standard
Fe	54	294.2	8.3	-0.0629	0.006	9.2	mg/L	634	Standard
Fe	57	3728.8	2.0	0.0198	0.001	5.9	mg/L	2670	Standard
Sc-1	45	325714.1	1.3				mg/L	375691	Standard
Cl	35	602.0	1.5				ug/L	4	Standard
Kr	83	38.6	13.0				ug/L	39	Standard
Br	81	685.8	5.8				ug/L	639	Standard
P	31	146.7	18.2				ug/L	419	Standard
S	34	6303.8	2.6				ug/L	7420	Standard
Sr	88	46.7	16.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.028	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207061801

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	Cd	111		
	Cd	114		
>	In	115	88.690	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.112	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207061801

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Method 6020 - Summary Report

Sample ID: L1207061801PS WG404752-01

Sample Date/Time: Friday, July 27, 2012 14:33:37

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35531.6	2.2	-6328.9259	202.590	3.2	ug/L	11199	Standard
|	Be	9	89225.3	0.8	41.4194	0.474	1.1	ug/L	10	Standard
|	Al	27	4702281.3	0.4	274.8972	0.419	0.2	ug/L	7920	Standard
[>	Sc	45	388063.5	0.5				ug/L	375691	Standard
|	Ti	47	108.0	13.6	0.0188	0.010	54.6	ug/L	70	Standard
|	V	51	467436.9	1.0	38.4825	0.384	1.0	ug/L	3172	Standard
|	Cr	52	386918.0	0.2	38.9249	0.095	0.2	ug/L	9852	Standard
|	Cr	53	79096.8	1.6	47.4294	0.786	1.7	ug/L	518	Standard
|	Mn	55	699592.2	1.2	39.4131	0.489	1.2	ug/L	1193	Standard
|	Co	59	443247.2	0.7	38.6549	0.280	0.7	ug/L	98	Standard
|	Ni	60	118481.5	0.5	39.8951	0.223	0.6	ug/L	67	Standard
|	Cu	65	110713.0	0.6	40.4125	0.222	0.5	ug/L	90	Standard
|	Zn	66	51444.9	1.2	41.5857	0.508	1.2	ug/L	148	Standard
[>	Ge	72	320178.6	0.0				ug/L	304674	Standard
|	As	75	49351.4	0.3	39.7782	0.118	0.3	ug/L	-174	Standard
|	Se	82	5150.6	0.7	41.1397	0.277	0.7	ug/L	26	Standard
[	Se-1	77	4320.9	1.8	47.2616	0.891	1.9	ug/L	133	Standard
[>	Ga	71	1291.7	5.8				mg/L	630	Standard
|	Rb	85	20038.2	2.7				ug/L	12	Standard
|	Y	89	281189.6	2.5				ug/L	271719	Standard
[>	Rh	103	435.0	3.0				ug/L	392	Standard
|	Mo	98	520.7	7.0	0.1161	0.008	6.6	ug/L	7	Standard
|	Ag	107	324732.6	1.1	38.4298	0.207	0.5	ug/L	55	Standard
|	Cd	111	189085.3	0.5	40.5363	0.210	0.5	mg/L	67	Standard
|	Cd	114	524578.1	1.6	39.9841	0.539	1.3	ug/L	219	Standard
[>	In	115	902100.4	0.7				ug/L	887392	Standard
|	Sn	118	881.7	7.3	0.0104	0.004	36.0	ug/L	653	Standard
|	Sb	123	453514.6	0.5	39.5070	0.134	0.3	ug/L	48	Standard
|	Ba	135	226537.7	0.7	42.0294	0.266	0.6	ug/L	28	Standard
|	Ce	140	542.7	3.7				ug/L	34	Standard
[>	Tb	159	1190525.2	0.9				ug/L	1226141	Standard
|	Ho	165	20.0	15.0				ug/L	14	Standard
|	Tl	203	790903.6	0.5	36.8350	0.210	0.6	ug/L	9	Standard
|	Tl	205	1858660.5	0.5	38.6626	0.349	0.9	ug/L	20	Standard
|	Pb	206	619402.5	0.9	37.5518	0.495	1.3	ug/L	419	Standard
|	Pb	207	530207.6	0.9	38.2825	0.498	1.3	ug/L	338	Standard
|	Pb	208	2450387.5	0.8	38.3628	0.454	1.2	ug/L	1616	Standard
|	U	238	767178.4	0.2	37.4937	0.088	0.2	ug/L	2	Standard
[>	Bi	209	659745.1	0.4				ug/L	641071	Standard

Sample ID: L1207061801PS WG404752-01

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Na	23	125931.2	0.9	6.4515	0.053	0.8	mg/L	412	Standard
Mg	24	2460.2	6.4	0.0033	0.000	6.1	mg/L	177	Standard
K	39	6976.6	3.6	5.1415	0.189	3.7	mg/L	150	Standard
Ca	43	6.7	114.6	2.2592	5.433	240.5	mg/L	7	Standard
Fe	54	693.2	8.8	0.0035	0.011	325.5	mg/L	634	Standard
Fe	57	4894.1	1.4	0.0248	0.001	4.1	mg/L	2670	Standard
Sc-1	45	388063.5	0.5				mg/L	375691	Standard
Cl	35	531.0	4.8				ug/L	4	Standard
Kr	83	45.2	6.7				ug/L	39	Standard
Br	81	907.5	13.3				ug/L	639	Standard
P	31	456.7	5.7				ug/L	419	Standard
S	34	7025.8	2.3				ug/L	7420	Standard
Sr	88	58.3	27.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.089	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207061801PS WG404752-01

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	Cd	111	
	Cd	114	
>	In	115	101.657
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	102.913
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207061801SDL WG404752-02

Sample Date/Time: Friday, July 27, 2012 14:36:45

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 250

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13049.0	5.4	-1137.0823	184.771	16.2	ug/L	11199	Standard
|	Be	9	6.7	43.3	-0.0157	0.002	10.8	ug/L	10	Standard
|	Al	27	610667.5	1.2	43.3462	0.089	0.2	ug/L	7920	Standard
[>	Sc	45	316561.4	1.1				ug/L	375691	Standard
|	Ti	47	60.3	5.1	-0.0077	0.002	31.7	ug/L	70	Standard
|	V	51	3237.2	2.5	0.0424	0.009	22.1	ug/L	3172	Standard
|	Cr	52	8048.8	2.3	-0.0769	0.017	22.6	ug/L	9852	Standard
|	Cr	53	4706.6	2.0	2.9719	0.048	1.6	ug/L	518	Standard
|	Mn	55	2796.9	9.6	0.1020	0.017	16.3	ug/L	1193	Standard
|	Co	59	215.3	62.9	0.0096	0.014	141.5	ug/L	98	Standard
|	Ni	60	278.3	7.8	0.0823	0.008	9.6	ug/L	67	Standard
|	Cu	65	208.7	19.0	0.0452	0.016	35.9	ug/L	90	Standard
|	Zn	66	2820.3	2.2	2.5296	0.043	1.7	ug/L	148	Standard
[>	Ge	72	275911.2	0.6				ug/L	304674	Standard
|	As	75	-199.5	4.3	0.0085	0.007	80.7	ug/L	-174	Standard
|	Se	82	54.4	6.1	0.3496	0.028	8.1	ug/L	26	Standard
[	Se-1	77	259.0	5.4	1.9432	0.193	9.9	ug/L	133	Standard
[>	Ga	71	630.0	2.4				mg/L	630	Standard
|	Rb	85	3248.7	5.9				ug/L	12	Standard
|	Y	89	234474.7	2.9				ug/L	271719	Standard
[>	Rh	103	353.3	8.3				ug/L	392	Standard
|	Mo	98	98.9	24.1	0.0216	0.007	30.5	ug/L	7	Standard
|	Ag	107	85.7	14.7	0.0012	0.002	144.6	ug/L	55	Standard
|	Cd	111	30.8	27.9	-0.0100	0.002	21.2	mg/L	67	Standard
|	Cd	114	101.3	22.0	-0.0074	0.002	26.2	ug/L	219	Standard
[>	In	115	766146.4	0.8				ug/L	887392	Standard
|	Sn	118	399.0	0.7	-0.0160	0.000	0.7	ug/L	653	Standard
|	Sb	123	1177.7	8.1	0.1248	0.009	7.3	ug/L	48	Standard
|	Ba	135	2830.9	1.6	0.6095	0.007	1.1	ug/L	28	Standard
|	Ce	140	106.3	4.2				ug/L	34	Standard
[>	Tb	159	1056846.4	0.1				ug/L	1226141	Standard
|	Ho	165	12.3	40.0				ug/L	14	Standard
|	Tl	203	660.7	89.9	0.0336	0.031	91.4	ug/L	9	Standard
|	Tl	205	1470.4	83.3	0.0311	0.028	90.8	ug/L	20	Standard
|	Pb	206	826.4	46.4	0.0293	0.026	87.6	ug/L	419	Standard
|	Pb	207	660.3	47.2	0.0266	0.025	93.2	ug/L	338	Standard
|	Pb	208	3111.8	43.4	0.0256	0.023	90.8	ug/L	1616	Standard
	U	238	116.0	111.5	0.0064	0.007	109.1	ug/L	2	Standard
[>	Bi	209	586340.1	1.5				ug/L	641071	Standard

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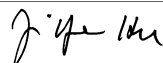
Na	23	59080.0	2.8	3.6934	0.066	1.8	mg/L	412	Standard
Mg	24	561.7	10.6	0.0009	0.000	9.5	mg/L	177	Standard
K	39	1296.7	3.5	1.0713	0.048	4.4	mg/L	150	Standard
Ca	43	3.3	86.6	0.3981	2.497	627.2	mg/L	7	Standard
Fe	54	192.5	13.3	-0.0851	0.006	6.6	mg/L	634	Standard
Fe	57	2456.9	6.3	0.0039	0.002	44.1	mg/L	2670	Standard
Sc-1	45	316561.4	1.1				mg/L	375691	Standard
Cl	35	109.3	4.6				ug/L	4	Standard
Kr	83	35.0	13.8				ug/L	39	Standard
Br	81	507.5	9.9				ug/L	639	Standard
P	31	110.0	12.0				ug/L	419	Standard
S	34	6356.3	2.4				ug/L	7420	Standard
Sr	88	40.0	45.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.559	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207061801SDL WG404752-02
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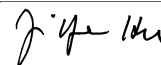
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	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.463
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 14:39:57

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10818.9	4.9	175.3471	149.694	85.4	ug/L	11199	Standard
|	Be	9	101795.8	0.9	48.2748	0.825	1.7	ug/L	10	Standard
|	Al	27	800034.3	0.8	47.3672	0.681	1.4	ug/L	7920	Standard
[>	Sc	45	379921.3	1.2				ug/L	375691	Standard
|	Ti	47	136226.4	1.5	95.2656	1.648	1.7	ug/L	70	Standard
|	V	51	554539.3	0.5	45.9999	0.264	0.6	ug/L	3172	Standard
|	Cr	52	456829.6	0.1	46.4506	0.137	0.3	ug/L	9852	Standard
|	Cr	53	78609.3	2.0	47.4402	0.914	1.9	ug/L	518	Standard
|	Mn	55	812631.5	0.9	46.0895	0.325	0.7	ug/L	1193	Standard
|	Co	59	518283.7	0.2	45.4921	0.082	0.2	ug/L	98	Standard
|	Ni	60	139021.9	0.5	47.1176	0.151	0.3	ug/L	67	Standard
|	Cu	65	129136.0	1.1	47.4479	0.390	0.8	ug/L	90	Standard
|	Zn	66	59723.2	1.1	48.6083	0.396	0.8	ug/L	148	Standard
[>	Ge	72	318129.8	0.3				ug/L	304674	Standard
|	As	75	58412.6	0.3	47.3486	0.304	0.6	ug/L	-174	Standard
|	Se	82	5888.8	1.0	47.3620	0.479	1.0	ug/L	26	Standard
[	Se-1	77	4380.3	1.6	48.2504	0.941	1.9	ug/L	133	Standard
[>	Ga	71	681.7	7.3				mg/L	630	Standard
|	Rb	85	848.4	6.0				ug/L	12	Standard
|	Y	89	278606.9	1.6				ug/L	271719	Standard
[>	Rh	103	470.0	19.9				ug/L	392	Standard
|	Mo	98	403733.6	0.3	98.3590	0.929	0.9	ug/L	7	Standard
|	Ag	107	385284.7	0.8	47.5042	0.615	1.3	ug/L	55	Standard
|	Cd	111	211030.2	0.5	47.1333	0.500	1.1	mg/L	67	Standard
|	Cd	114	604674.2	1.0	48.0186	0.656	1.4	ug/L	219	Standard
[>	In	115	865955.6	0.6				ug/L	887392	Standard
|	Sn	118	714393.7	0.9	47.8177	0.714	1.5	ug/L	653	Standard
|	Sb	123	522674.1	1.2	47.4342	0.863	1.8	ug/L	48	Standard
|	Ba	135	260102.2	1.4	50.2751	0.932	1.9	ug/L	28	Standard
|	Ce	140	944.7	0.9				ug/L	34	Standard
[>	Tb	159	1174771.6	0.6				ug/L	1226141	Standard
|	Ho	165	15.3	33.5				ug/L	14	Standard
|	Tl	203	925387.1	0.3	46.2798	0.182	0.4	ug/L	9	Standard
|	Tl	205	2167830.3	0.5	48.4226	0.290	0.6	ug/L	20	Standard
|	Pb	206	721228.8	0.4	46.9582	0.211	0.4	ug/L	419	Standard
|	Pb	207	609493.0	0.4	47.2605	0.142	0.3	ug/L	338	Standard
|	Pb	208	2833527.3	0.3	47.6417	0.149	0.3	ug/L	1616	Standard
	U	238	889949.6	0.4	46.7054	0.425	0.9	ug/L	2	Standard
[>	Bi	209	614394.2	0.5				ug/L	641071	Standard

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Na	23	114166.9	1.5	5.9721	0.137	2.3	mg/L	412	Standard
Mg	24	3616325.0	0.7	4.8682	0.073	1.5	mg/L	177	Standard
K	39	6179.6	7.8	4.6375	0.328	7.1	mg/L	150	Standard
Ca	43	10.0	50.0	4.7944	3.700	77.2	mg/L	7	Standard
Fe	54	25542.4	1.8	4.9259	0.109	2.2	mg/L	634	Standard
Fe	57	457170.4	1.3	5.1392	0.024	0.5	mg/L	2670	Standard
Sc-1	45	379921.3	1.2				mg/L	375691	Standard
Cl	35	7.0	62.3				ug/L	4	Standard
Kr	83	39.9	5.6				ug/L	39	Standard
Br	81	771.7	8.3				ug/L	639	Standard
P	31	491.7	9.2				ug/L	419	Standard
S	34	6860.7	1.5				ug/L	7420	Standard
Sr	88	35.0	14.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	94.734		
Sc	45			
Ti	47	95.266		
V	51	92.000		
Cr	52	92.901		
Cr	53			
Mn	55	92.179		
Co	59	90.984		
Ni	60	94.235		
Cu	65	94.896		
Zn	66	97.217		
Ge	72		104.416	
As	75	94.697		
Se	82	94.724		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	98.359		
Ag	107	95.008		

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	Cd	111	94.267	
	Cd	114		
>	In	115		97.584
	Sn	118	95.635	
	Sb	123	94.868	
	Ba	135	100.550	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.560	
|	Tl	205		
|	Pb	206	93.916	
|	Pb	207	94.521	
|	Pb	208	95.283	
|	U	238	93.411	
>	Bi	209		95.839
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 14:43:07

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10775.5	3.8	149.5245	133.563	89.3	ug/L	11199	Standard
|	Be	9	40.0	57.3	-0.0004	0.011	2674.9	ug/L	10	Standard
|	Al	27	9401.4	25.2	0.0730	0.139	190.4	ug/L	7920	Standard
[>	Sc	45	375142.7	1.0				ug/L	375691	Standard
|	Ti	47	92.3	38.4	0.0083	0.025	301.5	ug/L	70	Standard
|	V	51	3184.3	16.5	-0.0035	0.044	1251.7	ug/L	3172	Standard
|	Cr	52	9124.1	6.5	-0.0935	0.064	68.2	ug/L	9852	Standard
|	Cr	53	1071.7	12.3	0.3258	0.085	26.0	ug/L	518	Standard
|	Mn	55	1313.7	11.8	-0.0066	0.009	139.4	ug/L	1193	Standard
|	Co	59	296.7	92.8	0.0139	0.024	174.4	ug/L	98	Standard
|	Ni	60	103.3	45.8	0.0086	0.016	188.8	ug/L	67	Standard
|	Cu	65	146.3	26.7	0.0106	0.014	136.4	ug/L	90	Standard
|	Zn	66	1699.4	1.4	1.2622	0.008	0.6	ug/L	148	Standard
[>	Ge	72	318311.0	0.8				ug/L	304674	Standard
|	As	75	-194.2	13.6	0.0374	0.022	58.9	ug/L	-174	Standard
|	Se	82	24.2	13.1	0.0381	0.027	70.6	ug/L	26	Standard
[	Se-1	77	150.3	9.1	0.2603	0.168	64.4	ug/L	133	Standard
[>	Ga	71	658.3	1.2				mg/L	630	Standard
|	Rb	85	15.0	57.7				ug/L	12	Standard
|	Y	89	277371.8	2.4				ug/L	271719	Standard
[>	Rh	103	373.3	9.7				ug/L	392	Standard
|	Mo	98	336.1	11.0	0.0754	0.009	11.5	ug/L	7	Standard
|	Ag	107	137.0	8.6	0.0059	0.001	22.8	ug/L	55	Standard
|	Cd	111	98.5	10.9	0.0040	0.002	56.7	mg/L	67	Standard
|	Cd	114	274.2	20.1	0.0051	0.004	84.7	ug/L	219	Standard
[>	In	115	874856.7	0.6				ug/L	887392	Standard
|	Sn	118	937.0	2.9	0.0159	0.002	9.8	ug/L	653	Standard
|	Sb	123	2477.0	6.2	0.2265	0.013	5.9	ug/L	48	Standard
|	Ba	135	55.0	23.2	0.0015	0.002	164.2	ug/L	28	Standard
|	Ce	140	24.0	4.2				ug/L	34	Standard
[>	Tb	159	1159005.4	0.0				ug/L	1226141	Standard
|	Ho	165	12.7	9.1				ug/L	14	Standard
|	Tl	203	192.3	16.1	0.0085	0.002	17.7	ug/L	9	Standard
|	Tl	205	429.7	15.9	0.0062	0.001	23.8	ug/L	20	Standard
|	Pb	206	464.7	3.0	0.0025	0.001	31.6	ug/L	419	Standard
|	Pb	207	397.7	5.7	0.0032	0.002	51.2	ug/L	338	Standard
|	Pb	208	1820.0	4.9	0.0008	0.001	181.4	ug/L	1616	Standard
	U	238	544.4	144.3	0.0279	0.040	143.7	ug/L	2	Standard
[>	Bi	209	629309.5	0.3				ug/L	641071	Standard

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Na	23	670.0	48.5	-0.0031	0.017	549.6	mg/L	412	Standard
Mg	24	1391.8	123.8	0.0019	0.002	122.4	mg/L	177	Standard
K	39	130.0	3.8	-0.0284	0.003	11.5	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2648	2.113	167.1	mg/L	7	Standard
Fe	54	641.3	4.4	-0.0022	0.007	310.2	mg/L	634	Standard
Fe	57	3055.3	12.5	0.0056	0.004	72.2	mg/L	2670	Standard
Sc-1	45	375142.7	1.0				mg/L	375691	Standard
Cl	35	7.7	15.1				ug/L	4	Standard
Kr	83	40.7	17.7				ug/L	39	Standard
Br	81	759.2	2.0				ug/L	639	Standard
P	31	411.7	11.2				ug/L	419	Standard
S	34	6733.2	3.4				ug/L	7420	Standard
Sr	88	35.0	37.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.476	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	98.587
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.165
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 14:45:37

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Method 6020 - Summary Report

Sample ID: PBW 15 WG403843-03

Sample Date/Time: Friday, July 27, 2012 14:50:35

Number of Replicates: 3

Autosampler Position: 323

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10393.6	2.1	223.6007	21.260	9.5	ug/L	11199	Standard
|	Be	9	6.7	114.6	-0.0163	0.004	22.5	ug/L	10	Standard
|	Al	27	12244.9	3.1	0.2542	0.023	9.2	ug/L	7920	Standard
[>	Sc	45	371013.1	1.4				ug/L	375691	Standard
|	Ti	47	49.3	18.2	-0.0219	0.006	28.9	ug/L	70	Standard
|	V	51	2978.6	4.2	-0.0212	0.010	45.7	ug/L	3172	Standard
|	Cr	52	8977.0	1.1	-0.1108	0.010	8.7	ug/L	9852	Standard
|	Cr	53	836.7	7.6	0.1816	0.038	20.8	ug/L	518	Standard
|	Mn	55	1947.5	2.1	0.0292	0.002	8.1	ug/L	1193	Standard
|	Co	59	96.3	11.6	-0.0037	0.001	25.9	ug/L	98	Standard
|	Ni	60	172.3	1.8	0.0318	0.001	2.6	ug/L	67	Standard
|	Cu	65	180.3	10.6	0.0229	0.007	30.6	ug/L	90	Standard
|	Zn	66	2690.9	1.0	2.0665	0.030	1.4	ug/L	148	Standard
[>	Ge	72	318946.4	0.4				ug/L	304674	Standard
|	As	75	-223.8	16.3	0.0140	0.029	210.0	ug/L	-174	Standard
|	Se	82	21.8	15.3	0.0182	0.027	146.8	ug/L	26	Standard
[	Se-1	77	137.7	3.3	0.1128	0.055	49.1	ug/L	133	Standard
[>	Ga	71	686.7	1.1				mg/L	630	Standard
|	Rb	85	15.0	57.7				ug/L	12	Standard
|	Y	89	278335.3	1.5				ug/L	271719	Standard
[>	Rh	103	401.7	13.9				ug/L	392	Standard
|	Mo	98	111.4	16.1	0.0214	0.004	20.0	ug/L	7	Standard
|	Ag	107	51.3	11.2	-0.0045	0.001	16.4	ug/L	55	Standard
|	Cd	111	63.1	6.5	-0.0038	0.001	23.8	mg/L	67	Standard
|	Cd	114	205.1	5.7	-0.0003	0.001	278.7	ug/L	219	Standard
[>	In	115	870940.8	0.7				ug/L	887392	Standard
|	Sn	118	803.0	9.3	0.0072	0.005	66.2	ug/L	653	Standard
|	Sb	123	691.8	28.2	0.0664	0.017	26.0	ug/L	48	Standard
|	Ba	135	58.0	12.4	0.0021	0.001	62.7	ug/L	28	Standard
|	Ce	140	40.7	9.9				ug/L	34	Standard
[>	Tb	159	1163142.5	1.1				ug/L	1226141	Standard
|	Ho	165	12.7	37.3				ug/L	14	Standard
|	Tl	203	66.3	10.9	0.0024	0.000	15.3	ug/L	9	Standard
|	Tl	205	148.3	7.5	0.0001	0.000	218.7	ug/L	20	Standard
|	Pb	206	508.0	8.8	0.0055	0.003	54.8	ug/L	419	Standard
|	Pb	207	414.0	6.6	0.0046	0.002	42.6	ug/L	338	Standard
|	Pb	208	1957.4	2.5	0.0033	0.001	30.7	ug/L	1616	Standard
	U	238	6.0	33.3	0.0004	0.000	25.8	ug/L	2	Standard
[>	Bi	209	625130.6	0.6				ug/L	641071	Standard

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Na	23	518.3	4.9	-0.0108	0.001	10.1	mg/L	412	Standard
Mg	24	313.3	5.1	0.0004	0.000	5.8	mg/L	177	Standard
K	39	133.3	19.2	-0.0244	0.021	87.9	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2558	2.129	169.5	mg/L	7	Standard
Fe	54	663.7	3.6	0.0037	0.003	79.1	mg/L	634	Standard
Fe	57	2835.3	6.0	0.0034	0.002	43.8	mg/L	2670	Standard
Sc-1	45	371013.1	1.4				mg/L	375691	Standard
Cl	35	5.7	27.0				ug/L	4	Standard
Kr	83	40.2	14.1				ug/L	39	Standard
Br	81	746.7	4.1				ug/L	639	Standard
P	31	439.2	11.1				ug/L	419	Standard
S	34	6483.1	1.6				ug/L	7420	Standard
Sr	88	53.3	23.6				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.684	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	98.146
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.513
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 15 WG403843-03

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Method 6020 - Summary Report

Sample ID: LCSW 15 WG403843-04

Sample Date/Time: Friday, July 27, 2012 14:53:45

Number of Replicates: 3

Autosampler Position: 324

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

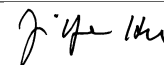
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11596.1	1.7	254.6035	44.069	17.3	ug/L	11199	Standard
|	Be	9	52052.6	1.2	22.3993	0.307	1.4	ug/L	10	Standard
|	Al	27	498272.2	0.3	26.5670	0.193	0.7	ug/L	7920	Standard
[>	Sc	45	418454.8	0.5				ug/L	375691	Standard
|	Ti	47	101.7	8.2	0.0092	0.006	62.8	ug/L	70	Standard
|	V	51	301960.2	0.2	22.9401	0.169	0.7	ug/L	3172	Standard
|	Cr	52	256403.0	0.5	23.5146	0.343	1.5	ug/L	9852	Standard
|	Cr	53	43978.7	1.2	24.2937	0.485	2.0	ug/L	518	Standard
|	Mn	55	453604.9	0.4	23.6612	0.299	1.3	ug/L	1193	Standard
|	Co	59	284123.3	0.6	22.9678	0.238	1.0	ug/L	98	Standard
|	Ni	60	76875.2	1.2	23.9908	0.504	2.1	ug/L	67	Standard
|	Cu	65	72328.9	0.2	24.4615	0.281	1.1	ug/L	90	Standard
|	Zn	66	33205.3	0.2	24.8369	0.281	1.1	ug/L	148	Standard
[>	Ge	72	345356.8	1.0				ug/L	304674	Standard
|	As	75	30149.2	1.5	22.6160	0.488	2.2	ug/L	-174	Standard
|	Se	82	2962.4	0.8	21.8649	0.328	1.5	ug/L	26	Standard
[	Se-1	77	2213.8	2.0	21.6903	0.414	1.9	ug/L	133	Standard
[>	Ga	71	770.0	5.8				mg/L	630	Standard
|	Rb	85	38.3	7.5				ug/L	12	Standard
|	Y	89	297341.3	1.4				ug/L	271719	Standard
[>	Rh	103	468.3	11.4				ug/L	392	Standard
|	Mo	98	86.4	25.5	0.0139	0.005	34.7	ug/L	7	Standard
|	Ag	107	209283.0	1.5	23.9489	0.155	0.6	ug/L	55	Standard
|	Cd	111	112797.1	0.6	23.3798	0.125	0.5	mg/L	67	Standard
|	Cd	114	315828.2	0.6	23.2759	0.090	0.4	ug/L	219	Standard
[>	In	115	932740.7	0.9				ug/L	887392	Standard
|	Sn	118	899.7	4.8	0.0097	0.002	24.0	ug/L	653	Standard
|	Sb	123	270763.6	0.9	22.8136	0.049	0.2	ug/L	48	Standard
|	Ba	135	133201.6	0.3	23.8982	0.257	1.1	ug/L	28	Standard
|	Ce	140	335.7	4.5				ug/L	34	Standard
[>	Tb	159	1236076.6	0.5				ug/L	1226141	Standard
|	Ho	165	17.0	15.6				ug/L	14	Standard
|	Tl	203	504037.7	0.4	23.7581	0.014	0.1	ug/L	9	Standard
|	Tl	205	1170250.1	0.8	24.6359	0.243	1.0	ug/L	20	Standard
|	Pb	206	389311.5	1.0	23.8773	0.246	1.0	ug/L	419	Standard
|	Pb	207	335440.1	1.0	24.5027	0.293	1.2	ug/L	338	Standard
|	Pb	208	1547813.1	0.8	24.5145	0.228	0.9	ug/L	1616	Standard
	U	238	468796.1	1.0	23.1889	0.323	1.4	ug/L	2	Standard
[>	Bi	209	651861.4	0.5				ug/L	641071	Standard

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Na	23	678.3	5.2	-0.0063	0.002	27.1	mg/L	412	Standard
Mg	24	721.7	20.8	0.0009	0.000	20.7	mg/L	177	Standard
K	39	131.7	41.8	-0.0378	0.038	100.8	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	987.9	15.4	0.0469	0.028	60.4	mg/L	634	Standard
Fe	57	3477.1	2.8	0.0063	0.001	16.6	mg/L	2670	Standard
Sc-1	45	418454.8	0.5				mg/L	375691	Standard
Cl	35	4.0	66.1				ug/L	4	Standard
Kr	83	41.9	8.9				ug/L	39	Standard
Br	81	897.5	7.1				ug/L	639	Standard
P	31	646.7	4.3				ug/L	419	Standard
S	34	6625.6	1.3				ug/L	7420	Standard
Sr	88	23.3	24.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		113.353	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 15 WG403843-04

Report Date/Time: Friday, July 27, 2012 14:56:15

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	Cd	111	
	Cd	114	
>	In	115	105.110
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.683
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 15 WG403843-04

Report Date/Time: Friday, July 27, 2012 14:56:15

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Method 6020 - Summary Report

Sample ID: L1207053402 WG403843-01

Sample Date/Time: Friday, July 27, 2012 14:56:55

Number of Replicates: 3

Autosampler Position: 325

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	53756.9	2.2	-12542.1930	282.069	2.2	ug/L	11199	Standard
|	Be	9	8.3	34.6	-0.0153	0.001	9.0	ug/L	10	Standard
|	Al	27	53857.3	2.6	2.9631	0.171	5.8	ug/L	7920	Standard
[>	Sc	45	354161.8	2.8				ug/L	375691	Standard
[	Ti	47	394.0	9.1	0.2489	0.030	12.1	ug/L	70	Standard
|	V	51	9249.4	1.9	0.5849	0.020	3.5	ug/L	3172	Standard
|	Cr	52	13271.8	1.2	0.4853	0.040	8.2	ug/L	9852	Standard
|	Cr	53	3070.3	1.9	1.7391	0.052	3.0	ug/L	518	Standard
|	Mn	55	15038.8	2.7	0.8646	0.039	4.5	ug/L	1193	Standard
|	Co	59	453.0	2.7	0.0318	0.001	3.7	ug/L	98	Standard
|	Ni	60	1306.7	4.1	0.4640	0.024	5.3	ug/L	67	Standard
|	Cu	65	813.7	4.6	0.2880	0.019	6.7	ug/L	90	Standard
|	Zn	66	2810.3	2.1	2.4143	0.089	3.7	ug/L	148	Standard
[>	Ge	72	287524.5	1.4				ug/L	304674	Standard
|	As	75	4287.2	5.4	4.0220	0.155	3.9	ug/L	-174	Standard
|	Se	82	1547.2	8.1	13.6487	0.930	6.8	ug/L	26	Standard
[	Se-1	77	250.3	2.7	1.6975	0.090	5.3	ug/L	133	Standard
[>	Ga	71	645.0	5.1				mg/L	630	Standard
[	Rb	85	12550.2	0.3				ug/L	12	Standard
[	Y	89	252360.1	2.5				ug/L	271719	Standard
[>	Rh	103	421.7	14.0				ug/L	392	Standard
[	Mo	98	17522.3	1.8	4.7424	0.167	3.5	ug/L	7	Standard
|	Ag	107	87.7	10.4	0.0013	0.001	106.5	ug/L	55	Standard
|	Cd	111	72.3	8.1	0.0002	0.002	1062.0	mg/L	67	Standard
|	Cd	114	303.1	6.5	0.0103	0.002	24.0	ug/L	219	Standard
[>	In	115	779066.8	3.1				ug/L	887392	Standard
|	Sn	118	818.4	3.8	0.0147	0.003	22.6	ug/L	653	Standard
|	Sb	123	1740.4	3.4	0.1795	0.001	0.4	ug/L	48	Standard
[	Ba	135	216344.1	1.1	46.5125	1.787	3.8	ug/L	28	Standard
[	Ce	140	300.0	3.3				ug/L	34	Standard
[>	Tb	159	1108459.2	3.2				ug/L	1226141	Standard
[	Ho	165	45.3	34.2				ug/L	14	Standard
|	Tl	203	709.0	8.8	0.0443	0.005	11.5	ug/L	9	Standard
|	Tl	205	1627.8	2.5	0.0431	0.002	5.4	ug/L	20	Standard
|	Pb	206	475.0	4.5	0.0123	0.003	21.5	ug/L	419	Standard
|	Pb	207	391.3	5.3	0.0116	0.001	9.5	ug/L	338	Standard
|	Pb	208	1808.7	0.6	0.0096	0.001	10.3	ug/L	1616	Standard
	U	238	36173.8	0.4	2.4127	0.055	2.3	ug/L	2	Standard
[>	Bi	209	483624.2	2.5				ug/L	641071	Standard

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Na	23	414336.0	1.1	23.3667	0.408	1.7	mg/L	412	Standard
Mg	24	824087.9	1.6	1.1907	0.043	3.6	mg/L	177	Standard
K	39	935.0	3.0	0.6450	0.045	7.0	mg/L	150	Standard
Ca	43	16.7	34.6	10.4045	4.206	40.4	mg/L	7	Standard
Fe	54	658.0	6.6	0.0089	0.006	72.7	mg/L	634	Standard
Fe	57	4112.2	8.2	0.0206	0.005	24.9	mg/L	2670	Standard
Sc-1	45	354161.8	2.8				mg/L	375691	Standard
Cl	35	89.7	5.3				ug/L	4	Standard
Kr	83	42.3	2.4				ug/L	39	Standard
Br	81	79839.4	5.5				ug/L	639	Standard
P	31	792.5	4.6				ug/L	419	Standard
S	34	19130.4	0.9				ug/L	7420	Standard
Sr	88	383.3	28.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.371	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053402 WG403843-01

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	Cd	111	
	Cd	114	
>	In	115	87.793
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	75.440
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053402 WG403843-01

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Method 6020 - Summary Report

Sample ID: L1207053414S WG403843-05

Sample Date/Time: Friday, July 27, 2012 15:00:05

Number of Replicates: 3

Autosampler Position: 326

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	58107.9	1.9	-13535.2216	393.993	2.9	ug/L	11199	Standard
|	Be	9	45800.8	3.4	22.9192	1.016	4.4	ug/L	10	Standard
|	Al	27	439742.7	1.5	27.2763	0.823	3.0	ug/L	7920	Standard
[>	Sc	45	359968.2	1.6				ug/L	375691	Standard
[	Ti	47	458.3	29.0	0.2955	0.103	35.0	ug/L	70	Standard
|	V	51	261620.7	1.3	23.6649	0.654	2.8	ug/L	3172	Standard
|	Cr	52	213222.3	1.0	23.2623	0.611	2.6	ug/L	9852	Standard
|	Cr	53	37877.3	0.6	24.9059	0.282	1.1	ug/L	518	Standard
|	Mn	55	374859.5	1.1	23.2709	0.600	2.6	ug/L	1193	Standard
|	Co	59	239342.6	1.6	23.0290	0.701	3.0	ug/L	98	Standard
|	Ni	60	62866.5	1.1	23.3443	0.292	1.3	ug/L	67	Standard
|	Cu	65	57539.1	0.7	23.1541	0.184	0.8	ug/L	90	Standard
|	Zn	66	29952.9	0.5	26.6720	0.486	1.8	ug/L	148	Standard
[>	Ge	72	290224.3	1.5				ug/L	304674	Standard
|	As	75	32113.7	0.9	28.6166	0.622	2.2	ug/L	-174	Standard
|	Se	82	4327.4	2.4	38.1352	1.476	3.9	ug/L	26	Standard
[	Se-1	77	2142.8	2.0	25.2073	0.738	2.9	ug/L	133	Standard
[>	Ga	71	686.7	5.5				mg/L	630	Standard
[	Rb	85	9387.9	1.9				ug/L	12	Standard
[	Y	89	255316.6	0.6				ug/L	271719	Standard
[>	Rh	103	403.3	1.9				ug/L	392	Standard
[	Mo	98	17282.1	1.4	4.5850	0.096	2.1	ug/L	7	Standard
|	Ag	107	142792.8	1.0	19.1869	0.225	1.2	ug/L	55	Standard
|	Cd	111	97248.9	1.1	23.6700	0.283	1.2	mg/L	67	Standard
|	Cd	114	272689.2	0.8	23.6004	0.362	1.5	ug/L	219	Standard
[>	In	115	794319.3	0.8				ug/L	887392	Standard
|	Sn	118	829.4	9.4	0.0143	0.006	39.5	ug/L	653	Standard
|	Sb	123	241951.5	0.4	23.9397	0.271	1.1	ug/L	48	Standard
[	Ba	135	297179.9	0.8	62.6249	0.930	1.5	ug/L	28	Standard
[	Ce	140	488.7	6.0				ug/L	34	Standard
[>	Tb	159	1131025.1	0.7				ug/L	1226141	Standard
[	Ho	165	56.3	2.0				ug/L	14	Standard
|	Tl	203	398729.2	1.2	24.9063	0.431	1.7	ug/L	9	Standard
|	Tl	205	910410.7	0.9	25.3975	0.325	1.3	ug/L	20	Standard
|	Pb	206	300023.3	1.2	24.3842	0.295	1.2	ug/L	419	Standard
|	Pb	207	252831.8	0.7	24.4726	0.168	0.7	ug/L	338	Standard
|	Pb	208	1169972.3	0.8	24.5547	0.200	0.8	ug/L	1616	Standard
	U	238	435248.7	0.9	28.5292	0.348	1.2	ug/L	2	Standard
[>	Bi	209	491925.6	0.6				ug/L	641071	Standard

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Na	23	418768.4	0.7	23.2312	0.336	1.4	mg/L	412	Standard
Mg	24	619242.9	1.6	0.8799	0.018	2.0	mg/L	177	Standard
K	39	776.7	6.9	0.5025	0.039	7.8	mg/L	150	Standard
Ca	43	15.0	33.3	9.0080	3.911	43.4	mg/L	7	Standard
Fe	54	606.9	9.2	-0.0039	0.013	335.4	mg/L	634	Standard
Fe	57	4123.9	3.1	0.0198	0.001	3.6	mg/L	2670	Standard
Sc-1	45	359968.2	1.6				mg/L	375691	Standard
Cl	35	91.3	10.4				ug/L	4	Standard
Kr	83	46.8	12.6				ug/L	39	Standard
Br	81	81837.2	2.2				ug/L	639	Standard
P	31	772.5	7.3				ug/L	419	Standard
S	34	18929.3	2.0				ug/L	7420	Standard
Sr	88	261.7	28.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.257	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	89.512
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	76.735
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053414S WG403843-05

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Method 6020 - Summary Report

Sample ID: L1207053416SD WG403843-06

Sample Date/Time: Friday, July 27, 2012 15:03:14

Number of Replicates: 3

Autosampler Position: 327

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	57855.3	1.0	-13685.5334	675.790	4.9	ug/L	11199	Standard
|	Be	9	47069.7	1.1	23.8613	0.736	3.1	ug/L	10	Standard
|	Al	27	585381.2	1.0	36.9509	0.796	2.2	ug/L	7920	Standard
[>	Sc	45	355429.7	3.0				ug/L	375691	Standard
|	Ti	47	436.7	1.5	0.2824	0.006	2.0	ug/L	70	Standard
|	V	51	269403.6	0.3	24.6505	0.080	0.3	ug/L	3172	Standard
|	Cr	52	217098.0	0.3	23.9797	0.165	0.7	ug/L	9852	Standard
|	Cr	53	39053.6	1.9	25.9828	0.502	1.9	ug/L	518	Standard
|	Mn	55	383660.0	1.4	24.0845	0.284	1.2	ug/L	1193	Standard
|	Co	59	244074.9	0.5	23.7449	0.164	0.7	ug/L	98	Standard
|	Ni	60	62993.7	0.9	23.6556	0.145	0.6	ug/L	67	Standard
|	Cu	65	57405.5	0.9	23.3613	0.127	0.5	ug/L	90	Standard
|	Zn	66	31569.2	0.7	28.4346	0.293	1.0	ug/L	148	Standard
[>	Ge	72	286961.3	0.4				ug/L	304674	Standard
|	As	75	32419.4	1.3	29.2076	0.372	1.3	ug/L	-174	Standard
|	Se	82	4299.7	1.7	38.3092	0.735	1.9	ug/L	26	Standard
[	Se-1	77	2175.5	0.4	25.9164	0.175	0.7	ug/L	133	Standard
[>	Ga	71	685.0	5.1				mg/L	630	Standard
|	Rb	85	8394.0	1.0				ug/L	12	Standard
|	Y	89	256819.9	3.4				ug/L	271719	Standard
[>	Rh	103	506.7	6.4				ug/L	392	Standard
|	Mo	98	16859.1	1.4	4.5190	0.127	2.8	ug/L	7	Standard
|	Ag	107	151655.6	0.9	20.5904	0.486	2.4	ug/L	55	Standard
|	Cd	111	98692.2	1.2	24.2724	0.648	2.7	mg/L	67	Standard
|	Cd	114	273607.9	0.9	23.9217	0.255	1.1	ug/L	219	Standard
[>	In	115	786304.2	1.5				ug/L	887392	Standard
|	Sn	118	892.4	4.7	0.0196	0.002	11.0	ug/L	653	Standard
|	Sb	123	244340.7	1.4	24.4214	0.049	0.2	ug/L	48	Standard
|	Ba	135	287496.3	0.5	61.2045	0.783	1.3	ug/L	28	Standard
|	Ce	140	1056.0	1.8				ug/L	34	Standard
[>	Tb	159	1119680.2	0.4				ug/L	1226141	Standard
|	Ho	165	56.0	28.3				ug/L	14	Standard
|	Tl	203	405473.2	1.0	25.2184	0.318	1.3	ug/L	9	Standard
|	Tl	205	930789.1	0.4	25.8543	0.113	0.4	ug/L	20	Standard
|	Pb	206	308762.0	0.5	24.9878	0.115	0.5	ug/L	419	Standard
|	Pb	207	260562.8	0.7	25.1135	0.130	0.5	ug/L	338	Standard
|	Pb	208	1199566.9	0.1	25.0686	0.052	0.2	ug/L	1616	Standard
	U	238	440877.0	0.3	28.7739	0.173	0.6	ug/L	2	Standard
[>	Bi	209	494037.3	0.3				ug/L	641071	Standard

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Na	23	418374.3	0.4	23.5186	0.783	3.3	mg/L	412	Standard
Mg	24	560841.4	1.6	0.8072	0.011	1.4	mg/L	177	Standard
K	39	730.0	3.0	0.4723	0.006	1.3	mg/L	150	Standard
Ca	43	10.0	50.0	5.2369	3.839	73.3	mg/L	7	Standard
Fe	54	676.5	0.3	0.0124	0.005	37.6	mg/L	634	Standard
Fe	57	4384.0	2.7	0.0236	0.002	8.8	mg/L	2670	Standard
Sc-1	45	355429.7	3.0				mg/L	375691	Standard
Cl	35	90.7	3.4				ug/L	4	Standard
Kr	83	43.9	6.8				ug/L	39	Standard
Br	81	76124.9	1.0				ug/L	639	Standard
P	31	821.7	5.2				ug/L	419	Standard
S	34	18955.2	0.7				ug/L	7420	Standard
Sr	88	305.0	11.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.186	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053416SD WG403843-06

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	Cd	111	
	Cd	114	
>	In	115	88.608
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	77.064
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053416SD WG403843-06

Report Date/Time: Friday, July 27, 2012 15:05:44

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Method 6020 - Summary Report

Sample ID: L1207051502

Sample Date/Time: Friday, July 27, 2012 15:06:24

Number of Replicates: 3

Autosampler Position: 328

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	89887.5	1.0	-20140.6569	293.117	1.5	ug/L	11199	Standard
|	Be	9	26.7	78.1	-0.0075	0.009	126.7	ug/L	10	Standard
|	Al	27	72010.7	1.7	3.6097	0.042	1.2	ug/L	7920	Standard
[>	Sc	45	398654.4	2.0				ug/L	375691	Standard
[	Ti	47	1102.0	11.8	0.7460	0.090	12.1	ug/L	70	Standard
|	V	51	44223.3	1.4	3.5716	0.043	1.2	ug/L	3172	Standard
|	Cr	52	12952.5	2.1	0.3600	0.027	7.6	ug/L	9852	Standard
|	Cr	53	1896.0	4.6	0.8738	0.057	6.6	ug/L	518	Standard
|	Mn	55	72723.2	2.2	4.2196	0.087	2.1	ug/L	1193	Standard
|	Co	59	1104.0	16.8	0.0887	0.016	18.5	ug/L	98	Standard
|	Ni	60	3563.1	2.7	1.2312	0.031	2.5	ug/L	67	Standard
|	Cu	65	1778.8	0.8	0.6377	0.009	1.4	ug/L	90	Standard
|	Zn	66	3187.0	1.7	2.5831	0.034	1.3	ug/L	148	Standard
[>	Ge	72	305631.8	0.5				ug/L	304674	Standard
|	As	75	570.8	1.2	0.6738	0.007	1.1	ug/L	-174	Standard
|	Se	82	269.5	1.2	2.1066	0.035	1.7	ug/L	26	Standard
[	Se-1	77	232.0	10.5	1.2956	0.300	23.2	ug/L	133	Standard
[>	Ga	71	660.0	12.4				mg/L	630	Standard
[	Rb	85	4205.6	1.3				ug/L	12	Standard
[	Y	89	267487.9	2.2				ug/L	271719	Standard
[>	Rh	103	466.7	4.1				ug/L	392	Standard
[	Mo	98	727.9	2.9	0.1806	0.003	1.8	ug/L	7	Standard
|	Ag	107	102.3	18.4	0.0025	0.002	88.9	ug/L	55	Standard
|	Cd	111	90.9	15.2	0.0035	0.003	95.2	mg/L	67	Standard
|	Cd	114	274.1	14.7	0.0064	0.003	50.8	ug/L	219	Standard
[>	In	115	824800.5	2.0				ug/L	887392	Standard
|	Sn	118	904.0	24.5	0.0172	0.014	83.8	ug/L	653	Standard
|	Sb	123	319.6	21.4	0.0344	0.006	17.3	ug/L	48	Standard
[	Ba	135	205179.4	1.2	41.6398	0.571	1.4	ug/L	28	Standard
[	Ce	140	391.0	1.3				ug/L	34	Standard
[>	Tb	159	1163113.6	0.8				ug/L	1226141	Standard
[	Ho	165	19.7	15.5				ug/L	14	Standard
|	Tl	203	608.7	8.8	0.0318	0.002	7.7	ug/L	9	Standard
|	Tl	205	1521.1	21.1	0.0332	0.007	21.8	ug/L	20	Standard
|	Pb	206	867.7	22.1	0.0335	0.013	37.7	ug/L	419	Standard
|	Pb	207	770.4	26.7	0.0371	0.016	44.0	ug/L	338	Standard
|	Pb	208	3562.5	26.4	0.0351	0.016	46.0	ug/L	1616	Standard
	U	238	5551.0	4.6	0.3125	0.011	3.5	ug/L	2	Standard
[>	Bi	209	572737.6	1.3				ug/L	641071	Standard

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Na	23	147967.4	1.1	7.3860	0.130	1.8	mg/L	412	Standard
Mg	24	1370241.4	1.6	1.7581	0.036	2.0	mg/L	177	Standard
K	39	1343.4	4.8	0.8589	0.066	7.7	mg/L	150	Standard
Ca	43	115.0	34.0	77.2891	28.490	36.9	mg/L	7	Standard
Fe	54	675.1	2.3	-0.0034	0.005	152.5	mg/L	634	Standard
Fe	57	12528.5	3.7	0.1056	0.003	2.8	mg/L	2670	Standard
Sc-1	45	398654.4	2.0				mg/L	375691	Standard
Cl	35	32.7	10.8				ug/L	4	Standard
Kr	83	40.9	7.1				ug/L	39	Standard
Br	81	7567.7	2.3				ug/L	639	Standard
P	31	473.3	8.4				ug/L	419	Standard
S	34	15579.7	1.5				ug/L	7420	Standard
Sr	88	315.0	9.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.314	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207051502

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	Cd	111	
	Cd	114	
>	In	115	92.947
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.341
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207051503

Sample Date/Time: Friday, July 27, 2012 15:09:34

Number of Replicates: 3

Autosampler Position: 329

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	143185.1	1.4	-33600.9154	639.232	1.9	ug/L	11199	Standard
|	Be	9	25.0	138.6	-0.0083	0.016	188.1	ug/L	10	Standard
|	Al	27	133998.3	0.7	7.0791	0.240	3.4	ug/L	7920	Standard
[>	Sc	45	402250.3	2.6				ug/L	375691	Standard
[	Ti	47	1003.7	3.8	0.6707	0.031	4.6	ug/L	70	Standard
|	V	51	7380.2	3.6	0.3683	0.022	6.0	ug/L	3172	Standard
|	Cr	52	14381.8	1.0	0.5059	0.005	1.0	ug/L	9852	Standard
|	Cr	53	2155.2	3.2	1.0301	0.048	4.7	ug/L	518	Standard
|	Mn	55	1002312.1	1.2	58.8609	0.463	0.8	ug/L	1193	Standard
|	Co	59	978.4	3.0	0.0767	0.002	2.6	ug/L	98	Standard
|	Ni	60	4245.6	5.1	1.4634	0.065	4.5	ug/L	67	Standard
|	Cu	65	2675.2	5.1	0.9751	0.050	5.2	ug/L	90	Standard
|	Zn	66	6429.0	3.8	5.3056	0.180	3.4	ug/L	148	Standard
[>	Ge	72	307363.7	0.7				ug/L	304674	Standard
|	As	75	3339.5	1.1	2.9845	0.038	1.3	ug/L	-174	Standard
|	Se	82	251.4	6.8	1.9430	0.139	7.1	ug/L	26	Standard
[	Se-1	77	179.7	4.7	0.6642	0.086	13.0	ug/L	133	Standard
[>	Ga	71	680.0	9.0				mg/L	630	Standard
[	Rb	85	7138.3	3.9				ug/L	12	Standard
[	Y	89	276807.3	0.4				ug/L	271719	Standard
[>	Rh	103	546.7	6.5				ug/L	392	Standard
[	Mo	98	3603.6	3.5	0.8857	0.028	3.1	ug/L	7	Standard
|	Ag	107	210.7	80.6	0.0155	0.021	136.1	ug/L	55	Standard
|	Cd	111	177.7	46.9	0.0224	0.019	83.3	mg/L	67	Standard
|	Cd	114	502.7	43.0	0.0240	0.017	71.7	ug/L	219	Standard
[>	In	115	852960.0	1.0				ug/L	887392	Standard
|	Sn	118	1664.8	4.0	0.0670	0.004	5.9	ug/L	653	Standard
|	Sb	123	587.0	33.1	0.0580	0.018	30.3	ug/L	48	Standard
[	Ba	135	403881.0	0.7	79.2632	1.199	1.5	ug/L	28	Standard
[	Ce	140	891.0	2.9				ug/L	34	Standard
[>	Tb	159	1185776.8	0.5				ug/L	1226141	Standard
[	Ho	165	29.0	26.0				ug/L	14	Standard
|	Tl	203	751.4	18.9	0.0390	0.007	19.2	ug/L	9	Standard
|	Tl	205	1806.8	14.7	0.0397	0.006	16.0	ug/L	20	Standard
|	Pb	206	978.4	11.0	0.0407	0.008	19.9	ug/L	419	Standard
|	Pb	207	834.4	9.2	0.0418	0.007	16.4	ug/L	338	Standard
|	Pb	208	3830.9	8.8	0.0394	0.006	16.4	ug/L	1616	Standard
	U	238	6776.2	2.1	0.3778	0.012	3.1	ug/L	2	Standard
[>	Bi	209	578571.2	1.1				ug/L	641071	Standard

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Na	23	152863.9	0.4	7.5653	0.213	2.8	mg/L	412	Standard
Mg	24	4419217.3	1.3	5.6216	0.202	3.6	mg/L	177	Standard
K	39	1695.1	1.4	1.1062	0.034	3.1	mg/L	150	Standard
Ca	43	85.0	11.8	55.8387	7.828	14.0	mg/L	7	Standard
Fe	54	758.6	5.4	0.0110	0.004	35.6	mg/L	634	Standard
Fe	57	11065.7	3.7	0.0889	0.006	7.2	mg/L	2670	Standard
Sc-1	45	402250.3	2.6				mg/L	375691	Standard
Cl	35	37.7	13.1				ug/L	4	Standard
Kr	83	41.7	11.8				ug/L	39	Standard
Br	81	9522.2	7.9				ug/L	639	Standard
P	31	470.0	4.2				ug/L	419	Standard
S	34	16811.8	1.5				ug/L	7420	Standard
Sr	88	701.7	6.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.883	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207051503

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	Cd	111		
	Cd	114		
>	In	115	96.120	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.251	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207051503

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Method 6020 - Summary Report

Sample ID: L1207051503PS WG403863-03

Sample Date/Time: Friday, July 27, 2012 15:12:44

Number of Replicates: 3

Autosampler Position: 330

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

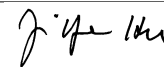
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	148033.0	0.9	-34563.9833	563.265	1.6	ug/L	11199	Standard
|	Be	9	102287.5	0.6	45.4812	0.402	0.9	ug/L	10	Standard
|	Al	27	899511.1	1.4	49.9664	1.036	2.1	ug/L	7920	Standard
[>	Sc	45	405162.6	0.8				ug/L	375691	Standard
|	Ti	47	1000.4	2.7	0.6515	0.020	3.1	ug/L	70	Standard
|	V	51	546833.0	0.4	45.8681	0.506	1.1	ug/L	3172	Standard
|	Cr	52	449051.6	0.9	46.1651	0.654	1.4	ug/L	9852	Standard
|	Cr	53	75253.1	0.6	45.9139	0.521	1.1	ug/L	518	Standard
|	Mn	55	1807177.1	1.0	103.7519	1.853	1.8	ug/L	1193	Standard
|	Co	59	504238.9	0.4	44.7559	0.576	1.3	ug/L	98	Standard
|	Ni	60	134864.9	0.5	46.2203	0.448	1.0	ug/L	67	Standard
|	Cu	65	124330.1	0.9	46.1939	0.653	1.4	ug/L	90	Standard
|	Zn	66	61389.1	0.6	50.5291	0.451	0.9	ug/L	148	Standard
[>	Ge	72	314634.0	1.4				ug/L	304674	Standard
|	As	75	61246.9	0.4	50.1902	0.549	1.1	ug/L	-174	Standard
|	Se	82	5934.1	0.3	48.2650	0.593	1.2	ug/L	26	Standard
[	Se-1	77	4334.3	0.7	48.2824	1.038	2.2	ug/L	133	Standard
[>	Ga	71	1190.0	6.5				mg/L	630	Standard
|	Rb	85	7293.4	1.9				ug/L	12	Standard
|	Y	89	268048.8	1.1				ug/L	271719	Standard
[>	Rh	103	550.0	5.7				ug/L	392	Standard
|	Mo	98	3565.2	2.6	0.8758	0.027	3.1	ug/L	7	Standard
|	Ag	107	352722.6	1.4	44.1310	1.118	2.5	ug/L	55	Standard
|	Cd	111	211855.2	1.2	48.0155	1.082	2.3	mg/L	67	Standard
|	Cd	114	583816.1	0.2	47.0425	0.615	1.3	ug/L	219	Standard
[>	In	115	853482.1	1.2				ug/L	887392	Standard
|	Sn	118	1694.8	4.3	0.0690	0.006	9.1	ug/L	653	Standard
|	Sb	123	512887.4	1.0	47.2312	1.033	2.2	ug/L	48	Standard
|	Ba	135	644799.7	1.4	126.4832	3.071	2.4	ug/L	28	Standard
|	Ce	140	937.0	2.2				ug/L	34	Standard
[>	Tb	159	1186310.8	0.4				ug/L	1226141	Standard
|	Ho	165	25.7	21.5				ug/L	14	Standard
|	Tl	203	888277.2	0.3	46.8672	0.337	0.7	ug/L	9	Standard
|	Tl	205	2089288.8	0.4	49.2352	0.416	0.8	ug/L	20	Standard
|	Pb	206	680548.9	0.6	46.7453	0.073	0.2	ug/L	419	Standard
|	Pb	207	580475.9	0.8	47.4859	0.425	0.9	ug/L	338	Standard
|	Pb	208	2674647.5	0.7	47.4423	0.093	0.2	ug/L	1616	Standard
	U	238	900679.7	0.9	49.8671	0.530	1.1	ug/L	2	Standard
[>	Bi	209	582370.6	0.5				ug/L	641071	Standard

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Na	23	152456.5	0.3	7.4872	0.062	0.8	mg/L	412	Standard
Mg	24	4463235.8	0.5	5.6336	0.043	0.8	mg/L	177	Standard
K	39	1781.8	3.4	1.1596	0.048	4.2	mg/L	150	Standard
Ca	43	86.7	17.6	56.4752	10.617	18.8	mg/L	7	Standard
Fe	54	645.7	4.3	-0.0109	0.006	56.5	mg/L	634	Standard
Fe	57	11974.7	2.9	0.0976	0.004	4.5	mg/L	2670	Standard
Sc-1	45	405162.6	0.8				mg/L	375691	Standard
Cl	35	47.0	14.7				ug/L	4	Standard
Kr	83	50.3	6.9				ug/L	39	Standard
Br	81	9906.6	9.1				ug/L	639	Standard
P	31	456.7	6.2				ug/L	419	Standard
S	34	17175.6	1.6				ug/L	7420	Standard
Sr	88	716.7	2.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.269	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207051503PS WG403863-03

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	Cd	111	
	Cd	114	
>	In	115	96.179
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.843
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1207051503PS WG403863-03

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Method 6020 - Summary Report

Sample ID: L1207051503SDL WG403863-04

Sample Date/Time: Friday, July 27, 2012 15:15:54

Number of Replicates: 3

Autosampler Position: 331

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	32423.0	1.1	-7078.1748	58.745	0.8	ug/L	11199	Standard
|	Be	9	21.7	35.3	-0.0076	0.004	57.4	ug/L	10	Standard
|	Al	27	34098.3	0.3	1.8664	0.039	2.1	ug/L	7920	Standard
[>	Sc	45	328087.9	1.4				ug/L	375691	Standard
|	Ti	47	209.3	3.5	0.1096	0.005	4.8	ug/L	70	Standard
|	V	51	3356.4	1.7	0.0482	0.003	6.4	ug/L	3172	Standard
|	Cr	52	8706.5	2.3	-0.0163	0.016	95.9	ug/L	9852	Standard
|	Cr	53	840.9	3.7	0.2535	0.025	10.0	ug/L	518	Standard
|	Mn	55	174456.4	1.1	11.1479	0.081	0.7	ug/L	1193	Standard
|	Co	59	244.0	3.7	0.0121	0.001	6.5	ug/L	98	Standard
|	Ni	60	871.7	3.3	0.3084	0.009	3.1	ug/L	67	Standard
|	Cu	65	598.7	3.2	0.2062	0.007	3.2	ug/L	90	Standard
|	Zn	66	3292.7	1.4	2.9200	0.025	0.9	ug/L	148	Standard
[>	Ge	72	280814.5	0.8				ug/L	304674	Standard
|	As	75	499.3	3.5	0.6508	0.017	2.6	ug/L	-174	Standard
|	Se	82	66.3	5.0	0.4494	0.027	5.9	ug/L	26	Standard
[	Se-1	77	128.3	5.2	0.2047	0.096	46.7	ug/L	133	Standard
[>	Ga	71	585.0	7.0				mg/L	630	Standard
|	Rb	85	1298.4	2.6				ug/L	12	Standard
|	Y	89	238905.5	0.9				ug/L	271719	Standard
[>	Rh	103	390.0	10.2				ug/L	392	Standard
|	Mo	98	608.5	4.3	0.1607	0.007	4.2	ug/L	7	Standard
|	Ag	107	107.0	9.8	0.0040	0.001	34.7	ug/L	55	Standard
|	Cd	111	43.9	25.1	-0.0068	0.003	41.9	mg/L	67	Standard
|	Cd	114	129.4	3.4	-0.0050	0.000	7.5	ug/L	219	Standard
[>	In	115	771673.6	0.8				ug/L	887392	Standard
|	Sn	118	618.0	1.7	0.0002	0.000	222.8	ug/L	653	Standard
|	Sb	123	1626.3	5.9	0.1696	0.009	5.3	ug/L	48	Standard
[	Ba	135	71977.3	2.0	15.6060	0.359	2.3	ug/L	28	Standard
|	Ce	140	209.3	4.8				ug/L	34	Standard
[>	Tb	159	1093258.2	0.3				ug/L	1226141	Standard
|	Ho	165	14.3	21.3				ug/L	14	Standard
|	Tl	203	369.0	8.9	0.0186	0.002	10.3	ug/L	9	Standard
|	Tl	205	834.0	4.3	0.0165	0.001	4.0	ug/L	20	Standard
|	Pb	206	505.0	5.5	0.0077	0.002	27.3	ug/L	419	Standard
|	Pb	207	404.0	10.0	0.0061	0.004	62.6	ug/L	338	Standard
|	Pb	208	1911.0	5.3	0.0048	0.002	50.0	ug/L	1616	Standard
	U	238	1239.7	2.7	0.0687	0.003	4.5	ug/L	2	Standard
[>	Bi	209	583328.0	1.8				ug/L	641071	Standard

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Na	23	97427.3	2.2	5.9018	0.195	3.3	mg/L	412	Standard
Mg	24	632842.5	0.2	0.9865	0.011	1.1	mg/L	177	Standard
K	39	436.7	9.2	0.2605	0.038	14.7	mg/L	150	Standard
Ca	43	25.0	60.0	18.4689	12.402	67.2	mg/L	7	Standard
Fe	54	254.6	20.5	-0.0725	0.012	16.2	mg/L	634	Standard
Fe	57	3425.4	2.3	0.0155	0.002	9.7	mg/L	2670	Standard
Sc-1	45	328087.9	1.4				mg/L	375691	Standard
Cl	35	13.0	35.3				ug/L	4	Standard
Kr	83	41.7	5.0				ug/L	39	Standard
Br	81	2061.0	5.8				ug/L	639	Standard
P	31	175.0	14.9				ug/L	419	Standard
S	34	8200.6	4.3				ug/L	7420	Standard
Sr	88	178.3	4.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.169	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207051503SDL WG403863-04
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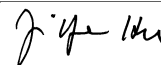
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	Cd	114		
>	In	115	86.960	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.993	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207051503SDL WG403863-04
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 15:19:05

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10833.9	5.1	29.6463	177.241	597.9	ug/L	11199	Standard
|	Be	9	100789.7	5.0	50.0649	1.647	3.3	ug/L	10	Standard
|	Al	27	793864.9	2.3	49.2670	0.310	0.6	ug/L	7920	Standard
>	Sc	45	362543.7	1.7				ug/L	375691	Standard
[	Ti	47	130891.3	0.7	93.1309	1.249	1.3	ug/L	70	Standard
|	V	51	545444.2	0.3	46.0351	0.419	0.9	ug/L	3172	Standard
|	Cr	52	449090.6	0.8	46.4602	0.476	1.0	ug/L	9852	Standard
|	Cr	53	75834.3	0.6	46.5599	0.625	1.3	ug/L	518	Standard
|	Mn	55	794033.1	0.8	45.8225	0.730	1.6	ug/L	1193	Standard
|	Co	59	509186.2	0.7	45.4719	0.153	0.3	ug/L	98	Standard
|	Ni	60	135603.1	0.0	46.7609	0.357	0.8	ug/L	67	Standard
|	Cu	65	126441.8	0.9	47.2700	0.653	1.4	ug/L	90	Standard
|	Zn	66	58035.3	0.6	48.0570	0.101	0.2	ug/L	148	Standard
>	Ge	72	312685.0	0.8				ug/L	304674	Standard
|	As	75	57112.2	0.7	47.1014	0.188	0.4	ug/L	-174	Standard
|	Se	82	5787.7	0.3	47.3615	0.388	0.8	ug/L	26	Standard
[	Se-1	77	4274.3	0.9	47.8937	0.791	1.7	ug/L	133	Standard
>	Ga	71	691.7	8.6				mg/L	630	Standard
[	Rb	85	931.7	10.1				ug/L	12	Standard
[	Y	89	278060.8	2.3				ug/L	271719	Standard
>	Rh	103	413.3	15.6				ug/L	392	Standard
[	Mo	98	394593.4	0.6	97.2136	0.343	0.4	ug/L	7	Standard
|	Ag	107	374473.8	1.5	46.6889	0.522	1.1	ug/L	55	Standard
|	Cd	111	206587.8	1.5	46.6585	0.489	1.0	mg/L	67	Standard
|	Cd	114	586806.9	1.4	47.1229	0.558	1.2	ug/L	219	Standard
>	In	115	856295.6	0.7				ug/L	887392	Standard
|	Sn	118	691540.5	1.2	46.8058	0.379	0.8	ug/L	653	Standard
|	Sb	123	511474.6	1.2	46.9372	0.317	0.7	ug/L	48	Standard
[	Ba	135	245360.4	0.5	47.9581	0.317	0.7	ug/L	28	Standard
[	Ce	140	996.4	2.0				ug/L	34	Standard
>	Tb	159	1183585.2	0.8				ug/L	1226141	Standard
[	Ho	165	22.0	7.9				ug/L	14	Standard
|	Tl	203	913598.5	0.9	46.2565	0.558	1.2	ug/L	9	Standard
|	Tl	205	2153889.0	0.7	48.7070	0.486	1.0	ug/L	20	Standard
|	Pb	206	706601.2	1.1	46.5760	0.647	1.4	ug/L	419	Standard
|	Pb	207	602939.4	0.8	47.3310	0.382	0.8	ug/L	338	Standard
|	Pb	208	2786549.5	0.5	47.4320	0.395	0.8	ug/L	1616	Standard
	U	238	876980.6	0.9	46.5942	0.564	1.2	ug/L	2	Standard
>	Bi	209	606881.2	0.3				ug/L	641071	Standard

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Na	23	112699.3	0.3	6.1797	0.120	1.9	mg/L	412	Standard
Mg	24	3511529.4	2.6	4.9531	0.090	1.8	mg/L	177	Standard
K	39	6256.3	1.0	4.9313	0.121	2.5	mg/L	150	Standard
Ca	43	18.3	87.7	11.3390	12.082	106.5	mg/L	7	Standard
Fe	54	25093.7	1.8	5.0751	0.074	1.5	mg/L	634	Standard
Fe	57	435461.0	4.2	5.1296	0.191	3.7	mg/L	2670	Standard
Sc-1	45	362543.7	1.7				mg/L	375691	Standard
Cl	35	4.0	66.1				ug/L	4	Standard
Kr	83	42.3	13.7				ug/L	39	Standard
Br	81	801.7	7.8				ug/L	639	Standard
P	31	454.2	1.8				ug/L	419	Standard
S	34	6710.7	5.0				ug/L	7420	Standard
Sr	88	43.3	24.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.534		
Sc	45			
Ti	47	93.131		
V	51	92.070		
Cr	52	92.920		
Cr	53			
Mn	55	91.645		
Co	59	90.944		
Ni	60	93.522		
Cu	65	94.540		
Zn	66	96.114		
Ge	72		102.629	
As	75	94.203		
Se	82	94.723		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	97.214		
Ag	107	93.378		

Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 15:21:36

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	Cd	111	93.317	
	Cd	114		
>	In	115		96.496
	Sn	118	93.612	
	Sb	123	93.874	
	Ba	135	95.916	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.513	
|	Tl	205		
|	Pb	206	93.152	
|	Pb	207	94.662	
|	Pb	208	94.864	
|	U	238	93.188	
>	Bi	209		94.667
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 15:21:36

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 15:22:16

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10048.3	0.8	228.3236	69.025	30.2	ug/L	11199	Standard
|	Be	9	20.0	66.1	-0.0097	0.006	66.9	ug/L	10	Standard
|	Al	27	7203.4	3.9	-0.0406	0.004	10.2	ug/L	7920	Standard
[>	Sc	45	359480.5	3.1				ug/L	375691	Standard
|	Ti	47	65.0	7.1	-0.0094	0.004	38.4	ug/L	70	Standard
|	V	51	2849.3	1.0	-0.0237	0.005	22.1	ug/L	3172	Standard
|	Cr	52	8653.5	1.7	-0.1132	0.002	1.6	ug/L	9852	Standard
|	Cr	53	597.5	6.6	0.0494	0.027	55.2	ug/L	518	Standard
|	Mn	55	1236.4	2.9	-0.0087	0.001	12.8	ug/L	1193	Standard
|	Co	59	120.3	3.9	-0.0013	0.001	40.1	ug/L	98	Standard
|	Ni	60	78.7	1.5	0.0010	0.000	46.2	ug/L	67	Standard
|	Cu	65	122.3	4.0	0.0032	0.003	84.0	ug/L	90	Standard
|	Zn	66	735.0	1.9	0.4953	0.011	2.2	ug/L	148	Standard
[>	Ge	72	308255.8	1.8				ug/L	304674	Standard
|	As	75	-217.7	2.6	0.0127	0.008	60.4	ug/L	-174	Standard
|	Se	82	23.2	21.4	0.0371	0.045	122.0	ug/L	26	Standard
[	Se-1	77	132.7	13.6	0.1062	0.187	176.1	ug/L	133	Standard
[>	Ga	71	636.7	7.1				mg/L	630	Standard
|	Rb	85	16.7	17.3				ug/L	12	Standard
|	Y	89	264580.6	3.8				ug/L	271719	Standard
[>	Rh	103	355.0	17.1				ug/L	392	Standard
|	Mo	98	277.1	10.8	0.0634	0.006	10.2	ug/L	7	Standard
|	Ag	107	104.7	7.7	0.0024	0.001	49.1	ug/L	55	Standard
|	Cd	111	83.3	8.5	0.0013	0.002	149.1	mg/L	67	Standard
|	Cd	114	220.6	4.8	0.0014	0.001	76.3	ug/L	219	Standard
[>	In	115	846744.7	1.4				ug/L	887392	Standard
|	Sn	118	883.4	7.0	0.0142	0.003	24.0	ug/L	653	Standard
|	Sb	123	2264.0	3.9	0.2140	0.005	2.5	ug/L	48	Standard
|	Ba	135	53.7	29.9	0.0016	0.003	210.4	ug/L	28	Standard
|	Ce	140	22.7	2.5				ug/L	34	Standard
[>	Tb	159	1148004.4	2.8				ug/L	1226141	Standard
|	Ho	165	16.3	35.9				ug/L	14	Standard
|	Tl	203	87.3	13.3	0.0035	0.001	19.2	ug/L	9	Standard
|	Tl	205	196.0	23.4	0.0013	0.001	88.5	ug/L	20	Standard
|	Pb	206	446.3	4.1	0.0022	0.002	82.7	ug/L	419	Standard
|	Pb	207	373.3	6.9	0.0022	0.002	75.3	ug/L	338	Standard
|	Pb	208	1708.4	2.3	-0.0002	0.001	349.4	ug/L	1616	Standard
	U	238	67.7	20.0	0.0037	0.001	21.4	ug/L	2	Standard
[>	Bi	209	611488.3	2.4				ug/L	641071	Standard

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Na	23	785.0	7.1	0.0050	0.004	87.4	mg/L	412	Standard
Mg	24	428.3	9.7	0.0006	0.000	12.5	mg/L	177	Standard
K	39	125.0	0.0	-0.0279	0.003	11.6	mg/L	150	Standard
Ca	43	3.3	173.2	0.1634	4.587	2807.2	mg/L	7	Standard
Fe	54	649.6	8.1	0.0050	0.007	145.5	mg/L	634	Standard
Fe	57	2761.9	7.7	0.0037	0.003	93.3	mg/L	2670	Standard
Sc-1	45	359480.5	3.1				mg/L	375691	Standard
Cl	35	4.3	48.0				ug/L	4	Standard
Kr	83	40.6	6.9				ug/L	39	Standard
Br	81	740.0	9.1				ug/L	639	Standard
P	31	417.5	3.3				ug/L	419	Standard
S	34	6382.2	2.2				ug/L	7420	Standard
Sr	88	38.3	27.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.176	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	95.419
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.385
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 15:24:47

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, July 27, 2012 15:25:29

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10603.7	5.5	183.9694	102.367	55.6	ug/L	11199	Standard
|	Be	9	16.7	75.5	-0.0114	0.006	56.4	ug/L	10	Standard
|	Al	27	6746.5	4.5	-0.0846	0.031	37.1	ug/L	7920	Standard
[>	Sc	45	373331.7	3.3				ug/L	375691	Standard
[	Ti	47	71.3	18.0	-0.0062	0.008	129.6	ug/L	70	Standard
|	V	51	7071.2	1.1	0.3252	0.020	6.1	ug/L	3172	Standard
|	Cr	52	15750.2	0.9	0.6077	0.053	8.7	ug/L	9852	Standard
|	Cr	53	1765.1	2.4	0.7552	0.051	6.8	ug/L	518	Standard
|	Mn	55	8803.2	0.6	0.4226	0.015	3.5	ug/L	1193	Standard
|	Co	59	3907.5	1.6	0.3334	0.013	4.0	ug/L	98	Standard
|	Ni	60	4354.0	1.0	1.4606	0.041	2.8	ug/L	67	Standard
|	Cu	65	2125.5	1.8	0.7442	0.031	4.2	ug/L	90	Standard
|	Zn	66	7635.6	0.9	6.1524	0.206	3.3	ug/L	148	Standard
[>	Ge	72	315983.4	2.4				ug/L	304674	Standard
|	As	75	218.1	16.2	0.3716	0.030	8.2	ug/L	-174	Standard
|	Se	82	69.8	10.7	0.4109	0.066	16.0	ug/L	26	Standard
[	Se-1	77	162.3	0.7	0.4099	0.056	13.6	ug/L	133	Standard
[>	Ga	71	653.3	16.2				mg/L	630	Standard
[	Rb	85	25.0	40.0				ug/L	12	Standard
[	Y	89	264066.3	0.6				ug/L	271719	Standard
[>	Rh	103	396.7	4.4				ug/L	392	Standard
[	Mo	98	85.9	23.2	0.0157	0.005	30.9	ug/L	7	Standard
|	Ag	107	2914.9	1.5	0.3552	0.002	0.7	ug/L	55	Standard
|	Cd	111	1019.8	1.6	0.2142	0.004	1.7	mg/L	67	Standard
|	Cd	114	2948.9	3.5	0.2221	0.009	4.0	ug/L	219	Standard
[>	In	115	850504.7	1.7				ug/L	887392	Standard
|	Sn	118	709.0	7.3	0.0021	0.004	177.0	ug/L	653	Standard
|	Sb	123	4258.2	1.1	0.3975	0.009	2.4	ug/L	48	Standard
[	Ba	135	3529.1	3.0	0.6855	0.014	2.0	ug/L	28	Standard
[	Ce	140	28.0	3.6				ug/L	34	Standard
[>	Tb	159	1159552.5	0.6				ug/L	1226141	Standard
[	Ho	165	14.3	10.7				ug/L	14	Standard
|	Tl	203	1479.7	2.1	0.0737	0.001	1.0	ug/L	9	Standard
|	Tl	205	3608.8	5.0	0.0780	0.003	4.4	ug/L	20	Standard
|	Pb	206	3277.0	2.1	0.1880	0.005	2.6	ug/L	419	Standard
|	Pb	207	2655.9	3.9	0.1806	0.006	3.3	ug/L	338	Standard
|	Pb	208	12610.1	1.2	0.1846	0.001	0.5	ug/L	1616	Standard
	U	238	6705.8	1.5	0.3546	0.008	2.3	ug/L	2	Standard
[>	Bi	209	609999.3	1.1				ug/L	641071	Standard

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Na	23	725.0	3.2	0.0002	0.002	1556.2	mg/L	412	Standard
Mg	24	271.7	50.5	0.0004	0.000	50.1	mg/L	177	Standard
K	39	135.0	13.4	-0.0241	0.012	47.8	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	600.8	7.2	-0.0095	0.013	136.0	mg/L	634	Standard
Fe	57	2818.6	3.1	0.0031	0.002	68.4	mg/L	2670	Standard
Sc-1	45	373331.7	3.3				mg/L	375691	Standard
Cl	35	5.0	34.6				ug/L	4	Standard
Kr	83	39.0	8.7				ug/L	39	Standard
Br	81	759.2	6.7				ug/L	639	Standard
P	31	432.5	4.4				ug/L	419	Standard
S	34	6248.0	2.3				ug/L	7420	Standard
Sr	88	26.7	28.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	81.309		
Cr	52	75.963		
Cr	53			
Mn	55	84.522		
Co	59	83.359		
Ni	60	91.291		
Cu	65	93.029		
Zn	66	98.438		
Ge	72		103.712	
As	75	92.909		
Se	82	102.723		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	88.810		

Sample ID: QC Std 8

Report Date/Time: Friday, July 27, 2012 15:27:59

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	Cd	111	89.255	
	Cd	114		
>	In	115		95.843
	Sn	118		
	Sb	123	99.377	
	Ba	135	91.400	
	Ce	140		
>	Tb	159		
	Ho	165		
|	Tl	203	92.081	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	92.287	
|	U	238	88.650	
>	Bi	209		95.153
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 8

Report Date/Time: Friday, July 27, 2012 15:27:59

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Method 6020 - Summary Report

Sample ID: PBS 76 WG404676-02

Sample Date/Time: Friday, July 27, 2012 15:28:39

Number of Replicates: 3

Autosampler Position: 332

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9136.1	1.5	121.6917	54.831	45.1	ug/L	11199	Standard
|	Be	9	11.7	89.2	-0.0130	0.006	44.8	ug/L	10	Standard
|	Al	27	10923.9	3.7	0.2918	0.009	3.0	ug/L	7920	Standard
[>	Sc	45	315138.8	3.0				ug/L	375691	Standard
|	Ti	47	67.0	17.9	-0.0020	0.010	472.9	ug/L	70	Standard
|	V	51	3741.8	14.5	0.0923	0.049	53.3	ug/L	3172	Standard
|	Cr	52	8416.0	2.9	-0.0281	0.019	67.3	ug/L	9852	Standard
|	Cr	53	29965.7	10.7	20.7569	2.063	9.9	ug/L	518	Standard
|	Mn	55	1145.7	1.1	-0.0058	0.001	24.3	ug/L	1193	Standard
|	Co	59	101.0	6.9	-0.0019	0.001	43.3	ug/L	98	Standard
|	Ni	60	2150.5	0.7	0.8185	0.009	1.1	ug/L	67	Standard
|	Cu	65	171.0	10.6	0.0297	0.009	29.4	ug/L	90	Standard
|	Zn	66	1272.4	1.0	1.0792	0.008	0.7	ug/L	148	Standard
[>	Ge	72	274586.7	1.3				ug/L	304674	Standard
|	As	75	-261.3	38.0	-0.0499	0.092	183.5	ug/L	-174	Standard
|	Se	82	36.3	33.1	0.1828	0.114	62.4	ug/L	26	Standard
[	Se-1	77	1210.0	8.5	14.4528	1.212	8.4	ug/L	133	Standard
[>	Ga	71	590.0	11.1				mg/L	630	Standard
|	Rb	85	20.0	25.0				ug/L	12	Standard
|	Y	89	231407.7	2.4				ug/L	271719	Standard
[>	Rh	103	301.7	9.4				ug/L	392	Standard
|	Mo	98	68.2	15.7	0.0130	0.003	21.9	ug/L	7	Standard
|	Ag	107	93.7	18.2	0.0022	0.002	110.4	ug/L	55	Standard
|	Cd	111	29.2	26.0	-0.0105	0.002	18.5	mg/L	67	Standard
|	Cd	114	102.6	33.5	-0.0074	0.003	42.3	ug/L	219	Standard
[>	In	115	772846.7	0.5				ug/L	887392	Standard
|	Sn	118	399.7	5.3	-0.0162	0.002	10.4	ug/L	653	Standard
|	Sb	123	227.6	6.8	0.0271	0.002	6.0	ug/L	48	Standard
|	Ba	135	55.7	41.1	0.0030	0.005	166.4	ug/L	28	Standard
|	Ce	140	43.0	30.2				ug/L	34	Standard
[>	Tb	159	1072859.8	0.4				ug/L	1226141	Standard
|	Ho	165	8.7	24.0				ug/L	14	Standard
|	Tl	203	59.0	29.6	0.0023	0.001	42.8	ug/L	9	Standard
|	Tl	205	124.0	40.9	-0.0002	0.001	579.5	ug/L	20	Standard
|	Pb	206	474.7	6.4	0.0057	0.002	42.8	ug/L	419	Standard
|	Pb	207	382.7	6.0	0.0045	0.002	51.2	ug/L	338	Standard
|	Pb	208	1834.0	5.0	0.0035	0.002	57.6	ug/L	1616	Standard
	U	238	11.0	79.3	0.0007	0.000	69.5	ug/L	2	Standard
[>	Bi	209	581508.2	1.3				ug/L	641071	Standard

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Na	23	1063.4	3.2	0.0288	0.004	14.3	mg/L	412	Standard
Mg	24	1016.7	16.1	0.0017	0.000	18.5	mg/L	177	Standard
K	39	140.0	16.4	0.0002	0.020	8748.3	mg/L	150	Standard
Ca	43	3.3	173.2	0.5197	5.204	1001.3	mg/L	7	Standard
Fe	54	240.3	8.3	-0.0734	0.005	7.0	mg/L	634	Standard
Fe	57	2280.2	9.0	0.0017	0.003	159.9	mg/L	2670	Standard
Sc-1	45	315138.8	3.0				mg/L	375691	Standard
Cl	35	1351.4	3.1				ug/L	4	Standard
Kr	83	45.4	9.3				ug/L	39	Standard
Br	81	1406.7	29.6				ug/L	639	Standard
P	31	138.3	12.7				ug/L	419	Standard
S	34	5947.8	1.5				ug/L	7420	Standard
Sr	88	41.7	18.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.125	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	87.092
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.709
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBS 76 WG404676-02

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Method 6020 - Summary Report

Sample ID: F BLANK WG404620-01

Sample Date/Time: Friday, July 27, 2012 15:36:25

Number of Replicates: 3

Autosampler Position: 333

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

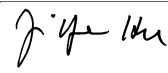
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9237.8	2.5	125.8957	121.147	96.2	ug/L	11199	Standard
|	Be	9	40.0	152.1	0.0031	0.035	1119.9	ug/L	10	Standard
|	Al	27	10655.4	7.3	0.2632	0.061	23.1	ug/L	7920	Standard
[>	Sc	45	319142.0	2.1				ug/L	375691	Standard
[	Ti	47	80.3	40.6	0.0071	0.026	361.7	ug/L	70	Standard
|	V	51	5651.9	12.7	0.2637	0.069	26.2	ug/L	3172	Standard
|	Cr	52	9689.1	1.3	0.0961	0.008	7.9	ug/L	9852	Standard
|	Cr	53	36390.4	4.1	24.6503	1.009	4.1	ug/L	518	Standard
|	Mn	55	2348.5	38.3	0.0696	0.058	83.4	ug/L	1193	Standard
|	Co	59	329.0	112.4	0.0205	0.037	179.3	ug/L	98	Standard
|	Ni	60	1636.4	2.6	0.6004	0.022	3.7	ug/L	67	Standard
|	Cu	65	308.0	13.0	0.0847	0.017	19.9	ug/L	90	Standard
|	Zn	66	1419.1	1.6	1.1843	0.025	2.2	ug/L	148	Standard
[>	Ge	72	281664.9	1.3				ug/L	304674	Standard
|	As	75	-195.3	41.4	0.0161	0.073	455.2	ug/L	-174	Standard
|	Se	82	32.8	8.8	0.1423	0.023	16.0	ug/L	26	Standard
[	Se-1	77	1455.7	2.8	17.2072	0.418	2.4	ug/L	133	Standard
[>	Ga	71	596.7	4.6				mg/L	630	Standard
[	Rb	85	25.0	60.0				ug/L	12	Standard
[	Y	89	234932.4	0.8				ug/L	271719	Standard
[>	Rh	103	368.3	6.1				ug/L	392	Standard
[	Mo	98	78.8	37.0	0.0157	0.008	51.6	ug/L	7	Standard
|	Ag	107	106.0	68.7	0.0038	0.010	269.2	ug/L	55	Standard
|	Cd	111	61.5	84.9	-0.0025	0.013	521.5	mg/L	67	Standard
|	Cd	114	182.6	77.8	-0.0004	0.013	3520.5	ug/L	219	Standard
[>	In	115	782438.4	1.0				ug/L	887392	Standard
|	Sn	118	512.7	13.4	-0.0082	0.005	65.1	ug/L	653	Standard
|	Sb	123	218.0	43.3	0.0260	0.010	37.5	ug/L	48	Standard
[	Ba	135	163.0	87.3	0.0260	0.031	118.9	ug/L	28	Standard
[	Ce	140	40.7	18.5				ug/L	34	Standard
[>	Tb	159	1081533.5	0.5				ug/L	1226141	Standard
[	Ho	165	11.3	10.2				ug/L	14	Standard
|	Tl	203	360.7	147.8	0.0185	0.029	155.0	ug/L	9	Standard
|	Tl	205	1083.4	151.5	0.0228	0.039	172.8	ug/L	20	Standard
|	Pb	206	807.4	68.3	0.0291	0.039	133.4	ug/L	419	Standard
|	Pb	207	671.7	78.5	0.0287	0.044	153.7	ug/L	338	Standard
|	Pb	208	3178.2	73.9	0.0280	0.043	152.6	ug/L	1616	Standard
	U	238	306.0	162.5	0.0173	0.028	161.7	ug/L	2	Standard
[>	Bi	209	578009.2	0.8				ug/L	641071	Standard

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Na	23	128917.8	0.2	8.0427	0.180	2.2	mg/L	412	Standard
Mg	24	1806.9	131.5	0.0029	0.004	131.1	mg/L	177	Standard
K	39	126.7	19.5	-0.0133	0.025	187.0	mg/L	150	Standard
Ca	43	6.7	86.6	3.3379	5.043	151.1	mg/L	7	Standard
Fe	54	254.1	13.3	-0.0709	0.008	11.8	mg/L	634	Standard
Fe	57	2226.8	5.9	0.0006	0.002	380.0	mg/L	2670	Standard
Sc-1	45	319142.0	2.1				mg/L	375691	Standard
Cl	35	1401.1	4.8				ug/L	4	Standard
Kr	83	43.8	6.2				ug/L	39	Standard
Br	81	1175.0	13.2				ug/L	639	Standard
P	31	154.2	23.3				ug/L	419	Standard
S	34	5915.3	3.5				ug/L	7420	Standard
Sr	88	33.3	31.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.448	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	88.173
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.163
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG404620-01

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Method 6020 - Summary Report

Sample ID: F BLANK WG404620-02

Sample Date/Time: Friday, July 27, 2012 15:39:36

Number of Replicates: 3

Autosampler Position: 334

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9432.9	0.1	122.1267	100.107	82.0	ug/L	11199	Standard
|	Be	9	5.0	100.0	-0.0168	0.003	17.0	ug/L	10	Standard
|	Al	27	7231.7	3.0	0.0095	0.031	324.8	ug/L	7920	Standard
[>	Sc	45	325551.0	3.2				ug/L	375691	Standard
[	Ti	47	52.7	7.9	-0.0142	0.004	25.4	ug/L	70	Standard
|	V	51	5740.9	18.2	0.2781	0.096	34.7	ug/L	3172	Standard
|	Cr	52	9575.0	3.3	0.0962	0.033	34.3	ug/L	9852	Standard
|	Cr	53	42334.2	5.6	29.0745	1.469	5.1	ug/L	518	Standard
|	Mn	55	940.4	6.0	-0.0201	0.003	16.0	ug/L	1193	Standard
|	Co	59	102.7	9.9	-0.0019	0.001	52.8	ug/L	98	Standard
|	Ni	60	148.7	4.6	0.0311	0.002	7.6	ug/L	67	Standard
|	Cu	65	220.7	6.8	0.0496	0.007	13.4	ug/L	90	Standard
|	Zn	66	1761.1	3.5	1.5192	0.062	4.1	ug/L	148	Standard
[>	Ge	72	278296.3	0.7				ug/L	304674	Standard
|	As	75	-224.5	40.8	-0.0130	0.085	652.7	ug/L	-174	Standard
|	Se	82	29.6	3.0	0.1166	0.009	7.9	ug/L	26	Standard
[	Se-1	77	1463.7	3.6	17.5368	0.643	3.7	ug/L	133	Standard
[>	Ga	71	631.7	15.4				mg/L	630	Standard
[	Rb	85	25.0	80.0				ug/L	12	Standard
[	Y	89	228413.5	3.5				ug/L	271719	Standard
[>	Rh	103	350.0	21.0				ug/L	392	Standard
[	Mo	98	29.0	57.0	0.0023	0.005	199.2	ug/L	7	Standard
|	Ag	107	43.7	3.5	-0.0048	0.000	4.2	ug/L	55	Standard
|	Cd	111	23.3	8.8	-0.0120	0.001	4.7	mg/L	67	Standard
|	Cd	114	81.5	14.9	-0.0093	0.001	11.1	ug/L	219	Standard
[>	In	115	776227.1	0.9				ug/L	887392	Standard
|	Sn	118	405.3	5.1	-0.0160	0.002	11.0	ug/L	653	Standard
|	Sb	123	63.0	17.2	0.0104	0.001	11.2	ug/L	48	Standard
[	Ba	135	41.3	22.0	-0.0002	0.002	1212.0	ug/L	28	Standard
[	Ce	140	48.0	4.2				ug/L	34	Standard
[>	Tb	159	1072014.6	0.9				ug/L	1226141	Standard
[	Ho	165	11.0	9.1				ug/L	14	Standard
|	Tl	203	36.3	6.9	0.0010	0.000	12.4	ug/L	9	Standard
|	Tl	205	87.7	7.3	-0.0011	0.000	13.7	ug/L	20	Standard
|	Pb	206	464.7	6.1	0.0045	0.002	41.1	ug/L	419	Standard
|	Pb	207	401.3	6.1	0.0055	0.002	37.4	ug/L	338	Standard
|	Pb	208	1833.7	1.6	0.0030	0.000	15.2	ug/L	1616	Standard
	U	238	10.7	5.4	0.0007	0.000	4.6	ug/L	2	Standard
[>	Bi	209	589573.8	0.2				ug/L	641071	Standard

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Na	23	2913.6	11.3	0.1408	0.026	18.4	mg/L	412	Standard
Mg	24	428.3	4.1	0.0007	0.000	7.1	mg/L	177	Standard
K	39	138.3	21.8	-0.0047	0.031	660.0	mg/L	150	Standard
Ca	43	5.0	100.0	1.8400	4.363	237.1	mg/L	7	Standard
Fe	54	275.5	12.6	-0.0670	0.010	15.0	mg/L	634	Standard
Fe	57	2045.1	10.2	-0.0023	0.004	153.7	mg/L	2670	Standard
Sc-1	45	325551.0	3.2				mg/L	375691	Standard
Cl	35	1475.7	3.1				ug/L	4	Standard
Kr	83	40.8	5.4				ug/L	39	Standard
Br	81	1025.0	2.4				ug/L	639	Standard
P	31	167.5	4.5				ug/L	419	Standard
S	34	6002.9	2.1				ug/L	7420	Standard
Sr	88	46.7	40.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.342	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: F BLANK WG404620-02

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	Cd	111	
	Cd	114	
>	In	115	87.473
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.967
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: F BLANK WG404620-02

Report Date/Time: Friday, July 27, 2012 15:42:07

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Method 6020 - Summary Report

Sample ID: LCSW 76 WG404676-03

Sample Date/Time: Friday, July 27, 2012 15:42:46

Number of Replicates: 3

Autosampler Position: 335

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	363442.9	2.8	-94222.0448	5272.148	5.6	ug/L	11199	Standard
|	Be	9	2716.9	1.2	1.2518	0.047	3.8	ug/L	10	Standard
|	Al	27	4555425.4	1.3	268.2189	4.118	1.5	ug/L	7920	Standard
[>	Sc	45	385388.8	2.7				ug/L	375691	Standard
[	Ti	47	34060.6	2.2	23.4315	0.584	2.5	ug/L	70	Standard
|	V	51	289182.9	0.5	23.5090	0.122	0.5	ug/L	3172	Standard
|	Cr	52	126000.9	1.8	11.8676	0.259	2.2	ug/L	9852	Standard
|	Cr	53	100426.9	3.2	59.8212	2.297	3.8	ug/L	518	Standard
|	Mn	55	207486.4	0.6	11.5370	0.160	1.4	ug/L	1193	Standard
|	Co	59	52668.4	1.7	4.5452	0.100	2.2	ug/L	98	Standard
|	Ni	60	34479.2	2.1	11.4950	0.144	1.3	ug/L	67	Standard
|	Cu	65	32488.8	1.7	11.7309	0.125	1.1	ug/L	90	Standard
|	Zn	66	30764.9	3.6	24.6105	0.647	2.6	ug/L	148	Standard
[>	Ge	72	322826.5	1.0				ug/L	304674	Standard
|	As	75	11069.5	1.2	9.0001	0.074	0.8	ug/L	-174	Standard
|	Se	82	1179.9	0.8	9.2265	0.165	1.8	ug/L	26	Standard
[	Se-1	77	3476.1	1.9	37.4140	0.373	1.0	ug/L	133	Standard
[>	Ga	71	751.7	10.8				mg/L	630	Standard
[	Rb	85	853.4	2.6				ug/L	12	Standard
[	Y	89	285440.6	1.2				ug/L	271719	Standard
[>	Rh	103	375.0	7.1				ug/L	392	Standard
[	Mo	98	100909.7	0.5	23.5665	0.124	0.5	ug/L	7	Standard
|	Ag	107	79535.2	1.5	9.3942	0.199	2.1	ug/L	55	Standard
|	Cd	111	5355.5	1.7	1.1296	0.029	2.6	mg/L	67	Standard
|	Cd	114	15763.1	1.1	1.1842	0.023	2.0	ug/L	219	Standard
[>	In	115	903167.1	0.8				ug/L	887392	Standard
|	Sn	118	912.0	5.8	0.0123	0.003	28.2	ug/L	653	Standard
|	Sb	123	311874.1	0.8	27.1394	0.425	1.6	ug/L	48	Standard
[	Ba	135	124361.3	0.7	23.0421	0.257	1.1	ug/L	28	Standard
[	Ce	140	131.3	11.7				ug/L	34	Standard
[>	Tb	159	1224040.2	0.4				ug/L	1226141	Standard
[	Ho	165	12.7	12.1				ug/L	14	Standard
|	Tl	203	234584.1	0.7	11.1428	0.010	0.1	ug/L	9	Standard
|	Tl	205	545531.4	1.1	11.5717	0.045	0.4	ug/L	20	Standard
|	Pb	206	177603.9	0.7	10.9630	0.033	0.3	ug/L	419	Standard
|	Pb	207	161408.9	0.6	11.8681	0.067	0.6	ug/L	338	Standard
|	Pb	208	720824.4	1.0	11.4896	0.058	0.5	ug/L	1616	Standard
	U	238	13.3	31.2	0.0008	0.000	26.9	ug/L	2	Standard
[>	Bi	209	646828.7	0.7				ug/L	641071	Standard

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Na	23	65586.7	1.9	3.3660	0.084	2.5	mg/L	412	Standard
Mg	24	170734.0	3.5	0.2265	0.004	1.6	mg/L	177	Standard
K	39	1723.4	4.3	1.1810	0.030	2.5	mg/L	150	Standard
Ca	43	6.7	114.6	2.3321	5.487	235.3	mg/L	7	Standard
Fe	54	1013.2	12.7	0.0673	0.029	42.7	mg/L	634	Standard
Fe	57	10123.4	3.4	0.0835	0.002	2.6	mg/L	2670	Standard
Sc-1	45	385388.8	2.7				mg/L	375691	Standard
Cl	35	2755.3	2.8				ug/L	4	Standard
Kr	83	52.9	17.7				ug/L	39	Standard
Br	81	779.2	6.5				ug/L	639	Standard
P	31	449.2	5.5				ug/L	419	Standard
S	34	6844.9	1.8				ug/L	7420	Standard
Sr	88	106.7	14.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.958	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 76 WG404676-03

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	Cd	111	
	Cd	114	
>	In	115	101.778
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.898
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 76 WG404676-03

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Method 6020 - Summary Report

Sample ID: L1207077401 WG404676-01

Sample Date/Time: Friday, July 27, 2012 15:52:01

Number of Replicates: 3

Autosampler Position: 336

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9256.2	8.4	74.2336	226.105	304.6	ug/L	11199	Standard
|	Be	9	10.0	100.0	-0.0138	0.006	41.4	ug/L	10	Standard
|	Al	27	17892.2	4.1	0.7987	0.042	5.2	ug/L	7920	Standard
[>	Sc	45	314038.0	1.0				ug/L	375691	Standard
|	Ti	47	130.0	17.0	0.0493	0.016	33.2	ug/L	70	Standard
|	V	51	3557.7	6.1	0.0761	0.018	24.1	ug/L	3172	Standard
|	Cr	52	8008.5	4.3	-0.0736	0.026	35.3	ug/L	9852	Standard
|	Cr	53	16844.4	7.2	11.5714	0.658	5.7	ug/L	518	Standard
|	Mn	55	1378.4	10.5	0.0098	0.008	85.0	ug/L	1193	Standard
|	Co	59	140.3	32.2	0.0021	0.005	210.5	ug/L	98	Standard
|	Ni	60	614.7	5.6	0.2158	0.009	4.3	ug/L	67	Standard
|	Cu	65	444.3	4.1	0.1468	0.007	4.8	ug/L	90	Standard
|	Zn	66	2298.8	4.0	2.0575	0.054	2.6	ug/L	148	Standard
[>	Ge	72	273534.9	1.9				ug/L	304674	Standard
|	As	75	-209.2	28.0	-0.0029	0.059	2015.0	ug/L	-174	Standard
|	Se	82	24.0	15.9	0.0684	0.039	57.3	ug/L	26	Standard
[	Se-1	77	667.3	8.5	7.3559	0.648	8.8	ug/L	133	Standard
[>	Ga	71	596.7	12.6				mg/L	630	Standard
|	Rb	85	116.7	10.8				ug/L	12	Standard
|	Y	89	229969.3	2.3				ug/L	271719	Standard
[>	Rh	103	308.3	11.0				ug/L	392	Standard
|	Mo	98	153.7	80.0	0.0373	0.034	91.1	ug/L	7	Standard
|	Ag	107	161.0	121.6	0.0119	0.027	229.8	ug/L	55	Standard
|	Cd	111	71.0	116.4	0.0004	0.021	5943.0	mg/L	67	Standard
|	Cd	114	217.3	113.4	0.0033	0.022	681.5	ug/L	219	Standard
[>	In	115	750997.6	1.8				ug/L	887392	Standard
|	Sn	118	584.7	18.6	-0.0012	0.008	649.7	ug/L	653	Standard
|	Sb	123	200.2	104.6	0.0248	0.022	87.1	ug/L	48	Standard
|	Ba	135	1138.0	10.1	0.2444	0.022	9.1	ug/L	28	Standard
|	Ce	140	71.0	14.7				ug/L	34	Standard
[>	Tb	159	1058627.8	1.4				ug/L	1226141	Standard
|	Ho	165	11.7	26.2				ug/L	14	Standard
|	Tl	203	167.7	106.6	0.0081	0.009	116.2	ug/L	9	Standard
|	Tl	205	375.3	89.9	0.0058	0.008	136.0	ug/L	20	Standard
|	Pb	206	563.7	24.6	0.0125	0.009	72.1	ug/L	419	Standard
|	Pb	207	450.0	15.6	0.0106	0.005	47.3	ug/L	338	Standard
|	Pb	208	2122.1	16.7	0.0093	0.006	60.5	ug/L	1616	Standard
|	U	238	39.0	115.6	0.0023	0.002	109.3	ug/L	2	Standard
[>	Bi	209	570149.7	3.2				ug/L	641071	Standard

Sample ID: L1207077401 WG404676-01

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Na	23	130923.2	0.8	8.2994	0.030	0.4	mg/L	412	Standard
Mg	24	11045.7	3.6	0.0180	0.000	2.5	mg/L	177	Standard
K	39	153.3	19.9	0.0130	0.027	208.6	mg/L	150	Standard
Ca	43	3.3	173.2	0.4730	5.123	1083.0	mg/L	7	Standard
Fe	54	213.0	11.0	-0.0798	0.006	6.9	mg/L	634	Standard
Fe	57	2088.5	7.1	-0.0008	0.002	221.0	mg/L	2670	Standard
Sc-1	45	314038.0	1.0				mg/L	375691	Standard
Cl	35	550.0	3.4				ug/L	4	Standard
Kr	83	39.3	3.9				ug/L	39	Standard
Br	81	556.7	6.5				ug/L	639	Standard
P	31	275.8	6.4				ug/L	419	Standard
S	34	6187.9	2.7				ug/L	7420	Standard
Sr	88	33.3	22.9				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.779	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	84.630
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	88.937
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207077401 WG404676-01

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Method 6020 - Summary Report

Sample ID: L1207077402S WG404676-04

Sample Date/Time: Friday, July 27, 2012 15:55:11

Number of Replicates: 3

Autosampler Position: 337

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	137969.2	3.6	-41235.7833	1838.935	4.5	ug/L	11199	Standard
|	Be	9	1150.0	3.0	0.6267	0.028	4.5	ug/L	10	Standard
|	Al	27	1585594.0	1.4	111.8339	2.084	1.9	ug/L	7920	Standard
[>	Sc	45	320862.6	1.9				ug/L	375691	Standard
|	Ti	47	12805.7	3.6	10.2707	0.277	2.7	ug/L	70	Standard
|	V	51	109640.8	3.9	10.2742	0.310	3.0	ug/L	3172	Standard
|	Cr	52	51556.3	3.2	5.1359	0.141	2.7	ug/L	9852	Standard
|	Cr	53	42899.9	5.6	29.7148	1.404	4.7	ug/L	518	Standard
|	Mn	55	79858.7	2.9	5.1485	0.104	2.0	ug/L	1193	Standard
|	Co	59	21000.2	3.5	2.1128	0.054	2.6	ug/L	98	Standard
|	Ni	60	13334.5	2.3	5.1856	0.073	1.4	ug/L	67	Standard
|	Cu	65	13031.6	2.7	5.4806	0.098	1.8	ug/L	90	Standard
|	Zn	66	16503.0	2.3	15.3981	0.275	1.8	ug/L	148	Standard
[>	Ge	72	275982.6	1.0				ug/L	304674	Standard
|	As	75	4977.5	2.1	4.8258	0.074	1.5	ug/L	-174	Standard
|	Se	82	622.3	5.2	5.6305	0.247	4.4	ug/L	26	Standard
[	Se-1	77	1710.4	3.2	20.9230	0.689	3.3	ug/L	133	Standard
[>	Ga	71	603.3	9.1				mg/L	630	Standard
|	Rb	85	493.3	12.5				ug/L	12	Standard
|	Y	89	232882.8	0.2				ug/L	271719	Standard
[>	Rh	103	338.3	5.2				ug/L	392	Standard
|	Mo	98	38147.6	0.9	10.4775	0.183	1.7	ug/L	7	Standard
|	Ag	107	31067.5	1.5	4.3110	0.112	2.6	ug/L	55	Standard
|	Cd	111	2365.0	2.5	0.5782	0.017	3.0	mg/L	67	Standard
|	Cd	114	6907.9	1.4	0.6025	0.016	2.6	ug/L	219	Standard
[>	In	115	767839.9	1.6				ug/L	887392	Standard
|	Sn	118	521.7	7.7	-0.0068	0.003	42.4	ug/L	653	Standard
|	Sb	123	134477.4	2.1	13.7666	0.278	2.0	ug/L	48	Standard
[	Ba	135	51601.8	2.3	11.2422	0.283	2.5	ug/L	28	Standard
[	Ce	140	128.7	7.8				ug/L	34	Standard
[>	Tb	159	1073376.4	0.3				ug/L	1226141	Standard
|	Ho	165	14.7	41.7				ug/L	14	Standard
|	Tl	203	91774.9	2.8	4.8836	0.102	2.1	ug/L	9	Standard
|	Tl	205	215922.7	1.9	5.1300	0.064	1.2	ug/L	20	Standard
|	Pb	206	72409.0	2.3	4.9933	0.097	1.9	ug/L	419	Standard
|	Pb	207	65539.8	2.1	5.3846	0.081	1.5	ug/L	338	Standard
|	Pb	208	293512.8	1.8	5.2262	0.064	1.2	ug/L	1616	Standard
	U	238	9.0	19.2	0.0006	0.000	15.6	ug/L	2	Standard
[>	Bi	209	577273.5	0.7				ug/L	641071	Standard

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Na	23	133515.7	0.6	8.2848	0.106	1.3	mg/L	412	Standard
Mg	24	79849.9	2.2	0.1273	0.000	0.4	mg/L	177	Standard
K	39	766.7	15.5	0.5699	0.100	17.6	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	367.4	18.4	-0.0445	0.017	39.0	mg/L	634	Standard
Fe	57	5424.3	6.8	0.0433	0.005	12.5	mg/L	2670	Standard
Sc-1	45	320862.6	1.9				mg/L	375691	Standard
Cl	35	1112.4	1.0				ug/L	4	Standard
Kr	83	40.0	7.9				ug/L	39	Standard
Br	81	619.2	8.5				ug/L	639	Standard
P	31	260.8	10.7				ug/L	419	Standard
S	34	6311.3	0.7				ug/L	7420	Standard
Sr	88	70.0	18.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.583	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207077402S WG404676-04

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	Cd	111	
	Cd	114	
>	In	115	86.528
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.048
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207077402S WG404676-04

Report Date/Time: Friday, July 27, 2012 15:57:42

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Method 6020 - Summary Report

Sample ID: L1207077403SD WG404676-05

Sample Date/Time: Friday, July 27, 2012 15:58:21

Number of Replicates: 3

Autosampler Position: 338

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	132869.3	4.8	-39199.2571	2247.813	5.7	ug/L	11199	Standard
|	Be	9	1048.4	1.9	0.5639	0.017	3.0	ug/L	10	Standard
|	Al	27	1553022.0	3.4	108.5109	4.575	4.2	ug/L	7920	Standard
[>	Sc	45	323967.3	3.1				ug/L	375691	Standard
[	Ti	47	12443.4	2.9	9.9930	0.243	2.4	ug/L	70	Standard
|	V	51	104443.5	3.0	9.7889	0.260	2.7	ug/L	3172	Standard
|	Cr	52	49697.8	3.7	4.9215	0.197	4.0	ug/L	9852	Standard
|	Cr	53	43197.4	3.6	29.9695	0.949	3.2	ug/L	518	Standard
|	Mn	55	81024.5	3.1	5.2322	0.140	2.7	ug/L	1193	Standard
|	Co	59	19821.0	3.2	1.9964	0.055	2.7	ug/L	98	Standard
|	Ni	60	12715.7	4.2	4.9503	0.188	3.8	ug/L	67	Standard
|	Cu	65	12742.0	3.5	5.3654	0.171	3.2	ug/L	90	Standard
|	Zn	66	15719.5	4.2	14.6806	0.568	3.9	ug/L	148	Standard
[>	Ge	72	275611.9	0.5				ug/L	304674	Standard
|	As	75	4740.3	2.0	4.6108	0.068	1.5	ug/L	-174	Standard
|	Se	82	594.6	2.4	5.3808	0.109	2.0	ug/L	26	Standard
[	Se-1	77	1638.1	2.9	20.0038	0.524	2.6	ug/L	133	Standard
[>	Ga	71	601.7	0.5				mg/L	630	Standard
[	Rb	85	506.7	9.7				ug/L	12	Standard
[	Y	89	234641.5	1.4				ug/L	271719	Standard
[>	Rh	103	401.7	8.5				ug/L	392	Standard
[	Mo	98	37133.6	3.4	10.2357	0.306	3.0	ug/L	7	Standard
|	Ag	107	29908.2	1.9	4.1646	0.057	1.4	ug/L	55	Standard
|	Cd	111	2211.4	1.3	0.5416	0.006	1.1	mg/L	67	Standard
|	Cd	114	6599.3	2.9	0.5769	0.012	2.1	ug/L	219	Standard
[>	In	115	764920.5	1.2				ug/L	887392	Standard
|	Sn	118	538.3	8.1	-0.0054	0.004	65.2	ug/L	653	Standard
|	Sb	123	129338.1	3.5	13.2891	0.384	2.9	ug/L	48	Standard
[	Ba	135	49650.6	3.9	10.8562	0.381	3.5	ug/L	28	Standard
[	Ce	140	592.3	4.6				ug/L	34	Standard
[>	Tb	159	1067235.2	0.9				ug/L	1226141	Standard
[	Ho	165	16.3	23.2				ug/L	14	Standard
|	Tl	203	88007.3	2.4	4.7063	0.097	2.1	ug/L	9	Standard
|	Tl	205	204926.4	3.6	4.8924	0.163	3.3	ug/L	20	Standard
|	Pb	206	70855.7	3.3	4.9095	0.150	3.1	ug/L	419	Standard
|	Pb	207	64048.3	4.4	5.2872	0.223	4.2	ug/L	338	Standard
|	Pb	208	287157.5	3.8	5.1374	0.181	3.5	ug/L	1616	Standard
	U	238	17.0	11.8	0.0011	0.000	10.4	ug/L	2	Standard
[>	Bi	209	574465.5	0.3				ug/L	641071	Standard

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Na	23	133942.8	1.1	8.2365	0.319	3.9	mg/L	412	Standard
Mg	24	78570.0	3.1	0.1241	0.006	5.1	mg/L	177	Standard
K	39	790.0	7.8	0.5845	0.038	6.4	mg/L	150	Standard
Ca	43	1.7	173.2	-1.0171	2.542	250.0	mg/L	7	Standard
Fe	54	459.7	26.8	-0.0241	0.028	117.0	mg/L	634	Standard
Fe	57	5569.4	6.0	0.0446	0.006	13.1	mg/L	2670	Standard
Sc-1	45	323967.3	3.1				mg/L	375691	Standard
Cl	35	1103.4	3.8				ug/L	4	Standard
Kr	83	42.2	7.3				ug/L	39	Standard
Br	81	592.5	9.4				ug/L	639	Standard
P	31	269.2	11.1				ug/L	419	Standard
S	34	6323.8	4.0				ug/L	7420	Standard
Sr	88	78.3	32.8				ug/L	35	Standard

QC Calculated Values

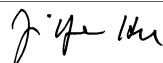
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.461	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207077403SD WG404676-05

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	Cd	111		
	Cd	114		
>	In	115	86.199	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	89.610	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207077403SD WG404676-05

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Method 6020 - Summary Report

Sample ID: L1207074601

Sample Date/Time: Friday, July 27, 2012 16:01:32

Number of Replicates: 3

Autosampler Position: 339

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23216.1	3.5	-4406.5876	348.278	7.9	ug/L	11199	Standard
|	Be	9	5.0	100.0	-0.0167	0.003	17.1	ug/L	10	Standard
|	Al	27	62547.2	2.4	3.9684	0.155	3.9	ug/L	7920	Standard
[>	Sc	45	318499.7	1.1				ug/L	375691	Standard
|	Ti	47	129.7	10.5	0.0493	0.011	23.3	ug/L	70	Standard
|	V	51	3608.0	5.5	0.0813	0.020	24.2	ug/L	3172	Standard
|	Cr	52	8288.9	4.4	-0.0389	0.041	104.5	ug/L	9852	Standard
|	Cr	53	11426.0	2.7	7.7539	0.174	2.2	ug/L	518	Standard
|	Mn	55	3712.8	0.7	0.1643	0.002	1.4	ug/L	1193	Standard
|	Co	59	155.0	2.6	0.0037	0.000	10.5	ug/L	98	Standard
|	Ni	60	1717.1	3.3	0.6511	0.020	3.1	ug/L	67	Standard
|	Cu	65	353.0	5.9	0.1079	0.010	9.0	ug/L	90	Standard
|	Zn	66	4129.9	0.9	3.7982	0.044	1.2	ug/L	148	Standard
[>	Ge	72	273359.6	0.5				ug/L	304674	Standard
|	As	75	-194.0	7.6	0.0118	0.015	124.8	ug/L	-174	Standard
|	Se	82	51.6	16.7	0.3275	0.079	24.1	ug/L	26	Standard
[	Se-1	77	639.3	4.9	6.9966	0.428	6.1	ug/L	133	Standard
[>	Ga	71	563.3	10.3				mg/L	630	Standard
|	Rb	85	17631.9	2.8				ug/L	12	Standard
|	Y	89	232111.1	0.6				ug/L	271719	Standard
[>	Rh	103	336.7	13.8				ug/L	392	Standard
|	Mo	98	653.1	11.8	0.1781	0.023	12.7	ug/L	7	Standard
|	Ag	107	47.7	14.0	-0.0040	0.001	24.0	ug/L	55	Standard
|	Cd	111	28.4	32.1	-0.0105	0.002	21.9	mg/L	67	Standard
|	Cd	114	80.8	18.1	-0.0091	0.001	15.8	ug/L	219	Standard
[>	In	115	750470.2	1.3				ug/L	887392	Standard
|	Sn	118	443.7	3.9	-0.0119	0.002	15.0	ug/L	653	Standard
|	Sb	123	117.5	7.5	0.0163	0.001	6.6	ug/L	48	Standard
|	Ba	135	45797.5	2.0	10.2093	0.332	3.2	ug/L	28	Standard
|	Ce	140	99.0	7.1				ug/L	34	Standard
[>	Tb	159	1060984.5	0.7				ug/L	1226141	Standard
|	Ho	165	12.0	0.0				ug/L	14	Standard
|	Tl	203	159.7	7.7	0.0076	0.001	7.8	ug/L	9	Standard
|	Tl	205	377.0	5.1	0.0058	0.000	8.0	ug/L	20	Standard
|	Pb	206	10833.2	2.3	0.7223	0.011	1.5	ug/L	419	Standard
|	Pb	207	9262.8	1.4	0.7361	0.004	0.5	ug/L	338	Standard
|	Pb	208	42290.0	1.9	0.7263	0.010	1.3	ug/L	1616	Standard
	U	238	5.3	10.8	0.0004	0.000	7.4	ug/L	2	Standard
[>	Bi	209	578642.0	1.0				ug/L	641071	Standard

Sample ID: L1207074601

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Na	23	123012.4	1.4	7.6858	0.082	1.1	mg/L	412	Standard
Mg	24	1475.1	8.3	0.0024	0.000	8.9	mg/L	177	Standard
K	39	6406.4	3.3	5.7697	0.260	4.5	mg/L	150	Standard
Ca	43	16.7	34.6	11.9310	4.989	41.8	mg/L	7	Standard
Fe	54	219.5	11.6	-0.0789	0.007	8.4	mg/L	634	Standard
Fe	57	3027.0	3.4	0.0115	0.002	15.5	mg/L	2670	Standard
Sc-1	45	318499.7	1.1				mg/L	375691	Standard
Cl	35	589.0	8.6				ug/L	4	Standard
Kr	83	40.7	12.6				ug/L	39	Standard
Br	81	636.7	8.1				ug/L	639	Standard
P	31	126.7	6.9				ug/L	419	Standard
S	34	6258.8	3.0				ug/L	7420	Standard
Sr	88	48.3	57.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.722	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207074601

Report Date/Time: Friday, July 27, 2012 16:04:02

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	Cd	111	
	Cd	114	
>	In	115	84.570
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.262
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207074601

Report Date/Time: Friday, July 27, 2012 16:04:02

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Method 6020 - Summary Report

Sample ID: L1207074601PS WG404761-01

Sample Date/Time: Friday, July 27, 2012 16:04:42

Number of Replicates: 3

Autosampler Position: 340

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26339.6	3.7	-4176.3957	304.495	7.3	ug/L	11199	Standard
|	Be	9	94022.6	1.8	45.4441	0.395	0.9	ug/L	10	Standard
|	Al	27	799473.9	0.6	48.2591	0.505	1.0	ug/L	7920	Standard
[>	Sc	45	372695.0	0.9				ug/L	375691	Standard
|	Ti	47	160.3	2.8	0.0576	0.003	5.4	ug/L	70	Standard
|	V	51	509853.7	0.6	42.9254	0.181	0.4	ug/L	3172	Standard
|	Cr	52	417582.3	0.7	43.0382	0.321	0.7	ug/L	9852	Standard
|	Cr	53	81637.8	2.3	50.0459	1.292	2.6	ug/L	518	Standard
|	Mn	55	740098.3	0.5	42.6160	0.260	0.6	ug/L	1193	Standard
|	Co	59	470015.6	0.3	41.8893	0.209	0.5	ug/L	98	Standard
|	Ni	60	125190.8	1.3	43.0808	0.583	1.4	ug/L	67	Standard
|	Cu	65	118442.5	0.9	44.1856	0.344	0.8	ug/L	90	Standard
|	Zn	66	57355.7	1.1	47.3967	0.443	0.9	ug/L	148	Standard
[>	Ge	72	313309.6	0.2				ug/L	304674	Standard
|	As	75	53458.8	0.6	44.0126	0.154	0.3	ug/L	-174	Standard
|	Se	82	5406.1	1.0	44.1374	0.344	0.8	ug/L	26	Standard
[	Se-1	77	4490.7	1.2	50.2851	0.714	1.4	ug/L	133	Standard
[>	Ga	71	755.0	16.1				mg/L	630	Standard
|	Rb	85	17525.1	1.1				ug/L	12	Standard
|	Y	89	271121.3	1.6				ug/L	271719	Standard
[>	Rh	103	378.3	8.6				ug/L	392	Standard
|	Mo	98	614.7	6.1	0.1438	0.010	6.9	ug/L	7	Standard
|	Ag	107	346686.2	0.6	42.6450	0.405	0.9	ug/L	55	Standard
|	Cd	111	195136.6	1.4	43.4784	0.327	0.8	mg/L	67	Standard
|	Cd	114	553142.8	0.6	43.8223	0.130	0.3	ug/L	219	Standard
[>	In	115	867958.0	0.8				ug/L	887392	Standard
|	Sn	118	993.4	5.3	0.0201	0.003	15.2	ug/L	653	Standard
|	Sb	123	485105.9	1.1	43.9197	0.171	0.4	ug/L	48	Standard
|	Ba	135	270112.5	0.7	52.0869	0.186	0.4	ug/L	28	Standard
[	Ce	140	149.0	11.1				ug/L	34	Standard
[>	Tb	159	1173976.8	0.7				ug/L	1226141	Standard
|	Ho	165	16.3	30.2				ug/L	14	Standard
|	Tl	203	849000.3	1.1	41.5594	0.515	1.2	ug/L	9	Standard
|	Tl	205	1983263.0	0.5	43.3603	0.324	0.7	ug/L	20	Standard
|	Pb	206	675128.7	1.0	43.0229	0.521	1.2	ug/L	419	Standard
|	Pb	207	570296.4	0.9	43.2817	0.475	1.1	ug/L	338	Standard
|	Pb	208	2648207.7	0.7	43.5795	0.406	0.9	ug/L	1616	Standard
	U	238	814722.2	0.7	41.8497	0.285	0.7	ug/L	2	Standard
[>	Bi	209	627703.2	0.3				ug/L	641071	Standard

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Na	23	123565.1	0.2	6.5924	0.058	0.9	mg/L	412	Standard
Mg	24	1811.8	10.6	0.0025	0.000	11.4	mg/L	177	Standard
K	39	6159.6	1.2	4.7160	0.015	0.3	mg/L	150	Standard
Ca	43	15.0	33.3	8.5835	3.594	41.9	mg/L	7	Standard
Fe	54	601.8	5.5	-0.0093	0.008	83.2	mg/L	634	Standard
Fe	57	4235.6	3.7	0.0194	0.002	9.3	mg/L	2670	Standard
Sc-1	45	372695.0	0.9				mg/L	375691	Standard
Cl	35	552.0	4.6				ug/L	4	Standard
Kr	83	41.3	15.6				ug/L	39	Standard
Br	81	825.0	3.4				ug/L	639	Standard
P	31	455.0	11.5				ug/L	419	Standard
S	34	7093.3	1.3				ug/L	7420	Standard
Sr	88	60.0	50.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.834	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207074601PS WG404761-01

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	Cd	111	
	Cd	114	
>	In	115	97.810
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.915
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207074601PS WG404761-01

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Method 6020 - Summary Report

Sample ID: L1207074601SDL WG404761-02

Sample Date/Time: Friday, July 27, 2012 16:07:52

Number of Replicates: 3

Autosampler Position: 341

Sample Description: 250

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10922.3	3.2	-514.0440	139.325	27.1	ug/L	11199	Standard
|	Be	9	15.0	0.0	-0.0109	0.000	3.0	ug/L	10	Standard
|	Al	27	14838.9	4.4	0.5890	0.009	1.5	ug/L	7920	Standard
[>	Sc	45	310786.2	3.7				ug/L	375691	Standard
|	Ti	47	53.0	21.8	-0.0132	0.010	73.0	ug/L	70	Standard
|	V	51	3136.3	9.7	0.0352	0.028	80.5	ug/L	3172	Standard
|	Cr	52	7922.7	1.4	-0.0837	0.009	10.7	ug/L	9852	Standard
|	Cr	53	4179.7	0.2	2.6286	0.011	0.4	ug/L	518	Standard
|	Mn	55	1307.1	2.2	0.0052	0.001	28.4	ug/L	1193	Standard
|	Co	59	136.7	11.3	0.0018	0.002	92.3	ug/L	98	Standard
|	Ni	60	437.7	2.8	0.1461	0.005	3.2	ug/L	67	Standard
|	Cu	65	118.3	6.0	0.0074	0.003	44.6	ug/L	90	Standard
|	Zn	66	2492.2	0.9	2.2416	0.018	0.8	ug/L	148	Standard
[>	Ge	72	273521.1	0.5				ug/L	304674	Standard
|	As	75	-171.8	11.6	0.0328	0.019	59.1	ug/L	-174	Standard
|	Se	82	24.0	10.6	0.0680	0.024	35.2	ug/L	26	Standard
[	Se-1	77	224.3	5.9	1.5148	0.172	11.3	ug/L	133	Standard
[>	Ga	71	523.3	7.7				mg/L	630	Standard
|	Rb	85	2460.2	4.5				ug/L	12	Standard
|	Y	89	228873.8	3.5				ug/L	271719	Standard
[>	Rh	103	323.3	13.2				ug/L	392	Standard
|	Mo	98	104.0	17.8	0.0243	0.005	20.0	ug/L	7	Standard
|	Ag	107	102.7	5.0	0.0042	0.001	14.2	ug/L	55	Standard
|	Cd	111	39.4	6.5	-0.0074	0.001	10.6	mg/L	67	Standard
|	Cd	114	112.1	10.6	-0.0060	0.001	21.3	ug/L	219	Standard
[>	In	115	732814.1	1.9				ug/L	887392	Standard
|	Sn	118	369.7	3.8	-0.0170	0.002	9.8	ug/L	653	Standard
|	Sb	123	111.0	13.1	0.0159	0.001	8.4	ug/L	48	Standard
|	Ba	135	6631.1	2.0	1.5057	0.014	1.0	ug/L	28	Standard
|	Ce	140	38.3	31.1				ug/L	34	Standard
[>	Tb	159	1028546.1	1.8				ug/L	1226141	Standard
|	Ho	165	13.7	11.2				ug/L	14	Standard
|	Tl	203	323.3	9.9	0.0167	0.002	12.2	ug/L	9	Standard
|	Tl	205	803.4	7.3	0.0163	0.002	10.8	ug/L	20	Standard
|	Pb	206	1981.5	1.2	0.1130	0.004	3.1	ug/L	419	Standard
|	Pb	207	1689.1	1.8	0.1152	0.002	1.3	ug/L	338	Standard
|	Pb	208	7833.1	1.1	0.1138	0.001	1.0	ug/L	1616	Standard
|	U	238	72.7	21.8	0.0042	0.001	22.4	ug/L	2	Standard
[>	Bi	209	566665.0	1.8				ug/L	641071	Standard

Sample ID: L1207074601SDL WG404761-02

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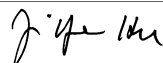
Na	23	48917.2	1.5	3.1126	0.145	4.7	mg/L	412	Standard
Mg	24	340.0	19.1	0.0006	0.000	15.6	mg/L	177	Standard
K	39	1005.0	3.3	0.8193	0.051	6.2	mg/L	150	Standard
Ca	43	1.7	173.2	-1.0411	2.501	240.2	mg/L	7	Standard
Fe	54	202.6	17.5	-0.0819	0.008	9.3	mg/L	634	Standard
Fe	57	2113.5	3.4	-0.0002	0.000	130.3	mg/L	2670	Standard
Sc-1	45	310786.2	3.7				mg/L	375691	Standard
Cl	35	90.7	9.6				ug/L	4	Standard
Kr	83	40.4	11.5				ug/L	39	Standard
Br	81	480.0	5.2				ug/L	639	Standard
P	31	123.3	11.2				ug/L	419	Standard
S	34	6328.8	3.7				ug/L	7420	Standard
Sr	88	48.3	36.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.775	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207074601SDL WG404761-02
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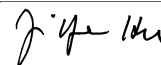
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	Cd	114		
>	In	115	82.581	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	88.393	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207074601SDL WG404761-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 16:11:03

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10678.8	3.3	187.1292	23.502	12.6	ug/L	11199	Standard
|	Be	9	98371.7	2.2	47.0827	0.342	0.7	ug/L	10	Standard
|	Al	27	809059.6	2.0	48.3582	0.326	0.7	ug/L	7920	Standard
>	Sc	45	376422.3	2.6				ug/L	375691	Standard
[	Ti	47	134688.4	0.6	94.1342	0.636	0.7	ug/L	70	Standard
|	V	51	548356.1	1.0	45.4573	0.337	0.7	ug/L	3172	Standard
|	Cr	52	454388.3	1.6	46.1694	0.709	1.5	ug/L	9852	Standard
|	Cr	53	78413.3	1.9	47.2944	0.891	1.9	ug/L	518	Standard
|	Mn	55	802064.9	1.2	45.4634	0.457	1.0	ug/L	1193	Standard
|	Co	59	507818.8	0.8	44.5483	0.381	0.9	ug/L	98	Standard
|	Ni	60	137241.9	1.5	46.4868	0.584	1.3	ug/L	67	Standard
|	Cu	65	128474.1	0.7	47.1782	0.250	0.5	ug/L	90	Standard
|	Zn	66	59535.8	1.7	48.4285	0.782	1.6	ug/L	148	Standard
>	Ge	72	318309.2	0.3				ug/L	304674	Standard
|	As	75	58324.3	0.6	47.2498	0.174	0.4	ug/L	-174	Standard
|	Se	82	5929.9	2.2	47.6650	0.943	2.0	ug/L	26	Standard
[	Se-1	77	4403.0	2.1	48.4759	0.923	1.9	ug/L	133	Standard
>	Ga	71	698.3	0.8				mg/L	630	Standard
[	Rb	85	971.7	2.6				ug/L	12	Standard
[	Y	89	273330.8	2.2				ug/L	271719	Standard
>	Rh	103	448.3	6.8				ug/L	392	Standard
[	Mo	98	405494.5	0.7	102.9936	1.479	1.4	ug/L	7	Standard
|	Ag	107	369523.2	0.7	47.4988	0.513	1.1	ug/L	55	Standard
|	Cd	111	200603.0	1.4	46.7127	0.964	2.1	mg/L	67	Standard
|	Cd	114	582333.4	0.7	48.2129	0.663	1.4	ug/L	219	Standard
>	In	115	830622.4	0.8				ug/L	887392	Standard
|	Sn	118	693085.0	1.2	48.3665	0.895	1.8	ug/L	653	Standard
|	Sb	123	501395.7	2.2	47.4411	1.329	2.8	ug/L	48	Standard
[	Ba	135	246420.1	0.8	49.6551	0.560	1.1	ug/L	28	Standard
[	Ce	140	952.0	3.3				ug/L	34	Standard
>	Tb	159	1154966.8	1.0				ug/L	1226141	Standard
[	Ho	165	20.3	32.7				ug/L	14	Standard
|	Tl	203	924950.0	0.4	47.0911	0.210	0.4	ug/L	9	Standard
|	Tl	205	2167184.9	0.6	49.2798	0.257	0.5	ug/L	20	Standard
|	Pb	206	717278.7	0.7	47.5426	0.336	0.7	ug/L	419	Standard
|	Pb	207	607322.3	0.7	47.9409	0.323	0.7	ug/L	338	Standard
|	Pb	208	2807779.9	0.9	48.0595	0.470	1.0	ug/L	1616	Standard
	U	238	869884.0	1.5	46.4734	0.677	1.5	ug/L	2	Standard
>	Bi	209	603518.7	0.1				ug/L	641071	Standard

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Na	23	112324.9	2.2	5.9306	0.126	2.1	mg/L	412	Standard
Mg	24	3664573.0	0.7	4.9812	0.159	3.2	mg/L	177	Standard
K	39	6493.1	4.1	4.9315	0.280	5.7	mg/L	150	Standard
Ca	43	8.3	124.9	3.5007	7.446	212.7	mg/L	7	Standard
Fe	54	25597.8	1.4	4.9850	0.097	2.0	mg/L	634	Standard
Fe	57	417630.5	3.6	4.7356	0.074	1.6	mg/L	2670	Standard
Sc-1	45	376422.3	2.6				mg/L	375691	Standard
Cl	35	5.0	20.0				ug/L	4	Standard
Kr	83	45.9	7.5				ug/L	39	Standard
Br	81	671.7	8.1				ug/L	639	Standard
P	31	485.8	5.9				ug/L	419	Standard
S	34	6829.0	3.2				ug/L	7420	Standard
Sr	88	43.3	33.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.716		
Sc	45			
Ti	47	94.134		
V	51	90.915		
Cr	52	92.339		
Cr	53			
Mn	55	90.927		
Co	59	89.097		
Ni	60	92.974		
Cu	65	94.356		
Zn	66	96.857		
Ge	72		104.475	
As	75	94.500		
Se	82	95.330		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	102.994		
Ag	107	94.998		

Sample ID: QC Std 6

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Cd	111	93.425	
Cd	114		
> In	115		93.603
Sn	118	96.733	
Sb	123	94.882	
Ba	135	99.310	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	94.182	
Tl	205		
Pb	206	95.085	
Pb	207	95.882	
Pb	208	96.119	
U	238	92.947	
> Bi	209		94.142
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

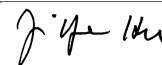
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Co	59	

Sample ID: QC Std 6

Report Date/Time: Friday, July 27, 2012 16:13:34

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 16:14:13

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10021.6	3.2	202.9148	26.962	13.3	ug/L	11199	Standard
|	Be	9	18.3	63.0	-0.0102	0.006	58.3	ug/L	10	Standard
|	Al	27	7433.5	12.5	-0.0204	0.056	272.2	ug/L	7920	Standard
>	Sc	45	355169.4	2.3				ug/L	375691	Standard
[	Ti	47	65.7	14.1	-0.0080	0.007	85.0	ug/L	70	Standard
|	V	51	2930.8	1.2	-0.0119	0.002	16.5	ug/L	3172	Standard
|	Cr	52	8679.5	0.1	-0.0925	0.005	5.0	ug/L	9852	Standard
|	Cr	53	955.0	5.7	0.2849	0.035	12.3	ug/L	518	Standard
|	Mn	55	1172.0	2.9	-0.0111	0.002	17.5	ug/L	1193	Standard
|	Co	59	140.7	24.5	0.0008	0.003	391.0	ug/L	98	Standard
|	Ni	60	72.7	17.7	-0.0006	0.005	820.6	ug/L	67	Standard
|	Cu	65	121.0	5.4	0.0036	0.003	73.0	ug/L	90	Standard
|	Zn	66	741.0	5.2	0.5123	0.033	6.4	ug/L	148	Standard
>	Ge	72	302446.2	0.4				ug/L	304674	Standard
|	As	75	-209.0	1.4	0.0166	0.003	15.2	ug/L	-174	Standard
|	Se	82	25.4	5.8	0.0587	0.012	20.6	ug/L	26	Standard
[	Se-1	77	132.7	3.6	0.1382	0.063	45.6	ug/L	133	Standard
>	Ga	71	645.0	18.0				mg/L	630	Standard
[	Rb	85	11.7	24.7				ug/L	12	Standard
[	Y	89	257258.9	3.4				ug/L	271719	Standard
>	Rh	103	370.0	8.9				ug/L	392	Standard
[	Mo	98	310.3	11.7	0.0766	0.010	12.9	ug/L	7	Standard
|	Ag	107	136.0	35.0	0.0075	0.006	86.3	ug/L	55	Standard
|	Cd	111	81.9	19.0	0.0021	0.004	180.5	mg/L	67	Standard
|	Cd	114	263.9	28.7	0.0063	0.007	104.6	ug/L	219	Standard
>	In	115	796374.7	0.5				ug/L	887392	Standard
|	Sn	118	848.4	9.8	0.0156	0.006	40.1	ug/L	653	Standard
|	Sb	123	2068.2	1.7	0.2081	0.004	2.1	ug/L	48	Standard
[	Ba	135	64.3	37.5	0.0045	0.005	114.2	ug/L	28	Standard
[	Ce	140	23.0	11.5				ug/L	34	Standard
>	Tb	159	1089286.4	1.5				ug/L	1226141	Standard
[	Ho	165	11.7	30.1				ug/L	14	Standard
|	Tl	203	170.7	43.4	0.0080	0.004	49.4	ug/L	9	Standard
|	Tl	205	423.7	41.7	0.0067	0.004	63.0	ug/L	20	Standard
|	Pb	206	454.0	9.5	0.0036	0.003	90.4	ug/L	419	Standard
|	Pb	207	411.0	11.3	0.0061	0.004	67.2	ug/L	338	Standard
|	Pb	208	1840.7	11.1	0.0030	0.004	131.5	ug/L	1616	Standard
	U	238	97.0	47.6	0.0054	0.003	47.7	ug/L	2	Standard
>	Bi	209	593393.2	1.1				ug/L	641071	Standard

Sample ID: QC Std 7

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Na	23	485.0	5.7	-0.0114	0.001	8.6	mg/L	412	Standard
Mg	24	438.3	34.3	0.0007	0.000	36.0	mg/L	177	Standard
K	39	146.7	16.1	-0.0086	0.022	250.7	mg/L	150	Standard
Ca	43	8.3	69.3	3.9439	4.365	110.7	mg/L	7	Standard
Fe	54	657.6	4.5	0.0085	0.009	100.7	mg/L	634	Standard
Fe	57	2698.6	3.8	0.0033	0.001	43.8	mg/L	2670	Standard
Sc-1	45	355169.4	2.3				mg/L	375691	Standard
Cl	35	7.3	47.9				ug/L	4	Standard
Kr	83	38.2	8.1				ug/L	39	Standard
Br	81	625.0	11.6				ug/L	639	Standard
P	31	456.7	5.1				ug/L	419	Standard
S	34	6458.0	1.9				ug/L	7420	Standard
Sr	88	46.7	22.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.269	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	89.743	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.563	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207061801

Sample Date/Time: Friday, July 27, 2012 16:17:26

Number of Replicates: 3

Autosampler Position: 342

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

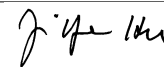
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	32072.3	1.9	-7386.6524	358.303	4.9	ug/L	11199	Standard
|	Be	9	20.0	25.0	-0.0081	0.003	33.1	ug/L	10	Standard
|	Al	27	4233968.9	4.9	305.0610	18.987	6.2	ug/L	7920	Standard
[>	Sc	45	315105.1	1.6				ug/L	375691	Standard
|	Ti	47	77.0	4.5	0.0072	0.003	39.4	ug/L	70	Standard
|	V	51	3191.4	12.3	0.0452	0.040	89.3	ug/L	3172	Standard
|	Cr	52	7721.6	3.7	-0.0946	0.035	37.3	ug/L	9852	Standard
|	Cr	53	6624.8	19.5	4.4251	0.942	21.3	ug/L	518	Standard
|	Mn	55	4161.2	2.4	0.1977	0.008	3.8	ug/L	1193	Standard
|	Co	59	168.0	10.3	0.0052	0.002	32.9	ug/L	98	Standard
|	Ni	60	361.3	6.5	0.1181	0.009	7.7	ug/L	67	Standard
|	Cu	65	227.7	15.1	0.0555	0.015	26.7	ug/L	90	Standard
|	Zn	66	1260.7	3.5	1.0897	0.035	3.2	ug/L	148	Standard
[>	Ge	72	269677.2	0.7				ug/L	304674	Standard
|	As	75	-250.2	2.7	-0.0442	0.007	16.3	ug/L	-174	Standard
|	Se	82	197.9	2.8	1.7271	0.049	2.8	ug/L	26	Standard
[	Se-1	77	639.0	5.8	7.1073	0.508	7.2	ug/L	133	Standard
[>	Ga	71	1100.0	3.6				mg/L	630	Standard
|	Rb	85	20694.1	4.6				ug/L	12	Standard
|	Y	89	228449.4	0.6				ug/L	271719	Standard
[>	Rh	103	290.0	6.2				ug/L	392	Standard
|	Mo	98	336.6	4.2	0.0911	0.003	3.4	ug/L	7	Standard
|	Ag	107	49.7	14.3	-0.0036	0.001	27.1	ug/L	55	Standard
|	Cd	111	27.5	21.4	-0.0105	0.002	15.3	mg/L	67	Standard
|	Cd	114	78.6	7.4	-0.0091	0.001	7.0	ug/L	219	Standard
[>	In	115	734371.5	1.4				ug/L	887392	Standard
|	Sn	118	411.7	7.3	-0.0137	0.002	14.5	ug/L	653	Standard
|	Sb	123	315.4	18.9	0.0377	0.006	15.8	ug/L	48	Standard
|	Ba	135	17561.8	2.9	3.9937	0.073	1.8	ug/L	28	Standard
|	Ce	140	525.3	6.3				ug/L	34	Standard
[>	Tb	159	1040076.1	0.4				ug/L	1226141	Standard
|	Ho	165	22.0	19.8				ug/L	14	Standard
|	Tl	203	233.7	8.1	0.0116	0.001	9.7	ug/L	9	Standard
|	Tl	205	543.0	4.2	0.0097	0.001	6.0	ug/L	20	Standard
|	Pb	206	744.7	0.9	0.0246	0.001	3.0	ug/L	419	Standard
|	Pb	207	611.0	3.3	0.0235	0.002	8.8	ug/L	338	Standard
|	Pb	208	2900.1	0.7	0.0228	0.001	3.2	ug/L	1616	Standard
	U	238	20.3	20.5	0.0012	0.000	18.5	ug/L	2	Standard
[>	Bi	209	577892.7	0.9				ug/L	641071	Standard

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Na	23	125657.3	0.9	7.9385	0.174	2.2	mg/L	412	Standard
Mg	24	2420.2	5.2	0.0039	0.000	6.1	mg/L	177	Standard
K	39	7935.4	2.7	7.2546	0.184	2.5	mg/L	150	Standard
Ca	43	13.3	57.3	9.2384	6.839	74.0	mg/L	7	Standard
Fe	54	270.8	10.9	-0.0661	0.008	11.4	mg/L	634	Standard
Fe	57	3208.7	4.7	0.0143	0.001	9.8	mg/L	2670	Standard
Sc-1	45	315105.1	1.6				mg/L	375691	Standard
Cl	35	626.7	2.3				ug/L	4	Standard
Kr	83	40.3	6.6				ug/L	39	Standard
Br	81	609.2	9.0				ug/L	639	Standard
P	31	145.8	17.2				ug/L	419	Standard
S	34	5931.2	3.1				ug/L	7420	Standard
Sr	88	60.0	14.4				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.513	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207061801

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	Cd	111	
	Cd	114	
>	In	115	82.756
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.145
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207061801

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Method 6020 - Summary Report

Sample ID: +10 PPB

Sample Date/Time: Friday, July 27, 2012 16:20:35

Number of Replicates: 3

Autosampler Position: 343

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

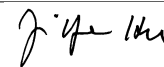
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	34534.4	4.1	-8363.2096	448.148	5.4	ug/L	11199	Standard
|	Be	9	26651.8	3.0	15.4608	0.496	3.2	ug/L	10	Standard
|	Al	27	4847350.1	1.5	354.5343	3.652	1.0	ug/L	7920	Standard
[>	Sc	45	310293.5	0.5				ug/L	375691	Standard
|	Ti	47	94.7	10.0	0.0218	0.008	36.6	ug/L	70	Standard
|	V	51	131716.0	0.7	12.6904	0.224	1.8	ug/L	3172	Standard
|	Cr	52	112934.4	2.0	12.8045	0.424	3.3	ug/L	9852	Standard
|	Cr	53	28124.4	4.2	19.8317	1.046	5.3	ug/L	518	Standard
|	Mn	55	190920.9	1.7	12.7113	0.349	2.7	ug/L	1193	Standard
|	Co	59	121729.1	1.9	12.5919	0.371	2.9	ug/L	98	Standard
|	Ni	60	32367.9	2.6	12.9185	0.463	3.6	ug/L	67	Standard
|	Cu	65	30601.2	1.3	13.2280	0.295	2.2	ug/L	90	Standard
|	Zn	66	18015.7	1.2	17.2117	0.377	2.2	ug/L	148	Standard
[>	Ge	72	269814.0	1.1				ug/L	304674	Standard
|	As	75	15453.4	1.0	14.9044	0.256	1.7	ug/L	-174	Standard
|	Se	82	1978.7	1.6	18.6725	0.478	2.6	ug/L	26	Standard
[	Se-1	77	2105.5	1.7	26.7216	0.631	2.4	ug/L	133	Standard
[>	Ga	71	1131.7	2.8				mg/L	630	Standard
|	Rb	85	22112.8	1.4				ug/L	12	Standard
|	Y	89	226711.9	0.7				ug/L	271719	Standard
[>	Rh	103	390.0	2.6				ug/L	392	Standard
|	Mo	98	348.0	3.3	0.0941	0.004	4.0	ug/L	7	Standard
|	Ag	107	91454.6	2.5	13.2488	0.381	2.9	ug/L	55	Standard
|	Cd	111	55357.8	1.0	14.5231	0.218	1.5	mg/L	67	Standard
|	Cd	114	158578.5	2.2	14.7939	0.402	2.7	ug/L	219	Standard
[>	In	115	736618.1	0.9				ug/L	887392	Standard
|	Sn	118	440.0	5.5	-0.0116	0.002	19.0	ug/L	653	Standard
|	Sb	123	125151.2	0.4	13.3548	0.142	1.1	ug/L	48	Standard
|	Ba	135	79200.2	2.0	17.9905	0.386	2.1	ug/L	28	Standard
|	Ce	140	546.3	5.0				ug/L	34	Standard
[>	Tb	159	1056695.7	1.3				ug/L	1226141	Standard
|	Ho	165	16.7	19.3				ug/L	14	Standard
|	Tl	203	231684.3	0.3	11.9506	0.049	0.4	ug/L	9	Standard
|	Tl	205	536542.9	1.2	12.3591	0.139	1.1	ug/L	20	Standard
|	Pb	206	180420.2	2.2	12.0960	0.250	2.1	ug/L	419	Standard
|	Pb	207	153590.4	1.7	12.2639	0.182	1.5	ug/L	338	Standard
|	Pb	208	710028.6	1.9	12.2916	0.207	1.7	ug/L	1616	Standard
	U	238	211037.0	1.0	11.4234	0.097	0.8	ug/L	2	Standard
[>	Bi	209	595662.1	0.6				ug/L	641071	Standard

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Na	23	128855.6	0.6	8.2668	0.076	0.9	mg/L	412	Standard
Mg	24	2710.2	10.4	0.0045	0.000	10.4	mg/L	177	Standard
K	39	8530.7	4.8	7.9304	0.356	4.5	mg/L	150	Standard
Ca	43	13.3	78.1	9.3500	9.247	98.9	mg/L	7	Standard
Fe	54	267.6	9.8	-0.0660	0.006	9.2	mg/L	634	Standard
Fe	57	3662.1	3.8	0.0213	0.002	8.0	mg/L	2670	Standard
Sc-1	45	310293.5	0.5				mg/L	375691	Standard
Cl	35	697.7	5.3				ug/L	4	Standard
Kr	83	40.3	0.8				ug/L	39	Standard
Br	81	663.3	10.7				ug/L	639	Standard
P	31	141.7	11.5				ug/L	419	Standard
S	34	6209.6	3.4				ug/L	7420	Standard
Sr	88	68.3	34.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.558	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: +10 PPB

Report Date/Time: Friday, July 27, 2012 16:23:05

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	Cd	111		
	Cd	114		
>	In	115	83.009	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.917	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: +10 PPB

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Method 6020 - Summary Report

Sample ID: +20 PPB

Sample Date/Time: Friday, July 27, 2012 16:23:44

Number of Replicates: 3

Autosampler Position: 344

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	37264.2	5.3	-8821.8366	626.969	7.1	ug/L	11199	Standard
|	Be	9	54317.3	3.1	30.3864	1.002	3.3	ug/L	10	Standard
|	Al	27	5523944.4	4.3	389.4280	16.350	4.2	ug/L	7920	Standard
[>	Sc	45	321973.6	1.1				ug/L	375691	Standard
|	Ti	47	91.3	16.7	0.0181	0.012	66.2	ug/L	70	Standard
|	V	51	268541.3	5.4	25.8415	1.189	4.6	ug/L	3172	Standard
|	Cr	52	222711.8	4.2	25.9408	0.898	3.5	ug/L	9852	Standard
|	Cr	53	49498.4	5.1	34.7237	1.471	4.2	ug/L	518	Standard
|	Mn	55	392305.5	4.3	25.8942	0.859	3.3	ug/L	1193	Standard
|	Co	59	252752.2	3.3	25.8510	0.667	2.6	ug/L	98	Standard
|	Ni	60	65772.6	4.2	25.9680	0.919	3.5	ug/L	67	Standard
|	Cu	65	62491.4	3.9	26.7416	0.849	3.2	ug/L	90	Standard
|	Zn	66	35308.8	4.5	33.4527	1.231	3.7	ug/L	148	Standard
[>	Ge	72	272930.1	1.1				ug/L	304674	Standard
|	As	75	32036.4	4.6	30.3341	1.208	4.0	ug/L	-174	Standard
|	Se	82	3887.8	3.9	36.4062	1.172	3.2	ug/L	26	Standard
[	Se-1	77	3569.8	4.7	45.7515	1.882	4.1	ug/L	133	Standard
[>	Ga	71	1175.0	2.8				mg/L	630	Standard
|	Rb	85	24117.5	5.3				ug/L	12	Standard
|	Y	89	231503.6	0.8				ug/L	271719	Standard
[>	Rh	103	335.0	2.6				ug/L	392	Standard
|	Mo	98	401.6	3.8	0.1087	0.003	3.0	ug/L	7	Standard
|	Ag	107	186429.8	4.1	26.8568	0.863	3.2	ug/L	55	Standard
|	Cd	111	112033.1	3.8	29.2350	0.864	3.0	mg/L	67	Standard
|	Cd	114	324706.1	3.9	30.1282	0.955	3.2	ug/L	219	Standard
[>	In	115	740857.0	1.0				ug/L	887392	Standard
|	Sn	118	510.3	10.3	-0.0063	0.004	59.8	ug/L	653	Standard
|	Sb	123	262955.6	3.5	27.8900	0.783	2.8	ug/L	48	Standard
|	Ba	135	144630.2	4.4	32.6646	1.192	3.7	ug/L	28	Standard
|	Ce	140	619.0	2.2				ug/L	34	Standard
[>	Tb	159	1055220.8	1.1				ug/L	1226141	Standard
|	Ho	165	23.7	20.0				ug/L	14	Standard
|	Tl	203	472716.1	4.3	24.2334	0.950	3.9	ug/L	9	Standard
|	Tl	205	1105505.1	3.4	25.3117	0.750	3.0	ug/L	20	Standard
|	Pb	206	368374.6	2.8	24.5742	0.607	2.5	ug/L	419	Standard
|	Pb	207	315895.0	4.1	25.0964	0.922	3.7	ug/L	338	Standard
|	Pb	208	1462230.6	3.6	25.1885	0.802	3.2	ug/L	1616	Standard
	U	238	437582.6	3.1	23.5411	0.632	2.7	ug/L	2	Standard
[>	Bi	209	599299.3	0.5				ug/L	641071	Standard

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Na	23	131192.2	0.4	8.1113	0.120	1.5	mg/L	412	Standard
Mg	24	2758.6	5.2	0.0044	0.000	4.4	mg/L	177	Standard
K	39	9484.6	6.0	8.5089	0.546	6.4	mg/L	150	Standard
Ca	43	11.7	49.5	7.4870	4.916	65.7	mg/L	7	Standard
Fe	54	252.0	9.9	-0.0719	0.006	8.9	mg/L	634	Standard
Fe	57	3533.7	0.7	0.0178	0.000	2.4	mg/L	2670	Standard
Sc-1	45	321973.6	1.1				mg/L	375691	Standard
Cl	35	752.0	8.2				ug/L	4	Standard
Kr	83	40.7	5.0				ug/L	39	Standard
Br	81	677.5	2.4				ug/L	639	Standard
P	31	160.0	8.7				ug/L	419	Standard
S	34	6300.5	1.8				ug/L	7420	Standard
Sr	88	65.0	20.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.581	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	83.487
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.484
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: +30 PPB

Sample Date/Time: Friday, July 27, 2012 16:26:54

Number of Replicates: 3

Autosampler Position: 345

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	36793.0	3.1	-8988.1014	487.682	5.4	ug/L	11199	Standard
|	Be	9	77690.7	5.5	44.6213	2.207	4.9	ug/L	10	Standard
|	Al	27	5444087.6	1.4	394.0552	5.906	1.5	ug/L	7920	Standard
>	Sc	45	313623.1	1.6				ug/L	375691	Standard
[	Ti	47	87.7	15.5	0.0153	0.012	76.9	ug/L	70	Standard
|	V	51	370089.4	2.4	35.7679	1.197	3.3	ug/L	3172	Standard
|	Cr	52	306878.5	2.8	36.1917	1.372	3.8	ug/L	9852	Standard
|	Cr	53	64314.6	2.3	45.2827	1.454	3.2	ug/L	518	Standard
|	Mn	55	543145.8	3.1	35.9364	1.490	4.1	ug/L	1193	Standard
|	Co	59	351550.7	2.8	36.0096	1.318	3.7	ug/L	98	Standard
|	Ni	60	91285.3	3.0	36.0984	1.255	3.5	ug/L	67	Standard
|	Cu	65	85975.7	2.6	36.8544	1.142	3.1	ug/L	90	Standard
|	Zn	66	48814.9	2.4	46.3597	1.413	3.0	ug/L	148	Standard
>	Ge	72	272661.5	1.5				ug/L	304674	Standard
|	As	75	44133.0	3.0	41.7735	1.637	3.9	ug/L	-174	Standard
|	Se	82	5322.1	2.5	49.9635	1.712	3.4	ug/L	26	Standard
[	Se-1	77	4533.0	4.6	58.5684	2.957	5.0	ug/L	133	Standard
>	Ga	71	1111.7	15.1				mg/L	630	Standard
[	Rb	85	22980.8	2.6				ug/L	12	Standard
[	Y	89	232338.5	2.5				ug/L	271719	Standard
>	Rh	103	400.0	14.7				ug/L	392	Standard
[	Mo	98	383.7	1.6	0.1035	0.002	2.3	ug/L	7	Standard
|	Ag	107	257908.8	3.0	37.0940	1.135	3.1	ug/L	55	Standard
|	Cd	111	155277.6	3.3	40.4594	1.509	3.7	mg/L	67	Standard
|	Cd	114	447589.0	3.4	41.4670	1.581	3.8	ug/L	219	Standard
>	In	115	742303.1	1.1				ug/L	887392	Standard
|	Sn	118	515.7	4.4	-0.0059	0.002	31.6	ug/L	653	Standard
|	Sb	123	370051.5	2.8	39.1841	1.414	3.6	ug/L	48	Standard
[	Ba	135	192154.7	1.8	43.3313	1.117	2.6	ug/L	28	Standard
[	Ce	140	609.7	4.0				ug/L	34	Standard
>	Tb	159	1048046.8	1.5				ug/L	1226141	Standard
[	Ho	165	25.7	25.3				ug/L	14	Standard
|	Tl	203	657403.1	3.3	33.9733	1.215	3.6	ug/L	9	Standard
|	Tl	205	1536702.8	2.8	35.4736	1.338	3.8	ug/L	20	Standard
|	Pb	206	512768.1	3.8	34.5007	1.705	4.9	ug/L	419	Standard
|	Pb	207	435924.0	3.6	34.9268	1.540	4.4	ug/L	338	Standard
|	Pb	208	2018659.9	3.4	35.0693	1.473	4.2	ug/L	1616	Standard
	U	238	603484.9	2.7	32.7294	1.130	3.5	ug/L	2	Standard
>	Bi	209	594676.6	1.8				ug/L	641071	Standard

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Na	23	130632.4	1.0	8.2932	0.163	2.0	mg/L	412	Standard
Mg	24	2728.6	1.6	0.0045	0.000	2.6	mg/L	177	Standard
K	39	8777.5	2.5	8.0792	0.304	3.8	mg/L	150	Standard
Ca	43	18.3	83.3	13.7311	13.733	100.0	mg/L	7	Standard
Fe	54	291.7	5.8	-0.0609	0.004	6.0	mg/L	634	Standard
Fe	57	3598.8	4.0	0.0199	0.003	13.7	mg/L	2670	Standard
Sc-1	45	313623.1	1.6				mg/L	375691	Standard
Cl	35	729.7	6.2				ug/L	4	Standard
Kr	83	40.3	3.6				ug/L	39	Standard
Br	81	644.2	3.7				ug/L	639	Standard
P	31	151.7	4.1				ug/L	419	Standard
S	34	6273.8	1.3				ug/L	7420	Standard
Sr	88	46.7	16.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.493	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	83.650
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.763
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 16:30:06

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

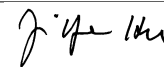
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10301.8	5.0	264.3922	118.173	44.7	ug/L	11199	Standard
|	Be	9	99391.7	2.5	48.0162	1.481	3.1	ug/L	10	Standard
|	Al	27	812553.1	1.3	49.0189	0.263	0.5	ug/L	7920	Standard
>	Sc	45	372963.4	1.3				ug/L	375691	Standard
[	Ti	47	136647.1	0.4	96.1899	2.045	2.1	ug/L	70	Standard
|	V	51	559677.0	1.5	46.7290	0.572	1.2	ug/L	3172	Standard
|	Cr	52	458139.2	0.8	46.8960	0.588	1.3	ug/L	9852	Standard
|	Cr	53	80422.9	1.6	48.8595	0.854	1.7	ug/L	518	Standard
|	Mn	55	802609.3	0.3	45.8187	0.680	1.5	ug/L	1193	Standard
|	Co	59	505994.2	0.1	44.7048	0.777	1.7	ug/L	98	Standard
|	Ni	60	139768.0	0.4	47.6815	0.798	1.7	ug/L	67	Standard
|	Cu	65	131083.0	0.9	48.4815	0.975	2.0	ug/L	90	Standard
|	Zn	66	60564.8	1.5	49.6203	1.119	2.3	ug/L	148	Standard
>	Ge	72	316118.0	1.8				ug/L	304674	Standard
|	As	75	59120.8	0.5	48.2314	0.701	1.5	ug/L	-174	Standard
|	Se	82	5991.1	0.1	48.5063	0.907	1.9	ug/L	26	Standard
[	Se-1	77	4444.3	2.4	49.3202	2.105	4.3	ug/L	133	Standard
>	Ga	71	721.7	1.6				mg/L	630	Standard
[	Rb	85	865.0	7.8				ug/L	12	Standard
[	Y	89	276069.9	2.3				ug/L	271719	Standard
>	Rh	103	381.7	20.3				ug/L	392	Standard
[	Mo	98	405601.5	0.9	101.4054	1.055	1.0	ug/L	7	Standard
|	Ag	107	373527.3	0.6	47.2647	0.765	1.6	ug/L	55	Standard
|	Cd	111	199121.9	0.9	45.6425	0.848	1.9	mg/L	67	Standard
|	Cd	114	585121.1	0.8	47.6837	0.372	0.8	ug/L	219	Standard
>	In	115	843854.9	1.3				ug/L	887392	Standard
|	Sn	118	690808.0	1.1	47.4501	0.597	1.3	ug/L	653	Standard
|	Sb	123	512465.4	0.6	47.7257	0.379	0.8	ug/L	48	Standard
[	Ba	135	248793.1	1.0	49.3476	0.378	0.8	ug/L	28	Standard
[	Ce	140	948.0	4.8				ug/L	34	Standard
>	Tb	159	1159930.6	0.1				ug/L	1226141	Standard
[	Ho	165	20.7	11.2				ug/L	14	Standard
|	Tl	203	924921.3	1.1	46.8287	0.311	0.7	ug/L	9	Standard
|	Tl	205	2198562.0	0.4	49.7190	0.453	0.9	ug/L	20	Standard
|	Pb	206	714414.8	0.9	47.0902	0.142	0.3	ug/L	419	Standard
|	Pb	207	611875.1	0.3	48.0353	0.433	0.9	ug/L	338	Standard
|	Pb	208	2818625.2	0.5	47.9787	0.081	0.2	ug/L	1616	Standard
	U	238	870371.0	0.4	46.2431	0.114	0.2	ug/L	2	Standard
>	Bi	209	606871.0	0.6				ug/L	641071	Standard

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Na	23	111574.3	0.4	5.9449	0.064	1.1	mg/L	412	Standard
Mg	24	3615528.4	1.7	4.9582	0.123	2.5	mg/L	177	Standard
K	39	6439.7	2.7	4.9338	0.175	3.5	mg/L	150	Standard
Ca	43	13.3	21.7	7.3534	2.059	28.0	mg/L	7	Standard
Fe	54	26294.8	1.8	5.1718	0.096	1.9	mg/L	634	Standard
Fe	57	428795.9	2.8	4.9089	0.117	2.4	mg/L	2670	Standard
Sc-1	45	372963.4	1.3				mg/L	375691	Standard
Cl	35	13.3	62.9				ug/L	4	Standard
Kr	83	41.0	4.9				ug/L	39	Standard
Br	81	620.8	5.9				ug/L	639	Standard
P	31	455.0	9.5				ug/L	419	Standard
S	34	6653.1	1.2				ug/L	7420	Standard
Sr	88	26.7	21.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.038		
Sc	45			
Ti	47	96.190		
V	51	93.458		
Cr	52	93.792		
Cr	53			
Mn	55	91.637		
Co	59	89.410		
Ni	60	95.363		
Cu	65	96.963		
Zn	66	99.241		
Ge	72		103.756	
As	75	96.463		
Se	82	97.013		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	101.405		
Ag	107	94.529		

Sample ID: QC Std 6

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	Cd	111	91.285	
	Cd	114		
>	In	115		95.094
	Sn	118	94.900	
	Sb	123	95.451	
	Ba	135	98.695	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.657	
|	Tl	205		
|	Pb	206	94.180	
|	Pb	207	96.071	
|	Pb	208	95.957	
|	U	238	92.486	
>	Bi	209		94.665
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Co	59	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 16:33:17

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10120.0	4.3	285.6288	18.253	6.4	ug/L	11199	Standard
|	Be	9	16.7	75.5	-0.0114	0.006	55.6	ug/L	10	Standard
|	Al	27	8555.8	4.2	0.0311	0.025	80.6	ug/L	7920	Standard
[>	Sc	45	369160.7	3.8				ug/L	375691	Standard
[	Ti	47	76.0	35.8	-0.0033	0.018	552.0	ug/L	70	Standard
|	V	51	3067.3	4.8	-0.0136	0.011	78.3	ug/L	3172	Standard
|	Cr	52	8913.0	2.0	-0.1165	0.009	8.0	ug/L	9852	Standard
|	Cr	53	1035.0	7.1	0.3023	0.039	12.9	ug/L	518	Standard
|	Mn	55	1305.7	12.6	-0.0072	0.009	120.2	ug/L	1193	Standard
|	Co	59	202.0	47.0	0.0055	0.008	148.3	ug/L	98	Standard
|	Ni	60	96.0	26.3	0.0060	0.008	137.5	ug/L	67	Standard
|	Cu	65	122.3	11.3	0.0017	0.005	277.6	ug/L	90	Standard
|	Zn	66	756.0	2.3	0.4923	0.012	2.3	ug/L	148	Standard
[>	Ge	72	318615.7	1.0				ug/L	304674	Standard
|	As	75	-200.3	11.9	0.0327	0.019	58.9	ug/L	-174	Standard
|	Se	82	25.8	14.8	0.0509	0.031	61.4	ug/L	26	Standard
[	Se-1	77	142.7	1.1	0.1710	0.019	11.2	ug/L	133	Standard
[>	Ga	71	706.7	8.5				mg/L	630	Standard
[	Rb	85	35.0	37.8				ug/L	12	Standard
[	Y	89	275260.0	1.8				ug/L	271719	Standard
[>	Rh	103	378.3	7.5				ug/L	392	Standard
[	Mo	98	389.8	22.7	0.0931	0.021	23.1	ug/L	7	Standard
|	Ag	107	290.3	91.2	0.0263	0.034	127.5	ug/L	55	Standard
|	Cd	111	155.7	75.1	0.0182	0.027	146.6	mg/L	67	Standard
|	Cd	114	481.8	78.1	0.0232	0.031	132.2	ug/L	219	Standard
[>	In	115	832366.0	0.8				ug/L	887392	Standard
|	Sn	118	1000.7	18.7	0.0234	0.012	53.1	ug/L	653	Standard
|	Sb	123	3426.3	5.6	0.3274	0.017	5.2	ug/L	48	Standard
[	Ba	135	115.7	85.4	0.0141	0.020	138.9	ug/L	28	Standard
[	Ce	140	25.7	25.9				ug/L	34	Standard
[>	Tb	159	1122017.6	0.9				ug/L	1226141	Standard
[	Ho	165	12.7	19.9				ug/L	14	Standard
|	Tl	203	366.7	77.7	0.0175	0.015	83.1	ug/L	9	Standard
|	Tl	205	791.4	76.0	0.0146	0.014	94.0	ug/L	20	Standard
|	Pb	206	579.0	29.9	0.0107	0.012	111.3	ug/L	419	Standard
|	Pb	207	488.0	28.7	0.0109	0.011	105.5	ug/L	338	Standard
|	Pb	208	2273.1	25.8	0.0091	0.010	115.5	ug/L	1616	Standard
	U	238	169.7	75.1	0.0090	0.007	75.6	ug/L	2	Standard
[>	Bi	209	617301.8	1.5				ug/L	641071	Standard

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Na	23	581.7	4.7	-0.0072	0.002	21.2	mg/L	412	Standard
Mg	24	488.3	57.2	0.0007	0.000	57.6	mg/L	177	Standard
K	39	96.7	25.5	-0.0529	0.021	39.9	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0229	2.135	9338.5	mg/L	7	Standard
Fe	54	619.0	11.9	-0.0048	0.012	251.8	mg/L	634	Standard
Fe	57	2611.9	5.4	0.0011	0.002	227.0	mg/L	2670	Standard
Sc-1	45	369160.7	3.8				mg/L	375691	Standard
Cl	35	7.0	14.3				ug/L	4	Standard
Kr	83	41.7	4.9				ug/L	39	Standard
Br	81	623.3	3.1				ug/L	639	Standard
P	31	480.8	9.0				ug/L	419	Standard
S	34	6536.4	2.8				ug/L	7420	Standard
Sr	88	38.3	39.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.576	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111		
	Cd	114		
>	In	115	93.799	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	96.292	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Friday, July 27, 2012 16:35:48

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Method 6020 - Summary Report

Sample ID: PBS 23 WG404144-02

Sample Date/Time: Friday, July 27, 2012 16:36:29

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10098.4	2.0	265.0872	65.738	24.8	ug/L	11199	Standard
|	Be	9	15.0	57.7	-0.0122	0.004	34.9	ug/L	10	Standard
|	Al	27	11994.7	1.5	0.2493	0.012	4.8	ug/L	7920	Standard
[>	Sc	45	365793.5	1.5				ug/L	375691	Standard
|	Ti	47	79.7	16.9	-0.0008	0.009	1156.9	ug/L	70	Standard
|	V	51	3020.2	6.8	-0.0177	0.019	108.1	ug/L	3172	Standard
|	Cr	52	8859.6	0.2	-0.1230	0.009	7.2	ug/L	9852	Standard
|	Cr	53	845.9	4.3	0.1873	0.026	14.1	ug/L	518	Standard
|	Mn	55	3226.0	0.8	0.1016	0.003	2.9	ug/L	1193	Standard
|	Co	59	164.3	34.5	0.0022	0.005	227.9	ug/L	98	Standard
|	Ni	60	220.3	6.5	0.0481	0.005	11.4	ug/L	67	Standard
|	Cu	65	165.7	13.3	0.0176	0.009	49.0	ug/L	90	Standard
|	Zn	66	1742.8	3.1	1.2947	0.050	3.9	ug/L	148	Standard
[>	Ge	72	318985.0	0.8				ug/L	304674	Standard
|	As	75	-177.5	43.7	0.0516	0.062	119.4	ug/L	-174	Standard
|	Se	82	27.7	25.0	0.0665	0.058	87.0	ug/L	26	Standard
[	Se-1	77	136.0	0.7	0.0936	0.005	5.4	ug/L	133	Standard
[>	Ga	71	656.7	9.4				mg/L	630	Standard
|	Rb	85	28.3	62.0				ug/L	12	Standard
|	Y	89	278074.0	1.6				ug/L	271719	Standard
[>	Rh	103	378.3	9.6				ug/L	392	Standard
|	Mo	98	170.7	39.5	0.0374	0.017	45.1	ug/L	7	Standard
|	Ag	107	169.0	82.2	0.0108	0.018	163.9	ug/L	55	Standard
|	Cd	111	128.6	61.3	0.0119	0.018	152.5	mg/L	67	Standard
|	Cd	114	374.5	62.4	0.0143	0.019	134.1	ug/L	219	Standard
[>	In	115	836859.0	0.4				ug/L	887392	Standard
|	Sn	118	1112.0	5.7	0.0308	0.004	14.2	ug/L	653	Standard
|	Sb	123	1051.6	8.3	0.1028	0.009	8.3	ug/L	48	Standard
|	Ba	135	109.0	46.2	0.0127	0.010	78.5	ug/L	28	Standard
|	Ce	140	42.0	9.5				ug/L	34	Standard
[>	Tb	159	1129606.4	1.6				ug/L	1226141	Standard
|	Ho	165	10.0	20.0				ug/L	14	Standard
|	Tl	203	234.3	55.6	0.0108	0.007	60.6	ug/L	9	Standard
|	Tl	205	544.0	55.5	0.0089	0.007	75.7	ug/L	20	Standard
|	Pb	206	617.3	14.8	0.0129	0.006	47.0	ug/L	419	Standard
|	Pb	207	501.7	13.2	0.0117	0.005	45.1	ug/L	338	Standard
|	Pb	208	2350.7	12.5	0.0102	0.005	50.1	ug/L	1616	Standard
	U	238	109.3	39.6	0.0058	0.002	39.4	ug/L	2	Standard
[>	Bi	209	618986.5	0.4				ug/L	641071	Standard

Sample ID: PBS 23 WG404144-02

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[Na	23	631.7	9.5	-0.0042	0.003	66.2	mg/L	412	Standard
	Mg	24	550.0	7.9	0.0008	0.000	8.9	mg/L	177	Standard
|	K	39	130.0	27.7	-0.0256	0.030	116.6	mg/L	150	Standard
|	Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
|	Fe	54	646.5	3.7	0.0022	0.007	311.4	mg/L	634	Standard
|	Fe	57	2866.9	5.6	0.0043	0.002	49.7	mg/L	2670	Standard
[>	Sc-1	45	365793.5	1.5				mg/L	375691	Standard
|	Cl	35	3.7	15.7				ug/L	4	Standard
|	Kr	83	41.8	6.1				ug/L	39	Standard
|	Br	81	646.7	4.7				ug/L	639	Standard
|	P	31	457.5	6.8				ug/L	419	Standard
|	S	34	6386.3	1.3				ug/L	7420	Standard
|	Sr	88	45.0	0.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
|	Zn	66		
>	Ge	72	104.697	
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: PBS 23 WG404144-02

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	Cd	111	
	Cd	114	
>	In	115	94.305
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.555
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBS 23 WG404144-02

Report Date/Time: Friday, July 27, 2012 16:39:00

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Method 6020 - Summary Report

Sample ID: LCSS 23 WG404144-03

Sample Date/Time: Friday, July 27, 2012 16:39:40

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10913.9	0.6	172.4842	87.294	50.6	ug/L	11199	Standard
|	Be	9	49602.7	1.4	23.3326	0.824	3.5	ug/L	10	Standard
|	Al	27	564014.0	1.5	32.9861	1.061	3.2	ug/L	7920	Standard
[>	Sc	45	383063.0	3.0				ug/L	375691	Standard
[	Ti	47	117.3	34.4	0.0239	0.028	118.4	ug/L	70	Standard
|	V	51	280454.6	1.0	22.5475	0.384	1.7	ug/L	3172	Standard
|	Cr	52	236581.8	0.7	22.9397	0.321	1.4	ug/L	9852	Standard
|	Cr	53	40703.0	3.0	23.7894	0.749	3.1	ug/L	518	Standard
|	Mn	55	411324.3	1.2	22.7065	0.437	1.9	ug/L	1193	Standard
|	Co	59	260493.7	1.2	22.2887	0.433	1.9	ug/L	98	Standard
|	Ni	60	72050.3	1.4	23.7981	0.513	2.2	ug/L	67	Standard
|	Cu	65	68011.6	1.0	24.3444	0.319	1.3	ug/L	90	Standard
|	Zn	66	33035.6	0.6	26.1600	0.341	1.3	ug/L	148	Standard
[>	Ge	72	326291.4	0.7				ug/L	304674	Standard
|	As	75	29903.0	0.7	23.7313	0.333	1.4	ug/L	-174	Standard
|	Se	82	2992.2	0.5	23.3845	0.084	0.4	ug/L	26	Standard
[	Se-1	77	2286.2	1.4	23.8444	0.505	2.1	ug/L	133	Standard
[>	Ga	71	776.7	3.5				mg/L	630	Standard
[	Rb	85	53.3	14.3				ug/L	12	Standard
[	Y	89	281693.1	1.3				ug/L	271719	Standard
[>	Rh	103	433.3	8.7				ug/L	392	Standard
[	Mo	98	106.7	36.3	0.0210	0.010	45.4	ug/L	7	Standard
|	Ag	107	178086.5	0.2	22.4972	0.208	0.9	ug/L	55	Standard
|	Cd	111	101608.0	0.6	23.2484	0.168	0.7	mg/L	67	Standard
|	Cd	114	294772.2	0.6	23.9815	0.158	0.7	ug/L	219	Standard
[>	In	115	844983.5	1.1				ug/L	887392	Standard
|	Sn	118	834.7	7.2	0.0110	0.004	34.4	ug/L	653	Standard
|	Sb	123	251690.1	1.1	23.4099	0.257	1.1	ug/L	48	Standard
[	Ba	135	124931.6	0.7	24.7420	0.133	0.5	ug/L	28	Standard
[	Ce	140	545.0	2.8				ug/L	34	Standard
[>	Tb	159	1157085.9	0.9				ug/L	1226141	Standard
[	Ho	165	17.7	26.7				ug/L	14	Standard
|	Tl	203	473297.2	1.1	23.1098	0.180	0.8	ug/L	9	Standard
|	Tl	205	1097963.9	0.5	23.9440	0.198	0.8	ug/L	20	Standard
|	Pb	206	365564.2	0.7	23.2249	0.107	0.5	ug/L	419	Standard
|	Pb	207	313655.7	0.6	23.7325	0.039	0.2	ug/L	338	Standard
|	Pb	208	1446119.4	0.4	23.7251	0.136	0.6	ug/L	1616	Standard
	U	238	425948.9	0.8	21.8253	0.185	0.8	ug/L	2	Standard
[>	Bi	209	629270.1	0.5				ug/L	641071	Standard

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[Na	23	1226.7	67.7	0.0251	0.043	169.6	mg/L	412	Standard
	Mg	24	1970.2	63.5	0.0026	0.002	62.2	mg/L	177	Standard
|	K	39	155.0	34.0	-0.0118	0.038	324.4	mg/L	150	Standard
|	Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
|	Fe	54	778.4	9.7	0.0224	0.020	87.3	mg/L	634	Standard
|	Fe	57	3153.7	8.1	0.0060	0.002	37.2	mg/L	2670	Standard
[>	Sc-1	45	383063.0	3.0				mg/L	375691	Standard
|	Cl	35	5.7	73.5				ug/L	4	Standard
|	Kr	83	39.1	3.4				ug/L	39	Standard
|	Br	81	725.0	7.5				ug/L	639	Standard
|	P	31	460.8	7.0				ug/L	419	Standard
|	S	34	6434.7	3.4				ug/L	7420	Standard
|	Sr	88	53.3	32.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
|	Zn	66		
>	Ge	72	107.095	
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: LCSS 23 WG404144-03

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	Cd	111		
	Cd	114		
>	In	115	95.221	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.159	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSS 23 WG404144-03

Report Date/Time: Friday, July 27, 2012 16:42:10

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Method 6020 - Summary Report

Sample ID: L1207062739 WG404144-01

Sample Date/Time: Friday, July 27, 2012 16:42:50

Number of Replicates: 3

Autosampler Position: 403

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	46581.5	1.6	-10696.4046	258.977	2.4	ug/L	11199	Standard
|	Be	9	541.7	1.4	0.2612	0.011	4.3	ug/L	10	Standard
|	Al	27	47484507.2	0.2	3103.0429	99.527	3.2	ug/L	7920	Standard
[>	Sc	45	347975.0	3.3				ug/L	375691	Standard
[	Ti	47	17554.8	2.1	13.3433	0.401	3.0	ug/L	70	Standard
|	V	51	60605.9	1.1	5.2466	0.092	1.7	ug/L	3172	Standard
|	Cr	52	64589.7	1.0	6.2822	0.072	1.2	ug/L	9852	Standard
|	Cr	53	10461.9	1.8	6.6090	0.170	2.6	ug/L	518	Standard
|	Mn	55	3456034.1	0.4	214.1029	2.809	1.3	ug/L	1193	Standard
|	Co	59	24347.9	0.2	2.3195	0.025	1.1	ug/L	98	Standard
|	Ni	60	25272.7	0.6	9.3219	0.142	1.5	ug/L	67	Standard
|	Cu	65	18923.1	1.5	7.5482	0.187	2.5	ug/L	90	Standard
|	Zn	66	64272.1	1.5	57.0851	1.363	2.4	ug/L	148	Standard
[>	Ge	72	291680.3	0.9				ug/L	304674	Standard
|	As	75	1796.3	2.4	1.7758	0.041	2.3	ug/L	-174	Standard
|	Se	82	80.5	4.3	0.5517	0.027	4.9	ug/L	26	Standard
[	Se-1	77	173.7	0.9	0.7038	0.018	2.6	ug/L	133	Standard
[>	Ga	71	5799.4	1.4				mg/L	630	Standard
[	Rb	85	89735.0	1.2				ug/L	12	Standard
[	Y	89	398057.9	0.8				ug/L	271719	Standard
[>	Rh	103	385.0	7.8				ug/L	392	Standard
[	Mo	98	526.0	4.9	0.1434	0.007	5.2	ug/L	7	Standard
|	Ag	107	435.0	2.6	0.0516	0.002	3.6	ug/L	55	Standard
|	Cd	111	3224.4	2.2	0.8198	0.020	2.5	mg/L	67	Standard
|	Cd	114	9377.8	1.2	0.8497	0.015	1.8	ug/L	219	Standard
[>	In	115	744791.8	0.9				ug/L	887392	Standard
|	Sn	118	862.0	3.2	0.0209	0.002	11.8	ug/L	653	Standard
|	Sb	123	968.6	10.4	0.1062	0.011	10.4	ug/L	48	Standard
[	Ba	135	328353.5	0.5	73.7979	1.042	1.4	ug/L	28	Standard
[	Ce	140	820400.1	0.5				ug/L	34	Standard
[>	Tb	159	1082096.3	0.2				ug/L	1226141	Standard
[	Ho	165	19714.5	0.8				ug/L	14	Standard
|	Tl	203	1391.7	5.5	0.0725	0.004	5.9	ug/L	9	Standard
|	Tl	205	3260.4	1.9	0.0736	0.002	3.3	ug/L	20	Standard
|	Pb	206	92169.9	1.2	6.3004	0.157	2.5	ug/L	419	Standard
|	Pb	207	73989.9	0.7	6.0218	0.101	1.7	ug/L	338	Standard
|	Pb	208	351555.8	0.8	6.2033	0.128	2.1	ug/L	1616	Standard
	U	238	12465.5	0.6	0.6894	0.011	1.6	ug/L	2	Standard
[>	Bi	209	583153.5	1.2				ug/L	641071	Standard

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Na	23	1828.4	8.2	0.0664	0.008	12.6	mg/L	412	Standard
Mg	24	529262.8	2.7	0.7779	0.006	0.8	mg/L	177	Standard
K	39	1360.1	5.4	1.0161	0.053	5.2	mg/L	150	Standard
Ca	43	3.3	173.2	0.2201	4.685	2128.5	mg/L	7	Standard
Fe	54	18735.3	3.4	3.9242	0.264	6.7	mg/L	634	Standard
Fe	57	292659.8	5.4	3.5896	0.306	8.5	mg/L	2670	Standard
Sc-1	45	347975.0	3.3				mg/L	375691	Standard
Cl	35	7.0	28.6				ug/L	4	Standard
Kr	83	49.9	14.5				ug/L	39	Standard
Br	81	620.0	3.9				ug/L	639	Standard
P	31	13648.6	2.7				ug/L	419	Standard
S	34	6174.6	1.0				ug/L	7420	Standard
Sr	88	95.0	18.2				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.735	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062739 WG404144-01

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	Cd	111	
	Cd	114	
>	In	115	83.930
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.965
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062739 WG404144-01

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Method 6020 - Summary Report

Sample ID: L1207062739S WG404144-04

Sample Date/Time: Friday, July 27, 2012 16:46:00

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	45242.5	2.9	-10208.2161	408.017	4.0	ug/L	11199	Standard
|	Be	9	9491.3	3.2	4.8643	0.145	3.0	ug/L	10	Standard
|	Al	27	49154093.8	1.3	3189.3777	56.913	1.8	ug/L	7920	Standard
[>	Sc	45	350235.1	0.6				ug/L	375691	Standard
[	Ti	47	18248.6	0.4	13.7894	0.012	0.1	ug/L	70	Standard
|	V	51	106142.8	0.1	9.3341	0.050	0.5	ug/L	3172	Standard
|	Cr	52	96389.0	1.2	9.8242	0.152	1.5	ug/L	9852	Standard
|	Cr	53	16181.1	2.1	10.3356	0.184	1.8	ug/L	518	Standard
|	Mn	55	3937627.6	0.2	242.5114	0.732	0.3	ug/L	1193	Standard
|	Co	59	68487.4	0.6	6.5079	0.007	0.1	ug/L	98	Standard
|	Ni	60	36091.3	1.5	13.2444	0.153	1.2	ug/L	67	Standard
|	Cu	65	31593.2	1.1	12.5558	0.157	1.3	ug/L	90	Standard
|	Zn	66	69688.3	1.5	61.5344	0.660	1.1	ug/L	148	Standard
[>	Ge	72	293388.0	0.5				ug/L	304674	Standard
|	As	75	6569.0	2.4	5.9441	0.136	2.3	ug/L	-174	Standard
|	Se	82	557.0	1.6	4.7170	0.080	1.7	ug/L	26	Standard
[	Se-1	77	519.3	3.4	4.9432	0.197	4.0	ug/L	133	Standard
[>	Ga	71	6211.3	8.7				mg/L	630	Standard
[	Rb	85	94537.4	1.9				ug/L	12	Standard
[	Y	89	387650.1	1.1				ug/L	271719	Standard
[>	Rh	103	363.3	14.1				ug/L	392	Standard
[	Mo	98	500.2	7.7	0.1347	0.012	8.6	ug/L	7	Standard
|	Ag	107	28117.1	0.6	3.9818	0.026	0.7	ug/L	55	Standard
|	Cd	111	21491.4	2.0	5.5114	0.127	2.3	mg/L	67	Standard
|	Cd	114	63059.4	1.1	5.7516	0.081	1.4	ug/L	219	Standard
[>	In	115	752057.5	0.6				ug/L	887392	Standard
|	Sn	118	908.7	5.4	0.0238	0.004	14.9	ug/L	653	Standard
|	Sb	123	3508.6	1.0	0.3706	0.006	1.5	ug/L	48	Standard
[	Ba	135	379748.1	0.6	84.5226	0.993	1.2	ug/L	28	Standard
[	Ce	140	856679.0	0.6				ug/L	34	Standard
[>	Tb	159	1081324.2	1.4				ug/L	1226141	Standard
[	Ho	165	18480.9	0.8				ug/L	14	Standard
|	Tl	203	80242.9	1.2	4.2208	0.089	2.1	ug/L	9	Standard
|	Tl	205	188440.3	0.3	4.4248	0.063	1.4	ug/L	20	Standard
|	Pb	206	162935.4	0.5	11.1384	0.137	1.2	ug/L	419	Standard
|	Pb	207	135587.3	0.9	11.0389	0.199	1.8	ug/L	338	Standard
|	Pb	208	632023.9	0.6	11.1559	0.161	1.4	ug/L	1616	Standard
	U	238	82567.0	0.4	4.5582	0.067	1.5	ug/L	2	Standard
[>	Bi	209	584127.0	1.1				ug/L	641071	Standard

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Na	23	1511.7	10.8	0.0476	0.010	20.6	mg/L	412	Standard
Mg	24	528670.4	0.7	0.7719	0.003	0.4	mg/L	177	Standard
K	39	1381.7	4.9	1.0270	0.063	6.1	mg/L	150	Standard
Ca	43	11.7	49.5	6.6782	4.510	67.5	mg/L	7	Standard
Fe	54	18127.3	2.2	3.7621	0.105	2.8	mg/L	634	Standard
Fe	57	281584.9	2.0	3.4242	0.084	2.4	mg/L	2670	Standard
Sc-1	45	350235.1	0.6				mg/L	375691	Standard
Cl	35	8.0	33.1				ug/L	4	Standard
Kr	83	52.8	4.7				ug/L	39	Standard
Br	81	595.0	8.3				ug/L	639	Standard
P	31	12798.7	0.9				ug/L	419	Standard
S	34	6110.4	1.3				ug/L	7420	Standard
Sr	88	91.7	19.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.296	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	84.749
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.117
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062739S WG404144-04
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Method 6020 - Summary Report

Sample ID: L1207062739SD WG404144-05

Sample Date/Time: Friday, July 27, 2012 16:49:10

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	66371.8	1.9	-15817.4107	852.901	5.4	ug/L	11199	Standard
|	Be	9	9319.5	0.7	4.6242	0.095	2.1	ug/L	10	Standard
|	Al	27	71346129.5	2.7	4481.4498	76.494	1.7	ug/L	7920	Standard
[>	Sc	45	361812.5	2.6				ug/L	375691	Standard
|	Ti	47	37799.1	1.3	28.3300	0.504	1.8	ug/L	70	Standard
|	V	51	115822.7	0.9	10.1028	0.159	1.6	ug/L	3172	Standard
|	Cr	52	126957.0	0.8	13.1262	0.384	2.9	ug/L	9852	Standard
|	Cr	53	20965.3	1.3	13.3509	0.458	3.4	ug/L	518	Standard
|	Mn	55	3511730.9	0.9	214.0619	3.240	1.5	ug/L	1193	Standard
|	Co	59	70224.4	1.0	6.6070	0.224	3.4	ug/L	98	Standard
|	Ni	60	44805.2	0.8	16.2854	0.536	3.3	ug/L	67	Standard
|	Cu	65	32223.2	0.6	12.6767	0.271	2.1	ug/L	90	Standard
|	Zn	66	80387.0	1.1	70.2758	1.120	1.6	ug/L	148	Standard
[>	Ge	72	296484.8	2.4				ug/L	304674	Standard
|	As	75	7419.0	1.3	6.6225	0.155	2.3	ug/L	-174	Standard
|	Se	82	657.9	2.2	5.5403	0.046	0.8	ug/L	26	Standard
[	Se-1	77	610.7	3.6	5.9880	0.150	2.5	ug/L	133	Standard
[>	Ga	71	8213.9	0.6				mg/L	630	Standard
[	Rb	85	124045.8	1.1				ug/L	12	Standard
[	Y	89	387890.8	0.2				ug/L	271719	Standard
[>	Rh	103	376.7	9.8				ug/L	392	Standard
[	Mo	98	746.8	7.8	0.2031	0.016	7.8	ug/L	7	Standard
|	Ag	107	27944.4	0.2	3.9437	0.009	0.2	ug/L	55	Standard
|	Cd	111	20279.8	1.6	5.1814	0.065	1.3	mg/L	67	Standard
|	Cd	114	59470.2	1.7	5.4043	0.073	1.3	ug/L	219	Standard
[>	In	115	754630.8	0.4				ug/L	887392	Standard
|	Sn	118	661.7	7.1	0.0046	0.003	74.8	ug/L	653	Standard
|	Sb	123	2105.9	4.1	0.2233	0.008	3.7	ug/L	48	Standard
[	Ba	135	348405.2	0.1	77.2781	0.233	0.3	ug/L	28	Standard
[	Ce	140	892149.8	0.4				ug/L	34	Standard
[>	Tb	159	1081057.5	0.4				ug/L	1226141	Standard
[	Ho	165	18829.0	1.3				ug/L	14	Standard
|	Tl	203	80955.0	0.6	4.2610	0.039	0.9	ug/L	9	Standard
|	Tl	205	187934.1	1.3	4.4158	0.038	0.9	ug/L	20	Standard
|	Pb	206	142439.1	0.3	9.7408	0.067	0.7	ug/L	419	Standard
|	Pb	207	118211.3	0.2	9.6274	0.086	0.9	ug/L	338	Standard
|	Pb	208	551374.5	0.3	9.7356	0.096	1.0	ug/L	1616	Standard
	U	238	81712.4	0.5	4.5143	0.062	1.4	ug/L	2	Standard
[>	Bi	209	583692.2	1.0				ug/L	641071	Standard

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Na	23	2368.5	28.0	0.0922	0.037	39.6	mg/L	412	Standard
Mg	24	623241.6	0.3	0.8813	0.024	2.7	mg/L	177	Standard
K	39	1788.4	2.6	1.3194	0.016	1.2	mg/L	150	Standard
Ca	43	6.7	86.6	2.6557	4.453	167.7	mg/L	7	Standard
Fe	54	26081.3	1.3	5.2924	0.121	2.3	mg/L	634	Standard
Fe	57	419564.4	1.9	4.9545	0.190	3.8	mg/L	2670	Standard
Sc-1	45	361812.5	2.6				mg/L	375691	Standard
Cl	35	4.7	32.7				ug/L	4	Standard
Kr	83	52.3	7.3				ug/L	39	Standard
Br	81	589.2	7.6				ug/L	639	Standard
P	31	10515.3	0.6				ug/L	419	Standard
S	34	5744.4	3.6				ug/L	7420	Standard
Sr	88	55.0	9.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.312	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062739SD WG404144-05

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	Cd	111	
	Cd	114	
>	In	115	85.039
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.049
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062739SD WG404144-05

Report Date/Time: Friday, July 27, 2012 16:51:42

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Method 6020 - Summary Report

Sample ID: L1207062701

Sample Date/Time: Friday, July 27, 2012 16:52:21

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	65392.5	1.0	-15279.8928	259.249	1.7	ug/L	11199	Standard
|	Be	9	851.7	3.5	0.3990	0.011	2.7	ug/L	10	Standard
|	Al	27	66104387.2	4.0	4097.4489	168.367	4.1	ug/L	7920	Standard
[>	Sc	45	366694.3	2.4				ug/L	375691	Standard
[	Ti	47	30590.5	2.6	23.0795	0.700	3.0	ug/L	70	Standard
|	V	51	64705.7	0.9	5.5662	0.084	1.5	ug/L	3172	Standard
|	Cr	52	65459.5	1.9	6.3140	0.183	2.9	ug/L	9852	Standard
|	Cr	53	10853.1	1.3	6.8026	0.138	2.0	ug/L	518	Standard
|	Mn	55	4488360.2	1.0	275.5450	3.596	1.3	ug/L	1193	Standard
|	Co	59	33516.4	1.6	3.1685	0.067	2.1	ug/L	98	Standard
|	Ni	60	29353.7	1.1	10.7325	0.167	1.6	ug/L	67	Standard
|	Cu	65	17147.7	1.8	6.7732	0.158	2.3	ug/L	90	Standard
|	Zn	66	45115.1	1.7	39.6669	0.901	2.3	ug/L	148	Standard
[>	Ge	72	294349.4	0.6				ug/L	304674	Standard
|	As	75	1838.2	0.7	1.7979	0.015	0.8	ug/L	-174	Standard
|	Se	82	76.0	11.1	0.5056	0.071	14.1	ug/L	26	Standard
[	Se-1	77	201.7	9.9	1.0267	0.232	22.6	ug/L	133	Standard
[>	Ga	71	7938.7	3.3				mg/L	630	Standard
[	Rb	85	143766.1	3.5				ug/L	12	Standard
[	Y	89	503837.4	2.1				ug/L	271719	Standard
[>	Rh	103	383.3	11.8				ug/L	392	Standard
[	Mo	98	621.3	2.1	0.1676	0.002	1.5	ug/L	7	Standard
|	Ag	107	476.7	4.4	0.0565	0.003	4.9	ug/L	55	Standard
|	Cd	111	1771.6	2.8	0.4352	0.012	2.6	mg/L	67	Standard
|	Cd	114	5287.3	0.8	0.4642	0.008	1.7	ug/L	219	Standard
[>	In	115	756639.4	0.9				ug/L	887392	Standard
|	Sn	118	869.7	3.7	0.0204	0.002	11.8	ug/L	653	Standard
|	Sb	123	309.6	14.1	0.0362	0.005	12.7	ug/L	48	Standard
[	Ba	135	326424.6	0.9	72.2162	1.205	1.7	ug/L	28	Standard
[	Ce	140	1136817.4	1.5				ug/L	34	Standard
[>	Tb	159	1096841.2	1.1				ug/L	1226141	Standard
[	Ho	165	31157.3	0.6				ug/L	14	Standard
|	Tl	203	1885.5	0.9	0.0984	0.001	0.7	ug/L	9	Standard
|	Tl	205	4432.3	1.0	0.1011	0.002	1.6	ug/L	20	Standard
|	Pb	206	82210.1	1.2	5.6115	0.097	1.7	ug/L	419	Standard
|	Pb	207	64599.4	1.6	5.2498	0.111	2.1	ug/L	338	Standard
|	Pb	208	307365.8	0.9	5.4150	0.075	1.4	ug/L	1616	Standard
	U	238	15777.9	1.0	0.8718	0.013	1.5	ug/L	2	Standard
[>	Bi	209	583601.0	0.5				ug/L	641071	Standard

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Na	23	2927.0	6.2	0.1209	0.009	7.4	mg/L	412	Standard
Mg	24	782931.8	1.0	1.0923	0.027	2.5	mg/L	177	Standard
K	39	1703.4	3.0	1.2322	0.030	2.4	mg/L	150	Standard
Ca	43	5.0	100.0	1.2850	3.827	297.9	mg/L	7	Standard
Fe	54	26578.1	2.6	5.3202	0.039	0.7	mg/L	634	Standard
Fe	57	413684.8	2.2	4.8178	0.138	2.9	mg/L	2670	Standard
Sc-1	45	366694.3	2.4				mg/L	375691	Standard
Cl	35	6.3	24.1				ug/L	4	Standard
Kr	83	60.8	6.3				ug/L	39	Standard
Br	81	568.3	6.2				ug/L	639	Standard
P	31	23232.0	3.6				ug/L	419	Standard
S	34	5791.9	1.3				ug/L	7420	Standard
Sr	88	78.3	18.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.611	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062701

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	Cd	111	
	Cd	114	
>	In	115	85.266
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.035
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062701

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Method 6020 - Summary Report

Sample ID: L1207062703

Sample Date/Time: Friday, July 27, 2012 16:55:30

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	65466.2	2.1	-15514.6748	300.984	1.9	ug/L	11199	Standard
|	Be	9	783.4	9.6	0.3705	0.044	11.8	ug/L	10	Standard
|	Al	27	71054235.1	3.0	4454.6626	47.166	1.1	ug/L	7920	Standard
[>	Sc	45	362422.8	2.0				ug/L	375691	Standard
[	Ti	47	19924.8	1.2	14.9915	0.134	0.9	ug/L	70	Standard
|	V	51	79940.4	1.2	6.9305	0.116	1.7	ug/L	3172	Standard
|	Cr	52	92301.0	1.6	9.3156	0.173	1.9	ug/L	9852	Standard
|	Cr	53	15201.0	1.3	9.6445	0.150	1.6	ug/L	518	Standard
|	Mn	55	4418218.2	0.6	270.8721	1.952	0.7	ug/L	1193	Standard
|	Co	59	36190.2	2.3	3.4174	0.075	2.2	ug/L	98	Standard
|	Ni	60	38015.0	2.5	13.8873	0.306	2.2	ug/L	67	Standard
|	Cu	65	22757.7	1.5	8.9910	0.174	1.9	ug/L	90	Standard
|	Zn	66	70811.8	2.1	62.2423	1.227	2.0	ug/L	148	Standard
[>	Ge	72	294740.9	0.6				ug/L	304674	Standard
|	As	75	2835.6	2.3	2.6647	0.045	1.7	ug/L	-174	Standard
|	Se	82	97.3	6.0	0.6905	0.046	6.6	ug/L	26	Standard
[	Se-1	77	198.7	9.7	0.9875	0.235	23.8	ug/L	133	Standard
[>	Ga	71	8560.8	0.2				mg/L	630	Standard
[	Rb	85	139576.8	2.2				ug/L	12	Standard
[	Y	89	430521.8	2.6				ug/L	271719	Standard
[>	Rh	103	360.0	16.8				ug/L	392	Standard
[	Mo	98	723.3	3.4	0.1960	0.008	4.0	ug/L	7	Standard
|	Ag	107	523.3	7.0	0.0630	0.005	7.7	ug/L	55	Standard
|	Cd	111	2915.5	4.5	0.7276	0.039	5.4	mg/L	67	Standard
|	Cd	114	8595.5	1.8	0.7647	0.019	2.5	ug/L	219	Standard
[>	In	115	756991.9	0.7				ug/L	887392	Standard
|	Sn	118	656.3	3.0	0.0040	0.001	29.4	ug/L	653	Standard
|	Sb	123	247.3	12.7	0.0297	0.003	11.6	ug/L	48	Standard
[	Ba	135	311594.6	1.0	68.9017	1.162	1.7	ug/L	28	Standard
[	Ce	140	1188529.4	0.7				ug/L	34	Standard
[>	Tb	159	1086211.4	0.3				ug/L	1226141	Standard
[	Ho	165	24692.8	0.5				ug/L	14	Standard
|	Tl	203	2017.8	1.5	0.1057	0.003	2.4	ug/L	9	Standard
|	Tl	205	4669.1	1.9	0.1070	0.001	0.9	ug/L	20	Standard
|	Pb	206	94618.6	1.6	6.4835	0.037	0.6	ug/L	419	Standard
|	Pb	207	75921.1	2.3	6.1942	0.080	1.3	ug/L	338	Standard
|	Pb	208	359082.0	1.5	6.3517	0.031	0.5	ug/L	1616	Standard
	U	238	12761.4	0.8	0.7075	0.007	1.0	ug/L	2	Standard
[>	Bi	209	581667.9	1.0				ug/L	641071	Standard

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Na	23	2628.6	4.3	0.1064	0.008	7.5	mg/L	412	Standard
Mg	24	760546.4	0.7	1.0735	0.027	2.5	mg/L	177	Standard
K	39	1838.4	4.6	1.3577	0.073	5.4	mg/L	150	Standard
Ca	43	10.0	86.6	5.1726	6.634	128.3	mg/L	7	Standard
Fe	54	28124.8	2.1	5.7068	0.154	2.7	mg/L	634	Standard
Fe	57	449660.6	4.6	5.2996	0.210	4.0	mg/L	2670	Standard
Sc-1	45	362422.8	2.0				mg/L	375691	Standard
Cl	35	4.7	24.7				ug/L	4	Standard
Kr	83	56.9	1.5				ug/L	39	Standard
Br	81	630.8	8.3				ug/L	639	Standard
P	31	13184.9	1.7				ug/L	419	Standard
S	34	5491.8	2.5				ug/L	7420	Standard
Sr	88	90.0	47.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.740	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062703

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	Cd	111	
	Cd	114	
>	In	115	85.305
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.734
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits


Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1207062703PS WG404770-01

Sample Date/Time: Friday, July 27, 2012 16:58:39

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63158.0	1.6	-14736.2650	682.921	4.6	ug/L	11199	Standard
|	Be	9	92132.8	3.1	45.4989	2.431	5.3	ug/L	10	Standard
|	Al	27	70422423.0	2.5	4386.4742	202.203	4.6	ug/L	7920	Standard
[>	Sc	45	365082.6	2.3				ug/L	375691	Standard
[	Ti	47	19455.5	1.6	14.7037	0.364	2.5	ug/L	70	Standard
|	V	51	542878.7	1.9	48.8424	1.314	2.7	ug/L	3172	Standard
|	Cr	52	474340.7	2.4	52.4269	1.749	3.3	ug/L	9852	Standard
|	Cr	53	81212.1	2.0	53.1805	1.542	2.9	ug/L	518	Standard
|	Mn	55	5037413.3	2.7	310.2590	11.151	3.6	ug/L	1193	Standard
|	Co	59	472804.9	2.5	44.9982	1.509	3.4	ug/L	98	Standard
|	Ni	60	157559.3	0.4	57.8991	0.481	0.8	ug/L	67	Standard
|	Cu	65	136275.1	1.1	54.2940	1.046	1.9	ug/L	90	Standard
|	Zn	66	129610.4	1.4	114.5429	2.574	2.2	ug/L	148	Standard
[>	Ge	72	293455.0	0.9				ug/L	304674	Standard
|	As	75	60133.0	1.3	52.8248	1.119	2.1	ug/L	-174	Standard
|	Se	82	6391.9	0.6	55.7632	0.775	1.4	ug/L	26	Standard
[	Se-1	77	4724.4	0.4	56.6620	0.589	1.0	ug/L	133	Standard
[>	Ga	71	8574.1	3.3				mg/L	630	Standard
[	Rb	85	138962.9	2.1				ug/L	12	Standard
[	Y	89	420021.9	1.9				ug/L	271719	Standard
[>	Rh	103	410.0	13.6				ug/L	392	Standard
[	Mo	98	787.6	4.4	0.2125	0.010	4.6	ug/L	7	Standard
|	Ag	107	333863.7	2.4	46.8031	1.467	3.1	ug/L	55	Standard
|	Cd	111	189405.5	1.6	48.0968	1.089	2.3	mg/L	67	Standard
|	Cd	114	550608.7	1.9	49.7147	1.302	2.6	ug/L	219	Standard
[>	In	115	761697.1	0.7				ug/L	887392	Standard
|	Sn	118	828.0	1.5	0.0168	0.001	4.6	ug/L	653	Standard
|	Sb	123	455113.8	2.0	46.9588	1.247	2.7	ug/L	48	Standard
[	Ba	135	523084.2	2.3	114.9660	3.455	3.0	ug/L	28	Standard
[	Ce	140	1165444.8	1.5				ug/L	34	Standard
[>	Tb	159	1106080.5	1.2				ug/L	1226141	Standard
[	Ho	165	24366.2	1.7				ug/L	14	Standard
|	Tl	203	823496.4	2.0	43.1774	0.942	2.2	ug/L	9	Standard
|	Tl	205	1911773.6	1.4	44.7691	0.694	1.6	ug/L	20	Standard
|	Pb	206	728799.3	1.4	49.7498	0.824	1.7	ug/L	419	Standard
|	Pb	207	616647.6	2.0	50.1313	1.079	2.2	ug/L	338	Standard
|	Pb	208	2860128.9	1.7	50.4178	0.927	1.8	ug/L	1616	Standard
	U	238	767711.0	1.5	42.2395	0.729	1.7	ug/L	2	Standard
[>	Bi	209	586042.2	0.5				ug/L	641071	Standard

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Na	23	2618.6	7.3	0.1049	0.013	12.8	mg/L	412	Standard
Mg	24	739245.3	2.9	1.0363	0.053	5.1	mg/L	177	Standard
K	39	1820.1	4.7	1.3332	0.099	7.4	mg/L	150	Standard
Ca	43	8.3	34.6	3.7967	2.152	56.7	mg/L	7	Standard
Fe	54	28650.9	1.8	5.7739	0.194	3.4	mg/L	634	Standard
Fe	57	440355.0	2.5	5.1524	0.125	2.4	mg/L	2670	Standard
Sc-1	45	365082.6	2.3				mg/L	375691	Standard
Cl	35	4.7	44.6				ug/L	4	Standard
Kr	83	57.8	1.9				ug/L	39	Standard
Br	81	565.0	0.8				ug/L	639	Standard
P	31	13109.8	2.9				ug/L	419	Standard
S	34	5421.8	5.3				ug/L	7420	Standard
Sr	88	88.3	8.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.318	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062703PS WG404770-01

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	Cd	111	
	Cd	114	
>	In	115	85.835
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.416
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

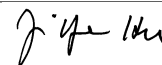
Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1207062703PS WG404770-01

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Method 6020 - Summary Report

Sample ID: L1207062703SDL WG404770-02

Sample Date/Time: Friday, July 27, 2012 17:01:48

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17977.3	1.9	-2511.7058	190.489	7.6	ug/L	11199	Standard
|	Be	9	193.3	19.1	0.0861	0.020	22.9	ug/L	10	Standard
|	Al	27	11652380.1	1.4	802.8079	17.357	2.2	ug/L	7920	Standard
[>	Sc	45	329729.8	1.6				ug/L	375691	Standard
[	Ti	47	3190.0	2.0	2.4327	0.051	2.1	ug/L	70	Standard
|	V	51	14824.4	1.4	1.1103	0.031	2.8	ug/L	3172	Standard
|	Cr	52	20821.3	1.7	1.3722	0.046	3.4	ug/L	9852	Standard
|	Cr	53	2960.3	2.3	1.6808	0.066	3.9	ug/L	518	Standard
|	Mn	55	654707.2	0.8	41.3998	0.422	1.0	ug/L	1193	Standard
|	Co	59	6083.9	3.8	0.5836	0.027	4.7	ug/L	98	Standard
|	Ni	60	6359.3	1.6	2.3781	0.016	0.7	ug/L	67	Standard
|	Cu	65	3773.1	1.6	1.5042	0.026	1.8	ug/L	90	Standard
|	Zn	66	14317.8	1.5	12.9042	0.197	1.5	ug/L	148	Standard
[>	Ge	72	285300.2	1.1				ug/L	304674	Standard
|	As	75	331.7	6.4	0.4928	0.022	4.4	ug/L	-174	Standard
|	Se	82	39.7	0.8	0.2007	0.006	2.8	ug/L	26	Standard
[	Se-1	77	142.7	13.2	0.3589	0.231	64.4	ug/L	133	Standard
[>	Ga	71	2003.5	6.1				mg/L	630	Standard
[	Rb	85	21914.2	1.1				ug/L	12	Standard
[	Y	89	262989.8	1.6				ug/L	271719	Standard
[>	Rh	103	340.0	18.1				ug/L	392	Standard
[	Mo	98	131.2	14.0	0.0320	0.006	17.2	ug/L	7	Standard
|	Ag	107	180.0	18.0	0.0153	0.005	32.0	ug/L	55	Standard
|	Cd	111	509.7	2.5	0.1160	0.004	3.7	mg/L	67	Standard
|	Cd	114	1542.1	3.2	0.1275	0.006	4.5	ug/L	219	Standard
[>	In	115	736909.4	0.8				ug/L	887392	Standard
|	Sn	118	447.7	1.6	-0.0110	0.001	7.6	ug/L	653	Standard
|	Sb	123	2409.5	2.4	0.2609	0.005	1.7	ug/L	48	Standard
[	Ba	135	50741.8	0.5	11.5183	0.135	1.2	ug/L	28	Standard
[	Ce	140	193505.2	0.4				ug/L	34	Standard
[>	Tb	159	1033000.7	0.5				ug/L	1226141	Standard
[	Ho	165	3930.2	1.5				ug/L	14	Standard
|	Tl	203	442.0	15.2	0.0226	0.003	15.4	ug/L	9	Standard
|	Tl	205	979.7	13.4	0.0200	0.003	14.8	ug/L	20	Standard
|	Pb	206	15736.8	1.0	1.0597	0.008	0.7	ug/L	419	Standard
|	Pb	207	12586.2	0.8	1.0083	0.015	1.5	ug/L	338	Standard
|	Pb	208	59824.1	0.6	1.0378	0.006	0.6	ug/L	1616	Standard
	U	238	2296.2	15.5	0.1278	0.019	15.0	ug/L	2	Standard
[>	Bi	209	579590.5	0.7				ug/L	641071	Standard

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Na	23	751.7	11.7	0.0069	0.006	88.0	mg/L	412	Standard
Mg	24	141171.4	1.6	0.2190	0.004	1.6	mg/L	177	Standard
K	39	376.7	12.3	0.2048	0.038	18.5	mg/L	150	Standard
Ca	43	6.7	43.3	3.0715	2.347	76.4	mg/L	7	Standard
Fe	54	4789.8	1.7	0.9619	0.028	3.0	mg/L	634	Standard
Fe	57	73301.9	0.6	0.9257	0.020	2.2	mg/L	2670	Standard
Sc-1	45	329729.8	1.6				mg/L	375691	Standard
Cl	35	5.0	20.0				ug/L	4	Standard
Kr	83	40.4	9.5				ug/L	39	Standard
Br	81	449.2	12.1				ug/L	639	Standard
P	31	2466.9	6.4				ug/L	419	Standard
S	34	5038.3	1.1				ug/L	7420	Standard
Sr	88	45.0	19.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.641	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062703SDL WG404770-02
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	Cd	111		
	Cd	114		
>	In	115	83.042	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.410	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062703SDL WG404770-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 17:05:01

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10732.1	1.1	191.8769	102.842	53.6	ug/L	11199	Standard
|	Be	9	99535.9	1.8	47.2949	0.433	0.9	ug/L	10	Standard
|	Al	27	858513.7	7.0	51.0046	4.255	8.3	ug/L	7920	Standard
[>	Sc	45	379179.5	2.4				ug/L	375691	Standard
|	Ti	47	136059.8	0.2	93.9587	0.821	0.9	ug/L	70	Standard
|	V	51	562794.8	1.1	46.1043	0.833	1.8	ug/L	3172	Standard
|	Cr	52	463498.4	1.0	46.5439	0.788	1.7	ug/L	9852	Standard
|	Cr	53	79454.5	1.5	47.3540	0.992	2.1	ug/L	518	Standard
|	Mn	55	813973.0	0.6	45.5878	0.192	0.4	ug/L	1193	Standard
|	Co	59	507787.2	1.2	44.0160	0.815	1.9	ug/L	98	Standard
|	Ni	60	139409.5	0.9	46.6576	0.314	0.7	ug/L	67	Standard
|	Cu	65	132078.6	1.3	47.9268	0.944	2.0	ug/L	90	Standard
|	Zn	66	61412.9	1.9	49.3635	1.102	2.2	ug/L	148	Standard
[>	Ge	72	322161.7	0.7				ug/L	304674	Standard
|	As	75	59719.1	0.4	47.8011	0.458	1.0	ug/L	-174	Standard
|	Se	82	6017.5	0.5	47.7948	0.464	1.0	ug/L	26	Standard
[	Se-1	77	4358.6	2.9	47.3881	1.585	3.3	ug/L	133	Standard
[>	Ga	71	770.0	2.3				mg/L	630	Standard
|	Rb	85	1041.7	4.8				ug/L	12	Standard
|	Y	89	278491.2	1.0				ug/L	271719	Standard
[>	Rh	103	416.7	14.4				ug/L	392	Standard
|	Mo	98	410771.8	0.9	103.9722	0.924	0.9	ug/L	7	Standard
|	Ag	107	373737.4	0.7	47.8751	0.323	0.7	ug/L	55	Standard
|	Cd	111	202975.1	0.3	47.1000	0.204	0.4	mg/L	67	Standard
|	Cd	114	587372.4	0.3	48.4625	0.354	0.7	ug/L	219	Standard
[>	In	115	833464.2	0.5				ug/L	887392	Standard
|	Sn	118	682230.0	0.9	47.4411	0.169	0.4	ug/L	653	Standard
|	Sb	123	504094.5	1.1	47.5271	0.277	0.6	ug/L	48	Standard
|	Ba	135	245690.4	0.5	49.3376	0.198	0.4	ug/L	28	Standard
|	Ce	140	1253.4	36.0				ug/L	34	Standard
[>	Tb	159	1141506.8	0.3				ug/L	1226141	Standard
|	Ho	165	51.0	105.3				ug/L	14	Standard
|	Tl	203	904449.0	0.5	46.0926	0.497	1.1	ug/L	9	Standard
|	Tl	205	2168118.1	0.4	49.3489	0.410	0.8	ug/L	20	Standard
|	Pb	206	709510.7	0.6	47.0736	0.541	1.1	ug/L	419	Standard
|	Pb	207	605199.0	0.5	47.8207	0.592	1.2	ug/L	338	Standard
|	Pb	208	2790300.3	0.4	47.8072	0.529	1.1	ug/L	1616	Standard
	U	238	862077.2	1.2	46.1042	0.899	2.0	ug/L	2	Standard
[>	Bi	209	602958.2	0.8				ug/L	641071	Standard

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Na	23	112655.7	1.5	5.9047	0.111	1.9	mg/L	412	Standard
Mg	24	3590383.2	0.7	4.8442	0.128	2.6	mg/L	177	Standard
K	39	6124.6	3.8	4.6108	0.292	6.3	mg/L	150	Standard
Ca	43	18.3	103.3	10.9544	13.950	127.4	mg/L	7	Standard
Fe	54	25852.9	0.5	4.9994	0.149	3.0	mg/L	634	Standard
Fe	57	462463.2	1.8	5.2103	0.085	1.6	mg/L	2670	Standard
Sc-1	45	379179.5	2.4				mg/L	375691	Standard
Cl	35	3.7	15.7				ug/L	4	Standard
Kr	83	42.4	10.2				ug/L	39	Standard
Br	81	685.0	7.9				ug/L	639	Standard
P	31	468.3	11.1				ug/L	419	Standard
S	34	6399.7	2.1				ug/L	7420	Standard
Sr	88	41.7	36.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	102.009		
Sc	45			
Ti	47	93.959		
V	51	92.209		
Cr	52	93.088		
Cr	53			
Mn	55	91.176		
Co	59	88.032		
Ni	60	93.315		
Cu	65	95.854		
Zn	66	98.727		
Ge	72		105.740	
As	75	95.602		
Se	82	95.590		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	103.972		
Ag	107	95.750		

Sample ID: QC Std 6

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	Cd	111	94.200	
	Cd	114		
>	In	115		93.923
	Sn	118	94.882	
	Sb	123	95.054	
	Ba	135	98.675	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.185	
|	Tl	205		
|	Pb	206	94.147	
|	Pb	207	95.641	
|	Pb	208	95.614	
|	U	238	92.208	
>	Bi	209		94.055
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Co	59	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 17:08:11

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9914.9	1.3	342.3713	38.468	11.2	ug/L	11199	Standard
|	Be	9	15.0	57.7	-0.0123	0.004	32.6	ug/L	10	Standard
|	Al	27	8624.1	6.5	0.0346	0.022	63.8	ug/L	7920	Standard
[>	Sc	45	369202.4	2.4				ug/L	375691	Standard
|	Ti	47	51.3	17.5	-0.0204	0.006	30.8	ug/L	70	Standard
|	V	51	2907.1	2.4	-0.0266	0.007	26.6	ug/L	3172	Standard
|	Cr	52	8749.9	0.2	-0.1322	0.011	8.7	ug/L	9852	Standard
|	Cr	53	568.3	2.1	0.0198	0.007	36.7	ug/L	518	Standard
|	Mn	55	1291.4	1.8	-0.0078	0.002	19.6	ug/L	1193	Standard
|	Co	59	120.0	4.3	-0.0016	0.000	21.0	ug/L	98	Standard
|	Ni	60	73.7	6.7	-0.0015	0.002	127.8	ug/L	67	Standard
|	Cu	65	103.3	11.9	-0.0052	0.005	93.6	ug/L	90	Standard
|	Zn	66	763.7	4.2	0.4992	0.020	4.0	ug/L	148	Standard
[>	Ge	72	318227.8	1.2				ug/L	304674	Standard
|	As	75	-202.4	9.4	0.0307	0.017	56.0	ug/L	-174	Standard
|	Se	82	24.0	11.9	0.0367	0.025	67.1	ug/L	26	Standard
[	Se-1	77	135.3	15.9	0.0916	0.261	284.8	ug/L	133	Standard
[>	Ga	71	621.7	8.1				mg/L	630	Standard
[	Rb	85	25.0	34.6				ug/L	12	Standard
[	Y	89	272798.9	0.3				ug/L	271719	Standard
[>	Rh	103	368.3	4.4				ug/L	392	Standard
[	Mo	98	246.9	6.8	0.0568	0.004	6.7	ug/L	7	Standard
|	Ag	107	106.7	4.3	0.0029	0.001	24.3	ug/L	55	Standard
|	Cd	111	73.1	12.7	-0.0009	0.002	233.8	mg/L	67	Standard
|	Cd	114	221.9	5.6	0.0018	0.001	50.4	ug/L	219	Standard
[>	In	115	834117.6	0.8				ug/L	887392	Standard
|	Sn	118	813.0	6.5	0.0103	0.003	31.4	ug/L	653	Standard
|	Sb	123	2792.1	2.6	0.2670	0.006	2.4	ug/L	48	Standard
[	Ba	135	47.7	11.9	0.0005	0.001	237.4	ug/L	28	Standard
[	Ce	140	48.7	21.6				ug/L	34	Standard
[>	Tb	159	1123818.8	0.5				ug/L	1226141	Standard
[	Ho	165	14.3	35.8				ug/L	14	Standard
|	Tl	203	81.0	13.1	0.0032	0.001	15.8	ug/L	9	Standard
|	Tl	205	171.0	14.0	0.0007	0.001	74.9	ug/L	20	Standard
|	Pb	206	425.7	6.8	0.0008	0.002	208.6	ug/L	419	Standard
|	Pb	207	388.3	5.7	0.0033	0.002	45.4	ug/L	338	Standard
|	Pb	208	1707.0	3.3	-0.0003	0.001	283.7	ug/L	1616	Standard
	U	238	62.7	24.5	0.0034	0.001	23.3	ug/L	2	Standard
[>	Bi	209	611937.3	0.8				ug/L	641071	Standard

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Na	23	446.7	17.0	-0.0145	0.005	32.2	mg/L	412	Standard
Mg	24	330.0	17.1	0.0005	0.000	14.2	mg/L	177	Standard
K	39	133.3	7.8	-0.0239	0.011	44.1	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2155	2.199	180.9	mg/L	7	Standard
Fe	54	639.5	9.4	-0.0004	0.014	3333.5	mg/L	634	Standard
Fe	57	2800.3	4.2	0.0032	0.002	54.7	mg/L	2670	Standard
Sc-1	45	369202.4	2.4				mg/L	375691	Standard
Cl	35	4.3	70.5				ug/L	4	Standard
Kr	83	38.6	4.8				ug/L	39	Standard
Br	81	650.8	5.0				ug/L	639	Standard
P	31	445.8	2.5				ug/L	419	Standard
S	34	6248.8	0.7				ug/L	7420	Standard
Sr	88	33.3	70.9				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.449	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	93.997
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.455
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207062705

Sample Date/Time: Friday, July 27, 2012 17:11:23

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	68082.6	0.3	-16248.9240	191.432	1.2	ug/L	11199	Standard
|	Be	9	826.7	7.3	0.3911	0.025	6.3	ug/L	10	Standard
|	Al	27	65149028.7	1.1	4083.5836	99.575	2.4	ug/L	7920	Standard
[>	Sc	45	362620.1	1.3				ug/L	375691	Standard
[	Ti	47	25095.1	0.4	18.9276	0.154	0.8	ug/L	70	Standard
|	V	51	83361.2	1.3	7.2502	0.063	0.9	ug/L	3172	Standard
|	Cr	52	73696.5	0.4	7.2413	0.050	0.7	ug/L	9852	Standard
|	Cr	53	11945.5	0.3	7.5220	0.057	0.8	ug/L	518	Standard
|	Mn	55	3068710.0	1.1	188.4136	2.022	1.1	ug/L	1193	Standard
|	Co	59	27509.0	1.0	2.5990	0.037	1.4	ug/L	98	Standard
|	Ni	60	25474.1	0.2	9.3128	0.018	0.2	ug/L	67	Standard
|	Cu	65	19085.7	0.9	7.5451	0.071	0.9	ug/L	90	Standard
|	Zn	66	58182.8	0.6	51.2026	0.232	0.5	ug/L	148	Standard
[>	Ge	72	294264.4	0.4				ug/L	304674	Standard
|	As	75	3007.7	0.9	2.8190	0.011	0.4	ug/L	-174	Standard
|	Se	82	82.2	7.7	0.5602	0.058	10.4	ug/L	26	Standard
[	Se-1	77	187.3	7.3	0.8524	0.166	19.5	ug/L	133	Standard
[>	Ga	71	8075.5	2.4				mg/L	630	Standard
[	Rb	85	149074.9	1.3				ug/L	12	Standard
[	Y	89	492708.0	0.2				ug/L	271719	Standard
[>	Rh	103	351.7	17.1				ug/L	392	Standard
[	Mo	98	943.7	1.1	0.2587	0.002	0.8	ug/L	7	Standard
|	Ag	107	538.0	1.2	0.0655	0.001	1.4	ug/L	55	Standard
|	Cd	111	2465.3	1.6	0.6154	0.001	0.2	mg/L	67	Standard
|	Cd	114	7122.2	2.5	0.6341	0.022	3.5	ug/L	219	Standard
[>	In	115	753258.0	1.7				ug/L	887392	Standard
|	Sn	118	861.7	6.8	0.0202	0.006	28.0	ug/L	653	Standard
|	Sb	123	573.9	19.6	0.0639	0.012	18.5	ug/L	48	Standard
[	Ba	135	389033.1	1.0	86.4706	2.172	2.5	ug/L	28	Standard
[	Ce	140	984484.4	1.1				ug/L	34	Standard
[>	Tb	159	1097642.9	1.5				ug/L	1226141	Standard
[	Ho	165	29521.4	0.6				ug/L	14	Standard
|	Tl	203	1808.8	0.3	0.0941	0.001	0.9	ug/L	9	Standard
|	Tl	205	4169.9	2.7	0.0947	0.003	3.4	ug/L	20	Standard
|	Pb	206	95636.9	0.6	6.5144	0.070	1.1	ug/L	419	Standard
|	Pb	207	77531.5	0.2	6.2886	0.047	0.7	ug/L	338	Standard
|	Pb	208	364949.2	0.6	6.4172	0.070	1.1	ug/L	1616	Standard
	U	238	14214.3	1.0	0.7833	0.013	1.6	ug/L	2	Standard
[>	Bi	209	585204.0	0.8				ug/L	641071	Standard

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Na	23	2350.2	2.4	0.0909	0.004	4.1	mg/L	412	Standard
Mg	24	501114.6	1.3	0.7068	0.017	2.4	mg/L	177	Standard
K	39	1541.7	3.1	1.1170	0.048	4.3	mg/L	150	Standard
Ca	43	10.0	86.6	5.0641	6.538	129.1	mg/L	7	Standard
Fe	54	25329.4	2.3	5.1224	0.090	1.8	mg/L	634	Standard
Fe	57	410349.4	0.8	4.8316	0.044	0.9	mg/L	2670	Standard
Sc-1	45	362620.1	1.3				mg/L	375691	Standard
Cl	35	5.0	52.9				ug/L	4	Standard
Kr	83	66.0	6.7				ug/L	39	Standard
Br	81	637.5	12.6				ug/L	639	Standard
P	31	19062.0	1.2				ug/L	419	Standard
S	34	5993.7	0.8				ug/L	7420	Standard
Sr	88	101.7	24.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.583	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062705

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	Cd	111	
	Cd	114	
>	In	115	84.884
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.285
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062705

Report Date/Time: Friday, July 27, 2012 17:13:53

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Method 6020 - Summary Report

Sample ID: L1207062707

Sample Date/Time: Friday, July 27, 2012 17:14:32

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	74914.8	1.1	-18417.3182	236.931	1.3	ug/L	11199	Standard
|	Be	9	846.7	2.5	0.4057	0.007	1.8	ug/L	10	Standard
|	Al	27	68122039.1	1.5	4314.4435	45.127	1.0	ug/L	7920	Standard
[>	Sc	45	358802.3	0.9				ug/L	375691	Standard
[	Ti	47	23852.8	0.1	18.1864	0.147	0.8	ug/L	70	Standard
|	V	51	76306.3	0.5	6.6899	0.070	1.1	ug/L	3172	Standard
|	Cr	52	69617.9	1.0	6.8689	0.077	1.1	ug/L	9852	Standard
|	Cr	53	11370.9	1.8	7.2259	0.071	1.0	ug/L	518	Standard
|	Mn	55	3852449.0	1.0	239.1514	0.264	0.1	ug/L	1193	Standard
|	Co	59	30712.1	1.3	2.9349	0.016	0.5	ug/L	98	Standard
|	Ni	60	29511.0	0.8	10.9118	0.088	0.8	ug/L	67	Standard
|	Cu	65	19275.3	2.0	7.7050	0.164	2.1	ug/L	90	Standard
|	Zn	66	63107.5	0.8	56.1590	0.238	0.4	ug/L	148	Standard
[>	Ge	72	291068.3	0.9				ug/L	304674	Standard
|	As	75	2655.6	1.3	2.5374	0.046	1.8	ug/L	-174	Standard
|	Se	82	73.7	0.4	0.4929	0.003	0.7	ug/L	26	Standard
[	Se-1	77	174.7	2.2	0.7211	0.067	9.3	ug/L	133	Standard
[>	Ga	71	8222.2	2.8				mg/L	630	Standard
[	Rb	85	123293.1	2.2				ug/L	12	Standard
[	Y	89	448615.0	2.2				ug/L	271719	Standard
[>	Rh	103	346.7	4.2				ug/L	392	Standard
[	Mo	98	727.9	7.0	0.1963	0.014	7.1	ug/L	7	Standard
|	Ag	107	387.3	7.1	0.0436	0.004	9.1	ug/L	55	Standard
|	Cd	111	2179.7	2.8	0.5366	0.018	3.3	mg/L	67	Standard
|	Cd	114	6295.5	0.7	0.5528	0.007	1.2	ug/L	219	Standard
[>	In	115	760723.7	1.0				ug/L	887392	Standard
|	Sn	118	812.4	5.7	0.0157	0.004	22.9	ug/L	653	Standard
|	Sb	123	427.4	1.7	0.0481	0.000	0.7	ug/L	48	Standard
[	Ba	135	495067.3	1.6	108.9498	2.773	2.5	ug/L	28	Standard
[	Ce	140	1012588.9	1.5				ug/L	34	Standard
[>	Tb	159	1094875.5	0.7				ug/L	1226141	Standard
[	Ho	165	25085.1	1.6				ug/L	14	Standard
|	Tl	203	1548.7	5.3	0.0812	0.005	6.0	ug/L	9	Standard
|	Tl	205	3577.1	3.4	0.0815	0.003	4.3	ug/L	20	Standard
|	Pb	206	75863.2	1.9	5.2058	0.115	2.2	ug/L	419	Standard
|	Pb	207	60427.6	1.1	4.9372	0.093	1.9	ug/L	338	Standard
|	Pb	208	287855.1	1.4	5.0986	0.099	1.9	ug/L	1616	Standard
	U	238	10187.4	0.7	0.5662	0.007	1.2	ug/L	2	Standard
[>	Bi	209	580300.3	0.8				ug/L	641071	Standard

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Na	23	1588.4	7.2	0.0498	0.007	13.2	mg/L	412	Standard
Mg	24	556276.8	3.0	0.7928	0.017	2.1	mg/L	177	Standard
K	39	1568.4	5.2	1.1521	0.075	6.5	mg/L	150	Standard
Ca	43	3.3	86.6	0.0641	2.208	3441.3	mg/L	7	Standard
Fe	54	28278.5	0.9	5.7967	0.027	0.5	mg/L	634	Standard
Fe	57	449867.1	6.8	5.3541	0.314	5.9	mg/L	2670	Standard
Sc-1	45	358802.3	0.9				mg/L	375691	Standard
Cl	35	3.7	15.7				ug/L	4	Standard
Kr	83	60.6	2.7				ug/L	39	Standard
Br	81	574.2	1.5				ug/L	639	Standard
P	31	10309.3	2.4				ug/L	419	Standard
S	34	5466.0	3.1				ug/L	7420	Standard
Sr	88	53.3	10.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.534	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062707

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	Cd	111	
	Cd	114	
>	In	115	85.726
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.520
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1207062707

Report Date/Time: Friday, July 27, 2012 17:17:02

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Method 6020 - Summary Report

Sample ID: L1207062709

Sample Date/Time: Friday, July 27, 2012 17:17:41

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	62620.8	2.0	-14514.8255	397.973	2.7	ug/L	11199	Standard
|	Be	9	725.0	8.6	0.3370	0.029	8.5	ug/L	10	Standard
|	Al	27	55877828.3	3.4	3466.4504	127.348	3.7	ug/L	7920	Standard
[>	Sc	45	366330.8	0.7				ug/L	375691	Standard
[	Ti	47	19800.6	2.7	14.7816	0.410	2.8	ug/L	70	Standard
|	V	51	81143.4	2.1	6.9820	0.181	2.6	ug/L	3172	Standard
|	Cr	52	78219.8	2.2	7.6676	0.227	3.0	ug/L	9852	Standard
|	Cr	53	12369.2	4.6	7.7238	0.367	4.8	ug/L	518	Standard
|	Mn	55	4932465.6	1.5	300.0630	5.933	2.0	ug/L	1193	Standard
|	Co	59	37915.1	2.3	3.5530	0.093	2.6	ug/L	98	Standard
|	Ni	60	28173.2	3.1	10.2063	0.372	3.6	ug/L	67	Standard
|	Cu	65	21671.2	2.3	8.4925	0.220	2.6	ug/L	90	Standard
|	Zn	66	58684.8	2.7	51.1646	1.662	3.2	ug/L	148	Standard
[>	Ge	72	297060.6	0.7				ug/L	304674	Standard
|	As	75	2885.5	3.9	2.6890	0.109	4.0	ug/L	-174	Standard
|	Se	82	59.7	23.6	0.3595	0.124	34.6	ug/L	26	Standard
[	Se-1	77	181.0	9.1	0.7531	0.186	24.7	ug/L	133	Standard
[>	Ga	71	6719.8	3.8				mg/L	630	Standard
[	Rb	85	99683.7	2.7				ug/L	12	Standard
[	Y	89	455535.9	2.5				ug/L	271719	Standard
[>	Rh	103	356.7	2.9				ug/L	392	Standard
[	Mo	98	615.4	5.3	0.1642	0.009	5.3	ug/L	7	Standard
|	Ag	107	432.3	4.6	0.0496	0.003	5.3	ug/L	55	Standard
|	Cd	111	5577.2	2.8	1.3934	0.035	2.5	mg/L	67	Standard
|	Cd	114	16362.0	1.5	1.4555	0.019	1.3	ug/L	219	Standard
[>	In	115	764587.6	0.3				ug/L	887392	Standard
|	Sn	118	902.0	2.9	0.0222	0.002	8.2	ug/L	653	Standard
|	Sb	123	375.4	8.7	0.0426	0.003	7.6	ug/L	48	Standard
[	Ba	135	417857.0	2.2	91.4739	1.750	1.9	ug/L	28	Standard
[	Ce	140	1084819.1	2.1				ug/L	34	Standard
[>	Tb	159	1098461.2	0.9				ug/L	1226141	Standard
[	Ho	165	25678.1	1.5				ug/L	14	Standard
|	Tl	203	1647.1	4.5	0.0852	0.004	4.9	ug/L	9	Standard
|	Tl	205	3874.5	3.4	0.0873	0.003	3.8	ug/L	20	Standard
|	Pb	206	89896.4	3.1	6.0904	0.217	3.6	ug/L	419	Standard
|	Pb	207	71470.6	2.1	5.7651	0.148	2.6	ug/L	338	Standard
|	Pb	208	340682.7	2.3	5.9578	0.161	2.7	ug/L	1616	Standard
	U	238	13824.6	2.5	0.7579	0.022	2.9	ug/L	2	Standard
[>	Bi	209	588235.4	0.4				ug/L	641071	Standard

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Na	23	1911.8	2.1	0.0656	0.002	3.6	mg/L	412	Standard
Mg	24	517394.9	4.1	0.7223	0.029	4.0	mg/L	177	Standard
K	39	1368.4	8.4	0.9657	0.098	10.2	mg/L	150	Standard
Ca	43	6.7	86.6	2.5500	4.360	171.0	mg/L	7	Standard
Fe	54	22320.5	1.2	4.4518	0.073	1.6	mg/L	634	Standard
Fe	57	356721.4	3.1	4.1528	0.103	2.5	mg/L	2670	Standard
Sc-1	45	366330.8	0.7				mg/L	375691	Standard
Cl	35	4.7	53.9				ug/L	4	Standard
Kr	83	60.1	8.0				ug/L	39	Standard
Br	81	580.8	2.0				ug/L	639	Standard
P	31	11482.7	2.2				ug/L	419	Standard
S	34	5712.7	2.3				ug/L	7420	Standard
Sr	88	85.0	11.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.501	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	86.161	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	91.758	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062709

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Method 6020 - Summary Report

Sample ID: L1207062711

Sample Date/Time: Friday, July 27, 2012 17:20:50

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	56923.4	1.9	-13046.2500	91.120	0.7	ug/L	11199	Standard
|	Be	9	666.7	12.8	0.3111	0.040	13.0	ug/L	10	Standard
|	Al	27	50988936.9	3.9	3190.0304	122.313	3.8	ug/L	7920	Standard
[>	Sc	45	363266.2	2.2				ug/L	375691	Standard
[	Ti	47	20348.7	3.1	15.1888	0.298	2.0	ug/L	70	Standard
|	V	51	77382.3	1.5	6.6452	0.096	1.4	ug/L	3172	Standard
|	Cr	52	96625.6	2.5	9.7140	0.119	1.2	ug/L	9852	Standard
|	Cr	53	15744.0	1.8	9.9186	0.006	0.1	ug/L	518	Standard
|	Mn	55	4706421.7	1.5	286.2772	3.246	1.1	ug/L	1193	Standard
|	Co	59	35388.3	1.2	3.3152	0.042	1.3	ug/L	98	Standard
|	Ni	60	49490.7	3.1	17.9440	0.407	2.3	ug/L	67	Standard
|	Cu	65	26308.2	2.0	10.3196	0.296	2.9	ug/L	90	Standard
|	Zn	66	89052.4	2.4	77.6827	0.852	1.1	ug/L	148	Standard
[>	Ge	72	297094.1	1.8				ug/L	304674	Standard
|	As	75	2825.4	1.8	2.6366	0.030	1.2	ug/L	-174	Standard
|	Se	82	91.2	13.0	0.6300	0.090	14.2	ug/L	26	Standard
[	Se-1	77	195.0	10.0	0.9231	0.220	23.9	ug/L	133	Standard
[>	Ga	71	6261.3	4.2				mg/L	630	Standard
[	Rb	85	91673.4	3.3				ug/L	12	Standard
[	Y	89	477621.4	0.7				ug/L	271719	Standard
[>	Rh	103	343.3	6.9				ug/L	392	Standard
[	Mo	98	976.0	2.5	0.2640	0.009	3.4	ug/L	7	Standard
|	Ag	107	466.7	2.0	0.0545	0.001	2.5	ug/L	55	Standard
|	Cd	111	4458.3	2.6	1.1119	0.041	3.7	mg/L	67	Standard
|	Cd	114	12920.5	1.3	1.1472	0.015	1.3	ug/L	219	Standard
[>	In	115	763766.2	1.1				ug/L	887392	Standard
|	Sn	118	870.4	2.6	0.0199	0.002	10.5	ug/L	653	Standard
|	Sb	123	348.5	9.3	0.0398	0.003	8.0	ug/L	48	Standard
[	Ba	135	318176.5	1.8	69.7315	1.326	1.9	ug/L	28	Standard
[	Ce	140	952122.0	1.4				ug/L	34	Standard
[>	Tb	159	1096700.8	0.8				ug/L	1226141	Standard
[	Ho	165	27812.8	0.4				ug/L	14	Standard
|	Tl	203	1675.1	2.1	0.0874	0.002	1.9	ug/L	9	Standard
|	Tl	205	3821.8	2.6	0.0868	0.002	2.5	ug/L	20	Standard
|	Pb	206	89344.7	1.7	6.1096	0.145	2.4	ug/L	419	Standard
|	Pb	207	71667.5	1.7	5.8352	0.124	2.1	ug/L	338	Standard
|	Pb	208	339158.8	1.5	5.9865	0.114	1.9	ug/L	1616	Standard
	U	238	17313.6	2.1	0.9580	0.022	2.3	ug/L	2	Standard
[>	Bi	209	582797.4	0.7				ug/L	641071	Standard

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Na	23	2206.8	7.7	0.0827	0.007	8.6	mg/L	412	Standard
Mg	24	478784.1	0.9	0.6742	0.012	1.8	mg/L	177	Standard
K	39	1368.4	3.5	0.9751	0.051	5.2	mg/L	150	Standard
Ca	43	5.0	100.0	1.2547	3.723	296.7	mg/L	7	Standard
Fe	54	25203.0	6.2	5.0876	0.317	6.2	mg/L	634	Standard
Fe	57	409286.0	3.1	4.8099	0.088	1.8	mg/L	2670	Standard
Sc-1	45	363266.2	2.2				mg/L	375691	Standard
Cl	35	3.7	87.7				ug/L	4	Standard
Kr	83	61.6	8.8				ug/L	39	Standard
Br	81	578.3	7.8				ug/L	639	Standard
P	31	16025.1	1.0				ug/L	419	Standard
S	34	5591.0	1.7				ug/L	7420	Standard
Sr	88	71.7	4.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.512	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062711

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	Cd	111	
	Cd	114	
>	In	115	86.069
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.910
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062711

Report Date/Time: Friday, July 27, 2012 17:23:21

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Method 6020 - Summary Report

Sample ID: L1207062713

Sample Date/Time: Friday, July 27, 2012 17:24:01

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15239.3	2.3	-1711.4366	178.320	10.4	ug/L	11199	Standard
|	Be	9	65.0	20.4	0.0164	0.007	43.6	ug/L	10	Standard
|	Al	27	1510938.0	2.4	104.8701	1.564	1.5	ug/L	7920	Standard
[>	Sc	45	325915.7	2.1				ug/L	375691	Standard
[	Ti	47	3902.2	1.1	3.1768	0.094	3.0	ug/L	70	Standard
|	V	51	7915.8	4.8	0.5124	0.023	4.4	ug/L	3172	Standard
|	Cr	52	11614.1	2.0	0.3875	0.005	1.3	ug/L	9852	Standard
|	Cr	53	697.5	2.0	0.1762	0.003	1.6	ug/L	518	Standard
|	Mn	55	411379.4	1.8	27.5858	0.211	0.8	ug/L	1193	Standard
|	Co	59	2575.2	11.2	0.2552	0.025	9.8	ug/L	98	Standard
|	Ni	60	10059.3	3.8	4.0136	0.210	5.2	ug/L	67	Standard
|	Cu	65	1112.7	4.2	0.4410	0.012	2.7	ug/L	90	Standard
|	Zn	66	2940.0	3.4	2.7157	0.072	2.6	ug/L	148	Standard
[>	Ge	72	268762.9	1.8				ug/L	304674	Standard
|	As	75	263.0	13.2	0.4459	0.038	8.4	ug/L	-174	Standard
|	Se	82	69.6	5.7	0.5076	0.026	5.1	ug/L	26	Standard
[	Se-1	77	129.7	5.8	0.2965	0.108	36.4	ug/L	133	Standard
[>	Ga	71	681.7	13.2				mg/L	630	Standard
[	Rb	85	3190.3	7.4				ug/L	12	Standard
[	Y	89	236501.9	1.9				ug/L	271719	Standard
[>	Rh	103	361.7	16.6				ug/L	392	Standard
[	Mo	98	107.4	5.9	0.0270	0.002	5.6	ug/L	7	Standard
|	Ag	107	68.7	27.8	-0.0002	0.003	1211.5	ug/L	55	Standard
|	Cd	111	170.4	1.2	0.0297	0.001	3.0	mg/L	67	Standard
|	Cd	114	516.1	5.5	0.0346	0.002	6.2	ug/L	219	Standard
[>	In	115	694338.5	1.5				ug/L	887392	Standard
|	Sn	118	407.7	3.3	-0.0122	0.001	12.3	ug/L	653	Standard
|	Sb	123	213.0	3.3	0.0281	0.001	2.3	ug/L	48	Standard
[	Ba	135	254417.7	1.0	61.3417	1.378	2.2	ug/L	28	Standard
[	Ce	140	14003.8	2.4				ug/L	34	Standard
[>	Tb	159	1040811.1	0.4				ug/L	1226141	Standard
[	Ho	165	312.3	29.3				ug/L	14	Standard
|	Tl	203	486.0	134.4	0.0277	0.038	138.5	ug/L	9	Standard
|	Tl	205	1108.1	131.6	0.0259	0.038	147.4	ug/L	20	Standard
|	Pb	206	4566.0	17.3	0.3228	0.060	18.6	ug/L	419	Standard
|	Pb	207	3798.8	16.1	0.3196	0.055	17.3	ug/L	338	Standard
|	Pb	208	17633.7	15.1	0.3197	0.052	16.3	ug/L	1616	Standard
	U	238	728.4	32.9	0.0450	0.015	32.7	ug/L	2	Standard
[>	Bi	209	522419.0	0.6				ug/L	641071	Standard

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Na	23	2281.8	7.9	0.1012	0.009	8.5	mg/L	412	Standard
Mg	24	978708.7	2.6	1.5366	0.070	4.5	mg/L	177	Standard
K	39	185.0	27.4	0.0368	0.047	127.4	mg/L	150	Standard
Ca	43	268.3	33.9	225.1571	81.102	36.0	mg/L	7	Standard
Fe	54	1670.2	2.4	0.2548	0.014	5.7	mg/L	634	Standard
Fe	57	48703.3	5.0	0.6123	0.021	3.4	mg/L	2670	Standard
Sc-1	45	325915.7	2.1				mg/L	375691	Standard
Cl	35	7.7	37.7				ug/L	4	Standard
Kr	83	46.8	11.4				ug/L	39	Standard
Br	81	652.5	8.2				ug/L	639	Standard
P	31	1738.4	2.8				ug/L	419	Standard
S	34	8173.0	4.2				ug/L	7420	Standard
Sr	88	298.3	23.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.213	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062713

Report Date/Time: Friday, July 27, 2012 17:26:32

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	Cd	111	
	Cd	114	
>	In	115	78.245
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	81.492
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062713

Report Date/Time: Friday, July 27, 2012 17:26:32

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Method 6020 - Summary Report

Sample ID: L1207062715

Sample Date/Time: Friday, July 27, 2012 17:27:11

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15092.5	5.0	-1860.3259	304.401	16.4	ug/L	11199	Standard
|	Be	9	71.7	21.3	0.0216	0.008	39.0	ug/L	10	Standard
|	Al	27	2534229.7	1.3	183.4652	2.979	1.6	ug/L	7920	Standard
[>	Sc	45	313112.5	1.2				ug/L	375691	Standard
[	Ti	47	5192.2	1.5	4.2929	0.069	1.6	ug/L	70	Standard
|	V	51	14133.8	1.3	1.1427	0.023	2.0	ug/L	3172	Standard
|	Cr	52	13746.9	1.6	0.6692	0.030	4.5	ug/L	9852	Standard
|	Cr	53	1007.5	3.7	0.4074	0.028	6.8	ug/L	518	Standard
|	Mn	55	548615.3	1.8	37.2348	0.749	2.0	ug/L	1193	Standard
|	Co	59	2467.2	2.0	0.2471	0.006	2.4	ug/L	98	Standard
|	Ni	60	10783.8	2.2	4.3514	0.104	2.4	ug/L	67	Standard
|	Cu	65	2433.5	4.2	1.0282	0.047	4.6	ug/L	90	Standard
|	Zn	66	6373.7	2.3	6.1024	0.156	2.6	ug/L	148	Standard
[>	Ge	72	265747.3	0.3				ug/L	304674	Standard
|	As	75	205.1	13.2	0.3923	0.026	6.5	ug/L	-174	Standard
|	Se	82	82.8	8.0	0.6432	0.064	9.9	ug/L	26	Standard
[	Se-1	77	148.7	2.7	0.5740	0.060	10.4	ug/L	133	Standard
[>	Ga	71	793.4	4.6				mg/L	630	Standard
[	Rb	85	8475.7	6.2				ug/L	12	Standard
[	Y	89	232198.4	3.0				ug/L	271719	Standard
[>	Rh	103	328.3	3.8				ug/L	392	Standard
[	Mo	98	161.0	8.9	0.0453	0.005	10.2	ug/L	7	Standard
|	Ag	107	107.0	8.3	0.0064	0.001	21.6	ug/L	55	Standard
|	Cd	111	754.0	2.6	0.2009	0.006	3.2	mg/L	67	Standard
|	Cd	114	2253.3	3.9	0.2159	0.009	4.1	ug/L	219	Standard
[>	In	115	666893.3	0.3				ug/L	887392	Standard
|	Sn	118	430.3	1.8	-0.0088	0.001	6.4	ug/L	653	Standard
|	Sb	123	359.3	6.5	0.0463	0.003	5.6	ug/L	48	Standard
[	Ba	135	229694.3	1.6	57.6460	0.758	1.3	ug/L	28	Standard
[	Ce	140	31599.3	2.2				ug/L	34	Standard
[>	Tb	159	1025566.4	0.9				ug/L	1226141	Standard
[	Ho	165	632.7	6.3				ug/L	14	Standard
|	Tl	203	183.0	7.2	0.0100	0.001	7.6	ug/L	9	Standard
|	Tl	205	428.7	3.7	0.0082	0.000	4.3	ug/L	20	Standard
|	Pb	206	25410.3	1.8	1.9328	0.028	1.5	ug/L	419	Standard
|	Pb	207	21385.4	1.4	1.9374	0.015	0.8	ug/L	338	Standard
|	Pb	208	99643.1	1.7	1.9556	0.024	1.2	ug/L	1616	Standard
	U	238	1396.7	1.3	0.0869	0.001	1.0	ug/L	2	Standard
[>	Bi	209	518931.9	0.7				ug/L	641071	Standard

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Na	23	1900.1	4.1	0.0826	0.004	4.2	mg/L	412	Standard
Mg	24	789044.2	0.2	1.2888	0.013	1.0	mg/L	177	Standard
K	39	223.3	21.5	0.0795	0.047	59.6	mg/L	150	Standard
Ca	43	335.0	10.8	292.5477	35.090	12.0	mg/L	7	Standard
Fe	54	1382.9	6.0	0.2013	0.018	9.1	mg/L	634	Standard
Fe	57	41299.6	4.0	0.5373	0.026	4.8	mg/L	2670	Standard
Sc-1	45	313112.5	1.2				mg/L	375691	Standard
Cl	35	4.7	86.6				ug/L	4	Standard
Kr	83	45.1	9.4				ug/L	39	Standard
Br	81	597.5	3.7				ug/L	639	Standard
P	31	3224.5	0.8				ug/L	419	Standard
S	34	8374.8	1.6				ug/L	7420	Standard
Sr	88	236.7	18.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.223	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	75.152
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	80.948
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062715

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Method 6020 - Summary Report

Sample ID: L1207062717

Sample Date/Time: Friday, July 27, 2012 17:30:22

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13813.0	2.5	-1372.0763	42.600	3.1	ug/L	11199	Standard
|	Be	9	40.0	25.0	0.0032	0.006	186.7	ug/L	10	Standard
|	Al	27	1505862.5	3.8	107.3217	5.765	5.4	ug/L	7920	Standard
[>	Sc	45	317603.1	1.6				ug/L	375691	Standard
[	Ti	47	3970.5	2.9	3.2320	0.125	3.9	ug/L	70	Standard
|	V	51	12572.1	2.2	0.9725	0.039	4.0	ug/L	3172	Standard
|	Cr	52	13438.3	1.3	0.6118	0.036	5.9	ug/L	9852	Standard
|	Cr	53	904.2	8.5	0.3247	0.056	17.2	ug/L	518	Standard
|	Mn	55	371325.1	2.2	24.8893	0.773	3.1	ug/L	1193	Standard
|	Co	59	2074.5	4.0	0.2034	0.011	5.2	ug/L	98	Standard
|	Ni	60	8548.1	2.9	3.4045	0.126	3.7	ug/L	67	Standard
|	Cu	65	1227.0	0.9	0.4908	0.002	0.5	ug/L	90	Standard
|	Zn	66	3771.1	1.8	3.5182	0.094	2.7	ug/L	148	Standard
[>	Ge	72	268839.2	0.9				ug/L	304674	Standard
|	As	75	170.6	8.1	0.3571	0.013	3.6	ug/L	-174	Standard
|	Se	82	66.2	5.9	0.4751	0.043	9.1	ug/L	26	Standard
[	Se-1	77	128.3	5.8	0.2784	0.117	41.9	ug/L	133	Standard
[>	Ga	71	745.0	8.6				mg/L	630	Standard
[	Rb	85	2405.2	8.7				ug/L	12	Standard
[	Y	89	235640.6	2.4				ug/L	271719	Standard
[>	Rh	103	351.7	7.8				ug/L	392	Standard
[	Mo	98	183.1	3.6	0.0524	0.002	4.4	ug/L	7	Standard
|	Ag	107	100.0	13.7	0.0052	0.002	38.7	ug/L	55	Standard
|	Cd	111	511.9	5.9	0.1309	0.009	7.2	mg/L	67	Standard
|	Cd	114	1561.5	1.9	0.1447	0.005	3.4	ug/L	219	Standard
[>	In	115	666426.8	1.2				ug/L	887392	Standard
|	Sn	118	542.0	4.2	0.0009	0.002	248.5	ug/L	653	Standard
|	Sb	123	212.4	15.6	0.0291	0.004	14.2	ug/L	48	Standard
[	Ba	135	223192.6	1.8	56.0672	1.648	2.9	ug/L	28	Standard
[	Ce	140	18033.1	3.0				ug/L	34	Standard
[>	Tb	159	1015076.3	1.1				ug/L	1226141	Standard
[	Ho	165	376.3	3.6				ug/L	14	Standard
|	Tl	203	118.7	11.4	0.0061	0.001	12.0	ug/L	9	Standard
|	Tl	205	277.3	4.9	0.0041	0.000	10.3	ug/L	20	Standard
|	Pb	206	16727.9	1.7	1.2528	0.016	1.3	ug/L	419	Standard
|	Pb	207	14090.6	3.0	1.2569	0.034	2.7	ug/L	338	Standard
|	Pb	208	65485.4	2.0	1.2648	0.026	2.0	ug/L	1616	Standard
	U	238	931.7	3.4	0.0575	0.001	2.6	ug/L	2	Standard
[>	Bi	209	523136.2	1.1				ug/L	641071	Standard

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Na	23	1723.4	4.9	0.0698	0.004	5.1	mg/L	412	Standard
Mg	24	863423.4	3.7	1.3910	0.071	5.1	mg/L	177	Standard
K	39	193.3	11.7	0.0487	0.023	47.5	mg/L	150	Standard
Ca	43	240.0	7.2	205.8212	16.814	8.2	mg/L	7	Standard
Fe	54	1324.6	7.8	0.1829	0.024	13.4	mg/L	634	Standard
Fe	57	34066.6	4.2	0.4316	0.026	6.0	mg/L	2670	Standard
Sc-1	45	317603.1	1.6				mg/L	375691	Standard
Cl	35	5.7	44.4				ug/L	4	Standard
Kr	83	39.0	9.0				ug/L	39	Standard
Br	81	517.5	2.1				ug/L	639	Standard
P	31	2120.1	4.2				ug/L	419	Standard
S	34	8718.3	2.5				ug/L	7420	Standard
Sr	88	268.3	15.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.238	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062717

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	Cd	111	
	Cd	114	
>	In	115	75.099
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	81.603
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062719

Sample Date/Time: Friday, July 27, 2012 17:33:32

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13933.1	2.2	-1441.5065	65.206	4.5	ug/L	11199	Standard
|	Be	9	18.3	41.7	-0.0091	0.004	47.1	ug/L	10	Standard
|	Al	27	1400130.8	3.2	100.4499	5.950	5.9	ug/L	7920	Standard
[>	Sc	45	315555.3	2.7				ug/L	375691	Standard
[	Ti	47	3932.2	0.8	3.2013	0.092	2.9	ug/L	70	Standard
|	V	51	10968.0	1.1	0.8145	0.035	4.3	ug/L	3172	Standard
|	Cr	52	12648.6	1.0	0.5153	0.049	9.5	ug/L	9852	Standard
|	Cr	53	740.0	6.2	0.2064	0.023	11.3	ug/L	518	Standard
|	Mn	55	309604.1	1.1	20.7433	0.454	2.2	ug/L	1193	Standard
|	Co	59	1948.1	0.7	0.1903	0.003	1.8	ug/L	98	Standard
|	Ni	60	9080.1	1.6	3.6192	0.116	3.2	ug/L	67	Standard
|	Cu	65	1765.4	4.3	0.7250	0.021	2.9	ug/L	90	Standard
|	Zn	66	4275.6	0.2	4.0067	0.099	2.5	ug/L	148	Standard
[>	Ge	72	268802.1	2.1				ug/L	304674	Standard
|	As	75	228.3	16.4	0.4122	0.034	8.3	ug/L	-174	Standard
|	Se	82	66.2	9.3	0.4761	0.071	14.9	ug/L	26	Standard
[	Se-1	77	134.0	10.8	0.3568	0.228	63.8	ug/L	133	Standard
[>	Ga	71	741.7	14.6				mg/L	630	Standard
[	Rb	85	2861.9	1.9				ug/L	12	Standard
[	Y	89	233180.7	1.0				ug/L	271719	Standard
[>	Rh	103	375.0	2.3				ug/L	392	Standard
[	Mo	98	153.0	3.0	0.0433	0.001	3.0	ug/L	7	Standard
|	Ag	107	85.7	9.4	0.0031	0.001	40.7	ug/L	55	Standard
|	Cd	111	412.6	4.0	0.1032	0.005	4.9	mg/L	67	Standard
|	Cd	114	1277.3	2.1	0.1166	0.003	2.8	ug/L	219	Standard
[>	In	115	660060.2	0.4				ug/L	887392	Standard
|	Sn	118	537.7	1.2	0.0010	0.001	50.2	ug/L	653	Standard
|	Sb	123	286.5	0.8	0.0381	0.000	1.1	ug/L	48	Standard
[	Ba	135	233051.7	0.9	59.0978	0.758	1.3	ug/L	28	Standard
[	Ce	140	18686.5	0.2				ug/L	34	Standard
[>	Tb	159	1012987.9	0.3				ug/L	1226141	Standard
[	Ho	165	391.0	6.3				ug/L	14	Standard
|	Tl	203	120.0	6.6	0.0062	0.001	8.9	ug/L	9	Standard
|	Tl	205	274.0	5.7	0.0041	0.001	12.3	ug/L	20	Standard
|	Pb	206	21080.7	1.1	1.5997	0.026	1.6	ug/L	419	Standard
|	Pb	207	17749.7	1.4	1.6041	0.023	1.4	ug/L	338	Standard
|	Pb	208	82626.6	1.3	1.6174	0.021	1.3	ug/L	1616	Standard
	U	238	707.7	3.9	0.0441	0.002	3.9	ug/L	2	Standard
[>	Bi	209	518749.7	1.2				ug/L	641071	Standard

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Na	23	1628.4	6.8	0.0646	0.010	15.2	mg/L	412	Standard
Mg	24	1003469.3	1.8	1.6268	0.040	2.5	mg/L	177	Standard
K	39	151.7	16.3	0.0107	0.020	184.0	mg/L	150	Standard
Ca	43	255.0	13.7	219.7901	25.975	11.8	mg/L	7	Standard
Fe	54	936.4	3.3	0.0924	0.003	3.6	mg/L	634	Standard
Fe	57	32331.2	5.3	0.4110	0.027	6.7	mg/L	2670	Standard
Sc-1	45	315555.3	2.7				mg/L	375691	Standard
Cl	35	5.7	40.8				ug/L	4	Standard
Kr	83	46.6	3.5				ug/L	39	Standard
Br	81	508.3	4.4				ug/L	639	Standard
P	31	1952.6	1.5				ug/L	419	Standard
S	34	8463.2	2.3				ug/L	7420	Standard
Sr	88	263.3	18.6				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.226	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062719

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	Cd	111	
	Cd	114	
>	In	115	74.382
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	80.919
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062721

Sample Date/Time: Friday, July 27, 2012 17:36:41

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	73263.4	2.1	-18002.6044	340.739	1.9	ug/L	11199	Standard
|	Be	9	931.7	8.4	0.4500	0.043	9.5	ug/L	10	Standard
|	Al	27	76362794.8	1.0	4850.8239	69.249	1.4	ug/L	7920	Standard
>	Sc	45	357773.6	1.3				ug/L	375691	Standard
[	Ti	47	43716.7	2.0	33.8989	0.517	1.5	ug/L	70	Standard
|	V	51	75459.1	2.3	6.7198	0.144	2.1	ug/L	3172	Standard
|	Cr	52	62481.6	1.6	6.1704	0.204	3.3	ug/L	9852	Standard
|	Cr	53	9456.3	1.9	6.0525	0.026	0.4	ug/L	518	Standard
|	Mn	55	5073908.7	2.6	319.9306	7.839	2.5	ug/L	1193	Standard
|	Co	59	33538.1	2.0	3.2565	0.061	1.9	ug/L	98	Standard
|	Ni	60	17377.6	2.4	6.5150	0.140	2.1	ug/L	67	Standard
|	Cu	65	17382.3	2.6	7.0523	0.118	1.7	ug/L	90	Standard
|	Zn	66	43382.7	2.2	39.1708	0.671	1.7	ug/L	148	Standard
>	Ge	72	286627.3	2.3				ug/L	304674	Standard
|	As	75	1940.7	1.8	1.9333	0.037	1.9	ug/L	-174	Standard
|	Se	82	55.3	7.5	0.3383	0.031	9.2	ug/L	26	Standard
[	Se-1	77	157.3	7.6	0.5377	0.175	32.6	ug/L	133	Standard
>	Ga	71	9362.9	7.1				mg/L	630	Standard
[	Rb	85	260878.4	4.8				ug/L	12	Standard
[	Y	89	384428.1	1.4				ug/L	271719	Standard
>	Rh	103	378.3	16.6				ug/L	392	Standard
[	Mo	98	399.7	1.2	0.1139	0.002	2.2	ug/L	7	Standard
|	Ag	107	449.0	4.7	0.0572	0.004	6.3	ug/L	55	Standard
|	Cd	111	1794.1	3.5	0.4741	0.014	2.8	mg/L	67	Standard
|	Cd	114	5362.1	1.6	0.5063	0.003	0.6	ug/L	219	Standard
>	In	115	705554.2	1.0				ug/L	887392	Standard
|	Sn	118	801.4	3.6	0.0196	0.003	13.0	ug/L	653	Standard
|	Sb	123	144.9	20.6	0.0201	0.003	15.8	ug/L	48	Standard
[	Ba	135	413507.4	2.4	98.0914	1.466	1.5	ug/L	28	Standard
[	Ce	140	1237248.0	2.3				ug/L	34	Standard
>	Tb	159	1070565.6	0.7				ug/L	1226141	Standard
[	Ho	165	22236.3	1.6				ug/L	14	Standard
|	Tl	203	2128.8	3.7	0.1145	0.003	2.7	ug/L	9	Standard
|	Tl	205	5010.2	1.0	0.1181	0.001	0.6	ug/L	20	Standard
|	Pb	206	96698.7	2.1	6.7980	0.085	1.3	ug/L	419	Standard
|	Pb	207	77533.2	1.8	6.4905	0.073	1.1	ug/L	338	Standard
|	Pb	208	367716.4	2.3	6.6733	0.102	1.5	ug/L	1616	Standard
	U	238	8083.8	3.5	0.4597	0.012	2.5	ug/L	2	Standard
>	Bi	209	567048.4	1.0				ug/L	641071	Standard

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Na	23	2158.5	7.7	0.0819	0.009	10.5	mg/L	412	Standard
Mg	24	824229.2	1.7	1.1781	0.010	0.8	mg/L	177	Standard
K	39	2145.2	5.6	1.6278	0.084	5.2	mg/L	150	Standard
Ca	43	6.7	43.3	2.6667	2.297	86.1	mg/L	7	Standard
Fe	54	28753.9	5.0	5.9123	0.248	4.2	mg/L	634	Standard
Fe	57	393553.7	6.3	4.6936	0.239	5.1	mg/L	2670	Standard
Sc-1	45	357773.6	1.3				mg/L	375691	Standard
Cl	35	4.7	44.6				ug/L	4	Standard
Kr	83	55.2	2.1				ug/L	39	Standard
Br	81	509.2	8.5				ug/L	639	Standard
P	31	10438.6	2.2				ug/L	419	Standard
S	34	6199.6	2.7				ug/L	7420	Standard
Sr	88	73.3	25.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.077	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062721

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	Cd	111	
	Cd	114	
>	In	115	79.509
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	88.453
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1207062723

Sample Date/Time: Friday, July 27, 2012 17:39:51

Number of Replicates: 3

Autosampler Position: 419

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	91550.8	2.1	-22840.5641	807.848	3.5	ug/L	11199	Standard
|	Be	9	1173.4	11.4	0.5612	0.058	10.3	ug/L	10	Standard
|	Al	27	93613448.3	2.2	5847.1768	82.305	1.4	ug/L	7920	Standard
[>	Sc	45	363821.8	1.4				ug/L	375691	Standard
|	Ti	47	77157.0	2.6	59.1807	1.467	2.5	ug/L	70	Standard
|	V	51	91961.5	3.1	8.1498	0.249	3.1	ug/L	3172	Standard
|	Cr	52	71687.0	3.0	7.1354	0.230	3.2	ug/L	9852	Standard
|	Cr	53	11031.5	3.0	7.0290	0.187	2.7	ug/L	518	Standard
|	Mn	55	5226815.6	3.5	325.7534	10.501	3.2	ug/L	1193	Standard
|	Co	59	37502.4	3.7	3.6006	0.129	3.6	ug/L	98	Standard
|	Ni	60	20234.2	2.1	7.5023	0.143	1.9	ug/L	67	Standard
|	Cu	65	19179.1	3.4	7.6958	0.244	3.2	ug/L	90	Standard
|	Zn	66	49739.6	2.9	44.4083	1.234	2.8	ug/L	148	Standard
[>	Ge	72	289935.5	0.5				ug/L	304674	Standard
|	As	75	2261.2	1.5	2.1970	0.024	1.1	ug/L	-174	Standard
|	Se	82	60.1	5.5	0.3757	0.032	8.4	ug/L	26	Standard
[	Se-1	77	177.3	7.2	0.7628	0.167	22.0	ug/L	133	Standard
[>	Ga	71	11552.7	1.9				mg/L	630	Standard
|	Rb	85	292701.0	3.6				ug/L	12	Standard
|	Y	89	425953.8	4.0				ug/L	271719	Standard
[>	Rh	103	386.7	8.2				ug/L	392	Standard
|	Mo	98	416.0	4.0	0.1150	0.003	2.5	ug/L	7	Standard
|	Ag	107	546.7	7.5	0.0694	0.005	6.6	ug/L	55	Standard
|	Cd	111	1921.1	4.2	0.4931	0.015	3.0	mg/L	67	Standard
|	Cd	114	5675.9	4.0	0.5202	0.012	2.3	ug/L	219	Standard
[>	In	115	727318.7	1.8				ug/L	887392	Standard
|	Sn	118	987.7	2.2	0.0325	0.001	1.9	ug/L	653	Standard
|	Sb	123	158.6	22.4	0.0211	0.004	16.9	ug/L	48	Standard
|	Ba	135	440155.6	3.4	101.2783	1.756	1.7	ug/L	28	Standard
|	Ce	140	1356536.4	3.0				ug/L	34	Standard
[>	Tb	159	1079978.8	0.9				ug/L	1226141	Standard
|	Ho	165	26842.4	3.4				ug/L	14	Standard
|	Tl	203	2575.2	3.8	0.1374	0.004	2.9	ug/L	9	Standard
|	Tl	205	6018.2	4.9	0.1412	0.006	4.1	ug/L	20	Standard
|	Pb	206	102899.5	3.1	7.1722	0.166	2.3	ug/L	419	Standard
|	Pb	207	83031.7	2.8	6.8919	0.160	2.3	ug/L	338	Standard
|	Pb	208	392424.1	2.9	7.0615	0.166	2.4	ug/L	1616	Standard
	U	238	10940.3	3.3	0.6167	0.013	2.2	ug/L	2	Standard
[>	Bi	209	572025.8	1.1				ug/L	641071	Standard

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Na	23	2586.9	6.4	0.1035	0.010	9.6	mg/L	412	Standard
Mg	24	938468.5	2.5	1.3190	0.017	1.3	mg/L	177	Standard
K	39	2446.9	5.0	1.8414	0.072	3.9	mg/L	150	Standard
Ca	43	8.3	91.7	3.8011	5.789	152.3	mg/L	7	Standard
Fe	54	35102.5	3.6	7.1257	0.257	3.6	mg/L	634	Standard
Fe	57	507101.8	3.6	5.9574	0.196	3.3	mg/L	2670	Standard
Sc-1	45	363821.8	1.4				mg/L	375691	Standard
Cl	35	4.7	12.4				ug/L	4	Standard
Kr	83	56.4	3.8				ug/L	39	Standard
Br	81	497.5	4.8				ug/L	639	Standard
P	31	11196.6	1.2				ug/L	419	Standard
S	34	5704.4	1.2				ug/L	7420	Standard
Sr	88	61.7	40.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.162	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062723

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	Cd	111	
	Cd	114	
>	In	115	81.961
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.230
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

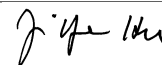
Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 17:43:03

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9975.0	2.1	291.2620	58.965	20.2	ug/L	11199	Standard
|	Be	9	98041.2	1.5	48.4339	0.124	0.3	ug/L	10	Standard
|	Al	27	827488.4	2.1	51.0902	1.636	3.2	ug/L	7920	Standard
>	Sc	45	364659.9	1.4				ug/L	375691	Standard
[	Ti	47	134951.7	0.6	95.0403	0.793	0.8	ug/L	70	Standard
|	V	51	558839.4	0.7	46.6890	0.465	1.0	ug/L	3172	Standard
|	Cr	52	456768.6	0.5	46.7809	0.460	1.0	ug/L	9852	Standard
|	Cr	53	78145.2	0.7	47.4957	0.515	1.1	ug/L	518	Standard
|	Mn	55	796908.7	0.7	45.5163	0.134	0.3	ug/L	1193	Standard
|	Co	59	505413.5	0.5	44.6758	0.200	0.4	ug/L	98	Standard
|	Ni	60	140351.1	1.0	47.9042	0.330	0.7	ug/L	67	Standard
|	Cu	65	129737.4	0.4	48.0073	0.225	0.5	ug/L	90	Standard
|	Zn	66	60235.2	1.4	49.3762	0.837	1.7	ug/L	148	Standard
>	Ge	72	315897.2	0.5				ug/L	304674	Standard
|	As	75	58622.1	1.8	47.8517	0.862	1.8	ug/L	-174	Standard
|	Se	82	5902.2	0.3	47.8079	0.362	0.8	ug/L	26	Standard
[	Se-1	77	4408.3	2.0	48.9212	1.088	2.2	ug/L	133	Standard
>	Ga	71	745.0	17.5				mg/L	630	Standard
[	Rb	85	1031.7	9.4				ug/L	12	Standard
[	Y	89	271670.6	0.2				ug/L	271719	Standard
>	Rh	103	438.3	4.3				ug/L	392	Standard
[	Mo	98	403402.0	0.4	105.8092	1.138	1.1	ug/L	7	Standard
|	Ag	107	366877.0	1.2	48.7002	0.726	1.5	ug/L	55	Standard
|	Cd	111	192173.2	1.1	46.2100	0.690	1.5	mg/L	67	Standard
|	Cd	114	572851.8	1.1	48.9769	0.659	1.3	ug/L	219	Standard
>	In	115	804334.3	0.7				ug/L	887392	Standard
|	Sn	118	665834.0	0.4	47.9801	0.290	0.6	ug/L	653	Standard
|	Sb	123	483049.3	0.8	47.1936	0.280	0.6	ug/L	48	Standard
[	Ba	135	243983.1	0.8	50.7729	0.777	1.5	ug/L	28	Standard
[	Ce	140	1125.0	7.1				ug/L	34	Standard
>	Tb	159	1140091.9	0.2				ug/L	1226141	Standard
[	Ho	165	21.0	4.8				ug/L	14	Standard
|	Tl	203	908898.6	0.6	47.1273	0.611	1.3	ug/L	9	Standard
|	Tl	205	2161704.6	0.2	50.0614	0.505	1.0	ug/L	20	Standard
|	Pb	206	702447.2	0.7	47.4182	0.664	1.4	ug/L	419	Standard
|	Pb	207	597634.2	0.7	48.0448	0.437	0.9	ug/L	338	Standard
|	Pb	208	2756623.3	0.8	48.0538	0.667	1.4	ug/L	1616	Standard
	U	238	842888.4	0.5	45.8601	0.267	0.6	ug/L	2	Standard
>	Bi	209	592631.7	0.9				ug/L	641071	Standard

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Na	23	110615.7	0.8	6.0284	0.056	0.9	mg/L	412	Standard
Mg	24	3648133.1	2.4	5.1173	0.173	3.4	mg/L	177	Standard
K	39	6491.4	2.8	5.0889	0.072	1.4	mg/L	150	Standard
Ca	43	10.0	86.6	5.0842	6.557	129.0	mg/L	7	Standard
Fe	54	25753.9	0.3	5.1814	0.081	1.6	mg/L	634	Standard
Fe	57	413937.7	3.5	4.8477	0.209	4.3	mg/L	2670	Standard
Sc-1	45	364659.9	1.4				mg/L	375691	Standard
Cl	35	5.0	69.3				ug/L	4	Standard
Kr	83	37.3	0.9				ug/L	39	Standard
Br	81	590.0	7.0				ug/L	639	Standard
P	31	446.7	8.7				ug/L	419	Standard
S	34	6644.8	0.9				ug/L	7420	Standard
Sr	88	36.7	63.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	102.180		
Sc	45			
Ti	47	95.040		
V	51	93.378		
Cr	52	93.562		
Cr	53			
Mn	55	91.033		
Co	59	89.352		
Ni	60	95.808		
Cu	65	96.015		
Zn	66	98.752		
Ge	72		103.684	
As	75	95.703		
Se	82	95.616		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	105.809		
Ag	107	97.400		

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	Cd	111	92.420	
	Cd	114		
>	In	115		90.640
	Sn	118	95.960	
	Sb	123	94.387	
	Ba	135	101.546	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	94.255	
|	Tl	205		
|	Pb	206	94.836	
|	Pb	207	96.090	
|	Pb	208	96.108	
|	U	238	91.720	
>	Bi	209		92.444
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Co	59	

Sample ID: QC Std 6

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Na	23	360.0	12.5	-0.0192	0.002	11.4	mg/L	412	Standard
Mg	24	688.4	41.3	0.0010	0.000	41.6	mg/L	177	Standard
K	39	145.0	26.9	-0.0142	0.033	229.4	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	577.5	9.1	-0.0127	0.011	84.8	mg/L	634	Standard
Fe	57	2640.2	3.0	0.0015	0.001	78.3	mg/L	2670	Standard
Sc-1	45	367910.4	1.4				mg/L	375691	Standard
Cl	35	2.7	43.3				ug/L	4	Standard
Kr	83	39.7	1.7				ug/L	39	Standard
Br	81	603.3	7.1				ug/L	639	Standard
P	31	407.5	15.6				ug/L	419	Standard
S	34	6393.0	3.2				ug/L	7420	Standard
Sr	88	36.7	55.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.444	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	90.770
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.344
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207062725

Sample Date/Time: Friday, July 27, 2012 17:49:27

Number of Replicates: 3

Autosampler Position: 420

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

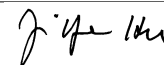
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	64296.2	3.0	-15165.6948	585.338	3.9	ug/L	11199	Standard
|	Be	9	856.7	3.4	0.4060	0.007	1.7	ug/L	10	Standard
|	Al	27	76221572.7	2.9	4774.0937	60.315	1.3	ug/L	7920	Standard
[>	Sc	45	362810.8	2.5				ug/L	375691	Standard
[	Ti	47	34321.8	1.8	26.0775	0.633	2.4	ug/L	70	Standard
|	V	51	76107.3	2.2	6.6406	0.153	2.3	ug/L	3172	Standard
|	Cr	52	65979.1	2.5	6.4213	0.144	2.2	ug/L	9852	Standard
|	Cr	53	10231.0	1.8	6.4386	0.069	1.1	ug/L	518	Standard
|	Mn	55	5038273.4	3.2	311.3920	9.608	3.1	ug/L	1193	Standard
|	Co	59	34660.3	2.7	3.2987	0.068	2.1	ug/L	98	Standard
|	Ni	60	23316.3	2.3	8.5780	0.254	3.0	ug/L	67	Standard
|	Cu	65	17328.6	2.6	6.8924	0.240	3.5	ug/L	90	Standard
|	Zn	66	58661.7	2.2	51.9639	1.321	2.5	ug/L	148	Standard
[>	Ge	72	292381.4	1.2				ug/L	304674	Standard
|	As	75	1911.2	2.0	1.8729	0.035	1.8	ug/L	-174	Standard
|	Se	82	68.7	11.3	0.4463	0.071	16.0	ug/L	26	Standard
[	Se-1	77	162.0	9.0	0.5561	0.201	36.1	ug/L	133	Standard
[>	Ga	71	9004.3	2.7				mg/L	630	Standard
[	Rb	85	188376.0	2.6				ug/L	12	Standard
[	Y	89	396805.5	3.1				ug/L	271719	Standard
[>	Rh	103	355.0	3.7				ug/L	392	Standard
[	Mo	98	776.7	10.2	0.2134	0.020	9.4	ug/L	7	Standard
|	Ag	107	575.7	22.0	0.0712	0.016	23.0	ug/L	55	Standard
|	Cd	111	3476.2	4.8	0.8813	0.025	2.9	mg/L	67	Standard
|	Cd	114	10368.3	7.4	0.9366	0.050	5.3	ug/L	219	Standard
[>	In	115	747773.8	2.5				ug/L	887392	Standard
|	Sn	118	1192.4	45.3	0.0458	0.040	86.9	ug/L	653	Standard
|	Sb	123	844.9	71.0	0.0920	0.061	66.0	ug/L	48	Standard
[	Ba	135	415098.2	3.2	92.9136	1.624	1.7	ug/L	28	Standard
[	Ce	140	1242257.8	2.9				ug/L	34	Standard
[>	Tb	159	1101403.8	2.7				ug/L	1226141	Standard
[	Ho	165	22530.1	1.8				ug/L	14	Standard
|	Tl	203	2578.9	26.0	0.1355	0.033	24.6	ug/L	9	Standard
|	Tl	205	5924.5	21.8	0.1368	0.028	20.5	ug/L	20	Standard
|	Pb	206	100747.0	2.4	6.9280	0.029	0.4	ug/L	419	Standard
|	Pb	207	80842.5	2.4	6.6203	0.113	1.7	ug/L	338	Standard
|	Pb	208	383369.3	2.3	6.8060	0.067	1.0	ug/L	1616	Standard
	U	238	9769.8	3.8	0.5433	0.010	1.8	ug/L	2	Standard
[>	Bi	209	579756.5	2.1				ug/L	641071	Standard

Sample ID: L1207062725

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Na	23	2711.9	6.3	0.1107	0.006	5.8	mg/L	412	Standard
Mg	24	948016.8	2.1	1.3364	0.020	1.5	mg/L	177	Standard
K	39	2073.5	3.0	1.5459	0.040	2.6	mg/L	150	Standard
Ca	43	8.3	124.9	3.7261	7.717	207.1	mg/L	7	Standard
Fe	54	28581.7	1.2	5.7959	0.138	2.4	mg/L	634	Standard
Fe	57	424856.4	5.6	4.9982	0.177	3.6	mg/L	2670	Standard
Sc-1	45	362810.8	2.5				mg/L	375691	Standard
Cl	35	7.0	100.0				ug/L	4	Standard
Kr	83	51.7	3.9				ug/L	39	Standard
Br	81	549.2	6.1				ug/L	639	Standard
P	31	13797.1	3.4				ug/L	419	Standard
S	34	5714.4	1.0				ug/L	7420	Standard
Sr	88	88.3	21.4				ug/L	35	Standard

QC Calculated Values

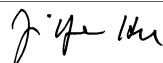
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.965	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	84.266
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.436
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062725

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Method 6020 - Summary Report

Sample ID: L1207062727

Sample Date/Time: Friday, July 27, 2012 17:52:37

Number of Replicates: 3

Autosampler Position: 421

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	83950.3	1.1	-20296.4931	722.529	3.6	ug/L	11199	Standard
|	Be	9	1123.4	12.3	0.5289	0.079	15.0	ug/L	10	Standard
|	Al	27	81471326.4	0.7	5005.7702	85.895	1.7	ug/L	7920	Standard
[>	Sc	45	369964.1	2.5				ug/L	375691	Standard
[	Ti	47	51938.2	1.7	39.3973	0.334	0.8	ug/L	70	Standard
|	V	51	84877.3	2.1	7.4196	0.156	2.1	ug/L	3172	Standard
|	Cr	52	65074.1	1.3	6.3029	0.052	0.8	ug/L	9852	Standard
|	Cr	53	9960.8	2.6	6.2457	0.168	2.7	ug/L	518	Standard
|	Mn	55	5551942.8	2.2	342.3627	4.648	1.4	ug/L	1193	Standard
|	Co	59	35686.3	1.2	3.3894	0.009	0.3	ug/L	98	Standard
|	Ni	60	18254.0	2.5	6.6934	0.110	1.6	ug/L	67	Standard
|	Cu	65	18548.0	1.8	7.3621	0.069	0.9	ug/L	90	Standard
|	Zn	66	49545.3	2.9	43.7627	0.876	2.0	ug/L	148	Standard
[>	Ge	72	293025.5	0.9				ug/L	304674	Standard
|	As	75	2398.1	2.2	2.2959	0.044	1.9	ug/L	-174	Standard
|	Se	82	64.1	6.0	0.4045	0.029	7.2	ug/L	26	Standard
[	Se-1	77	175.0	6.7	0.7111	0.160	22.5	ug/L	133	Standard
[>	Ga	71	10306.8	2.8				mg/L	630	Standard
[	Rb	85	260433.3	7.2				ug/L	12	Standard
[	Y	89	430835.0	1.0				ug/L	271719	Standard
[>	Rh	103	361.7	7.0				ug/L	392	Standard
[	Mo	98	1103.7	2.2	0.3072	0.009	2.9	ug/L	7	Standard
|	Ag	107	510.3	0.7	0.0624	0.001	0.9	ug/L	55	Standard
|	Cd	111	2314.5	2.6	0.5837	0.019	3.3	mg/L	67	Standard
|	Cd	114	6872.3	2.2	0.6185	0.017	2.8	ug/L	219	Standard
[>	In	115	744562.7	0.6				ug/L	887392	Standard
|	Sn	118	1016.7	4.1	0.0330	0.003	9.7	ug/L	653	Standard
|	Sb	123	312.6	6.1	0.0370	0.002	5.9	ug/L	48	Standard
[	Ba	135	440458.9	1.4	99.0267	1.991	2.0	ug/L	28	Standard
[	Ce	140	1322347.2	1.9				ug/L	34	Standard
[>	Tb	159	1102064.9	0.5				ug/L	1226141	Standard
[	Ho	165	26478.5	1.4				ug/L	14	Standard
|	Tl	203	2550.9	1.0	0.1355	0.002	1.6	ug/L	9	Standard
|	Tl	205	5874.8	1.4	0.1371	0.002	1.8	ug/L	20	Standard
|	Pb	206	129621.6	2.0	8.9981	0.235	2.6	ug/L	419	Standard
|	Pb	207	104280.1	2.4	8.6203	0.262	3.0	ug/L	338	Standard
|	Pb	208	494068.1	2.3	8.8549	0.258	2.9	ug/L	1616	Standard
	U	238	10035.0	2.0	0.5630	0.015	2.6	ug/L	2	Standard
[>	Bi	209	574912.5	0.6				ug/L	641071	Standard

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Na	23	2310.2	5.2	0.0861	0.006	6.6	mg/L	412	Standard
Mg	24	849617.8	2.3	1.1747	0.029	2.5	mg/L	177	Standard
K	39	2095.1	3.4	1.5303	0.017	1.1	mg/L	150	Standard
Ca	43	8.3	124.9	3.7929	7.822	206.2	mg/L	7	Standard
Fe	54	30595.9	2.5	6.0894	0.104	1.7	mg/L	634	Standard
Fe	57	450193.4	3.9	5.1978	0.179	3.5	mg/L	2670	Standard
Sc-1	45	369964.1	2.5				mg/L	375691	Standard
Cl	35	2.3	65.5				ug/L	4	Standard
Kr	83	58.0	3.6				ug/L	39	Standard
Br	81	583.3	3.2				ug/L	639	Standard
P	31	10867.2	3.2				ug/L	419	Standard
S	34	5584.4	2.2				ug/L	7420	Standard
Sr	88	71.7	20.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.177	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062727

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	Cd	111	
	Cd	114	
>	In	115	83.905
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.680
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062727

Report Date/Time: Friday, July 27, 2012 17:55:08

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Method 6020 - Summary Report

Sample ID: L1207062729

Sample Date/Time: Friday, July 27, 2012 17:55:47

Number of Replicates: 3

Autosampler Position: 422

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	83365.8	5.4	-20375.4033	1356.522	6.7	ug/L	11199	Standard
|	Be	9	886.7	11.1	0.4168	0.045	10.8	ug/L	10	Standard
|	Al	27	83008686.7	3.4	5152.9505	140.668	2.7	ug/L	7920	Standard
>	Sc	45	366074.0	2.0				ug/L	375691	Standard
[	Ti	47	41900.6	3.9	31.6767	0.983	3.1	ug/L	70	Standard
|	V	51	88629.5	3.3	7.7349	0.188	2.4	ug/L	3172	Standard
|	Cr	52	88563.4	1.3	8.9249	0.035	0.4	ug/L	9852	Standard
|	Cr	53	13650.3	3.1	8.6529	0.232	2.7	ug/L	518	Standard
|	Mn	55	6504176.1	3.4	399.9211	11.239	2.8	ug/L	1193	Standard
|	Co	59	44318.4	3.8	4.1994	0.128	3.0	ug/L	98	Standard
|	Ni	60	32653.2	3.1	11.9592	0.283	2.4	ug/L	67	Standard
|	Cu	65	19137.8	3.8	7.5748	0.231	3.0	ug/L	90	Standard
|	Zn	66	111495.3	2.9	98.3516	2.124	2.2	ug/L	148	Standard
>	Ge	72	293879.2	1.0				ug/L	304674	Standard
|	As	75	2792.4	2.8	2.6341	0.049	1.8	ug/L	-174	Standard
|	Se	82	101.8	6.6	0.7329	0.065	8.9	ug/L	26	Standard
[	Se-1	77	204.3	10.4	1.0629	0.237	22.3	ug/L	133	Standard
>	Ga	71	10390.2	5.7				mg/L	630	Standard
[	Rb	85	153753.1	2.0				ug/L	12	Standard
[	Y	89	479887.6	2.5				ug/L	271719	Standard
>	Rh	103	315.0	13.0				ug/L	392	Standard
[	Mo	98	1306.5	6.5	0.3615	0.020	5.5	ug/L	7	Standard
|	Ag	107	439.7	7.7	0.0518	0.005	9.5	ug/L	55	Standard
|	Cd	111	4665.3	5.3	1.1844	0.046	3.9	mg/L	67	Standard
|	Cd	114	13609.3	1.8	1.2308	0.009	0.7	ug/L	219	Standard
>	In	115	750536.4	1.4				ug/L	887392	Standard
|	Sn	118	900.0	6.3	0.0233	0.003	14.6	ug/L	653	Standard
|	Sb	123	312.8	18.0	0.0367	0.005	14.8	ug/L	48	Standard
[	Ba	135	529851.4	2.4	118.1601	1.480	1.3	ug/L	28	Standard
[	Ce	140	1467661.3	3.0				ug/L	34	Standard
>	Tb	159	1111326.3	0.3				ug/L	1226141	Standard
[	Ho	165	30571.2	2.1				ug/L	14	Standard
|	Tl	203	1987.1	5.4	0.1042	0.006	5.6	ug/L	9	Standard
|	Tl	205	4700.7	2.8	0.1078	0.003	2.5	ug/L	20	Standard
|	Pb	206	120216.0	3.3	8.2487	0.252	3.1	ug/L	419	Standard
|	Pb	207	95302.0	3.2	7.7860	0.209	2.7	ug/L	338	Standard
|	Pb	208	455566.1	3.1	8.0702	0.238	2.9	ug/L	1616	Standard
	U	238	17779.1	2.6	0.9860	0.021	2.1	ug/L	2	Standard
>	Bi	209	581415.3	1.3				ug/L	641071	Standard

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Na	23	2781.9	1.2	0.1133	0.003	2.3	mg/L	412	Standard
Mg	24	696102.9	2.2	0.9727	0.029	3.0	mg/L	177	Standard
K	39	1738.4	2.7	1.2631	0.057	4.5	mg/L	150	Standard
Ca	43	20.0	25.0	12.6192	4.035	32.0	mg/L	7	Standard
Fe	54	32837.9	4.9	6.6172	0.356	5.4	mg/L	634	Standard
Fe	57	509620.1	5.2	5.9547	0.401	6.7	mg/L	2670	Standard
Sc-1	45	366074.0	2.0				mg/L	375691	Standard
Cl	35	5.3	47.2				ug/L	4	Standard
Kr	83	64.0	5.9				ug/L	39	Standard
Br	81	575.0	9.1				ug/L	639	Standard
P	31	22304.7	2.4				ug/L	419	Standard
S	34	5285.1	2.2				ug/L	7420	Standard
Sr	88	118.3	37.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.457	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062729

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	Cd	111	
	Cd	114	
>	In	115	84.578
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.694
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1207062729

Report Date/Time: Friday, July 27, 2012 17:58:17

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Method 6020 - Summary Report

Sample ID: L1207062731

Sample Date/Time: Friday, July 27, 2012 17:58:56

Number of Replicates: 3

Autosampler Position: 423

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	56093.8	4.6	-12610.1470	790.898	6.3	ug/L	11199	Standard
|	Be	9	793.4	10.5	0.3692	0.043	11.7	ug/L	10	Standard
|	Al	27	59118926.0	2.6	3651.7197	116.202	3.2	ug/L	7920	Standard
[>	Sc	45	367937.4	0.8				ug/L	375691	Standard
[	Ti	47	26041.7	3.4	19.3973	0.816	4.2	ug/L	70	Standard
|	V	51	83484.0	3.1	7.1672	0.283	3.9	ug/L	3172	Standard
|	Cr	52	84472.7	3.6	8.3341	0.412	4.9	ug/L	9852	Standard
|	Cr	53	13356.7	2.0	8.3388	0.248	3.0	ug/L	518	Standard
|	Mn	55	5009852.2	3.0	303.8011	11.608	3.8	ug/L	1193	Standard
|	Co	59	37423.2	3.5	3.4954	0.142	4.1	ug/L	98	Standard
|	Ni	60	38101.6	3.4	13.7682	0.591	4.3	ug/L	67	Standard
|	Cu	65	23246.5	3.0	9.0828	0.300	3.3	ug/L	90	Standard
|	Zn	66	86922.4	2.6	75.5956	2.549	3.4	ug/L	148	Standard
[>	Ge	72	298053.9	1.0				ug/L	304674	Standard
|	As	75	3222.2	2.9	2.9708	0.093	3.1	ug/L	-174	Standard
|	Se	82	113.5	1.8	0.8204	0.016	1.9	ug/L	26	Standard
[	Se-1	77	206.3	1.0	1.0535	0.029	2.8	ug/L	133	Standard
[>	Ga	71	7687.0	5.8				mg/L	630	Standard
[	Rb	85	146754.6	3.8				ug/L	12	Standard
[	Y	89	466909.0	1.2				ug/L	271719	Standard
[>	Rh	103	383.3	12.5				ug/L	392	Standard
[	Mo	98	978.5	3.9	0.2657	0.012	4.6	ug/L	7	Standard
|	Ag	107	423.7	5.8	0.0487	0.003	6.2	ug/L	55	Standard
|	Cd	111	2697.9	3.8	0.6683	0.030	4.5	mg/L	67	Standard
|	Cd	114	7763.4	1.4	0.6854	0.015	2.1	ug/L	219	Standard
[>	In	115	760922.1	0.7				ug/L	887392	Standard
|	Sn	118	841.7	1.3	0.0179	0.001	4.7	ug/L	653	Standard
|	Sb	123	281.7	7.5	0.0331	0.002	6.6	ug/L	48	Standard
[	Ba	135	385723.6	2.2	84.8597	2.426	2.9	ug/L	28	Standard
[	Ce	140	1177628.0	1.6				ug/L	34	Standard
[>	Tb	159	1114850.8	0.2				ug/L	1226141	Standard
[	Ho	165	28667.4	2.8				ug/L	14	Standard
|	Tl	203	1757.1	1.8	0.0917	0.001	1.1	ug/L	9	Standard
|	Tl	205	4089.9	3.8	0.0931	0.004	4.2	ug/L	20	Standard
|	Pb	206	101533.9	2.7	6.9397	0.222	3.2	ug/L	419	Standard
|	Pb	207	81826.1	2.8	6.6592	0.200	3.0	ug/L	338	Standard
|	Pb	208	388255.8	2.7	6.8503	0.199	2.9	ug/L	1616	Standard
	U	238	12839.8	3.6	0.7098	0.028	4.0	ug/L	2	Standard
[>	Bi	209	583397.6	1.0				ug/L	641071	Standard

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Na	23	1646.8	5.1	0.0508	0.005	10.3	mg/L	412	Standard
Mg	24	532582.1	0.5	0.7403	0.004	0.6	mg/L	177	Standard
K	39	1616.8	4.5	1.1588	0.067	5.7	mg/L	150	Standard
Ca	43	10.0	50.0	4.9915	3.694	74.0	mg/L	7	Standard
Fe	54	31675.1	3.7	6.3443	0.260	4.1	mg/L	634	Standard
Fe	57	486062.7	2.3	5.6453	0.146	2.6	mg/L	2670	Standard
Sc-1	45	367937.4	0.8				mg/L	375691	Standard
Cl	35	5.3	78.1				ug/L	4	Standard
Kr	83	58.7	3.0				ug/L	39	Standard
Br	81	591.7	2.0				ug/L	639	Standard
P	31	12608.6	4.9				ug/L	419	Standard
S	34	5492.7	2.1				ug/L	7420	Standard
Sr	88	93.3	12.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.827	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062731

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	Cd	111	
	Cd	114	
>	In	115	85.748
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.004
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062731

Report Date/Time: Friday, July 27, 2012 18:01:26

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Method 6020 - Summary Report

Sample ID: L1207062733

Sample Date/Time: Friday, July 27, 2012 18:02:04

Number of Replicates: 3

Autosampler Position: 424

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	78822.9	1.8	-18598.3958	694.914	3.7	ug/L	11199	Standard
|	Be	9	885.0	7.5	0.4066	0.035	8.5	ug/L	10	Standard
|	Al	27	85024127.5	4.5	5163.6234	333.451	6.5	ug/L	7920	Standard
[>	Sc	45	374499.6	2.0				ug/L	375691	Standard
|	Ti	47	54732.7	2.9	41.4621	1.481	3.6	ug/L	70	Standard
|	V	51	102877.2	3.5	9.0370	0.402	4.5	ug/L	3172	Standard
|	Cr	52	105630.4	2.1	10.8630	0.347	3.2	ug/L	9852	Standard
|	Cr	53	17271.5	7.4	11.0547	0.925	8.4	ug/L	518	Standard
|	Mn	55	6191869.0	3.2	381.3188	14.867	3.9	ug/L	1193	Standard
|	Co	59	47910.0	3.6	4.5482	0.198	4.3	ug/L	98	Standard
|	Ni	60	27981.2	3.7	10.2610	0.462	4.5	ug/L	67	Standard
|	Cu	65	16287.8	3.4	6.4509	0.270	4.2	ug/L	90	Standard
|	Zn	66	52866.1	2.4	46.6415	1.483	3.2	ug/L	148	Standard
[>	Ge	72	293499.2	0.8				ug/L	304674	Standard
|	As	75	2547.1	4.8	2.4235	0.124	5.1	ug/L	-174	Standard
|	Se	82	59.5	7.7	0.3636	0.043	11.7	ug/L	26	Standard
[	Se-1	77	173.3	8.2	0.6873	0.190	27.7	ug/L	133	Standard
[>	Ga	71	10633.7	1.9				mg/L	630	Standard
|	Rb	85	222777.8	4.2				ug/L	12	Standard
|	Y	89	402955.2	1.2				ug/L	271719	Standard
[>	Rh	103	368.3	17.5				ug/L	392	Standard
|	Mo	98	596.6	1.4	0.1608	0.003	1.9	ug/L	7	Standard
|	Ag	107	620.7	5.7	0.0769	0.005	6.0	ug/L	55	Standard
|	Cd	111	5687.0	5.2	1.4372	0.076	5.3	mg/L	67	Standard
|	Cd	114	16535.8	3.5	1.4877	0.056	3.7	ug/L	219	Standard
[>	In	115	756266.3	0.8				ug/L	887392	Standard
|	Sn	118	767.4	2.4	0.0126	0.002	15.1	ug/L	653	Standard
|	Sb	123	270.2	8.1	0.0321	0.002	7.0	ug/L	48	Standard
|	Ba	135	466036.8	3.8	103.1578	4.226	4.1	ug/L	28	Standard
[	Ce	140	1691737.9	4.2				ug/L	34	Standard
[>	Tb	159	1107316.4	0.6				ug/L	1226141	Standard
|	Ho	165	23142.3	4.2				ug/L	14	Standard
|	Tl	203	1935.1	2.7	0.1011	0.003	3.3	ug/L	9	Standard
|	Tl	205	4575.4	6.6	0.1045	0.008	7.3	ug/L	20	Standard
|	Pb	206	121544.3	3.5	8.3129	0.318	3.8	ug/L	419	Standard
|	Pb	207	99039.6	3.6	8.0664	0.318	3.9	ug/L	338	Standard
|	Pb	208	466494.7	3.5	8.2374	0.323	3.9	ug/L	1616	Standard
	U	238	11438.0	3.2	0.6323	0.023	3.7	ug/L	2	Standard
[>	Bi	209	583377.5	0.8				ug/L	641071	Standard

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Na	23	2363.5	1.1	0.0875	0.003	3.0	mg/L	412	Standard
Mg	24	791712.6	3.9	1.0819	0.062	5.8	mg/L	177	Standard
K	39	1630.1	4.5	1.1464	0.055	4.8	mg/L	150	Standard
Ca	43	15.0	66.7	8.5625	7.297	85.2	mg/L	7	Standard
Fe	54	30998.9	3.9	6.0992	0.367	6.0	mg/L	634	Standard
Fe	57	479958.0	5.8	5.4808	0.425	7.8	mg/L	2670	Standard
Sc-1	45	374499.6	2.0				mg/L	375691	Standard
Cl	35	5.3	10.8				ug/L	4	Standard
Kr	83	57.3	1.2				ug/L	39	Standard
Br	81	610.8	4.8				ug/L	639	Standard
P	31	10288.5	1.5				ug/L	419	Standard
S	34	5073.3	0.7				ug/L	7420	Standard
Sr	88	98.3	28.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.332	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	85.223
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.000
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1207062735

Sample Date/Time: Friday, July 27, 2012 18:05:15

Number of Replicates: 3

Autosampler Position: 425

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	49734.9	3.3	-11341.0982	751.467	6.6	ug/L	11199	Standard
|	Be	9	716.7	9.3	0.3441	0.031	9.0	ug/L	10	Standard
|	Al	27	53279340.7	1.3	3410.4866	60.374	1.8	ug/L	7920	Standard
[>	Sc	45	355072.0	2.2				ug/L	375691	Standard
[	Ti	47	20157.1	0.9	15.3122	0.216	1.4	ug/L	70	Standard
|	V	51	56449.7	0.5	4.8630	0.051	1.0	ug/L	3172	Standard
|	Cr	52	50460.2	0.6	4.6745	0.075	1.6	ug/L	9852	Standard
|	Cr	53	7535.2	2.3	4.6643	0.161	3.4	ug/L	518	Standard
|	Mn	55	4232018.5	1.3	261.9253	4.809	1.8	ug/L	1193	Standard
|	Co	59	26686.8	1.0	2.5411	0.052	2.0	ug/L	98	Standard
|	Ni	60	14915.0	3.6	5.4858	0.249	4.5	ug/L	67	Standard
|	Cu	65	12272.3	1.3	4.8751	0.113	2.3	ug/L	90	Standard
|	Zn	66	29223.2	1.6	25.8590	0.479	1.9	ug/L	148	Standard
[>	Ge	72	291986.2	1.3				ug/L	304674	Standard
|	As	75	1598.9	2.3	1.6004	0.018	1.1	ug/L	-174	Standard
|	Se	82	50.0	8.3	0.2831	0.042	14.8	ug/L	26	Standard
[	Se-1	77	161.3	10.3	0.5490	0.204	37.1	ug/L	133	Standard
[>	Ga	71	7136.7	4.6				mg/L	630	Standard
[	Rb	85	145100.3	3.3				ug/L	12	Standard
[	Y	89	362346.7	0.8				ug/L	271719	Standard
[>	Rh	103	326.7	14.5				ug/L	392	Standard
[	Mo	98	384.5	4.5	0.1011	0.004	3.5	ug/L	7	Standard
|	Ag	107	390.3	7.6	0.0440	0.003	7.6	ug/L	55	Standard
|	Cd	111	1802.9	1.5	0.4412	0.011	2.4	mg/L	67	Standard
|	Cd	114	5169.4	1.0	0.4514	0.006	1.4	ug/L	219	Standard
[>	In	115	760026.1	1.5				ug/L	887392	Standard
|	Sn	118	1038.0	4.4	0.0330	0.003	7.9	ug/L	653	Standard
|	Sb	123	230.9	14.2	0.0279	0.003	11.1	ug/L	48	Standard
[	Ba	135	358893.2	0.5	79.0469	0.804	1.0	ug/L	28	Standard
[	Ce	140	1099635.6	1.2				ug/L	34	Standard
[>	Tb	159	1098107.4	0.8				ug/L	1226141	Standard
[	Ho	165	17773.4	1.2				ug/L	14	Standard
|	Tl	203	1559.4	1.8	0.0816	0.000	0.5	ug/L	9	Standard
|	Tl	205	3562.1	2.1	0.0810	0.001	1.1	ug/L	20	Standard
|	Pb	206	91682.9	0.8	6.2920	0.048	0.8	ug/L	419	Standard
|	Pb	207	73991.6	1.6	6.0464	0.086	1.4	ug/L	338	Standard
|	Pb	208	351111.2	1.0	6.2205	0.078	1.3	ug/L	1616	Standard
	U	238	6848.5	3.4	0.3803	0.008	2.1	ug/L	2	Standard
[>	Bi	209	580754.3	1.3				ug/L	641071	Standard

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Na	23	1701.8	5.2	0.0571	0.003	5.3	mg/L	412	Standard
Mg	24	577941.4	0.4	0.8327	0.019	2.3	mg/L	177	Standard
K	39	1371.7	5.8	1.0023	0.044	4.4	mg/L	150	Standard
Ca	43	11.7	24.7	6.5894	2.373	36.0	mg/L	7	Standard
Fe	54	20171.3	1.3	4.1425	0.073	1.8	mg/L	634	Standard
Fe	57	312762.4	3.3	3.7543	0.108	2.9	mg/L	2670	Standard
Sc-1	45	355072.0	2.2				mg/L	375691	Standard
Cl	35	6.0					ug/L	4	Standard
Kr	83	49.4	2.6				ug/L	39	Standard
Br	81	585.8	6.4				ug/L	639	Standard
P	31	8393.2	1.0				ug/L	419	Standard
S	34	5262.6	1.5				ug/L	7420	Standard
Sr	88	41.7	6.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.836	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	85.647
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.591
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207062735

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Method 6020 - Summary Report

Sample ID: L1207062737

Sample Date/Time: Friday, July 27, 2012 18:08:25

Number of Replicates: 3

Autosampler Position: 426

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	74839.5	3.7	-17543.8756	816.612	4.7	ug/L	11199	Standard
|	Be	9	1011.7	9.9	0.4698	0.064	13.7	ug/L	10	Standard
|	Al	27	81807775.9	1.7	4977.1237	151.361	3.0	ug/L	7920	Standard
[>	Sc	45	373811.8	4.1				ug/L	375691	Standard
[	Ti	47	38964.1	4.8	29.0399	1.284	4.4	ug/L	70	Standard
|	V	51	89354.1	3.2	7.6881	0.237	3.1	ug/L	3172	Standard
|	Cr	52	67542.7	3.5	6.4523	0.224	3.5	ug/L	9852	Standard
|	Cr	53	10477.8	3.0	6.4713	0.262	4.0	ug/L	518	Standard
|	Mn	55	12200125.4	3.9	739.7117	26.078	3.5	ug/L	1193	Standard
|	Co	59	38150.0	3.2	3.5625	0.094	2.6	ug/L	98	Standard
|	Ni	60	21344.0	3.6	7.6978	0.222	2.9	ug/L	67	Standard
|	Cu	65	17776.1	4.1	6.9336	0.253	3.6	ug/L	90	Standard
|	Zn	66	40396.1	2.8	35.0560	0.827	2.4	ug/L	148	Standard
[>	Ge	72	298097.7	2.1				ug/L	304674	Standard
|	As	75	2266.0	4.0	2.1463	0.065	3.0	ug/L	-174	Standard
|	Se	82	67.8	13.5	0.4280	0.088	20.5	ug/L	26	Standard
[	Se-1	77	178.0	10.8	0.7129	0.268	37.6	ug/L	133	Standard
[>	Ga	71	10790.5	6.3				mg/L	630	Standard
[	Rb	85	180435.8	4.0				ug/L	12	Standard
[	Y	89	410265.2	2.1				ug/L	271719	Standard
[>	Rh	103	386.7	13.1				ug/L	392	Standard
[	Mo	98	938.5	1.6	0.2502	0.004	1.7	ug/L	7	Standard
|	Ag	107	587.0	4.4	0.0702	0.003	4.3	ug/L	55	Standard
|	Cd	111	2238.2	5.6	0.5417	0.034	6.2	mg/L	67	Standard
|	Cd	114	6443.2	3.5	0.5562	0.023	4.2	ug/L	219	Standard
[>	In	115	774107.9	1.4				ug/L	887392	Standard
|	Sn	118	1015.0	2.7	0.0298	0.002	7.1	ug/L	653	Standard
|	Sb	123	310.5	18.5	0.0355	0.006	16.3	ug/L	48	Standard
[	Ba	135	655945.3	2.9	141.8663	4.978	3.5	ug/L	28	Standard
[	Ce	140	1506520.6	2.8				ug/L	34	Standard
[>	Tb	159	1119847.2	0.2				ug/L	1226141	Standard
[	Ho	165	23977.6	2.9				ug/L	14	Standard
|	Tl	203	1956.8	4.7	0.1017	0.005	4.9	ug/L	9	Standard
|	Tl	205	4678.1	2.4	0.1063	0.003	2.4	ug/L	20	Standard
|	Pb	206	137336.3	3.0	9.3453	0.279	3.0	ug/L	419	Standard
|	Pb	207	111484.3	3.3	9.0339	0.299	3.3	ug/L	338	Standard
|	Pb	208	526304.6	3.1	9.2464	0.282	3.0	ug/L	1616	Standard
	U	238	10192.4	4.0	0.5604	0.022	3.9	ug/L	2	Standard
[>	Bi	209	586496.4	0.2				ug/L	641071	Standard

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Na	23	2181.8	2.8	0.0780	0.002	2.0	mg/L	412	Standard
Mg	24	881936.4	2.0	1.2073	0.029	2.4	mg/L	177	Standard
K	39	1933.5	2.6	1.3875	0.044	3.2	mg/L	150	Standard
Ca	43	6.7	114.6	2.2856	5.353	234.2	mg/L	7	Standard
Fe	54	31881.4	2.3	6.2917	0.336	5.3	mg/L	634	Standard
Fe	57	526276.0	7.4	6.0220	0.476	7.9	mg/L	2670	Standard
Sc-1	45	373811.8	4.1				mg/L	375691	Standard
Cl	35	5.3	21.7				ug/L	4	Standard
Kr	83	53.7	3.8				ug/L	39	Standard
Br	81	656.7	7.3				ug/L	639	Standard
P	31	11728.7	2.0				ug/L	419	Standard
S	34	5657.7	3.1				ug/L	7420	Standard
Sr	88	108.3	2.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.841	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062737

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	Cd	111	
	Cd	114	
>	In	115	87.234
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.487
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1207062737

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 18:11:38

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10632.1	0.6	217.6217	36.673	16.9	ug/L	11199	Standard
|	Be	9	97905.3	1.3	46.5642	0.718	1.5	ug/L	10	Standard
|	Al	27	809632.9	0.8	48.0873	0.918	1.9	ug/L	7920	Standard
[>	Sc	45	378805.7	1.3				ug/L	375691	Standard
[	Ti	47	135870.9	0.9	94.5277	1.619	1.7	ug/L	70	Standard
|	V	51	557667.1	0.4	46.0213	0.600	1.3	ug/L	3172	Standard
|	Cr	52	453621.0	0.9	45.8762	0.885	1.9	ug/L	9852	Standard
|	Cr	53	79509.0	2.0	47.7370	1.016	2.1	ug/L	518	Standard
|	Mn	55	819128.8	0.3	46.2199	0.605	1.3	ug/L	1193	Standard
|	Co	59	515483.6	0.9	45.0152	0.838	1.9	ug/L	98	Standard
|	Ni	60	140412.6	0.3	47.3432	0.426	0.9	ug/L	67	Standard
|	Cu	65	130642.5	1.1	47.7579	0.984	2.1	ug/L	90	Standard
|	Zn	66	61010.9	0.5	49.4045	0.722	1.5	ug/L	148	Standard
[>	Ge	72	319801.0	1.0				ug/L	304674	Standard
|	As	75	59352.8	0.1	47.8599	0.509	1.1	ug/L	-174	Standard
|	Se	82	6017.8	1.3	48.1567	1.132	2.4	ug/L	26	Standard
[	Se-1	77	4373.0	2.3	47.9140	1.499	3.1	ug/L	133	Standard
[>	Ga	71	726.7	13.7				mg/L	630	Standard
[	Rb	85	1048.4	10.8				ug/L	12	Standard
[	Y	89	279193.2	2.5				ug/L	271719	Standard
[>	Rh	103	420.0	17.5				ug/L	392	Standard
[	Mo	98	409465.1	1.7	102.9118	1.605	1.6	ug/L	7	Standard
|	Ag	107	374327.1	0.8	47.6129	0.243	0.5	ug/L	55	Standard
|	Cd	111	204847.4	1.3	47.1997	0.546	1.2	mg/L	67	Standard
|	Cd	114	587718.2	0.6	48.1501	0.431	0.9	ug/L	219	Standard
[>	In	115	839371.2	0.7				ug/L	887392	Standard
|	Sn	118	696019.7	1.4	48.0621	0.745	1.5	ug/L	653	Standard
|	Sb	123	504540.1	1.5	47.2383	0.903	1.9	ug/L	48	Standard
[	Ba	135	248467.5	0.8	49.5443	0.285	0.6	ug/L	28	Standard
[	Ce	140	1173.7	8.5				ug/L	34	Standard
[>	Tb	159	1157096.2	1.4				ug/L	1226141	Standard
[	Ho	165	23.0	19.9				ug/L	14	Standard
|	Tl	203	913469.2	0.7	46.9805	0.162	0.3	ug/L	9	Standard
|	Tl	205	2175880.2	0.3	49.9826	0.207	0.4	ug/L	20	Standard
|	Pb	206	710263.3	1.3	47.5565	0.464	1.0	ug/L	419	Standard
|	Pb	207	596982.0	0.4	47.6050	0.024	0.1	ug/L	338	Standard
|	Pb	208	2773187.4	0.6	47.9511	0.153	0.3	ug/L	1616	Standard
	U	238	861468.7	0.3	46.4935	0.063	0.1	ug/L	2	Standard
[>	Bi	209	597425.3	0.4				ug/L	641071	Standard

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Na	23	113527.1	0.5	5.9557	0.061	1.0	mg/L	412	Standard
Mg	24	3644975.4	1.9	4.9219	0.148	3.0	mg/L	177	Standard
K	39	6418.0	3.1	4.8375	0.112	2.3	mg/L	150	Standard
Ca	43	3.3	86.6	-0.0736	2.088	2839.4	mg/L	7	Standard
Fe	54	25855.4	2.2	5.0024	0.080	1.6	mg/L	634	Standard
Fe	57	465186.5	3.8	5.2476	0.266	5.1	mg/L	2670	Standard
Sc-1	45	378805.7	1.3				mg/L	375691	Standard
Cl	35	5.0	34.6				ug/L	4	Standard
Kr	83	39.2	18.2				ug/L	39	Standard
Br	81	712.5	3.3				ug/L	639	Standard
P	31	407.5	7.1				ug/L	419	Standard
S	34	6392.2	1.8				ug/L	7420	Standard
Sr	88	46.7	40.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.175		
Sc	45			
Ti	47	94.528		
V	51	92.043		
Cr	52	91.752		
Cr	53			
Mn	55	92.440		
Co	59	90.030		
Ni	60	94.686		
Cu	65	95.516		
Zn	66	98.809		
Ge	72		104.965	
As	75	95.720		
Se	82	96.313		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	102.912		
Ag	107	95.226		

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	Cd	111	94.399	
	Cd	114		
>	In	115		94.589
	Sn	118	96.124	
	Sb	123	94.477	
	Ba	135	99.089	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.961	
|	Tl	205		
|	Pb	206	95.113	
|	Pb	207	95.210	
|	Pb	208	95.902	
|	U	238	92.987	
>	Bi	209		93.192
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 18:14:48

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10497.0	2.5	217.4224	53.364	24.5	ug/L	11199	Standard
|	Be	9	21.7	35.3	-0.0091	0.004	40.2	ug/L	10	Standard
|	Al	27	10915.6	6.2	0.1674	0.037	21.9	ug/L	7920	Standard
[>	Sc	45	373907.6	0.9				ug/L	375691	Standard
|	Ti	47	76.3	19.1	-0.0030	0.011	362.7	ug/L	70	Standard
|	V	51	2938.2	1.6	-0.0248	0.000	1.3	ug/L	3172	Standard
|	Cr	52	9124.7	1.0	-0.0964	0.012	12.6	ug/L	9852	Standard
|	Cr	53	415.0	5.8	-0.0741	0.017	23.2	ug/L	518	Standard
|	Mn	55	1752.4	5.0	0.0180	0.004	19.5	ug/L	1193	Standard
|	Co	59	145.0	3.0	0.0005	0.000	84.9	ug/L	98	Standard
|	Ni	60	85.0	19.4	0.0022	0.005	237.7	ug/L	67	Standard
|	Cu	65	122.3	6.3	0.0016	0.002	142.5	ug/L	90	Standard
|	Zn	66	767.0	4.3	0.4997	0.018	3.6	ug/L	148	Standard
[>	Ge	72	319306.3	1.5				ug/L	304674	Standard
|	As	75	-229.3	5.0	0.0097	0.010	106.3	ug/L	-174	Standard
|	Se	82	23.4	23.2	0.0312	0.041	131.5	ug/L	26	Standard
[	Se-1	77	141.0	8.2	0.1500	0.151	100.8	ug/L	133	Standard
[>	Ga	71	723.4	3.8				mg/L	630	Standard
|	Rb	85	50.0	26.5				ug/L	12	Standard
|	Y	89	274206.1	1.7				ug/L	271719	Standard
[>	Rh	103	380.0	10.3				ug/L	392	Standard
|	Mo	98	252.9	7.1	0.0586	0.004	7.6	ug/L	7	Standard
|	Ag	107	114.0	6.6	0.0039	0.001	24.7	ug/L	55	Standard
|	Cd	111	87.1	9.6	0.0025	0.002	88.1	mg/L	67	Standard
|	Cd	114	243.8	12.2	0.0037	0.002	67.0	ug/L	219	Standard
[>	In	115	831538.5	1.2				ug/L	887392	Standard
|	Sn	118	988.0	4.7	0.0227	0.004	16.5	ug/L	653	Standard
|	Sb	123	2355.9	1.6	0.2266	0.003	1.2	ug/L	48	Standard
|	Ba	135	80.0	10.9	0.0070	0.002	23.2	ug/L	28	Standard
|	Ce	140	94.7	6.4				ug/L	34	Standard
[>	Tb	159	1134295.1	0.7				ug/L	1226141	Standard
|	Ho	165	15.0	29.1				ug/L	14	Standard
|	Tl	203	105.0	7.2	0.0044	0.000	8.8	ug/L	9	Standard
|	Tl	205	234.7	14.9	0.0022	0.001	37.5	ug/L	20	Standard
|	Pb	206	459.0	3.5	0.0032	0.001	38.4	ug/L	419	Standard
|	Pb	207	399.7	8.6	0.0044	0.003	64.2	ug/L	338	Standard
|	Pb	208	1837.4	3.7	0.0022	0.001	59.1	ug/L	1616	Standard
	U	238	100.7	6.1	0.0054	0.000	6.6	ug/L	2	Standard
[>	Bi	209	607679.5	0.7				ug/L	641071	Standard

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Na	23	443.3	10.2	-0.0150	0.003	17.3	mg/L	412	Standard
Mg	24	560.0	12.4	0.0008	0.000	13.1	mg/L	177	Standard
K	39	158.3	16.2	-0.0059	0.019	322.2	mg/L	150	Standard
Ca	43	5.0	100.0	1.2175	3.723	305.8	mg/L	7	Standard
Fe	54	704.4	9.4	0.0109	0.013	118.6	mg/L	634	Standard
Fe	57	2715.2	7.2	0.0018	0.003	138.2	mg/L	2670	Standard
Sc-1	45	373907.6	0.9				mg/L	375691	Standard
Cl	35	4.7	12.4				ug/L	4	Standard
Kr	83	38.3	3.0				ug/L	39	Standard
Br	81	635.0	3.8				ug/L	639	Standard
P	31	431.7	6.4				ug/L	419	Standard
S	34	6293.8	2.0				ug/L	7420	Standard
Sr	88	56.7	27.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.803	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111		
	Cd	114		
>	In	115	93.706	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.791	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: PBS B5 WG404158-01

Sample Date/Time: Friday, July 27, 2012 18:17:59

Number of Replicates: 3

Autosampler Position: 427

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8023.8	2.2	342.2437	51.199	15.0	ug/L	11199	Standard
|	Be	9	6.7	114.6	-0.0154	0.005	31.4	ug/L	10	Standard
|	Al	27	6803.2	7.7	0.0229	0.060	262.2	ug/L	7920	Standard
[>	Sc	45	298849.7	3.9				ug/L	375691	Standard
|	Ti	47	43.0	19.9	-0.0207	0.009	43.4	ug/L	70	Standard
|	V	51	2501.1	0.8	-0.0239	0.014	59.8	ug/L	3172	Standard
|	Cr	52	7348.8	3.0	-0.1451	0.021	14.7	ug/L	9852	Standard
|	Cr	53	336.7	29.2	-0.0865	0.063	72.4	ug/L	518	Standard
|	Mn	55	825.7	4.4	-0.0260	0.005	20.7	ug/L	1193	Standard
|	Co	59	104.0	8.5	-0.0015	0.001	48.8	ug/L	98	Standard
|	Ni	60	91.3	6.7	0.0100	0.004	43.7	ug/L	67	Standard
|	Cu	65	96.0	10.6	-0.0019	0.002	123.6	ug/L	90	Standard
|	Zn	66	501.3	18.0	0.3574	0.093	26.0	ug/L	148	Standard
[>	Ge	72	271314.3	5.2				ug/L	304674	Standard
|	As	75	-190.8	12.1	0.0125	0.032	256.2	ug/L	-174	Standard
|	Se	82	21.3	24.4	0.0435	0.041	94.0	ug/L	26	Standard
[	Se-1	77	114.0	6.3	0.0730	0.100	137.1	ug/L	133	Standard
[>	Ga	71	556.7	10.9				mg/L	630	Standard
|	Rb	85	28.3	20.4				ug/L	12	Standard
|	Y	89	225468.1	5.1				ug/L	271719	Standard
[>	Rh	103	346.7	10.8				ug/L	392	Standard
|	Mo	98	62.8	26.2	0.0131	0.004	34.0	ug/L	7	Standard
|	Ag	107	55.3	8.5	-0.0024	0.001	39.1	ug/L	55	Standard
|	Cd	111	21.5	23.9	-0.0119	0.002	13.2	mg/L	67	Standard
|	Cd	114	91.0	10.5	-0.0076	0.001	12.3	ug/L	219	Standard
[>	In	115	704408.0	3.2				ug/L	887392	Standard
|	Sn	118	373.7	0.7	-0.0155	0.001	7.6	ug/L	653	Standard
|	Sb	123	241.8	21.3	0.0309	0.005	16.6	ug/L	48	Standard
|	Ba	135	27.3	14.8	-0.0025	0.001	44.9	ug/L	28	Standard
|	Ce	140	48.7	18.4				ug/L	34	Standard
[>	Tb	159	1001850.5	2.5				ug/L	1226141	Standard
|	Ho	165	12.3	23.4				ug/L	14	Standard
|	Tl	203	47.3	12.2	0.0018	0.000	16.9	ug/L	9	Standard
|	Tl	205	99.0	18.7	-0.0007	0.000	70.8	ug/L	20	Standard
|	Pb	206	344.3	11.8	-0.0019	0.003	140.3	ug/L	419	Standard
|	Pb	207	282.3	3.9	-0.0024	0.001	54.1	ug/L	338	Standard
|	Pb	208	1338.7	3.7	-0.0039	0.001	18.2	ug/L	1616	Standard
	U	238	25.3	28.0	0.0016	0.000	28.1	ug/L	2	Standard
[>	Bi	209	549344.1	1.8				ug/L	641071	Standard

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Na	23	348.3	2.2	-0.0154	0.001	7.7	mg/L	412	Standard
Mg	24	403.3	36.6	0.0007	0.000	34.6	mg/L	177	Standard
K	39	108.3	14.1	-0.0236	0.015	63.5	mg/L	150	Standard
Ca	43	1.7	173.2	-0.9893	2.590	261.8	mg/L	7	Standard
Fe	54	224.6	7.7	-0.0742	0.005	6.5	mg/L	634	Standard
Fe	57	1945.1	7.0	-0.0014	0.001	70.8	mg/L	2670	Standard
Sc-1	45	298849.7	3.9				mg/L	375691	Standard
Cl	35	5.7	20.4				ug/L	4	Standard
Kr	83	37.4	11.9				ug/L	39	Standard
Br	81	448.3	11.8				ug/L	639	Standard
P	31	119.2	20.7				ug/L	419	Standard
S	34	5285.1	4.2				ug/L	7420	Standard
Sr	88	50.0	10.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.051	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBS B5 WG404158-01

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	Cd	111	
	Cd	114	
>	In	115	79.380
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	85.692
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBS B5 WG404158-01

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Method 6020 - Summary Report

Sample ID: LCSS B5 WG404158-02

Sample Date/Time: Friday, July 27, 2012 18:21:09

Number of Replicates: 3

Autosampler Position: 428

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8554.1	4.3	292.5969	83.759	28.6	ug/L	11199	Standard
|	Be	9	44182.7	3.3	25.4352	0.480	1.9	ug/L	10	Standard
|	Al	27	336245.9	1.8	23.9402	0.520	2.2	ug/L	7920	Standard
>	Sc	45	312791.7	2.2				ug/L	375691	Standard
[	Ti	47	50.3	10.9	-0.0161	0.004	26.0	ug/L	70	Standard
|	V	51	216553.4	2.4	20.3639	0.453	2.2	ug/L	3172	Standard
|	Cr	52	138495.5	7.0	15.3971	1.084	7.0	ug/L	9852	Standard
|	Cr	53	22508.5	9.9	15.2881	1.474	9.6	ug/L	518	Standard
|	Mn	55	319860.8	4.2	20.6713	0.822	4.0	ug/L	1193	Standard
|	Co	59	207334.3	3.8	20.7748	0.749	3.6	ug/L	98	Standard
|	Ni	60	56416.6	3.2	21.8192	0.600	2.7	ug/L	67	Standard
|	Cu	65	53736.9	4.3	22.5229	0.891	4.0	ug/L	90	Standard
|	Zn	66	32767.4	4.0	30.4076	1.127	3.7	ug/L	148	Standard
>	Ge	72	278585.9	0.9				ug/L	304674	Standard
|	As	75	27414.9	1.0	25.4669	0.268	1.1	ug/L	-174	Standard
|	Se	82	3207.0	0.6	29.3964	0.332	1.1	ug/L	26	Standard
[	Se-1	77	2442.5	3.0	30.1943	0.678	2.2	ug/L	133	Standard
>	Ga	71	618.3	13.3				mg/L	630	Standard
[	Rb	85	38.3	30.1				ug/L	12	Standard
[	Y	89	229524.6	2.7				ug/L	271719	Standard
>	Rh	103	346.7	6.5				ug/L	392	Standard
[	Mo	98	63.6	15.7	0.0129	0.003	23.4	ug/L	7	Standard
|	Ag	107	143523.7	4.2	21.1703	0.881	4.2	ug/L	55	Standard
|	Cd	111	90138.4	3.4	24.0831	0.790	3.3	mg/L	67	Standard
|	Cd	114	265830.9	3.5	25.2549	0.865	3.4	ug/L	219	Standard
>	In	115	723597.0	0.8				ug/L	887392	Standard
|	Sn	118	389.0	0.9	-0.0151	0.001	3.3	ug/L	653	Standard
|	Sb	123	201463.0	1.2	21.8805	0.102	0.5	ug/L	48	Standard
[	Ba	135	100004.3	4.1	23.1253	0.893	3.9	ug/L	28	Standard
[	Ce	140	49.0	5.4				ug/L	34	Standard
>	Tb	159	1016326.8	0.9				ug/L	1226141	Standard
[	Ho	165	10.3	39.1				ug/L	14	Standard
|	Tl	203	392724.8	2.8	21.5765	0.402	1.9	ug/L	9	Standard
|	Tl	205	916975.9	3.4	22.4994	0.581	2.6	ug/L	20	Standard
|	Pb	206	293617.4	7.2	20.9807	1.297	6.2	ug/L	419	Standard
|	Pb	207	250223.0	7.1	21.2938	1.282	6.0	ug/L	338	Standard
|	Pb	208	1154166.3	7.1	21.2961	1.290	6.1	ug/L	1616	Standard
	U	238	261609.1	7.3	15.0779	0.952	6.3	ug/L	2	Standard
>	Bi	209	559202.2	1.3				ug/L	641071	Standard

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Na	23	718.4	5.2	0.0072	0.003	38.8	mg/L	412	Standard
Mg	24	3692.1	7.9	0.0060	0.000	6.0	mg/L	177	Standard
K	39	131.7	9.6	-0.0065	0.012	192.1	mg/L	150	Standard
Ca	43	1.7	173.2	-0.9810	2.605	265.5	mg/L	7	Standard
Fe	54	201.4	19.2	-0.0823	0.010	12.5	mg/L	634	Standard
Fe	57	2151.8	0.8	0.0002	0.001	399.9	mg/L	2670	Standard
Sc-1	45	312791.7	2.2				mg/L	375691	Standard
Cl	35	5.0	72.1				ug/L	4	Standard
Kr	83	35.2	6.7				ug/L	39	Standard
Br	81	466.7	0.6				ug/L	639	Standard
P	31	120.0	11.6				ug/L	419	Standard
S	34	5088.4	2.1				ug/L	7420	Standard
Sr	88	43.3	29.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.437	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSS B5 WG404158-02

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	Cd	111	
	Cd	114	
>	In	115	81.542
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	87.229
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSS B5 WG404158-02

Report Date/Time: Friday, July 27, 2012 18:23:40

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Method 6020 - Summary Report

Sample ID: LCSS DP WG404158-03

Sample Date/Time: Friday, July 27, 2012 18:24:19

Number of Replicates: 3

Autosampler Position: 429

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8759.2	2.4	240.4236	38.611	16.1	ug/L	11199	Standard
|	Be	9	43447.2	0.8	24.8803	0.398	1.6	ug/L	10	Standard
|	Al	27	330302.4	2.1	23.3771	0.668	2.9	ug/L	7920	Standard
[>	Sc	45	314497.3	1.0				ug/L	375691	Standard
|	Ti	47	48.7	20.0	-0.0176	0.008	45.8	ug/L	70	Standard
|	V	51	219809.4	2.4	20.5446	0.301	1.5	ug/L	3172	Standard
|	Cr	52	179216.1	9.3	20.0928	1.767	8.8	ug/L	9852	Standard
|	Cr	53	29130.6	9.0	19.7541	1.610	8.2	ug/L	518	Standard
|	Mn	55	328192.5	4.6	21.0778	0.767	3.6	ug/L	1193	Standard
|	Co	59	211371.5	4.2	21.0467	0.687	3.3	ug/L	98	Standard
|	Ni	60	57696.7	3.1	22.1775	0.501	2.3	ug/L	67	Standard
|	Cu	65	55660.9	5.0	23.1840	0.925	4.0	ug/L	90	Standard
|	Zn	66	33005.6	3.3	30.4390	0.727	2.4	ug/L	148	Standard
[>	Ge	72	280296.1	1.0				ug/L	304674	Standard
|	As	75	27478.1	1.8	25.3696	0.358	1.4	ug/L	-174	Standard
|	Se	82	3191.3	1.1	29.0717	0.262	0.9	ug/L	26	Standard
[	Se-1	77	2377.2	0.4	29.1663	0.401	1.4	ug/L	133	Standard
[>	Ga	71	548.3	10.8				mg/L	630	Standard
|	Rb	85	16.7	75.5				ug/L	12	Standard
|	Y	89	232862.1	3.4				ug/L	271719	Standard
[>	Rh	103	326.7	7.9				ug/L	392	Standard
|	Mo	98	30.3	28.7	0.0033	0.003	77.5	ug/L	7	Standard
|	Ag	107	141660.9	3.0	21.0889	0.589	2.8	ug/L	55	Standard
|	Cd	111	91760.7	4.6	24.7434	1.084	4.4	mg/L	67	Standard
|	Cd	114	268951.2	4.4	25.7870	1.086	4.2	ug/L	219	Standard
[>	In	115	716942.1	0.3				ug/L	887392	Standard
|	Sn	118	387.0	6.1	-0.0149	0.002	12.9	ug/L	653	Standard
|	Sb	123	207269.5	0.7	22.7202	0.104	0.5	ug/L	48	Standard
|	Ba	135	102821.9	4.6	23.9976	1.048	4.4	ug/L	28	Standard
|	Ce	140	37.0	29.7				ug/L	34	Standard
[>	Tb	159	1006180.1	1.0				ug/L	1226141	Standard
|	Ho	165	13.0	30.8				ug/L	14	Standard
|	Tl	203	394082.8	3.2	21.6985	0.996	4.6	ug/L	9	Standard
|	Tl	205	917029.1	3.2	22.5494	1.003	4.4	ug/L	20	Standard
|	Pb	206	304777.1	6.1	21.8318	1.487	6.8	ug/L	419	Standard
|	Pb	207	258871.4	6.4	22.0841	1.571	7.1	ug/L	338	Standard
|	Pb	208	1198894.4	6.5	22.1772	1.614	7.3	ug/L	1616	Standard
	U	238	264682.9	7.7	15.2959	1.341	8.8	ug/L	2	Standard
[>	Bi	209	558313.7	2.1				ug/L	641071	Standard

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Na	23	315.0	8.8	-0.0187	0.002	8.6	mg/L	412	Standard
Mg	24	435.0	9.1	0.0007	0.000	7.9	mg/L	177	Standard
K	39	126.7	8.2	-0.0119	0.010	82.3	mg/L	150	Standard
Ca	43	3.3	86.6	0.4239	2.519	594.3	mg/L	7	Standard
Fe	54	183.5	1.3	-0.0869	0.001	0.9	mg/L	634	Standard
Fe	57	2126.8	4.6	-0.0003	0.001	404.0	mg/L	2670	Standard
Sc-1	45	314497.3	1.0				mg/L	375691	Standard
Cl	35	3.0	57.7				ug/L	4	Standard
Kr	83	39.7	3.0				ug/L	39	Standard
Br	81	497.5	9.3				ug/L	639	Standard
P	31	116.7	12.6				ug/L	419	Standard
S	34	5025.8	1.1				ug/L	7420	Standard
Sr	88	41.7	34.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.999	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSS DP WG404158-03

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	Cd	111		
	Cd	114		
>	In	115	80.792	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.091	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSS DP WG404158-03

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Method 6020 - Summary Report

Sample ID: L1207062702

Sample Date/Time: Friday, July 27, 2012 18:27:28

Number of Replicates: 3

Autosampler Position: 430

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9956.6	3.6	-194.1581	67.333	34.7	ug/L	11199	Standard
|	Be	9	40.0	130.5	0.0034	0.030	886.4	ug/L	10	Standard
|	Al	27	966512.7	1.7	70.2618	1.092	1.6	ug/L	7920	Standard
[>	Sc	45	310505.7	2.6				ug/L	375691	Standard
[	Ti	47	2500.2	4.0	1.9092	0.036	1.9	ug/L	70	Standard
|	V	51	5228.1	4.4	0.2211	0.018	8.1	ug/L	3172	Standard
|	Cr	52	8632.8	3.6	-0.0332	0.019	57.9	ug/L	9852	Standard
|	Cr	53	554.2	9.3	0.0527	0.030	56.9	ug/L	518	Standard
|	Mn	55	25009.7	7.6	1.5145	0.090	5.9	ug/L	1193	Standard
|	Co	59	300.7	27.6	0.0175	0.008	45.8	ug/L	98	Standard
|	Ni	60	399.7	21.2	0.1257	0.031	24.6	ug/L	67	Standard
|	Cu	65	307.0	14.7	0.0836	0.017	20.5	ug/L	90	Standard
|	Zn	66	1064.4	2.7	0.8524	0.022	2.6	ug/L	148	Standard
[>	Ge	72	283083.2	2.2				ug/L	304674	Standard
|	As	75	-141.5	28.5	0.0661	0.035	52.4	ug/L	-174	Standard
|	Se	82	21.8	20.6	0.0407	0.042	102.3	ug/L	26	Standard
[	Se-1	77	128.0	8.6	0.1855	0.111	59.6	ug/L	133	Standard
[>	Ga	71	673.3	5.2				mg/L	630	Standard
[	Rb	85	3005.3	3.3				ug/L	12	Standard
[	Y	89	230793.3	2.0				ug/L	271719	Standard
[>	Rh	103	306.7	12.3				ug/L	392	Standard
[	Mo	98	227.3	23.3	0.0611	0.016	26.0	ug/L	7	Standard
|	Ag	107	163.7	54.3	0.0136	0.013	98.5	ug/L	55	Standard
|	Cd	111	71.5	64.4	0.0015	0.013	844.5	mg/L	67	Standard
|	Cd	114	210.5	58.2	0.0037	0.012	321.6	ug/L	219	Standard
[>	In	115	719008.5	1.4				ug/L	887392	Standard
|	Sn	118	564.0	6.9	-0.0008	0.003	398.4	ug/L	653	Standard
|	Sb	123	2222.4	7.9	0.2469	0.020	7.9	ug/L	48	Standard
[	Ba	135	2090.1	5.2	0.4776	0.026	5.5	ug/L	28	Standard
[	Ce	140	2274.8	4.7				ug/L	34	Standard
[>	Tb	159	1008641.6	0.8				ug/L	1226141	Standard
[	Ho	165	62.0	2.8				ug/L	14	Standard
|	Tl	203	388.7	20.5	0.0206	0.005	23.1	ug/L	9	Standard
|	Tl	205	911.4	20.9	0.0193	0.005	26.0	ug/L	20	Standard
|	Pb	206	655.0	9.7	0.0200	0.005	23.0	ug/L	419	Standard
|	Pb	207	548.3	15.3	0.0199	0.007	34.3	ug/L	338	Standard
|	Pb	208	2554.1	17.5	0.0182	0.008	43.6	ug/L	1616	Standard
	U	238	902.4	22.1	0.0524	0.013	24.1	ug/L	2	Standard
[>	Bi	209	557934.1	2.3				ug/L	641071	Standard

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Na	23	916.7	9.1	0.0203	0.004	21.8	mg/L	412	Standard
Mg	24	17410.0	7.8	0.0287	0.002	5.8	mg/L	177	Standard
K	39	355.0	25.7	0.2048	0.082	40.0	mg/L	150	Standard
Ca	43	5.0	100.0	2.0206	4.574	226.3	mg/L	7	Standard
Fe	54	370.8	2.2	-0.0410	0.003	8.1	mg/L	634	Standard
Fe	57	4675.7	9.4	0.0353	0.006	17.1	mg/L	2670	Standard
Sc-1	45	310505.7	2.6				mg/L	375691	Standard
Cl	35	2.0	50.0				ug/L	4	Standard
Kr	83	39.1	5.7				ug/L	39	Standard
Br	81	465.8	11.6				ug/L	639	Standard
P	31	665.8	7.2				ug/L	419	Standard
S	34	4997.5	4.0				ug/L	7420	Standard
Sr	88	38.3	41.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.913	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062702

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	Cd	111		
	Cd	114		
>	In	115	81.025	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.032	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062702

Report Date/Time: Friday, July 27, 2012 18:29:58

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Method 6020 - Summary Report

Sample ID: L1207062704

Sample Date/Time: Friday, July 27, 2012 18:30:37

Number of Replicates: 3

Autosampler Position: 431

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10775.5	5.0	-411.5309	170.342	41.4	ug/L	11199	Standard
|	Be	9	21.7	48.0	-0.0070	0.006	89.7	ug/L	10	Standard
|	Al	27	616590.9	13.2	43.8743	5.096	11.6	ug/L	7920	Standard
[>	Sc	45	315449.5	3.7				ug/L	375691	Standard
|	Ti	47	1562.7	18.7	1.1788	0.231	19.6	ug/L	70	Standard
|	V	51	6563.6	4.5	0.3496	0.035	9.9	ug/L	3172	Standard
|	Cr	52	8816.6	2.5	-0.0064	0.031	476.7	ug/L	9852	Standard
|	Cr	53	531.7	8.7	0.0397	0.037	92.8	ug/L	518	Standard
|	Mn	55	24043.6	25.9	1.4598	0.388	26.6	ug/L	1193	Standard
|	Co	59	271.7	10.9	0.0148	0.003	20.0	ug/L	98	Standard
|	Ni	60	421.0	4.9	0.1347	0.006	4.5	ug/L	67	Standard
|	Cu	65	377.3	6.4	0.1136	0.012	10.5	ug/L	90	Standard
|	Zn	66	1000.4	17.1	0.7976	0.152	19.1	ug/L	148	Standard
[>	Ge	72	281720.6	1.4				ug/L	304674	Standard
|	As	75	-75.1	21.9	0.1256	0.015	11.8	ug/L	-174	Standard
|	Se	82	27.2	24.3	0.0910	0.063	69.0	ug/L	26	Standard
[	Se-1	77	109.0	9.9	-0.0498	0.121	243.4	ug/L	133	Standard
[>	Ga	71	603.3	2.4				mg/L	630	Standard
|	Rb	85	1455.1	6.1				ug/L	12	Standard
|	Y	89	234713.0	2.4				ug/L	271719	Standard
[>	Rh	103	301.7	16.7				ug/L	392	Standard
|	Mo	98	161.5	16.2	0.0417	0.008	20.0	ug/L	7	Standard
|	Ag	107	86.0	7.6	0.0020	0.001	59.0	ug/L	55	Standard
|	Cd	111	39.3	12.5	-0.0073	0.001	18.4	mg/L	67	Standard
|	Cd	114	122.9	6.5	-0.0048	0.001	19.7	ug/L	219	Standard
[>	In	115	721073.0	1.6				ug/L	887392	Standard
|	Sn	118	450.3	3.0	-0.0100	0.001	6.2	ug/L	653	Standard
|	Sb	123	741.3	5.8	0.0847	0.003	4.1	ug/L	48	Standard
|	Ba	135	1934.1	13.3	0.4399	0.060	13.5	ug/L	28	Standard
|	Ce	140	1887.1	22.4				ug/L	34	Standard
[>	Tb	159	1018377.7	2.0				ug/L	1226141	Standard
|	Ho	165	43.7	36.5				ug/L	14	Standard
|	Tl	203	130.0	12.2	0.0063	0.001	17.0	ug/L	9	Standard
|	Tl	205	285.3	20.0	0.0039	0.002	41.4	ug/L	20	Standard
|	Pb	206	608.3	10.2	0.0167	0.005	32.1	ug/L	419	Standard
|	Pb	207	489.0	13.3	0.0149	0.006	39.1	ug/L	338	Standard
|	Pb	208	2310.1	10.9	0.0138	0.005	38.0	ug/L	1616	Standard
	U	238	132.7	30.8	0.0078	0.002	32.0	ug/L	2	Standard
[>	Bi	209	557539.5	3.0				ug/L	641071	Standard

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Na	23	1711.8	12.8	0.0701	0.017	24.2	mg/L	412	Standard
Mg	24	16972.9	10.8	0.0276	0.004	13.1	mg/L	177	Standard
K	39	231.7	24.8	0.0853	0.054	62.9	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	296.2	7.3	-0.0602	0.003	5.7	mg/L	634	Standard
Fe	57	4060.5	5.4	0.0259	0.002	8.8	mg/L	2670	Standard
Sc-1	45	315449.5	3.7				mg/L	375691	Standard
Cl	35	4.0	43.3				ug/L	4	Standard
Kr	83	34.6	12.4				ug/L	39	Standard
Br	81	459.2	9.7				ug/L	639	Standard
P	31	655.0	9.5				ug/L	419	Standard
S	34	4791.6	2.3				ug/L	7420	Standard
Sr	88	41.7	13.9				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.466	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062704

Report Date/Time: Friday, July 27, 2012 18:33:07

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	Cd	111		
	Cd	114		
>	In	115	81.258	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.970	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062704

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Method 6020 - Summary Report

Sample ID: L1207062706

Sample Date/Time: Friday, July 27, 2012 18:33:46

Number of Replicates: 3

Autosampler Position: 432

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11501.0	2.8	-705.8465	106.156	15.0	ug/L	11199	Standard
|	Be	9	13.3	21.7	-0.0119	0.001	12.4	ug/L	10	Standard
|	Al	27	487087.4	2.7	35.1501	1.275	3.6	ug/L	7920	Standard
[>	Sc	45	310713.8	3.0				ug/L	375691	Standard
[	Ti	47	1033.4	6.9	0.7571	0.053	7.0	ug/L	70	Standard
|	V	51	3698.6	2.8	0.0781	0.008	10.3	ug/L	3172	Standard
|	Cr	52	8382.7	2.4	-0.0612	0.009	14.3	ug/L	9852	Standard
|	Cr	53	389.2	8.8	-0.0593	0.025	42.7	ug/L	518	Standard
|	Mn	55	159717.1	3.7	10.1260	0.157	1.5	ug/L	1193	Standard
|	Co	59	688.0	8.4	0.0558	0.005	9.3	ug/L	98	Standard
|	Ni	60	464.7	7.0	0.1507	0.008	5.5	ug/L	67	Standard
|	Cu	65	231.3	6.3	0.0526	0.008	15.7	ug/L	90	Standard
|	Zn	66	1891.1	4.9	1.6120	0.062	3.8	ug/L	148	Standard
[>	Ge	72	282778.0	2.4				ug/L	304674	Standard
|	As	75	-104.0	51.2	0.0999	0.048	48.0	ug/L	-174	Standard
|	Se	82	26.1	30.1	0.0799	0.070	88.1	ug/L	26	Standard
[	Se-1	77	121.0	2.2	0.1002	0.067	66.9	ug/L	133	Standard
[>	Ga	71	636.7	7.3				mg/L	630	Standard
[	Rb	85	3868.8	8.6				ug/L	12	Standard
[	Y	89	236376.5	1.6				ug/L	271719	Standard
[>	Rh	103	305.0	2.8				ug/L	392	Standard
[	Mo	98	60.3	13.0	0.0121	0.002	17.0	ug/L	7	Standard
|	Ag	107	58.7	12.3	-0.0020	0.001	49.4	ug/L	55	Standard
|	Cd	111	122.2	7.7	0.0152	0.003	21.3	mg/L	67	Standard
|	Cd	114	398.3	4.8	0.0217	0.002	8.1	ug/L	219	Standard
[>	In	115	717843.3	2.0				ug/L	887392	Standard
|	Sn	118	635.7	3.0	0.0051	0.002	37.5	ug/L	653	Standard
|	Sb	123	403.8	7.5	0.0482	0.002	5.2	ug/L	48	Standard
[	Ba	135	31163.0	2.3	7.2578	0.034	0.5	ug/L	28	Standard
[	Ce	140	1162.4	8.7				ug/L	34	Standard
[>	Tb	159	1010060.4	2.5				ug/L	1226141	Standard
[	Ho	165	49.0	16.2				ug/L	14	Standard
|	Tl	203	85.3	7.5	0.0038	0.000	6.1	ug/L	9	Standard
|	Tl	205	201.7	5.3	0.0018	0.000	12.8	ug/L	20	Standard
|	Pb	206	479.3	10.2	0.0073	0.004	48.2	ug/L	419	Standard
|	Pb	207	388.3	4.7	0.0062	0.002	32.8	ug/L	338	Standard
|	Pb	208	1840.4	3.4	0.0050	0.002	35.5	ug/L	1616	Standard
	U	238	129.0	8.9	0.0076	0.001	11.5	ug/L	2	Standard
[>	Bi	209	558941.6	2.7				ug/L	641071	Standard

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Na	23	1505.1	16.4	0.0580	0.014	24.9	mg/L	412	Standard
Mg	24	49556.0	3.1	0.0816	0.001	1.4	mg/L	177	Standard
K	39	585.0	12.9	0.4238	0.089	20.9	mg/L	150	Standard
Ca	43	1.7	173.2	-1.0378	2.506	241.5	mg/L	7	Standard
Fe	54	269.0	8.8	-0.0656	0.007	10.9	mg/L	634	Standard
Fe	57	3178.7	7.4	0.0146	0.003	20.8	mg/L	2670	Standard
Sc-1	45	310713.8	3.0				mg/L	375691	Standard
Cl	35	3.0	57.7				ug/L	4	Standard
Kr	83	36.9	22.2				ug/L	39	Standard
Br	81	494.2	5.9				ug/L	639	Standard
P	31	1078.4	7.2				ug/L	419	Standard
S	34	5065.8	3.5				ug/L	7420	Standard
Sr	88	55.0	9.1				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.813	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	80.894	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.189	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

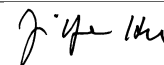
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062706

Report Date/Time: Friday, July 27, 2012 18:36:16

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Method 6020 - Summary Report

Sample ID: L1207062706PS WG404768-01

Sample Date/Time: Friday, July 27, 2012 18:36:55

Number of Replicates: 3

Autosampler Position: 433

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11639.5	4.2	-741.0636	39.966	5.4	ug/L	11199	Standard
|	Be	9	79692.4	2.3	46.1148	1.026	2.2	ug/L	10	Standard
|	Al	27	1070535.6	1.7	77.7141	3.879	5.0	ug/L	7920	Standard
[>	Sc	45	311420.0	3.2				ug/L	375691	Standard
|	Ti	47	976.4	3.8	0.7094	0.020	2.8	ug/L	70	Standard
|	V	51	407350.8	0.7	37.8398	0.678	1.8	ug/L	3172	Standard
|	Cr	52	336414.4	2.3	38.1621	0.095	0.3	ug/L	9852	Standard
|	Cr	53	56756.1	2.4	38.3373	0.700	1.8	ug/L	518	Standard
|	Mn	55	747756.1	0.4	47.5591	1.081	2.3	ug/L	1193	Standard
|	Co	59	381911.5	1.3	37.5813	0.475	1.3	ug/L	98	Standard
|	Ni	60	104830.9	2.3	39.8231	0.079	0.2	ug/L	67	Standard
|	Cu	65	101211.4	2.6	41.6795	0.197	0.5	ug/L	90	Standard
|	Zn	66	59125.5	2.0	53.9630	0.711	1.3	ug/L	148	Standard
[>	Ge	72	283810.8	2.5				ug/L	304674	Standard
|	As	75	51329.4	1.9	46.6454	0.357	0.8	ug/L	-174	Standard
|	Se	82	6037.5	1.4	54.4648	0.737	1.4	ug/L	26	Standard
[	Se-1	77	4387.3	2.3	54.3487	0.303	0.6	ug/L	133	Standard
[>	Ga	71	630.0	2.9				mg/L	630	Standard
|	Rb	85	3902.2	6.3				ug/L	12	Standard
|	Y	89	231038.3	1.1				ug/L	271719	Standard
[>	Rh	103	321.7	9.1				ug/L	392	Standard
|	Mo	98	99.4	18.5	0.0230	0.005	22.5	ug/L	7	Standard
|	Ag	107	289926.0	0.5	42.3334	0.286	0.7	ug/L	55	Standard
|	Cd	111	166420.7	0.1	44.0198	0.424	1.0	mg/L	67	Standard
|	Cd	114	488418.9	0.5	45.9353	0.526	1.1	ug/L	219	Standard
[>	In	115	731194.9	0.9				ug/L	887392	Standard
|	Sn	118	524.0	4.1	-0.0047	0.002	33.6	ug/L	653	Standard
|	Sb	123	394192.2	0.7	42.3655	0.199	0.5	ug/L	48	Standard
|	Ba	135	218459.3	0.3	50.0073	0.422	0.8	ug/L	28	Standard
|	Ce	140	1312.7	4.5				ug/L	34	Standard
[>	Tb	159	1015338.9	0.1				ug/L	1226141	Standard
|	Ho	165	50.0	25.1				ug/L	14	Standard
|	Tl	203	718562.8	1.4	39.5913	0.431	1.1	ug/L	9	Standard
|	Tl	205	1662141.5	0.8	40.9049	0.479	1.2	ug/L	20	Standard
|	Pb	206	555654.2	1.4	39.8537	0.433	1.1	ug/L	419	Standard
|	Pb	207	471993.3	1.5	40.3163	0.312	0.8	ug/L	338	Standard
|	Pb	208	2176720.5	1.3	40.3164	0.339	0.8	ug/L	1616	Standard
	U	238	598329.4	2.5	34.5888	0.305	0.9	ug/L	2	Standard
[>	Bi	209	557717.8	1.9				ug/L	641071	Standard

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Na	23	1428.4	8.2	0.0529	0.006	11.0	mg/L	412	Standard
Mg	24	50726.5	3.9	0.0834	0.005	5.5	mg/L	177	Standard
K	39	600.0	3.8	0.4349	0.009	2.2	mg/L	150	Standard
Ca	43	5.0	100.0	1.8491	4.311	233.1	mg/L	7	Standard
Fe	54	254.7	12.3	-0.0691	0.010	14.0	mg/L	634	Standard
Fe	57	3252.0	4.1	0.0155	0.003	20.5	mg/L	2670	Standard
Sc-1	45	311420.0	3.2				mg/L	375691	Standard
Cl	35	2.3	89.2				ug/L	4	Standard
Kr	83	40.8	12.9				ug/L	39	Standard
Br	81	470.0	4.5				ug/L	639	Standard
P	31	1074.2	4.0				ug/L	419	Standard
S	34	4951.6	3.0				ug/L	7420	Standard
Sr	88	45.0	40.1				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.152	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062706PS WG404768-01

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	Cd	111		
	Cd	114		
>	In	115	82.398	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
	Pb	208		
	U	238		
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	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062706PS WG404768-01

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Method 6020 - Summary Report

Sample ID: L1207062706SDL WG404768-02

Sample Date/Time: Friday, July 27, 2012 18:40:05

Number of Replicates: 3

Autosampler Position: 434

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8824.2	5.0	188.9730	4.204	2.2	ug/L	11199	Standard
|	Be	9	20.0	86.6	-0.0082	0.009	115.3	ug/L	10	Standard
|	Al	27	119036.0	23.4	8.1880	1.883	23.0	ug/L	7920	Standard
[>	Sc	45	311297.5	5.2				ug/L	375691	Standard
[	Ti	47	255.3	15.1	0.1460	0.031	21.3	ug/L	70	Standard
|	V	51	2968.9	7.0	0.0113	0.017	151.7	ug/L	3172	Standard
|	Cr	52	7735.0	2.7	-0.1314	0.013	9.7	ug/L	9852	Standard
|	Cr	53	352.5	9.8	-0.0828	0.026	30.9	ug/L	518	Standard
|	Mn	55	38660.2	22.3	2.3990	0.511	21.3	ug/L	1193	Standard
|	Co	59	329.3	41.0	0.0205	0.013	64.0	ug/L	98	Standard
|	Ni	60	299.3	11.1	0.0883	0.011	12.3	ug/L	67	Standard
|	Cu	65	113.7	23.9	0.0042	0.011	276.7	ug/L	90	Standard
|	Zn	66	1961.8	28.6	1.6844	0.491	29.2	ug/L	148	Standard
[>	Ge	72	281036.1	2.0				ug/L	304674	Standard
|	As	75	-161.4	6.3	0.0465	0.012	25.0	ug/L	-174	Standard
|	Se	82	29.1	14.7	0.1091	0.043	39.2	ug/L	26	Standard
[	Se-1	77	128.3	5.1	0.2031	0.082	40.2	ug/L	133	Standard
[>	Ga	71	575.0	6.3				mg/L	630	Standard
[	Rb	85	1241.7	48.4				ug/L	12	Standard
[	Y	89	236518.6	5.4				ug/L	271719	Standard
[>	Rh	103	356.7	7.1				ug/L	392	Standard
[	Mo	98	176.2	142.0	0.0450	0.071	158.9	ug/L	7	Standard
|	Ag	107	417.0	125.9	0.0499	0.076	151.6	ug/L	55	Standard
|	Cd	111	216.9	121.8	0.0394	0.069	175.0	mg/L	67	Standard
|	Cd	114	639.0	122.6	0.0434	0.073	167.5	ug/L	219	Standard
[>	In	115	723359.2	1.9				ug/L	887392	Standard
|	Sn	118	524.7	45.3	-0.0044	0.018	414.7	ug/L	653	Standard
|	Sb	123	2990.6	14.5	0.3284	0.041	12.6	ug/L	48	Standard
[	Ba	135	7185.4	22.1	1.6517	0.355	21.5	ug/L	28	Standard
[	Ce	140	1130.1	128.8				ug/L	34	Standard
[>	Tb	159	1008478.7	1.3				ug/L	1226141	Standard
[	Ho	165	33.0	61.3				ug/L	14	Standard
|	Tl	203	430.7	96.8	0.0225	0.022	98.4	ug/L	9	Standard
|	Tl	205	949.4	93.2	0.0199	0.021	105.6	ug/L	20	Standard
|	Pb	206	625.0	45.8	0.0174	0.019	111.2	ug/L	419	Standard
|	Pb	207	534.7	51.4	0.0183	0.022	121.6	ug/L	338	Standard
|	Pb	208	2409.1	46.2	0.0151	0.019	128.5	ug/L	1616	Standard
|	U	238	283.7	50.7	0.0164	0.008	48.7	ug/L	2	Standard
[>	Bi	209	559963.8	2.9				ug/L	641071	Standard

Sample ID: L1207062706SDL WG404768-02

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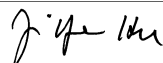
Na	23	856.7	8.9	0.0165	0.006	38.6	mg/L	412	Standard
Mg	24	11843.0	16.5	0.0194	0.003	13.6	mg/L	177	Standard
K	39	191.7	13.1	0.0508	0.024	48.0	mg/L	150	Standard
Ca	43	3.3	173.2	0.3522	4.914	1395.3	mg/L	7	Standard
Fe	54	232.8	19.5	-0.0745	0.011	14.1	mg/L	634	Standard
Fe	57	2438.5	3.8	0.0043	0.001	30.5	mg/L	2670	Standard
Sc-1	45	311297.5	5.2				mg/L	375691	Standard
Cl	35	4.0	50.0				ug/L	4	Standard
Kr	83	37.1	4.1				ug/L	39	Standard
Br	81	519.2	9.5				ug/L	639	Standard
P	31	307.5	5.7				ug/L	419	Standard
S	34	4827.4	0.2				ug/L	7420	Standard
Sr	88	43.3	13.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.242	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062706SDL WG404768-02
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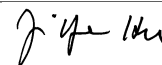
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	Cd	114		
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	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
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	Pb	206		
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	Pb	208		
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	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062706SDL WG404768-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 18:43:17

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10265.1	2.3	251.7085	111.822	44.4	ug/L	11199	Standard
|	Be	9	99247.5	2.8	48.3119	1.893	3.9	ug/L	10	Standard
|	Al	27	818637.1	1.1	49.7710	1.121	2.3	ug/L	7920	Standard
[>	Sc	45	370245.7	2.3				ug/L	375691	Standard
[	Ti	47	135980.5	0.8	94.5517	0.298	0.3	ug/L	70	Standard
|	V	51	550429.9	0.6	45.4005	0.728	1.6	ug/L	3172	Standard
|	Cr	52	453010.6	0.5	45.7896	0.633	1.4	ug/L	9852	Standard
|	Cr	53	79395.9	2.1	47.6405	0.485	1.0	ug/L	518	Standard
|	Mn	55	794679.9	1.1	44.8136	0.252	0.6	ug/L	1193	Standard
|	Co	59	508204.2	0.5	44.3580	0.674	1.5	ug/L	98	Standard
|	Ni	60	141167.7	1.5	47.5743	0.659	1.4	ug/L	67	Standard
|	Cu	65	130535.0	1.4	47.6887	0.123	0.3	ug/L	90	Standard
|	Zn	66	61339.2	0.7	49.6451	0.344	0.7	ug/L	148	Standard
[>	Ge	72	319951.2	1.1				ug/L	304674	Standard
|	As	75	59708.0	0.7	48.1218	0.432	0.9	ug/L	-174	Standard
|	Se	82	5978.3	0.5	47.8123	0.303	0.6	ug/L	26	Standard
[	Se-1	77	4437.7	4.2	48.6010	1.548	3.2	ug/L	133	Standard
[>	Ga	71	676.7	9.5				mg/L	630	Standard
[	Rb	85	1013.4	4.6				ug/L	12	Standard
[	Y	89	275660.7	2.0				ug/L	271719	Standard
[>	Rh	103	448.3	4.6				ug/L	392	Standard
[	Mo	98	411557.3	0.6	104.5774	0.790	0.8	ug/L	7	Standard
|	Ag	107	378713.4	0.8	48.7033	0.617	1.3	ug/L	55	Standard
|	Cd	111	201177.5	1.2	46.8624	0.179	0.4	mg/L	67	Standard
|	Cd	114	586344.7	0.6	48.5653	0.285	0.6	ug/L	219	Standard
[>	In	115	830252.8	1.0				ug/L	887392	Standard
|	Sn	118	689368.9	0.4	48.1263	0.309	0.6	ug/L	653	Standard
|	Sb	123	500035.1	0.6	47.3302	0.444	0.9	ug/L	48	Standard
[	Ba	135	244336.4	0.1	49.2591	0.572	1.2	ug/L	28	Standard
[	Ce	140	965.4	2.4				ug/L	34	Standard
[>	Tb	159	1144013.8	1.7				ug/L	1226141	Standard
[	Ho	165	20.3	7.5				ug/L	14	Standard
|	Tl	203	908967.5	0.4	46.7372	0.438	0.9	ug/L	9	Standard
|	Tl	205	2165577.4	0.5	49.7315	0.290	0.6	ug/L	20	Standard
|	Pb	206	703005.8	0.3	47.0599	0.536	1.1	ug/L	419	Standard
|	Pb	207	597020.4	0.7	47.5975	0.731	1.5	ug/L	338	Standard
|	Pb	208	2756527.0	0.4	47.6513	0.545	1.1	ug/L	1616	Standard
	U	238	849330.7	0.9	45.8277	0.698	1.5	ug/L	2	Standard
[>	Bi	209	597610.5	0.9				ug/L	641071	Standard

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Na	23	113011.6	0.5	6.0682	0.150	2.5	mg/L	412	Standard
Mg	24	3574884.8	2.0	4.9381	0.053	1.1	mg/L	177	Standard
K	39	6401.4	1.4	4.9404	0.067	1.4	mg/L	150	Standard
Ca	43	13.3	21.7	7.4562	2.254	30.2	mg/L	7	Standard
Fe	54	25839.0	1.8	5.1184	0.050	1.0	mg/L	634	Standard
Fe	57	450855.0	4.5	5.1997	0.138	2.7	mg/L	2670	Standard
Sc-1	45	370245.7	2.3				mg/L	375691	Standard
Cl	35	4.0	25.0				ug/L	4	Standard
Kr	83	37.9	3.7				ug/L	39	Standard
Br	81	700.8	0.8				ug/L	639	Standard
P	31	481.7	7.5				ug/L	419	Standard
S	34	6373.8	0.9				ug/L	7420	Standard
Sr	88	43.3	17.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	99.542		
Sc	45			
Ti	47	94.552		
V	51	90.801		
Cr	52	91.579		
Cr	53			
Mn	55	89.627		
Co	59	88.716		
Ni	60	95.149		
Cu	65	95.377		
Zn	66	99.290		
Ge	72		105.014	
As	75	96.244		
Se	82	95.625		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	104.577		
Ag	107	97.407		

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	Cd	111	93.725	
	Cd	114		
>	In	115		93.561
	Sn	118	96.253	
	Sb	123	94.660	
	Ba	135	98.518	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	93.474	
|	Tl	205		
|	Pb	206	94.120	
|	Pb	207	95.195	
|	Pb	208	95.303	
|	U	238	91.655	
>	Bi	209		93.221
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Co	59	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 18:46:28

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10195.1	1.2	315.7294	56.117	17.8	ug/L	11199	Standard
|	Be	9	25.0	34.6	-0.0076	0.004	54.4	ug/L	10	Standard
|	Al	27	8369.0	5.2	0.0100	0.030	295.8	ug/L	7920	Standard
[>	Sc	45	376012.7	1.6				ug/L	375691	Standard
[	Ti	47	65.7	23.1	-0.0110	0.010	95.3	ug/L	70	Standard
|	V	51	2890.7	2.0	-0.0312	0.005	16.2	ug/L	3172	Standard
|	Cr	52	8829.9	0.6	-0.1364	0.010	7.1	ug/L	9852	Standard
|	Cr	53	409.2	10.5	-0.0803	0.026	31.9	ug/L	518	Standard
|	Mn	55	1365.1	5.0	-0.0047	0.004	82.8	ug/L	1193	Standard
|	Co	59	168.7	18.4	0.0024	0.003	111.1	ug/L	98	Standard
|	Ni	60	89.7	7.9	0.0035	0.002	63.7	ug/L	67	Standard
|	Cu	65	114.0	14.8	-0.0019	0.006	316.3	ug/L	90	Standard
|	Zn	66	749.4	4.2	0.4793	0.028	5.8	ug/L	148	Standard
[>	Ge	72	322628.8	0.6				ug/L	304674	Standard
|	As	75	-224.2	6.2	0.0157	0.010	66.6	ug/L	-174	Standard
|	Se	82	23.9	28.5	0.0336	0.055	162.2	ug/L	26	Standard
[	Se-1	77	135.7	2.4	0.0724	0.030	40.8	ug/L	133	Standard
[>	Ga	71	731.7	11.8				mg/L	630	Standard
[	Rb	85	10.0	86.6				ug/L	12	Standard
[	Y	89	279248.7	1.8				ug/L	271719	Standard
[>	Rh	103	350.0	7.6				ug/L	392	Standard
[	Mo	98	292.7	32.7	0.0690	0.025	36.3	ug/L	7	Standard
|	Ag	107	230.3	42.1	0.0189	0.013	66.8	ug/L	55	Standard
|	Cd	111	119.0	39.4	0.0100	0.011	111.6	mg/L	67	Standard
|	Cd	114	310.3	35.3	0.0092	0.009	99.7	ug/L	219	Standard
[>	In	115	829937.4	1.4				ug/L	887392	Standard
|	Sn	118	970.7	20.6	0.0217	0.014	66.7	ug/L	653	Standard
|	Sb	123	2972.8	9.1	0.2856	0.028	9.9	ug/L	48	Standard
[	Ba	135	104.0	40.0	0.0120	0.009	71.5	ug/L	28	Standard
[	Ce	140	24.7	39.4				ug/L	34	Standard
[>	Tb	159	1129470.1	1.3				ug/L	1226141	Standard
[	Ho	165	12.7	9.1				ug/L	14	Standard
|	Tl	203	186.3	52.1	0.0085	0.005	56.4	ug/L	9	Standard
|	Tl	205	457.3	58.3	0.0072	0.006	82.6	ug/L	20	Standard
|	Pb	206	645.7	18.2	0.0156	0.007	47.3	ug/L	419	Standard
|	Pb	207	551.0	16.2	0.0163	0.007	40.0	ug/L	338	Standard
|	Pb	208	2519.7	15.0	0.0138	0.006	43.2	ug/L	1616	Standard
	U	238	225.3	20.2	0.0121	0.002	18.8	ug/L	2	Standard
[>	Bi	209	606240.6	1.8				ug/L	641071	Standard

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Na	23	398.3	8.8	-0.0175	0.002	11.9	mg/L	412	Standard
Mg	24	560.0	34.8	0.0008	0.000	35.4	mg/L	177	Standard
K	39	138.3	24.6	-0.0222	0.026	116.2	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	664.6	18.2	0.0019	0.022	1151.3	mg/L	634	Standard
Fe	57	2805.3	4.6	0.0027	0.002	70.3	mg/L	2670	Standard
Sc-1	45	376012.7	1.6				mg/L	375691	Standard
Cl	35	4.7	12.4				ug/L	4	Standard
Kr	83	40.1	13.4				ug/L	39	Standard
Br	81	620.0	10.8				ug/L	639	Standard
P	31	368.3	5.8				ug/L	419	Standard
S	34	6166.3	2.7				ug/L	7420	Standard
Sr	88	41.7	61.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.893	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	93.525
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.567
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207062708

Sample Date/Time: Friday, July 27, 2012 18:49:42

Number of Replicates: 3

Autosampler Position: 435

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

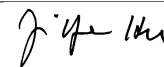
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11314.2	1.4	-642.6758	99.379	15.5	ug/L	11199	Standard
|	Be	9	25.0	34.6	-0.0051	0.005	98.0	ug/L	10	Standard
|	Al	27	1158433.7	1.7	84.2455	2.761	3.3	ug/L	7920	Standard
[>	Sc	45	310801.0	1.8				ug/L	375691	Standard
|	Ti	47	2067.5	2.8	1.5816	0.036	2.3	ug/L	70	Standard
|	V	51	3789.4	1.8	0.0890	0.007	7.8	ug/L	3172	Standard
|	Cr	52	8879.9	1.6	0.0037	0.012	318.9	ug/L	9852	Standard
|	Cr	53	560.8	4.6	0.0605	0.018	30.3	ug/L	518	Standard
|	Mn	55	32243.9	1.3	1.9932	0.012	0.6	ug/L	1193	Standard
|	Co	59	237.0	4.9	0.0114	0.001	11.4	ug/L	98	Standard
|	Ni	60	428.3	2.8	0.1380	0.004	3.2	ug/L	67	Standard
|	Cu	65	221.0	5.0	0.0488	0.005	10.9	ug/L	90	Standard
|	Zn	66	1521.7	3.0	1.2825	0.046	3.6	ug/L	148	Standard
[>	Ge	72	280946.9	0.8				ug/L	304674	Standard
|	As	75	-138.6	12.6	0.0673	0.017	25.1	ug/L	-174	Standard
|	Se	82	23.6	30.0	0.0585	0.063	108.5	ug/L	26	Standard
[	Se-1	77	111.7	8.3	-0.0112	0.108	966.6	ug/L	133	Standard
[>	Ga	71	636.7	11.5				mg/L	630	Standard
|	Rb	85	3037.0	10.0				ug/L	12	Standard
|	Y	89	233929.8	3.1				ug/L	271719	Standard
[>	Rh	103	353.3	14.5				ug/L	392	Standard
|	Mo	98	99.5	18.5	0.0236	0.005	20.0	ug/L	7	Standard
|	Ag	107	61.3	26.8	-0.0016	0.002	149.5	ug/L	55	Standard
|	Cd	111	52.8	5.1	-0.0036	0.001	29.2	mg/L	67	Standard
|	Cd	114	139.4	5.8	-0.0031	0.001	16.1	ug/L	219	Standard
[>	In	115	717694.6	2.3				ug/L	887392	Standard
|	Sn	118	468.7	3.4	-0.0083	0.002	25.9	ug/L	653	Standard
|	Sb	123	436.6	24.1	0.0517	0.010	20.2	ug/L	48	Standard
|	Ba	135	14513.6	4.5	3.3754	0.099	2.9	ug/L	28	Standard
|	Ce	140	3005.6	6.6				ug/L	34	Standard
[>	Tb	159	1012476.5	1.2				ug/L	1226141	Standard
|	Ho	165	62.7	10.6				ug/L	14	Standard
|	Tl	203	77.7	4.5	0.0035	0.000	7.7	ug/L	9	Standard
|	Tl	205	181.0	5.4	0.0013	0.000	10.5	ug/L	20	Standard
|	Pb	206	523.3	4.4	0.0109	0.001	10.4	ug/L	419	Standard
|	Pb	207	447.7	2.4	0.0117	0.001	8.1	ug/L	338	Standard
|	Pb	208	2045.1	1.2	0.0092	0.001	8.4	ug/L	1616	Standard
	U	238	87.7	7.0	0.0052	0.000	5.4	ug/L	2	Standard
[>	Bi	209	552497.0	2.4				ug/L	641071	Standard

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[Na	23	1223.4	4.7	0.0400	0.002	5.8	mg/L	412	Standard
	Mg	24	33031.0	1.6	0.0544	0.000	0.6	mg/L	177	Standard
|	K	39	478.3	9.5	0.3212	0.041	12.8	mg/L	150	Standard
|	Ca	43	5.0	100.0	1.8976	4.345	229.0	mg/L	7	Standard
|	Fe	54	354.1	9.1	-0.0450	0.009	20.1	mg/L	634	Standard
|	Fe	57	4464.0	5.6	0.0323	0.002	7.2	mg/L	2670	Standard
[>	Sc-1	45	310801.0	1.8				mg/L	375691	Standard
|	Cl	35	6.7	31.2				ug/L	4	Standard
|	Kr	83	36.8	10.3				ug/L	39	Standard
|	Br	81	462.5	5.7				ug/L	639	Standard
|	P	31	713.4	5.0				ug/L	419	Standard
|	S	34	5095.9	3.3				ug/L	7420	Standard
|	Sr	88	51.7	24.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72	92.212	
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

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	Cd	111	
	Cd	114	
>	In	115	80.877
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	86.183
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062710

Sample Date/Time: Friday, July 27, 2012 18:52:50

Number of Replicates: 3

Autosampler Position: 436

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12677.0	2.6	-1074.2408	76.325	7.1	ug/L	11199	Standard
|	Be	9	11.7	49.5	-0.0128	0.003	25.6	ug/L	10	Standard
|	Al	27	726500.8	7.3	52.3767	3.644	7.0	ug/L	7920	Standard
[>	Sc	45	312342.5	3.6				ug/L	375691	Standard
[	Ti	47	1393.1	4.1	1.0516	0.058	5.5	ug/L	70	Standard
|	V	51	4112.0	2.7	0.1208	0.013	10.7	ug/L	3172	Standard
|	Cr	52	9985.0	1.6	0.1381	0.037	26.8	ug/L	9852	Standard
|	Cr	53	719.2	11.3	0.1715	0.061	35.5	ug/L	518	Standard
|	Mn	55	124527.6	14.7	7.9462	1.046	13.2	ug/L	1193	Standard
|	Co	59	431.0	14.0	0.0308	0.005	17.3	ug/L	98	Standard
|	Ni	60	626.3	7.9	0.2147	0.017	7.8	ug/L	67	Standard
|	Cu	65	319.3	6.6	0.0903	0.011	12.0	ug/L	90	Standard
|	Zn	66	1971.5	12.8	1.7018	0.203	11.9	ug/L	148	Standard
[>	Ge	72	280003.0	1.6				ug/L	304674	Standard
|	As	75	-118.1	7.4	0.0858	0.009	10.2	ug/L	-174	Standard
|	Se	82	27.0	16.0	0.0899	0.036	39.5	ug/L	26	Standard
[	Se-1	77	116.7	6.5	0.0589	0.101	171.2	ug/L	133	Standard
[>	Ga	71	648.3	7.0				mg/L	630	Standard
[	Rb	85	2661.9	7.7				ug/L	12	Standard
[	Y	89	229060.2	0.6				ug/L	271719	Standard
[>	Rh	103	381.7	11.1				ug/L	392	Standard
[	Mo	98	81.8	9.2	0.0183	0.002	11.1	ug/L	7	Standard
|	Ag	107	47.0	2.1	-0.0038	0.000	3.3	ug/L	55	Standard
|	Cd	111	121.5	21.0	0.0148	0.007	46.2	mg/L	67	Standard
|	Cd	114	362.8	24.4	0.0181	0.008	46.6	ug/L	219	Standard
[>	In	115	720744.1	1.6				ug/L	887392	Standard
|	Sn	118	405.0	3.2	-0.0137	0.001	4.1	ug/L	653	Standard
|	Sb	123	270.3	17.4	0.0335	0.005	15.0	ug/L	48	Standard
[	Ba	135	15705.6	14.6	3.6376	0.518	14.2	ug/L	28	Standard
[	Ce	140	1411.7	12.6				ug/L	34	Standard
[>	Tb	159	1008739.5	1.4				ug/L	1226141	Standard
[	Ho	165	54.3	19.5				ug/L	14	Standard
|	Tl	203	78.3	7.5	0.0034	0.000	8.2	ug/L	9	Standard
|	Tl	205	174.0	14.2	0.0011	0.001	46.1	ug/L	20	Standard
|	Pb	206	482.7	8.6	0.0075	0.004	49.5	ug/L	419	Standard
|	Pb	207	421.0	4.6	0.0089	0.002	25.7	ug/L	338	Standard
|	Pb	208	1922.0	2.2	0.0064	0.002	24.6	ug/L	1616	Standard
	U	238	103.0	8.9	0.0060	0.000	6.7	ug/L	2	Standard
[>	Bi	209	560156.1	2.5				ug/L	641071	Standard

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Na	23	1908.5	7.6	0.0835	0.008	9.9	mg/L	412	Standard
Mg	24	56462.1	7.5	0.0925	0.007	7.2	mg/L	177	Standard
K	39	530.0	5.7	0.3682	0.037	10.0	mg/L	150	Standard
Ca	43	5.0	0.0	1.9294	0.155	8.0	mg/L	7	Standard
Fe	54	287.2	23.4	-0.0614	0.018	28.8	mg/L	634	Standard
Fe	57	3470.4	5.6	0.0183	0.002	9.1	mg/L	2670	Standard
Sc-1	45	312342.5	3.6				mg/L	375691	Standard
Cl	35	3.7	68.6				ug/L	4	Standard
Kr	83	37.1	3.6				ug/L	39	Standard
Br	81	502.5	7.8				ug/L	639	Standard
P	31	1028.4	4.7				ug/L	419	Standard
S	34	5064.2	3.0				ug/L	7420	Standard
Sr	88	50.0	55.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.902	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062710

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	Cd	111		
	Cd	114		
>	In	115	81.220	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.378	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062712

Sample Date/Time: Friday, July 27, 2012 18:56:01

Number of Replicates: 3

Autosampler Position: 437

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11494.4	4.7	-792.5037	89.024	11.2	ug/L	11199	Standard
|	Be	9	3.3	86.6	-0.0176	0.002	9.5	ug/L	10	Standard
|	Al	27	115396.6	4.0	8.1445	0.110	1.4	ug/L	7920	Standard
[>	Sc	45	303548.8	4.1				ug/L	375691	Standard
|	Ti	47	332.7	12.8	0.2103	0.028	13.1	ug/L	70	Standard
|	V	51	3838.3	2.3	0.0984	0.005	4.6	ug/L	3172	Standard
|	Cr	52	7713.0	1.8	-0.1214	0.015	12.3	ug/L	9852	Standard
|	Cr	53	347.5	8.7	-0.0835	0.015	17.6	ug/L	518	Standard
|	Mn	55	43714.4	3.7	2.7680	0.028	1.0	ug/L	1193	Standard
|	Co	59	202.3	2.8	0.0082	0.001	11.7	ug/L	98	Standard
|	Ni	60	443.7	4.0	0.1461	0.004	2.5	ug/L	67	Standard
|	Cu	65	243.3	3.3	0.0594	0.002	2.5	ug/L	90	Standard
|	Zn	66	1037.4	4.5	0.8488	0.071	8.4	ug/L	148	Standard
[>	Ge	72	277278.1	2.8				ug/L	304674	Standard
|	As	75	-107.0	15.0	0.0949	0.016	16.4	ug/L	-174	Standard
|	Se	82	22.6	17.4	0.0524	0.034	64.6	ug/L	26	Standard
[	Se-1	77	114.7	5.0	0.0468	0.036	77.9	ug/L	133	Standard
[>	Ga	71	651.7	3.9				mg/L	630	Standard
|	Rb	85	1111.7	4.8				ug/L	12	Standard
|	Y	89	223958.8	2.6				ug/L	271719	Standard
[>	Rh	103	341.7	5.5				ug/L	392	Standard
|	Mo	98	61.1	11.5	0.0124	0.002	17.3	ug/L	7	Standard
|	Ag	107	51.7	5.9	-0.0031	0.000	13.9	ug/L	55	Standard
|	Cd	111	48.9	10.7	-0.0046	0.001	32.6	mg/L	67	Standard
|	Cd	114	148.5	7.2	-0.0022	0.001	55.7	ug/L	219	Standard
[>	In	115	714973.4	1.5				ug/L	887392	Standard
|	Sn	118	380.7	7.1	-0.0154	0.002	11.7	ug/L	653	Standard
|	Sb	123	226.3	15.3	0.0289	0.004	12.4	ug/L	48	Standard
|	Ba	135	5631.7	4.1	1.3092	0.034	2.6	ug/L	28	Standard
|	Ce	140	283.3	4.5				ug/L	34	Standard
[>	Tb	159	999752.8	0.9				ug/L	1226141	Standard
|	Ho	165	20.0	21.8				ug/L	14	Standard
|	Tl	203	56.7	4.1	0.0023	0.000	7.6	ug/L	9	Standard
|	Tl	205	126.7	4.6	-0.0000	0.000	418.2	ug/L	20	Standard
|	Pb	206	354.3	4.9	-0.0014	0.002	137.2	ug/L	419	Standard
|	Pb	207	311.0	3.7	-0.0002	0.001	692.6	ug/L	338	Standard
|	Pb	208	1405.7	4.6	-0.0029	0.002	67.7	ug/L	1616	Standard
	U	238	45.0	32.7	0.0027	0.001	34.6	ug/L	2	Standard
[>	Bi	209	555258.0	2.9				ug/L	641071	Standard

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Na	23	1853.4	4.8	0.0834	0.001	1.3	mg/L	412	Standard
Mg	24	30534.1	3.1	0.0515	0.001	2.8	mg/L	177	Standard
K	39	380.0	6.0	0.2372	0.018	7.7	mg/L	150	Standard
Ca	43	5.0	100.0	1.9693	4.487	227.8	mg/L	7	Standard
Fe	54	209.6	13.3	-0.0788	0.008	9.6	mg/L	634	Standard
Fe	57	2403.5	5.9	0.0046	0.001	18.5	mg/L	2670	Standard
Sc-1	45	303548.8	4.1				mg/L	375691	Standard
Cl	35	3.3	17.3				ug/L	4	Standard
Kr	83	36.0	4.2				ug/L	39	Standard
Br	81	456.7	4.0				ug/L	639	Standard
P	31	804.2	8.3				ug/L	419	Standard
S	34	5199.2	0.3				ug/L	7420	Standard
Sr	88	48.3	21.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.008	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062712

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	Cd	111		
	Cd	114		
>	In	115	80.570	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.614	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062712

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Method 6020 - Summary Report

Sample ID: L1207062714

Sample Date/Time: Friday, July 27, 2012 18:59:10

Number of Replicates: 3

Autosampler Position: 438

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9452.9	2.2	-34.6480	51.835	149.6	ug/L	11199	Standard
|	Be	9	8.3	34.6	-0.0147	0.002	11.1	ug/L	10	Standard
|	Al	27	24519.8	4.0	1.3037	0.091	7.0	ug/L	7920	Standard
[>	Sc	45	309754.5	1.1				ug/L	375691	Standard
[	Ti	47	85.0	18.9	0.0106	0.011	108.0	ug/L	70	Standard
|	V	51	3839.9	3.9	0.0924	0.011	12.0	ug/L	3172	Standard
|	Cr	52	8116.8	3.9	-0.0897	0.028	30.8	ug/L	9852	Standard
|	Cr	53	294.2	14.9	-0.1237	0.031	24.7	ug/L	518	Standard
|	Mn	55	1360.7	5.7	0.0060	0.004	59.5	ug/L	1193	Standard
|	Co	59	126.0	15.9	0.0003	0.002	616.7	ug/L	98	Standard
|	Ni	60	327.3	10.5	0.0986	0.011	11.1	ug/L	67	Standard
|	Cu	65	152.0	5.8	0.0198	0.003	16.8	ug/L	90	Standard
|	Zn	66	549.0	26.6	0.3837	0.146	38.1	ug/L	148	Standard
[>	Ge	72	281973.1	2.1				ug/L	304674	Standard
|	As	75	-162.7	16.7	0.0460	0.024	51.3	ug/L	-174	Standard
|	Se	82	19.5	42.5	0.0210	0.075	355.9	ug/L	26	Standard
[	Se-1	77	111.0	7.2	-0.0243	0.099	406.0	ug/L	133	Standard
[>	Ga	71	621.7	6.0				mg/L	630	Standard
|	Rb	85	1296.7	4.9				ug/L	12	Standard
[	Y	89	236407.5	2.5				ug/L	271719	Standard
[>	Rh	103	368.3	2.1				ug/L	392	Standard
[	Mo	98	134.1	21.6	0.0337	0.007	20.9	ug/L	7	Standard
|	Ag	107	44.0	2.3	-0.0042	0.000	7.5	ug/L	55	Standard
|	Cd	111	22.0	14.0	-0.0118	0.001	7.7	mg/L	67	Standard
|	Cd	114	69.4	13.3	-0.0098	0.001	6.5	ug/L	219	Standard
[>	In	115	715563.4	4.2				ug/L	887392	Standard
|	Sn	118	469.3	12.9	-0.0083	0.004	43.9	ug/L	653	Standard
|	Sb	123	255.1	27.0	0.0318	0.007	20.7	ug/L	48	Standard
[	Ba	135	4671.1	4.9	1.0835	0.018	1.7	ug/L	28	Standard
[	Ce	140	108.0	37.9				ug/L	34	Standard
[>	Tb	159	1002395.7	2.2				ug/L	1226141	Standard
[	Ho	165	10.3	14.8				ug/L	14	Standard
|	Tl	203	35.7	14.1	0.0011	0.000	24.6	ug/L	9	Standard
|	Tl	205	90.7	5.0	-0.0009	0.000	14.9	ug/L	20	Standard
|	Pb	206	370.7	5.7	-0.0004	0.001	160.6	ug/L	419	Standard
|	Pb	207	315.0	6.1	-0.0001	0.001	1343.2	ug/L	338	Standard
|	Pb	208	1445.0	1.5	-0.0023	0.001	23.5	ug/L	1616	Standard
	U	238	33.0	15.2	0.0020	0.000	11.8	ug/L	2	Standard
[>	Bi	209	558243.9	3.5				ug/L	641071	Standard

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Na	23	3230.3	6.3	0.1699	0.014	8.5	mg/L	412	Standard
Mg	24	125148.3	2.6	0.2066	0.004	1.8	mg/L	177	Standard
K	39	173.3	14.8	0.0343	0.026	75.5	mg/L	150	Standard
Ca	43	6.7	114.6	3.4209	6.720	196.4	mg/L	7	Standard
Fe	54	213.0	14.4	-0.0791	0.007	9.5	mg/L	634	Standard
Fe	57	2355.2	2.7	0.0033	0.001	28.9	mg/L	2670	Standard
Sc-1	45	309754.5	1.1				mg/L	375691	Standard
Cl	35	3.0	57.7				ug/L	4	Standard
Kr	83	37.4	10.5				ug/L	39	Standard
Br	81	440.8	1.7				ug/L	639	Standard
P	31	150.8	13.4				ug/L	419	Standard
S	34	5413.5	5.0				ug/L	7420	Standard
Sr	88	66.7	35.4				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.549	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062714

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	Cd	111		
	Cd	114		
>	In	115	80.637	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.080	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062714

Report Date/Time: Friday, July 27, 2012 19:01:41

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Method 6020 - Summary Report

Sample ID: L1207062716

Sample Date/Time: Friday, July 27, 2012 19:02:20

Number of Replicates: 3

Autosampler Position: 439

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9257.8	1.9	37.1656	79.278	213.3	ug/L	11199	Standard
|	Be	9	3.3	86.6	-0.0176	0.002	9.5	ug/L	10	Standard
|	Al	27	26271.1	5.7	1.4277	0.125	8.8	ug/L	7920	Standard
[>	Sc	45	310497.8	1.0				ug/L	375691	Standard
|	Ti	47	108.0	10.2	0.0292	0.006	21.0	ug/L	70	Standard
|	V	51	6843.0	3.2	0.3780	0.005	1.4	ug/L	3172	Standard
|	Cr	52	8248.6	3.3	-0.0698	0.013	18.1	ug/L	9852	Standard
|	Cr	53	303.3	6.9	-0.1165	0.015	12.7	ug/L	518	Standard
|	Mn	55	2107.5	6.0	0.0547	0.011	20.3	ug/L	1193	Standard
|	Co	59	129.3	10.7	0.0007	0.001	167.2	ug/L	98	Standard
|	Ni	60	287.7	1.0	0.0842	0.005	5.4	ug/L	67	Standard
|	Cu	65	231.3	7.8	0.0531	0.005	8.7	ug/L	90	Standard
|	Zn	66	602.3	25.3	0.4366	0.159	36.5	ug/L	148	Standard
[>	Ge	72	280710.8	3.1				ug/L	304674	Standard
|	As	75	-146.1	8.7	0.0606	0.008	12.5	ug/L	-174	Standard
|	Se	82	24.9	14.0	0.0713	0.039	54.4	ug/L	26	Standard
[	Se-1	77	121.0	10.0	0.1109	0.152	137.4	ug/L	133	Standard
[>	Ga	71	588.3	3.2				mg/L	630	Standard
[	Rb	85	1938.5	5.3				ug/L	12	Standard
[	Y	89	236721.4	3.6				ug/L	271719	Standard
[>	Rh	103	301.7	15.9				ug/L	392	Standard
[	Mo	98	223.2	9.4	0.0601	0.005	7.7	ug/L	7	Standard
|	Ag	107	45.0	8.9	-0.0041	0.000	11.6	ug/L	55	Standard
|	Cd	111	19.1	27.0	-0.0126	0.002	11.9	mg/L	67	Standard
|	Cd	114	79.7	12.6	-0.0088	0.001	13.4	ug/L	219	Standard
[>	In	115	715262.4	2.7				ug/L	887392	Standard
|	Sn	118	444.7	4.1	-0.0102	0.001	6.1	ug/L	653	Standard
|	Sb	123	180.5	14.7	0.0238	0.003	10.8	ug/L	48	Standard
[	Ba	135	3826.5	2.5	0.8869	0.029	3.3	ug/L	28	Standard
[	Ce	140	133.7	19.5				ug/L	34	Standard
[>	Tb	159	1006027.7	1.8				ug/L	1226141	Standard
[	Ho	165	17.0	21.2				ug/L	14	Standard
|	Tl	203	44.0	18.0	0.0016	0.000	31.6	ug/L	9	Standard
|	Tl	205	107.0	13.0	-0.0005	0.000	48.5	ug/L	20	Standard
|	Pb	206	404.0	9.9	0.0020	0.003	157.4	ug/L	419	Standard
|	Pb	207	335.0	0.3	0.0017	0.001	66.4	ug/L	338	Standard
|	Pb	208	1553.7	3.9	-0.0003	0.001	474.7	ug/L	1616	Standard
	U	238	19.3	30.3	0.0012	0.000	25.4	ug/L	2	Standard
[>	Bi	209	558380.3	3.6				ug/L	641071	Standard

Sample ID: L1207062716

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Na	23	2261.8	9.2	0.1070	0.013	12.5	mg/L	412	Standard
Mg	24	19474.2	2.1	0.0321	0.000	1.1	mg/L	177	Standard
K	39	233.3	13.6	0.0902	0.028	30.6	mg/L	150	Standard
Ca	43	11.7	49.5	7.9021	5.197	65.8	mg/L	7	Standard
Fe	54	215.7	30.5	-0.0787	0.015	19.5	mg/L	634	Standard
Fe	57	2356.9	3.4	0.0032	0.001	24.7	mg/L	2670	Standard
Sc-1	45	310497.8	1.0				mg/L	375691	Standard
Cl	35	3.0	33.3				ug/L	4	Standard
Kr	83	34.7	1.9				ug/L	39	Standard
Br	81	445.0	9.0				ug/L	639	Standard
P	31	192.5	10.1				ug/L	419	Standard
S	34	5706.1	4.0				ug/L	7420	Standard
Sr	88	36.7	39.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.135	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062716

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	Cd	111		
	Cd	114		
>	In	115	80.603	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.101	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062716

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Method 6020 - Summary Report

Sample ID: L1207062718

Sample Date/Time: Friday, July 27, 2012 19:05:31

Number of Replicates: 3

Autosampler Position: 440

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9629.7	7.1	-24.4409	132.333	541.4	ug/L	11199	Standard
|	Be	9	25.0	72.1	-0.0055	0.010	180.5	ug/L	10	Standard
|	Al	27	38911.6	22.4	2.2951	0.578	25.2	ug/L	7920	Standard
[>	Sc	45	316387.3	3.8				ug/L	375691	Standard
|	Ti	47	142.0	14.6	0.0549	0.014	25.8	ug/L	70	Standard
|	V	51	8329.7	3.6	0.5101	0.013	2.6	ug/L	3172	Standard
|	Cr	52	8725.8	1.3	-0.0243	0.017	68.8	ug/L	9852	Standard
|	Cr	53	310.8	4.4	-0.1138	0.004	3.4	ug/L	518	Standard
|	Mn	55	3062.4	45.2	0.1131	0.085	75.3	ug/L	1193	Standard
|	Co	59	259.7	52.8	0.0133	0.013	98.7	ug/L	98	Standard
|	Ni	60	305.0	11.8	0.0893	0.011	12.2	ug/L	67	Standard
|	Cu	65	151.0	12.6	0.0190	0.007	38.3	ug/L	90	Standard
|	Zn	66	842.7	17.1	0.6472	0.127	19.6	ug/L	148	Standard
[>	Ge	72	283737.6	2.6				ug/L	304674	Standard
|	As	75	-22.3	117.1	0.1736	0.024	13.9	ug/L	-174	Standard
|	Se	82	25.3	29.6	0.0718	0.066	91.7	ug/L	26	Standard
[	Se-1	77	122.3	3.4	0.1114	0.054	48.9	ug/L	133	Standard
[>	Ga	71	575.0	1.7				mg/L	630	Standard
[	Rb	85	1643.4	2.1				ug/L	12	Standard
[	Y	89	238558.1	3.4				ug/L	271719	Standard
[>	Rh	103	343.3	14.1				ug/L	392	Standard
[	Mo	98	414.0	43.1	0.1122	0.049	43.7	ug/L	7	Standard
|	Ag	107	221.0	140.0	0.0208	0.044	211.7	ug/L	55	Standard
|	Cd	111	116.0	133.3	0.0123	0.040	325.3	mg/L	67	Standard
|	Cd	114	381.0	134.0	0.0186	0.047	251.5	ug/L	219	Standard
[>	In	115	738275.9	1.8				ug/L	887392	Standard
|	Sn	118	610.7	41.5	0.0016	0.019	1215.2	ug/L	653	Standard
|	Sb	123	420.1	72.7	0.0485	0.032	65.5	ug/L	48	Standard
[	Ba	135	4603.0	14.0	1.0335	0.134	12.9	ug/L	28	Standard
[	Ce	140	365.3	111.1				ug/L	34	Standard
[>	Tb	159	1020374.5	1.8				ug/L	1226141	Standard
[	Ho	165	13.3	34.6				ug/L	14	Standard
|	Tl	203	261.0	137.8	0.0133	0.019	146.5	ug/L	9	Standard
|	Tl	205	649.0	137.1	0.0126	0.022	171.2	ug/L	20	Standard
|	Pb	206	615.0	45.8	0.0166	0.020	118.5	ug/L	419	Standard
|	Pb	207	531.3	45.8	0.0180	0.020	112.8	ug/L	338	Standard
|	Pb	208	2451.4	43.6	0.0158	0.019	121.8	ug/L	1616	Standard
	U	238	132.0	124.2	0.0076	0.009	122.3	ug/L	2	Standard
[>	Bi	209	563298.4	1.9				ug/L	641071	Standard

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Na	23	2831.9	6.2	0.1402	0.005	3.7	mg/L	412	Standard
Mg	24	135492.9	8.8	0.2189	0.014	6.6	mg/L	177	Standard
K	39	191.7	8.0	0.0475	0.008	17.0	mg/L	150	Standard
Ca	43	1.7	173.2	-0.9671	2.629	271.8	mg/L	7	Standard
Fe	54	218.8	18.8	-0.0786	0.011	13.8	mg/L	634	Standard
Fe	57	2520.2	4.5	0.0049	0.002	39.3	mg/L	2670	Standard
Sc-1	45	316387.3	3.8				mg/L	375691	Standard
Cl	35	3.7	83.3				ug/L	4	Standard
Kr	83	36.6	5.0				ug/L	39	Standard
Br	81	474.2	6.5				ug/L	639	Standard
P	31	182.5	15.4				ug/L	419	Standard
S	34	5987.0	2.3				ug/L	7420	Standard
Sr	88	40.0	21.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.128	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	83.196
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	87.868
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062720

Sample Date/Time: Friday, July 27, 2012 19:08:39

Number of Replicates: 3

Autosampler Position: 441

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10130.1	3.2	-146.5167	82.357	56.2	ug/L	11199	Standard
|	Be	9	6.7	43.3	-0.0158	0.002	10.7	ug/L	10	Standard
|	Al	27	37683.8	10.1	2.1728	0.213	9.8	ug/L	7920	Standard
[>	Sc	45	320559.8	2.1				ug/L	375691	Standard
|	Ti	47	166.0	22.3	0.0727	0.032	44.7	ug/L	70	Standard
|	V	51	9086.1	3.0	0.5692	0.002	0.4	ug/L	3172	Standard
|	Cr	52	8929.3	2.7	-0.0149	0.027	178.2	ug/L	9852	Standard
|	Cr	53	311.7	9.8	-0.1162	0.017	14.6	ug/L	518	Standard
|	Mn	55	2841.9	9.3	0.0971	0.012	12.0	ug/L	1193	Standard
|	Co	59	135.3	8.8	0.0010	0.001	136.5	ug/L	98	Standard
|	Ni	60	332.0	6.9	0.0981	0.009	9.3	ug/L	67	Standard
|	Cu	65	260.0	8.6	0.0626	0.010	15.9	ug/L	90	Standard
|	Zn	66	725.0	16.8	0.5327	0.127	23.9	ug/L	148	Standard
[>	Ge	72	287705.3	2.9				ug/L	304674	Standard
|	As	75	-4.8	252.2	0.1897	0.011	5.7	ug/L	-174	Standard
|	Se	82	29.1	22.2	0.1019	0.053	52.0	ug/L	26	Standard
[	Se-1	77	117.3	19.6	0.0225	0.252	1120.0	ug/L	133	Standard
[>	Ga	71	590.0	15.0				mg/L	630	Standard
|	Rb	85	1621.8	5.1				ug/L	12	Standard
|	Y	89	240786.8	1.6				ug/L	271719	Standard
[>	Rh	103	365.0	14.3				ug/L	392	Standard
|	Mo	98	200.8	9.1	0.0524	0.005	9.4	ug/L	7	Standard
|	Ag	107	51.0	27.5	-0.0033	0.002	58.0	ug/L	55	Standard
|	Cd	111	21.5	26.1	-0.0121	0.001	12.0	mg/L	67	Standard
|	Cd	114	75.1	7.5	-0.0094	0.001	7.0	ug/L	219	Standard
[>	In	115	730600.8	2.7				ug/L	887392	Standard
|	Sn	118	482.3	10.5	-0.0080	0.003	38.5	ug/L	653	Standard
|	Sb	123	200.0	16.7	0.0255	0.003	12.3	ug/L	48	Standard
|	Ba	135	4190.6	5.9	0.9506	0.031	3.3	ug/L	28	Standard
|	Ce	140	282.3	14.9				ug/L	34	Standard
[>	Tb	159	1023364.0	2.4				ug/L	1226141	Standard
|	Ho	165	14.3	29.0				ug/L	14	Standard
|	Tl	203	51.0	15.3	0.0019	0.000	21.4	ug/L	9	Standard
|	Tl	205	107.7	7.2	-0.0006	0.000	40.1	ug/L	20	Standard
|	Pb	206	660.0	8.3	0.0191	0.005	24.4	ug/L	419	Standard
|	Pb	207	573.3	10.6	0.0207	0.005	22.2	ug/L	338	Standard
|	Pb	208	2632.8	7.9	0.0184	0.004	22.9	ug/L	1616	Standard
	U	238	35.7	20.3	0.0021	0.000	18.8	ug/L	2	Standard
[>	Bi	209	573524.7	2.5				ug/L	641071	Standard

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Na	23	3175.3	9.2	0.1592	0.014	8.8	mg/L	412	Standard
Mg	24	145675.3	0.7	0.2325	0.005	2.1	mg/L	177	Standard
K	39	175.0	15.9	0.0299	0.023	78.4	mg/L	150	Standard
Ca	43	6.7	86.6	3.3139	5.022	151.5	mg/L	7	Standard
Fe	54	193.9	14.2	-0.0854	0.005	6.4	mg/L	634	Standard
Fe	57	2505.2	13.3	0.0041	0.004	91.2	mg/L	2670	Standard
Sc-1	45	320559.8	2.1				mg/L	375691	Standard
Cl	35	3.3	69.3				ug/L	4	Standard
Kr	83	34.9	4.3				ug/L	39	Standard
Br	81	490.8	2.9				ug/L	639	Standard
P	31	184.2	4.1				ug/L	419	Standard
S	34	6040.4	3.1				ug/L	7420	Standard
Sr	88	48.3	31.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.430	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062720

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	Cd	111		
	Cd	114		
>	In	115	82.331	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	89.463	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062720

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Method 6020 - Summary Report

Sample ID: L1207062722

Sample Date/Time: Friday, July 27, 2012 19:11:49

Number of Replicates: 3

Autosampler Position: 442

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10969.0	1.3	-499.7680	138.505	27.7	ug/L	11199	Standard
|	Be	9	18.3	31.5	-0.0090	0.004	40.6	ug/L	10	Standard
|	Al	27	278691.7	1.4	19.7251	0.535	2.7	ug/L	7920	Standard
[>	Sc	45	313353.5	2.5				ug/L	375691	Standard
|	Ti	47	710.7	2.1	0.5086	0.019	3.7	ug/L	70	Standard
|	V	51	3506.9	2.5	0.0632	0.007	11.2	ug/L	3172	Standard
|	Cr	52	8190.9	1.9	-0.0744	0.028	38.1	ug/L	9852	Standard
|	Cr	53	325.0	11.4	-0.1011	0.027	26.4	ug/L	518	Standard
|	Mn	55	110215.9	4.1	7.0283	0.193	2.7	ug/L	1193	Standard
|	Co	59	321.7	7.4	0.0199	0.002	11.4	ug/L	98	Standard
|	Ni	60	419.0	1.2	0.1349	0.004	2.8	ug/L	67	Standard
|	Cu	65	259.0	4.6	0.0649	0.003	4.9	ug/L	90	Standard
|	Zn	66	1368.4	2.2	1.1447	0.042	3.6	ug/L	148	Standard
[>	Ge	72	280171.5	2.3				ug/L	304674	Standard
|	As	75	-137.3	14.9	0.0685	0.016	23.4	ug/L	-174	Standard
|	Se	82	20.5	27.7	0.0304	0.048	158.1	ug/L	26	Standard
[	Se-1	77	114.3	6.8	0.0283	0.105	373.3	ug/L	133	Standard
[>	Ga	71	630.0	6.9				mg/L	630	Standard
|	Rb	85	7495.2	4.9				ug/L	12	Standard
|	Y	89	234572.7	2.7				ug/L	271719	Standard
[>	Rh	103	270.0	3.2				ug/L	392	Standard
|	Mo	98	51.0	24.1	0.0093	0.003	36.5	ug/L	7	Standard
|	Ag	107	43.0	2.3	-0.0044	0.000	5.2	ug/L	55	Standard
|	Cd	111	64.5	10.8	-0.0004	0.002	386.0	mg/L	67	Standard
|	Cd	114	201.3	6.3	0.0028	0.001	51.0	ug/L	219	Standard
[>	In	115	717798.6	1.6				ug/L	887392	Standard
|	Sn	118	374.3	6.7	-0.0160	0.002	10.8	ug/L	653	Standard
|	Sb	123	118.7	16.8	0.0170	0.002	12.2	ug/L	48	Standard
|	Ba	135	19273.9	3.6	4.4854	0.124	2.8	ug/L	28	Standard
|	Ce	140	1090.0	9.4				ug/L	34	Standard
[>	Tb	159	1006140.5	1.5				ug/L	1226141	Standard
|	Ho	165	44.0	12.7				ug/L	14	Standard
|	Tl	203	59.0	27.7	0.0023	0.001	36.3	ug/L	9	Standard
|	Tl	205	123.3	6.9	-0.0001	0.000	211.7	ug/L	20	Standard
|	Pb	206	402.3	4.6	0.0016	0.001	35.1	ug/L	419	Standard
|	Pb	207	343.3	10.5	0.0021	0.002	108.1	ug/L	338	Standard
|	Pb	208	1573.7	3.4	-0.0002	0.000	159.9	ug/L	1616	Standard
	U	238	49.0	8.2	0.0029	0.000	10.7	ug/L	2	Standard
[>	Bi	209	562170.6	2.9				ug/L	641071	Standard

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Na	23	1190.0	6.3	0.0372	0.005	13.3	mg/L	412	Standard
Mg	24	58245.1	2.6	0.0951	0.002	2.3	mg/L	177	Standard
K	39	826.7	3.3	0.6442	0.041	6.3	mg/L	150	Standard
Ca	43	3.3	173.2	0.4218	5.034	1193.6	mg/L	7	Standard
Fe	54	241.1	17.2	-0.0729	0.010	14.3	mg/L	634	Standard
Fe	57	2943.6	3.7	0.0110	0.002	21.4	mg/L	2670	Standard
Sc-1	45	313353.5	2.5				mg/L	375691	Standard
Cl	35	3.7	41.7				ug/L	4	Standard
Kr	83	38.2	11.0				ug/L	39	Standard
Br	81	453.3	2.7				ug/L	639	Standard
P	31	1090.9	6.9				ug/L	419	Standard
S	34	5969.5	1.6				ug/L	7420	Standard
Sr	88	55.0					ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.958	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062722

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	Cd	111		
	Cd	114		
>	In	115	80.889	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.692	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062722

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Method 6020 - Summary Report

Sample ID: L1207062724

Sample Date/Time: Friday, July 27, 2012 19:14:58

Number of Replicates: 3

Autosampler Position: 443

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11240.8	4.8	-693.7860	75.589	10.9	ug/L	11199	Standard
|	Be	9	5.0	100.0	-0.0166	0.003	17.5	ug/L	10	Standard
|	Al	27	384139.4	1.5	28.1924	0.686	2.4	ug/L	7920	Standard
[>	Sc	45	304483.2	3.6				ug/L	375691	Standard
[	Ti	47	1056.4	9.7	0.7957	0.067	8.5	ug/L	70	Standard
|	V	51	3977.4	2.6	0.1138	0.009	8.0	ug/L	3172	Standard
|	Cr	52	8173.2	2.8	-0.0615	0.014	23.0	ug/L	9852	Standard
|	Cr	53	339.2	4.7	-0.0872	0.021	24.6	ug/L	518	Standard
|	Mn	55	14441.9	3.3	0.8652	0.009	1.0	ug/L	1193	Standard
|	Co	59	138.7	1.5	0.0019	0.001	31.7	ug/L	98	Standard
|	Ni	60	194.3	5.0	0.0495	0.002	4.3	ug/L	67	Standard
|	Cu	65	198.0	17.3	0.0404	0.011	28.0	ug/L	90	Standard
|	Zn	66	846.0	6.7	0.6745	0.085	12.6	ug/L	148	Standard
[>	Ge	72	275893.0	4.1				ug/L	304674	Standard
|	As	75	-133.6	9.9	0.0700	0.008	11.3	ug/L	-174	Standard
|	Se	82	23.6	9.8	0.0628	0.020	32.0	ug/L	26	Standard
[	Se-1	77	118.0	5.9	0.1000	0.105	104.7	ug/L	133	Standard
[>	Ga	71	603.3	10.1				mg/L	630	Standard
[	Rb	85	6119.6	2.9				ug/L	12	Standard
[	Y	89	234194.3	3.7				ug/L	271719	Standard
[>	Rh	103	356.7	11.2				ug/L	392	Standard
[	Mo	98	55.4	10.1	0.0110	0.002	15.0	ug/L	7	Standard
|	Ag	107	45.0	11.1	-0.0039	0.001	27.5	ug/L	55	Standard
|	Cd	111	25.5	31.4	-0.0107	0.002	21.1	mg/L	67	Standard
|	Cd	114	79.2	5.8	-0.0087	0.000	4.7	ug/L	219	Standard
[>	In	115	703541.3	5.4				ug/L	887392	Standard
|	Sn	118	414.7	3.8	-0.0120	0.001	10.8	ug/L	653	Standard
|	Sb	123	85.7	18.2	0.0136	0.002	12.0	ug/L	48	Standard
[	Ba	135	5229.6	3.3	1.2364	0.037	3.0	ug/L	28	Standard
[	Ce	140	1451.4	3.8				ug/L	34	Standard
[>	Tb	159	988464.6	3.4				ug/L	1226141	Standard
[	Ho	165	38.0	25.1				ug/L	14	Standard
|	Tl	203	43.0	22.2	0.0015	0.000	30.8	ug/L	9	Standard
|	Tl	205	111.0	5.5	-0.0004	0.000	75.6	ug/L	20	Standard
|	Pb	206	452.3	1.7	0.0061	0.001	17.6	ug/L	419	Standard
|	Pb	207	353.3	2.3	0.0039	0.001	23.2	ug/L	338	Standard
|	Pb	208	1654.0	2.7	0.0022	0.001	54.8	ug/L	1616	Standard
	U	238	29.0	29.9	0.0018	0.001	29.6	ug/L	2	Standard
[>	Bi	209	546456.2	4.0				ug/L	641071	Standard

Sample ID: L1207062724

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Na	23	1436.7	12.8	0.0554	0.009	16.1	mg/L	412	Standard
Mg	24	27845.6	5.3	0.0468	0.001	2.0	mg/L	177	Standard
K	39	563.3	19.6	0.4117	0.096	23.4	mg/L	150	Standard
Ca	43	1.7	173.2	-1.0113	2.552	252.4	mg/L	7	Standard
Fe	54	249.4	14.6	-0.0693	0.007	10.5	mg/L	634	Standard
Fe	57	3075.3	5.8	0.0141	0.004	29.2	mg/L	2670	Standard
Sc-1	45	304483.2	3.6				mg/L	375691	Standard
Cl	35	3.7	31.5				ug/L	4	Standard
Kr	83	37.3	12.5				ug/L	39	Standard
Br	81	425.8	0.9				ug/L	639	Standard
P	31	583.3	2.9				ug/L	419	Standard
S	34	5876.1	2.1				ug/L	7420	Standard
Sr	88	41.7	38.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.553	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062724

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	Cd	111		
	Cd	114		
>	In	115	79.282	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	85.241	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062726

Sample Date/Time: Friday, July 27, 2012 19:18:08

Number of Replicates: 3

Autosampler Position: 444

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10643.7	3.4	-371.2915	48.966	13.2	ug/L	11199	Standard
|	Be	9	30.0	50.0	-0.0023	0.009	381.1	ug/L	10	Standard
|	Al	27	951676.9	3.0	68.1720	1.967	2.9	ug/L	7920	Standard
[>	Sc	45	315114.2	3.7				ug/L	375691	Standard
[	Ti	47	2100.5	4.6	1.6099	0.040	2.5	ug/L	70	Standard
|	V	51	3681.0	2.3	0.0793	0.011	13.6	ug/L	3172	Standard
|	Cr	52	8229.6	2.4	-0.0711	0.033	46.0	ug/L	9852	Standard
|	Cr	53	397.5	11.6	-0.0517	0.029	55.9	ug/L	518	Standard
|	Mn	55	56023.6	5.9	3.5255	0.074	2.1	ug/L	1193	Standard
|	Co	59	246.7	12.1	0.0123	0.002	17.9	ug/L	98	Standard
|	Ni	60	353.7	13.2	0.1091	0.013	11.6	ug/L	67	Standard
|	Cu	65	215.0	16.7	0.0463	0.014	29.2	ug/L	90	Standard
|	Zn	66	2667.9	8.2	2.3425	0.136	5.8	ug/L	148	Standard
[>	Ge	72	280648.7	4.2				ug/L	304674	Standard
|	As	75	-141.1	17.0	0.0651	0.020	30.0	ug/L	-174	Standard
|	Se	82	21.9	12.5	0.0435	0.019	44.7	ug/L	26	Standard
[	Se-1	77	125.0	9.8	0.1689	0.231	137.0	ug/L	133	Standard
[>	Ga	71	705.0	14.0				mg/L	630	Standard
[	Rb	85	4000.5	2.5				ug/L	12	Standard
[	Y	89	227226.1	3.8				ug/L	271719	Standard
[>	Rh	103	331.7	19.7				ug/L	392	Standard
[	Mo	98	42.4	80.0	0.0068	0.010	144.2	ug/L	7	Standard
|	Ag	107	58.7	35.1	-0.0020	0.003	148.9	ug/L	55	Standard
|	Cd	111	81.6	26.1	0.0044	0.005	122.7	mg/L	67	Standard
|	Cd	114	238.4	22.8	0.0065	0.005	71.0	ug/L	219	Standard
[>	In	115	709668.5	3.4				ug/L	887392	Standard
|	Sn	118	421.0	12.4	-0.0119	0.004	30.7	ug/L	653	Standard
|	Sb	123	103.0	44.3	0.0153	0.005	31.2	ug/L	48	Standard
[	Ba	135	15049.1	4.5	3.5399	0.038	1.1	ug/L	28	Standard
[	Ce	140	2832.3	13.0				ug/L	34	Standard
[>	Tb	159	998769.5	3.0				ug/L	1226141	Standard
[	Ho	165	64.0	2.7				ug/L	14	Standard
|	Tl	203	82.7	79.4	0.0036	0.003	94.8	ug/L	9	Standard
|	Tl	205	210.3	77.2	0.0020	0.004	193.2	ug/L	20	Standard
|	Pb	206	582.0	16.2	0.0149	0.006	39.7	ug/L	419	Standard
|	Pb	207	486.3	11.0	0.0148	0.003	22.5	ug/L	338	Standard
|	Pb	208	2239.4	12.2	0.0126	0.004	32.5	ug/L	1616	Standard
	U	238	81.0	55.0	0.0047	0.002	50.8	ug/L	2	Standard
[>	Bi	209	554956.8	4.4				ug/L	641071	Standard

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Na	23	1153.4	13.3	0.0343	0.007	20.6	mg/L	412	Standard
Mg	24	45407.9	1.3	0.0737	0.002	2.4	mg/L	177	Standard
K	39	416.7	18.1	0.2595	0.081	31.1	mg/L	150	Standard
Ca	43	1.7	173.2	-0.9713	2.621	269.9	mg/L	7	Standard
Fe	54	377.7	5.0	-0.0405	0.007	17.5	mg/L	634	Standard
Fe	57	4714.1	4.9	0.0349	0.004	11.1	mg/L	2670	Standard
Sc-1	45	315114.2	3.7				mg/L	375691	Standard
Cl	35	2.3	65.5				ug/L	4	Standard
Kr	83	36.2	5.5				ug/L	39	Standard
Br	81	464.2	7.2				ug/L	639	Standard
P	31	1228.4	7.2				ug/L	419	Standard
S	34	5756.9	3.0				ug/L	7420	Standard
Sr	88	53.3	10.8				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.114	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062726

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	Cd	111	
	Cd	114	
>	In	115	79.972
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	86.567
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 19:21:19

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

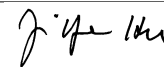
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10280.2	2.2	287.2053	42.520	14.8	ug/L	11199	Standard
|	Be	9	100277.4	0.2	48.1519	1.036	2.2	ug/L	10	Standard
|	Al	27	820914.8	1.4	49.2421	1.654	3.4	ug/L	7920	Standard
[>	Sc	45	375285.7	2.2				ug/L	375691	Standard
[	Ti	47	135620.6	0.8	94.6203	1.528	1.6	ug/L	70	Standard
|	V	51	551240.1	1.2	45.6222	1.142	2.5	ug/L	3172	Standard
|	Cr	52	452338.8	0.8	45.8743	0.712	1.6	ug/L	9852	Standard
|	Cr	53	78755.9	1.9	47.4202	1.194	2.5	ug/L	518	Standard
|	Mn	55	797676.5	1.4	45.1310	0.431	1.0	ug/L	1193	Standard
|	Co	59	502621.3	0.6	44.0142	0.606	1.4	ug/L	98	Standard
|	Ni	60	139877.4	0.6	47.3001	0.890	1.9	ug/L	67	Standard
|	Cu	65	131074.2	0.6	48.0510	0.838	1.7	ug/L	90	Standard
|	Zn	66	60916.5	0.4	49.4688	0.788	1.6	ug/L	148	Standard
[>	Ge	72	318905.5	1.3				ug/L	304674	Standard
|	As	75	58972.5	0.2	47.6887	0.542	1.1	ug/L	-174	Standard
|	Se	82	5902.0	1.4	47.3582	0.930	2.0	ug/L	26	Standard
[	Se-1	77	4394.3	0.9	48.2885	0.403	0.8	ug/L	133	Standard
[>	Ga	71	750.0	4.1				mg/L	630	Standard
|	Rb	85	1008.4	6.6				ug/L	12	Standard
[	Y	89	278835.8	0.9				ug/L	271719	Standard
[>	Rh	103	408.3	19.9				ug/L	392	Standard
[	Mo	98	405054.0	0.3	102.9797	0.604	0.6	ug/L	7	Standard
|	Ag	107	372410.5	1.0	47.9174	0.592	1.2	ug/L	55	Standard
|	Cd	111	198642.9	0.9	46.2982	0.358	0.8	mg/L	67	Standard
|	Cd	114	580649.9	1.0	48.1191	0.501	1.0	ug/L	219	Standard
[>	In	115	829783.7	0.3				ug/L	887392	Standard
|	Sn	118	685591.3	0.1	47.8877	0.178	0.4	ug/L	653	Standard
|	Sb	123	491532.4	0.5	46.5499	0.358	0.8	ug/L	48	Standard
[	Ba	135	243892.3	0.3	49.1935	0.081	0.2	ug/L	28	Standard
[	Ce	140	1015.4	5.9				ug/L	34	Standard
[>	Tb	159	1142778.7	0.2				ug/L	1226141	Standard
[	Ho	165	18.0	5.6				ug/L	14	Standard
|	Tl	203	899302.3	0.4	46.4277	0.090	0.2	ug/L	9	Standard
|	Tl	205	2152166.4	0.2	49.6257	0.254	0.5	ug/L	20	Standard
|	Pb	206	698934.5	1.0	46.9774	0.612	1.3	ug/L	419	Standard
|	Pb	207	594750.1	0.7	47.6080	0.485	1.0	ug/L	338	Standard
|	Pb	208	2757862.7	0.9	47.8681	0.530	1.1	ug/L	1616	Standard
	U	238	849917.6	0.5	46.0439	0.137	0.3	ug/L	2	Standard
[>	Bi	209	595168.0	0.4				ug/L	641071	Standard

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Na	23	112272.9	2.0	5.9460	0.151	2.5	mg/L	412	Standard
Mg	24	3520596.7	0.8	4.7995	0.143	3.0	mg/L	177	Standard
K	39	6318.0	5.5	4.8040	0.162	3.4	mg/L	150	Standard
Ca	43	8.3	34.6	3.6384	2.137	58.7	mg/L	7	Standard
Fe	54	25666.6	4.2	5.0177	0.331	6.6	mg/L	634	Standard
Fe	57	437405.2	1.8	4.9791	0.168	3.4	mg/L	2670	Standard
Sc-1	45	375285.7	2.2				mg/L	375691	Standard
Cl	35	5.3	28.6				ug/L	4	Standard
Kr	83	38.7	8.5				ug/L	39	Standard
Br	81	665.0	2.6				ug/L	639	Standard
P	31	529.2	1.5				ug/L	419	Standard
S	34	6677.3	2.1				ug/L	7420	Standard
Sr	88	53.3	42.3				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.484		
Sc	45			
Ti	47	94.620		
V	51	91.244		
Cr	52	91.749		
Cr	53			
Mn	55	90.262		
Co	59	88.028		
Ni	60	94.600		
Cu	65	96.102		
Zn	66	98.938		
Ge	72		104.671	
As	75	95.377		
Se	82	94.716		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	102.980		
Ag	107	95.835		

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	Cd	111	92.596	
	Cd	114		
>	In	115		93.508
	Sn	118	95.775	
	Sb	123	93.100	
	Ba	135	98.387	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.855	
|	Tl	205		
|	Pb	206	93.955	
|	Pb	207	95.216	
|	Pb	208	95.736	
|	U	238	92.088	
>	Bi	209		92.840
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Co	59	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 19:24:29

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10381.9	0.2	229.6210	67.410	29.4	ug/L	11199	Standard
|	Be	9	15.0	33.3	-0.0123	0.002	19.0	ug/L	10	Standard
|	Al	27	8624.1	3.9	0.0318	0.025	79.0	ug/L	7920	Standard
[>	Sc	45	371542.1	2.5				ug/L	375691	Standard
[	Ti	47	78.0	1.3	-0.0013	0.001	50.3	ug/L	70	Standard
|	V	51	2913.7	0.7	-0.0238	0.002	7.7	ug/L	3172	Standard
|	Cr	52	8971.0	0.8	-0.1006	0.008	8.3	ug/L	9852	Standard
|	Cr	53	380.8	6.6	-0.0920	0.016	17.1	ug/L	518	Standard
|	Mn	55	1307.4	2.0	-0.0062	0.002	26.2	ug/L	1193	Standard
|	Co	59	129.7	18.4	-0.0007	0.002	303.0	ug/L	98	Standard
|	Ni	60	72.3	14.8	-0.0017	0.004	211.6	ug/L	67	Standard
|	Cu	65	110.7	9.2	-0.0022	0.004	172.5	ug/L	90	Standard
|	Zn	66	774.0	5.3	0.5136	0.033	6.3	ug/L	148	Standard
[>	Ge	72	315291.4	0.2				ug/L	304674	Standard
|	As	75	-211.1	17.3	0.0221	0.030	134.9	ug/L	-174	Standard
|	Se	82	30.4	11.2	0.0905	0.028	31.0	ug/L	26	Standard
[	Se-1	77	142.3	3.9	0.1841	0.063	34.1	ug/L	133	Standard
[>	Ga	71	678.3	3.0				mg/L	630	Standard
[	Rb	85	23.3	32.7				ug/L	12	Standard
[	Y	89	270113.2	0.8				ug/L	271719	Standard
[>	Rh	103	321.7	6.5				ug/L	392	Standard
[	Mo	98	253.0	1.5	0.0590	0.001	1.4	ug/L	7	Standard
|	Ag	107	195.3	19.1	0.0145	0.005	33.6	ug/L	55	Standard
|	Cd	111	80.1	1.9	0.0009	0.000	39.0	mg/L	67	Standard
|	Cd	114	221.6	5.0	0.0019	0.001	47.5	ug/L	219	Standard
[>	In	115	826599.2	0.3				ug/L	887392	Standard
|	Sn	118	973.4	3.6	0.0221	0.003	11.8	ug/L	653	Standard
|	Sb	123	2571.6	4.3	0.2485	0.011	4.4	ug/L	48	Standard
[	Ba	135	57.7	13.2	0.0026	0.002	59.6	ug/L	28	Standard
[	Ce	140	38.7	10.8				ug/L	34	Standard
[>	Tb	159	1124136.1	0.7				ug/L	1226141	Standard
[	Ho	165	13.3	17.3				ug/L	14	Standard
|	Tl	203	69.0	36.3	0.0026	0.001	48.5	ug/L	9	Standard
|	Tl	205	189.7	33.0	0.0011	0.001	125.0	ug/L	20	Standard
|	Pb	206	453.3	3.5	0.0029	0.001	40.2	ug/L	419	Standard
|	Pb	207	387.7	3.8	0.0035	0.001	35.7	ug/L	338	Standard
|	Pb	208	1799.7	3.4	0.0015	0.001	74.6	ug/L	1616	Standard
	U	238	121.0	3.3	0.0065	0.000	3.6	ug/L	2	Standard
[>	Bi	209	607361.2	0.4				ug/L	641071	Standard

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Na	23	425.0	5.4	-0.0159	0.001	4.2	mg/L	412	Standard
Mg	24	400.0	18.2	0.0006	0.000	16.5	mg/L	177	Standard
K	39	153.3	19.1	-0.0089	0.023	260.1	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	679.0	3.5	0.0067	0.006	86.6	mg/L	634	Standard
Fe	57	2738.6	4.9	0.0023	0.001	63.2	mg/L	2670	Standard
Sc-1	45	371542.1	2.5				mg/L	375691	Standard
Cl	35	2.7	57.3				ug/L	4	Standard
Kr	83	38.4	8.7				ug/L	39	Standard
Br	81	628.3	10.2				ug/L	639	Standard
P	31	442.5	4.8				ug/L	419	Standard
S	34	6623.1	1.6				ug/L	7420	Standard
Sr	88	50.0	17.3				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.485	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	93.149
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.742
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207062728

Sample Date/Time: Friday, July 27, 2012 19:27:42

Number of Replicates: 3

Autosampler Position: 445

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10318.5	4.8	-378.7493	97.351	25.7	ug/L	11199	Standard
|	Be	9	20.0	86.6	-0.0076	0.011	140.3	ug/L	10	Standard
|	Al	27	384157.2	8.9	28.1583	2.453	8.7	ug/L	7920	Standard
[>	Sc	45	304701.1	2.4				ug/L	375691	Standard
|	Ti	47	906.4	5.5	0.6644	0.050	7.5	ug/L	70	Standard
|	V	51	3431.6	4.0	0.0562	0.017	30.0	ug/L	3172	Standard
|	Cr	52	7519.2	2.2	-0.1538	0.019	12.6	ug/L	9852	Standard
|	Cr	53	347.5	10.6	-0.0855	0.028	33.1	ug/L	518	Standard
|	Mn	55	64613.2	16.2	4.0841	0.636	15.6	ug/L	1193	Standard
|	Co	59	247.0	9.2	0.0125	0.003	20.5	ug/L	98	Standard
|	Ni	60	313.7	3.4	0.0943	0.002	1.8	ug/L	67	Standard
|	Cu	65	228.7	10.6	0.0524	0.011	21.5	ug/L	90	Standard
|	Zn	66	1263.7	14.1	1.0467	0.156	14.9	ug/L	148	Standard
[>	Ge	72	280153.1	2.1				ug/L	304674	Standard
|	As	75	-155.4	7.5	0.0518	0.008	14.8	ug/L	-174	Standard
|	Se	82	20.4	11.1	0.0304	0.025	81.6	ug/L	26	Standard
[	Se-1	77	119.0	9.1	0.0866	0.112	129.3	ug/L	133	Standard
[>	Ga	71	656.7	19.4				mg/L	630	Standard
|	Rb	85	4207.3	8.6				ug/L	12	Standard
|	Y	89	227577.3	2.9				ug/L	271719	Standard
[>	Rh	103	311.7	12.3				ug/L	392	Standard
|	Mo	98	114.9	23.4	0.0288	0.009	31.6	ug/L	7	Standard
|	Ag	107	76.3	33.2	0.0008	0.004	505.6	ug/L	55	Standard
|	Cd	111	58.1	15.9	-0.0019	0.003	162.6	mg/L	67	Standard
|	Cd	114	184.0	13.9	0.0015	0.003	201.6	ug/L	219	Standard
[>	In	115	707240.9	2.9				ug/L	887392	Standard
|	Sn	118	446.3	8.7	-0.0096	0.004	44.7	ug/L	653	Standard
|	Sb	123	345.8	14.9	0.0423	0.005	11.1	ug/L	48	Standard
|	Ba	135	11818.7	16.3	2.7830	0.392	14.1	ug/L	28	Standard
|	Ce	140	952.7	21.3				ug/L	34	Standard
[>	Tb	159	1000208.6	1.4				ug/L	1226141	Standard
|	Ho	165	47.3	3.2				ug/L	14	Standard
|	Tl	203	124.0	45.0	0.0061	0.003	53.8	ug/L	9	Standard
|	Tl	205	260.0	57.3	0.0034	0.004	115.0	ug/L	20	Standard
|	Pb	206	454.7	16.8	0.0061	0.006	103.0	ug/L	419	Standard
|	Pb	207	395.7	19.9	0.0074	0.008	101.7	ug/L	338	Standard
|	Pb	208	1802.0	15.3	0.0048	0.006	122.6	ug/L	1616	Standard
	U	238	109.7	66.4	0.0066	0.004	67.7	ug/L	2	Standard
[>	Bi	209	550341.0	2.3				ug/L	641071	Standard

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Na	23	1263.4	11.5	0.0441	0.008	18.8	mg/L	412	Standard
Mg	24	39804.1	7.7	0.0668	0.005	7.7	mg/L	177	Standard
K	39	438.3	6.9	0.2925	0.039	13.4	mg/L	150	Standard
Ca	43	1.7	173.2	-0.9396	2.676	284.8	mg/L	7	Standard
Fe	54	248.0	5.4	-0.0696	0.002	3.6	mg/L	634	Standard
Fe	57	2933.6	2.1	0.0120	0.001	11.4	mg/L	2670	Standard
Sc-1	45	304701.1	2.4				mg/L	375691	Standard
Cl	35	3.3	75.5				ug/L	4	Standard
Kr	83	37.7	9.3				ug/L	39	Standard
Br	81	460.8	5.5				ug/L	639	Standard
P	31	772.5	7.4				ug/L	419	Standard
S	34	5718.6	0.5				ug/L	7420	Standard
Sr	88	30.0	16.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.952	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	79.699	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	85.847	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062728

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Method 6020 - Summary Report

Sample ID: L1207062730

Sample Date/Time: Friday, July 27, 2012 19:30:51

Number of Replicates: 3

Autosampler Position: 446

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10897.3	4.9	-562.3424	64.009	11.4	ug/L	11199	Standard
|	Be	9	18.3	56.8	-0.0086	0.007	77.3	ug/L	10	Standard
|	Al	27	2742193.5	11.9	203.9419	29.499	14.5	ug/L	7920	Standard
[>	Sc	45	305728.1	3.7				ug/L	375691	Standard
[	Ti	47	4503.7	8.2	3.5404	0.321	9.1	ug/L	70	Standard
|	V	51	4933.8	4.3	0.2007	0.025	12.5	ug/L	3172	Standard
|	Cr	52	9786.5	2.2	0.1193	0.039	32.4	ug/L	9852	Standard
|	Cr	53	641.7	5.8	0.1191	0.018	14.8	ug/L	518	Standard
|	Mn	55	31497.0	11.4	1.9581	0.199	10.2	ug/L	1193	Standard
|	Co	59	302.7	11.3	0.0182	0.004	22.8	ug/L	98	Standard
|	Ni	60	542.3	1.3	0.1834	0.007	3.8	ug/L	67	Standard
|	Cu	65	294.7	8.7	0.0806	0.013	16.7	ug/L	90	Standard
|	Zn	66	2581.9	9.1	2.2793	0.207	9.1	ug/L	148	Standard
[>	Ge	72	278913.8	2.5				ug/L	304674	Standard
|	As	75	-111.7	13.7	0.0914	0.012	13.4	ug/L	-174	Standard
|	Se	82	22.8	18.2	0.0533	0.044	82.3	ug/L	26	Standard
[	Se-1	77	119.0	10.5	0.0980	0.201	205.5	ug/L	133	Standard
[>	Ga	71	860.0	3.1				mg/L	630	Standard
[	Rb	85	4052.2	6.2				ug/L	12	Standard
[	Y	89	229170.9	2.6				ug/L	271719	Standard
[>	Rh	103	315.0	15.6				ug/L	392	Standard
[	Mo	98	128.7	39.4	0.0330	0.017	51.7	ug/L	7	Standard
|	Ag	107	94.3	57.5	0.0036	0.009	246.6	ug/L	55	Standard
|	Cd	111	72.4	43.2	0.0021	0.010	447.6	mg/L	67	Standard
|	Cd	114	231.4	42.0	0.0062	0.011	172.3	ug/L	219	Standard
[>	In	115	711608.7	4.4				ug/L	887392	Standard
|	Sn	118	507.0	10.8	-0.0047	0.006	135.4	ug/L	653	Standard
|	Sb	123	222.5	10.0	0.0287	0.004	12.4	ug/L	48	Standard
[	Ba	135	9963.3	9.8	2.3322	0.154	6.6	ug/L	28	Standard
[	Ce	140	7447.8	9.1				ug/L	34	Standard
[>	Tb	159	1002348.7	3.3				ug/L	1226141	Standard
[	Ho	165	125.7	24.6				ug/L	14	Standard
|	Tl	203	122.0	85.9	0.0060	0.006	102.7	ug/L	9	Standard
|	Tl	205	284.7	70.4	0.0040	0.005	132.9	ug/L	20	Standard
|	Pb	206	863.7	11.1	0.0355	0.009	25.3	ug/L	419	Standard
|	Pb	207	706.0	14.8	0.0339	0.011	31.8	ug/L	338	Standard
|	Pb	208	3292.5	13.4	0.0324	0.010	32.0	ug/L	1616	Standard
	U	238	137.7	44.7	0.0082	0.004	47.8	ug/L	2	Standard
[>	Bi	209	555143.6	3.9				ug/L	641071	Standard

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Na	23	1281.7	5.7	0.0451	0.002	4.5	mg/L	412	Standard
Mg	24	25867.1	3.2	0.0433	0.000	0.6	mg/L	177	Standard
K	39	468.3	13.6	0.3198	0.065	20.4	mg/L	150	Standard
Ca	43	5.0	0.0	2.0253	0.170	8.4	mg/L	7	Standard
Fe	54	580.4	11.1	0.0124	0.019	157.7	mg/L	634	Standard
Fe	57	7548.6	9.3	0.0769	0.012	15.6	mg/L	2670	Standard
Sc-1	45	305728.1	3.7				mg/L	375691	Standard
Cl	35	4.3	66.6				ug/L	4	Standard
Kr	83	35.2	6.8				ug/L	39	Standard
Br	81	426.7	2.1				ug/L	639	Standard
P	31	1041.7	5.7				ug/L	419	Standard
S	34	5611.9	1.1				ug/L	7420	Standard
Sr	88	48.3	43.1				ug/L	35	Standard

QC Calculated Values

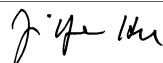
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.545	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062730

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	Cd	111		
	Cd	114		
>	In	115	80.191	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.596	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062730

Report Date/Time: Friday, July 27, 2012 19:33:21

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Method 6020 - Summary Report

Sample ID: L1207062732

Sample Date/Time: Friday, July 27, 2012 19:34:00

Number of Replicates: 3

Autosampler Position: 447

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10598.7	3.8	-348.6193	43.176	12.4	ug/L	11199	Standard
|	Be	9	13.3	57.3	-0.0119	0.004	36.9	ug/L	10	Standard
|	Al	27	2782356.6	2.9	199.8487	6.672	3.3	ug/L	7920	Standard
[>	Sc	45	315850.3	4.2				ug/L	375691	Standard
|	Ti	47	4463.3	1.5	3.5018	0.067	1.9	ug/L	70	Standard
|	V	51	6741.0	2.7	0.3717	0.016	4.3	ug/L	3172	Standard
|	Cr	52	14616.4	3.1	0.6891	0.025	3.6	ug/L	9852	Standard
|	Cr	53	1402.6	5.4	0.6447	0.022	3.4	ug/L	518	Standard
|	Mn	55	22996.8	4.3	1.4068	0.038	2.7	ug/L	1193	Standard
|	Co	59	330.0	2.6	0.0208	0.002	7.4	ug/L	98	Standard
|	Ni	60	629.7	2.2	0.2169	0.012	5.7	ug/L	67	Standard
|	Cu	65	408.3	9.1	0.1277	0.012	9.0	ug/L	90	Standard
|	Zn	66	1917.5	2.1	1.6592	0.058	3.5	ug/L	148	Standard
[>	Ge	72	279348.9	3.4				ug/L	304674	Standard
|	As	75	-79.7	24.6	0.1205	0.021	17.2	ug/L	-174	Standard
|	Se	82	26.5	28.6	0.0856	0.064	74.7	ug/L	26	Standard
[	Se-1	77	114.7	3.5	0.0363	0.006	17.1	ug/L	133	Standard
[>	Ga	71	803.4	9.2				mg/L	630	Standard
|	Rb	85	4824.1	3.8				ug/L	12	Standard
|	Y	89	232407.2	3.8				ug/L	271719	Standard
[>	Rh	103	333.3	8.3				ug/L	392	Standard
|	Mo	98	204.4	12.9	0.0543	0.007	12.8	ug/L	7	Standard
|	Ag	107	54.7	5.3	-0.0027	0.000	16.5	ug/L	55	Standard
|	Cd	111	28.2	14.3	-0.0102	0.001	11.9	mg/L	67	Standard
|	Cd	114	93.4	8.8	-0.0076	0.001	12.3	ug/L	219	Standard
[>	In	115	719160.6	2.0				ug/L	887392	Standard
|	Sn	118	470.0	3.3	-0.0083	0.001	13.6	ug/L	653	Standard
|	Sb	123	176.5	22.9	0.0232	0.004	17.4	ug/L	48	Standard
|	Ba	135	4058.9	4.4	0.9354	0.023	2.5	ug/L	28	Standard
|	Ce	140	5425.0	3.7				ug/L	34	Standard
[>	Tb	159	1005615.0	0.3				ug/L	1226141	Standard
|	Ho	165	179.0	15.0				ug/L	14	Standard
|	Tl	203	70.7	18.8	0.0030	0.001	22.9	ug/L	9	Standard
|	Tl	205	155.0	10.7	0.0006	0.000	51.8	ug/L	20	Standard
|	Pb	206	874.7	1.1	0.0355	0.001	2.1	ug/L	419	Standard
|	Pb	207	707.3	3.1	0.0333	0.001	2.4	ug/L	338	Standard
|	Pb	208	3344.8	1.7	0.0326	0.001	3.1	ug/L	1616	Standard
	U	238	120.3	10.5	0.0070	0.001	8.4	ug/L	2	Standard
[>	Bi	209	560148.3	2.2				ug/L	641071	Standard

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Na	23	900.0	8.9	0.0183	0.006	31.0	mg/L	412	Standard
Mg	24	23733.6	2.5	0.0385	0.002	5.7	mg/L	177	Standard
K	39	390.0	8.4	0.2326	0.034	14.7	mg/L	150	Standard
Ca	43	0.0		-2.4848	0.000	0.0	mg/L	7	Standard
Fe	54	531.4	13.1	-0.0046	0.012	251.9	mg/L	634	Standard
Fe	57	7233.4	2.4	0.0692	0.007	9.5	mg/L	2670	Standard
Sc-1	45	315850.3	4.2				mg/L	375691	Standard
Cl	35	4.0	25.0				ug/L	4	Standard
Kr	83	38.1	3.9				ug/L	39	Standard
Br	81	510.0	8.3				ug/L	639	Standard
P	31	735.0	5.4				ug/L	419	Standard
S	34	5622.7	1.4				ug/L	7420	Standard
Sr	88	40.0	25.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.688	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062732

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	Cd	111		
	Cd	114		
>	In	115	81.042	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.377	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062732

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Method 6020 - Summary Report

Sample ID: L1207062734

Sample Date/Time: Friday, July 27, 2012 19:37:08

Number of Replicates: 3

Autosampler Position: 448

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11522.7	2.7	-567.9666	38.562	6.8	ug/L	11199	Standard
|	Be	9	31.7	9.1	-0.0019	0.002	104.2	ug/L	10	Standard
|	Al	27	2119761.4	16.0	148.5329	21.849	14.7	ug/L	7920	Standard
[>	Sc	45	322887.7	2.9				ug/L	375691	Standard
[	Ti	47	3815.1	6.6	2.9360	0.237	8.1	ug/L	70	Standard
|	V	51	4491.7	2.6	0.1508	0.012	8.1	ug/L	3172	Standard
|	Cr	52	9206.1	2.5	0.0306	0.034	112.5	ug/L	9852	Standard
|	Cr	53	535.0	8.1	0.0387	0.030	76.7	ug/L	518	Standard
|	Mn	55	162966.8	12.4	10.2766	1.091	10.6	ug/L	1193	Standard
|	Co	59	736.4	7.5	0.0602	0.004	6.8	ug/L	98	Standard
|	Ni	60	762.4	0.5	0.2631	0.004	1.7	ug/L	67	Standard
|	Cu	65	274.7	10.1	0.0701	0.013	19.2	ug/L	90	Standard
|	Zn	66	3028.6	10.5	2.6413	0.238	9.0	ug/L	148	Standard
[>	Ge	72	284042.0	1.9				ug/L	304674	Standard
|	As	75	-144.0	18.4	0.0642	0.022	33.6	ug/L	-174	Standard
|	Se	82	19.8	6.3	0.0220	0.013	60.3	ug/L	26	Standard
[	Se-1	77	127.0	12.3	0.1687	0.198	117.3	ug/L	133	Standard
[>	Ga	71	701.7	3.7				mg/L	630	Standard
[	Rb	85	5225.9	7.1				ug/L	12	Standard
[	Y	89	234014.1	2.6				ug/L	271719	Standard
[>	Rh	103	270.0	13.4				ug/L	392	Standard
[	Mo	98	41.1	7.8	0.0064	0.001	11.0	ug/L	7	Standard
|	Ag	107	52.3	27.0	-0.0030	0.002	75.4	ug/L	55	Standard
|	Cd	111	187.2	22.0	0.0324	0.010	31.8	mg/L	67	Standard
|	Cd	114	564.7	17.4	0.0373	0.008	22.0	ug/L	219	Standard
[>	In	115	720409.3	2.7				ug/L	887392	Standard
|	Sn	118	460.3	4.3	-0.0092	0.002	17.3	ug/L	653	Standard
|	Sb	123	121.0	6.2	0.0172	0.001	3.7	ug/L	48	Standard
[	Ba	135	22197.1	12.4	5.1408	0.514	10.0	ug/L	28	Standard
[	Ce	140	7979.8	12.9				ug/L	34	Standard
[>	Tb	159	1000750.7	1.5				ug/L	1226141	Standard
[	Ho	165	123.3	14.2				ug/L	14	Standard
|	Tl	203	51.3	7.4	0.0020	0.000	15.0	ug/L	9	Standard
|	Tl	205	133.3	9.4	0.0001	0.000	305.7	ug/L	20	Standard
|	Pb	206	769.4	1.6	0.0283	0.003	11.4	ug/L	419	Standard
|	Pb	207	643.7	7.5	0.0283	0.007	23.0	ug/L	338	Standard
|	Pb	208	2989.8	3.8	0.0264	0.004	16.6	ug/L	1616	Standard
	U	238	132.0	5.7	0.0077	0.000	2.7	ug/L	2	Standard
[>	Bi	209	557539.8	4.1				ug/L	641071	Standard

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Na	23	1473.4	2.6	0.0526	0.005	9.3	mg/L	412	Standard
Mg	24	54070.5	11.4	0.0857	0.011	12.3	mg/L	177	Standard
K	39	405.0	13.4	0.2382	0.053	22.2	mg/L	150	Standard
Ca	43	3.3	86.6	0.3395	2.448	721.1	mg/L	7	Standard
Fe	54	520.8	26.5	-0.0100	0.029	290.7	mg/L	634	Standard
Fe	57	7395.1	2.0	0.0690	0.001	1.8	mg/L	2670	Standard
Sc-1	45	322887.7	2.9				mg/L	375691	Standard
Cl	35	3.3	34.6				ug/L	4	Standard
Kr	83	36.1	11.7				ug/L	39	Standard
Br	81	470.8	6.7				ug/L	639	Standard
P	31	865.9	10.3				ug/L	419	Standard
S	34	5566.0	2.6				ug/L	7420	Standard
Sr	88	43.3	29.0				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.228	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	81.183	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.970	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207062736

Sample Date/Time: Friday, July 27, 2012 19:40:18

Number of Replicates: 3

Autosampler Position: 449

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10895.6	2.2	-526.6432	99.859	19.0	ug/L	11199	Standard
|	Be	9	66.7	82.3	0.0190	0.031	163.2	ug/L	10	Standard
|	Al	27	625978.1	1.6	45.5927	1.649	3.6	ug/L	7920	Standard
[>	Sc	45	308892.3	3.2				ug/L	375691	Standard
[	Ti	47	1159.0	5.5	0.8664	0.025	2.9	ug/L	70	Standard
|	V	51	3430.0	5.6	0.0565	0.009	15.1	ug/L	3172	Standard
|	Cr	52	7961.8	1.3	-0.0991	0.019	19.1	ug/L	9852	Standard
|	Cr	53	341.7	12.4	-0.0896	0.022	24.5	ug/L	518	Standard
|	Mn	55	101107.1	3.1	6.4579	0.020	0.3	ug/L	1193	Standard
|	Co	59	453.0	25.6	0.0330	0.010	31.8	ug/L	98	Standard
|	Ni	60	425.3	14.2	0.1374	0.019	13.6	ug/L	67	Standard
|	Cu	65	210.7	13.5	0.0449	0.010	23.3	ug/L	90	Standard
|	Zn	66	1553.4	1.0	1.3203	0.054	4.1	ug/L	148	Standard
[>	Ge	72	279480.1	3.2				ug/L	304674	Standard
|	As	75	-150.0	21.2	0.0557	0.034	60.9	ug/L	-174	Standard
|	Se	82	18.5	29.6	0.0121	0.046	382.0	ug/L	26	Standard
[	Se-1	77	125.3	16.8	0.1787	0.309	172.9	ug/L	133	Standard
[>	Ga	71	685.0	8.4				mg/L	630	Standard
[	Rb	85	3232.0	4.4				ug/L	12	Standard
[	Y	89	231860.4	5.2				ug/L	271719	Standard
[>	Rh	103	338.3	16.5				ug/L	392	Standard
[	Mo	98	57.8	66.5	0.0114	0.011	98.0	ug/L	7	Standard
|	Ag	107	67.7	39.4	-0.0007	0.004	586.2	ug/L	55	Standard
|	Cd	111	96.9	22.9	0.0085	0.006	66.5	mg/L	67	Standard
|	Cd	114	312.9	17.5	0.0137	0.005	36.1	ug/L	219	Standard
[>	In	115	711889.7	2.8				ug/L	887392	Standard
|	Sn	118	437.7	9.7	-0.0106	0.003	25.6	ug/L	653	Standard
|	Sb	123	120.9	33.9	0.0173	0.004	24.8	ug/L	48	Standard
[	Ba	135	22131.8	3.6	5.1945	0.043	0.8	ug/L	28	Standard
[	Ce	140	1941.8	4.3				ug/L	34	Standard
[>	Tb	159	992708.7	2.2				ug/L	1226141	Standard
[	Ho	165	55.7	21.7				ug/L	14	Standard
|	Tl	203	125.7	99.0	0.0060	0.007	111.8	ug/L	9	Standard
|	Tl	205	247.0	96.8	0.0029	0.006	200.4	ug/L	20	Standard
|	Pb	206	521.3	19.3	0.0104	0.006	62.2	ug/L	419	Standard
|	Pb	207	447.0	22.3	0.0113	0.008	69.2	ug/L	338	Standard
|	Pb	208	2058.7	22.3	0.0091	0.008	86.5	ug/L	1616	Standard
	U	238	180.7	108.1	0.0104	0.011	105.8	ug/L	2	Standard
[>	Bi	209	556271.1	2.5				ug/L	641071	Standard

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Na	23	1380.1	7.1	0.0507	0.007	13.3	mg/L	412	Standard
Mg	24	40497.4	3.5	0.0671	0.001	2.0	mg/L	177	Standard
K	39	476.7	10.0	0.3227	0.045	13.9	mg/L	150	Standard
Ca	43	3.3	86.6	0.5133	2.600	506.5	mg/L	7	Standard
Fe	54	291.3	5.6	-0.0598	0.005	9.0	mg/L	634	Standard
Fe	57	3745.5	2.0	0.0228	0.003	11.9	mg/L	2670	Standard
Sc-1	45	308892.3	3.2				mg/L	375691	Standard
Cl	35	2.3	24.7				ug/L	4	Standard
Kr	83	37.9	5.7				ug/L	39	Standard
Br	81	493.3	4.6				ug/L	639	Standard
P	31	855.0	2.5				ug/L	419	Standard
S	34	5572.7	0.7				ug/L	7420	Standard
Sr	88	51.7	43.6				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.731	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062736

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	Cd	111		
	Cd	114		
>	In	115	80.223	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.772	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062736

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Method 6020 - Summary Report

Sample ID: L1207062738

Sample Date/Time: Friday, July 27, 2012 19:43:27

Number of Replicates: 3

Autosampler Position: 450

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10381.9	2.8	-360.2253	54.433	15.1	ug/L	11199	Standard
|	Be	9	20.0	43.3	-0.0080	0.005	60.0	ug/L	10	Standard
|	Al	27	1851926.4	1.6	136.1135	5.597	4.1	ug/L	7920	Standard
[>	Sc	45	308393.1	3.7				ug/L	375691	Standard
|	Ti	47	3610.1	3.4	2.8301	0.027	1.0	ug/L	70	Standard
|	V	51	4202.2	2.9	0.1316	0.005	3.9	ug/L	3172	Standard
|	Cr	52	8654.1	2.8	-0.0134	0.013	100.3	ug/L	9852	Standard
|	Cr	53	408.3	2.5	-0.0419	0.005	12.8	ug/L	518	Standard
|	Mn	55	146743.2	3.8	9.4448	0.062	0.7	ug/L	1193	Standard
|	Co	59	332.0	5.0	0.0211	0.001	3.0	ug/L	98	Standard
|	Ni	60	508.3	3.2	0.1706	0.008	4.6	ug/L	67	Standard
|	Cu	65	252.0	5.1	0.0629	0.009	14.8	ug/L	90	Standard
|	Zn	66	1900.8	3.5	1.6493	0.065	4.0	ug/L	148	Standard
[>	Ge	72	278466.1	4.1				ug/L	304674	Standard
|	As	75	-121.6	8.8	0.0821	0.006	7.5	ug/L	-174	Standard
|	Se	82	19.4	13.4	0.0225	0.031	136.3	ug/L	26	Standard
[	Se-1	77	115.3	2.6	0.0517	0.082	158.7	ug/L	133	Standard
[>	Ga	71	773.4	5.4				mg/L	630	Standard
|	Rb	85	3210.3	2.1				ug/L	12	Standard
|	Y	89	235952.0	2.4				ug/L	271719	Standard
[>	Rh	103	388.3	12.0				ug/L	392	Standard
|	Mo	98	44.7	16.4	0.0075	0.002	23.5	ug/L	7	Standard
|	Ag	107	49.0	9.4	-0.0035	0.001	16.8	ug/L	55	Standard
|	Cd	111	42.2	13.5	-0.0064	0.002	23.9	mg/L	67	Standard
|	Cd	114	115.2	8.3	-0.0054	0.001	11.7	ug/L	219	Standard
[>	In	115	715640.3	3.1				ug/L	887392	Standard
|	Sn	118	489.3	4.0	-0.0066	0.001	13.7	ug/L	653	Standard
|	Sb	123	96.0	13.4	0.0145	0.001	8.4	ug/L	48	Standard
|	Ba	135	14939.0	4.6	3.4843	0.054	1.5	ug/L	28	Standard
|	Ce	140	5251.2	7.5				ug/L	34	Standard
[>	Tb	159	1001783.0	2.0				ug/L	1226141	Standard
|	Ho	165	117.3	3.8				ug/L	14	Standard
|	Tl	203	47.3	4.9	0.0018	0.000	11.9	ug/L	9	Standard
|	Tl	205	114.0	11.4	-0.0003	0.000	74.7	ug/L	20	Standard
|	Pb	206	689.3	2.3	0.0229	0.003	11.4	ug/L	419	Standard
|	Pb	207	541.3	3.1	0.0197	0.003	13.1	ug/L	338	Standard
|	Pb	208	2676.8	2.8	0.0209	0.003	13.6	ug/L	1616	Standard
	U	238	72.7	19.0	0.0043	0.001	16.2	ug/L	2	Standard
[>	Bi	209	553908.7	3.0				ug/L	641071	Standard

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Na	23	1045.0	4.3	0.0290	0.001	2.9	mg/L	412	Standard
Mg	24	32282.8	7.1	0.0535	0.003	5.0	mg/L	177	Standard
K	39	450.0	7.8	0.2975	0.019	6.4	mg/L	150	Standard
Ca	43	3.3	86.6	0.4389	2.533	577.2	mg/L	7	Standard
Fe	54	542.7	11.1	0.0015	0.014	902.5	mg/L	634	Standard
Fe	57	6623.1	2.4	0.0630	0.005	8.1	mg/L	2670	Standard
Sc-1	45	308393.1	3.7				mg/L	375691	Standard
Cl	35	3.0	66.7				ug/L	4	Standard
Kr	83	37.9	10.6				ug/L	39	Standard
Br	81	485.8	2.9				ug/L	639	Standard
P	31	803.4	3.9				ug/L	419	Standard
S	34	5368.5	2.9				ug/L	7420	Standard
Sr	88	40.0	37.5				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.398	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062738

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	Cd	111		
	Cd	114		
>	In	115	80.645	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.404	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062738

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Method 6020 - Summary Report

Sample ID: L1207062740

Sample Date/Time: Friday, July 27, 2012 19:46:37

Number of Replicates: 3

Autosampler Position: 451

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9251.2	2.9	23.1081	67.229	290.9	ug/L	11199	Standard
|	Be	9	13.3	21.7	-0.0118	0.001	12.2	ug/L	10	Standard
|	Al	27	498776.1	13.3	36.2620	5.338	14.7	ug/L	7920	Standard
[>	Sc	45	308915.0	3.6				ug/L	375691	Standard
|	Ti	47	1008.4	7.6	0.7483	0.080	10.7	ug/L	70	Standard
|	V	51	6676.8	4.4	0.3659	0.043	11.8	ug/L	3172	Standard
|	Cr	52	8523.4	1.8	-0.0318	0.049	155.0	ug/L	9852	Standard
|	Cr	53	391.7	16.5	-0.0535	0.052	97.1	ug/L	518	Standard
|	Mn	55	8495.4	9.6	0.4675	0.035	7.4	ug/L	1193	Standard
|	Co	59	187.3	19.0	0.0065	0.003	46.0	ug/L	98	Standard
|	Ni	60	367.3	9.6	0.1154	0.014	12.3	ug/L	67	Standard
|	Cu	65	403.0	4.7	0.1256	0.009	7.1	ug/L	90	Standard
|	Zn	66	1083.7	15.8	0.8810	0.133	15.0	ug/L	148	Standard
[>	Ge	72	279457.9	3.4				ug/L	304674	Standard
|	As	75	-145.0	21.4	0.0615	0.024	39.8	ug/L	-174	Standard
|	Se	82	23.8	20.5	0.0632	0.053	83.3	ug/L	26	Standard
[	Se-1	77	116.0	5.7	0.0545	0.104	191.7	ug/L	133	Standard
[>	Ga	71	675.0	15.3				mg/L	630	Standard
|	Rb	85	1793.4	3.2				ug/L	12	Standard
|	Y	89	234476.1	2.5				ug/L	271719	Standard
[>	Rh	103	326.7	7.6				ug/L	392	Standard
|	Mo	98	193.9	3.6	0.0520	0.001	2.3	ug/L	7	Standard
|	Ag	107	45.3	18.5	-0.0039	0.001	35.1	ug/L	55	Standard
|	Cd	111	31.5	15.8	-0.0092	0.001	13.3	mg/L	67	Standard
|	Cd	114	96.6	17.2	-0.0071	0.002	21.6	ug/L	219	Standard
[>	In	115	710506.7	1.7				ug/L	887392	Standard
|	Sn	118	412.3	3.7	-0.0126	0.001	5.4	ug/L	653	Standard
|	Sb	123	106.3	3.8	0.0158	0.001	3.7	ug/L	48	Standard
|	Ba	135	2229.2	17.2	0.5157	0.086	16.6	ug/L	28	Standard
|	Ce	140	2020.1	28.9				ug/L	34	Standard
[>	Tb	159	994085.7	2.3				ug/L	1226141	Standard
|	Ho	165	49.7	8.1				ug/L	14	Standard
|	Tl	203	55.7	12.2	0.0022	0.000	13.0	ug/L	9	Standard
|	Tl	205	109.7	6.1	-0.0004	0.000	26.3	ug/L	20	Standard
|	Pb	206	477.0	3.8	0.0074	0.002	31.2	ug/L	419	Standard
|	Pb	207	387.7	3.3	0.0063	0.001	20.7	ug/L	338	Standard
|	Pb	208	1789.7	2.4	0.0042	0.001	33.7	ug/L	1616	Standard
	U	238	48.3	35.2	0.0029	0.001	33.6	ug/L	2	Standard
[>	Bi	209	555498.5	3.2				ug/L	641071	Standard

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Na	23	815.0	9.1	0.0140	0.004	31.5	mg/L	412	Standard
Mg	24	12952.3	12.9	0.0214	0.002	11.6	mg/L	177	Standard
K	39	408.3	15.3	0.2575	0.055	21.5	mg/L	150	Standard
Ca	43	1.7	173.2	-1.0321	2.516	243.8	mg/L	7	Standard
Fe	54	249.3	8.9	-0.0699	0.007	10.7	mg/L	634	Standard
Fe	57	3180.3	4.8	0.0149	0.003	19.2	mg/L	2670	Standard
Sc-1	45	308915.0	3.6				mg/L	375691	Standard
Cl	35	3.0	0.0				ug/L	4	Standard
Kr	83	35.7	15.4				ug/L	39	Standard
Br	81	494.2	6.4				ug/L	639	Standard
P	31	875.0	7.1				ug/L	419	Standard
S	34	5586.0	2.3				ug/L	7420	Standard
Sr	88	30.0	16.7				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.724	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062740

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	Cd	111		
	Cd	114		
>	In	115	80.067	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	86.652	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, July 27, 2012 19:49:49

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10413.6	2.2	241.5817	66.655	27.6	ug/L	11199	Standard
|	Be	9	96743.0	2.9	46.5935	1.612	3.5	ug/L	10	Standard
|	Al	27	813726.4	1.6	48.9515	1.478	3.0	ug/L	7920	Standard
[>	Sc	45	374114.7	1.5				ug/L	375691	Standard
[	Ti	47	136670.3	0.1	93.9665	1.020	1.1	ug/L	70	Standard
|	V	51	553290.8	0.3	45.1184	0.338	0.8	ug/L	3172	Standard
|	Cr	52	454372.7	0.3	45.3999	0.354	0.8	ug/L	9852	Standard
|	Cr	53	78073.2	1.5	46.3220	1.185	2.6	ug/L	518	Standard
|	Mn	55	802939.0	0.7	44.7706	0.311	0.7	ug/L	1193	Standard
|	Co	59	511479.2	0.7	44.1413	0.735	1.7	ug/L	98	Standard
|	Ni	60	140748.4	0.4	46.9020	0.661	1.4	ug/L	67	Standard
|	Cu	65	132147.8	0.5	47.7401	0.669	1.4	ug/L	90	Standard
|	Zn	66	61023.3	0.5	48.8331	0.579	1.2	ug/L	148	Standard
[>	Ge	72	323592.2	1.0				ug/L	304674	Standard
|	As	75	59803.8	0.8	47.6611	0.792	1.7	ug/L	-174	Standard
|	Se	82	5966.9	0.6	47.1809	0.240	0.5	ug/L	26	Standard
[	Se-1	77	4454.0	2.3	48.2383	1.436	3.0	ug/L	133	Standard
[>	Ga	71	713.4	13.9				mg/L	630	Standard
[	Rb	85	916.7	11.6				ug/L	12	Standard
[	Y	89	280088.8	1.3				ug/L	271719	Standard
[>	Rh	103	425.0	15.0				ug/L	392	Standard
[	Mo	98	414126.1	0.4	106.1033	1.000	0.9	ug/L	7	Standard
|	Ag	107	374314.5	0.9	48.5359	0.646	1.3	ug/L	55	Standard
|	Cd	111	198304.0	1.0	46.5763	0.212	0.5	mg/L	67	Standard
|	Cd	114	579926.3	0.7	48.4306	0.136	0.3	ug/L	219	Standard
[>	In	115	823415.4	0.6				ug/L	887392	Standard
|	Sn	118	680119.6	0.3	47.8730	0.142	0.3	ug/L	653	Standard
|	Sb	123	495156.2	0.9	47.2545	0.153	0.3	ug/L	48	Standard
[	Ba	135	245347.8	0.1	49.8710	0.303	0.6	ug/L	28	Standard
[	Ce	140	1001.0	3.2				ug/L	34	Standard
[>	Tb	159	1137853.2	0.5				ug/L	1226141	Standard
[	Ho	165	25.7	22.5				ug/L	14	Standard
|	Tl	203	902872.8	1.0	46.3536	0.717	1.5	ug/L	9	Standard
|	Tl	205	2155225.2	0.7	49.4195	0.619	1.3	ug/L	20	Standard
|	Pb	206	703728.2	0.2	47.0346	0.303	0.6	ug/L	419	Standard
|	Pb	207	597062.3	0.2	47.5261	0.435	0.9	ug/L	338	Standard
|	Pb	208	2765056.6	0.3	47.7253	0.533	1.1	ug/L	1616	Standard
	U	238	842386.3	0.7	45.3818	0.495	1.1	ug/L	2	Standard
[>	Bi	209	598527.3	0.8				ug/L	641071	Standard

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Na	23	112103.2	0.7	5.9554	0.125	2.1	mg/L	412	Standard
Mg	24	3580910.3	1.1	4.8955	0.090	1.8	mg/L	177	Standard
K	39	6318.0	1.3	4.8228	0.120	2.5	mg/L	150	Standard
Ca	43	11.7	24.7	6.1189	2.201	36.0	mg/L	7	Standard
Fe	54	26247.1	2.1	5.1455	0.069	1.3	mg/L	634	Standard
Fe	57	444715.4	2.8	5.0770	0.154	3.0	mg/L	2670	Standard
Sc-1	45	374114.7	1.5				mg/L	375691	Standard
Cl	35	5.7	71.3				ug/L	4	Standard
Kr	83	44.8	7.5				ug/L	39	Standard
Br	81	699.2	3.0				ug/L	639	Standard
P	31	475.8	9.5				ug/L	419	Standard
S	34	6663.1	3.4				ug/L	7420	Standard
Sr	88	43.3	29.0				ug/L	35	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.903		
Sc	45			
Ti	47	93.966		
V	51	90.237		
Cr	52	90.800		
Cr	53			
Mn	55	89.541		
Co	59	88.283		
Ni	60	93.804		
Cu	65	95.480		
Zn	66	97.666		
Ge	72		106.209	
As	75	95.322		
Se	82	94.362		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	106.103		
Ag	107	97.072		

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	Cd	111	93.153	
	Cd	114		
>	In	115		92.790
	Sn	118	95.746	
	Sb	123	94.509	
	Ba	135	99.742	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	92.707	
|	Tl	205		
|	Pb	206	94.069	
|	Pb	207	95.052	
|	Pb	208	95.451	
|	U	238	90.764	
>	Bi	209		93.364
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

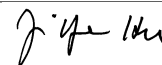
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Co	59	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, July 27, 2012 19:52:59

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10440.3	1.8	257.2122	34.344	13.4	ug/L	11199	Standard
|	Be	9	23.3	12.4	-0.0084	0.001	16.0	ug/L	10	Standard
|	Al	27	9808.2	8.9	0.0956	0.058	60.9	ug/L	7920	Standard
[>	Sc	45	377104.3	1.6				ug/L	375691	Standard
[	Ti	47	72.0	19.7	-0.0065	0.010	156.5	ug/L	70	Standard
|	V	51	2954.9	2.1	-0.0257	0.005	19.1	ug/L	3172	Standard
|	Cr	52	9081.1	0.7	-0.1098	0.008	6.9	ug/L	9852	Standard
|	Cr	53	358.3	4.9	-0.1105	0.012	11.3	ug/L	518	Standard
|	Mn	55	1419.1	2.6	-0.0016	0.003	178.3	ug/L	1193	Standard
|	Co	59	170.0	8.0	0.0026	0.001	50.5	ug/L	98	Standard
|	Ni	60	94.7	18.5	0.0052	0.006	116.8	ug/L	67	Standard
|	Cu	65	120.0	7.6	0.0004	0.004	1033.8	ug/L	90	Standard
|	Zn	66	774.7	1.2	0.5003	0.012	2.3	ug/L	148	Standard
[>	Ge	72	322304.2	1.0				ug/L	304674	Standard
|	As	75	-217.3	21.2	0.0212	0.035	165.0	ug/L	-174	Standard
|	Se	82	22.2	19.2	0.0205	0.035	172.2	ug/L	26	Standard
[	Se-1	77	132.3	6.5	0.0374	0.110	294.4	ug/L	133	Standard
[>	Ga	71	618.3	12.5				mg/L	630	Standard
[	Rb	85	26.7	28.6				ug/L	12	Standard
[	Y	89	275909.8	1.4				ug/L	271719	Standard
[>	Rh	103	378.3	8.5				ug/L	392	Standard
[	Mo	98	270.5	18.0	0.0639	0.013	20.0	ug/L	7	Standard
|	Ag	107	252.7	13.2	0.0221	0.004	19.3	ug/L	55	Standard
|	Cd	111	95.7	19.4	0.0047	0.004	94.3	mg/L	67	Standard
|	Cd	114	272.3	15.1	0.0063	0.004	56.2	ug/L	219	Standard
[>	In	115	821648.1	0.5				ug/L	887392	Standard
|	Sn	118	994.7	5.9	0.0240	0.004	18.6	ug/L	653	Standard
|	Sb	123	2636.9	8.5	0.2562	0.022	8.7	ug/L	48	Standard
[	Ba	135	75.0	27.0	0.0062	0.004	66.8	ug/L	28	Standard
[	Ce	140	47.0	6.4				ug/L	34	Standard
[>	Tb	159	1116574.5	1.1				ug/L	1226141	Standard
[	Ho	165	8.7	37.1				ug/L	14	Standard
|	Tl	203	166.3	49.7	0.0075	0.004	55.6	ug/L	9	Standard
|	Tl	205	386.0	47.2	0.0055	0.004	74.5	ug/L	20	Standard
|	Pb	206	482.3	11.4	0.0046	0.004	81.1	ug/L	419	Standard
|	Pb	207	410.3	11.3	0.0051	0.004	73.2	ug/L	338	Standard
|	Pb	208	1944.7	11.2	0.0038	0.004	100.1	ug/L	1616	Standard
	U	238	171.3	28.1	0.0091	0.003	28.1	ug/L	2	Standard
[>	Bi	209	611181.0	0.4				ug/L	641071	Standard

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Na	23	448.3	3.4	-0.0150	0.001	3.5	mg/L	412	Standard
Mg	24	668.3	39.2	0.0009	0.000	37.9	mg/L	177	Standard
K	39	121.7	43.6	-0.0350	0.042	120.4	mg/L	150	Standard
Ca	43	6.7	43.3	2.4027	2.179	90.7	mg/L	7	Standard
Fe	54	632.7	6.8	-0.0046	0.008	180.7	mg/L	634	Standard
Fe	57	2906.9	0.9	0.0037	0.001	13.9	mg/L	2670	Standard
Sc-1	45	377104.3	1.6				mg/L	375691	Standard
Cl	35	2.7	21.7				ug/L	4	Standard
Kr	83	39.8	0.5				ug/L	39	Standard
Br	81	611.7	5.4				ug/L	639	Standard
P	31	441.7	18.1				ug/L	419	Standard
S	34	6580.6	1.9				ug/L	7420	Standard
Sr	88	23.3	12.4				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.787	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111		
	Cd	114		
>	In	115	92.591	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	95.337	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, July 27, 2012 19:56:11

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10503.6	2.1	189.4348	46.129	24.4	ug/L	11199	Standard
|	Be	9	10.0	50.0	-0.0147	0.003	17.5	ug/L	10	Standard
|	Al	27	8897.6	12.1	0.0489	0.054	110.9	ug/L	7920	Standard
[>	Sc	45	370642.2	2.6				ug/L	375691	Standard
|	Ti	47	56.0	12.5	-0.0175	0.005	28.6	ug/L	70	Standard
|	V	51	7058.4	2.1	0.3146	0.018	5.6	ug/L	3172	Standard
|	Cr	52	15938.0	1.4	0.6004	0.022	3.7	ug/L	9852	Standard
|	Cr	53	1550.9	3.8	0.6087	0.044	7.3	ug/L	518	Standard
|	Mn	55	9031.7	4.3	0.4274	0.022	5.2	ug/L	1193	Standard
|	Co	59	3978.2	7.6	0.3339	0.026	7.7	ug/L	98	Standard
|	Ni	60	4450.7	1.3	1.4692	0.023	1.6	ug/L	67	Standard
|	Cu	65	2142.5	1.1	0.7377	0.016	2.2	ug/L	90	Standard
|	Zn	66	7813.3	1.3	6.1948	0.114	1.8	ug/L	148	Standard
[>	Ge	72	321028.9	1.0				ug/L	304674	Standard
|	As	75	227.1	0.8	0.3758	0.001	0.1	ug/L	-174	Standard
|	Se	82	67.0	3.1	0.3792	0.013	3.5	ug/L	26	Standard
[	Se-1	77	146.3	9.9	0.2011	0.179	89.0	ug/L	133	Standard
[>	Ga	71	728.4	7.6				mg/L	630	Standard
|	Rb	85	23.3	32.7				ug/L	12	Standard
|	Y	89	275894.3	0.8				ug/L	271719	Standard
[>	Rh	103	371.7	15.1				ug/L	392	Standard
|	Mo	98	64.8	6.8	0.0109	0.001	10.4	ug/L	7	Standard
|	Ag	107	2949.0	1.6	0.3685	0.005	1.5	ug/L	55	Standard
|	Cd	111	1002.9	3.3	0.2159	0.008	3.9	mg/L	67	Standard
|	Cd	114	2904.9	2.1	0.2241	0.005	2.2	ug/L	219	Standard
[>	In	115	830375.4	0.3				ug/L	887392	Standard
|	Sn	118	686.0	3.0	0.0017	0.001	79.4	ug/L	653	Standard
|	Sb	123	4278.2	3.2	0.4088	0.012	2.8	ug/L	48	Standard
|	Ba	135	3454.4	2.1	0.6873	0.014	2.1	ug/L	28	Standard
|	Ce	140	51.7	37.6				ug/L	34	Standard
[>	Tb	159	1126221.9	0.7				ug/L	1226141	Standard
|	Ho	165	8.7	29.0				ug/L	14	Standard
|	Tl	203	1623.1	20.1	0.0816	0.015	19.0	ug/L	9	Standard
|	Tl	205	3769.5	19.2	0.0824	0.015	18.6	ug/L	20	Standard
|	Pb	206	3330.0	9.1	0.1936	0.017	8.8	ug/L	419	Standard
|	Pb	207	2732.6	8.2	0.1887	0.015	7.8	ug/L	338	Standard
|	Pb	208	12868.5	7.9	0.1911	0.015	7.6	ug/L	1616	Standard
	U	238	6550.4	3.7	0.3499	0.008	2.4	ug/L	2	Standard
[>	Bi	209	603620.2	1.5				ug/L	641071	Standard

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Na	23	456.7	29.7	-0.0142	0.007	47.7	mg/L	412	Standard
Mg	24	716.7	124.5	0.0010	0.001	121.2	mg/L	177	Standard
K	39	136.7	15.2	-0.0220	0.015	68.7	mg/L	150	Standard
Ca	43	1.7	173.2	-1.2690	2.106	165.9	mg/L	7	Standard
Fe	54	707.8	8.6	0.0127	0.009	74.3	mg/L	634	Standard
Fe	57	2790.3	5.3	0.0029	0.001	36.1	mg/L	2670	Standard
Sc-1	45	370642.2	2.6				mg/L	375691	Standard
Cl	35	5.3	10.8				ug/L	4	Standard
Kr	83	38.4	1.8				ug/L	39	Standard
Br	81	651.7	13.1				ug/L	639	Standard
P	31	411.7	7.6				ug/L	419	Standard
S	34	6264.6	4.0				ug/L	7420	Standard
Sr	88	45.0	19.2				ug/L	35	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	78.661		
Cr	52	75.047		
Cr	53			
Mn	55	85.471		
Co	59	83.483		
Ni	60	91.828		
Cu	65	92.212		
Zn	66	99.117		
Ge	72		105.368	
As	75	93.954		
Se	82	94.806		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	92.117		

Sample ID: QC Std 8

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	Cd	111	89.951	
	Cd	114		
>	In	115		93.575
	Sn	118		
	Sb	123	102.204	
	Ba	135	91.643	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	102.039	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	95.566	
|	U	238	87.481	
>	Bi	209		94.158
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 8

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MassCal File Name

Mass Calibration File Name Default.tun
 MassCal File Path C:\NexIONData\MassCal\Default.tun
 Peak Search Window: 1.00

Sample Information

Sample Date/Time: Sunday, July 29, 2012 08:13:13

Mass Calibration and Resolution

Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	7.025	1340	2021	0.715
Mg	23.985	24.025	4714	2020	0.714
In	114.904	114.925	22873	2023	0.680
U	238.050	238.025	47467	2034	0.681

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	6.279
5.575	4.089
5.625	3.286
5.675	2.030
5.725	2.198
5.775	2.475
5.825	4.092
5.875	2.259
5.925	3.906
5.975	3.386
6.025	3.822
6.075	2.308
6.125	2.211
6.175	3.259
6.225	6.137
6.275	64.358
6.325	136.931
6.375	37.268
6.425	22.122
6.475	8.892
6.525	10.608
6.575	4.668
6.625	4.368
6.675	1.405
6.725	4.036
6.775	1.115
6.825	1.291
6.875	2.904

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6.925	2.496
6.975	1.098
7.025	2.612
7.075	1.348
7.125	4.720
7.175	2.969
7.225	3.213
7.275	51.349
7.325	136.931
7.375	223.607
7.425	223.607
7.475	136.931
7.525	223.607
7.575	136.931
7.625	223.607
7.675	136.931
7.725	
7.775	
7.825	
7.875	223.607
7.925	223.607
7.975	223.607
8.025	223.607
8.075	91.287
8.125	223.607
8.175	223.607
8.225	136.931
8.275	223.607
8.325	
8.375	
8.425	34.233
8.475	24.686
22.525	10.469
22.575	2.293
22.625	2.137
22.675	1.139
22.725	2.997
22.775	2.669
22.825	1.600
22.875	1.166
22.925	1.588
22.975	1.541
23.025	1.343
23.075	1.247
23.125	1.761
23.175	0.967
23.225	2.060

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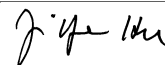
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23.275	1.775
23.325	5.646
23.375	100.000
23.425	
23.475	223.607
23.525	18.807
23.575	2.038
23.625	3.311
23.675	5.152
23.725	2.553
23.775	2.514
23.825	2.737
23.875	1.416
23.925	2.657
23.975	1.746
24.025	0.551
24.075	1.512
24.125	1.109
24.175	2.169
24.225	1.532
24.275	1.523
24.325	14.987
24.375	223.607
24.425	223.607
24.475	122.475
24.525	81.441
24.575	22.886
24.625	7.511
24.675	9.251
24.725	7.760
24.775	5.425
24.825	5.859
24.875	4.678
24.925	6.079
24.975	5.470
25.025	7.029
25.075	3.181
25.125	6.685
25.175	4.992
25.225	4.243
25.275	4.288
25.325	26.716
25.375	104.583
25.425	223.607
25.475	149.071
113.525	28.445
113.575	12.509

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113.625	5.954
113.675	3.874
113.725	4.128
113.775	3.036
113.825	2.149
113.875	1.096
113.925	1.710
113.975	2.621
114.025	3.161
114.075	2.289
114.125	3.412
114.175	5.211
114.225	5.358
114.275	19.485
114.325	91.287
114.375	42.492
114.425	22.080
114.475	8.587
114.525	1.977
114.575	3.217
114.625	1.783
114.675	1.589
114.725	1.674
114.775	0.972
114.825	2.256
114.875	2.013
114.925	1.534
114.975	1.964
115.025	1.785
115.075	2.112
115.125	0.774
115.175	1.647
115.225	1.594
115.275	11.058
115.325	105.409
115.375	223.607
115.425	74.689
115.475	31.566
115.525	14.302
115.575	6.780
115.625	10.227
115.675	5.327
115.725	6.260
115.775	3.857
115.825	5.547
115.875	2.187
115.925	2.132

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115.975	1.512
116.025	5.209
116.075	4.523
116.125	4.995
116.175	5.462
116.225	12.293
116.275	49.496
116.325	63.888
116.375	
116.425	104.583
116.475	136.931
236.525	223.607
236.575	
236.625	
236.675	223.607
236.725	223.607
236.775	
236.825	
236.875	
236.925	
236.975	
237.025	
237.075	
237.125	
237.175	223.607
237.225	
237.275	149.071
237.325	
237.375	
237.425	223.607
237.475	59.266
237.525	33.912
237.575	11.592
237.625	9.204
237.675	3.388
237.725	3.067
237.775	2.489
237.825	1.911
237.875	2.102
237.925	2.269
237.975	1.577
238.025	1.747
238.075	1.604
238.125	1.462
238.175	1.806
238.225	2.680
238.275	2.203

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238.325	2.526
238.375	3.399
238.425	6.729
238.475	7.308
238.525	37.499
238.575	91.287
238.625	136.931
238.675	
238.725	
238.775	136.931
238.825	
238.875	223.607
238.925	223.607
238.975	
239.025	223.607
239.075	223.607
239.125	136.931
239.175	
239.225	
239.275	
239.325	
239.375	
239.425	
239.475	223.607

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Daily Performance Report

Sample ID: Daily Performance Check

Sample Date/Time: Sunday, July 29, 2012 08:16:54

Sample Description:

Method File: C:\NexIONData\Method\ESI Daily Performance.mth

Dataset File: C:\NexIONData\DataSet\072012\Daily Performance Check.878

MassCal File: C:\NexIONData\MassCal\Default.tun

Conditions File: C:\NexIONData\Conditions\Default.dac

Dual Detector Mode: Pulse

Acq. Dead Time (ns): 33

Current Dead Time (ns): 33

Torch Z position (mm): 0.00

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
Be	9.0	2225.4	2225.430	59.428	2.7	Standard
Mg	24.0	32655.2	32655.158	474.735	1.5	Standard
In	114.9	68508.0	68507.953	916.459	1.3	Standard
U	238.1	60250.0	60249.969	743.741	1.2	Standard
[	CeO	155.9	1512.6	0.016	0.000	2.1 Standard
>	Ce	139.9	95992.3	95992.260	561.639	0.6 Standard
]	Ce++	70.0	1229.9	0.013	0.000	2.1 Standard
	Bkgd	220.0	0.4	0.400	0.279	69.7 Standard

Current Conditions File Data

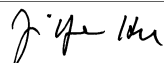
Current Value	Description
0.99	Nebulizer Gas Flow STD/KED [NEB]
1.00	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1975.00	Analog Stage Voltage
1300.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
3.00	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: Daily Performance Check

Report Date/Time: Sunday, July 29, 2012 08:19:13

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SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 7/29/2012 8:16:53 AM

End Time: 7/29/2012 8:19:13 AM

Daily Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9.0122): 2225.43

Obtained Intensity (Mg 23.985): 32655.16

Obtained Intensity (In 114.904): 68507.95

Obtained Intensity (U 238.05): 60249.97

Obtained Intensity (Bkgd 220): 0.40

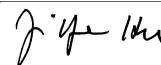
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1512.61 / 95992.26)

Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.013 (=1229.92 / 95992.26)

Report Date/Time: Sunday, July 29, 2012 08:19:13

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SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 7/29/2012 8:16:53 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\ESI Daily Performance.mth.
Intensity Criterion: Be 9.0122 > 2000
Intensity Criterion: Mg 23.985 > 15000
Intensity Criterion: In 114.904 > 40000
Intensity Criterion: U 238.05 > 30000
Intensity Criterion: Bkgd 220 <= 1
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): 2225.43
Obtained Intensity (Mg 23.985): 32655.16
Obtained Intensity (In 114.904): 68507.95
Obtained Intensity (U 238.05): 60249.97
Obtained Intensity (Bkgd 220): 0.40
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1512.61 / 95992.26)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.013 (=1229.92 / 95992.26)

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

End Time: 7/29/2012 8:19:13 AM

Approved: July 30, 2012



Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, July 29, 2012 08:37:10

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

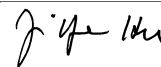
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9464.6	3.1				ug/L		Standard
|	Be	9	10.0	50.0				ug/L		Standard
|	Al	27	7870.4	3.1				ug/L		Standard
[>	Sc	45	330667.8	2.8				ug/L		Standard
[	Ti	47	52.7	12.2				ug/L		Standard
|	V	51	2686.8	1.7				ug/L		Standard
|	Cr	52	8407.7	1.0				ug/L		Standard
|	Cr	53	287.5	2.6				ug/L		Standard
|	Mn	55	1080.4	0.5				ug/L		Standard
|	Co	59	116.7	15.1				ug/L		Standard
|	Ni	60	68.3	15.6				ug/L		Standard
|	Cu	65	141.0	8.2				ug/L		Standard
|	Zn	66	138.3	4.9				ug/L		Standard
[>	Ge	72	283229.8	0.5				ug/L		Standard
|	As	75	-197.9	12.1				ug/L		Standard
|	Se	82	21.4	7.8				ug/L		Standard
[	Se-1	77	131.3	8.7				ug/L		Standard
[>	Ga	71	606.7	9.9				mg/L		Standard
[	Rb	85	30.0	16.7				ug/L		Standard
[	Y	89	251555.1	2.4				ug/L		Standard
[>	Rh	103	335.0	9.1				ug/L		Standard
[	Mo	98	12.6	8.1				ug/L		Standard
|	Ag	107	36.0	9.6				ug/L		Standard
|	Cd	111	48.6	9.3				mg/L		Standard
|	Cd	114	170.4	8.0				ug/L		Standard
[>	In	115	727801.9	0.9				ug/L		Standard
|	Sn	118	471.3	3.4				ug/L		Standard
|	Sb	123	39.1	34.8				ug/L		Standard
[	Ba	135	25.3	16.0				ug/L		Standard
[	Ce	140	24.7	13.0				ug/L		Standard
[>	Tb	159	1071746.7	0.7				ug/L		Standard
[	Ho	165	13.3	45.2				ug/L		Standard
|	Tl	203	4.7	44.6				ug/L		Standard
|	Tl	205	10.0	20.0				ug/L		Standard
|	Pb	206	382.0	4.6				ug/L		Standard
|	Pb	207	305.7	4.1				ug/L		Standard
	Pb	208	1442.7	2.1				ug/L		Standard
	U	238	4.7	32.7				ug/L		Standard
[>	Bi	209	561075.2	1.3				ug/L		Standard

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[Na	23	288.3	8.0	mg/L	Standard
	Mg	24	218.3	9.3	mg/L	Standard
	K	39	125.0	18.3	mg/L	Standard
|	Ca	43	3.3	86.6	mg/L	Standard
|	Fe	54	549.6	1.3	mg/L	Standard
|	Fe	57	1771.8	3.8	mg/L	Standard
[>	Sc-1	45	330667.8	2.8	mg/L	Standard
|	Cl	35	4.7	44.6	ug/L	Standard
|	Kr	83	38.0	8.5	ug/L	Standard
|	Br	81	344.2	3.3	ug/L	Standard
|	P	31	311.7	5.8	ug/L	Standard
|	S	34	5593.5	0.7	ug/L	Standard
|	Sr	88	55.0	18.2	ug/L	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Blank

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Blank

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Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, July 29, 2012 08:40:21

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9184.5	2.6				ug/L	9465	Standard
|	Be	9	3.3	86.6				ug/L	10	Standard
|	Al	27	8110.5	3.4				ug/L	7870	Standard
[>	Sc	45	333287.5	0.5				ug/L	330668	Standard
[	Ti	47	56.3	7.4				ug/L	53	Standard
|	V	51	2676.7	2.1				ug/L	2687	Standard
|	Cr	52	8324.6	0.8				ug/L	8408	Standard
|	Cr	53	260.0	8.4				ug/L	288	Standard
|	Mn	55	1079.4	6.9				ug/L	1080	Standard
|	Co	59	125.7	4.4				ug/L	117	Standard
|	Ni	60	65.7	11.5				ug/L	68	Standard
|	Cu	65	127.3	7.9				ug/L	141	Standard
|	Zn	66	154.3	4.4				ug/L	138	Standard
[>	Ge	72	289612.8	0.6				ug/L	283230	Standard
|	As	75	-187.6	22.6				ug/L	-198	Standard
|	Se	82	25.0	24.6				ug/L	21	Standard
[	Se-1	77	128.3	9.7				ug/L	131	Standard
[>	Ga	71	583.3	4.4				mg/L	607	Standard
[	Rb	85	40.0	43.3				ug/L	30	Standard
[	Y	89	249653.8	1.8				ug/L	251555	Standard
[>	Rh	103	373.3	10.4				ug/L	335	Standard
[	Mo	98	10.5	66.4				ug/L	13	Standard
|	Ag	107	40.3	20.0				ug/L	36	Standard
|	Cd	111	53.3	10.3				mg/L	49	Standard
|	Cd	114	169.7	6.4				ug/L	170	Standard
[>	In	115	729266.5	1.6				ug/L	727802	Standard
|	Sn	118	472.3	5.3				ug/L	471	Standard
|	Sb	123	21.7	7.0				ug/L	39	Standard
[	Ba	135	31.0	39.2				ug/L	25	Standard
[	Ce	140	33.3	3.5				ug/L	25	Standard
[>	Tb	159	1085426.6	0.7				ug/L	1071747	Standard
[	Ho	165	9.7	23.9				ug/L	13	Standard
|	Tl	203	5.7	20.4				ug/L	5	Standard
|	Tl	205	11.7	27.6				ug/L	10	Standard
|	Pb	206	382.7	3.3				ug/L	382	Standard
|	Pb	207	323.3	4.6				ug/L	306	Standard
	Pb	208	1508.4	1.3				ug/L	1443	Standard
	U	238	2.7	57.3				ug/L	5	Standard
[>	Bi	209	571440.7	0.9				ug/L	561075	Standard

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[Na	23	350.0	16.2	mg/L	288	Standard
	Mg	24	221.7	13.8	mg/L	218	Standard
	K	39	116.7	43.8	mg/L	125	Standard
|	Ca	43	8.3	69.3	mg/L	3	Standard
|	Fe	54	556.6	17.5	mg/L	550	Standard
|	Fe	57	1676.8	4.1	mg/L	1772	Standard
[>	Sc-1	45	333287.5	0.5	mg/L	330668	Standard
|	Cl	35	3.3	75.5	ug/L	5	Standard
|	Kr	83	38.6	16.3	ug/L	38	Standard
|	Br	81	325.8	6.4	ug/L	344	Standard
|	P	31	347.5	13.7	ug/L	312	Standard
|	S	34	5613.5	2.1	ug/L	5594	Standard
|	Sr	88	41.7	48.5	ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Standard 1

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 1

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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, July 29, 2012 08:43:32

Number of Replicates: 3

Autosampler Position: 2

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9006.0	3.4				ug/L	9465	Standard
|	Be	9	118.3	23.3				ug/L	10	Standard
|	Al	27	8889.3	3.5				ug/L	7870	Standard
[>	Sc	45	330177.5	1.3				ug/L	330668	Standard
[	Ti	47	167.0	5.7				ug/L	53	Standard
|	V	51	3262.4	2.2				ug/L	2687	Standard
|	Cr	52	8831.2	0.9				ug/L	8408	Standard
|	Cr	53	325.8	1.9				ug/L	288	Standard
|	Mn	55	1769.8	1.9				ug/L	1080	Standard
|	Co	59	524.3	0.4				ug/L	117	Standard
|	Ni	60	184.3	7.2				ug/L	68	Standard
|	Cu	65	253.7	3.3				ug/L	141	Standard
|	Zn	66	205.0	4.2				ug/L	138	Standard
[>	Ge	72	285259.6	0.4				ug/L	283230	Standard
|	As	75	-123.0	28.3				ug/L	-198	Standard
|	Se	82	29.2	5.3				ug/L	21	Standard
[	Se-1	77	133.7	10.4				ug/L	131	Standard
[>	Ga	71	545.0	7.3				mg/L	607	Standard
[	Rb	85	16.7	75.5				ug/L	30	Standard
[	Y	89	246034.2	2.9				ug/L	251555	Standard
[>	Rh	103	356.7	25.1				ug/L	335	Standard
[	Mo	98	376.3	4.7				ug/L	13	Standard
|	Ag	107	364.3	2.8				ug/L	36	Standard
|	Cd	111	216.4	6.8				mg/L	49	Standard
|	Cd	114	676.9	3.8				ug/L	170	Standard
[>	In	115	720600.3	0.4				ug/L	727802	Standard
|	Sn	118	1109.0	4.5				ug/L	471	Standard
|	Sb	123	403.5	8.1				ug/L	39	Standard
[	Ba	135	266.0	5.6				ug/L	25	Standard
[	Ce	140	31.3	11.2				ug/L	25	Standard
[>	Tb	159	1089761.4	0.2				ug/L	1071747	Standard
[	Ho	165	12.3	16.9				ug/L	13	Standard
|	Tl	203	863.7	1.7				ug/L	5	Standard
|	Tl	205	1971.8	1.0				ug/L	10	Standard
|	Pb	206	1071.4	2.7				ug/L	382	Standard
|	Pb	207	857.0	1.5				ug/L	306	Standard
|	Pb	208	4056.5	0.3				ug/L	1443	Standard
	U	238	777.0	1.9				ug/L	5	Standard
[>	Bi	209	570214.0	0.3				ug/L	561075	Standard

Sample ID: Standard 2

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[Na	23	703.3	13.6	mg/L	288	Standard
	Mg	24	3132.0	4.1	mg/L	218	Standard
	K	39	128.3	9.8	mg/L	125	Standard
|	Ca	43	5.0	0.0	mg/L	3	Standard
|	Fe	54	527.6	16.5	mg/L	550	Standard
|	Fe	57	2003.5	6.2	mg/L	1772	Standard
[>	Sc-1	45	330177.5	1.3	mg/L	330668	Standard
|	Cl	35	5.0	69.3	ug/L	5	Standard
|	Kr	83	38.2	4.0	ug/L	38	Standard
|	Br	81	350.0	4.5	ug/L	344	Standard
|	P	31	320.8	10.8	ug/L	312	Standard
|	S	34	5600.2	0.8	ug/L	5594	Standard
|	Sr	88	68.3	18.4	ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
|	Be	9		
|	Al	27		
[>	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Cr	53		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
[Se-1	77		
[>	Ga	71		
	Rb	85		
	Y	89		
[>	Rh	103		
	Mo	98		
	Ag	107		

Sample ID: Standard 2

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 2

Report Date/Time: Sunday, July 29, 2012 08:46:02

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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Sunday, July 29, 2012 08:46:42

Number of Replicates: 3

Autosampler Position: 3

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

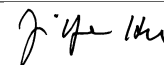
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9299.5	5.3	50.0000	87.875	175.7	ug/L	9465	Standard
|	Be	9	83744.2	2.5	50.0000	1.804	3.6	ug/L	10	Standard
|	Al	27	719338.6	2.3	50.0000	1.430	2.9	ug/L	7870	Standard
[>	Sc	45	330775.4	1.4				ug/L	330668	Standard
|	Ti	47	117581.2	0.9	100.0000	1.802	1.8	ug/L	53	Standard
|	V	51	500658.9	0.5	50.0000	0.687	1.4	ug/L	2687	Standard
|	Cr	52	401500.7	0.9	50.0000	0.927	1.9	ug/L	8408	Standard
|	Cr	53	66693.1	1.1	50.0000	1.049	2.1	ug/L	288	Standard
|	Mn	55	670241.4	0.7	50.0000	0.919	1.8	ug/L	1080	Standard
|	Co	59	419231.4	0.9	50.0000	0.860	1.7	ug/L	117	Standard
|	Ni	60	117302.4	1.6	50.0000	1.310	2.6	ug/L	68	Standard
|	Cu	65	109432.1	0.9	50.0000	0.950	1.9	ug/L	141	Standard
|	Zn	66	51596.7	1.3	50.0000	1.150	2.3	ug/L	138	Standard
[>	Ge	72	285886.5	1.1				ug/L	283230	Standard
|	As	75	50287.5	0.4	50.0000	0.621	1.2	ug/L	-198	Standard
|	Se	82	5047.2	1.9	50.0000	1.313	2.6	ug/L	21	Standard
[	Se-1	77	3662.8	2.8	50.0000	0.917	1.8	ug/L	131	Standard
[>	Ga	71	676.7	10.8				mg/L	607	Standard
|	Rb	85	650.0	8.0				ug/L	30	Standard
|	Y	89	256674.5	1.6				ug/L	251555	Standard
[>	Rh	103	415.0	10.5				ug/L	335	Standard
|	Mo	98	351994.9	0.4	100.0000	0.687	0.7	ug/L	13	Standard
|	Ag	107	309597.9	0.7	50.0000	0.351	0.7	ug/L	36	Standard
|	Cd	111	159499.6	1.0	50.0000	0.627	1.3	mg/L	49	Standard
|	Cd	114	484132.9	0.8	50.0000	0.471	0.9	ug/L	170	Standard
[>	In	115	725912.7	0.3				ug/L	727802	Standard
|	Sn	118	571959.4	0.6	50.0000	0.463	0.9	ug/L	471	Standard
|	Sb	123	415800.5	1.3	50.0000	0.788	1.6	ug/L	39	Standard
|	Ba	135	216417.8	1.2	50.0000	0.783	1.6	ug/L	25	Standard
|	Ce	140	885.4	3.5				ug/L	25	Standard
[>	Tb	159	1101783.5	0.7				ug/L	1071747	Standard
|	Ho	165	19.7	26.1				ug/L	13	Standard
|	Tl	203	815318.8	0.5	50.0000	0.907	1.8	ug/L	5	Standard
|	Tl	205	1865115.5	0.8	50.0000	0.606	1.2	ug/L	10	Standard
|	Pb	206	629232.4	1.0	50.0000	0.856	1.7	ug/L	382	Standard
|	Pb	207	533061.7	1.7	50.0000	0.671	1.3	ug/L	306	Standard
|	Pb	208	2470534.3	1.4	50.0000	0.747	1.5	ug/L	1443	Standard
	U	238	754979.5	0.5	50.0000	0.456	0.9	ug/L	5	Standard
[>	Bi	209	554535.6	1.3				ug/L	561075	Standard

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Na	23	106887.4	0.6	5.0000	0.098	2.0	mg/L	288	Standard
Mg	24	3280414.2	1.2	5.0000	0.117	2.3	mg/L	218	Standard
K	39	5662.7	3.4	5.0000	0.244	4.9	mg/L	125	Standard
Ca	43	8.3	91.7	5.0000	11.532	230.6	mg/L	3	Standard
Fe	54	21151.7	2.3	5.0000	0.127	2.5	mg/L	550	Standard
Fe	57	247840.6	0.6	5.0000	0.065	1.3	mg/L	1772	Standard
Sc-1	45	330775.4	1.4				mg/L	330668	Standard
Cl	35	4.7	49.5				ug/L	5	Standard
Kr	83	36.1	2.1				ug/L	38	Standard
Br	81	343.3	3.0				ug/L	344	Standard
P	31	383.3	5.8				ug/L	312	Standard
S	34	5786.1	1.3				ug/L	5594	Standard
Sr	88	30.0	33.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: Standard 3

Report Date/Time: Sunday, July 29, 2012 08:49:12

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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Sunday, July 29, 2012 08:49:53

Number of Replicates: 3

Autosampler Position: 4

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

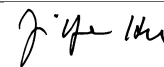
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9302.9	2.2	89.9853	43.989	48.9	ug/L	9465	Standard
|	Be	9	162050.4	1.1	99.2725	1.250	1.3	ug/L	10	Standard
|	Al	27	1382811.7	1.0	99.2203	1.260	1.3	ug/L	7870	Standard
[>	Sc	45	324723.2	1.3				ug/L	330668	Standard
|	Ti	47	230631.4	0.3	198.9897	0.504	0.3	ug/L	53	Standard
|	V	51	978514.4	1.1	99.4426	0.707	0.7	ug/L	2687	Standard
|	Cr	52	778586.0	0.9	99.4379	1.282	1.3	ug/L	8408	Standard
|	Cr	53	130445.8	0.3	99.4386	0.735	0.7	ug/L	288	Standard
|	Mn	55	1292761.3	0.6	98.6850	0.768	0.8	ug/L	1080	Standard
|	Co	59	819481.8	0.4	99.3199	0.757	0.8	ug/L	117	Standard
|	Ni	60	229791.1	0.7	99.4316	0.701	0.7	ug/L	68	Standard
|	Cu	65	211097.1	0.4	98.6835	0.868	0.9	ug/L	141	Standard
|	Zn	66	100051.9	0.1	98.9832	0.505	0.5	ug/L	138	Standard
[>	Ge	72	283254.2	0.5				ug/L	283230	Standard
|	As	75	98809.4	0.6	99.4887	0.858	0.9	ug/L	-198	Standard
|	Se	82	9841.4	1.5	99.3067	1.788	1.8	ug/L	21	Standard
[	Se-1	77	7060.3	3.2	99.5148	3.174	3.2	ug/L	131	Standard
[>	Ga	71	646.7	13.2				mg/L	607	Standard
|	Rb	85	5167.5	3.2				ug/L	30	Standard
|	Y	89	242495.7	2.0				ug/L	251555	Standard
[>	Rh	103	425.0	10.3				ug/L	335	Standard
|	Mo	98	685858.8	0.7	201.0317	0.782	0.4	ug/L	13	Standard
|	Ag	107	603623.1	0.7	100.5504	0.571	0.6	ug/L	36	Standard
|	Cd	111	308568.5	0.4	100.1662	0.643	0.6	mg/L	49	Standard
|	Cd	114	939922.6	0.9	100.3472	1.599	1.6	ug/L	170	Standard
[>	In	115	699985.1	1.0				ug/L	727802	Standard
|	Sn	118	1110205.7	0.9	100.3460	0.447	0.4	ug/L	471	Standard
|	Sb	123	824238.4	0.9	101.3735	1.206	1.2	ug/L	39	Standard
|	Ba	135	422965.2	0.6	100.6707	0.654	0.6	ug/L	25	Standard
|	Ce	140	320.0	8.1				ug/L	25	Standard
[>	Tb	159	1083206.9	1.1				ug/L	1071747	Standard
|	Ho	165	30.0	8.8				ug/L	13	Standard
|	Tl	203	1592439.1	1.7	100.8741	0.629	0.6	ug/L	5	Standard
|	Tl	205	3784126.9	0.6	102.7826	0.734	0.7	ug/L	10	Standard
|	Pb	206	1228891.1	0.6	100.8919	0.646	0.6	ug/L	382	Standard
|	Pb	207	1011454.7	0.3	99.4541	1.158	1.2	ug/L	306	Standard
|	Pb	208	4820070.6	0.2	100.8443	1.045	1.0	ug/L	1443	Standard
	U	238	1437969.4	0.3	99.6278	1.417	1.4	ug/L	5	Standard
[>	Bi	209	532060.5	1.1				ug/L	561075	Standard

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Na	23	127322.7	0.1	7.5570	0.094	1.2	mg/L	288	Standard
Mg	24	6637292.2	1.1	10.1501	0.248	2.4	mg/L	218	Standard
K	39	11422.6	0.7	10.1899	0.148	1.5	mg/L	125	Standard
Ca	43	16.7	34.6	12.8394	6.362	49.5	mg/L	3	Standard
Fe	54	42240.0	1.1	10.1473	0.217	2.1	mg/L	550	Standard
Fe	57	508503.9	2.5	10.2395	0.384	3.7	mg/L	1772	Standard
Sc-1	45	324723.2	1.3				mg/L	330668	Standard
Cl	35	4.0	50.0				ug/L	5	Standard
Kr	83	38.4	2.2				ug/L	38	Standard
Br	81	362.5	10.2				ug/L	344	Standard
P	31	401.7	1.4				ug/L	312	Standard
S	34	5315.1	3.5				ug/L	5594	Standard
Sr	88	46.7	59.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: Standard 4

Report Date/Time: Sunday, July 29, 2012 08:52:24

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	Cd	111
	Cd	114
>	In	115
	Sn	118
	Sb	123
	Ba	135
	Ce	140
>	Tb	159
	Ho	165
	Tl	203
	Tl	205
	Pb	206
	Pb	207
|	Pb	208
|	U	238
>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Corr. Coef.	Na	23	Correlation coefficient < 0.998
Corr. Coef.	Ca	43	Correlation coefficient < 0.998

Sample ID: Standard 4

Report Date/Time: Sunday, July 29, 2012 08:52:24

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Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, July 29, 2012 08:53:06

Number of Replicates: 3

Autosampler Position: 201

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

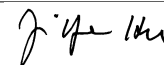
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8662.5	3.8	-93.8641	75.144	80.1	ug/L	9465	Standard
|	Be	9	80719.5	0.9	47.8705	0.961	2.0	ug/L	10	Standard
|	Al	27	719267.8	1.1	49.6777	0.217	0.4	ug/L	7870	Standard
[>	Sc	45	335392.0	1.5				ug/L	330668	Standard
|	Ti	47	117860.7	1.0	101.5507	1.353	1.3	ug/L	53	Standard
|	V	51	490920.4	1.6	49.6931	0.902	1.8	ug/L	2687	Standard
|	Cr	52	395834.4	0.6	49.9612	0.511	1.0	ug/L	8408	Standard
|	Cr	53	66234.5	1.3	50.3315	0.540	1.1	ug/L	288	Standard
|	Mn	55	657011.1	1.4	50.0539	0.883	1.8	ug/L	1080	Standard
|	Co	59	413344.9	2.1	50.0317	1.190	2.4	ug/L	117	Standard
|	Ni	60	115729.7	1.1	50.0043	0.775	1.6	ug/L	68	Standard
|	Cu	65	108230.9	0.2	50.5018	0.320	0.6	ug/L	141	Standard
|	Zn	66	52082.0	1.4	51.3929	0.888	1.7	ug/L	138	Standard
[>	Ge	72	283592.1	0.4				ug/L	283230	Standard
|	As	75	49370.5	0.2	49.7369	0.293	0.6	ug/L	-198	Standard
|	Se	82	4993.1	0.6	50.2025	0.407	0.8	ug/L	21	Standard
[	Se-1	77	3607.1	2.1	49.8747	1.209	2.4	ug/L	131	Standard
[>	Ga	71	668.3	4.3				mg/L	607	Standard
|	Rb	85	721.7	5.2				ug/L	30	Standard
|	Y	89	253461.1	1.5				ug/L	251555	Standard
[>	Rh	103	310.0	18.3				ug/L	335	Standard
|	Mo	98	353380.3	0.7	101.8434	1.466	1.4	ug/L	13	Standard
|	Ag	107	310628.4	2.0	50.8660	0.520	1.0	ug/L	36	Standard
|	Cd	111	158698.6	1.1	50.6419	0.589	1.2	mg/L	49	Standard
|	Cd	114	480160.3	1.5	50.3867	0.505	1.0	ug/L	170	Standard
[>	In	115	711943.8	1.1				ug/L	727802	Standard
|	Sn	118	574044.8	1.9	50.9925	1.037	2.0	ug/L	471	Standard
|	Sb	123	413912.5	1.7	50.0497	0.483	1.0	ug/L	39	Standard
|	Ba	135	215701.3	0.9	50.4736	0.706	1.4	ug/L	25	Standard
|	Ce	140	888.4	3.3				ug/L	25	Standard
[>	Tb	159	1080786.6	1.0				ug/L	1071747	Standard
|	Ho	165	15.3	21.0				ug/L	13	Standard
|	Tl	203	805840.2	0.9	49.6528	0.467	0.9	ug/L	5	Standard
|	Tl	205	1853810.0	1.9	48.9745	0.941	1.9	ug/L	10	Standard
|	Pb	206	621790.8	2.3	49.6345	1.112	2.2	ug/L	382	Standard
|	Pb	207	531403.8	2.3	50.8050	1.162	2.3	ug/L	306	Standard
|	Pb	208	2446190.5	1.7	49.7608	0.799	1.6	ug/L	1443	Standard
	U	238	746377.8	0.6	50.2965	0.759	1.5	ug/L	5	Standard
[>	Bi	209	547047.5	1.5				ug/L	561075	Standard

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Na	23	105274.5	1.5	6.0424	0.112	1.9	mg/L	288	Standard
Mg	24	3239886.4	2.8	4.7975	0.180	3.7	mg/L	218	Standard
K	39	5949.5	4.8	5.0827	0.183	3.6	mg/L	125	Standard
Ca	43	8.3	69.3	3.3993	5.967	175.5	mg/L	3	Standard
Fe	54	22037.4	2.8	5.0661	0.185	3.7	mg/L	550	Standard
Fe	57	257731.1	5.5	5.0064	0.290	5.8	mg/L	1772	Standard
Sc-1	45	335392.0	1.5				mg/L	330668	Standard
Cl	35	4.3	74.2				ug/L	5	Standard
Kr	83	38.9	7.3				ug/L	38	Standard
Br	81	358.3	12.5				ug/L	344	Standard
P	31	368.3	7.3				ug/L	312	Standard
S	34	5062.5	1.0				ug/L	5594	Standard
Sr	88	43.3	26.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	95.741		
Al	27	99.355		
Sc	45			
Ti	47	101.551		
V	51	99.386		
Cr	52	99.922		
Cr	53	100.663		
Mn	55	100.108		
Co	59	100.063		
Ni	60	100.009		
Cu	65	101.004		
Zn	66	102.786		
Ge	72		100.128	
As	75	99.474		
Se	82	100.405		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	101.843		
Ag	107	101.732		

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	Cd	111	101.284	
	Cd	114		
>	In	115		97.821
	Sn	118	101.985	
	Sb	123	100.099	
	Ba	135	100.947	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	99.306	
|	Tl	205		
|	Pb	206	99.269	
|	Pb	207	101.610	
|	Pb	208	99.522	
|	U	238	100.593	
>	Bi	209		97.500
|	Na	23	120.849	
|	Mg	24	95.949	
|	K	39	101.654	
|	Ca	43	67.986	
|	Fe	54	101.322	
|	Fe	57	100.127	
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

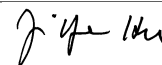
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Na	23	
QC Std 1	Ca	43	

Sample ID: QC Std 1

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Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, July 29, 2012 08:56:19

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8427.3	4.3	-89.0158	28.841	32.4	ug/L	9465	Standard
|	Be	9	25.0	52.9	-0.0058	0.008	146.8	ug/L	10	Standard
|	Al	27	8265.6	4.9	0.0149	0.031	204.8	ug/L	7870	Standard
[>	Sc	45	325191.2	2.9				ug/L	330668	Standard
|	Ti	47	81.7	18.4	0.0266	0.013	47.8	ug/L	53	Standard
|	V	51	2452.7	3.1	-0.0328	0.004	13.6	ug/L	2687	Standard
|	Cr	52	7555.9	0.8	-0.1169	0.009	7.3	ug/L	8408	Standard
|	Cr	53	254.2	21.0	-0.0046	0.044	955.6	ug/L	288	Standard
|	Mn	55	1078.4	4.0	-0.0028	0.002	76.4	ug/L	1080	Standard
|	Co	59	178.0	21.9	0.0082	0.005	55.3	ug/L	117	Standard
|	Ni	60	83.7	9.7	0.0066	0.003	47.5	ug/L	68	Standard
|	Cu	65	179.0	14.3	0.0150	0.011	75.7	ug/L	141	Standard
|	Zn	66	150.3	10.2	-0.0044	0.013	306.8	ug/L	138	Standard
[>	Ge	72	286289.2	1.6				ug/L	283230	Standard
|	As	75	-154.9	10.3	0.0186	0.016	87.8	ug/L	-198	Standard
|	Se	82	30.0	9.5	0.0575	0.033	57.5	ug/L	21	Standard
[	Se-1	77	108.0	14.9	-0.3213	0.232	72.3	ug/L	131	Standard
[>	Ga	71	610.0	5.7				mg/L	607	Standard
|	Rb	85	35.0	51.5				ug/L	30	Standard
|	Y	89	253498.3	1.3				ug/L	251555	Standard
[>	Rh	103	343.3	8.9				ug/L	335	Standard
|	Mo	98	255.6	10.5	0.0652	0.008	11.9	ug/L	13	Standard
|	Ag	107	121.3	19.9	0.0106	0.004	37.1	ug/L	36	Standard
|	Cd	111	88.7	11.4	0.0095	0.003	34.1	mg/L	49	Standard
|	Cd	114	255.2	18.4	0.0061	0.005	81.1	ug/L	170	Standard
[>	In	115	725043.0	0.7				ug/L	727802	Standard
|	Sn	118	887.0	4.4	0.0300	0.003	9.8	ug/L	471	Standard
|	Sb	123	2252.4	3.9	0.2692	0.009	3.4	ug/L	39	Standard
|	Ba	135	64.7	26.3	0.0034	0.004	117.4	ug/L	25	Standard
|	Ce	140	28.3	42.1				ug/L	25	Standard
[>	Tb	159	1077437.1	0.5				ug/L	1071747	Standard
|	Ho	165	13.7	25.7				ug/L	13	Standard
|	Tl	203	145.0	41.3	0.0076	0.004	46.8	ug/L	5	Standard
|	Tl	205	349.3	43.0	0.0089	0.004	42.5	ug/L	10	Standard
|	Pb	206	482.0	12.9	0.0050	0.005	94.2	ug/L	382	Standard
|	Pb	207	383.3	14.9	0.0067	0.005	78.1	ug/L	306	Standard
|	Pb	208	1893.0	12.4	0.0079	0.005	57.3	ug/L	1443	Standard
	U	238	154.7	42.2	0.0098	0.004	42.8	ug/L	5	Standard
[>	Bi	209	567523.3	0.6				ug/L	561075	Standard

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Na	23	475.0	7.4	-0.0079	0.002	19.8	mg/L	288	Standard
Mg	24	676.7	33.0	0.0013	0.000	23.3	mg/L	218	Standard
K	39	120.0	15.0	-0.0011	0.013	1217.8	mg/L	125	Standard
Ca	43	3.3	173.2	-1.8434	6.090	330.4	mg/L	3	Standard
Fe	54	554.4	3.7	0.0134	0.001	10.9	mg/L	550	Standard
Fe	57	1591.8	4.9	-0.0027	0.001	39.5	mg/L	1772	Standard
Sc-1	45	325191.2	2.9				mg/L	330668	Standard
Cl	35	2.3	65.5				ug/L	5	Standard
Kr	83	35.6	9.8				ug/L	38	Standard
Br	81	349.2	7.7				ug/L	344	Standard
P	31	345.0	8.1				ug/L	312	Standard
S	34	5025.0	1.4				ug/L	5594	Standard
Sr	88	41.7	54.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.080	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	99.621
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.149
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 2	Ca	43	

Sample ID: QC Std 2

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Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, July 29, 2012 08:59:31

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9006.0	2.0	3.1850	60.027	1884.7	ug/L	9465	Standard
|	Be	9	11.7	89.2	-0.0141	0.006	44.7	ug/L	10	Standard
|	Al	27	5724.4	5.8	-0.1740	0.026	14.8	ug/L	7870	Standard
[>	Sc	45	329739.9	1.5				ug/L	330668	Standard
|	Ti	47	63.0	8.4	0.0109	0.005	43.4	ug/L	53	Standard
|	V	51	6442.2	0.8	0.3722	0.007	1.9	ug/L	2687	Standard
|	Cr	52	13885.0	1.8	0.6989	0.037	5.2	ug/L	8408	Standard
|	Cr	53	1248.4	5.7	0.7501	0.050	6.7	ug/L	288	Standard
|	Mn	55	7516.5	1.0	0.4863	0.008	1.6	ug/L	1080	Standard
|	Co	59	3321.0	1.6	0.3868	0.005	1.4	ug/L	117	Standard
|	Ni	60	3987.9	3.2	1.6857	0.059	3.5	ug/L	68	Standard
|	Cu	65	1763.4	1.7	0.7517	0.013	1.7	ug/L	141	Standard
|	Zn	66	8250.2	0.7	7.9700	0.091	1.1	ug/L	138	Standard
[>	Ge	72	285106.5	0.4				ug/L	283230	Standard
|	As	75	207.1	13.9	0.3795	0.028	7.5	ug/L	-198	Standard
|	Se	82	62.2	4.9	0.3821	0.032	8.4	ug/L	21	Standard
[	Se-1	77	144.0	5.9	0.1978	0.119	60.2	ug/L	131	Standard
[>	Ga	71	626.7	12.4				mg/L	607	Standard
|	Rb	85	15.0	88.2				ug/L	30	Standard
|	Y	89	251900.5	1.8				ug/L	251555	Standard
[>	Rh	103	346.7	5.1				ug/L	335	Standard
|	Mo	98	80.3	8.3	0.0155	0.002	11.0	ug/L	13	Standard
|	Ag	107	2518.2	2.6	0.3951	0.009	2.2	ug/L	36	Standard
|	Cd	111	846.8	1.7	0.2466	0.004	1.8	mg/L	49	Standard
|	Cd	114	2508.4	2.3	0.2377	0.004	1.7	ug/L	170	Standard
[>	In	115	726762.6	1.4				ug/L	727802	Standard
|	Sn	118	664.0	6.9	0.0104	0.005	45.9	ug/L	471	Standard
|	Sb	123	3799.7	2.2	0.4520	0.015	3.3	ug/L	39	Standard
|	Ba	135	3296.0	2.5	0.7443	0.024	3.2	ug/L	25	Standard
|	Ce	140	26.7	27.1				ug/L	25	Standard
[>	Tb	159	1072411.0	0.4				ug/L	1071747	Standard
|	Ho	165	10.3	14.8				ug/L	13	Standard
|	Tl	203	1389.1	2.5	0.0816	0.002	2.0	ug/L	5	Standard
|	Tl	205	3154.0	1.0	0.0805	0.000	0.5	ug/L	10	Standard
|	Pb	206	2941.6	1.2	0.1948	0.004	1.9	ug/L	382	Standard
|	Pb	207	2428.5	1.7	0.1957	0.003	1.3	ug/L	306	Standard
|	Pb	208	11399.0	1.3	0.1948	0.003	1.5	ug/L	1443	Standard
	U	238	5910.2	1.3	0.3843	0.007	1.8	ug/L	5	Standard
[>	Bi	209	566525.9	0.5				ug/L	561075	Standard

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Na	23	386.7	15.0	-0.0135	0.003	23.4	mg/L	288	Standard
Mg	24	236.7	23.2	0.0006	0.000	12.9	mg/L	218	Standard
K	39	118.3	21.7	-0.0040	0.021	540.1	mg/L	125	Standard
Ca	43	3.3	86.6	-1.7497	3.126	178.7	mg/L	3	Standard
Fe	54	619.5	8.6	0.0272	0.013	49.4	mg/L	550	Standard
Fe	57	1721.8	8.4	-0.0006	0.002	437.1	mg/L	1772	Standard
Sc-1	45	329739.9	1.5				mg/L	330668	Standard
Cl	35	4.0	66.1				ug/L	5	Standard
Kr	83	38.6	8.2				ug/L	38	Standard
Br	81	369.2	7.8				ug/L	344	Standard
P	31	342.5	14.2				ug/L	312	Standard
S	34	5168.4	0.5				ug/L	5594	Standard
Sr	88	48.3	11.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	93.042		
Cr	52	87.364		
Cr	53			
Mn	55	97.259		
Co	59	96.704		
Ni	60	105.357		
Cu	65	93.964		
Zn	66	127.519		
Ge	72		100.663	
As	75	94.865		
Se	82	95.516		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	98.771		

Sample ID: QC Std 3

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	Cd	111	102.730	
	Cd	114		
>	In	115		99.857
	Sn	118		
	Sb	123	112.999	
	Ba	135	99.239	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	101.979	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	97.411	
|	U	238	96.080	
>	Bi	209		100.971
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 3

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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, July 29, 2012 09:02:42

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7471.9	9.3	-60.5936	121.734	200.9	ug/L	9465	Standard
|	Be	9	71.7	149.7	0.0280	0.073	262.1	ug/L	10	Standard
|	Al	27	59159679.8	1.7	4893.0525	75.102	1.5	ug/L	7870	Standard
[>	Sc	45	283351.0	2.4				ug/L	330668	Standard
|	Ti	47	12740.4	2.4	12.6314	0.180	1.4	ug/L	53	Standard
|	V	51	2578.6	4.1	0.0228	0.008	35.8	ug/L	2687	Standard
|	Cr	52	7246.1	5.3	-0.0040	0.045	1143.0	ug/L	8408	Standard
|	Cr	53	1357.6	16.2	0.9970	0.180	18.0	ug/L	288	Standard
|	Mn	55	959.0	6.5	0.0002	0.005	2613.7	ug/L	1080	Standard
|	Co	59	269.0	9.3	0.0245	0.003	12.3	ug/L	117	Standard
|	Ni	60	701.0	23.9	0.3198	0.078	24.3	ug/L	68	Standard
|	Cu	65	257.7	40.9	0.0706	0.054	77.0	ug/L	141	Standard
|	Zn	66	1305.1	5.5	1.3385	0.063	4.7	ug/L	138	Standard
[>	Ge	72	245702.5	1.5				ug/L	283230	Standard
|	As	75	-149.8	15.8	-0.0010	0.029	2882.8	ug/L	-198	Standard
|	Se	82	24.2	14.5	0.0389	0.041	104.8	ug/L	21	Standard
[	Se-1	77	234.7	4.3	2.0280	0.153	7.6	ug/L	131	Standard
[>	Ga	71	548.3	12.4				mg/L	607	Standard
|	Rb	85	2070.1	3.6				ug/L	30	Standard
|	Y	89	209299.2	1.2				ug/L	251555	Standard
[>	Rh	103	298.3	5.9				ug/L	335	Standard
|	Mo	98	258770.9	1.9	82.9889	1.159	1.4	ug/L	13	Standard
|	Ag	107	127.3	42.7	0.0142	0.010	67.4	ug/L	36	Standard
|	Cd	111	-75.0	41.4	-0.0449	0.011	24.0	mg/L	49	Standard
|	Cd	114	1246.0	4.3	0.1253	0.004	3.0	ug/L	170	Standard
[>	In	115	639822.2	2.6				ug/L	727802	Standard
|	Sn	118	463.3	23.6	-0.0017	0.010	585.8	ug/L	471	Standard
|	Sb	123	513.7	12.5	0.0708	0.008	10.6	ug/L	39	Standard
|	Ba	135	59.3	31.3	0.0039	0.005	119.4	ug/L	25	Standard
|	Ce	140	1519.1	4.9				ug/L	25	Standard
[>	Tb	159	986969.7	1.9				ug/L	1071747	Standard
|	Ho	165	18.7	48.0				ug/L	13	Standard
|	Tl	203	185.3	42.1	0.0112	0.005	44.5	ug/L	5	Standard
|	Tl	205	418.0	33.5	0.0118	0.004	31.6	ug/L	10	Standard
|	Pb	206	509.0	13.5	0.0114	0.005	45.9	ug/L	382	Standard
|	Pb	207	430.3	6.4	0.0154	0.001	5.7	ug/L	306	Standard
|	Pb	208	2000.4	5.9	0.0144	0.002	15.0	ug/L	1443	Standard
	U	238	633.4	157.6	0.0448	0.071	158.1	ug/L	5	Standard
[>	Bi	209	510789.9	4.4				ug/L	561075	Standard

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Na	23	130262.6	1.2	8.8674	0.108	1.2	mg/L	288	Standard
Mg	24	2631217.3	3.1	4.6110	0.125	2.7	mg/L	218	Standard
K	39	4782.4	6.0	4.8319	0.267	5.5	mg/L	125	Standard
Ca	43	21.7	13.3	21.6854	3.006	13.9	mg/L	3	Standard
Fe	54	13627.4	1.4	3.6756	0.065	1.8	mg/L	550	Standard
Fe	57	151214.1	5.7	3.4636	0.115	3.3	mg/L	1772	Standard
Sc-1	45	283351.0	2.4				mg/L	330668	Standard
Cl	35	220.7	13.2				ug/L	5	Standard
Kr	83	37.1	7.0				ug/L	38	Standard
Br	81	308.3	1.7				ug/L	344	Standard
P	31	26539.1	1.4				ug/L	312	Standard
S	34	10998.2	4.1				ug/L	5594	Standard
Sr	88	55.0	32.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.861		
Sc	45			
Ti	47	12.631		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.750	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	82.989		
Ag	107			

Sample ID: QC Std 4

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	Cd	111		
	Cd	114		
>	In	115	87.912	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	91.038	
|	Na	23	70.939	
|	Mg	24	92.221	
|	K	39	96.638	
|	Ca	43	144.569	
|	Fe	54	29.405	
|	Fe	57	27.709	
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	
QC Std 4	Na	23	
QC Std 4	Ca	43	
QC Std 4	Fe	54	
QC Std 4	Fe	57	

Sample ID: QC Std 4

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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, July 29, 2012 09:05:51

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

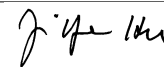
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9089.4	3.5	1.4076	67.100	4767.1	ug/L	9465	Standard
|	Be	9	164219.0	3.0	98.0803	2.859	2.9	ug/L	10	Standard
|	Al	27	72371319.1	3.6	5092.2260	201.735	4.0	ug/L	7870	Standard
>	Sc	45	333042.2	0.4				ug/L	330668	Standard
[	Ti	47	121995.6	2.1	106.0503	1.453	1.4	ug/L	53	Standard
|	V	51	943234.3	0.9	96.5982	0.629	0.7	ug/L	2687	Standard
|	Cr	52	752888.5	2.1	96.8636	0.830	0.9	ug/L	8408	Standard
|	Cr	53	128840.6	1.8	98.9949	2.833	2.9	ug/L	288	Standard
|	Mn	55	1336024.8	0.3	102.7896	1.087	1.1	ug/L	1080	Standard
|	Co	59	835388.8	0.7	102.0458	1.834	1.8	ug/L	117	Standard
|	Ni	60	222939.5	0.3	97.2254	1.386	1.4	ug/L	68	Standard
|	Cu	65	208283.3	1.0	98.1228	0.495	0.5	ug/L	141	Standard
|	Zn	66	99677.8	0.6	99.3847	1.022	1.0	ug/L	138	Standard
>	Ge	72	281077.2	1.4				ug/L	283230	Standard
|	As	75	100514.3	0.9	101.9883	0.682	0.7	ug/L	-198	Standard
|	Se	82	10061.2	1.2	102.3184	0.588	0.6	ug/L	21	Standard
[	Se-1	77	7215.1	1.9	102.5345	0.534	0.5	ug/L	131	Standard
>	Ga	71	780.0	10.6				mg/L	607	Standard
[	Rb	85	2731.9	6.7				ug/L	30	Standard
[	Y	89	247295.7	2.2				ug/L	251555	Standard
>	Rh	103	365.0	4.9				ug/L	335	Standard
[	Mo	98	347535.9	0.5	95.3157	0.945	1.0	ug/L	13	Standard
|	Ag	107	583922.3	1.8	91.0204	2.071	2.3	ug/L	36	Standard
|	Cd	111	344214.6	0.4	104.5527	0.400	0.4	mg/L	49	Standard
|	Cd	114	1005811.0	0.8	100.4725	1.010	1.0	ug/L	170	Standard
>	In	115	748070.5	0.5				ug/L	727802	Standard
|	Sn	118	1074.0	7.4	0.0434	0.006	14.6	ug/L	471	Standard
|	Sb	123	891158.8	1.0	102.5525	0.706	0.7	ug/L	39	Standard
[	Ba	135	431007.1	0.6	95.9879	0.525	0.5	ug/L	25	Standard
[	Ce	140	1815.4	2.6				ug/L	25	Standard
>	Tb	159	1115951.4	0.4				ug/L	1071747	Standard
[	Ho	165	24.0	26.0				ug/L	13	Standard
|	Tl	203	1607214.2	0.7	97.9586	0.139	0.1	ug/L	5	Standard
|	Tl	205	3903604.3	0.4	102.0103	0.450	0.4	ug/L	10	Standard
|	Pb	206	1243632.7	0.5	98.2318	0.275	0.3	ug/L	382	Standard
|	Pb	207	1066483.1	0.4	100.8877	0.395	0.4	ug/L	306	Standard
|	Pb	208	5039046.0	0.3	101.4287	0.556	0.5	ug/L	1443	Standard
	U	238	1537984.0	0.5	102.5166	1.138	1.1	ug/L	5	Standard
>	Bi	209	553002.0	0.8				ug/L	561075	Standard

Sample ID: QC Std 5

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Na	23	137452.3	0.3	7.9556	0.054	0.7	mg/L	288	Standard
Mg	24	3174966.7	3.0	4.7331	0.136	2.9	mg/L	218	Standard
K	39	5362.6	2.4	4.6050	0.123	2.7	mg/L	125	Standard
Ca	43	40.0	45.1	37.2318	19.309	51.9	mg/L	3	Standard
Fe	54	49788.0	1.5	11.6783	0.206	1.8	mg/L	550	Standard
Fe	57	681685.7	3.2	13.3912	0.465	3.5	mg/L	1772	Standard
Sc-1	45	333042.2	0.4				mg/L	330668	Standard
Cl	35	238.3	4.5				ug/L	5	Standard
Kr	83	43.3	13.4				ug/L	38	Standard
Br	81	422.5	8.4				ug/L	344	Standard
P	31	70740.6	1.1				ug/L	312	Standard
S	34	11804.6	0.6				ug/L	5594	Standard
Sr	88	61.7	32.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	101.845		
Sc	45			
Ti	47	106.050		
V	51	96.598		
Cr	52	96.864		
Cr	53			
Mn	55	102.790		
Co	59	102.046		
Ni	60	97.225		
Cu	65	98.123		
Zn	66	99.385		
Ge	72		99.240	
As	75	101.988		
Se	82	102.318		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	95.316		
Ag	107	91.020		

Sample ID: QC Std 5

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Cd	111	104.553	
Cd	114		
> In	115		102.785
Sn	118		
Sb	123	102.553	
Ba	135	95.988	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	97.959	
Tl	205		
Pb	206	98.232	
Pb	207	100.888	
Pb	208	101.429	
U	238	102.517	
> Bi	209		98.561
Na	23	63.645	
Mg	24	94.663	
K	39	92.100	
Ca	43	248.212	
Fe	54	93.426	
Fe	57	107.130	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

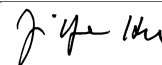
Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Na	23	
QC Std 5	Ca	43	

Sample ID: QC Std 5

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 09:09:02

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

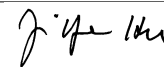
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10410.3	9.1	-42.4291	45.917	108.2	ug/L	9465	Standard
|	Be	9	95659.8	10.3	48.6117	1.333	2.7	ug/L	10	Standard
|	Al	27	793088.8	9.5	46.9341	1.010	2.2	ug/L	7870	Standard
>	Sc	45	390793.1	7.7				ug/L	330668	Standard
[	Ti	47	134278.1	8.4	100.4556	0.255	0.3	ug/L	53	Standard
|	V	51	551362.0	7.1	48.4910	0.801	1.7	ug/L	2687	Standard
|	Cr	52	440909.4	6.9	48.3313	1.117	2.3	ug/L	8408	Standard
|	Cr	53	75558.8	8.4	49.8519	0.184	0.4	ug/L	288	Standard
|	Mn	55	774377.1	6.8	51.2749	0.998	1.9	ug/L	1080	Standard
|	Co	59	479151.8	6.6	50.4130	1.146	2.3	ug/L	117	Standard
|	Ni	60	133060.5	9.5	49.8853	0.455	0.9	ug/L	68	Standard
|	Cu	65	124047.5	8.5	50.2532	0.118	0.2	ug/L	141	Standard
|	Zn	66	57289.8	6.7	49.1283	1.090	2.2	ug/L	138	Standard
>	Ge	72	326654.2	8.6				ug/L	283230	Standard
|	As	75	56083.1	7.6	49.0840	0.560	1.1	ug/L	-198	Standard
|	Se	82	5696.6	6.8	49.7783	1.122	2.3	ug/L	21	Standard
[	Se-1	77	4098.2	7.1	49.2146	0.870	1.8	ug/L	131	Standard
>	Ga	71	705.0	9.8				mg/L	607	Standard
[	Rb	85	788.4	12.2				ug/L	30	Standard
[	Y	89	289481.0	9.7				ug/L	251555	Standard
>	Rh	103	401.7	2.9				ug/L	335	Standard
[	Mo	98	402956.2	9.2	96.2291	2.077	2.2	ug/L	13	Standard
|	Ag	107	366210.0	8.8	49.7088	0.853	1.7	ug/L	36	Standard
|	Cd	111	198792.7	7.6	52.6114	0.233	0.4	mg/L	49	Standard
|	Cd	114	579591.8	7.7	50.4414	0.309	0.6	ug/L	170	Standard
>	In	115	858221.3	7.1				ug/L	727802	Standard
|	Sn	118	693673.8	7.0	51.1166	0.097	0.2	ug/L	471	Standard
|	Sb	123	505779.5	6.6	50.7488	0.364	0.7	ug/L	39	Standard
[	Ba	135	247009.2	6.6	47.9563	0.266	0.6	ug/L	25	Standard
[	Ce	140	1031.7	17.5				ug/L	25	Standard
>	Tb	159	1231933.2	5.9				ug/L	1071747	Standard
[	Ho	165	20.7	10.1				ug/L	13	Standard
|	Tl	203	908929.4	5.7	49.1607	0.471	1.0	ug/L	5	Standard
|	Tl	205	2188348.5	8.4	50.6949	1.574	3.1	ug/L	10	Standard
|	Pb	206	703479.6	5.5	49.2974	0.465	0.9	ug/L	382	Standard
|	Pb	207	601284.0	5.4	50.4706	0.720	1.4	ug/L	306	Standard
|	Pb	208	2764643.7	5.3	49.3758	0.561	1.1	ug/L	1443	Standard
	U	238	865934.5	5.8	51.2170	0.037	0.1	ug/L	5	Standard
>	Bi	209	623200.7	5.8				ug/L	561075	Standard

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Na	23	114709.3	1.6	5.6665	0.369	6.5	mg/L	288	Standard
Mg	24	3579737.1	5.7	4.5533	0.114	2.5	mg/L	218	Standard
K	39	6066.2	4.3	4.4443	0.187	4.2	mg/L	125	Standard
Ca	43	15.0	33.3	8.0742	3.674	45.5	mg/L	3	Standard
Fe	54	24207.0	5.3	4.7748	0.156	3.3	mg/L	550	Standard
Fe	57	348931.5	8.3	5.8207	0.127	2.2	mg/L	1772	Standard
Sc-1	45	390793.1	7.7				mg/L	330668	Standard
Cl	35	8.7	58.1				ug/L	5	Standard
Kr	83	44.2	9.3				ug/L	38	Standard
Br	81	532.5	6.6				ug/L	344	Standard
P	31	392.5	8.3				ug/L	312	Standard
S	34	5426.8	4.9				ug/L	5594	Standard
Sr	88	58.3	35.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	93.868		
Sc	45			
Ti	47	100.456		
V	51	96.982		
Cr	52	96.663		
Cr	53			
Mn	55	102.550		
Co	59	100.826		
Ni	60	99.771		
Cu	65	100.506		
Zn	66	98.257		
Ge	72		115.332	
As	75	98.168		
Se	82	99.557		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.229		
Ag	107	99.418		

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	Cd	111	105.223	
	Cd	114		
>	In	115		117.920
	Sn	118	102.233	
	Sb	123	101.498	
	Ba	135	95.913	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	98.321	
|	Tl	205		
|	Pb	206	98.595	
|	Pb	207	100.941	
|	Pb	208	98.752	
|	U	238	102.434	
>	Bi	209		111.073
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 09:12:12

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10622.1	3.6	-33.2506	47.711	143.5	ug/L	9465	Standard
|	Be	9	41.7	77.1	-0.0004	0.016	3842.8	ug/L	10	Standard
|	Al	27	14180.6	38.4	0.2549	0.314	123.3	ug/L	7870	Standard
[>	Sc	45	396828.0	0.9				ug/L	330668	Standard
|	Ti	47	84.3	26.0	0.0189	0.017	89.9	ug/L	53	Standard
|	V	51	2862.6	1.4	-0.0323	0.007	21.2	ug/L	2687	Standard
|	Cr	52	8649.8	1.0	-0.1335	0.012	8.7	ug/L	8408	Standard
|	Cr	53	334.2	12.3	0.0199	0.030	148.6	ug/L	288	Standard
|	Mn	55	1327.7	17.8	0.0021	0.017	807.5	ug/L	1080	Standard
|	Co	59	222.3	53.4	0.0099	0.013	127.7	ug/L	117	Standard
|	Ni	60	101.0	35.7	0.0080	0.014	172.9	ug/L	68	Standard
|	Cu	65	183.3	18.5	0.0052	0.015	282.4	ug/L	141	Standard
|	Zn	66	173.7	11.5	-0.0054	0.019	352.2	ug/L	138	Standard
[>	Ge	72	333471.2	1.4				ug/L	283230	Standard
|	As	75	-201.2	10.2	0.0009	0.018	1853.0	ug/L	-198	Standard
|	Se	82	22.7	22.8	-0.0483	0.042	87.4	ug/L	21	Standard
[	Se-1	77	135.0	7.1	-0.2091	0.129	61.6	ug/L	131	Standard
[>	Ga	71	731.7	7.5				mg/L	607	Standard
|	Rb	85	28.3	53.9				ug/L	30	Standard
|	Y	89	285689.2	2.3				ug/L	251555	Standard
[>	Rh	103	400.0	11.5				ug/L	335	Standard
|	Mo	98	350.2	13.8	0.0745	0.011	14.7	ug/L	13	Standard
|	Ag	107	178.0	42.5	0.0146	0.010	68.7	ug/L	36	Standard
|	Cd	111	110.5	41.7	0.0103	0.012	116.0	mg/L	49	Standard
|	Cd	114	338.6	51.6	0.0086	0.015	173.4	ug/L	170	Standard
[>	In	115	879707.1	0.6				ug/L	727802	Standard
|	Sn	118	920.7	7.6	0.0188	0.005	26.8	ug/L	471	Standard
|	Sb	123	3280.7	7.5	0.3228	0.023	7.1	ug/L	39	Standard
|	Ba	135	93.3	66.3	0.0062	0.012	190.1	ug/L	25	Standard
|	Ce	140	31.0	16.1				ug/L	25	Standard
[>	Tb	159	1228804.2	0.8				ug/L	1071747	Standard
|	Ho	165	17.0	15.6				ug/L	13	Standard
|	Tl	203	269.3	87.5	0.0131	0.012	94.5	ug/L	5	Standard
|	Tl	205	604.0	87.4	0.0136	0.012	87.2	ug/L	10	Standard
|	Pb	206	600.0	31.7	0.0087	0.013	147.9	ug/L	382	Standard
|	Pb	207	515.7	31.9	0.0133	0.013	99.8	ug/L	306	Standard
|	Pb	208	2352.4	32.5	0.0115	0.013	114.0	ug/L	1443	Standard
	U	238	224.3	98.6	0.0126	0.013	100.4	ug/L	5	Standard
[>	Bi	209	642758.5	1.3				ug/L	561075	Standard

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Na	23	678.3	19.8	-0.0031	0.006	199.5	mg/L	288	Standard
Mg	24	893.4	67.9	0.0014	0.001	53.4	mg/L	218	Standard
K	39	140.0	3.6	-0.0055	0.005	83.4	mg/L	125	Standard
Ca	43	6.7	43.3	0.5882	2.563	435.7	mg/L	3	Standard
Fe	54	644.4	9.1	0.0070	0.011	156.0	mg/L	550	Standard
Fe	57	2248.5	8.4	0.0024	0.003	118.5	mg/L	1772	Standard
Sc-1	45	396828.0	0.9				mg/L	330668	Standard
Cl	35	5.7	20.4				ug/L	5	Standard
Kr	83	44.6	5.6				ug/L	38	Standard
Br	81	476.7	8.0				ug/L	344	Standard
P	31	385.8	1.5				ug/L	312	Standard
S	34	5482.7	2.9				ug/L	5594	Standard
Sr	88	55.0	24.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		117.739	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	120.872
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	114.558
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for QC Std	In	115	Rerun sample

Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 09:14:43

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 09:16:27

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

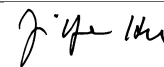
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10150.1	5.8	-46.4519	89.365	192.4	ug/L	9465	Standard
|	Be	9	30.0	44.1	-0.0056	0.007	120.6	ug/L	10	Standard
|	Al	27	12066.6	22.5	0.1583	0.161	101.8	ug/L	7870	Standard
[>	Sc	45	382074.4	1.0				ug/L	330668	Standard
|	Ti	47	71.0	7.5	0.0110	0.004	34.1	ug/L	53	Standard
|	V	51	2758.0	2.2	-0.0319	0.005	15.7	ug/L	2687	Standard
|	Cr	52	8422.3	1.6	-0.1218	0.020	16.6	ug/L	8408	Standard
|	Cr	53	302.5	10.0	0.0070	0.022	312.3	ug/L	288	Standard
|	Mn	55	1306.7	12.7	0.0039	0.011	278.3	ug/L	1080	Standard
|	Co	59	222.7	43.2	0.0107	0.010	95.2	ug/L	117	Standard
|	Ni	60	86.7	3.5	0.0039	0.001	23.8	ug/L	68	Standard
|	Cu	65	175.7	13.5	0.0047	0.010	207.7	ug/L	141	Standard
|	Zn	66	175.3	8.0	0.0017	0.012	692.5	ug/L	138	Standard
[>	Ge	72	320767.3	0.7				ug/L	283230	Standard
|	As	75	-218.2	6.8	-0.0210	0.015	69.0	ug/L	-198	Standard
|	Se	82	27.0	21.0	-0.0019	0.050	2613.6	ug/L	21	Standard
[	Se-1	77	134.0	8.4	-0.1572	0.143	90.8	ug/L	131	Standard
[>	Ga	71	721.7	7.8				mg/L	607	Standard
|	Rb	85	30.0	28.9				ug/L	30	Standard
|	Y	89	279606.5	0.9				ug/L	251555	Standard
[>	Rh	103	453.3	16.6				ug/L	335	Standard
|	Mo	98	302.3	72.3	0.0655	0.052	79.4	ug/L	13	Standard
|	Ag	107	178.3	84.0	0.0154	0.020	131.8	ug/L	36	Standard
|	Cd	111	122.6	68.7	0.0144	0.022	154.3	mg/L	49	Standard
|	Cd	114	362.2	56.4	0.0115	0.018	152.9	ug/L	170	Standard
[>	In	115	850830.4	1.0				ug/L	727802	Standard
|	Sn	118	750.0	15.5	0.0083	0.008	98.2	ug/L	471	Standard
|	Sb	123	757.4	6.6	0.0784	0.005	5.9	ug/L	39	Standard
|	Ba	135	95.3	66.9	0.0071	0.012	173.6	ug/L	25	Standard
|	Ce	140	29.0	32.9				ug/L	25	Standard
[>	Tb	159	1206367.5	0.7				ug/L	1071747	Standard
|	Ho	165	17.7	32.2				ug/L	13	Standard
|	Tl	203	186.7	93.7	0.0090	0.009	104.9	ug/L	5	Standard
|	Tl	205	477.0	81.0	0.0110	0.009	80.9	ug/L	10	Standard
|	Pb	206	562.7	21.5	0.0071	0.008	117.7	ug/L	382	Standard
|	Pb	207	469.0	20.1	0.0104	0.008	73.8	ug/L	306	Standard
|	Pb	208	2199.4	21.2	0.0098	0.008	82.6	ug/L	1443	Standard
	U	238	156.7	68.4	0.0089	0.006	69.9	ug/L	5	Standard
[>	Bi	209	627407.9	0.8				ug/L	561075	Standard

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Na	23	525.0	19.0	-0.0096	0.005	50.0	mg/L	288	Standard
Mg	24	808.4	55.6	0.0013	0.001	43.2	mg/L	218	Standard
K	39	151.7	6.9	0.0073	0.007	93.0	mg/L	125	Standard
Ca	43	3.3	86.6	-2.2868	2.661	116.4	mg/L	3	Standard
Fe	54	590.7	13.3	0.0008	0.015	1891.4	mg/L	550	Standard
Fe	57	2113.5	4.0	0.0015	0.001	83.9	mg/L	1772	Standard
Sc-1	45	382074.4	1.0				mg/L	330668	Standard
Cl	35	3.7	31.5				ug/L	5	Standard
Kr	83	40.6	14.2				ug/L	38	Standard
Br	81	443.3	5.7				ug/L	344	Standard
P	31	362.5	10.4				ug/L	312	Standard
S	34	5574.4	1.0				ug/L	5594	Standard
Sr	88	43.3	17.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		113.253	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	116.904
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	111.822
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 09:18:58

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Method 6020 - Summary Report

Sample ID: PBW 2A WG404305-02

Sample Date/Time: Sunday, July 29, 2012 09:21:41

Number of Replicates: 3

Autosampler Position: 205

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9803.2	4.1	-45.8404	66.819	145.8	ug/L	9465	Standard
|	Be	9	13.3	78.1	-0.0140	0.006	40.9	ug/L	10	Standard
|	Al	27	10555.3	1.0	0.0896	0.012	13.9	ug/L	7870	Standard
[>	Sc	45	368946.6	1.1				ug/L	330668	Standard
[	Ti	47	44.0	9.9	-0.0089	0.004	39.9	ug/L	53	Standard
|	V	51	2696.0	1.7	-0.0330	0.004	12.1	ug/L	2687	Standard
|	Cr	52	8373.0	1.2	-0.1097	0.005	4.2	ug/L	8408	Standard
|	Cr	53	290.0	0.9	0.0022	0.003	123.7	ug/L	288	Standard
|	Mn	55	1134.7	1.4	-0.0063	0.001	21.6	ug/L	1080	Standard
|	Co	59	116.3	4.1	-0.0004	0.001	136.5	ug/L	117	Standard
|	Ni	60	94.3	8.0	0.0075	0.003	38.1	ug/L	68	Standard
|	Cu	65	154.7	2.3	-0.0027	0.001	53.3	ug/L	141	Standard
|	Zn	66	389.7	8.3	0.1955	0.026	13.5	ug/L	138	Standard
[>	Ge	72	314868.5	0.8				ug/L	283230	Standard
|	As	75	-188.5	4.3	0.0022	0.009	395.7	ug/L	-198	Standard
|	Se	82	24.9	18.4	-0.0169	0.040	238.9	ug/L	21	Standard
[	Se-1	77	121.7	6.2	-0.2851	0.087	30.4	ug/L	131	Standard
[>	Ga	71	641.7	6.5				mg/L	607	Standard
[	Rb	85	20.0	25.0				ug/L	30	Standard
[	Y	89	273283.4	2.4				ug/L	251555	Standard
[>	Rh	103	421.7	3.4				ug/L	335	Standard
[	Mo	98	110.0	33.0	0.0203	0.009	45.8	ug/L	13	Standard
|	Ag	107	52.7	17.9	-0.0015	0.001	93.8	ug/L	36	Standard
|	Cd	111	67.1	9.0	0.0003	0.002	690.5	mg/L	49	Standard
|	Cd	114	201.2	0.3	-0.0019	0.000	21.4	ug/L	170	Standard
[>	In	115	822183.3	2.4				ug/L	727802	Standard
|	Sn	118	676.0	8.0	0.0046	0.003	69.0	ug/L	471	Standard
|	Sb	123	499.4	23.3	0.0541	0.013	23.2	ug/L	39	Standard
[	Ba	135	41.3	15.7	-0.0031	0.001	45.3	ug/L	25	Standard
[	Ce	140	22.3	15.7				ug/L	25	Standard
[>	Tb	159	1172218.5	1.6				ug/L	1071747	Standard
[	Ho	165	13.0	20.4				ug/L	13	Standard
|	Tl	203	22.0	62.5	0.0002	0.001	469.8	ug/L	5	Standard
|	Tl	205	53.3	38.7	0.0013	0.000	38.1	ug/L	10	Standard
|	Pb	206	419.7	8.1	-0.0021	0.002	99.7	ug/L	382	Standard
|	Pb	207	359.7	10.5	0.0021	0.003	147.2	ug/L	306	Standard
|	Pb	208	1666.7	5.2	0.0011	0.001	116.5	ug/L	1443	Standard
	U	238	14.0	75.6	0.0006	0.001	104.1	ug/L	5	Standard
[>	Bi	209	611656.0	1.3				ug/L	561075	Standard

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Na	23	391.7	9.7	-0.0156	0.002	14.2	mg/L	288	Standard
Mg	24	261.7	6.7	0.0006	0.000	4.3	mg/L	218	Standard
K	39	145.0	12.4	0.0063	0.015	242.8	mg/L	125	Standard
Ca	43	3.3	173.2	-2.1765	5.513	253.3	mg/L	3	Standard
Fe	54	584.4	13.6	0.0040	0.018	450.0	mg/L	550	Standard
Fe	57	1950.1	0.7	-0.0001	0.000	346.2	mg/L	1772	Standard
Sc-1	45	368946.6	1.1				mg/L	330668	Standard
Cl	35	5.0	60.0				ug/L	5	Standard
Kr	83	39.1	12.8				ug/L	38	Standard
Br	81	445.8	3.1				ug/L	344	Standard
P	31	348.3	12.4				ug/L	312	Standard
S	34	5526.0	1.8				ug/L	5594	Standard
Sr	88	51.7	40.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.171	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 2A WG404305-02

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	Cd	111	
	Cd	114	
>	In	115	112.968
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	109.015
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 2A WG404305-02

Report Date/Time: Sunday, July 29, 2012 09:24:11

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Method 6020 - Summary Report

Sample ID: LCSW 2A WG404305-03

Sample Date/Time: Sunday, July 29, 2012 09:25:13

Number of Replicates: 3

Autosampler Position: 206

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10071.7	1.7	-74.4437	36.421	48.9	ug/L	9465	Standard
|	Be	9	44715.9	2.1	23.0612	0.534	2.3	ug/L	10	Standard
|	Al	27	431093.7	2.2	25.6266	0.340	1.3	ug/L	7870	Standard
[>	Sc	45	385451.7	1.1				ug/L	330668	Standard
|	Ti	47	85.7	8.9	0.0206	0.007	31.8	ug/L	53	Standard
|	V	51	274903.8	0.4	23.8203	0.404	1.7	ug/L	2687	Standard
|	Cr	52	226808.0	0.7	24.1059	0.402	1.7	ug/L	8408	Standard
|	Cr	53	38542.3	0.6	25.1243	0.186	0.7	ug/L	288	Standard
|	Mn	55	382845.4	0.9	25.0767	0.443	1.8	ug/L	1080	Standard
|	Co	59	240205.2	1.0	25.0323	0.428	1.7	ug/L	117	Standard
|	Ni	60	66483.9	1.0	24.7218	0.098	0.4	ug/L	68	Standard
|	Cu	65	62285.1	0.2	24.9947	0.291	1.2	ug/L	141	Standard
|	Zn	66	29121.0	1.9	24.6655	0.369	1.5	ug/L	138	Standard
[>	Ge	72	329327.7	1.3				ug/L	283230	Standard
|	As	75	26725.9	1.2	23.2815	0.548	2.4	ug/L	-198	Standard
|	Se	82	2623.5	0.8	22.5844	0.416	1.8	ug/L	21	Standard
[	Se-1	77	1947.5	1.3	22.1982	0.589	2.7	ug/L	131	Standard
[>	Ga	71	698.3	6.7				mg/L	607	Standard
|	Rb	85	45.0	11.1				ug/L	30	Standard
|	Y	89	287514.5	1.7				ug/L	251555	Standard
[>	Rh	103	420.0	8.6				ug/L	335	Standard
|	Mo	98	98.1	19.6	0.0165	0.005	30.2	ug/L	13	Standard
|	Ag	107	183964.8	0.5	25.1865	0.538	2.1	ug/L	36	Standard
|	Cd	111	94366.7	0.4	25.1694	0.518	2.1	mg/L	49	Standard
|	Cd	114	275547.6	0.5	24.1673	0.474	2.0	ug/L	170	Standard
[>	In	115	851621.0	1.6				ug/L	727802	Standard
|	Sn	118	838.7	5.6	0.0150	0.004	30.0	ug/L	471	Standard
|	Sb	123	238222.2	0.3	24.0872	0.453	1.9	ug/L	39	Standard
|	Ba	135	123273.8	0.7	24.1125	0.541	2.2	ug/L	25	Standard
|	Ce	140	245.7	5.0				ug/L	25	Standard
[>	Tb	159	1228778.0	0.8				ug/L	1071747	Standard
|	Ho	165	22.3	21.2				ug/L	13	Standard
|	Tl	203	454249.8	0.4	24.4086	0.230	0.9	ug/L	5	Standard
|	Tl	205	1054060.5	0.8	24.2849	0.323	1.3	ug/L	10	Standard
|	Pb	206	352297.2	1.0	24.5089	0.247	1.0	ug/L	382	Standard
|	Pb	207	299091.6	0.7	24.9235	0.338	1.4	ug/L	306	Standard
|	Pb	208	1384892.9	0.3	24.5539	0.220	0.9	ug/L	1443	Standard
	U	238	412456.3	1.1	24.2375	0.317	1.3	ug/L	5	Standard
[>	Bi	209	627259.0	0.6				ug/L	561075	Standard

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Na	23	1128.4	9.0	0.0205	0.005	25.1	mg/L	288	Standard
Mg	24	8951.0	2.4	0.0118	0.000	2.6	mg/L	218	Standard
K	39	158.3	37.9	0.0112	0.045	397.4	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	904.7	4.0	0.0641	0.007	11.5	mg/L	550	Standard
Fe	57	2080.1	5.5	0.0006	0.002	367.2	mg/L	1772	Standard
Sc-1	45	385451.7	1.1				mg/L	330668	Standard
Cl	35	4.0	43.3				ug/L	5	Standard
Kr	83	35.9	10.0				ug/L	38	Standard
Br	81	446.7	4.0				ug/L	344	Standard
P	31	511.7	1.8				ug/L	312	Standard
S	34	5494.3	2.0				ug/L	5594	Standard
Sr	88	58.3	62.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		116.276	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 2A WG404305-03

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	Cd	111	
	Cd	114	
>	In	115	117.013
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	111.796
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 2A WG404305-03

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Method 6020 - Summary Report

Sample ID: L1207066608

Sample Date/Time: Sunday, July 29, 2012 09:28:23

Number of Replicates: 3

Autosampler Position: 207

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

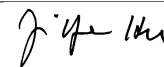
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10145.1	0.3	41.0160	40.390	98.5	ug/L	9465	Standard
|	Be	9	23.3	61.9	-0.0084	0.008	96.0	ug/L	10	Standard
|	Al	27	439983.7	0.6	27.7737	0.510	1.8	ug/L	7870	Standard
[>	Sc	45	363737.5	2.3				ug/L	330668	Standard
[	Ti	47	744.7	5.7	0.5495	0.037	6.7	ug/L	53	Standard
|	V	51	3729.9	1.5	0.0703	0.005	6.5	ug/L	2687	Standard
|	Cr	52	12431.8	1.4	0.3975	0.019	4.8	ug/L	8408	Standard
|	Cr	53	1076.7	2.9	0.5609	0.015	2.7	ug/L	288	Standard
|	Mn	55	22614.9	0.7	1.5087	0.023	1.5	ug/L	1080	Standard
|	Co	59	409.0	13.5	0.0326	0.007	20.3	ug/L	117	Standard
|	Ni	60	965.4	2.6	0.3560	0.014	3.8	ug/L	68	Standard
|	Cu	65	1040.0	3.5	0.3807	0.014	3.6	ug/L	141	Standard
|	Zn	66	4346.6	1.9	3.8189	0.085	2.2	ug/L	138	Standard
[>	Ge	72	307258.4	1.0				ug/L	283230	Standard
|	As	75	-164.3	25.6	0.0203	0.040	196.5	ug/L	-198	Standard
|	Se	82	23.9	14.2	-0.0203	0.031	153.6	ug/L	21	Standard
[	Se-1	77	120.7	15.6	-0.2580	0.259	100.4	ug/L	131	Standard
[>	Ga	71	690.0	5.2				mg/L	607	Standard
[	Rb	85	1193.4	7.0				ug/L	30	Standard
[	Y	89	270967.3	2.3				ug/L	251555	Standard
[>	Rh	103	346.7	10.8				ug/L	335	Standard
[	Mo	98	3189.2	1.3	0.8006	0.014	1.8	ug/L	13	Standard
|	Ag	107	83.0	1.2	0.0030	0.000	2.7	ug/L	36	Standard
|	Cd	111	76.7	13.2	0.0032	0.003	84.0	mg/L	49	Standard
|	Cd	114	302.7	6.4	0.0077	0.002	21.6	ug/L	170	Standard
[>	In	115	810145.1	0.6				ug/L	727802	Standard
|	Sn	118	1290.4	3.0	0.0534	0.003	5.6	ug/L	471	Standard
|	Sb	123	1462.8	2.4	0.1572	0.004	2.8	ug/L	39	Standard
[	Ba	135	3484.7	1.4	0.7052	0.010	1.4	ug/L	25	Standard
[	Ce	140	4375.6	2.0				ug/L	25	Standard
[>	Tb	159	1173926.8	0.2				ug/L	1071747	Standard
[	Ho	165	76.7	14.3				ug/L	13	Standard
|	Tl	203	143.0	13.3	0.0069	0.001	14.7	ug/L	5	Standard
|	Tl	205	306.0	15.4	0.0074	0.001	15.1	ug/L	10	Standard
|	Pb	206	1692.4	3.6	0.0907	0.003	3.5	ug/L	382	Standard
|	Pb	207	1371.1	3.5	0.0905	0.005	6.0	ug/L	306	Standard
|	Pb	208	6537.6	0.8	0.0917	0.000	0.4	ug/L	1443	Standard
	U	238	180.0	37.7	0.0108	0.004	38.3	ug/L	5	Standard
[>	Bi	209	602169.1	1.1				ug/L	561075	Standard

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Na	23	19772.9	5.2	1.0160	0.034	3.4	mg/L	288	Standard
Mg	24	16333.8	1.6	0.0226	0.000	1.1	mg/L	218	Standard
K	39	178.3	1.6	0.0347	0.003	9.4	mg/L	125	Standard
Ca	43	3.3	86.6	-2.1294	2.799	131.5	mg/L	3	Standard
Fe	54	854.6	4.4	0.0644	0.010	15.6	mg/L	550	Standard
Fe	57	4595.7	3.4	0.0481	0.003	6.7	mg/L	1772	Standard
Sc-1	45	363737.5	2.3				mg/L	330668	Standard
Cl	35	5.3	10.8				ug/L	5	Standard
Kr	83	37.8	18.1				ug/L	38	Standard
Br	81	420.8	6.2				ug/L	344	Standard
P	31	1036.7	1.8				ug/L	312	Standard
S	34	5161.7	1.5				ug/L	5594	Standard
Sr	88	36.7	41.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		108.484	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	111.314
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	107.324
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207066618

Sample Date/Time: Sunday, July 29, 2012 09:31:33

Number of Replicates: 3

Autosampler Position: 208

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

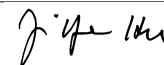
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10438.6	0.9	106.8428	33.136	31.0	ug/L	9465	Standard
|	Be	9	23.3	32.7	-0.0083	0.004	50.4	ug/L	10	Standard
|	Al	27	1585700.7	1.2	102.3292	1.770	1.7	ug/L	7870	Standard
[>	Sc	45	361170.3	2.2				ug/L	330668	Standard
[	Ti	47	1324.4	3.5	1.0045	0.041	4.1	ug/L	53	Standard
|	V	51	18045.7	2.3	1.4057	0.055	3.9	ug/L	2687	Standard
|	Cr	52	24823.7	0.6	1.8553	0.044	2.4	ug/L	8408	Standard
|	Cr	53	3293.7	4.5	2.1093	0.128	6.1	ug/L	288	Standard
|	Mn	55	67971.5	1.2	4.6757	0.107	2.3	ug/L	1080	Standard
|	Co	59	860.7	2.3	0.0825	0.001	1.8	ug/L	117	Standard
|	Ni	60	4316.6	1.7	1.6833	0.045	2.7	ug/L	68	Standard
|	Cu	65	1470.1	1.5	0.5625	0.014	2.4	ug/L	141	Standard
|	Zn	66	11020.7	0.7	9.8565	0.140	1.4	ug/L	138	Standard
[>	Ge	72	309074.8	1.1				ug/L	283230	Standard
|	As	75	28.6	129.9	0.1993	0.034	17.2	ug/L	-198	Standard
|	Se	82	49.0	16.5	0.2115	0.079	37.4	ug/L	21	Standard
[	Se-1	77	137.0	4.6	-0.0531	0.091	171.5	ug/L	131	Standard
[>	Ga	71	905.0	4.5				mg/L	607	Standard
[	Rb	85	1961.8	4.1				ug/L	30	Standard
[	Y	89	278972.0	1.8				ug/L	251555	Standard
[>	Rh	103	350.0	9.4				ug/L	335	Standard
[	Mo	98	898.5	3.4	0.2219	0.009	4.0	ug/L	13	Standard
|	Ag	107	109.3	7.1	0.0069	0.001	16.1	ug/L	36	Standard
|	Cd	111	485.5	6.1	0.1188	0.009	7.6	mg/L	49	Standard
|	Cd	114	1424.3	2.8	0.1121	0.004	4.0	ug/L	170	Standard
[>	In	115	804910.9	0.7				ug/L	727802	Standard
|	Sn	118	873.7	0.5	0.0213	0.000	0.6	ug/L	471	Standard
|	Sb	123	471.4	19.4	0.0523	0.010	19.4	ug/L	39	Standard
[	Ba	135	5764.4	2.3	1.1817	0.022	1.9	ug/L	25	Standard
[	Ce	140	17323.9	0.2				ug/L	25	Standard
[>	Tb	159	1177330.3	0.4				ug/L	1071747	Standard
[	Ho	165	846.4	3.4				ug/L	13	Standard
|	Tl	203	280.0	4.5	0.0146	0.001	4.3	ug/L	5	Standard
|	Tl	205	621.3	4.6	0.0149	0.001	4.3	ug/L	10	Standard
|	Pb	206	2538.5	1.2	0.1519	0.002	1.2	ug/L	382	Standard
|	Pb	207	1856.1	2.5	0.1325	0.003	2.3	ug/L	306	Standard
|	Pb	208	8943.3	1.2	0.1360	0.002	1.3	ug/L	1443	Standard
	U	238	1468.1	1.2	0.0896	0.001	1.0	ug/L	5	Standard
[>	Bi	209	602675.5	0.7				ug/L	561075	Standard

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Na	23	2311.8	0.9	0.0878	0.002	2.0	mg/L	288	Standard
Mg	24	34064.9	0.6	0.0471	0.001	2.1	mg/L	218	Standard
K	39	163.3	31.4	0.0235	0.041	173.5	mg/L	125	Standard
Ca	43	3.3	173.2	-2.1368	5.582	261.2	mg/L	3	Standard
Fe	54	1704.7	10.2	0.2510	0.031	12.2	mg/L	550	Standard
Fe	57	15499.6	4.3	0.2469	0.017	6.9	mg/L	1772	Standard
Sc-1	45	361170.3	2.2				mg/L	330668	Standard
Cl	35	8.0	33.1				ug/L	5	Standard
Kr	83	38.6	4.8				ug/L	38	Standard
Br	81	402.5	8.6				ug/L	344	Standard
P	31	2072.6	2.2				ug/L	312	Standard
S	34	5401.0	1.1				ug/L	5594	Standard
Sr	88	66.7	4.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		109.125	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L120706618

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	Cd	111	
	Cd	114	
>	In	115	110.595
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	107.414
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207066618

Report Date/Time: Sunday, July 29, 2012 09:34:04

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Method 6020 - Summary Report

Sample ID: L1207065820 WG404305-01

Sample Date/Time: Sunday, July 29, 2012 09:34:42

Number of Replicates: 3

Autosampler Position: 209

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26925.6	2.3	3641.4122	93.147	2.6	ug/L	9465	Standard
|	Be	9	26.7	47.2	-0.0049	0.008	154.3	ug/L	10	Standard
|	Al	27	1479342.9	2.1	106.3516	1.508	1.4	ug/L	7870	Standard
[>	Sc	45	324183.3	1.0				ug/L	330668	Standard
[	Ti	47	2578.9	0.9	2.2669	0.025	1.1	ug/L	53	Standard
|	V	51	5851.0	2.7	0.3388	0.017	4.9	ug/L	2687	Standard
|	Cr	52	8993.0	1.3	0.1229	0.010	8.0	ug/L	8408	Standard
|	Cr	53	590.8	2.3	0.2713	0.012	4.6	ug/L	288	Standard
|	Mn	55	82474.6	1.8	6.4554	0.089	1.4	ug/L	1080	Standard
|	Co	59	3379.7	1.8	0.4121	0.005	1.2	ug/L	117	Standard
|	Ni	60	915.4	5.7	0.3820	0.023	6.1	ug/L	68	Standard
|	Cu	65	535.7	5.4	0.1922	0.012	6.5	ug/L	141	Standard
|	Zn	66	2546.5	1.4	2.4670	0.026	1.1	ug/L	138	Standard
[>	Ge	72	272912.0	0.6				ug/L	283230	Standard
|	As	75	585.3	1.2	0.7833	0.008	1.1	ug/L	-198	Standard
|	Se	82	31.9	10.5	0.0914	0.033	36.6	ug/L	21	Standard
[	Se-1	77	108.3	1.4	-0.2417	0.023	9.5	ug/L	131	Standard
[>	Ga	71	733.4	6.8				mg/L	607	Standard
[	Rb	85	2410.2	2.5				ug/L	30	Standard
[	Y	89	236589.4	3.6				ug/L	251555	Standard
[>	Rh	103	291.7	7.9				ug/L	335	Standard
[	Mo	98	204.1	8.8	0.0512	0.005	10.0	ug/L	13	Standard
|	Ag	107	264.0	15.0	0.0340	0.006	18.6	ug/L	36	Standard
|	Cd	111	68.5	14.3	0.0035	0.003	94.1	mg/L	49	Standard
|	Cd	114	219.5	8.7	0.0027	0.002	69.9	ug/L	170	Standard
[>	In	115	717115.3	1.1				ug/L	727802	Standard
|	Sn	118	726.0	1.0	0.0167	0.001	3.3	ug/L	471	Standard
|	Sb	123	286.2	16.5	0.0361	0.006	15.6	ug/L	39	Standard
[	Ba	135	22255.3	2.5	5.1601	0.153	3.0	ug/L	25	Standard
[	Ce	140	37144.1	1.0				ug/L	25	Standard
[>	Tb	159	1080544.4	0.8				ug/L	1071747	Standard
[	Ho	165	472.3	8.4				ug/L	13	Standard
|	Tl	203	136.7	11.9	0.0072	0.001	12.7	ug/L	5	Standard
|	Tl	205	302.3	10.0	0.0079	0.001	9.3	ug/L	10	Standard
|	Pb	206	2114.5	5.7	0.1336	0.008	5.9	ug/L	382	Standard
|	Pb	207	1680.8	2.2	0.1292	0.005	4.1	ug/L	306	Standard
|	Pb	208	8019.2	2.8	0.1310	0.005	3.8	ug/L	1443	Standard
	U	238	222.3	5.0	0.0145	0.001	6.0	ug/L	5	Standard
[>	Bi	209	557459.8	1.2				ug/L	561075	Standard

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Na	23	109215.8	3.0	6.4866	0.141	2.2	mg/L	288	Standard
Mg	24	104093.3	3.2	0.1597	0.004	2.3	mg/L	218	Standard
K	39	241.7	8.4	0.1093	0.017	15.5	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5251	3.177	90.1	mg/L	3	Standard
Fe	54	924.0	5.2	0.1038	0.010	9.8	mg/L	550	Standard
Fe	57	9749.8	5.8	0.1624	0.010	5.9	mg/L	1772	Standard
Sc-1	45	324183.3	1.0				mg/L	330668	Standard
Cl	35	6.0	57.7				ug/L	5	Standard
Kr	83	34.1	4.6				ug/L	38	Standard
Br	81	443.3	4.9				ug/L	344	Standard
P	31	261.7	3.6				ug/L	312	Standard
S	34	6809.0	0.8				ug/L	5594	Standard
Sr	88	68.3	23.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.357	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065820 WG404305-01

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	Cd	111	
	Cd	114	
>	In	115	98.532
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.356
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065820 WG404305-01

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Method 6020 - Summary Report

Sample ID: L1207065820S WG404305-04

Sample Date/Time: Sunday, July 29, 2012 09:37:51

Number of Replicates: 3

Autosampler Position: 210

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

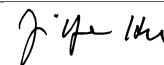
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27747.1	6.6	3810.7494	346.185	9.1	ug/L	9465	Standard
|	Be	9	9452.9	3.2	5.7849	0.190	3.3	ug/L	10	Standard
|	Al	27	1510075.5	2.0	108.6658	2.048	1.9	ug/L	7870	Standard
[>	Sc	45	323924.4	0.5				ug/L	330668	Standard
[	Ti	47	2451.5	4.0	2.1348	0.047	2.2	ug/L	53	Standard
|	V	51	57062.3	1.8	5.7113	0.243	4.3	ug/L	2687	Standard
|	Cr	52	50035.8	1.5	5.5731	0.259	4.7	ug/L	8408	Standard
|	Cr	53	7598.6	1.8	5.7793	0.069	1.2	ug/L	288	Standard
|	Mn	55	158412.0	1.6	12.3856	0.524	4.2	ug/L	1080	Standard
|	Co	59	49810.8	1.7	6.2062	0.203	3.3	ug/L	117	Standard
|	Ni	60	13315.2	2.4	5.9060	0.153	2.6	ug/L	68	Standard
|	Cu	65	12406.1	2.3	5.9099	0.199	3.4	ug/L	141	Standard
|	Zn	66	8433.3	2.3	8.4543	0.245	2.9	ug/L	138	Standard
[>	Ge	72	275115.7	2.6				ug/L	283230	Standard
|	As	75	6470.1	1.1	6.8715	0.198	2.9	ug/L	-198	Standard
|	Se	82	654.2	0.6	6.5733	0.183	2.8	ug/L	21	Standard
[	Se-1	77	549.0	6.2	6.2666	0.611	9.8	ug/L	131	Standard
[>	Ga	71	751.7	9.0				mg/L	607	Standard
[	Rb	85	2378.5	1.6				ug/L	30	Standard
[	Y	89	235437.0	1.4				ug/L	251555	Standard
[>	Rh	103	285.0	20.7				ug/L	335	Standard
[	Mo	98	210.9	7.8	0.0529	0.004	8.4	ug/L	13	Standard
|	Ag	107	34476.9	1.6	5.5752	0.162	2.9	ug/L	36	Standard
|	Cd	111	20297.7	0.9	6.3886	0.145	2.3	mg/L	49	Standard
|	Cd	114	59507.5	1.7	6.1566	0.134	2.2	ug/L	170	Standard
[>	In	115	720156.3	1.7				ug/L	727802	Standard
|	Sn	118	629.7	6.1	0.0079	0.004	46.4	ug/L	471	Standard
|	Sb	123	47303.3	2.1	5.6579	0.181	3.2	ug/L	39	Standard
[	Ba	135	47463.9	0.6	10.9718	0.180	1.6	ug/L	25	Standard
[	Ce	140	39128.8	1.1				ug/L	25	Standard
[>	Tb	159	1073153.0	2.3				ug/L	1071747	Standard
[	Ho	165	504.0	4.8				ug/L	13	Standard
|	Tl	203	91433.1	1.0	5.5125	0.139	2.5	ug/L	5	Standard
|	Tl	205	210529.0	1.0	5.4430	0.131	2.4	ug/L	10	Standard
|	Pb	206	73034.3	0.9	5.6770	0.128	2.2	ug/L	382	Standard
|	Pb	207	61377.1	1.0	5.7169	0.118	2.1	ug/L	306	Standard
|	Pb	208	285816.5	1.0	5.6642	0.147	2.6	ug/L	1443	Standard
|	U	238	80690.3	1.3	5.3208	0.137	2.6	ug/L	5	Standard
[>	Bi	209	559161.0	2.5				ug/L	561075	Standard

Sample ID: L1207065820S WG404305-04

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Na	23	113327.4	2.0	6.7380	0.101	1.5	mg/L	288	Standard
Mg	24	113646.7	4.0	0.1745	0.006	3.6	mg/L	218	Standard
K	39	211.7	8.3	0.0824	0.015	18.1	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5289	3.171	89.9	mg/L	3	Standard
Fe	54	856.9	2.1	0.0877	0.005	5.9	mg/L	550	Standard
Fe	57	8931.0	2.9	0.1461	0.006	3.9	mg/L	1772	Standard
Sc-1	45	323924.4	0.5				mg/L	330668	Standard
Cl	35	6.7	22.9				ug/L	5	Standard
Kr	83	37.4	6.7				ug/L	38	Standard
Br	81	416.7	6.6				ug/L	344	Standard
P	31	279.2	11.1				ug/L	312	Standard
S	34	6807.4	0.9				ug/L	5594	Standard
Sr	88	66.7	11.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.135	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065820S WG404305-04

Report Date/Time: Sunday, July 29, 2012 09:40:21

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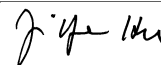
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	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
	Pb	208		
	U	238		
>	Bi	209	99.659	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065820S WG404305-04
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Method 6020 - Summary Report

Sample ID: L1207065820SD WG404305-05

Sample Date/Time: Sunday, July 29, 2012 09:40:59

Number of Replicates: 3

Autosampler Position: 211

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	28553.6	2.5	3867.0740	124.227	3.2	ug/L	9465	Standard
|	Be	9	10068.3	3.1	6.0479	0.176	2.9	ug/L	10	Standard
|	Al	27	1728714.7	2.2	122.1617	2.574	2.1	ug/L	7870	Standard
[>	Sc	45	330132.9	2.8				ug/L	330668	Standard
[	Ti	47	2754.3	4.8	2.3883	0.092	3.8	ug/L	53	Standard
|	V	51	59710.3	1.8	5.9458	0.047	0.8	ug/L	2687	Standard
|	Cr	52	51830.9	1.8	5.7641	0.074	1.3	ug/L	8408	Standard
|	Cr	53	7897.9	2.0	5.9746	0.058	1.0	ug/L	288	Standard
|	Mn	55	162220.8	1.0	12.5966	0.014	0.1	ug/L	1080	Standard
|	Co	59	51363.3	1.2	6.3568	0.014	0.2	ug/L	117	Standard
|	Ni	60	13869.7	2.4	6.1125	0.084	1.4	ug/L	68	Standard
|	Cu	65	12950.9	1.7	6.1305	0.050	0.8	ug/L	141	Standard
|	Zn	66	8782.9	2.0	8.7519	0.136	1.5	ug/L	138	Standard
[>	Ge	72	276841.1	1.0				ug/L	283230	Standard
|	As	75	6738.2	2.1	7.1017	0.073	1.0	ug/L	-198	Standard
|	Se	82	688.1	3.9	6.8775	0.208	3.0	ug/L	21	Standard
[	Se-1	77	588.0	3.5	6.7828	0.324	4.8	ug/L	131	Standard
[>	Ga	71	760.0	11.2				mg/L	607	Standard
[	Rb	85	2716.9	2.8				ug/L	30	Standard
[	Y	89	243641.9	1.4				ug/L	251555	Standard
[>	Rh	103	306.7	11.5				ug/L	335	Standard
[	Mo	98	231.6	2.5	0.0582	0.001	1.5	ug/L	13	Standard
|	Ag	107	36411.7	3.4	5.8321	0.114	2.0	ug/L	36	Standard
|	Cd	111	20845.4	0.6	6.5006	0.058	0.9	mg/L	49	Standard
|	Cd	114	61346.3	2.2	6.2881	0.045	0.7	ug/L	170	Standard
[>	In	115	726773.5	1.5				ug/L	727802	Standard
|	Sn	118	636.7	6.1	0.0080	0.003	32.2	ug/L	471	Standard
|	Sb	123	48256.1	1.4	5.7181	0.074	1.3	ug/L	39	Standard
[	Ba	135	48684.1	1.5	11.1497	0.017	0.1	ug/L	25	Standard
[	Ce	140	39958.0	1.4				ug/L	25	Standard
[>	Tb	159	1075869.9	0.7				ug/L	1071747	Standard
[	Ho	165	550.7	5.8				ug/L	13	Standard
|	Tl	203	93644.5	1.2	5.5947	0.047	0.8	ug/L	5	Standard
|	Tl	205	217456.3	1.6	5.5712	0.072	1.3	ug/L	10	Standard
|	Pb	206	74896.0	1.1	5.7697	0.039	0.7	ug/L	382	Standard
|	Pb	207	63644.7	1.5	5.8756	0.064	1.1	ug/L	306	Standard
|	Pb	208	294090.2	1.3	5.7759	0.050	0.9	ug/L	1443	Standard
|	U	238	83546.1	2.3	5.4592	0.111	2.0	ug/L	5	Standard
[>	Bi	209	564042.0	0.4				ug/L	561075	Standard

Sample ID: L1207065820SD WG404305-05

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Na	23	113634.6	1.1	6.6337	0.262	4.0	mg/L	288	Standard
Mg	24	109952.7	2.3	0.1657	0.005	2.8	mg/L	218	Standard
K	39	218.3	5.8	0.0848	0.012	13.8	mg/L	125	Standard
Ca	43	3.3	86.6	-1.7415	3.135	180.0	mg/L	3	Standard
Fe	54	1039.0	8.2	0.1272	0.017	13.3	mg/L	550	Standard
Fe	57	10025.0	1.6	0.1645	0.005	3.1	mg/L	1772	Standard
Sc-1	45	330132.9	2.8				mg/L	330668	Standard
Cl	35	5.7	27.0				ug/L	5	Standard
Kr	83	35.3	4.1				ug/L	38	Standard
Br	81	384.2	1.5				ug/L	344	Standard
P	31	278.3	9.0				ug/L	312	Standard
S	34	6667.3	1.7				ug/L	5594	Standard
Sr	88	93.3	30.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.744	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065820SD WG404305-05
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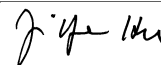
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	Ba	135	
	Ce	140	
>	Tb	159	
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	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.529
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065820SD WG404305-05
 Report Date/Time: Sunday, July 29, 2012 09:43:30
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Method 6020 - Summary Report

Sample ID: L1207065812

Sample Date/Time: Sunday, July 29, 2012 09:44:07

Number of Replicates: 3

Autosampler Position: 212

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

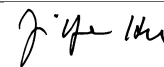
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	41560.3	2.2	6749.8858	302.906	4.5	ug/L	9465	Standard
|	Be	9	45.0	61.9	0.0068	0.017	248.1	ug/L	10	Standard
|	Al	27	2635122.1	2.1	193.6077	8.120	4.2	ug/L	7870	Standard
[>	Sc	45	318189.0	2.2				ug/L	330668	Standard
|	Ti	47	4264.3	3.6	3.7150	0.145	3.9	ug/L	53	Standard
|	V	51	9433.6	1.2	0.7016	0.015	2.2	ug/L	2687	Standard
|	Cr	52	17765.7	0.2	1.2600	0.016	1.3	ug/L	8408	Standard
|	Cr	53	2006.0	4.0	1.3675	0.064	4.7	ug/L	288	Standard
|	Mn	55	345103.9	1.1	26.8406	0.415	1.5	ug/L	1080	Standard
|	Co	59	5681.4	3.2	0.6901	0.023	3.3	ug/L	117	Standard
|	Ni	60	1409.7	5.3	0.5939	0.036	6.0	ug/L	68	Standard
|	Cu	65	905.4	2.1	0.3647	0.010	2.9	ug/L	141	Standard
|	Zn	66	3057.3	2.4	2.9414	0.063	2.1	ug/L	138	Standard
[>	Ge	72	277389.9	0.5				ug/L	283230	Standard
|	As	75	589.4	5.6	0.7778	0.037	4.7	ug/L	-198	Standard
|	Se	82	31.4	6.4	0.0813	0.022	26.8	ug/L	21	Standard
[	Se-1	77	120.0	9.8	-0.0973	0.165	169.5	ug/L	131	Standard
[>	Ga	71	946.7	10.4				mg/L	607	Standard
[	Rb	85	15179.3	1.3				ug/L	30	Standard
[	Y	89	248206.7	1.1				ug/L	251555	Standard
[>	Rh	103	295.0	14.7				ug/L	335	Standard
[	Mo	98	1390.9	4.8	0.3879	0.018	4.5	ug/L	13	Standard
|	Ag	107	80.3	19.5	0.0040	0.002	59.3	ug/L	36	Standard
|	Cd	111	68.3	13.4	0.0032	0.003	79.1	mg/L	49	Standard
|	Cd	114	226.0	10.6	0.0032	0.002	74.9	ug/L	170	Standard
[>	In	115	722307.6	1.7				ug/L	727802	Standard
|	Sn	118	707.0	3.2	0.0145	0.002	16.0	ug/L	471	Standard
|	Sb	123	307.0	12.9	0.0384	0.005	13.1	ug/L	39	Standard
[	Ba	135	41961.7	1.8	9.6709	0.296	3.1	ug/L	25	Standard
[	Ce	140	64254.6	1.2				ug/L	25	Standard
[>	Tb	159	1080066.7	0.6				ug/L	1071747	Standard
[	Ho	165	1077.0	0.3				ug/L	13	Standard
|	Tl	203	142.0	22.2	0.0074	0.002	24.2	ug/L	5	Standard
|	Tl	205	292.0	12.8	0.0075	0.001	12.3	ug/L	10	Standard
|	Pb	206	3565.4	1.4	0.2448	0.006	2.4	ug/L	382	Standard
|	Pb	207	2781.3	1.9	0.2300	0.002	0.9	ug/L	306	Standard
|	Pb	208	13423.7	0.9	0.2365	0.005	2.1	ug/L	1443	Standard
	U	238	642.7	8.1	0.0419	0.004	8.5	ug/L	5	Standard
[>	Bi	209	562617.4	1.4				ug/L	561075	Standard

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Na	23	115344.0	0.1	6.9853	0.152	2.2	mg/L	288	Standard
Mg	24	178374.2	2.4	0.2788	0.012	4.2	mg/L	218	Standard
K	39	915.0	5.2	0.7328	0.030	4.2	mg/L	125	Standard
Ca	43	5.0	100.0	0.1576	5.547	3519.9	mg/L	3	Standard
Fe	54	1700.2	5.6	0.3011	0.033	10.8	mg/L	550	Standard
Fe	57	19519.2	2.2	0.3678	0.018	4.9	mg/L	1772	Standard
Sc-1	45	318189.0	2.2				mg/L	330668	Standard
Cl	35	8.3	30.2				ug/L	5	Standard
Kr	83	37.7	7.2				ug/L	38	Standard
Br	81	455.8	1.4				ug/L	344	Standard
P	31	296.7	13.3				ug/L	312	Standard
S	34	6392.2	1.4				ug/L	5594	Standard
Sr	88	111.7	27.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.938	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065812

Report Date/Time: Sunday, July 29, 2012 09:46:37

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	Cd	111	
	Cd	114	
>	In	115	99.245
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.275
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065812

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Method 6020 - Summary Report

Sample ID: L1207065812PS WG404831-01

Sample Date/Time: Sunday, July 29, 2012 09:47:17

Number of Replicates: 3

Autosampler Position: 213

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	47462.6	1.3	6366.6464	181.256	2.8	ug/L	9465	Standard
|	Be	9	84060.9	1.8	43.9562	1.224	2.8	ug/L	10	Standard
|	Al	27	3534627.7	1.4	217.1974	3.227	1.5	ug/L	7870	Standard
[>	Sc	45	380367.2	1.0				ug/L	330668	Standard
[	Ti	47	4546.7	1.5	3.4999	0.033	1.0	ug/L	53	Standard
|	V	51	482520.1	0.7	44.1257	0.409	0.9	ug/L	2687	Standard
|	Cr	52	392579.6	0.3	44.6864	0.566	1.3	ug/L	8408	Standard
|	Cr	53	67110.8	1.1	46.0877	0.203	0.4	ug/L	288	Standard
|	Mn	55	1037727.8	1.4	71.5044	0.431	0.6	ug/L	1080	Standard
|	Co	59	421347.9	0.1	46.1070	0.525	1.1	ug/L	117	Standard
|	Ni	60	115887.5	1.2	45.2626	0.117	0.3	ug/L	68	Standard
|	Cu	65	107672.6	1.1	45.4126	0.077	0.2	ug/L	141	Standard
|	Zn	66	53379.9	0.9	47.6083	0.520	1.1	ug/L	138	Standard
[>	Ge	72	313694.3	1.1				ug/L	283230	Standard
|	As	75	50273.5	0.6	45.8030	0.554	1.2	ug/L	-198	Standard
|	Se	82	4978.8	0.1	45.2339	0.441	1.0	ug/L	21	Standard
[	Se-1	77	3630.4	0.8	45.2147	0.648	1.4	ug/L	131	Standard
[>	Ga	71	1136.7	0.9				mg/L	607	Standard
[	Rb	85	16564.1	3.2				ug/L	30	Standard
[	Y	89	280837.3	0.9				ug/L	251555	Standard
[>	Rh	103	421.7	9.7				ug/L	335	Standard
[	Mo	98	1612.9	1.7	0.3942	0.009	2.2	ug/L	13	Standard
|	Ag	107	313907.3	0.9	44.3801	0.103	0.2	ug/L	36	Standard
|	Cd	111	175947.5	0.3	48.4727	0.322	0.7	mg/L	49	Standard
|	Cd	114	503126.0	0.5	45.5810	0.114	0.2	ug/L	170	Standard
[>	In	115	824622.7	0.7				ug/L	727802	Standard
|	Sn	118	1175.4	5.8	0.0428	0.005	11.7	ug/L	471	Standard
|	Sb	123	440145.8	0.6	45.9508	0.217	0.5	ug/L	39	Standard
[	Ba	135	257212.5	0.5	51.9622	0.618	1.2	ug/L	25	Standard
[	Ce	140	66861.2	1.1				ug/L	25	Standard
[>	Tb	159	1180215.2	0.9				ug/L	1071747	Standard
[	Ho	165	1117.7	2.8				ug/L	13	Standard
|	Tl	203	797799.1	0.5	44.3599	0.534	1.2	ug/L	5	Standard
|	Tl	205	1834544.8	0.5	43.7348	0.436	1.0	ug/L	10	Standard
|	Pb	206	624535.0	0.5	44.9854	0.429	1.0	ug/L	382	Standard
|	Pb	207	526717.9	0.4	45.4395	0.450	1.0	ug/L	306	Standard
|	Pb	208	2443595.1	0.1	44.8536	0.314	0.7	ug/L	1443	Standard
|	U	238	746964.1	0.4	45.4196	0.360	0.8	ug/L	5	Standard
[>	Bi	209	606199.0	0.7				ug/L	561075	Standard

Sample ID: L1207065812PS WG404831-01

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Na	23	113782.3	1.1	5.7563	0.055	1.0	mg/L	288	Standard
Mg	24	187355.3	3.2	0.2449	0.009	3.6	mg/L	218	Standard
K	39	956.7	2.5	0.6274	0.012	2.0	mg/L	125	Standard
Ca	43	1.7	173.2	-3.8110	2.682	70.4	mg/L	3	Standard
Fe	54	2183.9	6.1	0.3323	0.032	9.7	mg/L	550	Standard
Fe	57	24120.9	5.5	0.3810	0.019	4.9	mg/L	1772	Standard
Sc-1	45	380367.2	1.0				mg/L	330668	Standard
Cl	35	6.0	16.7				ug/L	5	Standard
Kr	83	37.1	4.2				ug/L	38	Standard
Br	81	565.0	6.5				ug/L	344	Standard
P	31	469.2	2.6				ug/L	312	Standard
S	34	6918.2	2.1				ug/L	5594	Standard
Sr	88	88.3	26.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		110.756	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065812PS WG404831-01
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	Cd	111	
	Cd	114	
>	In	115	113.303
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	108.042
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065812PS WG404831-01
 Report Date/Time: Sunday, July 29, 2012 09:49:47
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Approved: July 30, 2012



Method 6020 - Summary Report

Sample ID: L1207065812SDL WG404831-02

Sample Date/Time: Sunday, July 29, 2012 09:50:26

Number of Replicates: 3

Autosampler Position: 214

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

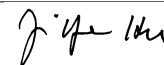
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16170.3	1.5	1212.1214	46.463	3.8	ug/L	9465	Standard
|	Be	9	26.7	39.0	-0.0062	0.006	95.4	ug/L	10	Standard
|	Al	27	486091.8	1.3	31.7245	1.217	3.8	ug/L	7870	Standard
[>	Sc	45	352829.1	2.4				ug/L	330668	Standard
[	Ti	47	893.7	2.0	0.6906	0.022	3.2	ug/L	53	Standard
|	V	51	4052.7	2.9	0.1126	0.006	5.5	ug/L	2687	Standard
|	Cr	52	10156.7	1.3	0.1651	0.021	12.5	ug/L	8408	Standard
|	Cr	53	595.8	7.9	0.2354	0.027	11.4	ug/L	288	Standard
|	Mn	55	71143.3	0.8	5.0865	0.134	2.6	ug/L	1080	Standard
|	Co	59	1256.4	2.7	0.1317	0.004	2.7	ug/L	117	Standard
|	Ni	60	520.0	5.6	0.1850	0.016	8.5	ug/L	68	Standard
|	Cu	65	325.3	3.7	0.0769	0.004	5.7	ug/L	141	Standard
|	Zn	66	3056.3	3.5	2.7283	0.089	3.3	ug/L	138	Standard
[>	Ge	72	297846.0	1.9				ug/L	283230	Standard
|	As	75	-40.6	96.8	0.1336	0.039	28.8	ug/L	-198	Standard
|	Se	82	23.6	22.6	-0.0167	0.047	282.8	ug/L	21	Standard
[	Se-1	77	125.0	5.5	-0.1490	0.099	66.6	ug/L	131	Standard
[>	Ga	71	676.7	3.5				mg/L	607	Standard
[	Rb	85	3210.3	2.4				ug/L	30	Standard
[	Y	89	257215.3	3.8				ug/L	251555	Standard
[>	Rh	103	340.0	2.5				ug/L	335	Standard
[	Mo	98	318.0	7.4	0.0749	0.005	7.3	ug/L	13	Standard
|	Ag	107	124.7	19.8	0.0093	0.003	37.1	ug/L	36	Standard
|	Cd	111	76.9	31.1	0.0037	0.007	180.7	mg/L	49	Standard
|	Cd	114	256.7	22.1	0.0039	0.005	131.4	ug/L	170	Standard
[>	In	115	795323.8	0.8				ug/L	727802	Standard
|	Sn	118	583.3	4.7	-0.0010	0.002	250.2	ug/L	471	Standard
|	Sb	123	2155.0	1.8	0.2350	0.002	1.0	ug/L	39	Standard
[	Ba	135	8234.9	0.8	1.7138	0.029	1.7	ug/L	25	Standard
[	Ce	140	12543.9	0.7				ug/L	25	Standard
[>	Tb	159	1146422.8	1.1				ug/L	1071747	Standard
[	Ho	165	229.3	6.1				ug/L	13	Standard
|	Tl	203	143.0	42.6	0.0070	0.003	48.2	ug/L	5	Standard
|	Tl	205	315.0	35.2	0.0077	0.003	34.4	ug/L	10	Standard
|	Pb	206	1133.0	3.8	0.0511	0.003	5.2	ug/L	382	Standard
|	Pb	207	926.7	2.6	0.0529	0.002	3.2	ug/L	306	Standard
|	Pb	208	4359.2	5.1	0.0524	0.004	6.9	ug/L	1443	Standard
|	U	238	218.7	15.0	0.0133	0.002	14.6	ug/L	5	Standard
[>	Bi	209	594690.0	0.6				ug/L	561075	Standard

Sample ID: L1207065812SDL WG404831-02

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Na	23	50837.0	5.7	2.7561	0.199	7.2	mg/L	288	Standard
Mg	24	36925.0	2.0	0.0523	0.001	2.8	mg/L	218	Standard
K	39	305.0	17.3	0.1436	0.039	26.9	mg/L	125	Standard
Ca	43	1.7	173.2	-3.7032	2.869	77.5	mg/L	3	Standard
Fe	54	808.2	7.2	0.0599	0.016	26.4	mg/L	550	Standard
Fe	57	5787.8	4.1	0.0728	0.003	3.5	mg/L	1772	Standard
Sc-1	45	352829.1	2.4				mg/L	330668	Standard
Cl	35	3.7	83.3				ug/L	5	Standard
Kr	83	35.9	21.9				ug/L	38	Standard
Br	81	400.8	5.6				ug/L	344	Standard
P	31	312.5	8.4				ug/L	312	Standard
S	34	5230.1	2.5				ug/L	5594	Standard
Sr	88	46.7	27.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.161	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065812SDL WG404831-02
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	Cd	111	
	Cd	114	
>	In	115	109.278
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	105.991
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065812SDL WG404831-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 09:53:38

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

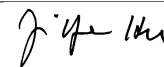
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10013.3	2.1	-57.3908	92.199	160.7	ug/L	9465	Standard
|	Be	9	95173.0	0.8	49.8712	1.891	3.8	ug/L	10	Standard
|	Al	27	762983.5	1.0	46.5214	1.366	2.9	ug/L	7870	Standard
[>	Sc	45	379826.8	3.2				ug/L	330668	Standard
|	Ti	47	130694.7	1.5	98.9579	1.165	1.2	ug/L	53	Standard
|	V	51	540919.6	1.2	48.1078	0.238	0.5	ug/L	2687	Standard
|	Cr	52	434040.0	1.2	48.1034	0.339	0.7	ug/L	8408	Standard
|	Cr	53	73281.8	1.3	48.9330	0.449	0.9	ug/L	288	Standard
|	Mn	55	753838.1	0.9	50.4693	0.078	0.2	ug/L	1080	Standard
|	Co	59	475018.7	1.5	50.5269	0.651	1.3	ug/L	117	Standard
|	Ni	60	129529.0	1.4	49.1829	0.689	1.4	ug/L	68	Standard
|	Cu	65	120513.5	1.5	49.4192	0.933	1.9	ug/L	141	Standard
|	Zn	66	56463.0	0.7	48.9552	0.206	0.4	ug/L	138	Standard
[>	Ge	72	322702.5	1.0				ug/L	283230	Standard
|	As	75	55742.8	1.3	49.3522	0.550	1.1	ug/L	-198	Standard
|	Se	82	5620.4	1.3	49.6611	0.786	1.6	ug/L	21	Standard
[	Se-1	77	4136.2	2.4	50.2719	1.169	2.3	ug/L	131	Standard
[>	Ga	71	678.3	11.3				mg/L	607	Standard
|	Rb	85	708.4	11.3				ug/L	30	Standard
|	Y	89	281698.5	1.9				ug/L	251555	Standard
[>	Rh	103	445.0	8.9				ug/L	335	Standard
|	Mo	98	393644.9	1.7	96.1472	1.659	1.7	ug/L	13	Standard
|	Ag	107	351586.4	1.5	48.8027	0.942	1.9	ug/L	36	Standard
|	Cd	111	194247.2	0.6	52.5371	0.470	0.9	mg/L	49	Standard
|	Cd	114	562390.0	1.0	50.0215	0.620	1.2	ug/L	170	Standard
[>	In	115	839978.5	0.5				ug/L	727802	Standard
|	Sn	118	666880.6	0.8	50.2060	0.255	0.5	ug/L	471	Standard
|	Sb	123	485325.7	0.7	49.7404	0.118	0.2	ug/L	39	Standard
|	Ba	135	239051.4	0.6	47.4087	0.550	1.2	ug/L	25	Standard
|	Ce	140	940.0	1.3				ug/L	25	Standard
[>	Tb	159	1200150.1	0.6				ug/L	1071747	Standard
|	Ho	165	16.7	22.7				ug/L	13	Standard
|	Tl	203	882550.1	0.0	48.9777	0.171	0.3	ug/L	5	Standard
|	Tl	205	2159620.1	0.8	51.3866	0.573	1.1	ug/L	10	Standard
|	Pb	206	684892.3	1.3	49.2421	0.696	1.4	ug/L	382	Standard
|	Pb	207	581025.6	0.2	50.0313	0.134	0.3	ug/L	306	Standard
|	Pb	208	2688299.9	0.2	49.2544	0.284	0.6	ug/L	1443	Standard
	U	238	840139.2	0.5	50.9883	0.396	0.8	ug/L	5	Standard
[>	Bi	209	607340.4	0.3				ug/L	561075	Standard

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Na	23	112971.3	1.7	5.7287	0.271	4.7	mg/L	288	Standard
Mg	24	3583720.3	0.2	4.6880	0.163	3.5	mg/L	218	Standard
K	39	6169.6	4.3	4.6512	0.301	6.5	mg/L	125	Standard
Ca	43	13.3	78.1	7.2568	10.232	141.0	mg/L	3	Standard
Fe	54	23292.6	2.4	4.7207	0.118	2.5	mg/L	550	Standard
Fe	57	342391.0	1.5	5.8811	0.173	2.9	mg/L	1772	Standard
Sc-1	45	379826.8	3.2				mg/L	330668	Standard
Cl	35	2.3	65.5				ug/L	5	Standard
Kr	83	40.9	8.0				ug/L	38	Standard
Br	81	449.2	12.5				ug/L	344	Standard
P	31	378.3	12.2				ug/L	312	Standard
S	34	5730.3	2.3				ug/L	5594	Standard
Sr	88	55.0	9.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	93.043		
Sc	45			
Ti	47	98.958		
V	51	96.216		
Cr	52	96.207		
Cr	53			
Mn	55	100.939		
Co	59	101.054		
Ni	60	98.366		
Cu	65	98.838		
Zn	66	97.910		
Ge	72		113.937	
As	75	98.704		
Se	82	99.322		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.147		
Ag	107	97.605		

Sample ID: QC Std 6

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	Cd	111	105.074	
	Cd	114		
>	In	115		115.413
	Sn	118	100.412	
	Sb	123	99.481	
	Ba	135	94.817	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.955	
|	Tl	205		
|	Pb	206	98.484	
|	Pb	207	100.063	
|	Pb	208	98.509	
|	U	238	101.977	
>	Bi	209		108.246
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Sunday, July 29, 2012 09:56:08

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Approved: July 30, 2012



Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 09:56:48

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9229.5	0.3	-72.2883	34.823	48.2	ug/L	9465	Standard
|	Be	9	25.0	60.0	-0.0072	0.008	117.9	ug/L	10	Standard
|	Al	27	7678.6	2.8	-0.0708	0.016	22.6	ug/L	7870	Standard
[>	Sc	45	352851.1	2.3				ug/L	330668	Standard
|	Ti	47	54.3	13.9	0.0012	0.006	521.2	ug/L	53	Standard
|	V	51	2486.2	1.8	-0.0410	0.005	12.5	ug/L	2687	Standard
|	Cr	52	7697.0	1.8	-0.1441	0.019	13.3	ug/L	8408	Standard
|	Cr	53	257.5	5.9	-0.0115	0.011	92.5	ug/L	288	Standard
|	Mn	55	1093.0	5.5	-0.0054	0.004	82.6	ug/L	1080	Standard
|	Co	59	123.0	9.2	0.0010	0.001	149.8	ug/L	117	Standard
|	Ni	60	64.7	3.9	-0.0028	0.001	40.9	ug/L	68	Standard
|	Cu	65	150.3	8.3	-0.0015	0.005	324.9	ug/L	141	Standard
|	Zn	66	155.7	16.5	-0.0063	0.023	359.8	ug/L	138	Standard
[>	Ge	72	300097.0	1.1				ug/L	283230	Standard
|	As	75	-171.3	5.8	0.0102	0.008	75.8	ug/L	-198	Standard
|	Se	82	24.6	16.1	-0.0078	0.039	501.4	ug/L	21	Standard
[	Se-1	77	112.0	9.4	-0.3381	0.145	42.9	ug/L	131	Standard
[>	Ga	71	623.3	0.9				mg/L	607	Standard
|	Rb	85	20.0	90.1				ug/L	30	Standard
|	Y	89	256611.7	1.3				ug/L	251555	Standard
[>	Rh	103	355.0	18.6				ug/L	335	Standard
|	Mo	98	183.1	8.9	0.0400	0.004	10.9	ug/L	13	Standard
|	Ag	107	89.3	3.4	0.0041	0.000	10.9	ug/L	36	Standard
|	Cd	111	58.6	15.4	-0.0016	0.003	160.0	mg/L	49	Standard
|	Cd	114	206.1	15.5	-0.0009	0.003	344.7	ug/L	170	Standard
[>	In	115	797067.2	0.4				ug/L	727802	Standard
|	Sn	118	828.4	6.7	0.0184	0.004	23.7	ug/L	471	Standard
|	Sb	123	2589.8	7.7	0.2815	0.022	7.9	ug/L	39	Standard
|	Ba	135	40.7	3.8	-0.0030	0.000	10.6	ug/L	25	Standard
|	Ce	140	31.7	11.1				ug/L	25	Standard
[>	Tb	159	1146507.7	0.3				ug/L	1071747	Standard
|	Ho	165	10.7	19.5				ug/L	13	Standard
|	Tl	203	61.7	22.1	0.0024	0.001	32.6	ug/L	5	Standard
|	Tl	205	133.7	31.4	0.0033	0.001	31.8	ug/L	10	Standard
|	Pb	206	431.7	3.3	-0.0005	0.001	232.4	ug/L	382	Standard
|	Pb	207	355.0	7.2	0.0025	0.002	98.6	ug/L	306	Standard
|	Pb	208	1676.7	2.6	0.0021	0.001	43.8	ug/L	1443	Standard
	U	238	74.3	17.1	0.0044	0.001	18.7	ug/L	5	Standard
[>	Bi	209	596960.0	0.6				ug/L	561075	Standard

Sample ID: QC Std 7

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Na	23	401.7	20.5	-0.0141	0.005	34.1	mg/L	288	Standard
Mg	24	365.0	20.5	0.0008	0.000	14.4	mg/L	218	Standard
K	39	116.7	2.5	-0.0120	0.004	36.8	mg/L	125	Standard
Ca	43	1.7	173.2	-3.6801	2.909	79.0	mg/L	3	Standard
Fe	54	532.7	2.5	-0.0019	0.006	304.2	mg/L	550	Standard
Fe	57	1943.5	6.8	0.0014	0.003	212.1	mg/L	1772	Standard
Sc-1	45	352851.1	2.3				mg/L	330668	Standard
Cl	35	5.7	27.0				ug/L	5	Standard
Kr	83	35.4	7.9				ug/L	38	Standard
Br	81	430.8	11.7				ug/L	344	Standard
P	31	330.0	5.9				ug/L	312	Standard
S	34	5655.2	1.0				ug/L	5594	Standard
Sr	88	38.3	27.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.955	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 09:59:18

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	Cd	111	
	Cd	114	
>	In	115	109.517
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	106.396
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

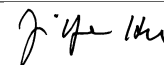
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 09:59:18

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Method 6020 - Summary Report

Sample ID: L1207064901

Sample Date/Time: Sunday, July 29, 2012 09:59:59

Number of Replicates: 3

Autosampler Position: 215

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	52340.4	4.4	9013.7903	545.529	6.1	ug/L	9465	Standard
|	Be	9	20.0	50.0	-0.0087	0.006	71.7	ug/L	10	Standard
|	Al	27	584539.0	3.8	42.6925	1.950	4.6	ug/L	7870	Standard
[>	Sc	45	316624.2	0.8				ug/L	330668	Standard
[	Ti	47	1990.8	5.5	1.7535	0.093	5.3	ug/L	53	Standard
|	V	51	6887.7	2.6	0.4540	0.016	3.6	ug/L	2687	Standard
|	Cr	52	9935.3	3.6	0.2593	0.045	17.2	ug/L	8408	Standard
|	Cr	53	754.2	9.3	0.4053	0.055	13.5	ug/L	288	Standard
|	Mn	55	115754.5	0.2	9.1651	0.033	0.4	ug/L	1080	Standard
|	Co	59	702.7	5.5	0.0760	0.005	6.1	ug/L	117	Standard
|	Ni	60	1162.7	3.9	0.4971	0.019	3.8	ug/L	68	Standard
|	Cu	65	425.3	1.2	0.1403	0.002	1.1	ug/L	141	Standard
|	Zn	66	1924.1	2.3	1.8422	0.041	2.2	ug/L	138	Standard
[>	Ge	72	270832.8	0.4				ug/L	283230	Standard
|	As	75	23.0	119.6	0.1969	0.029	14.7	ug/L	-198	Standard
|	Se	82	106.8	11.6	0.8874	0.133	15.0	ug/L	21	Standard
[	Se-1	77	160.3	6.0	0.5512	0.136	24.6	ug/L	131	Standard
[>	Ga	71	618.3	9.1				mg/L	607	Standard
[	Rb	85	1495.1	4.2				ug/L	30	Standard
[	Y	89	235769.2	2.3				ug/L	251555	Standard
[>	Rh	103	406.7	9.9				ug/L	335	Standard
[	Mo	98	814.0	2.7	0.2268	0.005	2.0	ug/L	13	Standard
|	Ag	107	70.7	15.7	0.0026	0.002	66.7	ug/L	36	Standard
|	Cd	111	93.0	1.9	0.0114	0.001	6.7	mg/L	49	Standard
|	Cd	114	251.9	5.0	0.0062	0.001	20.7	ug/L	170	Standard
[>	In	115	713678.9	0.8				ug/L	727802	Standard
|	Sn	118	586.3	4.3	0.0046	0.002	42.5	ug/L	471	Standard
|	Sb	123	1022.3	6.0	0.1251	0.007	5.3	ug/L	39	Standard
[	Ba	135	26536.9	4.1	6.1837	0.242	3.9	ug/L	25	Standard
[	Ce	140	4348.6	1.3				ug/L	25	Standard
[>	Tb	159	1078535.8	0.3				ug/L	1071747	Standard
[	Ho	165	80.3	1.4				ug/L	13	Standard
|	Tl	203	364.0	10.4	0.0212	0.002	11.1	ug/L	5	Standard
|	Tl	205	876.4	8.5	0.0230	0.002	8.7	ug/L	10	Standard
|	Pb	206	934.7	0.9	0.0421	0.001	1.3	ug/L	382	Standard
|	Pb	207	801.0	2.6	0.0475	0.002	4.4	ug/L	306	Standard
|	Pb	208	3681.5	1.8	0.0453	0.001	3.3	ug/L	1443	Standard
	U	238	17896.9	1.5	1.1986	0.020	1.6	ug/L	5	Standard
[>	Bi	209	550266.3	0.2				ug/L	561075	Standard

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Na	23	126554.7	0.9	7.7040	0.120	1.6	mg/L	288	Standard
Mg	24	1191573.3	2.0	1.8689	0.047	2.5	mg/L	218	Standard
K	39	263.3	13.5	0.1348	0.034	25.2	mg/L	125	Standard
Ca	43	21.7	13.3	18.8818	3.251	17.2	mg/L	3	Standard
Fe	54	485.6	10.5	-0.0001	0.012	9637.3	mg/L	550	Standard
Fe	57	5617.7	5.4	0.0816	0.007	8.8	mg/L	1772	Standard
Sc-1	45	316624.2	0.8				mg/L	330668	Standard
Cl	35	14.3	22.4				ug/L	5	Standard
Kr	83	37.7	9.0				ug/L	38	Standard
Br	81	714.2	5.3				ug/L	344	Standard
P	31	247.5	10.9				ug/L	312	Standard
S	34	8044.6	2.4				ug/L	5594	Standard
Sr	88	208.3	10.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.623	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064901

Report Date/Time: Sunday, July 29, 2012 10:02:30

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	Cd	111		
	Cd	114		
>	In	115	98.059	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.074	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064901

Report Date/Time: Sunday, July 29, 2012 10:02:30

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Method 6020 - Summary Report

Sample ID: L1207064902

Sample Date/Time: Sunday, July 29, 2012 10:03:09

Number of Replicates: 3

Autosampler Position: 216

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	48673.1	1.6	8526.1839	113.451	1.3	ug/L	9465	Standard
|	Be	9	20.0	66.1	-0.0083	0.009	104.2	ug/L	10	Standard
|	Al	27	37760.3	0.9	2.2895	0.024	1.0	ug/L	7870	Standard
[>	Sc	45	308284.8	0.6				ug/L	330668	Standard
|	Ti	47	339.0	11.7	0.2670	0.041	15.4	ug/L	53	Standard
|	V	51	5248.5	2.4	0.2861	0.013	4.6	ug/L	2687	Standard
|	Cr	52	7941.1	0.9	0.0032	0.008	257.4	ug/L	8408	Standard
|	Cr	53	526.7	9.4	0.2291	0.045	19.8	ug/L	288	Standard
|	Mn	55	100016.0	0.9	8.0050	0.080	1.0	ug/L	1080	Standard
|	Co	59	434.3	3.7	0.0426	0.002	4.3	ug/L	117	Standard
|	Ni	60	662.7	4.1	0.2743	0.008	2.9	ug/L	68	Standard
|	Cu	65	212.0	5.9	0.0372	0.006	16.7	ug/L	141	Standard
|	Zn	66	1464.7	2.2	1.3849	0.047	3.4	ug/L	138	Standard
[>	Ge	72	267591.7	1.6				ug/L	283230	Standard
|	As	75	-73.6	35.1	0.0942	0.028	30.2	ug/L	-198	Standard
|	Se	82	82.0	1.6	0.6347	0.008	1.3	ug/L	21	Standard
[	Se-1	77	161.3	11.6	0.5989	0.320	53.5	ug/L	131	Standard
[>	Ga	71	560.0	3.1				mg/L	607	Standard
|	Rb	85	791.7	5.1				ug/L	30	Standard
|	Y	89	227999.4	0.9				ug/L	251555	Standard
[>	Rh	103	311.7	9.4				ug/L	335	Standard
|	Mo	98	1058.0	1.2	0.2984	0.001	0.5	ug/L	13	Standard
|	Ag	107	62.3	17.2	0.0013	0.002	141.2	ug/L	36	Standard
|	Cd	111	32.1	31.9	-0.0080	0.003	41.3	mg/L	49	Standard
|	Cd	114	123.2	20.0	-0.0072	0.003	37.2	ug/L	170	Standard
[>	In	115	710439.6	0.9				ug/L	727802	Standard
|	Sn	118	612.7	0.3	0.0072	0.000	6.4	ug/L	471	Standard
|	Sb	123	423.2	7.0	0.0531	0.003	6.0	ug/L	39	Standard
|	Ba	135	20678.1	1.9	4.8379	0.054	1.1	ug/L	25	Standard
|	Ce	140	302.7	1.9				ug/L	25	Standard
[>	Tb	159	1057558.6	0.1				ug/L	1071747	Standard
|	Ho	165	15.0	13.3				ug/L	13	Standard
|	Tl	203	377.0	4.6	0.0221	0.001	4.1	ug/L	5	Standard
|	Tl	205	874.4	2.3	0.0230	0.000	1.7	ug/L	10	Standard
|	Pb	206	490.7	7.5	0.0070	0.003	45.6	ug/L	382	Standard
|	Pb	207	396.7	3.8	0.0092	0.002	18.5	ug/L	306	Standard
|	Pb	208	1864.7	4.4	0.0086	0.002	22.7	ug/L	1443	Standard
	U	238	19380.7	0.3	1.3004	0.012	0.9	ug/L	5	Standard
[>	Bi	209	549255.9	0.7				ug/L	561075	Standard

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Na	23	124474.2	1.1	7.7820	0.048	0.6	mg/L	288	Standard
Mg	24	1141740.5	1.9	1.8390	0.036	2.0	mg/L	218	Standard
K	39	265.0	7.5	0.1428	0.018	12.8	mg/L	125	Standard
Ca	43	23.3	24.7	21.4734	6.791	31.6	mg/L	3	Standard
Fe	54	277.8	14.7	-0.0500	0.011	21.3	mg/L	550	Standard
Fe	57	2476.9	11.7	0.0179	0.006	33.7	mg/L	1772	Standard
Sc-1	45	308284.8	0.6				mg/L	330668	Standard
Cl	35	11.3	31.0				ug/L	5	Standard
Kr	83	36.9	14.9				ug/L	38	Standard
Br	81	588.3	5.2				ug/L	344	Standard
P	31	214.2	13.0				ug/L	312	Standard
S	34	8377.3	2.8				ug/L	5594	Standard
Sr	88	193.3	32.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.479	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064902

Report Date/Time: Sunday, July 29, 2012 10:05:39

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	Cd	111	
	Cd	114	
>	In	115	97.614
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.893
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064902

Report Date/Time: Sunday, July 29, 2012 10:05:39

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Method 6020 - Summary Report

Sample ID: L1207064903

Sample Date/Time: Sunday, July 29, 2012 10:06:18

Number of Replicates: 3

Autosampler Position: 217

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	39300.9	1.4	6435.8325	127.872	2.0	ug/L	9465	Standard
|	Be	9	16.7	45.8	-0.0106	0.005	47.5	ug/L	10	Standard
|	Al	27	252780.2	2.2	18.3869	0.232	1.3	ug/L	7870	Standard
[>	Sc	45	312284.0	1.2				ug/L	330668	Standard
|	Ti	47	2808.3	2.9	2.5076	0.072	2.9	ug/L	53	Standard
|	V	51	6517.4	2.2	0.4189	0.015	3.7	ug/L	2687	Standard
|	Cr	52	9400.9	0.5	0.1953	0.010	5.1	ug/L	8408	Standard
|	Cr	53	820.9	6.6	0.4628	0.044	9.5	ug/L	288	Standard
|	Mn	55	15225.0	1.9	1.1400	0.026	2.3	ug/L	1080	Standard
|	Co	59	415.3	3.5	0.0399	0.002	4.7	ug/L	117	Standard
|	Ni	60	628.7	1.1	0.2572	0.004	1.4	ug/L	68	Standard
|	Cu	65	245.3	9.2	0.0529	0.011	20.4	ug/L	141	Standard
|	Zn	66	1791.8	3.6	1.7167	0.063	3.7	ug/L	138	Standard
[>	Ge	72	269129.2	0.3				ug/L	283230	Standard
|	As	75	-55.6	28.4	0.1139	0.017	14.8	ug/L	-198	Standard
|	Se	82	103.4	1.1	0.8575	0.015	1.8	ug/L	21	Standard
[	Se-1	77	171.0	8.1	0.7281	0.213	29.2	ug/L	131	Standard
[>	Ga	71	536.7	13.5				mg/L	607	Standard
|	Rb	85	781.7	2.0				ug/L	30	Standard
|	Y	89	230589.9	1.0				ug/L	251555	Standard
[>	Rh	103	323.3	8.9				ug/L	335	Standard
|	Mo	98	1053.4	3.6	0.2967	0.012	4.0	ug/L	13	Standard
|	Ag	107	49.0	5.4	-0.0009	0.000	45.6	ug/L	36	Standard
|	Cd	111	32.8	13.9	-0.0078	0.001	18.4	mg/L	49	Standard
|	Cd	114	102.3	5.1	-0.0095	0.001	6.2	ug/L	170	Standard
[>	In	115	711405.5	0.3				ug/L	727802	Standard
|	Sn	118	548.7	0.3	0.0014	0.000	18.6	ug/L	471	Standard
|	Sb	123	413.4	9.2	0.0518	0.005	8.8	ug/L	39	Standard
|	Ba	135	24198.3	1.7	5.6562	0.114	2.0	ug/L	25	Standard
|	Ce	140	4864.8	2.2				ug/L	25	Standard
[>	Tb	159	1064933.5	0.4				ug/L	1071747	Standard
|	Ho	165	68.3	7.2				ug/L	13	Standard
|	Tl	203	373.0	6.7	0.0216	0.001	6.5	ug/L	5	Standard
|	Tl	205	891.4	6.8	0.0233	0.002	6.5	ug/L	10	Standard
|	Pb	206	940.0	2.0	0.0421	0.002	4.8	ug/L	382	Standard
|	Pb	207	815.0	5.1	0.0484	0.005	9.8	ug/L	306	Standard
|	Pb	208	3683.8	0.7	0.0449	0.001	3.0	ug/L	1443	Standard
	U	238	18475.9	1.2	1.2295	0.023	1.9	ug/L	5	Standard
[>	Bi	209	553841.3	1.2				ug/L	561075	Standard

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Na	23	116242.6	1.9	7.1722	0.159	2.2	mg/L	288	Standard
Mg	24	1023952.1	0.9	1.6284	0.028	1.7	mg/L	218	Standard
K	39	238.3	5.3	0.1146	0.013	11.0	mg/L	125	Standard
Ca	43	25.0	91.7	22.8266	25.711	112.6	mg/L	3	Standard
Fe	54	450.4	7.7	-0.0072	0.010	133.0	mg/L	550	Standard
Fe	57	4912.5	1.9	0.0684	0.001	1.8	mg/L	1772	Standard
Sc-1	45	312284.0	1.2				mg/L	330668	Standard
Cl	35	16.3	7.1				ug/L	5	Standard
Kr	83	32.3	3.7				ug/L	38	Standard
Br	81	672.5	3.3				ug/L	344	Standard
P	31	242.5	5.7				ug/L	312	Standard
S	34	8752.5	2.4				ug/L	5594	Standard
Sr	88	160.0	21.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.022	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064903

Report Date/Time: Sunday, July 29, 2012 10:08:48

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	Cd	111	
	Cd	114	
>	In	115	97.747
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.711
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064903

Report Date/Time: Sunday, July 29, 2012 10:08:48

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Method 6020 - Summary Report

Sample ID: L1207064904

Sample Date/Time: Sunday, July 29, 2012 10:09:27

Number of Replicates: 3

Autosampler Position: 218

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

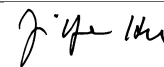
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	40056.3	4.7	6624.8838	324.604	4.9	ug/L	9465	Standard
|	Be	9	11.7	49.5	-0.0138	0.004	26.2	ug/L	10	Standard
|	Al	27	32089.0	3.3	1.8363	0.055	3.0	ug/L	7870	Standard
[>	Sc	45	311056.0	1.5				ug/L	330668	Standard
|	Ti	47	213.3	16.7	0.1524	0.032	20.9	ug/L	53	Standard
|	V	51	4902.3	2.4	0.2507	0.009	3.7	ug/L	2687	Standard
|	Cr	52	8920.6	1.5	0.1416	0.016	11.3	ug/L	8408	Standard
|	Cr	53	775.9	7.1	0.4325	0.044	10.2	ug/L	288	Standard
|	Mn	55	10760.2	2.0	0.7893	0.021	2.6	ug/L	1080	Standard
|	Co	59	499.3	3.1	0.0512	0.002	4.7	ug/L	117	Standard
|	Ni	60	627.0	1.8	0.2592	0.007	2.7	ug/L	68	Standard
|	Cu	65	285.0	6.7	0.0738	0.009	12.8	ug/L	141	Standard
|	Zn	66	1639.1	2.6	1.5741	0.053	3.4	ug/L	138	Standard
[>	Ge	72	266584.9	0.7				ug/L	283230	Standard
|	As	75	-67.9	29.1	0.1001	0.022	21.6	ug/L	-198	Standard
|	Se	82	94.7	3.4	0.7744	0.036	4.6	ug/L	21	Standard
[	Se-1	77	161.0	9.3	0.5991	0.212	35.4	ug/L	131	Standard
[>	Ga	71	535.0	7.5				mg/L	607	Standard
|	Rb	85	506.7	1.5				ug/L	30	Standard
|	Y	89	232036.7	0.9				ug/L	251555	Standard
[>	Rh	103	338.3	5.6				ug/L	335	Standard
|	Mo	98	1137.9	3.1	0.3189	0.014	4.4	ug/L	13	Standard
|	Ag	107	89.0	60.0	0.0056	0.009	159.2	ug/L	36	Standard
|	Cd	111	58.6	27.5	0.0004	0.005	1473.7	mg/L	49	Standard
|	Cd	114	163.0	44.3	-0.0031	0.008	246.3	ug/L	170	Standard
[>	In	115	716298.3	1.2				ug/L	727802	Standard
|	Sn	118	595.7	8.4	0.0052	0.005	96.1	ug/L	471	Standard
|	Sb	123	283.5	8.1	0.0359	0.003	8.7	ug/L	39	Standard
|	Ba	135	23787.3	1.7	5.5220	0.097	1.8	ug/L	25	Standard
|	Ce	140	222.0	7.6				ug/L	25	Standard
[>	Tb	159	1060601.2	0.5				ug/L	1071747	Standard
|	Ho	165	16.3	23.2				ug/L	13	Standard
|	Tl	203	428.7	5.6	0.0249	0.001	5.4	ug/L	5	Standard
|	Tl	205	991.0	6.3	0.0258	0.002	6.2	ug/L	10	Standard
|	Pb	206	505.3	3.2	0.0076	0.001	14.1	ug/L	382	Standard
|	Pb	207	400.7	11.6	0.0090	0.004	47.6	ug/L	306	Standard
|	Pb	208	1937.7	5.9	0.0096	0.002	24.0	ug/L	1443	Standard
	U	238	17779.1	1.9	1.1780	0.022	1.9	ug/L	5	Standard
[>	Bi	209	556216.9	0.5				ug/L	561075	Standard

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Na	23	117500.5	0.7	7.2794	0.117	1.6	mg/L	288	Standard
Mg	24	1028998.7	2.3	1.6428	0.039	2.4	mg/L	218	Standard
K	39	236.7	27.2	0.1145	0.064	56.2	mg/L	125	Standard
Ca	43	18.3	15.7	15.5392	3.461	22.3	mg/L	3	Standard
Fe	54	248.6	7.8	-0.0581	0.004	7.6	mg/L	550	Standard
Fe	57	2526.9	6.1	0.0185	0.004	19.6	mg/L	1772	Standard
Sc-1	45	311056.0	1.5				mg/L	330668	Standard
Cl	35	14.7	20.8				ug/L	5	Standard
Kr	83	38.3	7.6				ug/L	38	Standard
Br	81	669.2	10.9				ug/L	344	Standard
P	31	226.7	8.4				ug/L	312	Standard
S	34	8711.7	2.8				ug/L	5594	Standard
Sr	88	185.0	8.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.123	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064904

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	Cd	111	
	Cd	114	
>	In	115	98.419
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.134
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064904

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Method 6020 - Summary Report

Sample ID: L1207064906

Sample Date/Time: Sunday, July 29, 2012 10:12:36

Number of Replicates: 3

Autosampler Position: 219

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63648.4	0.6	11219.9688	108.982	1.0	ug/L	9465	Standard
|	Be	9	18.3	78.7	-0.0098	0.009	91.0	ug/L	10	Standard
|	Al	27	4922163.8	0.6	360.3188	3.044	0.8	ug/L	7870	Standard
[>	Sc	45	319617.6	0.4				ug/L	330668	Standard
[	Ti	47	10838.9	5.2	9.7363	0.625	6.4	ug/L	53	Standard
|	V	51	14640.5	2.0	1.2794	0.048	3.8	ug/L	2687	Standard
|	Cr	52	12591.2	1.8	0.6170	0.053	8.6	ug/L	8408	Standard
|	Cr	53	1421.7	7.5	0.9377	0.087	9.3	ug/L	288	Standard
|	Mn	55	83173.4	2.2	6.5577	0.230	3.5	ug/L	1080	Standard
|	Co	59	1616.8	0.6	0.1917	0.002	0.9	ug/L	117	Standard
|	Ni	60	1942.5	4.0	0.8497	0.046	5.4	ug/L	68	Standard
|	Cu	65	949.0	4.4	0.3963	0.026	6.7	ug/L	141	Standard
|	Zn	66	2224.5	2.6	2.1522	0.090	4.2	ug/L	138	Standard
[>	Ge	72	271075.4	1.4				ug/L	283230	Standard
|	As	75	43.3	140.6	0.2180	0.064	29.3	ug/L	-198	Standard
|	Se	82	222.8	6.5	2.1134	0.182	8.6	ug/L	21	Standard
[	Se-1	77	269.7	3.9	2.1911	0.198	9.0	ug/L	131	Standard
[>	Ga	71	973.4	3.9				mg/L	607	Standard
[	Rb	85	4817.4	4.2				ug/L	30	Standard
[	Y	89	227417.4	0.9				ug/L	251555	Standard
[>	Rh	103	333.3	12.1				ug/L	335	Standard
[	Mo	98	586.9	5.1	0.1596	0.009	5.8	ug/L	13	Standard
|	Ag	107	58.3	5.5	0.0005	0.000	99.9	ug/L	36	Standard
|	Cd	111	39.6	11.4	-0.0058	0.001	25.2	mg/L	49	Standard
|	Cd	114	127.2	11.9	-0.0071	0.002	21.8	ug/L	170	Standard
[>	In	115	722378.3	0.8				ug/L	727802	Standard
|	Sn	118	627.3	7.1	0.0075	0.004	50.5	ug/L	471	Standard
|	Sb	123	344.0	9.0	0.0428	0.004	9.2	ug/L	39	Standard
[	Ba	135	34314.2	1.4	7.9031	0.086	1.1	ug/L	25	Standard
[	Ce	140	18116.8	1.2				ug/L	25	Standard
[>	Tb	159	1066933.5	0.1				ug/L	1071747	Standard
[	Ho	165	312.3	3.1				ug/L	13	Standard
|	Tl	203	398.0	8.1	0.0232	0.002	8.0	ug/L	5	Standard
|	Tl	205	940.4	6.9	0.0246	0.002	6.4	ug/L	10	Standard
|	Pb	206	1858.8	2.6	0.1147	0.003	2.7	ug/L	382	Standard
|	Pb	207	1505.1	1.7	0.1137	0.002	1.9	ug/L	306	Standard
|	Pb	208	7110.3	1.5	0.1139	0.001	1.3	ug/L	1443	Standard
	U	238	20232.8	2.1	1.3481	0.024	1.8	ug/L	5	Standard
[>	Bi	209	553096.4	0.5				ug/L	561075	Standard

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Na	23	120601.5	1.3	7.2706	0.123	1.7	mg/L	288	Standard
Mg	24	1452500.6	0.6	2.2565	0.021	0.9	mg/L	218	Standard
K	39	238.3	3.2	0.1095	0.008	6.9	mg/L	125	Standard
Ca	43	20.0	129.9	16.7436	28.668	171.2	mg/L	3	Standard
Fe	54	1571.8	4.6	0.2670	0.019	7.0	mg/L	550	Standard
Fe	57	18417.9	6.6	0.3432	0.026	7.5	mg/L	1772	Standard
Sc-1	45	319617.6	0.4				mg/L	330668	Standard
Cl	35	15.3	10.0				ug/L	5	Standard
Kr	83	36.4	2.9				ug/L	38	Standard
Br	81	670.0	5.8				ug/L	344	Standard
P	31	351.7	13.9				ug/L	312	Standard
S	34	9733.1	2.3				ug/L	5594	Standard
Sr	88	213.3	5.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.709	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064906

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	Cd	111	
	Cd	114	
>	In	115	99.255
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.578
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064906

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Method 6020 - Summary Report

Sample ID: L1207064907

Sample Date/Time: Sunday, July 29, 2012 10:15:46

Number of Replicates: 3

Autosampler Position: 220

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	65404.4	4.2	11761.7881	144.625	1.2	ug/L	9465	Standard
|	Be	9	11.7	107.9	-0.0139	0.008	56.7	ug/L	10	Standard
|	Al	27	24209.3	3.1	1.2195	0.057	4.7	ug/L	7870	Standard
[>	Sc	45	315220.8	3.2				ug/L	330668	Standard
[	Ti	47	232.3	3.2	0.1655	0.007	4.0	ug/L	53	Standard
|	V	51	7472.8	3.1	0.5124	0.026	5.1	ug/L	2687	Standard
|	Cr	52	8085.2	3.5	0.0041	0.040	982.5	ug/L	8408	Standard
|	Cr	53	558.3	2.9	0.2466	0.013	5.1	ug/L	288	Standard
|	Mn	55	18310.7	1.9	1.3715	0.031	2.3	ug/L	1080	Standard
|	Co	59	287.7	5.1	0.0232	0.002	7.6	ug/L	117	Standard
|	Ni	60	735.7	3.3	0.3021	0.011	3.7	ug/L	68	Standard
|	Cu	65	284.0	4.7	0.0704	0.007	9.7	ug/L	141	Standard
|	Zn	66	1543.4	4.3	1.4397	0.070	4.9	ug/L	138	Standard
[>	Ge	72	272208.1	0.3				ug/L	283230	Standard
|	As	75	-40.4	97.8	0.1305	0.041	31.6	ug/L	-198	Standard
|	Se	82	226.1	3.8	2.1371	0.096	4.5	ug/L	21	Standard
[	Se-1	77	262.0	7.9	2.0578	0.301	14.6	ug/L	131	Standard
[>	Ga	71	526.7	10.2				mg/L	607	Standard
[	Rb	85	528.3	12.0				ug/L	30	Standard
[	Y	89	238028.7	1.5				ug/L	251555	Standard
[>	Rh	103	403.3	14.1				ug/L	335	Standard
[	Mo	98	673.8	7.1	0.1836	0.014	7.5	ug/L	13	Standard
|	Ag	107	51.3	7.9	-0.0007	0.001	86.2	ug/L	36	Standard
|	Cd	111	36.7	17.2	-0.0067	0.002	30.1	mg/L	49	Standard
|	Cd	114	112.5	15.4	-0.0086	0.002	19.8	ug/L	170	Standard
[>	In	115	724883.5	1.2				ug/L	727802	Standard
|	Sn	118	640.3	7.6	0.0085	0.004	46.0	ug/L	471	Standard
|	Sb	123	298.3	18.7	0.0372	0.007	17.6	ug/L	39	Standard
[	Ba	135	25384.6	1.7	5.8239	0.126	2.2	ug/L	25	Standard
[	Ce	140	179.0	5.1				ug/L	25	Standard
[>	Tb	159	1068918.1	0.6				ug/L	1071747	Standard
[	Ho	165	15.3	15.1				ug/L	13	Standard
|	Tl	203	383.0	9.7	0.0223	0.002	9.4	ug/L	5	Standard
|	Tl	205	876.7	7.8	0.0229	0.002	7.5	ug/L	10	Standard
|	Pb	206	644.7	1.9	0.0189	0.001	7.7	ug/L	382	Standard
|	Pb	207	552.3	3.2	0.0236	0.002	8.1	ug/L	306	Standard
|	Pb	208	2530.1	1.0	0.0217	0.001	4.6	ug/L	1443	Standard
	U	238	22150.9	2.4	1.4764	0.031	2.1	ug/L	5	Standard
[>	Bi	209	552926.8	1.0				ug/L	561075	Standard

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Na	23	127060.5	0.2	7.7745	0.259	3.3	mg/L	288	Standard
Mg	24	1510838.4	0.7	2.3811	0.060	2.5	mg/L	218	Standard
K	39	278.3	9.9	0.1494	0.019	12.7	mg/L	125	Standard
Ca	43	25.0	40.0	22.5132	10.386	46.1	mg/L	3	Standard
Fe	54	274.8	10.5	-0.0523	0.007	13.6	mg/L	550	Standard
Fe	57	2846.9	3.5	0.0245	0.003	13.8	mg/L	1772	Standard
Sc-1	45	315220.8	3.2				mg/L	330668	Standard
Cl	35	14.7	15.7				ug/L	5	Standard
Kr	83	32.2	9.3				ug/L	38	Standard
Br	81	664.2	4.7				ug/L	344	Standard
P	31	255.0	2.0				ug/L	312	Standard
S	34	10452.8	1.6				ug/L	5594	Standard
Sr	88	273.3	14.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.109	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064907

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	Cd	111		
	Cd	114		
>	In	115	99.599	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.548	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064907

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Method 6020 - Summary Report

Sample ID: L1207064908

Sample Date/Time: Sunday, July 29, 2012 10:18:56

Number of Replicates: 3

Autosampler Position: 221

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

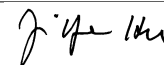
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	53213.4	4.1	9011.0782	337.343	3.7	ug/L	9465	Standard
|	Be	9	8.3	91.7	-0.0161	0.005	29.5	ug/L	10	Standard
|	Al	27	391659.8	1.3	27.9398	0.548	2.0	ug/L	7870	Standard
[>	Sc	45	321842.5	1.0				ug/L	330668	Standard
[	Ti	47	1259.7	0.2	1.1049	0.024	2.1	ug/L	53	Standard
|	V	51	6573.5	3.6	0.4274	0.035	8.1	ug/L	2687	Standard
|	Cr	52	8975.7	2.3	0.1419	0.055	38.5	ug/L	8408	Standard
|	Cr	53	757.5	0.6	0.4138	0.014	3.3	ug/L	288	Standard
|	Mn	55	107930.7	0.6	8.6239	0.241	2.8	ug/L	1080	Standard
|	Co	59	470.7	5.8	0.0471	0.003	6.9	ug/L	117	Standard
|	Ni	60	841.0	0.6	0.3551	0.007	2.1	ug/L	68	Standard
|	Cu	65	293.7	2.1	0.0773	0.006	7.9	ug/L	141	Standard
|	Zn	66	1765.1	1.5	1.6955	0.068	4.0	ug/L	138	Standard
[>	Ge	72	268326.9	2.2				ug/L	283230	Standard
|	As	75	-26.3	227.7	0.1455	0.062	42.9	ug/L	-198	Standard
|	Se	82	120.3	7.7	1.0430	0.127	12.2	ug/L	21	Standard
[	Se-1	77	187.0	3.0	0.9782	0.062	6.3	ug/L	131	Standard
[>	Ga	71	591.7	15.7				mg/L	607	Standard
[	Rb	85	1075.0	10.5				ug/L	30	Standard
[	Y	89	231807.4	2.8				ug/L	251555	Standard
[>	Rh	103	306.7	22.8				ug/L	335	Standard
[	Mo	98	945.4	3.0	0.2631	0.005	1.9	ug/L	13	Standard
|	Ag	107	43.3	9.3	-0.0019	0.001	30.4	ug/L	36	Standard
|	Cd	111	32.7	5.5	-0.0079	0.001	8.9	mg/L	49	Standard
|	Cd	114	100.9	8.3	-0.0097	0.001	9.5	ug/L	170	Standard
[>	In	115	717637.0	1.2				ug/L	727802	Standard
|	Sn	118	464.0	7.7	-0.0065	0.003	50.8	ug/L	471	Standard
|	Sb	123	212.4	9.1	0.0273	0.002	8.1	ug/L	39	Standard
[	Ba	135	40927.5	1.1	9.4913	0.093	1.0	ug/L	25	Standard
[	Ce	140	2925.9	5.3				ug/L	25	Standard
[>	Tb	159	1064109.7	0.6				ug/L	1071747	Standard
[	Ho	165	53.7	7.1				ug/L	13	Standard
|	Tl	203	389.7	8.3	0.0224	0.002	8.1	ug/L	5	Standard
|	Tl	205	924.0	6.2	0.0239	0.001	5.6	ug/L	10	Standard
|	Pb	206	870.7	6.6	0.0360	0.005	13.5	ug/L	382	Standard
|	Pb	207	702.3	1.4	0.0371	0.001	2.8	ug/L	306	Standard
|	Pb	208	3415.2	2.5	0.0388	0.002	4.7	ug/L	1443	Standard
	U	238	12144.9	0.4	0.8004	0.008	1.0	ug/L	5	Standard
[>	Bi	209	559121.0	0.6				ug/L	561075	Standard

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Na	23	126734.6	1.5	7.5900	0.189	2.5	mg/L	288	Standard
Mg	24	1297154.4	0.5	2.0014	0.028	1.4	mg/L	218	Standard
K	39	256.7	18.1	0.1244	0.040	32.5	mg/L	125	Standard
Ca	43	8.3	69.3	3.8388	6.434	167.6	mg/L	3	Standard
Fe	54	407.2	13.0	-0.0212	0.013	63.6	mg/L	550	Standard
Fe	57	4495.7	4.2	0.0569	0.005	8.0	mg/L	1772	Standard
Sc-1	45	321842.5	1.0				mg/L	330668	Standard
Cl	35	18.3	3.1				ug/L	5	Standard
Kr	83	32.9	7.1				ug/L	38	Standard
Br	81	711.7	3.7				ug/L	344	Standard
P	31	318.3	2.0				ug/L	312	Standard
S	34	9195.3	1.5				ug/L	5594	Standard
Sr	88	223.3	4.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.738	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	98.603	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	99.652	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064909

Sample Date/Time: Sunday, July 29, 2012 10:22:04

Number of Replicates: 3

Autosampler Position: 222

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	54519.6	0.9	9710.7846	378.303	3.9	ug/L	9465	Standard
|	Be	9	5.0	100.0	-0.0179	0.003	18.3	ug/L	10	Standard
|	Al	27	15798.2	2.8	0.6138	0.023	3.8	ug/L	7870	Standard
[>	Sc	45	309907.1	2.7				ug/L	330668	Standard
[	Ti	47	216.7	4.9	0.1596	0.010	6.0	ug/L	53	Standard
|	V	51	5866.8	2.1	0.3681	0.015	4.1	ug/L	2687	Standard
|	Cr	52	8462.7	0.9	0.1023	0.013	12.4	ug/L	8408	Standard
|	Cr	53	603.3	10.1	0.3025	0.052	17.1	ug/L	288	Standard
|	Mn	55	109819.6	1.9	9.0118	0.193	2.1	ug/L	1080	Standard
|	Co	59	390.3	2.6	0.0382	0.001	3.4	ug/L	117	Standard
|	Ni	60	557.3	9.3	0.2323	0.025	10.7	ug/L	68	Standard
|	Cu	65	180.7	11.5	0.0238	0.011	45.4	ug/L	141	Standard
|	Zn	66	1406.7	2.5	1.3594	0.043	3.1	ug/L	138	Standard
[>	Ge	72	261285.3	0.3				ug/L	283230	Standard
|	As	75	-60.5	61.8	0.1067	0.041	38.3	ug/L	-198	Standard
|	Se	82	109.7	4.0	0.9598	0.051	5.3	ug/L	21	Standard
[	Se-1	77	185.3	2.2	1.0287	0.072	7.0	ug/L	131	Standard
[>	Ga	71	538.3	2.7				mg/L	607	Standard
[	Rb	85	591.7	12.3				ug/L	30	Standard
[	Y	89	228431.7	2.8				ug/L	251555	Standard
[>	Rh	103	286.7	2.7				ug/L	335	Standard
[	Mo	98	1033.5	2.4	0.2942	0.011	3.7	ug/L	13	Standard
|	Ag	107	39.0	5.1	-0.0025	0.000	10.0	ug/L	36	Standard
|	Cd	111	32.5	21.7	-0.0078	0.002	27.6	mg/L	49	Standard
|	Cd	114	106.6	5.2	-0.0089	0.001	7.7	ug/L	170	Standard
[>	In	115	703741.7	1.3				ug/L	727802	Standard
|	Sn	118	423.7	0.7	-0.0093	0.001	8.1	ug/L	471	Standard
|	Sb	123	220.1	7.6	0.0287	0.002	6.8	ug/L	39	Standard
[	Ba	135	41045.5	1.2	9.7078	0.191	2.0	ug/L	25	Standard
[	Ce	140	137.3	2.6				ug/L	25	Standard
[>	Tb	159	1047148.8	1.0				ug/L	1071747	Standard
[	Ho	165	14.0	28.6				ug/L	13	Standard
|	Tl	203	400.7	8.1	0.0236	0.002	7.6	ug/L	5	Standard
|	Tl	205	948.0	8.0	0.0251	0.002	7.3	ug/L	10	Standard
|	Pb	206	392.7	4.9	-0.0007	0.001	170.1	ug/L	382	Standard
|	Pb	207	335.0	1.8	0.0034	0.001	22.1	ug/L	306	Standard
|	Pb	208	1562.7	1.7	0.0026	0.000	11.1	ug/L	1443	Standard
	U	238	12337.7	0.9	0.8313	0.002	0.3	ug/L	5	Standard
[>	Bi	209	546910.9	0.9				ug/L	561075	Standard

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Na	23	127586.7	1.6	7.9374	0.108	1.4	mg/L	288	Standard
Mg	24	1355256.5	2.6	2.1718	0.052	2.4	mg/L	218	Standard
K	39	261.7	13.0	0.1389	0.038	27.3	mg/L	125	Standard
Ca	43	20.0	25.0	17.4855	5.679	32.5	mg/L	3	Standard
Fe	54	307.5	15.6	-0.0430	0.011	24.6	mg/L	550	Standard
Fe	57	2630.2	2.3	0.0209	0.002	8.6	mg/L	1772	Standard
Sc-1	45	309907.1	2.7				mg/L	330668	Standard
Cl	35	23.0	23.0				ug/L	5	Standard
Kr	83	35.3	0.9				ug/L	38	Standard
Br	81	770.0	10.2				ug/L	344	Standard
P	31	270.0	7.6				ug/L	312	Standard
S	34	9465.5	2.2				ug/L	5594	Standard
Sr	88	246.7	29.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.252	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064909

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	Cd	111		
	Cd	114		
>	In	115	96.694	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	97.476	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064909

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Method 6020 - Summary Report

Sample ID: L1207064910

Sample Date/Time: Sunday, July 29, 2012 10:25:14

Number of Replicates: 3

Autosampler Position: 223

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	61491.2	2.4	10880.4447	329.035	3.0	ug/L	9465	Standard
|	Be	9	8.3	34.6	-0.0160	0.002	11.3	ug/L	10	Standard
|	Al	27	750361.9	1.8	54.8761	0.857	1.6	ug/L	7870	Standard
[>	Sc	45	317071.7	0.4				ug/L	330668	Standard
[	Ti	47	2213.2	1.3	2.0235	0.044	2.2	ug/L	53	Standard
|	V	51	7506.7	0.5	0.5476	0.012	2.1	ug/L	2687	Standard
|	Cr	52	9182.4	1.4	0.2006	0.026	13.2	ug/L	8408	Standard
|	Cr	53	894.2	10.0	0.5422	0.079	14.6	ug/L	288	Standard
|	Mn	55	128897.4	1.5	10.5709	0.210	2.0	ug/L	1080	Standard
|	Co	59	569.7	3.8	0.0616	0.003	5.6	ug/L	117	Standard
|	Ni	60	859.0	6.0	0.3732	0.029	7.6	ug/L	68	Standard
|	Cu	65	362.3	3.7	0.1155	0.005	4.2	ug/L	141	Standard
|	Zn	66	1681.4	1.3	1.6510	0.042	2.5	ug/L	138	Standard
[>	Ge	72	261817.6	1.1				ug/L	283230	Standard
|	As	75	-34.8	69.1	0.1348	0.026	19.5	ug/L	-198	Standard
|	Se	82	116.6	3.1	1.0331	0.052	5.1	ug/L	21	Standard
[	Se-1	77	175.7	7.1	0.8740	0.221	25.2	ug/L	131	Standard
[>	Ga	71	590.0	3.1				mg/L	607	Standard
[	Rb	85	1408.4	5.0				ug/L	30	Standard
[	Y	89	229760.9	1.6				ug/L	251555	Standard
[>	Rh	103	380.0	13.7				ug/L	335	Standard
[	Mo	98	1066.3	5.3	0.3004	0.019	6.5	ug/L	13	Standard
|	Ag	107	43.3	11.6	-0.0019	0.001	40.0	ug/L	36	Standard
|	Cd	111	34.1	34.6	-0.0074	0.004	52.6	mg/L	49	Standard
|	Cd	114	115.8	3.5	-0.0080	0.001	7.0	ug/L	170	Standard
[>	In	115	711719.0	1.1				ug/L	727802	Standard
|	Sn	118	528.0	7.7	-0.0004	0.004	932.0	ug/L	471	Standard
|	Sb	123	205.8	15.0	0.0267	0.004	14.9	ug/L	39	Standard
[	Ba	135	47997.6	1.3	11.2271	0.273	2.4	ug/L	25	Standard
[	Ce	140	4157.6	3.1				ug/L	25	Standard
[>	Tb	159	1061657.8	0.5				ug/L	1071747	Standard
[	Ho	165	82.0	8.8				ug/L	13	Standard
|	Tl	203	414.3	2.5	0.0243	0.001	2.3	ug/L	5	Standard
|	Tl	205	952.7	8.9	0.0250	0.002	8.5	ug/L	10	Standard
|	Pb	206	686.7	3.5	0.0224	0.002	8.3	ug/L	382	Standard
|	Pb	207	545.3	4.4	0.0232	0.002	10.6	ug/L	306	Standard
|	Pb	208	2635.1	3.1	0.0241	0.002	7.1	ug/L	1443	Standard
	U	238	14064.2	1.5	0.9421	0.011	1.1	ug/L	5	Standard
[>	Bi	209	550097.4	0.4				ug/L	561075	Standard

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Na	23	131165.3	0.3	7.9741	0.024	0.3	mg/L	288	Standard
Mg	24	1688851.6	22.6	2.6430	0.584	22.1	mg/L	218	Standard
K	39	248.3	2.3	0.1204	0.006	4.7	mg/L	125	Standard
Ca	43	13.3	21.7	9.5331	3.209	33.7	mg/L	3	Standard
Fe	54	506.0	12.3	0.0048	0.016	324.0	mg/L	550	Standard
Fe	57	5325.9	3.2	0.0754	0.003	4.1	mg/L	1772	Standard
Sc-1	45	317071.7	0.4				mg/L	330668	Standard
Cl	35	13.7	15.2				ug/L	5	Standard
Kr	83	37.0	14.5				ug/L	38	Standard
Br	81	709.2	4.8				ug/L	344	Standard
P	31	302.5	9.9				ug/L	312	Standard
S	34	9808.2	1.4				ug/L	5594	Standard
Sr	88	251.7	11.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.440	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064910

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	Cd	111	
	Cd	114	
>	In	115	97.790
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.043
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064910

Report Date/Time: Sunday, July 29, 2012 10:27:44

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Method 6020 - Summary Report

Sample ID: L1207064911

Sample Date/Time: Sunday, July 29, 2012 10:28:22

Number of Replicates: 3

Autosampler Position: 224

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	57291.5	3.1	9877.6116	271.263	2.7	ug/L	9465	Standard
|	Be	9	21.7	53.3	-0.0078	0.007	88.9	ug/L	10	Standard
|	Al	27	84334.4	4.5	5.5786	0.218	3.9	ug/L	7870	Standard
[>	Sc	45	320783.8	1.2				ug/L	330668	Standard
[	Ti	47	387.3	7.2	0.3102	0.027	8.7	ug/L	53	Standard
|	V	51	5979.6	4.4	0.3637	0.022	6.0	ug/L	2687	Standard
|	Cr	52	8352.3	3.0	0.0572	0.021	36.7	ug/L	8408	Standard
|	Cr	53	643.3	3.8	0.3221	0.016	4.8	ug/L	288	Standard
|	Mn	55	111798.0	1.8	8.9417	0.141	1.6	ug/L	1080	Standard
|	Co	59	358.7	17.9	0.0328	0.008	23.4	ug/L	117	Standard
|	Ni	60	651.3	3.1	0.2687	0.010	3.7	ug/L	68	Standard
|	Cu	65	233.7	12.0	0.0476	0.012	26.1	ug/L	141	Standard
|	Zn	66	1815.8	3.5	1.7496	0.069	3.9	ug/L	138	Standard
[>	Ge	72	268053.2	1.2				ug/L	283230	Standard
|	As	75	-44.1	52.1	0.1260	0.024	19.2	ug/L	-198	Standard
|	Se	82	108.4	2.5	0.9156	0.028	3.0	ug/L	21	Standard
[	Se-1	77	171.7	8.0	0.7500	0.234	31.2	ug/L	131	Standard
[>	Ga	71	571.7	9.4				mg/L	607	Standard
[	Rb	85	665.0	6.9				ug/L	30	Standard
[	Y	89	228654.9	2.7				ug/L	251555	Standard
[>	Rh	103	378.3	13.8				ug/L	335	Standard
[	Mo	98	978.0	4.1	0.2729	0.010	3.6	ug/L	13	Standard
|	Ag	107	43.3	8.7	-0.0019	0.001	31.2	ug/L	36	Standard
|	Cd	111	36.0	16.4	-0.0068	0.002	28.2	mg/L	49	Standard
|	Cd	114	111.9	17.9	-0.0085	0.002	23.5	ug/L	170	Standard
[>	In	115	716388.1	0.7				ug/L	727802	Standard
|	Sn	118	588.0	0.7	0.0045	0.000	6.4	ug/L	471	Standard
|	Sb	123	212.7	8.3	0.0274	0.002	8.4	ug/L	39	Standard
[	Ba	135	41989.1	1.8	9.7540	0.119	1.2	ug/L	25	Standard
[	Ce	140	426.7	5.9				ug/L	25	Standard
[>	Tb	159	1059375.3	0.3				ug/L	1071747	Standard
[	Ho	165	15.3	33.5				ug/L	13	Standard
|	Tl	203	400.0	4.4	0.0232	0.001	4.0	ug/L	5	Standard
|	Tl	205	941.4	8.0	0.0245	0.002	7.8	ug/L	10	Standard
|	Pb	206	473.7	5.8	0.0052	0.002	43.5	ug/L	382	Standard
|	Pb	207	378.7	0.3	0.0070	0.000	3.9	ug/L	306	Standard
|	Pb	208	1797.7	1.9	0.0068	0.001	10.1	ug/L	1443	Standard
	U	238	13036.3	2.5	0.8647	0.019	2.2	ug/L	5	Standard
[>	Bi	209	555514.6	0.6				ug/L	561075	Standard

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Na	23	128643.9	1.2	7.7300	0.143	1.8	mg/L	288	Standard
Mg	24	1369388.5	1.8	2.1197	0.032	1.5	mg/L	218	Standard
K	39	270.0	9.8	0.1374	0.022	16.2	mg/L	125	Standard
Ca	43	16.7	17.3	13.0597	3.325	25.5	mg/L	3	Standard
Fe	54	311.1	8.3	-0.0446	0.006	13.8	mg/L	550	Standard
Fe	57	2886.9	6.3	0.0242	0.003	12.5	mg/L	1772	Standard
Sc-1	45	320783.8	1.2				mg/L	330668	Standard
Cl	35	18.3	36.3				ug/L	5	Standard
Kr	83	34.3	9.3				ug/L	38	Standard
Br	81	694.2	4.0				ug/L	344	Standard
P	31	300.0	10.4				ug/L	312	Standard
S	34	9663.9	2.2				ug/L	5594	Standard
Sr	88	188.3	23.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.642	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064911

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	Cd	111	
	Cd	114	
>	In	115	98.432
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.009
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064911

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 10:31:35

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

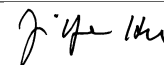
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9881.6	1.8	56.3516	42.111	74.7	ug/L	9465	Standard
|	Be	9	91378.1	1.3	51.7379	0.432	0.8	ug/L	10	Standard
|	Al	27	729026.4	1.1	48.0620	0.768	1.6	ug/L	7870	Standard
[>	Sc	45	351241.4	0.8				ug/L	330668	Standard
[	Ti	47	121059.7	1.0	99.4106	0.452	0.5	ug/L	53	Standard
|	V	51	502495.9	0.9	48.4725	0.506	1.0	ug/L	2687	Standard
|	Cr	52	403956.2	1.1	48.5639	0.360	0.7	ug/L	8408	Standard
|	Cr	53	68359.7	1.1	49.5123	0.945	1.9	ug/L	288	Standard
|	Mn	55	701772.2	0.3	50.9586	0.527	1.0	ug/L	1080	Standard
|	Co	59	438622.6	1.6	50.6005	0.841	1.7	ug/L	117	Standard
|	Ni	60	118644.0	0.1	48.8587	0.456	0.9	ug/L	68	Standard
|	Cu	65	111249.0	1.2	49.4723	0.268	0.5	ug/L	141	Standard
|	Zn	66	52672.4	0.4	49.5330	0.579	1.2	ug/L	138	Standard
[>	Ge	72	297549.1	0.8				ug/L	283230	Standard
|	As	75	52039.4	0.4	49.9667	0.378	0.8	ug/L	-198	Standard
|	Se	82	5347.5	1.1	51.2486	0.361	0.7	ug/L	21	Standard
[	Se-1	77	3829.5	1.0	50.4884	0.730	1.4	ug/L	131	Standard
[>	Ga	71	645.0	7.1				mg/L	607	Standard
[	Rb	85	788.4	7.0				ug/L	30	Standard
[	Y	89	261124.4	0.9				ug/L	251555	Standard
[>	Rh	103	365.0	5.5				ug/L	335	Standard
[	Mo	98	365607.3	0.6	94.6916	0.512	0.5	ug/L	13	Standard
|	Ag	107	329412.4	0.1	48.4856	0.455	0.9	ug/L	36	Standard
|	Cd	111	185520.2	1.3	53.2094	0.936	1.8	mg/L	49	Standard
|	Cd	114	537445.6	0.8	50.6922	0.769	1.5	ug/L	170	Standard
[>	In	115	792154.1	1.0				ug/L	727802	Standard
|	Sn	118	628961.8	0.9	50.2107	0.125	0.2	ug/L	471	Standard
|	Sb	123	461022.5	0.1	50.1062	0.550	1.1	ug/L	39	Standard
[	Ba	135	248279.4	0.6	52.2154	0.745	1.4	ug/L	25	Standard
[	Ce	140	898.4	0.7				ug/L	25	Standard
[>	Tb	159	1158583.1	1.4				ug/L	1071747	Standard
[	Ho	165	20.7	19.6				ug/L	13	Standard
|	Tl	203	858174.6	0.5	48.8586	0.464	1.0	ug/L	5	Standard
|	Tl	205	1978799.7	0.6	48.3047	0.713	1.5	ug/L	10	Standard
|	Pb	206	664114.6	0.4	48.9856	0.624	1.3	ug/L	382	Standard
|	Pb	207	562222.6	0.4	49.6669	0.569	1.1	ug/L	306	Standard
|	Pb	208	2603130.8	0.3	48.9297	0.555	1.1	ug/L	1443	Standard
	U	238	813943.5	0.6	50.6787	0.643	1.3	ug/L	5	Standard
[>	Bi	209	592050.6	1.3				ug/L	561075	Standard

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Na	23	110405.8	0.7	6.0505	0.056	0.9	mg/L	288	Standard
Mg	24	3389236.5	0.8	4.7911	0.062	1.3	mg/L	218	Standard
K	39	5836.1	1.8	4.7550	0.051	1.1	mg/L	125	Standard
Ca	43	13.3	78.1	8.1412	10.628	130.5	mg/L	3	Standard
Fe	54	22100.1	5.6	4.8464	0.314	6.5	mg/L	550	Standard
Fe	57	294757.6	6.6	5.4715	0.406	7.4	mg/L	1772	Standard
Sc-1	45	351241.4	0.8				mg/L	330668	Standard
Cl	35	3.7	41.7				ug/L	5	Standard
Kr	83	37.4	6.8				ug/L	38	Standard
Br	81	421.7	4.4				ug/L	344	Standard
P	31	423.3	16.3				ug/L	312	Standard
S	34	6550.6	2.9				ug/L	5594	Standard
Sr	88	58.3	24.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.124		
Sc	45			
Ti	47	99.411		
V	51	96.945		
Cr	52	97.128		
Cr	53			
Mn	55	101.917		
Co	59	101.201		
Ni	60	97.717		
Cu	65	98.945		
Zn	66	99.066		
Ge	72		105.056	
As	75	99.933		
Se	82	102.497		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	94.692		
Ag	107	96.971		

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	Cd	111	106.419	
	Cd	114		
>	In	115		108.842
	Sn	118	100.421	
	Sb	123	100.212	
	Ba	135	104.431	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.717	
|	Tl	205		
|	Pb	206	97.971	
|	Pb	207	99.334	
|	Pb	208	97.859	
|	U	238	101.357	
>	Bi	209		105.521
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

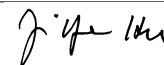
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 10:34:45

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9051.0	1.4	-74.8966	65.993	88.1	ug/L	9465	Standard
|	Be	9	15.0	0.0	-0.0126	0.000	1.7	ug/L	10	Standard
|	Al	27	8087.2	2.0	-0.0338	0.024	71.7	ug/L	7870	Standard
[>	Sc	45	346665.8	2.4				ug/L	330668	Standard
|	Ti	47	73.0	14.5	0.0187	0.009	47.7	ug/L	53	Standard
|	V	51	2417.0	0.8	-0.0385	0.003	6.6	ug/L	2687	Standard
|	Cr	52	7516.2	0.3	-0.1304	0.001	0.4	ug/L	8408	Standard
|	Cr	53	250.8	5.0	-0.0092	0.010	106.6	ug/L	288	Standard
|	Mn	55	1112.7	5.1	-0.0009	0.004	508.6	ug/L	1080	Standard
|	Co	59	130.3	9.9	0.0024	0.002	65.6	ug/L	117	Standard
|	Ni	60	68.0	10.3	-0.0004	0.003	810.2	ug/L	68	Standard
|	Cu	65	155.3	7.7	0.0034	0.005	158.4	ug/L	141	Standard
|	Zn	66	151.7	4.4	-0.0043	0.006	146.5	ug/L	138	Standard
[>	Ge	72	288802.5	0.2				ug/L	283230	Standard
|	As	75	-170.7	14.7	0.0044	0.025	553.5	ug/L	-198	Standard
|	Se	82	24.6	7.0	0.0008	0.017	2187.5	ug/L	21	Standard
[	Se-1	77	109.7	2.9	-0.3119	0.043	13.8	ug/L	131	Standard
[>	Ga	71	636.7	5.7				mg/L	607	Standard
|	Rb	85	21.7	35.3				ug/L	30	Standard
|	Y	89	254406.9	2.0				ug/L	251555	Standard
[>	Rh	103	361.7	23.8				ug/L	335	Standard
|	Mo	98	192.9	11.2	0.0438	0.006	14.2	ug/L	13	Standard
|	Ag	107	81.0	28.9	0.0032	0.004	113.3	ug/L	36	Standard
|	Cd	111	67.5	15.9	0.0015	0.003	223.3	mg/L	49	Standard
|	Cd	114	220.4	18.5	0.0010	0.004	408.0	ug/L	170	Standard
[>	In	115	777470.1	1.3				ug/L	727802	Standard
|	Sn	118	866.0	2.3	0.0231	0.002	9.7	ug/L	471	Standard
|	Sb	123	2289.4	4.4	0.2554	0.014	5.5	ug/L	39	Standard
|	Ba	135	48.3	32.1	-0.0011	0.003	305.4	ug/L	25	Standard
|	Ce	140	22.3	6.8				ug/L	25	Standard
[>	Tb	159	1122966.0	0.0				ug/L	1071747	Standard
|	Ho	165	12.3	38.3				ug/L	13	Standard
|	Tl	203	78.7	38.8	0.0034	0.002	51.5	ug/L	5	Standard
|	Tl	205	182.7	46.1	0.0045	0.002	46.3	ug/L	10	Standard
|	Pb	206	449.7	8.8	0.0010	0.003	326.2	ug/L	382	Standard
|	Pb	207	381.3	5.6	0.0049	0.002	40.8	ug/L	306	Standard
|	Pb	208	1752.4	5.7	0.0036	0.002	58.8	ug/L	1443	Standard
	U	238	97.3	44.3	0.0058	0.003	46.6	ug/L	5	Standard
[>	Bi	209	594772.2	0.7				ug/L	561075	Standard

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Na	23	450.0	6.9	-0.0110	0.002	20.7	mg/L	288	Standard
Mg	24	561.7	30.4	0.0011	0.000	23.3	mg/L	218	Standard
K	39	143.3	17.2	0.0125	0.023	182.9	mg/L	125	Standard
Ca	43	3.3	86.6	-1.9963	2.913	145.9	mg/L	3	Standard
Fe	54	607.5	5.9	0.0173	0.011	63.8	mg/L	550	Standard
Fe	57	1751.8	6.1	-0.0017	0.001	84.6	mg/L	1772	Standard
Sc-1	45	346665.8	2.4				mg/L	330668	Standard
Cl	35	2.7	21.7				ug/L	5	Standard
Kr	83	34.2	8.5				ug/L	38	Standard
Br	81	373.3	2.2				ug/L	344	Standard
P	31	393.3	2.2				ug/L	312	Standard
S	34	6386.3	3.1				ug/L	5594	Standard
Sr	88	40.0	57.3				ug/L	55	Standard

QC Calculated Values

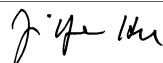
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.968	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	106.824
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	106.006
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 10:37:15

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Method 6020 - Summary Report

Sample ID: L1207065814

Sample Date/Time: Sunday, July 29, 2012 10:37:56

Number of Replicates: 3

Autosampler Position: 225

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35633.5	0.9	5487.7534	150.566	2.7	ug/L	9465	Standard
|	Be	9	41.7	48.5	0.0048	0.013	269.1	ug/L	10	Standard
|	Al	27	1801411.8	0.9	131.3186	2.747	2.1	ug/L	7870	Standard
[>	Sc	45	320108.1	1.2				ug/L	330668	Standard
|	Ti	47	4665.7	0.5	4.2014	0.023	0.6	ug/L	53	Standard
|	V	51	10167.8	3.5	0.8122	0.037	4.6	ug/L	2687	Standard
|	Cr	52	12114.5	4.1	0.5666	0.068	12.0	ug/L	8408	Standard
|	Cr	53	1122.5	7.4	0.7068	0.070	9.9	ug/L	288	Standard
|	Mn	55	193866.9	1.3	15.5293	0.223	1.4	ug/L	1080	Standard
|	Co	59	3695.5	1.6	0.4591	0.005	1.1	ug/L	117	Standard
|	Ni	60	1821.4	2.7	0.8018	0.023	2.9	ug/L	68	Standard
|	Cu	65	987.4	4.4	0.4190	0.020	4.7	ug/L	141	Standard
|	Zn	66	15050.5	1.3	15.5681	0.214	1.4	ug/L	138	Standard
[>	Ge	72	268708.5	0.4				ug/L	283230	Standard
|	As	75	312.8	6.7	0.5041	0.022	4.3	ug/L	-198	Standard
|	Se	82	26.0	27.8	0.0341	0.078	228.1	ug/L	21	Standard
[	Se-1	77	111.3	10.4	-0.1714	0.171	99.9	ug/L	131	Standard
[>	Ga	71	838.4	13.1				mg/L	607	Standard
|	Rb	85	4217.3	3.1				ug/L	30	Standard
|	Y	89	237083.9	0.5				ug/L	251555	Standard
[>	Rh	103	343.3	8.3				ug/L	335	Standard
|	Mo	98	284.4	8.8	0.0746	0.007	9.4	ug/L	13	Standard
|	Ag	107	59.7	16.1	0.0008	0.002	197.3	ug/L	36	Standard
|	Cd	111	143.3	11.6	0.0274	0.005	18.9	mg/L	49	Standard
|	Cd	114	419.4	1.6	0.0237	0.001	2.7	ug/L	170	Standard
[>	In	115	713750.7	0.3				ug/L	727802	Standard
|	Sn	118	1151.7	2.3	0.0547	0.002	3.8	ug/L	471	Standard
|	Sb	123	465.1	15.2	0.0579	0.008	14.5	ug/L	39	Standard
|	Ba	135	36520.6	1.7	8.5136	0.121	1.4	ug/L	25	Standard
|	Ce	140	64805.3	1.6				ug/L	25	Standard
[>	Tb	159	1062389.4	0.9				ug/L	1071747	Standard
|	Ho	165	857.0	3.8				ug/L	13	Standard
|	Tl	203	233.7	21.0	0.0131	0.003	22.3	ug/L	5	Standard
|	Tl	205	524.0	22.2	0.0136	0.003	21.8	ug/L	10	Standard
|	Pb	206	4357.3	2.0	0.3094	0.005	1.6	ug/L	382	Standard
|	Pb	207	3485.7	0.9	0.2985	0.001	0.4	ug/L	306	Standard
|	Pb	208	16660.9	1.2	0.3035	0.002	0.7	ug/L	1443	Standard
	U	238	431.0	14.9	0.0283	0.004	14.5	ug/L	5	Standard
[>	Bi	209	557517.8	0.6				ug/L	561075	Standard

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Na	23	112303.0	0.9	6.7573	0.047	0.7	mg/L	288	Standard
Mg	24	335245.8	1.8	0.5204	0.016	3.0	mg/L	218	Standard
K	39	225.0	14.6	0.0969	0.030	30.6	mg/L	125	Standard
Ca	43	6.7	43.3	2.0045	3.136	156.5	mg/L	3	Standard
Fe	54	2744.1	2.2	0.5556	0.023	4.2	mg/L	550	Standard
Fe	57	34582.8	4.8	0.6741	0.040	6.0	mg/L	1772	Standard
Sc-1	45	320108.1	1.2				mg/L	330668	Standard
Cl	35	6.0					ug/L	5	Standard
Kr	83	35.2	3.8				ug/L	38	Standard
Br	81	409.2	10.8				ug/L	344	Standard
P	31	497.5	4.8				ug/L	312	Standard
S	34	7608.6	1.0				ug/L	5594	Standard
Sr	88	115.0	11.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.873	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065814

Report Date/Time: Sunday, July 29, 2012 10:40:26

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	Cd	111	
	Cd	114	
>	In	115	98.069
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.366
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065814

Report Date/Time: Sunday, July 29, 2012 10:40:26

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Method 6020 - Summary Report

Sample ID: L1207065815

Sample Date/Time: Sunday, July 29, 2012 10:41:05

Number of Replicates: 3

Autosampler Position: 226

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	36442.1	3.1	5620.2573	251.403	4.5	ug/L	9465	Standard
|	Be	9	50.0	10.0	0.0097	0.003	32.1	ug/L	10	Standard
|	Al	27	1284667.2	1.9	93.0708	2.216	2.4	ug/L	7870	Standard
[>	Sc	45	321484.9	0.5				ug/L	330668	Standard
|	Ti	47	3294.7	1.6	2.9226	0.052	1.8	ug/L	53	Standard
|	V	51	7735.9	2.1	0.5421	0.008	1.5	ug/L	2687	Standard
|	Cr	52	10053.0	2.5	0.2714	0.020	7.5	ug/L	8408	Standard
|	Cr	53	753.4	1.6	0.4031	0.017	4.1	ug/L	288	Standard
|	Mn	55	28651.1	2.0	2.1986	0.022	1.0	ug/L	1080	Standard
|	Co	59	1705.1	1.7	0.2025	0.006	2.9	ug/L	117	Standard
|	Ni	60	1119.7	1.8	0.4763	0.012	2.5	ug/L	68	Standard
|	Cu	65	775.0	3.8	0.3103	0.013	4.2	ug/L	141	Standard
|	Zn	66	21482.2	1.8	22.0472	0.184	0.8	ug/L	138	Standard
[>	Ge	72	271581.5	1.1				ug/L	283230	Standard
|	As	75	106.9	47.1	0.2844	0.052	18.2	ug/L	-198	Standard
|	Se	82	254.8	8.0	2.4433	0.187	7.6	ug/L	21	Standard
[	Se-1	77	270.7	3.4	2.1976	0.148	6.7	ug/L	131	Standard
[>	Ga	71	768.4	4.2				mg/L	607	Standard
|	Rb	85	4350.6	10.4				ug/L	30	Standard
|	Y	89	237363.9	2.5				ug/L	251555	Standard
[>	Rh	103	311.7	10.9				ug/L	335	Standard
|	Mo	98	259.7	2.3	0.0662	0.002	2.3	ug/L	13	Standard
|	Ag	107	41.7	9.7	-0.0023	0.001	28.8	ug/L	36	Standard
|	Cd	111	181.4	6.4	0.0385	0.004	9.1	mg/L	49	Standard
|	Cd	114	521.3	8.1	0.0334	0.004	12.5	ug/L	170	Standard
[>	In	115	726333.7	0.4				ug/L	727802	Standard
|	Sn	118	1105.7	4.2	0.0489	0.004	7.5	ug/L	471	Standard
|	Sb	123	520.8	19.7	0.0635	0.012	18.9	ug/L	39	Standard
|	Ba	135	29434.9	0.9	6.7408	0.065	1.0	ug/L	25	Standard
|	Ce	140	70431.4	2.2				ug/L	25	Standard
[>	Tb	159	1069204.2	0.2				ug/L	1071747	Standard
|	Ho	165	863.7	3.2				ug/L	13	Standard
|	Tl	203	209.0	10.9	0.0115	0.001	10.9	ug/L	5	Standard
|	Tl	205	484.0	6.5	0.0125	0.001	5.7	ug/L	10	Standard
|	Pb	206	2641.2	2.6	0.1739	0.005	3.0	ug/L	382	Standard
|	Pb	207	2124.8	3.3	0.1698	0.006	3.4	ug/L	306	Standard
|	Pb	208	10067.6	1.7	0.1709	0.002	0.9	ug/L	1443	Standard
	U	238	626.7	4.2	0.0410	0.002	4.1	ug/L	5	Standard
[>	Bi	209	560213.0	1.0				ug/L	561075	Standard

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Na	23	128975.0	0.4	7.7324	0.068	0.9	mg/L	288	Standard
Mg	24	367630.2	2.6	0.5681	0.017	3.0	mg/L	218	Standard
K	39	220.0	4.5	0.0915	0.010	10.9	mg/L	125	Standard
Ca	43	5.0	100.0	0.1515	5.527	3649.0	mg/L	3	Standard
Fe	54	1215.7	6.8	0.1773	0.019	10.9	mg/L	550	Standard
Fe	57	13923.1	9.7	0.2494	0.029	11.5	mg/L	1772	Standard
Sc-1	45	321484.9	0.5				mg/L	330668	Standard
Cl	35	6.0	33.3				ug/L	5	Standard
Kr	83	34.1	6.5				ug/L	38	Standard
Br	81	659.2	10.9				ug/L	344	Standard
P	31	400.0	4.5				ug/L	312	Standard
S	34	8684.2	2.0				ug/L	5594	Standard
Sr	88	135.0	6.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.887	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065815

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	Cd	111		
	Cd	114		
>	In	115	99.798	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	99.846	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065815

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Method 6020 - Summary Report

Sample ID: L1207065816

Sample Date/Time: Sunday, July 29, 2012 10:44:16

Number of Replicates: 3

Autosampler Position: 227

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31826.7	2.2	4795.9587	63.827	1.3	ug/L	9465	Standard
|	Be	9	33.3	122.2	-0.0000	0.026	85490.6	ug/L	10	Standard
|	Al	27	300675.4	4.9	21.7229	1.050	4.8	ug/L	7870	Standard
[>	Sc	45	315914.9	1.4				ug/L	330668	Standard
[	Ti	47	819.4	8.7	0.6946	0.061	8.8	ug/L	53	Standard
|	V	51	4193.1	2.0	0.1659	0.016	9.4	ug/L	2687	Standard
|	Cr	52	7929.4	0.9	-0.0138	0.009	65.7	ug/L	8408	Standard
|	Cr	53	420.8	11.8	0.1384	0.040	28.9	ug/L	288	Standard
|	Mn	55	66183.6	1.4	5.1936	0.154	3.0	ug/L	1080	Standard
|	Co	59	653.7	6.9	0.0696	0.007	9.4	ug/L	117	Standard
|	Ni	60	503.0	20.7	0.1978	0.046	23.2	ug/L	68	Standard
|	Cu	65	336.0	16.8	0.0961	0.026	27.4	ug/L	141	Standard
|	Zn	66	2875.6	1.5	2.8223	0.092	3.3	ug/L	138	Standard
[>	Ge	72	271453.8	1.5				ug/L	283230	Standard
|	As	75	-40.3	74.9	0.1305	0.032	24.2	ug/L	-198	Standard
|	Se	82	218.2	3.3	2.0604	0.102	4.9	ug/L	21	Standard
[	Se-1	77	251.3	10.3	1.9102	0.394	20.6	ug/L	131	Standard
[>	Ga	71	530.0	4.1				mg/L	607	Standard
[	Rb	85	8932.6	4.7				ug/L	30	Standard
[	Y	89	231275.4	1.7				ug/L	251555	Standard
[>	Rh	103	325.0	17.3				ug/L	335	Standard
[	Mo	98	370.7	12.9	0.0976	0.014	14.0	ug/L	13	Standard
|	Ag	107	65.7	47.5	0.0016	0.005	317.9	ug/L	36	Standard
|	Cd	111	304.1	9.3	0.0769	0.009	11.8	mg/L	49	Standard
|	Cd	114	911.1	11.2	0.0735	0.011	14.4	ug/L	170	Standard
[>	In	115	726444.2	0.5				ug/L	727802	Standard
|	Sn	118	1054.7	7.5	0.0445	0.007	15.9	ug/L	471	Standard
|	Sb	123	329.9	9.1	0.0409	0.003	8.3	ug/L	39	Standard
[	Ba	135	19370.7	2.1	4.4313	0.087	2.0	ug/L	25	Standard
[	Ce	140	12026.1	1.4				ug/L	25	Standard
[>	Tb	159	1061093.8	0.2				ug/L	1071747	Standard
[	Ho	165	170.0	6.9				ug/L	13	Standard
|	Tl	203	154.7	38.1	0.0083	0.003	41.6	ug/L	5	Standard
|	Tl	205	354.0	33.6	0.0092	0.003	32.3	ug/L	10	Standard
|	Pb	206	889.4	5.1	0.0376	0.003	7.6	ug/L	382	Standard
|	Pb	207	739.0	5.7	0.0407	0.003	8.0	ug/L	306	Standard
|	Pb	208	3458.2	5.5	0.0398	0.003	7.7	ug/L	1443	Standard
	U	238	515.0	16.1	0.0338	0.005	15.1	ug/L	5	Standard
[>	Bi	209	557689.2	1.1				ug/L	561075	Standard

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Na	23	125507.7	1.0	7.6575	0.120	1.6	mg/L	288	Standard
Mg	24	252002.6	2.5	0.3963	0.009	2.3	mg/L	218	Standard
K	39	396.7	17.0	0.2592	0.066	25.4	mg/L	125	Standard
Ca	43	3.3	86.6	-1.6292	3.231	198.3	mg/L	3	Standard
Fe	54	412.2	3.3	-0.0181	0.004	23.3	mg/L	550	Standard
Fe	57	3700.5	4.8	0.0420	0.004	8.7	mg/L	1772	Standard
Sc-1	45	315914.9	1.4				mg/L	330668	Standard
Cl	35	5.3	57.3				ug/L	5	Standard
Kr	83	34.6	9.7				ug/L	38	Standard
Br	81	575.0	4.1				ug/L	344	Standard
P	31	273.3	19.7				ug/L	312	Standard
S	34	8148.9	1.5				ug/L	5594	Standard
Sr	88	91.7	8.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.842	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065816

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	Cd	111	
	Cd	114	
>	In	115	99.813
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.397
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065816

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Method 6020 - Summary Report

Sample ID: L1207065817

Sample Date/Time: Sunday, July 29, 2012 10:47:26

Number of Replicates: 3

Autosampler Position: 228

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	30492.3	1.0	4102.9867	116.958	2.9	ug/L	9465	Standard
|	Be	9	96.7	3.0	0.0356	0.002	4.4	ug/L	10	Standard
|	Al	27	8268545.8	0.4	572.1861	14.670	2.6	ug/L	7870	Standard
[>	Sc	45	338470.9	2.9				ug/L	330668	Standard
|	Ti	47	11862.6	0.6	10.5384	0.082	0.8	ug/L	53	Standard
|	V	51	19831.3	2.1	1.8089	0.046	2.6	ug/L	2687	Standard
|	Cr	52	19465.8	1.7	1.5155	0.047	3.1	ug/L	8408	Standard
|	Cr	53	2271.0	3.4	1.5957	0.060	3.8	ug/L	288	Standard
|	Mn	55	186708.7	0.9	14.6600	0.161	1.1	ug/L	1080	Standard
|	Co	59	4643.4	2.3	0.5687	0.014	2.4	ug/L	117	Standard
|	Ni	60	2908.3	2.9	1.2718	0.037	2.9	ug/L	68	Standard
|	Cu	65	1842.8	4.5	0.8232	0.042	5.1	ug/L	141	Standard
|	Zn	66	26404.7	1.6	26.8904	0.465	1.7	ug/L	138	Standard
[>	Ge	72	274043.8	0.2				ug/L	283230	Standard
|	As	75	219.3	5.7	0.4005	0.013	3.3	ug/L	-198	Standard
|	Se	82	187.0	2.3	1.7118	0.043	2.5	ug/L	21	Standard
[	Se-1	77	233.3	4.7	1.6068	0.169	10.5	ug/L	131	Standard
[>	Ga	71	1703.4	4.4				mg/L	607	Standard
|	Rb	85	14777.2	0.9				ug/L	30	Standard
|	Y	89	249329.0	2.7				ug/L	251555	Standard
[>	Rh	103	348.3	4.6				ug/L	335	Standard
|	Mo	98	594.8	5.6	0.1577	0.010	6.6	ug/L	13	Standard
|	Ag	107	52.7	15.2	-0.0007	0.001	185.5	ug/L	36	Standard
|	Cd	111	77.6	7.8	0.0055	0.002	32.5	mg/L	49	Standard
|	Cd	114	248.4	9.9	0.0049	0.002	47.8	ug/L	170	Standard
[>	In	115	740579.2	0.7				ug/L	727802	Standard
|	Sn	118	1425.7	2.2	0.0744	0.003	4.3	ug/L	471	Standard
|	Sb	123	303.0	14.5	0.0370	0.005	13.2	ug/L	39	Standard
|	Ba	135	42111.1	1.0	9.4627	0.030	0.3	ug/L	25	Standard
|	Ce	140	194912.1	1.1				ug/L	25	Standard
[>	Tb	159	1077199.2	0.3				ug/L	1071747	Standard
|	Ho	165	2448.2	0.6				ug/L	13	Standard
|	Tl	203	254.0	7.2	0.0140	0.001	7.3	ug/L	5	Standard
|	Tl	205	497.0	2.7	0.0127	0.000	3.7	ug/L	10	Standard
|	Pb	206	7463.2	1.0	0.5429	0.009	1.6	ug/L	382	Standard
|	Pb	207	5900.5	1.6	0.5157	0.003	0.6	ug/L	306	Standard
|	Pb	208	28114.5	1.0	0.5227	0.005	1.0	ug/L	1443	Standard
	U	238	821.0	3.2	0.0531	0.002	4.2	ug/L	5	Standard
[>	Bi	209	567153.6	1.0				ug/L	561075	Standard

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Na	23	124677.5	0.7	7.1006	0.220	3.1	mg/L	288	Standard
Mg	24	221343.7	1.6	0.3252	0.013	3.9	mg/L	218	Standard
K	39	450.0	6.2	0.2802	0.017	6.2	mg/L	125	Standard
Ca	43	3.3	173.2	-1.9218	5.954	309.8	mg/L	3	Standard
Fe	54	3627.6	1.7	0.7250	0.014	1.9	mg/L	550	Standard
Fe	57	46685.2	3.8	0.8706	0.050	5.8	mg/L	1772	Standard
Sc-1	45	338470.9	2.9				mg/L	330668	Standard
Cl	35	4.0	25.0				ug/L	5	Standard
Kr	83	39.7	5.9				ug/L	38	Standard
Br	81	535.0	2.6				ug/L	344	Standard
P	31	544.2	13.9				ug/L	312	Standard
S	34	7592.7	2.1				ug/L	5594	Standard
Sr	88	73.3	14.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.757	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065817

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	Cd	111	
	Cd	114	
>	In	115	101.756
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.083
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065818

Sample Date/Time: Sunday, July 29, 2012 10:50:37

Number of Replicates: 3

Autosampler Position: 229

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

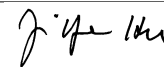
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	58912.6	0.6	10314.5735	124.620	1.2	ug/L	9465	Standard
|	Be	9	28.3	53.9	-0.0034	0.010	289.3	ug/L	10	Standard
|	Al	27	383323.5	0.6	27.6707	0.431	1.6	ug/L	7870	Standard
[>	Sc	45	318004.6	1.4				ug/L	330668	Standard
|	Ti	47	1273.1	17.4	1.1011	0.198	18.0	ug/L	53	Standard
|	V	51	4121.6	1.1	0.1574	0.004	2.3	ug/L	2687	Standard
|	Cr	52	7977.4	1.3	-0.0094	0.008	83.4	ug/L	8408	Standard
|	Cr	53	1037.5	1.3	0.6284	0.011	1.8	ug/L	288	Standard
|	Mn	55	51558.6	1.8	4.0186	0.049	1.2	ug/L	1080	Standard
|	Co	59	747.4	4.5	0.0812	0.004	4.5	ug/L	117	Standard
|	Ni	60	724.7	5.9	0.2974	0.017	5.8	ug/L	68	Standard
|	Cu	65	293.7	6.3	0.0753	0.010	13.1	ug/L	141	Standard
|	Zn	66	2681.2	3.4	2.6152	0.078	3.0	ug/L	138	Standard
[>	Ge	72	271934.0	0.6				ug/L	283230	Standard
|	As	75	-50.8	114.1	0.1193	0.061	51.1	ug/L	-198	Standard
|	Se	82	306.5	5.0	2.9856	0.142	4.8	ug/L	21	Standard
[	Se-1	77	299.7	4.5	2.6250	0.177	6.7	ug/L	131	Standard
[>	Ga	71	658.3	16.2				mg/L	607	Standard
|	Rb	85	1375.1	6.6				ug/L	30	Standard
|	Y	89	229874.2	1.3				ug/L	251555	Standard
[>	Rh	103	355.0	4.2				ug/L	335	Standard
|	Mo	98	165.9	10.0	0.0393	0.005	12.8	ug/L	13	Standard
|	Ag	107	47.0	9.3	-0.0015	0.001	54.5	ug/L	36	Standard
|	Cd	111	83.9	7.0	0.0078	0.002	27.9	mg/L	49	Standard
|	Cd	114	268.5	4.0	0.0072	0.001	13.3	ug/L	170	Standard
[>	In	115	733441.3	1.7				ug/L	727802	Standard
|	Sn	118	689.0	4.4	0.0120	0.002	13.3	ug/L	471	Standard
|	Sb	123	137.8	15.0	0.0180	0.002	13.3	ug/L	39	Standard
|	Ba	135	22247.0	1.5	5.0428	0.061	1.2	ug/L	25	Standard
|	Ce	140	6470.0	1.3				ug/L	25	Standard
[>	Tb	159	1068606.0	1.3				ug/L	1071747	Standard
|	Ho	165	98.0	10.4				ug/L	13	Standard
|	Tl	203	446.0	6.4	0.0261	0.001	4.7	ug/L	5	Standard
|	Tl	205	994.0	6.4	0.0259	0.001	4.6	ug/L	10	Standard
|	Pb	206	1070.0	4.5	0.0523	0.004	8.5	ug/L	382	Standard
|	Pb	207	847.0	1.4	0.0513	0.003	4.9	ug/L	306	Standard
|	Pb	208	3995.5	2.3	0.0511	0.003	5.4	ug/L	1443	Standard
	U	238	242.3	8.5	0.0159	0.001	6.8	ug/L	5	Standard
[>	Bi	209	554283.3	1.8				ug/L	561075	Standard

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Na	23	139294.1	1.0	8.4465	0.127	1.5	mg/L	288	Standard
Mg	24	794200.9	0.8	1.2404	0.022	1.7	mg/L	218	Standard
K	39	261.7	7.2	0.1322	0.021	15.6	mg/L	125	Standard
Ca	43	15.0	33.3	11.3798	5.666	49.8	mg/L	3	Standard
Fe	54	589.3	6.3	0.0252	0.011	42.9	mg/L	550	Standard
Fe	57	6219.6	3.3	0.0936	0.006	6.4	mg/L	1772	Standard
Sc-1	45	318004.6	1.4				mg/L	330668	Standard
Cl	35	26.7	9.4				ug/L	5	Standard
Kr	83	35.7	14.0				ug/L	38	Standard
Br	81	1335.1	4.7				ug/L	344	Standard
P	31	255.8	5.6				ug/L	312	Standard
S	34	10942.3	2.0				ug/L	5594	Standard
Sr	88	198.3	7.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.012	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065818

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	Cd	111	
	Cd	114	
>	In	115	100.775
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.789
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065819

Sample Date/Time: Sunday, July 29, 2012 10:53:46

Number of Replicates: 3

Autosampler Position: 230

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	83710.7	2.5	15721.5946	649.089	4.1	ug/L	9465	Standard
|	Be	9	18.3	56.8	-0.0095	0.007	70.8	ug/L	10	Standard
|	Al	27	61884.7	5.7	4.0650	0.320	7.9	ug/L	7870	Standard
[>	Sc	45	312331.7	1.2				ug/L	330668	Standard
[	Ti	47	329.0	3.8	0.2569	0.014	5.6	ug/L	53	Standard
|	V	51	2975.8	1.9	0.0403	0.008	20.6	ug/L	2687	Standard
|	Cr	52	7957.4	2.4	0.0033	0.037	1108.5	ug/L	8408	Standard
|	Cr	53	1090.0	2.0	0.6824	0.022	3.3	ug/L	288	Standard
|	Mn	55	124272.3	0.9	9.9453	0.127	1.3	ug/L	1080	Standard
|	Co	59	500.0	10.6	0.0509	0.007	14.3	ug/L	117	Standard
|	Ni	60	659.3	1.1	0.2722	0.005	1.8	ug/L	68	Standard
|	Cu	65	373.7	2.0	0.1168	0.004	3.4	ug/L	141	Standard
|	Zn	66	2506.5	1.9	2.4718	0.055	2.2	ug/L	138	Standard
[>	Ge	72	268156.6	1.0				ug/L	283230	Standard
|	As	75	-29.2	24.1	0.1417	0.007	5.1	ug/L	-198	Standard
|	Se	82	57.4	4.4	0.3709	0.032	8.5	ug/L	21	Standard
[	Se-1	77	133.0	4.7	0.1607	0.085	52.6	ug/L	131	Standard
[>	Ga	71	553.3	10.0				mg/L	607	Standard
[	Rb	85	1873.4	7.8				ug/L	30	Standard
[	Y	89	233133.5	1.4				ug/L	251555	Standard
[>	Rh	103	435.0	7.0				ug/L	335	Standard
[	Mo	98	210.0	6.6	0.0520	0.003	6.2	ug/L	13	Standard
|	Ag	107	115.7	105.8	0.0094	0.019	204.6	ug/L	36	Standard
|	Cd	111	186.5	58.1	0.0396	0.033	82.7	mg/L	49	Standard
|	Cd	114	579.5	60.3	0.0390	0.035	89.4	ug/L	170	Standard
[>	In	115	728354.9	1.4				ug/L	727802	Standard
|	Sn	118	1087.7	20.6	0.0469	0.018	38.6	ug/L	471	Standard
|	Sb	123	262.6	96.6	0.0326	0.029	90.2	ug/L	39	Standard
[	Ba	135	29628.3	1.9	6.7661	0.060	0.9	ug/L	25	Standard
[	Ce	140	1136.7	8.6				ug/L	25	Standard
[>	Tb	159	1065339.6	0.4				ug/L	1071747	Standard
[	Ho	165	29.3	16.1				ug/L	13	Standard
|	Tl	203	609.7	43.6	0.0367	0.016	44.9	ug/L	5	Standard
|	Tl	205	1361.1	37.6	0.0362	0.014	37.6	ug/L	10	Standard
|	Pb	206	596.7	23.6	0.0158	0.011	71.5	ug/L	382	Standard
|	Pb	207	509.3	21.0	0.0203	0.010	50.7	ug/L	306	Standard
|	Pb	208	2307.4	21.5	0.0180	0.010	56.4	ug/L	1443	Standard
	U	238	1787.8	5.6	0.1208	0.007	5.7	ug/L	5	Standard
[>	Bi	209	544382.8	0.5				ug/L	561075	Standard

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Na	23	149426.7	1.9	9.2297	0.267	2.9	mg/L	288	Standard
Mg	24	1844205.5	22.5	2.9344	0.677	23.1	mg/L	218	Standard
K	39	435.0	3.0	0.2990	0.015	5.1	mg/L	125	Standard
Ca	43	15.0	33.3	11.6478	5.689	48.8	mg/L	3	Standard
Fe	54	342.9	12.4	-0.0345	0.011	31.5	mg/L	550	Standard
Fe	57	3138.7	1.8	0.0311	0.002	6.3	mg/L	1772	Standard
Sc-1	45	312331.7	1.2				mg/L	330668	Standard
Cl	35	31.0	8.5				ug/L	5	Standard
Kr	83	35.6	4.8				ug/L	38	Standard
Br	81	1322.6	3.6				ug/L	344	Standard
P	31	260.8	8.4				ug/L	312	Standard
S	34	19133.7	2.3				ug/L	5594	Standard
Sr	88	438.3	6.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.678	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065819

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	Cd	111	
	Cd	114	
>	In	115	100.076
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	97.025
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065819

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 10:56:58

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9234.5	2.3	-88.6010	20.204	22.8	ug/L	9465	Standard
|	Be	9	88363.6	0.9	49.3209	0.145	0.3	ug/L	10	Standard
|	Al	27	710500.3	1.8	46.1482	0.469	1.0	ug/L	7870	Standard
[>	Sc	45	356302.7	1.1				ug/L	330668	Standard
[	Ti	47	120838.0	1.3	99.5497	0.895	0.9	ug/L	53	Standard
|	V	51	493704.2	0.7	47.7739	0.259	0.5	ug/L	2687	Standard
|	Cr	52	398614.8	1.4	48.0702	0.966	2.0	ug/L	8408	Standard
|	Cr	53	68340.5	0.9	49.6558	0.546	1.1	ug/L	288	Standard
|	Mn	55	707827.7	0.7	51.5653	0.532	1.0	ug/L	1080	Standard
|	Co	59	443006.9	0.6	51.2711	0.150	0.3	ug/L	117	Standard
|	Ni	60	118284.6	0.3	48.8677	0.311	0.6	ug/L	68	Standard
|	Cu	65	110257.4	0.4	49.1915	0.133	0.3	ug/L	141	Standard
|	Zn	66	52416.8	0.4	49.4513	0.444	0.9	ug/L	138	Standard
[>	Ge	72	296584.3	0.6				ug/L	283230	Standard
|	As	75	51977.6	0.3	50.0682	0.203	0.4	ug/L	-198	Standard
|	Se	82	5293.1	1.7	50.8922	0.985	1.9	ug/L	21	Standard
[	Se-1	77	3871.8	2.0	51.2352	0.940	1.8	ug/L	131	Standard
[>	Ga	71	636.7	6.5				mg/L	607	Standard
[	Rb	85	723.4	5.4				ug/L	30	Standard
[	Y	89	259404.1	2.2				ug/L	251555	Standard
[>	Rh	103	390.0	10.0				ug/L	335	Standard
[	Mo	98	363241.2	0.4	92.7946	0.160	0.2	ug/L	13	Standard
|	Ag	107	330346.8	0.3	47.9586	0.334	0.7	ug/L	36	Standard
|	Cd	111	188409.6	1.2	53.2983	0.656	1.2	mg/L	49	Standard
|	Cd	114	544422.3	0.8	50.6458	0.153	0.3	ug/L	170	Standard
[>	In	115	803093.7	0.5				ug/L	727802	Standard
|	Sn	118	640542.1	0.7	50.4395	0.485	1.0	ug/L	471	Standard
|	Sb	123	472727.5	0.8	50.6756	0.510	1.0	ug/L	39	Standard
[	Ba	135	244548.3	1.3	50.7258	0.712	1.4	ug/L	25	Standard
[	Ce	140	939.4	4.2				ug/L	25	Standard
[>	Tb	159	1156784.9	0.7				ug/L	1071747	Standard
[	Ho	165	21.3	7.2				ug/L	13	Standard
|	Tl	203	855406.5	0.8	49.1219	0.300	0.6	ug/L	5	Standard
|	Tl	205	1975937.9	0.3	48.6506	0.198	0.4	ug/L	10	Standard
|	Pb	206	665180.4	0.6	49.4874	0.186	0.4	ug/L	382	Standard
|	Pb	207	563944.8	0.5	50.2494	0.154	0.3	ug/L	306	Standard
|	Pb	208	2608683.1	0.5	49.4575	0.093	0.2	ug/L	1443	Standard
	U	238	813813.1	0.2	51.1079	0.100	0.2	ug/L	5	Standard
[>	Bi	209	586925.6	0.3				ug/L	561075	Standard

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Na	23	114089.6	0.4	6.1645	0.052	0.8	mg/L	288	Standard
Mg	24	3348346.6	2.0	4.6656	0.052	1.1	mg/L	218	Standard
K	39	5689.4	5.2	4.5647	0.208	4.6	mg/L	125	Standard
Ca	43	5.0	100.0	-0.4124	4.960	1202.6	mg/L	3	Standard
Fe	54	22287.2	3.4	4.8158	0.157	3.3	mg/L	550	Standard
Fe	57	305939.1	3.8	5.5962	0.167	3.0	mg/L	1772	Standard
Sc-1	45	356302.7	1.1				mg/L	330668	Standard
Cl	35	6.7	37.7				ug/L	5	Standard
Kr	83	40.7	10.7				ug/L	38	Standard
Br	81	465.8	13.9				ug/L	344	Standard
P	31	415.0	4.3				ug/L	312	Standard
S	34	6145.4	0.5				ug/L	5594	Standard
Sr	88	41.7	18.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	92.296		
Sc	45			
Ti	47	99.550		
V	51	95.548		
Cr	52	96.140		
Cr	53			
Mn	55	103.131		
Co	59	102.542		
Ni	60	97.735		
Cu	65	98.383		
Zn	66	98.903		
Ge	72		104.715	
As	75	100.136		
Se	82	101.784		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	92.795		
Ag	107	95.917		

Sample ID: QC Std 6

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	Cd	111	106.597	
	Cd	114		
>	In	115		110.345
	Sn	118	100.879	
	Sb	123	101.351	
	Ba	135	101.452	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	98.244	
|	Tl	205		
|	Pb	206	98.975	
|	Pb	207	100.499	
|	Pb	208	98.915	
|	U	238	102.216	
>	Bi	209		104.607
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

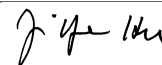
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 11:00:08

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9189.5	4.2	-10.8922	85.327	783.4	ug/L	9465	Standard
|	Be	9	8.3	91.7	-0.0163	0.005	28.1	ug/L	10	Standard
|	Al	27	7762.0	6.7	-0.0439	0.048	108.3	ug/L	7870	Standard
[>	Sc	45	339136.1	2.1				ug/L	330668	Standard
|	Ti	47	55.3	13.8	0.0037	0.007	192.4	ug/L	53	Standard
|	V	51	2381.6	2.5	-0.0426	0.010	22.6	ug/L	2687	Standard
|	Cr	52	7356.5	0.6	-0.1527	0.019	12.4	ug/L	8408	Standard
|	Cr	53	240.0	9.9	-0.0178	0.017	94.2	ug/L	288	Standard
|	Mn	55	1076.7	4.6	-0.0038	0.003	66.0	ug/L	1080	Standard
|	Co	59	139.0	13.4	0.0034	0.002	58.6	ug/L	117	Standard
|	Ni	60	70.3	12.1	0.0005	0.003	612.0	ug/L	68	Standard
|	Cu	65	143.7	5.3	-0.0020	0.004	211.2	ug/L	141	Standard
|	Zn	66	155.3	13.6	-0.0013	0.018	1424.9	ug/L	138	Standard
[>	Ge	72	289496.2	1.5				ug/L	283230	Standard
|	As	75	-170.5	28.8	0.0054	0.046	855.7	ug/L	-198	Standard
|	Se	82	24.6	32.2	0.0016	0.081	5078.8	ug/L	21	Standard
[	Se-1	77	120.7	11.2	-0.1627	0.164	100.8	ug/L	131	Standard
[>	Ga	71	573.3	5.0				mg/L	607	Standard
|	Rb	85	16.7	34.6				ug/L	30	Standard
|	Y	89	255316.7	1.0				ug/L	251555	Standard
[>	Rh	103	320.0	4.1				ug/L	335	Standard
|	Mo	98	196.3	4.4	0.0435	0.002	3.8	ug/L	13	Standard
|	Ag	107	85.7	17.9	0.0036	0.002	63.9	ug/L	36	Standard
|	Cd	111	71.5	17.8	0.0022	0.004	161.9	mg/L	49	Standard
|	Cd	114	202.5	1.9	-0.0012	0.000	12.0	ug/L	170	Standard
[>	In	115	794603.3	1.2				ug/L	727802	Standard
|	Sn	118	877.4	6.6	0.0224	0.004	17.9	ug/L	471	Standard
|	Sb	123	2411.7	7.9	0.2630	0.018	7.0	ug/L	39	Standard
|	Ba	135	44.7	20.1	-0.0022	0.002	83.3	ug/L	25	Standard
|	Ce	140	27.3	10.6				ug/L	25	Standard
[>	Tb	159	1127209.8	0.7				ug/L	1071747	Standard
|	Ho	165	13.3	37.7				ug/L	13	Standard
|	Tl	203	64.3	28.9	0.0026	0.001	39.9	ug/L	5	Standard
|	Tl	205	161.0	42.5	0.0040	0.002	41.8	ug/L	10	Standard
|	Pb	206	420.3	6.7	-0.0008	0.002	239.0	ug/L	382	Standard
|	Pb	207	344.3	4.0	0.0020	0.001	52.4	ug/L	306	Standard
|	Pb	208	1646.0	4.9	0.0020	0.001	72.4	ug/L	1443	Standard
	U	238	77.7	29.8	0.0046	0.001	30.9	ug/L	5	Standard
[>	Bi	209	587537.5	0.5				ug/L	561075	Standard

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Na	23	451.7	11.2	-0.0104	0.003	25.5	mg/L	288	Standard
Mg	24	415.0	30.4	0.0009	0.000	19.6	mg/L	218	Standard
K	39	153.3	28.5	0.0240	0.040	166.6	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5766	3.088	86.3	mg/L	3	Standard
Fe	54	514.4	25.8	-0.0015	0.030	1921.8	mg/L	550	Standard
Fe	57	2000.1	8.0	0.0039	0.003	65.3	mg/L	1772	Standard
Sc-1	45	339136.1	2.1				mg/L	330668	Standard
Cl	35	5.7	36.7				ug/L	5	Standard
Kr	83	39.7	14.9				ug/L	38	Standard
Br	81	396.7	11.1				ug/L	344	Standard
P	31	339.2	16.0				ug/L	312	Standard
S	34	6005.4	1.2				ug/L	5594	Standard
Sr	88	50.0	36.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.213	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 11:02:39

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	Cd	111	
	Cd	114	
>	In	115	109.179
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.716
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 11:02:39

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, July 29, 2012 11:03:21

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8947.6	3.5	-2.3042	51.502	2235.1	ug/L	9465	Standard
|	Be	9	21.7	26.6	-0.0080	0.004	46.2	ug/L	10	Standard
|	Al	27	6201.3	8.9	-0.1375	0.055	39.7	ug/L	7870	Standard
[>	Sc	45	328582.1	3.2				ug/L	330668	Standard
|	Ti	47	67.7	8.4	0.0159	0.004	24.4	ug/L	53	Standard
|	V	51	6080.2	1.0	0.3460	0.012	3.6	ug/L	2687	Standard
|	Cr	52	13249.5	1.3	0.6461	0.012	1.9	ug/L	8408	Standard
|	Cr	53	1260.9	5.8	0.7763	0.065	8.4	ug/L	288	Standard
|	Mn	55	7725.3	2.4	0.5123	0.024	4.7	ug/L	1080	Standard
|	Co	59	3443.1	2.8	0.4086	0.013	3.2	ug/L	117	Standard
|	Ni	60	3689.1	2.2	1.5842	0.043	2.7	ug/L	68	Standard
|	Cu	65	1728.4	2.3	0.7490	0.006	0.8	ug/L	141	Standard
|	Zn	66	8049.8	3.1	7.9077	0.278	3.5	ug/L	138	Standard
[>	Ge	72	280377.7	2.0				ug/L	283230	Standard
|	As	75	240.8	12.5	0.4170	0.027	6.5	ug/L	-198	Standard
|	Se	82	56.2	12.1	0.3301	0.059	17.7	ug/L	21	Standard
[	Se-1	77	139.3	5.2	0.1647	0.091	55.3	ug/L	131	Standard
[>	Ga	71	548.3	19.6				mg/L	607	Standard
|	Rb	85	16.7	17.3				ug/L	30	Standard
|	Y	89	241359.1	1.3				ug/L	251555	Standard
[>	Rh	103	311.7	12.5				ug/L	335	Standard
|	Mo	98	120.3	55.0	0.0256	0.018	69.4	ug/L	13	Standard
|	Ag	107	2607.2	4.6	0.3954	0.016	4.0	ug/L	36	Standard
|	Cd	111	927.7	6.6	0.2621	0.016	6.2	mg/L	49	Standard
|	Cd	114	2710.4	4.3	0.2493	0.013	5.0	ug/L	170	Standard
[>	In	115	751716.2	1.5				ug/L	727802	Standard
|	Sn	118	690.3	16.6	0.0107	0.009	88.8	ug/L	471	Standard
|	Sb	123	3974.8	2.6	0.4571	0.017	3.8	ug/L	39	Standard
|	Ba	135	3195.3	3.3	0.6969	0.026	3.8	ug/L	25	Standard
|	Ce	140	42.0	26.8				ug/L	25	Standard
[>	Tb	159	1086172.7	1.7				ug/L	1071747	Standard
|	Ho	165	13.0	13.3				ug/L	13	Standard
|	Tl	203	1422.1	7.5	0.0830	0.006	7.3	ug/L	5	Standard
|	Tl	205	3239.7	9.2	0.0821	0.007	8.8	ug/L	10	Standard
|	Pb	206	2991.0	3.9	0.1970	0.007	3.7	ug/L	382	Standard
|	Pb	207	2491.2	3.9	0.1999	0.009	4.7	ug/L	306	Standard
|	Pb	208	11732.8	1.6	0.1998	0.004	2.2	ug/L	1443	Standard
	U	238	6118.9	0.5	0.3952	0.007	1.8	ug/L	5	Standard
[>	Bi	209	570459.8	1.4				ug/L	561075	Standard

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Na	23	835.0	63.4	0.0137	0.033	243.0	mg/L	288	Standard
Mg	24	1148.4	86.6	0.0021	0.002	76.9	mg/L	218	Standard
K	39	125.0	14.4	0.0029	0.019	663.7	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5970	3.053	84.9	mg/L	3	Standard
Fe	54	524.9	3.8	0.0051	0.009	172.0	mg/L	550	Standard
Fe	57	1895.1	8.7	0.0031	0.004	127.6	mg/L	1772	Standard
Sc-1	45	328582.1	3.2				mg/L	330668	Standard
Cl	35	3.3	45.8				ug/L	5	Standard
Kr	83	36.8	7.8				ug/L	38	Standard
Br	81	405.8	5.2				ug/L	344	Standard
P	31	365.0	5.4				ug/L	312	Standard
S	34	5799.4	2.5				ug/L	5594	Standard
Sr	88	26.7	10.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	86.507		
Cr	52	80.766		
Cr	53			
Mn	55	102.457		
Co	59	102.148		
Ni	60	99.014		
Cu	65	93.622		
Zn	66	126.523		
Ge	72		98.993	
As	75	104.246		
Se	82	82.527		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	98.857		

Sample ID: QC Std 8

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	Cd	111	109.220	
	Cd	114		
>	In	115		103.286
	Sn	118		
	Sb	123	114.282	
	Ba	135	92.915	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	103.704	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	99.905	
|	U	238	98.800	
>	Bi	209		101.673
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 8

Report Date/Time: Sunday, July 29, 2012 11:05:52

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Method 6020 - Summary Report

Sample ID: PBW 6P WG404095-03

Sample Date/Time: Sunday, July 29, 2012 11:10:18

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8840.9	1.7	-19.9649	47.003	235.4	ug/L	9465	Standard
|	Be	9	6.7	114.6	-0.0172	0.005	26.6	ug/L	10	Standard
|	Al	27	8727.5	1.9	0.0429	0.013	30.3	ug/L	7870	Standard
[>	Sc	45	328056.9	3.9				ug/L	330668	Standard
[	Ti	47	46.0	26.4	-0.0024	0.011	464.7	ug/L	53	Standard
|	V	51	2332.7	3.4	-0.0369	0.011	29.9	ug/L	2687	Standard
|	Cr	52	7361.8	1.6	-0.1097	0.036	33.2	ug/L	8408	Standard
|	Cr	53	230.8	3.8	-0.0168	0.008	47.3	ug/L	288	Standard
|	Mn	55	1048.7	5.2	-0.0022	0.006	284.5	ug/L	1080	Standard
|	Co	59	111.7	6.8	0.0007	0.001	151.2	ug/L	117	Standard
|	Ni	60	246.0	6.5	0.0797	0.008	9.9	ug/L	68	Standard
|	Cu	65	128.7	5.8	-0.0063	0.004	63.1	ug/L	141	Standard
|	Zn	66	1670.8	4.7	1.5404	0.039	2.5	ug/L	138	Standard
[>	Ge	72	277016.9	2.6				ug/L	283230	Standard
|	As	75	-175.3	7.8	-0.0075	0.015	202.0	ug/L	-198	Standard
|	Se	82	22.0	10.7	-0.0158	0.025	160.2	ug/L	21	Standard
[	Se-1	77	125.3	8.0	-0.0129	0.195	1509.9	ug/L	131	Standard
[>	Ga	71	571.7	4.5				mg/L	607	Standard
[	Rb	85	10.0					ug/L	30	Standard
[	Y	89	238297.9	4.0				ug/L	251555	Standard
[>	Rh	103	333.3	6.1				ug/L	335	Standard
[	Mo	98	36.5	39.7	0.0031	0.005	147.1	ug/L	13	Standard
|	Ag	107	50.7	18.3	-0.0010	0.001	151.0	ug/L	36	Standard
|	Cd	111	52.2	11.0	-0.0022	0.001	52.9	mg/L	49	Standard
|	Cd	114	163.5	2.0	-0.0036	0.001	25.2	ug/L	170	Standard
[>	In	115	738857.1	4.4				ug/L	727802	Standard
|	Sn	118	613.3	2.3	0.0052	0.004	67.3	ug/L	471	Standard
|	Sb	123	342.9	24.1	0.0421	0.012	27.4	ug/L	39	Standard
[	Ba	135	36.7	16.4	-0.0033	0.001	31.8	ug/L	25	Standard
[	Ce	140	31.7	28.7				ug/L	25	Standard
[>	Tb	159	1070080.1	4.4				ug/L	1071747	Standard
[	Ho	165	12.0	16.7				ug/L	13	Standard
|	Tl	203	16.7	24.2	-0.0001	0.000	433.4	ug/L	5	Standard
|	Tl	205	44.7	14.9	0.0012	0.000	14.6	ug/L	10	Standard
|	Pb	206	393.3	4.1	-0.0013	0.001	101.0	ug/L	382	Standard
|	Pb	207	291.0	7.8	-0.0014	0.002	173.6	ug/L	306	Standard
|	Pb	208	1473.4	6.3	0.0001	0.001	712.9	ug/L	1443	Standard
	U	238	7.0	24.7	0.0002	0.000	56.7	ug/L	5	Standard
[>	Bi	209	559024.2	3.7				ug/L	561075	Standard

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Na	23	356.7	6.6	-0.0151	0.002	12.8	mg/L	288	Standard
Mg	24	276.7	8.1	0.0007	0.000	3.8	mg/L	218	Standard
K	39	126.7	21.7	0.0045	0.026	586.1	mg/L	125	Standard
Ca	43	6.7	114.6	1.7259	8.173	473.5	mg/L	3	Standard
Fe	54	545.9	11.1	0.0106	0.019	181.7	mg/L	550	Standard
Fe	57	1688.4	5.2	-0.0009	0.003	321.4	mg/L	1772	Standard
Sc-1	45	328056.9	3.9				mg/L	330668	Standard
Cl	35	4.3	13.3				ug/L	5	Standard
Kr	83	36.6	5.0				ug/L	38	Standard
Br	81	391.7	4.3				ug/L	344	Standard
P	31	352.5	9.3				ug/L	312	Standard
S	34	5805.3	1.4				ug/L	5594	Standard
Sr	88	43.3	17.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.806	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 6P WG404095-03

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	Cd	111		
	Cd	114		
>	In	115	101.519	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	99.634	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 6P WG404095-03

Report Date/Time: Sunday, July 29, 2012 11:12:48

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Method 6020 - Summary Report

Sample ID: LCSW 6P WG404095-04

Sample Date/Time: Sunday, July 29, 2012 11:13:27

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9184.5	2.2	-33.2727	69.633	209.3	ug/L	9465	Standard
|	Be	9	43246.6	2.0	25.0463	0.775	3.1	ug/L	10	Standard
|	Al	27	417884.7	4.4	27.9262	0.080	0.3	ug/L	7870	Standard
[>	Sc	45	343497.6	4.1				ug/L	330668	Standard
[	Ti	47	91.3	2.8	0.0330	0.003	9.1	ug/L	53	Standard
|	V	51	246778.5	2.6	23.9885	0.404	1.7	ug/L	2687	Standard
|	Cr	52	205483.8	2.3	24.5199	0.573	2.3	ug/L	8408	Standard
|	Cr	53	34482.6	5.2	25.2058	0.794	3.2	ug/L	288	Standard
|	Mn	55	352614.1	2.9	25.9097	0.375	1.4	ug/L	1080	Standard
|	Co	59	221670.7	2.4	25.9133	0.225	0.9	ug/L	117	Standard
|	Ni	60	59337.3	2.6	24.7540	0.437	1.8	ug/L	68	Standard
|	Cu	65	56393.5	3.3	25.3830	0.270	1.1	ug/L	141	Standard
|	Zn	66	27744.0	1.8	26.3786	0.528	2.0	ug/L	138	Standard
[>	Ge	72	293589.8	3.0				ug/L	283230	Standard
|	As	75	24777.1	2.6	24.2064	0.584	2.4	ug/L	-198	Standard
|	Se	82	2430.5	2.4	23.4811	0.439	1.9	ug/L	21	Standard
[	Se-1	77	1771.4	4.0	22.6830	0.679	3.0	ug/L	131	Standard
[>	Ga	71	685.0	14.9				mg/L	607	Standard
[	Rb	85	43.3	69.6				ug/L	30	Standard
[	Y	89	259833.3	2.6				ug/L	251555	Standard
[>	Rh	103	370.0	3.6				ug/L	335	Standard
[	Mo	98	119.6	79.7	0.0237	0.025	104.7	ug/L	13	Standard
|	Ag	107	156377.7	3.2	22.7971	0.519	2.3	ug/L	36	Standard
|	Cd	111	90362.1	2.3	25.6662	0.379	1.5	mg/L	49	Standard
|	Cd	114	260299.7	1.4	24.3137	0.159	0.7	ug/L	170	Standard
[>	In	115	799474.1	1.0				ug/L	727802	Standard
|	Sn	118	878.0	17.8	0.0221	0.013	58.3	ug/L	471	Standard
|	Sb	123	224203.9	2.1	24.1424	0.331	1.4	ug/L	39	Standard
[	Ba	135	113653.8	1.8	23.6741	0.229	1.0	ug/L	25	Standard
[	Ce	140	200.7	3.3				ug/L	25	Standard
[>	Tb	159	1134219.7	0.6				ug/L	1071747	Standard
[	Ho	165	17.7	14.2				ug/L	13	Standard
|	Tl	203	423490.2	1.7	24.4404	0.147	0.6	ug/L	5	Standard
|	Tl	205	978344.5	1.8	24.2088	0.182	0.8	ug/L	10	Standard
|	Pb	206	329206.0	1.8	24.5985	0.169	0.7	ug/L	382	Standard
|	Pb	207	280505.4	3.1	25.1023	0.509	2.0	ug/L	306	Standard
|	Pb	208	1296428.9	2.2	24.6864	0.265	1.1	ug/L	1443	Standard
	U	238	392255.3	2.7	24.7555	0.402	1.6	ug/L	5	Standard
[>	Bi	209	583975.0	1.1				ug/L	561075	Standard

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Na	23	920.0	13.5	0.0159	0.009	56.5	mg/L	288	Standard
Mg	24	2703.6	6.0	0.0042	0.000	9.4	mg/L	218	Standard
K	39	141.7	7.3	0.0118	0.006	47.5	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	762.6	3.6	0.0544	0.011	20.4	mg/L	550	Standard
Fe	57	2096.8	3.9	0.0053	0.003	53.4	mg/L	1772	Standard
Sc-1	45	343497.6	4.1				mg/L	330668	Standard
Cl	35	3.3	17.3				ug/L	5	Standard
Kr	83	39.9	7.5				ug/L	38	Standard
Br	81	454.2	5.1				ug/L	344	Standard
P	31	494.2	4.6				ug/L	312	Standard
S	34	6000.4	5.4				ug/L	5594	Standard
Sr	88	51.7	31.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.658	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 6P WG404095-04

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	Cd	111	
	Cd	114	
>	In	115	109.848
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.081
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 6P WG404095-04

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Method 6020 - Summary Report

Sample ID: L1207063602 WG404095-01

Sample Date/Time: Sunday, July 29, 2012 11:16:37

Number of Replicates: 3

Autosampler Position: 403

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

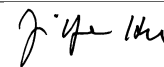
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	393306.8	6.6	65676.7642	667.639	1.0	ug/L	9465	Standard
|	Be	9	21.7	26.6	-0.0099	0.003	28.9	ug/L	10	Standard
|	Al	27	208791.8	7.1	12.2715	0.175	1.4	ug/L	7870	Standard
[>	Sc	45	380508.8	5.7				ug/L	330668	Standard
|	Ti	47	239.7	6.5	0.1551	0.009	5.6	ug/L	53	Standard
|	V	51	3483.3	5.5	0.0601	0.011	17.9	ug/L	2687	Standard
|	Cr	52	14495.3	5.5	0.7112	0.033	4.6	ug/L	8408	Standard
|	Cr	53	1227.5	8.7	0.7007	0.045	6.4	ug/L	288	Standard
|	Mn	55	1326155.8	2.8	97.0904	2.521	2.6	ug/L	1080	Standard
|	Co	59	5340.9	4.8	0.6074	0.009	1.5	ug/L	117	Standard
|	Ni	60	18891.5	10.7	7.7916	0.409	5.3	ug/L	68	Standard
|	Cu	65	1733.8	5.8	0.7092	0.004	0.6	ug/L	141	Standard
|	Zn	66	2844.9	6.8	2.5484	0.064	2.5	ug/L	138	Standard
[>	Ge	72	295615.6	5.5				ug/L	283230	Standard
|	As	75	2815.2	4.2	2.8853	0.039	1.3	ug/L	-198	Standard
|	Se	82	223.4	9.2	1.9237	0.190	9.9	ug/L	21	Standard
[	Se-1	77	208.7	6.6	1.0142	0.087	8.6	ug/L	131	Standard
[>	Ga	71	796.7	11.7				mg/L	607	Standard
[	Rb	85	51465.6	0.8				ug/L	30	Standard
[	Y	89	277326.6	5.5				ug/L	251555	Standard
[>	Rh	103	518.3	11.2				ug/L	335	Standard
[	Mo	98	634.9	4.2	0.1439	0.005	3.5	ug/L	13	Standard
|	Ag	107	108.0	28.8	0.0056	0.004	69.3	ug/L	36	Standard
|	Cd	111	295.5	4.7	0.0597	0.004	6.7	mg/L	49	Standard
|	Cd	114	785.3	3.3	0.0479	0.001	2.5	ug/L	170	Standard
[>	In	115	862013.5	2.2				ug/L	727802	Standard
|	Sn	118	783.4	4.0	0.0101	0.002	18.6	ug/L	471	Standard
|	Sb	123	1505.2	2.9	0.1521	0.004	2.5	ug/L	39	Standard
[	Ba	135	26829.7	2.5	5.1742	0.035	0.7	ug/L	25	Standard
[	Ce	140	730.0	7.4				ug/L	25	Standard
[>	Tb	159	1232083.6	1.5				ug/L	1071747	Standard
[	Ho	165	48.0	14.6				ug/L	13	Standard
|	Tl	203	236199.8	1.5	14.0981	0.103	0.7	ug/L	5	Standard
|	Tl	205	549141.2	1.4	14.0542	0.139	1.0	ug/L	10	Standard
|	Pb	206	515.7	11.9	0.0078	0.004	50.2	ug/L	382	Standard
|	Pb	207	442.3	7.4	0.0123	0.002	16.9	ug/L	306	Standard
|	Pb	208	2022.4	8.9	0.0106	0.003	24.8	ug/L	1443	Standard
	U	238	351.7	31.6	0.0226	0.007	29.4	ug/L	5	Standard
[>	Bi	209	564717.4	2.2				ug/L	561075	Standard

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Na	23	153721.1	2.2	7.8091	0.598	7.7	mg/L	288	Standard
Mg	24	11570507.7	3.0	15.1154	0.563	3.7	mg/L	218	Standard
K	39	905.0	11.6	0.5872	0.068	11.7	mg/L	125	Standard
Ca	43	463.3	17.4	424.2349	51.897	12.2	mg/L	3	Standard
Fe	54	521.1	20.7	-0.0134	0.019	137.9	mg/L	550	Standard
Fe	57	56652.1	14.0	0.9391	0.084	9.0	mg/L	1772	Standard
Sc-1	45	380508.8	5.7				mg/L	330668	Standard
Cl	35	8.3	42.1				ug/L	5	Standard
Kr	83	54.7	1.6				ug/L	38	Standard
Br	81	1020.9	5.4				ug/L	344	Standard
P	31	472.5	16.8				ug/L	312	Standard
S	34	361874.3	3.7				ug/L	5594	Standard
Sr	88	961.7	5.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.373	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063602 WG404095-01

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	Cd	111	
	Cd	114	
>	In	115	118.441
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.649
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063602 WG404095-01
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Method 6020 - Summary Report

Sample ID: L1207063602DP WG404095-05

Sample Date/Time: Sunday, July 29, 2012 11:19:47

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

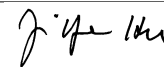
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	368936.4	2.6	65075.5922	2122.567	3.3	ug/L	9465	Standard
|	Be	9	15.0	88.2	-0.0130	0.007	56.2	ug/L	10	Standard
|	Al	27	170231.1	1.5	10.4931	0.279	2.7	ug/L	7870	Standard
[>	Sc	45	360309.3	1.3				ug/L	330668	Standard
|	Ti	47	229.0	11.8	0.1565	0.024	15.2	ug/L	53	Standard
|	V	51	3205.8	3.3	0.0498	0.011	21.4	ug/L	2687	Standard
|	Cr	52	13284.5	0.9	0.6499	0.015	2.3	ug/L	8408	Standard
|	Cr	53	1134.2	2.2	0.6777	0.021	3.0	ug/L	288	Standard
|	Mn	55	1216214.9	0.9	93.7524	1.014	1.1	ug/L	1080	Standard
|	Co	59	5042.5	1.9	0.6041	0.011	1.8	ug/L	117	Standard
|	Ni	60	16540.7	2.3	7.2007	0.168	2.3	ug/L	68	Standard
|	Cu	65	1554.4	3.3	0.6665	0.025	3.8	ug/L	141	Standard
|	Zn	66	2559.2	2.3	2.4090	0.056	2.3	ug/L	138	Standard
[>	Ge	72	280489.1	0.2				ug/L	283230	Standard
|	As	75	2667.8	2.0	2.8806	0.058	2.0	ug/L	-198	Standard
|	Se	82	215.8	4.7	1.9615	0.102	5.2	ug/L	21	Standard
[	Se-1	77	193.7	6.5	0.9521	0.186	19.5	ug/L	131	Standard
[>	Ga	71	715.0	9.7				mg/L	607	Standard
|	Rb	85	48196.6	1.8				ug/L	30	Standard
|	Y	89	266914.5	2.1				ug/L	251555	Standard
[>	Rh	103	576.7	14.0				ug/L	335	Standard
|	Mo	98	548.9	6.2	0.1269	0.010	7.8	ug/L	13	Standard
|	Ag	107	56.0	8.2	-0.0012	0.001	44.2	ug/L	36	Standard
|	Cd	111	269.7	7.4	0.0546	0.005	9.4	mg/L	49	Standard
|	Cd	114	729.2	1.9	0.0446	0.000	0.9	ug/L	170	Standard
[>	In	115	840694.6	1.5				ug/L	727802	Standard
|	Sn	118	738.4	4.7	0.0082	0.002	26.7	ug/L	471	Standard
|	Sb	123	440.7	8.4	0.0469	0.003	6.9	ug/L	39	Standard
|	Ba	135	24925.5	1.9	4.9283	0.025	0.5	ug/L	25	Standard
[	Ce	140	638.3	3.3				ug/L	25	Standard
[>	Tb	159	1215431.0	2.4				ug/L	1071747	Standard
|	Ho	165	47.7	15.7				ug/L	13	Standard
|	Tl	203	225283.3	1.4	13.6400	0.068	0.5	ug/L	5	Standard
|	Tl	205	518720.0	1.4	13.4663	0.058	0.4	ug/L	10	Standard
|	Pb	206	423.3	1.8	0.0011	0.001	45.0	ug/L	382	Standard
|	Pb	207	349.0	5.8	0.0042	0.002	38.5	ug/L	306	Standard
|	Pb	208	1630.0	0.5	0.0034	0.000	10.0	ug/L	1443	Standard
|	U	238	220.3	1.1	0.0144	0.000	1.0	ug/L	5	Standard
[>	Bi	209	556632.2	1.0				ug/L	561075	Standard

Sample ID: L1207063602DP WG404095-05

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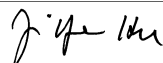
Na	23	155655.5	0.9	8.3305	0.180	2.2	mg/L	288	Standard
Mg	24	11171603.6	1.8	15.3977	0.474	3.1	mg/L	218	Standard
K	39	948.4	2.4	0.6619	0.026	3.9	mg/L	125	Standard
Ca	43	440.0	12.3	427.0466	51.007	11.9	mg/L	3	Standard
Fe	54	658.5	10.7	0.0230	0.013	58.7	mg/L	550	Standard
Fe	57	48668.0	0.7	0.8513	0.015	1.8	mg/L	1772	Standard
Sc-1	45	360309.3	1.3				mg/L	330668	Standard
Cl	35	10.0	20.0				ug/L	5	Standard
Kr	83	56.2	7.6				ug/L	38	Standard
Br	81	1101.7	3.2				ug/L	344	Standard
P	31	400.0	6.0				ug/L	312	Standard
S	34	339212.4	1.6				ug/L	5594	Standard
Sr	88	826.7	6.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.032	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063602DP WG404095-05
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	Cd	111	
	Cd	114	
>	In	115	115.511
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.208
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063602DP WG404095-05
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Method 6020 - Summary Report

Sample ID: L1207063602S WG404095-06

Sample Date/Time: Sunday, July 29, 2012 11:22:57

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	393638.8	1.8	67413.7621	721.837	1.1	ug/L	9465	Standard
|	Be	9	48475.8	1.7	25.9487	0.328	1.3	ug/L	10	Standard
|	Al	27	577241.1	1.1	35.8447	0.193	0.5	ug/L	7870	Standard
[>	Sc	45	371387.3	1.6				ug/L	330668	Standard
|	Ti	47	295.0	3.2	0.2075	0.007	3.6	ug/L	53	Standard
|	V	51	251116.2	3.2	24.9135	0.754	3.0	ug/L	2687	Standard
|	Cr	52	207185.7	2.0	25.2499	0.509	2.0	ug/L	8408	Standard
|	Cr	53	34669.6	1.6	25.8716	0.407	1.6	ug/L	288	Standard
|	Mn	55	1672203.1	0.8	125.6874	0.909	0.7	ug/L	1080	Standard
|	Co	59	241618.3	1.6	28.8184	0.424	1.5	ug/L	117	Standard
|	Ni	60	73647.6	2.5	31.3514	0.737	2.4	ug/L	68	Standard
|	Cu	65	52375.4	1.2	24.0518	0.246	1.0	ug/L	141	Standard
|	Zn	66	27650.2	1.9	26.8197	0.571	2.1	ug/L	138	Standard
[>	Ge	72	287725.9	0.4				ug/L	283230	Standard
|	As	75	30465.6	1.5	30.3178	0.431	1.4	ug/L	-198	Standard
|	Se	82	3234.6	1.7	31.9656	0.470	1.5	ug/L	21	Standard
[	Se-1	77	2246.2	2.9	29.8921	0.883	3.0	ug/L	131	Standard
[>	Ga	71	878.4	5.3				mg/L	607	Standard
|	Rb	85	52253.4	3.4				ug/L	30	Standard
|	Y	89	274628.7	1.7				ug/L	251555	Standard
[>	Rh	103	546.7	8.3				ug/L	335	Standard
|	Mo	98	598.4	4.4	0.1357	0.005	3.7	ug/L	13	Standard
|	Ag	107	169140.9	0.7	22.9398	0.168	0.7	ug/L	36	Standard
|	Cd	111	108711.2	1.3	28.7272	0.383	1.3	mg/L	49	Standard
|	Cd	114	288973.0	0.9	25.1090	0.161	0.6	ug/L	170	Standard
[>	In	115	859506.3	1.3				ug/L	727802	Standard
|	Sn	118	876.4	0.4	0.0171	0.001	3.9	ug/L	471	Standard
|	Sb	123	255564.6	1.5	25.5980	0.045	0.2	ug/L	39	Standard
[	Ba	135	144559.1	1.5	28.0120	0.245	0.9	ug/L	25	Standard
|	Ce	140	1439.4	3.0				ug/L	25	Standard
[>	Tb	159	1224976.1	0.8				ug/L	1071747	Standard
|	Ho	165	91.7	10.6				ug/L	13	Standard
|	Tl	203	667561.9	1.1	40.0358	0.301	0.8	ug/L	5	Standard
|	Tl	205	1537376.9	1.0	39.5319	0.228	0.6	ug/L	10	Standard
|	Pb	206	329437.9	1.1	25.5811	0.142	0.6	ug/L	382	Standard
|	Pb	207	276701.2	1.6	25.7337	0.181	0.7	ug/L	306	Standard
|	Pb	208	1288571.7	1.1	25.4993	0.137	0.5	ug/L	1443	Standard
|	U	238	443119.3	0.9	29.0636	0.312	1.1	ug/L	5	Standard
[>	Bi	209	562005.9	1.2				ug/L	561075	Standard

Sample ID: L1207063602S WG404095-06

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Na	23	156660.8	0.5	8.1335	0.159	2.0	mg/L	288	Standard
Mg	24	11529893.1	1.6	15.4138	0.156	1.0	mg/L	218	Standard
K	39	963.4	7.4	0.6507	0.059	9.0	mg/L	125	Standard
Ca	43	475.0	9.4	447.3805	36.160	8.1	mg/L	3	Standard
Fe	54	558.1	10.1	-0.0025	0.012	476.6	mg/L	550	Standard
Fe	57	52514.4	5.7	0.8923	0.038	4.3	mg/L	1772	Standard
Sc-1	45	371387.3	1.6				mg/L	330668	Standard
Cl	35	8.3	25.0				ug/L	5	Standard
Kr	83	60.6	3.7				ug/L	38	Standard
Br	81	1062.5	0.8				ug/L	344	Standard
P	31	474.2	3.1				ug/L	312	Standard
S	34	358117.3	1.2				ug/L	5594	Standard
Sr	88	933.4	12.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.587	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063602S WG404095-06
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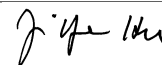
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	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.166
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207063602S WG404095-06
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Method 6020 - Summary Report

Sample ID: L1207063901

Sample Date/Time: Sunday, July 29, 2012 11:26:06

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

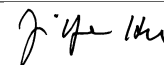
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	53822.1	0.4	6462.9071	73.553	1.1	ug/L	9465	Standard
|	Be	9	25.0	52.9	-0.0095	0.006	65.3	ug/L	10	Standard
|	Al	27	233192.5	0.6	12.2396	0.042	0.3	ug/L	7870	Standard
[>	Sc	45	426249.3	0.5				ug/L	330668	Standard
|	Ti	47	1995.1	7.9	1.5269	0.120	7.9	ug/L	53	Standard
|	V	51	23685.0	2.1	1.9210	0.020	1.0	ug/L	2687	Standard
|	Cr	52	16137.6	1.6	0.8178	0.010	1.2	ug/L	8408	Standard
|	Cr	53	2744.4	4.6	1.7150	0.103	6.0	ug/L	288	Standard
|	Mn	55	18181.6	1.0	1.1825	0.010	0.8	ug/L	1080	Standard
|	Co	59	538.7	2.3	0.0464	0.001	2.6	ug/L	117	Standard
|	Ni	60	1757.8	4.0	0.6644	0.021	3.1	ug/L	68	Standard
|	Cu	65	1168.0	5.5	0.4303	0.021	4.9	ug/L	141	Standard
|	Zn	66	5980.8	0.4	5.2531	0.081	1.5	ug/L	138	Standard
[>	Ge	72	310606.8	1.3				ug/L	283230	Standard
|	As	75	509.5	11.7	0.6393	0.050	7.8	ug/L	-198	Standard
|	Se	82	317.1	3.0	2.6819	0.051	1.9	ug/L	21	Standard
[	Se-1	77	186.0	4.2	0.5787	0.077	13.3	ug/L	131	Standard
[>	Ga	71	735.0	1.8				mg/L	607	Standard
|	Rb	85	13747.9	3.4				ug/L	30	Standard
|	Y	89	287600.9	1.4				ug/L	251555	Standard
[>	Rh	103	450.0	10.0				ug/L	335	Standard
|	Mo	98	4015.6	1.0	0.8880	0.012	1.3	ug/L	13	Standard
|	Ag	107	214.0	6.9	0.0182	0.002	12.3	ug/L	36	Standard
|	Cd	111	111.7	9.4	0.0093	0.003	32.9	mg/L	49	Standard
|	Cd	114	351.2	13.4	0.0083	0.004	43.4	ug/L	170	Standard
[>	In	115	920574.2	2.2				ug/L	727802	Standard
|	Sn	118	2290.8	3.0	0.1101	0.005	4.7	ug/L	471	Standard
|	Sb	123	3033.3	4.9	0.2853	0.008	2.7	ug/L	39	Standard
|	Ba	135	201498.1	0.9	36.4652	0.462	1.3	ug/L	25	Standard
|	Ce	140	2224.5	2.4				ug/L	25	Standard
[>	Tb	159	1273399.1	0.9				ug/L	1071747	Standard
|	Ho	165	50.7	3.0				ug/L	13	Standard
|	Tl	203	665.3	4.1	0.0340	0.002	5.5	ug/L	5	Standard
|	Tl	205	1495.1	4.4	0.0338	0.002	5.6	ug/L	10	Standard
|	Pb	206	2160.2	3.3	0.1153	0.003	3.0	ug/L	382	Standard
|	Pb	207	1751.4	0.7	0.1145	0.001	0.7	ug/L	306	Standard
|	Pb	208	8257.9	1.7	0.1144	0.001	1.1	ug/L	1443	Standard
	U	238	3632.1	2.4	0.2089	0.005	2.6	ug/L	5	Standard
[>	Bi	209	640233.4	1.2				ug/L	561075	Standard

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Na	23	146865.0	0.7	6.6356	0.048	0.7	mg/L	288	Standard
Mg	24	2114069.4	21.5	2.4628	0.532	21.6	mg/L	218	Standard
K	39	1108.4	3.8	0.6524	0.030	4.5	mg/L	125	Standard
Ca	43	35.0	24.7	23.7266	7.202	30.4	mg/L	3	Standard
Fe	54	793.3	7.0	0.0258	0.010	40.4	mg/L	550	Standard
Fe	57	9743.1	8.7	0.1151	0.013	11.4	mg/L	1772	Standard
Sc-1	45	426249.3	0.5				mg/L	330668	Standard
Cl	35	42.0	8.6				ug/L	5	Standard
Kr	83	38.1	14.4				ug/L	38	Standard
Br	81	8403.2	2.3				ug/L	344	Standard
P	31	362.5	3.6				ug/L	312	Standard
S	34	20309.4	2.0				ug/L	5594	Standard
Sr	88	436.7	7.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		109.666	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063901

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	Cd	111	
	Cd	114	
>	In	115	126.487
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	114.108
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for sample	In	115	Rerun sample

Sample ID: L1207063901

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Method 6020 - Summary Report

Sample ID: L1207063901PS WG404829-01

Sample Date/Time: Sunday, July 29, 2012 11:29:16

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

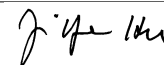
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	53358.8	2.3	6221.9652	123.933	2.0	ug/L	9465	Standard
|	Be	9	100584.5	1.7	45.9578	0.877	1.9	ug/L	10	Standard
|	Al	27	959406.6	1.0	51.0748	0.495	1.0	ug/L	7870	Standard
[>	Sc	45	435256.8	0.8				ug/L	330668	Standard
|	Ti	47	2062.8	13.7	1.5371	0.220	14.3	ug/L	53	Standard
|	V	51	546245.2	0.4	49.1264	0.238	0.5	ug/L	2687	Standard
|	Cr	52	434080.7	0.5	48.6535	0.310	0.6	ug/L	8408	Standard
|	Cr	53	75918.9	0.9	51.2647	0.432	0.8	ug/L	288	Standard
|	Mn	55	793972.0	0.8	53.7517	0.579	1.1	ug/L	1080	Standard
|	Co	59	481243.8	0.8	51.7569	0.526	1.0	ug/L	117	Standard
|	Ni	60	125565.5	1.1	48.2047	0.586	1.2	ug/L	68	Standard
|	Cu	65	116158.6	1.5	48.1570	0.818	1.7	ug/L	141	Standard
|	Zn	66	58267.5	0.7	51.0856	0.435	0.9	ug/L	138	Standard
[>	Ge	72	319164.2	0.3				ug/L	283230	Standard
|	As	75	54816.4	1.1	49.0709	0.652	1.3	ug/L	-198	Standard
|	Se	82	5672.6	1.7	50.6790	0.792	1.6	ug/L	21	Standard
[	Se-1	77	3909.8	3.0	47.9670	1.594	3.3	ug/L	131	Standard
[>	Ga	71	748.4	8.4				mg/L	607	Standard
|	Rb	85	13621.1	0.5				ug/L	30	Standard
|	Y	89	290895.5	2.6				ug/L	251555	Standard
[>	Rh	103	496.7	9.1				ug/L	335	Standard
|	Mo	98	4017.0	2.2	0.8805	0.014	1.6	ug/L	13	Standard
|	Ag	107	404642.3	13.4	50.8234	6.929	13.6	ug/L	36	Standard
|	Cd	111	219395.4	1.3	53.6819	0.618	1.2	mg/L	49	Standard
|	Cd	114	594940.8	0.9	47.8708	0.333	0.7	ug/L	170	Standard
[>	In	115	928479.8	0.7				ug/L	727802	Standard
|	Sn	118	2701.6	1.5	0.1367	0.002	1.5	ug/L	471	Standard
|	Sb	123	532934.0	0.4	49.4159	0.494	1.0	ug/L	39	Standard
|	Ba	135	447932.2	1.0	80.3715	0.626	0.8	ug/L	25	Standard
|	Ce	140	2248.8	0.7				ug/L	25	Standard
[>	Tb	159	1283226.1	0.3				ug/L	1071747	Standard
|	Ho	165	51.0	2.0				ug/L	13	Standard
|	Tl	203	910299.4	0.7	48.6110	0.531	1.1	ug/L	5	Standard
|	Tl	205	2223825.7	0.7	50.9175	0.671	1.3	ug/L	10	Standard
|	Pb	206	704596.9	0.6	48.7457	0.438	0.9	ug/L	382	Standard
|	Pb	207	599118.5	1.2	49.6440	0.897	1.8	ug/L	306	Standard
|	Pb	208	2771094.4	0.9	48.8548	0.598	1.2	ug/L	1443	Standard
|	U	238	924394.5	0.4	53.9830	0.287	0.5	ug/L	5	Standard
[>	Bi	209	631181.4	0.7				ug/L	561075	Standard

Sample ID: L1207063901PS WG404829-01

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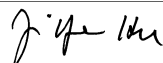
Na	23	144277.0	0.2	6.3825	0.036	0.6	mg/L	288	Standard
Mg	24	1851028.8	23.6	2.1094	0.481	22.8	mg/L	218	Standard
K	39	1090.0	10.8	0.6241	0.076	12.3	mg/L	125	Standard
Ca	43	51.7	22.3	36.6943	9.444	25.7	mg/L	3	Standard
Fe	54	1034.6	13.9	0.0664	0.025	37.1	mg/L	550	Standard
Fe	57	11254.2	4.0	0.1348	0.006	4.2	mg/L	1772	Standard
Sc-1	45	435256.8	0.8				mg/L	330668	Standard
Cl	35	34.0	2.9				ug/L	5	Standard
Kr	83	41.6	8.0				ug/L	38	Standard
Br	81	9046.0	7.3				ug/L	344	Standard
P	31	493.3	5.9				ug/L	312	Standard
S	34	20048.3	1.3				ug/L	5594	Standard
Sr	88	413.3	7.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		112.687	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063901PS WG404829-01
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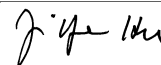
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	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
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	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	112.495
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for sample	In	115	Rerun sample

Sample ID: L1207063901PS WG404829-01
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Method 6020 - Summary Report

Sample ID: L1207063901SDL WG404829-02

Sample Date/Time: Sunday, July 29, 2012 11:32:25

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10393.6	3.5	138.9779	95.757	68.9	ug/L	9465	Standard
|	Be	9	23.3	12.4	-0.0081	0.002	21.8	ug/L	10	Standard
|	Al	27	15804.9	0.9	0.4664	0.013	2.7	ug/L	7870	Standard
[>	Sc	45	353705.4	2.1				ug/L	330668	Standard
|	Ti	47	46.0	2.2	-0.0048	0.001	24.5	ug/L	53	Standard
|	V	51	2661.6	0.4	-0.0188	0.003	14.0	ug/L	2687	Standard
|	Cr	52	8106.8	0.6	-0.0737	0.013	18.1	ug/L	8408	Standard
|	Cr	53	282.5	6.4	0.0108	0.014	126.5	ug/L	288	Standard
|	Mn	55	4612.7	1.2	0.2553	0.006	2.3	ug/L	1080	Standard
|	Co	59	162.3	35.6	0.0059	0.007	117.5	ug/L	117	Standard
|	Ni	60	239.3	6.4	0.0706	0.006	9.2	ug/L	68	Standard
|	Cu	65	208.3	2.2	0.0261	0.003	11.1	ug/L	141	Standard
|	Zn	66	3320.0	1.7	3.0176	0.046	1.5	ug/L	138	Standard
[>	Ge	72	294005.2	0.9				ug/L	283230	Standard
|	As	75	-191.3	17.3	-0.0128	0.033	261.7	ug/L	-198	Standard
|	Se	82	27.4	33.5	0.0234	0.087	371.4	ug/L	21	Standard
[	Se-1	77	117.0	5.1	-0.2380	0.074	30.9	ug/L	131	Standard
[>	Ga	71	610.0	3.8				mg/L	607	Standard
|	Rb	85	31.7	63.8				ug/L	30	Standard
|	Y	89	261226.7	2.2				ug/L	251555	Standard
[>	Rh	103	361.7	14.7				ug/L	335	Standard
|	Mo	98	49.3	15.6	0.0046	0.002	42.0	ug/L	13	Standard
|	Ag	107	157.7	10.7	0.0125	0.002	19.8	ug/L	36	Standard
|	Cd	111	94.9	32.9	0.0069	0.008	122.3	mg/L	49	Standard
|	Cd	114	261.8	17.9	0.0026	0.004	162.6	ug/L	170	Standard
[>	In	115	858605.4	1.4				ug/L	727802	Standard
|	Sn	118	742.0	5.8	0.0073	0.004	52.9	ug/L	471	Standard
|	Sb	123	2102.1	3.2	0.2126	0.006	2.7	ug/L	39	Standard
|	Ba	135	143.7	57.3	0.0164	0.016	98.6	ug/L	25	Standard
|	Ce	140	40.3	1.4				ug/L	25	Standard
[>	Tb	159	1205430.4	0.9				ug/L	1071747	Standard
|	Ho	165	13.3	21.7				ug/L	13	Standard
|	Tl	203	176.0	64.0	0.0085	0.006	72.0	ug/L	5	Standard
|	Tl	205	397.0	62.0	0.0092	0.006	61.8	ug/L	10	Standard
|	Pb	206	596.3	10.0	0.0098	0.004	43.1	ug/L	382	Standard
|	Pb	207	490.3	21.7	0.0125	0.009	70.4	ug/L	306	Standard
|	Pb	208	2264.4	14.0	0.0113	0.006	50.0	ug/L	1443	Standard
	U	238	123.0	49.4	0.0070	0.004	50.9	ug/L	5	Standard
[>	Bi	209	622661.3	1.2				ug/L	561075	Standard

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Na	23	628.3	12.1	-0.0018	0.005	277.3	mg/L	288	Standard
Mg	24	735.0	49.3	0.0013	0.001	40.4	mg/L	218	Standard
K	39	116.7	24.4	-0.0122	0.024	197.1	mg/L	125	Standard
Ca	43	1.7	173.2	-3.7086	2.860	77.1	mg/L	3	Standard
Fe	54	567.7	9.7	0.0056	0.013	230.9	mg/L	550	Standard
Fe	57	2096.8	4.1	0.0041	0.002	58.3	mg/L	1772	Standard
Sc-1	45	353705.4	2.1				mg/L	330668	Standard
Cl	35	3.0	88.2				ug/L	5	Standard
Kr	83	37.7	26.4				ug/L	38	Standard
Br	81	595.8	16.1				ug/L	344	Standard
P	31	355.0	4.4				ug/L	312	Standard
S	34	6204.6	2.4				ug/L	5594	Standard
Sr	88	43.3	33.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.805	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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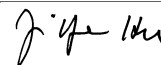
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	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
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	U	238	
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	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063901SDL WG404829-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 11:35:37

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

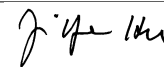
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9623.1	2.1	6.4935	28.826	443.9	ug/L	9465	Standard
|	Be	9	87049.6	3.9	49.2316	1.358	2.8	ug/L	10	Standard
|	Al	27	664906.5	0.6	43.7425	0.314	0.7	ug/L	7870	Standard
>	Sc	45	351562.3	1.2				ug/L	330668	Standard
[	Ti	47	114479.6	1.2	97.0074	1.298	1.3	ug/L	53	Standard
|	V	51	479172.0	0.2	47.6928	0.429	0.9	ug/L	2687	Standard
|	Cr	52	380210.9	1.3	47.1359	0.538	1.1	ug/L	8408	Standard
|	Cr	53	64326.4	3.3	48.0593	1.178	2.5	ug/L	288	Standard
|	Mn	55	697693.6	1.1	52.2765	0.005	0.0	ug/L	1080	Standard
|	Co	59	433080.5	0.8	51.5586	0.920	1.8	ug/L	117	Standard
|	Ni	60	110480.7	0.6	46.9493	0.790	1.7	ug/L	68	Standard
|	Cu	65	103419.4	0.7	47.4592	0.745	1.6	ug/L	141	Standard
|	Zn	66	49297.1	0.9	47.8316	0.631	1.3	ug/L	138	Standard
>	Ge	72	288358.3	1.1				ug/L	283230	Standard
|	As	75	49331.2	0.5	48.8818	0.543	1.1	ug/L	-198	Standard
|	Se	82	5023.2	0.5	49.6695	0.303	0.6	ug/L	21	Standard
[	Se-1	77	3631.4	3.2	49.3541	1.196	2.4	ug/L	131	Standard
>	Ga	71	615.0	13.7				mg/L	607	Standard
[	Rb	85	695.0	5.7				ug/L	30	Standard
[	Y	89	257289.2	3.1				ug/L	251555	Standard
>	Rh	103	380.0	17.4				ug/L	335	Standard
[	Mo	98	350180.1	1.4	88.8012	1.277	1.4	ug/L	13	Standard
|	Ag	107	323659.9	0.8	46.6439	0.649	1.4	ug/L	36	Standard
|	Cd	111	193206.0	0.7	54.2585	0.948	1.7	mg/L	49	Standard
|	Cd	114	540394.8	0.4	49.9040	0.514	1.0	ug/L	170	Standard
>	In	115	809056.0	1.0				ug/L	727802	Standard
|	Sn	118	635512.9	0.7	49.6761	0.586	1.2	ug/L	471	Standard
|	Sb	123	478784.1	0.3	50.9495	0.579	1.1	ug/L	39	Standard
[	Ba	135	236433.4	0.2	48.6842	0.605	1.2	ug/L	25	Standard
[	Ce	140	883.7	2.2				ug/L	25	Standard
>	Tb	159	1170949.0	0.8				ug/L	1071747	Standard
[	Ho	165	18.3	3.1				ug/L	13	Standard
|	Tl	203	842684.9	0.1	47.8164	0.116	0.2	ug/L	5	Standard
|	Tl	205	1951734.6	0.7	47.4828	0.249	0.5	ug/L	10	Standard
|	Pb	206	654711.3	0.4	48.1288	0.140	0.3	ug/L	382	Standard
|	Pb	207	557182.3	0.2	49.0560	0.043	0.1	ug/L	306	Standard
|	Pb	208	2579610.9	0.7	48.3241	0.247	0.5	ug/L	1443	Standard
	U	238	817339.5	0.7	50.7187	0.300	0.6	ug/L	5	Standard
>	Bi	209	593987.3	0.2				ug/L	561075	Standard

Sample ID: QC Std 6

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Na	23	114848.7	1.9	6.2892	0.049	0.8	mg/L	288	Standard
Mg	24	3245665.8	1.0	4.5840	0.059	1.3	mg/L	218	Standard
K	39	5214.2	0.7	4.2336	0.081	1.9	mg/L	125	Standard
Ca	43	21.7	13.3	16.4704	2.892	17.6	mg/L	3	Standard
Fe	54	20432.6	2.4	4.4659	0.091	2.0	mg/L	550	Standard
Fe	57	288137.5	4.5	5.3433	0.305	5.7	mg/L	1772	Standard
Sc-1	45	351562.3	1.2				mg/L	330668	Standard
Cl	35	3.3	75.5				ug/L	5	Standard
Kr	83	40.6	7.8				ug/L	38	Standard
Br	81	480.8	5.7				ug/L	344	Standard
P	31	380.8	0.8				ug/L	312	Standard
S	34	6036.2	3.7				ug/L	5594	Standard
Sr	88	48.3	23.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	87.485		
Sc	45			
Ti	47	97.007		
V	51	95.386		
Cr	52	94.272		
Cr	53			
Mn	55	104.553		
Co	59	103.117		
Ni	60	93.899		
Cu	65	94.918		
Zn	66	95.663		
Ge	72		101.811	
As	75	97.764		
Se	82	99.339		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	88.801		
Ag	107	93.288		

Sample ID: QC Std 6

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	Cd	111	108.517	
	Cd	114		
>	In	115		111.164
	Sn	118	99.352	
	Sb	123	101.899	
	Ba	135	97.368	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	95.633	
|	Tl	205		
|	Pb	206	96.258	
|	Pb	207	98.112	
|	Pb	208	96.648	
|	U	238	101.437	
>	Bi	209		105.866
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	
QC Std 6	Mo	98	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 11:38:47

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9514.7	3.2	34.8808	67.539	193.6	ug/L	9465	Standard
|	Be	9	30.0	44.1	-0.0039	0.007	191.0	ug/L	10	Standard
|	Al	27	7725.3	2.5	-0.0518	0.016	31.1	ug/L	7870	Standard
[>	Sc	45	342263.7	2.1				ug/L	330668	Standard
[	Ti	47	63.3	14.3	0.0101	0.007	72.5	ug/L	53	Standard
|	V	51	2257.9	2.0	-0.0563	0.004	6.7	ug/L	2687	Standard
|	Cr	52	7053.6	1.2	-0.1962	0.009	4.5	ug/L	8408	Standard
|	Cr	53	247.5	9.0	-0.0133	0.015	113.3	ug/L	288	Standard
|	Mn	55	1178.7	4.9	0.0033	0.004	117.8	ug/L	1080	Standard
|	Co	59	154.3	5.9	0.0051	0.001	19.8	ug/L	117	Standard
|	Ni	60	74.3	20.4	0.0020	0.006	303.2	ug/L	68	Standard
|	Cu	65	149.0	3.1	-0.0000	0.002	5589.8	ug/L	141	Standard
|	Zn	66	167.3	2.8	0.0096	0.005	53.7	ug/L	138	Standard
[>	Ge	72	291162.4	0.8				ug/L	283230	Standard
|	As	75	-186.2	10.8	-0.0093	0.018	196.9	ug/L	-198	Standard
|	Se	82	18.1	5.8	-0.0645	0.012	18.4	ug/L	21	Standard
[	Se-1	77	106.3	4.7	-0.3712	0.058	15.6	ug/L	131	Standard
[>	Ga	71	610.0	8.1				mg/L	607	Standard
[	Rb	85	20.0	25.0				ug/L	30	Standard
[	Y	89	257927.0	1.0				ug/L	251555	Standard
[>	Rh	103	376.7	11.3				ug/L	335	Standard
[	Mo	98	175.9	11.7	0.0362	0.005	14.7	ug/L	13	Standard
|	Ag	107	100.3	23.6	0.0051	0.003	67.1	ug/L	36	Standard
|	Cd	111	76.6	10.6	0.0026	0.002	90.6	mg/L	49	Standard
|	Cd	114	249.2	15.7	0.0022	0.004	169.7	ug/L	170	Standard
[>	In	115	833119.7	0.8				ug/L	727802	Standard
|	Sn	118	937.7	2.4	0.0238	0.001	5.8	ug/L	471	Standard
|	Sb	123	2646.5	2.2	0.2753	0.008	2.9	ug/L	39	Standard
[	Ba	135	55.7	24.3	-0.0004	0.003	751.7	ug/L	25	Standard
[	Ce	140	30.7	21.7				ug/L	25	Standard
[>	Tb	159	1161572.3	0.2				ug/L	1071747	Standard
[	Ho	165	14.0	31.1				ug/L	13	Standard
|	Tl	203	133.0	36.6	0.0063	0.003	42.1	ug/L	5	Standard
|	Tl	205	310.0	41.2	0.0074	0.003	40.5	ug/L	10	Standard
|	Pb	206	506.3	10.0	0.0042	0.003	80.7	ug/L	382	Standard
|	Pb	207	433.0	4.2	0.0086	0.002	18.4	ug/L	306	Standard
|	Pb	208	1954.4	8.6	0.0065	0.003	44.2	ug/L	1443	Standard
	U	238	135.7	31.1	0.0080	0.003	31.5	ug/L	5	Standard
[>	Bi	209	609066.7	0.8				ug/L	561075	Standard

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Na	23	385.0	11.2	-0.0144	0.002	16.5	mg/L	288	Standard
Mg	24	658.3	48.4	0.0012	0.000	36.6	mg/L	218	Standard
K	39	103.3	22.9	-0.0206	0.020	95.2	mg/L	125	Standard
Ca	43	6.7	173.2	1.4165	11.736	828.6	mg/L	3	Standard
Fe	54	471.3	8.1	-0.0124	0.009	74.1	mg/L	550	Standard
Fe	57	1896.8	3.8	0.0016	0.002	131.9	mg/L	1772	Standard
Sc-1	45	342263.7	2.1				mg/L	330668	Standard
Cl	35	4.0	25.0				ug/L	5	Standard
Kr	83	42.0	1.4				ug/L	38	Standard
Br	81	436.7	7.0				ug/L	344	Standard
P	31	349.2	12.9				ug/L	312	Standard
S	34	5779.4	1.5				ug/L	5594	Standard
Sr	88	40.0	33.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.801	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	114.471
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	108.553
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207062765

Sample Date/Time: Sunday, July 29, 2012 11:42:00

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

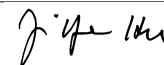
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9763.1	3.7	6.0533	73.145	1208.4	ug/L	9465	Standard
|	Be	9	33.3	60.6	-0.0026	0.011	422.0	ug/L	10	Standard
|	Al	27	406842.0	2.5	26.1383	0.555	2.1	ug/L	7870	Standard
[>	Sc	45	356807.5	0.5				ug/L	330668	Standard
|	Ti	47	423.3	3.1	0.3053	0.012	3.8	ug/L	53	Standard
|	V	51	2981.9	4.9	0.0096	0.013	135.7	ug/L	2687	Standard
|	Cr	52	10699.4	2.3	0.2351	0.034	14.4	ug/L	8408	Standard
|	Cr	53	735.9	5.5	0.3389	0.031	9.2	ug/L	288	Standard
|	Mn	55	12751.7	4.9	0.8446	0.041	4.9	ug/L	1080	Standard
|	Co	59	562.0	33.1	0.0518	0.021	40.7	ug/L	117	Standard
|	Ni	60	1270.1	2.5	0.4950	0.015	3.0	ug/L	68	Standard
|	Cu	65	3810.5	0.4	1.6319	0.009	0.6	ug/L	141	Standard
|	Zn	66	4193.9	2.1	3.8106	0.074	2.0	ug/L	138	Standard
[>	Ge	72	297054.4	0.7				ug/L	283230	Standard
|	As	75	-163.9	22.8	0.0155	0.037	237.2	ug/L	-198	Standard
|	Se	82	27.3	10.2	0.0200	0.028	138.0	ug/L	21	Standard
[	Se-1	77	124.0	6.1	-0.1580	0.113	71.6	ug/L	131	Standard
[>	Ga	71	580.0	2.3				mg/L	607	Standard
[	Rb	85	328.3	16.7				ug/L	30	Standard
[	Y	89	263898.4	0.4				ug/L	251555	Standard
[>	Rh	103	393.3	20.4				ug/L	335	Standard
[	Mo	98	170.2	2.2	0.0348	0.001	3.1	ug/L	13	Standard
|	Ag	107	97.7	26.3	0.0047	0.004	75.2	ug/L	36	Standard
|	Cd	111	117.3	10.1	0.0138	0.003	22.6	mg/L	49	Standard
|	Cd	114	384.0	23.3	0.0143	0.008	55.7	ug/L	170	Standard
[>	In	115	831845.8	0.4				ug/L	727802	Standard
|	Sn	118	1428.1	12.6	0.0612	0.013	22.0	ug/L	471	Standard
|	Sb	123	906.6	29.1	0.0956	0.027	28.5	ug/L	39	Standard
[	Ba	135	1788.1	4.9	0.3466	0.017	4.8	ug/L	25	Standard
[	Ce	140	1819.8	1.4				ug/L	25	Standard
[>	Tb	159	1191042.1	0.3				ug/L	1071747	Standard
[	Ho	165	48.7	11.3				ug/L	13	Standard
|	Tl	203	524.0	91.3	0.0276	0.026	95.1	ug/L	5	Standard
|	Tl	205	1137.1	90.3	0.0267	0.024	90.5	ug/L	10	Standard
|	Pb	206	2721.6	13.6	0.1607	0.027	16.8	ug/L	382	Standard
|	Pb	207	2195.8	14.6	0.1576	0.028	17.6	ug/L	306	Standard
|	Pb	208	10246.4	12.7	0.1557	0.024	15.4	ug/L	1443	Standard
	U	238	279.7	75.5	0.0165	0.013	76.9	ug/L	5	Standard
[>	Bi	209	616969.3	0.4				ug/L	561075	Standard

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Na	23	45237.6	5.7	2.4187	0.138	5.7	mg/L	288	Standard
Mg	24	5876.2	34.7	0.0085	0.003	33.2	mg/L	218	Standard
K	39	173.3	8.3	0.0334	0.013	37.4	mg/L	125	Standard
Ca	43	5.0	0.0	-0.3958	0.025	6.4	mg/L	3	Standard
Fe	54	633.5	10.6	0.0190	0.014	74.8	mg/L	550	Standard
Fe	57	2545.2	8.0	0.0120	0.004	29.4	mg/L	1772	Standard
Sc-1	45	356807.5	0.5				mg/L	330668	Standard
Cl	35	4.0	25.0				ug/L	5	Standard
Kr	83	35.7	14.8				ug/L	38	Standard
Br	81	462.5	5.9				ug/L	344	Standard
P	31	640.0	3.2				ug/L	312	Standard
S	34	5834.5	1.1				ug/L	5594	Standard
Sr	88	50.0	26.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.881	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062765

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	Cd	111	
	Cd	114	
>	In	115	114.296
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	109.962
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062765

Report Date/Time: Sunday, July 29, 2012 11:44:30

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Method 6020 - Summary Report

Sample ID: L1207062766

Sample Date/Time: Sunday, July 29, 2012 11:45:09

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

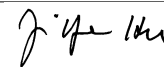
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10050.0	5.9	132.2562	154.060	116.5	ug/L	9465	Standard
|	Be	9	25.0	80.0	-0.0066	0.012	180.6	ug/L	10	Standard
|	Al	27	63079.4	0.9	3.7243	0.063	1.7	ug/L	7870	Standard
[>	Sc	45	343426.4	2.2				ug/L	330668	Standard
[	Ti	47	177.7	10.9	0.1069	0.016	14.9	ug/L	53	Standard
|	V	51	2579.8	7.0	-0.0228	0.020	89.6	ug/L	2687	Standard
|	Cr	52	11751.9	1.1	0.4025	0.029	7.2	ug/L	8408	Standard
|	Cr	53	958.4	2.6	0.5192	0.023	4.4	ug/L	288	Standard
|	Mn	55	4111.9	1.2	0.2231	0.003	1.2	ug/L	1080	Standard
|	Co	59	336.7	9.5	0.0268	0.003	12.8	ug/L	117	Standard
|	Ni	60	892.0	1.6	0.3485	0.003	0.9	ug/L	68	Standard
|	Cu	65	1222.0	3.8	0.4915	0.020	4.0	ug/L	141	Standard
|	Zn	66	1957.5	1.8	1.7462	0.048	2.8	ug/L	138	Standard
[>	Ge	72	289510.2	0.9				ug/L	283230	Standard
|	As	75	-166.6	5.1	0.0089	0.010	109.4	ug/L	-198	Standard
|	Se	82	22.8	40.2	-0.0181	0.089	491.4	ug/L	21	Standard
[	Se-1	77	123.3	11.8	-0.1234	0.204	165.5	ug/L	131	Standard
[>	Ga	71	603.3	9.7				mg/L	607	Standard
[	Rb	85	98.3	19.3				ug/L	30	Standard
[	Y	89	258784.8	1.1				ug/L	251555	Standard
[>	Rh	103	386.7	3.7				ug/L	335	Standard
[	Mo	98	180.0	7.0	0.0375	0.003	8.1	ug/L	13	Standard
|	Ag	107	66.3	17.3	0.0004	0.002	403.8	ug/L	36	Standard
|	Cd	111	80.2	8.3	0.0038	0.002	47.8	mg/L	49	Standard
|	Cd	114	234.8	5.5	0.0010	0.001	110.6	ug/L	170	Standard
[>	In	115	826314.9	0.3				ug/L	727802	Standard
|	Sn	118	777.7	3.9	0.0121	0.002	19.1	ug/L	471	Standard
|	Sb	123	388.8	22.0	0.0423	0.009	21.0	ug/L	39	Standard
[	Ba	135	710.3	2.8	0.1317	0.004	3.2	ug/L	25	Standard
[	Ce	140	305.3	1.3				ug/L	25	Standard
[>	Tb	159	1164605.9	0.6				ug/L	1071747	Standard
[	Ho	165	17.7	26.7				ug/L	13	Standard
|	Tl	203	42.0	15.6	0.0013	0.000	27.4	ug/L	5	Standard
|	Tl	205	92.3	34.4	0.0022	0.001	33.6	ug/L	10	Standard
|	Pb	206	494.3	6.0	0.0033	0.002	56.7	ug/L	382	Standard
|	Pb	207	403.3	3.7	0.0060	0.001	22.6	ug/L	306	Standard
|	Pb	208	1872.0	2.5	0.0050	0.001	12.4	ug/L	1443	Standard
	U	238	23.3	21.1	0.0012	0.000	24.8	ug/L	5	Standard
[>	Bi	209	609506.5	0.7				ug/L	561075	Standard

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Na	23	8757.5	3.6	0.4580	0.029	6.2	mg/L	288	Standard
Mg	24	1231.7	9.0	0.0021	0.000	9.5	mg/L	218	Standard
K	39	131.7	34.2	0.0029	0.036	1243.3	mg/L	125	Standard
Ca	43	1.7	173.2	-3.6106	3.029	83.9	mg/L	3	Standard
Fe	54	617.0	5.3	0.0207	0.008	38.0	mg/L	550	Standard
Fe	57	2716.9	10.0	0.0172	0.006	34.2	mg/L	1772	Standard
Sc-1	45	343426.4	2.2				mg/L	330668	Standard
Cl	35	5.3	60.3				ug/L	5	Standard
Kr	83	32.8	5.2				ug/L	38	Standard
Br	81	456.7	1.7				ug/L	344	Standard
P	31	412.5	3.1				ug/L	312	Standard
S	34	5877.0	3.6				ug/L	5594	Standard
Sr	88	36.7	55.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.217	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207062766

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	Cd	111	
	Cd	114	
>	In	115	113.536
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	108.632
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207062766

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Method 6020 - Summary Report

Sample ID: L1207063601

Sample Date/Time: Sunday, July 29, 2012 11:48:17

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

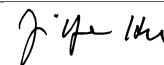
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	355958.9	3.2	66361.1366	3026.562	4.6	ug/L	9465	Standard
|	Be	9	16.7	69.3	-0.0115	0.007	58.8	ug/L	10	Standard
|	Al	27	235784.1	1.7	15.6169	0.279	1.8	ug/L	7870	Standard
[>	Sc	45	341150.1	1.5				ug/L	330668	Standard
|	Ti	47	254.0	14.6	0.1922	0.035	18.4	ug/L	53	Standard
|	V	51	3174.7	0.8	0.0671	0.005	6.8	ug/L	2687	Standard
|	Cr	52	12976.2	1.0	0.7156	0.025	3.5	ug/L	8408	Standard
|	Cr	53	1069.2	4.1	0.6793	0.040	5.9	ug/L	288	Standard
|	Mn	55	1230270.8	1.4	100.7807	1.943	1.9	ug/L	1080	Standard
|	Co	59	5221.9	0.3	0.6661	0.003	0.4	ug/L	117	Standard
|	Ni	60	16347.8	2.6	7.5628	0.160	2.1	ug/L	68	Standard
|	Cu	65	1655.4	2.8	0.7631	0.019	2.6	ug/L	141	Standard
|	Zn	66	2956.6	3.1	2.9915	0.083	2.8	ug/L	138	Standard
[>	Ge	72	263974.4	0.5				ug/L	283230	Standard
|	As	75	2766.1	0.7	3.1561	0.035	1.1	ug/L	-198	Standard
|	Se	82	214.7	4.6	2.0879	0.115	5.5	ug/L	21	Standard
[	Se-1	77	201.3	2.0	1.2456	0.051	4.1	ug/L	131	Standard
[>	Ga	71	758.4	8.5				mg/L	607	Standard
|	Rb	85	47011.2	1.1				ug/L	30	Standard
|	Y	89	244470.8	2.8				ug/L	251555	Standard
[>	Rh	103	485.0	13.9				ug/L	335	Standard
|	Mo	98	580.6	4.9	0.1475	0.007	4.6	ug/L	13	Standard
|	Ag	107	68.3	14.4	0.0014	0.001	106.7	ug/L	36	Standard
|	Cd	111	274.3	8.1	0.0627	0.007	11.2	mg/L	49	Standard
|	Cd	114	787.1	3.7	0.0562	0.003	5.1	ug/L	170	Standard
[>	In	115	769991.1	0.6				ug/L	727802	Standard
|	Sn	118	756.0	2.5	0.0147	0.002	11.2	ug/L	471	Standard
|	Sb	123	358.3	6.6	0.0419	0.003	6.3	ug/L	39	Standard
|	Ba	135	25887.1	0.4	5.5903	0.023	0.4	ug/L	25	Standard
|	Ce	140	1299.1	3.9				ug/L	25	Standard
[>	Tb	159	1143957.0	0.3				ug/L	1071747	Standard
|	Ho	165	56.7	13.2				ug/L	13	Standard
|	Tl	203	225408.4	0.6	14.5720	0.131	0.9	ug/L	5	Standard
|	Tl	205	523431.3	0.9	14.5085	0.061	0.4	ug/L	10	Standard
|	Pb	206	602.7	4.1	0.0184	0.003	13.7	ug/L	382	Standard
|	Pb	207	491.7	2.1	0.0207	0.001	5.3	ug/L	306	Standard
|	Pb	208	2303.1	1.8	0.0200	0.001	7.5	ug/L	1443	Standard
	U	238	245.7	5.9	0.0171	0.001	6.8	ug/L	5	Standard
[>	Bi	209	521371.6	1.3				ug/L	561075	Standard

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Na	23	151840.5	1.5	8.5823	0.036	0.4	mg/L	288	Standard
Mg	24	11337393.6	0.4	16.5012	0.186	1.1	mg/L	218	Standard
K	39	923.4	11.4	0.6830	0.083	12.1	mg/L	125	Standard
Ca	43	425.0	5.1	435.7744	16.319	3.7	mg/L	3	Standard
Fe	54	493.8	10.0	-0.0068	0.013	195.5	mg/L	550	Standard
Fe	57	47268.6	1.9	0.8740	0.004	0.5	mg/L	1772	Standard
Sc-1	45	341150.1	1.5				mg/L	330668	Standard
Cl	35	8.0	25.0				ug/L	5	Standard
Kr	83	52.7	4.9				ug/L	38	Standard
Br	81	861.7	5.4				ug/L	344	Standard
P	31	445.0	6.8				ug/L	312	Standard
S	34	356519.1	0.3				ug/L	5594	Standard
Sr	88	835.0	8.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.201	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063601

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	Cd	111	
	Cd	114	
>	In	115	105.797
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.924
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207063601

Report Date/Time: Sunday, July 29, 2012 11:50:48

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Method 6020 - Summary Report

Sample ID: L1207063902 WG404095-02

Sample Date/Time: Sunday, July 29, 2012 11:51:26

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31399.2	2.5	3452.4017	145.264	4.2	ug/L	9465	Standard
|	Be	9	25.0	52.9	-0.0085	0.007	79.7	ug/L	10	Standard
|	Al	27	103680.3	2.2	5.6210	0.110	2.0	ug/L	7870	Standard
[>	Sc	45	391755.3	1.1				ug/L	330668	Standard
[	Ti	47	1181.0	3.5	0.9502	0.040	4.2	ug/L	53	Standard
|	V	51	15308.2	1.9	1.2402	0.036	2.9	ug/L	2687	Standard
|	Cr	52	9422.6	1.8	0.1033	0.025	24.4	ug/L	8408	Standard
|	Cr	53	1030.9	3.3	0.5701	0.025	4.3	ug/L	288	Standard
|	Mn	55	13887.0	1.1	0.9496	0.017	1.8	ug/L	1080	Standard
|	Co	59	334.3	7.5	0.0264	0.003	10.5	ug/L	117	Standard
|	Ni	60	1310.1	3.7	0.5232	0.017	3.3	ug/L	68	Standard
|	Cu	65	1515.4	1.3	0.6229	0.005	0.8	ug/L	141	Standard
|	Zn	66	89051.9	0.7	85.8238	0.574	0.7	ug/L	138	Standard
[>	Ge	72	290700.0	0.7				ug/L	283230	Standard
|	As	75	15.1	297.7	0.1876	0.044	23.4	ug/L	-198	Standard
|	Se	82	112.0	0.3	0.8606	0.009	1.1	ug/L	21	Standard
[	Se-1	77	166.7	9.7	0.4762	0.235	49.4	ug/L	131	Standard
[>	Ga	71	638.3	3.2				mg/L	607	Standard
[	Rb	85	1483.4	1.7				ug/L	30	Standard
[	Y	89	258451.0	1.5				ug/L	251555	Standard
[>	Rh	103	420.0	4.3				ug/L	335	Standard
[	Mo	98	8066.1	1.2	1.9728	0.029	1.5	ug/L	13	Standard
|	Ag	107	67.0	3.0	0.0004	0.000	63.4	ug/L	36	Standard
|	Cd	111	115.6	12.0	0.0132	0.004	29.6	mg/L	49	Standard
|	Cd	114	356.9	11.1	0.0117	0.003	27.9	ug/L	170	Standard
[>	In	115	835879.7	1.0				ug/L	727802	Standard
|	Sn	118	1099.0	4.1	0.0358	0.003	7.9	ug/L	471	Standard
|	Sb	123	286.1	12.5	0.0313	0.004	12.3	ug/L	39	Standard
[	Ba	135	137246.8	0.5	27.3488	0.389	1.4	ug/L	25	Standard
[	Ce	140	1171.0	2.6				ug/L	25	Standard
[>	Tb	159	1188569.3	0.4				ug/L	1071747	Standard
[	Ho	165	30.7	19.1				ug/L	13	Standard
|	Tl	203	351.7	7.7	0.0188	0.001	7.8	ug/L	5	Standard
|	Tl	205	800.0	4.0	0.0194	0.001	3.6	ug/L	10	Standard
|	Pb	206	1563.1	0.9	0.0823	0.001	1.5	ug/L	382	Standard
|	Pb	207	1261.4	0.6	0.0819	0.000	0.6	ug/L	306	Standard
|	Pb	208	6000.1	0.6	0.0827	0.001	0.7	ug/L	1443	Standard
	U	238	1279.4	1.5	0.0788	0.001	1.4	ug/L	5	Standard
[>	Bi	209	596856.9	0.4				ug/L	561075	Standard

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Na	23	139761.7	0.8	6.8722	0.051	0.7	mg/L	288	Standard
Mg	24	1436120.9	1.4	1.8206	0.046	2.5	mg/L	218	Standard
K	39	1000.0	3.5	0.6385	0.026	4.0	mg/L	125	Standard
Ca	43	25.0	34.6	17.2118	7.714	44.8	mg/L	3	Standard
Fe	54	555.4	11.4	-0.0091	0.014	150.4	mg/L	550	Standard
Fe	57	4447.3	4.5	0.0397	0.003	7.9	mg/L	1772	Standard
Sc-1	45	391755.3	1.1				mg/L	330668	Standard
Cl	35	22.3	18.1				ug/L	5	Standard
Kr	83	36.3	6.9				ug/L	38	Standard
Br	81	1640.9	8.1				ug/L	344	Standard
P	31	559.2	5.0				ug/L	312	Standard
S	34	17353.3	0.5				ug/L	5594	Standard
Sr	88	253.3	9.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.638	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063902 WG404095-02

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	Cd	111	
	Cd	114	
>	In	115	114.850
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	106.377
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063902 WG404095-02

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Method 6020 - Summary Report

Sample ID: L1207063902S WG404095-07

Sample Date/Time: Sunday, July 29, 2012 11:54:36

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

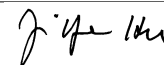
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	32693.6	2.4	3620.4886	175.308	4.8	ug/L	9465	Standard
|	Be	9	48902.1	1.9	24.5980	0.662	2.7	ug/L	10	Standard
|	Al	27	434142.3	0.9	25.1620	0.443	1.8	ug/L	7870	Standard
>	Sc	45	395322.9	2.5				ug/L	330668	Standard
[	Ti	47	1277.7	15.0	1.0004	0.155	15.5	ug/L	53	Standard
|	V	51	267134.9	0.5	25.4900	0.112	0.4	ug/L	2687	Standard
|	Cr	52	207829.8	1.0	24.3153	0.214	0.9	ug/L	8408	Standard
|	Cr	53	35252.6	1.1	25.2901	0.297	1.2	ug/L	288	Standard
|	Mn	55	377159.2	0.4	27.1917	0.197	0.7	ug/L	1080	Standard
|	Co	59	228271.3	1.5	26.1766	0.270	1.0	ug/L	117	Standard
|	Ni	60	60047.1	1.0	24.5715	0.088	0.4	ug/L	68	Standard
|	Cu	65	56517.5	0.2	24.9586	0.245	1.0	ug/L	141	Standard
|	Zn	66	35704.4	1.6	33.3327	0.256	0.8	ug/L	138	Standard
>	Ge	72	299248.7	0.8				ug/L	283230	Standard
|	As	75	27035.1	1.5	25.8927	0.204	0.8	ug/L	-198	Standard
|	Se	82	2795.0	0.1	26.5181	0.202	0.8	ug/L	21	Standard
[	Se-1	77	2061.8	0.3	26.1665	0.316	1.2	ug/L	131	Standard
>	Ga	71	626.7	7.2				mg/L	607	Standard
[	Rb	85	1586.8	7.1				ug/L	30	Standard
[	Y	89	264812.9	1.7				ug/L	251555	Standard
>	Rh	103	410.0	9.2				ug/L	335	Standard
[	Mo	98	8346.0	1.0	2.0095	0.021	1.0	ug/L	13	Standard
|	Ag	107	163283.2	1.0	22.4152	0.281	1.3	ug/L	36	Standard
|	Cd	111	105161.8	0.7	28.1281	0.320	1.1	mg/L	49	Standard
|	Cd	114	289855.2	1.0	25.4939	0.376	1.5	ug/L	170	Standard
>	In	115	849127.8	0.6				ug/L	727802	Standard
|	Sn	118	1286.7	11.2	0.0485	0.011	22.1	ug/L	471	Standard
|	Sb	123	251218.9	1.3	25.4719	0.432	1.7	ug/L	39	Standard
[	Ba	135	258954.1	1.3	50.8048	0.959	1.9	ug/L	25	Standard
[	Ce	140	885.0	6.3				ug/L	25	Standard
>	Tb	159	1195092.4	0.5				ug/L	1071747	Standard
[	Ho	165	27.7	11.6				ug/L	13	Standard
|	Tl	203	442399.7	0.0	24.7915	0.169	0.7	ug/L	5	Standard
|	Tl	205	1022895.5	0.3	24.5774	0.185	0.8	ug/L	10	Standard
|	Pb	206	342765.9	0.7	24.8692	0.186	0.7	ug/L	382	Standard
|	Pb	207	290812.6	1.3	25.2715	0.177	0.7	ug/L	306	Standard
|	Pb	208	1352733.8	0.8	25.0121	0.048	0.2	ug/L	1443	Standard
	U	238	424557.3	1.3	26.0173	0.165	0.6	ug/L	5	Standard
>	Bi	209	601457.1	0.7				ug/L	561075	Standard

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Na	23	138742.4	1.1	6.7614	0.110	1.6	mg/L	288	Standard
Mg	24	1437593.9	1.5	1.8060	0.018	1.0	mg/L	218	Standard
K	39	905.0	8.7	0.5626	0.076	13.5	mg/L	125	Standard
Ca	43	26.7	47.2	18.4248	10.991	59.7	mg/L	3	Standard
Fe	54	559.3	2.7	-0.0094	0.004	45.4	mg/L	550	Standard
Fe	57	4449.0	6.7	0.0390	0.003	8.3	mg/L	1772	Standard
Sc-1	45	395322.9	2.5				mg/L	330668	Standard
Cl	35	18.3	20.7				ug/L	5	Standard
Kr	83	40.9	9.4				ug/L	38	Standard
Br	81	1530.9	7.5				ug/L	344	Standard
P	31	576.7	13.5				ug/L	312	Standard
S	34	17474.2	2.6				ug/L	5594	Standard
Sr	88	291.7	13.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.656	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063902S WG404095-07

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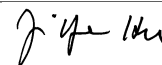
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	Cd	114	
>	In	115	116.670
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	107.197
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063902S WG404095-07
 Report Date/Time: Sunday, July 29, 2012 11:57:07
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Method 6020 - Summary Report

Sample ID: L1207063902SD WG404095-08

Sample Date/Time: Sunday, July 29, 2012 11:57:46

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

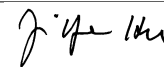
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	30649.3	2.0	3621.9961	147.492	4.1	ug/L	9465	Standard
|	Be	9	47255.3	1.9	25.3677	0.864	3.4	ug/L	10	Standard
|	Al	27	549122.5	1.9	34.1654	0.970	2.8	ug/L	7870	Standard
[>	Sc	45	370430.8	1.5				ug/L	330668	Standard
|	Ti	47	1766.4	2.5	1.4808	0.071	4.8	ug/L	53	Standard
|	V	51	256959.2	1.0	25.8915	0.771	3.0	ug/L	2687	Standard
|	Cr	52	200516.5	1.0	24.7846	0.487	2.0	ug/L	8408	Standard
|	Cr	53	34251.2	0.8	25.9430	0.454	1.7	ug/L	288	Standard
|	Mn	55	360651.7	1.8	27.4592	1.171	4.3	ug/L	1080	Standard
|	Co	59	220529.7	0.7	26.7029	0.850	3.2	ug/L	117	Standard
|	Ni	60	57847.2	0.2	24.9931	0.686	2.7	ug/L	68	Standard
|	Cu	65	54539.0	1.0	25.4237	0.380	1.5	ug/L	141	Standard
|	Zn	66	34810.6	0.8	34.3208	1.129	3.3	ug/L	138	Standard
[>	Ge	72	283558.8	2.5				ug/L	283230	Standard
|	As	75	26094.0	0.7	26.3853	0.829	3.1	ug/L	-198	Standard
|	Se	82	2706.3	1.6	27.1103	0.632	2.3	ug/L	21	Standard
[	Se-1	77	1984.1	1.8	26.6167	1.055	4.0	ug/L	131	Standard
[>	Ga	71	611.7	4.9				mg/L	607	Standard
|	Rb	85	1743.4	4.5				ug/L	30	Standard
|	Y	89	256105.1	1.7				ug/L	251555	Standard
[>	Rh	103	378.3	12.7				ug/L	335	Standard
|	Mo	98	8077.2	0.4	2.0377	0.021	1.0	ug/L	13	Standard
|	Ag	107	157479.9	0.6	22.6507	0.283	1.2	ug/L	36	Standard
|	Cd	111	100682.5	1.5	28.2153	0.511	1.8	mg/L	49	Standard
|	Cd	114	278609.7	0.5	25.6741	0.278	1.1	ug/L	170	Standard
[>	In	115	810455.1	0.6				ug/L	727802	Standard
|	Sn	118	1362.1	1.7	0.0590	0.002	4.0	ug/L	471	Standard
|	Sb	123	248924.1	0.7	26.4428	0.226	0.9	ug/L	39	Standard
|	Ba	135	252964.9	0.4	51.9953	0.253	0.5	ug/L	25	Standard
|	Ce	140	1791.4	3.7				ug/L	25	Standard
[>	Tb	159	1150626.5	0.7				ug/L	1071747	Standard
|	Ho	165	30.0	12.0				ug/L	13	Standard
|	Tl	203	429001.2	0.8	24.9428	0.211	0.8	ug/L	5	Standard
|	Tl	205	989031.9	0.2	24.6554	0.086	0.3	ug/L	10	Standard
|	Pb	206	332149.9	0.5	25.0039	0.160	0.6	ug/L	382	Standard
|	Pb	207	281691.2	0.6	25.3989	0.169	0.7	ug/L	306	Standard
|	Pb	208	1306475.9	0.0	25.0642	0.048	0.2	ug/L	1443	Standard
	U	238	415000.8	0.7	26.3873	0.132	0.5	ug/L	5	Standard
[>	Bi	209	579688.5	0.2				ug/L	561075	Standard

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Na	23	138646.5	0.6	7.2120	0.077	1.1	mg/L	288	Standard
Mg	24	1435486.5	2.1	1.9245	0.049	2.6	mg/L	218	Standard
K	39	928.4	3.6	0.6249	0.029	4.6	mg/L	125	Standard
Ca	43	26.7	21.7	20.0907	5.203	25.9	mg/L	3	Standard
Fe	54	584.0	8.1	0.0033	0.010	314.6	mg/L	550	Standard
Fe	57	4670.7	2.3	0.0479	0.003	6.6	mg/L	1772	Standard
Sc-1	45	370430.8	1.5				mg/L	330668	Standard
Cl	35	26.7	5.7				ug/L	5	Standard
Kr	83	37.4	3.7				ug/L	38	Standard
Br	81	1981.8	1.2				ug/L	344	Standard
P	31	563.3	3.3				ug/L	312	Standard
S	34	16997.0	1.2				ug/L	5594	Standard
Sr	88	283.3	8.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.116	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063902SD WG404095-08
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	Cd	111	
	Cd	114	
>	In	115	111.357
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.317
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207063903

Sample Date/Time: Sunday, July 29, 2012 12:00:57

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

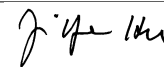
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	32899.0	2.7	3738.5354	83.555	2.2	ug/L	9465	Standard
|	Be	9	23.3	44.6	-0.0093	0.005	57.4	ug/L	10	Standard
|	Al	27	60529.0	1.7	3.0655	0.110	3.6	ug/L	7870	Standard
[>	Sc	45	389113.9	1.5				ug/L	330668	Standard
[	Ti	47	1034.7	4.1	0.8155	0.048	5.8	ug/L	53	Standard
|	V	51	17193.3	2.2	1.4044	0.057	4.1	ug/L	2687	Standard
|	Cr	52	84647.5	0.8	9.4228	0.214	2.3	ug/L	8408	Standard
|	Cr	53	14143.3	0.7	10.1869	0.201	2.0	ug/L	288	Standard
|	Mn	55	15191.6	1.1	1.0314	0.023	2.2	ug/L	1080	Standard
|	Co	59	832.4	2.7	0.0839	0.004	4.4	ug/L	117	Standard
|	Ni	60	102423.0	1.0	42.5838	0.787	1.8	ug/L	68	Standard
|	Cu	65	2348.8	2.1	0.9881	0.008	0.8	ug/L	141	Standard
|	Zn	66	4404.0	0.5	4.0427	0.065	1.6	ug/L	138	Standard
[>	Ge	72	294720.1	1.4				ug/L	283230	Standard
|	As	75	42.3	58.1	0.2138	0.024	11.4	ug/L	-198	Standard
|	Se	82	120.2	3.8	0.9255	0.057	6.2	ug/L	21	Standard
[	Se-1	77	180.3	7.4	0.6336	0.205	32.4	ug/L	131	Standard
[>	Ga	71	616.7	12.4				mg/L	607	Standard
[	Rb	85	1651.8	4.1				ug/L	30	Standard
[	Y	89	256269.1	0.8				ug/L	251555	Standard
[>	Rh	103	380.0	5.7				ug/L	335	Standard
[	Mo	98	7090.8	1.7	1.7519	0.028	1.6	ug/L	13	Standard
|	Ag	107	94.0	8.7	0.0043	0.001	27.2	ug/L	36	Standard
|	Cd	111	112.6	18.6	0.0127	0.006	45.7	mg/L	49	Standard
|	Cd	114	328.1	3.7	0.0094	0.001	11.7	ug/L	170	Standard
[>	In	115	827062.0	0.1				ug/L	727802	Standard
|	Sn	118	805.0	7.0	0.0142	0.004	30.0	ug/L	471	Standard
|	Sb	123	726.5	3.5	0.0774	0.003	3.3	ug/L	39	Standard
[	Ba	135	148884.3	0.7	29.9826	0.243	0.8	ug/L	25	Standard
[	Ce	140	314.3	0.7				ug/L	25	Standard
[>	Tb	159	1177357.0	0.8				ug/L	1071747	Standard
[	Ho	165	18.0	5.6				ug/L	13	Standard
|	Tl	203	433.7	6.6	0.0238	0.001	6.1	ug/L	5	Standard
|	Tl	205	969.7	4.9	0.0239	0.001	4.0	ug/L	10	Standard
|	Pb	206	1124.7	4.3	0.0516	0.003	5.6	ug/L	382	Standard
|	Pb	207	911.0	4.3	0.0525	0.003	5.5	ug/L	306	Standard
|	Pb	208	4295.6	5.3	0.0522	0.004	7.1	ug/L	1443	Standard
	U	238	1890.8	4.4	0.1185	0.004	3.7	ug/L	5	Standard
[>	Bi	209	587050.4	1.0				ug/L	561075	Standard

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Na	23	139060.3	0.9	6.8853	0.154	2.2	mg/L	288	Standard
Mg	24	1460348.2	0.4	1.8637	0.021	1.1	mg/L	218	Standard
K	39	1005.0	4.8	0.6477	0.046	7.0	mg/L	125	Standard
Ca	43	28.3	20.4	20.3895	4.874	23.9	mg/L	3	Standard
Fe	54	857.8	8.6	0.0528	0.013	25.5	mg/L	550	Standard
Fe	57	9629.7	2.3	0.1275	0.003	2.2	mg/L	1772	Standard
Sc-1	45	389113.9	1.5				mg/L	330668	Standard
Cl	35	21.0	14.3				ug/L	5	Standard
Kr	83	36.8	13.6				ug/L	38	Standard
Br	81	1682.6	1.3				ug/L	344	Standard
P	31	435.0	10.2				ug/L	312	Standard
S	34	16961.2	1.2				ug/L	5594	Standard
Sr	88	255.0	17.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.057	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063903

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	Cd	111	
	Cd	114	
>	In	115	113.638
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.630
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063903

Report Date/Time: Sunday, July 29, 2012 12:03:28

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Method 6020 - Summary Report

Sample ID: L1207064001

Sample Date/Time: Sunday, July 29, 2012 12:04:07

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	60206.1	0.8	9023.1578	186.193	2.1	ug/L	9465	Standard
|	Be	9	31.7	107.5	-0.0040	0.019	469.6	ug/L	10	Standard
|	Al	27	75554.7	3.1	4.2867	0.199	4.7	ug/L	7870	Standard
[>	Sc	45	363854.3	1.4				ug/L	330668	Standard
[	Ti	47	1055.0	25.1	0.8517	0.225	26.4	ug/L	53	Standard
|	V	51	35043.7	1.0	3.2299	0.011	0.3	ug/L	2687	Standard
|	Cr	52	20923.4	0.5	1.5729	0.027	1.7	ug/L	8408	Standard
|	Cr	53	2796.1	3.2	1.9021	0.076	4.0	ug/L	288	Standard
|	Mn	55	4295.3	1.8	0.2383	0.003	1.5	ug/L	1080	Standard
|	Co	59	273.3	6.9	0.0194	0.002	10.5	ug/L	117	Standard
|	Ni	60	1634.1	8.7	0.6657	0.056	8.4	ug/L	68	Standard
|	Cu	65	1007.4	3.0	0.3953	0.013	3.2	ug/L	141	Standard
|	Zn	66	4710.7	1.2	4.4359	0.067	1.5	ug/L	138	Standard
[>	Ge	72	288201.9	0.7				ug/L	283230	Standard
|	As	75	884.4	1.2	1.0464	0.013	1.3	ug/L	-198	Standard
|	Se	82	103.6	7.9	0.7873	0.081	10.3	ug/L	21	Standard
[	Se-1	77	156.3	11.4	0.3490	0.239	68.4	ug/L	131	Standard
[>	Ga	71	645.0	8.9				mg/L	607	Standard
[	Rb	85	9733.1	3.9				ug/L	30	Standard
[	Y	89	257515.0	0.9				ug/L	251555	Standard
[>	Rh	103	388.3	9.7				ug/L	335	Standard
[	Mo	98	6337.4	2.3	1.5905	0.056	3.5	ug/L	13	Standard
|	Ag	107	86.3	37.0	0.0034	0.004	131.5	ug/L	36	Standard
|	Cd	111	91.1	6.0	0.0072	0.002	21.2	mg/L	49	Standard
|	Cd	114	276.3	19.7	0.0051	0.005	91.4	ug/L	170	Standard
[>	In	115	814145.6	1.6				ug/L	727802	Standard
|	Sn	118	897.7	3.3	0.0224	0.003	15.1	ug/L	471	Standard
|	Sb	123	564.0	5.8	0.0615	0.004	7.0	ug/L	39	Standard
[	Ba	135	105823.9	0.6	21.6481	0.226	1.0	ug/L	25	Standard
[	Ce	140	549.7	4.3				ug/L	25	Standard
[>	Tb	159	1157929.7	1.1				ug/L	1071747	Standard
[	Ho	165	22.7	14.2				ug/L	13	Standard
|	Tl	203	320.0	10.8	0.0175	0.002	11.7	ug/L	5	Standard
|	Tl	205	742.4	12.4	0.0184	0.002	12.1	ug/L	10	Standard
|	Pb	206	797.7	2.2	0.0277	0.001	3.1	ug/L	382	Standard
|	Pb	207	662.7	4.0	0.0309	0.002	7.8	ug/L	306	Standard
|	Pb	208	3068.8	2.9	0.0294	0.002	5.7	ug/L	1443	Standard
	U	238	5871.5	1.7	0.3711	0.003	0.9	ug/L	5	Standard
[>	Bi	209	582848.0	0.8				ug/L	561075	Standard

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Na	23	132969.3	1.0	7.0417	0.169	2.4	mg/L	288	Standard
Mg	24	1002051.8	1.0	1.3678	0.031	2.2	mg/L	218	Standard
K	39	1051.7	4.5	0.7377	0.049	6.6	mg/L	125	Standard
Ca	43	35.0	51.5	28.6502	17.418	60.8	mg/L	3	Standard
Fe	54	554.2	2.7	-0.0009	0.003	325.2	mg/L	550	Standard
Fe	57	4444.0	4.0	0.0454	0.004	9.3	mg/L	1772	Standard
Sc-1	45	363854.3	1.4				mg/L	330668	Standard
Cl	35	12.3	44.7				ug/L	5	Standard
Kr	83	36.9	6.2				ug/L	38	Standard
Br	81	1560.1	2.5				ug/L	344	Standard
P	31	323.3	1.9				ug/L	312	Standard
S	34	15202.6	2.1				ug/L	5594	Standard
Sr	88	390.0	3.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.756	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064001

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	Cd	111	
	Cd	114	
>	In	115	111.864
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.881
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064001

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Method 6020 - Summary Report

Sample ID: L1207064002

Sample Date/Time: Sunday, July 29, 2012 12:07:17

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	60925.6	1.1	8799.0695	132.786	1.5	ug/L	9465	Standard
|	Be	9	61.7	24.8	0.0115	0.008	73.1	ug/L	10	Standard
|	Al	27	730815.0	1.8	44.9758	1.000	2.2	ug/L	7870	Standard
[>	Sc	45	375966.1	1.0				ug/L	330668	Standard
[	Ti	47	1599.4	6.2	1.3122	0.071	5.4	ug/L	53	Standard
|	V	51	80465.0	1.1	7.7746	0.123	1.6	ug/L	2687	Standard
|	Cr	52	11656.8	0.6	0.3960	0.008	1.9	ug/L	8408	Standard
|	Cr	53	1370.1	1.3	0.8308	0.021	2.6	ug/L	288	Standard
|	Mn	55	78541.4	0.7	5.8098	0.084	1.4	ug/L	1080	Standard
|	Co	59	701.0	0.9	0.0704	0.002	2.4	ug/L	117	Standard
|	Ni	60	1105.7	2.3	0.4408	0.008	1.7	ug/L	68	Standard
|	Cu	65	2018.5	2.2	0.8595	0.012	1.4	ug/L	141	Standard
|	Zn	66	9944.9	0.6	9.5264	0.044	0.5	ug/L	138	Standard
[>	Ge	72	288401.8	1.1				ug/L	283230	Standard
|	As	75	3152.8	1.9	3.2849	0.035	1.1	ug/L	-198	Standard
|	Se	82	114.7	4.5	0.8964	0.059	6.6	ug/L	21	Standard
[	Se-1	77	154.3	9.6	0.3212	0.223	69.4	ug/L	131	Standard
[>	Ga	71	771.7	6.5				mg/L	607	Standard
[	Rb	85	4855.8	5.6				ug/L	30	Standard
[	Y	89	262738.6	1.1				ug/L	251555	Standard
[>	Rh	103	378.3	15.0				ug/L	335	Standard
[	Mo	98	7524.1	2.3	1.8772	0.051	2.7	ug/L	13	Standard
|	Ag	107	207.7	8.9	0.0206	0.003	12.8	ug/L	36	Standard
|	Cd	111	213.9	9.7	0.0411	0.006	14.4	mg/L	49	Standard
|	Cd	114	683.7	5.0	0.0422	0.003	7.2	ug/L	170	Standard
[>	In	115	819302.1	0.5				ug/L	727802	Standard
|	Sn	118	2645.6	1.8	0.1570	0.003	2.0	ug/L	471	Standard
|	Sb	123	1236.5	5.0	0.1317	0.007	5.1	ug/L	39	Standard
[	Ba	135	173132.3	1.1	35.1995	0.544	1.5	ug/L	25	Standard
[	Ce	140	8178.5	0.5				ug/L	25	Standard
[>	Tb	159	1164881.4	0.1				ug/L	1071747	Standard
[	Ho	165	110.0	0.9				ug/L	13	Standard
|	Tl	203	690.3	3.8	0.0385	0.002	4.1	ug/L	5	Standard
|	Tl	205	1599.8	2.7	0.0394	0.002	3.8	ug/L	10	Standard
|	Pb	206	4863.1	1.6	0.3292	0.003	1.0	ug/L	382	Standard
|	Pb	207	4000.2	1.3	0.3273	0.002	0.6	ug/L	306	Standard
|	Pb	208	18520.1	0.8	0.3215	0.003	0.9	ug/L	1443	Standard
	U	238	10186.8	1.6	0.6383	0.006	0.9	ug/L	5	Standard
[>	Bi	209	588072.9	1.6				ug/L	561075	Standard

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Na	23	131723.5	0.8	6.7481	0.015	0.2	mg/L	288	Standard
Mg	24	536989.2	2.0	0.7094	0.011	1.6	mg/L	218	Standard
K	39	1010.0	1.8	0.6776	0.006	0.9	mg/L	125	Standard
Ca	43	18.3	56.8	11.9178	9.780	82.1	mg/L	3	Standard
Fe	54	761.8	4.6	0.0388	0.008	21.8	mg/L	550	Standard
Fe	57	6613.1	5.1	0.0806	0.005	6.3	mg/L	1772	Standard
Sc-1	45	375966.1	1.0				mg/L	330668	Standard
Cl	35	16.7	21.1				ug/L	5	Standard
Kr	83	36.1	16.4				ug/L	38	Standard
Br	81	1565.9	11.4				ug/L	344	Standard
P	31	385.8	1.6				ug/L	312	Standard
S	34	11996.4	1.4				ug/L	5594	Standard
Sr	88	273.3	17.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.826	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064002

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	Cd	111	
	Cd	114	
>	In	115	112.572
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.812
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064002

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Method 6020 - Summary Report

Sample ID: L1207064003

Sample Date/Time: Sunday, July 29, 2012 12:10:26

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	49092.8	1.6	6573.7816	449.661	6.8	ug/L	9465	Standard
|	Be	9	26.7	92.5	-0.0076	0.012	165.0	ug/L	10	Standard
|	Al	27	669017.2	2.2	40.2693	1.692	4.2	ug/L	7870	Standard
[>	Sc	45	384145.0	3.8				ug/L	330668	Standard
|	Ti	47	2591.6	1.3	2.1468	0.032	1.5	ug/L	53	Standard
|	V	51	20780.7	0.9	1.7935	0.005	0.3	ug/L	2687	Standard
|	Cr	52	13031.3	1.0	0.5652	0.011	1.9	ug/L	8408	Standard
|	Cr	53	2716.9	2.6	1.8353	0.075	4.1	ug/L	288	Standard
|	Mn	55	29050.2	1.6	2.0893	0.059	2.8	ug/L	1080	Standard
|	Co	59	639.7	2.9	0.0628	0.003	4.9	ug/L	117	Standard
|	Ni	60	1757.4	7.5	0.7154	0.052	7.3	ug/L	68	Standard
|	Cu	65	888.7	7.3	0.3391	0.027	8.0	ug/L	141	Standard
|	Zn	66	10398.6	0.6	9.9371	0.124	1.3	ug/L	138	Standard
[>	Ge	72	289293.6	1.1				ug/L	283230	Standard
|	As	75	200.0	22.7	0.3694	0.043	11.8	ug/L	-198	Standard
|	Se	82	171.0	6.2	1.4496	0.090	6.2	ug/L	21	Standard
[	Se-1	77	210.3	12.2	1.1035	0.392	35.5	ug/L	131	Standard
[>	Ga	71	740.0	9.7				mg/L	607	Standard
|	Rb	85	11682.8	2.7				ug/L	30	Standard
|	Y	89	255456.2	2.2				ug/L	251555	Standard
[>	Rh	103	405.0	11.8				ug/L	335	Standard
|	Mo	98	4879.6	0.7	1.2255	0.024	2.0	ug/L	13	Standard
|	Ag	107	191.0	8.9	0.0185	0.003	14.2	ug/L	36	Standard
|	Cd	111	115.6	8.7	0.0141	0.003	21.7	mg/L	49	Standard
|	Cd	114	353.4	2.3	0.0123	0.001	9.5	ug/L	170	Standard
[>	In	115	812321.4	1.4				ug/L	727802	Standard
|	Sn	118	1190.4	3.4	0.0454	0.004	9.0	ug/L	471	Standard
|	Sb	123	289.3	11.4	0.0325	0.004	11.9	ug/L	39	Standard
|	Ba	135	129507.9	1.2	26.5585	0.683	2.6	ug/L	25	Standard
|	Ce	140	8410.3	0.7				ug/L	25	Standard
[>	Tb	159	1167139.9	1.4				ug/L	1071747	Standard
|	Ho	165	127.7	13.8				ug/L	13	Standard
|	Tl	203	551.7	7.0	0.0310	0.002	7.3	ug/L	5	Standard
|	Tl	205	1278.7	5.2	0.0319	0.002	5.2	ug/L	10	Standard
|	Pb	206	1355.4	1.4	0.0701	0.001	2.1	ug/L	382	Standard
|	Pb	207	1106.7	1.7	0.0713	0.002	2.4	ug/L	306	Standard
|	Pb	208	5169.0	1.7	0.0701	0.002	2.4	ug/L	1443	Standard
	U	238	4452.7	2.0	0.2830	0.006	2.0	ug/L	5	Standard
[>	Bi	209	579421.2	0.0				ug/L	561075	Standard

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Na	23	140653.2	0.6	7.0598	0.238	3.4	mg/L	288	Standard
Mg	24	2635591.6	0.9	3.4095	0.118	3.5	mg/L	218	Standard
K	39	1075.0	9.9	0.7132	0.114	16.0	mg/L	125	Standard
Ca	43	45.0	0.0	36.1758	1.625	4.5	mg/L	3	Standard
Fe	54	691.6	3.3	0.0212	0.010	44.8	mg/L	550	Standard
Fe	57	8040.5	1.5	0.1027	0.007	7.2	mg/L	1772	Standard
Sc-1	45	384145.0	3.8				mg/L	330668	Standard
Cl	35	49.0	8.2				ug/L	5	Standard
Kr	83	37.7	21.2				ug/L	38	Standard
Br	81	3342.9	6.2				ug/L	344	Standard
P	31	350.8	4.5				ug/L	312	Standard
S	34	16632.5	0.5				ug/L	5594	Standard
Sr	88	350.0	24.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.141	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064003

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	Cd	111	
	Cd	114	
>	In	115	111.613
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.270
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064003

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 12:13:38

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9329.5	1.2	23.8206	49.204	206.6	ug/L	9465	Standard
|	Be	9	87493.7	2.5	51.5441	1.757	3.4	ug/L	10	Standard
|	Al	27	660485.1	3.0	45.2620	1.396	3.1	ug/L	7870	Standard
[>	Sc	45	337665.1	1.6				ug/L	330668	Standard
[	Ti	47	115298.0	0.7	97.9030	1.073	1.1	ug/L	53	Standard
|	V	51	476640.0	0.6	47.5355	0.160	0.3	ug/L	2687	Standard
|	Cr	52	379147.7	0.7	47.1023	0.614	1.3	ug/L	8408	Standard
|	Cr	53	64277.7	1.0	48.1287	0.347	0.7	ug/L	288	Standard
|	Mn	55	702097.0	0.6	52.7166	0.111	0.2	ug/L	1080	Standard
|	Co	59	433764.5	0.5	51.7411	0.059	0.1	ug/L	117	Standard
|	Ni	60	111906.8	1.1	47.6492	0.504	1.1	ug/L	68	Standard
|	Cu	65	105115.4	0.4	48.3344	0.133	0.3	ug/L	141	Standard
|	Zn	66	49908.7	1.2	48.5243	0.472	1.0	ug/L	138	Standard
[>	Ge	72	287759.9	0.6				ug/L	283230	Standard
|	As	75	49819.6	0.4	49.4641	0.440	0.9	ug/L	-198	Standard
|	Se	82	5051.6	0.9	50.0531	0.188	0.4	ug/L	21	Standard
[	Se-1	77	3624.4	3.5	49.3700	1.829	3.7	ug/L	131	Standard
[>	Ga	71	583.3	2.6				mg/L	607	Standard
[	Rb	85	721.7	11.0				ug/L	30	Standard
[	Y	89	257160.9	1.4				ug/L	251555	Standard
[>	Rh	103	315.0	8.8				ug/L	335	Standard
[	Mo	98	349788.9	0.8	88.3534	0.491	0.6	ug/L	13	Standard
|	Ag	107	324681.4	1.5	46.6077	0.887	1.9	ug/L	36	Standard
|	Cd	111	194932.6	0.8	54.5256	0.638	1.2	mg/L	49	Standard
|	Cd	114	543705.1	0.9	50.0128	0.642	1.3	ug/L	170	Standard
[>	In	115	812221.2	0.6				ug/L	727802	Standard
|	Sn	118	633460.0	0.8	49.3187	0.099	0.2	ug/L	471	Standard
|	Sb	123	472923.2	0.6	50.1279	0.556	1.1	ug/L	39	Standard
[	Ba	135	235344.7	0.7	48.2677	0.372	0.8	ug/L	25	Standard
[	Ce	140	873.7	1.7				ug/L	25	Standard
[>	Tb	159	1162825.5	1.1				ug/L	1071747	Standard
[	Ho	165	21.0	9.5				ug/L	13	Standard
|	Tl	203	841288.7	0.5	48.2807	0.077	0.2	ug/L	5	Standard
|	Tl	205	1933329.9	0.4	47.5710	0.085	0.2	ug/L	10	Standard
|	Pb	206	649438.1	0.9	48.2845	0.297	0.6	ug/L	382	Standard
|	Pb	207	553464.9	0.5	49.2837	0.147	0.3	ug/L	306	Standard
|	Pb	208	2555676.1	0.5	48.4212	0.077	0.2	ug/L	1443	Standard
	U	238	815556.7	0.8	51.1846	0.347	0.7	ug/L	5	Standard
[>	Bi	209	587298.0	0.3				ug/L	561075	Standard

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Na	23	112899.1	1.0	6.4388	0.094	1.5	mg/L	288	Standard
Mg	24	3235135.5	0.5	4.7577	0.079	1.7	mg/L	218	Standard
K	39	5349.3	6.7	4.5269	0.250	5.5	mg/L	125	Standard
Ca	43	13.3	78.1	8.6847	11.005	126.7	mg/L	3	Standard
Fe	54	20974.9	1.3	4.7830	0.138	2.9	mg/L	550	Standard
Fe	57	299151.9	2.1	5.7761	0.078	1.3	mg/L	1772	Standard
Sc-1	45	337665.1	1.6				mg/L	330668	Standard
Cl	35	3.3	34.6				ug/L	5	Standard
Kr	83	37.9	0.5				ug/L	38	Standard
Br	81	547.5	5.8				ug/L	344	Standard
P	31	391.7	10.9				ug/L	312	Standard
S	34	6038.7	0.8				ug/L	5594	Standard
Sr	88	41.7	13.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	90.524		
Sc	45			
Ti	47	97.903		
V	51	95.071		
Cr	52	94.205		
Cr	53			
Mn	55	105.433		
Co	59	103.482		
Ni	60	95.298		
Cu	65	96.669		
Zn	66	97.049		
Ge	72		101.599	
As	75	98.928		
Se	82	100.106		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	88.353		
Ag	107	93.215		

Sample ID: QC Std 6

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	Cd	111	109.051	
	Cd	114		
>	In	115		111.599
	Sn	118	98.637	
	Sb	123	100.256	
	Ba	135	96.535	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.561	
|	Tl	205		
|	Pb	206	96.569	
|	Pb	207	98.567	
|	Pb	208	96.842	
|	U	238	102.369	
>	Bi	209		104.674
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 12:16:48

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9207.8	2.7	6.9343	31.166	449.4	ug/L	9465	Standard
|	Be	9	26.7	71.0	-0.0056	0.011	195.9	ug/L	10	Standard
|	Al	27	7707.0	7.2	-0.0444	0.024	53.3	ug/L	7870	Standard
[>	Sc	45	336357.8	2.9				ug/L	330668	Standard
|	Ti	47	75.7	22.2	0.0226	0.016	68.8	ug/L	53	Standard
|	V	51	2382.9	5.3	-0.0364	0.011	30.5	ug/L	2687	Standard
|	Cr	52	7183.4	2.5	-0.1511	0.017	11.2	ug/L	8408	Standard
|	Cr	53	271.7	5.2	0.0112	0.011	94.4	ug/L	288	Standard
|	Mn	55	1326.1	11.6	0.0175	0.012	66.6	ug/L	1080	Standard
|	Co	59	214.3	35.2	0.0130	0.009	70.5	ug/L	117	Standard
|	Ni	60	95.3	30.9	0.0123	0.013	107.7	ug/L	68	Standard
|	Cu	65	173.0	9.1	0.0135	0.009	63.6	ug/L	141	Standard
|	Zn	66	173.0	16.1	0.0207	0.030	146.5	ug/L	138	Standard
[>	Ge	72	282145.1	1.4				ug/L	283230	Standard
|	As	75	-173.1	10.1	-0.0020	0.018	887.5	ug/L	-198	Standard
|	Se	82	24.1	23.9	0.0014	0.056	3984.1	ug/L	21	Standard
[	Se-1	77	121.0	8.1	-0.1131	0.119	105.1	ug/L	131	Standard
[>	Ga	71	608.3	12.4				mg/L	607	Standard
[	Rb	85	28.3	100.3				ug/L	30	Standard
[	Y	89	256059.1	1.2				ug/L	251555	Standard
[>	Rh	103	375.0	3.5				ug/L	335	Standard
[	Mo	98	388.5	58.0	0.0917	0.057	62.3	ug/L	13	Standard
|	Ag	107	289.3	77.2	0.0329	0.032	97.8	ug/L	36	Standard
|	Cd	111	186.4	71.0	0.0342	0.037	108.5	mg/L	49	Standard
|	Cd	114	507.7	62.2	0.0268	0.029	108.7	ug/L	170	Standard
[>	In	115	807561.1	1.5				ug/L	727802	Standard
|	Sn	118	1167.7	19.2	0.0441	0.018	40.3	ug/L	471	Standard
|	Sb	123	2592.5	5.2	0.2783	0.018	6.6	ug/L	39	Standard
[	Ba	135	207.7	82.9	0.0314	0.035	112.7	ug/L	25	Standard
[	Ce	140	30.0	26.5				ug/L	25	Standard
[>	Tb	159	1147147.9	0.3				ug/L	1071747	Standard
[	Ho	165	18.3	26.9				ug/L	13	Standard
|	Tl	203	320.7	73.0	0.0172	0.013	76.3	ug/L	5	Standard
|	Tl	205	720.4	68.8	0.0176	0.012	67.6	ug/L	10	Standard
|	Pb	206	588.7	25.6	0.0114	0.011	97.5	ug/L	382	Standard
|	Pb	207	493.7	25.4	0.0150	0.011	72.5	ug/L	306	Standard
|	Pb	208	2314.4	25.3	0.0144	0.011	75.6	ug/L	1443	Standard
	U	238	219.3	49.7	0.0135	0.007	50.7	ug/L	5	Standard
[>	Bi	209	591432.0	2.1				ug/L	561075	Standard

Sample ID: QC Std 7

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Na	23	656.7	44.0	0.0013	0.015	1186.3	mg/L	288	Standard
Mg	24	1503.4	55.3	0.0025	0.001	47.0	mg/L	218	Standard
K	39	135.0	9.8	0.0086	0.010	120.8	mg/L	125	Standard
Ca	43	1.7	173.2	-3.6595	2.945	80.5	mg/L	3	Standard
Fe	54	526.9	8.0	0.0028	0.013	481.0	mg/L	550	Standard
Fe	57	1985.1	9.1	0.0039	0.003	65.9	mg/L	1772	Standard
Sc-1	45	336357.8	2.9				mg/L	330668	Standard
Cl	35	3.7	15.7				ug/L	5	Standard
Kr	83	39.4	11.8				ug/L	38	Standard
Br	81	438.3	8.0				ug/L	344	Standard
P	31	327.5	12.3				ug/L	312	Standard
S	34	5911.2	1.4				ug/L	5594	Standard
Sr	88	50.0	20.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.617	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	110.959
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	105.410
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

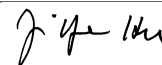
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207080304

Sample Date/Time: Sunday, July 29, 2012 12:21:05

Number of Replicates: 3

Autosampler Position: 419

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	43256.7	3.3	5771.2235	156.606	2.7	ug/L	9465	Standard
|	Be	9	40.0	25.0	0.0001	0.005	10071.2	ug/L	10	Standard
|	Al	27	1842385.0	1.8	114.9281	3.570	3.1	ug/L	7870	Standard
[>	Sc	45	373896.3	1.7				ug/L	330668	Standard
|	Ti	47	4719.7	4.7	3.9926	0.171	4.3	ug/L	53	Standard
|	V	51	21485.8	1.4	1.8900	0.048	2.5	ug/L	2687	Standard
|	Cr	52	19615.7	1.2	1.4273	0.003	0.2	ug/L	8408	Standard
|	Cr	53	3438.7	3.5	2.4057	0.092	3.8	ug/L	288	Standard
|	Mn	55	22220.9	0.8	1.5982	0.027	1.7	ug/L	1080	Standard
|	Co	59	706.7	2.0	0.0718	0.001	1.7	ug/L	117	Standard
|	Ni	60	1463.7	2.1	0.5985	0.006	1.1	ug/L	68	Standard
|	Cu	65	709.3	1.1	0.2610	0.004	1.7	ug/L	141	Standard
|	Zn	66	3166.0	3.0	2.9565	0.071	2.4	ug/L	138	Standard
[>	Ge	72	285847.7	1.1				ug/L	283230	Standard
|	As	75	577.2	1.8	0.7477	0.017	2.2	ug/L	-198	Standard
|	Se	82	320.5	2.0	2.9696	0.033	1.1	ug/L	21	Standard
[	Se-1	77	191.3	10.7	0.8661	0.290	33.5	ug/L	131	Standard
[>	Ga	71	841.7	5.4				mg/L	607	Standard
[	Rb	85	12975.6	1.9				ug/L	30	Standard
[	Y	89	252019.7	2.7				ug/L	251555	Standard
[>	Rh	103	431.7	7.4				ug/L	335	Standard
[	Mo	98	4166.6	0.8	1.0490	0.018	1.7	ug/L	13	Standard
|	Ag	107	66.0	7.6	0.0005	0.001	132.4	ug/L	36	Standard
|	Cd	111	125.0	2.8	0.0168	0.001	7.2	mg/L	49	Standard
|	Cd	114	344.3	7.4	0.0116	0.002	18.3	ug/L	170	Standard
[>	In	115	809477.6	0.9				ug/L	727802	Standard
|	Sn	118	1044.7	4.5	0.0342	0.003	8.7	ug/L	471	Standard
|	Sb	123	737.8	15.2	0.0802	0.011	14.1	ug/L	39	Standard
[	Ba	135	201851.2	1.4	41.5353	0.281	0.7	ug/L	25	Standard
[	Ce	140	19140.8	2.3				ug/L	25	Standard
[>	Tb	159	1152627.6	0.5				ug/L	1071747	Standard
[	Ho	165	249.3	2.9				ug/L	13	Standard
|	Tl	203	598.7	4.5	0.0338	0.002	4.9	ug/L	5	Standard
|	Tl	205	1373.1	4.0	0.0343	0.002	4.6	ug/L	10	Standard
|	Pb	206	1803.1	1.3	0.1038	0.002	2.4	ug/L	382	Standard
|	Pb	207	1491.7	1.6	0.1060	0.003	2.8	ug/L	306	Standard
|	Pb	208	7051.3	2.3	0.1063	0.004	3.8	ug/L	1443	Standard
	U	238	2647.9	1.8	0.1682	0.003	1.8	ug/L	5	Standard
[>	Bi	209	579643.4	0.6				ug/L	561075	Standard

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Na	23	135291.4	0.6	6.9713	0.088	1.3	mg/L	288	Standard
Mg	24	1346612.7	1.5	1.7885	0.028	1.5	mg/L	218	Standard
K	39	1188.4	2.9	0.8215	0.012	1.4	mg/L	125	Standard
Ca	43	21.7	48.0	15.2057	10.021	65.9	mg/L	3	Standard
Fe	54	1203.2	10.3	0.1332	0.031	23.0	mg/L	550	Standard
Fe	57	13382.6	3.3	0.2000	0.006	3.0	mg/L	1772	Standard
Sc-1	45	373896.3	1.7				mg/L	330668	Standard
Cl	35	36.3	6.9				ug/L	5	Standard
Kr	83	38.6	13.9				ug/L	38	Standard
Br	81	9027.7	3.2				ug/L	344	Standard
P	31	1280.9	4.0				ug/L	312	Standard
S	34	14378.5	0.9				ug/L	5594	Standard
Sr	88	341.7	3.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.924	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	111.222
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.309
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207080304

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Method 6020 - Summary Report

Sample ID: L1207080305

Sample Date/Time: Sunday, July 29, 2012 12:24:14

Number of Replicates: 3

Autosampler Position: 420

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	48074.5	3.5	6622.4721	130.200	2.0	ug/L	9465	Standard
|	Be	9	20.0	43.3	-0.0105	0.005	45.3	ug/L	10	Standard
|	Al	27	113723.6	1.2	6.5571	0.105	1.6	ug/L	7870	Standard
[>	Sc	45	373451.6	2.6				ug/L	330668	Standard
[	Ti	47	1326.1	2.1	1.0839	0.019	1.7	ug/L	53	Standard
|	V	51	14858.4	0.7	1.2112	0.012	1.0	ug/L	2687	Standard
|	Cr	52	15510.9	1.8	0.8901	0.034	3.8	ug/L	8408	Standard
|	Cr	53	2952.8	8.3	2.0233	0.170	8.4	ug/L	288	Standard
|	Mn	55	4192.6	0.8	0.2312	0.006	2.4	ug/L	1080	Standard
|	Co	59	636.7	7.0	0.0629	0.005	7.5	ug/L	117	Standard
|	Ni	60	2131.5	3.4	0.8796	0.039	4.5	ug/L	68	Standard
|	Cu	65	479.7	6.5	0.1532	0.015	9.9	ug/L	141	Standard
|	Zn	66	2165.2	1.8	1.9610	0.029	1.5	ug/L	138	Standard
[>	Ge	72	287618.4	1.0				ug/L	283230	Standard
|	As	75	1106.3	4.0	1.2678	0.044	3.5	ug/L	-198	Standard
|	Se	82	615.5	3.5	5.8890	0.237	4.0	ug/L	21	Standard
[	Se-1	77	199.3	4.3	0.9620	0.103	10.8	ug/L	131	Standard
[>	Ga	71	595.0	6.3				mg/L	607	Standard
[	Rb	85	11644.5	3.5				ug/L	30	Standard
[	Y	89	254948.8	0.8				ug/L	251555	Standard
[>	Rh	103	383.3	17.6				ug/L	335	Standard
[	Mo	98	2459.5	1.9	0.6126	0.014	2.3	ug/L	13	Standard
|	Ag	107	64.0	2.7	0.0002	0.000	118.7	ug/L	36	Standard
|	Cd	111	125.1	5.6	0.0167	0.003	15.6	mg/L	49	Standard
|	Cd	114	364.5	4.5	0.0132	0.001	9.4	ug/L	170	Standard
[>	In	115	814425.2	1.9				ug/L	727802	Standard
|	Sn	118	1025.0	7.1	0.0322	0.004	13.3	ug/L	471	Standard
|	Sb	123	1611.6	4.4	0.1721	0.004	2.5	ug/L	39	Standard
[	Ba	135	113813.9	1.4	23.2745	0.129	0.6	ug/L	25	Standard
[	Ce	140	1307.7	5.9				ug/L	25	Standard
[>	Tb	159	1166726.9	1.1				ug/L	1071747	Standard
[	Ho	165	27.3	16.5				ug/L	13	Standard
|	Tl	203	708.0	2.4	0.0404	0.001	1.7	ug/L	5	Standard
|	Tl	205	1629.1	3.7	0.0409	0.001	3.0	ug/L	10	Standard
|	Pb	206	857.0	5.3	0.0329	0.003	8.9	ug/L	382	Standard
|	Pb	207	713.4	6.3	0.0361	0.004	9.9	ug/L	306	Standard
|	Pb	208	3374.5	3.0	0.0360	0.001	4.1	ug/L	1443	Standard
	U	238	3420.4	1.1	0.2186	0.001	0.4	ug/L	5	Standard
[>	Bi	209	576212.3	0.8				ug/L	561075	Standard

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Na	23	141967.0	0.9	7.3269	0.122	1.7	mg/L	288	Standard
Mg	24	2759289.5	1.4	3.6693	0.051	1.4	mg/L	218	Standard
K	39	1190.0	3.9	0.8240	0.027	3.3	mg/L	125	Standard
Ca	43	50.0	17.3	42.1385	8.719	20.7	mg/L	3	Standard
Fe	54	808.3	5.9	0.0499	0.014	28.7	mg/L	550	Standard
Fe	57	9985.0	7.5	0.1405	0.010	6.9	mg/L	1772	Standard
Sc-1	45	373451.6	2.6				mg/L	330668	Standard
Cl	35	52.0	15.0				ug/L	5	Standard
Kr	83	39.6	9.3				ug/L	38	Standard
Br	81	20242.7	3.1				ug/L	344	Standard
P	31	1289.2	2.4				ug/L	312	Standard
S	34	21081.3	0.6				ug/L	5594	Standard
Sr	88	486.7	2.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.550	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207080305

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	Cd	111	
	Cd	114	
>	In	115	111.902
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	102.698
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207080305

Report Date/Time: Sunday, July 29, 2012 12:26:45

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Method 6020 - Summary Report

Sample ID: L1207080306

Sample Date/Time: Sunday, July 29, 2012 12:27:24

Number of Replicates: 3

Autosampler Position: 421

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	62450.2	4.0	8561.2736	397.122	4.6	ug/L	9465	Standard
|	Be	9	31.7	24.1	-0.0052	0.004	77.5	ug/L	10	Standard
|	Al	27	1217093.2	2.6	71.7901	2.659	3.7	ug/L	7870	Standard
[>	Sc	45	394214.6	1.1				ug/L	330668	Standard
|	Ti	47	3720.1	3.2	3.0565	0.091	3.0	ug/L	53	Standard
|	V	51	16940.2	1.0	1.3868	0.022	1.6	ug/L	2687	Standard
|	Cr	52	15540.3	0.8	0.8550	0.018	2.1	ug/L	8408	Standard
|	Cr	53	3231.2	3.9	2.1860	0.104	4.8	ug/L	288	Standard
|	Mn	55	49268.6	1.0	3.5502	0.046	1.3	ug/L	1080	Standard
|	Co	59	1094.0	2.0	0.1149	0.002	1.9	ug/L	117	Standard
|	Ni	60	3256.4	6.7	1.3316	0.090	6.8	ug/L	68	Standard
|	Cu	65	703.7	6.6	0.2501	0.023	9.0	ug/L	141	Standard
|	Zn	66	12406.4	1.1	11.7175	0.188	1.6	ug/L	138	Standard
[>	Ge	72	293370.7	0.5				ug/L	283230	Standard
|	As	75	1839.2	5.0	1.9577	0.092	4.7	ug/L	-198	Standard
|	Se	82	991.0	3.4	9.4359	0.364	3.9	ug/L	21	Standard
[	Se-1	77	198.3	3.6	0.8935	0.109	12.1	ug/L	131	Standard
[>	Ga	71	760.0	10.3				mg/L	607	Standard
|	Rb	85	15845.0	2.9				ug/L	30	Standard
|	Y	89	266479.7	0.7				ug/L	251555	Standard
[>	Rh	103	446.7	6.6				ug/L	335	Standard
|	Mo	98	1782.2	3.2	0.4290	0.018	4.3	ug/L	13	Standard
|	Ag	107	218.0	7.3	0.0213	0.002	9.4	ug/L	36	Standard
|	Cd	111	74.1	11.1	0.0018	0.002	124.8	mg/L	49	Standard
|	Cd	114	244.2	11.1	0.0016	0.003	171.9	ug/L	170	Standard
[>	In	115	838642.6	1.6				ug/L	727802	Standard
|	Sn	118	4490.7	2.6	0.2915	0.009	3.0	ug/L	471	Standard
|	Sb	123	409.8	19.6	0.0438	0.008	18.4	ug/L	39	Standard
|	Ba	135	93666.3	0.3	18.6009	0.293	1.6	ug/L	25	Standard
|	Ce	140	12316.3	0.4				ug/L	25	Standard
[>	Tb	159	1190903.0	1.3				ug/L	1071747	Standard
|	Ho	165	212.7	9.5				ug/L	13	Standard
|	Tl	203	700.0	3.7	0.0395	0.001	3.3	ug/L	5	Standard
|	Tl	205	1648.1	3.7	0.0409	0.001	2.8	ug/L	10	Standard
|	Pb	206	2845.9	2.1	0.1816	0.003	1.8	ug/L	382	Standard
|	Pb	207	2335.5	2.3	0.1814	0.004	2.3	ug/L	306	Standard
|	Pb	208	10985.6	1.9	0.1810	0.003	1.5	ug/L	1443	Standard
	U	238	8161.2	1.5	0.5167	0.005	0.9	ug/L	5	Standard
[>	Bi	209	581908.4	0.9				ug/L	561075	Standard

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Na	23	147622.3	0.6	7.2156	0.095	1.3	mg/L	288	Standard
Mg	24	3796295.4	2.4	4.7824	0.166	3.5	mg/L	218	Standard
K	39	1431.7	2.5	0.9543	0.018	1.9	mg/L	125	Standard
Ca	43	76.7	52.3	63.8035	36.750	57.6	mg/L	3	Standard
Fe	54	1157.6	4.0	0.1106	0.009	8.2	mg/L	550	Standard
Fe	57	16458.9	4.5	0.2391	0.013	5.5	mg/L	1772	Standard
Sc-1	45	394214.6	1.1				mg/L	330668	Standard
Cl	35	58.3	17.3				ug/L	5	Standard
Kr	83	40.7	12.1				ug/L	38	Standard
Br	81	33022.6	3.2				ug/L	344	Standard
P	31	1200.9	5.5				ug/L	312	Standard
S	34	30719.4	0.6				ug/L	5594	Standard
Sr	88	605.0	6.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.580	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207080306

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	Cd	111	
	Cd	114	
>	In	115	115.230
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.713
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207080306

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Method 6020 - Summary Report

Sample ID: L1207080307

Sample Date/Time: Sunday, July 29, 2012 12:30:33

Number of Replicates: 3

Autosampler Position: 422

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

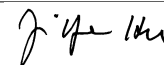
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	60599.3	0.6	8427.8902	90.677	1.1	ug/L	9465	Standard
|	Be	9	55.0	72.2	0.0071	0.021	289.8	ug/L	10	Standard
|	Al	27	875863.8	1.7	52.3812	0.736	1.4	ug/L	7870	Standard
[>	Sc	45	387540.4	0.6				ug/L	330668	Standard
[	Ti	47	3283.0	5.7	2.7140	0.174	6.4	ug/L	53	Standard
|	V	51	16219.8	1.4	1.3280	0.017	1.3	ug/L	2687	Standard
|	Cr	52	15453.5	0.5	0.8589	0.014	1.7	ug/L	8408	Standard
|	Cr	53	3040.3	2.9	2.0624	0.079	3.8	ug/L	288	Standard
|	Mn	55	44655.0	0.8	3.2350	0.040	1.2	ug/L	1080	Standard
|	Co	59	1113.0	3.4	0.1181	0.004	3.2	ug/L	117	Standard
|	Ni	60	2952.0	1.3	1.2138	0.008	0.7	ug/L	68	Standard
|	Cu	65	816.4	5.5	0.3037	0.019	6.3	ug/L	141	Standard
|	Zn	66	12323.7	1.9	11.7274	0.175	1.5	ug/L	138	Standard
[>	Ge	72	291148.8	0.7				ug/L	283230	Standard
|	As	75	1436.1	3.4	1.5770	0.046	2.9	ug/L	-198	Standard
|	Se	82	782.5	0.7	7.4574	0.096	1.3	ug/L	21	Standard
[	Se-1	77	215.7	5.1	1.1565	0.153	13.3	ug/L	131	Standard
[>	Ga	71	706.7	11.4				mg/L	607	Standard
[	Rb	85	15202.6	2.8				ug/L	30	Standard
[	Y	89	257397.1	2.3				ug/L	251555	Standard
[>	Rh	103	430.0	24.3				ug/L	335	Standard
[	Mo	98	1708.0	2.6	0.4170	0.020	4.8	ug/L	13	Standard
|	Ag	107	276.7	29.3	0.0300	0.011	37.4	ug/L	36	Standard
|	Cd	111	118.9	30.3	0.0144	0.010	67.8	mg/L	49	Standard
|	Cd	114	302.6	22.6	0.0072	0.006	88.1	ug/L	170	Standard
[>	In	115	826770.8	2.1				ug/L	727802	Standard
|	Sn	118	4129.9	0.2	0.2689	0.007	2.6	ug/L	471	Standard
|	Sb	123	393.4	10.4	0.0428	0.005	10.7	ug/L	39	Standard
[	Ba	135	89870.8	0.9	18.1077	0.539	3.0	ug/L	25	Standard
[	Ce	140	12367.7	2.1				ug/L	25	Standard
[>	Tb	159	1176027.0	1.8				ug/L	1071747	Standard
[	Ho	165	206.7	4.9				ug/L	13	Standard
|	Tl	203	846.4	25.2	0.0482	0.012	24.6	ug/L	5	Standard
|	Tl	205	1903.8	20.1	0.0475	0.009	19.0	ug/L	10	Standard
|	Pb	206	2689.2	4.5	0.1709	0.009	5.4	ug/L	382	Standard
|	Pb	207	2218.8	4.8	0.1720	0.009	5.5	ug/L	306	Standard
|	Pb	208	10499.4	3.3	0.1728	0.007	4.2	ug/L	1443	Standard
	U	238	8029.1	3.7	0.5110	0.012	2.4	ug/L	5	Standard
[>	Bi	209	578887.7	2.4				ug/L	561075	Standard

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Na	23	146597.5	0.6	7.2888	0.076	1.0	mg/L	288	Standard
Mg	24	3644917.5	2.6	4.6693	0.096	2.1	mg/L	218	Standard
K	39	1301.7	12.3	0.8748	0.125	14.3	mg/L	125	Standard
Ca	43	60.0	16.7	49.5036	9.362	18.9	mg/L	3	Standard
Fe	54	1105.9	10.1	0.1041	0.023	22.2	mg/L	550	Standard
Fe	57	16303.8	1.5	0.2411	0.003	1.4	mg/L	1772	Standard
Sc-1	45	387540.4	0.6				mg/L	330668	Standard
Cl	35	50.3	14.1				ug/L	5	Standard
Kr	83	41.1	1.2				ug/L	38	Standard
Br	81	26360.4	3.8				ug/L	344	Standard
P	31	1092.5	3.6				ug/L	312	Standard
S	34	29318.3	0.7				ug/L	5594	Standard
Sr	88	550.0	8.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.796	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207080307

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	Cd	111	
	Cd	114	
>	In	115	113.598
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.175
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207080307

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Method 6020 - Summary Report

Sample ID: L1207063602 WG404095-01

Sample Date/Time: Sunday, July 29, 2012 12:33:43

Number of Replicates: 3

Autosampler Position: 423

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	45304.4	4.8	7987.8134	197.795	2.5	ug/L	9465	Standard
|	Be	9	15.0	33.3	-0.0113	0.004	31.2	ug/L	10	Standard
|	Al	27	25875.4	3.8	1.4228	0.065	4.6	ug/L	7870	Standard
[>	Sc	45	302687.2	3.2				ug/L	330668	Standard
|	Ti	47	61.0	15.6	0.0141	0.009	66.5	ug/L	53	Standard
|	V	51	2388.1	6.2	-0.0162	0.016	96.8	ug/L	2687	Standard
|	Cr	52	7607.9	4.3	-0.0167	0.044	260.8	ug/L	8408	Standard
|	Cr	53	324.2	13.8	0.0712	0.034	47.2	ug/L	288	Standard
|	Mn	55	130711.3	2.7	10.7465	0.157	1.5	ug/L	1080	Standard
|	Co	59	627.7	4.0	0.0694	0.004	6.1	ug/L	117	Standard
|	Ni	60	1674.4	7.7	0.7566	0.055	7.3	ug/L	68	Standard
|	Cu	65	260.7	14.5	0.0643	0.017	27.0	ug/L	141	Standard
|	Zn	66	1246.7	5.6	1.1877	0.059	5.0	ug/L	138	Standard
[>	Ge	72	261140.8	1.3				ug/L	283230	Standard
|	As	75	170.5	10.8	0.3585	0.019	5.4	ug/L	-198	Standard
|	Se	82	46.1	3.8	0.2633	0.025	9.4	ug/L	21	Standard
[	Se-1	77	122.0	6.7	0.0433	0.112	257.8	ug/L	131	Standard
[>	Ga	71	533.3	13.6				mg/L	607	Standard
|	Rb	85	4892.5	2.7				ug/L	30	Standard
|	Y	89	230210.7	0.1				ug/L	251555	Standard
[>	Rh	103	306.7	13.7				ug/L	335	Standard
|	Mo	98	77.5	12.4	0.0140	0.002	16.9	ug/L	13	Standard
|	Ag	107	43.3	8.1	-0.0022	0.001	28.3	ug/L	36	Standard
|	Cd	111	52.8	19.2	-0.0023	0.003	135.7	mg/L	49	Standard
|	Cd	114	137.8	4.4	-0.0065	0.000	6.3	ug/L	170	Standard
[>	In	115	751123.2	1.4				ug/L	727802	Standard
|	Sn	118	518.0	3.9	-0.0038	0.002	58.2	ug/L	471	Standard
|	Sb	123	78.6	39.6	0.0108	0.003	31.9	ug/L	39	Standard
|	Ba	135	2837.3	1.8	0.6179	0.011	1.8	ug/L	25	Standard
|	Ce	140	98.7	6.2				ug/L	25	Standard
[>	Tb	159	1085983.9	1.0				ug/L	1071747	Standard
|	Ho	165	15.7	3.7				ug/L	13	Standard
|	Tl	203	26043.0	2.8	1.5621	0.022	1.4	ug/L	5	Standard
|	Tl	205	60655.6	3.2	1.5609	0.031	2.0	ug/L	10	Standard
|	Pb	206	375.7	2.0	-0.0029	0.001	18.8	ug/L	382	Standard
|	Pb	207	324.0	0.8	0.0016	0.000	25.2	ug/L	306	Standard
|	Pb	208	1431.0	3.6	-0.0008	0.001	153.8	ug/L	1443	Standard
	U	238	24.0	29.2	0.0013	0.000	32.3	ug/L	5	Standard
[>	Bi	209	561469.3	1.5				ug/L	561075	Standard

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Na	23	64483.7	3.9	4.0891	0.107	2.6	mg/L	288	Standard
Mg	24	945335.8	2.6	1.5512	0.031	2.0	mg/L	218	Standard
K	39	221.7	8.5	0.1061	0.025	23.2	mg/L	125	Standard
Ca	43	56.7	13.5	61.1363	10.538	17.2	mg/L	3	Standard
Fe	54	203.8	15.9	-0.0681	0.008	11.1	mg/L	550	Standard
Fe	57	7190.1	10.6	0.1210	0.015	12.8	mg/L	1772	Standard
Sc-1	45	302687.2	3.2				mg/L	330668	Standard
Cl	35	3.7	68.6				ug/L	5	Standard
Kr	83	35.3	9.3				ug/L	38	Standard
Br	81	705.0	16.6				ug/L	344	Standard
P	31	131.7	5.8				ug/L	312	Standard
S	34	46879.2	4.7				ug/L	5594	Standard
Sr	88	110.0	4.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.201	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063602 WG404095-01

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	Cd	111		
	Cd	114		
>	In	115	103.204	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	100.070	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063602 WG404095-01

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Method 6020 - Summary Report

Sample ID: L1207063602DP WG404095-05

Sample Date/Time: Sunday, July 29, 2012 12:36:52

Number of Replicates: 3

Autosampler Position: 424

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

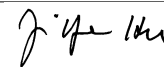
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	37407.8	2.2	6949.6584	314.003	4.5	ug/L	9465	Standard
|	Be	9	31.7	118.5	0.0011	0.026	2378.2	ug/L	10	Standard
|	Al	27	21058.0	4.5	1.1824	0.065	5.5	ug/L	7870	Standard
[>	Sc	45	279824.0	1.4				ug/L	330668	Standard
|	Ti	47	70.7	55.6	0.0307	0.041	133.5	ug/L	53	Standard
|	V	51	2357.8	4.0	0.0105	0.013	118.5	ug/L	2687	Standard
|	Cr	52	7364.1	2.0	0.0679	0.027	39.9	ug/L	8408	Standard
|	Cr	53	298.3	9.7	0.0785	0.026	33.3	ug/L	288	Standard
|	Mn	55	106896.2	2.4	9.7945	0.250	2.6	ug/L	1080	Standard
|	Co	59	526.0	4.6	0.0640	0.004	6.0	ug/L	117	Standard
|	Ni	60	1369.1	5.1	0.6876	0.038	5.5	ug/L	68	Standard
|	Cu	65	232.7	1.4	0.0638	0.002	3.5	ug/L	141	Standard
|	Zn	66	1123.7	9.9	1.1950	0.133	11.1	ug/L	138	Standard
[>	Ge	72	234175.5	0.4				ug/L	283230	Standard
|	As	75	137.0	10.1	0.3393	0.017	5.0	ug/L	-198	Standard
|	Se	82	40.4	18.6	0.2513	0.093	36.8	ug/L	21	Standard
[	Se-1	77	106.7	14.5	-0.0032	0.273	8526.8	ug/L	131	Standard
[>	Ga	71	485.0	11.7				mg/L	607	Standard
[	Rb	85	3928.8	4.1				ug/L	30	Standard
[	Y	89	205951.0	2.8				ug/L	251555	Standard
[>	Rh	103	306.7	10.0				ug/L	335	Standard
[	Mo	98	60.7	10.6	0.0109	0.002	17.8	ug/L	13	Standard
|	Ag	107	51.7	42.5	-0.0002	0.004	1694.3	ug/L	36	Standard
|	Cd	111	44.9	44.7	-0.0035	0.007	191.8	mg/L	49	Standard
|	Cd	114	140.7	23.7	-0.0050	0.004	75.1	ug/L	170	Standard
[>	In	115	690803.3	0.8				ug/L	727802	Standard
|	Sn	118	371.3	2.5	-0.0134	0.001	4.7	ug/L	471	Standard
|	Sb	123	84.3	17.2	0.0123	0.002	14.7	ug/L	39	Standard
[	Ba	135	2336.5	2.1	0.5521	0.015	2.7	ug/L	25	Standard
[	Ce	140	81.0	13.7				ug/L	25	Standard
[>	Tb	159	1006442.7	0.9				ug/L	1071747	Standard
[	Ho	165	16.3	9.4				ug/L	13	Standard
|	Tl	203	21782.7	2.9	1.3903	0.021	1.5	ug/L	5	Standard
|	Tl	205	50822.5	3.0	1.3918	0.027	2.0	ug/L	10	Standard
|	Pb	206	352.0	10.4	-0.0029	0.003	108.8	ug/L	382	Standard
|	Pb	207	294.0	4.4	0.0005	0.002	323.9	ug/L	306	Standard
|	Pb	208	1340.4	6.5	-0.0009	0.002	222.3	ug/L	1443	Standard
|	U	238	169.0	150.7	0.0116	0.018	153.9	ug/L	5	Standard
[>	Bi	209	527623.9	1.5				ug/L	561075	Standard

Sample ID: L1207063602DP WG404095-05

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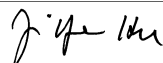
Na	23	57903.8	2.9	3.9702	0.069	1.7	mg/L	288	Standard
Mg	24	809054.3	1.6	1.4359	0.032	2.2	mg/L	218	Standard
K	39	208.3	11.1	0.1093	0.027	24.9	mg/L	125	Standard
Ca	43	46.7	40.6	53.9204	24.586	45.6	mg/L	3	Standard
Fe	54	204.4	24.0	-0.0634	0.014	22.8	mg/L	550	Standard
Fe	57	6398.0	2.8	0.1152	0.006	5.3	mg/L	1772	Standard
Sc-1	45	279824.0	1.4				mg/L	330668	Standard
Cl	35	5.0	52.9				ug/L	5	Standard
Kr	83	37.1	15.1				ug/L	38	Standard
Br	81	414.2	6.1				ug/L	344	Standard
P	31	133.3	10.8				ug/L	312	Standard
S	34	40920.2	1.5				ug/L	5594	Standard
Sr	88	100.0	5.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.680	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063602DP WG404095-05
 Report Date/Time: Sunday, July 29, 2012 12:39:22
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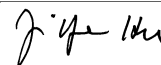
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	Cd	114	
>	In	115	94.916
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.038
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063602DP WG404095-05
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Method 6020 - Summary Report

Sample ID: L1207063602S WG404095-06

Sample Date/Time: Sunday, July 29, 2012 12:40:01

Number of Replicates: 3

Autosampler Position: 425

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	37123.8	4.6	6974.6252	484.338	6.9	ug/L	9465	Standard
|	Be	9	4067.2	6.7	2.9067	0.296	10.2	ug/L	10	Standard
|	Al	27	53079.5	0.5	3.9128	0.147	3.7	ug/L	7870	Standard
>	Sc	45	277016.4	3.5				ug/L	330668	Standard
[	Ti	47	60.0	14.5	0.0188	0.008	45.3	ug/L	53	Standard
|	V	51	22152.4	1.6	2.4186	0.019	0.8	ug/L	2687	Standard
|	Cr	52	23031.2	1.3	2.4725	0.051	2.1	ug/L	8408	Standard
|	Cr	53	3000.3	1.6	2.5424	0.044	1.7	ug/L	288	Standard
|	Mn	55	132057.7	0.7	11.9772	0.063	0.5	ug/L	1080	Standard
|	Co	59	19066.0	1.8	2.7502	0.081	3.0	ug/L	117	Standard
|	Ni	60	5924.8	5.0	3.0368	0.162	5.3	ug/L	68	Standard
|	Cu	65	4620.7	2.2	2.5165	0.072	2.9	ug/L	141	Standard
|	Zn	66	3646.8	1.2	4.1681	0.072	1.7	ug/L	138	Standard
>	Ge	72	236948.9	1.2				ug/L	283230	Standard
|	As	75	2433.5	2.7	3.0966	0.071	2.3	ug/L	-198	Standard
|	Se	82	303.1	4.7	3.4219	0.158	4.6	ug/L	21	Standard
[	Se-1	77	288.0	3.6	3.0872	0.176	5.7	ug/L	131	Standard
>	Ga	71	500.0	4.4				mg/L	607	Standard
[	Rb	85	3880.5	1.9				ug/L	30	Standard
[	Y	89	205379.5	1.7				ug/L	251555	Standard
>	Rh	103	313.3	6.4				ug/L	335	Standard
[	Mo	98	66.9	7.5	0.0128	0.002	13.2	ug/L	13	Standard
|	Ag	107	12739.4	1.0	2.1529	0.005	0.2	ug/L	36	Standard
|	Cd	111	9114.2	1.8	2.9959	0.028	0.9	mg/L	49	Standard
|	Cd	114	25442.1	0.9	2.7472	0.029	1.1	ug/L	170	Standard
>	In	115	687145.8	1.1				ug/L	727802	Standard
|	Sn	118	384.3	5.7	-0.0120	0.002	18.5	ug/L	471	Standard
|	Sb	123	19627.2	1.2	2.4607	0.011	0.4	ug/L	39	Standard
[	Ba	135	12108.8	1.3	2.9249	0.052	1.8	ug/L	25	Standard
[	Ce	140	154.0	4.5				ug/L	25	Standard
>	Tb	159	1006426.9	0.8				ug/L	1071747	Standard
[	Ho	165	17.3	16.7				ug/L	13	Standard
|	Tl	203	59202.1	0.1	3.7409	0.004	0.1	ug/L	5	Standard
|	Tl	205	138841.2	0.4	3.7626	0.012	0.3	ug/L	10	Standard
|	Pb	206	30254.2	0.5	2.4469	0.014	0.6	ug/L	382	Standard
|	Pb	207	25467.4	0.4	2.4704	0.008	0.3	ug/L	306	Standard
|	Pb	208	118430.4	0.2	2.4436	0.008	0.3	ug/L	1443	Standard
	U	238	35436.7	1.1	2.4492	0.024	1.0	ug/L	5	Standard
>	Bi	209	533249.8	0.1				ug/L	561075	Standard

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Na	23	56453.3	1.9	3.9115	0.075	1.9	mg/L	288	Standard
Mg	24	794190.7	1.0	1.4247	0.049	3.5	mg/L	218	Standard
K	39	203.3	20.9	0.1057	0.043	40.6	mg/L	125	Standard
Ca	43	51.7	55.9	60.8318	37.232	61.2	mg/L	3	Standard
Fe	54	192.6	8.2	-0.0663	0.003	5.2	mg/L	550	Standard
Fe	57	5882.8	3.2	0.1047	0.008	8.0	mg/L	1772	Standard
Sc-1	45	277016.4	3.5				mg/L	330668	Standard
Cl	35	6.3	71.2				ug/L	5	Standard
Kr	83	36.7	6.9				ug/L	38	Standard
Br	81	361.7	10.1				ug/L	344	Standard
P	31	149.2	1.9				ug/L	312	Standard
S	34	39231.6	1.4				ug/L	5594	Standard
Sr	88	106.7	28.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.660	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063602S WG404095-06

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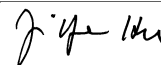
	Cd	111	
	Cd	114	
>	In	115	94.414
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.041
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207063601

Sample Date/Time: Sunday, July 29, 2012 12:43:12

Number of Replicates: 3

Autosampler Position: 426

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	38970.1	4.8	7388.1939	305.074	4.1	ug/L	9465	Standard
|	Be	9	11.7	65.5	-0.0128	0.006	43.5	ug/L	10	Standard
|	Al	27	26337.9	3.5	1.6437	0.048	2.9	ug/L	7870	Standard
[>	Sc	45	277389.9	1.5				ug/L	330668	Standard
|	Ti	47	59.3	7.0	0.0183	0.004	20.9	ug/L	53	Standard
|	V	51	2340.3	1.9	0.0060	0.004	67.8	ug/L	2687	Standard
|	Cr	52	7342.8	2.0	0.0552	0.013	23.3	ug/L	8408	Standard
|	Cr	53	273.3	6.7	0.0533	0.016	30.3	ug/L	288	Standard
|	Mn	55	108727.5	1.8	9.8819	0.087	0.9	ug/L	1080	Standard
|	Co	59	556.7	4.6	0.0678	0.003	4.4	ug/L	117	Standard
|	Ni	60	1413.7	6.6	0.7047	0.042	5.9	ug/L	68	Standard
|	Cu	65	223.7	3.6	0.0577	0.005	8.3	ug/L	141	Standard
|	Zn	66	1081.7	3.9	1.1340	0.040	3.5	ug/L	138	Standard
[>	Ge	72	236082.8	0.9				ug/L	283230	Standard
|	As	75	139.2	14.4	0.3405	0.023	6.9	ug/L	-198	Standard
|	Se	82	41.9	18.1	0.2647	0.089	33.8	ug/L	21	Standard
[	Se-1	77	111.7	14.4	0.0660	0.260	393.6	ug/L	131	Standard
[>	Ga	71	520.0	8.8				mg/L	607	Standard
|	Rb	85	4098.9	0.4				ug/L	30	Standard
|	Y	89	206378.7	3.3				ug/L	251555	Standard
[>	Rh	103	288.3	32.2				ug/L	335	Standard
|	Mo	98	58.0	2.5	0.0104	0.001	6.1	ug/L	13	Standard
|	Ag	107	52.0	1.9	-0.0000	0.000	440.7	ug/L	36	Standard
|	Cd	111	43.5	3.5	-0.0037	0.000	13.0	mg/L	49	Standard
|	Cd	114	117.2	0.7	-0.0073	0.000	3.5	ug/L	170	Standard
[>	In	115	679309.0	1.4				ug/L	727802	Standard
|	Sn	118	392.0	5.2	-0.0109	0.001	12.7	ug/L	471	Standard
|	Sb	123	551.3	13.2	0.0716	0.009	12.2	ug/L	39	Standard
|	Ba	135	2465.5	4.9	0.5932	0.028	4.7	ug/L	25	Standard
|	Ce	140	152.7	9.5				ug/L	25	Standard
[>	Tb	159	999007.9	1.3				ug/L	1071747	Standard
|	Ho	165	12.7	16.4				ug/L	13	Standard
|	Tl	203	22321.4	3.3	1.4253	0.035	2.4	ug/L	5	Standard
|	Tl	205	51662.0	2.8	1.4154	0.027	1.9	ug/L	10	Standard
|	Pb	206	363.3	6.5	-0.0020	0.002	84.3	ug/L	382	Standard
|	Pb	207	319.7	2.1	0.0031	0.001	23.2	ug/L	306	Standard
|	Pb	208	1432.7	1.5	0.0010	0.000	26.9	ug/L	1443	Standard
	U	238	35.3	24.1	0.0022	0.001	27.1	ug/L	5	Standard
[>	Bi	209	527399.0	0.9				ug/L	561075	Standard

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Na	23	58496.2	4.1	4.0489	0.214	5.3	mg/L	288	Standard
Mg	24	844703.4	2.9	1.5119	0.022	1.5	mg/L	218	Standard
K	39	206.7	21.8	0.1091	0.047	43.1	mg/L	125	Standard
Ca	43	41.7	36.7	48.0144	20.012	41.7	mg/L	3	Standard
Fe	54	191.6	30.0	-0.0667	0.016	24.4	mg/L	550	Standard
Fe	57	6217.9	4.7	0.1122	0.005	4.5	mg/L	1772	Standard
Sc-1	45	277389.9	1.5				mg/L	330668	Standard
Cl	35	5.0	20.0				ug/L	5	Standard
Kr	83	33.0	13.4				ug/L	38	Standard
Br	81	340.8	6.7				ug/L	344	Standard
P	31	142.5	6.3				ug/L	312	Standard
S	34	42016.5	2.9				ug/L	5594	Standard
Sr	88	136.7	23.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.354	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207063601

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	Cd	111	
	Cd	114	
>	In	115	93.337
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.998
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207063601

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 12:46:24

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8702.5	2.2	-17.2843	8.603	49.8	ug/L	9465	Standard
|	Be	9	83162.6	0.8	51.3433	1.173	2.3	ug/L	10	Standard
|	Al	27	631096.7	2.4	45.3306	1.439	3.2	ug/L	7870	Standard
[>	Sc	45	322205.6	1.8				ug/L	330668	Standard
|	Ti	47	108429.3	0.7	98.3548	1.705	1.7	ug/L	53	Standard
|	V	51	454703.3	0.3	48.4474	0.517	1.1	ug/L	2687	Standard
|	Cr	52	363990.6	0.1	48.3304	0.537	1.1	ug/L	8408	Standard
|	Cr	53	60711.4	1.5	48.5631	0.957	2.0	ug/L	288	Standard
|	Mn	55	655588.8	0.5	52.5817	0.350	0.7	ug/L	1080	Standard
|	Co	59	407435.9	0.5	51.9186	0.799	1.5	ug/L	117	Standard
|	Ni	60	104726.0	0.1	47.6340	0.475	1.0	ug/L	68	Standard
|	Cu	65	98582.3	0.6	48.4247	0.742	1.5	ug/L	141	Standard
|	Zn	66	47170.3	0.2	48.9927	0.460	0.9	ug/L	138	Standard
[>	Ge	72	269398.1	1.1				ug/L	283230	Standard
|	As	75	47548.1	0.6	50.4273	0.814	1.6	ug/L	-198	Standard
|	Se	82	4846.9	1.9	51.3141	1.418	2.8	ug/L	21	Standard
[	Se-1	77	3457.7	3.6	50.3346	1.354	2.7	ug/L	131	Standard
[>	Ga	71	586.7	17.6				mg/L	607	Standard
|	Rb	85	730.0	9.4				ug/L	30	Standard
|	Y	89	238633.1	1.3				ug/L	251555	Standard
[>	Rh	103	356.7	11.3				ug/L	335	Standard
|	Mo	98	334887.6	0.5	88.9258	1.507	1.7	ug/L	13	Standard
|	Ag	107	308535.0	1.2	46.5630	1.250	2.7	ug/L	36	Standard
|	Cd	111	181996.1	0.7	53.5121	0.716	1.3	mg/L	49	Standard
|	Cd	114	518333.7	1.0	50.1179	0.622	1.2	ug/L	170	Standard
[>	In	115	772744.2	1.6				ug/L	727802	Standard
|	Sn	118	603596.5	1.0	49.3980	0.348	0.7	ug/L	471	Standard
|	Sb	123	456520.2	0.2	50.8666	0.706	1.4	ug/L	39	Standard
|	Ba	135	227950.3	0.5	49.1452	0.623	1.3	ug/L	25	Standard
|	Ce	140	859.4	4.0				ug/L	25	Standard
[>	Tb	159	1107406.9	0.8				ug/L	1071747	Standard
|	Ho	165	18.0	41.9				ug/L	13	Standard
|	Tl	203	813784.9	0.7	48.0501	0.175	0.4	ug/L	5	Standard
|	Tl	205	1873372.9	0.5	47.4262	0.102	0.2	ug/L	10	Standard
|	Pb	206	631300.5	0.3	48.2915	0.034	0.1	ug/L	382	Standard
|	Pb	207	535728.7	0.3	49.0817	0.193	0.4	ug/L	306	Standard
|	Pb	208	2472369.1	0.2	48.1952	0.118	0.2	ug/L	1443	Standard
	U	238	778726.0	0.8	50.2836	0.224	0.4	ug/L	5	Standard
[>	Bi	209	570820.9	0.3				ug/L	561075	Standard

Sample ID: QC Std 6

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Na	23	112801.7	0.5	6.7441	0.116	1.7	mg/L	288	Standard
Mg	24	3134656.3	2.5	4.8307	0.114	2.4	mg/L	218	Standard
K	39	5102.5	1.8	4.5287	0.150	3.3	mg/L	125	Standard
Ca	43	13.3	21.7	9.3034	3.199	34.4	mg/L	3	Standard
Fe	54	19855.7	1.5	4.7434	0.094	2.0	mg/L	550	Standard
Fe	57	260651.9	2.2	5.2725	0.162	3.1	mg/L	1772	Standard
Sc-1	45	322205.6	1.8				mg/L	330668	Standard
Cl	35	5.0	0.0				ug/L	5	Standard
Kr	83	38.1	3.3				ug/L	38	Standard
Br	81	414.2	9.6				ug/L	344	Standard
P	31	365.8	8.9				ug/L	312	Standard
S	34	6176.3	3.2				ug/L	5594	Standard
Sr	88	35.0	42.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	90.661		
Sc	45			
Ti	47	98.355		
V	51	96.895		
Cr	52	96.661		
Cr	53			
Mn	55	105.163		
Co	59	103.837		
Ni	60	95.268		
Cu	65	96.849		
Zn	66	97.985		
Ge	72		95.116	
As	75	100.855		
Se	82	102.628		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	88.926		
Ag	107	93.126		

Sample ID: QC Std 6

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	Cd	111	107.024	
	Cd	114		
>	In	115		106.175
	Sn	118	98.796	
	Sb	123	101.733	
	Ba	135	98.290	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.100	
|	Tl	205		
|	Pb	206	96.583	
|	Pb	207	98.163	
|	Pb	208	96.390	
|	U	238	100.567	
>	Bi	209		101.737
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
|	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 12:49:35

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8470.7	3.4	-55.2235	33.580	60.8	ug/L	9465	Standard
|	Be	9	15.0	66.7	-0.0120	0.006	51.1	ug/L	10	Standard
|	Al	27	7181.7	2.0	-0.0557	0.014	24.5	ug/L	7870	Standard
[>	Sc	45	320503.8	2.2				ug/L	330668	Standard
|	Ti	47	50.0	5.3	0.0028	0.003	107.9	ug/L	53	Standard
|	V	51	2154.3	1.2	-0.0465	0.007	14.9	ug/L	2687	Standard
|	Cr	52	6801.2	0.3	-0.1478	0.022	14.7	ug/L	8408	Standard
|	Cr	53	216.7	13.8	-0.0212	0.023	106.6	ug/L	288	Standard
|	Mn	55	1047.4	2.7	0.0009	0.001	157.6	ug/L	1080	Standard
|	Co	59	115.7	7.0	0.0018	0.001	43.6	ug/L	117	Standard
|	Ni	60	66.3	13.7	0.0013	0.004	325.9	ug/L	68	Standard
|	Cu	65	148.0	11.3	0.0059	0.009	154.3	ug/L	141	Standard
|	Zn	66	154.7	4.9	0.0114	0.010	85.6	ug/L	138	Standard
[>	Ge	72	266310.9	2.4				ug/L	283230	Standard
|	As	75	-175.2	13.5	-0.0148	0.027	185.1	ug/L	-198	Standard
|	Se	82	25.9	5.8	0.0360	0.015	41.0	ug/L	21	Standard
[	Se-1	77	110.3	1.9	-0.1703	0.063	37.0	ug/L	131	Standard
[>	Ga	71	613.3	10.3				mg/L	607	Standard
|	Rb	85	16.7	45.8				ug/L	30	Standard
|	Y	89	241086.6	1.7				ug/L	251555	Standard
[>	Rh	103	278.3	17.7				ug/L	335	Standard
|	Mo	98	179.2	7.9	0.0409	0.003	8.5	ug/L	13	Standard
|	Ag	107	81.3	11.7	0.0034	0.002	44.9	ug/L	36	Standard
|	Cd	111	67.9	15.8	0.0019	0.003	171.8	mg/L	49	Standard
|	Cd	114	209.1	7.9	0.0002	0.002	700.0	ug/L	170	Standard
[>	In	115	765050.4	0.8				ug/L	727802	Standard
|	Sn	118	853.0	7.2	0.0232	0.006	23.8	ug/L	471	Standard
|	Sb	123	2387.5	8.0	0.2705	0.022	8.3	ug/L	39	Standard
|	Ba	135	39.0	11.8	-0.0030	0.001	35.5	ug/L	25	Standard
|	Ce	140	23.7	14.8				ug/L	25	Standard
[>	Tb	159	1087882.9	1.1				ug/L	1071747	Standard
|	Ho	165	13.3	11.5				ug/L	13	Standard
|	Tl	203	70.3	15.9	0.0031	0.001	19.9	ug/L	5	Standard
|	Tl	205	141.0	19.3	0.0036	0.001	17.8	ug/L	10	Standard
|	Pb	206	395.7	8.1	-0.0019	0.002	99.9	ug/L	382	Standard
|	Pb	207	352.7	2.8	0.0036	0.002	45.4	ug/L	306	Standard
|	Pb	208	1591.7	3.1	0.0018	0.001	28.7	ug/L	1443	Standard
	U	238	86.0	9.2	0.0053	0.001	10.9	ug/L	5	Standard
[>	Bi	209	572118.9	2.3				ug/L	561075	Standard

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Na	23	291.7	10.5	-0.0186	0.002	8.1	mg/L	288	Standard
Mg	24	443.3	9.6	0.0010	0.000	7.0	mg/L	218	Standard
K	39	128.3	20.0	0.0084	0.023	277.6	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	529.9	8.1	0.0093	0.008	91.4	mg/L	550	Standard
Fe	57	1836.8	4.2	0.0028	0.001	38.8	mg/L	1772	Standard
Sc-1	45	320503.8	2.2				mg/L	330668	Standard
Cl	35	4.7	24.7				ug/L	5	Standard
Kr	83	30.1	13.1				ug/L	38	Standard
Br	81	373.3	5.0				ug/L	344	Standard
P	31	368.3	11.7				ug/L	312	Standard
S	34	5865.3	3.1				ug/L	5594	Standard
Sr	88	46.7	16.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.026	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	105.118
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.968
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 12:52:05

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Method 6020 - Summary Report

Sample ID: PBW 59 WG403906-02

Sample Date/Time: Sunday, July 29, 2012 13:08:20

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8594.1	5.4	-25.3762	98.955	390.0	ug/L	9465	Standard
|	Be	9	11.7	49.5	-0.0140	0.004	25.6	ug/L	10	Standard
|	Al	27	7281.8	4.2	-0.0471	0.023	48.8	ug/L	7870	Standard
[>	Sc	45	319701.0	0.3				ug/L	330668	Standard
[	Ti	47	53.7	7.5	0.0052	0.004	76.2	ug/L	53	Standard
|	V	51	2350.5	3.9	-0.0305	0.012	39.2	ug/L	2687	Standard
|	Cr	52	7305.8	0.9	-0.0993	0.022	22.3	ug/L	8408	Standard
|	Cr	53	222.5	5.1	-0.0200	0.010	47.8	ug/L	288	Standard
|	Mn	55	1000.7	3.4	-0.0046	0.002	44.7	ug/L	1080	Standard
|	Co	59	98.0	13.3	-0.0007	0.002	222.2	ug/L	117	Standard
|	Ni	60	129.7	3.9	0.0292	0.001	5.1	ug/L	68	Standard
|	Cu	65	136.3	5.0	-0.0014	0.004	256.6	ug/L	141	Standard
|	Zn	66	715.7	3.4	0.5872	0.030	5.1	ug/L	138	Standard
[>	Ge	72	271883.0	1.4				ug/L	283230	Standard
|	As	75	-175.2	5.0	-0.0108	0.011	106.5	ug/L	-198	Standard
|	Se	82	22.2	16.0	-0.0096	0.034	351.3	ug/L	21	Standard
[	Se-1	77	124.3	5.8	0.0049	0.133	2714.5	ug/L	131	Standard
[>	Ga	71	580.0	10.5				mg/L	607	Standard
[	Rb	85	23.3	32.7				ug/L	30	Standard
[	Y	89	240910.3	1.1				ug/L	251555	Standard
[>	Rh	103	345.0	5.2				ug/L	335	Standard
[	Mo	98	31.0	30.4	0.0013	0.003	201.4	ug/L	13	Standard
|	Ag	107	45.7	17.0	-0.0019	0.001	63.8	ug/L	36	Standard
|	Cd	111	62.3	2.4	0.0005	0.000	94.7	mg/L	49	Standard
|	Cd	114	181.6	9.7	-0.0022	0.002	80.2	ug/L	170	Standard
[>	In	115	754257.2	0.2				ug/L	727802	Standard
|	Sn	118	600.0	13.3	0.0029	0.007	227.2	ug/L	471	Standard
|	Sb	123	278.0	33.1	0.0335	0.010	31.2	ug/L	39	Standard
[	Ba	135	34.7	16.4	-0.0038	0.001	32.9	ug/L	25	Standard
[	Ce	140	28.0	12.9				ug/L	25	Standard
[>	Tb	159	1086398.4	0.5				ug/L	1071747	Standard
[	Ho	165	14.7	21.9				ug/L	13	Standard
|	Tl	203	8.3	48.5	-0.0006	0.000	42.2	ug/L	5	Standard
|	Tl	205	17.7	36.4	0.0005	0.000	34.4	ug/L	10	Standard
|	Pb	206	384.0	3.0	-0.0028	0.001	30.3	ug/L	382	Standard
|	Pb	207	299.0	3.0	-0.0013	0.001	63.3	ug/L	306	Standard
|	Pb	208	1460.0	4.8	-0.0008	0.001	171.4	ug/L	1443	Standard
	U	238	5.3	57.3	0.0001	0.000	171.2	ug/L	5	Standard
[>	Bi	209	572049.9	0.2				ug/L	561075	Standard

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Na	23	276.7	15.6	-0.0195	0.003	13.5	mg/L	288	Standard
Mg	24	216.7	16.4	0.0006	0.000	8.8	mg/L	218	Standard
K	39	143.3	11.2	0.0224	0.015	65.9	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5149	3.195	90.9	mg/L	3	Standard
Fe	54	482.8	5.6	-0.0019	0.006	331.1	mg/L	550	Standard
Fe	57	1920.1	3.6	0.0046	0.001	29.2	mg/L	1772	Standard
Sc-1	45	319701.0	0.3				mg/L	330668	Standard
Cl	35	5.3	43.3				ug/L	5	Standard
Kr	83	36.6	2.3				ug/L	38	Standard
Br	81	410.8	7.6				ug/L	344	Standard
P	31	334.2	12.9				ug/L	312	Standard
S	34	5856.1	1.8				ug/L	5594	Standard
Sr	88	58.3	4.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.994	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 59 WG403906-02

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	Cd	111	
	Cd	114	
>	In	115	103.635
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.956
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 59 WG403906-02

Report Date/Time: Sunday, July 29, 2012 13:10:51

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Method 6020 - Summary Report

Sample ID: LCSW 59 WG403906-03

Sample Date/Time: Sunday, July 29, 2012 13:11:31

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9391.2	5.3	7.7866	113.916	1463.0	ug/L	9465	Standard
|	Be	9	44079.0	2.4	25.5488	0.717	2.8	ug/L	10	Standard
|	Al	27	432449.0	1.7	28.9668	0.627	2.2	ug/L	7870	Standard
[>	Sc	45	343009.5	1.1				ug/L	330668	Standard
|	Ti	47	79.3	2.9	0.0220	0.001	5.0	ug/L	53	Standard
|	V	51	251204.3	1.0	24.0634	0.151	0.6	ug/L	2687	Standard
|	Cr	52	209395.7	0.6	24.6249	0.329	1.3	ug/L	8408	Standard
|	Cr	53	35435.6	0.1	25.5418	0.443	1.7	ug/L	288	Standard
|	Mn	55	365506.1	0.5	26.4729	0.537	2.0	ug/L	1080	Standard
|	Co	59	225298.8	0.8	25.9558	0.343	1.3	ug/L	117	Standard
|	Ni	60	60739.9	1.5	24.9683	0.153	0.6	ug/L	68	Standard
|	Cu	65	57675.6	0.9	25.5874	0.238	0.9	ug/L	141	Standard
|	Zn	66	29131.0	1.2	27.2937	0.150	0.6	ug/L	138	Standard
[>	Ge	72	297907.0	1.6				ug/L	283230	Standard
|	As	75	25632.7	1.0	24.6707	0.147	0.6	ug/L	-198	Standard
|	Se	82	2506.0	3.2	23.8550	0.430	1.8	ug/L	21	Standard
[	Se-1	77	1847.1	0.4	23.3635	0.321	1.4	ug/L	131	Standard
[>	Ga	71	678.3	3.3				mg/L	607	Standard
|	Rb	85	40.0	43.3				ug/L	30	Standard
|	Y	89	257435.6	1.5				ug/L	251555	Standard
[>	Rh	103	355.0	29.3				ug/L	335	Standard
|	Mo	98	64.2	14.4	0.0090	0.002	24.0	ug/L	13	Standard
|	Ag	107	161871.5	1.3	23.1717	0.249	1.1	ug/L	36	Standard
|	Cd	111	95862.8	0.7	26.7364	0.185	0.7	mg/L	49	Standard
|	Cd	114	273370.1	0.4	25.0721	0.234	0.9	ug/L	170	Standard
[>	In	115	814309.1	1.1				ug/L	727802	Standard
|	Sn	118	1292.4	5.4	0.0530	0.006	10.7	ug/L	471	Standard
|	Sb	123	238951.0	0.7	25.2661	0.449	1.8	ug/L	39	Standard
|	Ba	135	118151.2	0.3	24.1662	0.327	1.4	ug/L	25	Standard
|	Ce	140	297.0	4.0				ug/L	25	Standard
[>	Tb	159	1153628.1	0.4				ug/L	1071747	Standard
|	Ho	165	16.7	15.1				ug/L	13	Standard
|	Tl	203	443870.5	0.1	25.0751	0.129	0.5	ug/L	5	Standard
|	Tl	205	1031877.2	0.7	24.9939	0.227	0.9	ug/L	10	Standard
|	Pb	206	347362.4	0.5	25.4073	0.047	0.2	ug/L	382	Standard
|	Pb	207	294669.5	0.6	25.8163	0.276	1.1	ug/L	306	Standard
|	Pb	208	1367244.1	0.4	25.4864	0.185	0.7	ug/L	1443	Standard
	U	238	407868.3	0.7	25.1982	0.206	0.8	ug/L	5	Standard
[>	Bi	209	596624.5	0.6				ug/L	561075	Standard

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Na	23	713.4	7.7	0.0041	0.003	77.0	mg/L	288	Standard
Mg	24	1691.8	5.3	0.0027	0.000	4.1	mg/L	218	Standard
K	39	163.3	4.7	0.0306	0.008	26.3	mg/L	125	Standard
Ca	43	8.3	34.6	3.2655	3.047	93.3	mg/L	3	Standard
Fe	54	734.2	12.9	0.0477	0.021	43.2	mg/L	550	Standard
Fe	57	2068.5	5.1	0.0048	0.002	51.4	mg/L	1772	Standard
Sc-1	45	343009.5	1.1				mg/L	330668	Standard
Cl	35	6.0	16.7				ug/L	5	Standard
Kr	83	40.9	4.1				ug/L	38	Standard
Br	81	425.0	2.1				ug/L	344	Standard
P	31	479.2	5.4				ug/L	312	Standard
S	34	6038.7	1.5				ug/L	5594	Standard
Sr	88	55.0	18.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.182	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 59 WG403906-03

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	Cd	111	
	Cd	114	
>	In	115	111.886
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	106.336
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 59 WG403906-03

Report Date/Time: Sunday, July 29, 2012 13:14:02

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Method 6020 - Summary Report

Sample ID: L1207049112 WG403906-01

Sample Date/Time: Sunday, July 29, 2012 13:14:42

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	37199.0	2.6	5108.7990	48.596	1.0	ug/L	9465	Standard
|	Be	9	45.0	29.4	0.0042	0.007	175.1	ug/L	10	Standard
|	Al	27	65742.4	2.7	3.7896	0.018	0.5	ug/L	7870	Standard
[>	Sc	45	352487.9	2.4				ug/L	330668	Standard
|	Ti	47	1979.5	0.2	1.8408	0.050	2.7	ug/L	53	Standard
|	V	51	30063.8	2.4	3.0975	0.035	1.1	ug/L	2687	Standard
|	Cr	52	17120.0	4.5	1.3544	0.094	6.9	ug/L	8408	Standard
|	Cr	53	739.2	8.5	0.4253	0.053	12.4	ug/L	288	Standard
|	Mn	55	718111.2	2.5	60.4020	1.184	2.0	ug/L	1080	Standard
|	Co	59	22184.9	3.0	2.9514	0.068	2.3	ug/L	117	Standard
|	Ni	60	15336.1	2.4	7.2882	0.058	0.8	ug/L	68	Standard
|	Cu	65	1419.1	6.9	0.6634	0.032	4.9	ug/L	141	Standard
|	Zn	66	2734.2	3.5	2.8342	0.030	1.1	ug/L	138	Standard
[>	Ge	72	256956.8	2.5				ug/L	283230	Standard
|	As	75	825.5	3.5	1.0872	0.016	1.5	ug/L	-198	Standard
|	Se	82	110.2	9.3	0.9856	0.109	11.0	ug/L	21	Standard
[	Se-1	77	142.7	6.3	0.4028	0.151	37.5	ug/L	131	Standard
[>	Ga	71	1001.7	11.3				mg/L	607	Standard
|	Rb	85	16689.2	0.9				ug/L	30	Standard
|	Y	89	233818.9	1.5				ug/L	251555	Standard
[>	Rh	103	521.7	7.7				ug/L	335	Standard
|	Mo	98	17417.5	1.9	4.8136	0.077	1.6	ug/L	13	Standard
|	Ag	107	110.7	33.2	0.0083	0.005	62.0	ug/L	36	Standard
|	Cd	111	84.9	24.7	0.0076	0.006	74.8	mg/L	49	Standard
|	Cd	114	342.2	13.0	0.0142	0.003	23.1	ug/L	170	Standard
[>	In	115	741585.2	3.5				ug/L	727802	Standard
|	Sn	118	701.0	3.5	0.0124	0.000	3.4	ug/L	471	Standard
|	Sb	123	2988.5	8.6	0.3483	0.018	5.1	ug/L	39	Standard
|	Ba	135	151471.9	1.9	34.0338	0.559	1.6	ug/L	25	Standard
|	Ce	140	422.7	7.6				ug/L	25	Standard
[>	Tb	159	1094038.0	2.3				ug/L	1071747	Standard
|	Ho	165	26.0	19.2				ug/L	13	Standard
|	Tl	203	305.3	11.2	0.0192	0.002	9.9	ug/L	5	Standard
|	Tl	205	695.3	14.8	0.0198	0.003	14.0	ug/L	10	Standard
|	Pb	206	510.3	12.3	0.0118	0.004	37.3	ug/L	382	Standard
|	Pb	207	426.0	10.1	0.0152	0.004	26.4	ug/L	306	Standard
|	Pb	208	1968.4	9.8	0.0139	0.003	24.8	ug/L	1443	Standard
	U	238	36710.8	3.3	2.6648	0.015	0.6	ug/L	5	Standard
[>	Bi	209	507686.0	2.8				ug/L	561075	Standard

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Na	23	123921.4	0.4	6.7742	0.185	2.7	mg/L	288	Standard
Mg	24	28033022.5	0.8	39.4979	0.943	2.4	mg/L	218	Standard
K	39	1861.8	5.5	1.4377	0.087	6.1	mg/L	125	Standard
Ca	43	361.7	7.6	358.6056	35.164	9.8	mg/L	3	Standard
Fe	54	617.1	3.3	0.0171	0.006	37.1	mg/L	550	Standard
Fe	57	31324.0	2.0	0.5482	0.008	1.5	mg/L	1772	Standard
Sc-1	45	352487.9	2.4				mg/L	330668	Standard
Cl	35	17.3	31.8				ug/L	5	Standard
Kr	83	48.6	3.5				ug/L	38	Standard
Br	81	1196.7	13.5				ug/L	344	Standard
P	31	6351.3	0.6				ug/L	312	Standard
S	34	273348.9	1.0				ug/L	5594	Standard
Sr	88	1115.0	9.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.724	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049112 WG403906-01
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	Cd	111	
	Cd	114	
>	In	115	101.894
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.484
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049112 WG403906-01

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Method 6020 - Summary Report

Sample ID: L1207049112S WG403906-04

Sample Date/Time: Sunday, July 29, 2012 13:17:51

Number of Replicates: 3

Autosampler Position: 304

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

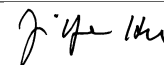
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	38791.3	1.5	5323.2233	240.768	4.5	ug/L	9465	Standard
|	Be	9	42564.7	2.3	23.7258	0.487	2.1	ug/L	10	Standard
|	Al	27	375618.9	2.3	24.1092	0.883	3.7	ug/L	7870	Standard
[>	Sc	45	356676.1	2.6				ug/L	330668	Standard
[	Ti	47	1983.8	2.4	1.8112	0.039	2.1	ug/L	53	Standard
|	V	51	257817.9	1.2	28.1804	0.391	1.4	ug/L	2687	Standard
|	Cr	52	192664.7	2.5	25.8595	0.665	2.6	ug/L	8408	Standard
|	Cr	53	31040.9	2.2	25.4845	0.656	2.6	ug/L	288	Standard
|	Mn	55	1080668.1	0.8	89.3448	0.736	0.8	ug/L	1080	Standard
|	Co	59	231928.8	1.1	30.4367	0.299	1.0	ug/L	117	Standard
|	Ni	60	66680.8	1.4	31.2319	0.428	1.4	ug/L	68	Standard
|	Cu	65	48320.9	1.3	24.4154	0.290	1.2	ug/L	141	Standard
|	Zn	66	26547.6	0.8	28.3399	0.317	1.1	ug/L	138	Standard
[>	Ge	72	261510.2	0.4				ug/L	283230	Standard
|	As	75	27003.1	1.6	29.5699	0.409	1.4	ug/L	-198	Standard
|	Se	82	2824.7	1.4	30.7052	0.424	1.4	ug/L	21	Standard
[	Se-1	77	2020.1	2.3	29.5594	0.651	2.2	ug/L	131	Standard
[>	Ga	71	1183.4	9.5				mg/L	607	Standard
[	Rb	85	17390.0	5.6				ug/L	30	Standard
[	Y	89	239200.2	1.0				ug/L	251555	Standard
[>	Rh	103	556.7	8.3				ug/L	335	Standard
[	Mo	98	18184.6	2.0	4.9809	0.124	2.5	ug/L	13	Standard
|	Ag	107	148493.8	0.4	23.1399	0.230	1.0	ug/L	36	Standard
|	Cd	111	96846.2	1.1	29.4048	0.402	1.4	mg/L	49	Standard
|	Cd	114	261343.5	0.8	26.0911	0.054	0.2	ug/L	170	Standard
[>	In	115	748050.0	0.6				ug/L	727802	Standard
|	Sn	118	728.7	3.1	0.0142	0.002	14.9	ug/L	471	Standard
|	Sb	123	239715.6	0.4	27.5887	0.130	0.5	ug/L	39	Standard
[	Ba	135	262699.2	0.9	58.5017	0.446	0.8	ug/L	25	Standard
[	Ce	140	480.3	10.3				ug/L	25	Standard
[>	Tb	159	1096339.0	0.7				ug/L	1071747	Standard
[	Ho	165	25.3	26.3				ug/L	13	Standard
|	Tl	203	398966.9	0.4	26.3571	0.166	0.6	ug/L	5	Standard
|	Tl	205	923306.8	1.4	26.1544	0.501	1.9	ug/L	10	Standard
|	Pb	206	305009.2	1.5	26.0918	0.523	2.0	ug/L	382	Standard
|	Pb	207	258679.6	1.6	26.5051	0.598	2.3	ug/L	306	Standard
|	Pb	208	1197570.0	1.1	26.1073	0.417	1.6	ug/L	1443	Standard
	U	238	444210.6	0.9	32.0947	0.508	1.6	ug/L	5	Standard
[>	Bi	209	510188.0	0.7				ug/L	561075	Standard

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Na	23	126373.4	2.5	6.8303	0.341	5.0	mg/L	288	Standard
Mg	24	28525047.7	3.2	39.7086	0.998	2.5	mg/L	218	Standard
K	39	1823.4	5.7	1.3898	0.121	8.7	mg/L	125	Standard
Ca	43	360.0	4.8	352.0384	8.817	2.5	mg/L	3	Standard
Fe	54	650.8	14.5	0.0230	0.022	94.3	mg/L	550	Standard
Fe	57	33777.6	4.0	0.5863	0.018	3.1	mg/L	1772	Standard
Sc-1	45	356676.1	2.6				mg/L	330668	Standard
Cl	35	19.0	13.9				ug/L	5	Standard
Kr	83	48.1	9.5				ug/L	38	Standard
Br	81	1305.1	6.7				ug/L	344	Standard
P	31	6422.2	3.0				ug/L	312	Standard
S	34	279632.2	1.5				ug/L	5594	Standard
Sr	88	1313.4	6.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.331	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049112S WG403906-04

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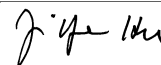
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	Ba	135	
	Ce	140	
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	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.930
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049112S WG403906-04
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Method 6020 - Summary Report

Sample ID: L1207049112SD WG403906-05

Sample Date/Time: Sunday, July 29, 2012 13:21:01

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

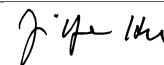
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	36985.1	0.1	5141.5215	156.043	3.0	ug/L	9465	Standard
|	Be	9	40352.0	2.1	22.9906	0.455	2.0	ug/L	10	Standard
|	Al	27	362753.2	1.3	23.7858	0.297	1.2	ug/L	7870	Standard
[>	Sc	45	348933.5	2.3				ug/L	330668	Standard
|	Ti	47	1926.1	1.0	1.8046	0.045	2.5	ug/L	53	Standard
|	V	51	252796.0	1.5	28.3520	0.317	1.1	ug/L	2687	Standard
|	Cr	52	189355.6	0.8	26.0880	0.361	1.4	ug/L	8408	Standard
|	Cr	53	30710.3	1.1	25.8715	0.232	0.9	ug/L	288	Standard
|	Mn	55	1062980.6	1.3	90.1748	1.261	1.4	ug/L	1080	Standard
|	Co	59	226806.6	0.5	30.5430	0.479	1.6	ug/L	117	Standard
|	Ni	60	65456.4	1.5	31.4575	0.404	1.3	ug/L	68	Standard
|	Cu	65	47401.4	1.4	24.5760	0.360	1.5	ug/L	141	Standard
|	Zn	66	25841.7	1.9	28.3016	0.085	0.3	ug/L	138	Standard
[>	Ge	72	254899.1	2.0				ug/L	283230	Standard
|	As	75	26508.4	2.0	29.7804	0.085	0.3	ug/L	-198	Standard
|	Se	82	2664.5	3.9	29.6984	0.586	2.0	ug/L	21	Standard
[	Se-1	77	1908.8	0.5	28.6070	0.644	2.3	ug/L	131	Standard
[>	Ga	71	1161.7	4.1				mg/L	607	Standard
|	Rb	85	17216.4	2.6				ug/L	30	Standard
|	Y	89	228942.0	1.5				ug/L	251555	Standard
[>	Rh	103	550.0	3.3				ug/L	335	Standard
|	Mo	98	17487.7	1.2	4.8657	0.040	0.8	ug/L	13	Standard
|	Ag	107	139863.7	1.5	22.1397	0.155	0.7	ug/L	36	Standard
|	Cd	111	93786.7	0.6	28.9289	0.318	1.1	mg/L	49	Standard
|	Cd	114	254582.3	2.1	25.8187	0.349	1.4	ug/L	170	Standard
[>	In	115	736391.0	1.7				ug/L	727802	Standard
|	Sn	118	643.7	3.6	0.0079	0.001	13.1	ug/L	471	Standard
|	Sb	123	232596.1	1.0	27.1949	0.188	0.7	ug/L	39	Standard
|	Ba	135	258434.5	0.8	58.4711	0.833	1.4	ug/L	25	Standard
|	Ce	140	563.7	0.7				ug/L	25	Standard
[>	Tb	159	1080548.3	1.1				ug/L	1071747	Standard
|	Ho	165	25.7	24.7				ug/L	13	Standard
|	Tl	203	388432.1	0.6	26.1993	0.279	1.1	ug/L	5	Standard
|	Tl	205	896936.3	0.7	25.9383	0.196	0.8	ug/L	10	Standard
|	Pb	206	296682.0	1.0	25.9089	0.156	0.6	ug/L	382	Standard
|	Pb	207	249918.8	1.0	26.1419	0.309	1.2	ug/L	306	Standard
|	Pb	208	1160990.9	0.9	25.8383	0.127	0.5	ug/L	1443	Standard
|	U	238	431339.4	0.5	31.8165	0.272	0.9	ug/L	5	Standard
[>	Bi	209	499741.1	1.4				ug/L	561075	Standard

Sample ID: L1207049112SD WG403906-05

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Na	23	123313.2	1.7	6.8109	0.268	3.9	mg/L	288	Standard
Mg	24	28592487.7	2.1	40.7028	1.539	3.8	mg/L	218	Standard
K	39	1851.8	2.4	1.4458	0.071	4.9	mg/L	125	Standard
Ca	43	390.0	14.1	390.0657	50.080	12.8	mg/L	3	Standard
Fe	54	657.4	18.8	0.0272	0.025	91.2	mg/L	550	Standard
Fe	57	33745.9	5.4	0.5993	0.023	3.8	mg/L	1772	Standard
Sc-1	45	348933.5	2.3				mg/L	330668	Standard
Cl	35	18.3	12.6				ug/L	5	Standard
Kr	83	48.3	6.0				ug/L	38	Standard
Br	81	976.7	2.6				ug/L	344	Standard
P	31	6635.6	1.5				ug/L	312	Standard
S	34	278732.3	0.9				ug/L	5594	Standard
Sr	88	1206.7	5.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.997	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049112SD WG403906-05
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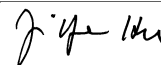
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	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
	Pb	208		
	U	238		
>	Bi	209	89.068	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049112SD WG403906-05
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Method 6020 - Summary Report

Sample ID: L1207049107

Sample Date/Time: Sunday, July 29, 2012 13:24:10

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

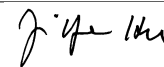
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35571.7	2.0	4993.1071	68.830	1.4	ug/L	9465	Standard
|	Be	9	46.7	12.4	0.0059	0.004	66.4	ug/L	10	Standard
|	Al	27	346065.6	3.5	23.0737	0.691	3.0	ug/L	7870	Standard
[>	Sc	45	342865.8	2.4				ug/L	330668	Standard
[	Ti	47	2292.2	4.0	2.2106	0.120	5.4	ug/L	53	Standard
|	V	51	6471.7	2.2	0.4709	0.007	1.5	ug/L	2687	Standard
|	Cr	52	13358.2	0.9	0.8819	0.011	1.3	ug/L	8408	Standard
|	Cr	53	839.2	7.2	0.5325	0.045	8.5	ug/L	288	Standard
|	Mn	55	758013.8	1.0	65.8789	1.525	2.3	ug/L	1080	Standard
|	Co	59	2244.5	1.6	0.2967	0.003	1.1	ug/L	117	Standard
|	Ni	60	29792.3	1.2	14.6579	0.328	2.2	ug/L	68	Standard
|	Cu	65	1721.1	4.7	0.8492	0.048	5.6	ug/L	141	Standard
|	Zn	66	12697.7	2.1	14.1788	0.450	3.2	ug/L	138	Standard
[>	Ge	72	248736.0	1.4				ug/L	283230	Standard
|	As	75	113.3	23.7	0.3023	0.030	9.8	ug/L	-198	Standard
|	Se	82	1361.1	2.4	15.4404	0.587	3.8	ug/L	21	Standard
[	Se-1	77	1045.0	2.8	15.2302	0.396	2.6	ug/L	131	Standard
[>	Ga	71	635.0	3.9				mg/L	607	Standard
[	Rb	85	21411.8	2.7				ug/L	30	Standard
[	Y	89	230681.4	1.6				ug/L	251555	Standard
[>	Rh	103	513.3	6.8				ug/L	335	Standard
[	Mo	98	7848.3	1.0	2.2400	0.009	0.4	ug/L	13	Standard
|	Ag	107	102.0	4.9	0.0076	0.001	12.0	ug/L	36	Standard
|	Cd	111	299.5	6.0	0.0767	0.005	7.1	mg/L	49	Standard
|	Cd	114	924.2	4.4	0.0762	0.005	6.7	ug/L	170	Standard
[>	In	115	716592.8	0.9				ug/L	727802	Standard
|	Sn	118	712.7	6.9	0.0155	0.004	26.3	ug/L	471	Standard
|	Sb	123	1965.0	2.1	0.2379	0.006	2.3	ug/L	39	Standard
[	Ba	135	103748.7	0.2	24.1126	0.181	0.7	ug/L	25	Standard
[	Ce	140	1533.7	1.1				ug/L	25	Standard
[>	Tb	159	1070580.7	0.3				ug/L	1071747	Standard
[	Ho	165	56.7	14.3				ug/L	13	Standard
|	Tl	203	441.3	18.9	0.0291	0.006	19.1	ug/L	5	Standard
|	Tl	205	1008.0	14.9	0.0296	0.004	14.3	ug/L	10	Standard
|	Pb	206	662.7	12.0	0.0267	0.007	25.1	ug/L	382	Standard
|	Pb	207	535.7	5.1	0.0283	0.003	9.3	ug/L	306	Standard
|	Pb	208	2571.4	8.9	0.0289	0.005	16.6	ug/L	1443	Standard
	U	238	32173.8	0.7	2.4077	0.025	1.0	ug/L	5	Standard
[>	Bi	209	492508.8	0.6				ug/L	561075	Standard

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Na	23	118787.2	1.4	6.6736	0.075	1.1	mg/L	288	Standard
Mg	24	29917257.8	1.8	43.3261	0.521	1.2	mg/L	218	Standard
K	39	2006.8	4.9	1.6043	0.059	3.7	mg/L	125	Standard
Ca	43	363.3	5.7	370.4980	30.376	8.2	mg/L	3	Standard
Fe	54	656.7	5.2	0.0300	0.006	19.3	mg/L	550	Standard
Fe	57	35025.4	1.7	0.6353	0.007	1.0	mg/L	1772	Standard
Sc-1	45	342865.8	2.4				mg/L	330668	Standard
Cl	35	13.7	29.6				ug/L	5	Standard
Kr	83	52.9	2.6				ug/L	38	Standard
Br	81	775.9	3.8				ug/L	344	Standard
P	31	7631.1	1.6				ug/L	312	Standard
S	34	287204.1	0.9				ug/L	5594	Standard
Sr	88	1163.4	10.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.821	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049107

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	Cd	111		
	Cd	114		
>	In	115	98.460	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	87.779	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049107

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Method 6020 - Summary Report

Sample ID: L1207049108

Sample Date/Time: Sunday, July 29, 2012 13:27:19

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	35322.8	2.5	4726.6656	121.816	2.6	ug/L	9465	Standard
|	Be	9	31.7	18.2	-0.0034	0.003	93.6	ug/L	10	Standard
|	Al	27	56169.0	2.5	3.1332	0.043	1.4	ug/L	7870	Standard
[>	Sc	45	354368.4	1.4				ug/L	330668	Standard
|	Ti	47	1606.4	3.7	1.4528	0.025	1.8	ug/L	53	Standard
|	V	51	5702.9	1.9	0.3472	0.013	3.7	ug/L	2687	Standard
|	Cr	52	13382.9	1.2	0.7828	0.022	2.8	ug/L	8408	Standard
|	Cr	53	544.2	7.4	0.2518	0.039	15.6	ug/L	288	Standard
|	Mn	55	746637.2	2.3	61.4788	0.420	0.7	ug/L	1080	Standard
|	Co	59	6965.3	1.5	0.8982	0.012	1.4	ug/L	117	Standard
|	Ni	60	16913.4	2.7	7.8714	0.119	1.5	ug/L	68	Standard
|	Cu	65	1505.4	3.4	0.6921	0.015	2.1	ug/L	141	Standard
|	Zn	66	2538.9	2.9	2.5631	0.043	1.7	ug/L	138	Standard
[>	Ge	72	262451.8	2.0				ug/L	283230	Standard
|	As	75	22.0	339.2	0.1969	0.081	41.3	ug/L	-198	Standard
|	Se	82	1029.1	0.1	10.9950	0.229	2.1	ug/L	21	Standard
[	Se-1	77	798.7	0.9	10.5223	0.167	1.6	ug/L	131	Standard
[>	Ga	71	556.7	3.2				mg/L	607	Standard
|	Rb	85	20480.5	3.3				ug/L	30	Standard
|	Y	89	240537.8	1.2				ug/L	251555	Standard
[>	Rh	103	518.3	7.4				ug/L	335	Standard
|	Mo	98	5434.7	1.2	1.5080	0.020	1.3	ug/L	13	Standard
|	Ag	107	57.7	8.2	0.0002	0.001	439.2	ug/L	36	Standard
|	Cd	111	72.3	28.0	0.0041	0.006	155.5	mg/L	49	Standard
|	Cd	114	227.9	5.3	0.0029	0.001	42.9	ug/L	170	Standard
[>	In	115	735971.5	0.6				ug/L	727802	Standard
|	Sn	118	599.3	10.9	0.0041	0.006	142.0	ug/L	471	Standard
|	Sb	123	824.6	7.4	0.0983	0.008	7.9	ug/L	39	Standard
|	Ba	135	101629.4	1.2	22.9983	0.414	1.8	ug/L	25	Standard
|	Ce	140	285.7	6.6				ug/L	25	Standard
[>	Tb	159	1086018.9	0.8				ug/L	1071747	Standard
|	Ho	165	21.0	37.2				ug/L	13	Standard
|	Tl	203	217.7	6.8	0.0135	0.001	8.3	ug/L	5	Standard
|	Tl	205	513.0	7.4	0.0147	0.001	7.8	ug/L	10	Standard
|	Pb	206	408.0	2.1	0.0033	0.000	14.0	ug/L	382	Standard
|	Pb	207	341.3	7.6	0.0068	0.003	44.0	ug/L	306	Standard
|	Pb	208	1608.4	2.0	0.0063	0.000	5.9	ug/L	1443	Standard
	U	238	30909.5	1.1	2.2590	0.006	0.2	ug/L	5	Standard
[>	Bi	209	504286.2	1.0				ug/L	561075	Standard

Sample ID: L1207049108

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Na	23	115940.2	0.5	6.3002	0.118	1.9	mg/L	288	Standard
Mg	24	29564762.1	3.1	41.4149	0.792	1.9	mg/L	218	Standard
K	39	2040.1	4.7	1.5762	0.064	4.1	mg/L	125	Standard
Ca	43	368.3	9.5	363.0644	38.209	10.5	mg/L	3	Standard
Fe	54	574.9	9.3	0.0069	0.011	162.1	mg/L	550	Standard
Fe	57	33670.8	4.6	0.5882	0.020	3.4	mg/L	1772	Standard
Sc-1	45	354368.4	1.4				mg/L	330668	Standard
Cl	35	16.0	12.5				ug/L	5	Standard
Kr	83	51.1	2.3				ug/L	38	Standard
Br	81	780.9	1.3				ug/L	344	Standard
P	31	6409.7	1.4				ug/L	312	Standard
S	34	284927.6	1.0				ug/L	5594	Standard
Sr	88	1160.0	8.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.664	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049108

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	Cd	111	
	Cd	114	
>	In	115	101.122
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.879
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049108

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Method 6020 - Summary Report

Sample ID: L1207049108PS WG404852-01

Sample Date/Time: Sunday, July 29, 2012 13:30:29

Number of Replicates: 3

Autosampler Position: 308

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

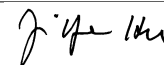
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	41099.0	1.3	5070.1033	149.512	2.9	ug/L	9465	Standard
|	Be	9	84045.8	0.9	42.6754	0.988	2.3	ug/L	10	Standard
|	Al	27	720861.6	0.4	42.5625	1.425	3.3	ug/L	7870	Standard
[>	Sc	45	391796.9	2.8				ug/L	330668	Standard
|	Ti	47	1891.5	1.1	1.5325	0.030	2.0	ug/L	53	Standard
|	V	51	492830.1	1.6	48.1921	0.122	0.3	ug/L	2687	Standard
|	Cr	52	390934.2	0.4	47.6324	0.672	1.4	ug/L	8408	Standard
|	Cr	53	65597.6	2.0	48.1565	0.661	1.4	ug/L	288	Standard
|	Mn	55	1537356.7	0.8	113.2895	2.153	1.9	ug/L	1080	Standard
|	Co	59	430793.4	0.1	50.3884	0.753	1.5	ug/L	117	Standard
|	Ni	60	129182.1	0.9	53.9364	0.500	0.9	ug/L	68	Standard
|	Cu	65	100816.0	0.9	45.4492	0.366	0.8	ug/L	141	Standard
|	Zn	66	50332.1	1.1	47.9816	0.620	1.3	ug/L	138	Standard
[>	Ge	72	293499.4	1.4				ug/L	283230	Standard
|	As	75	51480.6	0.8	50.1129	0.351	0.7	ug/L	-198	Standard
|	Se	82	6428.4	0.5	62.5179	0.788	1.3	ug/L	21	Standard
[	Se-1	77	4589.4	1.7	61.7417	1.099	1.8	ug/L	131	Standard
[>	Ga	71	726.7	2.4				mg/L	607	Standard
|	Rb	85	22613.5	2.7				ug/L	30	Standard
|	Y	89	268612.4	1.9				ug/L	251555	Standard
[>	Rh	103	688.3	4.4				ug/L	335	Standard
|	Mo	98	6261.2	0.7	1.5757	0.022	1.4	ug/L	13	Standard
|	Ag	107	302038.5	0.2	43.3863	0.440	1.0	ug/L	36	Standard
|	Cd	111	182998.4	0.9	51.2193	0.202	0.4	mg/L	49	Standard
|	Cd	114	504697.6	0.5	46.4553	0.461	1.0	ug/L	170	Standard
[>	In	115	811667.6	0.8				ug/L	727802	Standard
|	Sn	118	1830.8	8.0	0.0954	0.013	13.2	ug/L	471	Standard
|	Sb	123	455338.6	1.1	48.2945	0.203	0.4	ug/L	39	Standard
|	Ba	135	326084.4	0.8	66.9273	0.284	0.4	ug/L	25	Standard
[	Ce	140	372.7	8.3				ug/L	25	Standard
[>	Tb	159	1177638.1	0.3				ug/L	1071747	Standard
|	Ho	165	23.7	20.8				ug/L	13	Standard
|	Tl	203	782112.4	0.7	49.4864	0.245	0.5	ug/L	5	Standard
|	Tl	205	1804551.1	0.6	48.9544	0.126	0.3	ug/L	10	Standard
|	Pb	206	591255.1	0.1	48.4667	0.217	0.4	ug/L	382	Standard
|	Pb	207	498452.3	0.8	48.9356	0.360	0.7	ug/L	306	Standard
|	Pb	208	2309825.1	0.6	48.2499	0.242	0.5	ug/L	1443	Standard
	U	238	828434.5	0.6	57.3247	0.518	0.9	ug/L	5	Standard
[>	Bi	209	532687.3	0.5				ug/L	561075	Standard

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Na	23	119874.1	1.6	5.8896	0.074	1.2	mg/L	288	Standard
Mg	24	33011806.4	1.3	41.8579	1.502	3.6	mg/L	218	Standard
K	39	2275.2	11.0	1.5954	0.237	14.9	mg/L	125	Standard
Ca	43	408.3	12.9	363.9642	47.419	13.0	mg/L	3	Standard
Fe	54	772.3	10.6	0.0342	0.012	36.0	mg/L	550	Standard
Fe	57	40878.6	7.6	0.6496	0.049	7.5	mg/L	1772	Standard
Sc-1	45	391796.9	2.8				mg/L	330668	Standard
Cl	35	15.3	24.7				ug/L	5	Standard
Kr	83	56.2	1.2				ug/L	38	Standard
Br	81	855.9	7.3				ug/L	344	Standard
P	31	6725.7	3.3				ug/L	312	Standard
S	34	299947.7	1.3				ug/L	5594	Standard
Sr	88	1376.7	4.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.626	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049108PS WG404852-01
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	Cd	111	
	Cd	114	
>	In	115	111.523
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.940
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1207049108PS WG404852-01
 Report Date/Time: Sunday, July 29, 2012 13:32:59
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Approved: July 30, 2012



Method 6020 - Summary Report

Sample ID: L1207049108SDL WG404852-02

Sample Date/Time: Sunday, July 29, 2012 13:33:38

Number of Replicates: 3

Autosampler Position: 309

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

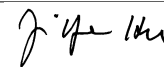
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15115.9	2.5	1051.5675	72.593	6.9	ug/L	9465	Standard
|	Be	9	38.3	7.5	0.0007	0.001	204.1	ug/L	10	Standard
|	Al	27	34370.6	0.2	1.7308	0.038	2.2	ug/L	7870	Standard
[>	Sc	45	348493.1	1.9				ug/L	330668	Standard
|	Ti	47	406.7	2.7	0.3056	0.013	4.1	ug/L	53	Standard
|	V	51	3610.4	4.1	0.0855	0.018	21.6	ug/L	2687	Standard
|	Cr	52	9993.3	2.6	0.1997	0.047	23.4	ug/L	8408	Standard
|	Cr	53	339.2	10.4	0.0601	0.025	41.5	ug/L	288	Standard
|	Mn	55	164657.5	0.3	12.4119	0.111	0.9	ug/L	1080	Standard
|	Co	59	1656.8	3.0	0.1864	0.007	4.0	ug/L	117	Standard
|	Ni	60	4078.9	0.9	1.7245	0.030	1.7	ug/L	68	Standard
|	Cu	65	593.0	1.8	0.2077	0.006	3.1	ug/L	141	Standard
|	Zn	66	4184.6	1.6	3.9671	0.087	2.2	ug/L	138	Standard
[>	Ge	72	285169.1	1.0				ug/L	283230	Standard
|	As	75	-119.1	22.3	0.0536	0.028	52.1	ug/L	-198	Standard
|	Se	82	225.0	4.5	2.0176	0.083	4.1	ug/L	21	Standard
[	Se-1	77	259.7	9.5	1.8497	0.391	21.1	ug/L	131	Standard
[>	Ga	71	665.0	5.9				mg/L	607	Standard
|	Rb	85	4035.5	2.2				ug/L	30	Standard
|	Y	89	247393.6	1.2				ug/L	251555	Standard
[>	Rh	103	345.0	10.9				ug/L	335	Standard
|	Mo	98	1176.7	1.3	0.3091	0.002	0.6	ug/L	13	Standard
|	Ag	107	118.3	5.4	0.0091	0.001	12.5	ug/L	36	Standard
|	Cd	111	90.8	14.1	0.0088	0.004	45.4	mg/L	49	Standard
|	Cd	114	290.3	3.9	0.0082	0.001	10.7	ug/L	170	Standard
[>	In	115	763420.6	1.3				ug/L	727802	Standard
|	Sn	118	1168.4	4.0	0.0494	0.003	6.3	ug/L	471	Standard
|	Sb	123	2044.9	8.6	0.2325	0.022	9.4	ug/L	39	Standard
|	Ba	135	21500.9	0.8	4.6818	0.086	1.8	ug/L	25	Standard
|	Ce	140	120.7	18.5				ug/L	25	Standard
[>	Tb	159	1131741.5	1.1				ug/L	1071747	Standard
|	Ho	165	17.7	8.6				ug/L	13	Standard
|	Tl	203	447.3	71.8	0.0260	0.020	76.1	ug/L	5	Standard
|	Tl	205	976.4	69.6	0.0254	0.018	70.8	ug/L	10	Standard
|	Pb	206	828.4	22.4	0.0326	0.015	47.0	ug/L	382	Standard
|	Pb	207	655.3	19.5	0.0327	0.013	39.0	ug/L	306	Standard
|	Pb	208	3097.1	21.3	0.0325	0.014	43.0	ug/L	1443	Standard
	U	238	6382.3	1.3	0.4198	0.008	1.9	ug/L	5	Standard
[>	Bi	209	560204.7	1.2				ug/L	561075	Standard

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Na	23	54773.9	3.8	3.0071	0.092	3.1	mg/L	288	Standard
Mg	24	6621301.3	3.0	9.4379	0.428	4.5	mg/L	218	Standard
K	39	493.3	2.6	0.3056	0.010	3.2	mg/L	125	Standard
Ca	43	76.7	35.9	72.8868	28.978	39.8	mg/L	3	Standard
Fe	54	555.8	5.0	0.0047	0.006	120.3	mg/L	550	Standard
Fe	57	9319.5	2.0	0.1407	0.005	3.3	mg/L	1772	Standard
Sc-1	45	348493.1	1.9				mg/L	330668	Standard
Cl	35	9.0	11.1				ug/L	5	Standard
Kr	83	39.6	4.2				ug/L	38	Standard
Br	81	470.8	3.2				ug/L	344	Standard
P	31	1546.7	4.6				ug/L	312	Standard
S	34	66678.9	0.1				ug/L	5594	Standard
Sr	88	246.7	6.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.685	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049108SDL WG404852-02
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	Cd	111	
	Cd	114	
>	In	115	104.894
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.845
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049108SDL WG404852-02
 Report Date/Time: Sunday, July 29, 2012 13:36:09
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 13:36:50

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

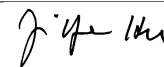
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8585.8	5.3	-86.6883	76.985	88.8	ug/L	9465	Standard
|	Be	9	83941.9	0.5	50.4614	0.810	1.6	ug/L	10	Standard
|	Al	27	665061.6	2.8	46.5178	0.731	1.6	ug/L	7870	Standard
[>	Sc	45	330863.9	1.3				ug/L	330668	Standard
[	Ti	47	114073.5	0.2	99.1353	1.291	1.3	ug/L	53	Standard
|	V	51	472605.7	0.8	48.2426	0.545	1.1	ug/L	2687	Standard
|	Cr	52	382224.0	0.8	48.6358	1.081	2.2	ug/L	8408	Standard
|	Cr	53	64217.5	2.3	49.2122	0.926	1.9	ug/L	288	Standard
|	Mn	55	670719.3	2.1	51.5366	0.906	1.8	ug/L	1080	Standard
|	Co	59	410491.4	0.6	50.1148	0.729	1.5	ug/L	117	Standard
|	Ni	60	111286.2	1.0	48.5020	1.087	2.2	ug/L	68	Standard
|	Cu	65	103534.2	1.1	48.7306	1.187	2.4	ug/L	141	Standard
|	Zn	66	49790.7	1.1	49.5537	1.118	2.3	ug/L	138	Standard
[>	Ge	72	281192.7	1.5				ug/L	283230	Standard
|	As	75	49138.3	1.3	49.9298	0.855	1.7	ug/L	-198	Standard
|	Se	82	4918.1	0.7	49.8737	0.638	1.3	ug/L	21	Standard
[	Se-1	77	3561.8	2.7	49.6557	1.022	2.1	ug/L	131	Standard
[>	Ga	71	566.7	12.2				mg/L	607	Standard
[	Rb	85	758.4	5.3				ug/L	30	Standard
[	Y	89	247924.0	1.8				ug/L	251555	Standard
[>	Rh	103	368.3	4.4				ug/L	335	Standard
[	Mo	98	340317.3	1.2	92.3518	1.185	1.3	ug/L	13	Standard
|	Ag	107	300674.0	2.2	46.3673	1.040	2.2	ug/L	36	Standard
|	Cd	111	170132.8	2.1	51.1225	1.020	2.0	mg/L	49	Standard
|	Cd	114	498070.0	1.6	49.2179	0.717	1.5	ug/L	170	Standard
[>	In	115	756024.6	0.3				ug/L	727802	Standard
|	Sn	118	578640.8	1.7	48.3981	0.723	1.5	ug/L	471	Standard
|	Sb	123	429096.5	1.1	48.8611	0.483	1.0	ug/L	39	Standard
[	Ba	135	225567.5	1.3	49.7005	0.597	1.2	ug/L	25	Standard
[	Ce	140	831.7	1.8				ug/L	25	Standard
[>	Tb	159	1121593.8	0.9				ug/L	1071747	Standard
[	Ho	165	17.7	37.7				ug/L	13	Standard
|	Tl	203	806277.2	1.4	48.5951	0.625	1.3	ug/L	5	Standard
|	Tl	205	1860800.1	0.4	48.0857	0.057	0.1	ug/L	10	Standard
|	Pb	206	626524.4	1.7	48.9202	0.707	1.4	ug/L	382	Standard
|	Pb	207	530270.8	1.2	49.5896	0.546	1.1	ug/L	306	Standard
|	Pb	208	2455025.9	1.5	48.8499	0.632	1.3	ug/L	1443	Standard
	U	238	757943.7	0.4	49.9579	0.158	0.3	ug/L	5	Standard
[>	Bi	209	559214.9	0.3				ug/L	561075	Standard

Sample ID: QC Std 6

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Na	23	106684.3	0.1	6.2082	0.087	1.4	mg/L	288	Standard
Mg	24	3267465.0	1.4	4.9032	0.042	0.9	mg/L	218	Standard
K	39	5771.1	1.5	4.9984	0.138	2.8	mg/L	125	Standard
Ca	43	16.7	62.4	12.5732	11.321	90.0	mg/L	3	Standard
Fe	54	21131.4	0.2	4.9201	0.052	1.1	mg/L	550	Standard
Fe	57	268412.2	3.8	5.2880	0.256	4.8	mg/L	1772	Standard
Sc-1	45	330863.9	1.3				mg/L	330668	Standard
Cl	35	4.3	66.6				ug/L	5	Standard
Kr	83	39.8	7.0				ug/L	38	Standard
Br	81	367.5	4.7				ug/L	344	Standard
P	31	326.7	3.1				ug/L	312	Standard
S	34	5663.6	1.1				ug/L	5594	Standard
Sr	88	45.0	55.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	93.036		
Sc	45			
Ti	47	99.135		
V	51	96.485		
Cr	52	97.272		
Cr	53			
Mn	55	103.073		
Co	59	100.230		
Ni	60	97.004		
Cu	65	97.461		
Zn	66	99.107		
Ge	72		99.281	
As	75	99.860		
Se	82	99.747		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	92.352		
Ag	107	92.735		

Sample ID: QC Std 6

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	Cd	111	102.245	
	Cd	114		
>	In	115		103.878
	Sn	118	96.796	
	Sb	123	97.722	
	Ba	135	99.401	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.190	
|	Tl	205		
|	Pb	206	97.840	
|	Pb	207	99.179	
|	Pb	208	97.700	
|	U	238	99.916	
>	Bi	209		99.668
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 13:40:00

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

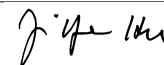
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8695.8	1.0	-63.9434	20.380	31.9	ug/L	9465	Standard
|	Be	9	85.0	127.7	0.0301	0.065	217.8	ug/L	10	Standard
|	Al	27	8243.9	7.3	0.0032	0.043	1331.7	ug/L	7870	Standard
[>	Sc	45	330751.5	1.3				ug/L	330668	Standard
[	Ti	47	115.3	68.2	0.0563	0.068	120.0	ug/L	53	Standard
|	V	51	2391.2	2.5	-0.0365	0.006	15.4	ug/L	2687	Standard
|	Cr	52	7535.9	0.9	-0.1096	0.006	5.9	ug/L	8408	Standard
|	Cr	53	280.0	38.0	0.0166	0.081	487.1	ug/L	288	Standard
|	Mn	55	1243.7	13.8	0.0107	0.013	121.0	ug/L	1080	Standard
|	Co	59	163.0	14.4	0.0066	0.003	42.3	ug/L	117	Standard
|	Ni	60	156.3	97.1	0.0383	0.065	170.9	ug/L	68	Standard
|	Cu	65	235.3	52.0	0.0422	0.057	135.3	ug/L	141	Standard
|	Zn	66	206.7	22.2	0.0529	0.045	85.2	ug/L	138	Standard
[>	Ge	72	283371.3	0.2				ug/L	283230	Standard
|	As	75	-130.6	44.8	0.0414	0.059	142.6	ug/L	-198	Standard
|	Se	82	25.8	19.7	0.0180	0.051	284.3	ug/L	21	Standard
[	Se-1	77	115.0	6.9	-0.2057	0.113	54.8	ug/L	131	Standard
[>	Ga	71	591.7	6.1				mg/L	607	Standard
[	Rb	85	25.0	52.9				ug/L	30	Standard
[	Y	89	247463.9	2.9				ug/L	251555	Standard
[>	Rh	103	355.0	6.1				ug/L	335	Standard
[	Mo	98	244.3	28.2	0.0613	0.020	32.3	ug/L	13	Standard
|	Ag	107	140.7	50.7	0.0135	0.012	85.6	ug/L	36	Standard
|	Cd	111	90.4	40.4	0.0098	0.012	117.6	mg/L	49	Standard
|	Cd	114	272.6	39.4	0.0076	0.011	146.4	ug/L	170	Standard
[>	In	115	733112.1	1.0				ug/L	727802	Standard
|	Sn	118	897.7	8.5	0.0301	0.007	24.1	ug/L	471	Standard
|	Sb	123	2291.4	2.2	0.2709	0.008	3.1	ug/L	39	Standard
[	Ba	135	82.7	63.3	0.0073	0.012	164.3	ug/L	25	Standard
[	Ce	140	26.7	21.3				ug/L	25	Standard
[>	Tb	159	1082926.6	0.7				ug/L	1071747	Standard
[	Ho	165	11.3	28.4				ug/L	13	Standard
|	Tl	203	146.3	84.0	0.0077	0.007	95.9	ug/L	5	Standard
|	Tl	205	351.0	66.2	0.0091	0.006	66.4	ug/L	10	Standard
|	Pb	206	473.7	20.6	0.0047	0.008	164.1	ug/L	382	Standard
|	Pb	207	413.3	11.0	0.0098	0.004	44.8	ug/L	306	Standard
|	Pb	208	1840.4	17.3	0.0072	0.006	89.3	ug/L	1443	Standard
	U	238	193.7	80.1	0.0125	0.010	81.9	ug/L	5	Standard
[>	Bi	209	562631.6	0.8				ug/L	561075	Standard

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Na	23	598.4	86.4	-0.0011	0.030	2654.7	mg/L	288	Standard
Mg	24	15505.3	163.2	0.0236	0.038	161.2	mg/L	218	Standard
K	39	146.7	16.1	0.0212	0.022	106.0	mg/L	125	Standard
Ca	43	5.0	173.2	0.0089	9.298104451.0		mg/L	3	Standard
Fe	54	536.7	7.8	0.0070	0.011	163.1	mg/L	550	Standard
Fe	57	2065.1	12.6	0.0062	0.005	82.0	mg/L	1772	Standard
Sc-1	45	330751.5	1.3				mg/L	330668	Standard
Cl	35	1.3	114.6				ug/L	5	Standard
Kr	83	34.0	2.6				ug/L	38	Standard
Br	81	342.5	1.5				ug/L	344	Standard
P	31	326.7	12.9				ug/L	312	Standard
S	34	5970.3	6.0				ug/L	5594	Standard
Sr	88	45.0	19.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.050	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	100.730
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.277
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207049109

Sample Date/Time: Sunday, July 29, 2012 13:44:50

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

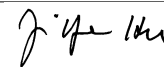
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13089.0	1.7	1146.7205	73.013	6.4	ug/L	9465	Standard
|	Be	9	13.3	78.1	-0.0121	0.007	59.5	ug/L	10	Standard
|	Al	27	73823.8	9.6	5.3437	0.549	10.3	ug/L	7870	Standard
[>	Sc	45	291952.7	0.8				ug/L	330668	Standard
[	Ti	47	551.7	2.9	0.4985	0.021	4.3	ug/L	53	Standard
|	V	51	3037.9	2.3	0.0720	0.010	13.9	ug/L	2687	Standard
|	Cr	52	8976.7	1.3	0.2360	0.022	9.2	ug/L	8408	Standard
|	Cr	53	250.0	16.8	0.0205	0.040	196.5	ug/L	288	Standard
|	Mn	55	135425.9	0.3	11.6843	0.157	1.3	ug/L	1080	Standard
|	Co	59	736.7	2.8	0.0884	0.003	3.1	ug/L	117	Standard
|	Ni	60	2750.2	0.5	1.3248	0.024	1.8	ug/L	68	Standard
|	Cu	65	487.0	5.2	0.1913	0.014	7.1	ug/L	141	Standard
|	Zn	66	1852.4	2.2	1.9356	0.014	0.7	ug/L	138	Standard
[>	Ge	72	249064.7	1.5				ug/L	283230	Standard
|	As	75	-56.1	44.2	0.1085	0.028	26.0	ug/L	-198	Standard
|	Se	82	115.3	6.1	1.0824	0.064	5.9	ug/L	21	Standard
[	Se-1	77	166.0	12.4	0.8548	0.334	39.1	ug/L	131	Standard
[>	Ga	71	570.0	4.9				mg/L	607	Standard
[	Rb	85	2868.6	1.6				ug/L	30	Standard
[	Y	89	214028.4	2.5				ug/L	251555	Standard
[>	Rh	103	286.7	8.2				ug/L	335	Standard
[	Mo	98	549.7	6.8	0.1636	0.011	6.4	ug/L	13	Standard
|	Ag	107	50.0	22.7	-0.0001	0.002	1369.2	ug/L	36	Standard
|	Cd	111	40.0	11.4	-0.0045	0.002	36.1	mg/L	49	Standard
|	Cd	114	144.4	6.4	-0.0039	0.001	25.8	ug/L	170	Standard
[>	In	115	660494.4	0.7				ug/L	727802	Standard
|	Sn	118	517.7	11.0	0.0022	0.005	240.8	ug/L	471	Standard
|	Sb	123	540.4	21.3	0.0722	0.015	20.1	ug/L	39	Standard
[	Ba	135	39413.5	1.4	9.9308	0.081	0.8	ug/L	25	Standard
[	Ce	140	553.0	3.8				ug/L	25	Standard
[>	Tb	159	1009489.0	0.5				ug/L	1071747	Standard
[	Ho	165	20.0	15.0				ug/L	13	Standard
|	Tl	203	121.7	17.4	0.0070	0.001	19.4	ug/L	5	Standard
|	Tl	205	292.3	10.2	0.0083	0.001	9.6	ug/L	10	Standard
|	Pb	206	422.7	7.5	0.0041	0.003	61.1	ug/L	382	Standard
|	Pb	207	359.0	5.3	0.0082	0.002	25.9	ug/L	306	Standard
|	Pb	208	1684.7	3.4	0.0076	0.001	14.0	ug/L	1443	Standard
	U	238	3287.0	0.6	0.2375	0.001	0.6	ug/L	5	Standard
[>	Bi	209	509607.6	0.6				ug/L	561075	Standard

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Na	23	51699.8	3.4	3.3928	0.118	3.5	mg/L	288	Standard
Mg	24	6010749.1	0.4	10.2222	0.117	1.1	mg/L	218	Standard
K	39	551.7	4.5	0.4445	0.029	6.5	mg/L	125	Standard
Ca	43	63.3	19.9	71.4103	14.761	20.7	mg/L	3	Standard
Fe	54	302.8	17.6	-0.0392	0.015	38.6	mg/L	550	Standard
Fe	57	7353.5	1.3	0.1304	0.003	2.4	mg/L	1772	Standard
Sc-1	45	291952.7	0.8				mg/L	330668	Standard
Cl	35	7.7	30.1				ug/L	5	Standard
Kr	83	34.0	2.0				ug/L	38	Standard
Br	81	348.3	9.1				ug/L	344	Standard
P	31	1755.1	5.0				ug/L	312	Standard
S	34	65118.8	0.7				ug/L	5594	Standard
Sr	88	208.3	18.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.937	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049109

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	Cd	111		
	Cd	114		
>	In	115	90.752	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.827	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049109

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Method 6020 - Summary Report

Sample ID: L1207049110

Sample Date/Time: Sunday, July 29, 2012 13:47:59

Number of Replicates: 3

Autosampler Position: 311

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13264.1	2.5	1157.8496	90.209	7.8	ug/L	9465	Standard
|	Be	9	13.3	57.3	-0.0122	0.005	42.2	ug/L	10	Standard
|	Al	27	24009.0	2.0	1.3283	0.052	3.9	ug/L	7870	Standard
[>	Sc	45	294739.3	0.9				ug/L	330668	Standard
|	Ti	47	432.0	4.4	0.3760	0.021	5.5	ug/L	53	Standard
|	V	51	3040.0	3.5	0.0681	0.014	20.8	ug/L	2687	Standard
|	Cr	52	9118.7	1.8	0.2412	0.031	12.9	ug/L	8408	Standard
|	Cr	53	273.3	4.7	0.0375	0.010	26.1	ug/L	288	Standard
|	Mn	55	145277.6	1.2	12.3914	0.227	1.8	ug/L	1080	Standard
|	Co	59	1402.1	0.1	0.1779	0.001	0.8	ug/L	117	Standard
|	Ni	60	2507.2	0.9	1.1905	0.012	1.0	ug/L	68	Standard
|	Cu	65	404.7	5.8	0.1450	0.013	9.3	ug/L	141	Standard
|	Zn	66	1171.4	4.4	1.1529	0.062	5.4	ug/L	138	Standard
[>	Ge	72	252022.4	0.6				ug/L	283230	Standard
|	As	75	-92.2	1.4	0.0685	0.001	1.9	ug/L	-198	Standard
|	Se	82	114.4	3.1	1.0575	0.038	3.6	ug/L	21	Standard
[	Se-1	77	166.0	5.7	0.8229	0.161	19.5	ug/L	131	Standard
[>	Ga	71	618.3	6.9				mg/L	607	Standard
|	Rb	85	2865.3	5.5				ug/L	30	Standard
|	Y	89	217109.5	0.4				ug/L	251555	Standard
[>	Rh	103	355.0	8.8				ug/L	335	Standard
|	Mo	98	499.4	1.3	0.1487	0.002	1.4	ug/L	13	Standard
|	Ag	107	41.7	28.6	-0.0016	0.002	136.2	ug/L	36	Standard
|	Cd	111	26.5	19.4	-0.0091	0.002	19.8	mg/L	49	Standard
|	Cd	114	101.0	5.5	-0.0087	0.001	7.5	ug/L	170	Standard
[>	In	115	657366.6	0.4				ug/L	727802	Standard
|	Sn	118	423.3	7.9	-0.0067	0.003	50.3	ug/L	471	Standard
|	Sb	123	306.7	15.2	0.0420	0.006	14.6	ug/L	39	Standard
[	Ba	135	42128.2	2.1	10.6665	0.220	2.1	ug/L	25	Standard
|	Ce	140	113.3	9.8				ug/L	25	Standard
[>	Tb	159	999233.4	0.2				ug/L	1071747	Standard
|	Ho	165	15.0	35.3				ug/L	13	Standard
|	Tl	203	133.7	2.2	0.0077	0.000	2.9	ug/L	5	Standard
|	Tl	205	282.0	3.7	0.0080	0.000	3.4	ug/L	10	Standard
|	Pb	206	350.0	2.8	-0.0023	0.001	27.7	ug/L	382	Standard
|	Pb	207	295.7	4.0	0.0015	0.001	70.0	ug/L	306	Standard
|	Pb	208	1356.0	5.6	0.0002	0.001	751.7	ug/L	1443	Standard
	U	238	3645.4	2.3	0.2616	0.007	2.8	ug/L	5	Standard
[>	Bi	209	513308.6	0.9				ug/L	561075	Standard

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Na	23	53828.8	2.9	3.5002	0.100	2.8	mg/L	288	Standard
Mg	24	6433625.1	1.9	10.8368	0.129	1.2	mg/L	218	Standard
K	39	528.3	14.3	0.4155	0.070	16.9	mg/L	125	Standard
Ca	43	93.3	44.6	107.0371	50.822	47.5	mg/L	3	Standard
Fe	54	300.7	12.7	-0.0406	0.010	24.3	mg/L	550	Standard
Fe	57	8085.5	4.2	0.1452	0.009	6.1	mg/L	1772	Standard
Sc-1	45	294739.3	0.9				mg/L	330668	Standard
Cl	35	3.0	33.3				ug/L	5	Standard
Kr	83	33.2	20.6				ug/L	38	Standard
Br	81	400.8	2.2				ug/L	344	Standard
P	31	1665.1	2.9				ug/L	312	Standard
S	34	69106.4	1.0				ug/L	5594	Standard
Sr	88	238.3	15.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.982	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049110

Report Date/Time: Sunday, July 29, 2012 13:50:30

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	Cd	111		
	Cd	114		
>	In	115	90.322	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	91.487	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049110

Report Date/Time: Sunday, July 29, 2012 13:50:30

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Method 6020 - Summary Report

Sample ID: L1207049111

Sample Date/Time: Sunday, July 29, 2012 13:51:08

Number of Replicates: 3

Autosampler Position: 312

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13109.0	2.8	1127.9284	58.325	5.2	ug/L	9465	Standard
|	Be	9	16.7	34.6	-0.0100	0.004	36.5	ug/L	10	Standard
|	Al	27	54432.8	5.6	3.7509	0.092	2.4	ug/L	7870	Standard
[>	Sc	45	294397.8	4.3				ug/L	330668	Standard
|	Ti	47	618.0	5.8	0.5770	0.026	4.4	ug/L	53	Standard
|	V	51	8679.1	4.9	0.7482	0.024	3.2	ug/L	2687	Standard
|	Cr	52	9790.8	4.2	0.3876	0.023	6.1	ug/L	8408	Standard
|	Cr	53	325.0	3.4	0.0916	0.004	4.9	ug/L	288	Standard
|	Mn	55	145219.3	4.7	12.8147	0.285	2.2	ug/L	1080	Standard
|	Co	59	1616.4	7.1	0.2146	0.012	5.4	ug/L	117	Standard
|	Ni	60	4182.6	3.5	2.0759	0.017	0.8	ug/L	68	Standard
|	Cu	65	590.3	7.9	0.2530	0.016	6.4	ug/L	141	Standard
|	Zn	66	2829.9	5.3	3.1077	0.084	2.7	ug/L	138	Standard
[>	Ge	72	243566.6	3.0				ug/L	283230	Standard
|	As	75	57.4	9.5	0.2398	0.006	2.6	ug/L	-198	Standard
|	Se	82	62.2	3.2	0.4900	0.045	9.3	ug/L	21	Standard
[	Se-1	77	138.7	10.5	0.4654	0.311	66.9	ug/L	131	Standard
[>	Ga	71	700.0	4.3				mg/L	607	Standard
[	Rb	85	3653.8	7.7				ug/L	30	Standard
[	Y	89	211812.6	2.7				ug/L	251555	Standard
[>	Rh	103	316.7	27.1				ug/L	335	Standard
[	Mo	98	3664.0	5.6	1.1526	0.041	3.6	ug/L	13	Standard
|	Ag	107	47.0	7.7	-0.0005	0.001	122.0	ug/L	36	Standard
|	Cd	111	69.9	21.5	0.0062	0.005	79.2	mg/L	49	Standard
|	Cd	114	260.1	13.3	0.0098	0.004	39.1	ug/L	170	Standard
[>	In	115	647894.8	2.3				ug/L	727802	Standard
|	Sn	118	445.3	11.0	-0.0040	0.004	100.7	ug/L	471	Standard
|	Sb	123	731.6	12.0	0.0990	0.011	11.2	ug/L	39	Standard
[	Ba	135	32368.6	3.4	8.3114	0.112	1.4	ug/L	25	Standard
[	Ce	140	535.3	10.4				ug/L	25	Standard
[>	Tb	159	979331.9	1.1				ug/L	1071747	Standard
[	Ho	165	25.3	25.7				ug/L	13	Standard
|	Tl	203	231.3	33.6	0.0142	0.005	33.9	ug/L	5	Standard
|	Tl	205	527.3	40.9	0.0149	0.006	38.7	ug/L	10	Standard
|	Pb	206	449.3	16.2	0.0065	0.006	86.2	ug/L	382	Standard
|	Pb	207	348.0	16.3	0.0071	0.005	70.4	ug/L	306	Standard
|	Pb	208	1698.0	13.7	0.0079	0.004	54.8	ug/L	1443	Standard
	U	238	7115.3	5.2	0.5155	0.014	2.8	ug/L	5	Standard
[>	Bi	209	508289.5	2.5				ug/L	561075	Standard

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Na	23	56316.1	1.3	3.6711	0.112	3.1	mg/L	288	Standard
Mg	24	6469141.2	4.2	10.9107	0.132	1.2	mg/L	218	Standard
K	39	521.7	11.7	0.4096	0.052	12.7	mg/L	125	Standard
Ca	43	81.7	12.7	93.0213	13.482	14.5	mg/L	3	Standard
Fe	54	308.2	8.5	-0.0385	0.005	13.6	mg/L	550	Standard
Fe	57	7992.1	5.7	0.1433	0.009	6.2	mg/L	1772	Standard
Sc-1	45	294397.8	4.3				mg/L	330668	Standard
Cl	35	3.7	31.5				ug/L	5	Standard
Kr	83	37.0	5.6				ug/L	38	Standard
Br	81	351.7	3.9				ug/L	344	Standard
P	31	2202.7	5.9				ug/L	312	Standard
S	34	70073.5	4.1				ug/L	5594	Standard
Sr	88	210.0	15.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.996	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207049111

Report Date/Time: Sunday, July 29, 2012 13:53:39

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	Cd	111		
	Cd	114		
>	In	115	89.021	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	90.592	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207049111

Report Date/Time: Sunday, July 29, 2012 13:53:39

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Method 6020 - Summary Report

Sample ID: L1207053701

Sample Date/Time: Sunday, July 29, 2012 13:54:19

Number of Replicates: 3

Autosampler Position: 313

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26501.5	1.0	4185.2291	89.635	2.1	ug/L	9465	Standard
|	Be	9	18.3	56.8	-0.0086	0.007	82.3	ug/L	10	Standard
|	Al	27	1008921.1	1.3	80.9395	0.459	0.6	ug/L	7870	Standard
[>	Sc	45	290022.9	0.8				ug/L	330668	Standard
[	Ti	47	2792.9	2.2	2.7480	0.068	2.5	ug/L	53	Standard
|	V	51	12767.9	1.9	1.2268	0.038	3.1	ug/L	2687	Standard
|	Cr	52	10027.0	2.4	0.4168	0.029	6.9	ug/L	8408	Standard
|	Cr	53	880.0	6.7	0.5813	0.054	9.3	ug/L	288	Standard
|	Mn	55	16143.6	1.2	1.3441	0.027	2.0	ug/L	1080	Standard
|	Co	59	505.3	4.1	0.0578	0.003	5.8	ug/L	117	Standard
|	Ni	60	703.3	2.7	0.3233	0.011	3.4	ug/L	68	Standard
|	Cu	65	308.0	5.4	0.0990	0.008	8.3	ug/L	141	Standard
|	Zn	66	1476.7	3.9	1.5429	0.075	4.9	ug/L	138	Standard
[>	Ge	72	244614.2	0.7				ug/L	283230	Standard
|	As	75	162.3	16.2	0.3616	0.031	8.5	ug/L	-198	Standard
|	Se	82	38.0	16.1	0.2024	0.074	36.7	ug/L	21	Standard
[	Se-1	77	122.0	3.3	0.1722	0.065	37.8	ug/L	131	Standard
[>	Ga	71	508.3	17.4				mg/L	607	Standard
[	Rb	85	1140.0	5.4				ug/L	30	Standard
[	Y	89	213928.1	0.8				ug/L	251555	Standard
[>	Rh	103	286.7	16.1				ug/L	335	Standard
[	Mo	98	1120.9	4.3	0.3453	0.017	4.9	ug/L	13	Standard
|	Ag	107	42.3	7.2	-0.0014	0.001	38.8	ug/L	36	Standard
|	Cd	111	30.6	22.3	-0.0076	0.002	30.3	mg/L	49	Standard
|	Cd	114	102.2	5.4	-0.0085	0.001	7.5	ug/L	170	Standard
[>	In	115	652590.3	0.7				ug/L	727802	Standard
|	Sn	118	428.0	5.4	-0.0059	0.002	33.5	ug/L	471	Standard
|	Sb	123	224.7	11.9	0.0314	0.004	11.9	ug/L	39	Standard
[	Ba	135	120109.5	0.6	30.6561	0.346	1.1	ug/L	25	Standard
[	Ce	140	5877.5	0.4				ug/L	25	Standard
[>	Tb	159	985462.9	0.1				ug/L	1071747	Standard
[	Ho	165	91.7	12.0				ug/L	13	Standard
|	Tl	203	337.7	14.0	0.0209	0.003	14.3	ug/L	5	Standard
|	Tl	205	752.0	10.4	0.0210	0.002	10.0	ug/L	10	Standard
|	Pb	206	669.0	2.9	0.0243	0.001	6.0	ug/L	382	Standard
|	Pb	207	539.0	5.3	0.0258	0.003	12.2	ug/L	306	Standard
|	Pb	208	2596.8	1.6	0.0266	0.001	4.1	ug/L	1443	Standard
	U	238	3142.7	1.3	0.2233	0.004	1.7	ug/L	5	Standard
[>	Bi	209	518199.4	0.5				ug/L	561075	Standard

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Na	23	97959.0	0.7	6.5045	0.087	1.3	mg/L	288	Standard
Mg	24	545111.9	1.2	0.9334	0.011	1.2	mg/L	218	Standard
K	39	320.0	12.4	0.2142	0.040	18.8	mg/L	125	Standard
Ca	43	13.3	86.6	10.9840	14.154	128.9	mg/L	3	Standard
Fe	54	547.8	4.8	0.0280	0.008	29.5	mg/L	550	Standard
Fe	57	5789.4	2.8	0.0961	0.003	3.4	mg/L	1772	Standard
Sc-1	45	290022.9	0.8				mg/L	330668	Standard
Cl	35	15.0	17.6				ug/L	5	Standard
Kr	83	32.2	7.0				ug/L	38	Standard
Br	81	438.3	4.7				ug/L	344	Standard
P	31	241.7	6.2				ug/L	312	Standard
S	34	6221.3	2.8				ug/L	5594	Standard
Sr	88	160.0	9.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.366	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053701

Report Date/Time: Sunday, July 29, 2012 13:56:49

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	Cd	111		
	Cd	114		
>	In	115	89.666	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.358	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053701

Report Date/Time: Sunday, July 29, 2012 13:56:49

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Method 6020 - Summary Report

Sample ID: L1207053702

Sample Date/Time: Sunday, July 29, 2012 13:57:29

Number of Replicates: 3

Autosampler Position: 314

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25269.4	3.8	3936.4015	183.678	4.7	ug/L	9465	Standard
|	Be	9	10.0	132.3	-0.0143	0.009	64.9	ug/L	10	Standard
|	Al	27	14520.3	4.0	0.5982	0.035	5.9	ug/L	7870	Standard
[>	Sc	45	288531.6	1.1				ug/L	330668	Standard
[	Ti	47	207.3	1.9	0.1637	0.009	5.3	ug/L	53	Standard
|	V	51	10537.2	1.0	0.9609	0.030	3.1	ug/L	2687	Standard
|	Cr	52	8455.7	0.8	0.1795	0.037	20.4	ug/L	8408	Standard
|	Cr	53	685.0	5.1	0.4081	0.047	11.5	ug/L	288	Standard
|	Mn	55	986.7	2.2	0.0028	0.002	64.5	ug/L	1080	Standard
|	Co	59	190.3	3.4	0.0135	0.001	5.1	ug/L	117	Standard
|	Ni	60	389.0	1.0	0.1653	0.003	2.1	ug/L	68	Standard
|	Cu	65	254.3	10.6	0.0694	0.012	16.6	ug/L	141	Standard
|	Zn	66	1602.8	3.4	1.6833	0.067	4.0	ug/L	138	Standard
[>	Ge	72	245212.6	2.7				ug/L	283230	Standard
|	As	75	123.2	32.3	0.3164	0.050	15.7	ug/L	-198	Standard
|	Se	82	33.2	13.4	0.1455	0.058	39.9	ug/L	21	Standard
[	Se-1	77	122.7	8.3	0.1765	0.123	69.9	ug/L	131	Standard
[>	Ga	71	475.0	15.9				mg/L	607	Standard
[	Rb	85	106.7	21.7				ug/L	30	Standard
[	Y	89	207832.5	1.0				ug/L	251555	Standard
[>	Rh	103	305.0	1.6				ug/L	335	Standard
[	Mo	98	1075.2	3.5	0.3404	0.015	4.3	ug/L	13	Standard
|	Ag	107	37.3	9.4	-0.0021	0.001	29.4	ug/L	36	Standard
|	Cd	111	23.1	30.8	-0.0100	0.002	24.8	mg/L	49	Standard
|	Cd	114	78.1	2.6	-0.0110	0.000	2.0	ug/L	170	Standard
[>	In	115	634873.5	0.7				ug/L	727802	Standard
|	Sn	118	381.3	5.5	-0.0094	0.002	24.6	ug/L	471	Standard
|	Sb	123	174.4	13.3	0.0255	0.003	13.0	ug/L	39	Standard
[	Ba	135	111581.8	1.9	29.2762	0.782	2.7	ug/L	25	Standard
[	Ce	140	119.7	4.6				ug/L	25	Standard
[>	Tb	159	965309.8	0.7				ug/L	1071747	Standard
[	Ho	165	12.3	9.4				ug/L	13	Standard
|	Tl	203	333.7	10.1	0.0208	0.002	11.1	ug/L	5	Standard
|	Tl	205	767.7	3.5	0.0215	0.001	3.9	ug/L	10	Standard
|	Pb	206	393.7	3.3	0.0012	0.001	81.8	ug/L	382	Standard
|	Pb	207	302.0	7.8	0.0020	0.002	113.4	ug/L	306	Standard
|	Pb	208	1450.0	2.7	0.0021	0.001	34.0	ug/L	1443	Standard
	U	238	2896.6	4.0	0.2068	0.009	4.5	ug/L	5	Standard
[>	Bi	209	515867.7	0.5				ug/L	561075	Standard

Sample ID: L1207053702

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Na	23	97811.5	2.3	6.5275	0.094	1.4	mg/L	288	Standard
Mg	24	529699.8	3.3	0.9116	0.021	2.3	mg/L	218	Standard
K	39	278.3	7.5	0.1736	0.023	13.1	mg/L	125	Standard
Ca	43	15.0	88.2	13.0099	16.180	124.4	mg/L	3	Standard
Fe	54	232.9	11.7	-0.0574	0.007	12.8	mg/L	550	Standard
Fe	57	2185.2	0.9	0.0149	0.001	6.7	mg/L	1772	Standard
Sc-1	45	288531.6	1.1				mg/L	330668	Standard
Cl	35	14.3	35.1				ug/L	5	Standard
Kr	83	36.3	5.1				ug/L	38	Standard
Br	81	461.7	8.9				ug/L	344	Standard
P	31	192.5	6.5				ug/L	312	Standard
S	34	6162.9	1.0				ug/L	5594	Standard
Sr	88	141.7	5.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.577	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053702

Report Date/Time: Sunday, July 29, 2012 13:59:59

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	Cd	111	
	Cd	114	
>	In	115	87.232
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.943
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053702

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Method 6020 - Summary Report

Sample ID: L1207053703

Sample Date/Time: Sunday, July 29, 2012 14:00:39

Number of Replicates: 3

Autosampler Position: 315

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22563.5	1.7	3274.7045	142.786	4.4	ug/L	9465	Standard
|	Be	9	21.7	35.3	-0.0064	0.005	78.9	ug/L	10	Standard
|	Al	27	1735783.9	1.6	139.0104	3.492	2.5	ug/L	7870	Standard
[>	Sc	45	291457.0	1.5				ug/L	330668	Standard
[	Ti	47	4574.4	1.6	4.4950	0.111	2.5	ug/L	53	Standard
|	V	51	18429.7	2.5	1.8790	0.067	3.6	ug/L	2687	Standard
|	Cr	52	9876.2	1.6	0.3836	0.035	9.2	ug/L	8408	Standard
|	Cr	53	930.9	7.4	0.6205	0.067	10.7	ug/L	288	Standard
|	Mn	55	37272.1	2.7	3.1894	0.111	3.5	ug/L	1080	Standard
|	Co	59	694.7	3.1	0.0837	0.002	2.7	ug/L	117	Standard
|	Ni	60	1024.4	2.1	0.4804	0.012	2.5	ug/L	68	Standard
|	Cu	65	400.0	4.0	0.1472	0.008	5.5	ug/L	141	Standard
|	Zn	66	1735.4	3.5	1.8250	0.079	4.3	ug/L	138	Standard
[>	Ge	72	246432.3	0.8				ug/L	283230	Standard
|	As	75	303.0	1.2	0.5228	0.002	0.4	ug/L	-198	Standard
|	Se	82	32.0	10.6	0.1288	0.037	28.5	ug/L	21	Standard
[	Se-1	77	134.0	3.9	0.3553	0.086	24.3	ug/L	131	Standard
[>	Ga	71	708.3	9.2				mg/L	607	Standard
[	Rb	85	2070.1	2.2				ug/L	30	Standard
[	Y	89	214557.0	1.5				ug/L	251555	Standard
[>	Rh	103	300.0	23.5				ug/L	335	Standard
[	Mo	98	1210.8	4.5	0.3827	0.020	5.3	ug/L	13	Standard
|	Ag	107	46.7	21.0	-0.0004	0.002	446.4	ug/L	36	Standard
|	Cd	111	51.4	31.0	0.0001	0.006	6599.6	mg/L	49	Standard
|	Cd	114	152.2	12.6	-0.0024	0.002	98.6	ug/L	170	Standard
[>	In	115	637325.9	0.8				ug/L	727802	Standard
|	Sn	118	539.3	6.9	0.0062	0.004	64.9	ug/L	471	Standard
|	Sb	123	2001.5	4.7	0.2722	0.014	5.3	ug/L	39	Standard
[	Ba	135	130826.8	1.8	34.1951	0.856	2.5	ug/L	25	Standard
[	Ce	140	9202.8	0.8				ug/L	25	Standard
[>	Tb	159	972290.6	1.3				ug/L	1071747	Standard
[	Ho	165	163.0	12.3				ug/L	13	Standard
|	Tl	203	388.0	1.7	0.0242	0.000	0.9	ug/L	5	Standard
|	Tl	205	880.4	8.6	0.0246	0.002	8.6	ug/L	10	Standard
|	Pb	206	932.0	3.6	0.0465	0.004	7.8	ug/L	382	Standard
|	Pb	207	758.4	2.0	0.0479	0.002	4.6	ug/L	306	Standard
|	Pb	208	3593.5	1.6	0.0480	0.002	4.1	ug/L	1443	Standard
	U	238	2841.6	2.3	0.2019	0.007	3.4	ug/L	5	Standard
[>	Bi	209	518330.1	1.0				ug/L	561075	Standard

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Na	23	92922.4	0.6	6.1383	0.106	1.7	mg/L	288	Standard
Mg	24	521632.8	0.8	0.8890	0.021	2.3	mg/L	218	Standard
K	39	305.0	7.1	0.1978	0.026	13.4	mg/L	125	Standard
Ca	43	8.3	69.3	4.7494	6.957	146.5	mg/L	3	Standard
Fe	54	793.3	7.8	0.0936	0.015	15.7	mg/L	550	Standard
Fe	57	7947.1	2.0	0.1441	0.005	3.3	mg/L	1772	Standard
Sc-1	45	291457.0	1.5				mg/L	330668	Standard
Cl	35	15.7	19.5				ug/L	5	Standard
Kr	83	32.8	6.8				ug/L	38	Standard
Br	81	389.2	19.3				ug/L	344	Standard
P	31	242.5	12.9				ug/L	312	Standard
S	34	6044.5	1.5				ug/L	5594	Standard
Sr	88	148.3	17.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.008	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053703

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	Cd	111		
	Cd	114		
>	In	115	87.569	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.382	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

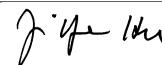
Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207053704

Sample Date/Time: Sunday, July 29, 2012 14:03:49

Number of Replicates: 3

Autosampler Position: 316

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

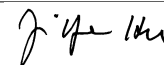
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20053.3	1.8	2720.1218	154.065	5.7	ug/L	9465	Standard
|	Be	9	36.7	139.3	0.0042	0.036	839.5	ug/L	10	Standard
|	Al	27	20774.5	15.8	1.0951	0.293	26.8	ug/L	7870	Standard
[>	Sc	45	290988.1	1.6				ug/L	330668	Standard
|	Ti	47	246.0	12.6	0.1987	0.032	16.2	ug/L	53	Standard
|	V	51	13935.2	1.4	1.3361	0.022	1.6	ug/L	2687	Standard
|	Cr	52	8043.8	2.8	0.0999	0.039	39.4	ug/L	8408	Standard
|	Cr	53	535.0	5.5	0.2680	0.027	10.2	ug/L	288	Standard
|	Mn	55	1231.1	6.5	0.0228	0.007	31.8	ug/L	1080	Standard
|	Co	59	214.0	30.0	0.0165	0.009	55.3	ug/L	117	Standard
|	Ni	60	380.0	7.8	0.1580	0.016	10.0	ug/L	68	Standard
|	Cu	65	243.3	25.1	0.0619	0.034	54.2	ug/L	141	Standard
|	Zn	66	1238.7	2.2	1.2451	0.033	2.7	ug/L	138	Standard
[>	Ge	72	248899.1	0.7				ug/L	283230	Standard
|	As	75	191.9	12.2	0.3923	0.027	6.9	ug/L	-198	Standard
|	Se	82	27.8	7.5	0.0775	0.024	31.0	ug/L	21	Standard
[	Se-1	77	121.0	9.2	0.1214	0.188	155.0	ug/L	131	Standard
[>	Ga	71	551.7	14.1				mg/L	607	Standard
[	Rb	85	368.3	11.5				ug/L	30	Standard
[	Y	89	214288.3	1.5				ug/L	251555	Standard
[>	Rh	103	303.3	13.4				ug/L	335	Standard
[	Mo	98	1140.4	1.5	0.3630	0.006	1.7	ug/L	13	Standard
|	Ag	107	67.7	40.1	0.0035	0.005	142.6	ug/L	36	Standard
|	Cd	111	32.3	33.5	-0.0067	0.004	58.5	mg/L	49	Standard
|	Cd	114	120.0	20.8	-0.0060	0.003	49.5	ug/L	170	Standard
[>	In	115	632217.2	0.2				ug/L	727802	Standard
|	Sn	118	396.7	4.5	-0.0077	0.002	23.7	ug/L	471	Standard
|	Sb	123	377.3	3.9	0.0532	0.002	3.5	ug/L	39	Standard
[	Ba	135	113382.4	1.6	29.8696	0.419	1.4	ug/L	25	Standard
[	Ce	140	151.0	2.0				ug/L	25	Standard
[>	Tb	159	960996.3	0.3				ug/L	1071747	Standard
[	Ho	165	11.7	34.6				ug/L	13	Standard
|	Tl	203	301.0	1.4	0.0187	0.000	2.0	ug/L	5	Standard
|	Tl	205	735.7	3.6	0.0208	0.001	4.5	ug/L	10	Standard
|	Pb	206	379.0	4.0	0.0002	0.002	678.7	ug/L	382	Standard
|	Pb	207	317.0	3.6	0.0037	0.002	41.5	ug/L	306	Standard
|	Pb	208	1513.4	4.8	0.0037	0.002	53.0	ug/L	1443	Standard
	U	238	2911.0	19.7	0.2094	0.043	20.7	ug/L	5	Standard
[>	Bi	209	512431.7	1.2				ug/L	561075	Standard

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Na	23	90751.0	1.6	6.0028	0.012	0.2	mg/L	288	Standard
Mg	24	470168.8	0.9	0.8027	0.020	2.5	mg/L	218	Standard
K	39	285.0	3.0	0.1780	0.012	6.9	mg/L	125	Standard
Ca	43	11.7	107.9	8.6949	15.128	174.0	mg/L	3	Standard
Fe	54	254.4	14.8	-0.0521	0.010	19.9	mg/L	550	Standard
Fe	57	2065.1	9.2	0.0118	0.005	40.1	mg/L	1772	Standard
Sc-1	45	290988.1	1.6				mg/L	330668	Standard
Cl	35	13.0	20.4				ug/L	5	Standard
Kr	83	35.4	3.6				ug/L	38	Standard
Br	81	445.8	5.8				ug/L	344	Standard
P	31	151.7	14.0				ug/L	312	Standard
S	34	6044.5	2.2				ug/L	5594	Standard
Sr	88	133.3	13.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.879	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053704

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	Cd	111	
	Cd	114	
>	In	115	86.867
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.330
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053704

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Method 6020 - Summary Report

Sample ID: L1207053705

Sample Date/Time: Sunday, July 29, 2012 14:06:58

Number of Replicates: 3

Autosampler Position: 317

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22984.1	2.9	3310.3576	228.521	6.9	ug/L	9465	Standard
|	Be	9	26.7	28.6	-0.0032	0.005	152.2	ug/L	10	Standard
|	Al	27	1407314.7	3.2	111.3172	5.359	4.8	ug/L	7870	Standard
[>	Sc	45	294875.5	1.6				ug/L	330668	Standard
|	Ti	47	3544.4	2.6	3.4384	0.151	4.4	ug/L	53	Standard
|	V	51	20069.1	2.3	2.0477	0.093	4.6	ug/L	2687	Standard
|	Cr	52	8960.6	0.6	0.2343	0.030	12.7	ug/L	8408	Standard
|	Cr	53	749.2	3.4	0.4537	0.010	2.3	ug/L	288	Standard
|	Mn	55	50959.6	0.5	4.3460	0.103	2.4	ug/L	1080	Standard
|	Co	59	795.4	1.7	0.0966	0.003	3.1	ug/L	117	Standard
|	Ni	60	1180.7	3.3	0.5524	0.026	4.7	ug/L	68	Standard
|	Cu	65	451.7	4.5	0.1727	0.015	8.6	ug/L	141	Standard
|	Zn	66	6069.2	2.6	6.6922	0.281	4.2	ug/L	138	Standard
[>	Ge	72	248992.3	1.8				ug/L	283230	Standard
|	As	75	315.7	10.1	0.5340	0.042	7.8	ug/L	-198	Standard
|	Se	82	30.4	21.5	0.1082	0.082	75.5	ug/L	21	Standard
[	Se-1	77	124.3	11.3	0.1741	0.216	124.2	ug/L	131	Standard
[>	Ga	71	640.0	6.1				mg/L	607	Standard
|	Rb	85	1771.8	0.6				ug/L	30	Standard
|	Y	89	219400.9	2.1				ug/L	251555	Standard
[>	Rh	103	296.7	7.8				ug/L	335	Standard
|	Mo	98	585.8	1.8	0.1822	0.003	1.5	ug/L	13	Standard
|	Ag	107	43.3	13.5	-0.0010	0.001	107.5	ug/L	36	Standard
|	Cd	111	38.3	15.4	-0.0046	0.002	47.9	mg/L	49	Standard
|	Cd	114	98.9	14.9	-0.0086	0.002	21.1	ug/L	170	Standard
[>	In	115	634759.3	0.6				ug/L	727802	Standard
|	Sn	118	562.0	5.6	0.0086	0.003	39.3	ug/L	471	Standard
|	Sb	123	138.7	9.9	0.0206	0.002	9.4	ug/L	39	Standard
|	Ba	135	180826.7	1.2	47.4571	0.822	1.7	ug/L	25	Standard
|	Ce	140	10867.9	0.7				ug/L	25	Standard
[>	Tb	159	968687.3	0.2				ug/L	1071747	Standard
|	Ho	165	203.7	1.5				ug/L	13	Standard
|	Tl	203	330.3	2.9	0.0204	0.000	2.2	ug/L	5	Standard
|	Tl	205	760.0	8.4	0.0212	0.002	8.4	ug/L	10	Standard
|	Pb	206	1005.0	2.6	0.0525	0.003	4.8	ug/L	382	Standard
|	Pb	207	862.7	5.3	0.0583	0.004	7.0	ug/L	306	Standard
|	Pb	208	3916.2	1.7	0.0548	0.001	2.3	ug/L	1443	Standard
	U	238	4355.3	3.0	0.3090	0.008	2.5	ug/L	5	Standard
[>	Bi	209	519143.1	0.9				ug/L	561075	Standard

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Na	23	96214.6	2.3	6.2818	0.090	1.4	mg/L	288	Standard
Mg	24	515918.5	0.6	0.8690	0.011	1.3	mg/L	218	Standard
K	39	213.3	25.8	0.1034	0.057	55.0	mg/L	125	Standard
Ca	43	23.3	12.4	22.7039	3.815	16.8	mg/L	3	Standard
Fe	54	704.3	4.7	0.0675	0.012	17.3	mg/L	550	Standard
Fe	57	7038.3	4.0	0.1219	0.009	7.1	mg/L	1772	Standard
Sc-1	45	294875.5	1.6				mg/L	330668	Standard
Cl	35	14.3	17.6				ug/L	5	Standard
Kr	83	33.3	10.5				ug/L	38	Standard
Br	81	531.7	5.2				ug/L	344	Standard
P	31	235.0	3.7				ug/L	312	Standard
S	34	6127.1	1.4				ug/L	5594	Standard
Sr	88	151.7	10.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.912	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	87.216	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	92.526	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207053706

Sample Date/Time: Sunday, July 29, 2012 14:10:08

Number of Replicates: 3

Autosampler Position: 318

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23341.3	0.9	3497.6343	268.507	7.7	ug/L	9465	Standard
|	Be	9	8.3	34.6	-0.0155	0.002	13.3	ug/L	10	Standard
|	Al	27	12948.9	3.3	0.4707	0.074	15.8	ug/L	7870	Standard
[>	Sc	45	289261.0	5.7				ug/L	330668	Standard
|	Ti	47	243.0	5.3	0.2027	0.015	7.3	ug/L	53	Standard
|	V	51	18740.8	2.9	1.9572	0.052	2.7	ug/L	2687	Standard
|	Cr	52	7473.2	0.9	0.0483	0.023	47.0	ug/L	8408	Standard
|	Cr	53	442.5	8.3	0.1990	0.035	17.7	ug/L	288	Standard
|	Mn	55	1575.4	5.5	0.0568	0.009	16.1	ug/L	1080	Standard
|	Co	59	182.3	6.4	0.0128	0.001	8.2	ug/L	117	Standard
|	Ni	60	471.7	6.1	0.2102	0.020	9.6	ug/L	68	Standard
|	Cu	65	219.3	4.6	0.0524	0.005	9.8	ug/L	141	Standard
|	Zn	66	1097.7	1.9	1.1224	0.014	1.2	ug/L	138	Standard
[>	Ge	72	241845.4	2.7				ug/L	283230	Standard
|	As	75	269.7	11.6	0.4898	0.029	6.0	ug/L	-198	Standard
|	Se	82	32.5	8.1	0.1419	0.031	22.0	ug/L	21	Standard
[	Se-1	77	134.0	8.3	0.3952	0.133	33.6	ug/L	131	Standard
[>	Ga	71	496.7	5.9				mg/L	607	Standard
|	Rb	85	245.0	12.7				ug/L	30	Standard
|	Y	89	211358.6	3.7				ug/L	251555	Standard
[>	Rh	103	333.3	16.5				ug/L	335	Standard
|	Mo	98	617.6	4.4	0.1957	0.002	0.9	ug/L	13	Standard
|	Ag	107	36.3	17.5	-0.0022	0.001	41.8	ug/L	36	Standard
|	Cd	111	22.9	21.8	-0.0100	0.002	15.4	mg/L	49	Standard
|	Cd	114	93.0	6.8	-0.0091	0.000	3.3	ug/L	170	Standard
[>	In	115	624616.3	4.3				ug/L	727802	Standard
|	Sn	118	359.7	12.1	-0.0111	0.003	26.3	ug/L	471	Standard
|	Sb	123	128.2	26.2	0.0194	0.004	20.7	ug/L	39	Standard
|	Ba	135	178501.5	1.5	47.6428	1.354	2.8	ug/L	25	Standard
|	Ce	140	111.0	9.5				ug/L	25	Standard
[>	Tb	159	946141.4	4.0				ug/L	1071747	Standard
|	Ho	165	15.0	11.5				ug/L	13	Standard
|	Tl	203	347.3	9.6	0.0218	0.001	5.7	ug/L	5	Standard
|	Tl	205	750.4	5.9	0.0212	0.001	4.0	ug/L	10	Standard
|	Pb	206	346.7	9.0	-0.0025	0.002	74.6	ug/L	382	Standard
|	Pb	207	281.3	4.2	0.0002	0.002	806.4	ug/L	306	Standard
|	Pb	208	1396.7	4.8	0.0012	0.000	13.9	ug/L	1443	Standard
	U	238	4574.0	1.8	0.3300	0.009	2.6	ug/L	5	Standard
[>	Bi	209	510962.7	4.3				ug/L	561075	Standard

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Na	23	96501.4	2.2	6.4429	0.502	7.8	mg/L	288	Standard
Mg	24	533157.2	2.0	0.9173	0.052	5.7	mg/L	218	Standard
K	39	183.3	16.4	0.0775	0.034	44.4	mg/L	125	Standard
Ca	43	21.7	48.0	21.6861	14.046	64.8	mg/L	3	Standard
Fe	54	253.0	15.4	-0.0515	0.015	28.7	mg/L	550	Standard
Fe	57	2328.5	8.9	0.0183	0.007	40.0	mg/L	1772	Standard
Sc-1	45	289261.0	5.7				mg/L	330668	Standard
Cl	35	16.7	22.7				ug/L	5	Standard
Kr	83	40.1	10.5				ug/L	38	Standard
Br	81	584.2	8.9				ug/L	344	Standard
P	31	178.3	6.9				ug/L	312	Standard
S	34	6279.6	1.5				ug/L	5594	Standard
Sr	88	183.3	11.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.388	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053706

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	Cd	111	
	Cd	114	
>	In	115	85.822
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.068
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053706

Report Date/Time: Sunday, July 29, 2012 14:12:38

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Method 6020 - Summary Report

Sample ID: L1207053707

Sample Date/Time: Sunday, July 29, 2012 14:13:17

Number of Replicates: 3

Autosampler Position: 319

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

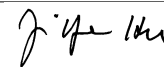
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	28359.9	2.2	4548.1890	113.679	2.5	ug/L	9465	Standard
|	Be	9	1.7	173.2	-0.0201	0.002	9.8	ug/L	10	Standard
|	Al	27	31263.9	2.2	1.9240	0.073	3.8	ug/L	7870	Standard
[>	Sc	45	292530.4	0.7				ug/L	330668	Standard
|	Ti	47	263.3	12.6	0.2190	0.032	14.6	ug/L	53	Standard
|	V	51	4829.7	4.3	0.2875	0.022	7.6	ug/L	2687	Standard
|	Cr	52	11387.3	3.8	0.6135	0.057	9.4	ug/L	8408	Standard
|	Cr	53	1738.4	12.4	1.3340	0.185	13.8	ug/L	288	Standard
|	Mn	55	6670.5	1.1	0.5036	0.004	0.9	ug/L	1080	Standard
|	Co	59	221.0	7.7	0.0178	0.002	12.7	ug/L	117	Standard
|	Ni	60	495.0	2.1	0.2179	0.006	2.8	ug/L	68	Standard
|	Cu	65	284.3	3.6	0.0856	0.005	5.8	ug/L	141	Standard
|	Zn	66	1563.7	3.0	1.6357	0.061	3.7	ug/L	138	Standard
[>	Ge	72	245568.4	0.5				ug/L	283230	Standard
|	As	75	179.0	38.3	0.3801	0.079	20.7	ug/L	-198	Standard
|	Se	82	61.4	8.0	0.4729	0.054	11.5	ug/L	21	Standard
[	Se-1	77	153.7	13.4	0.6877	0.331	48.1	ug/L	131	Standard
[>	Ga	71	505.0	3.6				mg/L	607	Standard
|	Rb	85	3278.7	2.3				ug/L	30	Standard
|	Y	89	210135.9	2.2				ug/L	251555	Standard
[>	Rh	103	338.3	6.2				ug/L	335	Standard
|	Mo	98	1487.8	1.7	0.4819	0.005	1.1	ug/L	13	Standard
|	Ag	107	40.0	7.5	-0.0015	0.001	35.0	ug/L	36	Standard
|	Cd	111	34.4	10.5	-0.0057	0.001	23.1	mg/L	49	Standard
|	Cd	114	116.6	12.7	-0.0062	0.002	29.8	ug/L	170	Standard
[>	In	115	624176.1	0.7				ug/L	727802	Standard
|	Sn	118	625.3	1.9	0.0160	0.001	5.0	ug/L	471	Standard
|	Sb	123	757.1	2.1	0.1062	0.002	1.5	ug/L	39	Standard
|	Ba	135	11351.3	1.1	3.0186	0.015	0.5	ug/L	25	Standard
|	Ce	140	153.7	13.1				ug/L	25	Standard
[>	Tb	159	957143.4	0.9				ug/L	1071747	Standard
|	Ho	165	17.3	8.8				ug/L	13	Standard
|	Tl	203	386.3	4.5	0.0245	0.001	4.8	ug/L	5	Standard
|	Tl	205	919.7	4.5	0.0261	0.001	5.2	ug/L	10	Standard
|	Pb	206	420.3	1.3	0.0040	0.001	15.4	ug/L	382	Standard
|	Pb	207	376.7	5.7	0.0100	0.002	23.1	ug/L	306	Standard
|	Pb	208	1665.0	1.7	0.0072	0.001	11.8	ug/L	1443	Standard
	U	238	2157.5	1.7	0.1559	0.003	2.1	ug/L	5	Standard
[>	Bi	209	509469.8	0.8				ug/L	561075	Standard

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Na	23	128781.7	0.6	8.4884	0.024	0.3	mg/L	288	Standard
Mg	24	1311789.2	2.3	2.2269	0.067	3.0	mg/L	218	Standard
K	39	1476.7	4.6	1.3687	0.059	4.3	mg/L	125	Standard
Ca	43	13.3	108.3	10.8561	17.636	162.5	mg/L	3	Standard
Fe	54	264.3	8.2	-0.0498	0.006	12.0	mg/L	550	Standard
Fe	57	2368.5	8.2	0.0183	0.004	21.6	mg/L	1772	Standard
Sc-1	45	292530.4	0.7				mg/L	330668	Standard
Cl	35	50.7	14.8				ug/L	5	Standard
Kr	83	36.2	12.5				ug/L	38	Standard
Br	81	970.9	7.1				ug/L	344	Standard
P	31	273.3	8.9				ug/L	312	Standard
S	34	8243.9	2.0				ug/L	5594	Standard
Sr	88	141.7	14.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.703	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053707

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	Cd	111	
	Cd	114	
>	In	115	85.762
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.802
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053707

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 14:16:29

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

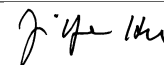
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8582.4	4.1	5.5551	59.636	1073.6	ug/L	9465	Standard
|	Be	9	76958.4	3.2	48.7942	1.534	3.1	ug/L	10	Standard
|	Al	27	649872.7	1.4	47.9767	0.915	1.9	ug/L	7870	Standard
[>	Sc	45	313660.2	0.8				ug/L	330668	Standard
|	Ti	47	107548.4	1.6	98.4081	0.653	0.7	ug/L	53	Standard
|	V	51	444508.8	0.9	47.7755	0.120	0.3	ug/L	2687	Standard
|	Cr	52	357167.6	0.9	47.8324	0.233	0.5	ug/L	8408	Standard
|	Cr	53	59837.9	0.1	48.2879	0.477	1.0	ug/L	288	Standard
|	Mn	55	608819.0	1.0	49.2581	0.368	0.7	ug/L	1080	Standard
|	Co	59	373972.7	0.5	48.0739	0.283	0.6	ug/L	117	Standard
|	Ni	60	104352.1	0.7	47.8840	0.191	0.4	ug/L	68	Standard
|	Cu	65	96629.2	0.4	47.8851	0.534	1.1	ug/L	141	Standard
|	Zn	66	46965.3	1.1	49.2110	0.165	0.3	ug/L	138	Standard
[>	Ge	72	267021.5	0.9				ug/L	283230	Standard
|	As	75	46153.4	1.5	49.3800	0.331	0.7	ug/L	-198	Standard
|	Se	82	4710.8	0.8	50.3044	0.187	0.4	ug/L	21	Standard
[	Se-1	77	3440.1	3.0	50.5321	1.097	2.2	ug/L	131	Standard
[>	Ga	71	598.3	8.4				mg/L	607	Standard
|	Rb	85	680.0	8.4				ug/L	30	Standard
|	Y	89	237507.9	5.9				ug/L	251555	Standard
[>	Rh	103	328.3	11.5				ug/L	335	Standard
|	Mo	98	324867.3	0.8	97.5970	0.316	0.3	ug/L	13	Standard
|	Ag	107	301771.0	0.8	51.5254	0.943	1.8	ug/L	36	Standard
|	Cd	111	150811.9	0.5	50.1724	0.663	1.3	mg/L	49	Standard
|	Cd	114	459168.5	0.8	50.2336	0.437	0.9	ug/L	170	Standard
[>	In	115	682925.3	1.1				ug/L	727802	Standard
|	Sn	118	531244.3	0.6	49.1936	0.288	0.6	ug/L	471	Standard
|	Sb	123	393584.6	0.7	49.6182	0.563	1.1	ug/L	39	Standard
|	Ba	135	212107.4	1.0	51.7388	0.303	0.6	ug/L	25	Standard
|	Ce	140	796.0	3.7				ug/L	25	Standard
[>	Tb	159	1034352.6	1.1				ug/L	1071747	Standard
|	Ho	165	18.7	11.2				ug/L	13	Standard
|	Tl	203	760493.9	0.7	47.6794	0.450	0.9	ug/L	5	Standard
|	Tl	205	1765719.4	0.4	47.4642	0.427	0.9	ug/L	10	Standard
|	Pb	206	594742.2	1.1	48.3046	0.176	0.4	ug/L	382	Standard
|	Pb	207	503170.9	0.4	48.9501	0.678	1.4	ug/L	306	Standard
|	Pb	208	2331784.3	0.6	48.2639	0.413	0.9	ug/L	1443	Standard
	U	238	708636.3	0.7	48.5910	0.934	1.9	ug/L	5	Standard
[>	Bi	209	537629.2	1.3				ug/L	561075	Standard

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Na	23	103841.3	1.3	6.3744	0.067	1.1	mg/L	288	Standard
Mg	24	3035350.3	2.4	4.8047	0.106	2.2	mg/L	218	Standard
K	39	5401.0	1.5	4.9321	0.080	1.6	mg/L	125	Standard
Ca	43	11.7	99.0	7.7644	12.917	166.4	mg/L	3	Standard
Fe	54	20141.0	1.4	4.9469	0.044	0.9	mg/L	550	Standard
Fe	57	237699.2	4.5	4.9353	0.207	4.2	mg/L	1772	Standard
Sc-1	45	313660.2	0.8				mg/L	330668	Standard
Cl	35	5.0	52.9				ug/L	5	Standard
Kr	83	38.6	6.5				ug/L	38	Standard
Br	81	348.3	16.4				ug/L	344	Standard
P	31	351.7	9.0				ug/L	312	Standard
S	34	6088.7	2.6				ug/L	5594	Standard
Sr	88	45.0	44.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	95.953		
Sc	45			
Ti	47	98.408		
V	51	95.551		
Cr	52	95.665		
Cr	53			
Mn	55	98.516		
Co	59	96.148		
Ni	60	95.768		
Cu	65	95.770		
Zn	66	98.422		
Ge	72		94.277	
As	75	98.760		
Se	82	100.609		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	97.597		
Ag	107	103.051		

Sample ID: QC Std 6

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Cd	111	100.345	
Cd	114		
> In	115		93.834
Sn	118	98.387	
Sb	123	99.236	
Ba	135	103.478	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	95.359	
Tl	205		
Pb	206	96.609	
Pb	207	97.900	
Pb	208	96.528	
U	238	97.182	
> Bi	209		95.821
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Approved: July 30, 2012



Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 14:19:39

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

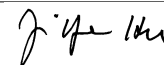
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7965.4	1.3	-84.5133	12.025	14.2	ug/L	9465	Standard
|	Be	9	48.3	70.4	0.0102	0.022	216.6	ug/L	10	Standard
|	Al	27	7373.5	3.4	-0.0173	0.022	130.2	ug/L	7870	Standard
[>	Sc	45	306618.2	0.8				ug/L	330668	Standard
[	Ti	47	107.0	47.1	0.0566	0.047	82.8	ug/L	53	Standard
|	V	51	2311.1	2.3	-0.0256	0.007	26.3	ug/L	2687	Standard
|	Cr	52	7117.7	2.4	-0.0890	0.031	34.6	ug/L	8408	Standard
|	Cr	53	285.0	9.5	0.0381	0.022	57.6	ug/L	288	Standard
|	Mn	55	1140.7	5.4	0.0099	0.004	45.1	ug/L	1080	Standard
|	Co	59	171.0	21.4	0.0093	0.005	49.9	ug/L	117	Standard
|	Ni	60	109.7	38.3	0.0220	0.020	88.8	ug/L	68	Standard
|	Cu	65	207.7	18.0	0.0371	0.019	50.4	ug/L	141	Standard
|	Zn	66	171.7	11.6	0.0320	0.021	64.0	ug/L	138	Standard
[>	Ge	72	262141.0	0.7				ug/L	283230	Standard
|	As	75	-158.5	18.0	0.0007	0.030	4276.4	ug/L	-198	Standard
|	Se	82	21.8	22.8	-0.0043	0.056	1279.5	ug/L	21	Standard
[	Se-1	77	116.3	12.3	-0.0516	0.218	423.2	ug/L	131	Standard
[>	Ga	71	553.3	12.5				mg/L	607	Standard
[	Rb	85	30.0	92.8				ug/L	30	Standard
[	Y	89	226539.4	0.8				ug/L	251555	Standard
[>	Rh	103	273.3	2.8				ug/L	335	Standard
[	Mo	98	227.1	22.1	0.0619	0.014	22.8	ug/L	13	Standard
|	Ag	107	134.7	34.2	0.0143	0.008	53.7	ug/L	36	Standard
|	Cd	111	83.5	32.9	0.0098	0.009	90.9	mg/L	49	Standard
|	Cd	114	253.5	26.5	0.0079	0.007	89.8	ug/L	170	Standard
[>	In	115	673334.2	1.9				ug/L	727802	Standard
|	Sn	118	862.0	7.9	0.0335	0.005	14.5	ug/L	471	Standard
|	Sb	123	2180.9	5.5	0.2805	0.010	3.5	ug/L	39	Standard
[	Ba	135	81.3	31.6	0.0085	0.006	70.7	ug/L	25	Standard
[	Ce	140	30.0	12.0				ug/L	25	Standard
[>	Tb	159	1004513.9	1.7				ug/L	1071747	Standard
[	Ho	165	10.3	34.0				ug/L	13	Standard
|	Tl	203	140.7	41.4	0.0077	0.004	47.0	ug/L	5	Standard
|	Tl	205	359.7	45.7	0.0097	0.004	45.5	ug/L	10	Standard
|	Pb	206	465.3	14.1	0.0057	0.005	93.9	ug/L	382	Standard
|	Pb	207	381.0	9.2	0.0084	0.003	40.4	ug/L	306	Standard
|	Pb	208	1760.0	9.6	0.0072	0.003	48.7	ug/L	1443	Standard
	U	238	193.3	71.3	0.0130	0.009	72.5	ug/L	5	Standard
[>	Bi	209	538621.5	0.1				ug/L	561075	Standard

Sample ID: QC Std 7

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Na	23	558.3	49.4	-0.0010	0.017	1816.6	mg/L	288	Standard
Mg	24	1370.1	54.6	0.0025	0.001	48.9	mg/L	218	Standard
K	39	115.0	4.3	0.0009	0.004	425.6	mg/L	125	Standard
Ca	43	1.7	173.2	-3.4395	3.326	96.7	mg/L	3	Standard
Fe	54	525.2	7.8	0.0140	0.010	67.9	mg/L	550	Standard
Fe	57	1706.8	4.8	0.0017	0.002	109.8	mg/L	1772	Standard
Sc-1	45	306618.2	0.8				mg/L	330668	Standard
Cl	35	3.7	41.7				ug/L	5	Standard
Kr	83	37.9	12.9				ug/L	38	Standard
Br	81	307.5	10.6				ug/L	344	Standard
P	31	302.5	7.9				ug/L	312	Standard
S	34	5811.1	0.2				ug/L	5594	Standard
Sr	88	45.0	11.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.554	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 14:22:09

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	Cd	111	
	Cd	114	
>	In	115	92.516
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.998
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 14:22:09

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Method 6020 - Summary Report

Sample ID: L1207053708

Sample Date/Time: Sunday, July 29, 2012 14:22:51

Number of Replicates: 3

Autosampler Position: 320

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

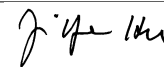
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26518.2	0.9	4450.3502	208.357	4.7	ug/L	9465	Standard
|	Be	9	11.7	65.5	-0.0129	0.005	41.0	ug/L	10	Standard
|	Al	27	22758.8	3.1	1.3392	0.104	7.8	ug/L	7870	Standard
[>	Sc	45	278003.4	2.7				ug/L	330668	Standard
|	Ti	47	196.0	6.9	0.1570	0.015	9.5	ug/L	53	Standard
|	V	51	4630.6	4.1	0.2780	0.022	8.0	ug/L	2687	Standard
|	Cr	52	10488.0	2.0	0.5195	0.037	7.1	ug/L	8408	Standard
|	Cr	53	1671.8	17.6	1.3125	0.259	19.7	ug/L	288	Standard
|	Mn	55	5861.5	3.8	0.4455	0.022	5.0	ug/L	1080	Standard
|	Co	59	403.3	11.6	0.0447	0.007	15.0	ug/L	117	Standard
|	Ni	60	480.0	5.0	0.2165	0.013	6.0	ug/L	68	Standard
|	Cu	65	277.7	4.9	0.0858	0.007	8.6	ug/L	141	Standard
|	Zn	66	1423.7	2.1	1.5167	0.024	1.6	ug/L	138	Standard
[>	Ge	72	239482.5	0.7				ug/L	283230	Standard
|	As	75	176.4	6.7	0.3825	0.015	4.0	ug/L	-198	Standard
|	Se	82	52.3	4.3	0.3824	0.023	6.0	ug/L	21	Standard
[	Se-1	77	144.7	10.7	0.5995	0.247	41.2	ug/L	131	Standard
[>	Ga	71	491.7	12.1				mg/L	607	Standard
|	Rb	85	3200.3	1.7				ug/L	30	Standard
|	Y	89	207150.2	2.1				ug/L	251555	Standard
[>	Rh	103	286.7	15.6				ug/L	335	Standard
|	Mo	98	1613.3	7.0	0.5317	0.037	6.9	ug/L	13	Standard
|	Ag	107	146.3	114.6	0.0187	0.032	169.0	ug/L	36	Standard
|	Cd	111	85.5	107.0	0.0133	0.034	253.2	mg/L	49	Standard
|	Cd	114	249.7	89.4	0.0101	0.027	267.0	ug/L	170	Standard
[>	In	115	614263.9	1.0				ug/L	727802	Standard
|	Sn	118	843.4	15.7	0.0394	0.013	33.3	ug/L	471	Standard
|	Sb	123	1003.2	10.6	0.1424	0.015	10.4	ug/L	39	Standard
|	Ba	135	12721.7	0.9	3.4396	0.063	1.8	ug/L	25	Standard
|	Ce	140	108.3	6.1				ug/L	25	Standard
[>	Tb	159	952490.8	0.7				ug/L	1071747	Standard
|	Ho	165	14.7	25.8				ug/L	13	Standard
|	Tl	203	493.7	26.6	0.0320	0.009	27.7	ug/L	5	Standard
|	Tl	205	1160.0	26.4	0.0333	0.009	26.7	ug/L	10	Standard
|	Pb	206	491.7	21.6	0.0106	0.009	87.9	ug/L	382	Standard
|	Pb	207	409.3	24.5	0.0139	0.011	75.8	ug/L	306	Standard
|	Pb	208	1920.7	21.7	0.0133	0.009	70.1	ug/L	1443	Standard
	U	238	2141.2	6.0	0.1565	0.010	6.6	ug/L	5	Standard
[>	Bi	209	503625.3	0.8				ug/L	561075	Standard

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Na	23	128613.6	0.8	8.9253	0.190	2.1	mg/L	288	Standard
Mg	24	1295231.4	0.9	2.3148	0.083	3.6	mg/L	218	Standard
K	39	1320.1	6.0	1.2828	0.109	8.5	mg/L	125	Standard
Ca	43	15.0	57.7	13.6242	10.566	77.6	mg/L	3	Standard
Fe	54	237.2	21.9	-0.0537	0.015	27.5	mg/L	550	Standard
Fe	57	2281.8	4.4	0.0191	0.004	19.1	mg/L	1772	Standard
Sc-1	45	278003.4	2.7				mg/L	330668	Standard
Cl	35	48.3	6.3				ug/L	5	Standard
Kr	83	34.3	17.3				ug/L	38	Standard
Br	81	976.7	7.0				ug/L	344	Standard
P	31	284.2	20.4				ug/L	312	Standard
S	34	7339.3	5.5				ug/L	5594	Standard
Sr	88	146.7	12.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		84.554	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	84.400	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	89.761	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053708

Report Date/Time: Sunday, July 29, 2012 14:25:22

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Method 6020 - Summary Report

Sample ID: L1207053709

Sample Date/Time: Sunday, July 29, 2012 14:26:01

Number of Replicates: 3

Autosampler Position: 321

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

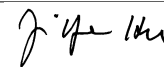
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22092.8	2.6	3396.3497	65.388	1.9	ug/L	9465	Standard
|	Be	9	20.0	25.0	-0.0069	0.003	49.2	ug/L	10	Standard
|	Al	27	776571.3	2.7	64.7390	0.896	1.4	ug/L	7870	Standard
[>	Sc	45	278571.2	1.4				ug/L	330668	Standard
|	Ti	47	1757.4	1.8	1.7637	0.047	2.7	ug/L	53	Standard
|	V	51	12333.6	1.4	1.2172	0.030	2.4	ug/L	2687	Standard
|	Cr	52	9378.9	1.9	0.3601	0.013	3.5	ug/L	8408	Standard
|	Cr	53	1021.7	9.0	0.7330	0.093	12.7	ug/L	288	Standard
|	Mn	55	14945.7	2.4	1.2761	0.045	3.5	ug/L	1080	Standard
|	Co	59	437.0	6.9	0.0500	0.005	9.6	ug/L	117	Standard
|	Ni	60	621.0	2.2	0.2910	0.009	3.1	ug/L	68	Standard
|	Cu	65	257.3	3.9	0.0756	0.007	8.9	ug/L	141	Standard
|	Zn	66	1277.1	3.6	1.3554	0.047	3.5	ug/L	138	Standard
[>	Ge	72	237801.4	1.1				ug/L	283230	Standard
|	As	75	130.7	24.9	0.3292	0.039	11.7	ug/L	-198	Standard
|	Se	82	33.3	8.4	0.1581	0.030	18.8	ug/L	21	Standard
[	Se-1	77	121.7	14.0	0.2243	0.287	127.8	ug/L	131	Standard
[>	Ga	71	516.7	6.9				mg/L	607	Standard
|	Rb	85	1325.1	5.6				ug/L	30	Standard
|	Y	89	210924.7	0.6				ug/L	251555	Standard
[>	Rh	103	285.0	18.2				ug/L	335	Standard
|	Mo	98	778.4	3.4	0.2498	0.009	3.6	ug/L	13	Standard
|	Ag	107	47.0	27.8	-0.0002	0.002	1588.8	ug/L	36	Standard
|	Cd	111	43.1	50.3	-0.0026	0.008	302.7	mg/L	49	Standard
|	Cd	114	158.4	56.9	-0.0012	0.011	858.8	ug/L	170	Standard
[>	In	115	621608.7	1.0				ug/L	727802	Standard
|	Sn	118	519.3	30.0	0.0054	0.015	284.9	ug/L	471	Standard
|	Sb	123	348.7	42.4	0.0499	0.020	39.8	ug/L	39	Standard
|	Ba	135	107838.9	2.3	28.8915	0.385	1.3	ug/L	25	Standard
|	Ce	140	3958.9	0.9				ug/L	25	Standard
[>	Tb	159	948737.7	0.8				ug/L	1071747	Standard
|	Ho	165	87.3	1.7				ug/L	13	Standard
|	Tl	203	524.7	30.8	0.0344	0.011	31.9	ug/L	5	Standard
|	Tl	205	1098.4	24.2	0.0318	0.008	24.4	ug/L	10	Standard
|	Pb	206	620.0	10.4	0.0222	0.006	25.7	ug/L	382	Standard
|	Pb	207	497.0	9.6	0.0235	0.005	21.9	ug/L	306	Standard
|	Pb	208	2412.7	9.8	0.0246	0.005	22.0	ug/L	1443	Standard
	U	238	3265.4	2.1	0.2409	0.005	2.1	ug/L	5	Standard
[>	Bi	209	499244.2	0.4				ug/L	561075	Standard

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Na	23	97623.5	1.0	6.7509	0.146	2.2	mg/L	288	Standard
Mg	24	572429.5	0.1	1.0206	0.014	1.4	mg/L	218	Standard
K	39	313.3	13.4	0.2204	0.044	19.8	mg/L	125	Standard
Ca	43	8.3	91.7	5.3253	9.810	184.2	mg/L	3	Standard
Fe	54	507.6	12.1	0.0229	0.019	84.1	mg/L	550	Standard
Fe	57	4599.0	2.3	0.0735	0.001	1.7	mg/L	1772	Standard
Sc-1	45	278571.2	1.4				mg/L	330668	Standard
Cl	35	21.3	7.2				ug/L	5	Standard
Kr	83	37.4	15.2				ug/L	38	Standard
Br	81	465.8	2.5				ug/L	344	Standard
P	31	188.3	15.4				ug/L	312	Standard
S	34	6324.7	1.9				ug/L	5594	Standard
Sr	88	161.7	17.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.961	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053709

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	Cd	111		
	Cd	114		
>	In	115	85.409	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	88.980	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053709

Report Date/Time: Sunday, July 29, 2012 14:28:32

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Method 6020 - Summary Report

Sample ID: L1207053710

Sample Date/Time: Sunday, July 29, 2012 14:29:11

Number of Replicates: 3

Autosampler Position: 322

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

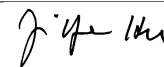
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22785.5	2.8	3565.1095	372.521	10.4	ug/L	9465	Standard
|	Be	9	5.0	100.0	-0.0175	0.004	21.3	ug/L	10	Standard
|	Al	27	14585.4	4.4	0.6462	0.067	10.3	ug/L	7870	Standard
[>	Sc	45	278816.9	4.4				ug/L	330668	Standard
|	Ti	47	240.3	11.1	0.1984	0.023	11.4	ug/L	53	Standard
|	V	51	12107.8	1.2	1.1584	0.016	1.3	ug/L	2687	Standard
|	Cr	52	8660.8	2.6	0.2211	0.008	3.5	ug/L	8408	Standard
|	Cr	53	856.7	11.0	0.5656	0.082	14.4	ug/L	288	Standard
|	Mn	55	1742.1	5.3	0.0709	0.008	11.2	ug/L	1080	Standard
|	Co	59	238.0	2.8	0.0205	0.002	7.8	ug/L	117	Standard
|	Ni	60	510.3	6.8	0.2282	0.017	7.3	ug/L	68	Standard
|	Cu	65	161.0	13.6	0.0200	0.012	59.7	ug/L	141	Standard
|	Zn	66	1224.4	1.2	1.2626	0.022	1.8	ug/L	138	Standard
[>	Ge	72	243008.2	2.1				ug/L	283230	Standard
|	As	75	167.5	9.6	0.3688	0.016	4.4	ug/L	-198	Standard
|	Se	82	38.3	7.2	0.2090	0.042	20.1	ug/L	21	Standard
[	Se-1	77	123.3	11.6	0.2092	0.251	119.8	ug/L	131	Standard
[>	Ga	71	518.3	7.2				mg/L	607	Standard
|	Rb	85	678.3	4.9				ug/L	30	Standard
|	Y	89	204539.8	1.0				ug/L	251555	Standard
[>	Rh	103	276.7	12.3				ug/L	335	Standard
|	Mo	98	824.5	1.6	0.2619	0.002	0.9	ug/L	13	Standard
|	Ag	107	30.3	14.9	-0.0033	0.001	27.5	ug/L	36	Standard
|	Cd	111	24.4	22.6	-0.0095	0.002	21.9	mg/L	49	Standard
|	Cd	114	96.0	6.7	-0.0088	0.001	7.9	ug/L	170	Standard
[>	In	115	628842.3	1.6				ug/L	727802	Standard
|	Sn	118	374.0	3.7	-0.0098	0.001	11.5	ug/L	471	Standard
|	Sb	123	217.5	10.7	0.0315	0.003	8.8	ug/L	39	Standard
|	Ba	135	109198.2	2.0	28.9235	0.528	1.8	ug/L	25	Standard
|	Ce	140	90.7	9.9				ug/L	25	Standard
[>	Tb	159	951331.8	0.5				ug/L	1071747	Standard
|	Ho	165	9.3	6.2				ug/L	13	Standard
|	Tl	203	372.0	4.3	0.0237	0.001	4.9	ug/L	5	Standard
|	Tl	205	841.4	2.1	0.0240	0.000	1.1	ug/L	10	Standard
|	Pb	206	367.0	3.3	-0.0005	0.001	244.4	ug/L	382	Standard
|	Pb	207	291.7	6.3	0.0014	0.002	112.0	ug/L	306	Standard
|	Pb	208	1430.4	1.0	0.0022	0.000	11.6	ug/L	1443	Standard
	U	238	3360.7	3.6	0.2440	0.006	2.6	ug/L	5	Standard
[>	Bi	209	507168.4	1.0				ug/L	561075	Standard

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Na	23	98925.3	1.1	6.8424	0.291	4.3	mg/L	288	Standard
Mg	24	594043.2	1.6	1.0599	0.063	6.0	mg/L	218	Standard
K	39	340.0	9.2	0.2495	0.049	19.5	mg/L	125	Standard
Ca	43	20.0	25.0	20.2685	7.483	36.9	mg/L	3	Standard
Fe	54	230.7	1.0	-0.0557	0.003	6.2	mg/L	550	Standard
Fe	57	2190.2	7.7	0.0167	0.002	10.1	mg/L	1772	Standard
Sc-1	45	278816.9	4.4				mg/L	330668	Standard
Cl	35	17.0	31.1				ug/L	5	Standard
Kr	83	34.9	8.7				ug/L	38	Standard
Br	81	553.3	8.2				ug/L	344	Standard
P	31	186.7	12.1				ug/L	312	Standard
S	34	6341.3	4.0				ug/L	5594	Standard
Sr	88	191.7	14.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.799	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053710

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Cd	111	
Cd	114	
> In	115	86.403
Sn	118	
Sb	123	
Ba	135	
Ce	140	
> Tb	159	
Ho	165	
Tl	203	
Tl	205	
Pb	206	
Pb	207	
Pb	208	
U	238	
> Bi	209	90.392
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053710

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Method 6020 - Summary Report

Sample ID: L1207053711

Sample Date/Time: Sunday, July 29, 2012 14:32:20

Number of Replicates: 3

Autosampler Position: 323

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	28900.9	2.2	4628.8253	231.618	5.0	ug/L	9465	Standard
|	Be	9	90.0	38.5	0.0398	0.024	61.0	ug/L	10	Standard
|	Al	27	12666756.5	0.6	1007.6986	24.560	2.4	ug/L	7870	Standard
[>	Sc	45	294488.3	1.8				ug/L	330668	Standard
[	Ti	47	18094.5	1.4	18.1469	0.363	2.0	ug/L	53	Standard
|	V	51	34525.7	2.6	3.8196	0.160	4.2	ug/L	2687	Standard
|	Cr	52	19774.6	2.5	1.8918	0.086	4.5	ug/L	8408	Standard
|	Cr	53	2618.6	1.8	2.1323	0.011	0.5	ug/L	288	Standard
|	Mn	55	587797.9	1.3	52.2362	1.485	2.8	ug/L	1080	Standard
|	Co	59	7146.4	2.4	0.9957	0.012	1.2	ug/L	117	Standard
|	Ni	60	5934.8	0.8	2.9629	0.025	0.8	ug/L	68	Standard
|	Cu	65	2366.9	3.5	1.2215	0.025	2.0	ug/L	141	Standard
|	Zn	66	15505.3	1.4	17.7456	0.443	2.5	ug/L	138	Standard
[>	Ge	72	243197.9	1.6				ug/L	283230	Standard
|	As	75	525.1	4.7	0.7878	0.036	4.6	ug/L	-198	Standard
|	Se	82	32.8	11.7	0.1433	0.047	32.5	ug/L	21	Standard
[	Se-1	77	129.7	3.6	0.3134	0.113	36.2	ug/L	131	Standard
[>	Ga	71	1920.1	11.1				mg/L	607	Standard
[	Rb	85	18064.1	2.3				ug/L	30	Standard
[	Y	89	224109.0	1.9				ug/L	251555	Standard
[>	Rh	103	293.3	8.7				ug/L	335	Standard
[	Mo	98	881.8	2.1	0.2838	0.007	2.4	ug/L	13	Standard
|	Ag	107	54.3	11.8	0.0012	0.001	96.8	ug/L	36	Standard
|	Cd	111	59.5	8.0	0.0035	0.002	46.7	mg/L	49	Standard
|	Cd	114	188.4	11.2	0.0024	0.003	107.5	ug/L	170	Standard
[>	In	115	621875.4	0.5				ug/L	727802	Standard
|	Sn	118	855.0	5.9	0.0396	0.006	14.0	ug/L	471	Standard
|	Sb	123	291.5	16.7	0.0422	0.007	16.3	ug/L	39	Standard
[	Ba	135	163765.1	1.7	43.8687	0.933	2.1	ug/L	25	Standard
[	Ce	140	165415.8	0.9				ug/L	25	Standard
[>	Tb	159	955962.6	1.0				ug/L	1071747	Standard
[	Ho	165	2617.9	2.0				ug/L	13	Standard
|	Tl	203	469.3	6.2	0.0299	0.002	8.3	ug/L	5	Standard
|	Tl	205	1056.7	3.0	0.0299	0.001	4.6	ug/L	10	Standard
|	Pb	206	8536.7	1.3	0.6981	0.023	3.3	ug/L	382	Standard
|	Pb	207	6857.9	1.8	0.6739	0.027	4.0	ug/L	306	Standard
|	Pb	208	32330.4	1.2	0.6754	0.021	3.1	ug/L	1443	Standard
	U	238	3149.0	2.1	0.2269	0.000	0.1	ug/L	5	Standard
[>	Bi	209	511054.5	2.0				ug/L	561075	Standard

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Na	23	95506.8	1.7	6.2446	0.123	2.0	mg/L	288	Standard
Mg	24	733764.4	2.8	1.2379	0.053	4.3	mg/L	218	Standard
K	39	470.0	7.4	0.3583	0.032	8.8	mg/L	125	Standard
Ca	43	23.3	32.7	22.8112	9.559	41.9	mg/L	3	Standard
Fe	54	4870.0	1.5	1.1846	0.043	3.6	mg/L	550	Standard
Fe	57	53649.9	4.5	1.1611	0.075	6.5	mg/L	1772	Standard
Sc-1	45	294488.3	1.8				mg/L	330668	Standard
Cl	35	16.3	12.7				ug/L	5	Standard
Kr	83	39.4	9.4				ug/L	38	Standard
Br	81	581.7	5.5				ug/L	344	Standard
P	31	1400.1	5.4				ug/L	312	Standard
S	34	5981.2	1.2				ug/L	5594	Standard
Sr	88	165.0	21.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.866	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053711

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	Cd	111	
	Cd	114	
>	In	115	85.446
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.085
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053711

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Method 6020 - Summary Report

Sample ID: L1207053712

Sample Date/Time: Sunday, July 29, 2012 14:36:13

Number of Replicates: 3

Autosampler Position: 324

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20814.3	5.7	2991.5783	104.520	3.5	ug/L	9465	Standard
|	Be	9	11.7	49.5	-0.0130	0.004	32.4	ug/L	10	Standard
|	Al	27	36656.0	3.3	2.4422	0.207	8.5	ug/L	7870	Standard
[>	Sc	45	284608.9	3.7				ug/L	330668	Standard
|	Ti	47	310.3	11.6	0.2675	0.036	13.6	ug/L	53	Standard
|	V	51	9950.2	1.2	0.8957	0.012	1.4	ug/L	2687	Standard
|	Cr	52	7650.9	2.5	0.0632	0.025	39.2	ug/L	8408	Standard
|	Cr	53	570.8	3.9	0.3085	0.021	6.8	ug/L	288	Standard
|	Mn	55	2851.9	0.9	0.1684	0.002	1.1	ug/L	1080	Standard
|	Co	59	491.7	6.5	0.0560	0.005	8.3	ug/L	117	Standard
|	Ni	60	330.7	4.1	0.1367	0.007	5.2	ug/L	68	Standard
|	Cu	65	146.3	7.9	0.0115	0.006	53.9	ug/L	141	Standard
|	Zn	66	1147.0	6.0	1.1661	0.075	6.4	ug/L	138	Standard
[>	Ge	72	244271.7	0.3				ug/L	283230	Standard
|	As	75	127.7	9.1	0.3215	0.014	4.2	ug/L	-198	Standard
|	Se	82	33.0	7.5	0.1445	0.028	19.4	ug/L	21	Standard
[	Se-1	77	103.0	4.4	-0.1412	0.079	56.0	ug/L	131	Standard
[>	Ga	71	541.7	10.1				mg/L	607	Standard
[	Rb	85	551.7	5.3				ug/L	30	Standard
[	Y	89	209338.4	2.3				ug/L	251555	Standard
[>	Rh	103	315.0	11.0				ug/L	335	Standard
[	Mo	98	1093.0	3.7	0.3511	0.016	4.4	ug/L	13	Standard
|	Ag	107	37.0	7.2	-0.0021	0.001	26.0	ug/L	36	Standard
|	Cd	111	31.7	22.3	-0.0068	0.003	37.2	mg/L	49	Standard
|	Cd	114	85.7	11.5	-0.0100	0.001	11.5	ug/L	170	Standard
[>	In	115	626023.2	0.7				ug/L	727802	Standard
|	Sn	118	471.3	9.9	0.0002	0.004	2084.0	ug/L	471	Standard
|	Sb	123	180.9	12.9	0.0267	0.003	12.5	ug/L	39	Standard
[	Ba	135	82919.6	1.2	22.0586	0.308	1.4	ug/L	25	Standard
[	Ce	140	233.3	10.3				ug/L	25	Standard
[>	Tb	159	954619.7	0.7				ug/L	1071747	Standard
[	Ho	165	18.0	14.7				ug/L	13	Standard
|	Tl	203	322.0	1.6	0.0202	0.000	0.8	ug/L	5	Standard
|	Tl	205	761.7	16.0	0.0215	0.003	15.5	ug/L	10	Standard
|	Pb	206	355.7	0.4	-0.0017	0.000	13.4	ug/L	382	Standard
|	Pb	207	308.0	6.9	0.0029	0.002	71.2	ug/L	306	Standard
|	Pb	208	1431.4	3.1	0.0020	0.001	35.3	ug/L	1443	Standard
	U	238	2446.9	0.5	0.1762	0.002	1.2	ug/L	5	Standard
[>	Bi	209	511204.3	0.9				ug/L	561075	Standard

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Na	23	93603.3	1.1	6.3372	0.213	3.4	mg/L	288	Standard
Mg	24	514123.8	2.5	0.8976	0.024	2.7	mg/L	218	Standard
K	39	268.3	12.7	0.1665	0.025	15.2	mg/L	125	Standard
Ca	43	11.7	24.7	9.2606	4.200	45.3	mg/L	3	Standard
Fe	54	241.3	10.5	-0.0541	0.008	14.1	mg/L	550	Standard
Fe	57	2183.5	3.8	0.0155	0.001	5.9	mg/L	1772	Standard
Sc-1	45	284608.9	3.7				mg/L	330668	Standard
Cl	35	15.7	35.2				ug/L	5	Standard
Kr	83	32.9	10.4				ug/L	38	Standard
Br	81	510.0	9.5				ug/L	344	Standard
P	31	227.5	18.1				ug/L	312	Standard
S	34	5773.6	2.6				ug/L	5594	Standard
Sr	88	163.3	25.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.245	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207053712

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	Cd	111	
	Cd	114	
>	In	115	86.016
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.112
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207053712

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 14:39:24

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

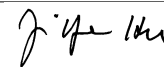
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8015.5	3.4	-65.2777	83.064	127.2	ug/L	9465	Standard
|	Be	9	76646.7	0.8	49.9596	1.609	3.2	ug/L	10	Standard
|	Al	27	636176.4	1.5	48.2715	1.114	2.3	ug/L	7870	Standard
[>	Sc	45	305314.4	3.3				ug/L	330668	Standard
|	Ti	47	107475.5	1.3	97.8805	0.869	0.9	ug/L	53	Standard
|	V	51	447073.2	0.5	47.8303	0.850	1.8	ug/L	2687	Standard
|	Cr	52	364354.4	1.7	48.5777	0.351	0.7	ug/L	8408	Standard
|	Cr	53	60210.2	0.3	48.3656	1.089	2.3	ug/L	288	Standard
|	Mn	55	609116.4	1.6	49.0466	0.337	0.7	ug/L	1080	Standard
|	Co	59	376151.1	0.8	48.1291	0.826	1.7	ug/L	117	Standard
|	Ni	60	104417.6	1.3	47.6873	0.530	1.1	ug/L	68	Standard
|	Cu	65	98191.9	1.9	48.4257	0.618	1.3	ug/L	141	Standard
|	Zn	66	47610.7	1.7	49.6501	0.245	0.5	ug/L	138	Standard
[>	Ge	72	268323.1	2.2				ug/L	283230	Standard
|	As	75	46658.5	1.6	49.6840	0.477	1.0	ug/L	-198	Standard
|	Se	82	4771.4	2.2	50.7075	0.633	1.2	ug/L	21	Standard
[	Se-1	77	3501.1	2.8	51.2044	0.371	0.7	ug/L	131	Standard
[>	Ga	71	600.0	16.1				mg/L	607	Standard
|	Rb	85	770.0	4.5				ug/L	30	Standard
|	Y	89	236631.9	0.8				ug/L	251555	Standard
[>	Rh	103	335.0	9.0				ug/L	335	Standard
|	Mo	98	322100.0	0.2	96.7222	1.440	1.5	ug/L	13	Standard
|	Ag	107	300462.8	1.0	51.2765	1.137	2.2	ug/L	36	Standard
|	Cd	111	152024.9	0.4	50.5504	0.810	1.6	mg/L	49	Standard
|	Cd	114	459767.4	0.9	50.2726	0.580	1.2	ug/L	170	Standard
[>	In	115	683302.6	1.3				ug/L	727802	Standard
|	Sn	118	531970.9	1.2	49.2357	0.747	1.5	ug/L	471	Standard
|	Sb	123	394987.8	0.6	49.7692	0.650	1.3	ug/L	39	Standard
|	Ba	135	210007.5	1.1	51.1981	0.153	0.3	ug/L	25	Standard
|	Ce	140	820.7	2.0				ug/L	25	Standard
[>	Tb	159	1027836.7	1.6				ug/L	1071747	Standard
|	Ho	165	22.0	7.9				ug/L	13	Standard
|	Tl	203	760638.1	0.4	48.2295	0.610	1.3	ug/L	5	Standard
|	Tl	205	1753047.5	0.1	47.6579	0.570	1.2	ug/L	10	Standard
|	Pb	206	592620.9	0.6	48.6787	0.336	0.7	ug/L	382	Standard
|	Pb	207	500609.8	0.3	49.2521	0.695	1.4	ug/L	306	Standard
|	Pb	208	2322602.7	0.2	48.6195	0.572	1.2	ug/L	1443	Standard
	U	238	695284.7	0.5	48.2098	0.318	0.7	ug/L	5	Standard
[>	Bi	209	531612.6	1.2				ug/L	561075	Standard

Sample ID: QC Std 6

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Na	23	102155.0	2.0	6.4446	0.097	1.5	mg/L	288	Standard
Mg	24	3041868.3	2.2	4.9480	0.076	1.5	mg/L	218	Standard
K	39	5366.0	0.9	5.0402	0.189	3.8	mg/L	125	Standard
Ca	43	8.3	34.6	4.3863	3.598	82.0	mg/L	3	Standard
Fe	54	19876.6	0.6	5.0202	0.138	2.8	mg/L	550	Standard
Fe	57	246204.5	1.5	5.2593	0.232	4.4	mg/L	1772	Standard
Sc-1	45	305314.4	3.3				mg/L	330668	Standard
Cl	35	4.0	66.1				ug/L	5	Standard
Kr	83	39.3	3.9				ug/L	38	Standard
Br	81	343.3	8.2				ug/L	344	Standard
P	31	378.3	2.1				ug/L	312	Standard
S	34	6159.6	1.4				ug/L	5594	Standard
Sr	88	60.0	43.3				ug/L	55	Standard

QC Calculated Values

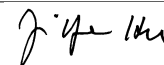
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.543		
Sc	45			
Ti	47	97.880		
V	51	95.661		
Cr	52	97.155		
Cr	53			
Mn	55	98.093		
Co	59	96.258		
Ni	60	95.375		
Cu	65	96.851		
Zn	66	99.300		
Ge	72		94.737	
As	75	99.368		
Se	82	101.415		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.722		
Ag	107	102.553		

Sample ID: QC Std 6

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	Cd	111	101.101	
	Cd	114		
>	In	115		93.886
	Sn	118	98.471	
	Sb	123	99.538	
	Ba	135	102.396	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.459	
|	Tl	205		
|	Pb	206	97.357	
|	Pb	207	98.504	
|	Pb	208	97.239	
|	U	238	96.420	
>	Bi	209		94.749
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 14:42:34

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7712.0	1.8	-118.4882	51.630	43.6	ug/L	9465	Standard
|	Be	9	38.3	27.2	0.0040	0.007	174.4	ug/L	10	Standard
|	Al	27	7817.0	14.2	0.0237	0.086	364.1	ug/L	7870	Standard
[>	Sc	45	303031.0	1.8				ug/L	330668	Standard
[	Ti	47	83.7	20.8	0.0350	0.016	45.7	ug/L	53	Standard
|	V	51	2359.7	4.2	-0.0198	0.010	52.6	ug/L	2687	Standard
|	Cr	52	7201.0	1.0	-0.0758	0.007	9.3	ug/L	8408	Standard
|	Cr	53	216.7	18.7	-0.0180	0.033	182.6	ug/L	288	Standard
|	Mn	55	1223.4	15.5	0.0169	0.015	91.0	ug/L	1080	Standard
|	Co	59	182.7	40.0	0.0108	0.010	87.9	ug/L	117	Standard
|	Ni	60	75.0	19.4	0.0059	0.007	113.9	ug/L	68	Standard
|	Cu	65	166.7	11.0	0.0165	0.009	54.6	ug/L	141	Standard
|	Zn	66	147.3	7.3	0.0063	0.011	175.5	ug/L	138	Standard
[>	Ge	72	261672.9	0.3				ug/L	283230	Standard
|	As	75	-177.0	7.2	-0.0199	0.014	71.0	ug/L	-198	Standard
|	Se	82	24.6	12.7	0.0263	0.034	129.9	ug/L	21	Standard
[	Se-1	77	134.0	4.2	0.2263	0.081	35.8	ug/L	131	Standard
[>	Ga	71	478.3	14.0				mg/L	607	Standard
[	Rb	85	38.3	54.3				ug/L	30	Standard
[	Y	89	228469.8	1.0				ug/L	251555	Standard
[>	Rh	103	315.0	1.6				ug/L	335	Standard
[	Mo	98	355.2	69.7	0.1008	0.076	74.9	ug/L	13	Standard
|	Ag	107	212.0	105.8	0.0277	0.039	140.3	ug/L	36	Standard
|	Cd	111	132.5	81.9	0.0263	0.037	139.1	mg/L	49	Standard
|	Cd	114	376.4	78.2	0.0215	0.033	152.2	ug/L	170	Standard
[>	In	115	675657.4	0.3				ug/L	727802	Standard
|	Sn	118	965.4	30.0	0.0431	0.027	63.5	ug/L	471	Standard
|	Sb	123	2208.7	10.8	0.2833	0.031	10.9	ug/L	39	Standard
[	Ba	135	184.7	124.7	0.0341	0.057	167.0	ug/L	25	Standard
[	Ce	140	63.7	88.9				ug/L	25	Standard
[>	Tb	159	994917.7	0.4				ug/L	1071747	Standard
[	Ho	165	13.7	18.4				ug/L	13	Standard
|	Tl	203	238.3	104.2	0.0140	0.016	112.1	ug/L	5	Standard
|	Tl	205	540.7	100.1	0.0147	0.015	100.0	ug/L	10	Standard
|	Pb	206	523.0	32.4	0.0108	0.014	128.6	ug/L	382	Standard
|	Pb	207	404.3	30.2	0.0111	0.012	108.3	ug/L	306	Standard
|	Pb	208	1949.4	31.0	0.0116	0.013	109.4	ug/L	1443	Standard
	U	238	157.0	75.2	0.0106	0.008	76.8	ug/L	5	Standard
[>	Bi	209	532388.0	0.3				ug/L	561075	Standard

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Na	23	405.0	25.2	-0.0103	0.007	64.5	mg/L	288	Standard
Mg	24	783.4	77.5	0.0016	0.001	63.4	mg/L	218	Standard
K	39	151.7	13.3	0.0379	0.021	56.0	mg/L	125	Standard
Ca	43	5.0	100.0	0.5258	5.854	1113.4	mg/L	3	Standard
Fe	54	509.7	7.6	0.0116	0.009	77.4	mg/L	550	Standard
Fe	57	1661.8	6.7	0.0012	0.002	154.8	mg/L	1772	Standard
Sc-1	45	303031.0	1.8				mg/L	330668	Standard
Cl	35	5.7	44.4				ug/L	5	Standard
Kr	83	40.1	1.3				ug/L	38	Standard
Br	81	322.5	10.9				ug/L	344	Standard
P	31	366.7	7.3				ug/L	312	Standard
S	34	5991.2	0.3				ug/L	5594	Standard
Sr	88	28.3	27.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.389	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	92.835	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.887	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, July 29, 2012 14:45:47

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

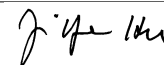
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7596.9	3.3	-141.6956	43.267	30.5	ug/L	9465	Standard
|	Be	9	15.0	120.2	-0.0113	0.012	105.6	ug/L	10	Standard
|	Al	27	4997.5	5.8	-0.1937	0.028	14.4	ug/L	7870	Standard
[>	Sc	45	302622.7	1.5				ug/L	330668	Standard
|	Ti	47	47.3	2.4	0.0006	0.000	81.9	ug/L	53	Standard
|	V	51	5658.8	1.4	0.3369	0.016	4.8	ug/L	2687	Standard
|	Cr	52	12539.2	1.6	0.6499	0.040	6.2	ug/L	8408	Standard
|	Cr	53	1195.0	10.6	0.7800	0.112	14.3	ug/L	288	Standard
|	Mn	55	6882.2	1.4	0.4782	0.003	0.6	ug/L	1080	Standard
|	Co	59	3031.0	0.8	0.3799	0.006	1.6	ug/L	117	Standard
|	Ni	60	3395.7	0.9	1.5432	0.028	1.8	ug/L	68	Standard
|	Cu	65	1624.1	2.3	0.7451	0.028	3.8	ug/L	141	Standard
|	Zn	66	6629.8	0.3	6.8760	0.082	1.2	ug/L	138	Standard
[>	Ge	72	264790.3	1.3				ug/L	283230	Standard
|	As	75	194.0	2.5	0.3814	0.008	2.1	ug/L	-198	Standard
|	Se	82	56.1	16.0	0.3640	0.095	26.1	ug/L	21	Standard
[	Se-1	77	149.0	3.7	0.4321	0.066	15.3	ug/L	131	Standard
[>	Ga	71	551.7	3.7				mg/L	607	Standard
|	Rb	85	13.3	21.7				ug/L	30	Standard
|	Y	89	230622.5	2.3				ug/L	251555	Standard
[>	Rh	103	323.3	23.5				ug/L	335	Standard
|	Mo	98	50.9	9.6	0.0085	0.001	16.1	ug/L	13	Standard
|	Ag	107	2263.2	2.5	0.3861	0.014	3.5	ug/L	36	Standard
|	Cd	111	803.2	3.3	0.2551	0.012	4.8	mg/L	49	Standard
|	Cd	114	2435.5	2.5	0.2523	0.009	3.4	ug/L	170	Standard
[>	In	115	668099.1	1.2				ug/L	727802	Standard
|	Sn	118	561.7	1.6	0.0058	0.001	23.3	ug/L	471	Standard
|	Sb	123	3494.4	1.8	0.4520	0.004	0.8	ug/L	39	Standard
|	Ba	135	2944.6	0.4	0.7229	0.006	0.8	ug/L	25	Standard
|	Ce	140	20.3	15.8				ug/L	25	Standard
[>	Tb	159	1005291.3	1.3				ug/L	1071747	Standard
|	Ho	165	13.0	26.6				ug/L	13	Standard
|	Tl	203	1231.7	3.0	0.0766	0.002	3.2	ug/L	5	Standard
|	Tl	205	2856.9	3.2	0.0772	0.002	2.3	ug/L	10	Standard
|	Pb	206	2744.9	2.8	0.1923	0.008	4.3	ug/L	382	Standard
|	Pb	207	2284.5	1.7	0.1949	0.004	2.1	ug/L	306	Standard
|	Pb	208	10525.4	0.9	0.1900	0.003	1.6	ug/L	1443	Standard
	U	238	5406.6	2.8	0.3724	0.007	1.9	ug/L	5	Standard
[>	Bi	209	534730.7	1.1				ug/L	561075	Standard

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Na	23	263.3	15.8	-0.0194	0.002	12.5	mg/L	288	Standard
Mg	24	156.7	11.2	0.0005	0.000	4.6	mg/L	218	Standard
K	39	131.7	18.7	0.0186	0.025	132.7	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	595.1	6.4	0.0341	0.010	29.8	mg/L	550	Standard
Fe	57	1655.1	3.6	0.0011	0.001	69.5	mg/L	1772	Standard
Sc-1	45	302622.7	1.5				mg/L	330668	Standard
Cl	35	4.7	32.7				ug/L	5	Standard
Kr	83	34.4	22.0				ug/L	38	Standard
Br	81	312.5	5.6				ug/L	344	Standard
P	31	335.8	3.1				ug/L	312	Standard
S	34	5983.7	2.9				ug/L	5594	Standard
Sr	88	36.7	43.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	84.234		
Cr	52	81.235		
Cr	53			
Mn	55	95.642		
Co	59	94.986		
Ni	60	96.451		
Cu	65	93.139		
Zn	66	110.016		
Ge	72		93.490	
As	75	95.344		
Se	82	90.993		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	96.535		

Sample ID: QC Std 8

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	Cd	111	106.272	
	Cd	114		
>	In	115		91.797
	Sn	118		
	Sb	123	113.011	
	Ba	135	96.387	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	95.739	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	94.982	
|	U	238	93.104	
>	Bi	209		95.305
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 8

Report Date/Time: Sunday, July 29, 2012 14:48:18

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Method 6020 - Summary Report

Sample ID: PBW 47 WG403907-02

Sample Date/Time: Sunday, July 29, 2012 15:03:13

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7820.4	1.3	-49.6493	91.202	183.7	ug/L	9465	Standard
|	Be	9	5.0	0.0	-0.0178	0.000	0.8	ug/L	10	Standard
|	Al	27	6893.2	3.6	-0.0340	0.006	16.6	ug/L	7870	Standard
[>	Sc	45	295406.9	4.2				ug/L	330668	Standard
|	Ti	47	48.7	10.5	0.0020	0.005	250.0	ug/L	53	Standard
|	V	51	2333.7	1.6	-0.0250	0.008	33.4	ug/L	2687	Standard
|	Cr	52	7333.1	1.4	-0.0668	0.028	42.2	ug/L	8408	Standard
|	Cr	53	235.0	17.6	-0.0046	0.034	747.5	ug/L	288	Standard
|	Mn	55	1039.0	2.5	0.0008	0.001	156.0	ug/L	1080	Standard
|	Co	59	107.3	10.0	0.0009	0.002	183.3	ug/L	117	Standard
|	Ni	60	109.3	5.6	0.0215	0.002	10.6	ug/L	68	Standard
|	Cu	65	132.0	15.4	-0.0016	0.010	663.9	ug/L	141	Standard
|	Zn	66	652.7	4.5	0.5419	0.037	6.9	ug/L	138	Standard
[>	Ge	72	264189.9	1.9				ug/L	283230	Standard
|	As	75	-210.9	2.4	-0.0546	0.006	11.4	ug/L	-198	Standard
|	Se	82	23.8	10.7	0.0157	0.032	206.4	ug/L	21	Standard
[	Se-1	77	111.0	2.7	-0.1470	0.058	39.4	ug/L	131	Standard
[>	Ga	71	620.0	10.1				mg/L	607	Standard
|	Rb	85	18.3	41.7				ug/L	30	Standard
|	Y	89	225981.2	0.9				ug/L	251555	Standard
[>	Rh	103	333.3	15.4				ug/L	335	Standard
|	Mo	98	33.9	42.5	0.0032	0.004	133.6	ug/L	13	Standard
|	Ag	107	36.3	20.8	-0.0026	0.001	53.6	ug/L	36	Standard
|	Cd	111	43.9	6.0	-0.0034	0.001	27.5	mg/L	49	Standard
|	Cd	114	146.4	10.9	-0.0039	0.002	39.8	ug/L	170	Standard
[>	In	115	669338.1	1.5				ug/L	727802	Standard
|	Sn	118	543.0	6.4	0.0039	0.003	70.5	ug/L	471	Standard
|	Sb	123	304.2	35.4	0.0409	0.014	33.2	ug/L	39	Standard
|	Ba	135	25.0	8.0	-0.0053	0.000	9.1	ug/L	25	Standard
|	Ce	140	26.7	12.1				ug/L	25	Standard
[>	Tb	159	999095.8	0.9				ug/L	1071747	Standard
|	Ho	165	11.7	13.1				ug/L	13	Standard
|	Tl	203	11.0	55.3	-0.0003	0.000	114.3	ug/L	5	Standard
|	Tl	205	28.0	28.6	0.0008	0.000	27.3	ug/L	10	Standard
|	Pb	206	350.0	5.8	-0.0032	0.001	40.6	ug/L	382	Standard
|	Pb	207	282.7	1.5	-0.0007	0.001	102.2	ug/L	306	Standard
|	Pb	208	1326.0	2.1	-0.0013	0.000	25.3	ug/L	1443	Standard
	U	238	7.7	37.7	0.0003	0.000	68.4	ug/L	5	Standard
[>	Bi	209	529668.8	1.4				ug/L	561075	Standard

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Na	23	280.0	12.9	-0.0178	0.003	14.0	mg/L	288	Standard
Mg	24	213.3	19.9	0.0006	0.000	10.2	mg/L	218	Standard
K	39	135.0	14.8	0.0246	0.015	59.6	mg/L	125	Standard
Ca	43	1.7	173.2	-3.4514	3.305	95.8	mg/L	3	Standard
Fe	54	490.9	7.1	0.0104	0.014	135.8	mg/L	550	Standard
Fe	57	1626.8	8.3	0.0013	0.003	215.5	mg/L	1772	Standard
Sc-1	45	295406.9	4.2				mg/L	330668	Standard
Cl	35	5.7	62.0				ug/L	5	Standard
Kr	83	39.0	17.1				ug/L	38	Standard
Br	81	340.8	10.3				ug/L	344	Standard
P	31	328.3	6.1				ug/L	312	Standard
S	34	5789.4	1.6				ug/L	5594	Standard
Sr	88	33.3	22.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.278	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 47 WG403907-02

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	Cd	111	
	Cd	114	
>	In	115	91.967
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.402
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 47 WG403907-02

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Method 6020 - Summary Report

Sample ID: LCSS 47 WG403907-03

Sample Date/Time: Sunday, July 29, 2012 15:06:23

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9019.4	1.4	9.3477	39.128	418.6	ug/L	9465	Standard
|	Be	9	39603.4	2.8	23.9312	0.882	3.7	ug/L	10	Standard
|	Al	27	418904.4	1.5	29.2541	0.168	0.6	ug/L	7870	Standard
[>	Sc	45	329048.7	1.8				ug/L	330668	Standard
|	Ti	47	63.7	34.6	0.0114	0.019	163.4	ug/L	53	Standard
|	V	51	246468.1	0.8	24.6634	0.445	1.8	ug/L	2687	Standard
|	Cr	52	202134.8	0.6	24.8330	0.512	2.1	ug/L	8408	Standard
|	Cr	53	33420.2	2.1	25.1551	0.861	3.4	ug/L	288	Standard
|	Mn	55	338413.9	0.4	25.5911	0.444	1.7	ug/L	1080	Standard
|	Co	59	206017.5	0.5	24.7851	0.445	1.8	ug/L	117	Standard
|	Ni	60	57985.4	0.2	24.8930	0.312	1.3	ug/L	68	Standard
|	Cu	65	54888.6	1.5	25.4307	0.619	2.4	ug/L	141	Standard
|	Zn	66	27273.9	0.5	26.6827	0.340	1.3	ug/L	138	Standard
[>	Ge	72	285282.0	1.4				ug/L	283230	Standard
|	As	75	24053.5	0.3	24.1803	0.344	1.4	ug/L	-198	Standard
|	Se	82	2414.4	1.9	24.0054	0.287	1.2	ug/L	21	Standard
[	Se-1	77	1796.8	0.5	23.7610	0.307	1.3	ug/L	131	Standard
[>	Ga	71	648.3	17.8				mg/L	607	Standard
|	Rb	85	16.7	17.3				ug/L	30	Standard
|	Y	89	248113.5	1.2				ug/L	251555	Standard
[>	Rh	103	355.0	23.3				ug/L	335	Standard
|	Mo	98	62.1	19.0	0.0104	0.003	32.4	ug/L	13	Standard
|	Ag	107	149253.9	0.0	23.9651	0.132	0.6	ug/L	36	Standard
|	Cd	111	80972.6	0.4	25.3295	0.176	0.7	mg/L	49	Standard
|	Cd	114	243717.9	0.4	25.0712	0.251	1.0	ug/L	170	Standard
[>	In	115	725986.5	0.6				ug/L	727802	Standard
|	Sn	118	807.4	4.6	0.0230	0.004	15.8	ug/L	471	Standard
|	Sb	123	207736.4	1.0	24.6361	0.378	1.5	ug/L	39	Standard
|	Ba	135	108720.0	0.9	24.9416	0.345	1.4	ug/L	25	Standard
|	Ce	140	286.0	3.5				ug/L	25	Standard
[>	Tb	159	1073180.7	1.5				ug/L	1071747	Standard
|	Ho	165	16.7	22.7				ug/L	13	Standard
|	Tl	203	413988.9	1.0	24.6876	0.013	0.1	ug/L	5	Standard
|	Tl	205	955558.6	0.7	24.4328	0.082	0.3	ug/L	10	Standard
|	Pb	206	324110.3	0.7	25.0261	0.262	1.0	ug/L	382	Standard
|	Pb	207	274938.6	1.2	25.4260	0.063	0.2	ug/L	306	Standard
|	Pb	208	1271039.8	0.6	25.0111	0.202	0.8	ug/L	1443	Standard
	U	238	373089.8	0.9	24.3321	0.193	0.8	ug/L	5	Standard
[>	Bi	209	565184.0	1.0				ug/L	561075	Standard

Sample ID: LCSS 47 WG403907-03

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Na	23	596.7	14.4	-0.0011	0.005	514.9	mg/L	288	Standard
Mg	24	751.7	1.7	0.0014	0.000	2.5	mg/L	218	Standard
K	39	123.3	26.1	0.0009	0.029	3117.0	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	776.7	7.9	0.0652	0.014	22.0	mg/L	550	Standard
Fe	57	1943.5	3.1	0.0040	0.001	28.0	mg/L	1772	Standard
Sc-1	45	329048.7	1.8				mg/L	330668	Standard
Cl	35	7.0	14.3				ug/L	5	Standard
Kr	83	35.3	3.4				ug/L	38	Standard
Br	81	389.2	1.0				ug/L	344	Standard
P	31	450.8	8.5				ug/L	312	Standard
S	34	5841.1	1.2				ug/L	5594	Standard
Sr	88	46.7	24.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.725	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSS 47 WG403907-03

Report Date/Time: Sunday, July 29, 2012 15:08:53

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	Cd	111		
	Cd	114		
>	In	115	99.751	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	100.732	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSS 47 WG403907-03

Report Date/Time: Sunday, July 29, 2012 15:08:53

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Method 6020 - Summary Report

Sample ID: L1207059013 WG403907-01

Sample Date/Time: Sunday, July 29, 2012 15:09:32

Number of Replicates: 3

Autosampler Position: 403

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27052.5	2.8	4713.6157	143.495	3.0	ug/L	9465	Standard
|	Be	9	15.0	88.2	-0.0103	0.010	93.7	ug/L	10	Standard
|	Al	27	19150.4	0.8	1.0695	0.018	1.7	ug/L	7870	Standard
[>	Sc	45	271925.1	0.6				ug/L	330668	Standard
|	Ti	47	172.7	4.4	0.1298	0.007	5.6	ug/L	53	Standard
|	V	51	5051.9	4.8	0.3174	0.029	9.2	ug/L	2687	Standard
|	Cr	52	7982.4	4.6	0.1139	0.056	49.3	ug/L	8408	Standard
|	Cr	53	660.8	13.8	0.3887	0.082	21.0	ug/L	288	Standard
|	Mn	55	1825.8	9.2	0.0776	0.015	19.5	ug/L	1080	Standard
|	Co	59	277.0	35.0	0.0259	0.014	53.0	ug/L	117	Standard
|	Ni	60	318.3	8.1	0.1307	0.013	10.1	ug/L	68	Standard
|	Cu	65	161.7	7.2	0.0199	0.006	31.8	ug/L	141	Standard
|	Zn	66	1594.4	2.9	1.6818	0.056	3.3	ug/L	138	Standard
[>	Ge	72	244068.8	0.1				ug/L	283230	Standard
|	As	75	-31.4	135.8	0.1361	0.050	36.6	ug/L	-198	Standard
|	Se	82	43.2	13.7	0.2644	0.070	26.3	ug/L	21	Standard
[	Se-1	77	126.0	5.0	0.2434	0.104	42.6	ug/L	131	Standard
[>	Ga	71	545.0	1.8				mg/L	607	Standard
|	Rb	85	415.0	4.2				ug/L	30	Standard
|	Y	89	205465.9	2.3				ug/L	251555	Standard
[>	Rh	103	281.7	7.4				ug/L	335	Standard
|	Mo	98	1086.0	2.3	0.3592	0.008	2.2	ug/L	13	Standard
|	Ag	107	62.3	21.4	0.0030	0.003	85.5	ug/L	36	Standard
|	Cd	111	71.4	13.9	0.0084	0.004	44.2	mg/L	49	Standard
|	Cd	114	215.2	2.0	0.0062	0.001	8.2	ug/L	170	Standard
[>	In	115	608236.9	0.1				ug/L	727802	Standard
|	Sn	118	365.3	4.1	-0.0094	0.002	16.5	ug/L	471	Standard
|	Sb	123	896.6	5.8	0.1287	0.007	5.8	ug/L	39	Standard
|	Ba	135	31544.5	0.5	8.6297	0.047	0.5	ug/L	25	Standard
|	Ce	140	193.0	2.3				ug/L	25	Standard
[>	Tb	159	947326.6	0.8				ug/L	1071747	Standard
|	Ho	165	11.7	34.6				ug/L	13	Standard
|	Tl	203	439.0	29.0	0.0285	0.009	30.9	ug/L	5	Standard
|	Tl	205	1136.0	43.9	0.0328	0.015	44.6	ug/L	10	Standard
|	Pb	206	486.3	32.2	0.0103	0.014	135.4	ug/L	382	Standard
|	Pb	207	424.0	38.4	0.0156	0.017	111.0	ug/L	306	Standard
|	Pb	208	1948.7	39.5	0.0141	0.017	123.7	ug/L	1443	Standard
	U	238	5468.0	3.3	0.4013	0.016	4.1	ug/L	5	Standard
[>	Bi	209	502110.7	1.0				ug/L	561075	Standard

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Na	23	102787.5	1.6	7.2836	0.143	2.0	mg/L	288	Standard
Mg	24	771569.1	2.0	1.4091	0.034	2.4	mg/L	218	Standard
K	39	173.3	10.9	0.0777	0.020	25.2	mg/L	125	Standard
Ca	43	5.0	0.0	1.1537	0.039	3.3	mg/L	3	Standard
Fe	54	188.2	12.1	-0.0665	0.006	9.6	mg/L	550	Standard
Fe	57	2046.8	6.7	0.0146	0.004	24.0	mg/L	1772	Standard
Sc-1	45	271925.1	0.6				mg/L	330668	Standard
Cl	35	13.7	41.6				ug/L	5	Standard
Kr	83	37.8	8.0				ug/L	38	Standard
Br	81	525.8	5.2				ug/L	344	Standard
P	31	215.8	7.4				ug/L	312	Standard
S	34	6610.6	4.3				ug/L	5594	Standard
Sr	88	158.3	1.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.173	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059013 WG403907-01

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	Cd	111	
	Cd	114	
>	In	115	83.572
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.491
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059013 WG403907-01
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Method 6020 - Summary Report

Sample ID: L1207059013S WG403907-04

Sample Date/Time: Sunday, July 29, 2012 15:12:42

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

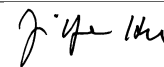
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27924.1	3.4	4856.2170	151.350	3.1	ug/L	9465	Standard
|	Be	9	7687.0	2.4	5.5494	0.211	3.8	ug/L	10	Standard
|	Al	27	131537.4	4.0	10.6425	0.400	3.8	ug/L	7870	Standard
[>	Sc	45	274668.2	2.4				ug/L	330668	Standard
|	Ti	47	193.0	9.0	0.1505	0.017	11.4	ug/L	53	Standard
|	V	51	45718.1	0.7	5.1352	0.021	0.4	ug/L	2687	Standard
|	Cr	52	40313.2	1.5	4.9670	0.098	2.0	ug/L	8408	Standard
|	Cr	53	6184.6	4.3	5.2927	0.220	4.1	ug/L	288	Standard
|	Mn	55	59289.4	0.9	5.1805	0.048	0.9	ug/L	1080	Standard
|	Co	59	34912.8	0.7	4.9054	0.032	0.6	ug/L	117	Standard
|	Ni	60	9912.9	0.6	4.9576	0.040	0.8	ug/L	68	Standard
|	Cu	65	9158.4	2.0	4.9115	0.096	2.0	ug/L	141	Standard
|	Zn	66	6798.2	2.6	7.6768	0.190	2.5	ug/L	138	Standard
[>	Ge	72	243709.7	0.3				ug/L	283230	Standard
|	As	75	4728.4	0.1	5.6964	0.014	0.3	ug/L	-198	Standard
|	Se	82	569.2	1.6	6.4487	0.124	1.9	ug/L	21	Standard
[	Se-1	77	485.0	6.1	6.2383	0.511	8.2	ug/L	131	Standard
[>	Ga	71	471.7	10.0				mg/L	607	Standard
|	Rb	85	408.3	7.9				ug/L	30	Standard
|	Y	89	209612.0	2.1				ug/L	251555	Standard
[>	Rh	103	306.7	4.1				ug/L	335	Standard
|	Mo	98	1089.4	4.0	0.3583	0.010	2.8	ug/L	13	Standard
|	Ag	107	24335.2	0.3	4.6322	0.071	1.5	ug/L	36	Standard
|	Cd	111	14604.4	0.6	5.4097	0.038	0.7	mg/L	49	Standard
|	Cd	114	44979.6	2.0	5.4773	0.076	1.4	ug/L	170	Standard
[>	In	115	611499.3	1.3				ug/L	727802	Standard
|	Sn	118	389.3	6.4	-0.0071	0.002	31.7	ug/L	471	Standard
|	Sb	123	38708.0	0.8	5.4518	0.096	1.8	ug/L	39	Standard
|	Ba	135	51521.8	0.7	14.0291	0.268	1.9	ug/L	25	Standard
|	Ce	140	1158.4	4.4				ug/L	25	Standard
[>	Tb	159	946398.1	1.0				ug/L	1071747	Standard
|	Ho	165	24.7	19.2				ug/L	13	Standard
|	Tl	203	73566.2	0.7	4.9539	0.025	0.5	ug/L	5	Standard
|	Tl	205	172018.0	0.8	4.9675	0.035	0.7	ug/L	10	Standard
|	Pb	206	57280.1	0.5	4.9693	0.018	0.4	ug/L	382	Standard
|	Pb	207	48134.3	0.1	5.0046	0.015	0.3	ug/L	306	Standard
|	Pb	208	225117.1	0.4	4.9795	0.025	0.5	ug/L	1443	Standard
	U	238	69949.4	1.0	5.1520	0.047	0.9	ug/L	5	Standard
[>	Bi	209	500421.4	0.3				ug/L	561075	Standard

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Na	23	102396.5	1.2	7.1866	0.254	3.5	mg/L	288	Standard
Mg	24	788746.6	1.4	1.4265	0.037	2.6	mg/L	218	Standard
K	39	218.3	7.4	0.1237	0.013	10.5	mg/L	125	Standard
Ca	43	13.3	94.4	11.8958	16.516	138.8	mg/L	3	Standard
Fe	54	262.7	7.9	-0.0457	0.005	10.9	mg/L	550	Standard
Fe	57	2155.2	3.5	0.0167	0.002	9.0	mg/L	1772	Standard
Sc-1	45	274668.2	2.4				mg/L	330668	Standard
Cl	35	20.3	27.1				ug/L	5	Standard
Kr	83	35.4	4.8				ug/L	38	Standard
Br	81	520.0	4.2				ug/L	344	Standard
P	31	202.5	13.4				ug/L	312	Standard
S	34	6894.9	1.9				ug/L	5594	Standard
Sr	88	146.7	2.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.047	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059013S WG403907-04

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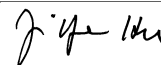
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	Cd	114	
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	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
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	Tl	203	
	Tl	205	
	Pb	206	
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	U	238	
>	Bi	209	89.190
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059013S WG403907-04
 Report Date/Time: Sunday, July 29, 2012 15:15:12
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Method 6020 - Summary Report

Sample ID: L1207059013SD WG403907-05

Sample Date/Time: Sunday, July 29, 2012 15:15:51

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27458.2	0.2	4619.9179	212.836	4.6	ug/L	9465	Standard
|	Be	9	7495.2	1.2	5.3022	0.134	2.5	ug/L	10	Standard
|	Al	27	78982.0	1.9	6.0265	0.189	3.1	ug/L	7870	Standard
[>	Sc	45	280280.6	3.4				ug/L	330668	Standard
|	Ti	47	193.0	7.2	0.1503	0.013	8.9	ug/L	53	Standard
|	V	51	46022.0	1.5	5.1665	0.095	1.8	ug/L	2687	Standard
|	Cr	52	40335.0	1.7	4.9650	0.118	2.4	ug/L	8408	Standard
|	Cr	53	6279.6	1.9	5.3727	0.123	2.3	ug/L	288	Standard
|	Mn	55	56931.4	1.8	4.9668	0.103	2.1	ug/L	1080	Standard
|	Co	59	35121.0	1.7	4.9304	0.089	1.8	ug/L	117	Standard
|	Ni	60	9999.3	1.2	4.9965	0.052	1.0	ug/L	68	Standard
|	Cu	65	9416.3	1.0	5.0472	0.057	1.1	ug/L	141	Standard
|	Zn	66	6439.0	1.8	7.2571	0.155	2.1	ug/L	138	Standard
[>	Ge	72	243926.5	0.3				ug/L	283230	Standard
|	As	75	4795.5	1.2	5.7699	0.082	1.4	ug/L	-198	Standard
|	Se	82	571.8	0.8	6.4735	0.069	1.1	ug/L	21	Standard
[	Se-1	77	474.3	5.5	6.0516	0.411	6.8	ug/L	131	Standard
[>	Ga	71	510.0	10.2				mg/L	607	Standard
[	Rb	85	383.3	6.2				ug/L	30	Standard
[	Y	89	202288.3	1.6				ug/L	251555	Standard
[>	Rh	103	295.0	24.0				ug/L	335	Standard
[	Mo	98	1123.3	4.8	0.3693	0.021	5.8	ug/L	13	Standard
|	Ag	107	25400.9	1.9	4.8280	0.136	2.8	ug/L	36	Standard
|	Cd	111	14759.8	1.3	5.4589	0.102	1.9	mg/L	49	Standard
|	Cd	114	44948.7	1.0	5.4653	0.085	1.5	ug/L	170	Standard
[>	In	115	612472.8	1.1				ug/L	727802	Standard
|	Sn	118	408.0	9.5	-0.0052	0.004	81.7	ug/L	471	Standard
|	Sb	123	38666.0	1.1	5.4372	0.110	2.0	ug/L	39	Standard
[	Ba	135	51065.6	0.9	13.8820	0.234	1.7	ug/L	25	Standard
[	Ce	140	180.3	11.4				ug/L	25	Standard
[>	Tb	159	946870.4	1.0				ug/L	1071747	Standard
[	Ho	165	12.7	35.6				ug/L	13	Standard
|	Tl	203	73844.2	1.1	4.8879	0.028	0.6	ug/L	5	Standard
|	Tl	205	170141.7	1.0	4.8299	0.067	1.4	ug/L	10	Standard
|	Pb	206	57228.2	1.2	4.8803	0.105	2.2	ug/L	382	Standard
|	Pb	207	48653.7	1.2	4.9724	0.069	1.4	ug/L	306	Standard
|	Pb	208	225444.1	0.8	4.9018	0.079	1.6	ug/L	1443	Standard
|	U	238	69795.4	0.3	5.0534	0.059	1.2	ug/L	5	Standard
[>	Bi	209	509107.2	1.3				ug/L	561075	Standard

Sample ID: L1207059013SD WG403907-05

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Na	23	102740.5	0.8	7.0672	0.241	3.4	mg/L	288	Standard
Mg	24	796551.5	2.7	1.4123	0.059	4.2	mg/L	218	Standard
K	39	211.7	11.7	0.1124	0.027	23.7	mg/L	125	Standard
Ca	43	6.7	114.6	2.9782	9.640	323.7	mg/L	3	Standard
Fe	54	240.6	19.4	-0.0534	0.012	23.3	mg/L	550	Standard
Fe	57	2206.8	5.3	0.0169	0.004	24.8	mg/L	1772	Standard
Sc-1	45	280280.6	3.4				mg/L	330668	Standard
Cl	35	15.0	37.1				ug/L	5	Standard
Kr	83	35.3	6.6				ug/L	38	Standard
Br	81	571.7	7.3				ug/L	344	Standard
P	31	212.5	16.2				ug/L	312	Standard
S	34	6983.3	3.8				ug/L	5594	Standard
Sr	88	171.7	8.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.123	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059013SD WG403907-05
 Report Date/Time: Sunday, July 29, 2012 15:18:22
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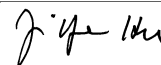
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	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059013SD WG403907-05
 Report Date/Time: Sunday, July 29, 2012 15:18:22
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Approved: July 30, 2012



Method 6020 - Summary Report

Sample ID: L1207059001

Sample Date/Time: Sunday, July 29, 2012 15:19:02

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

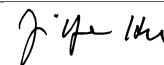
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16739.2	2.0	2090.5697	81.548	3.9	ug/L	9465	Standard
|	Be	9	13.3	43.3	-0.0118	0.004	35.4	ug/L	10	Standard
|	Al	27	888626.1	2.3	73.2163	3.093	4.2	ug/L	7870	Standard
[>	Sc	45	282387.1	3.0				ug/L	330668	Standard
|	Ti	47	2407.5	1.5	2.3717	0.031	1.3	ug/L	53	Standard
|	V	51	19525.0	1.8	2.0329	0.058	2.9	ug/L	2687	Standard
|	Cr	52	8205.9	1.3	0.1494	0.027	18.4	ug/L	8408	Standard
|	Cr	53	841.7	4.5	0.5499	0.024	4.3	ug/L	288	Standard
|	Mn	55	21665.5	0.7	1.8397	0.016	0.9	ug/L	1080	Standard
|	Co	59	447.0	1.4	0.0499	0.002	3.0	ug/L	117	Standard
|	Ni	60	489.3	4.8	0.2169	0.011	5.2	ug/L	68	Standard
|	Cu	65	288.3	9.4	0.0888	0.013	14.2	ug/L	141	Standard
|	Zn	66	1649.4	3.0	1.7483	0.077	4.4	ug/L	138	Standard
[>	Ge	72	243712.6	1.3				ug/L	283230	Standard
|	As	75	371.1	4.6	0.6064	0.023	3.7	ug/L	-198	Standard
|	Se	82	36.0	4.1	0.1803	0.022	12.2	ug/L	21	Standard
[	Se-1	77	122.7	3.4	0.1908	0.064	33.6	ug/L	131	Standard
[>	Ga	71	568.3	5.4				mg/L	607	Standard
|	Rb	85	1483.4	6.9				ug/L	30	Standard
|	Y	89	209520.7	1.7				ug/L	251555	Standard
[>	Rh	103	330.0	3.0				ug/L	335	Standard
|	Mo	98	918.8	1.7	0.2989	0.005	1.6	ug/L	13	Standard
|	Ag	107	43.7	29.1	-0.0007	0.002	365.4	ug/L	36	Standard
|	Cd	111	32.5	7.1	-0.0063	0.001	15.6	mg/L	49	Standard
|	Cd	114	98.3	7.2	-0.0083	0.001	9.0	ug/L	170	Standard
[>	In	115	616057.2	1.3				ug/L	727802	Standard
|	Sn	118	422.0	10.4	-0.0041	0.004	101.5	ug/L	471	Standard
|	Sb	123	336.7	14.8	0.0489	0.007	15.3	ug/L	39	Standard
|	Ba	135	98721.3	1.0	26.6933	0.571	2.1	ug/L	25	Standard
|	Ce	140	4985.5	0.4				ug/L	25	Standard
[>	Tb	159	951233.5	0.1				ug/L	1071747	Standard
|	Ho	165	90.3	6.8				ug/L	13	Standard
|	Tl	203	392.3	5.7	0.0251	0.002	6.2	ug/L	5	Standard
|	Tl	205	960.0	6.7	0.0274	0.002	7.1	ug/L	10	Standard
|	Pb	206	663.7	1.5	0.0252	0.001	4.3	ug/L	382	Standard
|	Pb	207	537.7	4.5	0.0269	0.003	10.5	ug/L	306	Standard
|	Pb	208	2558.4	2.7	0.0270	0.002	6.1	ug/L	1443	Standard
	U	238	1756.4	6.3	0.1276	0.008	6.7	ug/L	5	Standard
[>	Bi	209	506523.3	0.6				ug/L	561075	Standard

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Na	23	86472.8	2.1	5.8955	0.154	2.6	mg/L	288	Standard
Mg	24	489236.7	0.6	0.8610	0.029	3.4	mg/L	218	Standard
K	39	255.0	7.1	0.1553	0.011	6.9	mg/L	125	Standard
Ca	43	15.0	88.2	13.7303	17.153	124.9	mg/L	3	Standard
Fe	54	472.5	5.6	0.0110	0.008	72.9	mg/L	550	Standard
Fe	57	4789.1	4.6	0.0765	0.005	6.8	mg/L	1772	Standard
Sc-1	45	282387.1	3.0				mg/L	330668	Standard
Cl	35	19.3	31.2				ug/L	5	Standard
Kr	83	33.9	7.1				ug/L	38	Standard
Br	81	467.5	9.3				ug/L	344	Standard
P	31	200.0	7.0				ug/L	312	Standard
S	34	5801.9	1.7				ug/L	5594	Standard
Sr	88	145.0	21.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.048	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059001

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	Cd	111	
	Cd	114	
>	In	115	84.646
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.277
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059001

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Method 6020 - Summary Report

Sample ID: L1207059002

Sample Date/Time: Sunday, July 29, 2012 15:22:11

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16460.6	1.2	2016.6175	83.813	4.2	ug/L	9465	Standard
|	Be	9	8.3	34.6	-0.0153	0.002	13.5	ug/L	10	Standard
|	Al	27	30200.1	4.4	1.9196	0.112	5.8	ug/L	7870	Standard
[>	Sc	45	283049.6	1.1				ug/L	330668	Standard
[	Ti	47	252.7	4.3	0.2083	0.008	3.8	ug/L	53	Standard
|	V	51	17410.1	1.2	1.7664	0.007	0.4	ug/L	2687	Standard
|	Cr	52	7492.9	1.4	0.0336	0.006	19.0	ug/L	8408	Standard
|	Cr	53	595.0	12.4	0.3273	0.067	20.6	ug/L	288	Standard
|	Mn	55	2978.0	2.7	0.1781	0.005	3.1	ug/L	1080	Standard
|	Co	59	579.3	3.0	0.0679	0.003	4.0	ug/L	117	Standard
|	Ni	60	397.0	8.2	0.1688	0.014	8.2	ug/L	68	Standard
|	Cu	65	172.3	8.9	0.0252	0.009	36.4	ug/L	141	Standard
|	Zn	66	1598.8	0.2	1.6755	0.018	1.1	ug/L	138	Standard
[>	Ge	72	245582.1	1.2				ug/L	283230	Standard
|	As	75	341.6	8.6	0.5686	0.032	5.7	ug/L	-198	Standard
|	Se	82	34.8	10.7	0.1631	0.048	29.5	ug/L	21	Standard
[	Se-1	77	124.0	5.8	0.1967	0.098	49.9	ug/L	131	Standard
[>	Ga	71	518.3	11.2				mg/L	607	Standard
[	Rb	85	540.0	16.7				ug/L	30	Standard
[	Y	89	211420.0	1.4				ug/L	251555	Standard
[>	Rh	103	320.0	6.8				ug/L	335	Standard
[	Mo	98	921.6	4.3	0.3002	0.013	4.2	ug/L	13	Standard
|	Ag	107	38.0	13.2	-0.0018	0.001	52.3	ug/L	36	Standard
|	Cd	111	36.1	23.5	-0.0049	0.003	64.4	mg/L	49	Standard
|	Cd	114	116.9	9.7	-0.0060	0.001	23.6	ug/L	170	Standard
[>	In	115	615248.3	0.4				ug/L	727802	Standard
|	Sn	118	378.0	4.8	-0.0085	0.002	22.1	ug/L	471	Standard
|	Sb	123	188.0	13.2	0.0281	0.004	12.6	ug/L	39	Standard
[	Ba	135	91669.2	1.1	24.8145	0.342	1.4	ug/L	25	Standard
[	Ce	140	148.0	6.9				ug/L	25	Standard
[>	Tb	159	945702.0	0.4				ug/L	1071747	Standard
[	Ho	165	18.3	22.7				ug/L	13	Standard
|	Tl	203	388.7	6.4	0.0246	0.002	6.6	ug/L	5	Standard
|	Tl	205	875.4	1.1	0.0248	0.000	1.1	ug/L	10	Standard
|	Pb	206	424.0	9.0	0.0042	0.003	72.1	ug/L	382	Standard
|	Pb	207	360.7	1.4	0.0084	0.000	5.3	ug/L	306	Standard
|	Pb	208	1685.0	2.2	0.0076	0.001	7.7	ug/L	1443	Standard
	U	238	1551.1	0.7	0.1119	0.001	0.8	ug/L	5	Standard
[>	Bi	209	509708.2	0.6				ug/L	561075	Standard

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Na	23	86623.6	0.9	5.8899	0.015	0.2	mg/L	288	Standard
Mg	24	459256.7	0.9	0.8059	0.013	1.6	mg/L	218	Standard
K	39	216.7	14.1	0.1154	0.033	28.4	mg/L	125	Standard
Ca	43	6.7	43.3	2.9589	3.505	118.4	mg/L	3	Standard
Fe	54	268.3	19.6	-0.0462	0.015	33.1	mg/L	550	Standard
Fe	57	2065.1	5.2	0.0131	0.003	22.3	mg/L	1772	Standard
Sc-1	45	283049.6	1.1				mg/L	330668	Standard
Cl	35	15.0	54.6				ug/L	5	Standard
Kr	83	31.1	5.9				ug/L	38	Standard
Br	81	552.5	8.8				ug/L	344	Standard
P	31	161.7	3.9				ug/L	312	Standard
S	34	5674.4	1.3				ug/L	5594	Standard
Sr	88	163.3	16.9				ug/L	55	Standard

QC Calculated Values

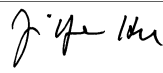
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.708	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059002

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	Cd	111	
	Cd	114	
>	In	115	84.535
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.845
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059002

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Method 6020 - Summary Report

Sample ID: L1207059002PS WG404853-01

Sample Date/Time: Sunday, July 29, 2012 15:25:27

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18674.8	1.8	1983.9543	40.978	2.1	ug/L	9465	Standard
|	Be	9	74318.5	0.8	45.6406	0.745	1.6	ug/L	10	Standard
|	Al	27	656533.0	0.8	46.9337	0.907	1.9	ug/L	7870	Standard
[>	Sc	45	323898.3	2.4				ug/L	330668	Standard
[	Ti	47	359.3	6.3	0.2758	0.022	7.8	ug/L	53	Standard
|	V	51	444317.8	0.4	46.2746	0.595	1.3	ug/L	2687	Standard
|	Cr	52	349048.1	0.2	45.2471	0.588	1.3	ug/L	8408	Standard
|	Cr	53	58742.8	0.6	45.9298	0.448	1.0	ug/L	288	Standard
|	Mn	55	584206.7	0.5	45.8053	0.753	1.6	ug/L	1080	Standard
|	Co	59	362566.1	0.6	45.1687	0.560	1.2	ug/L	117	Standard
|	Ni	60	102205.2	0.3	45.4520	0.638	1.4	ug/L	68	Standard
|	Cu	65	97136.7	1.1	46.6509	0.955	2.0	ug/L	141	Standard
|	Zn	66	47953.8	0.3	48.6962	0.477	1.0	ug/L	138	Standard
[>	Ge	72	275538.1	1.2				ug/L	283230	Standard
|	As	75	45500.3	0.9	47.1934	0.948	2.0	ug/L	-198	Standard
|	Se	82	4487.7	1.5	46.4304	1.162	2.5	ug/L	21	Standard
[	Se-1	77	3327.0	3.0	47.2672	2.079	4.4	ug/L	131	Standard
[>	Ga	71	606.7	21.5				mg/L	607	Standard
[	Rb	85	600.0	5.8				ug/L	30	Standard
[	Y	89	237676.7	1.8				ug/L	251555	Standard
[>	Rh	103	363.3	12.0				ug/L	335	Standard
[	Mo	98	1122.3	1.2	0.3274	0.006	1.9	ug/L	13	Standard
|	Ag	107	263866.9	0.8	44.6948	0.675	1.5	ug/L	36	Standard
|	Cd	111	143304.9	0.9	47.2969	0.669	1.4	mg/L	49	Standard
|	Cd	114	435122.7	0.3	47.2265	0.371	0.8	ug/L	170	Standard
[>	In	115	688343.5	0.7				ug/L	727802	Standard
|	Sn	118	889.7	12.4	0.0344	0.010	29.7	ug/L	471	Standard
|	Sb	123	376191.4	0.7	47.0491	0.098	0.2	ug/L	39	Standard
[	Ba	135	291027.1	0.6	70.4374	0.842	1.2	ug/L	25	Standard
[	Ce	140	224.7	20.1				ug/L	25	Standard
[>	Tb	159	1035815.4	0.8				ug/L	1071747	Standard
[	Ho	165	19.3	34.4				ug/L	13	Standard
|	Tl	203	729226.6	0.7	44.7890	0.413	0.9	ug/L	5	Standard
|	Tl	205	1688767.4	0.3	44.4714	0.091	0.2	ug/L	10	Standard
|	Pb	206	568663.0	0.4	45.2474	0.400	0.9	ug/L	382	Standard
|	Pb	207	481404.2	0.4	45.8760	0.319	0.7	ug/L	306	Standard
|	Pb	208	2231836.9	0.3	45.2538	0.304	0.7	ug/L	1443	Standard
|	U	238	671432.2	1.2	45.0986	0.525	1.2	ug/L	5	Standard
[>	Bi	209	548766.5	0.5				ug/L	561075	Standard

Sample ID: L1207059002PS WG404853-01

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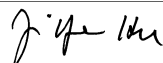
Na	23	86813.0	1.5	5.1564	0.178	3.4	mg/L	288	Standard
Mg	24	494386.4	0.3	0.7584	0.019	2.5	mg/L	218	Standard
K	39	235.0	11.8	0.1037	0.027	25.9	mg/L	125	Standard
Ca	43	8.3	69.3	3.6586	6.018	164.5	mg/L	3	Standard
Fe	54	534.9	10.3	0.0094	0.016	166.7	mg/L	550	Standard
Fe	57	2520.2	2.5	0.0163	0.001	5.4	mg/L	1772	Standard
Sc-1	45	323898.3	2.4				mg/L	330668	Standard
Cl	35	19.0	10.5				ug/L	5	Standard
Kr	83	38.8	5.9				ug/L	38	Standard
Br	81	682.5	6.4				ug/L	344	Standard
P	31	384.2	4.6				ug/L	312	Standard
S	34	6068.7	2.1				ug/L	5594	Standard
Sr	88	155.0	14.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.284	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059002PS WG404853-01
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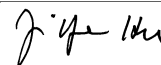
	Cd	111	
	Cd	114	
>	In	115	94.578
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
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	U	238	
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	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059002PS WG404853-01
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Method 6020 - Summary Report

Sample ID: L1207059002SDL WG404853-02

Sample Date/Time: Sunday, July 29, 2012 15:28:36

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9724.8	3.0	367.7592	33.782	9.2	ug/L	9465	Standard
|	Be	9	15.0	33.3	-0.0111	0.003	29.2	ug/L	10	Standard
|	Al	27	18222.6	0.9	0.8646	0.033	3.8	ug/L	7870	Standard
[>	Sc	45	295488.9	1.5				ug/L	330668	Standard
[	Ti	47	112.7	10.3	0.0631	0.013	21.1	ug/L	53	Standard
|	V	51	5351.9	1.1	0.3145	0.009	2.8	ug/L	2687	Standard
|	Cr	52	7368.5	1.2	-0.0450	0.011	24.4	ug/L	8408	Standard
|	Cr	53	360.8	11.7	0.1031	0.032	30.8	ug/L	288	Standard
|	Mn	55	3149.3	2.4	0.1782	0.012	6.5	ug/L	1080	Standard
|	Co	59	222.0	5.1	0.0162	0.001	5.6	ug/L	117	Standard
|	Ni	60	209.7	13.6	0.0696	0.012	17.4	ug/L	68	Standard
|	Cu	65	182.7	7.7	0.0253	0.007	27.6	ug/L	141	Standard
|	Zn	66	2544.5	2.6	2.5964	0.021	0.8	ug/L	138	Standard
[>	Ge	72	259858.5	2.2				ug/L	283230	Standard
|	As	75	-64.8	35.1	0.1014	0.027	26.2	ug/L	-198	Standard
|	Se	82	23.9	18.9	0.0197	0.047	236.4	ug/L	21	Standard
[	Se-1	77	115.3	1.3	-0.0505	0.049	96.9	ug/L	131	Standard
[>	Ga	71	578.3	10.1				mg/L	607	Standard
[	Rb	85	131.7	9.6				ug/L	30	Standard
[	Y	89	227268.7	1.3				ug/L	251555	Standard
[>	Rh	103	321.7	2.4				ug/L	335	Standard
[	Mo	98	224.1	1.6	0.0626	0.002	2.6	ug/L	13	Standard
|	Ag	107	244.7	18.1	0.0343	0.008	23.6	ug/L	36	Standard
|	Cd	111	58.8	24.2	0.0020	0.005	245.4	mg/L	49	Standard
|	Cd	114	176.1	6.8	-0.0002	0.001	618.0	ug/L	170	Standard
[>	In	115	659526.3	0.9				ug/L	727802	Standard
|	Sn	118	579.3	3.5	0.0082	0.002	29.0	ug/L	471	Standard
|	Sb	123	1916.7	4.2	0.2519	0.008	3.3	ug/L	39	Standard
[	Ba	135	18128.8	1.9	4.5682	0.046	1.0	ug/L	25	Standard
[	Ce	140	72.7	16.5				ug/L	25	Standard
[>	Tb	159	993047.9	1.8				ug/L	1071747	Standard
[	Ho	165	13.3	31.2				ug/L	13	Standard
|	Tl	203	166.7	15.4	0.0095	0.002	17.3	ug/L	5	Standard
|	Tl	205	363.0	7.5	0.0099	0.001	6.8	ug/L	10	Standard
|	Pb	206	463.3	5.7	0.0060	0.002	41.1	ug/L	382	Standard
|	Pb	207	367.7	6.5	0.0076	0.003	33.3	ug/L	306	Standard
|	Pb	208	1777.0	1.8	0.0080	0.001	10.9	ug/L	1443	Standard
	U	238	384.0	3.6	0.0264	0.001	2.8	ug/L	5	Standard
[>	Bi	209	531196.0	0.9				ug/L	561075	Standard

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Na	23	31046.8	2.3	1.9986	0.054	2.7	mg/L	288	Standard
Mg	24	97466.2	4.5	0.1640	0.007	4.0	mg/L	218	Standard
K	39	140.0	12.9	0.0299	0.018	61.2	mg/L	125	Standard
Ca	43	10.0	86.6	6.5794	10.253	155.8	mg/L	3	Standard
Fe	54	464.9	4.3	0.0030	0.004	123.4	mg/L	550	Standard
Fe	57	1576.7	9.7	0.0002	0.003	1546.9	mg/L	1772	Standard
Sc-1	45	295488.9	1.5				mg/L	330668	Standard
Cl	35	7.7	32.8				ug/L	5	Standard
Kr	83	34.7	7.3				ug/L	38	Standard
Br	81	397.5	4.5				ug/L	344	Standard
P	31	295.8	11.7				ug/L	312	Standard
S	34	5812.8	2.0				ug/L	5594	Standard
Sr	88	80.0	6.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.748	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	90.619
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.675
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 15:31:48

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7787.0	5.0	-91.8621	79.154	86.2	ug/L	9465	Standard
|	Be	9	74886.5	3.9	49.4775	2.110	4.3	ug/L	10	Standard
|	Al	27	633626.4	0.8	48.7454	0.403	0.8	ug/L	7870	Standard
[>	Sc	45	301036.3	0.8				ug/L	330668	Standard
|	Ti	47	104975.7	0.3	97.8982	1.775	1.8	ug/L	53	Standard
|	V	51	440902.0	0.7	48.2946	0.496	1.0	ug/L	2687	Standard
|	Cr	52	352053.2	0.6	48.0558	0.954	2.0	ug/L	8408	Standard
|	Cr	53	59764.3	1.7	49.1435	0.105	0.2	ug/L	288	Standard
|	Mn	55	597865.9	0.8	49.2930	0.366	0.7	ug/L	1080	Standard
|	Co	59	366767.8	0.6	48.0494	0.885	1.8	ug/L	117	Standard
|	Ni	60	102210.3	0.9	47.7990	0.957	2.0	ug/L	68	Standard
|	Cu	65	96613.7	0.9	48.7876	0.376	0.8	ug/L	141	Standard
|	Zn	66	47181.3	0.3	50.3859	0.636	1.3	ug/L	138	Standard
[>	Ge	72	262048.7	1.5				ug/L	283230	Standard
|	As	75	45661.0	1.1	49.7850	0.592	1.2	ug/L	-198	Standard
|	Se	82	4621.7	0.8	50.2949	0.727	1.4	ug/L	21	Standard
[	Se-1	77	3450.1	0.8	51.6922	0.475	0.9	ug/L	131	Standard
[>	Ga	71	596.7	3.5				mg/L	607	Standard
|	Rb	85	690.0	6.9				ug/L	30	Standard
|	Y	89	223624.9	0.7				ug/L	251555	Standard
[>	Rh	103	311.7	16.1				ug/L	335	Standard
|	Mo	98	317152.4	0.3	99.6776	1.191	1.2	ug/L	13	Standard
|	Ag	107	287057.1	1.5	51.2643	0.258	0.5	ug/L	36	Standard
|	Cd	111	144090.0	0.7	50.1484	0.943	1.9	mg/L	49	Standard
|	Cd	114	439615.6	1.1	50.3179	1.141	2.3	ug/L	170	Standard
[>	In	115	652837.8	1.2				ug/L	727802	Standard
|	Sn	118	512311.0	1.4	49.6343	1.227	2.5	ug/L	471	Standard
|	Sb	123	380174.3	1.0	50.1417	1.082	2.2	ug/L	39	Standard
|	Ba	135	201123.8	0.5	51.3266	0.862	1.7	ug/L	25	Standard
|	Ce	140	784.0	1.5				ug/L	25	Standard
[>	Tb	159	1002218.2	0.6				ug/L	1071747	Standard
|	Ho	165	17.7	16.3				ug/L	13	Standard
|	Tl	203	746529.3	0.2	48.5121	0.048	0.1	ug/L	5	Standard
|	Tl	205	1717471.4	0.2	47.8523	0.228	0.5	ug/L	10	Standard
|	Pb	206	575100.3	0.4	48.4170	0.328	0.7	ug/L	382	Standard
|	Pb	207	489253.4	0.9	49.3314	0.471	1.0	ug/L	306	Standard
|	Pb	208	2265879.2	0.3	48.6123	0.263	0.5	ug/L	1443	Standard
	U	238	682531.3	0.8	48.5050	0.461	0.9	ug/L	5	Standard
[>	Bi	209	518663.4	0.3				ug/L	561075	Standard

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Na	23	100725.4	0.8	6.4431	0.084	1.3	mg/L	288	Standard
Mg	24	2972212.2	1.8	4.9026	0.123	2.5	mg/L	218	Standard
K	39	5546.0	3.2	5.2853	0.208	3.9	mg/L	125	Standard
Ca	43	20.0	25.0	18.1875	5.939	32.7	mg/L	3	Standard
Fe	54	19694.7	0.8	5.0428	0.072	1.4	mg/L	550	Standard
Fe	57	233208.4	4.5	5.0477	0.268	5.3	mg/L	1772	Standard
Sc-1	45	301036.3	0.8				mg/L	330668	Standard
Cl	35	5.0	34.6				ug/L	5	Standard
Kr	83	36.3	0.9				ug/L	38	Standard
Br	81	325.8	6.6				ug/L	344	Standard
P	31	374.2	8.7				ug/L	312	Standard
S	34	5852.0	1.6				ug/L	5594	Standard
Sr	88	38.3	7.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.491		
Sc	45			
Ti	47	97.898		
V	51	96.589		
Cr	52	96.112		
Cr	53			
Mn	55	98.586		
Co	59	96.099		
Ni	60	95.598		
Cu	65	97.575		
Zn	66	100.772		
Ge	72		92.522	
As	75	99.570		
Se	82	100.590		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	99.678		
Ag	107	102.529		

Sample ID: QC Std 6

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	Cd	111	100.297	
	Cd	114		
>	In	115		89.700
	Sn	118	99.269	
	Sb	123	100.283	
	Ba	135	102.653	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	97.024	
|	Tl	205		
|	Pb	206	96.834	
|	Pb	207	98.663	
|	Pb	208	97.225	
|	U	238	97.010	
>	Bi	209		92.441
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 15:34:58

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7623.6	2.9	-92.8405	71.338	76.8	ug/L	9465	Standard
|	Be	9	20.0	25.0	-0.0077	0.004	48.2	ug/L	10	Standard
|	Al	27	7208.4	4.9	-0.0086	0.017	198.9	ug/L	7870	Standard
[>	Sc	45	295064.8	2.4				ug/L	330668	Standard
|	Ti	47	69.3	18.5	0.0214	0.011	53.8	ug/L	53	Standard
|	V	51	2337.5	3.9	-0.0234	0.006	26.2	ug/L	2687	Standard
|	Cr	52	6982.9	1.4	-0.1103	0.010	9.4	ug/L	8408	Standard
|	Cr	53	238.3	3.4	-0.0009	0.006	672.2	ug/L	288	Standard
|	Mn	55	1135.7	8.2	0.0092	0.006	68.0	ug/L	1080	Standard
|	Co	59	178.0	27.7	0.0101	0.006	60.9	ug/L	117	Standard
|	Ni	60	69.0	20.9	0.0030	0.007	236.4	ug/L	68	Standard
|	Cu	65	137.0	9.1	0.0013	0.007	516.7	ug/L	141	Standard
|	Zn	66	145.3	12.1	0.0037	0.021	568.6	ug/L	138	Standard
[>	Ge	72	262788.7	1.6				ug/L	283230	Standard
|	As	75	-177.8	8.6	-0.0201	0.019	95.7	ug/L	-198	Standard
|	Se	82	25.3	14.5	0.0331	0.039	117.9	ug/L	21	Standard
[	Se-1	77	111.3	17.5	-0.1299	0.329	252.9	ug/L	131	Standard
[>	Ga	71	545.0	4.2				mg/L	607	Standard
[	Rb	85	23.3	12.4				ug/L	30	Standard
[	Y	89	226160.8	1.9				ug/L	251555	Standard
[>	Rh	103	318.3	16.5				ug/L	335	Standard
[	Mo	98	275.9	47.0	0.0806	0.041	51.0	ug/L	13	Standard
|	Ag	107	254.3	47.4	0.0370	0.022	58.6	ug/L	36	Standard
|	Cd	111	108.0	70.6	0.0198	0.027	135.4	mg/L	49	Standard
|	Cd	114	316.2	47.1	0.0164	0.017	104.6	ug/L	170	Standard
[>	In	115	645123.2	0.5				ug/L	727802	Standard
|	Sn	118	900.4	4.6	0.0409	0.004	10.2	ug/L	471	Standard
|	Sb	123	2256.8	2.2	0.3030	0.007	2.3	ug/L	39	Standard
[	Ba	135	116.3	68.8	0.0185	0.021	111.2	ug/L	25	Standard
[	Ce	140	20.3	7.5				ug/L	25	Standard
[>	Tb	159	980578.1	0.6				ug/L	1071747	Standard
[	Ho	165	11.7	51.7				ug/L	13	Standard
|	Tl	203	216.0	62.8	0.0127	0.009	67.9	ug/L	5	Standard
|	Tl	205	444.3	60.4	0.0122	0.007	60.0	ug/L	10	Standard
|	Pb	206	498.7	20.8	0.0092	0.008	86.9	ug/L	382	Standard
|	Pb	207	391.7	16.7	0.0102	0.006	57.9	ug/L	306	Standard
|	Pb	208	1899.0	16.5	0.0109	0.006	55.5	ug/L	1443	Standard
	U	238	154.0	40.5	0.0105	0.004	40.3	ug/L	5	Standard
[>	Bi	209	526112.2	2.1				ug/L	561075	Standard

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Na	23	398.3	26.4	-0.0102	0.006	62.1	mg/L	288	Standard
Mg	24	680.0	43.5	0.0014	0.000	33.4	mg/L	218	Standard
K	39	128.3	11.9	0.0184	0.014	75.6	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	516.4	16.3	0.0169	0.022	127.8	mg/L	550	Standard
Fe	57	1700.1	4.0	0.0030	0.002	75.3	mg/L	1772	Standard
Sc-1	45	295064.8	2.4				mg/L	330668	Standard
Cl	35	5.0	105.8				ug/L	5	Standard
Kr	83	38.3	3.1				ug/L	38	Standard
Br	81	310.0	4.8				ug/L	344	Standard
P	31	346.7	19.2				ug/L	312	Standard
S	34	5785.3	2.0				ug/L	5594	Standard
Sr	88	43.3	17.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.783	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	88.640
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.769
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207059003

Sample Date/Time: Sunday, July 29, 2012 15:38:10

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20408.8	6.0	3071.7044	115.652	3.8	ug/L	9465	Standard
|	Be	9	30.0	66.7	0.0002	0.014	5862.4	ug/L	10	Standard
|	Al	27	194878.9	1.8	16.0755	0.667	4.1	ug/L	7870	Standard
[>	Sc	45	274426.8	3.7				ug/L	330668	Standard
|	Ti	47	737.0	2.8	0.7239	0.013	1.8	ug/L	53	Standard
|	V	51	11448.3	5.1	1.1260	0.027	2.4	ug/L	2687	Standard
|	Cr	52	7512.2	7.2	0.0861	0.046	53.5	ug/L	8408	Standard
|	Cr	53	525.0	13.0	0.2853	0.048	16.8	ug/L	288	Standard
|	Mn	55	3232.0	14.0	0.2128	0.033	15.5	ug/L	1080	Standard
|	Co	59	360.7	57.6	0.0391	0.029	73.3	ug/L	117	Standard
|	Ni	60	388.3	8.5	0.1732	0.011	6.5	ug/L	68	Standard
|	Cu	65	189.0	4.2	0.0388	0.005	14.1	ug/L	141	Standard
|	Zn	66	2163.5	23.6	2.4481	0.701	28.6	ug/L	138	Standard
[>	Ge	72	234945.5	3.3				ug/L	283230	Standard
|	As	75	76.3	41.0	0.2644	0.035	13.3	ug/L	-198	Standard
|	Se	82	28.5	4.9	0.1049	0.012	11.5	ug/L	21	Standard
[	Se-1	77	113.7	8.8	0.1107	0.144	129.8	ug/L	131	Standard
[>	Ga	71	505.0	18.1				mg/L	607	Standard
|	Rb	85	655.0	4.0				ug/L	30	Standard
|	Y	89	200381.8	2.4				ug/L	251555	Standard
[>	Rh	103	295.0	2.9				ug/L	335	Standard
|	Mo	98	727.9	8.7	0.2494	0.018	7.1	ug/L	13	Standard
|	Ag	107	92.0	31.4	0.0094	0.006	58.5	ug/L	36	Standard
|	Cd	111	31.6	14.5	-0.0059	0.002	26.5	mg/L	49	Standard
|	Cd	114	122.8	23.5	-0.0045	0.003	77.0	ug/L	170	Standard
[>	In	115	581775.0	1.9				ug/L	727802	Standard
|	Sn	118	417.0	11.0	-0.0021	0.004	198.8	ug/L	471	Standard
|	Sb	123	466.4	15.0	0.0707	0.009	13.1	ug/L	39	Standard
|	Ba	135	144011.3	4.4	41.2199	1.040	2.5	ug/L	25	Standard
|	Ce	140	1335.4	3.5				ug/L	25	Standard
[>	Tb	159	915855.8	2.0				ug/L	1071747	Standard
|	Ho	165	30.3	24.7				ug/L	13	Standard
|	Tl	203	535.7	56.0	0.0356	0.020	55.9	ug/L	5	Standard
|	Tl	205	1477.8	73.7	0.0433	0.031	72.0	ug/L	10	Standard
|	Pb	206	622.0	52.2	0.0231	0.028	120.3	ug/L	382	Standard
|	Pb	207	554.0	50.7	0.0302	0.029	95.2	ug/L	306	Standard
|	Pb	208	2583.1	56.1	0.0292	0.032	108.6	ug/L	1443	Standard
	U	238	3528.1	9.8	0.2652	0.021	7.9	ug/L	5	Standard
[>	Bi	209	489498.4	2.6				ug/L	561075	Standard

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Na	23	95149.6	2.1	6.6812	0.173	2.6	mg/L	288	Standard
Mg	24	511250.1	3.3	0.9253	0.006	0.6	mg/L	218	Standard
K	39	193.3	6.0	0.0973	0.005	4.8	mg/L	125	Standard
Ca	43	21.7	13.3	22.5863	3.275	14.5	mg/L	3	Standard
Fe	54	302.9	20.0	-0.0344	0.014	42.1	mg/L	550	Standard
Fe	57	2826.9	2.3	0.0328	0.002	5.7	mg/L	1772	Standard
Sc-1	45	274426.8	3.7				mg/L	330668	Standard
Cl	35	12.3	52.8				ug/L	5	Standard
Kr	83	34.7	12.6				ug/L	38	Standard
Br	81	490.8	12.5				ug/L	344	Standard
P	31	198.3	9.1				ug/L	312	Standard
S	34	5610.2	3.5				ug/L	5594	Standard
Sr	88	150.0	21.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.952	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059003

Report Date/Time: Sunday, July 29, 2012 15:40:40

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	Cd	111	
	Cd	114	
>	In	115	79.936
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	87.243
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059003

Report Date/Time: Sunday, July 29, 2012 15:40:40

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Method 6020 - Summary Report

Sample ID: L1207059004

Sample Date/Time: Sunday, July 29, 2012 15:41:19

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22465.0	4.4	3498.1000	136.247	3.9	ug/L	9465	Standard
|	Be	9	8.3	34.6	-0.0152	0.002	13.6	ug/L	10	Standard
|	Al	27	26219.4	8.2	1.6293	0.133	8.1	ug/L	7870	Standard
[>	Sc	45	277763.7	2.2				ug/L	330668	Standard
[	Ti	47	257.7	5.1	0.2165	0.013	5.8	ug/L	53	Standard
|	V	51	12002.0	4.0	1.1473	0.039	3.4	ug/L	2687	Standard
|	Cr	52	7846.4	3.1	0.1002	0.025	24.5	ug/L	8408	Standard
|	Cr	53	600.0	8.7	0.3377	0.044	13.1	ug/L	288	Standard
|	Mn	55	2889.6	4.3	0.1734	0.008	4.5	ug/L	1080	Standard
|	Co	59	790.4	4.1	0.0987	0.004	4.3	ug/L	117	Standard
|	Ni	60	392.0	10.2	0.1687	0.017	10.4	ug/L	68	Standard
|	Cu	65	173.7	6.6	0.0270	0.006	23.6	ug/L	141	Standard
|	Zn	66	1330.7	4.3	1.3870	0.046	3.3	ug/L	138	Standard
[>	Ge	72	242660.6	1.3				ug/L	283230	Standard
|	As	75	92.7	17.0	0.2817	0.020	7.0	ug/L	-198	Standard
|	Se	82	33.8	11.4	0.1564	0.050	31.8	ug/L	21	Standard
[	Se-1	77	119.0	8.1	0.1376	0.148	107.4	ug/L	131	Standard
[>	Ga	71	498.3	11.3				mg/L	607	Standard
[	Rb	85	528.3	6.7				ug/L	30	Standard
[	Y	89	204761.5	2.3				ug/L	251555	Standard
[>	Rh	103	293.3	12.8				ug/L	335	Standard
[	Mo	98	739.2	6.8	0.2463	0.014	5.6	ug/L	13	Standard
|	Ag	107	67.0	14.2	0.0041	0.002	49.7	ug/L	36	Standard
|	Cd	111	31.9	18.1	-0.0062	0.002	33.5	mg/L	49	Standard
|	Cd	114	98.2	11.7	-0.0079	0.001	16.1	ug/L	170	Standard
[>	In	115	598054.8	1.4				ug/L	727802	Standard
|	Sn	118	390.0	12.4	-0.0062	0.005	77.1	ug/L	471	Standard
|	Sb	123	462.5	18.2	0.0683	0.011	16.8	ug/L	39	Standard
[	Ba	135	157611.8	4.1	43.8945	1.476	3.4	ug/L	25	Standard
[	Ce	140	174.3	2.4				ug/L	25	Standard
[>	Tb	159	920698.2	1.1				ug/L	1071747	Standard
[	Ho	165	12.7	16.4				ug/L	13	Standard
|	Tl	203	405.3	9.9	0.0264	0.003	9.6	ug/L	5	Standard
|	Tl	205	905.0	5.4	0.0263	0.001	4.8	ug/L	10	Standard
|	Pb	206	414.7	3.3	0.0043	0.001	28.8	ug/L	382	Standard
|	Pb	207	312.7	6.2	0.0042	0.002	45.1	ug/L	306	Standard
|	Pb	208	1555.0	0.5	0.0055	0.000	7.6	ug/L	1443	Standard
	U	238	3714.5	3.5	0.2746	0.008	3.0	ug/L	5	Standard
[>	Bi	209	498195.0	0.8				ug/L	561075	Standard

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Na	23	99235.6	1.6	6.8831	0.129	1.9	mg/L	288	Standard
Mg	24	548849.6	3.0	0.9812	0.012	1.3	mg/L	218	Standard
K	39	193.3	1.5	0.0950	0.007	7.7	mg/L	125	Standard
Ca	43	21.7	35.3	22.1374	9.085	41.0	mg/L	3	Standard
Fe	54	214.4	11.2	-0.0603	0.006	10.0	mg/L	550	Standard
Fe	57	2085.1	5.6	0.0144	0.002	14.1	mg/L	1772	Standard
Sc-1	45	277763.7	2.2				mg/L	330668	Standard
Cl	35	12.3	26.1				ug/L	5	Standard
Kr	83	35.3	14.8				ug/L	38	Standard
Br	81	562.5	7.9				ug/L	344	Standard
P	31	192.5	12.5				ug/L	312	Standard
S	34	5861.1	2.6				ug/L	5594	Standard
Sr	88	161.7	21.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.676	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059004

Report Date/Time: Sunday, July 29, 2012 15:43:49

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	Cd	111	
	Cd	114	
>	In	115	82.173
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	88.793
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059004

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Method 6020 - Summary Report

Sample ID: L1207059005

Sample Date/Time: Sunday, July 29, 2012 15:44:28

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27556.8	5.5	4076.5878	302.602	7.4	ug/L	9465	Standard
|	Be	9	31.7	48.2	-0.0004	0.011	2565.3	ug/L	10	Standard
|	Al	27	305852.3	2.4	22.7699	1.131	5.0	ug/L	7870	Standard
[>	Sc	45	307442.3	5.5				ug/L	330668	Standard
|	Ti	47	864.0	6.0	0.7627	0.063	8.2	ug/L	53	Standard
|	V	51	14869.7	1.1	1.3567	0.050	3.7	ug/L	2687	Standard
|	Cr	52	8960.7	2.8	0.1669	0.019	11.5	ug/L	8408	Standard
|	Cr	53	719.2	8.5	0.3971	0.067	16.9	ug/L	288	Standard
|	Mn	55	4664.7	4.4	0.3005	0.015	5.0	ug/L	1080	Standard
|	Co	59	329.0	2.7	0.0300	0.002	7.5	ug/L	117	Standard
|	Ni	60	623.7	3.0	0.2622	0.008	3.1	ug/L	68	Standard
|	Cu	65	240.7	8.4	0.0538	0.011	20.9	ug/L	141	Standard
|	Zn	66	1655.4	1.7	1.6198	0.051	3.2	ug/L	138	Standard
[>	Ge	72	262409.8	3.3				ug/L	283230	Standard
|	As	75	145.4	14.8	0.3302	0.019	5.8	ug/L	-198	Standard
|	Se	82	36.0	15.8	0.1488	0.051	34.2	ug/L	21	Standard
[	Se-1	77	131.0	9.2	0.1786	0.243	136.0	ug/L	131	Standard
[>	Ga	71	598.3	10.8				mg/L	607	Standard
|	Rb	85	951.7	2.4				ug/L	30	Standard
|	Y	89	229769.0	3.8				ug/L	251555	Standard
[>	Rh	103	363.3	13.8				ug/L	335	Standard
|	Mo	98	945.2	8.0	0.2902	0.021	7.1	ug/L	13	Standard
|	Ag	107	68.0	22.8	0.0032	0.003	94.4	ug/L	36	Standard
|	Cd	111	44.7	8.1	-0.0026	0.002	64.0	mg/L	49	Standard
|	Cd	114	150.6	3.8	-0.0029	0.001	19.1	ug/L	170	Standard
[>	In	115	651946.3	2.7				ug/L	727802	Standard
|	Sn	118	461.0	11.7	-0.0026	0.006	241.0	ug/L	471	Standard
|	Sb	123	354.0	11.1	0.0486	0.005	10.7	ug/L	39	Standard
|	Ba	135	190047.2	2.2	48.5829	1.683	3.5	ug/L	25	Standard
|	Ce	140	2148.5	2.9				ug/L	25	Standard
[>	Tb	159	977824.5	3.5				ug/L	1071747	Standard
|	Ho	165	52.7	8.8				ug/L	13	Standard
|	Tl	203	486.7	5.2	0.0301	0.002	5.8	ug/L	5	Standard
|	Tl	205	1133.7	5.0	0.0312	0.002	5.8	ug/L	10	Standard
|	Pb	206	589.3	4.2	0.0168	0.001	6.4	ug/L	382	Standard
|	Pb	207	486.0	4.3	0.0197	0.002	11.7	ug/L	306	Standard
|	Pb	208	2231.7	3.2	0.0180	0.001	5.9	ug/L	1443	Standard
	U	238	4589.4	4.6	0.3215	0.020	6.1	ug/L	5	Standard
[>	Bi	209	526217.5	2.3				ug/L	561075	Standard

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Na	23	106709.5	1.7	6.7023	0.488	7.3	mg/L	288	Standard
Mg	24	655184.7	2.0	1.0604	0.061	5.8	mg/L	218	Standard
K	39	250.0	26.2	0.1303	0.065	50.1	mg/L	125	Standard
Ca	43	15.0	33.3	12.1580	6.770	55.7	mg/L	3	Standard
Fe	54	374.4	22.2	-0.0248	0.022	88.8	mg/L	550	Standard
Fe	57	3817.1	0.5	0.0468	0.004	9.0	mg/L	1772	Standard
Sc-1	45	307442.3	5.5				mg/L	330668	Standard
Cl	35	12.7	9.1				ug/L	5	Standard
Kr	83	36.3	11.5				ug/L	38	Standard
Br	81	517.5	0.8				ug/L	344	Standard
P	31	240.8	5.2				ug/L	312	Standard
S	34	6157.1	2.6				ug/L	5594	Standard
Sr	88	178.3	14.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.649	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059005

Report Date/Time: Sunday, July 29, 2012 15:46:59

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	Cd	111	
	Cd	114	
>	In	115	89.577
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.787
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059005

Report Date/Time: Sunday, July 29, 2012 15:46:59

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Method 6020 - Summary Report

Sample ID: L1207059006

Sample Date/Time: Sunday, July 29, 2012 15:47:38

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27929.1	2.3	4012.5334	288.704	7.2	ug/L	9465	Standard
|	Be	9	10.0	50.0	-0.0149	0.003	20.8	ug/L	10	Standard
|	Al	27	40469.0	0.6	2.4313	0.097	4.0	ug/L	7870	Standard
[>	Sc	45	315019.4	2.7				ug/L	330668	Standard
|	Ti	47	355.7	6.0	0.2807	0.018	6.4	ug/L	53	Standard
|	V	51	14422.4	1.7	1.2709	0.036	2.9	ug/L	2687	Standard
|	Cr	52	8603.1	1.5	0.0899	0.027	30.5	ug/L	8408	Standard
|	Cr	53	669.2	3.5	0.3422	0.019	5.4	ug/L	288	Standard
|	Mn	55	1829.1	4.1	0.0632	0.005	8.0	ug/L	1080	Standard
|	Co	59	299.0	12.2	0.0251	0.004	17.7	ug/L	117	Standard
|	Ni	60	541.3	2.6	0.2180	0.006	2.7	ug/L	68	Standard
|	Cu	65	202.3	2.5	0.0320	0.002	5.8	ug/L	141	Standard
|	Zn	66	1745.4	3.8	1.6734	0.083	4.9	ug/L	138	Standard
[>	Ge	72	268459.2	0.8				ug/L	283230	Standard
|	As	75	100.5	54.9	0.2793	0.058	20.9	ug/L	-198	Standard
|	Se	82	34.8	10.0	0.1279	0.035	27.0	ug/L	21	Standard
[	Se-1	77	122.7	7.4	0.0017	0.126	7561.5	ug/L	131	Standard
[>	Ga	71	551.7	1.4				mg/L	607	Standard
|	Rb	85	681.7	1.1				ug/L	30	Standard
|	Y	89	230811.0	3.3				ug/L	251555	Standard
[>	Rh	103	371.7	14.8				ug/L	335	Standard
|	Mo	98	924.6	2.0	0.2815	0.007	2.4	ug/L	13	Standard
|	Ag	107	71.7	14.7	0.0038	0.002	51.2	ug/L	36	Standard
|	Cd	111	37.4	27.0	-0.0053	0.004	66.8	mg/L	49	Standard
|	Cd	114	107.0	12.8	-0.0080	0.002	19.4	ug/L	170	Standard
[>	In	115	657240.6	0.8				ug/L	727802	Standard
|	Sn	118	459.0	3.9	-0.0032	0.002	57.2	ug/L	471	Standard
|	Sb	123	450.5	9.6	0.0608	0.006	10.0	ug/L	39	Standard
|	Ba	135	187000.5	1.8	47.4016	1.205	2.5	ug/L	25	Standard
|	Ce	140	160.3	5.3				ug/L	25	Standard
[>	Tb	159	983204.9	1.6				ug/L	1071747	Standard
|	Ho	165	14.3	21.3				ug/L	13	Standard
|	Tl	203	400.0	5.0	0.0243	0.001	4.9	ug/L	5	Standard
|	Tl	205	950.0	3.0	0.0258	0.001	3.7	ug/L	10	Standard
|	Pb	206	413.0	1.3	0.0018	0.000	16.2	ug/L	382	Standard
|	Pb	207	365.3	6.0	0.0073	0.002	29.6	ug/L	306	Standard
|	Pb	208	1642.7	2.1	0.0051	0.001	15.0	ug/L	1443	Standard
	U	238	4504.3	1.5	0.3116	0.007	2.2	ug/L	5	Standard
[>	Bi	209	532426.3	0.8				ug/L	561075	Standard

Sample ID: L1207059006

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Na	23	107652.8	1.4	6.5859	0.271	4.1	mg/L	288	Standard
Mg	24	664637.0	1.6	1.0486	0.045	4.3	mg/L	218	Standard
K	39	258.3	4.5	0.1314	0.013	10.1	mg/L	125	Standard
Ca	43	20.0	66.1	17.3620	15.623	90.0	mg/L	3	Standard
Fe	54	272.2	14.5	-0.0527	0.012	22.3	mg/L	550	Standard
Fe	57	2756.9	8.4	0.0226	0.004	16.1	mg/L	1772	Standard
Sc-1	45	315019.4	2.7				mg/L	330668	Standard
Cl	35	16.7	18.3				ug/L	5	Standard
Kr	83	37.8	7.5				ug/L	38	Standard
Br	81	608.3	5.8				ug/L	344	Standard
P	31	206.7	1.8				ug/L	312	Standard
S	34	6431.4	3.9				ug/L	5594	Standard
Sr	88	245.0	9.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.785	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059006

Report Date/Time: Sunday, July 29, 2012 15:50:09

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	Cd	111	
	Cd	114	
>	In	115	90.305
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.894
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059006

Report Date/Time: Sunday, July 29, 2012 15:50:09

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Method 6020 - Summary Report

Sample ID: L1207059007

Sample Date/Time: Sunday, July 29, 2012 15:50:49

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63119.6	3.1	11342.7606	157.506	1.4	ug/L	9465	Standard
|	Be	9	18.3	56.8	-0.0096	0.007	69.7	ug/L	10	Standard
|	Al	27	1747149.1	4.1	129.8085	3.496	2.7	ug/L	7870	Standard
[>	Sc	45	313944.9	1.9				ug/L	330668	Standard
[	Ti	47	4664.1	1.9	4.1913	0.069	1.6	ug/L	53	Standard
|	V	51	8623.1	2.7	0.6444	0.020	3.1	ug/L	2687	Standard
|	Cr	52	10242.1	2.7	0.3088	0.024	7.9	ug/L	8408	Standard
|	Cr	53	783.4	12.3	0.4319	0.072	16.6	ug/L	288	Standard
|	Mn	55	165822.0	3.0	13.2422	0.270	2.0	ug/L	1080	Standard
|	Co	59	1105.0	4.0	0.1278	0.005	4.1	ug/L	117	Standard
|	Ni	60	1448.1	3.1	0.6301	0.015	2.3	ug/L	68	Standard
|	Cu	65	668.3	4.8	0.2610	0.013	4.8	ug/L	141	Standard
|	Zn	66	4279.6	2.8	4.3088	0.086	2.0	ug/L	138	Standard
[>	Ge	72	269243.3	0.9				ug/L	283230	Standard
|	As	75	20.5	147.8	0.1946	0.032	16.5	ug/L	-198	Standard
|	Se	82	175.7	2.5	1.6266	0.061	3.8	ug/L	21	Standard
[	Se-1	77	221.7	10.3	1.4938	0.364	24.4	ug/L	131	Standard
[>	Ga	71	760.0	10.4				mg/L	607	Standard
[	Rb	85	2455.2	6.8				ug/L	30	Standard
[	Y	89	226257.4	2.3				ug/L	251555	Standard
[>	Rh	103	365.0	3.6				ug/L	335	Standard
[	Mo	98	519.0	7.0	0.1547	0.012	7.4	ug/L	13	Standard
|	Ag	107	64.3	7.3	0.0024	0.001	35.8	ug/L	36	Standard
|	Cd	111	48.1	8.3	-0.0017	0.001	80.3	mg/L	49	Standard
|	Cd	114	152.9	16.8	-0.0028	0.003	100.3	ug/L	170	Standard
[>	In	115	657787.3	0.7				ug/L	727802	Standard
|	Sn	118	675.3	2.0	0.0176	0.001	4.8	ug/L	471	Standard
|	Sb	123	418.4	11.7	0.0565	0.006	11.1	ug/L	39	Standard
[	Ba	135	37551.2	1.8	9.4998	0.116	1.2	ug/L	25	Standard
[	Ce	140	10486.0	2.1				ug/L	25	Standard
[>	Tb	159	988739.4	1.1				ug/L	1071747	Standard
[	Ho	165	188.0	8.2				ug/L	13	Standard
|	Tl	203	403.0	4.6	0.0246	0.001	5.4	ug/L	5	Standard
|	Tl	205	958.7	6.5	0.0262	0.002	6.9	ug/L	10	Standard
|	Pb	206	1279.7	4.1	0.0735	0.005	6.8	ug/L	382	Standard
|	Pb	207	1053.0	3.5	0.0754	0.003	4.6	ug/L	306	Standard
|	Pb	208	4963.3	3.4	0.0752	0.004	5.1	ug/L	1443	Standard
	U	238	16185.3	3.2	1.1266	0.042	3.7	ug/L	5	Standard
[>	Bi	209	529521.9	0.6				ug/L	561075	Standard

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Na	23	118353.8	1.3	7.2657	0.187	2.6	mg/L	288	Standard
Mg	24	1342459.7	1.7	2.1238	0.056	2.7	mg/L	218	Standard
K	39	235.0	25.8	0.1107	0.058	52.8	mg/L	125	Standard
Ca	43	10.0	50.0	5.8805	5.463	92.9	mg/L	3	Standard
Fe	54	1070.3	8.7	0.1478	0.019	13.1	mg/L	550	Standard
Fe	57	11641.1	5.1	0.2083	0.008	4.0	mg/L	1772	Standard
Sc-1	45	313944.9	1.9				mg/L	330668	Standard
Cl	35	14.7	10.4				ug/L	5	Standard
Kr	83	36.1	15.7				ug/L	38	Standard
Br	81	597.5	6.9				ug/L	344	Standard
P	31	385.0	4.9				ug/L	312	Standard
S	34	9851.5	1.2				ug/L	5594	Standard
Sr	88	193.3	11.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.062	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059007

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	Cd	111		
	Cd	114		
>	In	115	90.380	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.376	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207059008

Sample Date/Time: Sunday, July 29, 2012 15:53:59

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63096.1	2.0	11806.1723	300.223	2.5	ug/L	9465	Standard
|	Be	9	11.7	99.0	-0.0135	0.008	57.4	ug/L	10	Standard
|	Al	27	17635.3	3.3	0.7823	0.047	6.0	ug/L	7870	Standard
[>	Sc	45	303200.8	1.6				ug/L	330668	Standard
[	Ti	47	244.7	25.0	0.1805	0.056	31.0	ug/L	53	Standard
|	V	51	5523.3	1.7	0.3160	0.012	3.7	ug/L	2687	Standard
|	Cr	52	8650.1	2.8	0.1007	0.037	36.6	ug/L	8408	Standard
|	Cr	53	398.3	6.4	0.1251	0.022	17.3	ug/L	288	Standard
|	Mn	55	92389.9	1.5	7.3916	0.132	1.8	ug/L	1080	Standard
|	Co	59	209.7	8.1	0.0138	0.002	16.3	ug/L	117	Standard
|	Ni	60	574.7	5.4	0.2342	0.015	6.4	ug/L	68	Standard
|	Cu	65	254.3	9.9	0.0582	0.012	21.4	ug/L	141	Standard
|	Zn	66	1697.1	1.7	1.6292	0.035	2.2	ug/L	138	Standard
[>	Ge	72	267455.3	0.3				ug/L	283230	Standard
|	As	75	-56.8	31.3	0.1123	0.019	16.9	ug/L	-198	Standard
|	Se	82	177.7	5.5	1.6608	0.099	6.0	ug/L	21	Standard
[	Se-1	77	213.7	11.4	1.3922	0.360	25.9	ug/L	131	Standard
[>	Ga	71	543.3	6.0				mg/L	607	Standard
[	Rb	85	508.3	10.0				ug/L	30	Standard
[	Y	89	227184.1	1.3				ug/L	251555	Standard
[>	Rh	103	368.3	7.0				ug/L	335	Standard
[	Mo	98	537.4	1.9	0.1610	0.003	2.0	ug/L	13	Standard
|	Ag	107	43.0	14.1	-0.0013	0.001	85.6	ug/L	36	Standard
|	Cd	111	35.0	10.0	-0.0061	0.001	23.0	mg/L	49	Standard
|	Cd	114	98.6	9.3	-0.0090	0.001	12.6	ug/L	170	Standard
[>	In	115	655751.3	1.5				ug/L	727802	Standard
|	Sn	118	411.0	3.8	-0.0078	0.001	18.8	ug/L	471	Standard
|	Sb	123	179.2	31.7	0.0254	0.008	30.8	ug/L	39	Standard
[	Ba	135	30430.9	0.4	7.7217	0.114	1.5	ug/L	25	Standard
[	Ce	140	113.0	14.2				ug/L	25	Standard
[>	Tb	159	992278.6	1.3				ug/L	1071747	Standard
[	Ho	165	14.0	24.7				ug/L	13	Standard
|	Tl	203	336.3	14.5	0.0204	0.003	17.0	ug/L	5	Standard
|	Tl	205	777.4	7.3	0.0212	0.002	7.9	ug/L	10	Standard
|	Pb	206	399.0	4.8	0.0008	0.002	212.5	ug/L	382	Standard
|	Pb	207	334.0	4.9	0.0043	0.001	27.6	ug/L	306	Standard
|	Pb	208	1535.4	1.3	0.0030	0.000	12.1	ug/L	1443	Standard
	U	238	16529.7	2.0	1.1485	0.039	3.4	ug/L	5	Standard
[>	Bi	209	530579.8	1.7				ug/L	561075	Standard

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Na	23	120159.6	0.5	7.6387	0.101	1.3	mg/L	288	Standard
Mg	24	1378019.7	0.4	2.2571	0.042	1.9	mg/L	218	Standard
K	39	288.3	19.5	0.1692	0.051	30.0	mg/L	125	Standard
Ca	43	16.7	62.4	14.1384	12.282	86.9	mg/L	3	Standard
Fe	54	298.9	17.7	-0.0432	0.015	33.6	mg/L	550	Standard
Fe	57	2866.9	4.2	0.0273	0.003	12.5	mg/L	1772	Standard
Sc-1	45	303200.8	1.6				mg/L	330668	Standard
Cl	35	11.3	31.0				ug/L	5	Standard
Kr	83	37.1	13.5				ug/L	38	Standard
Br	81	594.2	3.6				ug/L	344	Standard
P	31	347.5	5.4				ug/L	312	Standard
S	34	10140.9	2.8				ug/L	5594	Standard
Sr	88	163.3	6.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.430	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059008

Report Date/Time: Sunday, July 29, 2012 15:56:30

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	Cd	111		
	Cd	114		
>	In	115	90.100	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	94.565	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059008

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Method 6020 - Summary Report

Sample ID: L1207059012

Sample Date/Time: Sunday, July 29, 2012 15:57:09

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	34507.6	4.3	5603.8140	194.260	3.5	ug/L	9465	Standard
|	Be	9	5.0	0.0	-0.0179	0.000	0.6	ug/L	10	Standard
|	Al	27	542958.1	1.1	41.1490	0.994	2.4	ug/L	7870	Standard
[>	Sc	45	305048.7	3.0				ug/L	330668	Standard
[	Ti	47	1598.8	2.1	1.4148	0.046	3.2	ug/L	53	Standard
|	V	51	7300.5	1.1	0.5059	0.004	0.7	ug/L	2687	Standard
|	Cr	52	10302.8	1.8	0.3230	0.011	3.4	ug/L	8408	Standard
|	Cr	53	877.5	3.5	0.5110	0.025	4.9	ug/L	288	Standard
|	Mn	55	31418.9	0.4	2.4518	0.022	0.9	ug/L	1080	Standard
|	Co	59	427.3	4.7	0.0416	0.002	5.1	ug/L	117	Standard
|	Ni	60	778.4	1.0	0.3267	0.000	0.1	ug/L	68	Standard
|	Cu	65	273.0	3.1	0.0671	0.004	5.4	ug/L	141	Standard
|	Zn	66	1562.4	1.5	1.4839	0.029	2.0	ug/L	138	Standard
[>	Ge	72	268115.3	1.1				ug/L	283230	Standard
|	As	75	8.8	209.7	0.1820	0.020	10.7	ug/L	-198	Standard
|	Se	82	54.7	2.8	0.3419	0.017	5.1	ug/L	21	Standard
[	Se-1	77	143.3	9.5	0.3183	0.209	65.8	ug/L	131	Standard
[>	Ga	71	583.3	5.7				mg/L	607	Standard
[	Rb	85	980.0	3.1				ug/L	30	Standard
[	Y	89	228125.9	3.5				ug/L	251555	Standard
[>	Rh	103	340.0	21.4				ug/L	335	Standard
[	Mo	98	1355.4	5.3	0.4167	0.018	4.2	ug/L	13	Standard
|	Ag	107	57.7	33.6	0.0013	0.003	261.8	ug/L	36	Standard
|	Cd	111	31.4	24.3	-0.0074	0.003	34.5	mg/L	49	Standard
|	Cd	114	115.4	9.7	-0.0071	0.001	15.9	ug/L	170	Standard
[>	In	115	655924.2	1.1				ug/L	727802	Standard
|	Sn	118	443.7	5.2	-0.0046	0.002	37.2	ug/L	471	Standard
|	Sb	123	207.0	10.2	0.0289	0.003	8.8	ug/L	39	Standard
[	Ba	135	38951.3	1.5	9.8827	0.038	0.4	ug/L	25	Standard
[	Ce	140	3305.7	1.7				ug/L	25	Standard
[>	Tb	159	991929.6	1.3				ug/L	1071747	Standard
[	Ho	165	55.7	17.7				ug/L	13	Standard
|	Tl	203	416.3	2.0	0.0252	0.000	0.9	ug/L	5	Standard
|	Tl	205	959.0	6.4	0.0259	0.001	4.8	ug/L	10	Standard
|	Pb	206	647.0	3.2	0.0208	0.001	4.5	ug/L	382	Standard
|	Pb	207	524.3	3.3	0.0227	0.002	8.5	ug/L	306	Standard
|	Pb	208	2444.1	3.0	0.0217	0.001	2.4	ug/L	1443	Standard
	U	238	6578.8	0.5	0.4533	0.010	2.2	ug/L	5	Standard
[>	Bi	209	534870.4	2.7				ug/L	561075	Standard

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Na	23	109490.9	1.3	6.9164	0.119	1.7	mg/L	288	Standard
Mg	24	960173.5	1.5	1.5639	0.050	3.2	mg/L	218	Standard
K	39	260.0	21.4	0.1412	0.056	39.5	mg/L	125	Standard
Ca	43	8.3	34.6	4.3811	3.561	81.3	mg/L	3	Standard
Fe	54	485.6	10.9	0.0049	0.017	355.8	mg/L	550	Standard
Fe	57	4839.1	6.5	0.0692	0.004	6.4	mg/L	1772	Standard
Sc-1	45	305048.7	3.0				mg/L	330668	Standard
Cl	35	19.7	2.9				ug/L	5	Standard
Kr	83	34.9	1.1				ug/L	38	Standard
Br	81	625.0	6.5				ug/L	344	Standard
P	31	271.7	6.7				ug/L	312	Standard
S	34	7529.4	1.1				ug/L	5594	Standard
Sr	88	181.7	5.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.664	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207059012

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	Cd	111	
	Cd	114	
>	In	115	90.124
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.330
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207059012

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 16:00:22

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

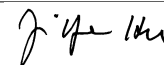
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8877.6	3.8	-68.6983	72.818	106.0	ug/L	9465	Standard
|	Be	9	81656.1	0.2	47.9607	0.941	2.0	ug/L	10	Standard
|	Al	27	721711.1	1.5	49.3615	0.318	0.6	ug/L	7870	Standard
[>	Sc	45	338662.1	1.8				ug/L	330668	Standard
|	Ti	47	117157.2	0.3	97.1213	0.751	0.8	ug/L	53	Standard
|	V	51	487004.3	1.0	47.4192	0.750	1.6	ug/L	2687	Standard
|	Cr	52	392213.4	0.8	47.5807	0.642	1.3	ug/L	8408	Standard
|	Cr	53	66843.8	1.7	48.8648	0.599	1.2	ug/L	288	Standard
|	Mn	55	660515.0	0.5	48.4115	0.081	0.2	ug/L	1080	Standard
|	Co	59	403621.0	1.0	47.0046	0.678	1.4	ug/L	117	Standard
|	Ni	60	117066.2	0.4	48.6644	0.067	0.1	ug/L	68	Standard
|	Cu	65	107862.2	0.5	48.4227	0.489	1.0	ug/L	141	Standard
|	Zn	66	52339.2	0.6	49.6866	0.585	1.2	ug/L	138	Standard
[>	Ge	72	294749.7	0.5				ug/L	283230	Standard
|	As	75	51270.1	0.6	49.6947	0.072	0.1	ug/L	-198	Standard
|	Se	82	5234.2	0.8	50.6361	0.200	0.4	ug/L	21	Standard
[	Se-1	77	3823.8	0.7	50.9054	0.427	0.8	ug/L	131	Standard
[>	Ga	71	676.7	13.4				mg/L	607	Standard
|	Rb	85	715.0	8.1				ug/L	30	Standard
|	Y	89	258639.9	2.8				ug/L	251555	Standard
[>	Rh	103	370.0	15.2				ug/L	335	Standard
|	Mo	98	354131.5	1.6	100.7135	0.395	0.4	ug/L	13	Standard
|	Ag	107	322283.5	1.1	52.0887	0.217	0.4	ug/L	36	Standard
|	Cd	111	157995.8	0.7	49.7647	1.007	2.0	mg/L	49	Standard
|	Cd	114	484201.3	1.1	50.1496	0.628	1.3	ug/L	170	Standard
[>	In	115	721390.5	1.5				ug/L	727802	Standard
|	Sn	118	564053.4	1.1	49.4473	0.316	0.6	ug/L	471	Standard
|	Sb	123	408721.6	0.5	48.7857	0.994	2.0	ug/L	39	Standard
|	Ba	135	220348.4	0.6	50.8893	0.784	1.5	ug/L	25	Standard
|	Ce	140	829.7	6.9				ug/L	25	Standard
[>	Tb	159	1073567.2	0.9				ug/L	1071747	Standard
|	Ho	165	19.7	20.5				ug/L	13	Standard
|	Tl	203	807569.4	0.6	47.8151	0.366	0.8	ug/L	5	Standard
|	Tl	205	1873467.5	0.7	47.5620	0.697	1.5	ug/L	10	Standard
|	Pb	206	625209.8	0.5	47.9615	0.844	1.8	ug/L	382	Standard
|	Pb	207	531624.4	1.0	48.8438	0.936	1.9	ug/L	306	Standard
|	Pb	208	2462042.1	0.2	48.1291	0.697	1.4	ug/L	1443	Standard
	U	238	743792.8	0.9	48.1666	1.034	2.1	ug/L	5	Standard
[>	Bi	209	569281.1	1.2				ug/L	561075	Standard

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Na	23	103742.4	1.8	5.8969	0.160	2.7	mg/L	288	Standard
Mg	24	3288873.1	0.5	4.8224	0.065	1.3	mg/L	218	Standard
K	39	5772.8	0.9	4.8822	0.100	2.0	mg/L	125	Standard
Ca	43	6.7	86.6	1.5444	5.979	387.1	mg/L	3	Standard
Fe	54	22178.7	0.3	5.0486	0.083	1.6	mg/L	550	Standard
Fe	57	289827.9	3.5	5.5773	0.098	1.8	mg/L	1772	Standard
Sc-1	45	338662.1	1.8				mg/L	330668	Standard
Cl	35	5.0	20.0				ug/L	5	Standard
Kr	83	39.3	12.5				ug/L	38	Standard
Br	81	358.3	2.5				ug/L	344	Standard
P	31	417.5	7.5				ug/L	312	Standard
S	34	6313.0	0.3				ug/L	5594	Standard
Sr	88	50.0	43.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.723		
Sc	45			
Ti	47	97.121		
V	51	94.838		
Cr	52	95.161		
Cr	53			
Mn	55	96.823		
Co	59	94.009		
Ni	60	97.329		
Cu	65	96.845		
Zn	66	99.373		
Ge	72		104.067	
As	75	99.389		
Se	82	101.272		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	100.714		
Ag	107	104.177		

Sample ID: QC Std 6

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	Cd	111	99.529	
	Cd	114		
>	In	115		99.119
	Sn	118	98.895	
	Sb	123	97.571	
	Ba	135	101.779	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	95.630	
|	Tl	205		
|	Pb	206	95.923	
|	Pb	207	97.688	
|	Pb	208	96.258	
|	U	238	96.333	
>	Bi	209		101.463
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 16:03:31

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8997.7	3.3	-23.1242	53.029	229.3	ug/L	9465	Standard
|	Be	9	20.0	75.0	-0.0093	0.009	96.1	ug/L	10	Standard
|	Al	27	7943.8	4.0	-0.0240	0.022	92.5	ug/L	7870	Standard
[>	Sc	45	334258.9	1.3				ug/L	330668	Standard
|	Ti	47	60.0	13.6	0.0074	0.008	101.9	ug/L	53	Standard
|	V	51	2520.9	1.6	-0.0300	0.007	23.3	ug/L	2687	Standard
|	Cr	52	7835.0	1.4	-0.0975	0.014	14.3	ug/L	8408	Standard
|	Cr	53	234.2	10.9	-0.0228	0.022	94.5	ug/L	288	Standard
|	Mn	55	1150.4	8.6	0.0013	0.007	563.3	ug/L	1080	Standard
|	Co	59	140.7	14.0	0.0035	0.002	67.0	ug/L	117	Standard
|	Ni	60	74.7	23.8	0.0023	0.008	341.6	ug/L	68	Standard
|	Cu	65	144.0	7.7	-0.0022	0.006	284.5	ug/L	141	Standard
|	Zn	66	163.7	17.1	0.0063	0.028	446.4	ug/L	138	Standard
[>	Ge	72	291038.2	1.8				ug/L	283230	Standard
|	As	75	-205.2	16.6	-0.0277	0.030	107.9	ug/L	-198	Standard
|	Se	82	26.5	8.4	0.0184	0.026	142.0	ug/L	21	Standard
[	Se-1	77	132.7	9.7	-0.0022	0.180	8227.0	ug/L	131	Standard
[>	Ga	71	576.7	8.9				mg/L	607	Standard
|	Rb	85	20.0	25.0				ug/L	30	Standard
|	Y	89	251668.7	2.4				ug/L	251555	Standard
[>	Rh	103	333.3	15.1				ug/L	335	Standard
|	Mo	98	216.4	25.1	0.0552	0.016	28.7	ug/L	13	Standard
|	Ag	107	108.0	44.4	0.0087	0.008	90.7	ug/L	36	Standard
|	Cd	111	74.8	30.8	0.0056	0.008	133.1	mg/L	49	Standard
|	Cd	114	215.6	26.8	0.0024	0.006	252.8	ug/L	170	Standard
[>	In	115	712342.7	2.5				ug/L	727802	Standard
|	Sn	118	885.0	10.3	0.0312	0.008	26.4	ug/L	471	Standard
|	Sb	123	2138.4	3.2	0.2602	0.007	2.5	ug/L	39	Standard
|	Ba	135	49.0	32.1	-0.0001	0.004	4890.9	ug/L	25	Standard
|	Ce	140	27.0	7.4				ug/L	25	Standard
[>	Tb	159	1041626.2	2.3				ug/L	1071747	Standard
|	Ho	165	11.3	27.0				ug/L	13	Standard
|	Tl	203	96.0	59.3	0.0046	0.003	73.8	ug/L	5	Standard
|	Tl	205	227.0	64.6	0.0058	0.004	65.2	ug/L	10	Standard
|	Pb	206	461.7	4.9	0.0034	0.002	51.1	ug/L	382	Standard
|	Pb	207	370.0	8.4	0.0054	0.003	57.4	ug/L	306	Standard
|	Pb	208	1769.7	8.1	0.0054	0.003	55.1	ug/L	1443	Standard
	U	238	88.3	53.9	0.0055	0.003	57.1	ug/L	5	Standard
[>	Bi	209	569107.8	1.7				ug/L	561075	Standard

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Na	23	346.7	16.0	-0.0161	0.003	20.6	mg/L	288	Standard
Mg	24	501.7	50.0	0.0010	0.000	34.9	mg/L	218	Standard
K	39	118.3	6.5	-0.0052	0.006	105.3	mg/L	125	Standard
Ca	43	3.3	173.2	-1.8119	6.145	339.1	mg/L	3	Standard
Fe	54	561.5	12.8	0.0114	0.016	141.1	mg/L	550	Standard
Fe	57	1948.5	1.9	0.0035	0.001	15.4	mg/L	1772	Standard
Sc-1	45	334258.9	1.3				mg/L	330668	Standard
Cl	35	5.7	36.7				ug/L	5	Standard
Kr	83	36.9	7.0				ug/L	38	Standard
Br	81	373.3	10.7				ug/L	344	Standard
P	31	392.5	16.0				ug/L	312	Standard
S	34	6166.3	1.8				ug/L	5594	Standard
Sr	88	28.3	83.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.757	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111		
	Cd	114		
>	In	115	97.876	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	101.432	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 16:06:02

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Method 6020 - Summary Report

Sample ID: PBW 54 WG404188-02

Sample Date/Time: Sunday, July 29, 2012 16:06:43

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8440.7	3.1	-103.2758	67.897	65.7	ug/L	9465	Standard
|	Be	9	6.7	43.3	-0.0172	0.002	10.2	ug/L	10	Standard
|	Al	27	7913.7	1.6	-0.0165	0.018	109.5	ug/L	7870	Standard
[>	Sc	45	328660.3	1.7				ug/L	330668	Standard
|	Ti	47	52.7	18.7	0.0021	0.009	403.3	ug/L	53	Standard
|	V	51	2508.4	1.0	-0.0258	0.001	2.8	ug/L	2687	Standard
|	Cr	52	7891.7	1.3	-0.0686	0.015	21.3	ug/L	8408	Standard
|	Cr	53	225.8	5.5	-0.0255	0.010	39.5	ug/L	288	Standard
|	Mn	55	1112.0	2.3	0.0003	0.002	777.8	ug/L	1080	Standard
|	Co	59	112.3	20.4	0.0004	0.003	638.5	ug/L	117	Standard
|	Ni	60	79.3	25.8	0.0050	0.009	182.3	ug/L	68	Standard
|	Cu	65	151.7	7.2	0.0027	0.005	178.9	ug/L	141	Standard
|	Zn	66	601.0	4.4	0.4407	0.026	5.8	ug/L	138	Standard
[>	Ge	72	284740.1	0.8				ug/L	283230	Standard
|	As	75	-214.7	9.9	-0.0420	0.022	52.2	ug/L	-198	Standard
|	Se	82	19.4	24.3	-0.0485	0.046	94.8	ug/L	21	Standard
[	Se-1	77	112.7	5.1	-0.2471	0.077	31.0	ug/L	131	Standard
[>	Ga	71	591.7	6.3				mg/L	607	Standard
|	Rb	85	18.3	31.5				ug/L	30	Standard
|	Y	89	259764.8	1.5				ug/L	251555	Standard
[>	Rh	103	315.0	7.3				ug/L	335	Standard
|	Mo	98	90.1	8.7	0.0187	0.002	12.7	ug/L	13	Standard
|	Ag	107	69.3	27.6	0.0023	0.003	133.5	ug/L	36	Standard
|	Cd	111	61.1	16.4	0.0011	0.003	280.9	mg/L	49	Standard
|	Cd	114	198.7	13.0	0.0005	0.003	518.9	ug/L	170	Standard
[>	In	115	716223.0	0.6				ug/L	727802	Standard
|	Sn	118	596.7	0.8	0.0053	0.001	12.9	ug/L	471	Standard
|	Sb	123	533.0	15.0	0.0659	0.010	14.8	ug/L	39	Standard
|	Ba	135	51.7	21.3	0.0005	0.003	498.1	ug/L	25	Standard
|	Ce	140	26.7	30.5				ug/L	25	Standard
[>	Tb	159	1047672.0	0.5				ug/L	1071747	Standard
|	Ho	165	11.0	24.1				ug/L	13	Standard
|	Tl	203	64.3	54.3	0.0028	0.002	75.5	ug/L	5	Standard
|	Tl	205	148.0	55.6	0.0038	0.002	55.3	ug/L	10	Standard
|	Pb	206	412.3	3.6	-0.0005	0.001	267.1	ug/L	382	Standard
|	Pb	207	346.0	2.1	0.0031	0.001	28.2	ug/L	306	Standard
|	Pb	208	1608.0	4.9	0.0022	0.002	67.7	ug/L	1443	Standard
	U	238	38.0	67.2	0.0022	0.002	74.5	ug/L	5	Standard
[>	Bi	209	569532.0	1.0				ug/L	561075	Standard

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Na	23	388.3	22.6	-0.0134	0.005	35.7	mg/L	288	Standard
Mg	24	478.3	42.4	0.0010	0.000	29.2	mg/L	218	Standard
K	39	130.0	27.7	0.0072	0.033	460.0	mg/L	125	Standard
Ca	43	3.3	86.6	-1.7705	3.109	175.6	mg/L	3	Standard
Fe	54	559.6	8.7	0.0134	0.014	102.9	mg/L	550	Standard
Fe	57	1970.1	4.0	0.0045	0.002	38.6	mg/L	1772	Standard
Sc-1	45	328660.3	1.7				mg/L	330668	Standard
Cl	35	4.7	44.6				ug/L	5	Standard
Kr	83	40.9	5.5				ug/L	38	Standard
Br	81	390.0	12.2				ug/L	344	Standard
P	31	369.2	8.5				ug/L	312	Standard
S	34	6051.2	1.2				ug/L	5594	Standard
Sr	88	71.7	20.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.533	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: PBW 54 WG404188-02

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	Cd	111	
	Cd	114	
>	In	115	98.409
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.507
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: PBW 54 WG404188-02

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Method 6020 - Summary Report

Sample ID: LCSW 54 WG404188-03

Sample Date/Time: Sunday, July 29, 2012 16:09:52

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

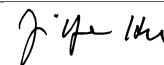
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9644.7	1.5	-64.1351	25.412	39.6	ug/L	9465	Standard
|	Be	9	43805.0	3.8	23.7325	0.805	3.4	ug/L	10	Standard
|	Al	27	510401.1	0.2	32.0227	0.125	0.4	ug/L	7870	Standard
[>	Sc	45	366863.4	0.5				ug/L	330668	Standard
|	Ti	47	81.3	15.3	0.0209	0.010	45.8	ug/L	53	Standard
|	V	51	267142.6	1.1	24.5334	0.259	1.1	ug/L	2687	Standard
|	Cr	52	220443.5	0.9	24.8567	0.303	1.2	ug/L	8408	Standard
|	Cr	53	37178.9	1.8	25.6842	0.468	1.8	ug/L	288	Standard
|	Mn	55	367703.5	0.8	25.5197	0.203	0.8	ug/L	1080	Standard
|	Co	59	223111.7	0.3	24.6348	0.080	0.3	ug/L	117	Standard
|	Ni	60	64885.7	1.2	25.5681	0.410	1.6	ug/L	68	Standard
|	Cu	65	61120.7	0.2	25.9909	0.101	0.4	ug/L	141	Standard
|	Zn	66	30400.8	0.7	27.3016	0.207	0.8	ug/L	138	Standard
[>	Ge	72	310790.2	0.6				ug/L	283230	Standard
|	As	75	26272.2	0.3	24.2397	0.064	0.3	ug/L	-198	Standard
|	Se	82	2637.3	0.7	24.0706	0.253	1.1	ug/L	21	Standard
[	Se-1	77	1945.5	0.7	23.6020	0.191	0.8	ug/L	131	Standard
[>	Ga	71	686.7	4.8				mg/L	607	Standard
|	Rb	85	51.7	63.0				ug/L	30	Standard
|	Y	89	275409.5	2.0				ug/L	251555	Standard
[>	Rh	103	323.3	27.2				ug/L	335	Standard
|	Mo	98	66.0	20.0	0.0104	0.003	32.9	ug/L	13	Standard
|	Ag	107	152729.6	0.4	23.1180	0.185	0.8	ug/L	36	Standard
|	Cd	111	84243.4	1.1	24.8424	0.302	1.2	mg/L	49	Standard
|	Cd	114	254389.7	1.4	24.6677	0.199	0.8	ug/L	170	Standard
[>	In	115	770108.3	0.6				ug/L	727802	Standard
|	Sn	118	872.0	3.7	0.0243	0.003	11.7	ug/L	471	Standard
|	Sb	123	214585.7	1.5	23.9884	0.246	1.0	ug/L	39	Standard
|	Ba	135	115579.2	0.5	24.9950	0.033	0.1	ug/L	25	Standard
|	Ce	140	488.7	7.5				ug/L	25	Standard
[>	Tb	159	1107057.6	0.6				ug/L	1071747	Standard
|	Ho	165	20.7	27.5				ug/L	13	Standard
|	Tl	203	438398.7	0.4	24.9465	0.200	0.8	ug/L	5	Standard
|	Tl	205	1013681.9	0.4	24.7317	0.146	0.6	ug/L	10	Standard
|	Pb	206	342352.6	0.2	25.2234	0.172	0.7	ug/L	382	Standard
|	Pb	207	291512.0	0.6	25.7254	0.269	1.0	ug/L	306	Standard
|	Pb	208	1344684.1	0.2	25.2479	0.105	0.4	ug/L	1443	Standard
	U	238	390447.1	1.0	24.2979	0.308	1.3	ug/L	5	Standard
[>	Bi	209	592309.6	0.5				ug/L	561075	Standard

Sample ID: LCSW 54 WG404188-03

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Na	23	626.7	10.7	-0.0031	0.003	109.1	mg/L	288	Standard
Mg	24	1326.7	4.5	0.0021	0.000	4.2	mg/L	218	Standard
K	39	150.0	20.8	0.0109	0.025	231.9	mg/L	125	Standard
Ca	43	3.3	86.6	-2.1324	2.795	131.1	mg/L	3	Standard
Fe	54	861.9	6.5	0.0643	0.011	17.7	mg/L	550	Standard
Fe	57	2248.5	4.5	0.0054	0.002	31.8	mg/L	1772	Standard
Sc-1	45	366863.4	0.5				mg/L	330668	Standard
Cl	35	3.3	17.3				ug/L	5	Standard
Kr	83	41.0	1.6				ug/L	38	Standard
Br	81	443.3	6.7				ug/L	344	Standard
P	31	525.8	7.3				ug/L	312	Standard
S	34	6243.0	1.6				ug/L	5594	Standard
Sr	88	41.7	50.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		109.731	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: LCSW 54 WG404188-03

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	Cd	111	
	Cd	114	
>	In	115	105.813
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	105.567
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: LCSW 54 WG404188-03

Report Date/Time: Sunday, July 29, 2012 16:12:22

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Method 6020 - Summary Report

Sample ID: L1207065801

Sample Date/Time: Sunday, July 29, 2012 16:13:01

Number of Replicates: 3

Autosampler Position: 419

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

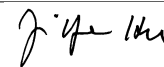
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	92567.0	2.8	18695.4211	327.211	1.8	ug/L	9465	Standard
|	Be	9	36.7	92.8	0.0033	0.023	679.5	ug/L	10	Standard
|	Al	27	84012.1	9.9	6.0986	0.769	12.6	ug/L	7870	Standard
[>	Sc	45	295099.8	1.6				ug/L	330668	Standard
|	Ti	47	339.3	3.9	0.2730	0.012	4.4	ug/L	53	Standard
|	V	51	10526.8	3.4	0.8781	0.043	4.9	ug/L	2687	Standard
|	Cr	52	12318.0	3.0	0.6347	0.058	9.1	ug/L	8408	Standard
|	Cr	53	1111.7	4.4	0.7196	0.044	6.1	ug/L	288	Standard
|	Mn	55	22537.8	2.6	1.7746	0.055	3.1	ug/L	1080	Standard
|	Co	59	715.0	31.9	0.0805	0.030	37.6	ug/L	117	Standard
|	Ni	60	439.3	10.4	0.1761	0.022	12.6	ug/L	68	Standard
|	Cu	65	496.0	1.4	0.1827	0.004	2.3	ug/L	141	Standard
|	Zn	66	1551.7	1.9	1.5080	0.028	1.9	ug/L	138	Standard
[>	Ge	72	262397.0	0.4				ug/L	283230	Standard
|	As	75	123.3	31.7	0.3066	0.043	14.0	ug/L	-198	Standard
|	Se	82	33.1	5.8	0.1180	0.022	18.3	ug/L	21	Standard
[	Se-1	77	133.7	7.3	0.2152	0.143	66.6	ug/L	131	Standard
[>	Ga	71	605.0	1.7				mg/L	607	Standard
|	Rb	85	44762.8	4.0				ug/L	30	Standard
|	Y	89	222372.1	2.2				ug/L	251555	Standard
[>	Rh	103	288.3	13.1				ug/L	335	Standard
|	Mo	98	1277.0	7.4	0.3975	0.028	7.1	ug/L	13	Standard
|	Ag	107	83.0	29.2	0.0060	0.004	71.8	ug/L	36	Standard
|	Cd	111	155.6	1.4	0.0364	0.001	2.7	mg/L	49	Standard
|	Cd	114	529.0	6.9	0.0409	0.004	10.4	ug/L	170	Standard
[>	In	115	647317.8	0.5				ug/L	727802	Standard
|	Sn	118	757.0	1.3	0.0266	0.001	2.4	ug/L	471	Standard
|	Sb	123	1245.0	1.7	0.1674	0.002	1.3	ug/L	39	Standard
|	Ba	135	28086.3	1.2	7.2180	0.092	1.3	ug/L	25	Standard
|	Ce	140	1247.7	1.8				ug/L	25	Standard
[>	Tb	159	984305.3	0.8				ug/L	1071747	Standard
|	Ho	165	43.3	13.5				ug/L	13	Standard
|	Tl	203	246.3	19.9	0.0147	0.003	20.5	ug/L	5	Standard
|	Tl	205	540.7	17.5	0.0149	0.003	16.8	ug/L	10	Standard
|	Pb	206	560.3	4.6	0.0145	0.002	15.3	ug/L	382	Standard
|	Pb	207	471.3	5.8	0.0182	0.002	13.0	ug/L	306	Standard
|	Pb	208	2222.4	5.6	0.0178	0.002	12.9	ug/L	1443	Standard
	U	238	1354.1	28.8	0.0945	0.026	28.0	ug/L	5	Standard
[>	Bi	209	526000.9	0.8				ug/L	561075	Standard

Sample ID: L1207065801

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Na	23	116593.6	1.3	7.6159	0.180	2.4	mg/L	288	Standard
Mg	24	300957.8	2.8	0.5066	0.009	1.7	mg/L	218	Standard
K	39	2258.5	3.5	2.1316	0.070	3.3	mg/L	125	Standard
Ca	43	15.0	57.7	12.6085	10.261	81.4	mg/L	3	Standard
Fe	54	282.0	6.2	-0.0457	0.004	8.1	mg/L	550	Standard
Fe	57	2081.8	14.7	0.0114	0.006	55.2	mg/L	1772	Standard
Sc-1	45	295099.8	1.6				mg/L	330668	Standard
Cl	35	6.7	31.2				ug/L	5	Standard
Kr	83	36.0	15.3				ug/L	38	Standard
Br	81	454.2	12.4				ug/L	344	Standard
P	31	339.2	14.1				ug/L	312	Standard
S	34	7762.0	2.3				ug/L	5594	Standard
Sr	88	136.7	7.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.645	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065801

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	Cd	111	
	Cd	114	
>	In	115	88.941
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.749
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065801

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Method 6020 - Summary Report

Sample ID: L1207065802 WG404188-01

Sample Date/Time: Sunday, July 29, 2012 16:16:12

Number of Replicates: 3

Autosampler Position: 420

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63615.0	1.8	11638.6253	243.141	2.1	ug/L	9465	Standard
|	Be	9	21.7	35.3	-0.0073	0.005	68.0	ug/L	10	Standard
|	Al	27	627507.5	4.8	46.9341	2.223	4.7	ug/L	7870	Standard
[>	Sc	45	309478.7	0.3				ug/L	330668	Standard
|	Ti	47	1751.4	1.1	1.5654	0.013	0.8	ug/L	53	Standard
|	V	51	5158.7	1.5	0.2793	0.005	1.9	ug/L	2687	Standard
|	Cr	52	8818.6	0.4	0.1295	0.005	3.5	ug/L	8408	Standard
|	Cr	53	361.7	10.0	0.0970	0.031	31.8	ug/L	288	Standard
|	Mn	55	176788.7	2.1	14.2892	0.284	2.0	ug/L	1080	Standard
|	Co	59	3461.1	2.3	0.4334	0.011	2.5	ug/L	117	Standard
|	Ni	60	914.4	3.0	0.3919	0.011	2.7	ug/L	68	Standard
|	Cu	65	7280.4	1.5	3.5565	0.054	1.5	ug/L	141	Standard
|	Zn	66	2179.8	1.5	2.1469	0.046	2.2	ug/L	138	Standard
[>	Ge	72	266170.6	0.6				ug/L	283230	Standard
|	As	75	-31.5	14.9	0.1391	0.005	3.5	ug/L	-198	Standard
|	Se	82	23.0	9.4	0.0043	0.024	558.2	ug/L	21	Standard
[	Se-1	77	114.7	5.9	-0.1038	0.112	108.0	ug/L	131	Standard
[>	Ga	71	633.3	8.2				mg/L	607	Standard
|	Rb	85	10997.3	3.2				ug/L	30	Standard
|	Y	89	232189.0	1.1				ug/L	251555	Standard
[>	Rh	103	340.0	5.3				ug/L	335	Standard
|	Mo	98	330.5	4.3	0.0965	0.005	5.4	ug/L	13	Standard
|	Ag	107	51.3	13.3	0.0002	0.001	651.4	ug/L	36	Standard
|	Cd	111	83.9	7.2	0.0109	0.002	19.1	mg/L	49	Standard
|	Cd	114	255.1	10.3	0.0089	0.003	30.7	ug/L	170	Standard
[>	In	115	654188.2	0.9				ug/L	727802	Standard
|	Sn	118	1275.1	3.1	0.0759	0.004	5.1	ug/L	471	Standard
|	Sb	123	391.0	9.1	0.0533	0.005	9.5	ug/L	39	Standard
|	Ba	135	68248.1	1.8	17.3724	0.382	2.2	ug/L	25	Standard
|	Ce	140	21086.3	1.3				ug/L	25	Standard
[>	Tb	159	985877.4	0.5				ug/L	1071747	Standard
|	Ho	165	341.7	0.4				ug/L	13	Standard
|	Tl	203	85.0	7.1	0.0043	0.000	8.3	ug/L	5	Standard
|	Tl	205	195.0	3.6	0.0053	0.000	3.4	ug/L	10	Standard
|	Pb	206	1603.1	3.8	0.0989	0.004	4.5	ug/L	382	Standard
|	Pb	207	1337.1	3.2	0.1022	0.004	3.6	ug/L	306	Standard
|	Pb	208	6298.8	2.0	0.1020	0.002	2.1	ug/L	1443	Standard
	U	238	482.3	5.7	0.0330	0.002	5.9	ug/L	5	Standard
[>	Bi	209	534654.1	0.4				ug/L	561075	Standard

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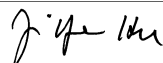
Na	23	92645.7	1.0	5.7605	0.060	1.0	mg/L	288	Standard
Mg	24	319521.4	1.9	0.5129	0.009	1.8	mg/L	218	Standard
K	39	663.3	15.0	0.5188	0.095	18.4	mg/L	125	Standard
Ca	43	3.3	173.2	-1.5346	6.625	431.7	mg/L	3	Standard
Fe	54	595.8	0.8	0.0308	0.001	3.0	mg/L	550	Standard
Fe	57	6619.8	5.5	0.1055	0.007	6.9	mg/L	1772	Standard
Sc-1	45	309478.7	0.3				mg/L	330668	Standard
Cl	35	8.3	50.0				ug/L	5	Standard
Kr	83	37.4	9.5				ug/L	38	Standard
Br	81	397.5	8.6				ug/L	344	Standard
P	31	213.3	5.8				ug/L	312	Standard
S	34	7202.5	2.5				ug/L	5594	Standard
Sr	88	120.0	14.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.977	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065802 WG404188-01
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	Cd	111	
	Cd	114	
>	In	115	89.885
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.291
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065802 WG404188-01

Report Date/Time: Sunday, July 29, 2012 16:18:42

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Method 6020 - Summary Report

Sample ID: L1207065803S WG404188-04

Sample Date/Time: Sunday, July 29, 2012 16:19:20

Number of Replicates: 3

Autosampler Position: 421

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	67213.8	0.6	12248.4111	278.540	2.3	ug/L	9465	Standard
|	Be	9	10076.7	6.2	6.3851	0.330	5.2	ug/L	10	Standard
|	Al	27	311395.4	2.5	22.7427	0.114	0.5	ug/L	7870	Standard
[>	Sc	45	312864.9	2.3				ug/L	330668	Standard
|	Ti	47	814.0	5.4	0.6972	0.039	5.5	ug/L	53	Standard
|	V	51	58353.2	3.0	5.9871	0.188	3.1	ug/L	2687	Standard
|	Cr	52	52292.5	2.7	6.0326	0.193	3.2	ug/L	8408	Standard
|	Cr	53	7606.1	2.4	5.9251	0.138	2.3	ug/L	288	Standard
|	Mn	55	254714.3	1.9	20.4243	0.397	1.9	ug/L	1080	Standard
|	Co	59	50008.4	3.2	6.3748	0.194	3.0	ug/L	117	Standard
|	Ni	60	13807.3	0.5	6.2689	0.045	0.7	ug/L	68	Standard
|	Cu	65	15840.6	2.1	7.7412	0.159	2.1	ug/L	141	Standard
|	Zn	66	8777.5	2.0	9.0137	0.187	2.1	ug/L	138	Standard
[>	Ge	72	268778.7	0.2				ug/L	283230	Standard
|	As	75	6237.0	2.5	6.7791	0.161	2.4	ug/L	-198	Standard
|	Se	82	686.1	1.4	7.0701	0.086	1.2	ug/L	21	Standard
[	Se-1	77	582.7	3.6	6.9603	0.309	4.4	ug/L	131	Standard
[>	Ga	71	546.7	10.2				mg/L	607	Standard
|	Rb	85	10341.9	7.3				ug/L	30	Standard
|	Y	89	229822.6	3.0				ug/L	251555	Standard
[>	Rh	103	326.7	3.2				ug/L	335	Standard
|	Mo	98	228.5	25.7	0.0635	0.019	29.1	ug/L	13	Standard
|	Ag	107	31903.9	1.2	5.5962	0.035	0.6	ug/L	36	Standard
|	Cd	111	19467.0	2.1	6.6470	0.108	1.6	mg/L	49	Standard
|	Cd	114	60105.5	1.1	6.7481	0.037	0.5	ug/L	170	Standard
[>	In	115	663708.4	0.6				ug/L	727802	Standard
|	Sn	118	828.0	7.5	0.0316	0.006	19.8	ug/L	471	Standard
|	Sb	123	47972.3	2.3	6.2236	0.110	1.8	ug/L	39	Standard
|	Ba	135	93587.9	2.4	23.4816	0.440	1.9	ug/L	25	Standard
|	Ce	140	7617.6	1.8				ug/L	25	Standard
[>	Tb	159	990052.7	0.8				ug/L	1071747	Standard
|	Ho	165	141.0	10.2				ug/L	13	Standard
|	Tl	203	96667.9	2.5	6.1044	0.150	2.5	ug/L	5	Standard
|	Tl	205	223832.5	1.6	6.0614	0.106	1.7	ug/L	10	Standard
|	Pb	206	75343.6	1.6	6.1368	0.091	1.5	ug/L	382	Standard
|	Pb	207	64306.5	1.6	6.2772	0.124	2.0	ug/L	306	Standard
|	Pb	208	297803.5	1.9	6.1841	0.120	1.9	ug/L	1443	Standard
	U	238	84812.8	2.4	5.8578	0.142	2.4	ug/L	5	Standard
[>	Bi	209	533656.3	0.6				ug/L	561075	Standard

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Na	23	96088.8	1.9	5.9112	0.027	0.5	mg/L	288	Standard
Mg	24	333271.6	3.4	0.5292	0.018	3.4	mg/L	218	Standard
K	39	690.0	13.4	0.5368	0.086	16.0	mg/L	125	Standard
Ca	43	8.3	34.6	4.0600	3.214	79.2	mg/L	3	Standard
Fe	54	417.4	5.0	-0.0157	0.007	45.9	mg/L	550	Standard
Fe	57	3200.3	1.6	0.0323	0.002	6.5	mg/L	1772	Standard
Sc-1	45	312864.9	2.3				mg/L	330668	Standard
Cl	35	6.0	16.7				ug/L	5	Standard
Kr	83	39.6	5.9				ug/L	38	Standard
Br	81	416.7	9.5				ug/L	344	Standard
P	31	236.7	5.8				ug/L	312	Standard
S	34	7180.0	1.7				ug/L	5594	Standard
Sr	88	113.3	13.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.898	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065803S WG404188-04

Report Date/Time: Sunday, July 29, 2012 16:21:52

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	Cd	111	
	Cd	114	
>	In	115	91.194
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.113
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065803S WG404188-04
 Report Date/Time: Sunday, July 29, 2012 16:21:52
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Method 6020 - Summary Report

Sample ID: L1207065804SD WG404188-05

Sample Date/Time: Sunday, July 29, 2012 16:22:30

Number of Replicates: 3

Autosampler Position: 422

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

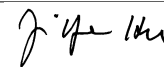
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	66214.4	0.6	12220.9822	331.357	2.7	ug/L	9465	Standard
|	Be	9	10528.7	1.9	6.7639	0.202	3.0	ug/L	10	Standard
|	Al	27	322177.9	1.0	23.8709	0.312	1.3	ug/L	7870	Standard
[>	Sc	45	308810.9	1.8				ug/L	330668	Standard
|	Ti	47	883.4	1.9	0.7543	0.014	1.8	ug/L	53	Standard
|	V	51	60321.5	1.3	6.1506	0.069	1.1	ug/L	2687	Standard
|	Cr	52	53392.3	1.8	6.1285	0.132	2.1	ug/L	8408	Standard
|	Cr	53	8055.5	1.6	6.2391	0.104	1.7	ug/L	288	Standard
|	Mn	55	253558.2	2.0	20.1797	0.360	1.8	ug/L	1080	Standard
|	Co	59	51314.4	1.6	6.4933	0.103	1.6	ug/L	117	Standard
|	Ni	60	14403.5	2.9	6.4924	0.197	3.0	ug/L	68	Standard
|	Cu	65	15764.9	0.4	7.6466	0.053	0.7	ug/L	141	Standard
|	Zn	66	9229.5	2.5	9.4146	0.255	2.7	ug/L	138	Standard
[>	Ge	72	270780.5	0.3				ug/L	283230	Standard
|	As	75	6583.6	2.5	7.0951	0.193	2.7	ug/L	-198	Standard
|	Se	82	720.7	2.7	7.3830	0.226	3.1	ug/L	21	Standard
[	Se-1	77	611.0	4.8	7.3201	0.421	5.7	ug/L	131	Standard
[>	Ga	71	613.3	14.0				mg/L	607	Standard
[	Rb	85	10180.1	3.1				ug/L	30	Standard
[	Y	89	229289.3	2.5				ug/L	251555	Standard
[>	Rh	103	323.3	14.0				ug/L	335	Standard
[	Mo	98	202.7	24.1	0.0557	0.014	25.8	ug/L	13	Standard
|	Ag	107	33119.2	1.3	5.8371	0.124	2.1	ug/L	36	Standard
|	Cd	111	20110.9	1.3	6.9003	0.164	2.4	mg/L	49	Standard
|	Cd	114	61462.8	1.3	6.9336	0.163	2.3	ug/L	170	Standard
[>	In	115	660712.1	1.1				ug/L	727802	Standard
|	Sn	118	683.3	6.2	0.0180	0.003	18.3	ug/L	471	Standard
|	Sb	123	50872.8	1.5	6.6310	0.148	2.2	ug/L	39	Standard
[	Ba	135	93228.7	2.0	23.5043	0.719	3.1	ug/L	25	Standard
[	Ce	140	6507.7	2.1				ug/L	25	Standard
[>	Tb	159	986518.8	0.5				ug/L	1071747	Standard
[	Ho	165	116.3	1.3				ug/L	13	Standard
|	Tl	203	98488.5	2.0	6.2195	0.100	1.6	ug/L	5	Standard
|	Tl	205	227289.7	1.5	6.1550	0.070	1.1	ug/L	10	Standard
|	Pb	206	77959.4	1.9	6.3510	0.099	1.6	ug/L	382	Standard
|	Pb	207	65894.7	1.5	6.4327	0.069	1.1	ug/L	306	Standard
|	Pb	208	305073.0	1.5	6.3359	0.068	1.1	ug/L	1443	Standard
|	U	238	87265.4	2.6	6.0271	0.134	2.2	ug/L	5	Standard
[>	Bi	209	533629.2	0.4				ug/L	561075	Standard

Sample ID: L1207065804SD WG404188-05

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Na	23	96343.7	0.7	6.0058	0.079	1.3	mg/L	288	Standard
Mg	24	336330.1	2.5	0.5409	0.004	0.8	mg/L	218	Standard
K	39	690.0	7.8	0.5459	0.061	11.1	mg/L	125	Standard
Ca	43	10.0	86.6	5.9955	9.834	164.0	mg/L	3	Standard
Fe	54	445.9	11.2	-0.0073	0.011	150.7	mg/L	550	Standard
Fe	57	3713.8	0.9	0.0441	0.001	2.9	mg/L	1772	Standard
Sc-1	45	308810.9	1.8				mg/L	330668	Standard
Cl	35	7.0	42.9				ug/L	5	Standard
Kr	83	35.6	3.5				ug/L	38	Standard
Br	81	384.2	3.1				ug/L	344	Standard
P	31	211.7	14.0				ug/L	312	Standard
S	34	6915.7	0.6				ug/L	5594	Standard
Sr	88	121.7	17.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.605	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065804SD WG404188-05
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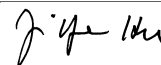
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	Cd	114		
>	In	115	90.782	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	95.108	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065804SD WG404188-05
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Method 6020 - Summary Report

Sample ID: L1207065806

Sample Date/Time: Sunday, July 29, 2012 16:25:39

Number of Replicates: 3

Autosampler Position: 423

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7520.2	2.6	-92.3650	33.051	35.8	ug/L	9465	Standard
|	Be	9	10.0	100.0	-0.0143	0.007	47.7	ug/L	10	Standard
|	Al	27	15956.7	3.2	0.7047	0.026	3.7	ug/L	7870	Standard
[>	Sc	45	290816.3	1.2				ug/L	330668	Standard
|	Ti	47	49.3	16.4	0.0030	0.008	251.5	ug/L	53	Standard
|	V	51	2408.8	3.1	-0.0143	0.007	51.4	ug/L	2687	Standard
|	Cr	52	7161.7	1.5	-0.0807	0.010	12.8	ug/L	8408	Standard
|	Cr	53	195.0	19.2	-0.0358	0.031	85.6	ug/L	288	Standard
|	Mn	55	1318.4	2.5	0.0248	0.003	11.5	ug/L	1080	Standard
|	Co	59	130.3	6.2	0.0040	0.001	25.1	ug/L	117	Standard
|	Ni	60	195.3	4.6	0.0623	0.005	7.4	ug/L	68	Standard
|	Cu	65	189.0	10.9	0.0279	0.010	35.5	ug/L	141	Standard
|	Zn	66	1338.1	1.3	1.2843	0.018	1.4	ug/L	138	Standard
[>	Ge	72	261523.4	0.5				ug/L	283230	Standard
|	As	75	-172.3	21.9	-0.0147	0.040	274.0	ug/L	-198	Standard
|	Se	82	24.8	9.3	0.0283	0.024	84.7	ug/L	21	Standard
[	Se-1	77	109.7	5.5	-0.1504	0.103	68.3	ug/L	131	Standard
[>	Ga	71	541.7	8.0				mg/L	607	Standard
|	Rb	85	66.7	38.5				ug/L	30	Standard
|	Y	89	225908.5	1.2				ug/L	251555	Standard
[>	Rh	103	315.0	7.3				ug/L	335	Standard
|	Mo	98	18.1	44.9	-0.0014	0.003	195.1	ug/L	13	Standard
|	Ag	107	78.3	12.8	0.0053	0.002	33.9	ug/L	36	Standard
|	Cd	111	32.6	6.4	-0.0067	0.001	12.8	mg/L	49	Standard
|	Cd	114	113.3	12.3	-0.0070	0.001	20.3	ug/L	170	Standard
[>	In	115	641686.1	1.5				ug/L	727802	Standard
|	Sn	118	759.4	7.0	0.0275	0.006	20.1	ug/L	471	Standard
|	Sb	123	215.6	26.1	0.0307	0.007	23.2	ug/L	39	Standard
|	Ba	135	121.3	49.0	0.0198	0.015	74.8	ug/L	25	Standard
|	Ce	140	64.3	4.5				ug/L	25	Standard
[>	Tb	159	962638.4	1.1				ug/L	1071747	Standard
|	Ho	165	12.0	33.3				ug/L	13	Standard
|	Tl	203	93.7	89.1	0.0049	0.005	108.1	ug/L	5	Standard
|	Tl	205	217.3	82.0	0.0060	0.005	81.4	ug/L	10	Standard
|	Pb	206	423.7	10.8	0.0029	0.004	131.8	ug/L	382	Standard
|	Pb	207	325.0	19.4	0.0034	0.006	176.9	ug/L	306	Standard
|	Pb	208	1563.7	12.7	0.0037	0.004	112.2	ug/L	1443	Standard
	U	238	44.0	47.5	0.0028	0.001	51.0	ug/L	5	Standard
[>	Bi	209	529692.7	0.9				ug/L	561075	Standard

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Na	23	1865.1	5.1	0.0879	0.005	5.5	mg/L	288	Standard
Mg	24	380.0	16.0	0.0009	0.000	10.3	mg/L	218	Standard
K	39	113.3	16.7	0.0052	0.019	362.5	mg/L	125	Standard
Ca	43	5.0	100.0	0.7064	6.018	852.0	mg/L	3	Standard
Fe	54	239.5	16.8	-0.0561	0.011	19.6	mg/L	550	Standard
Fe	57	1710.1	6.9	0.0038	0.003	72.3	mg/L	1772	Standard
Sc-1	45	290816.3	1.2				mg/L	330668	Standard
Cl	35	4.0	50.0				ug/L	5	Standard
Kr	83	36.1	5.4				ug/L	38	Standard
Br	81	303.3	4.7				ug/L	344	Standard
P	31	156.7	9.8				ug/L	312	Standard
S	34	5212.6	1.3				ug/L	5594	Standard
Sr	88	40.0	43.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.336	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065806

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	Cd	111	
	Cd	114	
>	In	115	88.168
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.407
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065806

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Method 6020 - Summary Report

Sample ID: L1207065806PS WG404837-01

Sample Date/Time: Sunday, July 29, 2012 16:28:48

Number of Replicates: 3

Autosampler Position: 424

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

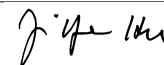
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9351.2	0.3	-30.4269	40.939	134.5	ug/L	9465	Standard
|	Be	9	80066.3	4.4	45.6398	2.180	4.8	ug/L	10	Standard
|	Al	27	696553.3	2.3	46.2097	1.437	3.1	ug/L	7870	Standard
[>	Sc	45	348983.4	2.6				ug/L	330668	Standard
|	Ti	47	62.3	21.2	0.0077	0.011	145.0	ug/L	53	Standard
|	V	51	470482.6	2.1	44.9384	0.629	1.4	ug/L	2687	Standard
|	Cr	52	384719.3	1.7	45.7617	0.781	1.7	ug/L	8408	Standard
|	Cr	53	64236.8	2.8	46.0704	0.912	2.0	ug/L	288	Standard
|	Mn	55	642088.3	2.5	46.1823	1.154	2.5	ug/L	1080	Standard
|	Co	59	393645.6	2.4	44.9865	0.957	2.1	ug/L	117	Standard
|	Ni	60	113727.3	1.4	46.3952	0.468	1.0	ug/L	68	Standard
|	Cu	65	107321.8	1.9	47.2788	0.650	1.4	ug/L	141	Standard
|	Zn	66	51650.9	2.3	48.1124	0.934	1.9	ug/L	138	Standard
[>	Ge	72	300347.3	1.3				ug/L	283230	Standard
|	As	75	47893.0	1.6	45.5724	0.647	1.4	ug/L	-198	Standard
|	Se	82	4873.7	1.1	46.2558	0.899	1.9	ug/L	21	Standard
[	Se-1	77	3570.8	1.8	46.4985	0.982	2.1	ug/L	131	Standard
[>	Ga	71	678.3	5.0				mg/L	607	Standard
|	Rb	85	58.3	26.2				ug/L	30	Standard
|	Y	89	266863.7	2.3				ug/L	251555	Standard
[>	Rh	103	351.7	12.1				ug/L	335	Standard
|	Mo	98	150.2	12.3	0.0346	0.005	15.8	ug/L	13	Standard
|	Ag	107	317686.0	3.1	50.1377	1.455	2.9	ug/L	36	Standard
|	Cd	111	151053.7	1.5	46.4515	0.572	1.2	mg/L	49	Standard
|	Cd	114	460057.2	1.8	46.5259	0.741	1.6	ug/L	170	Standard
[>	In	115	738722.6	0.9				ug/L	727802	Standard
|	Sn	118	1381.7	3.7	0.0710	0.005	7.3	ug/L	471	Standard
|	Sb	123	390582.0	2.2	45.5193	1.070	2.4	ug/L	39	Standard
|	Ba	135	206100.6	1.9	46.4767	0.966	2.1	ug/L	25	Standard
|	Ce	140	90.0	9.9				ug/L	25	Standard
[>	Tb	159	1075549.5	1.5				ug/L	1071747	Standard
|	Ho	165	14.0	32.7				ug/L	13	Standard
|	Tl	203	780035.2	1.1	45.4298	0.772	1.7	ug/L	5	Standard
|	Tl	205	1804567.3	1.9	45.0639	1.167	2.6	ug/L	10	Standard
|	Pb	206	610365.3	1.9	46.0536	1.161	2.5	ug/L	382	Standard
|	Pb	207	517594.3	1.1	46.7723	0.805	1.7	ug/L	306	Standard
|	Pb	208	2394969.2	1.5	46.0498	1.017	2.2	ug/L	1443	Standard
	U	238	714504.3	2.5	45.5110	1.442	3.2	ug/L	5	Standard
[>	Bi	209	578753.8	0.7				ug/L	561075	Standard

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Na	23	2133.5	7.6	0.0822	0.008	9.9	mg/L	288	Standard
Mg	24	535.0	2.5	0.0011	0.000	3.4	mg/L	218	Standard
K	39	133.3	17.3	0.0033	0.022	663.1	mg/L	125	Standard
Ca	43	1.7	173.2	-3.6248	3.005	82.9	mg/L	3	Standard
Fe	54	633.0	10.0	0.0223	0.018	80.4	mg/L	550	Standard
Fe	57	2100.1	7.3	0.0047	0.004	77.6	mg/L	1772	Standard
Sc-1	45	348983.4	2.6				mg/L	330668	Standard
Cl	35	4.7	61.9				ug/L	5	Standard
Kr	83	41.1	2.3				ug/L	38	Standard
Br	81	381.7	1.6				ug/L	344	Standard
P	31	349.2	8.5				ug/L	312	Standard
S	34	5634.4	3.4				ug/L	5594	Standard
Sr	88	28.3	36.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.044	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065806PS WG404837-01
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	Cd	111	
	Cd	114	
>	In	115	101.500
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.151
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065806PS WG404837-01
 Report Date/Time: Sunday, July 29, 2012 16:31:18
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Method 6020 - Summary Report

Sample ID: L1207065806SDL WG404837-02

Sample Date/Time: Sunday, July 29, 2012 16:31:57

Number of Replicates: 3

Autosampler Position: 425

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8694.2	4.0	-30.6819	44.515	145.1	ug/L	9465	Standard
|	Be	9	10.0	86.6	-0.0150	0.005	36.3	ug/L	10	Standard
|	Al	27	13150.7	1.3	0.3696	0.024	6.6	ug/L	7870	Standard
[>	Sc	45	324304.5	1.6				ug/L	330668	Standard
[	Ti	47	45.0	30.1	-0.0041	0.012	288.7	ug/L	53	Standard
|	V	51	2686.4	0.5	-0.0056	0.002	27.1	ug/L	2687	Standard
|	Cr	52	8191.9	1.5	-0.0215	0.020	92.2	ug/L	8408	Standard
|	Cr	53	232.5	1.1	-0.0190	0.001	6.5	ug/L	288	Standard
|	Mn	55	2040.8	3.6	0.0721	0.006	8.7	ug/L	1080	Standard
|	Co	59	142.0	13.4	0.0042	0.002	57.1	ug/L	117	Standard
|	Ni	60	178.0	5.4	0.0480	0.004	8.4	ug/L	68	Standard
|	Cu	65	172.7	6.6	0.0132	0.006	41.9	ug/L	141	Standard
|	Zn	66	2304.8	1.1	2.1384	0.027	1.3	ug/L	138	Standard
[>	Ge	72	282462.3	0.4				ug/L	283230	Standard
|	As	75	-180.2	10.3	-0.0089	0.018	204.3	ug/L	-198	Standard
|	Se	82	27.3	5.6	0.0335	0.015	46.1	ug/L	21	Standard
[	Se-1	77	119.7	5.6	-0.1329	0.103	77.6	ug/L	131	Standard
[>	Ga	71	623.3	5.3				mg/L	607	Standard
[	Rb	85	25.0	20.0				ug/L	30	Standard
[	Y	89	248952.2	1.6				ug/L	251555	Standard
[>	Rh	103	293.3	11.3				ug/L	335	Standard
[	Mo	98	35.3	4.0	0.0033	0.000	9.8	ug/L	13	Standard
|	Ag	107	96.0	10.9	0.0072	0.002	27.3	ug/L	36	Standard
|	Cd	111	61.6	17.2	0.0019	0.003	168.3	mg/L	49	Standard
|	Cd	114	172.2	8.3	-0.0016	0.001	77.8	ug/L	170	Standard
[>	In	115	693061.5	1.4				ug/L	727802	Standard
|	Sn	118	699.3	5.8	0.0165	0.005	27.7	ug/L	471	Standard
|	Sb	123	1937.5	3.6	0.2424	0.008	3.2	ug/L	39	Standard
[	Ba	135	65.3	3.9	0.0042	0.001	16.1	ug/L	25	Standard
[	Ce	140	48.7	9.7				ug/L	25	Standard
[>	Tb	159	1031677.4	0.4				ug/L	1071747	Standard
[	Ho	165	10.0	62.5				ug/L	13	Standard
|	Tl	203	89.0	33.1	0.0043	0.002	39.4	ug/L	5	Standard
|	Tl	205	221.7	28.2	0.0058	0.002	26.8	ug/L	10	Standard
|	Pb	206	433.0	9.1	0.0020	0.003	157.6	ug/L	382	Standard
|	Pb	207	377.3	6.9	0.0069	0.002	29.5	ug/L	306	Standard
|	Pb	208	1715.7	8.1	0.0052	0.002	45.9	ug/L	1443	Standard
|	U	238	102.3	45.6	0.0065	0.003	45.8	ug/L	5	Standard
[>	Bi	209	554489.1	1.2				ug/L	561075	Standard

Sample ID: L1207065806SDL WG404837-02

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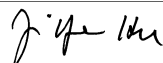
Na	23	676.7	3.0	0.0042	0.001	29.1	mg/L	288	Standard
Mg	24	341.7	19.9	0.0008	0.000	12.1	mg/L	218	Standard
K	39	146.7	17.2	0.0234	0.021	91.8	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5648	3.109	87.2	mg/L	3	Standard
Fe	54	517.3	9.6	0.0049	0.014	282.2	mg/L	550	Standard
Fe	57	1908.5	6.0	0.0038	0.002	45.6	mg/L	1772	Standard
Sc-1	45	324304.5	1.6				mg/L	330668	Standard
Cl	35	2.7	21.7				ug/L	5	Standard
Kr	83	37.9	4.5				ug/L	38	Standard
Br	81	389.2	4.3				ug/L	344	Standard
P	31	276.7	13.6				ug/L	312	Standard
S	34	5586.9	3.2				ug/L	5594	Standard
Sr	88	43.3	40.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.729	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	95.227
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.826
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 16:35:09

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8795.9	1.0	-61.3586	4.499	7.3	ug/L	9465	Standard
|	Be	9	81788.6	2.6	48.6946	1.251	2.6	ug/L	10	Standard
|	Al	27	705156.5	1.5	48.8913	0.677	1.4	ug/L	7870	Standard
[>	Sc	45	334032.2	1.0				ug/L	330668	Standard
[	Ti	47	115686.7	1.0	96.6629	0.547	0.6	ug/L	53	Standard
|	V	51	485587.9	0.9	47.6566	0.214	0.4	ug/L	2687	Standard
|	Cr	52	389143.7	0.5	47.5829	0.224	0.5	ug/L	8408	Standard
|	Cr	53	65386.7	1.9	48.1780	0.708	1.5	ug/L	288	Standard
|	Mn	55	653738.1	0.8	48.2962	0.219	0.5	ug/L	1080	Standard
|	Co	59	405612.3	0.7	47.6109	0.070	0.1	ug/L	117	Standard
|	Ni	60	116055.8	0.9	48.6289	0.368	0.8	ug/L	68	Standard
|	Cu	65	108688.5	1.7	49.1795	0.485	1.0	ug/L	141	Standard
|	Zn	66	52014.5	0.8	49.7699	0.202	0.4	ug/L	138	Standard
[>	Ge	72	292421.0	0.8				ug/L	283230	Standard
|	As	75	50272.0	1.2	49.1180	0.569	1.2	ug/L	-198	Standard
|	Se	82	5093.2	1.1	49.6608	0.541	1.1	ug/L	21	Standard
[	Se-1	77	3738.8	1.6	50.1443	0.911	1.8	ug/L	131	Standard
[>	Ga	71	618.3	14.7				mg/L	607	Standard
[	Rb	85	761.7	8.2				ug/L	30	Standard
[	Y	89	254527.8	2.8				ug/L	251555	Standard
[>	Rh	103	341.7	13.1				ug/L	335	Standard
[	Mo	98	350289.5	0.2	101.7025	0.154	0.2	ug/L	13	Standard
|	Ag	107	315742.4	0.6	52.0958	0.304	0.6	ug/L	36	Standard
|	Cd	111	153580.3	0.9	49.3758	0.563	1.1	mg/L	49	Standard
|	Cd	114	475533.4	0.4	50.2769	0.239	0.5	ug/L	170	Standard
[>	In	115	706628.5	0.3				ug/L	727802	Standard
|	Sn	118	548627.3	0.5	49.0977	0.403	0.8	ug/L	471	Standard
|	Sb	123	403811.0	0.5	49.1963	0.133	0.3	ug/L	39	Standard
[	Ba	135	214676.9	0.6	50.6077	0.197	0.4	ug/L	25	Standard
[	Ce	140	826.7	3.1				ug/L	25	Standard
[>	Tb	159	1049957.4	0.6				ug/L	1071747	Standard
[	Ho	165	17.7	3.3				ug/L	13	Standard
|	Tl	203	792945.5	0.3	48.4731	0.536	1.1	ug/L	5	Standard
|	Tl	205	1843960.3	1.0	48.3269	0.205	0.4	ug/L	10	Standard
|	Pb	206	615714.1	1.2	48.7597	0.454	0.9	ug/L	382	Standard
|	Pb	207	524986.7	0.8	49.7930	0.144	0.3	ug/L	306	Standard
|	Pb	208	2420343.3	0.7	48.8452	0.332	0.7	ug/L	1443	Standard
	U	238	729084.3	0.9	48.7415	0.749	1.5	ug/L	5	Standard
[>	Bi	209	551387.4	0.8				ug/L	561075	Standard

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Na	23	102403.3	1.4	5.9002	0.077	1.3	mg/L	288	Standard
Mg	24	3278444.3	1.6	4.8738	0.127	2.6	mg/L	218	Standard
K	39	5717.7	3.8	4.9029	0.212	4.3	mg/L	125	Standard
Ca	43	18.3	56.8	14.1198	11.198	79.3	mg/L	3	Standard
Fe	54	21567.6	3.9	4.9766	0.249	5.0	mg/L	550	Standard
Fe	57	293135.4	3.3	5.7204	0.136	2.4	mg/L	1772	Standard
Sc-1	45	334032.2	1.0				mg/L	330668	Standard
Cl	35	2.0	50.0				ug/L	5	Standard
Kr	83	38.3	13.1				ug/L	38	Standard
Br	81	412.5	10.3				ug/L	344	Standard
P	31	352.5	8.2				ug/L	312	Standard
S	34	6213.8	1.5				ug/L	5594	Standard
Sr	88	55.0	24.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.783		
Sc	45			
Ti	47	96.663		
V	51	95.313		
Cr	52	95.166		
Cr	53			
Mn	55	96.592		
Co	59	95.222		
Ni	60	97.258		
Cu	65	98.359		
Zn	66	99.540		
Ge	72		103.245	
As	75	98.236		
Se	82	99.322		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	101.703		
Ag	107	104.192		

Sample ID: QC Std 6

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Cd	111	98.752	
Cd	114		
> In	115		97.091
Sn	118	98.195	
Sb	123	98.393	
Ba	135	101.215	
Ce	140		
> Tb	159		
Ho	165		
Tl	203	96.946	
Tl	205		
Pb	206	97.519	
Pb	207	99.586	
Pb	208	97.690	
U	238	97.483	
> Bi	209		98.273
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 16:38:20

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8414.0	2.6	-90.7273	61.485	67.8	ug/L	9465	Standard
|	Be	9	15.0	57.7	-0.0120	0.005	44.6	ug/L	10	Standard
|	Al	27	7820.4	3.6	-0.0173	0.018	102.5	ug/L	7870	Standard
[>	Sc	45	325167.5	1.1				ug/L	330668	Standard
|	Ti	47	63.0	13.8	0.0111	0.007	67.0	ug/L	53	Standard
|	V	51	2523.7	1.8	-0.0236	0.006	27.3	ug/L	2687	Standard
|	Cr	52	7774.7	0.8	-0.0809	0.011	13.9	ug/L	8408	Standard
|	Cr	53	233.3	3.8	-0.0193	0.008	40.0	ug/L	288	Standard
|	Mn	55	1130.0	1.8	0.0019	0.002	83.5	ug/L	1080	Standard
|	Co	59	142.7	19.9	0.0042	0.004	84.8	ug/L	117	Standard
|	Ni	60	78.7	13.2	0.0047	0.005	97.6	ug/L	68	Standard
|	Cu	65	154.7	12.0	0.0044	0.009	204.8	ug/L	141	Standard
|	Zn	66	156.7	11.5	0.0032	0.019	585.0	ug/L	138	Standard
[>	Ge	72	283993.2	0.7				ug/L	283230	Standard
|	As	75	-176.8	15.9	-0.0046	0.028	617.0	ug/L	-198	Standard
|	Se	82	30.2	23.8	0.0624	0.074	119.0	ug/L	21	Standard
[	Se-1	77	116.7	17.0	-0.1860	0.280	150.3	ug/L	131	Standard
[>	Ga	71	568.3	8.4				mg/L	607	Standard
|	Rb	85	15.0	57.7				ug/L	30	Standard
|	Y	89	245015.5	1.5				ug/L	251555	Standard
[>	Rh	103	326.7	26.0				ug/L	335	Standard
|	Mo	98	206.9	12.6	0.0535	0.008	14.7	ug/L	13	Standard
|	Ag	107	122.7	20.8	0.0115	0.004	38.1	ug/L	36	Standard
|	Cd	111	67.8	40.6	0.0038	0.009	238.9	mg/L	49	Standard
|	Cd	114	226.8	25.3	0.0040	0.006	155.2	ug/L	170	Standard
[>	In	115	699683.0	0.6				ug/L	727802	Standard
|	Sn	118	852.4	7.2	0.0297	0.006	20.2	ug/L	471	Standard
|	Sb	123	2333.9	4.2	0.2890	0.013	4.4	ug/L	39	Standard
|	Ba	135	59.7	53.5	0.0027	0.008	281.9	ug/L	25	Standard
|	Ce	140	25.7	23.8				ug/L	25	Standard
[>	Tb	159	1029389.8	0.4				ug/L	1071747	Standard
|	Ho	165	12.0	16.7				ug/L	13	Standard
|	Tl	203	117.3	53.1	0.0061	0.004	62.2	ug/L	5	Standard
|	Tl	205	249.3	56.9	0.0065	0.004	56.7	ug/L	10	Standard
|	Pb	206	421.3	8.0	0.0012	0.003	215.0	ug/L	382	Standard
|	Pb	207	382.7	13.3	0.0076	0.005	63.2	ug/L	306	Standard
|	Pb	208	1728.7	9.6	0.0056	0.003	58.2	ug/L	1443	Standard
	U	238	103.3	39.5	0.0067	0.003	40.5	ug/L	5	Standard
[>	Bi	209	552654.4	0.5				ug/L	561075	Standard

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Na	23	331.7	16.7	-0.0164	0.004	21.5	mg/L	288	Standard
Mg	24	515.0	17.0	0.0011	0.000	12.6	mg/L	218	Standard
K	39	116.7	15.1	-0.0039	0.015	389.4	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5608	3.116	87.5	mg/L	3	Standard
Fe	54	567.8	7.7	0.0168	0.012	70.4	mg/L	550	Standard
Fe	57	1943.5	5.2	0.0044	0.002	48.1	mg/L	1772	Standard
Sc-1	45	325167.5	1.1				mg/L	330668	Standard
Cl	35	6.0	16.7				ug/L	5	Standard
Kr	83	41.4	4.4				ug/L	38	Standard
Br	81	355.8	10.3				ug/L	344	Standard
P	31	367.5	8.2				ug/L	312	Standard
S	34	5872.8	2.6				ug/L	5594	Standard
Sr	88	41.7	30.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.270	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	96.136	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	98.499	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207065807

Sample Date/Time: Sunday, July 29, 2012 16:41:31

Number of Replicates: 3

Autosampler Position: 426

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	96902.3	1.7	20099.3614	392.247	2.0	ug/L	9465	Standard
|	Be	9	10.0	50.0	-0.0143	0.004	25.0	ug/L	10	Standard
|	Al	27	108963.8	0.9	8.2530	0.249	3.0	ug/L	7870	Standard
[>	Sc	45	289160.5	1.9				ug/L	330668	Standard
|	Ti	47	400.0	7.7	0.3287	0.030	9.0	ug/L	53	Standard
|	V	51	10871.8	2.1	0.9129	0.020	2.2	ug/L	2687	Standard
|	Cr	52	12971.2	2.1	0.7210	0.031	4.3	ug/L	8408	Standard
|	Cr	53	1246.7	12.8	0.8282	0.131	15.8	ug/L	288	Standard
|	Mn	55	24004.3	0.5	1.8905	0.018	1.0	ug/L	1080	Standard
|	Co	59	649.0	7.8	0.0716	0.007	9.4	ug/L	117	Standard
|	Ni	60	437.3	2.2	0.1746	0.004	2.1	ug/L	68	Standard
|	Cu	65	420.3	5.6	0.1439	0.011	7.7	ug/L	141	Standard
|	Zn	66	2115.1	4.5	2.1047	0.092	4.4	ug/L	138	Standard
[>	Ge	72	263060.3	0.4				ug/L	283230	Standard
|	As	75	155.9	18.8	0.3414	0.031	9.1	ug/L	-198	Standard
|	Se	82	29.3	6.2	0.0764	0.019	24.5	ug/L	21	Standard
[	Se-1	77	114.0	7.5	-0.0933	0.139	149.4	ug/L	131	Standard
[>	Ga	71	581.7	12.2				mg/L	607	Standard
|	Rb	85	51106.1	2.0				ug/L	30	Standard
|	Y	89	218955.8	0.8				ug/L	251555	Standard
[>	Rh	103	343.3	4.4				ug/L	335	Standard
|	Mo	98	1427.1	2.6	0.4517	0.012	2.7	ug/L	13	Standard
|	Ag	107	52.3	21.1	0.0006	0.002	339.2	ug/L	36	Standard
|	Cd	111	246.2	3.3	0.0694	0.002	3.4	mg/L	49	Standard
|	Cd	114	764.9	6.5	0.0694	0.005	7.6	ug/L	170	Standard
[>	In	115	638122.7	0.6				ug/L	727802	Standard
|	Sn	118	848.4	6.8	0.0367	0.005	14.8	ug/L	471	Standard
|	Sb	123	719.9	7.0	0.0989	0.007	6.9	ug/L	39	Standard
|	Ba	135	30373.8	1.5	7.9193	0.110	1.4	ug/L	25	Standard
|	Ce	140	1303.7	6.1				ug/L	25	Standard
[>	Tb	159	963108.4	0.5				ug/L	1071747	Standard
|	Ho	165	44.3	12.4				ug/L	13	Standard
|	Tl	203	252.7	5.2	0.0154	0.001	4.9	ug/L	5	Standard
|	Tl	205	583.3	9.6	0.0163	0.001	9.1	ug/L	10	Standard
|	Pb	206	569.7	0.7	0.0159	0.001	3.7	ug/L	382	Standard
|	Pb	207	469.3	4.6	0.0187	0.002	10.0	ug/L	306	Standard
|	Pb	208	2183.4	1.2	0.0177	0.001	4.2	ug/L	1443	Standard
	U	238	1153.7	6.6	0.0818	0.006	6.8	ug/L	5	Standard
[>	Bi	209	518396.7	0.7				ug/L	561075	Standard

Sample ID: L1207065807

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Na	23	120588.0	1.0	8.0406	0.146	1.8	mg/L	288	Standard
Mg	24	323038.2	2.0	0.5549	0.006	1.2	mg/L	218	Standard
K	39	2660.2	2.3	2.5849	0.076	2.9	mg/L	125	Standard
Ca	43	6.7	43.3	2.7832	3.427	123.1	mg/L	3	Standard
Fe	54	349.1	4.6	-0.0258	0.005	20.7	mg/L	550	Standard
Fe	57	2370.2	8.4	0.0189	0.004	19.2	mg/L	1772	Standard
Sc-1	45	289160.5	1.9				mg/L	330668	Standard
Cl	35	9.3	30.9				ug/L	5	Standard
Kr	83	36.1	5.2				ug/L	38	Standard
Br	81	441.7	4.2				ug/L	344	Standard
P	31	342.5	12.3				ug/L	312	Standard
S	34	7850.4	2.7				ug/L	5594	Standard
Sr	88	158.3	32.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.879	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	87.678
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.393
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207065808

Sample Date/Time: Sunday, July 29, 2012 16:44:42

Number of Replicates: 3

Autosampler Position: 427

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

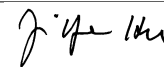
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26352.9	3.3	3838.6119	162.160	4.2	ug/L	9465	Standard
|	Be	9	15.0	88.2	-0.0115	0.009	75.1	ug/L	10	Standard
|	Al	27	357681.3	5.1	26.7951	1.277	4.8	ug/L	7870	Standard
[>	Sc	45	306143.7	0.7				ug/L	330668	Standard
|	Ti	47	941.4	6.2	0.8221	0.060	7.3	ug/L	53	Standard
|	V	51	4011.1	0.3	0.1551	0.005	3.2	ug/L	2687	Standard
|	Cr	52	9106.4	1.2	0.1696	0.018	10.8	ug/L	8408	Standard
|	Cr	53	475.8	7.4	0.1900	0.032	16.7	ug/L	288	Standard
|	Mn	55	36685.7	2.6	2.9006	0.111	3.8	ug/L	1080	Standard
|	Co	59	1271.4	4.8	0.1510	0.010	6.7	ug/L	117	Standard
|	Ni	60	490.0	7.3	0.1967	0.019	9.7	ug/L	68	Standard
|	Cu	65	375.7	2.9	0.1193	0.008	6.7	ug/L	141	Standard
|	Zn	66	1661.8	4.6	1.6022	0.105	6.5	ug/L	138	Standard
[>	Ge	72	266058.3	1.4				ug/L	283230	Standard
|	As	75	-108.5	22.4	0.0565	0.027	48.3	ug/L	-198	Standard
|	Se	82	34.7	9.6	0.1308	0.040	30.9	ug/L	21	Standard
[	Se-1	77	121.0	7.9	-0.0075	0.124	1654.6	ug/L	131	Standard
[>	Ga	71	578.3	3.0				mg/L	607	Standard
|	Rb	85	888.4	8.5				ug/L	30	Standard
|	Y	89	227182.4	1.3				ug/L	251555	Standard
[>	Rh	103	330.0	3.0				ug/L	335	Standard
|	Mo	98	729.3	36.2	0.2238	0.083	37.1	ug/L	13	Standard
|	Ag	107	199.7	130.7	0.0269	0.047	174.0	ug/L	36	Standard
|	Cd	111	115.2	117.4	0.0221	0.047	214.1	mg/L	49	Standard
|	Cd	114	374.9	108.9	0.0230	0.047	204.2	ug/L	170	Standard
[>	In	115	647614.6	1.0				ug/L	727802	Standard
|	Sn	118	575.0	35.7	0.0088	0.020	228.0	ug/L	471	Standard
|	Sb	123	422.9	68.1	0.0580	0.038	65.8	ug/L	39	Standard
|	Ba	135	33750.9	3.1	8.6728	0.299	3.4	ug/L	25	Standard
|	Ce	140	12939.5	2.1				ug/L	25	Standard
[>	Tb	159	968949.2	0.8				ug/L	1071747	Standard
|	Ho	165	100.7	9.2				ug/L	13	Standard
|	Tl	203	236.7	88.8	0.0140	0.013	95.6	ug/L	5	Standard
|	Tl	205	519.7	85.4	0.0142	0.012	85.4	ug/L	10	Standard
|	Pb	206	1200.4	14.7	0.0671	0.015	22.1	ug/L	382	Standard
|	Pb	207	995.0	8.7	0.0698	0.009	12.4	ug/L	306	Standard
|	Pb	208	4655.6	9.5	0.0688	0.010	13.8	ug/L	1443	Standard
	U	238	214.3	29.1	0.0147	0.004	29.7	ug/L	5	Standard
[>	Bi	209	528943.4	0.3				ug/L	561075	Standard

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Na	23	106093.5	1.6	6.6749	0.150	2.2	mg/L	288	Standard
Mg	24	153138.9	3.3	0.2486	0.008	3.1	mg/L	218	Standard
K	39	221.7	5.7	0.1032	0.013	12.3	mg/L	125	Standard
Ca	43	6.7	43.3	2.3404	3.281	140.2	mg/L	3	Standard
Fe	54	495.3	1.5	0.0066	0.003	39.6	mg/L	550	Standard
Fe	57	4495.7	7.1	0.0615	0.006	10.5	mg/L	1772	Standard
Sc-1	45	306143.7	0.7				mg/L	330668	Standard
Cl	35	4.7	32.7				ug/L	5	Standard
Kr	83	35.3	10.9				ug/L	38	Standard
Br	81	445.0	3.4				ug/L	344	Standard
P	31	277.5	8.6				ug/L	312	Standard
S	34	6997.4	1.5				ug/L	5594	Standard
Sr	88	68.3	23.5				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.937	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065808

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	Cd	111	
	Cd	114	
>	In	115	88.982
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	94.273
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065808

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Method 6020 - Summary Report

Sample ID: L1207065809

Sample Date/Time: Sunday, July 29, 2012 16:47:51

Number of Replicates: 3

Autosampler Position: 428

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

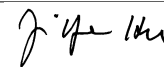
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	73042.4	3.0	14544.6656	777.308	5.3	ug/L	9465	Standard
|	Be	9	20.0	50.0	-0.0077	0.007	85.4	ug/L	10	Standard
|	Al	27	55803.2	9.9	3.9000	0.523	13.4	ug/L	7870	Standard
[>	Sc	45	292254.0	1.8				ug/L	330668	Standard
|	Ti	47	166.0	1.0	0.1094	0.002	1.9	ug/L	53	Standard
|	V	51	3828.8	5.4	0.1351	0.018	13.1	ug/L	2687	Standard
|	Cr	52	14274.1	1.2	0.8797	0.003	0.3	ug/L	8408	Standard
|	Cr	53	1978.5	2.7	1.4118	0.052	3.7	ug/L	288	Standard
|	Mn	55	2415.2	4.6	0.1121	0.007	5.8	ug/L	1080	Standard
|	Co	59	173.3	7.4	0.0093	0.002	16.4	ug/L	117	Standard
|	Ni	60	254.7	10.1	0.0881	0.011	12.7	ug/L	68	Standard
|	Cu	65	227.7	3.7	0.0456	0.005	11.1	ug/L	141	Standard
|	Zn	66	1704.1	4.9	1.6452	0.064	3.9	ug/L	138	Standard
[>	Ge	72	266077.6	1.3				ug/L	283230	Standard
|	As	75	-49.2	45.0	0.1202	0.024	19.6	ug/L	-198	Standard
|	Se	82	36.4	6.8	0.1490	0.029	19.7	ug/L	21	Standard
[	Se-1	77	127.0	3.4	0.0849	0.057	66.6	ug/L	131	Standard
[>	Ga	71	561.7	8.6				mg/L	607	Standard
|	Rb	85	26404.7	1.9				ug/L	30	Standard
|	Y	89	226866.4	2.3				ug/L	251555	Standard
[>	Rh	103	330.0	9.1				ug/L	335	Standard
|	Mo	98	4140.3	1.1	1.3221	0.015	1.2	ug/L	13	Standard
|	Ag	107	87.7	54.3	0.0071	0.009	123.3	ug/L	36	Standard
|	Cd	111	36.7	58.4	-0.0052	0.008	147.5	mg/L	49	Standard
|	Cd	114	157.6	34.5	-0.0018	0.006	359.9	ug/L	170	Standard
[>	In	115	639084.3	1.0				ug/L	727802	Standard
|	Sn	118	513.0	5.6	0.0034	0.003	83.5	ug/L	471	Standard
|	Sb	123	249.6	16.7	0.0354	0.005	15.4	ug/L	39	Standard
|	Ba	135	19040.6	1.8	4.9524	0.039	0.8	ug/L	25	Standard
[	Ce	140	618.7	4.7				ug/L	25	Standard
[>	Tb	159	965401.6	0.3				ug/L	1071747	Standard
|	Ho	165	15.3	7.5				ug/L	13	Standard
|	Tl	203	446.3	6.8	0.0279	0.002	6.8	ug/L	5	Standard
|	Tl	205	1052.4	12.6	0.0293	0.004	12.3	ug/L	10	Standard
|	Pb	206	478.0	5.9	0.0081	0.002	27.6	ug/L	382	Standard
|	Pb	207	412.7	8.3	0.0129	0.003	25.6	ug/L	306	Standard
|	Pb	208	1841.4	7.0	0.0102	0.003	25.7	ug/L	1443	Standard
	U	238	95.3	34.7	0.0065	0.002	35.5	ug/L	5	Standard
[>	Bi	209	519926.3	0.4				ug/L	561075	Standard

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Na	23	129879.3	1.0	8.5705	0.139	1.6	mg/L	288	Standard
Mg	24	12321.7	1.7	0.0212	0.001	3.5	mg/L	218	Standard
K	39	1238.4	7.2	1.1312	0.079	7.0	mg/L	125	Standard
Ca	43	3.3	86.6	-1.3536	3.470	256.3	mg/L	3	Standard
Fe	54	239.3	5.2	-0.0564	0.004	7.8	mg/L	550	Standard
Fe	57	1801.8	4.4	0.0057	0.002	36.9	mg/L	1772	Standard
Sc-1	45	292254.0	1.8				mg/L	330668	Standard
Cl	35	18.0	24.2				ug/L	5	Standard
Kr	83	33.8	9.0				ug/L	38	Standard
Br	81	719.2	4.5				ug/L	344	Standard
P	31	150.8	10.5				ug/L	312	Standard
S	34	5552.7	4.9				ug/L	5594	Standard
Sr	88	136.7	9.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.944	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065809

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	Cd	111	
	Cd	114	
>	In	115	87.810
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.666
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065809

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Method 6020 - Summary Report

Sample ID: L1207065810

Sample Date/Time: Sunday, July 29, 2012 16:51:01

Number of Replicates: 3

Autosampler Position: 429

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63489.5	2.6	12146.0243	97.480	0.8	ug/L	9465	Standard
|	Be	9	13.3	57.3	-0.0123	0.005	40.2	ug/L	10	Standard
|	Al	27	94354.6	1.3	6.8526	0.254	3.7	ug/L	7870	Standard
[>	Sc	45	297614.0	2.5				ug/L	330668	Standard
[	Ti	47	342.7	5.8	0.2740	0.020	7.3	ug/L	53	Standard
|	V	51	2938.7	6.4	0.0410	0.021	52.1	ug/L	2687	Standard
|	Cr	52	8450.7	2.5	0.0877	0.035	39.8	ug/L	8408	Standard
|	Cr	53	1300.1	5.1	0.8674	0.052	6.0	ug/L	288	Standard
|	Mn	55	68699.7	0.9	5.5431	0.080	1.4	ug/L	1080	Standard
|	Co	59	582.7	5.7	0.0626	0.005	7.6	ug/L	117	Standard
|	Ni	60	569.0	3.0	0.2348	0.009	4.0	ug/L	68	Standard
|	Cu	65	223.7	9.3	0.0444	0.011	24.9	ug/L	141	Standard
|	Zn	66	2119.5	2.3	2.0996	0.044	2.1	ug/L	138	Standard
[>	Ge	72	264206.4	0.5				ug/L	283230	Standard
|	As	75	-1.1	4660.2	0.1716	0.057	33.4	ug/L	-198	Standard
|	Se	82	54.5	17.7	0.3482	0.108	31.0	ug/L	21	Standard
[	Se-1	77	145.3	5.2	0.3814	0.128	33.5	ug/L	131	Standard
[>	Ga	71	581.7	12.2				mg/L	607	Standard
[	Rb	85	1658.4	2.9				ug/L	30	Standard
[	Y	89	226625.6	0.5				ug/L	251555	Standard
[>	Rh	103	395.0	10.0				ug/L	335	Standard
[	Mo	98	144.5	15.3	0.0390	0.007	17.0	ug/L	13	Standard
|	Ag	107	60.0	27.5	0.0019	0.003	151.4	ug/L	36	Standard
|	Cd	111	48.7	32.2	-0.0011	0.005	504.3	mg/L	49	Standard
|	Cd	114	160.4	60.3	-0.0016	0.011	698.1	ug/L	170	Standard
[>	In	115	642223.7	1.0				ug/L	727802	Standard
|	Sn	118	742.0	17.3	0.0256	0.012	47.0	ug/L	471	Standard
|	Sb	123	251.0	93.7	0.0353	0.031	88.3	ug/L	39	Standard
[	Ba	135	25806.3	2.4	6.6831	0.091	1.4	ug/L	25	Standard
[	Ce	140	1730.1	1.0				ug/L	25	Standard
[>	Tb	159	973322.1	0.7				ug/L	1071747	Standard
[	Ho	165	39.3	14.0				ug/L	13	Standard
|	Tl	203	584.0	47.7	0.0369	0.018	47.9	ug/L	5	Standard
|	Tl	205	1309.1	48.1	0.0366	0.017	46.9	ug/L	10	Standard
|	Pb	206	682.7	27.4	0.0256	0.015	59.2	ug/L	382	Standard
|	Pb	207	552.3	25.4	0.0272	0.014	49.7	ug/L	306	Standard
|	Pb	208	2532.4	26.0	0.0253	0.014	53.5	ug/L	1443	Standard
	U	238	503.3	24.5	0.0356	0.008	23.5	ug/L	5	Standard
[>	Bi	209	516251.3	1.3				ug/L	561075	Standard

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Na	23	136123.8	0.7	8.8230	0.159	1.8	mg/L	288	Standard
Mg	24	938503.3	3.1	1.5657	0.011	0.7	mg/L	218	Standard
K	39	368.3	13.2	0.2533	0.045	17.9	mg/L	125	Standard
Ca	43	13.3	43.3	10.5935	7.213	68.1	mg/L	3	Standard
Fe	54	924.1	6.9	0.1238	0.011	9.0	mg/L	550	Standard
Fe	57	10215.1	3.4	0.1903	0.002	1.2	mg/L	1772	Standard
Sc-1	45	297614.0	2.5				mg/L	330668	Standard
Cl	35	43.7	13.2				ug/L	5	Standard
Kr	83	37.3	2.4				ug/L	38	Standard
Br	81	1214.2	1.8				ug/L	344	Standard
P	31	183.3	6.3				ug/L	312	Standard
S	34	13042.3	1.3				ug/L	5594	Standard
Sr	88	363.3	25.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.283	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207065810

Report Date/Time: Sunday, July 29, 2012 16:53:32

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	Cd	111	
	Cd	114	
>	In	115	88.242
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.011
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065810

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Method 6020 - Summary Report

Sample ID: L1207065811

Sample Date/Time: Sunday, July 29, 2012 16:54:11

Number of Replicates: 3

Autosampler Position: 430

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7593.6	6.1	-30.5960	122.466	400.3	ug/L	9465	Standard
|	Be	9	6.7	86.6	-0.0166	0.004	24.2	ug/L	10	Standard
|	Al	27	17398.3	3.3	0.8573	0.024	2.8	ug/L	7870	Standard
[>	Sc	45	283440.5	1.8				ug/L	330668	Standard
[	Ti	47	40.0	28.4	-0.0054	0.011	199.4	ug/L	53	Standard
|	V	51	2563.4	4.6	0.0049	0.013	260.3	ug/L	2687	Standard
|	Cr	52	8103.8	2.4	0.0596	0.027	45.3	ug/L	8408	Standard
|	Cr	53	280.0	14.0	0.0362	0.032	88.8	ug/L	288	Standard
|	Mn	55	1061.4	5.3	0.0042	0.005	114.7	ug/L	1080	Standard
|	Co	59	137.3	6.2	0.0051	0.001	23.2	ug/L	117	Standard
|	Ni	60	341.3	0.7	0.1320	0.001	0.8	ug/L	68	Standard
|	Cu	65	165.3	18.1	0.0166	0.015	93.2	ug/L	141	Standard
|	Zn	66	1565.4	1.9	1.5408	0.028	1.8	ug/L	138	Standard
[>	Ge	72	259570.2	0.3				ug/L	283230	Standard
|	As	75	-170.7	21.8	-0.0146	0.041	280.8	ug/L	-198	Standard
|	Se	82	21.7	19.7	-0.0039	0.047	1191.4	ug/L	21	Standard
[	Se-1	77	117.0	11.3	-0.0227	0.212	933.2	ug/L	131	Standard
[>	Ga	71	486.7	9.0				mg/L	607	Standard
[	Rb	85	40.0	43.3				ug/L	30	Standard
[	Y	89	222067.5	1.7				ug/L	251555	Standard
[>	Rh	103	291.7	10.3				ug/L	335	Standard
[	Mo	98	23.7	11.1	0.0006	0.001	167.0	ug/L	13	Standard
|	Ag	107	42.3	25.3	-0.0011	0.002	161.0	ug/L	36	Standard
|	Cd	111	33.9	19.3	-0.0060	0.002	34.1	mg/L	49	Standard
|	Cd	114	93.6	6.6	-0.0090	0.001	8.4	ug/L	170	Standard
[>	In	115	624946.8	2.8				ug/L	727802	Standard
|	Sn	118	363.3	6.5	-0.0106	0.002	20.8	ug/L	471	Standard
|	Sb	123	155.2	7.5	0.0232	0.002	9.5	ug/L	39	Standard
[	Ba	135	48.3	24.7	0.0014	0.003	230.3	ug/L	25	Standard
[	Ce	140	54.7	11.8				ug/L	25	Standard
[>	Tb	159	943378.1	1.9				ug/L	1071747	Standard
[	Ho	165	11.7	9.9				ug/L	13	Standard
|	Tl	203	84.3	48.5	0.0043	0.003	58.8	ug/L	5	Standard
|	Tl	205	195.3	38.4	0.0054	0.002	37.0	ug/L	10	Standard
|	Pb	206	341.7	3.4	-0.0038	0.001	16.1	ug/L	382	Standard
|	Pb	207	294.0	3.7	0.0006	0.001	235.4	ug/L	306	Standard
|	Pb	208	1412.4	3.7	0.0006	0.001	136.8	ug/L	1443	Standard
	U	238	11.0	18.2	0.0005	0.000	27.6	ug/L	5	Standard
[>	Bi	209	526618.4	1.3				ug/L	561075	Standard

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Na	23	458.3	10.9	-0.0049	0.003	65.1	mg/L	288	Standard
Mg	24	766.7	7.9	0.0016	0.000	7.7	mg/L	218	Standard
K	39	126.7	16.4	0.0219	0.020	91.2	mg/L	125	Standard
Ca	43	1.7	173.2	-3.3106	3.549	107.2	mg/L	3	Standard
Fe	54	247.9	5.5	-0.0521	0.004	8.6	mg/L	550	Standard
Fe	57	1613.4	1.7	0.0026	0.001	20.9	mg/L	1772	Standard
Sc-1	45	283440.5	1.8				mg/L	330668	Standard
Cl	35	5.3	28.6				ug/L	5	Standard
Kr	83	37.8	13.7				ug/L	38	Standard
Br	81	286.7	3.9				ug/L	344	Standard
P	31	152.5	23.1				ug/L	312	Standard
S	34	5657.7	5.0				ug/L	5594	Standard
Sr	88	51.7	43.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.647	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111		
	Cd	114		
>	In	115	85.868	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	93.859	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207065811

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 16:57:24

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8942.6	0.6	-24.8991	26.541	106.6	ug/L	9465	Standard
|	Be	9	81967.8	1.9	49.0242	1.506	3.1	ug/L	10	Standard
|	Al	27	705838.9	1.5	49.1520	0.185	0.4	ug/L	7870	Standard
>	Sc	45	332605.1	1.7				ug/L	330668	Standard
[	Ti	47	116800.5	0.2	96.4161	0.960	1.0	ug/L	53	Standard
|	V	51	479302.3	0.7	46.4646	0.473	1.0	ug/L	2687	Standard
|	Cr	52	390096.4	0.5	47.1140	0.698	1.5	ug/L	8408	Standard
|	Cr	53	65512.2	0.2	47.6871	0.474	1.0	ug/L	288	Standard
|	Mn	55	650858.4	0.9	47.4998	0.332	0.7	ug/L	1080	Standard
|	Co	59	405674.5	0.4	47.0450	0.706	1.5	ug/L	117	Standard
|	Ni	60	115505.3	0.4	47.8128	0.437	0.9	ug/L	68	Standard
|	Cu	65	108626.0	0.5	48.5617	0.808	1.7	ug/L	141	Standard
|	Zn	66	51992.4	0.3	49.1478	0.687	1.4	ug/L	138	Standard
>	Ge	72	296016.6	1.2				ug/L	283230	Standard
|	As	75	50440.6	0.9	48.6929	0.991	2.0	ug/L	-198	Standard
|	Se	82	5140.4	1.5	49.5157	0.947	1.9	ug/L	21	Standard
[	Se-1	77	3729.1	2.8	49.3935	2.035	4.1	ug/L	131	Standard
>	Ga	71	585.0	6.7				mg/L	607	Standard
[	Rb	85	688.3	0.8				ug/L	30	Standard
[	Y	89	255225.3	1.5				ug/L	251555	Standard
>	Rh	103	423.3	4.9				ug/L	335	Standard
[	Mo	98	352179.4	0.8	101.7511	1.350	1.3	ug/L	13	Standard
|	Ag	107	314647.1	1.1	51.6633	0.984	1.9	ug/L	36	Standard
|	Cd	111	152350.7	0.6	48.7395	0.563	1.2	mg/L	49	Standard
|	Cd	114	472682.2	0.5	49.7312	0.645	1.3	ug/L	170	Standard
>	In	115	710145.4	0.9				ug/L	727802	Standard
|	Sn	118	552492.1	0.7	49.1990	0.233	0.5	ug/L	471	Standard
|	Sb	123	399152.1	0.8	48.3916	0.689	1.4	ug/L	39	Standard
[	Ba	135	215597.5	1.1	50.5756	0.692	1.4	ug/L	25	Standard
[	Ce	140	837.4	1.7				ug/L	25	Standard
>	Tb	159	1050444.8	0.2				ug/L	1071747	Standard
[	Ho	165	11.3	5.1				ug/L	13	Standard
|	Tl	203	790979.8	1.1	47.4680	0.978	2.1	ug/L	5	Standard
|	Tl	205	1827052.0	0.3	47.0078	0.566	1.2	ug/L	10	Standard
|	Pb	206	616917.7	1.1	47.9615	0.851	1.8	ug/L	382	Standard
|	Pb	207	525351.7	1.1	48.9153	0.789	1.6	ug/L	306	Standard
|	Pb	208	2422992.2	1.2	48.0020	0.762	1.6	ug/L	1443	Standard
	U	238	731933.1	0.3	48.0324	0.492	1.0	ug/L	5	Standard
>	Bi	209	561705.0	0.9				ug/L	561075	Standard

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Na	23	101324.4	1.1	5.8646	0.170	2.9	mg/L	288	Standard
Mg	24	3214350.2	2.8	4.8004	0.209	4.4	mg/L	218	Standard
K	39	5904.5	5.0	5.0862	0.185	3.6	mg/L	125	Standard
Ca	43	10.0	50.0	5.2335	5.166	98.7	mg/L	3	Standard
Fe	54	22519.9	2.7	5.2253	0.230	4.4	mg/L	550	Standard
Fe	57	284277.5	1.6	5.5733	0.188	3.4	mg/L	1772	Standard
Sc-1	45	332605.1	1.7				mg/L	330668	Standard
Cl	35	5.7	56.7				ug/L	5	Standard
Kr	83	38.3	11.3				ug/L	38	Standard
Br	81	385.0	6.7				ug/L	344	Standard
P	31	395.8	3.8				ug/L	312	Standard
S	34	5928.7	2.5				ug/L	5594	Standard
Sr	88	60.0	16.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.304		
Sc	45			
Ti	47	96.416		
V	51	92.929		
Cr	52	94.228		
Cr	53			
Mn	55	95.000		
Co	59	94.090		
Ni	60	95.626		
Cu	65	97.123		
Zn	66	98.296		
Ge	72		104.515	
As	75	97.386		
Se	82	99.031		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	101.751		
Ag	107	103.327		

Sample ID: QC Std 6

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	Cd	111	97.479	
	Cd	114		
>	In	115		97.574
	Sn	118	98.398	
	Sb	123	96.783	
	Ba	135	101.151	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	94.936	
|	Tl	205		
|	Pb	206	95.923	
|	Pb	207	97.831	
|	Pb	208	96.004	
|	U	238	96.065	
>	Bi	209		100.112
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Sunday, July 29, 2012 16:59:55

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 17:00:35

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8407.3	1.3	-125.2467	45.838	36.6	ug/L	9465	Standard
|	Be	9	40.0	57.3	0.0028	0.014	490.1	ug/L	10	Standard
|	Al	27	8010.5	3.2	-0.0150	0.016	104.0	ug/L	7870	Standard
[>	Sc	45	331716.3	2.2				ug/L	330668	Standard
|	Ti	47	69.0	28.0	0.0161	0.017	103.5	ug/L	53	Standard
|	V	51	2569.6	2.1	-0.0200	0.007	33.7	ug/L	2687	Standard
|	Cr	52	7822.7	0.9	-0.0789	0.011	13.9	ug/L	8408	Standard
|	Cr	53	217.5	9.1	-0.0321	0.015	45.2	ug/L	288	Standard
|	Mn	55	1144.4	1.4	0.0026	0.001	40.3	ug/L	1080	Standard
|	Co	59	149.7	8.0	0.0049	0.001	29.2	ug/L	117	Standard
|	Ni	60	85.7	18.5	0.0076	0.007	89.8	ug/L	68	Standard
|	Cu	65	162.0	9.7	0.0074	0.007	98.1	ug/L	141	Standard
|	Zn	66	142.0	13.4	-0.0119	0.020	164.5	ug/L	138	Standard
[>	Ge	72	285154.7	0.7				ug/L	283230	Standard
|	As	75	-161.6	17.1	0.0115	0.026	229.1	ug/L	-198	Standard
|	Se	82	24.6	15.9	0.0039	0.041	1059.7	ug/L	21	Standard
[	Se-1	77	115.3	10.3	-0.2109	0.175	83.1	ug/L	131	Standard
[>	Ga	71	576.7	2.8				mg/L	607	Standard
[	Rb	85	23.3	12.4				ug/L	30	Standard
[	Y	89	248018.7	1.3				ug/L	251555	Standard
[>	Rh	103	325.0	4.6				ug/L	335	Standard
[	Mo	98	226.4	11.1	0.0588	0.007	11.9	ug/L	13	Standard
|	Ag	107	106.7	20.2	0.0087	0.003	40.0	ug/L	36	Standard
|	Cd	111	76.5	15.9	0.0064	0.004	63.8	mg/L	49	Standard
|	Cd	114	215.9	17.1	0.0027	0.004	141.4	ug/L	170	Standard
[>	In	115	704138.4	0.9				ug/L	727802	Standard
|	Sn	118	862.0	3.5	0.0301	0.002	7.6	ug/L	471	Standard
|	Sb	123	2273.8	2.5	0.2797	0.005	1.6	ug/L	39	Standard
[	Ba	135	49.0	42.8	0.0001	0.005	7070.3	ug/L	25	Standard
[	Ce	140	29.7	14.0				ug/L	25	Standard
[>	Tb	159	1026177.6	0.3				ug/L	1071747	Standard
[	Ho	165	8.3	25.0				ug/L	13	Standard
|	Tl	203	109.0	34.7	0.0055	0.002	41.3	ug/L	5	Standard
|	Tl	205	258.7	38.7	0.0067	0.003	38.5	ug/L	10	Standard
|	Pb	206	460.7	6.5	0.0039	0.002	62.3	ug/L	382	Standard
|	Pb	207	380.0	8.6	0.0069	0.003	43.5	ug/L	306	Standard
|	Pb	208	1742.0	6.6	0.0054	0.002	42.4	ug/L	1443	Standard
	U	238	125.7	37.9	0.0080	0.003	39.1	ug/L	5	Standard
[>	Bi	209	559928.8	0.2				ug/L	561075	Standard

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Na	23	390.0	7.8	-0.0135	0.001	10.9	mg/L	288	Standard
Mg	24	645.0	48.1	0.0013	0.000	36.2	mg/L	218	Standard
K	39	110.0	12.0	-0.0117	0.012	99.1	mg/L	125	Standard
Ca	43	1.7	173.2	-3.5904	3.064	85.3	mg/L	3	Standard
Fe	54	581.1	4.1	0.0172	0.006	36.1	mg/L	550	Standard
Fe	57	2068.5	6.7	0.0061	0.002	33.1	mg/L	1772	Standard
Sc-1	45	331716.3	2.2				mg/L	330668	Standard
Cl	35	4.0	43.3				ug/L	5	Standard
Kr	83	39.4	2.0				ug/L	38	Standard
Br	81	375.8	5.5				ug/L	344	Standard
P	31	374.2	11.8				ug/L	312	Standard
S	34	5863.6	1.6				ug/L	5594	Standard
Sr	88	48.3	31.6				ug/L	55	Standard

QC Calculated Values

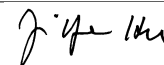
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.680	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111		
	Cd	114		
>	In	115	96.749	
	Sn	118		
	Sb	123		
	Ba	135		
	Ce	140		
>	Tb	159		
	Ho	165		
	Tl	203		
	Tl	205		
	Pb	206		
|	Pb	207		
|	Pb	208		
|	U	238		
>	Bi	209	99.796	
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 17:03:06

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Method 6020 - Summary Report

Sample ID: L1207064301

Sample Date/Time: Sunday, July 29, 2012 17:03:48

Number of Replicates: 3

Autosampler Position: 431

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12690.3	4.5	1037.8464	164.883	15.9	ug/L	9465	Standard
|	Be	9	10.0	50.0	-0.0144	0.004	24.6	ug/L	10	Standard
|	Al	27	41421.6	2.3	2.7191	0.005	0.2	ug/L	7870	Standard
[>	Sc	45	294140.2	2.1				ug/L	330668	Standard
|	Ti	47	217.0	4.4	0.1644	0.009	5.4	ug/L	53	Standard
|	V	51	5365.4	2.2	0.3256	0.013	3.8	ug/L	2687	Standard
|	Cr	52	8740.2	0.6	0.1679	0.007	4.1	ug/L	8408	Standard
|	Cr	53	265.0	8.4	0.0272	0.020	72.0	ug/L	288	Standard
|	Mn	55	149546.0	2.4	12.5730	0.297	2.4	ug/L	1080	Standard
|	Co	59	594.7	3.2	0.0667	0.002	3.4	ug/L	117	Standard
|	Ni	60	93358.1	1.2	44.7351	0.461	1.0	ug/L	68	Standard
|	Cu	65	423.3	8.8	0.1515	0.019	12.4	ug/L	141	Standard
|	Zn	66	52789.1	1.1	57.7941	0.816	1.4	ug/L	138	Standard
[>	Ge	72	255686.7	0.4				ug/L	283230	Standard
|	As	75	-368.8	15.7	-0.2380	0.065	27.4	ug/L	-198	Standard
|	Se	82	2193.8	2.3	24.3407	0.611	2.5	ug/L	21	Standard
[	Se-1	77	1618.1	6.0	23.8779	1.465	6.1	ug/L	131	Standard
[>	Ga	71	448.3	15.1				mg/L	607	Standard
|	Rb	85	3685.4	5.0				ug/L	30	Standard
|	Y	89	218550.5	2.4				ug/L	251555	Standard
[>	Rh	103	320.0	4.1				ug/L	335	Standard
|	Mo	98	15236.9	2.0	4.8174	0.007	0.1	ug/L	13	Standard
|	Ag	107	47.0	14.7	-0.0005	0.001	271.6	ug/L	36	Standard
|	Cd	111	285.8	1.3	0.0820	0.002	2.1	mg/L	49	Standard
|	Cd	114	950.3	1.9	0.0894	0.001	1.2	ug/L	170	Standard
[>	In	115	647992.5	2.1				ug/L	727802	Standard
|	Sn	118	498.3	2.5	0.0013	0.001	115.6	ug/L	471	Standard
|	Sb	123	830.9	10.9	0.1120	0.010	8.8	ug/L	39	Standard
|	Ba	135	5123.5	1.5	1.3063	0.034	2.6	ug/L	25	Standard
|	Ce	140	318.7	3.8				ug/L	25	Standard
[>	Tb	159	983313.7	0.4				ug/L	1071747	Standard
|	Ho	165	16.7	3.5				ug/L	13	Standard
|	Tl	203	138.3	9.6	0.0080	0.001	9.3	ug/L	5	Standard
|	Tl	205	313.7	2.7	0.0089	0.000	4.1	ug/L	10	Standard
|	Pb	206	416.3	4.0	0.0034	0.002	44.1	ug/L	382	Standard
|	Pb	207	334.3	6.1	0.0055	0.001	27.3	ug/L	306	Standard
|	Pb	208	1552.0	5.8	0.0045	0.001	33.0	ug/L	1443	Standard
	U	238	50341.8	1.1	3.6210	0.029	0.8	ug/L	5	Standard
[>	Bi	209	512463.5	1.9				ug/L	561075	Standard

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Na	23	47611.4	2.9	3.0985	0.084	2.7	mg/L	288	Standard
Mg	24	6542939.9	1.1	11.0467	0.232	2.1	mg/L	218	Standard
K	39	411.7	13.4	0.3004	0.049	16.2	mg/L	125	Standard
Ca	43	115.0	8.7	133.1355	11.672	8.8	mg/L	3	Standard
Fe	54	320.5	6.0	-0.0351	0.005	14.6	mg/L	550	Standard
Fe	57	9773.2	4.7	0.1832	0.010	5.7	mg/L	1772	Standard
Sc-1	45	294140.2	2.1				mg/L	330668	Standard
Cl	35	2.0	86.6				ug/L	5	Standard
Kr	83	36.3	6.9				ug/L	38	Standard
Br	81	364.2	9.9				ug/L	344	Standard
P	31	322.5	14.9				ug/L	312	Standard
S	34	71073.8	1.5				ug/L	5594	Standard
Sr	88	238.3	9.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.275	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	89.034
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.336
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064301

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Method 6020 - Summary Report

Sample ID: L1207064302

Sample Date/Time: Sunday, July 29, 2012 17:06:57

Number of Replicates: 3

Autosampler Position: 432

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

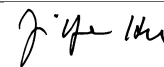
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13444.3	4.1	1100.3493	53.083	4.8	ug/L	9465	Standard
|	Be	9	10.0		-0.0147	0.000	1.1	ug/L	10	Standard
|	Al	27	50574.4	4.1	3.3094	0.089	2.7	ug/L	7870	Standard
[>	Sc	45	304585.5	2.4				ug/L	330668	Standard
|	Ti	47	190.0	9.0	0.1372	0.018	12.9	ug/L	53	Standard
|	V	51	5860.8	1.9	0.3763	0.017	4.5	ug/L	2687	Standard
|	Cr	52	8976.7	2.5	0.1915	0.037	19.3	ug/L	8408	Standard
|	Cr	53	335.0	5.9	0.0840	0.015	17.3	ug/L	288	Standard
|	Mn	55	161324.2	2.2	13.4618	0.398	3.0	ug/L	1080	Standard
|	Co	59	1099.4	3.6	0.1333	0.005	3.9	ug/L	117	Standard
|	Ni	60	104020.4	3.0	49.4553	1.851	3.7	ug/L	68	Standard
|	Cu	65	637.3	3.3	0.2599	0.013	5.0	ug/L	141	Standard
|	Zn	66	27668.9	2.2	29.9792	0.901	3.0	ug/L	138	Standard
[>	Ge	72	257764.2	0.8				ug/L	283230	Standard
|	As	75	-362.1	47.3	-0.2278	0.192	84.2	ug/L	-198	Standard
|	Se	82	2767.0	3.2	30.5175	1.148	3.8	ug/L	21	Standard
[	Se-1	77	2021.1	2.6	30.0380	1.051	3.5	ug/L	131	Standard
[>	Ga	71	520.0	8.3				mg/L	607	Standard
|	Rb	85	4172.2	1.5				ug/L	30	Standard
|	Y	89	220122.8	1.8				ug/L	251555	Standard
[>	Rh	103	355.0	23.1				ug/L	335	Standard
|	Mo	98	16831.0	2.7	5.1806	0.096	1.8	ug/L	13	Standard
|	Ag	107	45.7	9.9	-0.0010	0.001	69.8	ug/L	36	Standard
|	Cd	111	27.9	21.5	-0.0087	0.002	25.1	mg/L	49	Standard
|	Cd	114	168.2	1.1	-0.0013	0.000	13.7	ug/L	170	Standard
[>	In	115	665620.4	1.5				ug/L	727802	Standard
|	Sn	118	552.0	4.9	0.0051	0.002	48.9	ug/L	471	Standard
|	Sb	123	785.1	6.4	0.1033	0.005	4.8	ug/L	39	Standard
|	Ba	135	5548.7	1.8	1.3775	0.024	1.8	ug/L	25	Standard
|	Ce	140	316.0	1.8				ug/L	25	Standard
[>	Tb	159	997205.7	0.7				ug/L	1071747	Standard
|	Ho	165	26.7	17.7				ug/L	13	Standard
|	Tl	203	131.0	7.0	0.0074	0.001	8.8	ug/L	5	Standard
|	Tl	205	311.3	2.9	0.0086	0.000	3.6	ug/L	10	Standard
|	Pb	206	503.7	1.3	0.0101	0.000	3.3	ug/L	382	Standard
|	Pb	207	418.0	5.6	0.0133	0.002	18.0	ug/L	306	Standard
|	Pb	208	1943.4	1.2	0.0122	0.001	5.4	ug/L	1443	Standard
	U	238	56666.1	2.6	4.0005	0.082	2.0	ug/L	5	Standard
[>	Bi	209	522032.1	0.8				ug/L	561075	Standard

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Na	23	51005.7	1.0	3.2072	0.048	1.5	mg/L	288	Standard
Mg	24	7260112.7	2.4	11.8341	0.045	0.4	mg/L	218	Standard
K	39	478.3	2.6	0.3511	0.018	5.0	mg/L	125	Standard
Ca	43	95.0	19.0	105.2225	21.380	20.3	mg/L	3	Standard
Fe	54	329.6	16.8	-0.0355	0.016	46.3	mg/L	550	Standard
Fe	57	9478.0	3.4	0.1693	0.003	1.7	mg/L	1772	Standard
Sc-1	45	304585.5	2.4				mg/L	330668	Standard
Cl	35	5.3	10.8				ug/L	5	Standard
Kr	83	39.3	11.2				ug/L	38	Standard
Br	81	404.2	5.3				ug/L	344	Standard
P	31	282.5	9.3				ug/L	312	Standard
S	34	76731.4	2.5				ug/L	5594	Standard
Sr	88	268.3	7.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.009	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064302

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	Cd	111	
	Cd	114	
>	In	115	91.456
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	93.041
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064302

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Method 6020 - Summary Report

Sample ID: L1207064303

Sample Date/Time: Sunday, July 29, 2012 17:10:06

Number of Replicates: 3

Autosampler Position: 433

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

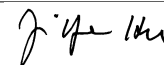
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15269.4	6.6	1258.5463	134.371	10.7	ug/L	9465	Standard
|	Be	9	10.0	50.0	-0.0151	0.003	21.1	ug/L	10	Standard
|	Al	27	33951.3	2.1	1.8463	0.023	1.3	ug/L	7870	Standard
[>	Sc	45	327814.6	2.4				ug/L	330668	Standard
[	Ti	47	442.3	6.6	0.3513	0.020	5.7	ug/L	53	Standard
|	V	51	3231.5	2.3	0.0602	0.002	3.6	ug/L	2687	Standard
|	Cr	52	8908.0	2.8	0.1065	0.028	26.7	ug/L	8408	Standard
|	Cr	53	276.7	9.7	0.0211	0.018	87.4	ug/L	288	Standard
|	Mn	55	161048.6	3.9	12.6323	0.431	3.4	ug/L	1080	Standard
|	Co	59	571.7	11.7	0.0584	0.007	12.4	ug/L	117	Standard
|	Ni	60	5727.4	5.2	2.5319	0.093	3.7	ug/L	68	Standard
|	Cu	65	542.3	7.5	0.1942	0.016	8.4	ug/L	141	Standard
|	Zn	66	4719.1	3.9	4.6809	0.171	3.7	ug/L	138	Standard
[>	Ge	72	274061.2	1.7				ug/L	283230	Standard
|	As	75	-160.8	46.8	0.0065	0.077	1186.1	ug/L	-198	Standard
|	Se	82	244.0	3.8	2.3085	0.128	5.6	ug/L	21	Standard
[	Se-1	77	275.0	3.7	2.2239	0.091	4.1	ug/L	131	Standard
[>	Ga	71	541.7	14.9				mg/L	607	Standard
[	Rb	85	3973.9	2.3				ug/L	30	Standard
[	Y	89	234853.3	2.0				ug/L	251555	Standard
[>	Rh	103	388.3	23.2				ug/L	335	Standard
[	Mo	98	1994.7	6.0	0.5532	0.021	3.7	ug/L	13	Standard
|	Ag	107	57.7	20.3	0.0002	0.002	744.5	ug/L	36	Standard
|	Cd	111	57.9	8.1	-0.0003	0.001	417.1	mg/L	49	Standard
|	Cd	114	230.1	3.5	0.0034	0.001	23.0	ug/L	170	Standard
[>	In	115	729949.9	2.4				ug/L	727802	Standard
|	Sn	118	479.7	11.8	-0.0059	0.004	74.4	ug/L	471	Standard
|	Sb	123	538.5	10.6	0.0652	0.005	8.2	ug/L	39	Standard
[	Ba	135	23877.8	3.2	5.4382	0.041	0.8	ug/L	25	Standard
[	Ce	140	197.7	11.4				ug/L	25	Standard
[>	Tb	159	1049759.1	1.6				ug/L	1071747	Standard
[	Ho	165	18.7	3.1				ug/L	13	Standard
|	Tl	203	215.0	61.9	0.0119	0.008	67.0	ug/L	5	Standard
|	Tl	205	510.7	69.8	0.0132	0.009	69.4	ug/L	10	Standard
|	Pb	206	445.3	26.0	0.0028	0.009	321.8	ug/L	382	Standard
|	Pb	207	367.3	21.6	0.0058	0.007	127.5	ug/L	306	Standard
|	Pb	208	1740.7	23.6	0.0055	0.008	146.4	ug/L	1443	Standard
	U	238	10160.1	5.4	0.6711	0.026	3.9	ug/L	5	Standard
[>	Bi	209	557600.4	1.5				ug/L	561075	Standard

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Na	23	58004.2	1.7	3.3908	0.065	1.9	mg/L	288	Standard
Mg	24	7585681.6	4.4	11.4850	0.225	2.0	mg/L	218	Standard
K	39	578.3	8.7	0.4074	0.038	9.3	mg/L	125	Standard
Ca	43	86.7	12.0	88.2668	10.731	12.2	mg/L	3	Standard
Fe	54	305.8	17.2	-0.0475	0.012	26.0	mg/L	550	Standard
Fe	57	9904.9	3.9	0.1633	0.003	1.8	mg/L	1772	Standard
Sc-1	45	327814.6	2.4				mg/L	330668	Standard
Cl	35	6.0					ug/L	5	Standard
Kr	83	43.2	14.6				ug/L	38	Standard
Br	81	398.3	13.8				ug/L	344	Standard
P	31	1712.6	4.1				ug/L	312	Standard
S	34	78532.3	2.6				ug/L	5594	Standard
Sr	88	325.0	18.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.763	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064303

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	Cd	111	
	Cd	114	
>	In	115	100.295
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.381
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

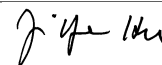
Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064303

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Method 6020 - Summary Report

Sample ID: L1207064304

Sample Date/Time: Sunday, July 29, 2012 17:13:15

Number of Replicates: 3

Autosampler Position: 434

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16333.8	3.9	1349.8086	128.593	9.5	ug/L	9465	Standard
|	Be	9	26.7	109.9	-0.0057	0.017	299.4	ug/L	10	Standard
|	Al	27	28548.5	2.6	1.3829	0.050	3.6	ug/L	7870	Standard
[>	Sc	45	340681.1	0.9				ug/L	330668	Standard
|	Ti	47	455.7	7.2	0.3570	0.021	5.8	ug/L	53	Standard
|	V	51	3077.8	3.9	0.0393	0.013	32.5	ug/L	2687	Standard
|	Cr	52	8818.2	1.6	0.0774	0.033	42.1	ug/L	8408	Standard
|	Cr	53	269.2	13.3	0.0119	0.024	200.5	ug/L	288	Standard
|	Mn	55	179123.1	1.7	13.8557	0.509	3.7	ug/L	1080	Standard
|	Co	59	2547.5	2.7	0.3015	0.014	4.7	ug/L	117	Standard
|	Ni	60	4146.9	3.9	1.7977	0.033	1.9	ug/L	68	Standard
|	Cu	65	472.3	7.6	0.1571	0.015	9.5	ug/L	141	Standard
|	Zn	66	1712.4	7.4	1.5748	0.099	6.3	ug/L	138	Standard
[>	Ge	72	278212.8	2.1				ug/L	283230	Standard
|	As	75	-126.0	35.2	0.0442	0.044	99.6	ug/L	-198	Standard
|	Se	82	86.1	10.2	0.6455	0.110	17.0	ug/L	21	Standard
[	Se-1	77	161.3	4.0	0.5018	0.060	12.0	ug/L	131	Standard
[>	Ga	71	600.0	2.5				mg/L	607	Standard
|	Rb	85	4203.9	3.0				ug/L	30	Standard
|	Y	89	242070.1	0.7				ug/L	251555	Standard
[>	Rh	103	365.0	10.3				ug/L	335	Standard
|	Mo	98	1481.6	7.1	0.4003	0.026	6.5	ug/L	13	Standard
|	Ag	107	50.0	55.6	-0.0012	0.004	364.4	ug/L	36	Standard
|	Cd	111	38.1	44.5	-0.0067	0.005	75.6	mg/L	49	Standard
|	Cd	114	122.7	28.2	-0.0079	0.003	42.3	ug/L	170	Standard
[>	In	115	745800.0	1.0				ug/L	727802	Standard
|	Sn	118	594.7	5.3	0.0030	0.002	72.3	ug/L	471	Standard
|	Sb	123	255.2	3.5	0.0312	0.001	3.2	ug/L	39	Standard
|	Ba	135	26176.9	1.7	5.8376	0.154	2.6	ug/L	25	Standard
|	Ce	140	104.7	8.9				ug/L	25	Standard
[>	Tb	159	1084790.7	0.6				ug/L	1071747	Standard
|	Ho	165	13.7	33.8				ug/L	13	Standard
|	Tl	203	139.3	9.0	0.0072	0.001	10.8	ug/L	5	Standard
|	Tl	205	304.7	15.2	0.0078	0.001	15.6	ug/L	10	Standard
|	Pb	206	394.7	3.2	-0.0017	0.001	63.9	ug/L	382	Standard
|	Pb	207	334.3	7.1	0.0022	0.002	107.5	ug/L	306	Standard
|	Pb	208	1569.0	6.6	0.0016	0.002	138.8	ug/L	1443	Standard
	U	238	11190.8	1.2	0.7260	0.006	0.8	ug/L	5	Standard
[>	Bi	209	567947.2	0.4				ug/L	561075	Standard

Sample ID: L1207064304

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Na	23	59498.3	1.7	3.3461	0.086	2.6	mg/L	288	Standard
Mg	24	8095450.4	3.0	11.7997	0.438	3.7	mg/L	218	Standard
K	39	560.0	7.3	0.3723	0.034	9.2	mg/L	125	Standard
Ca	43	106.7	39.9	105.7925	45.259	42.8	mg/L	3	Standard
Fe	54	329.5	10.5	-0.0448	0.008	18.1	mg/L	550	Standard
Fe	57	10528.7	5.2	0.1680	0.012	7.0	mg/L	1772	Standard
Sc-1	45	340681.1	0.9				mg/L	330668	Standard
Cl	35	7.7	94.4				ug/L	5	Standard
Kr	83	43.7	3.3				ug/L	38	Standard
Br	81	406.7	7.1				ug/L	344	Standard
P	31	1577.6	5.5				ug/L	312	Standard
S	34	84574.6	1.7				ug/L	5594	Standard
Sr	88	285.0	12.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.229	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.473
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.225
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064305

Sample Date/Time: Sunday, July 29, 2012 17:16:24

Number of Replicates: 3

Autosampler Position: 435

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

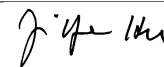
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15736.5	2.3	1299.1497	70.168	5.4	ug/L	9465	Standard
|	Be	9	13.3	57.3	-0.0132	0.005	34.0	ug/L	10	Standard
|	Al	27	43890.2	1.3	2.5054	0.175	7.0	ug/L	7870	Standard
[>	Sc	45	333806.6	4.4				ug/L	330668	Standard
|	Ti	47	617.3	3.0	0.4983	0.006	1.2	ug/L	53	Standard
|	V	51	3009.8	0.9	0.0318	0.014	43.2	ug/L	2687	Standard
|	Cr	52	8910.0	1.5	0.0876	0.047	54.0	ug/L	8408	Standard
|	Cr	53	247.5	15.9	-0.0044	0.035	795.8	ug/L	288	Standard
|	Mn	55	152758.2	1.0	11.7820	0.404	3.4	ug/L	1080	Standard
|	Co	59	915.4	4.5	0.0996	0.000	0.4	ug/L	117	Standard
|	Ni	60	4210.3	1.6	1.8232	0.051	2.8	ug/L	68	Standard
|	Cu	65	590.3	4.3	0.2133	0.023	10.7	ug/L	141	Standard
|	Zn	66	3474.4	1.5	3.3480	0.104	3.1	ug/L	138	Standard
[>	Ge	72	278847.4	4.1				ug/L	283230	Standard
|	As	75	-66.7	25.4	0.1043	0.019	18.3	ug/L	-198	Standard
|	Se	82	80.6	7.8	0.5853	0.060	10.2	ug/L	21	Standard
[	Se-1	77	152.3	1.0	0.3676	0.071	19.4	ug/L	131	Standard
[>	Ga	71	621.7	9.3				mg/L	607	Standard
|	Rb	85	3895.5	0.6				ug/L	30	Standard
|	Y	89	248574.9	2.4				ug/L	251555	Standard
[>	Rh	103	370.0	8.2				ug/L	335	Standard
|	Mo	98	752.6	1.9	0.1983	0.004	1.8	ug/L	13	Standard
|	Ag	107	44.0	10.4	-0.0021	0.001	33.2	ug/L	36	Standard
|	Cd	111	56.9	26.2	-0.0010	0.005	533.2	mg/L	49	Standard
|	Cd	114	182.2	10.0	-0.0021	0.001	53.7	ug/L	170	Standard
[>	In	115	751806.3	3.7				ug/L	727802	Standard
|	Sn	118	489.7	9.6	-0.0062	0.003	54.9	ug/L	471	Standard
|	Sb	123	301.9	11.5	0.0363	0.003	9.6	ug/L	39	Standard
|	Ba	135	47989.9	1.2	10.6307	0.264	2.5	ug/L	25	Standard
|	Ce	140	496.7	1.8				ug/L	25	Standard
[>	Tb	159	1081781.2	3.5				ug/L	1071747	Standard
|	Ho	165	16.7	9.2				ug/L	13	Standard
|	Tl	203	158.0	2.9	0.0083	0.001	7.6	ug/L	5	Standard
|	Tl	205	368.3	4.8	0.0094	0.000	3.2	ug/L	10	Standard
|	Pb	206	447.7	5.7	0.0023	0.003	108.5	ug/L	382	Standard
|	Pb	207	354.0	2.9	0.0039	0.002	42.5	ug/L	306	Standard
|	Pb	208	1661.0	2.3	0.0033	0.001	42.5	ug/L	1443	Standard
	U	238	3601.1	1.7	0.2331	0.006	2.5	ug/L	5	Standard
[>	Bi	209	569164.0	3.9				ug/L	561075	Standard

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Na	23	59051.5	1.9	3.3922	0.107	3.2	mg/L	288	Standard
Mg	24	7856687.3	3.7	11.6922	0.385	3.3	mg/L	218	Standard
K	39	590.0	5.2	0.4088	0.021	5.0	mg/L	125	Standard
Ca	43	98.3	24.0	99.8756	30.374	30.4	mg/L	3	Standard
Fe	54	382.7	3.6	-0.0305	0.006	20.2	mg/L	550	Standard
Fe	57	11421.0	4.2	0.1896	0.001	0.6	mg/L	1772	Standard
Sc-1	45	333806.6	4.4				mg/L	330668	Standard
Cl	35	6.3	32.9				ug/L	5	Standard
Kr	83	35.7	3.4				ug/L	38	Standard
Br	81	451.7	9.4				ug/L	344	Standard
P	31	1936.0	2.9				ug/L	312	Standard
S	34	82589.5	2.0				ug/L	5594	Standard
Sr	88	256.7	14.9				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.453	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064305

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	Cd	111	
	Cd	114	
>	In	115	103.298
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.442
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064305

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Method 6020 - Summary Report

Sample ID: L1207064301

Sample Date/Time: Sunday, July 29, 2012 17:19:34

Number of Replicates: 3

Autosampler Position: 436

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9519.7	2.7	191.5453	32.980	17.2	ug/L	9465	Standard
|	Be	9	11.7	99.0	-0.0138	0.007	52.5	ug/L	10	Standard
|	Al	27	11239.2	1.3	0.2550	0.013	5.0	ug/L	7870	Standard
[>	Sc	45	315118.5	1.2				ug/L	330668	Standard
|	Ti	47	48.3	4.8	0.0003	0.002	593.8	ug/L	53	Standard
|	V	51	3043.8	1.5	0.0423	0.007	16.7	ug/L	2687	Standard
|	Cr	52	8503.4	0.5	0.0591	0.021	35.3	ug/L	8408	Standard
|	Cr	53	173.3	10.8	-0.0594	0.017	28.0	ug/L	288	Standard
|	Mn	55	14277.7	3.1	1.0499	0.047	4.5	ug/L	1080	Standard
|	Co	59	173.3	14.9	0.0087	0.003	37.2	ug/L	117	Standard
|	Ni	60	8772.2	2.4	3.9181	0.127	3.2	ug/L	68	Standard
|	Cu	65	134.0	4.7	-0.0027	0.002	87.6	ug/L	141	Standard
|	Zn	66	6273.3	1.9	6.3102	0.176	2.8	ug/L	138	Standard
[>	Ge	72	272516.2	1.3				ug/L	283230	Standard
|	As	75	-171.3	16.0	-0.0064	0.029	463.5	ug/L	-198	Standard
|	Se	82	244.2	1.9	2.3240	0.014	0.6	ug/L	21	Standard
[	Se-1	77	265.3	2.1	2.1047	0.132	6.3	ug/L	131	Standard
[>	Ga	71	548.3	6.1				mg/L	607	Standard
|	Rb	85	373.3	12.2				ug/L	30	Standard
|	Y	89	231806.6	1.1				ug/L	251555	Standard
[>	Rh	103	326.7	9.2				ug/L	335	Standard
|	Mo	98	1295.7	1.7	0.3585	0.007	1.9	ug/L	13	Standard
|	Ag	107	39.0	14.3	-0.0027	0.001	32.6	ug/L	36	Standard
|	Cd	111	41.6	11.5	-0.0053	0.002	31.4	mg/L	49	Standard
|	Cd	114	150.8	5.8	-0.0047	0.001	18.9	ug/L	170	Standard
[>	In	115	727109.8	1.3				ug/L	727802	Standard
|	Sn	118	368.3	3.3	-0.0154	0.001	6.7	ug/L	471	Standard
|	Sb	123	117.9	12.5	0.0158	0.002	12.1	ug/L	39	Standard
|	Ba	135	487.0	5.4	0.1002	0.007	7.4	ug/L	25	Standard
|	Ce	140	54.0	17.7				ug/L	25	Standard
[>	Tb	159	1050608.1	1.7				ug/L	1071747	Standard
|	Ho	165	11.7	9.9				ug/L	13	Standard
|	Tl	203	29.0	34.5	0.0006	0.001	89.7	ug/L	5	Standard
|	Tl	205	73.7	16.6	0.0019	0.000	16.4	ug/L	10	Standard
|	Pb	206	355.0	4.1	-0.0052	0.001	28.5	ug/L	382	Standard
|	Pb	207	326.7	4.9	0.0010	0.001	131.2	ug/L	306	Standard
|	Pb	208	1451.7	0.9	-0.0012	0.001	52.0	ug/L	1443	Standard
	U	238	4470.0	1.9	0.2853	0.007	2.6	ug/L	5	Standard
[>	Bi	209	577165.4	1.4				ug/L	561075	Standard

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Na	23	6383.0	5.8	0.3560	0.022	6.2	mg/L	288	Standard
Mg	24	487464.3	2.0	0.7685	0.023	3.1	mg/L	218	Standard
K	39	166.7	33.2	0.0458	0.051	110.7	mg/L	125	Standard
Ca	43	11.7	49.5	7.7080	6.387	82.9	mg/L	3	Standard
Fe	54	237.2	18.4	-0.0618	0.010	16.7	mg/L	550	Standard
Fe	57	3097.0	4.7	0.0297	0.003	8.7	mg/L	1772	Standard
Sc-1	45	315118.5	1.2				mg/L	330668	Standard
Cl	35	2.3	49.5				ug/L	5	Standard
Kr	83	37.7	7.7				ug/L	38	Standard
Br	81	304.2	10.5				ug/L	344	Standard
P	31	133.3	5.7				ug/L	312	Standard
S	34	12707.0	3.1				ug/L	5594	Standard
Sr	88	61.7	38.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.217	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064301

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	Cd	111	
	Cd	114	
>	In	115	99.905
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	102.868
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064301

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Method 6020 - Summary Report

Sample ID: L1207064302

Sample Date/Time: Sunday, July 29, 2012 17:22:43

Number of Replicates: 3

Autosampler Position: 437

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9427.9	2.4	165.3091	59.619	36.1	ug/L	9465	Standard
|	Be	9	6.7	43.3	-0.0170	0.002	10.9	ug/L	10	Standard
|	Al	27	9044.4	2.8	0.0889	0.012	13.3	ug/L	7870	Standard
[>	Sc	45	316375.9	1.1				ug/L	330668	Standard
[	Ti	47	53.0	1.9	0.0057	0.000	3.2	ug/L	53	Standard
|	V	51	3030.5	0.9	0.0491	0.006	11.5	ug/L	2687	Standard
|	Cr	52	8310.6	0.4	0.0616	0.021	34.3	ug/L	8408	Standard
|	Cr	53	170.8	16.1	-0.0580	0.023	39.4	ug/L	288	Standard
|	Mn	55	15838.6	2.0	1.2058	0.039	3.3	ug/L	1080	Standard
|	Co	59	216.7	6.7	0.0149	0.002	10.4	ug/L	117	Standard
|	Ni	60	10128.1	1.4	4.6435	0.088	1.9	ug/L	68	Standard
|	Cu	65	135.7	7.4	-0.0001	0.006	4815.3	ug/L	141	Standard
|	Zn	66	4197.2	4.3	4.2805	0.170	4.0	ug/L	138	Standard
[>	Ge	72	265766.6	1.5				ug/L	283230	Standard
|	As	75	-192.7	13.0	-0.0337	0.027	79.8	ug/L	-198	Standard
|	Se	82	306.6	6.0	3.0606	0.154	5.0	ug/L	21	Standard
[	Se-1	77	312.0	9.0	2.9174	0.407	14.0	ug/L	131	Standard
[>	Ga	71	558.3	8.1				mg/L	607	Standard
[	Rb	85	416.7	23.0				ug/L	30	Standard
[	Y	89	234851.4	1.5				ug/L	251555	Standard
[>	Rh	103	321.7	14.9				ug/L	335	Standard
[	Mo	98	1526.2	1.6	0.4329	0.005	1.1	ug/L	13	Standard
|	Ag	107	40.3	12.2	-0.0023	0.001	37.8	ug/L	36	Standard
|	Cd	111	17.3	26.4	-0.0127	0.001	10.9	mg/L	49	Standard
|	Cd	114	80.3	15.5	-0.0118	0.001	11.9	ug/L	170	Standard
[>	In	115	711663.8	1.5				ug/L	727802	Standard
|	Sn	118	362.3	5.8	-0.0152	0.002	14.6	ug/L	471	Standard
|	Sb	123	108.3	12.5	0.0149	0.002	11.8	ug/L	39	Standard
[	Ba	135	535.0	3.4	0.1138	0.006	5.4	ug/L	25	Standard
[	Ce	140	53.7	15.6				ug/L	25	Standard
[>	Tb	159	1026988.1	1.2				ug/L	1071747	Standard
[	Ho	165	12.3	4.7				ug/L	13	Standard
|	Tl	203	23.7	35.2	0.0003	0.000	143.6	ug/L	5	Standard
|	Tl	205	64.3	7.3	0.0017	0.000	7.0	ug/L	10	Standard
|	Pb	206	374.7	1.3	-0.0034	0.000	7.4	ug/L	382	Standard
|	Pb	207	321.0	3.3	0.0008	0.001	139.5	ug/L	306	Standard
|	Pb	208	1450.4	3.1	-0.0009	0.001	99.5	ug/L	1443	Standard
	U	238	5325.3	2.6	0.3434	0.008	2.3	ug/L	5	Standard
[>	Bi	209	571117.5	0.5				ug/L	561075	Standard

Sample ID: L1207064302

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Na	23	7013.3	8.5	0.3928	0.032	8.2	mg/L	288	Standard
Mg	24	563009.6	1.6	0.8838	0.007	0.8	mg/L	218	Standard
K	39	145.0	17.2	0.0252	0.022	86.3	mg/L	125	Standard
Ca	43	10.0	86.6	5.8906	9.835	167.0	mg/L	3	Standard
Fe	54	222.8	22.0	-0.0655	0.013	19.5	mg/L	550	Standard
Fe	57	3190.3	5.9	0.0314	0.004	13.8	mg/L	1772	Standard
Sc-1	45	316375.9	1.1				mg/L	330668	Standard
Cl	35	4.0	25.0				ug/L	5	Standard
Kr	83	36.1	4.6				ug/L	38	Standard
Br	81	310.8	7.0				ug/L	344	Standard
P	31	135.8	7.7				ug/L	312	Standard
S	34	13588.6	0.8				ug/L	5594	Standard
Sr	88	75.0	30.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.834	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064302

Report Date/Time: Sunday, July 29, 2012 17:25:14

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	Cd	111	
	Cd	114	
>	In	115	97.783
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.790
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064302

Report Date/Time: Sunday, July 29, 2012 17:25:14

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<i>J. J. J.</i>

Method 6020 - Summary Report

Sample ID: L1207064303

Sample Date/Time: Sunday, July 29, 2012 17:25:54

Number of Replicates: 3

Autosampler Position: 438

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

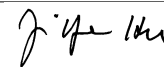
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9519.7	4.0	201.9088	52.277	25.9	ug/L	9465	Standard
|	Be	9	11.7	49.5	-0.0138	0.004	27.3	ug/L	10	Standard
|	Al	27	7805.3	2.2	0.0029	0.023	781.1	ug/L	7870	Standard
[>	Sc	45	313443.0	1.8				ug/L	330668	Standard
[	Ti	47	97.0	4.5	0.0453	0.005	10.3	ug/L	53	Standard
|	V	51	2733.7	0.9	0.0140	0.003	22.0	ug/L	2687	Standard
|	Cr	52	8197.2	1.1	0.0351	0.004	10.6	ug/L	8408	Standard
|	Cr	53	181.7	11.1	-0.0505	0.017	34.4	ug/L	288	Standard
|	Mn	55	16025.8	3.9	1.2083	0.048	4.0	ug/L	1080	Standard
|	Co	59	155.0	6.5	0.0067	0.001	17.5	ug/L	117	Standard
|	Ni	60	756.0	5.7	0.3162	0.020	6.3	ug/L	68	Standard
|	Cu	65	126.7	14.2	-0.0053	0.008	157.9	ug/L	141	Standard
|	Zn	66	1632.8	2.1	1.5561	0.021	1.3	ug/L	138	Standard
[>	Ge	72	268301.1	0.9				ug/L	283230	Standard
|	As	75	-152.0	14.8	0.0113	0.025	219.8	ug/L	-198	Standard
|	Se	82	48.3	19.5	0.2731	0.101	36.9	ug/L	21	Standard
[	Se-1	77	124.3	7.3	0.0294	0.153	522.2	ug/L	131	Standard
[>	Ga	71	578.3	13.2				mg/L	607	Standard
[	Rb	85	386.7	9.9				ug/L	30	Standard
[	Y	89	234071.1	1.4				ug/L	251555	Standard
[>	Rh	103	345.0	5.2				ug/L	335	Standard
[	Mo	98	217.5	4.5	0.0576	0.003	5.4	ug/L	13	Standard
|	Ag	107	39.3	13.0	-0.0023	0.001	36.6	ug/L	36	Standard
|	Cd	111	24.8	12.4	-0.0101	0.001	9.8	mg/L	49	Standard
|	Cd	114	66.7	11.6	-0.0130	0.001	6.4	ug/L	170	Standard
[>	In	115	689407.5	0.4				ug/L	727802	Standard
|	Sn	118	383.0	10.5	-0.0123	0.004	31.0	ug/L	471	Standard
|	Sb	123	86.5	15.2	0.0126	0.002	13.2	ug/L	39	Standard
[	Ba	135	2375.5	5.2	0.5627	0.031	5.6	ug/L	25	Standard
[	Ce	140	47.7	6.1				ug/L	25	Standard
[>	Tb	159	1013463.9	0.7				ug/L	1071747	Standard
[	Ho	165	10.7	44.3				ug/L	13	Standard
|	Tl	203	23.0	19.0	0.0003	0.000	80.0	ug/L	5	Standard
|	Tl	205	64.7	22.2	0.0017	0.000	21.3	ug/L	10	Standard
|	Pb	206	377.3	2.7	-0.0028	0.001	35.2	ug/L	382	Standard
|	Pb	207	293.3	2.3	-0.0014	0.001	52.4	ug/L	306	Standard
|	Pb	208	1445.4	0.9	-0.0006	0.000	23.5	ug/L	1443	Standard
	U	238	975.7	5.3	0.0637	0.003	4.7	ug/L	5	Standard
[>	Bi	209	562850.4	0.7				ug/L	561075	Standard

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Na	23	8352.3	7.8	0.4797	0.039	8.1	mg/L	288	Standard
Mg	24	593348.3	4.0	0.9405	0.047	4.9	mg/L	218	Standard
K	39	170.0	7.8	0.0500	0.014	27.7	mg/L	125	Standard
Ca	43	5.0	100.0	0.3538	5.719	1616.6	mg/L	3	Standard
Fe	54	217.8	16.0	-0.0664	0.008	11.6	mg/L	550	Standard
Fe	57	2953.6	4.7	0.0271	0.004	13.2	mg/L	1772	Standard
Sc-1	45	313443.0	1.8				mg/L	330668	Standard
Cl	35	4.7	53.9				ug/L	5	Standard
Kr	83	33.3	9.2				ug/L	38	Standard
Br	81	300.0	5.2				ug/L	344	Standard
P	31	270.8	9.1				ug/L	312	Standard
S	34	14179.1	4.0				ug/L	5594	Standard
Sr	88	65.0	15.4				ug/L	55	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.729	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	94.725
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.316
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064304

Sample Date/Time: Sunday, July 29, 2012 17:29:04

Number of Replicates: 3

Autosampler Position: 439

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9321.2	3.7	177.7356	53.866	30.3	ug/L	9465	Standard
|	Be	9	8.3	91.7	-0.0158	0.005	31.5	ug/L	10	Standard
|	Al	27	6219.6	1.7	-0.1118	0.007	6.3	ug/L	7870	Standard
[>	Sc	45	310734.8	2.0				ug/L	330668	Standard
|	Ti	47	74.7	11.2	0.0246	0.007	29.6	ug/L	53	Standard
|	V	51	2785.8	1.8	0.0180	0.005	27.3	ug/L	2687	Standard
|	Cr	52	8218.2	0.1	0.0322	0.004	11.7	ug/L	8408	Standard
|	Cr	53	172.5	16.7	-0.0588	0.023	38.5	ug/L	288	Standard
|	Mn	55	15128.2	1.8	1.1296	0.026	2.3	ug/L	1080	Standard
|	Co	59	307.7	3.6	0.0261	0.001	5.3	ug/L	117	Standard
|	Ni	60	521.0	4.2	0.2076	0.011	5.1	ug/L	68	Standard
|	Cu	65	109.0	18.6	-0.0143	0.010	71.0	ug/L	141	Standard
|	Zn	66	1352.1	2.1	1.2553	0.036	2.8	ug/L	138	Standard
[>	Ge	72	269712.1	0.4				ug/L	283230	Standard
|	As	75	-161.0	14.6	0.0028	0.024	853.3	ug/L	-198	Standard
|	Se	82	29.7	14.8	0.0727	0.048	66.0	ug/L	21	Standard
[	Se-1	77	131.3	15.0	0.1250	0.305	243.9	ug/L	131	Standard
[>	Ga	71	531.7	6.6				mg/L	607	Standard
[	Rb	85	428.3	20.4				ug/L	30	Standard
[	Y	89	231435.8	0.1				ug/L	251555	Standard
[>	Rh	103	303.3	9.4				ug/L	335	Standard
[	Mo	98	143.2	5.7	0.0353	0.003	8.3	ug/L	13	Standard
|	Ag	107	42.3	5.9	-0.0018	0.001	27.5	ug/L	36	Standard
|	Cd	111	16.7	24.0	-0.0128	0.001	10.3	mg/L	49	Standard
|	Cd	114	69.6	11.3	-0.0127	0.001	6.4	ug/L	170	Standard
[>	In	115	693042.9	1.3				ug/L	727802	Standard
|	Sn	118	364.3	3.8	-0.0142	0.001	5.9	ug/L	471	Standard
|	Sb	123	63.4	22.8	0.0097	0.002	19.4	ug/L	39	Standard
[	Ba	135	2187.8	6.7	0.5148	0.042	8.1	ug/L	25	Standard
[	Ce	140	30.0	5.8				ug/L	25	Standard
[>	Tb	159	1002844.6	0.5				ug/L	1071747	Standard
[	Ho	165	10.0	45.8				ug/L	13	Standard
|	Tl	203	26.3	28.5	0.0005	0.000	88.0	ug/L	5	Standard
|	Tl	205	73.7	48.6	0.0019	0.001	48.9	ug/L	10	Standard
|	Pb	206	360.0	1.4	-0.0039	0.001	17.3	ug/L	382	Standard
|	Pb	207	304.0	4.0	-0.0002	0.001	335.6	ug/L	306	Standard
|	Pb	208	1373.0	1.2	-0.0018	0.000	13.3	ug/L	1443	Standard
	U	238	876.4	2.4	0.0576	0.001	1.1	ug/L	5	Standard
[>	Bi	209	558579.8	2.1				ug/L	561075	Standard

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Na	23	7692.0	4.1	0.4430	0.011	2.5	mg/L	288	Standard
Mg	24	551645.2	4.1	0.8815	0.025	2.9	mg/L	218	Standard
K	39	156.7	13.3	0.0387	0.019	48.4	mg/L	125	Standard
Ca	43	15.0	33.3	11.8186	6.049	51.2	mg/L	3	Standard
Fe	54	201.1	6.5	-0.0701	0.003	4.7	mg/L	550	Standard
Fe	57	2993.6	9.4	0.0284	0.005	17.2	mg/L	1772	Standard
Sc-1	45	310734.8	2.0				mg/L	330668	Standard
Cl	35	5.0	20.0				ug/L	5	Standard
Kr	83	37.3	2.4				ug/L	38	Standard
Br	81	268.3	17.2				ug/L	344	Standard
P	31	234.2	14.2				ug/L	312	Standard
S	34	13626.1	2.4				ug/L	5594	Standard
Sr	88	63.3	35.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.227	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064304

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	Cd	111	
	Cd	114	
>	In	115	95.224
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	99.555
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064304

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Method 6020 - Summary Report

Sample ID: L1207064305

Sample Date/Time: Sunday, July 29, 2012 17:32:13

Number of Replicates: 3

Autosampler Position: 440

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9289.5	1.2	226.8859	54.588	24.1	ug/L	9465	Standard
|	Be	9	8.3	34.6	-0.0157	0.002	12.6	ug/L	10	Standard
|	Al	27	7948.8	3.0	0.0354	0.011	31.4	ug/L	7870	Standard
[>	Sc	45	302216.7	2.0				ug/L	330668	Standard
[	Ti	47	84.3	7.6	0.0348	0.006	16.3	ug/L	53	Standard
|	V	51	2736.8	2.1	0.0185	0.003	14.8	ug/L	2687	Standard
|	Cr	52	8264.9	0.8	0.0606	0.007	11.9	ug/L	8408	Standard
|	Cr	53	150.0	10.0	-0.0743	0.014	18.3	ug/L	288	Standard
|	Mn	55	13102.0	1.6	0.9879	0.025	2.5	ug/L	1080	Standard
|	Co	59	190.0	6.2	0.0116	0.002	15.7	ug/L	117	Standard
|	Ni	60	536.0	2.9	0.2192	0.004	2.0	ug/L	68	Standard
|	Cu	65	105.0	6.6	-0.0152	0.004	25.4	ug/L	141	Standard
|	Zn	66	1388.1	5.7	1.3210	0.078	5.9	ug/L	138	Standard
[>	Ge	72	264498.6	1.2				ug/L	283230	Standard
|	As	75	-169.8	12.9	-0.0100	0.023	233.3	ug/L	-198	Standard
|	Se	82	26.9	9.8	0.0487	0.028	58.3	ug/L	21	Standard
[	Se-1	77	110.7	16.5	-0.1561	0.265	169.7	ug/L	131	Standard
[>	Ga	71	525.0	15.7				mg/L	607	Standard
[	Rb	85	310.0	11.6				ug/L	30	Standard
[	Y	89	227842.6	2.4				ug/L	251555	Standard
[>	Rh	103	355.0	16.0				ug/L	335	Standard
[	Mo	98	80.9	8.4	0.0169	0.002	12.3	ug/L	13	Standard
|	Ag	107	38.7	5.4	-0.0024	0.000	13.8	ug/L	36	Standard
|	Cd	111	24.5	2.4	-0.0102	0.000	1.6	mg/L	49	Standard
|	Cd	114	70.0	18.9	-0.0126	0.001	11.1	ug/L	170	Standard
[>	In	115	690068.7	0.4				ug/L	727802	Standard
|	Sn	118	349.7	12.0	-0.0153	0.004	25.8	ug/L	471	Standard
|	Sb	123	59.2	22.0	0.0092	0.002	17.6	ug/L	39	Standard
[	Ba	135	3983.5	2.6	0.9504	0.029	3.0	ug/L	25	Standard
[	Ce	140	64.0	13.4				ug/L	25	Standard
[>	Tb	159	995127.0	0.9				ug/L	1071747	Standard
[	Ho	165	10.3	14.8				ug/L	13	Standard
|	Tl	203	20.7	26.6	0.0002	0.000	165.2	ug/L	5	Standard
|	Tl	205	61.7	11.5	0.0016	0.000	11.9	ug/L	10	Standard
|	Pb	206	340.0	4.5	-0.0053	0.001	18.9	ug/L	382	Standard
|	Pb	207	314.3	6.6	0.0010	0.002	177.3	ug/L	306	Standard
|	Pb	208	1369.7	5.6	-0.0017	0.001	75.1	ug/L	1443	Standard
	U	238	291.0	2.6	0.0191	0.000	2.3	ug/L	5	Standard
[>	Bi	209	555182.3	0.8				ug/L	561075	Standard

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Na	23	7323.4	5.1	0.4330	0.020	4.7	mg/L	288	Standard
Mg	24	558481.1	2.7	0.9182	0.039	4.2	mg/L	218	Standard
K	39	181.7	13.9	0.0674	0.026	39.0	mg/L	125	Standard
Ca	43	10.0	50.0	6.2870	5.633	89.6	mg/L	3	Standard
Fe	54	189.5	26.5	-0.0716	0.013	18.7	mg/L	550	Standard
Fe	57	3005.3	6.8	0.0305	0.005	16.6	mg/L	1772	Standard
Sc-1	45	302216.7	2.0				mg/L	330668	Standard
Cl	35	3.3	17.3				ug/L	5	Standard
Kr	83	38.4	4.4				ug/L	38	Standard
Br	81	272.5	4.2				ug/L	344	Standard
P	31	283.3	10.7				ug/L	312	Standard
S	34	13678.7	1.5				ug/L	5594	Standard
Sr	88	75.0	43.7				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.387	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064305

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	Cd	111	
	Cd	114	
>	In	115	94.815
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	98.950
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064305

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 17:35:25

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9603.0	3.8	-43.9802	48.254	109.7	ug/L	9465	Standard
|	Be	9	90739.3	2.0	49.9954	1.119	2.2	ug/L	10	Standard
|	Al	27	726054.7	0.8	46.5570	0.289	0.6	ug/L	7870	Standard
[>	Sc	45	360973.2	1.3				ug/L	330668	Standard
|	Ti	47	124288.8	1.6	99.3874	2.062	2.1	ug/L	53	Standard
|	V	51	504884.0	1.2	47.4175	0.763	1.6	ug/L	2687	Standard
|	Cr	52	406283.8	1.0	47.5411	0.825	1.7	ug/L	8408	Standard
|	Cr	53	70117.7	1.8	49.4471	0.994	2.0	ug/L	288	Standard
|	Mn	55	687853.5	0.6	48.6306	0.520	1.1	ug/L	1080	Standard
|	Co	59	426613.0	0.5	47.9212	0.472	1.0	ug/L	117	Standard
|	Ni	60	121106.4	1.1	48.5647	0.976	2.0	ug/L	68	Standard
|	Cu	65	113970.7	0.8	49.3543	0.736	1.5	ug/L	141	Standard
|	Zn	66	54014.5	1.6	49.4574	0.768	1.6	ug/L	138	Standard
[>	Ge	72	305587.1	1.0				ug/L	283230	Standard
|	As	75	52572.0	0.5	49.1548	0.539	1.1	ug/L	-198	Standard
|	Se	82	5363.7	0.4	50.0508	0.667	1.3	ug/L	21	Standard
[	Se-1	77	3886.8	1.1	49.8762	0.807	1.6	ug/L	131	Standard
[>	Ga	71	721.7	11.6				mg/L	607	Standard
|	Rb	85	808.4	6.3				ug/L	30	Standard
|	Y	89	276547.7	3.3				ug/L	251555	Standard
[>	Rh	103	371.7	13.1				ug/L	335	Standard
|	Mo	98	368954.9	2.3	96.3369	2.210	2.3	ug/L	13	Standard
|	Ag	107	337386.0	0.4	50.0623	0.188	0.4	ug/L	36	Standard
|	Cd	111	172103.8	0.9	49.7597	0.421	0.8	mg/L	49	Standard
|	Cd	114	519867.6	0.5	49.4302	0.209	0.4	ug/L	170	Standard
[>	In	115	785729.3	0.0				ug/L	727802	Standard
|	Sn	118	610231.5	0.3	49.1123	0.187	0.4	ug/L	471	Standard
|	Sb	123	439673.5	0.4	48.1731	0.168	0.3	ug/L	39	Standard
|	Ba	135	231977.1	1.0	49.1805	0.502	1.0	ug/L	25	Standard
|	Ce	140	891.0	1.2				ug/L	25	Standard
[>	Tb	159	1117738.2	0.9				ug/L	1071747	Standard
|	Ho	165	17.3	17.6				ug/L	13	Standard
|	Tl	203	852848.4	1.0	47.9824	0.482	1.0	ug/L	5	Standard
|	Tl	205	1975789.7	0.6	47.6600	0.089	0.2	ug/L	10	Standard
|	Pb	206	663981.0	0.5	48.3969	0.365	0.8	ug/L	382	Standard
|	Pb	207	564536.6	0.8	49.2820	0.423	0.9	ug/L	306	Standard
|	Pb	208	2608000.9	0.6	48.4417	0.280	0.6	ug/L	1443	Standard
	U	238	794961.0	0.5	48.9121	0.323	0.7	ug/L	5	Standard
[>	Bi	209	599081.1	0.8				ug/L	561075	Standard

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Na	23	108740.5	0.4	5.7975	0.073	1.3	mg/L	288	Standard
Mg	24	3422130.9	1.6	4.7069	0.047	1.0	mg/L	218	Standard
K	39	6067.9	4.5	4.8131	0.243	5.1	mg/L	125	Standard
Ca	43	6.7	86.6	1.2308	5.708	463.7	mg/L	3	Standard
Fe	54	22478.3	3.8	4.7958	0.248	5.2	mg/L	550	Standard
Fe	57	320162.6	4.1	5.7813	0.161	2.8	mg/L	1772	Standard
Sc-1	45	360973.2	1.3				mg/L	330668	Standard
Cl	35	3.0	115.5				ug/L	5	Standard
Kr	83	40.0	12.3				ug/L	38	Standard
Br	81	417.5	4.9				ug/L	344	Standard
P	31	412.5	9.5				ug/L	312	Standard
S	34	6531.4	3.8				ug/L	5594	Standard
Sr	88	58.3	34.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	93.114		
Sc	45			
Ti	47	99.387		
V	51	94.835		
Cr	52	95.082		
Cr	53			
Mn	55	97.261		
Co	59	95.842		
Ni	60	97.129		
Cu	65	98.709		
Zn	66	98.915		
Ge	72		107.894	
As	75	98.310		
Se	82	100.102		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	96.337		
Ag	107	100.125		

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	Cd	111	99.519	
	Cd	114		
>	In	115		107.959
	Sn	118	98.225	
	Sb	123	96.346	
	Ba	135	98.361	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	95.965	
|	Tl	205		
|	Pb	206	96.794	
|	Pb	207	98.564	
|	Pb	208	96.883	
|	U	238	97.824	
>	Bi	209		106.774
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 17:38:35

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9396.2	2.8	-36.0587	19.323	53.6	ug/L	9465	Standard
|	Be	9	23.3	68.9	-0.0081	0.009	110.2	ug/L	10	Standard
|	Al	27	8364.0	3.3	-0.0236	0.011	45.5	ug/L	7870	Standard
[>	Sc	45	351624.3	2.0				ug/L	330668	Standard
|	Ti	47	72.3	15.3	0.0154	0.010	63.9	ug/L	53	Standard
|	V	51	2560.1	2.1	-0.0359	0.006	17.2	ug/L	2687	Standard
|	Cr	52	8046.5	0.2	-0.1098	0.018	16.2	ug/L	8408	Standard
|	Cr	53	254.2	14.4	-0.0151	0.029	193.1	ug/L	288	Standard
|	Mn	55	1231.7	4.1	0.0038	0.004	95.9	ug/L	1080	Standard
|	Co	59	152.0	15.7	0.0041	0.003	66.0	ug/L	117	Standard
|	Ni	60	85.7	28.5	0.0055	0.010	184.6	ug/L	68	Standard
|	Cu	65	176.0	10.5	0.0092	0.008	89.7	ug/L	141	Standard
|	Zn	66	181.0	8.1	0.0162	0.014	87.2	ug/L	138	Standard
[>	Ge	72	302704.5	1.8				ug/L	283230	Standard
|	As	75	-196.2	9.6	-0.0118	0.017	146.7	ug/L	-198	Standard
|	Se	82	24.8	23.8	-0.0075	0.060	803.1	ug/L	21	Standard
[	Se-1	77	117.3	5.1	-0.2802	0.062	22.2	ug/L	131	Standard
[>	Ga	71	591.7	7.6				mg/L	607	Standard
|	Rb	85	18.3	78.7				ug/L	30	Standard
|	Y	89	267755.3	3.4				ug/L	251555	Standard
[>	Rh	103	345.0	7.7				ug/L	335	Standard
|	Mo	98	219.6	11.2	0.0503	0.007	13.3	ug/L	13	Standard
|	Ag	107	138.0	50.8	0.0115	0.010	88.8	ug/L	36	Standard
|	Cd	111	89.1	47.9	0.0075	0.012	161.3	mg/L	49	Standard
|	Cd	114	272.3	36.5	0.0057	0.009	162.3	ug/L	170	Standard
[>	In	115	784753.5	1.1				ug/L	727802	Standard
|	Sn	118	972.4	16.0	0.0309	0.012	38.4	ug/L	471	Standard
|	Sb	123	2380.7	8.6	0.2629	0.021	8.0	ug/L	39	Standard
|	Ba	135	79.7	50.6	0.0054	0.008	155.8	ug/L	25	Standard
|	Ce	140	20.7	14.8				ug/L	25	Standard
[>	Tb	159	1105974.0	1.1				ug/L	1071747	Standard
|	Ho	165	15.3	33.5				ug/L	13	Standard
|	Tl	203	151.0	81.5	0.0074	0.007	93.2	ug/L	5	Standard
|	Tl	205	350.7	69.6	0.0084	0.006	69.5	ug/L	10	Standard
|	Pb	206	519.0	17.6	0.0055	0.007	120.4	ug/L	382	Standard
|	Pb	207	395.3	13.3	0.0057	0.005	81.3	ug/L	306	Standard
|	Pb	208	1968.4	14.4	0.0072	0.005	73.9	ug/L	1443	Standard
	U	238	127.3	48.6	0.0076	0.004	50.2	ug/L	5	Standard
[>	Bi	209	602823.9	0.2				ug/L	561075	Standard

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Na	23	358.3	16.1	-0.0165	0.003	18.6	mg/L	288	Standard
Mg	24	863.4	34.8	0.0015	0.000	27.9	mg/L	218	Standard
K	39	150.0	36.1	0.0167	0.047	283.2	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	642.8	15.2	0.0235	0.024	104.2	mg/L	550	Standard
Fe	57	2218.5	7.6	0.0066	0.004	54.5	mg/L	1772	Standard
Sc-1	45	351624.3	2.0				mg/L	330668	Standard
Cl	35	5.7	44.4				ug/L	5	Standard
Kr	83	38.4	4.8				ug/L	38	Standard
Br	81	413.3	1.3				ug/L	344	Standard
P	31	321.7	3.1				ug/L	312	Standard
S	34	6207.1	2.8				ug/L	5594	Standard
Sr	88	40.0	33.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.876	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 17:41:05

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	Cd	111	
	Cd	114	
>	In	115	107.825
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	107.441
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 17:41:05

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Method 6020 - Summary Report

Sample ID: L1207064306

Sample Date/Time: Sunday, July 29, 2012 17:41:47

Number of Replicates: 3

Autosampler Position: 441

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15170.9	1.6	1378.7753	145.155	10.5	ug/L	9465	Standard
|	Be	9	16.7	34.6	-0.0106	0.004	36.7	ug/L	10	Standard
|	Al	27	34066.6	1.8	1.9644	0.068	3.5	ug/L	7870	Standard
[>	Sc	45	313862.6	4.1				ug/L	330668	Standard
|	Ti	47	481.0	3.1	0.4024	0.017	4.1	ug/L	53	Standard
|	V	51	2854.8	4.4	0.0319	0.002	5.9	ug/L	2687	Standard
|	Cr	52	8376.0	3.3	0.0778	0.017	21.9	ug/L	8408	Standard
|	Cr	53	292.5	11.6	0.0424	0.026	61.5	ug/L	288	Standard
|	Mn	55	159646.8	1.7	13.0036	0.277	2.1	ug/L	1080	Standard
|	Co	59	1698.1	2.0	0.2078	0.008	3.7	ug/L	117	Standard
|	Ni	60	3226.0	3.4	1.4686	0.030	2.0	ug/L	68	Standard
|	Cu	65	447.3	8.9	0.1563	0.012	7.5	ug/L	141	Standard
|	Zn	66	1640.8	4.4	1.5916	0.021	1.3	ug/L	138	Standard
[>	Ge	72	264118.3	3.8				ug/L	283230	Standard
|	As	75	-103.0	57.6	0.0632	0.059	93.6	ug/L	-198	Standard
|	Se	82	119.8	5.5	1.0594	0.118	11.1	ug/L	21	Standard
[	Se-1	77	170.0	7.1	0.7594	0.086	11.4	ug/L	131	Standard
[>	Ga	71	595.0	6.6				mg/L	607	Standard
|	Rb	85	3693.8	1.6				ug/L	30	Standard
|	Y	89	226422.0	3.1				ug/L	251555	Standard
[>	Rh	103	338.3	8.4				ug/L	335	Standard
|	Mo	98	658.7	3.2	0.1903	0.003	1.5	ug/L	13	Standard
|	Ag	107	57.7	10.5	0.0009	0.001	109.9	ug/L	36	Standard
|	Cd	111	29.8	25.2	-0.0084	0.003	30.3	mg/L	49	Standard
|	Cd	114	109.8	13.4	-0.0082	0.002	19.4	ug/L	170	Standard
[>	In	115	684258.9	1.9				ug/L	727802	Standard
|	Sn	118	615.7	3.9	0.0095	0.002	21.0	ug/L	471	Standard
|	Sb	123	552.3	12.8	0.0714	0.010	14.2	ug/L	39	Standard
|	Ba	135	49930.1	1.7	12.1469	0.050	0.4	ug/L	25	Standard
|	Ce	140	198.7	5.5				ug/L	25	Standard
[>	Tb	159	1025555.3	1.4				ug/L	1071747	Standard
|	Ho	165	18.7	16.4				ug/L	13	Standard
|	Tl	203	190.7	18.2	0.0109	0.002	20.6	ug/L	5	Standard
|	Tl	205	411.7	6.4	0.0111	0.001	7.2	ug/L	10	Standard
|	Pb	206	395.0	5.9	0.0001	0.002	2675.9	ug/L	382	Standard
|	Pb	207	349.7	3.1	0.0055	0.001	15.3	ug/L	306	Standard
|	Pb	208	1542.4	3.8	0.0028	0.001	33.3	ug/L	1443	Standard
	U	238	3730.8	0.9	0.2561	0.002	0.9	ug/L	5	Standard
[>	Bi	209	536587.2	1.5				ug/L	561075	Standard

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Na	23	60296.4	1.1	3.6890	0.196	5.3	mg/L	288	Standard
Mg	24	8344280.2	2.4	13.2099	0.482	3.7	mg/L	218	Standard
K	39	616.7	6.0	0.4660	0.012	2.5	mg/L	125	Standard
Ca	43	108.3	27.8	116.2385	30.008	25.8	mg/L	3	Standard
Fe	54	392.0	12.6	-0.0227	0.010	44.8	mg/L	550	Standard
Fe	57	10020.0	4.3	0.1746	0.004	2.2	mg/L	1772	Standard
Sc-1	45	313862.6	4.1				mg/L	330668	Standard
Cl	35	7.7	39.8				ug/L	5	Standard
Kr	83	42.0	0.8				ug/L	38	Standard
Br	81	429.2	7.4				ug/L	344	Standard
P	31	1465.9	1.7				ug/L	312	Standard
S	34	86730.0	0.8				ug/L	5594	Standard
Sr	88	268.3	8.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.252	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064306

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	Cd	111	
	Cd	114	
>	In	115	94.017
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	95.636
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064306

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Method 6020 - Summary Report

Sample ID: L1207064307

Sample Date/Time: Sunday, July 29, 2012 17:44:57

Number of Replicates: 3

Autosampler Position: 442

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

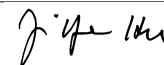
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13592.8	2.5	1204.4854	103.079	8.6	ug/L	9465	Standard
|	Be	9	20.0	25.0	-0.0078	0.003	42.2	ug/L	10	Standard
|	Al	27	54817.4	2.4	3.7396	0.116	3.1	ug/L	7870	Standard
[>	Sc	45	297349.6	1.0				ug/L	330668	Standard
|	Ti	47	536.0	3.2	0.4858	0.019	3.8	ug/L	53	Standard
|	V	51	9062.8	1.0	0.7758	0.017	2.2	ug/L	2687	Standard
|	Cr	52	8021.5	0.3	0.1019	0.016	15.8	ug/L	8408	Standard
|	Cr	53	242.5	10.8	0.0148	0.026	173.3	ug/L	288	Standard
|	Mn	55	152018.2	1.2	13.1946	0.282	2.1	ug/L	1080	Standard
|	Co	59	2027.8	2.5	0.2679	0.010	3.7	ug/L	117	Standard
|	Ni	60	4558.7	2.7	2.2267	0.072	3.3	ug/L	68	Standard
|	Cu	65	580.3	3.7	0.2427	0.016	6.6	ug/L	141	Standard
|	Zn	66	2863.6	0.6	3.0921	0.044	1.4	ug/L	138	Standard
[>	Ge	72	247794.2	1.6				ug/L	283230	Standard
|	As	75	51.2	49.0	0.2318	0.030	12.8	ug/L	-198	Standard
|	Se	82	64.6	8.8	0.5043	0.061	12.2	ug/L	21	Standard
[	Se-1	77	137.3	6.5	0.3982	0.151	38.0	ug/L	131	Standard
[>	Ga	71	681.7	9.5				mg/L	607	Standard
|	Rb	85	4083.9	4.3				ug/L	30	Standard
|	Y	89	215688.8	3.3				ug/L	251555	Standard
[>	Rh	103	335.0	11.7				ug/L	335	Standard
|	Mo	98	4052.1	3.4	1.2579	0.049	3.9	ug/L	13	Standard
|	Ag	107	39.3	12.5	-0.0020	0.001	41.7	ug/L	36	Standard
|	Cd	111	63.9	9.3	0.0038	0.002	49.9	mg/L	49	Standard
|	Cd	114	231.7	14.1	0.0061	0.004	59.6	ug/L	170	Standard
[>	In	115	657312.7	0.7				ug/L	727802	Standard
|	Sn	118	472.0	9.4	-0.0020	0.004	224.6	ug/L	471	Standard
|	Sb	123	756.6	3.7	0.1009	0.004	4.0	ug/L	39	Standard
|	Ba	135	36206.9	1.9	9.1669	0.205	2.2	ug/L	25	Standard
|	Ce	140	325.3	6.6				ug/L	25	Standard
[>	Tb	159	990490.4	1.7				ug/L	1071747	Standard
|	Ho	165	19.0	13.9				ug/L	13	Standard
|	Tl	203	196.3	17.8	0.0117	0.002	19.9	ug/L	5	Standard
|	Tl	205	437.0	7.6	0.0122	0.001	8.6	ug/L	10	Standard
|	Pb	206	381.0	2.3	0.0000	0.001	5448.0	ug/L	382	Standard
|	Pb	207	321.3	2.0	0.0038	0.001	29.2	ug/L	306	Standard
|	Pb	208	1500.4	2.9	0.0030	0.001	31.4	ug/L	1443	Standard
	U	238	6180.3	2.8	0.4392	0.015	3.3	ug/L	5	Standard
[>	Bi	209	518564.5	2.2				ug/L	561075	Standard

Sample ID: L1207064307

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Na	23	51000.7	2.0	3.2850	0.060	1.8	mg/L	288	Standard
Mg	24	6854792.0	2.0	11.4472	0.321	2.8	mg/L	218	Standard
K	39	561.7	1.4	0.4442	0.009	2.1	mg/L	125	Standard
Ca	43	85.0	52.3	96.2670	54.238	56.3	mg/L	3	Standard
Fe	54	326.6	10.8	-0.0345	0.009	24.7	mg/L	550	Standard
Fe	57	8439.0	2.3	0.1514	0.006	4.0	mg/L	1772	Standard
Sc-1	45	297349.6	1.0				mg/L	330668	Standard
Cl	35	5.0	34.6				ug/L	5	Standard
Kr	83	34.7	6.0				ug/L	38	Standard
Br	81	408.3	2.5				ug/L	344	Standard
P	31	1773.4	3.3				ug/L	312	Standard
S	34	73400.7	1.8				ug/L	5594	Standard
Sr	88	243.3	13.2				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.489	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	90.315
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	92.423
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064308

Sample Date/Time: Sunday, July 29, 2012 17:48:06

Number of Replicates: 3

Autosampler Position: 443

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13294.2	4.3	1263.8651	113.941	9.0	ug/L	9465	Standard
|	Be	9	31.7	81.0	0.0011	0.018	1663.4	ug/L	10	Standard
|	Al	27	24322.9	4.6	1.4194	0.111	7.8	ug/L	7870	Standard
[>	Sc	45	285082.7	2.0				ug/L	330668	Standard
[	Ti	47	460.0	8.0	0.4336	0.042	9.7	ug/L	53	Standard
|	V	51	9163.7	2.7	0.8411	0.041	4.9	ug/L	2687	Standard
|	Cr	52	7493.2	1.2	0.0791	0.012	15.1	ug/L	8408	Standard
|	Cr	53	272.5	19.2	0.0524	0.046	87.1	ug/L	288	Standard
|	Mn	55	163045.4	2.9	14.8712	0.593	4.0	ug/L	1080	Standard
|	Co	59	3255.4	4.0	0.4607	0.024	5.2	ug/L	117	Standard
|	Ni	60	3951.2	2.8	2.0233	0.044	2.2	ug/L	68	Standard
|	Cu	65	437.3	6.7	0.1777	0.015	8.3	ug/L	141	Standard
|	Zn	66	1680.4	2.1	1.8471	0.056	3.0	ug/L	138	Standard
[>	Ge	72	235991.8	1.0				ug/L	283230	Standard
|	As	75	77.8	8.2	0.2667	0.008	3.1	ug/L	-198	Standard
|	Se	82	42.8	1.6	0.2766	0.011	3.9	ug/L	21	Standard
[	Se-1	77	113.3	15.1	0.0967	0.290	300.3	ug/L	131	Standard
[>	Ga	71	580.0	3.1				mg/L	607	Standard
[	Rb	85	4293.9	8.0				ug/L	30	Standard
[	Y	89	203347.5	2.1				ug/L	251555	Standard
[>	Rh	103	263.3	11.1				ug/L	335	Standard
[	Mo	98	4451.0	3.1	1.4277	0.048	3.4	ug/L	13	Standard
|	Ag	107	45.7	25.7	-0.0006	0.002	362.3	ug/L	36	Standard
|	Cd	111	35.3	62.6	-0.0057	0.008	139.6	mg/L	49	Standard
|	Cd	114	116.5	16.4	-0.0065	0.002	34.6	ug/L	170	Standard
[>	In	115	636502.6	0.4				ug/L	727802	Standard
|	Sn	118	389.7	2.1	-0.0087	0.001	10.6	ug/L	471	Standard
|	Sb	123	623.6	9.1	0.0861	0.008	9.2	ug/L	39	Standard
[	Ba	135	39100.1	3.3	10.2243	0.362	3.5	ug/L	25	Standard
[	Ce	140	149.3	14.1				ug/L	25	Standard
[>	Tb	159	958552.0	1.3				ug/L	1071747	Standard
[	Ho	165	14.3	49.0				ug/L	13	Standard
|	Tl	203	182.3	11.8	0.0112	0.001	13.3	ug/L	5	Standard
|	Tl	205	375.0	18.6	0.0109	0.002	18.9	ug/L	10	Standard
|	Pb	206	367.0	6.8	-0.0000	0.002	9484.2	ug/L	382	Standard
|	Pb	207	294.3	2.3	0.0022	0.001	37.4	ug/L	306	Standard
|	Pb	208	1419.0	4.9	0.0024	0.002	68.4	ug/L	1443	Standard
	U	238	6945.3	3.0	0.5117	0.016	3.2	ug/L	5	Standard
[>	Bi	209	500080.1	0.4				ug/L	561075	Standard

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Na	23	57000.5	4.0	3.8385	0.234	6.1	mg/L	288	Standard
Mg	24	7296135.8	1.0	12.7093	0.259	2.0	mg/L	218	Standard
K	39	636.7	14.5	0.5439	0.083	15.2	mg/L	125	Standard
Ca	43	90.0	48.4	106.9812	55.481	51.9	mg/L	3	Standard
Fe	54	304.2	23.1	-0.0369	0.019	51.4	mg/L	550	Standard
Fe	57	8260.6	3.9	0.1552	0.005	3.3	mg/L	1772	Standard
Sc-1	45	285082.7	2.0				mg/L	330668	Standard
Cl	35	7.3	41.7				ug/L	5	Standard
Kr	83	40.9	8.7				ug/L	38	Standard
Br	81	344.2	16.4				ug/L	344	Standard
P	31	1640.1	6.9				ug/L	312	Standard
S	34	78582.5	2.8				ug/L	5594	Standard
Sr	88	251.7	21.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.322	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064308

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	Cd	111	
	Cd	114	
>	In	115	87.455
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	89.129
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064309

Sample Date/Time: Sunday, July 29, 2012 17:51:15

Number of Replicates: 3

Autosampler Position: 444

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

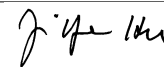
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13457.6	2.9	1312.2189	91.691	7.0	ug/L	9465	Standard
|	Be	9	10.0	86.6	-0.0142	0.006	43.6	ug/L	10	Standard
|	Al	27	37917.4	1.7	2.5473	0.072	2.8	ug/L	7870	Standard
[>	Sc	45	284107.8	1.8				ug/L	330668	Standard
[	Ti	47	539.3	7.9	0.5104	0.049	9.6	ug/L	53	Standard
|	V	51	3244.2	1.3	0.1128	0.004	3.4	ug/L	2687	Standard
|	Cr	52	7762.3	0.9	0.1088	0.009	8.2	ug/L	8408	Standard
|	Cr	53	243.3	14.2	0.0235	0.028	117.9	ug/L	288	Standard
|	Mn	55	152731.8	1.9	13.7836	0.317	2.3	ug/L	1080	Standard
|	Co	59	656.0	7.5	0.0813	0.006	6.9	ug/L	117	Standard
|	Ni	60	3847.5	2.7	1.9502	0.070	3.6	ug/L	68	Standard
|	Cu	65	519.0	5.8	0.2208	0.019	8.4	ug/L	141	Standard
|	Zn	66	2890.6	1.5	3.2524	0.082	2.5	ug/L	138	Standard
[>	Ge	72	238370.4	1.6				ug/L	283230	Standard
|	As	75	-41.5	110.1	0.1236	0.054	43.5	ug/L	-198	Standard
|	Se	82	174.6	8.8	1.8581	0.215	11.6	ug/L	21	Standard
[	Se-1	77	202.7	8.2	1.5998	0.240	15.0	ug/L	131	Standard
[>	Ga	71	518.3	7.3				mg/L	607	Standard
[	Rb	85	4018.9	2.8				ug/L	30	Standard
[	Y	89	209740.9	3.1				ug/L	251555	Standard
[>	Rh	103	318.3	13.7				ug/L	335	Standard
[	Mo	98	1443.0	2.3	0.4460	0.012	2.7	ug/L	13	Standard
|	Ag	107	38.3	18.9	-0.0021	0.001	64.9	ug/L	36	Standard
|	Cd	111	57.5	26.4	0.0018	0.005	308.3	mg/L	49	Standard
|	Cd	114	172.0	21.2	-0.0005	0.004	839.9	ug/L	170	Standard
[>	In	115	653442.0	1.3				ug/L	727802	Standard
|	Sn	118	472.3	5.1	-0.0017	0.003	162.5	ug/L	471	Standard
|	Sb	123	291.3	11.1	0.0402	0.004	11.2	ug/L	39	Standard
[	Ba	135	37308.2	2.0	9.5029	0.239	2.5	ug/L	25	Standard
[	Ce	140	484.0	2.5				ug/L	25	Standard
[>	Tb	159	973215.6	0.7				ug/L	1071747	Standard
[	Ho	165	20.7	15.6				ug/L	13	Standard
|	Tl	203	203.3	7.6	0.0124	0.001	7.7	ug/L	5	Standard
|	Tl	205	431.3	11.2	0.0123	0.001	11.2	ug/L	10	Standard
|	Pb	206	377.0	5.6	0.0003	0.002	597.2	ug/L	382	Standard
|	Pb	207	308.3	2.3	0.0031	0.001	32.4	ug/L	306	Standard
|	Pb	208	1467.4	3.9	0.0029	0.001	45.1	ug/L	1443	Standard
	U	238	6381.0	2.0	0.4619	0.010	2.2	ug/L	5	Standard
[>	Bi	209	508999.9	1.2				ug/L	561075	Standard

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Na	23	56030.1	0.9	3.7834	0.075	2.0	mg/L	288	Standard
Mg	24	7333245.1	3.6	12.8164	0.472	3.7	mg/L	218	Standard
K	39	588.3	8.7	0.4972	0.049	9.8	mg/L	125	Standard
Ca	43	96.7	20.9	114.9284	23.351	20.3	mg/L	3	Standard
Fe	54	294.2	8.4	-0.0393	0.008	19.6	mg/L	550	Standard
Fe	57	7893.7	7.4	0.1475	0.014	9.6	mg/L	1772	Standard
Sc-1	45	284107.8	1.8				mg/L	330668	Standard
Cl	35	9.0	19.2				ug/L	5	Standard
Kr	83	36.0	13.8				ug/L	38	Standard
Br	81	343.3	10.4				ug/L	344	Standard
P	31	2164.3	1.9				ug/L	312	Standard
S	34	78693.1	2.1				ug/L	5594	Standard
Sr	88	263.3	17.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		84.162	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064309

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	Cd	111	
	Cd	114	
>	In	115	89.783
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	90.719
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064310

Sample Date/Time: Sunday, July 29, 2012 17:54:23

Number of Replicates: 3

Autosampler Position: 445

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

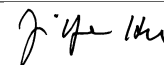
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13924.7	1.0	1372.8068	44.131	3.2	ug/L	9465	Standard
|	Be	9	26.7	10.8	-0.0028	0.002	67.4	ug/L	10	Standard
|	Al	27	31252.2	2.9	1.9597	0.086	4.4	ug/L	7870	Standard
[>	Sc	45	288300.4	0.5				ug/L	330668	Standard
[	Ti	47	425.7	3.0	0.3912	0.018	4.6	ug/L	53	Standard
|	V	51	3078.8	3.2	0.0907	0.009	9.4	ug/L	2687	Standard
|	Cr	52	7487.8	1.0	0.0605	0.006	9.6	ug/L	8408	Standard
|	Cr	53	232.5	5.7	0.0128	0.013	103.1	ug/L	288	Standard
|	Mn	55	167053.9	2.3	15.0050	0.520	3.5	ug/L	1080	Standard
|	Co	59	1453.4	2.8	0.1952	0.008	4.0	ug/L	117	Standard
|	Ni	60	2854.6	2.6	1.4315	0.053	3.7	ug/L	68	Standard
|	Cu	65	465.0	7.1	0.1892	0.017	8.8	ug/L	141	Standard
|	Zn	66	1716.8	3.7	1.8592	0.088	4.7	ug/L	138	Standard
[>	Ge	72	239650.9	1.2				ug/L	283230	Standard
|	As	75	-8.5	133.0	0.1626	0.013	8.3	ug/L	-198	Standard
|	Se	82	117.1	3.7	1.1573	0.057	4.9	ug/L	21	Standard
[	Se-1	77	169.0	4.1	1.0128	0.144	14.3	ug/L	131	Standard
[>	Ga	71	486.7	1.6				mg/L	607	Standard
[	Rb	85	3720.5	2.9				ug/L	30	Standard
[	Y	89	206469.3	2.0				ug/L	251555	Standard
[>	Rh	103	323.3	8.5				ug/L	335	Standard
[	Mo	98	924.0	1.0	0.2823	0.004	1.4	ug/L	13	Standard
|	Ag	107	41.3	18.2	-0.0016	0.001	82.2	ug/L	36	Standard
|	Cd	111	33.1	4.5	-0.0068	0.001	7.5	mg/L	49	Standard
|	Cd	114	80.9	12.2	-0.0110	0.001	9.8	ug/L	170	Standard
[>	In	115	654988.2	0.9				ug/L	727802	Standard
|	Sn	118	462.7	6.1	-0.0027	0.003	108.5	ug/L	471	Standard
|	Sb	123	244.6	10.1	0.0340	0.003	10.3	ug/L	39	Standard
[	Ba	135	38917.6	1.4	9.8898	0.222	2.2	ug/L	25	Standard
[	Ce	140	253.3	1.6				ug/L	25	Standard
[>	Tb	159	978523.1	0.5				ug/L	1071747	Standard
[	Ho	165	17.7	17.3				ug/L	13	Standard
|	Tl	203	131.7	2.2	0.0076	0.000	2.6	ug/L	5	Standard
|	Tl	205	295.7	5.5	0.0084	0.000	5.4	ug/L	10	Standard
|	Pb	206	359.0	1.0	-0.0015	0.000	22.3	ug/L	382	Standard
|	Pb	207	297.3	5.7	0.0017	0.002	103.6	ug/L	306	Standard
|	Pb	208	1372.0	4.5	0.0006	0.001	227.1	ug/L	1443	Standard
	U	238	6956.3	0.2	0.5003	0.002	0.4	ug/L	5	Standard
[>	Bi	209	512226.2	0.2				ug/L	561075	Standard

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Na	23	58646.7	2.3	3.9027	0.081	2.1	mg/L	288	Standard
Mg	24	7791231.7	1.4	13.4174	0.207	1.5	mg/L	218	Standard
K	39	603.3	15.1	0.5035	0.090	17.9	mg/L	125	Standard
Ca	43	95.0	19.0	111.2894	21.524	19.3	mg/L	3	Standard
Fe	54	278.5	20.1	-0.0449	0.015	33.4	mg/L	550	Standard
Fe	57	8185.5	0.9	0.1515	0.003	1.7	mg/L	1772	Standard
Sc-1	45	288300.4	0.5				mg/L	330668	Standard
Cl	35	6.7	48.2				ug/L	5	Standard
Kr	83	36.7	9.0				ug/L	38	Standard
Br	81	337.5	3.9				ug/L	344	Standard
P	31	1673.4	7.5				ug/L	312	Standard
S	34	81571.5	2.0				ug/L	5594	Standard
Sr	88	255.0	7.1				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		84.614	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064310

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	Cd	111	
	Cd	114	
>	In	115	89.995
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	91.294
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064310

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Method 6020 - Summary Report

Sample ID: L1207064306

Sample Date/Time: Sunday, July 29, 2012 17:57:32

Number of Replicates: 3

Autosampler Position: 446

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8949.3	7.8	201.0469	26.861	13.4	ug/L	9465	Standard
|	Be	9	18.3	15.7	-0.0088	0.002	26.2	ug/L	10	Standard
|	Al	27	7063.3	10.9	-0.0204	0.024	118.8	ug/L	7870	Standard
[>	Sc	45	294746.8	7.0				ug/L	330668	Standard
|	Ti	47	81.3	8.2	0.0367	0.008	22.5	ug/L	53	Standard
|	V	51	2589.2	7.1	0.0191	0.001	2.7	ug/L	2687	Standard
|	Cr	52	7832.4	8.4	0.0638	0.017	26.7	ug/L	8408	Standard
|	Cr	53	167.5	10.8	-0.0522	0.007	13.2	ug/L	288	Standard
|	Mn	55	11021.7	6.8	0.8709	0.025	2.9	ug/L	1080	Standard
|	Co	59	225.7	9.9	0.0179	0.001	7.0	ug/L	117	Standard
|	Ni	60	355.0	5.6	0.1452	0.005	3.8	ug/L	68	Standard
|	Cu	65	118.7	11.3	-0.0047	0.008	173.6	ug/L	141	Standard
|	Zn	66	1222.4	13.9	1.2175	0.097	8.0	ug/L	138	Standard
[>	Ge	72	249816.3	7.2				ug/L	283230	Standard
|	As	75	-156.3	7.3	-0.0065	0.024	368.2	ug/L	-198	Standard
|	Se	82	27.6	22.4	0.0716	0.050	70.0	ug/L	21	Standard
[	Se-1	77	113.0	17.4	-0.0242	0.200	827.3	ug/L	131	Standard
[>	Ga	71	528.3	4.4				mg/L	607	Standard
|	Rb	85	296.7	8.0				ug/L	30	Standard
|	Y	89	214535.2	7.4				ug/L	251555	Standard
[>	Rh	103	273.3	6.9				ug/L	335	Standard
|	Mo	98	56.3	27.9	0.0097	0.004	42.5	ug/L	13	Standard
|	Ag	107	44.0	34.1	-0.0015	0.002	163.5	ug/L	36	Standard
|	Cd	111	33.2	70.1	-0.0072	0.008	104.9	mg/L	49	Standard
|	Cd	114	120.4	89.7	-0.0070	0.012	165.6	ug/L	170	Standard
[>	In	115	678593.7	5.0				ug/L	727802	Standard
|	Sn	118	432.3	26.6	-0.0072	0.010	135.2	ug/L	471	Standard
|	Sb	123	144.3	89.2	0.0199	0.016	80.6	ug/L	39	Standard
|	Ba	135	3316.7	8.0	0.8022	0.033	4.1	ug/L	25	Standard
|	Ce	140	47.0	4.3				ug/L	25	Standard
[>	Tb	159	977763.5	2.4				ug/L	1071747	Standard
|	Ho	165	11.7	4.9				ug/L	13	Standard
|	Tl	203	98.0	111.4	0.0050	0.007	133.5	ug/L	5	Standard
|	Tl	205	206.7	112.5	0.0055	0.006	111.3	ug/L	10	Standard
|	Pb	206	389.3	21.9	-0.0007	0.006	901.5	ug/L	382	Standard
|	Pb	207	331.3	22.1	0.0033	0.007	195.6	ug/L	306	Standard
|	Pb	208	1532.0	18.4	0.0023	0.005	236.7	ug/L	1443	Standard
	U	238	265.3	18.3	0.0179	0.003	18.5	ug/L	5	Standard
[>	Bi	209	540994.2	5.2				ug/L	561075	Standard

Sample ID: L1207064306

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Na	23	6439.7	9.4	0.3867	0.020	5.3	mg/L	288	Standard
Mg	24	435025.7	6.6	0.7332	0.004	0.6	mg/L	218	Standard
K	39	175.0	4.9	0.0655	0.014	20.8	mg/L	125	Standard
Ca	43	13.3	43.3	11.0297	8.317	75.4	mg/L	3	Standard
Fe	54	176.2	16.7	-0.0737	0.010	13.3	mg/L	550	Standard
Fe	57	2758.6	11.4	0.0265	0.005	17.5	mg/L	1772	Standard
Sc-1	45	294746.8	7.0				mg/L	330668	Standard
Cl	35	4.0	43.3				ug/L	5	Standard
Kr	83	36.3	11.7				ug/L	38	Standard
Br	81	307.5	9.9				ug/L	344	Standard
P	31	175.8	4.6				ug/L	312	Standard
S	34	11823.0	6.8				ug/L	5594	Standard
Sr	88	45.0	33.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.203	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064306

Report Date/Time: Sunday, July 29, 2012 18:00:02

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	Cd	111	
	Cd	114	
>	In	115	93.239
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	96.421
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064306

Report Date/Time: Sunday, July 29, 2012 18:00:02

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Method 6020 - Summary Report

Sample ID: L1207064307

Sample Date/Time: Sunday, July 29, 2012 18:00:40

Number of Replicates: 3

Autosampler Position: 447

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9991.6	2.1	270.0269	33.905	12.6	ug/L	9465	Standard
|	Be	9	16.7	62.4	-0.0108	0.007	60.6	ug/L	10	Standard
|	Al	27	13953.1	1.0	0.4470	0.011	2.5	ug/L	7870	Standard
[>	Sc	45	318127.3	1.7				ug/L	330668	Standard
|	Ti	47	105.3	13.7	0.0519	0.014	26.4	ug/L	53	Standard
|	V	51	3396.8	1.1	0.0813	0.005	5.7	ug/L	2687	Standard
|	Cr	52	8284.6	1.0	0.0348	0.018	52.6	ug/L	8408	Standard
|	Cr	53	151.7	3.4	-0.0762	0.003	4.3	ug/L	288	Standard
|	Mn	55	15704.1	1.3	1.1686	0.023	2.0	ug/L	1080	Standard
|	Co	59	313.3	4.3	0.0265	0.002	6.6	ug/L	117	Standard
|	Ni	60	610.3	7.2	0.2466	0.019	7.8	ug/L	68	Standard
|	Cu	65	148.3	8.0	0.0046	0.006	119.5	ug/L	141	Standard
|	Zn	66	1446.1	2.3	1.3442	0.024	1.8	ug/L	138	Standard
[>	Ge	72	271280.1	0.7				ug/L	283230	Standard
|	As	75	-177.6	7.7	-0.0136	0.014	99.6	ug/L	-198	Standard
|	Se	82	24.6	13.1	0.0166	0.035	211.2	ug/L	21	Standard
[	Se-1	77	119.0	11.7	-0.0712	0.219	308.2	ug/L	131	Standard
[>	Ga	71	576.7	5.6				mg/L	607	Standard
|	Rb	85	411.7	12.2				ug/L	30	Standard
|	Y	89	233713.8	1.0				ug/L	251555	Standard
[>	Rh	103	296.7	17.3				ug/L	335	Standard
|	Mo	98	401.8	2.9	0.1081	0.005	4.3	ug/L	13	Standard
|	Ag	107	42.0	2.4	-0.0021	0.000	4.5	ug/L	36	Standard
|	Cd	111	23.4	17.7	-0.0108	0.001	13.0	mg/L	49	Standard
|	Cd	114	80.4	13.0	-0.0118	0.001	9.4	ug/L	170	Standard
[>	In	115	715302.8	1.1				ug/L	727802	Standard
|	Sn	118	369.3	5.4	-0.0147	0.002	11.7	ug/L	471	Standard
|	Sb	123	103.6	17.5	0.0143	0.002	15.2	ug/L	39	Standard
|	Ba	135	3576.4	1.0	0.8216	0.014	1.6	ug/L	25	Standard
|	Ce	140	73.0	7.6				ug/L	25	Standard
[>	Tb	159	1018055.2	1.0				ug/L	1071747	Standard
|	Ho	165	12.7	24.1				ug/L	13	Standard
|	Tl	203	33.3	14.8	0.0009	0.000	35.6	ug/L	5	Standard
|	Tl	205	69.0	19.6	0.0018	0.000	17.6	ug/L	10	Standard
|	Pb	206	364.7	4.0	-0.0040	0.001	16.3	ug/L	382	Standard
|	Pb	207	289.0	1.4	-0.0020	0.000	8.3	ug/L	306	Standard
|	Pb	208	1392.4	3.2	-0.0019	0.001	34.0	ug/L	1443	Standard
	U	238	589.0	4.0	0.0380	0.001	2.2	ug/L	5	Standard
[>	Bi	209	567270.4	1.9				ug/L	561075	Standard

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Na	23	8100.5	2.8	0.4568	0.007	1.6	mg/L	288	Standard
Mg	24	555636.7	0.7	0.8676	0.014	1.6	mg/L	218	Standard
K	39	170.0	13.5	0.0477	0.022	45.6	mg/L	125	Standard
Ca	43	13.3	21.7	9.5046	3.319	34.9	mg/L	3	Standard
Fe	54	225.8	21.5	-0.0652	0.011	17.6	mg/L	550	Standard
Fe	57	3078.6	4.9	0.0287	0.002	7.6	mg/L	1772	Standard
Sc-1	45	318127.3	1.7				mg/L	330668	Standard
Cl	35	4.3	58.1				ug/L	5	Standard
Kr	83	40.9	11.7				ug/L	38	Standard
Br	81	299.2	5.6				ug/L	344	Standard
P	31	260.0	9.5				ug/L	312	Standard
S	34	13501.0	2.6				ug/L	5594	Standard
Sr	88	61.7	12.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.781	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064307

Report Date/Time: Sunday, July 29, 2012 18:03:10

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	Cd	111	
	Cd	114	
>	In	115	98.283
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.104
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064307

Report Date/Time: Sunday, July 29, 2012 18:03:10

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Method 6020 - Summary Report

Sample ID: L1207064308

Sample Date/Time: Sunday, July 29, 2012 18:03:48

Number of Replicates: 3

Autosampler Position: 448

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9719.8	2.0	185.2685	32.876	17.7	ug/L	9465	Standard
|	Be	9	8.3	124.9	-0.0160	0.007	41.2	ug/L	10	Standard
|	Al	27	6756.5	1.8	-0.0903	0.013	14.5	ug/L	7870	Standard
[>	Sc	45	322840.9	2.1				ug/L	330668	Standard
|	Ti	47	89.0	9.2	0.0356	0.008	21.3	ug/L	53	Standard
|	V	51	3337.8	2.5	0.0682	0.008	11.9	ug/L	2687	Standard
|	Cr	52	8299.9	1.0	0.0152	0.015	100.4	ug/L	8408	Standard
|	Cr	53	171.7	17.4	-0.0630	0.022	35.2	ug/L	288	Standard
|	Mn	55	15044.1	2.5	1.0925	0.014	1.3	ug/L	1080	Standard
|	Co	59	388.3	4.7	0.0351	0.002	5.5	ug/L	117	Standard
|	Ni	60	570.0	3.6	0.2233	0.007	3.0	ug/L	68	Standard
|	Cu	65	119.3	10.8	-0.0107	0.006	52.0	ug/L	141	Standard
|	Zn	66	1517.1	1.1	1.3877	0.033	2.4	ug/L	138	Standard
[>	Ge	72	276626.0	1.3				ug/L	283230	Standard
|	As	75	-177.8	14.0	-0.0101	0.024	237.8	ug/L	-198	Standard
|	Se	82	24.6	11.2	0.0116	0.030	255.0	ug/L	21	Standard
[	Se-1	77	120.7	8.6	-0.0807	0.174	216.0	ug/L	131	Standard
[>	Ga	71	640.0	9.0				mg/L	607	Standard
|	Rb	85	396.7	15.2				ug/L	30	Standard
|	Y	89	238809.2	1.4				ug/L	251555	Standard
[>	Rh	103	355.0	17.1				ug/L	335	Standard
|	Mo	98	383.3	6.0	0.1023	0.008	7.6	ug/L	13	Standard
|	Ag	107	48.7	4.7	-0.0011	0.000	26.4	ug/L	36	Standard
|	Cd	111	20.4	15.2	-0.0118	0.001	7.8	mg/L	49	Standard
|	Cd	114	70.5	8.1	-0.0129	0.001	3.9	ug/L	170	Standard
[>	In	115	718872.4	1.2				ug/L	727802	Standard
|	Sn	118	354.7	9.6	-0.0162	0.003	16.8	ug/L	471	Standard
|	Sb	123	99.4	23.1	0.0137	0.003	19.3	ug/L	39	Standard
|	Ba	135	3359.0	2.2	0.7670	0.010	1.3	ug/L	25	Standard
|	Ce	140	33.7	12.4				ug/L	25	Standard
[>	Tb	159	1022103.0	0.9				ug/L	1071747	Standard
|	Ho	165	13.3	17.3				ug/L	13	Standard
|	Tl	203	28.7	47.5	0.0006	0.001	127.1	ug/L	5	Standard
|	Tl	205	67.7	10.5	0.0017	0.000	8.7	ug/L	10	Standard
|	Pb	206	367.7	8.6	-0.0044	0.003	62.6	ug/L	382	Standard
|	Pb	207	310.3	3.2	-0.0007	0.000	75.0	ug/L	306	Standard
|	Pb	208	1441.4	2.2	-0.0015	0.001	72.0	ug/L	1443	Standard
	U	238	586.0	4.1	0.0370	0.002	5.0	ug/L	5	Standard
[>	Bi	209	580322.4	1.8				ug/L	561075	Standard

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Na	23	7493.5	7.1	0.4129	0.023	5.6	mg/L	288	Standard
Mg	24	524725.2	1.9	0.8073	0.015	1.9	mg/L	218	Standard
K	39	185.0	11.8	0.0592	0.023	39.4	mg/L	125	Standard
Ca	43	16.7	62.4	12.7902	11.219	87.7	mg/L	3	Standard
Fe	54	192.6	30.4	-0.0739	0.015	20.8	mg/L	550	Standard
Fe	57	3097.0	6.1	0.0281	0.003	11.7	mg/L	1772	Standard
Sc-1	45	322840.9	2.1				mg/L	330668	Standard
Cl	35	9.0	29.4				ug/L	5	Standard
Kr	83	37.0	8.0				ug/L	38	Standard
Br	81	319.2	12.7				ug/L	344	Standard
P	31	251.7	7.5				ug/L	312	Standard
S	34	13358.4	2.6				ug/L	5594	Standard
Sr	88	70.0	21.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.668	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064308

Report Date/Time: Sunday, July 29, 2012 18:06:20

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	Cd	111	
	Cd	114	
>	In	115	98.773
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	103.430
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064308

Report Date/Time: Sunday, July 29, 2012 18:06:20

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Method 6020 - Summary Report

Sample ID: L1207064309

Sample Date/Time: Sunday, July 29, 2012 18:06:59

Number of Replicates: 3

Autosampler Position: 449

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

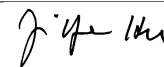
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9496.3	0.7	139.9651	40.945	29.3	ug/L	9465	Standard
|	Be	9	11.7	65.5	-0.0141	0.005	32.3	ug/L	10	Standard
|	Al	27	8182.2	3.5	0.0130	0.021	159.1	ug/L	7870	Standard
[>	Sc	45	322901.9	1.8				ug/L	330668	Standard
[	Ti	47	96.3	4.3	0.0404	0.005	11.2	ug/L	53	Standard
|	V	51	2859.5	0.8	0.0123	0.003	24.9	ug/L	2687	Standard
|	Cr	52	8320.6	0.2	-0.0041	0.010	236.2	ug/L	8408	Standard
|	Cr	53	136.7	12.5	-0.0923	0.014	14.9	ug/L	288	Standard
|	Mn	55	15272.7	0.9	1.0866	0.003	0.3	ug/L	1080	Standard
|	Co	59	169.7	14.4	0.0075	0.003	41.0	ug/L	117	Standard
|	Ni	60	602.3	4.6	0.2324	0.014	6.0	ug/L	68	Standard
|	Cu	65	119.0	11.8	-0.0120	0.006	50.7	ug/L	141	Standard
|	Zn	66	1420.7	1.5	1.2609	0.017	1.4	ug/L	138	Standard
[>	Ge	72	282283.8	1.1				ug/L	283230	Standard
|	As	75	-194.5	17.3	-0.0235	0.034	145.1	ug/L	-198	Standard
|	Se	82	36.2	17.4	0.1251	0.068	54.4	ug/L	21	Standard
[	Se-1	77	132.0	4.2	0.0463	0.100	216.8	ug/L	131	Standard
[>	Ga	71	595.0	2.2				mg/L	607	Standard
[	Rb	85	365.0	10.3				ug/L	30	Standard
[	Y	89	245408.9	2.5				ug/L	251555	Standard
[>	Rh	103	333.3	15.6				ug/L	335	Standard
[	Mo	98	154.1	8.3	0.0363	0.004	10.3	ug/L	13	Standard
|	Ag	107	44.7	13.7	-0.0018	0.001	55.8	ug/L	36	Standard
|	Cd	111	21.3	22.1	-0.0116	0.002	12.9	mg/L	49	Standard
|	Cd	114	65.4	9.0	-0.0135	0.001	4.7	ug/L	170	Standard
[>	In	115	727841.4	0.5				ug/L	727802	Standard
|	Sn	118	368.7	5.9	-0.0154	0.002	11.3	ug/L	471	Standard
|	Sb	123	60.0	17.5	0.0089	0.001	13.8	ug/L	39	Standard
[	Ba	135	3501.7	2.9	0.7901	0.022	2.8	ug/L	25	Standard
[	Ce	140	66.7	11.7				ug/L	25	Standard
[>	Tb	159	1034696.9	0.4				ug/L	1071747	Standard
[	Ho	165	12.3	44.7				ug/L	13	Standard
|	Tl	203	29.7	20.6	0.0007	0.000	53.2	ug/L	5	Standard
|	Tl	205	69.7	20.1	0.0018	0.000	18.9	ug/L	10	Standard
|	Pb	206	371.0	2.7	-0.0043	0.001	21.3	ug/L	382	Standard
|	Pb	207	324.3	5.6	0.0005	0.002	455.2	ug/L	306	Standard
|	Pb	208	1474.4	1.3	-0.0011	0.001	52.4	ug/L	1443	Standard
	U	238	585.3	3.2	0.0368	0.002	4.8	ug/L	5	Standard
[>	Bi	209	583695.2	1.5				ug/L	561075	Standard

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Na	23	8108.8	5.5	0.4500	0.023	5.2	mg/L	288	Standard
Mg	24	576435.6	1.6	0.8867	0.015	1.7	mg/L	218	Standard
K	39	145.0	15.8	0.0224	0.018	82.4	mg/L	125	Standard
Ca	43	8.3	34.6	3.8213	3.297	86.3	mg/L	3	Standard
Fe	54	236.3	15.9	-0.0633	0.010	15.9	mg/L	550	Standard
Fe	57	3167.0	8.4	0.0295	0.004	14.5	mg/L	1772	Standard
Sc-1	45	322901.9	1.8				mg/L	330668	Standard
Cl	35	4.3	93.3				ug/L	5	Standard
Kr	83	33.9	16.3				ug/L	38	Standard
Br	81	325.0	4.0				ug/L	344	Standard
P	31	314.2	9.5				ug/L	312	Standard
S	34	13960.6	2.7				ug/L	5594	Standard
Sr	88	63.3	35.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.666	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	100.005
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	104.032
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064310

Sample Date/Time: Sunday, July 29, 2012 18:10:08

Number of Replicates: 3

Autosampler Position: 450

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9804.8	2.4	194.6151	54.286	27.9	ug/L	9465	Standard
|	Be	9	18.3	56.8	-0.0100	0.006	61.3	ug/L	10	Standard
|	Al	27	7076.7	5.8	-0.0695	0.021	30.6	ug/L	7870	Standard
[>	Sc	45	324139.5	1.8				ug/L	330668	Standard
[	Ti	47	91.7	9.4	0.0363	0.006	17.6	ug/L	53	Standard
|	V	51	2915.5	5.2	0.0181	0.011	59.0	ug/L	2687	Standard
|	Cr	52	8467.7	3.3	0.0153	0.018	117.3	ug/L	8408	Standard
|	Cr	53	160.8	12.6	-0.0739	0.014	18.3	ug/L	288	Standard
|	Mn	55	13393.6	3.8	0.9429	0.021	2.2	ug/L	1080	Standard
|	Co	59	305.3	26.1	0.0239	0.009	37.9	ug/L	117	Standard
|	Ni	60	455.3	6.2	0.1685	0.009	5.2	ug/L	68	Standard
|	Cu	65	130.0	31.0	-0.0069	0.018	262.2	ug/L	141	Standard
|	Zn	66	1343.7	1.3	1.1856	0.043	3.6	ug/L	138	Standard
[>	Ge	72	282122.0	2.0				ug/L	283230	Standard
|	As	75	-171.4	6.0	-0.0002	0.009	4101.3	ug/L	-198	Standard
|	Se	82	33.9	10.1	0.1019	0.042	41.1	ug/L	21	Standard
[	Se-1	77	127.3	9.0	-0.0219	0.138	627.3	ug/L	131	Standard
[>	Ga	71	581.7	14.0				mg/L	607	Standard
[	Rb	85	326.7	3.9				ug/L	30	Standard
[	Y	89	247630.9	1.6				ug/L	251555	Standard
[>	Rh	103	350.0	18.2				ug/L	335	Standard
[	Mo	98	148.5	65.0	0.0341	0.026	77.6	ug/L	13	Standard
|	Ag	107	113.0	80.4	0.0089	0.014	160.3	ug/L	36	Standard
|	Cd	111	62.6	76.4	0.0010	0.015	1454.6	mg/L	49	Standard
|	Cd	114	204.3	69.7	0.0004	0.014	3169.6	ug/L	170	Standard
[>	In	115	735260.6	1.5				ug/L	727802	Standard
|	Sn	118	512.3	25.9	-0.0034	0.011	317.7	ug/L	471	Standard
|	Sb	123	183.8	61.1	0.0232	0.013	55.7	ug/L	39	Standard
[	Ba	135	2973.3	2.6	0.6623	0.014	2.1	ug/L	25	Standard
[	Ce	140	40.7	9.3				ug/L	25	Standard
[>	Tb	159	1039677.9	0.9				ug/L	1071747	Standard
[	Ho	165	12.0	8.3				ug/L	13	Standard
|	Tl	203	232.7	80.4	0.0121	0.011	87.2	ug/L	5	Standard
|	Tl	205	538.3	82.7	0.0131	0.011	82.4	ug/L	10	Standard
|	Pb	206	564.3	21.1	0.0096	0.008	85.4	ug/L	382	Standard
|	Pb	207	436.0	30.5	0.0099	0.011	113.6	ug/L	306	Standard
|	Pb	208	2103.1	26.2	0.0104	0.010	95.0	ug/L	1443	Standard
	U	238	625.0	22.8	0.0387	0.008	21.5	ug/L	5	Standard
[>	Bi	209	590285.2	1.7				ug/L	561075	Standard

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Na	23	6858.2	4.2	0.3736	0.020	5.3	mg/L	288	Standard
Mg	24	485519.2	2.4	0.7439	0.013	1.7	mg/L	218	Standard
K	39	198.3	17.2	0.0700	0.028	40.4	mg/L	125	Standard
Ca	43	8.3	124.9	3.8130	11.429	299.7	mg/L	3	Standard
Fe	54	176.1	21.2	-0.0783	0.009	11.5	mg/L	550	Standard
Fe	57	2998.6	4.1	0.0259	0.002	7.7	mg/L	1772	Standard
Sc-1	45	324139.5	1.8				mg/L	330668	Standard
Cl	35	4.0	66.1				ug/L	5	Standard
Kr	83	34.8	6.2				ug/L	38	Standard
Br	81	306.7	5.3				ug/L	344	Standard
P	31	249.2	3.5				ug/L	312	Standard
S	34	12853.0	2.4				ug/L	5594	Standard
Sr	88	43.3	35.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.609	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064310

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	Cd	111	
	Cd	114	
>	In	115	101.025
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	105.206
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064310

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 18:13:19

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

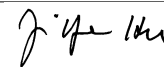
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10361.9	1.4	16.4095	56.612	345.0	ug/L	9465	Standard
|	Be	9	94185.2	1.8	49.7387	0.749	1.5	ug/L	10	Standard
|	Al	27	775545.8	2.2	47.6983	1.839	3.9	ug/L	7870	Standard
[>	Sc	45	376605.6	1.7				ug/L	330668	Standard
[	Ti	47	133108.8	0.7	100.2350	0.719	0.7	ug/L	53	Standard
|	V	51	533447.5	0.8	47.1787	0.289	0.6	ug/L	2687	Standard
|	Cr	52	428392.8	0.2	47.1994	0.450	1.0	ug/L	8408	Standard
|	Cr	53	74902.2	0.6	49.7477	0.728	1.5	ug/L	288	Standard
|	Mn	55	735347.5	0.1	48.9618	0.565	1.2	ug/L	1080	Standard
|	Co	59	449170.0	0.4	47.5176	0.638	1.3	ug/L	117	Standard
|	Ni	60	128493.4	2.5	48.5144	0.734	1.5	ug/L	68	Standard
|	Cu	65	120501.0	1.6	49.1364	0.274	0.6	ug/L	141	Standard
|	Zn	66	57430.6	0.2	49.5256	0.652	1.3	ug/L	138	Standard
[>	Ge	72	324487.4	1.1				ug/L	283230	Standard
|	As	75	55571.5	0.4	48.9337	0.506	1.0	ug/L	-198	Standard
|	Se	82	5672.6	0.1	49.8481	0.510	1.0	ug/L	21	Standard
[	Se-1	77	4207.3	2.7	50.8871	1.883	3.7	ug/L	131	Standard
[>	Ga	71	700.0	3.8				mg/L	607	Standard
[	Rb	85	778.4	5.6				ug/L	30	Standard
[	Y	89	287588.7	0.6				ug/L	251555	Standard
[>	Rh	103	465.0	16.1				ug/L	335	Standard
[	Mo	98	396596.5	0.9	98.2249	1.048	1.1	ug/L	13	Standard
|	Ag	107	359143.6	0.3	50.5478	0.180	0.4	ug/L	36	Standard
|	Cd	111	179878.6	1.0	49.3310	0.589	1.2	mg/L	49	Standard
|	Cd	114	548914.5	0.2	49.5055	0.076	0.2	ug/L	170	Standard
[>	In	115	828371.6	0.2				ug/L	727802	Standard
|	Sn	118	643214.5	0.7	49.1019	0.324	0.7	ug/L	471	Standard
|	Sb	123	462212.1	0.9	48.0362	0.521	1.1	ug/L	39	Standard
[	Ba	135	244577.2	0.5	49.1826	0.220	0.4	ug/L	25	Standard
[	Ce	140	914.7	2.5				ug/L	25	Standard
[>	Tb	159	1167453.8	0.1				ug/L	1071747	Standard
[	Ho	165	18.0	0.0				ug/L	13	Standard
|	Tl	203	888711.7	0.6	47.7663	0.290	0.6	ug/L	5	Standard
|	Tl	205	2186873.7	0.6	50.3963	0.442	0.9	ug/L	10	Standard
|	Pb	206	699884.0	1.1	48.7335	0.406	0.8	ug/L	382	Standard
|	Pb	207	592266.6	0.8	49.3926	0.348	0.7	ug/L	306	Standard
|	Pb	208	2744088.4	0.5	48.6922	0.111	0.2	ug/L	1443	Standard
	U	238	835868.9	0.7	49.1305	0.220	0.4	ug/L	5	Standard
[>	Bi	209	627087.2	0.3				ug/L	561075	Standard

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Na	23	109480.8	0.8	5.5938	0.089	1.6	mg/L	288	Standard
Mg	24	3504127.8	0.8	4.6203	0.062	1.4	mg/L	218	Standard
K	39	6187.9	1.3	4.7017	0.067	1.4	mg/L	125	Standard
Ca	43	13.3	43.3	7.2408	5.679	78.4	mg/L	3	Standard
Fe	54	24070.3	1.9	4.9242	0.120	2.4	mg/L	550	Standard
Fe	57	350410.9	3.7	6.0679	0.194	3.2	mg/L	1772	Standard
Sc-1	45	376605.6	1.7				mg/L	330668	Standard
Cl	35	4.0	66.1				ug/L	5	Standard
Kr	83	41.3	14.0				ug/L	38	Standard
Br	81	447.5	5.3				ug/L	344	Standard
P	31	460.8	7.2				ug/L	312	Standard
S	34	6719.0	7.0				ug/L	5594	Standard
Sr	88	31.7	50.8				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	95.397		
Sc	45			
Ti	47	100.235		
V	51	94.357		
Cr	52	94.399		
Cr	53			
Mn	55	97.924		
Co	59	95.035		
Ni	60	97.029		
Cu	65	98.273		
Zn	66	99.051		
Ge	72		114.567	
As	75	97.867		
Se	82	99.696		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	98.225		
Ag	107	101.096		

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	Cd	111	98.662	
	Cd	114		
>	In	115		113.818
	Sn	118	98.204	
	Sb	123	96.072	
	Ba	135	98.365	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	95.533	
|	Tl	205		
|	Pb	206	97.467	
|	Pb	207	98.785	
|	Pb	208	97.384	
|	U	238	98.261	
>	Bi	209		111.765
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 18:16:29

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9816.5	2.3	-55.1928	21.960	39.8	ug/L	9465	Standard
|	Be	9	15.0	88.2	-0.0131	0.007	55.6	ug/L	10	Standard
|	Al	27	8744.2	1.4	-0.0292	0.006	20.2	ug/L	7870	Standard
[>	Sc	45	371457.6	1.9				ug/L	330668	Standard
|	Ti	47	69.7	14.5	0.0106	0.008	73.1	ug/L	53	Standard
|	V	51	2688.6	1.9	-0.0356	0.004	12.0	ug/L	2687	Standard
|	Cr	52	8302.3	0.6	-0.1254	0.000	0.3	ug/L	8408	Standard
|	Cr	53	230.0	8.5	-0.0403	0.014	35.2	ug/L	288	Standard
|	Mn	55	1232.1	4.6	-0.0002	0.004	1844.6	ug/L	1080	Standard
|	Co	59	139.7	12.2	0.0020	0.002	95.9	ug/L	117	Standard
|	Ni	60	70.7	18.2	-0.0019	0.005	265.6	ug/L	68	Standard
|	Cu	65	175.3	9.3	0.0054	0.007	132.1	ug/L	141	Standard
|	Zn	66	179.0	7.3	0.0067	0.012	186.8	ug/L	138	Standard
[>	Ge	72	317361.0	0.6				ug/L	283230	Standard
|	As	75	-191.1	9.8	0.0013	0.017	1356.3	ug/L	-198	Standard
|	Se	82	28.4	22.0	0.0134	0.055	414.3	ug/L	21	Standard
[	Se-1	77	127.0	10.8	-0.2284	0.180	79.0	ug/L	131	Standard
[>	Ga	71	693.3	13.8				mg/L	607	Standard
|	Rb	85	18.3	68.6				ug/L	30	Standard
|	Y	89	275454.7	0.7				ug/L	251555	Standard
[>	Rh	103	410.0	15.3				ug/L	335	Standard
|	Mo	98	244.6	17.0	0.0548	0.011	19.9	ug/L	13	Standard
|	Ag	107	114.0	14.7	0.0074	0.003	33.7	ug/L	36	Standard
|	Cd	111	75.4	17.7	0.0029	0.004	134.4	mg/L	49	Standard
|	Cd	114	249.7	6.8	0.0028	0.002	61.0	ug/L	170	Standard
[>	In	115	810887.7	0.7				ug/L	727802	Standard
|	Sn	118	942.4	1.5	0.0261	0.001	2.3	ug/L	471	Standard
|	Sb	123	2583.6	6.4	0.2762	0.019	6.9	ug/L	39	Standard
|	Ba	135	56.7	15.0	0.0001	0.002	1261.8	ug/L	25	Standard
|	Ce	140	28.3	12.4				ug/L	25	Standard
[>	Tb	159	1133718.0	0.3				ug/L	1071747	Standard
|	Ho	165	16.0	57.3				ug/L	13	Standard
|	Tl	203	94.3	45.1	0.0041	0.002	57.0	ug/L	5	Standard
|	Tl	205	235.7	38.3	0.0055	0.002	38.4	ug/L	10	Standard
|	Pb	206	504.3	7.8	0.0033	0.003	87.0	ug/L	382	Standard
|	Pb	207	409.0	5.0	0.0058	0.002	31.9	ug/L	306	Standard
|	Pb	208	1941.4	5.5	0.0055	0.002	36.9	ug/L	1443	Standard
	U	238	112.7	23.5	0.0065	0.002	24.7	ug/L	5	Standard
[>	Bi	209	622134.9	0.3				ug/L	561075	Standard

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Na	23	366.7	0.8	-0.0171	0.000	1.5	mg/L	288	Standard
Mg	24	623.3	20.2	0.0011	0.000	14.4	mg/L	218	Standard
K	39	130.0	3.8	-0.0063	0.006	93.5	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	594.3	7.8	0.0052	0.011	209.6	mg/L	550	Standard
Fe	57	2505.2	3.2	0.0095	0.001	10.0	mg/L	1772	Standard
Sc-1	45	371457.6	1.9				mg/L	330668	Standard
Cl	35	3.7	103.3				ug/L	5	Standard
Kr	83	37.4	11.3				ug/L	38	Standard
Br	81	452.5	4.4				ug/L	344	Standard
P	31	376.7	5.4				ug/L	312	Standard
S	34	6301.3	1.4				ug/L	5594	Standard
Sr	88	50.0	10.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		112.051	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

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	Cd	111	
	Cd	114	
>	In	115	111.416
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	110.883
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1207064311

Sample Date/Time: Sunday, July 29, 2012 18:19:41

Number of Replicates: 3

Autosampler Position: 451

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15975.1	1.3	1227.8967	59.667	4.9	ug/L	9465	Standard
|	Be	9	26.7	28.6	-0.0059	0.004	70.3	ug/L	10	Standard
|	Al	27	47074.7	3.0	2.6009	0.091	3.5	ug/L	7870	Standard
[>	Sc	45	346712.4	1.2				ug/L	330668	Standard
[	Ti	47	647.7	3.1	0.5159	0.012	2.4	ug/L	53	Standard
|	V	51	4715.3	1.6	0.2006	0.012	5.9	ug/L	2687	Standard
|	Cr	52	8909.0	1.0	0.0684	0.015	21.9	ug/L	8408	Standard
|	Cr	53	313.3	14.8	0.0419	0.031	74.3	ug/L	288	Standard
|	Mn	55	170163.3	1.0	12.9211	0.214	1.7	ug/L	1080	Standard
|	Co	59	1240.7	1.0	0.1374	0.004	3.2	ug/L	117	Standard
|	Ni	60	6079.2	1.3	2.6027	0.019	0.7	ug/L	68	Standard
|	Cu	65	652.3	2.4	0.2375	0.010	4.4	ug/L	141	Standard
|	Zn	66	4426.6	1.9	4.2363	0.121	2.9	ug/L	138	Standard
[>	Ge	72	283203.9	2.0				ug/L	283230	Standard
|	As	75	-45.4	100.5	0.1265	0.047	37.2	ug/L	-198	Standard
|	Se	82	224.1	5.5	2.0237	0.099	4.9	ug/L	21	Standard
[	Se-1	77	257.7	6.9	1.8453	0.271	14.7	ug/L	131	Standard
[>	Ga	71	710.0	2.1				mg/L	607	Standard
[	Rb	85	4559.0	1.3				ug/L	30	Standard
[	Y	89	248047.3	0.6				ug/L	251555	Standard
[>	Rh	103	396.7	7.7				ug/L	335	Standard
[	Mo	98	2196.6	2.5	0.6033	0.007	1.2	ug/L	13	Standard
|	Ag	107	55.0	11.1	-0.0003	0.001	289.8	ug/L	36	Standard
|	Cd	111	74.1	5.4	0.0045	0.001	31.1	mg/L	49	Standard
|	Cd	114	254.2	13.1	0.0056	0.004	66.0	ug/L	170	Standard
[>	In	115	738226.6	1.7				ug/L	727802	Standard
|	Sn	118	614.3	10.0	0.0052	0.005	89.9	ug/L	471	Standard
|	Sb	123	653.1	10.9	0.0780	0.008	10.8	ug/L	39	Standard
[	Ba	135	40062.6	1.6	9.0323	0.204	2.3	ug/L	25	Standard
[	Ce	140	524.3	3.4				ug/L	25	Standard
[>	Tb	159	1071473.7	0.4				ug/L	1071747	Standard
[	Ho	165	19.0	36.8				ug/L	13	Standard
|	Tl	203	184.7	22.5	0.0100	0.003	25.8	ug/L	5	Standard
|	Tl	205	445.3	20.0	0.0115	0.002	20.6	ug/L	10	Standard
|	Pb	206	444.3	2.4	0.0024	0.001	52.7	ug/L	382	Standard
|	Pb	207	382.7	7.1	0.0069	0.003	41.5	ug/L	306	Standard
|	Pb	208	1761.7	3.3	0.0056	0.002	28.1	ug/L	1443	Standard
	U	238	7170.7	1.0	0.4687	0.010	2.2	ug/L	5	Standard
[>	Bi	209	563705.0	1.2				ug/L	561075	Standard

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Na	23	59896.6	2.8	3.3100	0.133	4.0	mg/L	288	Standard
Mg	24	8252419.3	1.1	11.8176	0.109	0.9	mg/L	218	Standard
K	39	570.0	4.0	0.3725	0.021	5.7	mg/L	125	Standard
Ca	43	106.7	9.8	103.6331	10.872	10.5	mg/L	3	Standard
Fe	54	349.5	8.0	-0.0415	0.007	16.5	mg/L	550	Standard
Fe	57	11721.2	1.1	0.1870	0.005	2.7	mg/L	1772	Standard
Sc-1	45	346712.4	1.2				mg/L	330668	Standard
Cl	35	8.3	38.6				ug/L	5	Standard
Kr	83	37.8	11.0				ug/L	38	Standard
Br	81	450.8	9.8				ug/L	344	Standard
P	31	2005.1	3.9				ug/L	312	Standard
S	34	85481.3	0.5				ug/L	5594	Standard
Sr	88	313.3	19.3				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.991	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064311

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	Cd	111	
	Cd	114	
>	In	115	101.432
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.469
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064312

Sample Date/Time: Sunday, July 29, 2012 18:22:51

Number of Replicates: 3

Autosampler Position: 452

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

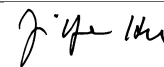
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16257.1	2.1	1345.0409	38.303	2.8	ug/L	9465	Standard
|	Be	9	21.7	58.1	-0.0085	0.007	87.7	ug/L	10	Standard
|	Al	27	44136.0	6.3	2.4652	0.192	7.8	ug/L	7870	Standard
[>	Sc	45	339542.6	0.8				ug/L	330668	Standard
|	Ti	47	501.3	5.3	0.3895	0.018	4.6	ug/L	53	Standard
|	V	51	4543.9	1.4	0.1832	0.012	6.3	ug/L	2687	Standard
|	Cr	52	8865.6	1.5	0.0629	0.025	39.3	ug/L	8408	Standard
|	Cr	53	282.5	10.1	0.0187	0.022	114.9	ug/L	288	Standard
|	Mn	55	176568.6	2.5	13.4131	0.483	3.6	ug/L	1080	Standard
|	Co	59	3314.4	1.6	0.3888	0.009	2.3	ug/L	117	Standard
|	Ni	60	4155.9	1.9	1.7703	0.044	2.5	ug/L	68	Standard
|	Cu	65	507.0	4.0	0.1694	0.008	5.0	ug/L	141	Standard
|	Zn	66	1954.8	0.6	1.7859	0.031	1.7	ug/L	138	Standard
[>	Ge	72	283177.4	1.3				ug/L	283230	Standard
|	As	75	-76.5	25.1	0.0960	0.018	19.1	ug/L	-198	Standard
|	Se	82	143.6	9.9	1.2104	0.152	12.6	ug/L	21	Standard
[	Se-1	77	184.7	6.0	0.7962	0.159	20.0	ug/L	131	Standard
[>	Ga	71	606.7	4.2				mg/L	607	Standard
|	Rb	85	4137.2	5.4				ug/L	30	Standard
|	Y	89	246318.1	1.7				ug/L	251555	Standard
[>	Rh	103	381.7	13.1				ug/L	335	Standard
|	Mo	98	1854.9	0.5	0.5047	0.006	1.2	ug/L	13	Standard
|	Ag	107	47.3	34.3	-0.0016	0.002	155.9	ug/L	36	Standard
|	Cd	111	41.2	7.8	-0.0057	0.001	13.8	mg/L	49	Standard
|	Cd	114	126.9	27.9	-0.0075	0.003	45.0	ug/L	170	Standard
[>	In	115	743692.2	1.6				ug/L	727802	Standard
|	Sn	118	524.0	5.7	-0.0028	0.003	113.6	ug/L	471	Standard
|	Sb	123	507.4	9.1	0.0606	0.006	10.4	ug/L	39	Standard
|	Ba	135	39884.8	1.3	8.9269	0.248	2.8	ug/L	25	Standard
|	Ce	140	181.3	7.2				ug/L	25	Standard
[>	Tb	159	1072827.4	1.0				ug/L	1071747	Standard
|	Ho	165	9.3	22.3				ug/L	13	Standard
|	Tl	203	157.7	23.5	0.0083	0.002	25.7	ug/L	5	Standard
|	Tl	205	374.7	1.9	0.0096	0.000	1.5	ug/L	10	Standard
|	Pb	206	401.0	5.4	-0.0011	0.002	153.6	ug/L	382	Standard
|	Pb	207	332.7	6.0	0.0021	0.002	80.8	ug/L	306	Standard
|	Pb	208	1590.0	6.3	0.0021	0.002	88.4	ug/L	1443	Standard
	U	238	7154.0	1.1	0.4655	0.008	1.8	ug/L	5	Standard
[>	Bi	209	566201.2	0.7				ug/L	561075	Standard

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Na	23	61666.9	1.5	3.4806	0.044	1.3	mg/L	288	Standard
Mg	24	8290716.4	2.9	12.1232	0.365	3.0	mg/L	218	Standard
K	39	601.7	11.8	0.4097	0.058	14.1	mg/L	125	Standard
Ca	43	90.0	20.0	88.5148	18.759	21.2	mg/L	3	Standard
Fe	54	389.5	9.8	-0.0306	0.009	30.5	mg/L	550	Standard
Fe	57	10538.7	5.5	0.1687	0.010	5.8	mg/L	1772	Standard
Sc-1	45	339542.6	0.8				mg/L	330668	Standard
Cl	35	7.0	28.6				ug/L	5	Standard
Kr	83	42.0	5.2				ug/L	38	Standard
Br	81	454.2	7.5				ug/L	344	Standard
P	31	1555.1	4.0				ug/L	312	Standard
S	34	85438.5	0.1				ug/L	5594	Standard
Sr	88	286.7	10.1				ug/L	55	Standard

QC Calculated Values

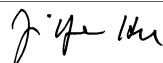
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.982	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

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	Cd	111	
	Cd	114	
>	In	115	102.183
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.914
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Method 6020 - Summary Report

Sample ID: L1207064311

Sample Date/Time: Sunday, July 29, 2012 18:26:01

Number of Replicates: 3

Autosampler Position: 453

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9332.9	4.2	172.8969	75.457	43.6	ug/L	9465	Standard
|	Be	9	11.7	89.2	-0.0139	0.007	46.9	ug/L	10	Standard
|	Al	27	10563.7	6.6	0.2140	0.076	35.4	ug/L	7870	Standard
[>	Sc	45	311982.6	2.9				ug/L	330668	Standard
|	Ti	47	93.7	7.5	0.0427	0.007	15.4	ug/L	53	Standard
|	V	51	2921.3	2.3	0.0356	0.006	17.6	ug/L	2687	Standard
|	Cr	52	8356.3	1.3	0.0621	0.010	15.5	ug/L	8408	Standard
|	Cr	53	177.5	9.9	-0.0533	0.014	26.0	ug/L	288	Standard
|	Mn	55	14435.9	2.8	1.0855	0.028	2.5	ug/L	1080	Standard
|	Co	59	229.7	19.4	0.0164	0.006	35.0	ug/L	117	Standard
|	Ni	60	668.3	4.5	0.2776	0.014	5.0	ug/L	68	Standard
|	Cu	65	143.7	3.3	0.0035	0.002	65.8	ug/L	141	Standard
|	Zn	66	1585.7	5.6	1.5147	0.091	6.0	ug/L	138	Standard
[>	Ge	72	267050.2	0.5				ug/L	283230	Standard
|	As	75	-140.0	22.6	0.0234	0.034	145.5	ug/L	-198	Standard
|	Se	82	43.6	12.2	0.2248	0.055	24.4	ug/L	21	Standard
[	Se-1	77	118.3	7.2	-0.0543	0.123	226.4	ug/L	131	Standard
[>	Ga	71	488.3	8.7				mg/L	607	Standard
|	Rb	85	383.3	27.4				ug/L	30	Standard
|	Y	89	233634.2	0.6				ug/L	251555	Standard
[>	Rh	103	331.7	8.6				ug/L	335	Standard
|	Mo	98	202.8	3.5	0.0517	0.001	1.9	ug/L	13	Standard
|	Ag	107	41.7	20.4	-0.0021	0.001	63.4	ug/L	36	Standard
|	Cd	111	43.5	49.8	-0.0044	0.007	152.3	mg/L	49	Standard
|	Cd	114	167.1	68.8	-0.0027	0.012	435.8	ug/L	170	Standard
[>	In	115	707001.6	1.8				ug/L	727802	Standard
|	Sn	118	568.0	40.7	0.0032	0.020	614.4	ug/L	471	Standard
|	Sb	123	233.2	75.6	0.0299	0.021	69.3	ug/L	39	Standard
|	Ba	135	3314.4	5.3	0.7693	0.030	3.9	ug/L	25	Standard
|	Ce	140	70.0	8.6				ug/L	25	Standard
[>	Tb	159	1017856.6	0.7				ug/L	1071747	Standard
|	Ho	165	14.0	53.9				ug/L	13	Standard
|	Tl	203	167.3	130.3	0.0089	0.013	144.8	ug/L	5	Standard
|	Tl	205	336.3	121.3	0.0086	0.010	119.9	ug/L	10	Standard
|	Pb	206	466.0	29.3	0.0041	0.010	247.4	ug/L	382	Standard
|	Pb	207	355.0	22.2	0.0044	0.007	157.1	ug/L	306	Standard
|	Pb	208	1701.7	27.2	0.0045	0.009	194.9	ug/L	1443	Standard
	U	238	604.3	15.8	0.0394	0.006	14.5	ug/L	5	Standard
[>	Bi	209	561299.2	1.6				ug/L	561075	Standard

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Na	23	7343.5	6.2	0.4193	0.016	3.8	mg/L	288	Standard
Mg	24	534151.9	3.6	0.8502	0.007	0.8	mg/L	218	Standard
K	39	165.0	6.1	0.0462	0.014	29.6	mg/L	125	Standard
Ca	43	6.7	43.3	2.1784	3.129	143.6	mg/L	3	Standard
Fe	54	188.0	13.9	-0.0735	0.007	10.1	mg/L	550	Standard
Fe	57	3270.4	7.2	0.0341	0.007	19.5	mg/L	1772	Standard
Sc-1	45	311982.6	2.9				mg/L	330668	Standard
Cl	35	7.7	32.8				ug/L	5	Standard
Kr	83	34.9	2.9				ug/L	38	Standard
Br	81	305.0	11.4				ug/L	344	Standard
P	31	257.5	10.1				ug/L	312	Standard
S	34	12957.2	3.1				ug/L	5594	Standard
Sr	88	58.3	9.9				ug/L	55	Standard

QC Calculated Values

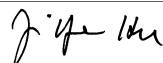
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.287	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064311

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	Cd	111	
	Cd	114	
>	In	115	97.142
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	100.040
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064311

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Method 6020 - Summary Report

Sample ID: L1207064312

Sample Date/Time: Sunday, July 29, 2012 18:29:10

Number of Replicates: 3

Autosampler Position: 454

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9479.6	2.1	191.7253	73.338	38.3	ug/L	9465	Standard
|	Be	9	13.3	21.7	-0.0128	0.002	12.9	ug/L	10	Standard
|	Al	27	7932.1	1.1	0.0113	0.009	80.5	ug/L	7870	Standard
[>	Sc	45	313972.9	2.6				ug/L	330668	Standard
|	Ti	47	76.3	4.0	0.0252	0.003	10.7	ug/L	53	Standard
|	V	51	2906.7	1.6	0.0270	0.006	24.1	ug/L	2687	Standard
|	Cr	52	8281.9	2.0	0.0264	0.028	106.0	ug/L	8408	Standard
|	Cr	53	183.3	9.9	-0.0520	0.014	27.0	ug/L	288	Standard
|	Mn	55	14335.4	1.4	1.0512	0.020	1.9	ug/L	1080	Standard
|	Co	59	368.3	5.9	0.0332	0.003	7.8	ug/L	117	Standard
|	Ni	60	555.7	4.3	0.2201	0.012	5.5	ug/L	68	Standard
|	Cu	65	103.7	8.2	-0.0176	0.004	23.5	ug/L	141	Standard
|	Zn	66	1604.4	4.3	1.4966	0.080	5.4	ug/L	138	Standard
[>	Ge	72	273231.3	0.5				ug/L	283230	Standard
|	As	75	-148.3	10.0	0.0181	0.016	87.7	ug/L	-198	Standard
|	Se	82	32.0	9.4	0.0929	0.031	32.9	ug/L	21	Standard
[	Se-1	77	115.0	4.5	-0.1441	0.086	59.9	ug/L	131	Standard
[>	Ga	71	518.3	16.3				mg/L	607	Standard
|	Rb	85	350.0	8.9				ug/L	30	Standard
|	Y	89	233749.7	1.8				ug/L	251555	Standard
[>	Rh	103	356.7	14.2				ug/L	335	Standard
|	Mo	98	145.7	6.0	0.0355	0.002	7.0	ug/L	13	Standard
|	Ag	107	40.3	21.4	-0.0022	0.001	63.9	ug/L	36	Standard
|	Cd	111	21.0	14.5	-0.0115	0.001	8.6	mg/L	49	Standard
|	Cd	114	62.2	5.2	-0.0136	0.000	2.8	ug/L	170	Standard
[>	In	115	700487.4	0.9				ug/L	727802	Standard
|	Sn	118	352.0	6.6	-0.0156	0.002	11.6	ug/L	471	Standard
|	Sb	123	103.0	3.1	0.0144	0.000	3.4	ug/L	39	Standard
|	Ba	135	3066.6	2.1	0.7179	0.013	1.8	ug/L	25	Standard
|	Ce	140	39.0	14.3				ug/L	25	Standard
[>	Tb	159	1010694.5	0.6				ug/L	1071747	Standard
|	Ho	165	10.0	10.0				ug/L	13	Standard
|	Tl	203	23.7	8.8	0.0004	0.000	31.1	ug/L	5	Standard
|	Tl	205	71.7	14.3	0.0018	0.000	12.5	ug/L	10	Standard
|	Pb	206	350.0	6.4	-0.0052	0.001	26.9	ug/L	382	Standard
|	Pb	207	314.3	9.1	0.0003	0.002	794.8	ug/L	306	Standard
|	Pb	208	1403.4	3.7	-0.0017	0.001	44.9	ug/L	1443	Standard
	U	238	560.3	8.8	0.0361	0.003	8.8	ug/L	5	Standard
[>	Bi	209	568063.0	1.7				ug/L	561075	Standard

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Na	23	7266.7	6.7	0.4121	0.030	7.3	mg/L	288	Standard
Mg	24	525574.6	1.4	0.8318	0.028	3.3	mg/L	218	Standard
K	39	151.7	14.9	0.0329	0.024	73.3	mg/L	125	Standard
Ca	43	15.0	88.2	11.7989	15.221	129.0	mg/L	3	Standard
Fe	54	241.3	8.4	-0.0605	0.004	5.9	mg/L	550	Standard
Fe	57	3072.0	6.9	0.0294	0.003	10.9	mg/L	1772	Standard
Sc-1	45	313972.9	2.6				mg/L	330668	Standard
Cl	35	4.0	86.6				ug/L	5	Standard
Kr	83	37.3	0.9				ug/L	38	Standard
Br	81	321.7	2.5				ug/L	344	Standard
P	31	245.8	8.2				ug/L	312	Standard
S	34	13031.4	2.2				ug/L	5594	Standard
Sr	88	78.3	18.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.470	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: L1207064312

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	Cd	111	
	Cd	114	
>	In	115	96.247
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	101.245
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: L1207064312

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, July 29, 2012 18:32:21

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9958.3	5.8	-6.1189	93.285	1524.5	ug/L	9465	Standard
|	Be	9	93643.9	4.7	50.8420	2.531	5.0	ug/L	10	Standard
|	Al	27	760398.1	2.8	48.0583	1.156	2.4	ug/L	7870	Standard
[>	Sc	45	366344.6	1.0				ug/L	330668	Standard
|	Ti	47	127042.5	1.4	100.8912	2.303	2.3	ug/L	53	Standard
|	V	51	515659.9	0.5	48.1048	1.127	2.3	ug/L	2687	Standard
|	Cr	52	416996.4	0.3	48.4832	1.135	2.3	ug/L	8408	Standard
|	Cr	53	71779.6	0.5	50.2812	1.279	2.5	ug/L	288	Standard
|	Mn	55	709941.3	1.2	49.8573	1.469	2.9	ug/L	1080	Standard
|	Co	59	434709.3	1.0	48.4952	0.867	1.8	ug/L	117	Standard
|	Ni	60	125194.4	0.6	49.8625	1.267	2.5	ug/L	68	Standard
|	Cu	65	115979.6	1.2	49.8764	0.782	1.6	ug/L	141	Standard
|	Zn	66	55355.6	1.5	50.3397	0.970	1.9	ug/L	138	Standard
[>	Ge	72	307763.4	2.3				ug/L	283230	Standard
|	As	75	53855.8	1.0	50.0101	1.217	2.4	ug/L	-198	Standard
|	Se	82	5523.4	0.4	51.1936	1.050	2.1	ug/L	21	Standard
[	Se-1	77	4016.2	1.5	51.2452	1.959	3.8	ug/L	131	Standard
[>	Ga	71	661.7	4.2				mg/L	607	Standard
|	Rb	85	786.7	9.6				ug/L	30	Standard
|	Y	89	274309.8	1.9				ug/L	251555	Standard
[>	Rh	103	391.7	9.9				ug/L	335	Standard
|	Mo	98	382165.9	1.2	98.7975	1.796	1.8	ug/L	13	Standard
|	Ag	107	346760.3	0.8	50.9563	1.627	3.2	ug/L	36	Standard
|	Cd	111	176052.3	0.3	50.4054	1.329	2.6	mg/L	49	Standard
|	Cd	114	532893.6	0.9	50.1662	0.774	1.5	ug/L	170	Standard
[>	In	115	793808.5	2.5				ug/L	727802	Standard
|	Sn	118	624855.2	0.8	49.7930	0.940	1.9	ug/L	471	Standard
|	Sb	123	448458.0	0.7	48.6597	1.479	3.0	ug/L	39	Standard
|	Ba	135	235172.1	0.7	49.3762	1.556	3.2	ug/L	25	Standard
|	Ce	140	896.4	3.8				ug/L	25	Standard
[>	Tb	159	1123968.4	1.0				ug/L	1071747	Standard
|	Ho	165	22.7	28.4				ug/L	13	Standard
|	Tl	203	865309.4	0.4	48.2524	0.436	0.9	ug/L	5	Standard
|	Tl	205	2046796.5	4.3	48.9221	1.553	3.2	ug/L	10	Standard
|	Pb	206	672726.8	0.8	48.6039	0.955	2.0	ug/L	382	Standard
|	Pb	207	572307.0	0.3	49.5186	0.506	1.0	ug/L	306	Standard
|	Pb	208	2649534.4	0.2	48.7793	0.627	1.3	ug/L	1443	Standard
	U	238	815400.0	0.1	49.7265	0.606	1.2	ug/L	5	Standard
[>	Bi	209	604461.6	1.2				ug/L	561075	Standard

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Na	23	109719.2	0.5	5.7634	0.043	0.7	mg/L	288	Standard
Mg	24	3464947.1	1.3	4.6961	0.059	1.2	mg/L	218	Standard
K	39	5931.2	0.9	4.6311	0.076	1.6	mg/L	125	Standard
Ca	43	11.7	49.5	5.8840	5.502	93.5	mg/L	3	Standard
Fe	54	22845.9	1.3	4.8016	0.110	2.3	mg/L	550	Standard
Fe	57	329760.5	1.7	5.8698	0.130	2.2	mg/L	1772	Standard
Sc-1	45	366344.6	1.0				mg/L	330668	Standard
Cl	35	4.3	13.3				ug/L	5	Standard
Kr	83	36.0	7.9				ug/L	38	Standard
Br	81	394.2	13.7				ug/L	344	Standard
P	31	380.8	9.1				ug/L	312	Standard
S	34	6514.7	5.0				ug/L	5594	Standard
Sr	88	63.3	4.6				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.117		
Sc	45			
Ti	47	100.891		
V	51	96.210		
Cr	52	96.966		
Cr	53			
Mn	55	99.715		
Co	59	96.990		
Ni	60	99.725		
Cu	65	99.753		
Zn	66	100.679		
Ge	72		108.662	
As	75	100.020		
Se	82	102.387		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98	98.797		
Ag	107	101.913		

Sample ID: QC Std 6

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	Cd	111	100.811	
	Cd	114		
>	In	115		109.069
	Sn	118	99.586	
	Sb	123	97.319	
	Ba	135	98.752	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	96.505	
|	Tl	205		
|	Pb	206	97.208	
|	Pb	207	99.037	
|	Pb	208	97.559	
|	U	238	99.453	
>	Bi	209		107.733
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 6

Report Date/Time: Sunday, July 29, 2012 18:34:53

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, July 29, 2012 18:35:32

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

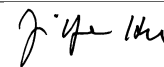
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9476.3	1.8	-36.9289	25.128	68.0	ug/L	9465	Standard
|	Be	9	21.7	87.4	-0.0092	0.011	115.0	ug/L	10	Standard
|	Al	27	8865.9	3.1	0.0045	0.010	222.0	ug/L	7870	Standard
[>	Sc	45	354837.4	1.4				ug/L	330668	Standard
|	Ti	47	81.3	43.6	0.0218	0.027	124.1	ug/L	53	Standard
|	V	51	2828.8	10.8	-0.0125	0.025	197.0	ug/L	2687	Standard
|	Cr	52	8353.0	2.4	-0.0802	0.007	8.3	ug/L	8408	Standard
|	Cr	53	239.2	17.4	-0.0273	0.030	109.9	ug/L	288	Standard
|	Mn	55	1428.4	29.9	0.0168	0.028	168.4	ug/L	1080	Standard
|	Co	59	287.7	79.0	0.0190	0.025	130.5	ug/L	117	Standard
|	Ni	60	100.7	33.6	0.0111	0.013	116.1	ug/L	68	Standard
|	Cu	65	189.3	16.4	0.0143	0.012	83.6	ug/L	141	Standard
|	Zn	66	184.3	9.1	0.0180	0.015	83.3	ug/L	138	Standard
[>	Ge	72	304861.4	1.8				ug/L	283230	Standard
|	As	75	-202.4	10.6	-0.0164	0.022	131.7	ug/L	-198	Standard
|	Se	82	29.1	12.1	0.0304	0.033	109.8	ug/L	21	Standard
[	Se-1	77	127.3	5.2	-0.1563	0.114	73.2	ug/L	131	Standard
[>	Ga	71	648.3	4.2				mg/L	607	Standard
|	Rb	85	20.0	66.1				ug/L	30	Standard
|	Y	89	273978.4	0.9				ug/L	251555	Standard
[>	Rh	103	346.7	11.7				ug/L	335	Standard
|	Mo	98	264.3	30.1	0.0617	0.020	32.8	ug/L	13	Standard
|	Ag	107	126.7	28.1	0.0098	0.005	52.6	ug/L	36	Standard
|	Cd	111	92.7	33.4	0.0085	0.009	102.4	mg/L	49	Standard
|	Cd	114	318.5	36.8	0.0100	0.011	108.7	ug/L	170	Standard
[>	In	115	786656.6	0.9				ug/L	727802	Standard
|	Sn	118	1050.0	14.3	0.0370	0.011	30.7	ug/L	471	Standard
|	Sb	123	2527.9	10.9	0.2783	0.028	10.0	ug/L	39	Standard
|	Ba	135	93.0	60.3	0.0081	0.012	143.7	ug/L	25	Standard
|	Ce	140	22.3	13.7				ug/L	25	Standard
[>	Tb	159	1098360.1	0.5				ug/L	1071747	Standard
|	Ho	165	10.7	19.5				ug/L	13	Standard
|	Tl	203	240.3	86.5	0.0122	0.011	92.9	ug/L	5	Standard
|	Tl	205	548.3	89.1	0.0130	0.011	88.0	ug/L	10	Standard
|	Pb	206	642.7	39.4	0.0141	0.018	125.1	ug/L	382	Standard
|	Pb	207	585.3	48.6	0.0218	0.024	110.0	ug/L	306	Standard
|	Pb	208	2651.4	49.2	0.0194	0.023	120.3	ug/L	1443	Standard
	U	238	318.0	103.0	0.0190	0.020	103.3	ug/L	5	Standard
[>	Bi	209	605710.1	1.1				ug/L	561075	Standard

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Na	23	481.7	33.5	-0.0099	0.009	89.5	mg/L	288	Standard
Mg	24	2266.9	92.0	0.0035	0.003	84.4	mg/L	218	Standard
K	39	123.3	6.2	-0.0070	0.008	109.1	mg/L	125	Standard
Ca	43	0.0		-5.3596	0.000	0.0	mg/L	3	Standard
Fe	54	636.3	7.5	0.0205	0.012	59.1	mg/L	550	Standard
Fe	57	2333.5	3.7	0.0084	0.002	25.0	mg/L	1772	Standard
Sc-1	45	354837.4	1.4				mg/L	330668	Standard
Cl	35	4.0	25.0				ug/L	5	Standard
Kr	83	38.0	10.6				ug/L	38	Standard
Br	81	380.8	8.5				ug/L	344	Standard
P	31	353.3	1.8				ug/L	312	Standard
S	34	6019.5	2.3				ug/L	5594	Standard
Sr	88	45.0	29.4				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.638	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			

Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 18:38:03

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	Cd	111	
	Cd	114	
>	In	115	108.087
	Sn	118	
	Sb	123	
	Ba	135	
	Ce	140	
>	Tb	159	
	Ho	165	
	Tl	203	
	Tl	205	
|	Pb	206	
|	Pb	207	
|	Pb	208	
|	U	238	
>	Bi	209	107.955
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 7

Report Date/Time: Sunday, July 29, 2012 18:38:03

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, July 29, 2012 18:38:44

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9412.9	5.1	-28.0256	114.833	409.7	ug/L	9465	Standard
|	Be	9	16.7	62.4	-0.0117	0.006	51.0	ug/L	10	Standard
|	Al	27	6044.5	8.2	-0.1766	0.043	24.4	ug/L	7870	Standard
[>	Sc	45	350937.5	2.4				ug/L	330668	Standard
|	Ti	47	54.3	14.3	0.0013	0.006	507.0	ug/L	53	Standard
|	V	51	6495.5	0.9	0.3460	0.007	2.0	ug/L	2687	Standard
|	Cr	52	14309.1	0.9	0.6652	0.003	0.5	ug/L	8408	Standard
|	Cr	53	1309.2	2.1	0.7487	0.011	1.4	ug/L	288	Standard
|	Mn	55	7743.6	0.5	0.4754	0.007	1.5	ug/L	1080	Standard
|	Co	59	3418.7	2.7	0.3788	0.009	2.4	ug/L	117	Standard
|	Ni	60	3989.9	1.4	1.6042	0.017	1.0	ug/L	68	Standard
|	Cu	65	1880.5	5.3	0.7644	0.048	6.3	ug/L	141	Standard
|	Zn	66	7498.2	1.6	6.8759	0.127	1.8	ug/L	138	Standard
[>	Ge	72	299463.3	1.0				ug/L	283230	Standard
|	As	75	219.1	5.7	0.3811	0.013	3.5	ug/L	-198	Standard
|	Se	82	72.4	3.5	0.4501	0.026	5.8	ug/L	21	Standard
[	Se-1	77	149.0	6.6	0.1672	0.128	76.4	ug/L	131	Standard
[>	Ga	71	623.3	0.9				mg/L	607	Standard
|	Rb	85	21.7	26.6				ug/L	30	Standard
|	Y	89	269608.0	1.6				ug/L	251555	Standard
[>	Rh	103	380.0	27.6				ug/L	335	Standard
|	Mo	98	67.9	15.3	0.0111	0.003	26.6	ug/L	13	Standard
|	Ag	107	2608.6	2.2	0.3904	0.008	2.2	ug/L	36	Standard
|	Cd	111	894.2	3.7	0.2486	0.012	4.9	mg/L	49	Standard
|	Cd	114	2663.1	1.8	0.2411	0.004	1.5	ug/L	170	Standard
[>	In	115	761698.8	0.9				ug/L	727802	Standard
|	Sn	118	627.0	9.1	0.0047	0.005	110.2	ug/L	471	Standard
|	Sb	123	3871.8	3.4	0.4395	0.018	4.1	ug/L	39	Standard
|	Ba	135	3267.0	0.7	0.7032	0.010	1.4	ug/L	25	Standard
|	Ce	140	22.3	15.7				ug/L	25	Standard
[>	Tb	159	1085528.2	0.4				ug/L	1071747	Standard
|	Ho	165	10.7	37.9				ug/L	13	Standard
|	Tl	203	1396.7	2.0	0.0792	0.001	1.4	ug/L	5	Standard
|	Tl	205	3186.3	1.6	0.0785	0.002	2.4	ug/L	10	Standard
|	Pb	206	3052.0	2.3	0.1953	0.005	2.6	ug/L	382	Standard
|	Pb	207	2507.9	2.0	0.1951	0.006	3.1	ug/L	306	Standard
|	Pb	208	11762.1	1.4	0.1941	0.005	2.5	ug/L	1443	Standard
	U	238	6151.6	1.8	0.3864	0.010	2.6	ug/L	5	Standard
[>	Bi	209	586561.7	0.8				ug/L	561075	Standard

Sample ID: QC Std 8

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Na	23	295.0	14.8	-0.0200	0.002	10.6	mg/L	288	Standard
Mg	24	200.0	15.2	0.0006	0.000	7.9	mg/L	218	Standard
K	39	125.0	18.3	-0.0047	0.018	388.4	mg/L	125	Standard
Ca	43	6.7	86.6	1.2843	5.754	448.1	mg/L	3	Standard
Fe	54	579.7	8.8	0.0094	0.014	148.5	mg/L	550	Standard
Fe	57	2196.8	3.5	0.0063	0.002	26.6	mg/L	1772	Standard
Sc-1	45	350937.5	2.4				mg/L	330668	Standard
Cl	35	1.3	43.3				ug/L	5	Standard
Kr	83	36.7	7.4				ug/L	38	Standard
Br	81	392.5	9.9				ug/L	344	Standard
P	31	389.2	8.1				ug/L	312	Standard
S	34	6098.7	3.1				ug/L	5594	Standard
Sr	88	43.3	24.0				ug/L	55	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	86.512		
Cr	52	83.156		
Cr	53			
Mn	55	95.076		
Co	59	94.709		
Ni	60	100.264		
Cu	65	95.550		
Zn	66	110.015		
Ge	72		105.732	
As	75	95.280		
Se	82	112.531		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107	97.597		

Sample ID: QC Std 8

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	Cd	111	103.579	
	Cd	114		
>	In	115		104.657
	Sn	118		
	Sb	123	109.867	
	Ba	135	93.759	
	Ce	140		
>	Tb	159		
|	Ho	165		
|	Tl	203	99.002	
|	Tl	205		
|	Pb	206		
|	Pb	207		
|	Pb	208	97.041	
|	U	238	96.597	
>	Bi	209		104.542
|	Na	23		
|	Mg	24		
|	K	39		
|	Ca	43		
|	Fe	54		
|	Fe	57		
>	Sc-1	45		
|	Cl	35		
|	Kr	83		
|	Br	81		
|	P	31		
|	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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Sample ID: QC Std 8

Report Date/Time: Sunday, July 29, 2012 18:41:14

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3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
August 8, 2012

ADC - ANTHONY D. CANTER	AGK - ANDREW G. KASICK	AJF - AMANDA J. FICKIESEN
ALB - ANNIE L. BROWN	ALV - AMY L. VALENTINE	AML - TONY M. LONG
AZH - AFTER HOURS	BLG - BRENDA L. GREENWALT	BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN	CAF - CHERYL A. FLOWERS	CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER	CLW - CHARISSA L. WINTERS
CPD - CHAD P. DAVIS	CS - CODY M. STRAHLER	CSH - CHRIS S. HILL
DDE - DEBRA D. ELLIOTT	DEV - DAVID E. VANDENBERG	DGB - DOUGLAS G. BUTCHER
DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER	DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH	DSM - DAVID S. MOSSOR	ECL - ERIC C. LAWSON
EDL - ERIN D. LONG	ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	HJR - HOLLY J. REED	JAL - JOHN A. LENT
JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON	JKS - JANE K. SCHAAD
JLL - JOHN L. LENT	JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES
JYH - JI Y. HU	KEB - KATIE E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MIKE D. COCHRAN	MES - MARY E. SCHILLING
MMB - MAREN M. BEERY	MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS	PWD - PAUL W. DENT	QX - QIN XU
RAH - ROY A. HALSTEAD	REK - BOB E. KYER	RLB - BOB BUCHANAN
RLK - ROBIN L. KLINGER	RS - ROSEMARY SCOTT	RWC - RODNEY W. CAMPBELL
SJP - SUZANNE J. PAUGH	SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WJB - WILL J. BEASLEY	WTD - WADE T. DELONG
XXX - UNAVAILABLE OR SUBCONTRACT		

List of Valid Qualifiers

August 08, 2012

Qualkey: STD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated value; the analyte concentration was less than the RL/LOQ.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below



COC No. A 30959

158 Starlite Drive
Marietta, OH 45750



CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835



Company Name: US ARMY Aberdeen Test Center		Contact Phone #: 410-278-7421										
Project Contact: GENE FABIAN		Location: LONGHORN AAP										
Turn Around Requirements: STANDARD												
Project ID: 3083.001 / B66490												
Sampler (print): CARL JENSEN JR		Signature: <i>Carl Jensen Jr.</i>										
Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	VOCs	TOTAL Metals	TOTAL # (LAB USE)	Program	ADDITIONAL REQUIREMENTS
MW-3-1	X	X	15 JULY 2012	1015	GW	4		3	1		<input type="checkbox"/> CWA <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> DOD <input type="checkbox"/> AFCEE <input type="checkbox"/> Other	
MW-3-2	X	X	15 JULY 2012	1038	GW	4		3	1			
MW-3-2 MS	X	X	15 JULY 2012	1220	GW	4		3	1			
MW-3-2 MSD	X	X	15 JULY 2012	1210	GW	4		1	1			
TRIP BLANK 15 JULY 2012	X	X	15 JULY 2012	-	-	2		2				
FIELD BLANK 15 JULY 2012	X	X	15 JULY 2012	1050	DI WATER	4		3	1			
MW-3-1-D	X	X	15 JULY 2012	1030	GW	4		3	1			
MW-58	X	X	15 JULY 2012	1410	GW	4		3	1			
MW-03	X	X	15 JULY 2012	1510	GW	4		3	1			
35B WW06	X	X	15 JULY 2012	0925	GW	4		3	1			
FIELD BLANK 16 JULY 2012	X	X	16 JULY 2012	0920	GW	4		3	1			
MW 3-3	X	X	15 JULY 2012	1325	GW	4		3	1			
TRIP BLANK 16 JULY 2012	X	X	16 JULY 2012	-	-	2		2				
FIELD BLANK 16 JULY 2012												
35B WW05	X	X	16 JULY 2012	1045	GW	4		3	1			
MW 1-1	X	X	16 JULY 2012	1000	GW	4		3	1			
MW 1-2	X	X	16 JULY 2012	1300	GW	4		3	1			
MW 1-3	X	X	16 JULY 2012	1400	GW	4		3	1			
35B WW08	X	X	16 JULY 2012	1500	GW	4		3	1			
35B WW09	X	X	16 JULY 2012	1550	GW	4		3	1			

Relinquished by: (Signature) <i>Carl Jensen Jr.</i>	Date 7-19-2012	Time 11:00	Relinquished by: (Signature) <i>Rosemary Scott</i>	Date 7-19-2012	Time 11:00
Received by: (Signature) <i>Carl Jensen Jr.</i>			Received by: (Signature) <i>Rosemary Scott</i>		
Remarks:			221000026997		

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

COC No. A 30958

158 Starlite Drive
Marietta, OH 45750



Phone: 740-373-4071
Fax: 740-373-4835

CHAIN-OF-CUSTODY RECORD

Company Name: US ARMY Aberdeen Test Center
 Project Contact: Gene Fabian
 Turn Around Requirements: STANDARD
 Project ID: 3083-001 / B 66490
 Sampler (print): CARL JOHANSSON JRC
 Signature: *Carl Johansson*

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	VOCs	TOTAL METALS	TOTAL # (LAB USE)	Program			ADDITIONAL REQUIREMENTS
											<input type="checkbox"/> CWA	<input type="checkbox"/> RCRA	<input checked="" type="checkbox"/> DOD		☐ AFCEE	☐ Other
MW 2-1	X	X	17 July 2012	0855	GW	4		3	1					
Trip Blank 17 Jul 2012	X	X			-	2		2						
Field Blank 17 Jul 2012	X	X		0835	Distilled Water	4		3	1					
MW 2-2	X	X		0945	GW	4		3	1					
MW-2-2D	X	X		1000	GW	4		3	1					
MW-2-3	X	X		1055	GW	4		3	1					
35B WWD1	X	X		1240	GW	4		3	1					
35B WWD4	X	X		1345	GW	4		3	1					
35B SW-1	X	X		1420	SW	4		3	1					
35B SW-2	X	X		1445	SW	4		3	1					
35B WWD-11	X	X		1525	GW	4		3	1					
Trip Blank 18 Jul 2012	X	X	18 Jul 2012		-	2		2						
Field Blank 18 Jul 2012	X	X		0830	Distilled Water	4		3	1					
MW-4-1	X	X		0845	GW	4		3	1					
MW-4-2	X	X		1045	GW	4		3	1					
MW 4-3	X	X		1300	GW	4		3	1					
35B WWD4	X	X		1425	GW	4		3	1					
35B WWD7	X	X		1540	GW	4		3	1					

Relinquished by: *Carl Johansson J* Date: 7-19-2012 Time: _____
 Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____

Remarks: _____

Microbac OVD
 Received: 07/20/2012 11:00
 By: ROSEMARY SCOTT

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

NELAP Addendum - March 4, 2011

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
 Total Halide by Bomb Combustion (TX)
 Particle Sizing - 200 Mesh (PS200)
 Sulfate (SO₄) - 9038
 Specific Gravity/Density (SPGRAV)
 Total Residual Chlorine (CL-TRL)
 Total Volatile Solids (all forms) (TVS)
 Total Coliform Bacteria (all methods)
 Fecal Coliform Bacteria (all methods)
 Sulfite (SO₃)
 Thiodiglycol (TDG-LCMS)

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
 Nitroguanidine
 Acetic acid
 Butyric acid
 Lactic acid
 Propionic acid
 Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
 1-Methylnaphthalene
 1,4-Dioxane
 Atrazine
 Benzaldehyde
 Biphenyl
 Caprolactam
 Hexamethylphosphoramide (HMPA)
 Pentachlorobenzene
 Pentachloroethane

NELAP Accreditation by Laboratory SOP**NONPOTABLE WATER**OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSK01/GC-FID

Isobutane
n-Butane
Propane
Propylene
Propyne

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

SOLID AND HAZARDOUS CHEMICALSOVL HPLCOS-HPLC-UV

Nitroguanidine

OVL KNITRO-C-S/UV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP**SOLID AND HAZARDOUS CHEMICALS**OVL MSV01/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

Laboratory Report Number: L12120503

Gene Fabian
Aberdeen Test Center
US Army Aberdeen Center
Aberdeen Proving Ground, MD 21005

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Stephanie Mossburg – Team Chemist/Data Specialist
(740) 373-4071
Stephanie.Mossburg@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on February 15 2013



David Vandenberg – Managing Director

State of Origin: TX
Accrediting Authority: Texas Commission on Environmental Quality ID:T104704252-07-TX
QAPP: Microbac OVD



Lab Report #: L12120503

Lab Project #: 3083.001

Project Name: Longhorn AAP

Lab Contact: Stephanie Mossburg

Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

There were no discrepancies.

Discrepancy	Resolution
-------------	------------

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #
0018110	H	1.0		1002239571960004575000873013166081
0018111	H	1.0		1015923871960004575000795548476551
0017859	H	1.0		1015923871960004575000795548476562

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	Yes



Lab Report #: L12120503

Lab Project #: 3083.001

Project Name: Longhorn AAP

Lab Contact: Stephanie Mossburg

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW1-1	L12120503-01	12/10/2012 09:35	12/14/2012 11:04
MW1-1-D	L12120503-02	12/10/2012 09:50	12/14/2012 11:04
MW1-1-2	L12120503-03	12/10/2012 11:20	12/14/2012 11:04
MW2-1	L12120503-04	12/10/2012 13:20	12/14/2012 11:04
FIELDBLANK10DEC2012	L12120503-05	12/10/2012 13:10	12/14/2012 11:04
MW2-2	L12120503-06	12/10/2012 14:40	12/14/2012 11:04
TRIPBLANK10DEC2012	L12120503-07	12/10/2012 00:01	12/14/2012 11:04
MW2-3	L12120503-08	12/10/2012 15:45	12/14/2012 11:04
MW3-1	L12120503-09	12/11/2012 09:10	12/14/2012 11:04
MW3-1MS	L12120503-10	12/11/2012 09:30	12/14/2012 11:04
MW3-1MSD	L12120503-11	12/11/2012 09:45	12/14/2012 11:04
MW3-2	L12120503-12	12/11/2012 10:45	12/14/2012 11:04
FIELDBLANK11DEC2012	L12120503-13	12/11/2012 10:10	12/14/2012 11:04
TRIPBLANK11DEC2012	L12120503-14	12/11/2012 00:01	12/14/2012 11:04
MW3-3	L12120503-15	12/11/2012 11:45	12/14/2012 11:04
MW-58	L12120503-16	12/11/2012 13:20	12/14/2012 11:04
35BWW03	L12120503-17	12/11/2012 14:30	12/14/2012 11:04
35BWW08	L12120503-18	12/11/2012 15:45	12/14/2012 11:04
35BWW06	L12120503-19	12/12/2012 09:20	12/14/2012 11:04
FIELDBLANK12DEC2012	L12120503-20	12/12/2012 09:10	12/14/2012 11:04
TRIPBLANK12DEC2012	L12120503-21	12/12/2012 00:01	12/14/2012 11:04
35BWW05	L12120503-22	12/12/2012 11:45	12/14/2012 11:04
35BWW14	L12120503-23	12/12/2012 13:40	12/14/2012 11:04
MW4-1	L12120503-24	12/12/2012 14:55	12/14/2012 11:04
MW4-1D	L12120503-25	12/12/2012 15:10	12/14/2012 11:04
MW4-1MS	L12120503-26	12/12/2012 15:20	12/14/2012 11:04
MW4-1MSD	L12120503-27	12/12/2012 15:30	12/14/2012 11:04
MW4-2	L12120503-28	12/12/2012 16:20	12/14/2012 11:04
MW4-3	L12120503-29	12/12/2012 17:25	12/14/2012 11:04



Login Number: L12120503
Department: Volatiles
Analyst: Anthony Canter

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: The percent difference was out of range for the following analytes: vinyl chloride. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: Recoveries out of range were observed for the following analytes: vinyl acetate, bromomethane, 2-chloroethylvinyl ether. Please see the applicable QC report for a detailed presentation of the failures.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: Recoveries out of range were observed for the following analytes: 2-Chloroethyl vinyl ether, Tetrachloroethene. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: Reanalysis of sample 01 performed 12/20/12 on HPMS11 was for naphalene only due to caontamination in the analysis performed 12/20/12 on HPMS10.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak. In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak. This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the

system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous. Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Managing Director or the QAO will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 57777

Approved By: Michael Albertson





Login Number: L12120503
Department: Metals
Analyst: Kim Rhodes

METHOD

Preparation: SW-846 3005

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG416958 - All acceptance criteria were met.

WG416961 - Sodium for client sample 17 was reported from a ten-fold dilution where the ten-fold post digestion spike was compliant.

Matrix Spikes: WG416958 - Sample 09 was chosen by the client for MS/MSD analysis. Samples 10(MS) and 11(MSD) yielded noncompliant recoveries for three analytes.

WG416961 - Sample 24 was chosen by the client for MS/MSD analysis. Samples 26(MS) and 27(MSD) yielded noncompliant recoveries for six analytes.

SAMPLES

Samples: WG416961 - Client samples 19, 24, 25, 26MS, and 27MSD required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 57437

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".



Login Number: L12120503
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG416945 - All acceptance criteria were met.

WG417061 - All acceptance criteria were met.

Matrix Spikes: WG416945 - Sample 24 was chosen by the client for MS/MSD analysis. Samples 26(MS) and 27(MSD) yielded noncompliant recoveries for manganese.

WG417061 - Sample 09 was chosen by the client for MS/MSD analysis. Samples 10(MS) and 11(MSD) met all acceptance criteria.

SAMPLES

Samples: WG416945 - Client samples 24, 25, 26 and 27 required dilution analyses in order to obtain results for manganese within the linear range.

WG417061 - Client sample 06 required a dilution analysis in order to obtain a result for zinc within the linear range. Client samples 15 and 28 required dilution analyses in order to obtain results for manganese within the linear range.

Narrative ID: 57406

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf".

Certificate of Analysis

Sample #: L12120503-01	PrePrep Method: N/A	Instrument: HPMS11
Client ID: MW1-1	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 03:52
Collect Date: 12/10/2012 09:35	Dilution: 1	File ID: 11M88918
Sample Tag: 02	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Naphthalene	91-20-3		ND	1.00	0.200
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	95.0	86	118		
1,2-Dichloroethane-d4	85.8	80	120		
Toluene-d8	105	88	110		
4-Bromofluorobenzene	97.0	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-01	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW1-1	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 16:29
Collect Date: 12/10/2012 09:35	Dilution: 1	File ID: 10M01167
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Trichloroethene	79-01-6	17.6		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.4	86	118		
1,2-Dichloroethane-d4	95.3	80	120		
Toluene-d8	99.1	88	110		
4-Bromofluorobenzene	104	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-01	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW1-1	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 19:55
Collect Date: 12/10/2012 09:35	Dilution: 1	File ID: P2.121812.195513
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.513		0.100	0.0500
Calcium, Total	7440-70-2	14.6		0.200	0.100
Iron, Total	7439-89-6	1.12		0.100	0.0500
Magnesium, Total	7439-95-4	7.52		0.500	0.250
Potassium, Total	7440-09-7	1.15		1.00	0.500
Sodium, Total	7440-23-5	96.9		0.500	0.250
Strontium, Total	7440-24-6	0.446		0.0100	0.00500

Sample #: L12120503-01	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW1-1	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 13:37
Collect Date: 12/10/2012 09:35	Dilution: 1	File ID: NI.121912.133703
Sample Tag: 01	Units: mg/L	

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0520		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00159	J	0.00200	0.00100
Copper, Total	7440-50-8	0.00130	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0283		0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2	0.0179		0.00100	0.000500
Thallium, Total	7440-28-0	0.000102	J	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00211		0.00100	0.000500
Zinc, Total	7440-66-6	0.0197	J	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-02

PrePrep Method: N/A

Instrument: HPMS10

Client ID: MW1-1-D

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 12/10/2012 17:11

Workgroup #: WG417120

Analyst: TMB

Run Date: 12/20/2012 17:00

Collect Date: 12/10/2012 09:50

Dilution: 1

File ID: 10M01168

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	20.1		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.4	86	118		
1,2-Dichloroethane-d4	96.0	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	107	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-02	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW1-1-D	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 20:01
Collect Date: 12/10/2012 09:50	Dilution: 1	File ID: P2.121812.200112
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.338		0.100	0.0500
Calcium, Total	7440-70-2	14.3		0.200	0.100
Iron, Total	7439-89-6	0.405		0.100	0.0500
Magnesium, Total	7439-95-4	8.17		0.500	0.250
Potassium, Total	7440-09-7	1.13		1.00	0.500
Sodium, Total	7440-23-5	98.4		0.500	0.250
Strontium, Total	7440-24-6	0.469		0.0100	0.00500

Sample #: L12120503-02	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW1-1-D	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 13:40
Collect Date: 12/10/2012 09:50	Dilution: 1	File ID: NI.121912.134025
Sample Tag: 01	Units: mg/L	

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0495		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00151	J	0.00200	0.00100
Copper, Total	7440-50-8	0.00101	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0354		0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2	0.0179		0.00100	0.000500
Thallium, Total	7440-28-0	0.000101	J	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00193		0.00100	0.000500
Zinc, Total	7440-66-6	0.0229	J	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-03

PrePrep Method: N/A

Instrument: HPMS10

Client ID: MW1-1-2

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 12/10/2012 17:11

Workgroup #: WG417120

Analyst: TMB

Run Date: 12/20/2012 17:31

Collect Date: 12/10/2012 11:20

Dilution: 1

File ID: 10M01169

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	8.57		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.9	86	118		
1,2-Dichloroethane-d4	96.4	80	120		
Toluene-d8	99.6	88	110		
4-Bromofluorobenzene	108	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW1-1-2	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 20:08
Collect Date: 12/10/2012 11:20	Dilution: 1	File ID: P2.121812.200809
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.515		0.100	0.0500
Calcium, Total	7440-70-2	14.4		0.200	0.100
Iron, Total	7439-89-6	0.869		0.100	0.0500
Magnesium, Total	7439-95-4	6.51		0.500	0.250
Potassium, Total	7440-09-7	3.24		1.00	0.500
Sodium, Total	7440-23-5	94.7		0.500	0.250
Strontium, Total	7440-24-6	0.604		0.0100	0.00500

Sample #: L12120503-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW1-1-2	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:00
Collect Date: 12/10/2012 11:20	Dilution: 1	File ID: NI.121912.140045
Sample Tag: 01	Units: mg/L	

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0709		0.00300	0.00150
Cadmium, Total	7440-43-9	0.000521	J	0.000600	0.000300
Chromium, Total	7440-47-3	0.00222		0.00200	0.00100
Copper, Total	7440-50-8	0.00164	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0646		0.00200	0.00100
Nickel, Total	7440-02-0	0.00259	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.0172		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00212		0.00100	0.000500
Zinc, Total	7440-66-6	0.0232	J	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-04

PrePrep Method: N/A

Instrument: HPMS10

Client ID: MW2-1

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 12/10/2012 17:11

Workgroup #: WG417120

Analyst: TMB

Run Date: 12/20/2012 18:02

Collect Date: 12/10/2012 13:20

Dilution: 1

File ID: 10M01170

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0	0.509	J	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	5.95		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	7.25		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.8	86	118		
1,2-Dichloroethane-d4	95.1	80	120		
Toluene-d8	99.7	88	110		
4-Bromofluorobenzene	108	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-04

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: MW2-1

Prep Method: 3005A

Prep Date: 12/18/2012 06:18

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/18/2012 08:55

Workgroup #: WG416958

Analyst: KHR

Run Date: 12/18/2012 20:14

Collect Date: 12/10/2012 13:20

Dilution: 1

File ID: P2.121812.201410

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.790		0.100	0.0500
Calcium, Total	7440-70-2	6.68		0.200	0.100
Iron, Total	7439-89-6	1.16		0.100	0.0500
Magnesium, Total	7439-95-4	2.55		0.500	0.250
Potassium, Total	7440-09-7	0.831	J	1.00	0.500
Sodium, Total	7440-23-5	32.4		0.500	0.250
Strontium, Total	7440-24-6	0.178		0.0100	0.00500
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

Sample #: L12120503-04	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-1	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:04
Collect Date: 12/10/2012 13:20	Dilution: 1	File ID: NI.121912.140406
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0623		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00137	J	0.00200	0.00100
Copper, Total	7440-50-8	0.00144	J	0.00200	0.00100
Lead, Total	7439-92-1	0.000545	J	0.00100	0.000500
Manganese, Total	7439-96-5	0.143		0.00200	0.00100
Nickel, Total	7440-02-0	0.00444		0.00400	0.00200
Selenium, Total	7782-49-2	0.00168		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.000913	J	0.00100	0.000500
Zinc, Total	7440-66-6	0.0493		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-05	PrePrep Method: N/A	Instrument: HPMS10
Client ID: FIELDBLANK10DEC2012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 13:53
Collect Date: 12/10/2012 13:10	Dilution: 1	File ID: 10M01162
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	2.80	J	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.223	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3	0.140	J	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.6	86	118		
1,2-Dichloroethane-d4	95.2	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	113	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-05

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: FIELDBLANK10DEC2012

Prep Method: 3005A

Prep Date: 12/18/2012 06:18

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/18/2012 08:55

Workgroup #: WG416958

Analyst: KHR

Run Date: 12/18/2012 20:20

Collect Date: 12/10/2012 13:10

Dilution: 1

File ID: P2.121812.202010

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		ND	0.100	0.0500
Calcium, Total	7440-70-2		ND	0.200	0.100
Iron, Total	7439-89-6		ND	0.100	0.0500
Magnesium, Total	7439-95-4		ND	0.500	0.250
Potassium, Total	7440-09-7		ND	1.00	0.500
Sodium, Total	7440-23-5		ND	0.500	0.250
Strontium, Total	7440-24-6		ND	0.0100	0.00500

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-05	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELDBLANK10DEC2012	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:07
Collect Date: 12/10/2012 13:10	Dilution: 1	File ID: NI.121912.140729
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3		ND	0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3		ND	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.00776		0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2		ND	0.00100	0.000500
Thallium, Total	7440-28-0	0.000159	J	0.000200	0.000100
Vanadium, Total	7440-62-2		ND	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-06	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW2-2	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 18:33
Collect Date: 12/10/2012 14:40	Dilution: 1	File ID: 10M01171
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50

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Analyte	CAS #	Result	Qual	RL	MDL
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	0.272	J	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	99.4	86	118	
1,2-Dichloroethane-d4	96.0	80	120	
Toluene-d8	99.8	88	110	
4-Bromofluorobenzene	108	86	115	

J	Estimated value; the analyte concentration was less than the RL/LOQ.
ND	Not detected at or above the reporting limit (RL).

Sample #: L12120503-06	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW2-2	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 20:39
Collect Date: 12/10/2012 14:40	Dilution: 1	File ID: P2.121812.203959
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	6.54		0.100	0.0500
Calcium, Total	7440-70-2	3.21		0.200	0.100
Iron, Total	7439-89-6	7.84		0.100	0.0500
Magnesium, Total	7439-95-4	1.92		0.500	0.250
Potassium, Total	7440-09-7	1.27		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	32.5		0.500	0.250
Strontium, Total	7440-24-6	0.101		0.0100	0.00500

Sample #: L12120503-06	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-2	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:10
Collect Date: 12/10/2012 14:40	Dilution: 1	File ID: NI.121912.141051
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0989		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00281		0.00200	0.00100
Copper, Total	7440-50-8	0.00280		0.00200	0.00100
Lead, Total	7439-92-1	0.00192		0.00100	0.000500
Manganese, Total	7439-96-5	0.0425		0.00200	0.00100
Nickel, Total	7440-02-0	0.00799		0.00400	0.00200
Selenium, Total	7782-49-2	0.00105		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00551		0.00100	0.000500
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-06	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-2	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/20/2012 13:42
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/20/2012 15:10
Collect Date: 12/10/2012 14:40	Dilution: 2	File ID: NI.122012.151018
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Zinc, Total	7440-66-6	0.317		0.0500	0.0250

Certificate of Analysis

Sample #: L12120503-07	PrePrep Method: N/A	Instrument: HPMS10
Client ID: TRIPBLANK10DEC2012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 12:51
Collect Date: 12/10/2012 00:01	Dilution: 1	File ID: 10M01160
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.0	86	118		
1,2-Dichloroethane-d4	94.3	80	120		
Toluene-d8	99.8	88	110		
4-Bromofluorobenzene	113	86	115		
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-08	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW2-3	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 19:04
Collect Date: 12/10/2012 15:45	Dilution: 1	File ID: 10M01172
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	0.256	J	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	1.24		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.9	86	118		
1,2-Dichloroethane-d4	95.4	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	109	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-08	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW2-3	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 10:45
Collect Date: 12/10/2012 15:45	Dilution: 1	File ID: P2.121912.104539
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.759		0.100	0.0500
Calcium, Total	7440-70-2	1.65		0.200	0.100
Iron, Total	7439-89-6	1.45		0.100	0.0500
Magnesium, Total	7439-95-4	0.895		0.500	0.250
Potassium, Total	7440-09-7	0.796	J	1.00	0.500
Sodium, Total	7440-23-5	29.1		0.500	0.250
Strontium, Total	7440-24-6	0.0437		0.0100	0.00500
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12120503-08	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW2-3	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:14
Collect Date: 12/10/2012 15:45	Dilution: 1	File ID: NI.121912.141414
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0588		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00134	J	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0300		0.00200	0.00100
Nickel, Total	7440-02-0	0.00476		0.00400	0.00200
Selenium, Total	7782-49-2	0.00134		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00170		0.00100	0.000500
Zinc, Total	7440-66-6	0.0461		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-09	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW3-1	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 19:35
Collect Date: 12/11/2012 09:10	Dilution: 1	File ID: 10M01173
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	3.26	J	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0	0.522	J	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6	0.340	J	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	26.2		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	2.43		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.0	86	118		
1,2-Dichloroethane-d4	96.5	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	108	86	115		

Certificate of Analysis

J	Estimated value; the analyte concentration was less than the RL/LOQ.
ND	Not detected at or above the reporting limit (RL).

Sample #: L12120503-09	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW3-1	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 20:45
Collect Date: 12/11/2012 09:10	Dilution: 1	File ID: P2.121812.204558
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.848		0.100	0.0500
Calcium, Total	7440-70-2	16.1		0.200	0.100
Iron, Total	7439-89-6	0.906		0.100	0.0500
Magnesium, Total	7439-95-4	7.60		0.500	0.250
Potassium, Total	7440-09-7	7.01		1.00	0.500
Sodium, Total	7440-23-5	95.1		0.500	0.250
Strontium, Total	7440-24-6	0.600		0.0100	0.00500

Sample #: L12120503-09	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-1	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 13:26
Collect Date: 12/11/2012 09:10	Dilution: 1	File ID: NI.121912.132657
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000552	J	0.00100	0.000500
Barium, Total	7440-39-3	0.0816		0.00300	0.00150
Cadmium, Total	7440-43-9	0.000539	J	0.000600	0.000300
Chromium, Total	7440-47-3	0.00244		0.00200	0.00100
Copper, Total	7440-50-8	0.00188	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0822		0.00200	0.00100
Nickel, Total	7440-02-0	0.00223	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.00193		0.00100	0.000500
Thallium, Total	7440-28-0	0.000225		0.000200	0.000100
Vanadium, Total	7440-62-2	0.0254		0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125

J	Estimated value; the analyte concentration was less than the RL/LOQ.
ND	Not detected at or above the reporting limit (RL).

Certificate of Analysis

Sample #: L12120503-10	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW3-1MS	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 11:49
Collect Date: 12/11/2012 09:30	Dilution: 1	File ID: 10M01158
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	22.9		10.0	2.50
Benzene	71-43-2	20.5		1.00	0.125
Bromobenzene	108-86-1	19.5		1.00	0.125
Bromochloromethane	74-97-5	20.6		1.00	0.200
Bromodichloromethane	75-27-4	20.7		1.00	0.250
Bromoform	75-25-2	19.0		1.00	0.500
Bromomethane	74-83-9	16.2		1.00	0.500
2-Butanone	78-93-3	22.1		10.0	2.50
n-Butylbenzene	104-51-8	19.2		1.00	0.250
sec-Butylbenzene	135-98-8	18.9		1.00	0.250
tert-Butylbenzene	98-06-6	17.7		1.00	0.250
Carbon disulfide	75-15-0	18.5		1.00	0.500
Carbon tetrachloride	56-23-5	20.5		1.00	0.250
Chlorobenzene	108-90-7	18.4		1.00	0.125
Chlorodibromomethane	124-48-1	20.7		1.00	0.250
Chloroethane	75-00-3	21.1		1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3	20.5		1.00	0.125
Chloromethane	74-87-3	19.2		1.00	0.500
2-Chlorotoluene	95-49-8	18.5		1.00	0.125
4-Chlorotoluene	106-43-4	17.5		1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8	18.5		5.00	1.00
1,2-Dibromoethane	106-93-4	20.7		1.00	0.250
Dibromomethane	74-95-3	20.6		1.00	0.250
1,2-Dichlorobenzene	95-50-1	18.9		1.00	0.125
1,3-Dichlorobenzene	541-73-1	18.3		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.0		1.00	0.125
Dichlorodifluoromethane	75-71-8	24.5		1.00	0.250
1,1-Dichloroethane	75-34-3	20.6		1.00	0.125
1,2-Dichloroethane	107-06-2	21.4		1.00	0.250
1,1-Dichloroethene	75-35-4	19.6		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	20.6		1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
trans-1,2-Dichloroethene	156-60-5	20.7		1.00	0.250
1,2-Dichloropropane	78-87-5	21.3		1.00	0.200
1,3-Dichloropropane	142-28-9	20.8		1.00	0.200
2,2-Dichloropropane	594-20-7	21.2		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	22.4		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.4		1.00	0.500
1,1-Dichloropropene	563-58-6	20.3		1.00	0.250
Ethylbenzene	100-41-4	19.8		1.00	0.250
2-Hexanone	591-78-6	21.1		10.0	2.50
Hexachlorobutadiene	87-68-3	19.9		1.00	0.250
Isopropylbenzene	98-82-8	19.1		1.00	0.250
p-Isopropyltoluene	99-87-6	20.2		1.00	0.250
4-Methyl-2-pentanone	108-10-1	20.1		10.0	2.50
Methylene chloride	75-09-2	19.8		5.00	0.250
Naphthalene	91-20-3	17.3		1.00	0.200
n-Propylbenzene	103-65-1	18.9		1.00	0.125
Styrene	100-42-5	20.8		1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6	20.6		1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5	22.3		1.00	0.200
Tetrachloroethene	127-18-4	41.1		1.00	0.250
Toluene	108-88-3	20.2		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	17.8		1.00	0.150
1,2,4-Trichlorobenzene	120-82-1	17.9		1.00	0.200
1,1,1-Trichloroethane	71-55-6	20.6		1.00	0.250
1,1,1,2-Trichloroethane	79-00-5	21.1		1.00	0.250
Trichloroethene	79-01-6	21.8		1.00	0.250
Trichlorofluoromethane	75-69-4	21.3		1.00	0.250
1,2,3-Trichloropropane	96-18-4	20.4		1.00	0.500
1,2,4-Trimethylbenzene	95-63-6	20.9		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.0		1.00	0.250
Vinyl acetate	108-05-4	36.8		10.0	2.50
Vinyl chloride	75-01-4	15.8		1.00	0.250
o-Xylene	95-47-6	18.3		1.00	0.250
m-,p-Xylene	179601-23-1	39.1		1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.2	86	118		
1,2-Dichloroethane-d4	94.8	80	120		
Toluene-d8	97.9	88	110		
4-Bromofluorobenzene	97.2	86	115		

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-10	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW3-1MS	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 20:51
Collect Date: 12/11/2012 09:30	Dilution: 1	File ID: P2.121812.205157
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.30		0.100	0.0500
Calcium, Total	7440-70-2	22.4		0.200	0.100
Iron, Total	7439-89-6	2.46		0.100	0.0500
Magnesium, Total	7439-95-4	12.5		0.500	0.250
Potassium, Total	7440-09-7	28.7		1.00	0.500
Sodium, Total	7440-23-5	118		0.500	0.250
Strontium, Total	7440-24-6	1.08		0.0100	0.00500

Sample #: L12120503-10	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-1MS	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 13:30
Collect Date: 12/11/2012 09:30	Dilution: 1	File ID: NI.121912.133019
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0604		0.00100	0.000500
Barium, Total	7440-39-3	0.140		0.00300	0.00150
Cadmium, Total	7440-43-9	0.0595		0.000600	0.000300
Chromium, Total	7440-47-3	0.0609		0.00200	0.00100
Copper, Total	7440-50-8	0.0595		0.00200	0.00100
Lead, Total	7439-92-1	0.0620		0.00100	0.000500
Manganese, Total	7439-96-5	0.134		0.00200	0.00100
Nickel, Total	7440-02-0	0.0600		0.00400	0.00200
Selenium, Total	7782-49-2	0.0610		0.00100	0.000500
Thallium, Total	7440-28-0	0.0599		0.000200	0.000100
Vanadium, Total	7440-62-2	0.0784		0.00100	0.000500
Zinc, Total	7440-66-6	0.0641		0.0250	0.0125

Certificate of Analysis

Sample #: L12120503-11	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW3-1MSD	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 12:20
Collect Date: 12/11/2012 09:45	Dilution: 1	File ID: 10M01159
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	23.5		10.0	2.50
Benzene	71-43-2	20.4		1.00	0.125
Bromobenzene	108-86-1	19.7		1.00	0.125
Bromochloromethane	74-97-5	21.5		1.00	0.200
Bromodichloromethane	75-27-4	20.9		1.00	0.250
Bromoform	75-25-2	19.2		1.00	0.500
Bromomethane	74-83-9	16.5		1.00	0.500
2-Butanone	78-93-3	21.5		10.0	2.50
n-Butylbenzene	104-51-8	19.3		1.00	0.250
sec-Butylbenzene	135-98-8	19.2		1.00	0.250
tert-Butylbenzene	98-06-6	17.7		1.00	0.250
Carbon disulfide	75-15-0	18.1		1.00	0.500
Carbon tetrachloride	56-23-5	20.5		1.00	0.250
Chlorobenzene	108-90-7	18.7		1.00	0.125
Chlorodibromomethane	124-48-1	20.9		1.00	0.250
Chloroethane	75-00-3	21.2		1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3	20.9		1.00	0.125
Chloromethane	74-87-3	19.3		1.00	0.500
2-Chlorotoluene	95-49-8	18.7		1.00	0.125
4-Chlorotoluene	106-43-4	17.8		1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8	19.1		5.00	1.00
1,2-Dibromoethane	106-93-4	20.9		1.00	0.250
Dibromomethane	74-95-3	20.9		1.00	0.250
1,2-Dichlorobenzene	95-50-1	19.3		1.00	0.125
1,3-Dichlorobenzene	541-73-1	18.6		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.3		1.00	0.125
Dichlorodifluoromethane	75-71-8	24.5		1.00	0.250
1,1-Dichloroethane	75-34-3	21.1		1.00	0.125
1,2-Dichloroethane	107-06-2	21.5		1.00	0.250
1,1-Dichloroethene	75-35-4	19.6		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	21.0		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.8		1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5	21.6		1.00	0.200
1,3-Dichloropropane	142-28-9	21.0		1.00	0.200
2,2-Dichloropropane	594-20-7	21.3		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	23.1		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.7		1.00	0.500
1,1-Dichloropropene	563-58-6	20.6		1.00	0.250
Ethylbenzene	100-41-4	19.9		1.00	0.250
2-Hexanone	591-78-6	20.5		10.0	2.50
Hexachlorobutadiene	87-68-3	20.4		1.00	0.250
Isopropylbenzene	98-82-8	19.2		1.00	0.250
p-Isopropyltoluene	99-87-6	20.4		1.00	0.250
4-Methyl-2-pentanone	108-10-1	20.0		10.0	2.50
Methylene chloride	75-09-2	20.3		5.00	0.250
Naphthalene	91-20-3	17.6		1.00	0.200
n-Propylbenzene	103-65-1	19.2		1.00	0.125
Styrene	100-42-5	21.1		1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6	20.8		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	22.8		1.00	0.200
Tetrachloroethene	127-18-4	42.0		1.00	0.250
Toluene	108-88-3	20.3		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	18.1		1.00	0.150
1,2,4-Trichlorobenzene	120-82-1	18.1		1.00	0.200
1,1,1-Trichloroethane	71-55-6	20.7		1.00	0.250
1,1,2-Trichloroethane	79-00-5	21.4		1.00	0.250
Trichloroethene	79-01-6	22.3		1.00	0.250
Trichlorofluoromethane	75-69-4	21.3		1.00	0.250
1,2,3-Trichloropropane	96-18-4	20.4		1.00	0.500
1,2,4-Trimethylbenzene	95-63-6	21.2		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.2		1.00	0.250
Vinyl acetate	108-05-4	35.8		10.0	2.50
Vinyl chloride	75-01-4	16.3		1.00	0.250
o-Xylene	95-47-6	18.6		1.00	0.250
m-,p-Xylene	179601-23-1	39.4		1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.6	86	118		
1,2-Dichloroethane-d4	93.5	80	120		
Toluene-d8	96.9	88	110		
4-Bromofluorobenzene	96.6	86	115		
ND	Not detected at or above the reporting limit (RL).				

Lab Report #: L12120503

Lab Project #: 3083.001

Project Name: Longhorn AAP

Lab Contact: Stephanie Mossburg

Certificate of Analysis

Sample #: L12120503-11	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW3-1MSD	Prep Method: 3005A	Prep Date: 12/18/2012 06:18
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/18/2012 08:55
Workgroup #: WG416958	Analyst: KHR	Run Date: 12/18/2012 20:57
Collect Date: 12/11/2012 09:45	Dilution: 1	File ID: P2.121812.205757
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.11		0.100	0.0500
Calcium, Total	7440-70-2	21.6		0.200	0.100
Iron, Total	7439-89-6	2.29		0.100	0.0500
Magnesium, Total	7439-95-4	12.2		0.500	0.250
Potassium, Total	7440-09-7	28.3		1.00	0.500
Sodium, Total	7440-23-5	112		0.500	0.250
Strontium, Total	7440-24-6	1.04		0.0100	0.00500

Sample #: L12120503-11	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-1MSD	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 13:33
Collect Date: 12/11/2012 09:45	Dilution: 1	File ID: NI.121912.133342
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0622		0.00100	0.000500
Barium, Total	7440-39-3	0.147		0.00300	0.00150
Cadmium, Total	7440-43-9	0.0617		0.000600	0.000300
Chromium, Total	7440-47-3	0.0637		0.00200	0.00100
Copper, Total	7440-50-8	0.0614		0.00200	0.00100
Lead, Total	7439-92-1	0.0649		0.00100	0.000500
Manganese, Total	7439-96-5	0.138		0.00200	0.00100
Nickel, Total	7440-02-0	0.0621		0.00400	0.00200
Selenium, Total	7782-49-2	0.0637		0.00100	0.000500
Thallium, Total	7440-28-0	0.0629		0.000200	0.000100
Vanadium, Total	7440-62-2	0.0783		0.00100	0.000500
Zinc, Total	7440-66-6	0.0648		0.0250	0.0125

Certificate of Analysis

Sample #: L12120503-12	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW3-2	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 20:07
Collect Date: 12/11/2012 10:45	Dilution: 1	File ID: 10M01174
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.158	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	0.537	J	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	32.5		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	1.90		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.1	86	118		
1,2-Dichloroethane-d4	95.3	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	108	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-12	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW3-2	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 10:52
Collect Date: 12/11/2012 10:45	Dilution: 1	File ID: P2.121912.105236
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.227		0.100	0.0500
Calcium, Total	7440-70-2	9.80		0.200	0.100
Iron, Total	7439-89-6	0.493		0.100	0.0500
Magnesium, Total	7439-95-4	4.86		0.500	0.250
Potassium, Total	7440-09-7	1.13		1.00	0.500
Sodium, Total	7440-23-5	30.4		0.500	0.250
Strontium, Total	7440-24-6	0.288		0.0100	0.00500

Sample #: L12120503-12	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-2	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:17
Collect Date: 12/11/2012 10:45	Dilution: 1	File ID: NI.121912.141737
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.132		0.00300	0.00150
Cadmium, Total	7440-43-9	0.000342	J	0.000600	0.000300
Chromium, Total	7440-47-3	0.00154	J	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0852		0.00200	0.00100
Nickel, Total	7440-02-0	0.00276	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.00156		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00140		0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-13	PrePrep Method: N/A	Instrument: HPMS10
Client ID: FIELDBLANK11DEC2012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 14:24
Collect Date: 12/11/2012 10:10	Dilution: 1	File ID: 10M01163
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	3.21	J	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.199	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3	0.131	J	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.5	86	118		
1,2-Dichloroethane-d4	94.2	80	120		
Toluene-d8	99.8	88	110		
4-Bromofluorobenzene	112	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-13	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: FIELDBLANK11DEC2012	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 10:58
Collect Date: 12/11/2012 10:10	Dilution: 1	File ID: P2.121912.105836
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		ND	0.100	0.0500
Calcium, Total	7440-70-2		ND	0.200	0.100
Iron, Total	7439-89-6		ND	0.100	0.0500
Magnesium, Total	7439-95-4		ND	0.500	0.250
Potassium, Total	7440-09-7		ND	1.00	0.500
Sodium, Total	7440-23-5		ND	0.500	0.250
Strontium, Total	7440-24-6		ND	0.0100	0.00500
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-13	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELDBLANK11DEC2012	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:20
Collect Date: 12/11/2012 10:10	Dilution: 1	File ID: NI.121912.142059
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3		ND	0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3		ND	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5		ND	0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2		ND	0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2		ND	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-14	PrePrep Method: N/A	Instrument: HPMS10
Client ID: TRIPBLANK11DEC2012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 13:21
Collect Date: 12/11/2012 00:01	Dilution: 1	File ID: 10M01161
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.3	86	118		
1,2-Dichloroethane-d4	95.5	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	113	86	115		
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-15	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW3-3	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 20:37
Collect Date: 12/11/2012 11:45	Dilution: 1	File ID: 10M01175
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.425	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	0.860	J	1.00	0.500
cis-1,2-Dichloroethene	156-59-2	1.20		1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	49.0		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	5.79		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.2	86	118		
1,2-Dichloroethane-d4	95.3	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	108	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-15	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW3-3	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 11:05
Collect Date: 12/11/2012 11:45	Dilution: 1	File ID: P2.121912.110529
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.937		0.100	0.0500
Calcium, Total	7440-70-2	6.16		0.200	0.100
Iron, Total	7439-89-6	3.71		0.100	0.0500
Magnesium, Total	7439-95-4	1.39		0.500	0.250
Potassium, Total	7440-09-7	1.49		1.00	0.500
Sodium, Total	7440-23-5	55.3		0.500	0.250
Strontium, Total	7440-24-6	0.0921		0.0100	0.00500

Sample #: L12120503-15	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-3	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:24
Collect Date: 12/11/2012 11:45	Dilution: 1	File ID: NI.121912.142422
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0543		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00458		0.00200	0.00100
Copper, Total	7440-50-8	0.00192	J	0.00200	0.00100
Lead, Total	7439-92-1	0.000550	J	0.00100	0.000500
Nickel, Total	7440-02-0	0.00294	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.00145		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00150		0.00100	0.000500
Zinc, Total	7440-66-6	0.0752		0.0250	0.0125

J	Estimated value; the analyte concentration was less than the RL/LOQ.
ND	Not detected at or above the reporting limit (RL).

Certificate of Analysis

Sample #: L12120503-15	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW3-3	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/20/2012 13:42
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/20/2012 15:06
Collect Date: 12/11/2012 11:45	Dilution: 20	File ID: NI.122012.150612
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.350		0.0400	0.0200

Sample #: L12120503-16	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW-58	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417120	Analyst: TMB	Run Date: 12/20/2012 21:09
Collect Date: 12/11/2012 13:20	Dilution: 1	File ID: 10M01176
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250

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Analyte	CAS #	Result	Qual	RL	MDL
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.306	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	0.810	J	1.00	0.500
cis-1,2-Dichloroethene	156-59-2	0.267	J	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	40.6		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	6.76		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250

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Analyte	CAS #	Result	Qual	RL	MDL
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.1	86	118		
1,2-Dichloroethane-d4	94.5	80	120		
Toluene-d8	99.4	88	110		
4-Bromofluorobenzene	107	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-16	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-58	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 11:11
Collect Date: 12/11/2012 13:20	Dilution: 1	File ID: P2.121912.111127
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.551		0.100	0.0500
Calcium, Total	7440-70-2	4.06		0.200	0.100
Iron, Total	7439-89-6	0.710		0.100	0.0500
Magnesium, Total	7439-95-4	2.11		0.500	0.250
Potassium, Total	7440-09-7	0.718	J	1.00	0.500
Sodium, Total	7440-23-5	54.3		0.500	0.250
Strontium, Total	7440-24-6	0.112		0.0100	0.00500
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12120503-16	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-58	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:27
Collect Date: 12/11/2012 13:20	Dilution: 1	File ID: NI.121912.142744
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0672		0.00300	0.00150
Cadmium, Total	7440-43-9	0.000704		0.000600	0.000300

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chromium, Total	7440-47-3	0.00211		0.00200	0.00100
Copper, Total	7440-50-8	0.00109	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0107		0.00200	0.00100
Nickel, Total	7440-02-0	0.00743		0.00400	0.00200
Selenium, Total	7782-49-2	0.00227		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00163		0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-17

PrePrep Method: N/A

Instrument: HPMS11

Client ID: 35BWW03

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 11/08/2012 14:43

Workgroup #: WG417226

Analyst: ADC

Run Date: 12/21/2012 04:23

Collect Date: 12/11/2012 14:30

Dilution: 1

File ID: 11M88919

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	96.5	86	118		
1,2-Dichloroethane-d4	87.2	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	98.6	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-17

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: 35BWW03

Prep Method: 3005A

Prep Date: 12/18/2012 06:23

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/19/2012 08:46

Workgroup #: WG416961

Analyst: KHR

Run Date: 12/19/2012 11:17

Collect Date: 12/11/2012 14:30

Dilution: 1

File ID: P2.121912.111725

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.745		0.100	0.0500
Calcium, Total	7440-70-2	5.68		0.200	0.100
Iron, Total	7439-89-6	1.22		0.100	0.0500
Magnesium, Total	7439-95-4	0.778		0.500	0.250
Potassium, Total	7440-09-7	12.4		1.00	0.500
Strontium, Total	7440-24-6	0.779		0.0100	0.00500

Sample #: L12120503-17

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: 35BWW03

Prep Method: 3005A

Prep Date: 12/18/2012 06:23

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/20/2012 09:09

Workgroup #: WG416961

Analyst: KHR

Run Date: 12/20/2012 16:26

Collect Date: 12/11/2012 14:30

Dilution: 10

File ID: P2.122012.162652

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	134		5.00	2.50

Certificate of Analysis

Sample #: L12120503-17	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35BWW03	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:31
Collect Date: 12/11/2012 14:30	Dilution: 1	File ID: NI.121912.143107
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0760		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.0120		0.00200	0.00100
Copper, Total	7440-50-8	0.00148	J	0.00200	0.00100
Lead, Total	7439-92-1	0.000574	J	0.00100	0.000500
Manganese, Total	7439-96-5	0.0165		0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2	0.00384		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00147		0.00100	0.000500
Zinc, Total	7440-66-6	0.106		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-18	PrePrep Method: N/A	Instrument: HPMS11
Client ID: 35BWW08	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 04:54
Collect Date: 12/11/2012 15:45	Dilution: 1	File ID: 11M88920
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2	0.300	J	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	62.5		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	94.7	86	118		
1,2-Dichloroethane-d4	87.0	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	98.1	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-18

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: 35BWW08

Prep Method: 3005A

Prep Date: 12/18/2012 06:23

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/19/2012 08:46

Workgroup #: WG416961

Analyst: KHR

Run Date: 12/19/2012 14:13

Collect Date: 12/11/2012 15:45

Dilution: 1

File ID: P2.121912.141323

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.316		0.100	0.0500
Calcium, Total	7440-70-2	30.3		0.200	0.100
Iron, Total	7439-89-6	0.852		0.100	0.0500
Magnesium, Total	7439-95-4	18.1		0.500	0.250
Potassium, Total	7440-09-7	1.37		1.00	0.500
Sodium, Total	7440-23-5	139		0.500	0.250
Strontium, Total	7440-24-6	1.05		0.0100	0.00500

Certificate of Analysis

Sample #: L12120503-18	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35BWW08	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:41
Collect Date: 12/11/2012 15:45	Dilution: 1	File ID: NI.121912.144118
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0575		0.00300	0.00150
Cadmium, Total	7440-43-9	0.000708		0.000600	0.000300
Chromium, Total	7440-47-3	0.00230		0.00200	0.00100
Copper, Total	7440-50-8	0.00110	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0490		0.00200	0.00100
Nickel, Total	7440-02-0	0.00283	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.0331		0.00100	0.000500
Thallium, Total	7440-28-0	0.000104	J	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00122		0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-19	PrePrep Method: N/A	Instrument: HPMS11
Client ID: 35BWW06	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 05:25
Collect Date: 12/12/2012 09:20	Dilution: 1	File ID: 11M88921
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	94.7	86	118		
1,2-Dichloroethane-d4	85.6	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	98.2	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-19

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: 35BWW06

Prep Method: 3005A

Prep Date: 12/18/2012 06:23

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/19/2012 08:46

Workgroup #: WG416961

Analyst: KHR

Run Date: 12/19/2012 14:19

Collect Date: 12/12/2012 09:20

Dilution: 1

File ID: P2.121912.141923

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		ND	0.100	0.0500
Calcium, Total	7440-70-2	68.9		0.200	0.100
Iron, Total	7439-89-6	1.85		0.100	0.0500
Magnesium, Total	7439-95-4	24.1		0.500	0.250
Potassium, Total	7440-09-7	2.37		1.00	0.500
Strontium, Total	7440-24-6	2.45		0.0100	0.00500
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-19	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: 35BWW06	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/20/2012 09:09
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/20/2012 16:46
Collect Date: 12/12/2012 09:20	Dilution: 50	File ID: P2.122012.164641
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	183		25.0	12.5

Sample #: L12120503-19	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35BWW06	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:44
Collect Date: 12/12/2012 09:20	Dilution: 1	File ID: NI.121912.144440
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0759		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00230		0.00200	0.00100
Copper, Total	7440-50-8	0.00111	J	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.200		0.00200	0.00100
Nickel, Total	7440-02-0	0.00362	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.00798		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2		ND	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-20	PrePrep Method: N/A	Instrument: HPMS11
Client ID: FIELDBLANK12DEC2012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 00:17
Collect Date: 12/12/2012 09:10	Dilution: 1	File ID: 11M88911
Sample Tag: 01	Units: ug/L	

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.217	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.4	86	118		
1,2-Dichloroethane-d4	87.7	80	120		
Toluene-d8	105	88	110		
4-Bromofluorobenzene	99.0	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-20	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: FIELDBLANK12DEC2012	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 14:25
Collect Date: 12/12/2012 09:10	Dilution: 1	File ID: P2.121912.142526
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		ND	0.100	0.0500
Calcium, Total	7440-70-2		ND	0.200	0.100
Iron, Total	7439-89-6		ND	0.100	0.0500
Magnesium, Total	7439-95-4		ND	0.500	0.250
Potassium, Total	7440-09-7		ND	1.00	0.500
Sodium, Total	7440-23-5		ND	0.500	0.250
Strontium, Total	7440-24-6		ND	0.0100	0.00500
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-20	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: FIELDBLANK12DEC2012	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:48
Collect Date: 12/12/2012 09:10	Dilution: 1	File ID: NI.121912.144802
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3		ND	0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3		ND	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5		ND	0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2		ND	0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2		ND	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-21	PrePrep Method: N/A	Instrument: HPMS11
Client ID: TRIPBLANK12DEC2012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/20/2012 23:46
Collect Date: 12/12/2012 00:01	Dilution: 1	File ID: 11M88910
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4		ND	1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6		ND	1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	96.0	86	118		
1,2-Dichloroethane-d4	89.6	80	120		
Toluene-d8	106	88	110		
4-Bromofluorobenzene	97.6	86	115		
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-22	PrePrep Method: N/A	Instrument: HPMS11
Client ID: 35BWW05	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 05:55
Collect Date: 12/12/2012 11:45	Dilution: 1	File ID: 11M88922
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7		ND	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3		ND	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4		ND	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		ND	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	1.41		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	14.6		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	94.5	86	118		
1,2-Dichloroethane-d4	85.6	80	120		
Toluene-d8	105	88	110		
4-Bromofluorobenzene	98.3	86	115		
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-22	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: 35BWW05	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 14:32
Collect Date: 12/12/2012 11:45	Dilution: 1	File ID: P2.121912.143223
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.424		0.100	0.0500
Calcium, Total	7440-70-2	9.63		0.200	0.100
Iron, Total	7439-89-6	1.91		0.100	0.0500
Magnesium, Total	7439-95-4	5.49		0.500	0.250
Potassium, Total	7440-09-7	0.655	J	1.00	0.500
Sodium, Total	7440-23-5	51.6		0.500	0.250
Strontium, Total	7440-24-6	0.346		0.0100	0.00500
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12120503-22	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35BWW05	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:51
Collect Date: 12/12/2012 11:45	Dilution: 1	File ID: NI.121912.145124
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0505		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00146	J	0.00200	0.00100
Copper, Total	7440-50-8	0.00282		0.00200	0.00100
Lead, Total	7439-92-1	0.00125		0.00100	0.000500
Manganese, Total	7439-96-5	0.0609		0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2	0.00187		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00167		0.00100	0.000500
Zinc, Total	7440-66-6	0.0317		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

Sample #: L12120503-23	PrePrep Method: N/A	Instrument: HPMS11
Client ID: 35BWW14	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 06:26
Collect Date: 12/12/2012 13:40	Dilution: 1	File ID: 11M88923
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2	0.216	J	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0		ND	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.137	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3	0.148	J	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	4.58		1.00	0.125
1,2-Dichloroethane	107-06-2	0.271	J	1.00	0.250
1,1-Dichloroethene	75-35-4	50.2		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	12.2		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	0.404	J	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	28.0		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	80.5		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4	4.42		1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	96.4	86	118		
1,2-Dichloroethane-d4	86.2	80	120		
Toluene-d8	106	88	110		
4-Bromofluorobenzene	96.6	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-23	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: 35BWW14	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 14:38
Collect Date: 12/12/2012 13:40	Dilution: 1	File ID: P2.121912.143823
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		ND	0.100	0.0500
Calcium, Total	7440-70-2	14.2		0.200	0.100
Iron, Total	7439-89-6	0.0928	J	0.100	0.0500
Magnesium, Total	7439-95-4	7.39		0.500	0.250
Potassium, Total	7440-09-7	0.924	J	1.00	0.500
Sodium, Total	7440-23-5	79.9		0.500	0.250
Strontium, Total	7440-24-6	0.492		0.0100	0.00500
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-23	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: 35BWW14	Prep Method: 3015	Prep Date: 12/18/2012 05:58
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:54
Collect Date: 12/12/2012 13:40	Dilution: 1	File ID: NI.121912.145447
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0421		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00131	J	0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Manganese, Total	7439-96-5	0.0493		0.00200	0.00100
Nickel, Total	7440-02-0		ND	0.00400	0.00200
Selenium, Total	7782-49-2	0.00285		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.000901	J	0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-24	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW4-1	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417313	Analyst: TMB	Run Date: 12/21/2012 21:59
Collect Date: 12/12/2012 14:55	Dilution: 1	File ID: 10M01215
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0	5.64		1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.203	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.278	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	1.15		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
cis-1,2-Dichloroethene	156-59-2	0.599	J	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	15.7		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	4.16		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4	0.316	J	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.0	86	118		
1,2-Dichloroethane-d4	92.4	80	120		
Toluene-d8	101	88	110		

Certificate of Analysis

4-Bromofluorobenzene	106	86	115	
J	Estimated value; the analyte concentration was less than the RL/LOQ.			
ND	Not detected at or above the reporting limit (RL).			

Sample #: L12120503-24 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW4-1 **Prep Method:** 3005A **Prep Date:** 12/18/2012 06:23
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 12/19/2012 08:46
Workgroup #: WG416961 **Analyst:** KHR **Run Date:** 12/19/2012 14:45
Collect Date: 12/12/2012 14:55 **Dilution:** 1 **File ID:** P2.121912.144523
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	1.49		0.100	0.0500
Calcium, Total	7440-70-2	39.3		0.200	0.100
Iron, Total	7439-89-6	2.82		0.100	0.0500
Magnesium, Total	7439-95-4	17.1		0.500	0.250
Potassium, Total	7440-09-7	3.05		1.00	0.500
Strontium, Total	7440-24-6	1.08		0.0100	0.00500

Sample #: L12120503-24 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW4-1 **Prep Method:** 3005A **Prep Date:** 12/18/2012 06:23
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 12/20/2012 09:09
Workgroup #: WG416961 **Analyst:** KHR **Run Date:** 12/20/2012 16:53
Collect Date: 12/12/2012 14:55 **Dilution:** 50 **File ID:** P2.122012.165336
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	235		25.0	12.5

Sample #: L12120503-24 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW4-1 **Prep Method:** 3015 **Prep Date:** 12/18/2012 06:40
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 12/18/2012 09:09
Workgroup #: WG416945 **Analyst:** JYH **Run Date:** 12/18/2012 13:01
Collect Date: 12/12/2012 14:55 **Dilution:** 1 **File ID:** NI.121812.130157
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000617	J	0.00100	0.000500
Barium, Total	7440-39-3	0.0516		0.00300	0.00150
Cadmium, Total	7440-43-9	0.00110		0.000600	0.000300
Chromium, Total	7440-47-3	0.00620		0.00200	0.00100

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Copper, Total	7440-50-8	0.00512		0.00200	0.00100
Lead, Total	7439-92-1	0.00205		0.00100	0.000500
Nickel, Total	7440-02-0	0.00814		0.00400	0.00200
Selenium, Total	7782-49-2	0.00355		0.00100	0.000500
Thallium, Total	7440-28-0	0.000135	J	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00717		0.00100	0.000500
Zinc, Total	7440-66-6	0.0489		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12120503-24	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 17:42
Collect Date: 12/12/2012 14:55	Dilution: 50	File ID: NI.121812.174250
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.795		0.100	0.0500

Sample #: L12120503-25	PrePrep Method: N/A	Instrument: HPMS11
Client ID: MW4-1D	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 06:57
Collect Date: 12/12/2012 15:10	Dilution: 1	File ID: 11M88924
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0	4.80		1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chlorobenzene	108-90-7	0.206	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.207	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	1.06		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	0.476	J	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	17.6		1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	4.21		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	95.9	86	118		
1,2-Dichloroethane-d4	85.4	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	98.7	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-25

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: MW4-1D

Prep Method: 3005A

Prep Date: 12/18/2012 06:23

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/19/2012 08:46

Workgroup #: WG416961

Analyst: KHR

Run Date: 12/19/2012 14:51

Collect Date: 12/12/2012 15:10

Dilution: 1

File ID: P2.121912.145124

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	1.47		0.100	0.0500
Calcium, Total	7440-70-2	38.7		0.200	0.100
Iron, Total	7439-89-6	2.75		0.100	0.0500
Magnesium, Total	7439-95-4	16.6		0.500	0.250
Potassium, Total	7440-09-7	2.97		1.00	0.500
Strontium, Total	7440-24-6	1.04		0.0100	0.00500

Certificate of Analysis

Sample #: L12120503-25	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW4-1D	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/20/2012 09:09
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/20/2012 17:00
Collect Date: 12/12/2012 15:10	Dilution: 50	File ID: P2.122012.170032
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	223		25.0	12.5

Sample #: L12120503-25	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1D	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 13:12
Collect Date: 12/12/2012 15:10	Dilution: 1	File ID: NI.121812.131205
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0443		0.00300	0.00150
Cadmium, Total	7440-43-9	0.000879		0.000600	0.000300
Chromium, Total	7440-47-3	0.00499		0.00200	0.00100
Copper, Total	7440-50-8	0.00474		0.00200	0.00100
Lead, Total	7439-92-1	0.00163		0.00100	0.000500
Nickel, Total	7440-02-0	0.00744		0.00400	0.00200
Selenium, Total	7782-49-2	0.00348		0.00100	0.000500
Thallium, Total	7440-28-0	0.000109	J	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00538		0.00100	0.000500
Zinc, Total	7440-66-6	0.0491		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-25	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1D	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 17:52
Collect Date: 12/12/2012 15:10	Dilution: 50	File ID: NI.121812.175258
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.648		0.100	0.0500

Certificate of Analysis

Sample #: L12120503-26	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW4-1MS	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417313	Analyst: TMB	Run Date: 12/21/2012 16:59
Collect Date: 12/12/2012 15:20	Dilution: 1	File ID: 10M01205
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	21.8		10.0	2.50
Benzene	71-43-2	21.2		1.00	0.125
Bromobenzene	108-86-1	20.0		1.00	0.125
Bromochloromethane	74-97-5	21.2		1.00	0.200
Bromodichloromethane	75-27-4	21.2		1.00	0.250
Bromoform	75-25-2	18.1		1.00	0.500
Bromomethane	74-83-9	16.4		1.00	0.500
2-Butanone	78-93-3	18.4		10.0	2.50
n-Butylbenzene	104-51-8	20.6		1.00	0.250
sec-Butylbenzene	135-98-8	20.4		1.00	0.250
tert-Butylbenzene	98-06-6	18.9		1.00	0.250
Carbon disulfide	75-15-0	22.2		1.00	0.500
Carbon tetrachloride	56-23-5	21.3		1.00	0.250
Chlorobenzene	108-90-7	19.2		1.00	0.125
Chlorodibromomethane	124-48-1	20.3		1.00	0.250
Chloroethane	75-00-3	22.9		1.00	0.500
2-Chloroethyl vinyl ether	110-75-8	19.1		10.0	2.00
Chloroform	67-66-3	21.3		1.00	0.125
Chloromethane	74-87-3	22.4		1.00	0.500
2-Chlorotoluene	95-49-8	19.4		1.00	0.125
4-Chlorotoluene	106-43-4	18.5		1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8	16.7		5.00	1.00
1,2-Dibromoethane	106-93-4	20.1		1.00	0.250
Dibromomethane	74-95-3	20.3		1.00	0.250
1,2-Dichlorobenzene	95-50-1	19.6		1.00	0.125
1,3-Dichlorobenzene	541-73-1	19.1		1.00	0.250
1,4-Dichlorobenzene	106-46-7	20.0		1.00	0.125
Dichlorodifluoromethane	75-71-8	28.9		1.00	0.250
1,1-Dichloroethane	75-34-3	22.1		1.00	0.125
1,2-Dichloroethane	107-06-2	21.6		1.00	0.250
1,1-Dichloroethene	75-35-4	21.3		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	21.9		1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
trans-1,2-Dichloroethene	156-60-5	21.8		1.00	0.250
1,2-Dichloropropane	78-87-5	22.4		1.00	0.200
1,3-Dichloropropane	142-28-9	20.6		1.00	0.200
2,2-Dichloropropane	594-20-7	22.6		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	23.2		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.7		1.00	0.500
1,1-Dichloropropene	563-58-6	21.5		1.00	0.250
Ethylbenzene	100-41-4	20.5		1.00	0.250
2-Hexanone	591-78-6	18.4		10.0	2.50
Hexachlorobutadiene	87-68-3	21.6		1.00	0.250
Isopropylbenzene	98-82-8	20.0		1.00	0.250
p-Isopropyltoluene	99-87-6	21.2		1.00	0.250
4-Methyl-2-pentanone	108-10-1	18.5		10.0	2.50
Methylene chloride	75-09-2	20.6		5.00	0.250
Naphthalene	91-20-3	16.5		1.00	0.200
n-Propylbenzene	103-65-1	20.1		1.00	0.125
Styrene	100-42-5	21.4		1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6	21.1		1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5	21.5		1.00	0.200
Tetrachloroethene	127-18-4	33.5		1.00	0.250
Toluene	108-88-3	21.0		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	17.9		1.00	0.150
1,2,4-Trichlorobenzene	120-82-1	18.5		1.00	0.200
1,1,1-Trichloroethane	71-55-6	21.4		1.00	0.250
1,1,1,2-Trichloroethane	79-00-5	20.8		1.00	0.250
Trichloroethene	79-01-6	24.2		1.00	0.250
Trichlorofluoromethane	75-69-4	22.6		1.00	0.250
1,2,3-Trichloropropane	96-18-4	19.0		1.00	0.500
1,2,4-Trimethylbenzene	95-63-6	22.2		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	22.1		1.00	0.250
Vinyl acetate	108-05-4	36.1		10.0	2.50
Vinyl chloride	75-01-4	27.3		1.00	0.250
o-Xylene	95-47-6	18.9		1.00	0.250
m-,p-Xylene	179601-23-1	40.7		1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.3	86	118		
1,2-Dichloroethane-d4	92.4	80	120		
Toluene-d8	98.7	88	110		
4-Bromofluorobenzene	97.3	86	115		

Certificate of Analysis

Sample #: L12120503-26	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW4-1MS	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 14:57
Collect Date: 12/12/2012 15:20	Dilution: 1	File ID: P2.121912.145721
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	8.45		0.100	0.0500
Calcium, Total	7440-70-2	47.9		0.200	0.100
Iron, Total	7439-89-6	5.61		0.100	0.0500
Magnesium, Total	7439-95-4	23.8		0.500	0.250
Potassium, Total	7440-09-7	27.8		1.00	0.500
Strontium, Total	7440-24-6	1.69		0.0100	0.00500

Sample #: L12120503-26	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW4-1MS	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/20/2012 09:09
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/20/2012 17:07
Collect Date: 12/12/2012 15:20	Dilution: 50	File ID: P2.122012.170733
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	274		25.0	12.5

Sample #: L12120503-26	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1MS	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 13:05
Collect Date: 12/12/2012 15:20	Dilution: 1	File ID: NI.121812.130519
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0643		0.00100	0.000500
Barium, Total	7440-39-3	0.117		0.00300	0.00150
Cadmium, Total	7440-43-9	0.0662		0.000600	0.000300
Chromium, Total	7440-47-3	0.0729		0.00200	0.00100
Copper, Total	7440-50-8	0.0667		0.00200	0.00100
Lead, Total	7439-92-1	0.0693		0.00100	0.000500
Nickel, Total	7440-02-0	0.0708		0.00400	0.00200
Selenium, Total	7782-49-2	0.0722		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Thallium, Total	7440-28-0	0.0661		0.000200	0.000100
Vanadium, Total	7440-62-2	0.0757		0.00100	0.000500
Zinc, Total	7440-66-6	0.124		0.0250	0.0125

Sample #: L12120503-26	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1MS	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 17:46
Collect Date: 12/12/2012 15:20	Dilution: 50	File ID: NI.121812.174613
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.819		0.100	0.0500

Sample #: L12120503-27	PrePrep Method: N/A	Instrument: HPMS10
Client ID: MW4-1MSD	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 12/10/2012 17:11
Workgroup #: WG417313	Analyst: TMB	Run Date: 12/21/2012 17:29
Collect Date: 12/12/2012 15:30	Dilution: 1	File ID: 10M01206
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1	20.0		10.0	2.50
Benzene	71-43-2	20.9		1.00	0.125
Bromobenzene	108-86-1	19.7		1.00	0.125
Bromochloromethane	74-97-5	20.7		1.00	0.200
Bromodichloromethane	75-27-4	20.9		1.00	0.250
Bromoform	75-25-2	18.4		1.00	0.500
Bromomethane	74-83-9	16.4		1.00	0.500
2-Butanone	78-93-3	17.7		10.0	2.50
n-Butylbenzene	104-51-8	20.1		1.00	0.250
sec-Butylbenzene	135-98-8	20.0		1.00	0.250
tert-Butylbenzene	98-06-6	18.4		1.00	0.250
Carbon disulfide	75-15-0	21.8		1.00	0.500
Carbon tetrachloride	56-23-5	20.9		1.00	0.250
Chlorobenzene	108-90-7	19.0		1.00	0.125
Chlorodibromomethane	124-48-1	20.3		1.00	0.250
Chloroethane	75-00-3	22.0		1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3	20.9		1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chloromethane	74-87-3	21.3		1.00	0.500
2-Chlorotoluene	95-49-8	19.0		1.00	0.125
4-Chlorotoluene	106-43-4	18.4		1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8	16.9		5.00	1.00
1,2-Dibromoethane	106-93-4	20.1		1.00	0.250
Dibromomethane	74-95-3	20.3		1.00	0.250
1,2-Dichlorobenzene	95-50-1	19.2		1.00	0.125
1,3-Dichlorobenzene	541-73-1	18.7		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.6		1.00	0.125
Dichlorodifluoromethane	75-71-8	28.7		1.00	0.250
1,1-Dichloroethane	75-34-3	21.6		1.00	0.125
1,2-Dichloroethane	107-06-2	21.5		1.00	0.250
1,1-Dichloroethene	75-35-4	20.7		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	21.3		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	21.2		1.00	0.250
1,2-Dichloropropane	78-87-5	21.9		1.00	0.200
1,3-Dichloropropane	142-28-9	20.6		1.00	0.200
2,2-Dichloropropane	594-20-7	22.0		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	22.6		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.3		1.00	0.500
1,1-Dichloropropene	563-58-6	21.0		1.00	0.250
Ethylbenzene	100-41-4	20.2		1.00	0.250
2-Hexanone	591-78-6	17.8		10.0	2.50
Hexachlorobutadiene	87-68-3	20.2		1.00	0.250
Isopropylbenzene	98-82-8	19.5		1.00	0.250
p-Isopropyltoluene	99-87-6	20.7		1.00	0.250
4-Methyl-2-pentanone	108-10-1	17.9		10.0	2.50
Methylene chloride	75-09-2	20.3		5.00	0.250
Naphthalene	91-20-3	16.5		1.00	0.200
n-Propylbenzene	103-65-1	19.6		1.00	0.125
Styrene	100-42-5	20.9		1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6	21.0		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	21.8		1.00	0.200
Tetrachloroethene	127-18-4	34.4		1.00	0.250
Toluene	108-88-3	20.6		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	17.5		1.00	0.150
1,2,4-Trichlorobenzene	120-82-1	18.1		1.00	0.200
1,1,1-Trichloroethane	71-55-6	21.1		1.00	0.250
1,1,2-Trichloroethane	79-00-5	20.7		1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Trichloroethene	79-01-6	23.8		1.00	0.250
Trichlorofluoromethane	75-69-4	22.3		1.00	0.250
1,2,3-Trichloropropane	96-18-4	19.4		1.00	0.500
1,2,4-Trimethylbenzene	95-63-6	21.8		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.7		1.00	0.250
Vinyl acetate	108-05-4	36.1		10.0	2.50
Vinyl chloride	75-01-4	27.0		1.00	0.250
o-Xylene	95-47-6	18.6		1.00	0.250
m-,p-Xylene	179601-23-1	40.0		1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.4	86	118		
1,2-Dichloroethane-d4	92.8	80	120		
Toluene-d8	97.7	88	110		
4-Bromofluorobenzene	97.1	86	115		
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-27	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW4-1MSD	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 15:04
Collect Date: 12/12/2012 15:30	Dilution: 1	File ID: P2.121912.150457
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	8.55		0.100	0.0500
Calcium, Total	7440-70-2	45.3		0.200	0.100
Iron, Total	7439-89-6	5.60		0.100	0.0500
Magnesium, Total	7439-95-4	22.5		0.500	0.250
Potassium, Total	7440-09-7	27.1		1.00	0.500
Strontium, Total	7440-24-6	1.60		0.0100	0.00500

Sample #: L12120503-27	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW4-1MSD	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/20/2012 09:09
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/20/2012 17:14
Collect Date: 12/12/2012 15:30	Dilution: 50	File ID: P2.122012.171430
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	253		25.0	12.5

Lab Report #: L12120503
 Lab Project #: 3083.001
 Project Name: Longhorn AAP
 Lab Contact: Stephanie Mossburg

Certificate of Analysis

Sample #: L12120503-27	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1MSD	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 13:08
Collect Date: 12/12/2012 15:30	Dilution: 1	File ID: NI.121812.130842
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0617		0.00100	0.000500
Barium, Total	7440-39-3	0.108		0.00300	0.00150
Cadmium, Total	7440-43-9	0.0648		0.000600	0.000300
Chromium, Total	7440-47-3	0.0701		0.00200	0.00100
Copper, Total	7440-50-8	0.0651		0.00200	0.00100
Lead, Total	7439-92-1	0.0670		0.00100	0.000500
Nickel, Total	7440-02-0	0.0690		0.00400	0.00200
Selenium, Total	7782-49-2	0.0714		0.00100	0.000500
Thallium, Total	7440-28-0	0.0638		0.000200	0.000100
Vanadium, Total	7440-62-2	0.0714		0.00100	0.000500
Zinc, Total	7440-66-6	0.105		0.0250	0.0125

Sample #: L12120503-27	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-1MSD	Prep Method: 3015	Prep Date: 12/18/2012 06:40
Matrix: Water	Analytical Method: 6020	Cal Date: 12/18/2012 09:09
Workgroup #: WG416945	Analyst: JYH	Run Date: 12/18/2012 17:49
Collect Date: 12/12/2012 15:30	Dilution: 50	File ID: NI.121812.174936
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.734		0.100	0.0500

Sample #: L12120503-28	PrePrep Method: N/A	Instrument: HPMS11
Client ID: MW4-2	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 07:27
Collect Date: 12/12/2012 16:20	Dilution: 1	File ID: 11M88925
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0	2.11		1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.133	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.270	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	1.81		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	0.534	J	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	9.18		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	4.19		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4		ND	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	94.7	86	118		
1,2-Dichloroethane-d4	86.0	80	120		
Toluene-d8	105	88	110		
4-Bromofluorobenzene	97.1	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-28

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: MW4-2

Prep Method: 3005A

Prep Date: 12/18/2012 06:23

Matrix: Water

Analytical Method: 6010B

Cal Date: 12/19/2012 08:46

Workgroup #: WG416961

Analyst: KHR

Run Date: 12/19/2012 15:10

Collect Date: 12/12/2012 16:20

Dilution: 1

File ID: P2.121912.151057

Sample Tag: 01

Units: mg/L

Lab Report #: L12120503

Lab Project #: 3083.001

Project Name: Longhorn AAP

Lab Contact: Stephanie Mossburg

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.307		0.100	0.0500
Calcium, Total	7440-70-2	8.44		0.200	0.100
Iron, Total	7439-89-6	0.682		0.100	0.0500
Magnesium, Total	7439-95-4	4.49		0.500	0.250
Potassium, Total	7440-09-7	1.06		1.00	0.500
Sodium, Total	7440-23-5	84.1		0.500	0.250
Strontium, Total	7440-24-6	0.235		0.0100	0.00500

Sample #: L12120503-28	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-2	Prep Method: 3015	Prep Date: 12/18/2012 06:29
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 14:58
Collect Date: 12/12/2012 16:20	Dilution: 1	File ID: NI.121912.145809
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0427		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00210		0.00200	0.00100
Copper, Total	7440-50-8		ND	0.00200	0.00100
Lead, Total	7439-92-1		ND	0.00100	0.000500
Nickel, Total	7440-02-0	0.00222	J	0.00400	0.00200
Selenium, Total	7782-49-2	0.00187		0.00100	0.000500
Thallium, Total	7440-28-0	0.000106	J	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00102		0.00100	0.000500
Zinc, Total	7440-66-6		ND	0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Sample #: L12120503-28	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-2	Prep Method: 3015	Prep Date: 12/18/2012 06:29
Matrix: Water	Analytical Method: 6020	Cal Date: 12/20/2012 13:42
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/20/2012 15:13
Collect Date: 12/12/2012 16:20	Dilution: 20	File ID: NI.122012.151341
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Manganese, Total	7439-96-5	0.302		0.0400	0.0200

Certificate of Analysis

Sample #: L12120503-29	PrePrep Method: N/A	Instrument: HPMS11
Client ID: MW4-3	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/08/2012 14:43
Workgroup #: WG417226	Analyst: ADC	Run Date: 12/21/2012 07:58
Collect Date: 12/12/2012 17:25	Dilution: 1	File ID: 11M88926
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Acetone	67-64-1		ND	10.0	2.50
Benzene	71-43-2		ND	1.00	0.125
Bromobenzene	108-86-1		ND	1.00	0.125
Bromochloromethane	74-97-5		ND	1.00	0.200
Bromodichloromethane	75-27-4		ND	1.00	0.250
Bromoform	75-25-2		ND	1.00	0.500
Bromomethane	74-83-9		ND	1.00	0.500
2-Butanone	78-93-3		ND	10.0	2.50
n-Butylbenzene	104-51-8		ND	1.00	0.250
sec-Butylbenzene	135-98-8		ND	1.00	0.250
tert-Butylbenzene	98-06-6		ND	1.00	0.250
Carbon disulfide	75-15-0	0.891	J	1.00	0.500
Carbon tetrachloride	56-23-5		ND	1.00	0.250
Chlorobenzene	108-90-7	0.229	J	1.00	0.125
Chlorodibromomethane	124-48-1		ND	1.00	0.250
Chloroethane	75-00-3		ND	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		ND	10.0	2.00
Chloroform	67-66-3		ND	1.00	0.125
Chloromethane	74-87-3		ND	1.00	0.500
2-Chlorotoluene	95-49-8		ND	1.00	0.125
4-Chlorotoluene	106-43-4		ND	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		ND	5.00	1.00
1,2-Dibromoethane	106-93-4		ND	1.00	0.250
Dibromomethane	74-95-3		ND	1.00	0.250
1,2-Dichlorobenzene	95-50-1		ND	1.00	0.125
1,3-Dichlorobenzene	541-73-1		ND	1.00	0.250
1,4-Dichlorobenzene	106-46-7		ND	1.00	0.125
Dichlorodifluoromethane	75-71-8		ND	1.00	0.250
1,1-Dichloroethane	75-34-3	0.901	J	1.00	0.125
1,2-Dichloroethane	107-06-2		ND	1.00	0.250
1,1-Dichloroethene	75-35-4	6.76		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	1.18		1.00	0.250
trans-1,2-Dichloroethene	156-60-5		ND	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2-Dichloropropane	78-87-5		ND	1.00	0.200
1,3-Dichloropropane	142-28-9		ND	1.00	0.200
2,2-Dichloropropane	594-20-7		ND	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		ND	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		ND	1.00	0.500
1,1-Dichloropropene	563-58-6		ND	1.00	0.250
Ethylbenzene	100-41-4		ND	1.00	0.250
2-Hexanone	591-78-6		ND	10.0	2.50
Hexachlorobutadiene	87-68-3		ND	1.00	0.250
Isopropylbenzene	98-82-8		ND	1.00	0.250
p-Isopropyltoluene	99-87-6		ND	1.00	0.250
4-Methyl-2-pentanone	108-10-1		ND	10.0	2.50
Methylene chloride	75-09-2		ND	5.00	0.250
Naphthalene	91-20-3		ND	1.00	0.200
n-Propylbenzene	103-65-1		ND	1.00	0.125
Styrene	100-42-5		ND	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		ND	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.00	0.200
Tetrachloroethene	127-18-4	20.1		1.00	0.250
Toluene	108-88-3		ND	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		ND	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1		ND	1.00	0.200
1,1,1-Trichloroethane	71-55-6		ND	1.00	0.250
1,1,2-Trichloroethane	79-00-5		ND	1.00	0.250
Trichloroethene	79-01-6	13.5		1.00	0.250
Trichlorofluoromethane	75-69-4		ND	1.00	0.250
1,2,3-Trichloropropane	96-18-4		ND	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		ND	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		ND	1.00	0.250
Vinyl acetate	108-05-4		ND	10.0	2.50
Vinyl chloride	75-01-4	0.565	J	1.00	0.250
o-Xylene	95-47-6		ND	1.00	0.250
m-,p-Xylene	179601-23-1		ND	1.00	0.500
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	95.1	86	118		
1,2-Dichloroethane-d4	86.3	80	120		
Toluene-d8	102	88	110		
4-Bromofluorobenzene	94.3	86	115		
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Certificate of Analysis

ND	Not detected at or above the reporting limit (RL).
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Sample #: L12120503-29	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW4-3	Prep Method: 3005A	Prep Date: 12/18/2012 06:23
Matrix: Water	Analytical Method: 6010B	Cal Date: 12/19/2012 08:46
Workgroup #: WG416961	Analyst: KHR	Run Date: 12/19/2012 15:29
Collect Date: 12/12/2012 17:25	Dilution: 1	File ID: P2.121912.152949
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	1.67		0.100	0.0500
Calcium, Total	7440-70-2	4.68		0.200	0.100
Iron, Total	7439-89-6	3.63		0.100	0.0500
Magnesium, Total	7439-95-4	1.66		0.500	0.250
Potassium, Total	7440-09-7	0.884	J	1.00	0.500
Sodium, Total	7440-23-5	75.6		0.500	0.250
Strontium, Total	7440-24-6	0.0790		0.0100	0.00500
J	Estimated value; the analyte concentration was less than the RL/LOQ.				

Sample #: L12120503-29	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW4-3	Prep Method: 3015	Prep Date: 12/18/2012 06:29
Matrix: Water	Analytical Method: 6020	Cal Date: 12/19/2012 09:29
Workgroup #: WG417061	Analyst: JYH	Run Date: 12/19/2012 15:01
Collect Date: 12/12/2012 17:25	Dilution: 1	File ID: NI.121912.150132
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		ND	0.00100	0.000500
Barium, Total	7440-39-3	0.0815		0.00300	0.00150
Cadmium, Total	7440-43-9		ND	0.000600	0.000300
Chromium, Total	7440-47-3	0.00190	J	0.00200	0.00100
Copper, Total	7440-50-8	0.00204		0.00200	0.00100
Lead, Total	7439-92-1	0.000691	J	0.00100	0.000500
Manganese, Total	7439-96-5	0.147		0.00200	0.00100
Nickel, Total	7440-02-0	0.00525		0.00400	0.00200
Selenium, Total	7782-49-2	0.00414		0.00100	0.000500
Thallium, Total	7440-28-0		ND	0.000200	0.000100
Vanadium, Total	7440-62-2	0.00240		0.00100	0.000500
Zinc, Total	7440-66-6	0.0956		0.0250	0.0125
J	Estimated value; the analyte concentration was less than the RL/LOQ.				
ND	Not detected at or above the reporting limit (RL).				

Certificate of Analysis

METHOD BLANK SUMMARY

Login Number: L12120503
 Blank File ID: 10M01156
 Prep Date: 12/20/12 10:47
 Analyzed Date: 12/20/12 10:47
 Analyst: TMB

Work Group: WG417120
 Blank Sample ID: WG417120-01
 Instrument ID: HPMS10
 Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG417120-02	10M01157	12/20/12 11:18	01
MW3-1MS	L12120503-10	10M01158	12/20/12 11:49	01
MW3-1MSD	L12120503-11	10M01159	12/20/12 12:20	01
TRIPBLANK10DEC2012	L12120503-07	10M01160	12/20/12 12:51	01
TRIPBLANK11DEC2012	L12120503-14	10M01161	12/20/12 13:21	01
FIELDBLANK10DEC2012	L12120503-05	10M01162	12/20/12 13:53	01
FIELDBLANK11DEC2012	L12120503-13	10M01163	12/20/12 14:24	01
MW1-1	L12120503-01	10M01167	12/20/12 16:29	01
MW1-1-D	L12120503-02	10M01168	12/20/12 17:00	01
MW1-1-2	L12120503-03	10M01169	12/20/12 17:31	01
MW2-1	L12120503-04	10M01170	12/20/12 18:02	01
MW2-2	L12120503-06	10M01171	12/20/12 18:33	01
MW2-3	L12120503-08	10M01172	12/20/12 19:04	01
MW3-1	L12120503-09	10M01173	12/20/12 19:35	01
MW3-2	L12120503-12	10M01174	12/20/12 20:07	01
MW3-3	L12120503-15	10M01175	12/20/12 20:37	01
MW-58	L12120503-16	10M01176	12/20/12 21:09	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2710947
 Report generated 12/29/2012 12:52



METHOD BLANK SUMMARY

Login Number: L12120503 Work Group: WG417313
 Blank File ID: 10M01203 Blank Sample ID: WG417313-01
 Prep Date: 12/21/12 15:58 Instrument ID: HPMS10
 Analyzed Date: 12/21/12 15:58 Method: 8260B
 Analyst: TMB

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG417313-02	10M01204	12/21/12 16:29	01
MW4-1MS	L12120503-26	10M01205	12/21/12 16:59	01
MW4-1MSD	L12120503-27	10M01206	12/21/12 17:29	01
MW4-1	L12120503-24	10M01215	12/21/12 21:59	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2710947
 Report generated 12/29/2012 12:52



METHOD BLANK SUMMARY

Login Number: L12120503
 Blank File ID: 11M88906
 Prep Date: 12/20/12 21:43
 Analyzed Date: 12/20/12 21:43
 Analyst: ADC

Work Group: WG417226
 Blank Sample ID: WG417226-01
 Instrument ID: HPMS11
 Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG417226-02	11M88907	12/20/12 22:14	01
LCS2	WG417226-03	11M88908	12/20/12 22:45	01
TRIPBLANK12DEC2012	L12120503-21	11M88910	12/20/12 23:46	01
FIELDBLANK12DEC2012	L12120503-20	11M88911	12/21/12 00:17	01
MW1-1	L12120503-01	11M88918	12/21/12 03:52	02
35BWW03	L12120503-17	11M88919	12/21/12 04:23	01
35BWW08	L12120503-18	11M88920	12/21/12 04:54	01
35BWW06	L12120503-19	11M88921	12/21/12 05:25	01
35BWW05	L12120503-22	11M88922	12/21/12 05:55	01
35BWW14	L12120503-23	11M88923	12/21/12 06:26	01
MW4-1D	L12120503-25	11M88924	12/21/12 06:57	01
MW4-2	L12120503-28	11M88925	12/21/12 07:27	01
MW4-3	L12120503-29	11M88926	12/21/12 07:58	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2710947
 Report generated 12/29/2012 12:52



Login Number: L12120503 Prep Date: 12/20/12 10:47 Sample ID: WG417120-01
 Instrument ID: HPMS10 Run Date: 12/20/12 10:47 Prep Method: 5030B/5030C/503
 File ID: 10M01156 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417120 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS10-10-DEC-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	1.00	0.125	1	U
Bromobenzene	0.125	1.00	0.125	1	U
Bromochloromethane	0.200	1.00	0.200	1	U
Bromodichloromethane	0.250	1.00	0.250	1	U
Bromoform	0.500	1.00	0.500	1	U
Bromomethane	0.500	1.00	0.500	1	U
2-Butanone	2.50	10.0	2.50	1	U
n-Butylbenzene	0.250	1.00	0.250	1	U
sec-Butylbenzene	0.250	1.00	0.250	1	U
tert-Butylbenzene	0.250	1.00	0.250	1	U
Carbon disulfide	0.500	1.00	0.500	1	U
Carbon tetrachloride	0.250	1.00	0.250	1	U
Chlorobenzene	0.125	1.00	0.125	1	U
Chlorodibromomethane	0.250	1.00	0.250	1	U
Chloroethane	0.500	1.00	0.500	1	U
2-Chloroethyl vinyl ether	2.00	10.0	2.00	1	U
Chloroform	0.125	1.00	0.125	1	U
Chloromethane	0.500	1.00	0.500	1	U
2-Chlorotoluene	0.125	1.00	0.125	1	U
4-Chlorotoluene	0.250	1.00	0.250	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	1.00	0.250	1	U
Dibromomethane	0.250	1.00	0.250	1	U
1,2-Dichlorobenzene	0.125	1.00	0.125	1	U
1,3-Dichlorobenzene	0.250	1.00	0.250	1	U
1,4-Dichlorobenzene	0.125	1.00	0.125	1	U
Dichlorodifluoromethane	0.250	1.00	0.250	1	U
1,1-Dichloroethane	0.125	1.00	0.125	1	U
1,2-Dichloroethane	0.250	1.00	0.250	1	U
1,1-Dichloroethene	0.500	1.00	0.500	1	U
cis-1,2-Dichloroethene	0.250	1.00	0.250	1	U
trans-1,2-Dichloroethene	0.250	1.00	0.250	1	U
1,2-Dichloropropane	0.200	1.00	0.200	1	U
1,3-Dichloropropane	0.200	1.00	0.200	1	U
2,2-Dichloropropane	0.250	1.00	0.250	1	U
cis-1,3-Dichloropropene	0.250	1.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	1.00	0.500	1	U
1,1-Dichloropropene	0.250	1.00	0.250	1	U
Ethylbenzene	0.250	1.00	0.250	1	U
2-Hexanone	2.50	10.0	2.50	1	U
Hexachlorobutadiene	0.250	1.00	0.250	1	U

Report Name: BLANK
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Login Number: L12120503 Prep Date: 12/20/12 10:47 Sample ID: WG417120-01
 Instrument ID: HPMS10 Run Date: 12/20/12 10:47 Prep Method: 5030B/5030C/503
 File ID: 10M01156 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417120 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS10-10-DEC-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Isopropylbenzene	0.250	1.00	0.250	1	U
p-Isopropyltoluene	0.250	1.00	0.250	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Naphthalene	0.200	1.00	0.200	1	U
n-Propylbenzene	0.125	1.00	0.125	1	U
Styrene	0.125	1.00	0.125	1	U
1,1,1,2-Tetrachloroethane	0.250	1.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	1	U
1,2,4-Trichlorobenzene	0.200	1.00	0.200	1	U
1,1,1-Trichloroethane	0.250	1.00	0.250	1	U
1,1,2-Trichloroethane	0.250	1.00	0.250	1	U
Trichloroethene	0.250	1.00	0.250	1	U
Trichlorofluoromethane	0.250	1.00	0.250	1	U
1,2,3-Trichloropropane	0.500	1.00	0.500	1	U
1,2,4-Trimethylbenzene	0.250	1.00	0.250	1	U
1,3,5-Trimethylbenzene	0.250	1.00	0.250	1	U
Vinyl acetate	2.50	10.0	2.50	1	U
Vinyl chloride	0.250	1.00	0.250	1	U
o-Xylene	0.250	1.00	0.250	1	U
m-,p-Xylene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	98.1	86 - 118	PASS
1,2-Dichloroethane-d4	94.5	80 - 120	PASS
Toluene-d8	100	88 - 110	PASS
4-Bromofluorobenzene	115	86 - 115	PASS

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
 PDF ID: 2710948
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Login Number: L12120503 Prep Date: 12/21/12 15:58 Sample ID: WG417313-01
 Instrument ID: HPMS10 Run Date: 12/21/12 15:58 Prep Method: 5030B/5030C/503
 File ID: 10M01203 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417313 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS10-10-DEC-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	1.00	0.125	1	U
Bromobenzene	0.125	1.00	0.125	1	U
Bromochloromethane	0.200	1.00	0.200	1	U
Bromodichloromethane	0.250	1.00	0.250	1	U
Bromoform	0.500	1.00	0.500	1	U
Bromomethane	0.500	1.00	0.500	1	U
2-Butanone	2.50	10.0	2.50	1	U
n-Butylbenzene	0.250	1.00	0.250	1	U
sec-Butylbenzene	0.250	1.00	0.250	1	U
tert-Butylbenzene	0.250	1.00	0.250	1	U
Carbon disulfide	0.500	1.00	0.500	1	U
Carbon tetrachloride	0.250	1.00	0.250	1	U
Chlorobenzene	0.125	1.00	0.125	1	U
Chlorodibromomethane	0.250	1.00	0.250	1	U
Chloroethane	0.500	1.00	0.500	1	U
2-Chloroethyl vinyl ether	2.00	10.0	2.00	1	U
Chloroform	0.125	1.00	0.125	1	U
Chloromethane	0.500	1.00	0.500	1	U
2-Chlorotoluene	0.125	1.00	0.125	1	U
4-Chlorotoluene	0.250	1.00	0.250	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	1.00	0.250	1	U
Dibromomethane	0.250	1.00	0.250	1	U
1,2-Dichlorobenzene	0.125	1.00	0.125	1	U
1,3-Dichlorobenzene	0.250	1.00	0.250	1	U
1,4-Dichlorobenzene	0.125	1.00	0.125	1	U
Dichlorodifluoromethane	0.250	1.00	0.250	1	U
1,1-Dichloroethane	0.125	1.00	0.125	1	U
1,2-Dichloroethane	0.250	1.00	0.250	1	U
1,1-Dichloroethene	0.500	1.00	0.500	1	U
cis-1,2-Dichloroethene	0.250	1.00	0.250	1	U
trans-1,2-Dichloroethene	0.250	1.00	0.250	1	U
1,2-Dichloropropane	0.200	1.00	0.200	1	U
1,3-Dichloropropane	0.200	1.00	0.200	1	U
2,2-Dichloropropane	0.250	1.00	0.250	1	U
cis-1,3-Dichloropropene	0.250	1.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	1.00	0.500	1	U
1,1-Dichloropropene	0.250	1.00	0.250	1	U
Ethylbenzene	0.250	1.00	0.250	1	U
2-Hexanone	2.50	10.0	2.50	1	U
Hexachlorobutadiene	0.250	1.00	0.250	1	U

Report Name: BLANK
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Login Number: L12120503 Prep Date: 12/21/12 15:58 Sample ID: WG417313-01
 Instrument ID: HPMS10 Run Date: 12/21/12 15:58 Prep Method: 5030B/5030C/503
 File ID: 10M01203 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417313 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS10-10-DEC-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Isopropylbenzene	0.250	1.00	0.250	1	U
p-Isopropyltoluene	0.250	1.00	0.250	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Naphthalene	0.200	1.00	0.200	1	U
n-Propylbenzene	0.125	1.00	0.125	1	U
Styrene	0.125	1.00	0.125	1	U
1,1,1,2-Tetrachloroethane	0.250	1.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	1	U
1,2,4-Trichlorobenzene	0.200	1.00	0.200	1	U
1,1,1-Trichloroethane	0.250	1.00	0.250	1	U
1,1,2-Trichloroethane	0.250	1.00	0.250	1	U
Trichloroethene	0.250	1.00	0.250	1	U
Trichlorofluoromethane	0.250	1.00	0.250	1	U
1,2,3-Trichloropropane	0.500	1.00	0.500	1	U
1,2,4-Trimethylbenzene	0.250	1.00	0.250	1	U
1,3,5-Trimethylbenzene	0.250	1.00	0.250	1	U
Vinyl acetate	2.50	10.0	2.50	1	U
Vinyl chloride	0.250	1.00	0.250	1	U
o-Xylene	0.250	1.00	0.250	1	U
m-,p-Xylene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	99.7	86 - 118	PASS
1,2-Dichloroethane-d4	93.0	80 - 120	PASS
Toluene-d8	100	88 - 110	PASS
4-Bromofluorobenzene	114	86 - 115	PASS

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
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Login Number: L12120503 Prep Date: 12/20/12 21:43 Sample ID: WG417226-01
 Instrument ID: HPMS11 Run Date: 12/20/12 21:43 Prep Method: 5030B/5030C/503
 File ID: 11M88906 Analyst: ADC Method: 8260B
 Workgroup (AAB#): WG417226 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS11-08-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	1.00	0.125	1	U
Bromobenzene	0.125	1.00	0.125	1	U
Bromochloromethane	0.200	1.00	0.200	1	U
Bromodichloromethane	0.250	1.00	0.250	1	U
Bromoform	0.500	1.00	0.500	1	U
Bromomethane	0.500	1.00	0.500	1	U
2-Butanone	2.50	10.0	2.50	1	U
n-Butylbenzene	0.250	1.00	0.250	1	U
sec-Butylbenzene	0.250	1.00	0.250	1	U
tert-Butylbenzene	0.250	1.00	0.250	1	U
Carbon disulfide	0.500	1.00	0.500	1	U
Carbon tetrachloride	0.250	1.00	0.250	1	U
Chlorobenzene	0.125	1.00	0.125	1	U
Chlorodibromomethane	0.250	1.00	0.250	1	U
Chloroethane	0.500	1.00	0.500	1	U
2-Chloroethyl vinyl ether	2.00	10.0	2.00	1	U
Chloroform	0.125	1.00	0.125	1	U
Chloromethane	0.500	1.00	0.500	1	U
2-Chlorotoluene	0.125	1.00	0.125	1	U
4-Chlorotoluene	0.250	1.00	0.250	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	1.00	0.250	1	U
Dibromomethane	0.250	1.00	0.250	1	U
1,2-Dichlorobenzene	0.125	1.00	0.125	1	U
1,3-Dichlorobenzene	0.250	1.00	0.250	1	U
1,4-Dichlorobenzene	0.125	1.00	0.125	1	U
Dichlorodifluoromethane	0.250	1.00	0.250	1	U
1,1-Dichloroethane	0.125	1.00	0.125	1	U
1,2-Dichloroethane	0.250	1.00	0.250	1	U
1,1-Dichloroethene	0.500	1.00	0.500	1	U
cis-1,2-Dichloroethene	0.250	1.00	0.250	1	U
trans-1,2-Dichloroethene	0.250	1.00	0.250	1	U
1,2-Dichloropropane	0.200	1.00	0.200	1	U
1,3-Dichloropropane	0.200	1.00	0.200	1	U
2,2-Dichloropropane	0.250	1.00	0.250	1	U
cis-1,3-Dichloropropene	0.250	1.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	1.00	0.500	1	U
1,1-Dichloropropene	0.250	1.00	0.250	1	U
Ethylbenzene	0.250	1.00	0.250	1	U
2-Hexanone	2.50	10.0	2.50	1	U
Hexachlorobutadiene	0.250	1.00	0.250	1	U

Report Name: BLANK
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Login Number: L12120503 Prep Date: 12/20/12 21:43 Sample ID: WG417226-01
 Instrument ID: HPMS11 Run Date: 12/20/12 21:43 Prep Method: 5030B/5030C/503
 File ID: 11M88906 Analyst: ADC Method: 8260B
 Workgroup (AAB#): WG417226 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS11-08-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Isopropylbenzene	0.250	1.00	0.250	1	U
p-Isopropyltoluene	0.250	1.00	0.250	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Naphthalene	0.200	1.00	0.200	1	U
n-Propylbenzene	0.125	1.00	0.125	1	U
Styrene	0.125	1.00	0.125	1	U
1,1,1,2-Tetrachloroethane	0.250	1.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	1	U
1,2,4-Trichlorobenzene	0.200	1.00	0.200	1	U
1,1,1-Trichloroethane	0.250	1.00	0.250	1	U
1,1,2-Trichloroethane	0.250	1.00	0.250	1	U
Trichloroethene	0.250	1.00	0.250	1	U
Trichlorofluoromethane	0.250	1.00	0.250	1	U
1,2,3-Trichloropropane	0.500	1.00	0.500	1	U
1,2,4-Trimethylbenzene	0.250	1.00	0.250	1	U
1,3,5-Trimethylbenzene	0.250	1.00	0.250	1	U
Vinyl acetate	2.50	10.0	2.50	1	U
Vinyl chloride	0.250	1.00	0.250	1	U
o-Xylene	0.250	1.00	0.250	1	U
m-,p-Xylene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	98.3	86 - 118	PASS
1,2-Dichloroethane-d4	89.8	80 - 120	PASS
Toluene-d8	106	88 - 110	PASS
4-Bromofluorobenzene	98.6	86 - 115	PASS

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
 PDF ID: 2710948
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Login Number: L12120503 Run Date: 12/20/2012 Sample ID: WG417120-02
 Instrument ID: HPMS10 Run Time: 11:18 Prep Method: 5030B/5030C/503
 File ID: 10M01157 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417120 Matrix: Water Units: ug/L
 QC Key: STD Lot#: STD55449 Cal ID: HPMS10-10-DEC-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Acetone	20.0	21.6	108	40 - 180	
Benzene	20.0	21.4	107	80 - 121	
Bromobenzene	20.0	19.8	99.0	80 - 120	
Bromochloromethane	20.0	21.4	107	65 - 130	
Bromodichloromethane	20.0	21.2	106	80 - 131	
Bromoform	20.0	19.5	97.4	70 - 130	
Bromomethane	20.0	16.0	79.9	30 - 145	
2-Butanone	20.0	21.9	109	10 - 170	
n-Butylbenzene	20.0	19.7	98.7	80 - 131	
sec-Butylbenzene	20.0	19.8	99.2	80 - 127	
tert-Butylbenzene	20.0	18.2	91.0	80 - 126	
Carbon disulfide	20.0	19.6	97.8	58 - 128	
Carbon tetrachloride	20.0	22.1	110	65 - 140	
Chlorobenzene	20.0	19.2	95.8	80 - 120	
Chlorodibromomethane	20.0	21.1	106	60 - 135	
Chloroethane	20.0	22.0	110	60 - 135	
2-Chloroethyl vinyl ether	20.0	20.3	101	45 - 160	
Chloroform	20.0	21.2	106	80 - 125	
Chloromethane	20.0	22.6	113	40 - 125	
2-Chlorotoluene	20.0	19.1	95.6	80 - 127	
4-Chlorotoluene	20.0	18.0	89.8	80 - 126	
1,2-Dibromo-3-chloropropane	20.0	18.0	89.8	50 - 130	
1,2-Dibromoethane	20.0	20.9	105	80 - 129	
Dibromomethane	20.0	20.9	104	75 - 125	
1,2-Dichlorobenzene	20.0	19.5	97.3	80 - 125	
1,3-Dichlorobenzene	20.0	19.0	94.9	80 - 120	
1,4-Dichlorobenzene	20.0	19.8	99.0	80 - 120	
Dichlorodifluoromethane	20.0	26.4	132	40 - 160	
1,1-Dichloroethane	20.0	21.6	108	80 - 125	
1,2-Dichloroethane	20.0	21.7	108	80 - 129	
1,1-Dichloroethene	20.0	20.5	103	80 - 132	
cis-1,2-Dichloroethene	20.0	21.5	107	70 - 125	
trans-1,2-Dichloroethene	20.0	21.7	109	80 - 127	
1,2-Dichloropropane	20.0	21.9	109	80 - 120	
1,3-Dichloropropane	20.0	21.2	106	80 - 120	
2,2-Dichloropropane	20.0	21.2	106	80 - 133	
cis-1,3-Dichloropropene	20.0	22.8	114	70 - 130	
trans-1,3-Dichloropropene	20.0	20.7	103	80 - 130	
1,1-Dichloropropene	20.0	21.6	108	75 - 130	
Ethylbenzene	20.0	20.9	104	80 - 122	
2-Hexanone	20.0	21.0	105	55 - 130	

LCS - Modified 03/06/2008
 PDF File ID: 2707983
 Report generated: 12/29/2012 12:52



Login Number: L12120503 Run Date: 12/20/2012 Sample ID: WG417120-02
 Instrument ID: HPMS10 Run Time: 11:18 Prep Method: 5030B/5030C/503
 File ID: 10M01157 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417120 Matrix: Water Units: ug/L
 QC Key: STD Lot#: STD55449 Cal ID: HPMS10-10-DEC-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Hexachlorobutadiene	20.0	21.0	105	72 - 132	
Isopropylbenzene	20.0	20.3	101	80 - 122	
p-Isopropyltoluene	20.0	20.6	103	80 - 122	
4-Methyl-2-pentanone	20.0	20.3	102	64 - 140	
Methylene chloride	20.0	20.7	103	80 - 123	
Naphthalene	20.0	16.6	83.0	59 - 149	
n-Propylbenzene	20.0	19.4	97.0	80 - 129	
Styrene	20.0	22.1	110	80 - 123	
1,1,1,2-Tetrachloroethane	20.0	21.5	107	80 - 130	
1,1,2,2-Tetrachloroethane	20.0	22.1	111	79 - 125	
Tetrachloroethene	20.0	21.3	106	80 - 124	
Toluene	20.0	21.3	106	80 - 124	
1,2,3-Trichlorobenzene	20.0	17.4	87.0	55 - 140	
1,2,4-Trichlorobenzene	20.0	17.9	89.6	65 - 135	
1,1,1-Trichloroethane	20.0	21.8	109	80 - 134	
1,1,2-Trichloroethane	20.0	21.6	108	80 - 125	
Trichloroethene	20.0	20.8	104	80 - 122	
Trichlorofluoromethane	20.0	23.0	115	62 - 151	
1,2,3-Trichloropropane	20.0	19.6	98.2	75 - 125	
1,2,4-Trimethylbenzene	20.0	21.7	108	80 - 125	
1,3,5-Trimethylbenzene	20.0	21.6	108	80 - 127	
Vinyl acetate	20.0	37.4	187	10 - 190	
Vinyl chloride	20.0	14.1	70.5	50 - 170	
o-Xylene	20.0	19.4	96.9	80 - 122	
m-,p-Xylene	40.0	41.4	103	80 - 122	

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	98.4	86 - 118	PASS
1,2-Dichloroethane-d4	93.1	80 - 120	PASS
Toluene-d8	97.3	88 - 110	PASS
4-Bromofluorobenzene	94.5	86 - 115	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
 PDF File ID: 2707983
 Report generated: 12/29/2012 12:52



Login Number: L12120503 Run Date: 12/21/2012 Sample ID: WG417313-02
 Instrument ID: HPMS10 Run Time: 16:29 Prep Method: 5030B/5030C/503
 File ID: 10M01204 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417313 Matrix: Water Units: ug/L
 QC Key: STD Lot#: STD55539 Cal ID: HPMS10-10-DEC-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Acetone	20.0	20.6	103	40 - 180	
Benzene	20.0	21.2	106	80 - 121	
Bromobenzene	20.0	19.6	98.2	80 - 120	
Bromochloromethane	20.0	21.1	106	65 - 130	
Bromodichloromethane	20.0	21.0	105	80 - 131	
Bromoform	20.0	18.4	91.8	70 - 130	
Bromomethane	20.0	16.6	83.2	30 - 145	
2-Butanone	20.0	20.5	102	10 - 170	
n-Butylbenzene	20.0	19.7	98.4	80 - 131	
sec-Butylbenzene	20.0	19.9	99.3	80 - 127	
tert-Butylbenzene	20.0	18.5	92.5	80 - 126	
Carbon disulfide	20.0	18.2	90.9	58 - 128	
Carbon tetrachloride	20.0	21.7	109	65 - 140	
Chlorobenzene	20.0	19.0	95.2	80 - 120	
Chlorodibromomethane	20.0	20.6	103	60 - 135	
Chloroethane	20.0	22.3	111	60 - 135	
2-Chloroethyl vinyl ether	20.0	18.6	93.2	45 - 160	
Chloroform	20.0	21.0	105	80 - 125	
Chloromethane	20.0	22.3	112	40 - 125	
2-Chlorotoluene	20.0	18.8	94.0	80 - 127	
4-Chlorotoluene	20.0	18.4	91.9	80 - 126	
1,2-Dibromo-3-chloropropane	20.0	16.7	83.6	50 - 130	
1,2-Dibromoethane	20.0	20.2	101	80 - 129	
Dibromomethane	20.0	20.3	101	75 - 125	
1,2-Dichlorobenzene	20.0	19.0	95.0	80 - 125	
1,3-Dichlorobenzene	20.0	18.7	93.3	80 - 120	
1,4-Dichlorobenzene	20.0	19.3	96.5	80 - 120	
Dichlorodifluoromethane	20.0	28.7	144	40 - 160	
1,1-Dichloroethane	20.0	21.6	108	80 - 125	
1,2-Dichloroethane	20.0	21.4	107	80 - 129	
1,1-Dichloroethene	20.0	20.1	101	80 - 132	
cis-1,2-Dichloroethene	20.0	21.1	106	70 - 125	
trans-1,2-Dichloroethene	20.0	21.7	108	80 - 127	
1,2-Dichloropropane	20.0	22.3	112	80 - 120	
1,3-Dichloropropane	20.0	20.8	104	80 - 120	
2,2-Dichloropropane	20.0	21.7	108	80 - 133	
cis-1,3-Dichloropropene	20.0	22.5	113	70 - 130	
trans-1,3-Dichloropropene	20.0	20.3	101	80 - 130	
1,1-Dichloropropene	20.0	21.3	106	75 - 130	
Ethylbenzene	20.0	20.5	103	80 - 122	
2-Hexanone	20.0	18.0	90.1	55 - 130	

LCS - Modified 03/06/2008
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Login Number: L12120503 Run Date: 12/21/2012 Sample ID: WG417313-02
 Instrument ID: HPMS10 Run Time: 16:29 Prep Method: 5030B/5030C/503
 File ID: 10M01204 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG417313 Matrix: Water Units: ug/L
 QC Key: STD Lot#: STD55539 Cal ID: HPMS10-10-DEC-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Hexachlorobutadiene	20.0	20.1	101	72 - 132	
Isopropylbenzene	20.0	19.9	99.3	80 - 122	
p-Isopropyltoluene	20.0	20.7	103	80 - 122	
4-Methyl-2-pentanone	20.0	18.1	90.5	64 - 140	
Methylene chloride	20.0	20.3	102	80 - 123	
Naphthalene	20.0	15.4	77.2	59 - 149	
n-Propylbenzene	20.0	19.6	98.1	80 - 129	
Styrene	20.0	21.4	107	80 - 123	
1,1,1,2-Tetrachloroethane	20.0	21.2	106	80 - 130	
1,1,2,2-Tetrachloroethane	20.0	21.6	108	79 - 125	
Tetrachloroethene	20.0	20.7	104	80 - 124	
Toluene	20.0	20.9	105	80 - 124	
1,2,3-Trichlorobenzene	20.0	16.9	84.3	55 - 140	
1,2,4-Trichlorobenzene	20.0	17.6	87.9	65 - 135	
1,1,1-Trichloroethane	20.0	21.2	106	80 - 134	
1,1,2-Trichloroethane	20.0	20.8	104	80 - 125	
Trichloroethene	20.0	20.5	103	80 - 122	
Trichlorofluoromethane	20.0	22.4	112	62 - 151	
1,2,3-Trichloropropane	20.0	19.0	95.2	75 - 125	
1,2,4-Trimethylbenzene	20.0	21.8	109	80 - 125	
1,3,5-Trimethylbenzene	20.0	21.7	109	80 - 127	
Vinyl acetate	20.0	34.5	173	10 - 190	
Vinyl chloride	20.0	27.2	136	50 - 170	
o-Xylene	20.0	18.9	94.4	80 - 122	
m-,p-Xylene	40.0	40.6	102	80 - 122	

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	98.4	86 - 118	PASS
1,2-Dichloroethane-d4	93.3	80 - 120	PASS
Toluene-d8	98.3	88 - 110	PASS
4-Bromofluorobenzene	95.8	86 - 115	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
 PDF File ID: 2707983
 Report generated: 12/29/2012 12:52



Login Number: L12120503 Analyst: ADC Prep Method: 5030B/5030C/503
 Instrument ID: HPMS11 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG417226 Units: ug/L
 QC Key: STD Lot #: STD55539

Sample ID: WG417226-02 LCS File ID: 11M88907 Run Date: 12/20/2012 22:14
 Sample ID: WG417226-03 LCS2 File ID: 11M88908 Run Date: 12/20/2012 22:45

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	19.9	99.5	20.0	19.8	99.0	0.507	40 - 180	20	
Benzene	20.0	19.2	96.0	20.0	18.4	92.2	4.13	80 - 121	20	
Bromobenzene	20.0	19.9	99.5	20.0	19.4	97.1	2.47	80 - 120	20	
Bromochloromethane	20.0	21.9	109	20.0	21.0	105	3.98	65 - 130	20	
Bromodichloromethane	20.0	19.4	96.9	20.0	18.8	93.9	3.18	80 - 131	20	
Bromoform	20.0	21.2	106	20.0	21.0	105	0.946	70 - 130	20	
Bromomethane	20.0	9.67	48.3	20.0	9.57	47.9	0.980	30 - 145	20	
2-Butanone	20.0	18.3	91.7	20.0	17.7	88.6	3.43	10 - 170	20	
n-Butylbenzene	20.0	22.5	113	20.0	21.7	108	4.00	80 - 131	20	
sec-Butylbenzene	20.0	20.5	103	20.0	20.0	100	2.40	80 - 127	20	
tert-Butylbenzene	20.0	21.0	105	20.0	20.0	100	4.94	80 - 126	20	
Carbon disulfide	20.0	20.0	100	20.0	19.2	96.0	4.28	58 - 128	20	
Carbon tetrachloride	20.0	21.9	109	20.0	20.7	104	5.42	65 - 140	20	
Chlorobenzene	20.0	20.1	101	20.0	19.5	97.3	3.44	80 - 120	20	
Chlorodibromomethane	20.0	21.0	105	20.0	20.2	101	3.48	60 - 135	20	
Chloroethane	20.0	18.9	94.7	20.0	18.7	93.3	1.50	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	9.87	49.4	20.0	10.8	54.2	9.32	45 - 160	20	
Chloroform	20.0	19.7	98.6	20.0	19.2	96.0	2.63	80 - 125	20	
Chloromethane	20.0	19.4	97.0	20.0	19.0	95.2	1.94	40 - 125	20	
2-Chlorotoluene	20.0	19.6	98.2	20.0	18.8	94.0	4.38	80 - 127	20	
4-Chlorotoluene	20.0	18.3	91.6	20.0	17.9	89.5	2.24	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	15.3	76.6	20.0	15.5	77.7	1.31	50 - 130	20	
1,2-Dibromoethane	20.0	21.1	106	20.0	20.1	101	4.80	80 - 129	20	
Dibromomethane	20.0	19.5	97.6	20.0	19.5	97.3	0.334	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.3	96.3	20.0	18.9	94.7	1.66	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.7	98.6	20.0	19.0	95.2	3.50	80 - 120	20	
1,4-Dichlorobenzene	20.0	20.6	103	20.0	20.1	100	2.72	80 - 120	20	
Dichlorodifluoromethane	20.0	25.8	129	20.0	25.7	129	0.155	40 - 160	20	
1,1-Dichloroethane	20.0	19.5	97.5	20.0	18.7	93.3	4.44	80 - 125	20	
1,2-Dichloroethane	20.0	19.5	97.6	20.0	19.0	95.2	2.55	80 - 129	20	
1,1-Dichloroethene	20.0	18.7	93.6	20.0	18.0	90.0	3.97	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.0	99.8	20.0	19.4	97.2	2.68	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.8	99.1	20.0	19.4	97.2	1.90	80 - 127	20	
1,2-Dichloropropane	20.0	19.6	97.8	20.0	18.8	94.2	3.76	80 - 120	20	
1,3-Dichloropropane	20.0	20.3	101	20.0	19.5	97.4	3.90	80 - 120	20	
2,2-Dichloropropane	20.0	18.1	90.3	20.0	16.8	84.1	7.16	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.4	102	20.0	19.4	96.9	4.97	70 - 130	20	
trans-1,3-Dichloropropene	20.0	20.0	99.9	20.0	19.7	98.6	1.24	80 - 130	20	
1,1-Dichloropropene	20.0	20.5	102	20.0	19.3	96.6	5.77	75 - 130	20	
Ethylbenzene	20.0	21.7	108	20.0	21.4	107	1.43	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
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Login Number: L12120503 Analyst: ADC Prep Method: 5030B/5030C/503
 Instrument ID: HPMS11 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG417226 Units: ug/L
 QC Key: STD Lot #: STD55539

Sample ID: WG417226-02 LCS File ID: 11M88907 Run Date: 12/20/2012 22:14
 Sample ID: WG417226-03 LCS2 File ID: 11M88908 Run Date: 12/20/2012 22:45

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	17.6	88.2	20.0	16.7	83.5	5.52	55 - 130	20	
Hexachlorobutadiene	20.0	25.8	129	20.0	25.5	127	1.22	72 - 132	20	
Isopropylbenzene	20.0	20.8	104	20.0	20.2	101	3.17	80 - 122	20	
p-Isopropyltoluene	20.0	21.3	107	20.0	20.6	103	3.30	80 - 122	20	
4-Methyl-2-pentanone	20.0	16.2	81.1	20.0	16.2	81.1	0.0802	64 - 140	20	
Methylene chloride	20.0	18.1	90.5	20.0	17.3	86.5	4.48	80 - 123	20	
Naphthalene	20.0	17.9	89.7	20.0	17.5	87.7	2.16	59 - 149	20	
n-Propylbenzene	20.0	19.8	99.0	20.0	19.1	95.5	3.58	80 - 129	20	
Styrene	20.0	21.4	107	20.0	20.8	104	2.62	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	22.5	113	20.0	21.7	109	3.53	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	18.1	90.4	20.0	18.1	90.3	0.131	79 - 125	20	
Tetrachloroethene	20.0	23.1	115	20.0	22.6	113	2.29	80 - 124	20	
Toluene	20.0	21.2	106	20.0	20.3	101	4.53	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	21.0	105	20.0	19.8	99.2	5.75	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	21.7	108	20.0	20.7	103	4.59	65 - 135	20	
1,1,1-Trichloroethane	20.0	20.6	103	20.0	19.8	99.2	4.01	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.6	103	20.0	20.4	102	1.36	80 - 125	20	
Trichloroethene	20.0	22.1	110	20.0	20.9	105	5.40	80 - 122	20	
Trichlorofluoromethane	20.0	21.5	108	20.0	20.9	104	3.08	62 - 151	20	
1,2,3-Trichloropropane	20.0	18.6	92.9	20.0	18.4	92.2	0.747	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.5	107	20.0	20.7	104	3.62	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.9	110	20.0	21.3	106	3.12	80 - 127	20	
Vinyl acetate	20.0	23.5	117	20.0	22.6	113	3.76	10 - 190	20	
Vinyl chloride	20.0	18.3	91.5	20.0	17.6	87.9	4.00	50 - 170	20	
o-Xylene	20.0	19.8	98.9	20.0	19.5	97.3	1.60	80 - 122	20	
m-,p-Xylene	40.0	41.4	104	40.0	40.6	102	1.96	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	90.9	88.2	80 - 120	PASS
Dibromofluoromethane	100	97.5	86 - 118	PASS
4-Bromofluorobenzene	97.1	95.4	86 - 115	PASS
Toluene-d8	106	105	88 - 110	PASS

* EXCEEDS %REC LIMIT
EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
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MS/MSD REPORT

Loginnum: L12120503 Cal ID: HPMS10- 10-DEC-12
 Instrument ID: HPMS10 Contract #: _____
 Parent ID: L12120503-09 File ID: 10M01173 Dil: 1
 Sample ID: L12120503-10 MS File ID: 10M01158 Dil: 1
 Sample ID: L12120503-11 MSD File ID: 10M01159 Dil: 1

Worknum: WG417120
 Prep Method: 5030B/5030C/
 Method: 5035A
 Matrix: 8260B
 Units: Water
ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Acetone	3.26	20.0	22.9	98.1	20.0	23.5	101	2.55	40 - 180	20	
Benzene	ND	20.0	20.5	102	20.0	20.4	102	0.0666	80 - 121	20	
Bromobenzene	ND	20.0	19.5	97.6	20.0	19.7	98.6	1.09	80 - 120	20	
Bromochloromethane	ND	20.0	20.6	103	20.0	21.5	107	4.07	65 - 130	20	
Bromodichloromethane	ND	20.0	20.7	104	20.0	20.9	104	0.690	80 - 131	20	
Bromoform	ND	20.0	19.0	95.2	20.0	19.2	96	0.799	70 - 130	20	
Bromomethane	ND	20.0	16.2	81.2	20.0	16.5	82.5	1.54	30 - 145	20	
2-Butanone	ND	20.0	22.1	110	20.0	21.5	108	2.52	30 - 170	20	
n-Butylbenzene	ND	20.0	19.2	96.2	20.0	19.3	96.6	0.414	80 - 131	20	
sec-Butylbenzene	ND	20.0	18.9	94.4	20.0	19.2	95.8	1.50	80 - 127	20	
tert-Butylbenzene	ND	20.0	17.7	88.5	20.0	17.7	88.6	0.170	80 - 126	20	
Carbon disulfide	0.522	20.0	18.5	89.7	20.0	18.1	88.1	1.74	58 - 128	20	
Carbon tetrachloride	ND	20.0	20.5	102	20.0	20.5	102	0.0488	65 - 140	20	
Chlorobenzene	ND	20.0	18.4	92.2	20.0	18.7	93.5	1.38	80 - 120	20	
Chlorodibromomethane	ND	20.0	20.7	103	20.0	20.9	105	1.18	60 - 135	20	
Chloroethane	ND	20.0	21.1	106	20.0	21.2	106	0.411	60 - 135	20	
2-Chloroethyl vinyl ether	ND	20.0	0	0	20.0	0	0	NA	58 - 160	20	**
Chloroform	ND	20.0	20.5	102	20.0	20.9	104	1.90	80 - 125	20	
Chloromethane	ND	20.0	19.2	96.1	20.0	19.3	96.4	0.300	40 - 125	20	
2-Chlorotoluene	ND	20.0	18.5	92.7	20.0	18.7	93.6	0.991	80 - 127	20	
4-Chlorotoluene	ND	20.0	17.5	87.3	20.0	17.8	88.8	1.70	80 - 126	20	
1,2-Dibromo-3-chloropropane	ND	20.0	18.5	92.7	20.0	19.1	95.3	2.83	50 - 130	20	
1,2-Dibromoethane	ND	20.0	20.7	103	20.0	20.9	105	1.42	80 - 129	20	
Dibromomethane	ND	20.0	20.6	103	20.0	20.9	104	1.06	75 - 125	20	
1,2-Dichlorobenzene	ND	20.0	18.9	94.5	20.0	19.3	96.6	2.19	80 - 125	20	
1,3-Dichlorobenzene	ND	20.0	18.3	91.6	20.0	18.6	93.1	1.52	80 - 120	20	
1,4-Dichlorobenzene	ND	20.0	19.0	95	20.0	19.3	96.5	1.59	80 - 120	20	
Dichlorodifluoromethane	ND	20.0	24.5	123	20.0	24.5	123	0.0638	50 - 160	20	
1,1-Dichloroethane	ND	20.0	20.6	103	20.0	21.1	105	2.40	80 - 125	20	
1,2-Dichloroethane	ND	20.0	21.4	107	20.0	21.5	108	0.773	80 - 129	20	
1,1-Dichloroethene	ND	20.0	19.6	97.8	20.0	19.6	98.2	0.355	80 - 132	20	
cis-1,2-Dichloroethene	ND	20.0	20.6	103	20.0	21.0	105	2.06	70 - 125	20	
trans-1,2-Dichloroethene	ND	20.0	20.7	103	20.0	20.8	104	0.705	80 - 127	20	
1,2-Dichloropropane	ND	20.0	21.3	107	20.0	21.6	108	1.49	80 - 120	20	
1,3-Dichloropropane	ND	20.0	20.8	104	20.0	21.0	105	0.857	80 - 120	20	
2,2-Dichloropropane	ND	20.0	21.2	106	20.0	21.3	106	0.282	80 - 133	20	
cis-1,3-Dichloropropene	ND	20.0	22.4	112	20.0	23.1	115	3.22	70 - 130	20	
trans-1,3-Dichloropropene	ND	20.0	20.4	102	20.0	20.7	103	1.33	80 - 130	20	
1,1-Dichloropropene	ND	20.0	20.3	101	20.0	20.6	103	1.58	75 - 130	20	
Ethylbenzene	ND	20.0	19.8	98.9	20.0	19.9	99.6	0.741	80 - 122	20	
2-Hexanone	ND	20.0	21.1	105	20.0	20.5	103	2.77	55 - 130	20	

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MS/MSD REPORT

Loginnum: L12120503 Cal ID: HPMS10 10-DEC-12
 Instrument ID: HPMS10 Contract #: _____
 Parent ID: L12120503-09 File ID: 10M01173 Dil: 1
 Sample ID: L12120503-10 MS File ID: 10M01158 Dil: 1
 Sample ID: L12120503-11 MSD File ID: 10M01159 Dil: 1

Worknum: WG417120
 Prep Method: 5030B/5030C/
 Method: 5035A
 Matrix: 8260B
 Units: Water
ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Hexachlorobutadiene	ND	20.0	19.9	99.5	20.0	20.4	102	2.44	72 - 132	20	
Isopropylbenzene	ND	20.0	19.1	95.4	20.0	19.2	95.9	0.532	80 - 122	20	
p-Isopropyltoluene	0.340	20.0	20.2	99.1	20.0	20.4	100	1.34	80 - 122	20	
4-Methyl-2-pentanone	ND	20.0	20.1	100	20.0	20.0	99.8	0.703	64 - 140	20	
Methylene chloride	ND	20.0	19.8	99.1	20.0	20.3	101	2.24	80 - 123	20	
Naphthalene	ND	20.0	17.3	86.5	20.0	17.6	87.8	1.52	59 - 149	20	
n-Propylbenzene	ND	20.0	18.9	94.3	20.0	19.2	95.8	1.59	80 - 129	20	
Styrene	ND	20.0	20.8	104	20.0	21.1	105	1.61	80 - 123	20	
1,1,1,2-Tetrachloroethane	ND	20.0	20.6	103	20.0	20.8	104	1.11	80 - 130	20	
1,1,2,2-Tetrachloroethane	ND	20.0	22.3	112	20.0	22.8	114	2.20	79 - 125	20	
Tetrachloroethene	26.2	20.0	41.1	74.6	20.0	42.0	79.3	2.27	80 - 124	20	*
Toluene	ND	20.0	20.2	101	20.0	20.3	102	0.479	80 - 124	20	
1,2,3-Trichlorobenzene	ND	20.0	17.8	89.1	20.0	18.1	90.4	1.47	55 - 140	20	
1,2,4-Trichlorobenzene	ND	20.0	17.9	89.6	20.0	18.1	90.7	1.31	65 - 135	20	
1,1,1-Trichloroethane	ND	20.0	20.6	103	20.0	20.7	103	0.374	80 - 134	20	
1,1,2-Trichloroethane	ND	20.0	21.1	106	20.0	21.4	107	1.05	80 - 125	20	
Trichloroethene	2.43	20.0	21.8	96.9	20.0	22.3	99.4	2.27	80 - 122	20	
Trichlorofluoromethane	ND	20.0	21.3	106	20.0	21.3	107	0.139	62 - 151	20	
1,2,3-Trichloropropane	ND	20.0	20.4	102	20.0	20.4	102	0.363	75 - 125	20	
1,2,4-Trimethylbenzene	ND	20.0	20.9	104	20.0	21.2	106	1.70	80 - 125	20	
1,3,5-Trimethylbenzene	ND	20.0	21.0	105	20.0	21.2	106	1.09	80 - 127	20	
Vinyl acetate	ND	20.0	36.8	184	20.0	35.8	179	2.81	10 - 190	20	
Vinyl chloride	ND	20.0	15.8	79	20.0	16.3	81.5	3.11	50 - 170	20	
o-Xylene	ND	20.0	18.3	91.7	20.0	18.6	92.9	1.39	80 - 122	20	
m-,p-Xylene	ND	40.0	39.1	97.7	40.0	39.4	98.5	0.760	80 - 122	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008
 PDF File ID: 2707984
 Report generated 12/29/2012 12:52



MS/MSD REPORT

Loginnum: L12120503 Cal ID: HPMS10- 10-DEC-12
 Instrument ID: HPMS10 Contract #: _____
 Parent ID: L12120503-24 File ID: 10M01215 Dil: 1
 Sample ID: L12120503-26 MS File ID: 10M01205 Dil: 1
 Sample ID: L12120503-27 MSD File ID: 10M01206 Dil: 1

Worknum: WG417313
 Prep Method: 5030B/5030C/
 Method: 5035A
 Matrix: 8260B
 Units: Water
ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Acetone	ND	20.0	21.8	109	20.0	20.0	99.9	8.72	40 - 180	20	
Benzene	ND	20.0	21.2	106	20.0	20.9	104	1.65	80 - 121	20	
Bromobenzene	ND	20.0	20.0	99.9	20.0	19.7	98.6	1.34	80 - 120	20	
Bromochloromethane	ND	20.0	21.2	106	20.0	20.7	104	2.01	65 - 130	20	
Bromodichloromethane	ND	20.0	21.2	106	20.0	20.9	104	1.75	80 - 131	20	
Bromoform	ND	20.0	18.1	90.4	20.0	18.4	91.8	1.47	70 - 130	20	
Bromomethane	ND	20.0	16.4	81.9	20.0	16.4	82.1	0.231	30 - 145	20	
2-Butanone	ND	20.0	18.4	91.8	20.0	17.7	88.6	3.56	30 - 170	20	
n-Butylbenzene	ND	20.0	20.6	103	20.0	20.1	101	2.55	80 - 131	20	
sec-Butylbenzene	ND	20.0	20.4	102	20.0	20.0	99.9	1.95	80 - 127	20	
tert-Butylbenzene	ND	20.0	18.9	94.6	20.0	18.4	92.1	2.76	80 - 126	20	
Carbon disulfide	5.64	20.0	22.2	82.7	20.0	21.8	80.8	1.73	58 - 128	20	
Carbon tetrachloride	ND	20.0	21.3	106	20.0	20.9	104	1.85	65 - 140	20	
Chlorobenzene	0.203	20.0	19.2	95.1	20.0	19.0	94.1	1.12	80 - 120	20	
Chlorodibromomethane	ND	20.0	20.3	102	20.0	20.3	101	0.245	60 - 135	20	
Chloroethane	ND	20.0	22.9	114	20.0	22.0	110	3.63	60 - 135	20	
2-Chloroethyl vinyl ether	ND	20.0	19.1	95.5	20.0	0	0	200	58 - 160	20	**
Chloroform	ND	20.0	21.3	106	20.0	20.9	104	1.85	80 - 125	20	
Chloromethane	ND	20.0	22.4	112	20.0	21.3	106	5.38	40 - 125	20	
2-Chlorotoluene	ND	20.0	19.4	97	20.0	19.0	94.9	2.15	80 - 127	20	
4-Chlorotoluene	ND	20.0	18.5	92.4	20.0	18.4	92.1	0.271	80 - 126	20	
1,2-Dibromo-3-chloropropane	ND	20.0	16.7	83.3	20.0	16.9	84.7	1.67	50 - 130	20	
1,2-Dibromoethane	ND	20.0	20.1	101	20.0	20.1	101	0.0552	80 - 129	20	
Dibromomethane	ND	20.0	20.3	102	20.0	20.3	101	0.461	75 - 125	20	
1,2-Dichlorobenzene	ND	20.0	19.6	98	20.0	19.2	95.9	2.19	80 - 125	20	
1,3-Dichlorobenzene	ND	20.0	19.1	95.6	20.0	18.7	93.7	2.04	80 - 120	20	
1,4-Dichlorobenzene	ND	20.0	20.0	99.9	20.0	19.6	98	1.92	80 - 120	20	
Dichlorodifluoromethane	ND	20.0	28.9	144	20.0	28.7	143	0.757	50 - 160	20	
1,1-Dichloroethane	0.278	20.0	22.1	109	20.0	21.6	106	2.34	80 - 125	20	
1,2-Dichloroethane	ND	20.0	21.6	108	20.0	21.5	107	0.554	80 - 129	20	
1,1-Dichloroethene	1.15	20.0	21.3	101	20.0	20.7	97.6	2.80	80 - 132	20	
cis-1,2-Dichloroethene	0.599	20.0	21.9	107	20.0	21.3	104	2.78	70 - 125	20	
trans-1,2-Dichloroethene	ND	20.0	21.8	109	20.0	21.2	106	2.51	80 - 127	20	
1,2-Dichloropropane	ND	20.0	22.4	112	20.0	21.9	110	2.14	80 - 120	20	
1,3-Dichloropropane	ND	20.0	20.6	103	20.0	20.6	103	0.258	80 - 120	20	
2,2-Dichloropropane	ND	20.0	22.6	113	20.0	22.0	110	2.83	80 - 133	20	
cis-1,3-Dichloropropene	ND	20.0	23.2	116	20.0	22.6	113	2.47	70 - 130	20	
trans-1,3-Dichloropropene	ND	20.0	20.7	103	20.0	20.3	101	2.09	80 - 130	20	
1,1-Dichloropropene	ND	20.0	21.5	107	20.0	21.0	105	2.23	75 - 130	20	
Ethylbenzene	ND	20.0	20.5	102	20.0	20.2	101	1.41	80 - 122	20	
2-Hexanone	ND	20.0	18.4	92.2	20.0	17.8	88.9	3.64	55 - 130	20	

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 PDF File ID: 2707984
 Report generated 12/29/2012 12:52



MS/MSD REPORT

Loginnum: L12120503 Cal ID: HPMS10 10-DEC-12
 Instrument ID: HPMS10 Contract #: _____
 Parent ID: L12120503-24 File ID: 10M01215 Dil: 1
 Sample ID: L12120503-26 MS File ID: 10M01205 Dil: 1
 Sample ID: L12120503-27 MSD File ID: 10M01206 Dil: 1

Worknum: WG417313
 Prep Method: 5030B/5030C/
 Method: 5035A
 Matrix: 8260B
 Units: Water
ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Hexachlorobutadiene	ND	20.0	21.6	108	20.0	20.2	101	6.41	72 - 132	20	
Isopropylbenzene	ND	20.0	20.0	99.8	20.0	19.5	97.6	2.19	80 - 122	20	
p-Isopropyltoluene	ND	20.0	21.2	106	20.0	20.7	104	2.30	80 - 122	20	
4-Methyl-2-pentanone	ND	20.0	18.5	92.7	20.0	17.9	89.5	3.47	64 - 140	20	
Methylene chloride	ND	20.0	20.6	103	20.0	20.3	102	1.47	80 - 123	20	
Naphthalene	ND	20.0	16.5	82.3	20.0	16.5	82.3	0.0750	59 - 149	20	
n-Propylbenzene	ND	20.0	20.1	100	20.0	19.6	98.2	2.13	80 - 129	20	
Styrene	ND	20.0	21.4	107	20.0	20.9	104	2.59	80 - 123	20	
1,1,1,2-Tetrachloroethane	ND	20.0	21.1	105	20.0	21.0	105	0.486	80 - 130	20	
1,1,2,2-Tetrachloroethane	ND	20.0	21.5	107	20.0	21.8	109	1.53	79 - 125	20	
Tetrachloroethene	15.7	20.0	33.5	88.8	20.0	34.4	93.4	2.69	80 - 124	20	
Toluene	ND	20.0	21.0	105	20.0	20.6	103	1.72	80 - 124	20	
1,2,3-Trichlorobenzene	ND	20.0	17.9	89.3	20.0	17.5	87.3	2.29	55 - 140	20	
1,2,4-Trichlorobenzene	ND	20.0	18.5	92.5	20.0	18.1	90.6	2.03	65 - 135	20	
1,1,1-Trichloroethane	ND	20.0	21.4	107	20.0	21.1	106	1.28	80 - 134	20	
1,1,2-Trichloroethane	ND	20.0	20.8	104	20.0	20.7	103	0.922	80 - 125	20	
Trichloroethene	4.16	20.0	24.2	100	20.0	23.8	98	1.66	80 - 122	20	
Trichlorofluoromethane	ND	20.0	22.6	113	20.0	22.3	112	1.38	62 - 151	20	
1,2,3-Trichloropropane	ND	20.0	19.0	94.8	20.0	19.4	97	2.28	75 - 125	20	
1,2,4-Trimethylbenzene	ND	20.0	22.2	111	20.0	21.8	109	1.80	80 - 125	20	
1,3,5-Trimethylbenzene	ND	20.0	22.1	111	20.0	21.7	109	1.83	80 - 127	20	
Vinyl acetate	ND	20.0	36.1	180	20.0	36.1	180	0.0045	10 - 190	20	
Vinyl chloride	0.316	20.0	27.3	135	20.0	27.0	133	1.18	50 - 170	20	
o-Xylene	ND	20.0	18.9	94.5	20.0	18.6	92.9	1.73	80 - 122	20	
m-,p-Xylene	ND	40.0	40.7	102	40.0	40.0	99.9	1.88	80 - 122	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

