

Instrument Summary:

Instrument ID: iCAP Q
Serial Number: Undefined

Labbook Summary:

Path and filename: _Application Data\Workspace\LabBooks\wlw\20211018-1.imexp
Labbook created by: Administrator
Based on template:
Hardware configuration: iCAPQ1
Labbook type: eQuant
Qtegra version (last saved): 2.7.2425.154
Labbook started: 10/18/2021 2:59:03 PM
Labbook finished: 10/18/2021 4:58:48 PM

Method Summary:

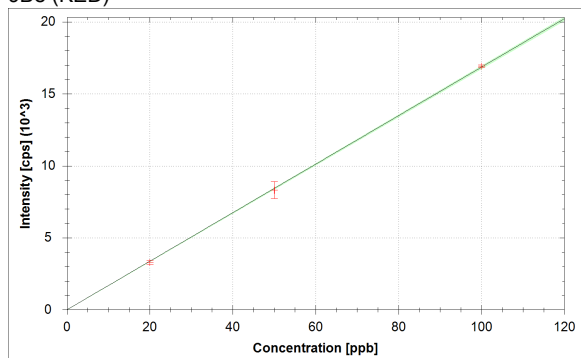
Isotope	Mode	Dwell time (s)	# of Channels	Spacing	Resolution	IS
6Li (KED)	KED	0.03	3	0.1	Normal	
9Be (KED)	KED	0.03	3	0.1	Normal	6Li (KED)
11B (KED)	KED	0.03	3	0.1	Normal	6Li (KED)
24Mg (KED)	KED	0.03	3	0.1	Normal	6Li (KED)
27Al (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
45Sc (KED)	KED	0.03	3	0.1	Normal	
51V (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
52Cr (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
55Mn (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
56Fe (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
58Ni (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
59Co (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
63Cu (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
64Zn (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
69Ga (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
75As (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
80Se (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
85Rb (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
88Sr (KED)	KED	0.03	3	0.1	Normal	89Y (KED)
89Y (KED)	KED	0.03	3	0.1	Normal	
107Ag (KED)	KED	0.03	3	0.1	Normal	115In (KED)
114Cd (KED)	KED	0.03	3	0.1	Normal	115In (KED)
115In (KED)	KED	0.03	3	0.1	Normal	
133Cs (KED)	KED	0.03	3	0.1	Normal	115In (KED)
138Ba (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
139La (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
140Ce (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
141Pr (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
142Nd (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
152Sm (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
153Eu (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
158Gd (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
159Tb (KED)	KED	0.03	3	0.1	Normal	
164Dy (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
166Er (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
169Tm (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
174Yb (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
175Lu (KED)	KED	0.03	3	0.1	Normal	159Tb (KED)
205Tl (KED)	KED	0.03	3	0.1	Normal	209Bi (KED)
208Pb (KED)	KED	0.03	3	0.1	Normal	209Bi (KED)
209Bi (KED)	KED	0.03	3	0.1	Normal	
232Th (KED)	KED	0.03	3	0.1	Normal	209Bi (KED)
238U (KED)	KED	0.03	3	0.1	Normal	209Bi (KED)

Isotope	Mode	Dwell time (s)	# of Channels	Spacing	Resolution
6Li (KED)	KED	0.03	3	0.1	Normal
45Sc (KED)	KED	0.03	3	0.1	Normal
89Y (KED)	KED	0.03	3	0.1	Normal
115In (KED)	KED	0.03	3	0.1	Normal
159Tb (KED)	KED	0.03	3	0.1	Normal
209Bi (KED)	KED	0.03	3	0.1	Normal

No. of sweeps	Time per sweep[s]	Time per main run[s]
10	3.87	38.7

Calibration Curves:

9Be (KED)



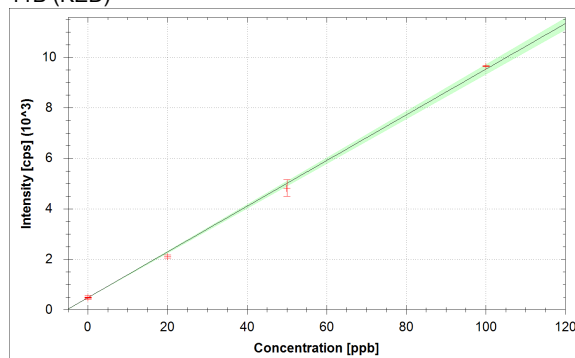
$$f(x) = 168.5303 \cdot x$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0000 \text{ ppb}$$

11B (KED)



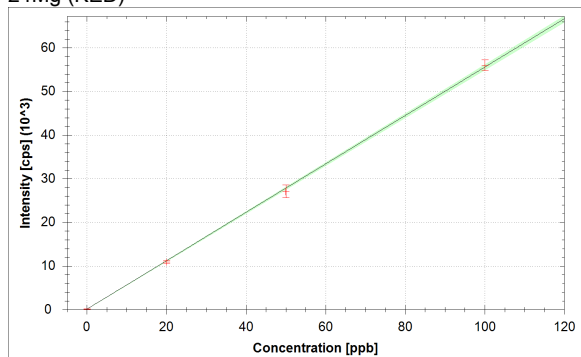
$$f(x) = 90.4374 \cdot x + 478.5733$$

$$R^2 = 0.9986$$

$$\text{BEC} = 5.292 \text{ ppb}$$

$$\text{LoD} = 0.8479 \text{ ppb}$$

24Mg (KED)



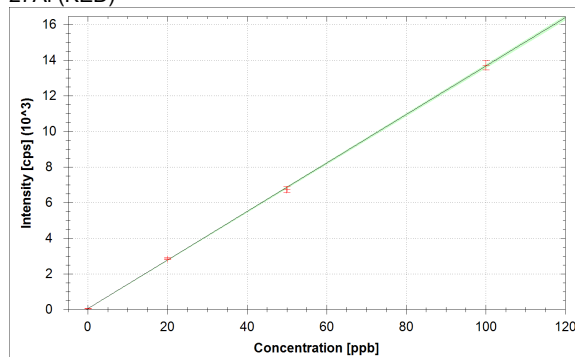
$$f(x) = 554.6889 \cdot x + 99.9433$$

$$R^2 = 0.9996$$

$$\text{BEC} = 0.180 \text{ ppb}$$

$$\text{LoD} = 0.0396 \text{ ppb}$$

27Al (KED)



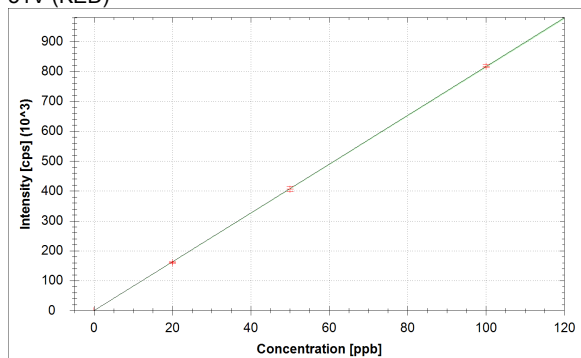
$$f(x) = 136.0916 \cdot x + 57.0807$$

$$R^2 = 0.9998$$

$$\text{BEC} = 0.419 \text{ ppb}$$

$$\text{LoD} = 0.1715 \text{ ppb}$$

51V (KED)



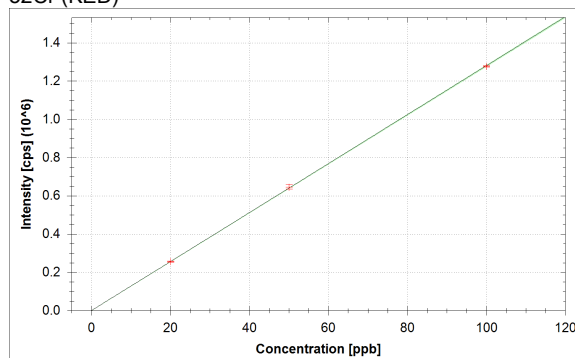
$$f(x) = 8156.1372 \cdot x + 2.1897$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0018 \text{ ppb}$$

52Cr (KED)



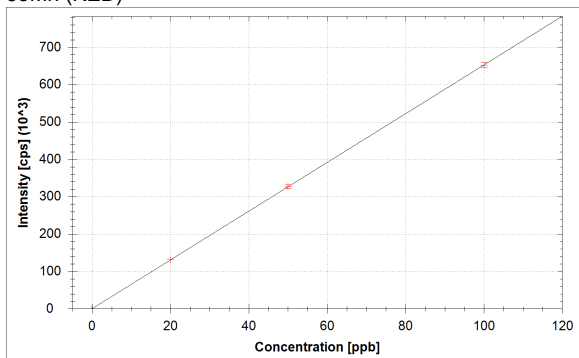
$$f(x) = 12800.9019 \cdot x + 82.8092$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.006 \text{ ppb}$$

$$\text{LoD} = 0.0034 \text{ ppb}$$

55Mn (KED)



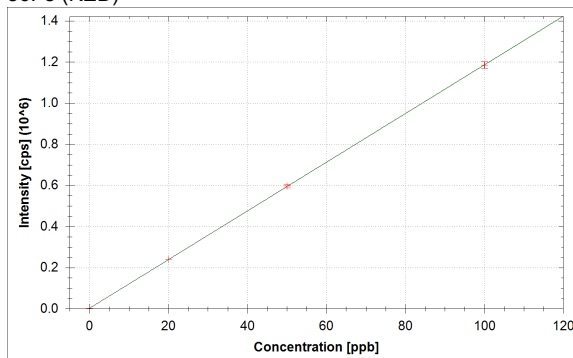
$$f(x) = 6526.3191 \cdot x + 39.8789$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.006 \text{ ppb}$$

$$\text{LoD} = 0.0050 \text{ ppb}$$

56Fe (KED)



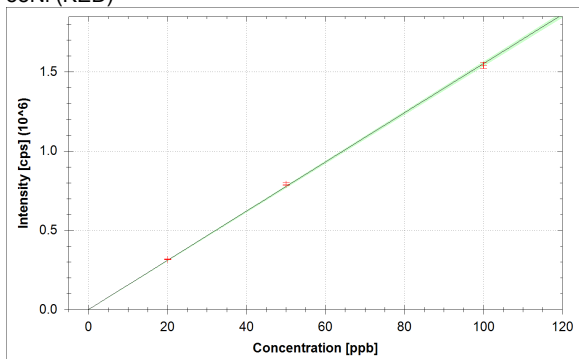
$$f(x) = 11843.5307 \cdot x + 1961.6738$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.166 \text{ ppb}$$

$$\text{LoD} = 0.0500 \text{ ppb}$$

58Ni (KED)



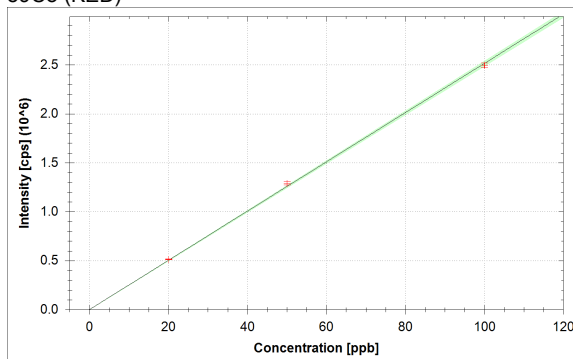
$$f(x) = 15509.4362 \cdot x + 266.6785$$

$$R^2 = 0.9998$$

$$\text{BEC} = 0.017 \text{ ppb}$$

$$\text{LoD} = 0.0022 \text{ ppb}$$

59Co (KED)



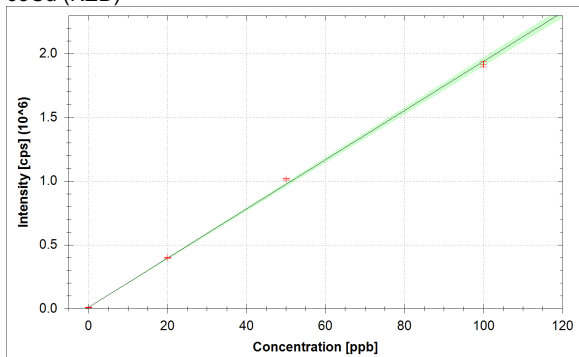
$$f(x) = 25143.7457 \cdot x + 20.4411$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.001 \text{ ppb}$$

$$\text{LoD} = 0.0013 \text{ ppb}$$

63Cu (KED)



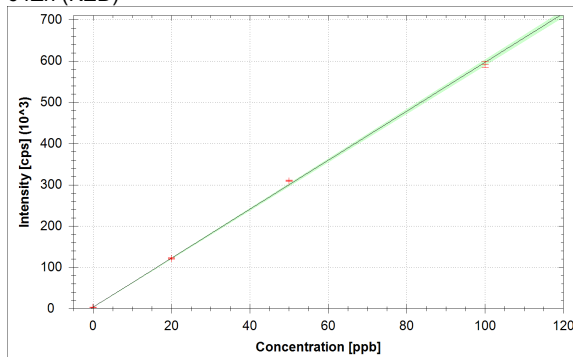
$$f(x) = 19280.5776 \cdot x + 9254.7909$$

$$R^2 = 0.9991$$

$$\text{BEC} = 0.480 \text{ ppb}$$

$$\text{LoD} = 0.1937 \text{ ppb}$$

64Zn (KED)



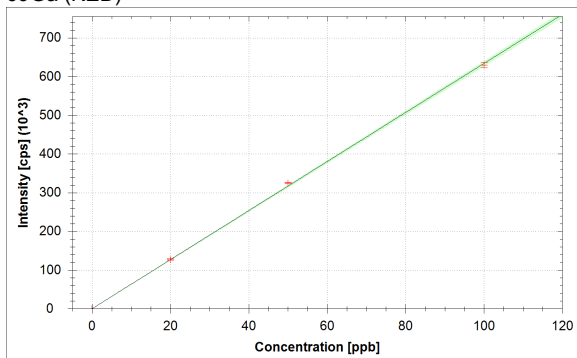
$$f(x) = 5932.7483 \cdot x + 3357.8830$$

$$R^2 = 0.9996$$

$$\text{BEC} = 0.566 \text{ ppb}$$

$$\text{LoD} = 0.1490 \text{ ppb}$$

69Ga (KED)



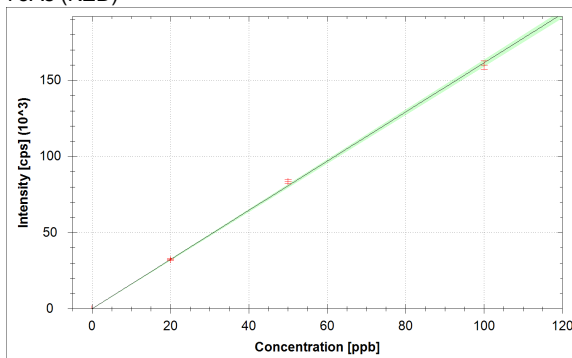
$$f(x) = 6337.6462 \cdot x + 66.7416$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.011 \text{ ppb}$$

$$\text{LoD} = 0.0127 \text{ ppb}$$

75As (KED)



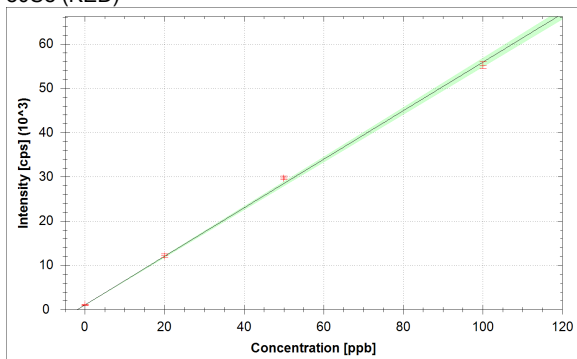
$$f(x) = 1614.1332 \cdot x + 15.0996$$

$$R^2 = 0.9995$$

$$\text{BEC} = 0.009 \text{ ppb}$$

$$\text{LoD} = 0.0181 \text{ ppb}$$

80Se (KED)



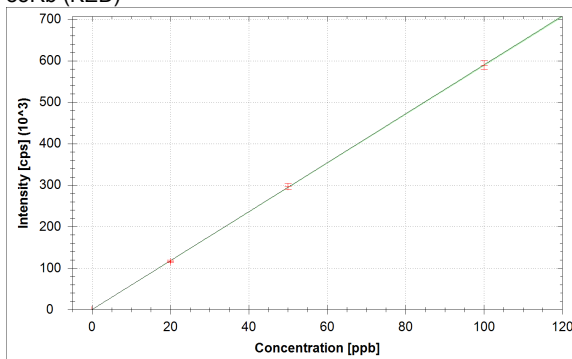
$$f(x) = 548.4486 \cdot x + 1039.1245$$

$$R^2 = 0.9990$$

$$\text{BEC} = 1.895 \text{ ppb}$$

$$\text{LoD} = 0.3304 \text{ ppb}$$

85Rb (KED)



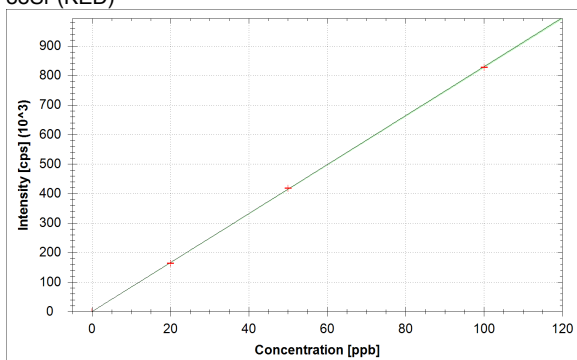
$$f(x) = 5896.4720 \cdot x + 10.7646$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.002 \text{ ppb}$$

$$\text{LoD} = 0.0017 \text{ ppb}$$

88Sr (KED)



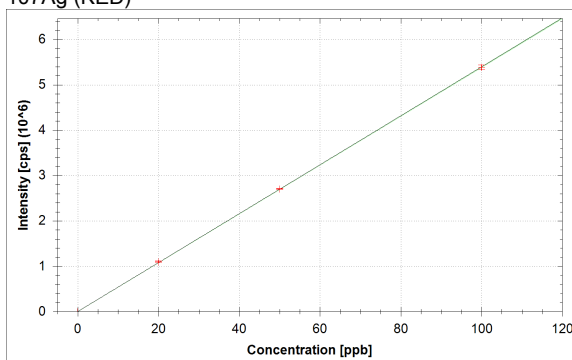
$$f(x) = 8295.1878 \cdot x + 97.8230$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.012 \text{ ppb}$$

$$\text{LoD} = 0.0028 \text{ ppb}$$

107Ag (KED)



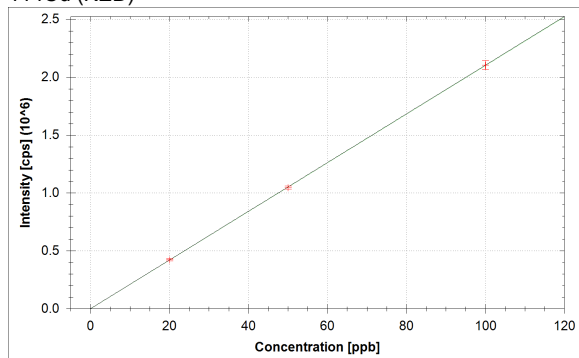
$$f(x) = 53938.4634 \cdot x + 42.7795$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.001 \text{ ppb}$$

$$\text{LoD} = 0.0002 \text{ ppb}$$

114Cd (KED)



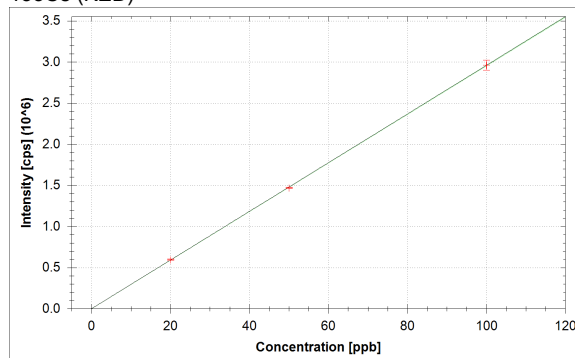
$$f(x) = 21030.1182 \cdot x + 85.4880$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.004 \text{ ppb}$$

$$\text{LoD} = 0.0010 \text{ ppb}$$

133Cs (KED)



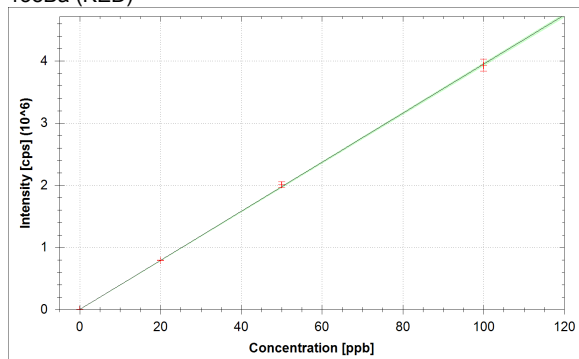
$$f(x) = 29577.1503 \cdot x + 12.0608$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0007 \text{ ppb}$$

138Ba (KED)



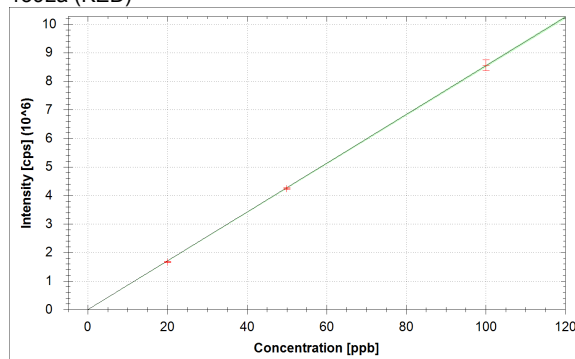
$$f(x) = 39465.1520 \cdot x + 1360.7026$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.034 \text{ ppb}$$

$$\text{LoD} = 0.0069 \text{ ppb}$$

139La (KED)



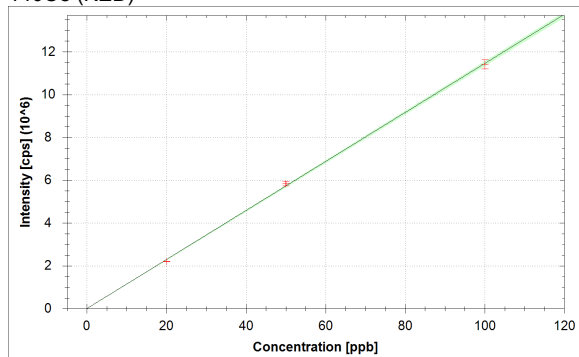
$$f(x) = 85384.9252 \cdot x + 25.8902$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0004 \text{ ppb}$$

140Ce (KED)



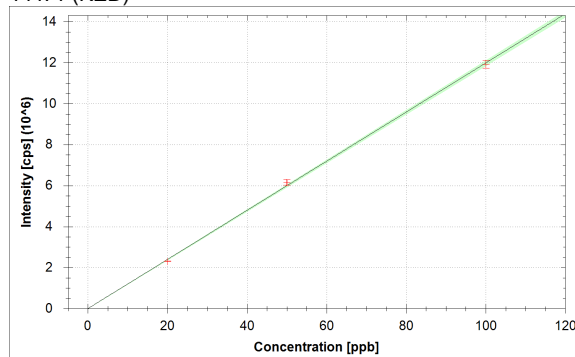
$$f(x) = 114526.2079 \cdot x + 352.1196$$

$$R^2 = 0.9998$$

$$\text{BEC} = 0.003 \text{ ppb}$$

$$\text{LoD} = 0.0011 \text{ ppb}$$

141Pr (KED)



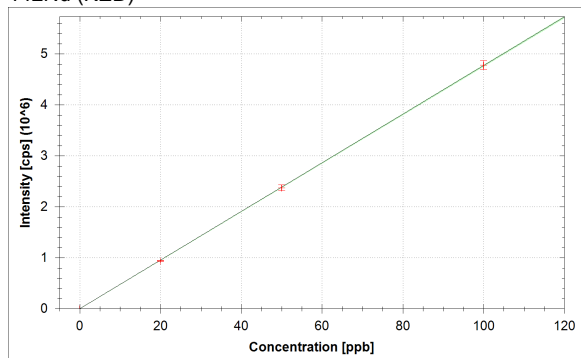
$$f(x) = 119851.9334 \cdot x + 24.8268$$

$$R^2 = 0.9996$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0004 \text{ ppb}$$

142Nd (KED)



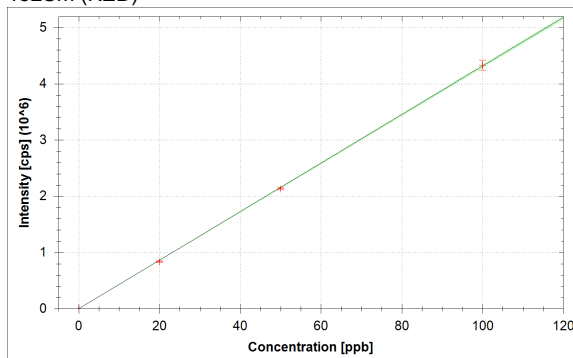
$$f(x) = 47688.1700 \cdot x + 49.6843$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.001 \text{ ppb}$$

$$\text{LoD} = 0.0004 \text{ ppb}$$

152Sm (KED)



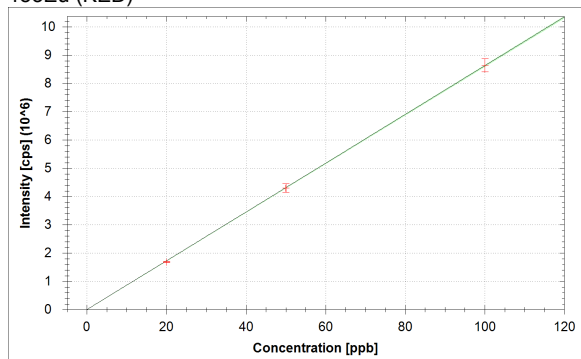
$$f(x) = 43156.7444 \cdot x + 9.7214$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0004 \text{ ppb}$$

153Eu (KED)



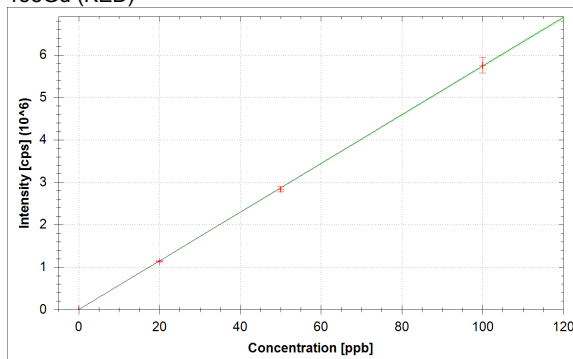
$$f(x) = 86242.9897 \cdot x + 25.9157$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0001 \text{ ppb}$$

158Gd (KED)



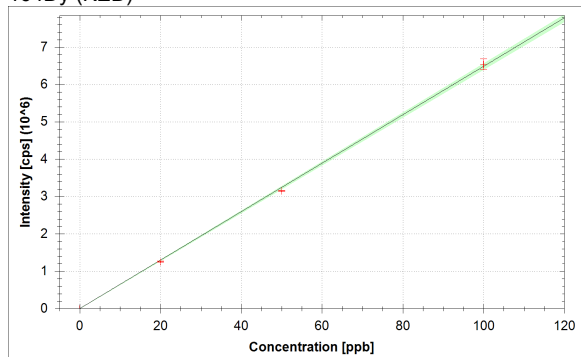
$$f(x) = 57358.9550 \cdot x + 15.0795$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0000 \text{ ppb}$$

164Dy (KED)



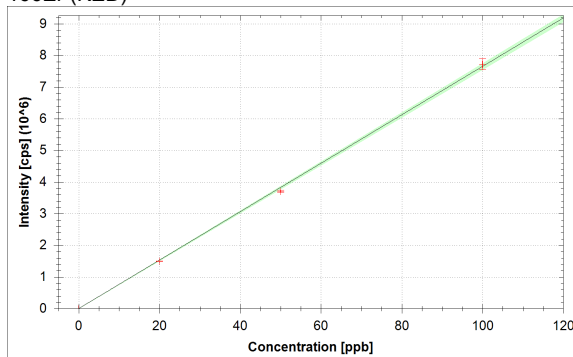
$$f(x) = 64846.4055 \cdot x + 19.5206$$

$$R^2 = 0.9995$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0000 \text{ ppb}$$

166Er (KED)



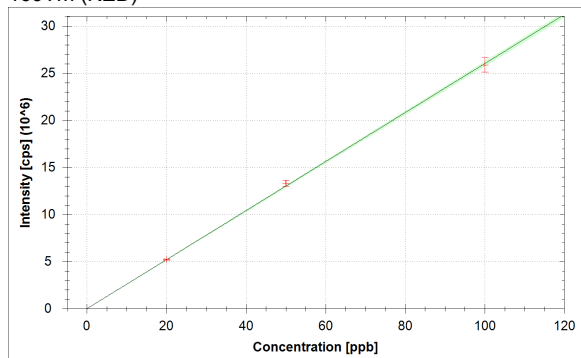
$$f(x) = 76567.7048 \cdot x + 538.3873$$

$$R^2 = 0.9995$$

$$\text{BEC} = 0.007 \text{ ppb}$$

$$\text{LoD} = 0.0007 \text{ ppb}$$

169Tm (KED)



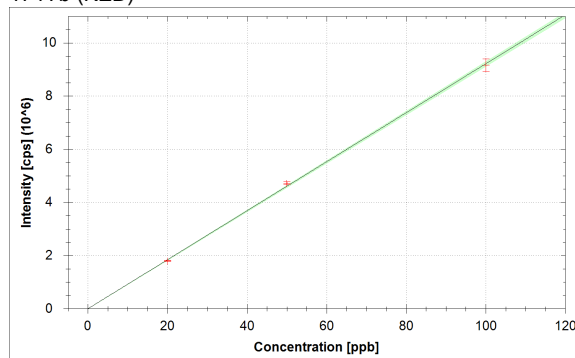
$$f(x) = 260271.1084 \cdot x + 36.8105$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0000 \text{ ppb}$$

174Yb (KED)



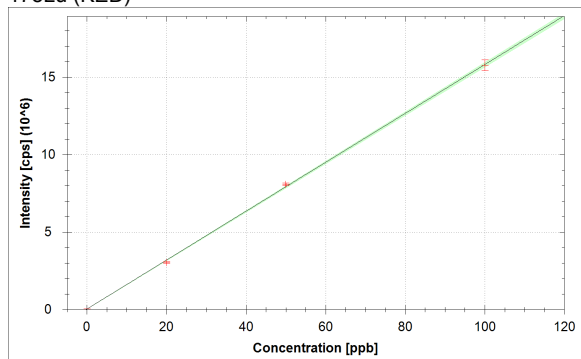
$$f(x) = 92102.3250 \cdot x + 27.9984$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0002 \text{ ppb}$$

175Lu (KED)



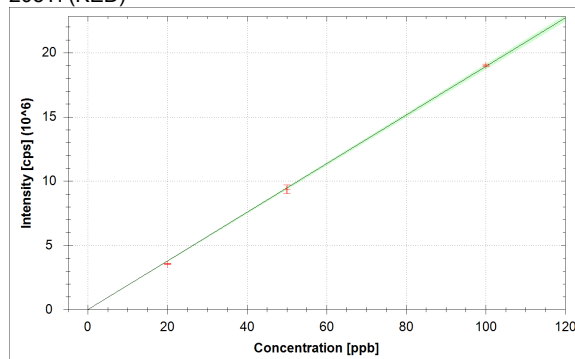
$$f(x) = 157813.4836 \cdot x + 36501.9693$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.231 \text{ ppb}$$

$$\text{LoD} = 0.0371 \text{ ppb}$$

205Tl (KED)



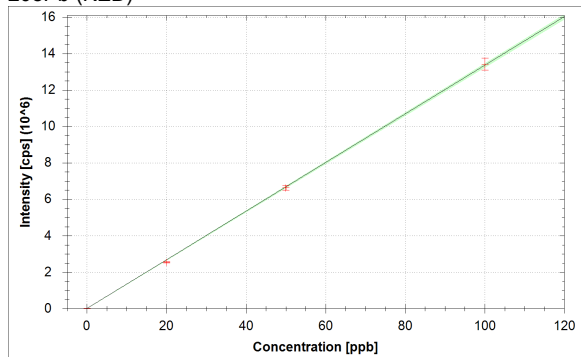
$$f(x) = 189206.9364 \cdot x + 18.6477$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0001 \text{ ppb}$$

208Pb (KED)



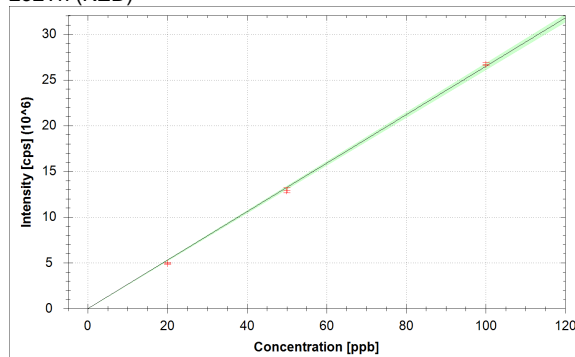
$$f(x) = 133500.7795 \cdot x + 7411.7417$$

$$R^2 = 0.9998$$

$$\text{BEC} = 0.056 \text{ ppb}$$

$$\text{LoD} = 0.0036 \text{ ppb}$$

232Th (KED)



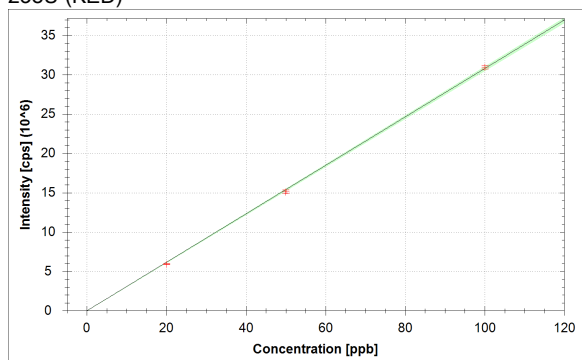
$$f(x) = 264759.9429 \cdot x + 106.5982$$

$$R^2 = 0.9994$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0001 \text{ ppb}$$

238U (KED)



$$f(x) = 307906.0769 \cdot x + 145.2650$$

$$R^2 = 0.9998$$

$$\text{BEC} = 0.000 \text{ ppb}$$

$$\text{LoD} = 0.0003 \text{ ppb}$$

Standards:

Analysis Index: 3
 Analysis Name: 0+20
 Analysis Type: STD
 Analysis Started at: 10/18/2021 3:05:48 PM
 Standard (Stock): std0
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	100.853 %		
9Be (KED)	0.000 ppb		0.000 ppb
11B (KED)	0.000 ppb	0.2 %	0.000 ppb
24Mg (KED)	0.000 ppb	0.3 %	0.000 ppb
27Al (KED)	0.000 ppb	0.1 %	0.000 ppb
45Sc (KED)	103.251 %		
51V (KED)	0.000 ppb	1.7 %	0.000 ppb
52Cr (KED)	0.000 ppb	0.2 %	0.000 ppb
55Mn (KED)	0.000 ppb	0.5 %	0.000 ppb
56Fe (KED)	0.000 ppb	0.1 %	0.000 ppb
58Ni (KED)	0.000 ppb	0.1 %	0.000 ppb
59Co (KED)	0.000 ppb	0.1 %	0.000 ppb
63Cu (KED)	0.000 ppb	0.2 %	0.000 ppb
64Zn (KED)	0.000 ppb	0.1 %	0.000 ppb
69Ga (KED)	0.000 ppb	0.3 %	0.000 ppb
75As (KED)	0.000 ppb	0.7 %	0.000 ppb
80Se (KED)	0.000 ppb	0.1 %	0.000 ppb
85Rb (KED)	0.000 ppb	0.5 %	0.000 ppb
88Sr (KED)	0.000 ppb	0.1 %	0.000 ppb
89Y (KED)	103.345 %		
107Ag (KED)	0.000 ppb	0.1 %	0.000 ppb
114Cd (KED)	0.000 ppb	0.1 %	0.000 ppb
115In (KED)	101.306 %		
133Cs (KED)	0.000 ppb	0.2 %	0.000 ppb
138Ba (KED)	0.000 ppb	0.2 %	0.000 ppb
139La (KED)	0.000 ppb	0.3 %	0.000 ppb
140Ce (KED)	0.000 ppb	0.1 %	0.000 ppb
141Pr (KED)	0.000 ppb	0.3 %	0.000 ppb
142Nd (KED)	0.000 ppb	0.3 %	0.000 ppb
152Sm (KED)	0.000 ppb	0.6 %	0.000 ppb
153Eu (KED)	0.000 ppb	0.2 %	0.000 ppb
158Gd (KED)	0.000 ppb	0.7 %	0.000 ppb
159Tb (KED)	102.801 %		
164Dy (KED)	0.000 ppb	0.6 %	0.000 ppb
166Er (KED)	0.000 ppb	0.1 %	0.000 ppb
169Tm (KED)	0.000 ppb	0.3 %	0.000 ppb
174Yb (KED)	0.000 ppb	0.6 %	0.000 ppb
175Lu (KED)	0.000 ppb	0.0 %	0.000 ppb
205Tl (KED)	0.000 ppb	0.6 %	0.000 ppb
208Pb (KED)	0.000 ppb	0.0 %	0.000 ppb
209Bi (KED)	100.950 %		
232Th (KED)	0.000 ppb	0.3 %	0.000 ppb
238U (KED)	0.000 ppb	0.2 %	0.000 ppb

Standards:

Analysis Index: 4
 Analysis Name: 20+20
 Analysis Type: STD
 Analysis Started at: 10/18/2021 3:09:14 PM
 Standard (Stock): std3
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	100.927 %		
9Be (KED)	19.547 ppb	4.2 %	20.000 ppb
11B (KED)	17.992 ppb	3.7 %	20.000 ppb
24Mg (KED)	19.519 ppb	3.0 %	20.000 ppb
27Al (KED)	20.492 ppb	1.8 %	20.000 ppb
45Sc (KED)	105.928 %		
51V (KED)	19.631 ppb	1.4 %	20.000 ppb
52Cr (KED)	19.962 ppb	1.4 %	20.000 ppb
55Mn (KED)	20.053 ppb	0.2 %	20.000 ppb
56Fe (KED)	20.096 ppb	0.4 %	20.000 ppb
58Ni (KED)	20.445 ppb	0.6 %	20.000 ppb
59Co (KED)	20.428 ppb	0.9 %	20.000 ppb
63Cu (KED)	20.226 ppb	1.1 %	20.000 ppb
64Zn (KED)	19.944 ppb	1.3 %	20.000 ppb
69Ga (KED)	20.073 ppb	1.5 %	20.000 ppb
75As (KED)	20.066 ppb	2.3 %	20.000 ppb
80Se (KED)	20.221 ppb	3.8 %	20.000 ppb
85Rb (KED)	19.642 ppb	3.0 %	20.000 ppb
88Sr (KED)	19.737 ppb	0.7 %	20.000 ppb
89Y (KED)	105.847 %		
107Ag (KED)	20.325 ppb	1.4 %	20.000 ppb
114Cd (KED)	20.077 ppb	2.2 %	20.000 ppb
115In (KED)	104.235 %		
133Cs (KED)	20.087 ppb	1.7 %	20.000 ppb
138Ba (KED)	20.076 ppb	0.4 %	20.000 ppb
139La (KED)	19.438 ppb	1.0 %	20.000 ppb
140Ce (KED)	19.191 ppb	0.4 %	20.000 ppb
141Pr (KED)	19.270 ppb	0.7 %	20.000 ppb
142Nd (KED)	19.613 ppb	1.3 %	20.000 ppb
152Sm (KED)	19.327 ppb	1.6 %	20.000 ppb
153Eu (KED)	19.529 ppb	1.1 %	20.000 ppb
158Gd (KED)	19.756 ppb	1.2 %	20.000 ppb
159Tb (KED)	104.526 %		
164Dy (KED)	19.380 ppb	1.6 %	20.000 ppb
166Er (KED)	19.553 ppb	0.4 %	20.000 ppb
169Tm (KED)	20.071 ppb	1.0 %	20.000 ppb
174Yb (KED)	19.456 ppb	1.0 %	20.000 ppb
175Lu (KED)	18.984 ppb	2.2 %	20.000 ppb
205Tl (KED)	18.710 ppb	0.9 %	20.000 ppb
208Pb (KED)	18.932 ppb	1.2 %	20.000 ppb
209Bi (KED)	103.295 %		
232Th (KED)	18.642 ppb	2.1 %	20.000 ppb
238U (KED)	19.238 ppb	0.8 %	20.000 ppb

Standards:

Analysis Index: 5
 Analysis Name: 50+20
 Analysis Type: STD
 Analysis Started at: 10/18/2021 3:13:08 PM
 Standard (Stock): std1
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	103.596 %		
9Be (KED)	49.284 ppb	7.1 %	50.000 ppb
11B (KED)	48.006 ppb	7.5 %	50.000 ppb
24Mg (KED)	48.620 ppb	5.4 %	50.000 ppb
27Al (KED)	49.097 ppb	2.4 %	50.000 ppb
45Sc (KED)	107.963 %		
51V (KED)	49.794 ppb	2.3 %	50.000 ppb
52Cr (KED)	50.468 ppb	1.7 %	50.000 ppb
55Mn (KED)	50.131 ppb	1.5 %	50.000 ppb
56Fe (KED)	50.166 ppb	1.4 %	50.000 ppb
58Ni (KED)	51.060 ppb	1.5 %	50.000 ppb
59Co (KED)	51.309 ppb	1.4 %	50.000 ppb
63Cu (KED)	52.159 ppb	0.9 %	50.000 ppb
64Zn (KED)	51.545 ppb	0.6 %	50.000 ppb
69Ga (KED)	51.287 ppb	0.6 %	50.000 ppb
75As (KED)	51.733 ppb	1.6 %	50.000 ppb
80Se (KED)	52.362 ppb	1.5 %	50.000 ppb
85Rb (KED)	50.329 ppb	2.1 %	50.000 ppb
88Sr (KED)	50.475 ppb	0.5 %	50.000 ppb
89Y (KED)	105.636 %		
107Ag (KED)	50.127 ppb	0.3 %	50.000 ppb
114Cd (KED)	49.816 ppb	1.2 %	50.000 ppb
115In (KED)	106.758 %		
133Cs (KED)	49.693 ppb	0.6 %	50.000 ppb
138Ba (KED)	50.850 ppb	2.4 %	50.000 ppb
139La (KED)	49.713 ppb	1.1 %	50.000 ppb
140Ce (KED)	50.971 ppb	1.9 %	50.000 ppb
141Pr (KED)	51.315 ppb	2.2 %	50.000 ppb
142Nd (KED)	49.744 ppb	2.3 %	50.000 ppb
152Sm (KED)	49.501 ppb	1.2 %	50.000 ppb
153Eu (KED)	49.788 ppb	3.4 %	50.000 ppb
158Gd (KED)	49.404 ppb	2.1 %	50.000 ppb
159Tb (KED)	104.831 %		
164Dy (KED)	48.490 ppb	0.4 %	50.000 ppb
166Er (KED)	48.397 ppb	0.9 %	50.000 ppb
169Tm (KED)	51.196 ppb	2.5 %	50.000 ppb
174Yb (KED)	51.263 ppb	1.1 %	50.000 ppb
175Lu (KED)	50.975 ppb	1.2 %	50.000 ppb
205Tl (KED)	49.482 ppb	3.7 %	50.000 ppb
208Pb (KED)	49.588 ppb	2.0 %	50.000 ppb
209Bi (KED)	102.680 %		
232Th (KED)	48.788 ppb	2.1 %	50.000 ppb
238U (KED)	49.112 ppb	1.7 %	50.000 ppb

Standards:

Analysis Index: 6
 Analysis Name: 100+20
 Analysis Type: STD
 Analysis Started at: 10/18/2021 3:17:24 PM
 Standard (Stock): std2
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	102.150 %		
9Be (KED)	100.448 ppb	0.5 %	100.000 ppb
11B (KED)	101.399 ppb	0.2 %	100.000 ppb
24Mg (KED)	100.786 ppb	2.1 %	100.000 ppb
27Al (KED)	100.353 ppb	1.9 %	100.000 ppb
45Sc (KED)	111.998 %		
51V (KED)	100.177 ppb	0.7 %	100.000 ppb
52Cr (KED)	99.774 ppb	0.4 %	100.000 ppb
55Mn (KED)	99.924 ppb	1.1 %	100.000 ppb
56Fe (KED)	99.898 ppb	1.4 %	100.000 ppb
58Ni (KED)	99.381 ppb	1.3 %	100.000 ppb
59Co (KED)	99.260 ppb	1.0 %	100.000 ppb
63Cu (KED)	98.875 ppb	1.1 %	100.000 ppb
64Zn (KED)	99.239 ppb	1.2 %	100.000 ppb
69Ga (KED)	99.342 ppb	1.1 %	100.000 ppb
75As (KED)	99.120 ppb	1.8 %	100.000 ppb
80Se (KED)	98.775 ppb	1.5 %	100.000 ppb
85Rb (KED)	99.907 ppb	1.8 %	100.000 ppb
88Sr (KED)	99.815 ppb	0.2 %	100.000 ppb
89Y (KED)	112.025 %		
107Ag (KED)	99.872 ppb	0.9 %	100.000 ppb
114Cd (KED)	100.076 ppb	1.9 %	100.000 ppb
115In (KED)	109.708 %		
133Cs (KED)	100.136 ppb	2.0 %	100.000 ppb
138Ba (KED)	99.560 ppb	2.4 %	100.000 ppb
139La (KED)	100.256 ppb	2.1 %	100.000 ppb
140Ce (KED)	99.676 ppb	1.9 %	100.000 ppb
141Pr (KED)	99.489 ppb	1.6 %	100.000 ppb
142Nd (KED)	100.205 ppb	1.8 %	100.000 ppb
152Sm (KED)	100.384 ppb	2.0 %	100.000 ppb
153Eu (KED)	100.200 ppb	2.7 %	100.000 ppb
158Gd (KED)	100.347 ppb	3.1 %	100.000 ppb
159Tb (KED)	111.609 %		
164Dy (KED)	100.879 ppb	2.3 %	100.000 ppb
166Er (KED)	100.891 ppb	2.3 %	100.000 ppb
169Tm (KED)	99.388 ppb	2.9 %	100.000 ppb
174Yb (KED)	99.477 ppb	2.6 %	100.000 ppb
175Lu (KED)	99.716 ppb	2.2 %	100.000 ppb
205Tl (KED)	100.517 ppb	0.4 %	100.000 ppb
208Pb (KED)	100.420 ppb	2.4 %	100.000 ppb
209Bi (KED)	105.356 %		
232Th (KED)	100.878 ppb	0.7 %	100.000 ppb
238U (KED)	100.597 ppb	0.8 %	100.000 ppb

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Main Runs:	Survey Runs:	Start Time:	User name:
1	water	3	0	10/18/2021 2:59:09 PM	WINDOWS-UPCI4ER\Administrator
2	blk	3	0	10/18/2021 3:02:09 PM	WINDOWS-UPCI4ER\Administrator
3	0+20	3	0	10/18/2021 3:05:48 PM	WINDOWS-UPCI4ER\Administrator
4	20+20	3	0	10/18/2021 3:09:14 PM	WINDOWS-UPCI4ER\Administrator
5	50+20	3	0	10/18/2021 3:13:08 PM	WINDOWS-UPCI4ER\Administrator
6	100+20	3	0	10/18/2021 3:17:24 PM	WINDOWS-UPCI4ER\Administrator
7	w127ti	3	0	10/18/2021 3:21:11 PM	WINDOWS-UPCI4ER\Administrator
8	191076ti	3	0	10/18/2021 3:25:37 PM	WINDOWS-UPCI4ER\Administrator
9	w120ti	3	0	10/18/2021 3:29:39 PM	WINDOWS-UPCI4ER\Administrator
10	191067ti	3	0	10/18/2021 3:33:39 PM	WINDOWS-UPCI4ER\Administrator
11	191090ti	3	0	10/18/2021 3:37:54 PM	WINDOWS-UPCI4ER\Administrator
12	w132ti	3	0	10/18/2021 3:41:46 PM	WINDOWS-UPCI4ER\Administrator
13	191086ti	3	0	10/18/2021 3:45:43 PM	WINDOWS-UPCI4ER\Administrator
14	w121ti	3	0	10/18/2021 3:49:49 PM	WINDOWS-UPCI4ER\Administrator
15	w131ti	3	0	10/18/2021 3:53:48 PM	WINDOWS-UPCI4ER\Administrator
16	w129ti	3	0	10/18/2021 3:57:49 PM	WINDOWS-UPCI4ER\Administrator
17	w123ti	3	0	10/18/2021 4:01:57 PM	WINDOWS-UPCI4ER\Administrator
18	191055ti	3	0	10/18/2021 4:06:10 PM	WINDOWS-UPCI4ER\Administrator
19	191064ti	3	0	10/18/2021 4:10:22 PM	WINDOWS-UPCI4ER\Administrator
20	w117ti	3	0	10/18/2021 4:14:31 PM	WINDOWS-UPCI4ER\Administrator
21	w128ti	3	0	10/18/2021 4:18:39 PM	WINDOWS-UPCI4ER\Administrator
22	w125ti	3	0	10/18/2021 4:22:50 PM	WINDOWS-UPCI4ER\Administrator
23	w118ti	3	0	10/18/2021 4:26:52 PM	WINDOWS-UPCI4ER\Administrator
24	191075ti	3	0	10/18/2021 4:31:10 PM	WINDOWS-UPCI4ER\Administrator
25	191078ti	3	0	10/18/2021 4:35:18 PM	WINDOWS-UPCI4ER\Administrator
26	191071ti	3	0	10/18/2021 4:39:23 PM	WINDOWS-UPCI4ER\Administrator
27	y100ti	3	0	10/18/2021 4:43:16 PM	WINDOWS-UPCI4ER\Administrator
28	191066ti	3	0	10/18/2021 4:47:17 PM	WINDOWS-UPCI4ER\Administrator
29	191079ti	3	0	10/18/2021 4:51:09 PM	WINDOWS-UPCI4ER\Administrator
30	1806100ti	3	0	10/18/2021 4:55:03 PM	WINDOWS-UPCI4ER\Administrator

Sample Summary

Instrument ID: iCAP Q

Analysis index: 1

Analysis name: water

Analysis started at: 10/18/2021 2:59:09 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	0.037 %	173.2 %
11B (KED)	Infinity ppb	
24Mg (KED)	Infinity ppb	
27Al (KED)	5.047 ppb	187.6 %
45Sc (KED)	0.164 %	19.0 %
51V (KED)	0.328 ppb	90.2 %
52Cr (KED)	0.447 ppb	115.0 %
55Mn (KED)	1.071 ppb	31.4 %
56Fe (KED)	12.950 ppb	32.0 %
58Ni (KED)	4.417 ppb	3.4 %
59Co (KED)	-0.001 ppb	
63Cu (KED)	Infinity ppb	
64Zn (KED)	Infinity ppb	
75As (KED)	Infinity ppb	
80Se (KED)	Infinity ppb	
88Sr (KED)	Infinity ppb	
89Y (KED)	0.000 %	
107Ag (KED)	Infinity ppb	
114Cd (KED)	Infinity ppb	
115In (KED)	0.000 %	173.2 %
138Ba (KED)	Infinity ppb	
159Tb (KED)	0.000 %	
205Tl (KED)	1.892 ppb	126.9 %
208Pb (KED)	31.894 ppb	23.6 %
209Bi (KED)	0.001 %	16.5 %
232Th (KED)	0.000 ppb	0.0 %
238U (KED)	1.013 ppb	104.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	0.037 %	1 cps	173.2 %
9Be (KED)		0 cps	
11B (KED)	Infinity ppb	60 cps	30.9 %
24Mg (KED)	Infinity ppb	20 cps	60.1 %
27Al (KED)	5.047 ppb	1 cps	173.2 %
45Sc (KED)	0.164 %	77 cps	19.0 %
51V (KED)	0.328 ppb	4 cps	86.6 %
52Cr (KED)	0.447 ppb	9 cps	108.3 %
55Mn (KED)	1.071 ppb	11 cps	17.3 %
56Fe (KED)	12.950 ppb	244 cps	16.4 %
58Ni (KED)	4.417 ppb	112 cps	16.9 %
59Co (KED)	-0.001 ppb	0 cps	
63Cu (KED)	Infinity ppb	97 cps	29.5 %
64Zn (KED)	Infinity ppb	416 cps	13.0 %
69Ga (KED)		3 cps	173.2 %
75As (KED)	Infinity ppb	13 cps	25.0 %
80Se (KED)	Infinity ppb	992 cps	15.9 %
85Rb (KED)		3 cps	100.0 %
88Sr (KED)	Infinity ppb	6 cps	69.3 %
89Y (KED)	0.000 %	0 cps	
107Ag (KED)	Infinity ppb	9 cps	78.1 %

Category	Concentration average	Intensity average	Intensity RSD
114Cd (KED)	Infinity ppb	7 cps	50.0 %
115In (KED)	0.000 %	1 cps	173.2 %
133Cs (KED)		1 cps	173.2 %
138Ba (KED)	Infinity ppb	57 cps	5.9 %
139La (KED)		0 cps	
140Ce (KED)		1 cps	173.2 %
141Pr (KED)		0 cps	
142Nd (KED)		0 cps	
152Sm (KED)		0 cps	
153Eu (KED)		0 cps	
158Gd (KED)		0 cps	
159Tb (KED)	0.000 %	0 cps	
164Dy (KED)		0 cps	
166Er (KED)		0 cps	
169Tm (KED)		0 cps	
174Yb (KED)		0 cps	
175Lu (KED)		0 cps	
205Tl (KED)	1.892 ppb	6 cps	124.9 %
208Pb (KED)	31.894 ppb	60 cps	5.6 %
209Bi (KED)	0.001 %	53 cps	16.5 %
232Th (KED)	0.000 ppb	0 cps	
238U (KED)	1.013 ppb	4 cps	114.6 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 2

Analysis name: blk

Analysis started at: 10/18/2021 3:02:09 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	100.000 %	
9Be (KED)	0.000 ppb	
11B (KED)	-0.101 ppb	280.4 %
24Mg (KED)	-0.028 ppb	46.7 %
27Al (KED)	-0.027 ppb	213.9 %
45Sc (KED)	100.000 %	
51V (KED)	0.000 ppb	150.3 %
52Cr (KED)	-0.001 ppb	169.4 %
55Mn (KED)	0.001 ppb	245.1 %
56Fe (KED)	-0.006 ppb	261.0 %
58Ni (KED)	-0.004 ppb	17.3 %
59Co (KED)	0.000 ppb	178.9 %
63Cu (KED)	-0.213 ppb	30.3 %
64Zn (KED)	-0.139 ppb	35.8 %
69Ga (KED)	0.000 ppb	1,248.5 %
75As (KED)	0.004 ppb	160.7 %
80Se (KED)	0.079 ppb	139.7 %
85Rb (KED)	0.000 ppb	419.2 %
88Sr (KED)	0.001 ppb	178.0 %
89Y (KED)	100.000 %	
107Ag (KED)	0.000 ppb	36.2 %
114Cd (KED)	-0.001 ppb	40.6 %
115In (KED)	100.000 %	
133Cs (KED)	0.000 ppb	292.9 %
138Ba (KED)	0.004 ppb	51.4 %
139La (KED)	0.000 ppb	3,531.8 %
140Ce (KED)	0.000 ppb	81.6 %
141Pr (KED)	0.000 ppb	786.9 %
142Nd (KED)	0.000 ppb	2,059.7 %
152Sm (KED)	0.000 ppb	624.2 %
153Eu (KED)	0.000 ppb	13.9 %
158Gd (KED)	0.000 ppb	0.8 %
159Tb (KED)	100.000 %	
164Dy (KED)	0.000 ppb	0.9 %
166Er (KED)	0.000 ppb	91.6 %
169Tm (KED)	0.000 ppb	6.8 %
174Yb (KED)	0.000 ppb	487.7 %
175Lu (KED)	0.045 ppb	27.4 %
205Tl (KED)	0.000 ppb	199.9 %
208Pb (KED)	0.003 ppb	40.8 %
209Bi (KED)	100.000 %	
232Th (KED)	0.000 ppb	26.1 %
238U (KED)	0.000 ppb	4,441.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	100.000 %	2,998 cps	3.6 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	-0.101 ppb	470 cps	8.7 %
24Mg (KED)	-0.028 ppb	84 cps	12.1 %
27Al (KED)	-0.027 ppb	53 cps	12.5 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	100.000 %	46,868 cps	2.2 %
51V (KED)	0.000 ppb	6 cps	91.7 %
52Cr (KED)	-0.001 ppb	74 cps	21.2 %
55Mn (KED)	0.001 ppb	44 cps	26.3 %
56Fe (KED)	-0.006 ppb	1,883 cps	8.8 %
58Ni (KED)	-0.004 ppb	201 cps	4.2 %
59Co (KED)	0.000 ppb	27 cps	43.3 %
63Cu (KED)	-0.213 ppb	5,144 cps	24.2 %
64Zn (KED)	-0.139 ppb	2,535 cps	11.6 %
69Ga (KED)	0.000 ppb	69 cps	38.8 %
75As (KED)	0.004 ppb	21 cps	45.6 %
80Se (KED)	0.079 ppb	1,082 cps	5.4 %
85Rb (KED)	0.000 ppb	10 cps	33.3 %
88Sr (KED)	0.001 ppb	102 cps	8.2 %
89Y (KED)	100.000 %	430,137 cps	0.7 %
107Ag (KED)	0.000 ppb	33 cps	10.0 %
114Cd (KED)	-0.001 ppb	68 cps	12.4 %
115In (KED)	100.000 %	807,690 cps	2.1 %
133Cs (KED)	0.000 ppb	14 cps	48.0 %
138Ba (KED)	0.004 ppb	1,537 cps	6.2 %
139La (KED)	0.000 ppb	26 cps	41.9 %
140Ce (KED)	0.000 ppb	302 cps	13.9 %
141Pr (KED)	0.000 ppb	27 cps	54.5 %
142Nd (KED)	0.000 ppb	50 cps	13.3 %
152Sm (KED)	0.000 ppb	9 cps	57.3 %
153Eu (KED)	0.000 ppb	12 cps	15.7 %
158Gd (KED)	0.000 ppb	10 cps	0.0 %
159Tb (KED)	100.000 %	4,047,455 cps	0.4 %
164Dy (KED)	0.000 ppb	13 cps	0.0 %
166Er (KED)	0.000 ppb	558 cps	2.9 %
169Tm (KED)	0.000 ppb	9 cps	21.7 %
174Yb (KED)	0.000 ppb	27 cps	25.0 %
175Lu (KED)	0.045 ppb	43,624 cps	4.3 %
205Tl (KED)	0.000 ppb	14 cps	58.1 %
208Pb (KED)	0.003 ppb	7,801 cps	3.0 %
209Bi (KED)	100.000 %	3,693,067 cps	1.3 %
232Th (KED)	0.000 ppb	66 cps	16.3 %
238U (KED)	0.000 ppb	144 cps	18.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 3

Analysis name: 0+20

Analysis started at: 10/18/2021 3:05:48 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	100.853 %	
9Be (KED)	0.000 ppb	
11B (KED)	0.000 ppb	0.2 %
24Mg (KED)	0.000 ppb	0.3 %
27Al (KED)	0.000 ppb	0.1 %
45Sc (KED)	103.251 %	
51V (KED)	0.000 ppb	1.7 %
52Cr (KED)	0.000 ppb	0.2 %
55Mn (KED)	0.000 ppb	0.5 %
56Fe (KED)	0.000 ppb	0.1 %
58Ni (KED)	0.000 ppb	0.1 %
59Co (KED)	0.000 ppb	0.1 %
63Cu (KED)	0.000 ppb	0.2 %
64Zn (KED)	0.000 ppb	0.1 %
69Ga (KED)	0.000 ppb	0.3 %
75As (KED)	0.000 ppb	0.7 %
80Se (KED)	0.000 ppb	0.1 %
85Rb (KED)	0.000 ppb	0.5 %
88Sr (KED)	0.000 ppb	0.1 %
89Y (KED)	103.345 %	
107Ag (KED)	0.000 ppb	0.1 %
114Cd (KED)	0.000 ppb	0.1 %
115In (KED)	101.306 %	
133Cs (KED)	0.000 ppb	0.2 %
138Ba (KED)	0.000 ppb	0.2 %
139La (KED)	0.000 ppb	0.3 %
140Ce (KED)	0.000 ppb	0.1 %
141Pr (KED)	0.000 ppb	0.3 %
142Nd (KED)	0.000 ppb	0.3 %
152Sm (KED)	0.000 ppb	0.6 %
153Eu (KED)	0.000 ppb	0.2 %
158Gd (KED)	0.000 ppb	0.7 %
159Tb (KED)	102.801 %	
164Dy (KED)	0.000 ppb	0.6 %
166Er (KED)	0.000 ppb	0.1 %
169Tm (KED)	0.000 ppb	0.3 %
174Yb (KED)	0.000 ppb	0.6 %
175Lu (KED)	0.000 ppb	0.0 %
205Tl (KED)	0.000 ppb	0.6 %
208Pb (KED)	0.000 ppb	0.0 %
209Bi (KED)	100.950 %	
232Th (KED)	0.000 ppb	0.3 %
238U (KED)	0.000 ppb	0.2 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	100.853 %	3,024 cps	3.0 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	0.000 ppb	481 cps	15.0 %
24Mg (KED)	0.000 ppb	101 cps	26.9 %
27Al (KED)	0.000 ppb	59 cps	6.5 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	103.251 %	48,391 cps	1.5 %
51V (KED)	0.000 ppb	2 cps	173.2 %
52Cr (KED)	0.000 ppb	86 cps	21.5 %
55Mn (KED)	0.000 ppb	41 cps	46.1 %
56Fe (KED)	0.000 ppb	2,027 cps	11.8 %
58Ni (KED)	0.000 ppb	276 cps	9.4 %
59Co (KED)	0.000 ppb	21 cps	9.1 %
63Cu (KED)	0.000 ppb	9,569 cps	24.0 %
64Zn (KED)	0.000 ppb	3,472 cps	11.7 %
69Ga (KED)	0.000 ppb	69 cps	29.6 %
75As (KED)	0.000 ppb	16 cps	68.9 %
80Se (KED)	0.000 ppb	1,073 cps	8.3 %
85Rb (KED)	0.000 ppb	11 cps	45.8 %
88Sr (KED)	0.000 ppb	101 cps	12.5 %
89Y (KED)	103.345 %	444,524 cps	0.8 %
107Ag (KED)	0.000 ppb	43 cps	7.7 %
114Cd (KED)	0.000 ppb	87 cps	13.9 %
115In (KED)	101.306 %	818,241 cps	0.9 %
133Cs (KED)	0.000 ppb	12 cps	15.7 %
138Ba (KED)	0.000 ppb	1,400 cps	17.2 %
139La (KED)	0.000 ppb	27 cps	33.1 %
140Ce (KED)	0.000 ppb	362 cps	12.2 %
141Pr (KED)	0.000 ppb	26 cps	30.1 %
142Nd (KED)	0.000 ppb	51 cps	30.8 %
152Sm (KED)	0.000 ppb	10 cps	57.7 %
153Eu (KED)	0.000 ppb	27 cps	25.0 %
158Gd (KED)	0.000 ppb	16 cps	68.9 %
159Tb (KED)	102.801 %	4,160,817 cps	0.9 %
164Dy (KED)	0.000 ppb	20 cps	57.7 %
166Er (KED)	0.000 ppb	553 cps	11.5 %
169Tm (KED)	0.000 ppb	38 cps	27.0 %
174Yb (KED)	0.000 ppb	29 cps	63.5 %
175Lu (KED)	0.000 ppb	37,519 cps	2.4 %
205Tl (KED)	0.000 ppb	19 cps	56.7 %
208Pb (KED)	0.000 ppb	7,482 cps	5.0 %
209Bi (KED)	100.950 %	3,728,140 cps	1.1 %
232Th (KED)	0.000 ppb	108 cps	34.5 %
238U (KED)	0.000 ppb	147 cps	23.6 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 4

Analysis name: 20+20

Analysis started at: 10/18/2021 3:09:14 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	100.927 %	
9Be (KED)	19.547 ppb	4.2 %
11B (KED)	17.992 ppb	3.7 %
24Mg (KED)	19.519 ppb	3.0 %
27Al (KED)	20.492 ppb	1.8 %
45Sc (KED)	105.928 %	
51V (KED)	19.631 ppb	1.4 %
52Cr (KED)	19.962 ppb	1.4 %
55Mn (KED)	20.053 ppb	0.2 %
56Fe (KED)	20.096 ppb	0.4 %
58Ni (KED)	20.445 ppb	0.6 %
59Co (KED)	20.428 ppb	0.9 %
63Cu (KED)	20.226 ppb	1.1 %
64Zn (KED)	19.944 ppb	1.3 %
69Ga (KED)	20.073 ppb	1.5 %
75As (KED)	20.066 ppb	2.3 %
80Se (KED)	20.221 ppb	3.8 %
85Rb (KED)	19.642 ppb	3.0 %
88Sr (KED)	19.737 ppb	0.7 %
89Y (KED)	105.847 %	
107Ag (KED)	20.325 ppb	1.4 %
114Cd (KED)	20.077 ppb	2.2 %
115In (KED)	104.235 %	
133Cs (KED)	20.087 ppb	1.7 %
138Ba (KED)	20.076 ppb	0.4 %
139La (KED)	19.438 ppb	1.0 %
140Ce (KED)	19.191 ppb	0.4 %
141Pr (KED)	19.270 ppb	0.7 %
142Nd (KED)	19.613 ppb	1.3 %
152Sm (KED)	19.327 ppb	1.6 %
153Eu (KED)	19.529 ppb	1.1 %
158Gd (KED)	19.756 ppb	1.2 %
159Tb (KED)	104.526 %	
164Dy (KED)	19.380 ppb	1.6 %
166Er (KED)	19.553 ppb	0.4 %
169Tm (KED)	20.071 ppb	1.0 %
174Yb (KED)	19.456 ppb	1.0 %
175Lu (KED)	18.984 ppb	2.2 %
205Tl (KED)	18.710 ppb	0.9 %
208Pb (KED)	18.932 ppb	1.2 %
209Bi (KED)	103.295 %	
232Th (KED)	18.642 ppb	2.1 %
238U (KED)	19.238 ppb	0.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	100.927 %	3,026 cps	3.6 %
9Be (KED)	19.547 ppb	3,322 cps	0.7 %
11B (KED)	17.992 ppb	2,126 cps	5.3 %
24Mg (KED)	19.519 ppb	11,020 cps	1.3 %
27Al (KED)	20.492 ppb	3,015 cps	2.5 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	105.928 %	49,646 cps	1.1 %
51V (KED)	19.631 ppb	169,591 cps	0.9 %
52Cr (KED)	19.962 ppb	270,746 cps	0.9 %
55Mn (KED)	20.053 ppb	138,672 cps	1.2 %
56Fe (KED)	20.096 ppb	254,197 cps	1.0 %
58Ni (KED)	20.445 ppb	336,174 cps	1.2 %
59Co (KED)	20.428 ppb	544,112 cps	1.4 %
63Cu (KED)	20.226 ppb	422,543 cps	0.6 %
64Zn (KED)	19.944 ppb	128,792 cps	0.7 %
69Ga (KED)	20.073 ppb	134,720 cps	1.0 %
75As (KED)	20.066 ppb	34,297 cps	1.8 %
80Se (KED)	20.221 ppb	12,838 cps	3.3 %
85Rb (KED)	19.642 ppb	122,587 cps	2.4 %
88Sr (KED)	19.737 ppb	173,405 cps	1.1 %
89Y (KED)	105.847 %	455,287 cps	0.6 %
107Ag (KED)	20.325 ppb	1,142,727 cps	0.8 %
114Cd (KED)	20.077 ppb	440,170 cps	1.8 %
115In (KED)	104.235 %	841,892 cps	0.6 %
133Cs (KED)	20.087 ppb	619,241 cps	1.1 %
138Ba (KED)	20.076 ppb	829,581 cps	0.1 %
139La (KED)	19.438 ppb	1,734,790 cps	0.6 %
140Ce (KED)	19.191 ppb	2,297,711 cps	0.2 %
141Pr (KED)	19.270 ppb	2,414,115 cps	0.4 %
142Nd (KED)	19.613 ppb	977,676 cps	1.1 %
152Sm (KED)	19.327 ppb	871,816 cps	1.5 %
153Eu (KED)	19.529 ppb	1,760,440 cps	0.7 %
158Gd (KED)	19.756 ppb	1,184,477 cps	0.9 %
159Tb (KED)	104.526 %	4,230,651 cps	0.4 %
164Dy (KED)	19.380 ppb	1,313,601 cps	1.1 %
166Er (KED)	19.553 ppb	1,565,438 cps	0.2 %
169Tm (KED)	20.071 ppb	5,460,369 cps	0.9 %
174Yb (KED)	19.456 ppb	1,873,167 cps	1.4 %
175Lu (KED)	18.984 ppb	3,169,487 cps	1.8 %
205Tl (KED)	18.710 ppb	3,656,899 cps	1.4 %
208Pb (KED)	18.932 ppb	2,618,521 cps	1.7 %
209Bi (KED)	103.295 %	3,814,761 cps	0.6 %
232Th (KED)	18.642 ppb	5,098,926 cps	2.6 %
238U (KED)	19.238 ppb	6,118,798 cps	1.2 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 5

Analysis name: 50+20

Analysis started at: 10/18/2021 3:13:08 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	103.596 %	
9Be (KED)	49.284 ppb	7.1 %
11B (KED)	48.006 ppb	7.5 %
24Mg (KED)	48.620 ppb	5.4 %
27Al (KED)	49.097 ppb	2.4 %
45Sc (KED)	107.963 %	
51V (KED)	49.794 ppb	2.3 %
52Cr (KED)	50.468 ppb	1.7 %
55Mn (KED)	50.131 ppb	1.5 %
56Fe (KED)	50.166 ppb	1.4 %
58Ni (KED)	51.060 ppb	1.5 %
59Co (KED)	51.309 ppb	1.4 %
63Cu (KED)	52.159 ppb	0.9 %
64Zn (KED)	51.545 ppb	0.6 %
69Ga (KED)	51.287 ppb	0.6 %
75As (KED)	51.733 ppb	1.6 %
80Se (KED)	52.362 ppb	1.5 %
85Rb (KED)	50.329 ppb	2.1 %
88Sr (KED)	50.475 ppb	0.5 %
89Y (KED)	105.636 %	
107Ag (KED)	50.127 ppb	0.3 %
114Cd (KED)	49.816 ppb	1.2 %
115In (KED)	106.758 %	
133Cs (KED)	49.693 ppb	0.6 %
138Ba (KED)	50.850 ppb	2.4 %
139La (KED)	49.713 ppb	1.1 %
140Ce (KED)	50.971 ppb	1.9 %
141Pr (KED)	51.315 ppb	2.2 %
142Nd (KED)	49.744 ppb	2.3 %
152Sm (KED)	49.501 ppb	1.2 %
153Eu (KED)	49.788 ppb	3.4 %
158Gd (KED)	49.404 ppb	2.1 %
159Tb (KED)	104.831 %	
164Dy (KED)	48.490 ppb	0.4 %
166Er (KED)	48.397 ppb	0.9 %
169Tm (KED)	51.196 ppb	2.5 %
174Yb (KED)	51.263 ppb	1.1 %
175Lu (KED)	50.975 ppb	1.2 %
205Tl (KED)	49.482 ppb	3.7 %
208Pb (KED)	49.588 ppb	2.0 %
209Bi (KED)	102.680 %	
232Th (KED)	48.788 ppb	2.1 %
238U (KED)	49.112 ppb	1.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	103.596 %	3,106 cps	6.0 %
9Be (KED)	49.284 ppb	8,581 cps	1.9 %
11B (KED)	48.006 ppb	4,980 cps	1.0 %
24Mg (KED)	48.620 ppb	27,982 cps	0.9 %
27Al (KED)	49.097 ppb	7,274 cps	1.9 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	107.963 %	50,600 cps	1.5 %
51V (KED)	49.794 ppb	438,388 cps	1.2 %
52Cr (KED)	50.468 ppb	697,448 cps	0.4 %
55Mn (KED)	50.131 ppb	353,218 cps	0.3 %
56Fe (KED)	50.166 ppb	643,486 cps	0.4 %
58Ni (KED)	51.060 ppb	855,260 cps	2.1 %
59Co (KED)	51.309 ppb	1,392,693 cps	0.4 %
63Cu (KED)	52.159 ppb	1,072,089 cps	0.6 %
64Zn (KED)	51.545 ppb	326,583 cps	0.6 %
69Ga (KED)	51.287 ppb	343,427 cps	0.5 %
75As (KED)	51.733 ppb	88,223 cps	1.2 %
80Se (KED)	52.362 ppb	31,433 cps	1.2 %
85Rb (KED)	50.329 ppb	313,481 cps	1.8 %
88Sr (KED)	50.475 ppb	442,395 cps	0.2 %
89Y (KED)	105.636 %	454,379 cps	0.4 %
107Ag (KED)	50.127 ppb	2,886,544 cps	0.7 %
114Cd (KED)	49.816 ppb	1,118,573 cps	1.7 %
115In (KED)	106.758 %	862,276 cps	0.5 %
133Cs (KED)	49.693 ppb	1,569,157 cps	1.1 %
138Ba (KED)	50.850 ppb	2,104,905 cps	1.6 %
139La (KED)	49.713 ppb	4,449,656 cps	0.8 %
140Ce (KED)	50.971 ppb	6,119,511 cps	1.7 %
141Pr (KED)	51.315 ppb	6,446,795 cps	1.8 %
142Nd (KED)	49.744 ppb	2,486,567 cps	1.7 %
152Sm (KED)	49.501 ppb	2,239,383 cps	1.0 %
153Eu (KED)	49.788 ppb	4,500,835 cps	3.0 %
158Gd (KED)	49.404 ppb	2,970,279 cps	1.2 %
159Tb (KED)	104.831 %	4,242,992 cps	1.0 %
164Dy (KED)	48.490 ppb	3,296,280 cps	0.7 %
166Er (KED)	48.397 ppb	3,885,389 cps	1.8 %
169Tm (KED)	51.196 ppb	13,966,869 cps	1.8 %
174Yb (KED)	51.263 ppb	4,949,377 cps	1.0 %
175Lu (KED)	50.975 ppb	8,471,971 cps	2.0 %
205Tl (KED)	49.482 ppb	9,608,542 cps	1.8 %
208Pb (KED)	49.588 ppb	6,803,913 cps	1.9 %
209Bi (KED)	102.680 %	3,792,032 cps	2.1 %
232Th (KED)	48.788 ppb	13,259,543 cps	0.8 %
238U (KED)	49.112 ppb	15,523,762 cps	0.7 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 6

Analysis name: 100+20

Analysis started at: 10/18/2021 3:17:24 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	102.150 %	
9Be (KED)	100.448 ppb	0.5 %
11B (KED)	101.399 ppb	0.2 %
24Mg (KED)	100.786 ppb	2.1 %
27Al (KED)	100.353 ppb	1.9 %
45Sc (KED)	111.998 %	
51V (KED)	100.177 ppb	0.7 %
52Cr (KED)	99.774 ppb	0.4 %
55Mn (KED)	99.924 ppb	1.1 %
56Fe (KED)	99.898 ppb	1.4 %
58Ni (KED)	99.381 ppb	1.3 %
59Co (KED)	99.260 ppb	1.0 %
63Cu (KED)	98.875 ppb	1.1 %
64Zn (KED)	99.239 ppb	1.2 %
69Ga (KED)	99.342 ppb	1.1 %
75As (KED)	99.120 ppb	1.8 %
80Se (KED)	98.775 ppb	1.5 %
85Rb (KED)	99.907 ppb	1.8 %
88Sr (KED)	99.815 ppb	0.2 %
89Y (KED)	112.025 %	
107Ag (KED)	99.872 ppb	0.9 %
114Cd (KED)	100.076 ppb	1.9 %
115In (KED)	109.708 %	
133Cs (KED)	100.136 ppb	2.0 %
138Ba (KED)	99.560 ppb	2.4 %
139La (KED)	100.256 ppb	2.1 %
140Ce (KED)	99.676 ppb	1.9 %
141Pr (KED)	99.489 ppb	1.6 %
142Nd (KED)	100.205 ppb	1.8 %
152Sm (KED)	100.384 ppb	2.0 %
153Eu (KED)	100.200 ppb	2.7 %
158Gd (KED)	100.347 ppb	3.1 %
159Tb (KED)	111.609 %	
164Dy (KED)	100.879 ppb	2.3 %
166Er (KED)	100.891 ppb	2.3 %
169Tm (KED)	99.388 ppb	2.9 %
174Yb (KED)	99.477 ppb	2.6 %
175Lu (KED)	99.716 ppb	2.2 %
205Tl (KED)	100.517 ppb	0.4 %
208Pb (KED)	100.420 ppb	2.4 %
209Bi (KED)	105.356 %	
232Th (KED)	100.878 ppb	0.7 %
238U (KED)	100.597 ppb	0.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	102.150 %	3,063 cps	1.4 %
9Be (KED)	100.448 ppb	17,292 cps	1.1 %
11B (KED)	101.399 ppb	9,856 cps	1.3 %
24Mg (KED)	100.786 ppb	57,201 cps	1.5 %
27Al (KED)	100.353 ppb	15,358 cps	1.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	111.998 %	52,491 cps	1.0 %
51V (KED)	100.177 ppb	915,097 cps	1.3 %
52Cr (KED)	99.774 ppb	1,430,555 cps	1.3 %
55Mn (KED)	99.924 ppb	730,421 cps	1.4 %
56Fe (KED)	99.898 ppb	1,327,183 cps	0.7 %
58Ni (KED)	99.381 ppb	1,726,461 cps	0.8 %
59Co (KED)	99.260 ppb	2,795,094 cps	0.7 %
63Cu (KED)	98.875 ppb	2,145,792 cps	1.0 %
64Zn (KED)	99.239 ppb	663,236 cps	0.5 %
69Ga (KED)	99.342 ppb	705,309 cps	0.9 %
75As (KED)	99.120 ppb	179,233 cps	1.7 %
80Se (KED)	98.775 ppb	61,842 cps	0.2 %
85Rb (KED)	99.907 ppb	659,845 cps	0.9 %
88Sr (KED)	99.815 ppb	927,655 cps	1.5 %
89Y (KED)	112.025 %	481,861 cps	1.6 %
107Ag (KED)	99.872 ppb	5,909,746 cps	0.5 %
114Cd (KED)	100.076 ppb	2,308,957 cps	1.7 %
115In (KED)	109.708 %	886,097 cps	0.5 %
133Cs (KED)	100.136 ppb	3,249,219 cps	2.0 %
138Ba (KED)	99.560 ppb	4,386,433 cps	3.1 %
139La (KED)	100.256 ppb	9,550,765 cps	0.4 %
140Ce (KED)	99.676 ppb	12,737,395 cps	0.8 %
141Pr (KED)	99.489 ppb	13,304,637 cps	0.9 %
142Nd (KED)	100.205 ppb	5,331,869 cps	0.9 %
152Sm (KED)	100.384 ppb	4,833,637 cps	0.7 %
153Eu (KED)	100.200 ppb	9,640,460 cps	0.3 %
158Gd (KED)	100.347 ppb	6,421,506 cps	2.1 %
159Tb (KED)	111.609 %	4,517,316 cps	2.5 %
164Dy (KED)	100.879 ppb	7,298,726 cps	1.3 %
166Er (KED)	100.891 ppb	8,619,430 cps	1.1 %
169Tm (KED)	99.388 ppb	28,858,030 cps	1.2 %
174Yb (KED)	99.477 ppb	10,221,664 cps	0.9 %
175Lu (KED)	99.716 ppb	17,599,222 cps	1.7 %
205Tl (KED)	100.517 ppb	20,036,675 cps	1.5 %
208Pb (KED)	100.420 ppb	14,128,160 cps	0.8 %
209Bi (KED)	105.356 %	3,890,857 cps	1.6 %
232Th (KED)	100.878 ppb	28,136,670 cps	0.9 %
238U (KED)	100.597 ppb	32,631,002 cps	1.1 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 7

Analysis name: w127ti

Analysis started at: 10/18/2021 3:21:11 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	99.147 %	4.8 %
9Be (KED)	0.040 ppb	52.3 %
11B (KED)	3.136 ppb	16.6 %
24Mg (KED)	116.767 ppb	5.4 %
27Al (KED)	81.884 ppb	1.0 %
45Sc (KED)	102.906 %	1.2 %
51V (KED)	0.160 ppb	15.0 %
52Cr (KED)	0.469 ppb	2.7 %
55Mn (KED)	3.062 ppb	0.5 %
56Fe (KED)	113.397 ppb	1.8 %
58Ni (KED)	0.811 ppb	2.0 %
59Co (KED)	0.079 ppb	10.7 %
63Cu (KED)	1.911 ppb	0.8 %
64Zn (KED)	47.457 ppb	0.9 %
69Ga (KED)	0.409 ppb	4.3 %
75As (KED)	0.067 ppb	17.9 %
80Se (KED)	0.337 ppb	66.0 %
85Rb (KED)	0.537 ppb	5.1 %
88Sr (KED)	2.679 ppb	5.1 %
89Y (KED)	105.298 %	0.6 %
107Ag (KED)	0.074 ppb	7.1 %
114Cd (KED)	0.013 ppb	17.8 %
115In (KED)	103.259 %	0.5 %
133Cs (KED)	0.019 ppb	11.6 %
138Ba (KED)	1.474 ppb	0.4 %
139La (KED)	0.082 ppb	2.2 %
140Ce (KED)	0.172 ppb	3.4 %
141Pr (KED)	0.022 ppb	12.1 %
142Nd (KED)	0.109 ppb	4.8 %
152Sm (KED)	0.020 ppb	41.2 %
153Eu (KED)	0.131 ppb	168.7 %
158Gd (KED)	0.197 ppb	162.1 %
159Tb (KED)	107.577 %	1.6 %
164Dy (KED)	0.156 ppb	161.9 %
166Er (KED)	0.114 ppb	169.3 %
169Tm (KED)	0.086 ppb	171.1 %
174Yb (KED)	0.076 ppb	162.5 %
175Lu (KED)	-0.018 ppb	691.0 %
205Tl (KED)	0.064 ppb	158.7 %
208Pb (KED)	0.295 ppb	24.3 %
209Bi (KED)	101.561 %	0.5 %
232Th (KED)	0.137 ppb	75.6 %
238U (KED)	0.038 ppb	137.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	99.147 %	2,973 cps	4.8 %
9Be (KED)	0.040 ppb	7 cps	50.0 %
11B (KED)	3.136 ppb	754 cps	3.4 %
24Mg (KED)	116.767 ppb	64,205 cps	0.7 %
27Al (KED)	81.884 ppb	11,525 cps	0.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	102.906 %	48,230 cps	1.2 %
51V (KED)	0.160 ppb	1,347 cps	16.1 %
52Cr (KED)	0.469 ppb	6,268 cps	3.7 %
55Mn (KED)	3.062 ppb	20,603 cps	0.8 %
56Fe (KED)	113.397 ppb	1,383,959 cps	1.5 %
58Ni (KED)	0.811 ppb	13,211 cps	1.6 %
59Co (KED)	0.079 ppb	2,061 cps	11.8 %
63Cu (KED)	1.911 ppb	48,544 cps	0.6 %
64Zn (KED)	47.457 ppb	299,997 cps	0.7 %
69Ga (KED)	0.409 ppb	2,801 cps	4.1 %
75As (KED)	0.067 ppb	129 cps	15.2 %
80Se (KED)	0.337 ppb	1,289 cps	9.9 %
85Rb (KED)	0.537 ppb	3,347 cps	4.5 %
88Sr (KED)	2.679 ppb	23,500 cps	5.1 %
89Y (KED)	105.298 %	452,925 cps	0.6 %
107Ag (KED)	0.074 ppb	4,165 cps	7.1 %
114Cd (KED)	0.013 ppb	371 cps	14.1 %
115In (KED)	103.259 %	834,016 cps	0.5 %
133Cs (KED)	0.019 ppb	608 cps	11.7 %
138Ba (KED)	1.474 ppb	64,035 cps	1.3 %
139La (KED)	0.082 ppb	7,546 cps	0.8 %
140Ce (KED)	0.172 ppb	21,534 cps	2.1 %
141Pr (KED)	0.022 ppb	2,849 cps	11.1 %
142Nd (KED)	0.109 ppb	5,665 cps	3.4 %
152Sm (KED)	0.020 ppb	945 cps	39.7 %
153Eu (KED)	0.131 ppb	12,021 cps	168.2 %
158Gd (KED)	0.197 ppb	12,031 cps	161.7 %
159Tb (KED)	107.577 %	4,354,122 cps	1.6 %
164Dy (KED)	0.156 ppb	10,784 cps	161.4 %
166Er (KED)	0.114 ppb	9,838 cps	159.2 %
169Tm (KED)	0.086 ppb	23,981 cps	170.8 %
174Yb (KED)	0.076 ppb	7,437 cps	161.7 %
175Lu (KED)	-0.018 ppb	35,988 cps	59.0 %
205Tl (KED)	0.064 ppb	12,364 cps	158.6 %
208Pb (KED)	0.295 ppb	47,503 cps	20.9 %
209Bi (KED)	101.561 %	3,750,728 cps	0.5 %
232Th (KED)	0.137 ppb	36,999 cps	75.9 %
238U (KED)	0.038 ppb	12,080 cps	136.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 8

Analysis name: 191076ti

Analysis started at: 10/18/2021 3:25:37 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	204.659 %	1.0 %
9Be (KED)	0.029 ppb	33.5 %
11B (KED)	-1.672 ppb	13.8 %
24Mg (KED)	104.708 ppb	1.9 %
27Al (KED)	88.006 ppb	2.9 %
45Sc (KED)	209.421 %	1.1 %
51V (KED)	0.166 ppb	2.2 %
52Cr (KED)	0.329 ppb	4.4 %
55Mn (KED)	3.003 ppb	1.9 %
56Fe (KED)	108.698 ppb	1.2 %
58Ni (KED)	0.523 ppb	2.2 %
59Co (KED)	0.053 ppb	6.1 %
63Cu (KED)	0.552 ppb	1.8 %
64Zn (KED)	23.511 ppb	0.5 %
69Ga (KED)	0.384 ppb	2.3 %
75As (KED)	0.048 ppb	6.8 %
80Se (KED)	-0.846 ppb	13.2 %
85Rb (KED)	0.535 ppb	7.8 %
88Sr (KED)	2.071 ppb	0.8 %
89Y (KED)	209.453 %	0.6 %
107Ag (KED)	0.011 ppb	12.0 %
114Cd (KED)	0.003 ppb	13.7 %
115In (KED)	205.269 %	0.7 %
133Cs (KED)	0.019 ppb	2.8 %
138Ba (KED)	1.284 ppb	1.5 %
139La (KED)	0.100 ppb	1.3 %
140Ce (KED)	0.198 ppb	1.3 %
141Pr (KED)	0.023 ppb	2.9 %
142Nd (KED)	0.122 ppb	2.5 %
152Sm (KED)	0.016 ppb	3.7 %
153Eu (KED)	0.003 ppb	12.5 %
158Gd (KED)	0.014 ppb	5.8 %
159Tb (KED)	227.807 %	1.6 %
164Dy (KED)	0.010 ppb	2.8 %
166Er (KED)	0.002 ppb	28.7 %
169Tm (KED)	0.001 ppb	17.6 %
174Yb (KED)	0.004 ppb	7.4 %
175Lu (KED)	-0.107 ppb	2.9 %
205Tl (KED)	0.002 ppb	6.0 %
208Pb (KED)	0.268 ppb	2.2 %
209Bi (KED)	212.216 %	1.9 %
232Th (KED)	0.030 ppb	1.7 %
238U (KED)	0.005 ppb	0.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	204.659 %	6,136 cps	1.0 %
9Be (KED)	0.029 ppb	10 cps	33.3 %
11B (KED)	-1.672 ppb	670 cps	6.6 %
24Mg (KED)	104.708 ppb	119,057 cps	1.0 %
27Al (KED)	88.006 ppb	25,205 cps	3.8 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	209.421 %	98,151 cps	1.1 %
51V (KED)	0.166 ppb	2,848 cps	1.6 %
52Cr (KED)	0.329 ppb	9,003 cps	3.8 %
55Mn (KED)	3.003 ppb	41,123 cps	0.8 %
56Fe (KED)	108.698 ppb	2,699,928 cps	0.7 %
58Ni (KED)	0.523 ppb	17,536 cps	1.5 %
59Co (KED)	0.053 ppb	2,853 cps	6.2 %
63Cu (KED)	0.552 ppb	41,673 cps	0.4 %
64Zn (KED)	23.511 ppb	299,191 cps	0.8 %
69Ga (KED)	0.384 ppb	5,238 cps	1.9 %
75As (KED)	0.048 ppb	196 cps	5.2 %
80Se (KED)	-0.846 ppb	1,205 cps	10.2 %
85Rb (KED)	0.535 ppb	6,626 cps	7.1 %
88Sr (KED)	2.071 ppb	36,182 cps	0.2 %
89Y (KED)	209.453 %	900,932 cps	0.6 %
107Ag (KED)	0.011 ppb	1,296 cps	11.7 %
114Cd (KED)	0.003 ppb	320 cps	5.5 %
115In (KED)	205.269 %	1,657,934 cps	0.7 %
133Cs (KED)	0.019 ppb	1,196 cps	3.1 %
138Ba (KED)	1.284 ppb	118,497 cps	0.4 %
139La (KED)	0.100 ppb	19,501 cps	2.8 %
140Ce (KED)	0.198 ppb	52,522 cps	1.2 %
141Pr (KED)	0.023 ppb	6,435 cps	3.9 %
142Nd (KED)	0.122 ppb	13,325 cps	0.9 %
152Sm (KED)	0.016 ppb	1,617 cps	5.0 %
153Eu (KED)	0.003 ppb	710 cps	10.6 %
158Gd (KED)	0.014 ppb	1,911 cps	4.2 %
159Tb (KED)	227.807 %	9,220,396 cps	1.6 %
164Dy (KED)	0.010 ppb	1,511 cps	1.5 %
166Er (KED)	0.002 ppb	1,611 cps	5.7 %
169Tm (KED)	0.001 ppb	431 cps	13.9 %
174Yb (KED)	0.004 ppb	911 cps	8.3 %
175Lu (KED)	-0.107 ppb	44,628 cps	1.6 %
205Tl (KED)	0.002 ppb	811 cps	7.6 %
208Pb (KED)	0.268 ppb	91,590 cps	0.6 %
209Bi (KED)	212.216 %	7,837,285 cps	1.9 %
232Th (KED)	0.030 ppb	17,224 cps	1.6 %
238U (KED)	0.005 ppb	3,802 cps	1.9 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 9

Analysis name: w120ti

Analysis started at: 10/18/2021 3:29:39 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	93.402 %	2.4 %
9Be (KED)	0.021 ppb	101.3 %
11B (KED)	2.636 ppb	11.4 %
24Mg (KED)	171.069 ppb	1.3 %
27Al (KED)	133.540 ppb	1.5 %
45Sc (KED)	94.537 %	1.1 %
51V (KED)	0.242 ppb	2.9 %
52Cr (KED)	0.553 ppb	2.3 %
55Mn (KED)	4.453 ppb	1.5 %
56Fe (KED)	155.055 ppb	1.0 %
58Ni (KED)	0.900 ppb	1.1 %
59Co (KED)	0.083 ppb	4.0 %
63Cu (KED)	2.028 ppb	3.7 %
64Zn (KED)	52.143 ppb	2.4 %
69Ga (KED)	0.638 ppb	0.2 %
75As (KED)	0.094 ppb	17.9 %
80Se (KED)	0.360 ppb	6.7 %
85Rb (KED)	1.038 ppb	2.0 %
88Sr (KED)	3.828 ppb	2.7 %
89Y (KED)	93.876 %	1.4 %
107Ag (KED)	0.042 ppb	37.6 %
114Cd (KED)	0.018 ppb	56.3 %
115In (KED)	91.953 %	0.5 %
133Cs (KED)	0.037 ppb	17.8 %
138Ba (KED)	2.192 ppb	1.1 %
139La (KED)	0.158 ppb	5.8 %
140Ce (KED)	0.309 ppb	3.8 %
141Pr (KED)	0.040 ppb	10.9 %
142Nd (KED)	0.197 ppb	2.0 %
152Sm (KED)	0.028 ppb	14.9 %
153Eu (KED)	0.006 ppb	46.3 %
158Gd (KED)	0.024 ppb	10.7 %
159Tb (KED)	95.612 %	1.5 %
164Dy (KED)	0.017 ppb	13.5 %
166Er (KED)	0.006 ppb	24.0 %
169Tm (KED)	0.002 ppb	73.7 %
174Yb (KED)	0.007 ppb	21.5 %
175Lu (KED)	-0.107 ppb	1.8 %
205Tl (KED)	0.004 ppb	15.7 %
208Pb (KED)	0.317 ppb	0.8 %
209Bi (KED)	91.139 %	1.5 %
232Th (KED)	0.045 ppb	1.4 %
238U (KED)	0.011 ppb	4.9 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	93.402 %	2,800 cps	2.4 %
9Be (KED)	0.021 ppb	3 cps	100.0 %
11B (KED)	2.636 ppb	670 cps	6.1 %
24Mg (KED)	171.069 ppb	88,706 cps	1.4 %
27Al (KED)	133.540 ppb	17,234 cps	1.5 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	94.537 %	44,307 cps	1.1 %
51V (KED)	0.242 ppb	1,871 cps	3.1 %
52Cr (KED)	0.553 ppb	6,774 cps	3.3 %
55Mn (KED)	4.453 ppb	27,509 cps	1.0 %
56Fe (KED)	155.055 ppb	1,737,898 cps	1.3 %
58Ni (KED)	0.900 ppb	13,441 cps	1.0 %
59Co (KED)	0.083 ppb	1,999 cps	3.0 %
63Cu (KED)	2.028 ppb	45,376 cps	1.9 %
64Zn (KED)	52.143 ppb	293,503 cps	1.4 %
69Ga (KED)	0.638 ppb	3,861 cps	1.6 %
75As (KED)	0.094 ppb	157 cps	14.9 %
80Se (KED)	0.360 ppb	1,161 cps	2.5 %
85Rb (KED)	1.038 ppb	5,757 cps	2.8 %
88Sr (KED)	3.828 ppb	29,892 cps	1.2 %
89Y (KED)	93.876 %	403,795 cps	1.4 %
107Ag (KED)	0.042 ppb	2,118 cps	37.2 %
114Cd (KED)	0.018 ppb	419 cps	46.0 %
115In (KED)	91.953 %	742,693 cps	0.5 %
133Cs (KED)	0.037 ppb	1,023 cps	17.8 %
138Ba (KED)	2.192 ppb	84,011 cps	0.6 %
139La (KED)	0.158 ppb	12,893 cps	4.3 %
140Ce (KED)	0.309 ppb	34,177 cps	2.5 %
141Pr (KED)	0.040 ppb	4,610 cps	9.3 %
142Nd (KED)	0.197 ppb	9,007 cps	0.5 %
152Sm (KED)	0.028 ppb	1,155 cps	13.3 %
153Eu (KED)	0.006 ppb	552 cps	42.6 %
158Gd (KED)	0.024 ppb	1,338 cps	9.9 %
159Tb (KED)	95.612 %	3,869,865 cps	1.5 %
164Dy (KED)	0.017 ppb	1,050 cps	11.8 %
166Er (KED)	0.006 ppb	959 cps	9.6 %
169Tm (KED)	0.002 ppb	434 cps	66.2 %
174Yb (KED)	0.007 ppb	647 cps	19.1 %
175Lu (KED)	-0.107 ppb	18,790 cps	0.5 %
205Tl (KED)	0.004 ppb	718 cps	16.8 %
208Pb (KED)	0.317 ppb	45,271 cps	0.8 %
209Bi (KED)	91.139 %	3,365,833 cps	1.5 %
232Th (KED)	0.045 ppb	10,966 cps	1.2 %
238U (KED)	0.011 ppb	3,193 cps	6.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 10

Analysis name: 191067ti

Analysis started at: 10/18/2021 3:33:39 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	109.193 %	2.1 %
9Be (KED)	0.018 ppb	2.1 %
11B (KED)	1.696 ppb	3.0 %
24Mg (KED)	80.082 ppb	2.1 %
27Al (KED)	38.279 ppb	2.0 %
45Sc (KED)	109.896 %	1.1 %
51V (KED)	0.074 ppb	4.0 %
52Cr (KED)	0.392 ppb	4.0 %
55Mn (KED)	1.681 ppb	3.4 %
56Fe (KED)	52.501 ppb	1.5 %
58Ni (KED)	0.476 ppb	2.6 %
59Co (KED)	0.039 ppb	5.6 %
63Cu (KED)	2.147 ppb	1.1 %
64Zn (KED)	50.853 ppb	0.6 %
69Ga (KED)	0.242 ppb	1.9 %
75As (KED)	0.039 ppb	34.3 %
80Se (KED)	0.216 ppb	33.7 %
85Rb (KED)	0.469 ppb	1.7 %
88Sr (KED)	1.369 ppb	0.9 %
89Y (KED)	108.664 %	0.4 %
107Ag (KED)	0.076 ppb	2.4 %
114Cd (KED)	0.008 ppb	5.7 %
115In (KED)	106.392 %	1.0 %
133Cs (KED)	0.010 ppb	10.4 %
138Ba (KED)	0.816 ppb	1.2 %
139La (KED)	0.037 ppb	3.4 %
140Ce (KED)	0.086 ppb	2.2 %
141Pr (KED)	0.009 ppb	2.5 %
142Nd (KED)	0.054 ppb	2.9 %
152Sm (KED)	0.007 ppb	15.6 %
153Eu (KED)	0.001 ppb	17.8 %
158Gd (KED)	0.006 ppb	9.0 %
159Tb (KED)	116.179 %	2.2 %
164Dy (KED)	0.004 ppb	9.5 %
166Er (KED)	0.000 ppb	398.5 %
169Tm (KED)	0.000 ppb	11.2 %
174Yb (KED)	0.002 ppb	13.5 %
175Lu (KED)	-0.122 ppb	5.0 %
205Tl (KED)	0.002 ppb	12.4 %
208Pb (KED)	0.144 ppb	3.3 %
209Bi (KED)	104.667 %	1.5 %
232Th (KED)	0.014 ppb	0.8 %
238U (KED)	0.003 ppb	5.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	109.193 %	3,274 cps	2.1 %
9Be (KED)	0.018 ppb	3 cps	0.0 %
11B (KED)	1.696 ppb	690 cps	2.2 %
24Mg (KED)	80.082 ppb	48,602 cps	1.5 %
27Al (KED)	38.279 ppb	5,787 cps	1.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	109.896 %	51,506 cps	1.1 %
51V (KED)	0.074 ppb	662 cps	3.9 %
52Cr (KED)	0.392 ppb	5,600 cps	2.8 %
55Mn (KED)	1.681 ppb	12,098 cps	2.6 %
56Fe (KED)	52.501 ppb	685,446 cps	1.4 %
58Ni (KED)	0.476 ppb	8,410 cps	1.7 %
59Co (KED)	0.039 ppb	1,112 cps	6.5 %
63Cu (KED)	2.147 ppb	55,035 cps	0.6 %
64Zn (KED)	50.853 ppb	331,480 cps	0.4 %
69Ga (KED)	0.242 ppb	1,742 cps	1.4 %
75As (KED)	0.039 ppb	86 cps	27.6 %
80Se (KED)	0.216 ppb	1,258 cps	3.8 %
85Rb (KED)	0.469 ppb	3,018 cps	1.5 %
88Sr (KED)	1.369 ppb	12,444 cps	0.5 %
89Y (KED)	108.664 %	467,403 cps	0.4 %
107Ag (KED)	0.076 ppb	4,419 cps	3.2 %
114Cd (KED)	0.008 ppb	279 cps	4.8 %
115In (KED)	106.392 %	859,317 cps	1.0 %
133Cs (KED)	0.010 ppb	319 cps	9.0 %
138Ba (KED)	0.816 ppb	39,014 cps	1.9 %
139La (KED)	0.037 ppb	3,734 cps	3.0 %
140Ce (KED)	0.086 ppb	11,916 cps	1.8 %
141Pr (KED)	0.009 ppb	1,240 cps	4.5 %
142Nd (KED)	0.054 ppb	3,036 cps	5.0 %
152Sm (KED)	0.007 ppb	359 cps	13.0 %
153Eu (KED)	0.001 ppb	154 cps	14.7 %
158Gd (KED)	0.006 ppb	394 cps	6.3 %
159Tb (KED)	116.179 %	4,702,312 cps	2.2 %
164Dy (KED)	0.004 ppb	330 cps	9.6 %
166Er (KED)	0.000 ppb	610 cps	10.5 %
169Tm (KED)	0.000 ppb	103 cps	8.5 %
174Yb (KED)	0.002 ppb	228 cps	9.7 %
175Lu (KED)	-0.122 ppb	20,100 cps	4.4 %
205Tl (KED)	0.002 ppb	338 cps	12.8 %
208Pb (KED)	0.144 ppb	27,948 cps	3.7 %
209Bi (KED)	104.667 %	3,865,431 cps	1.5 %
232Th (KED)	0.014 ppb	3,956 cps	1.3 %
238U (KED)	0.003 ppb	1,231 cps	5.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 11

Analysis name: 191090ti

Analysis started at: 10/18/2021 3:37:54 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	107.822 %	3.0 %
9Be (KED)	0.006 ppb	173.2 %
11B (KED)	4.779 ppb	3.7 %
24Mg (KED)	65.896 ppb	2.5 %
27Al (KED)	45.566 ppb	0.9 %
45Sc (KED)	106.078 %	1.0 %
51V (KED)	0.075 ppb	5.4 %
52Cr (KED)	0.323 ppb	1.6 %
55Mn (KED)	1.486 ppb	4.7 %
56Fe (KED)	57.452 ppb	1.3 %
58Ni (KED)	0.383 ppb	5.7 %
59Co (KED)	0.080 ppb	4.6 %
63Cu (KED)	1.746 ppb	1.2 %
64Zn (KED)	50.644 ppb	1.3 %
69Ga (KED)	0.285 ppb	6.1 %
75As (KED)	0.039 ppb	21.8 %
80Se (KED)	0.501 ppb	15.6 %
85Rb (KED)	0.805 ppb	0.5 %
88Sr (KED)	1.256 ppb	2.3 %
89Y (KED)	104.470 %	1.2 %
107Ag (KED)	0.029 ppb	6.0 %
114Cd (KED)	0.005 ppb	27.8 %
115In (KED)	103.338 %	1.6 %
133Cs (KED)	0.010 ppb	17.8 %
138Ba (KED)	0.980 ppb	3.1 %
139La (KED)	0.048 ppb	2.2 %
140Ce (KED)	0.103 ppb	3.5 %
141Pr (KED)	0.011 ppb	3.2 %
142Nd (KED)	0.062 ppb	4.0 %
152Sm (KED)	0.007 ppb	8.0 %
153Eu (KED)	0.001 ppb	23.2 %
158Gd (KED)	0.007 ppb	5.0 %
159Tb (KED)	106.636 %	2.0 %
164Dy (KED)	0.004 ppb	6.9 %
166Er (KED)	-0.001 ppb	47.5 %
169Tm (KED)	0.000 ppb	65.0 %
174Yb (KED)	0.002 ppb	8.2 %
175Lu (KED)	-0.119 ppb	1.2 %
205Tl (KED)	0.002 ppb	6.7 %
208Pb (KED)	0.187 ppb	1.5 %
209Bi (KED)	100.825 %	0.7 %
232Th (KED)	0.012 ppb	3.1 %
238U (KED)	0.004 ppb	6.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	107.822 %	3,233 cps	3.0 %
9Be (KED)	0.006 ppb	1 cps	173.2 %
11B (KED)	4.779 ppb	982 cps	4.4 %
24Mg (KED)	65.896 ppb	39,499 cps	0.7 %
27Al (KED)	45.566 ppb	6,638 cps	0.9 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	106.078 %	49,717 cps	1.0 %
51V (KED)	0.075 ppb	652 cps	5.1 %
52Cr (KED)	0.323 ppb	4,467 cps	0.7 %
55Mn (KED)	1.486 ppb	10,329 cps	3.9 %
56Fe (KED)	57.452 ppb	723,817 cps	0.5 %
58Ni (KED)	0.383 ppb	6,576 cps	4.5 %
59Co (KED)	0.080 ppb	2,168 cps	5.5 %
63Cu (KED)	1.746 ppb	44,836 cps	1.0 %
64Zn (KED)	50.644 ppb	317,393 cps	1.5 %
69Ga (KED)	0.285 ppb	1,957 cps	7.0 %
75As (KED)	0.039 ppb	82 cps	18.3 %
80Se (KED)	0.501 ppb	1,372 cps	2.1 %
85Rb (KED)	0.805 ppb	4,972 cps	1.2 %
88Sr (KED)	1.256 ppb	10,984 cps	1.6 %
89Y (KED)	104.470 %	449,365 cps	1.2 %
107Ag (KED)	0.029 ppb	1,687 cps	6.9 %
114Cd (KED)	0.005 ppb	192 cps	14.0 %
115In (KED)	103.338 %	834,652 cps	1.6 %
133Cs (KED)	0.010 ppb	326 cps	15.6 %
138Ba (KED)	0.980 ppb	42,661 cps	1.2 %
139La (KED)	0.048 ppb	4,359 cps	0.7 %
140Ce (KED)	0.103 ppb	12,946 cps	2.7 %
141Pr (KED)	0.011 ppb	1,481 cps	3.0 %
142Nd (KED)	0.062 ppb	3,214 cps	3.3 %
152Sm (KED)	0.007 ppb	348 cps	6.4 %
153Eu (KED)	0.001 ppb	139 cps	18.3 %
158Gd (KED)	0.007 ppb	448 cps	5.5 %
159Tb (KED)	106.636 %	4,316,053 cps	2.0 %
164Dy (KED)	0.004 ppb	307 cps	8.5 %
166Er (KED)	-0.001 ppb	478 cps	9.5 %
169Tm (KED)	0.000 ppb	90 cps	35.3 %
174Yb (KED)	0.002 ppb	203 cps	5.9 %
175Lu (KED)	-0.119 ppb	18,879 cps	1.6 %
205Tl (KED)	0.002 ppb	339 cps	5.7 %
208Pb (KED)	0.187 ppb	32,615 cps	1.6 %
209Bi (KED)	100.825 %	3,723,521 cps	0.7 %
232Th (KED)	0.012 ppb	3,422 cps	3.3 %
238U (KED)	0.004 ppb	1,461 cps	4.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 12

Analysis name: w132ti

Analysis started at: 10/18/2021 3:41:46 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	107.933 %	4.9 %
9Be (KED)	0.000 ppb	
11B (KED)	1.372 ppb	13.8 %
24Mg (KED)	68.982 ppb	3.9 %
27Al (KED)	38.175 ppb	2.5 %
45Sc (KED)	106.635 %	0.9 %
51V (KED)	0.119 ppb	3.3 %
52Cr (KED)	0.372 ppb	0.7 %
55Mn (KED)	1.839 ppb	1.7 %
56Fe (KED)	51.540 ppb	1.1 %
58Ni (KED)	0.594 ppb	0.9 %
59Co (KED)	0.036 ppb	5.0 %
63Cu (KED)	2.182 ppb	3.2 %
64Zn (KED)	46.419 ppb	2.4 %
69Ga (KED)	0.276 ppb	2.5 %
75As (KED)	0.054 ppb	28.1 %
80Se (KED)	0.480 ppb	9.3 %
85Rb (KED)	0.637 ppb	2.5 %
88Sr (KED)	1.628 ppb	1.5 %
89Y (KED)	104.722 %	1.9 %
107Ag (KED)	0.067 ppb	2.2 %
114Cd (KED)	0.010 ppb	6.5 %
115In (KED)	101.215 %	0.8 %
133Cs (KED)	0.008 ppb	20.5 %
138Ba (KED)	0.912 ppb	4.4 %
139La (KED)	0.064 ppb	3.7 %
140Ce (KED)	0.085 ppb	2.7 %
141Pr (KED)	0.009 ppb	1.3 %
142Nd (KED)	0.051 ppb	1.8 %
152Sm (KED)	0.006 ppb	12.5 %
153Eu (KED)	0.001 ppb	9.6 %
158Gd (KED)	0.005 ppb	1.1 %
159Tb (KED)	107.157 %	3.9 %
164Dy (KED)	0.004 ppb	18.1 %
166Er (KED)	-0.001 ppb	7.5 %
169Tm (KED)	0.000 ppb	8.9 %
174Yb (KED)	0.001 ppb	10.6 %
175Lu (KED)	-0.121 ppb	3.2 %
205Tl (KED)	0.002 ppb	18.2 %
208Pb (KED)	0.185 ppb	2.6 %
209Bi (KED)	99.266 %	1.8 %
232Th (KED)	0.011 ppb	2.8 %
238U (KED)	0.004 ppb	5.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	107.933 %	3,236 cps	4.9 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	1.372 ppb	650 cps	3.4 %
24Mg (KED)	68.982 ppb	41,356 cps	1.7 %
27Al (KED)	38.175 ppb	5,600 cps	1.6 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	106.635 %	49,978 cps	0.9 %
51V (KED)	0.119 ppb	1,037 cps	3.9 %
52Cr (KED)	0.372 ppb	5,161 cps	1.6 %
55Mn (KED)	1.839 ppb	12,841 cps	1.5 %
56Fe (KED)	51.540 ppb	652,994 cps	1.1 %
58Ni (KED)	0.594 ppb	10,101 cps	0.6 %
59Co (KED)	0.036 ppb	996 cps	5.6 %
63Cu (KED)	2.182 ppb	53,732 cps	0.8 %
64Zn (KED)	46.419 ppb	291,834 cps	0.8 %
69Ga (KED)	0.276 ppb	1,901 cps	1.8 %
75As (KED)	0.054 ppb	107 cps	22.5 %
80Se (KED)	0.480 ppb	1,363 cps	0.9 %
85Rb (KED)	0.637 ppb	3,943 cps	4.3 %
88Sr (KED)	1.628 ppb	14,246 cps	2.8 %
89Y (KED)	104.722 %	450,449 cps	1.9 %
107Ag (KED)	0.067 ppb	3,675 cps	2.4 %
114Cd (KED)	0.010 ppb	297 cps	5.1 %
115In (KED)	101.215 %	817,506 cps	0.8 %
133Cs (KED)	0.008 ppb	249 cps	18.8 %
138Ba (KED)	0.912 ppb	39,976 cps	0.5 %
139La (KED)	0.064 ppb	5,890 cps	0.8 %
140Ce (KED)	0.085 ppb	10,805 cps	1.4 %
141Pr (KED)	0.009 ppb	1,221 cps	4.0 %
142Nd (KED)	0.051 ppb	2,679 cps	3.3 %
152Sm (KED)	0.006 ppb	291 cps	8.7 %
153Eu (KED)	0.001 ppb	128 cps	4.0 %
158Gd (KED)	0.005 ppb	338 cps	3.5 %
159Tb (KED)	107.157 %	4,337,117 cps	3.9 %
164Dy (KED)	0.004 ppb	290 cps	13.3 %
166Er (KED)	-0.001 ppb	457 cps	2.6 %
169Tm (KED)	0.000 ppb	106 cps	1.8 %
174Yb (KED)	0.001 ppb	166 cps	11.1 %
175Lu (KED)	-0.121 ppb	18,656 cps	2.5 %
205Tl (KED)	0.002 ppb	367 cps	17.0 %
208Pb (KED)	0.185 ppb	31,830 cps	1.3 %
209Bi (KED)	99.266 %	3,665,969 cps	1.8 %
232Th (KED)	0.011 ppb	3,055 cps	1.6 %
238U (KED)	0.004 ppb	1,495 cps	3.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 13

Analysis name: 191086ti

Analysis started at: 10/18/2021 3:45:43 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	108.081 %	4.5 %
9Be (KED)	0.000 ppb	
11B (KED)	13.402 ppb	3.8 %
24Mg (KED)	125.004 ppb	4.0 %
27Al (KED)	110.832 ppb	0.9 %
45Sc (KED)	106.071 %	3.0 %
51V (KED)	0.201 ppb	4.9 %
52Cr (KED)	0.478 ppb	3.6 %
55Mn (KED)	3.732 ppb	5.5 %
56Fe (KED)	132.177 ppb	2.8 %
58Ni (KED)	0.816 ppb	3.7 %
59Co (KED)	0.061 ppb	5.4 %
63Cu (KED)	1.465 ppb	0.8 %
64Zn (KED)	55.286 ppb	1.1 %
69Ga (KED)	0.501 ppb	4.1 %
75As (KED)	0.052 ppb	10.4 %
80Se (KED)	0.522 ppb	28.4 %
85Rb (KED)	0.886 ppb	2.2 %
88Sr (KED)	2.730 ppb	2.0 %
89Y (KED)	103.798 %	1.2 %
107Ag (KED)	0.012 ppb	10.4 %
114Cd (KED)	0.007 ppb	8.3 %
115In (KED)	99.481 %	1.0 %
133Cs (KED)	0.026 ppb	9.1 %
138Ba (KED)	1.748 ppb	1.0 %
139La (KED)	0.123 ppb	1.4 %
140Ce (KED)	0.244 ppb	0.9 %
141Pr (KED)	0.029 ppb	3.4 %
142Nd (KED)	0.154 ppb	3.5 %
152Sm (KED)	0.018 ppb	8.2 %
153Eu (KED)	0.003 ppb	15.6 %
158Gd (KED)	0.016 ppb	7.5 %
159Tb (KED)	103.485 %	1.0 %
164Dy (KED)	0.011 ppb	5.1 %
166Er (KED)	0.003 ppb	40.6 %
169Tm (KED)	0.001 ppb	20.6 %
174Yb (KED)	0.005 ppb	7.3 %
175Lu (KED)	-0.121 ppb	2.9 %
205Tl (KED)	0.002 ppb	5.1 %
208Pb (KED)	0.218 ppb	0.7 %
209Bi (KED)	97.756 %	1.0 %
232Th (KED)	0.028 ppb	3.0 %
238U (KED)	0.006 ppb	4.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	108.081 %	3,240 cps	4.5 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	13.402 ppb	1,827 cps	4.5 %
24Mg (KED)	125.004 ppb	74,961 cps	0.4 %
27Al (KED)	110.832 ppb	16,057 cps	2.2 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	106.071 %	49,713 cps	3.0 %
51V (KED)	0.201 ppb	1,743 cps	2.0 %
52Cr (KED)	0.478 ppb	6,575 cps	1.8 %
55Mn (KED)	3.732 ppb	25,857 cps	3.6 %
56Fe (KED)	132.177 ppb	1,661,648 cps	0.3 %
58Ni (KED)	0.816 ppb	13,704 cps	2.0 %
59Co (KED)	0.061 ppb	1,645 cps	2.5 %
63Cu (KED)	1.465 ppb	38,931 cps	1.1 %
64Zn (KED)	55.286 ppb	343,913 cps	0.2 %
69Ga (KED)	0.501 ppb	3,365 cps	3.0 %
75As (KED)	0.052 ppb	103 cps	9.7 %
80Se (KED)	0.522 ppb	1,376 cps	5.9 %
85Rb (KED)	0.886 ppb	5,431 cps	2.5 %
88Sr (KED)	2.730 ppb	23,606 cps	2.3 %
89Y (KED)	103.798 %	446,472 cps	1.2 %
107Ag (KED)	0.012 ppb	704 cps	10.6 %
114Cd (KED)	0.007 ppb	232 cps	5.0 %
115In (KED)	99.481 %	803,499 cps	1.0 %
133Cs (KED)	0.026 ppb	787 cps	8.5 %
138Ba (KED)	1.748 ppb	72,798 cps	0.3 %
139La (KED)	0.123 ppb	10,858 cps	0.4 %
140Ce (KED)	0.244 ppb	29,321 cps	0.9 %
141Pr (KED)	0.029 ppb	3,569 cps	2.9 %
142Nd (KED)	0.154 ppb	7,652 cps	3.8 %
152Sm (KED)	0.018 ppb	806 cps	7.2 %
153Eu (KED)	0.003 ppb	331 cps	13.4 %
158Gd (KED)	0.016 ppb	994 cps	7.4 %
159Tb (KED)	103.485 %	4,188,521 cps	1.0 %
164Dy (KED)	0.011 ppb	777 cps	5.5 %
166Er (KED)	0.003 ppb	771 cps	11.3 %
169Tm (KED)	0.001 ppb	213 cps	18.0 %
174Yb (KED)	0.005 ppb	497 cps	7.5 %
175Lu (KED)	-0.121 ppb	18,058 cps	2.9 %
205Tl (KED)	0.002 ppb	393 cps	5.9 %
208Pb (KED)	0.218 ppb	35,658 cps	1.0 %
209Bi (KED)	97.756 %	3,610,210 cps	1.0 %
232Th (KED)	0.028 ppb	7,273 cps	3.8 %
238U (KED)	0.006 ppb	2,039 cps	2.9 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 14

Analysis name: w121ti

Analysis started at: 10/18/2021 3:49:49 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	113.197 %	1.1 %
9Be (KED)	0.000 ppb	
11B (KED)	4.907 ppb	16.7 %
24Mg (KED)	106.675 ppb	1.3 %
27Al (KED)	56.996 ppb	1.3 %
45Sc (KED)	111.501 %	0.7 %
51V (KED)	0.107 ppb	5.3 %
52Cr (KED)	0.270 ppb	1.0 %
55Mn (KED)	2.360 ppb	0.8 %
56Fe (KED)	77.251 ppb	0.9 %
58Ni (KED)	0.501 ppb	0.9 %
59Co (KED)	0.053 ppb	3.3 %
63Cu (KED)	1.948 ppb	1.8 %
64Zn (KED)	51.403 ppb	0.9 %
69Ga (KED)	0.341 ppb	4.2 %
75As (KED)	0.048 ppb	31.2 %
80Se (KED)	0.481 ppb	8.0 %
85Rb (KED)	0.829 ppb	5.6 %
88Sr (KED)	2.288 ppb	1.1 %
89Y (KED)	108.127 %	1.5 %
107Ag (KED)	0.015 ppb	10.5 %
114Cd (KED)	0.009 ppb	4.0 %
115In (KED)	104.583 %	0.8 %
133Cs (KED)	0.014 ppb	10.4 %
138Ba (KED)	1.154 ppb	3.5 %
139La (KED)	0.069 ppb	6.4 %
140Ce (KED)	0.147 ppb	4.6 %
141Pr (KED)	0.016 ppb	5.5 %
142Nd (KED)	0.091 ppb	4.8 %
152Sm (KED)	0.011 ppb	0.5 %
153Eu (KED)	0.002 ppb	13.1 %
158Gd (KED)	0.009 ppb	9.8 %
159Tb (KED)	112.687 %	5.6 %
164Dy (KED)	0.007 ppb	7.6 %
166Er (KED)	0.000 ppb	1,628.9 %
169Tm (KED)	0.000 ppb	31.3 %
174Yb (KED)	0.002 ppb	17.2 %
175Lu (KED)	-0.126 ppb	5.3 %
205Tl (KED)	0.002 ppb	7.4 %
208Pb (KED)	0.174 ppb	1.5 %
209Bi (KED)	101.354 %	2.1 %
232Th (KED)	0.021 ppb	3.1 %
238U (KED)	0.006 ppb	5.4 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	113.197 %	3,394 cps	1.1 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	4.907 ppb	1,044 cps	8.8 %
24Mg (KED)	106.675 ppb	67,090 cps	1.2 %
27Al (KED)	56.996 ppb	8,712 cps	0.8 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	111.501 %	52,258 cps	0.7 %
51V (KED)	0.107 ppb	974 cps	4.9 %
52Cr (KED)	0.270 ppb	3,952 cps	1.7 %
55Mn (KED)	2.360 ppb	17,216 cps	0.1 %
56Fe (KED)	77.251 ppb	1,022,303 cps	0.5 %
58Ni (KED)	0.501 ppb	8,955 cps	1.4 %
59Co (KED)	0.053 ppb	1,500 cps	2.5 %
63Cu (KED)	1.948 ppb	50,612 cps	0.8 %
64Zn (KED)	51.403 ppb	333,343 cps	0.6 %
69Ga (KED)	0.341 ppb	2,411 cps	3.2 %
75As (KED)	0.048 ppb	100 cps	26.5 %
80Se (KED)	0.481 ppb	1,409 cps	1.7 %
85Rb (KED)	0.829 ppb	5,299 cps	6.1 %
88Sr (KED)	2.288 ppb	20,624 cps	0.7 %
89Y (KED)	108.127 %	465,095 cps	1.5 %
107Ag (KED)	0.015 ppb	907 cps	10.7 %
114Cd (KED)	0.009 ppb	281 cps	2.7 %
115In (KED)	104.583 %	844,707 cps	0.8 %
133Cs (KED)	0.014 ppb	438 cps	9.6 %
138Ba (KED)	1.154 ppb	52,779 cps	2.2 %
139La (KED)	0.069 ppb	6,674 cps	1.9 %
140Ce (KED)	0.147 ppb	19,294 cps	2.6 %
141Pr (KED)	0.016 ppb	2,202 cps	1.5 %
142Nd (KED)	0.091 ppb	4,959 cps	4.5 %
152Sm (KED)	0.011 ppb	531 cps	5.3 %
153Eu (KED)	0.002 ppb	222 cps	6.2 %
158Gd (KED)	0.009 ppb	584 cps	10.5 %
159Tb (KED)	112.687 %	4,560,937 cps	5.6 %
164Dy (KED)	0.007 ppb	524 cps	2.2 %
166Er (KED)	0.000 ppb	610 cps	12.9 %
169Tm (KED)	0.000 ppb	134 cps	17.6 %
174Yb (KED)	0.002 ppb	278 cps	10.3 %
175Lu (KED)	-0.126 ppb	18,700 cps	3.0 %
205Tl (KED)	0.002 ppb	357 cps	6.1 %
208Pb (KED)	0.174 ppb	31,065 cps	2.7 %
209Bi (KED)	101.354 %	3,743,054 cps	2.1 %
232Th (KED)	0.021 ppb	5,691 cps	2.9 %
238U (KED)	0.006 ppb	1,888 cps	2.9 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 15

Analysis name: w131ti

Analysis started at: 10/18/2021 3:53:48 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	112.715 %	5.5 %
9Be (KED)	0.011 ppb	173.2 %
11B (KED)	4.309 ppb	4.7 %
24Mg (KED)	146.258 ppb	5.4 %
27Al (KED)	122.255 ppb	1.2 %
45Sc (KED)	111.977 %	0.7 %
51V (KED)	0.224 ppb	5.6 %
52Cr (KED)	0.447 ppb	1.3 %
55Mn (KED)	4.030 ppb	2.0 %
56Fe (KED)	159.763 ppb	1.3 %
58Ni (KED)	1.043 ppb	3.1 %
59Co (KED)	0.067 ppb	3.9 %
63Cu (KED)	1.788 ppb	1.4 %
64Zn (KED)	53.126 ppb	0.8 %
69Ga (KED)	0.604 ppb	4.0 %
75As (KED)	0.081 ppb	4.3 %
80Se (KED)	0.440 ppb	40.1 %
85Rb (KED)	0.664 ppb	5.1 %
88Sr (KED)	2.928 ppb	0.7 %
89Y (KED)	109.116 %	1.0 %
107Ag (KED)	0.012 ppb	10.3 %
114Cd (KED)	0.007 ppb	25.6 %
115In (KED)	105.182 %	1.0 %
133Cs (KED)	0.025 ppb	3.3 %
138Ba (KED)	2.020 ppb	2.6 %
139La (KED)	0.120 ppb	2.9 %
140Ce (KED)	0.240 ppb	5.0 %
141Pr (KED)	0.029 ppb	8.7 %
142Nd (KED)	0.155 ppb	3.4 %
152Sm (KED)	0.020 ppb	9.5 %
153Eu (KED)	0.004 ppb	15.0 %
158Gd (KED)	0.019 ppb	4.8 %
159Tb (KED)	111.312 %	1.2 %
164Dy (KED)	0.013 ppb	1.1 %
166Er (KED)	0.002 ppb	20.8 %
169Tm (KED)	0.001 ppb	13.3 %
174Yb (KED)	0.005 ppb	8.0 %
175Lu (KED)	-0.124 ppb	4.1 %
205Tl (KED)	0.002 ppb	6.3 %
208Pb (KED)	0.290 ppb	1.1 %
209Bi (KED)	101.088 %	2.1 %
232Th (KED)	0.031 ppb	3.6 %
238U (KED)	0.008 ppb	3.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	112.715 %	3,379 cps	5.5 %
9Be (KED)	0.011 ppb	2 cps	173.2 %
11B (KED)	4.309 ppb	979 cps	6.6 %
24Mg (KED)	146.258 ppb	91,377 cps	0.4 %
27Al (KED)	122.255 ppb	18,694 cps	1.1 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	111.977 %	52,481 cps	0.7 %
51V (KED)	0.224 ppb	2,045 cps	5.4 %
52Cr (KED)	0.447 ppb	6,498 cps	0.8 %
55Mn (KED)	4.030 ppb	29,493 cps	1.3 %
56Fe (KED)	159.763 ppb	2,120,859 cps	0.6 %
58Ni (KED)	1.043 ppb	18,402 cps	2.5 %
59Co (KED)	0.067 ppb	1,911 cps	3.1 %
63Cu (KED)	1.788 ppb	47,702 cps	0.9 %
64Zn (KED)	53.126 ppb	347,592 cps	1.7 %
69Ga (KED)	0.604 ppb	4,249 cps	4.7 %
75As (KED)	0.081 ppb	159 cps	4.8 %
80Se (KED)	0.440 ppb	1,397 cps	6.8 %
85Rb (KED)	0.664 ppb	4,283 cps	4.3 %
88Sr (KED)	2.928 ppb	26,608 cps	1.4 %
89Y (KED)	109.116 %	469,349 cps	1.0 %
107Ag (KED)	0.012 ppb	730 cps	9.1 %
114Cd (KED)	0.007 ppb	241 cps	15.9 %
115In (KED)	105.182 %	849,548 cps	1.0 %
133Cs (KED)	0.025 ppb	803 cps	4.0 %
138Ba (KED)	2.020 ppb	90,221 cps	1.4 %
139La (KED)	0.120 ppb	11,390 cps	2.3 %
140Ce (KED)	0.240 ppb	30,962 cps	3.7 %
141Pr (KED)	0.029 ppb	3,907 cps	7.3 %
142Nd (KED)	0.155 ppb	8,299 cps	3.0 %
152Sm (KED)	0.020 ppb	959 cps	8.4 %
153Eu (KED)	0.004 ppb	406 cps	13.5 %
158Gd (KED)	0.019 ppb	1,218 cps	3.6 %
159Tb (KED)	111.312 %	4,505,296 cps	1.2 %
164Dy (KED)	0.013 ppb	970 cps	0.6 %
166Er (KED)	0.002 ppb	780 cps	5.9 %
169Tm (KED)	0.001 ppb	256 cps	10.0 %
174Yb (KED)	0.005 ppb	547 cps	7.0 %
175Lu (KED)	-0.124 ppb	18,812 cps	3.9 %
205Tl (KED)	0.002 ppb	459 cps	4.0 %
208Pb (KED)	0.290 ppb	46,633 cps	2.2 %
209Bi (KED)	101.088 %	3,733,260 cps	2.1 %
232Th (KED)	0.031 ppb	8,318 cps	1.6 %
238U (KED)	0.008 ppb	2,560 cps	3.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 16

Analysis name: w129ti

Analysis started at: 10/18/2021 3:57:49 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	115.347 %	3.0 %
9Be (KED)	0.011 ppb	173.2 %
11B (KED)	2.719 ppb	41.6 %
24Mg (KED)	157.944 ppb	1.9 %
27Al (KED)	97.760 ppb	2.1 %
45Sc (KED)	115.003 %	1.1 %
51V (KED)	0.176 ppb	4.2 %
52Cr (KED)	0.471 ppb	0.6 %
55Mn (KED)	3.186 ppb	1.4 %
56Fe (KED)	115.513 ppb	0.2 %
58Ni (KED)	0.627 ppb	1.1 %
59Co (KED)	0.054 ppb	3.8 %
63Cu (KED)	2.311 ppb	1.3 %
64Zn (KED)	48.032 ppb	0.3 %
69Ga (KED)	0.520 ppb	4.9 %
75As (KED)	0.065 ppb	30.1 %
80Se (KED)	0.310 ppb	13.1 %
85Rb (KED)	0.960 ppb	3.8 %
88Sr (KED)	3.448 ppb	1.1 %
89Y (KED)	109.943 %	1.4 %
107Ag (KED)	0.186 ppb	2.8 %
114Cd (KED)	0.020 ppb	11.3 %
115In (KED)	107.592 %	1.2 %
133Cs (KED)	0.017 ppb	11.1 %
138Ba (KED)	1.717 ppb	3.6 %
139La (KED)	0.110 ppb	3.0 %
140Ce (KED)	0.214 ppb	3.0 %
141Pr (KED)	0.025 ppb	3.6 %
142Nd (KED)	0.132 ppb	2.9 %
152Sm (KED)	0.017 ppb	5.3 %
153Eu (KED)	0.003 ppb	6.7 %
158Gd (KED)	0.015 ppb	12.8 %
159Tb (KED)	116.610 %	1.4 %
164Dy (KED)	0.011 ppb	4.3 %
166Er (KED)	0.001 ppb	12.8 %
169Tm (KED)	0.001 ppb	20.1 %
174Yb (KED)	0.004 ppb	3.0 %
175Lu (KED)	-0.126 ppb	3.3 %
205Tl (KED)	0.002 ppb	7.0 %
208Pb (KED)	0.395 ppb	1.7 %
209Bi (KED)	103.731 %	1.0 %
232Th (KED)	0.026 ppb	3.1 %
238U (KED)	0.009 ppb	1.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	115.347 %	3,458 cps	3.0 %
9Be (KED)	0.011 ppb	2 cps	173.2 %
11B (KED)	2.719 ppb	833 cps	11.3 %
24Mg (KED)	157.944 ppb	101,131 cps	1.2 %
27Al (KED)	97.760 ppb	15,365 cps	1.9 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	115.003 %	53,899 cps	1.1 %
51V (KED)	0.176 ppb	1,652 cps	4.3 %
52Cr (KED)	0.471 ppb	7,031 cps	1.3 %
55Mn (KED)	3.186 ppb	23,960 cps	1.0 %
56Fe (KED)	115.513 ppb	1,575,586 cps	1.0 %
58Ni (KED)	0.627 ppb	11,485 cps	1.2 %
59Co (KED)	0.054 ppb	1,580 cps	2.7 %
63Cu (KED)	2.311 ppb	59,161 cps	0.8 %
64Zn (KED)	48.032 ppb	316,987 cps	1.4 %
69Ga (KED)	0.520 ppb	3,696 cps	3.4 %
75As (KED)	0.065 ppb	132 cps	26.5 %
80Se (KED)	0.310 ppb	1,329 cps	1.6 %
85Rb (KED)	0.960 ppb	6,235 cps	4.6 %
88Sr (KED)	3.448 ppb	31,554 cps	0.4 %
89Y (KED)	109.943 %	472,907 cps	1.4 %
107Ag (KED)	0.186 ppb	10,858 cps	2.4 %
114Cd (KED)	0.020 ppb	541 cps	10.3 %
115In (KED)	107.592 %	869,008 cps	1.2 %
133Cs (KED)	0.017 ppb	543 cps	11.7 %
138Ba (KED)	1.717 ppb	80,601 cps	2.4 %
139La (KED)	0.110 ppb	10,949 cps	3.0 %
140Ce (KED)	0.214 ppb	28,942 cps	1.8 %
141Pr (KED)	0.025 ppb	3,498 cps	2.2 %
142Nd (KED)	0.132 ppb	7,378 cps	2.2 %
152Sm (KED)	0.017 ppb	889 cps	5.7 %
153Eu (KED)	0.003 ppb	376 cps	7.5 %
158Gd (KED)	0.015 ppb	1,000 cps	11.1 %
159Tb (KED)	116.610 %	4,719,739 cps	1.4 %
164Dy (KED)	0.011 ppb	854 cps	3.2 %
166Er (KED)	0.001 ppb	752 cps	1.8 %
169Tm (KED)	0.001 ppb	207 cps	14.8 %
174Yb (KED)	0.004 ppb	471 cps	2.5 %
175Lu (KED)	-0.126 ppb	19,399 cps	3.1 %
205Tl (KED)	0.002 ppb	441 cps	7.2 %
208Pb (KED)	0.395 ppb	62,326 cps	1.3 %
209Bi (KED)	103.731 %	3,830,854 cps	1.0 %
232Th (KED)	0.026 ppb	7,269 cps	2.0 %
238U (KED)	0.009 ppb	3,137 cps	1.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 17

Analysis name: w123ti

Analysis started at: 10/18/2021 4:01:57 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	114.123 %	2.5 %
9Be (KED)	0.012 ppb	86.7 %
11B (KED)	6.925 ppb	16.2 %
24Mg (KED)	249.424 ppb	2.5 %
27Al (KED)	165.351 ppb	0.8 %
45Sc (KED)	116.522 %	1.4 %
51V (KED)	0.298 ppb	3.4 %
52Cr (KED)	0.614 ppb	1.7 %
55Mn (KED)	6.077 ppb	0.5 %
56Fe (KED)	197.502 ppb	2.5 %
58Ni (KED)	1.053 ppb	1.4 %
59Co (KED)	0.093 ppb	4.8 %
63Cu (KED)	2.364 ppb	2.4 %
64Zn (KED)	56.998 ppb	1.0 %
69Ga (KED)	0.814 ppb	3.5 %
75As (KED)	0.104 ppb	11.5 %
80Se (KED)	0.325 ppb	49.3 %
85Rb (KED)	1.389 ppb	1.5 %
88Sr (KED)	5.177 ppb	2.6 %
89Y (KED)	110.403 %	1.3 %
107Ag (KED)	0.051 ppb	4.8 %
114Cd (KED)	0.007 ppb	9.2 %
115In (KED)	108.232 %	1.2 %
133Cs (KED)	0.035 ppb	5.7 %
138Ba (KED)	2.643 ppb	2.5 %
139La (KED)	0.234 ppb	0.3 %
140Ce (KED)	0.433 ppb	2.8 %
141Pr (KED)	0.050 ppb	3.6 %
142Nd (KED)	0.265 ppb	1.6 %
152Sm (KED)	0.035 ppb	3.3 %
153Eu (KED)	0.005 ppb	12.5 %
158Gd (KED)	0.029 ppb	6.5 %
159Tb (KED)	114.745 %	1.3 %
164Dy (KED)	0.020 ppb	2.6 %
166Er (KED)	0.005 ppb	16.0 %
169Tm (KED)	0.001 ppb	6.6 %
174Yb (KED)	0.008 ppb	5.7 %
175Lu (KED)	-0.124 ppb	0.7 %
205Tl (KED)	0.004 ppb	2.6 %
208Pb (KED)	0.289 ppb	1.3 %
209Bi (KED)	101.733 %	0.4 %
232Th (KED)	0.042 ppb	2.1 %
238U (KED)	0.010 ppb	1.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	114.123 %	3,422 cps	2.5 %
9Be (KED)	0.012 ppb	2 cps	86.6 %
11B (KED)	6.925 ppb	1,259 cps	6.6 %
24Mg (KED)	249.424 ppb	157,944 cps	0.5 %
27Al (KED)	165.351 ppb	26,287 cps	1.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	116.522 %	54,611 cps	1.4 %
51V (KED)	0.298 ppb	2,831 cps	4.7 %
52Cr (KED)	0.614 ppb	9,259 cps	0.8 %
55Mn (KED)	6.077 ppb	46,257 cps	1.0 %
56Fe (KED)	197.502 ppb	2,727,268 cps	1.2 %
58Ni (KED)	1.053 ppb	19,342 cps	0.4 %
59Co (KED)	0.093 ppb	2,763 cps	5.3 %
63Cu (KED)	2.364 ppb	60,539 cps	0.8 %
64Zn (KED)	56.998 ppb	377,011 cps	0.4 %
69Ga (KED)	0.814 ppb	5,771 cps	4.4 %
75As (KED)	0.104 ppb	202 cps	9.9 %
80Se (KED)	0.325 ppb	1,345 cps	8.4 %
85Rb (KED)	1.389 ppb	9,053 cps	2.5 %
88Sr (KED)	5.177 ppb	47,520 cps	2.6 %
89Y (KED)	110.403 %	474,886 cps	1.3 %
107Ag (KED)	0.051 ppb	3,024 cps	5.9 %
114Cd (KED)	0.007 ppb	248 cps	5.4 %
115In (KED)	108.232 %	874,177 cps	1.2 %
133Cs (KED)	0.035 ppb	1,134 cps	5.2 %
138Ba (KED)	2.643 ppb	121,205 cps	1.3 %
139La (KED)	0.234 ppb	22,988 cps	1.2 %
140Ce (KED)	0.433 ppb	57,330 cps	1.8 %
141Pr (KED)	0.050 ppb	6,919 cps	2.6 %
142Nd (KED)	0.265 ppb	14,548 cps	1.3 %
152Sm (KED)	0.035 ppb	1,745 cps	3.4 %
153Eu (KED)	0.005 ppb	558 cps	10.6 %
158Gd (KED)	0.029 ppb	1,915 cps	5.2 %
159Tb (KED)	114.745 %	4,644,265 cps	1.3 %
164Dy (KED)	0.020 ppb	1,488 cps	3.5 %
166Er (KED)	0.005 ppb	1,090 cps	6.1 %
169Tm (KED)	0.001 ppb	387 cps	5.4 %
174Yb (KED)	0.008 ppb	841 cps	4.4 %
175Lu (KED)	-0.124 ppb	19,503 cps	1.8 %
205Tl (KED)	0.004 ppb	709 cps	2.4 %
208Pb (KED)	0.289 ppb	46,795 cps	1.0 %
209Bi (KED)	101.733 %	3,757,066 cps	0.4 %
232Th (KED)	0.042 ppb	11,386 cps	1.6 %
238U (KED)	0.010 ppb	3,365 cps	1.2 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 18

Analysis name: 191055ti

Analysis started at: 10/18/2021 4:06:10 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	114.346 %	1.5 %
9Be (KED)	0.000 ppb	
11B (KED)	3.807 ppb	7.4 %
24Mg (KED)	133.623 ppb	2.1 %
27Al (KED)	95.947 ppb	2.5 %
45Sc (KED)	114.825 %	2.8 %
51V (KED)	0.174 ppb	4.7 %
52Cr (KED)	0.532 ppb	5.3 %
55Mn (KED)	3.560 ppb	1.5 %
56Fe (KED)	120.146 ppb	1.5 %
58Ni (KED)	0.691 ppb	4.0 %
59Co (KED)	0.053 ppb	10.3 %
63Cu (KED)	1.888 ppb	1.6 %
64Zn (KED)	49.173 ppb	1.0 %
69Ga (KED)	0.490 ppb	3.0 %
75As (KED)	0.060 ppb	19.0 %
80Se (KED)	0.426 ppb	10.7 %
85Rb (KED)	0.676 ppb	0.7 %
88Sr (KED)	2.928 ppb	1.6 %
89Y (KED)	110.508 %	0.9 %
107Ag (KED)	0.013 ppb	11.3 %
114Cd (KED)	0.006 ppb	18.8 %
115In (KED)	107.441 %	0.2 %
133Cs (KED)	0.020 ppb	5.5 %
138Ba (KED)	1.642 ppb	3.4 %
139La (KED)	0.093 ppb	4.7 %
140Ce (KED)	0.189 ppb	3.6 %
141Pr (KED)	0.023 ppb	6.4 %
142Nd (KED)	0.119 ppb	3.9 %
152Sm (KED)	0.016 ppb	7.6 %
153Eu (KED)	0.004 ppb	8.0 %
158Gd (KED)	0.015 ppb	7.2 %
159Tb (KED)	111.172 %	2.5 %
164Dy (KED)	0.010 ppb	11.7 %
166Er (KED)	0.001 ppb	36.2 %
169Tm (KED)	0.001 ppb	18.2 %
174Yb (KED)	0.004 ppb	1.4 %
175Lu (KED)	-0.123 ppb	4.8 %
205Tl (KED)	0.002 ppb	6.2 %
208Pb (KED)	0.214 ppb	4.2 %
209Bi (KED)	102.800 %	1.3 %
232Th (KED)	0.025 ppb	2.9 %
238U (KED)	0.006 ppb	9.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	114.346 %	3,428 cps	1.5 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	3.807 ppb	941 cps	4.6 %
24Mg (KED)	133.623 ppb	84,850 cps	0.6 %
27Al (KED)	95.947 ppb	15,052 cps	1.1 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	114.825 %	53,816 cps	2.8 %
51V (KED)	0.174 ppb	1,630 cps	2.5 %
52Cr (KED)	0.532 ppb	7,910 cps	3.5 %
55Mn (KED)	3.560 ppb	26,716 cps	1.7 %
56Fe (KED)	120.146 ppb	1,635,705 cps	1.5 %
58Ni (KED)	0.691 ppb	12,604 cps	2.8 %
59Co (KED)	0.053 ppb	1,543 cps	7.3 %
63Cu (KED)	1.888 ppb	50,465 cps	2.2 %
64Zn (KED)	49.173 ppb	326,082 cps	1.0 %
69Ga (KED)	0.490 ppb	3,505 cps	2.2 %
75As (KED)	0.060 ppb	124 cps	17.2 %
80Se (KED)	0.426 ppb	1,407 cps	2.5 %
85Rb (KED)	0.676 ppb	4,420 cps	0.8 %
88Sr (KED)	2.928 ppb	26,950 cps	1.7 %
89Y (KED)	110.508 %	475,334 cps	0.9 %
107Ag (KED)	0.013 ppb	809 cps	10.5 %
114Cd (KED)	0.006 ppb	226 cps	11.2 %
115In (KED)	107.441 %	867,789 cps	0.2 %
133Cs (KED)	0.020 ppb	641 cps	5.3 %
138Ba (KED)	1.642 ppb	73,528 cps	0.8 %
139La (KED)	0.093 ppb	8,828 cps	3.2 %
140Ce (KED)	0.189 ppb	24,409 cps	1.3 %
141Pr (KED)	0.023 ppb	3,126 cps	8.2 %
142Nd (KED)	0.119 ppb	6,335 cps	2.4 %
152Sm (KED)	0.016 ppb	757 cps	6.4 %
153Eu (KED)	0.004 ppb	387 cps	8.7 %
158Gd (KED)	0.015 ppb	992 cps	4.6 %
159Tb (KED)	111.172 %	4,499,650 cps	2.5 %
164Dy (KED)	0.010 ppb	736 cps	11.3 %
166Er (KED)	0.001 ppb	678 cps	6.4 %
169Tm (KED)	0.001 ppb	202 cps	14.2 %
174Yb (KED)	0.004 ppb	416 cps	3.8 %
175Lu (KED)	-0.123 ppb	18,977 cps	3.4 %
205Tl (KED)	0.002 ppb	451 cps	5.5 %
208Pb (KED)	0.214 ppb	36,940 cps	2.1 %
209Bi (KED)	102.800 %	3,796,476 cps	1.3 %
232Th (KED)	0.025 ppb	7,016 cps	2.0 %
238U (KED)	0.006 ppb	2,058 cps	7.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 19

Analysis name: 191064ti

Analysis started at: 10/18/2021 4:10:22 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	112.455 %	3.5 %
9Be (KED)	0.000 ppb	
11B (KED)	4.916 ppb	12.6 %
24Mg (KED)	97.168 ppb	3.7 %
27Al (KED)	56.934 ppb	2.1 %
45Sc (KED)	113.924 %	0.2 %
51V (KED)	0.099 ppb	9.0 %
52Cr (KED)	0.313 ppb	4.3 %
55Mn (KED)	2.139 ppb	0.9 %
56Fe (KED)	71.961 ppb	0.3 %
58Ni (KED)	0.723 ppb	2.1 %
59Co (KED)	0.043 ppb	3.5 %
63Cu (KED)	1.482 ppb	2.3 %
64Zn (KED)	53.215 ppb	2.1 %
69Ga (KED)	0.309 ppb	1.6 %
75As (KED)	0.069 ppb	42.3 %
80Se (KED)	0.574 ppb	14.2 %
85Rb (KED)	0.822 ppb	5.5 %
88Sr (KED)	1.869 ppb	3.2 %
89Y (KED)	109.350 %	1.1 %
107Ag (KED)	0.010 ppb	11.2 %
114Cd (KED)	0.011 ppb	4.7 %
115In (KED)	104.815 %	0.2 %
133Cs (KED)	0.011 ppb	8.8 %
138Ba (KED)	1.035 ppb	2.4 %
139La (KED)	0.067 ppb	4.1 %
140Ce (KED)	0.139 ppb	1.5 %
141Pr (KED)	0.015 ppb	8.1 %
142Nd (KED)	0.087 ppb	2.3 %
152Sm (KED)	0.011 ppb	10.0 %
153Eu (KED)	0.002 ppb	30.0 %
158Gd (KED)	0.010 ppb	10.8 %
159Tb (KED)	110.374 %	2.0 %
164Dy (KED)	0.006 ppb	10.0 %
166Er (KED)	-0.001 ppb	52.4 %
169Tm (KED)	0.000 ppb	40.9 %
174Yb (KED)	0.002 ppb	8.8 %
175Lu (KED)	-0.126 ppb	1.8 %
205Tl (KED)	0.002 ppb	12.9 %
208Pb (KED)	0.149 ppb	2.7 %
209Bi (KED)	100.551 %	0.6 %
232Th (KED)	0.020 ppb	4.1 %
238U (KED)	0.004 ppb	5.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	112.455 %	3,372 cps	3.5 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	4.916 ppb	1,037 cps	2.6 %
24Mg (KED)	97.168 ppb	60,672 cps	0.8 %
27Al (KED)	56.934 ppb	8,892 cps	2.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	113.924 %	53,394 cps	0.2 %
51V (KED)	0.099 ppb	926 cps	8.9 %
52Cr (KED)	0.313 ppb	4,654 cps	4.1 %
55Mn (KED)	2.139 ppb	15,947 cps	0.8 %
56Fe (KED)	71.961 ppb	973,182 cps	0.4 %
58Ni (KED)	0.723 ppb	13,078 cps	1.9 %
59Co (KED)	0.043 ppb	1,269 cps	3.4 %
63Cu (KED)	1.482 ppb	41,360 cps	0.6 %
64Zn (KED)	53.215 ppb	348,843 cps	1.0 %
69Ga (KED)	0.309 ppb	2,216 cps	2.7 %
75As (KED)	0.069 ppb	139 cps	37.2 %
80Se (KED)	0.574 ppb	1,480 cps	2.2 %
85Rb (KED)	0.822 ppb	5,310 cps	6.2 %
88Sr (KED)	1.869 ppb	17,058 cps	2.2 %
89Y (KED)	109.350 %	470,353 cps	1.1 %
107Ag (KED)	0.010 ppb	620 cps	10.3 %
114Cd (KED)	0.011 ppb	328 cps	3.3 %
115In (KED)	104.815 %	846,576 cps	0.2 %
133Cs (KED)	0.011 ppb	357 cps	8.3 %
138Ba (KED)	1.035 ppb	46,569 cps	0.6 %
139La (KED)	0.067 ppb	6,323 cps	3.9 %
140Ce (KED)	0.139 ppb	18,009 cps	2.4 %
141Pr (KED)	0.015 ppb	2,071 cps	5.9 %
142Nd (KED)	0.087 ppb	4,630 cps	0.3 %
152Sm (KED)	0.011 ppb	547 cps	11.6 %
153Eu (KED)	0.002 ppb	196 cps	27.4 %
158Gd (KED)	0.010 ppb	638 cps	10.2 %
159Tb (KED)	110.374 %	4,467,344 cps	2.0 %
164Dy (KED)	0.006 ppb	470 cps	10.4 %
166Er (KED)	-0.001 ppb	480 cps	12.5 %
169Tm (KED)	0.000 ppb	106 cps	25.7 %
174Yb (KED)	0.002 ppb	267 cps	5.7 %
175Lu (KED)	-0.126 ppb	18,321 cps	3.0 %
205Tl (KED)	0.002 ppb	436 cps	12.4 %
208Pb (KED)	0.149 ppb	27,488 cps	1.4 %
209Bi (KED)	100.551 %	3,713,424 cps	0.6 %
232Th (KED)	0.020 ppb	5,537 cps	3.4 %
238U (KED)	0.004 ppb	1,441 cps	4.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 20

Analysis name: w117ti

Analysis started at: 10/18/2021 4:14:31 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	109.749 %	1.6 %
9Be (KED)	0.012 ppb	86.6 %
11B (KED)	2.087 ppb	8.8 %
24Mg (KED)	333.414 ppb	3.2 %
27Al (KED)	208.339 ppb	1.8 %
45Sc (KED)	117.136 %	0.7 %
51V (KED)	0.390 ppb	2.3 %
52Cr (KED)	0.707 ppb	0.3 %
55Mn (KED)	8.279 ppb	0.7 %
56Fe (KED)	252.750 ppb	1.7 %
58Ni (KED)	1.179 ppb	0.7 %
59Co (KED)	0.118 ppb	4.2 %
63Cu (KED)	3.380 ppb	1.5 %
64Zn (KED)	49.594 ppb	1.9 %
69Ga (KED)	0.977 ppb	1.7 %
75As (KED)	0.135 ppb	21.6 %
80Se (KED)	0.386 ppb	19.3 %
85Rb (KED)	1.850 ppb	2.1 %
88Sr (KED)	7.409 ppb	1.3 %
89Y (KED)	111.304 %	1.2 %
107Ag (KED)	0.013 ppb	8.2 %
114Cd (KED)	0.007 ppb	24.4 %
115In (KED)	107.016 %	0.4 %
133Cs (KED)	0.046 ppb	2.0 %
138Ba (KED)	3.313 ppb	0.9 %
139La (KED)	0.235 ppb	2.1 %
140Ce (KED)	0.459 ppb	3.2 %
141Pr (KED)	0.055 ppb	2.2 %
142Nd (KED)	0.296 ppb	3.4 %
152Sm (KED)	0.040 ppb	0.9 %
153Eu (KED)	0.008 ppb	10.2 %
158Gd (KED)	0.034 ppb	3.0 %
159Tb (KED)	114.462 %	2.5 %
164Dy (KED)	0.024 ppb	6.4 %
166Er (KED)	0.007 ppb	18.7 %
169Tm (KED)	0.001 ppb	18.2 %
174Yb (KED)	0.009 ppb	6.5 %
175Lu (KED)	-0.129 ppb	1.7 %
205Tl (KED)	0.004 ppb	0.7 %
208Pb (KED)	0.343 ppb	1.6 %
209Bi (KED)	100.327 %	0.8 %
232Th (KED)	0.052 ppb	2.1 %
238U (KED)	0.013 ppb	1.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	109.749 %	3,290 cps	1.6 %
9Be (KED)	0.012 ppb	2 cps	86.6 %
11B (KED)	2.087 ppb	732 cps	1.4 %
24Mg (KED)	333.414 ppb	203,012 cps	1.6 %
27Al (KED)	208.339 ppb	33,279 cps	2.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	117.136 %	54,899 cps	0.7 %
51V (KED)	0.390 ppb	3,725 cps	2.3 %
52Cr (KED)	0.707 ppb	10,697 cps	0.5 %
55Mn (KED)	8.279 ppb	63,338 cps	0.1 %
56Fe (KED)	252.750 ppb	3,508,468 cps	1.0 %
58Ni (KED)	1.179 ppb	21,726 cps	0.5 %
59Co (KED)	0.118 ppb	3,497 cps	4.4 %
63Cu (KED)	3.380 ppb	82,823 cps	0.7 %
64Zn (KED)	49.594 ppb	331,178 cps	0.7 %
69Ga (KED)	0.977 ppb	6,963 cps	1.2 %
75As (KED)	0.135 ppb	259 cps	20.8 %
80Se (KED)	0.386 ppb	1,392 cps	4.2 %
85Rb (KED)	1.850 ppb	12,149 cps	1.2 %
88Sr (KED)	7.409 ppb	68,507 cps	0.2 %
89Y (KED)	111.304 %	478,758 cps	1.2 %
107Ag (KED)	0.013 ppb	786 cps	7.6 %
114Cd (KED)	0.007 ppb	260 cps	16.0 %
115In (KED)	107.016 %	864,358 cps	0.4 %
133Cs (KED)	0.046 ppb	1,475 cps	1.9 %
138Ba (KED)	3.313 ppb	151,204 cps	1.6 %
139La (KED)	0.235 ppb	22,980 cps	1.6 %
140Ce (KED)	0.459 ppb	60,541 cps	0.7 %
141Pr (KED)	0.055 ppb	7,559 cps	1.1 %
142Nd (KED)	0.296 ppb	16,188 cps	1.4 %
152Sm (KED)	0.040 ppb	1,989 cps	2.4 %
153Eu (KED)	0.008 ppb	822 cps	12.3 %
158Gd (KED)	0.034 ppb	2,236 cps	5.5 %
159Tb (KED)	114.462 %	4,632,791 cps	2.5 %
164Dy (KED)	0.024 ppb	1,766 cps	3.9 %
166Er (KED)	0.007 ppb	1,265 cps	7.4 %
169Tm (KED)	0.001 ppb	441 cps	15.3 %
174Yb (KED)	0.009 ppb	997 cps	8.2 %
175Lu (KED)	-0.129 ppb	18,558 cps	1.9 %
205Tl (KED)	0.004 ppb	769 cps	1.4 %
208Pb (KED)	0.343 ppb	53,415 cps	1.2 %
209Bi (KED)	100.327 %	3,705,138 cps	0.8 %
232Th (KED)	0.052 ppb	13,946 cps	1.6 %
238U (KED)	0.013 ppb	4,293 cps	1.4 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 21

Analysis name: w128ti

Analysis started at: 10/18/2021 4:18:39 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	117.608 %	0.4 %
9Be (KED)	0.006 ppb	173.2 %
11B (KED)	1.154 ppb	10.5 %
24Mg (KED)	184.373 ppb	1.0 %
27Al (KED)	130.534 ppb	1.5 %
45Sc (KED)	118.403 %	1.2 %
51V (KED)	0.237 ppb	3.5 %
52Cr (KED)	0.494 ppb	4.8 %
55Mn (KED)	4.309 ppb	1.7 %
56Fe (KED)	148.249 ppb	1.0 %
58Ni (KED)	0.694 ppb	2.5 %
59Co (KED)	0.079 ppb	3.6 %
63Cu (KED)	2.931 ppb	2.3 %
64Zn (KED)	52.588 ppb	2.5 %
69Ga (KED)	0.612 ppb	1.9 %
75As (KED)	0.072 ppb	25.9 %
80Se (KED)	0.493 ppb	30.7 %
85Rb (KED)	1.126 ppb	0.8 %
88Sr (KED)	3.573 ppb	2.6 %
89Y (KED)	112.616 %	1.9 %
107Ag (KED)	0.011 ppb	13.5 %
114Cd (KED)	0.008 ppb	24.5 %
115In (KED)	108.675 %	1.1 %
133Cs (KED)	0.026 ppb	6.9 %
138Ba (KED)	1.991 ppb	3.8 %
139La (KED)	0.137 ppb	2.7 %
140Ce (KED)	0.280 ppb	1.8 %
141Pr (KED)	0.033 ppb	1.5 %
142Nd (KED)	0.175 ppb	1.2 %
152Sm (KED)	0.024 ppb	3.2 %
153Eu (KED)	0.004 ppb	12.1 %
158Gd (KED)	0.020 ppb	4.6 %
159Tb (KED)	116.855 %	1.4 %
164Dy (KED)	0.014 ppb	9.2 %
166Er (KED)	0.002 ppb	64.0 %
169Tm (KED)	0.001 ppb	15.8 %
174Yb (KED)	0.005 ppb	1.8 %
175Lu (KED)	-0.129 ppb	4.1 %
205Tl (KED)	0.002 ppb	8.3 %
208Pb (KED)	0.213 ppb	3.2 %
209Bi (KED)	102.336 %	0.4 %
232Th (KED)	0.035 ppb	5.0 %
238U (KED)	0.009 ppb	2.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	117.608 %	3,526 cps	0.4 %
9Be (KED)	0.006 ppb	1 cps	173.2 %
11B (KED)	1.154 ppb	686 cps	2.2 %
24Mg (KED)	184.373 ppb	120,398 cps	1.3 %
27Al (KED)	130.534 ppb	21,099 cps	0.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	118.403 %	55,493 cps	1.2 %
51V (KED)	0.237 ppb	2,288 cps	3.9 %
52Cr (KED)	0.494 ppb	7,590 cps	3.7 %
55Mn (KED)	4.309 ppb	33,343 cps	1.6 %
56Fe (KED)	148.249 ppb	2,081,199 cps	1.4 %
58Ni (KED)	0.694 ppb	13,056 cps	1.6 %
59Co (KED)	0.079 ppb	2,375 cps	3.8 %
63Cu (KED)	2.931 ppb	74,040 cps	0.3 %
64Zn (KED)	52.588 ppb	355,022 cps	0.6 %
69Ga (KED)	0.612 ppb	4,444 cps	1.0 %
75As (KED)	0.072 ppb	148 cps	24.1 %
80Se (KED)	0.493 ppb	1,473 cps	4.5 %
85Rb (KED)	1.126 ppb	7,486 cps	1.3 %
88Sr (KED)	3.573 ppb	33,477 cps	0.8 %
89Y (KED)	112.616 %	484,404 cps	1.9 %
107Ag (KED)	0.011 ppb	686 cps	13.5 %
114Cd (KED)	0.008 ppb	272 cps	16.7 %
115In (KED)	108.675 %	877,755 cps	1.1 %
133Cs (KED)	0.026 ppb	858 cps	6.3 %
138Ba (KED)	1.991 ppb	93,373 cps	3.1 %
139La (KED)	0.137 ppb	13,725 cps	2.0 %
140Ce (KED)	0.280 ppb	37,904 cps	0.5 %
141Pr (KED)	0.033 ppb	4,631 cps	1.6 %
142Nd (KED)	0.175 ppb	9,835 cps	2.5 %
152Sm (KED)	0.024 ppb	1,237 cps	4.4 %
153Eu (KED)	0.004 ppb	476 cps	9.9 %
158Gd (KED)	0.020 ppb	1,375 cps	3.5 %
159Tb (KED)	116.855 %	4,729,663 cps	1.4 %
164Dy (KED)	0.014 ppb	1,071 cps	7.7 %
166Er (KED)	0.002 ppb	802 cps	13.0 %
169Tm (KED)	0.001 ppb	279 cps	14.3 %
174Yb (KED)	0.005 ppb	581 cps	0.3 %
175Lu (KED)	-0.129 ppb	18,923 cps	4.7 %
205Tl (KED)	0.002 ppb	454 cps	7.5 %
208Pb (KED)	0.213 ppb	36,682 cps	2.1 %
209Bi (KED)	102.336 %	3,779,322 cps	0.4 %
232Th (KED)	0.035 ppb	9,600 cps	4.6 %
238U (KED)	0.009 ppb	3,079 cps	2.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 22

Analysis name: w125ti

Analysis started at: 10/18/2021 4:22:50 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	104.560 %	0.3 %
9Be (KED)	0.019 ppb	100.2 %
11B (KED)	2.943 ppb	31.2 %
24Mg (KED)	258.779 ppb	1.1 %
27Al (KED)	201.230 ppb	1.0 %
45Sc (KED)	107.523 %	0.2 %
51V (KED)	0.365 ppb	2.3 %
52Cr (KED)	0.767 ppb	0.8 %
55Mn (KED)	6.785 ppb	1.4 %
56Fe (KED)	264.469 ppb	1.2 %
58Ni (KED)	1.366 ppb	0.3 %
59Co (KED)	0.126 ppb	2.9 %
63Cu (KED)	2.257 ppb	2.8 %
64Zn (KED)	56.777 ppb	2.3 %
69Ga (KED)	0.949 ppb	2.6 %
75As (KED)	0.111 ppb	5.2 %
80Se (KED)	0.565 ppb	28.9 %
85Rb (KED)	1.122 ppb	0.7 %
88Sr (KED)	5.689 ppb	1.6 %
89Y (KED)	104.322 %	1.3 %
107Ag (KED)	0.012 ppb	6.7 %
114Cd (KED)	0.010 ppb	17.3 %
115In (KED)	100.131 %	1.1 %
133Cs (KED)	0.037 ppb	4.3 %
138Ba (KED)	3.177 ppb	0.6 %
139La (KED)	0.223 ppb	1.2 %
140Ce (KED)	0.449 ppb	1.2 %
141Pr (KED)	0.052 ppb	3.9 %
142Nd (KED)	0.286 ppb	1.7 %
152Sm (KED)	0.037 ppb	1.9 %
153Eu (KED)	0.008 ppb	5.0 %
158Gd (KED)	0.032 ppb	3.3 %
159Tb (KED)	102.439 %	0.7 %
164Dy (KED)	0.022 ppb	3.6 %
166Er (KED)	0.008 ppb	3.6 %
169Tm (KED)	0.001 ppb	9.8 %
174Yb (KED)	0.009 ppb	10.2 %
175Lu (KED)	-0.122 ppb	1.2 %
205Tl (KED)	0.003 ppb	8.9 %
208Pb (KED)	0.383 ppb	2.4 %
209Bi (KED)	93.664 %	2.3 %
232Th (KED)	0.054 ppb	2.5 %
238U (KED)	0.013 ppb	4.4 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	104.560 %	3,135 cps	0.3 %
9Be (KED)	0.019 ppb	3 cps	100.0 %
11B (KED)	2.943 ppb	779 cps	11.5 %
24Mg (KED)	258.779 ppb	150,188 cps	0.8 %
27Al (KED)	201.230 ppb	29,507 cps	0.9 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	107.523 %	50,394 cps	0.2 %
51V (KED)	0.365 ppb	3,199 cps	2.2 %
52Cr (KED)	0.767 ppb	10,641 cps	0.8 %
55Mn (KED)	6.785 ppb	47,655 cps	1.2 %
56Fe (KED)	264.469 ppb	3,370,019 cps	1.3 %
58Ni (KED)	1.366 ppb	23,071 cps	0.2 %
59Co (KED)	0.126 ppb	3,420 cps	2.7 %
63Cu (KED)	2.257 ppb	55,034 cps	1.7 %
64Zn (KED)	56.777 ppb	354,860 cps	1.8 %
69Ga (KED)	0.949 ppb	6,342 cps	1.4 %
75As (KED)	0.111 ppb	203 cps	5.9 %
80Se (KED)	0.565 ppb	1,407 cps	5.9 %
85Rb (KED)	1.122 ppb	6,913 cps	2.0 %
88Sr (KED)	5.689 ppb	49,325 cps	1.1 %
89Y (KED)	104.322 %	448,727 cps	1.3 %
107Ag (KED)	0.012 ppb	696 cps	5.3 %
114Cd (KED)	0.010 ppb	287 cps	13.2 %
115In (KED)	100.131 %	808,750 cps	1.1 %
133Cs (KED)	0.037 ppb	1,102 cps	3.6 %
138Ba (KED)	3.177 ppb	129,816 cps	1.3 %
139La (KED)	0.223 ppb	19,535 cps	0.8 %
140Ce (KED)	0.449 ppb	53,021 cps	0.7 %
141Pr (KED)	0.052 ppb	6,418 cps	3.4 %
142Nd (KED)	0.286 ppb	14,011 cps	1.6 %
152Sm (KED)	0.037 ppb	1,662 cps	2.5 %
153Eu (KED)	0.008 ppb	690 cps	5.5 %
158Gd (KED)	0.032 ppb	1,916 cps	3.7 %
159Tb (KED)	102.439 %	4,146,159 cps	0.7 %
164Dy (KED)	0.022 ppb	1,506 cps	3.0 %
166Er (KED)	0.008 ppb	1,149 cps	1.5 %
169Tm (KED)	0.001 ppb	422 cps	9.6 %
174Yb (KED)	0.009 ppb	859 cps	10.5 %
175Lu (KED)	-0.122 ppb	17,604 cps	1.1 %
205Tl (KED)	0.003 ppb	629 cps	6.7 %
208Pb (KED)	0.383 ppb	54,823 cps	0.7 %
209Bi (KED)	93.664 %	3,459,087 cps	2.3 %
232Th (KED)	0.054 ppb	13,437 cps	0.9 %
238U (KED)	0.013 ppb	3,930 cps	3.1 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 23

Analysis name: w118ti

Analysis started at: 10/18/2021 4:26:52 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	113.123 %	1.8 %
9Be (KED)	0.000 ppb	
11B (KED)	0.215 ppb	52.2 %
24Mg (KED)	224.418 ppb	0.4 %
27Al (KED)	183.412 ppb	0.8 %
45Sc (KED)	113.979 %	0.5 %
51V (KED)	0.340 ppb	2.3 %
52Cr (KED)	0.684 ppb	2.6 %
55Mn (KED)	6.280 ppb	0.8 %
56Fe (KED)	243.620 ppb	0.5 %
58Ni (KED)	1.179 ppb	0.8 %
59Co (KED)	0.111 ppb	2.7 %
63Cu (KED)	2.283 ppb	1.6 %
64Zn (KED)	52.478 ppb	0.6 %
69Ga (KED)	0.854 ppb	3.7 %
75As (KED)	0.099 ppb	11.8 %
80Se (KED)	0.289 ppb	30.0 %
85Rb (KED)	1.246 ppb	2.3 %
88Sr (KED)	4.624 ppb	2.0 %
89Y (KED)	110.317 %	0.9 %
107Ag (KED)	0.032 ppb	3.3 %
114Cd (KED)	0.008 ppb	29.7 %
115In (KED)	105.202 %	1.7 %
133Cs (KED)	0.033 ppb	5.2 %
138Ba (KED)	2.819 ppb	1.6 %
139La (KED)	0.224 ppb	3.4 %
140Ce (KED)	0.435 ppb	2.8 %
141Pr (KED)	0.053 ppb	4.5 %
142Nd (KED)	0.288 ppb	0.9 %
152Sm (KED)	0.038 ppb	4.7 %
153Eu (KED)	0.007 ppb	7.9 %
158Gd (KED)	0.030 ppb	4.6 %
159Tb (KED)	110.227 %	1.5 %
164Dy (KED)	0.020 ppb	2.3 %
166Er (KED)	0.006 ppb	6.3 %
169Tm (KED)	0.001 ppb	8.4 %
174Yb (KED)	0.008 ppb	2.8 %
175Lu (KED)	-0.123 ppb	2.2 %
205Tl (KED)	0.003 ppb	9.1 %
208Pb (KED)	0.352 ppb	1.4 %
209Bi (KED)	100.003 %	2.2 %
232Th (KED)	0.053 ppb	2.7 %
238U (KED)	0.012 ppb	5.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	113.123 %	3,392 cps	1.8 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	0.215 ppb	563 cps	2.6 %
24Mg (KED)	224.418 ppb	140,925 cps	1.4 %
27Al (KED)	183.412 ppb	28,516 cps	1.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	113.979 %	53,420 cps	0.5 %
51V (KED)	0.340 ppb	3,165 cps	2.6 %
52Cr (KED)	0.684 ppb	10,071 cps	2.5 %
55Mn (KED)	6.280 ppb	46,764 cps	1.2 %
56Fe (KED)	243.620 ppb	3,290,886 cps	0.7 %
58Ni (KED)	1.179 ppb	21,151 cps	1.2 %
59Co (KED)	0.111 ppb	3,214 cps	2.3 %
63Cu (KED)	2.283 ppb	58,766 cps	1.9 %
64Zn (KED)	52.478 ppb	347,158 cps	0.7 %
69Ga (KED)	0.854 ppb	6,040 cps	3.1 %
75As (KED)	0.099 ppb	193 cps	10.5 %
80Se (KED)	0.289 ppb	1,321 cps	3.2 %
85Rb (KED)	1.246 ppb	8,117 cps	3.0 %
88Sr (KED)	4.624 ppb	42,424 cps	2.7 %
89Y (KED)	110.317 %	474,516 cps	0.9 %
107Ag (KED)	0.032 ppb	1,850 cps	1.6 %
114Cd (KED)	0.008 ppb	274 cps	18.4 %
115In (KED)	105.202 %	849,703 cps	1.7 %
133Cs (KED)	0.033 ppb	1,043 cps	3.8 %
138Ba (KED)	2.819 ppb	124,129 cps	0.9 %
139La (KED)	0.224 ppb	21,118 cps	2.0 %
140Ce (KED)	0.435 ppb	55,263 cps	1.4 %
141Pr (KED)	0.053 ppb	7,014 cps	3.0 %
142Nd (KED)	0.288 ppb	15,191 cps	2.3 %
152Sm (KED)	0.038 ppb	1,811 cps	4.6 %
153Eu (KED)	0.007 ppb	721 cps	8.2 %
158Gd (KED)	0.030 ppb	1,932 cps	3.8 %
159Tb (KED)	110.227 %	4,461,401 cps	1.5 %
164Dy (KED)	0.020 ppb	1,481 cps	1.3 %
166Er (KED)	0.006 ppb	1,080 cps	3.2 %
169Tm (KED)	0.001 ppb	387 cps	6.7 %
174Yb (KED)	0.008 ppb	871 cps	1.5 %
175Lu (KED)	-0.123 ppb	18,807 cps	3.6 %
205Tl (KED)	0.003 ppb	580 cps	8.0 %
208Pb (KED)	0.352 ppb	54,421 cps	1.5 %
209Bi (KED)	100.003 %	3,693,164 cps	2.2 %
232Th (KED)	0.053 ppb	14,234 cps	3.5 %
238U (KED)	0.012 ppb	3,764 cps	3.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 24

Analysis name: 191075ti

Analysis started at: 10/18/2021 4:31:10 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	113.197 %	2.4 %
9Be (KED)	0.000 ppb	
11B (KED)	-0.006 ppb	12,094.9 %
24Mg (KED)	253.544 ppb	2.9 %
27Al (KED)	209.184 ppb	2.3 %
45Sc (KED)	114.182 %	1.7 %
51V (KED)	0.390 ppb	2.0 %
52Cr (KED)	0.677 ppb	1.2 %
55Mn (KED)	7.209 ppb	1.4 %
56Fe (KED)	266.329 ppb	2.3 %
58Ni (KED)	1.153 ppb	0.3 %
59Co (KED)	0.114 ppb	5.2 %
63Cu (KED)	1.976 ppb	1.8 %
64Zn (KED)	50.860 ppb	1.6 %
69Ga (KED)	0.919 ppb	4.7 %
75As (KED)	0.112 ppb	10.5 %
80Se (KED)	0.505 ppb	28.5 %
85Rb (KED)	1.123 ppb	1.4 %
88Sr (KED)	4.804 ppb	2.7 %
89Y (KED)	109.821 %	2.5 %
107Ag (KED)	0.019 ppb	2.9 %
114Cd (KED)	0.008 ppb	24.0 %
115In (KED)	105.403 %	1.2 %
133Cs (KED)	0.040 ppb	5.2 %
138Ba (KED)	3.025 ppb	0.9 %
139La (KED)	0.210 ppb	0.9 %
140Ce (KED)	0.420 ppb	1.3 %
141Pr (KED)	0.052 ppb	2.4 %
142Nd (KED)	0.277 ppb	1.4 %
152Sm (KED)	0.037 ppb	10.8 %
153Eu (KED)	0.008 ppb	10.1 %
158Gd (KED)	0.034 ppb	3.3 %
159Tb (KED)	110.576 %	0.4 %
164Dy (KED)	0.024 ppb	8.2 %
166Er (KED)	0.008 ppb	12.8 %
169Tm (KED)	0.001 ppb	18.5 %
174Yb (KED)	0.009 ppb	6.6 %
175Lu (KED)	-0.128 ppb	0.9 %
205Tl (KED)	0.003 ppb	8.4 %
208Pb (KED)	0.271 ppb	1.3 %
209Bi (KED)	100.574 %	2.3 %
232Th (KED)	0.063 ppb	2.3 %
238U (KED)	0.012 ppb	4.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	113.197 %	3,394 cps	2.4 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	-0.006 ppb	540 cps	10.9 %
24Mg (KED)	253.544 ppb	159,238 cps	0.5 %
27Al (KED)	209.184 ppb	32,564 cps	1.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	114.182 %	53,514 cps	1.7 %
51V (KED)	0.390 ppb	3,633 cps	0.7 %
52Cr (KED)	0.677 ppb	9,987 cps	1.0 %
55Mn (KED)	7.209 ppb	53,760 cps	0.5 %
56Fe (KED)	266.329 ppb	3,602,952 cps	0.8 %
58Ni (KED)	1.153 ppb	20,723 cps	1.4 %
59Co (KED)	0.114 ppb	3,302 cps	3.6 %
63Cu (KED)	1.976 ppb	52,001 cps	1.8 %
64Zn (KED)	50.860 ppb	334,973 cps	1.0 %
69Ga (KED)	0.919 ppb	6,464 cps	2.7 %
75As (KED)	0.112 ppb	216 cps	7.8 %
80Se (KED)	0.505 ppb	1,446 cps	7.1 %
85Rb (KED)	1.123 ppb	7,284 cps	2.8 %
88Sr (KED)	4.804 ppb	43,850 cps	0.2 %
89Y (KED)	109.821 %	472,380 cps	2.5 %
107Ag (KED)	0.019 ppb	1,110 cps	3.0 %
114Cd (KED)	0.008 ppb	264 cps	16.5 %
115In (KED)	105.403 %	851,330 cps	1.2 %
133Cs (KED)	0.040 ppb	1,271 cps	6.3 %
138Ba (KED)	3.025 ppb	133,528 cps	1.0 %
139La (KED)	0.210 ppb	19,897 cps	0.8 %
140Ce (KED)	0.420 ppb	53,617 cps	1.0 %
141Pr (KED)	0.052 ppb	6,958 cps	2.7 %
142Nd (KED)	0.277 ppb	14,682 cps	1.5 %
152Sm (KED)	0.037 ppb	1,795 cps	10.4 %
153Eu (KED)	0.008 ppb	750 cps	9.6 %
158Gd (KED)	0.034 ppb	2,186 cps	3.2 %
159Tb (KED)	110.576 %	4,475,498 cps	0.4 %
164Dy (KED)	0.024 ppb	1,728 cps	8.1 %
166Er (KED)	0.008 ppb	1,256 cps	6.4 %
169Tm (KED)	0.001 ppb	447 cps	16.6 %
174Yb (KED)	0.009 ppb	962 cps	6.3 %
175Lu (KED)	-0.128 ppb	17,951 cps	1.2 %
205Tl (KED)	0.003 ppb	682 cps	6.7 %
208Pb (KED)	0.271 ppb	43,771 cps	1.3 %
209Bi (KED)	100.574 %	3,714,253 cps	2.3 %
232Th (KED)	0.063 ppb	16,890 cps	0.2 %
238U (KED)	0.012 ppb	3,732 cps	2.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 25

Analysis name: 191078ti

Analysis started at: 10/18/2021 4:35:18 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	112.826 %	3.7 %
9Be (KED)	0.006 ppb	173.2 %
11B (KED)	1.786 ppb	27.9 %
24Mg (KED)	188.868 ppb	4.0 %
27Al (KED)	126.958 ppb	1.0 %
45Sc (KED)	113.767 %	1.2 %
51V (KED)	0.230 ppb	5.2 %
52Cr (KED)	0.486 ppb	2.9 %
55Mn (KED)	4.922 ppb	1.0 %
56Fe (KED)	172.584 ppb	1.3 %
58Ni (KED)	1.051 ppb	0.9 %
59Co (KED)	0.080 ppb	4.1 %
63Cu (KED)	1.753 ppb	0.3 %
64Zn (KED)	56.038 ppb	1.6 %
69Ga (KED)	0.596 ppb	2.8 %
75As (KED)	0.067 ppb	17.9 %
80Se (KED)	0.611 ppb	2.6 %
85Rb (KED)	0.977 ppb	2.4 %
88Sr (KED)	3.279 ppb	0.8 %
89Y (KED)	109.259 %	1.3 %
107Ag (KED)	0.017 ppb	7.5 %
114Cd (KED)	0.012 ppb	9.9 %
115In (KED)	105.378 %	2.0 %
133Cs (KED)	0.024 ppb	1.5 %
138Ba (KED)	1.943 ppb	1.4 %
139La (KED)	0.124 ppb	1.8 %
140Ce (KED)	0.240 ppb	2.4 %
141Pr (KED)	0.029 ppb	4.3 %
142Nd (KED)	0.156 ppb	2.6 %
152Sm (KED)	0.021 ppb	2.9 %
153Eu (KED)	0.004 ppb	3.5 %
158Gd (KED)	0.018 ppb	2.2 %
159Tb (KED)	112.274 %	3.2 %
164Dy (KED)	0.014 ppb	9.3 %
166Er (KED)	0.002 ppb	9.4 %
169Tm (KED)	0.001 ppb	14.2 %
174Yb (KED)	0.005 ppb	7.8 %
175Lu (KED)	-0.129 ppb	1.0 %
205Tl (KED)	0.003 ppb	6.6 %
208Pb (KED)	0.223 ppb	1.3 %
209Bi (KED)	99.139 %	1.7 %
232Th (KED)	0.034 ppb	0.2 %
238U (KED)	0.007 ppb	9.4 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	112.826 %	3,383 cps	3.7 %
9Be (KED)	0.006 ppb	1 cps	173.2 %
11B (KED)	1.786 ppb	721 cps	4.6 %
24Mg (KED)	188.868 ppb	118,196 cps	0.2 %
27Al (KED)	126.958 ppb	19,720 cps	0.4 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	113.767 %	53,320 cps	1.2 %
51V (KED)	0.230 ppb	2,140 cps	5.8 %
52Cr (KED)	0.486 ppb	7,178 cps	1.7 %
55Mn (KED)	4.922 ppb	36,586 cps	0.5 %
56Fe (KED)	172.584 ppb	2,327,560 cps	1.5 %
58Ni (KED)	1.051 ppb	18,845 cps	1.5 %
59Co (KED)	0.080 ppb	2,302 cps	4.8 %
63Cu (KED)	1.753 ppb	47,038 cps	1.1 %
64Zn (KED)	56.038 ppb	366,861 cps	0.8 %
69Ga (KED)	0.596 ppb	4,200 cps	2.9 %
75As (KED)	0.067 ppb	136 cps	16.7 %
80Se (KED)	0.611 ppb	1,501 cps	1.1 %
85Rb (KED)	0.977 ppb	6,302 cps	1.2 %
88Sr (KED)	3.279 ppb	29,827 cps	1.2 %
89Y (KED)	109.259 %	469,962 cps	1.3 %
107Ag (KED)	0.017 ppb	990 cps	5.5 %
114Cd (KED)	0.012 ppb	356 cps	5.3 %
115In (KED)	105.378 %	851,125 cps	2.0 %
133Cs (KED)	0.024 ppb	774 cps	3.3 %
138Ba (KED)	1.943 ppb	87,587 cps	2.0 %
139La (KED)	0.124 ppb	11,902 cps	2.0 %
140Ce (KED)	0.240 ppb	31,300 cps	1.0 %
141Pr (KED)	0.029 ppb	3,975 cps	1.6 %
142Nd (KED)	0.156 ppb	8,408 cps	3.0 %
152Sm (KED)	0.021 ppb	1,041 cps	3.2 %
153Eu (KED)	0.004 ppb	438 cps	5.4 %
158Gd (KED)	0.018 ppb	1,205 cps	1.1 %
159Tb (KED)	112.274 %	4,544,227 cps	3.2 %
164Dy (KED)	0.014 ppb	1,007 cps	6.0 %
166Er (KED)	0.002 ppb	768 cps	1.3 %
169Tm (KED)	0.001 ppb	253 cps	10.8 %
174Yb (KED)	0.005 ppb	582 cps	7.6 %
175Lu (KED)	-0.129 ppb	18,140 cps	2.0 %
205Tl (KED)	0.003 ppb	504 cps	7.8 %
208Pb (KED)	0.223 ppb	36,910 cps	2.5 %
209Bi (KED)	99.139 %	3,661,279 cps	1.7 %
232Th (KED)	0.034 ppb	8,939 cps	1.5 %
238U (KED)	0.007 ppb	2,319 cps	7.2 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 26

Analysis name: 191071ti

Analysis started at: 10/18/2021 4:39:23 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	114.754 %	2.0 %
9Be (KED)	0.006 ppb	173.2 %
11B (KED)	4.669 ppb	15.9 %
24Mg (KED)	126.539 ppb	0.6 %
27Al (KED)	85.613 ppb	2.0 %
45Sc (KED)	115.184 %	1.3 %
51V (KED)	0.150 ppb	1.9 %
52Cr (KED)	0.406 ppb	3.6 %
55Mn (KED)	3.137 ppb	2.8 %
56Fe (KED)	115.726 ppb	1.4 %
58Ni (KED)	0.616 ppb	0.9 %
59Co (KED)	0.050 ppb	4.8 %
63Cu (KED)	1.430 ppb	1.2 %
64Zn (KED)	54.088 ppb	1.9 %
69Ga (KED)	0.463 ppb	0.8 %
75As (KED)	0.063 ppb	5.7 %
80Se (KED)	0.411 ppb	25.8 %
85Rb (KED)	0.853 ppb	3.7 %
88Sr (KED)	2.329 ppb	1.2 %
89Y (KED)	111.985 %	2.2 %
107Ag (KED)	0.016 ppb	5.0 %
114Cd (KED)	0.009 ppb	15.6 %
115In (KED)	106.793 %	0.7 %
133Cs (KED)	0.017 ppb	8.3 %
138Ba (KED)	1.613 ppb	1.2 %
139La (KED)	0.077 ppb	0.9 %
140Ce (KED)	0.157 ppb	1.2 %
141Pr (KED)	0.019 ppb	1.4 %
142Nd (KED)	0.101 ppb	1.8 %
152Sm (KED)	0.014 ppb	3.5 %
153Eu (KED)	0.003 ppb	6.8 %
158Gd (KED)	0.012 ppb	5.5 %
159Tb (KED)	110.391 %	0.3 %
164Dy (KED)	0.009 ppb	7.6 %
166Er (KED)	0.000 ppb	640.6 %
169Tm (KED)	0.000 ppb	23.5 %
174Yb (KED)	0.003 ppb	8.2 %
175Lu (KED)	-0.130 ppb	2.5 %
205Tl (KED)	0.002 ppb	16.1 %
208Pb (KED)	0.188 ppb	1.3 %
209Bi (KED)	100.759 %	1.6 %
232Th (KED)	0.020 ppb	3.7 %
238U (KED)	0.007 ppb	6.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	114.754 %	3,440 cps	2.0 %
9Be (KED)	0.006 ppb	1 cps	173.2 %
11B (KED)	4.669 ppb	1,034 cps	8.9 %
24Mg (KED)	126.539 ppb	80,654 cps	1.5 %
27Al (KED)	85.613 ppb	13,484 cps	1.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	115.184 %	53,984 cps	1.3 %
51V (KED)	0.150 ppb	1,408 cps	1.1 %
52Cr (KED)	0.406 ppb	6,081 cps	4.6 %
55Mn (KED)	3.137 ppb	23,622 cps	1.5 %
56Fe (KED)	115.726 ppb	1,580,816 cps	0.9 %
58Ni (KED)	0.616 ppb	11,310 cps	2.0 %
59Co (KED)	0.050 ppb	1,465 cps	3.8 %
63Cu (KED)	1.430 ppb	41,229 cps	1.3 %
64Zn (KED)	54.088 ppb	363,011 cps	0.4 %
69Ga (KED)	0.463 ppb	3,364 cps	1.7 %
75As (KED)	0.063 ppb	130 cps	5.1 %
80Se (KED)	0.411 ppb	1,417 cps	6.6 %
85Rb (KED)	0.853 ppb	5,647 cps	5.2 %
88Sr (KED)	2.329 ppb	21,746 cps	1.7 %
89Y (KED)	111.985 %	481,688 cps	2.2 %
107Ag (KED)	0.016 ppb	939 cps	4.5 %
114Cd (KED)	0.009 ppb	282 cps	10.2 %
115In (KED)	106.793 %	862,553 cps	0.7 %
133Cs (KED)	0.017 ppb	550 cps	7.9 %
138Ba (KED)	1.613 ppb	71,759 cps	1.4 %
139La (KED)	0.077 ppb	7,258 cps	0.9 %
140Ce (KED)	0.157 ppb	20,179 cps	1.0 %
141Pr (KED)	0.019 ppb	2,517 cps	1.4 %
142Nd (KED)	0.101 ppb	5,372 cps	2.1 %
152Sm (KED)	0.014 ppb	694 cps	3.1 %
153Eu (KED)	0.003 ppb	300 cps	6.2 %
158Gd (KED)	0.012 ppb	784 cps	5.5 %
159Tb (KED)	110.391 %	4,468,033 cps	0.3 %
164Dy (KED)	0.009 ppb	692 cps	7.1 %
166Er (KED)	0.000 ppb	600 cps	5.9 %
169Tm (KED)	0.000 ppb	168 cps	18.0 %
174Yb (KED)	0.003 ppb	384 cps	7.8 %
175Lu (KED)	-0.130 ppb	17,722 cps	3.3 %
205Tl (KED)	0.002 ppb	378 cps	14.2 %
208Pb (KED)	0.188 ppb	32,734 cps	1.5 %
209Bi (KED)	100.759 %	3,721,115 cps	1.6 %
232Th (KED)	0.020 ppb	5,470 cps	2.5 %
238U (KED)	0.007 ppb	2,394 cps	5.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 27

Analysis name: y100ti

Analysis started at: 10/18/2021 4:43:16 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	112.826 %	2.7 %
9Be (KED)	0.023 ppb	173.2 %
11B (KED)	6.569 ppb	19.4 %
24Mg (KED)	188.803 ppb	0.8 %
27Al (KED)	155.409 ppb	1.9 %
45Sc (KED)	112.893 %	0.6 %
51V (KED)	0.282 ppb	0.4 %
52Cr (KED)	0.599 ppb	1.6 %
55Mn (KED)	5.075 ppb	1.6 %
56Fe (KED)	188.157 ppb	1.0 %
58Ni (KED)	1.067 ppb	1.7 %
59Co (KED)	0.084 ppb	5.5 %
63Cu (KED)	1.881 ppb	4.2 %
64Zn (KED)	62.088 ppb	2.3 %
69Ga (KED)	0.705 ppb	3.7 %
75As (KED)	0.105 ppb	5.4 %
80Se (KED)	0.402 ppb	25.1 %
85Rb (KED)	0.843 ppb	2.2 %
88Sr (KED)	3.941 ppb	0.7 %
89Y (KED)	109.352 %	1.2 %
107Ag (KED)	0.011 ppb	9.1 %
114Cd (KED)	0.007 ppb	6.7 %
115In (KED)	104.938 %	0.6 %
133Cs (KED)	0.031 ppb	6.5 %
138Ba (KED)	2.299 ppb	2.0 %
139La (KED)	0.167 ppb	3.8 %
140Ce (KED)	0.341 ppb	3.9 %
141Pr (KED)	0.039 ppb	4.0 %
142Nd (KED)	0.208 ppb	6.1 %
152Sm (KED)	0.026 ppb	3.4 %
153Eu (KED)	0.005 ppb	4.4 %
158Gd (KED)	0.023 ppb	10.2 %
159Tb (KED)	112.277 %	3.6 %
164Dy (KED)	0.016 ppb	7.7 %
166Er (KED)	0.004 ppb	29.1 %
169Tm (KED)	0.001 ppb	17.9 %
174Yb (KED)	0.008 ppb	4.9 %
175Lu (KED)	-0.129 ppb	3.3 %
205Tl (KED)	0.003 ppb	3.5 %
208Pb (KED)	0.339 ppb	1.6 %
209Bi (KED)	100.475 %	0.9 %
232Th (KED)	0.043 ppb	2.8 %
238U (KED)	0.011 ppb	4.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	112.826 %	3,383 cps	2.7 %
9Be (KED)	0.023 ppb	4 cps	173.2 %
11B (KED)	6.569 ppb	1,208 cps	8.2 %
24Mg (KED)	188.803 ppb	118,254 cps	1.9 %
27Al (KED)	155.409 ppb	23,940 cps	1.4 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	112.893 %	52,911 cps	0.6 %
51V (KED)	0.282 ppb	2,602 cps	0.4 %
52Cr (KED)	0.599 ppb	8,752 cps	2.2 %
55Mn (KED)	5.075 ppb	37,433 cps	1.0 %
56Fe (KED)	188.157 ppb	2,517,896 cps	0.6 %
58Ni (KED)	1.067 ppb	18,988 cps	1.9 %
59Co (KED)	0.084 ppb	2,406 cps	5.1 %
63Cu (KED)	1.881 ppb	49,761 cps	2.2 %
64Zn (KED)	62.088 ppb	406,399 cps	1.2 %
69Ga (KED)	0.705 ppb	4,958 cps	4.4 %
75As (KED)	0.105 ppb	202 cps	3.8 %
80Se (KED)	0.402 ppb	1,377 cps	3.4 %
85Rb (KED)	0.843 ppb	5,448 cps	2.2 %
88Sr (KED)	3.941 ppb	35,860 cps	1.9 %
89Y (KED)	109.352 %	470,364 cps	1.2 %
107Ag (KED)	0.011 ppb	688 cps	8.2 %
114Cd (KED)	0.007 ppb	250 cps	4.8 %
115In (KED)	104.938 %	847,575 cps	0.6 %
133Cs (KED)	0.031 ppb	973 cps	6.2 %
138Ba (KED)	2.299 ppb	103,365 cps	1.6 %
139La (KED)	0.167 ppb	16,025 cps	1.7 %
140Ce (KED)	0.341 ppb	44,166 cps	1.8 %
141Pr (KED)	0.039 ppb	5,310 cps	0.6 %
142Nd (KED)	0.208 ppb	11,164 cps	2.6 %
152Sm (KED)	0.026 ppb	1,261 cps	1.5 %
153Eu (KED)	0.005 ppb	496 cps	7.0 %
158Gd (KED)	0.023 ppb	1,519 cps	6.8 %
159Tb (KED)	112.277 %	4,544,364 cps	3.6 %
164Dy (KED)	0.016 ppb	1,220 cps	6.0 %
166Er (KED)	0.004 ppb	969 cps	7.6 %
169Tm (KED)	0.001 ppb	331 cps	12.3 %
174Yb (KED)	0.008 ppb	827 cps	1.5 %
175Lu (KED)	-0.129 ppb	18,087 cps	3.0 %
205Tl (KED)	0.003 ppb	497 cps	2.4 %
208Pb (KED)	0.339 ppb	52,901 cps	1.0 %
209Bi (KED)	100.475 %	3,710,598 cps	0.9 %
232Th (KED)	0.043 ppb	11,475 cps	1.9 %
238U (KED)	0.011 ppb	3,557 cps	3.7 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 28

Analysis name: 191066ti

Analysis started at: 10/18/2021 4:47:17 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	112.900 %	6.2 %
9Be (KED)	0.012 ppb	86.7 %
11B (KED)	5.560 ppb	25.8 %
24Mg (KED)	173.550 ppb	7.5 %
27Al (KED)	138.893 ppb	0.8 %
45Sc (KED)	113.406 %	0.5 %
51V (KED)	0.257 ppb	5.7 %
52Cr (KED)	0.467 ppb	2.7 %
55Mn (KED)	4.806 ppb	1.4 %
56Fe (KED)	167.802 ppb	1.3 %
58Ni (KED)	1.057 ppb	1.0 %
59Co (KED)	0.081 ppb	3.0 %
63Cu (KED)	1.188 ppb	2.7 %
64Zn (KED)	53.938 ppb	1.9 %
69Ga (KED)	0.691 ppb	6.0 %
75As (KED)	0.080 ppb	17.8 %
80Se (KED)	0.487 ppb	36.8 %
85Rb (KED)	1.061 ppb	2.4 %
88Sr (KED)	3.548 ppb	1.5 %
89Y (KED)	111.198 %	0.7 %
107Ag (KED)	0.013 ppb	5.0 %
114Cd (KED)	0.005 ppb	17.9 %
115In (KED)	106.088 %	1.0 %
133Cs (KED)	0.025 ppb	10.7 %
138Ba (KED)	2.361 ppb	2.3 %
139La (KED)	0.163 ppb	1.6 %
140Ce (KED)	0.329 ppb	2.6 %
141Pr (KED)	0.037 ppb	3.6 %
142Nd (KED)	0.205 ppb	1.6 %
152Sm (KED)	0.026 ppb	14.7 %
153Eu (KED)	0.005 ppb	12.4 %
158Gd (KED)	0.023 ppb	4.2 %
159Tb (KED)	109.307 %	2.5 %
164Dy (KED)	0.015 ppb	3.6 %
166Er (KED)	0.003 ppb	14.5 %
169Tm (KED)	0.001 ppb	9.0 %
174Yb (KED)	0.006 ppb	4.0 %
175Lu (KED)	-0.128 ppb	2.6 %
205Tl (KED)	0.003 ppb	6.9 %
208Pb (KED)	0.223 ppb	3.2 %
209Bi (KED)	100.292 %	1.7 %
232Th (KED)	0.041 ppb	1.2 %
238U (KED)	0.008 ppb	3.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	112.900 %	3,385 cps	6.2 %
9Be (KED)	0.012 ppb	2 cps	86.6 %
11B (KED)	5.560 ppb	1,103 cps	8.9 %
24Mg (KED)	173.550 ppb	108,462 cps	1.4 %
27Al (KED)	138.893 ppb	21,501 cps	0.8 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	113.406 %	53,151 cps	0.5 %
51V (KED)	0.257 ppb	2,378 cps	6.1 %
52Cr (KED)	0.467 ppb	6,879 cps	3.0 %
55Mn (KED)	4.806 ppb	35,615 cps	1.6 %
56Fe (KED)	167.802 ppb	2,256,016 cps	1.5 %
58Ni (KED)	1.057 ppb	18,894 cps	0.6 %
59Co (KED)	0.081 ppb	2,322 cps	2.5 %
63Cu (KED)	1.188 ppb	35,758 cps	1.3 %
64Zn (KED)	53.938 ppb	359,537 cps	1.3 %
69Ga (KED)	0.691 ppb	4,942 cps	6.0 %
75As (KED)	0.080 ppb	161 cps	15.5 %
80Se (KED)	0.487 ppb	1,452 cps	7.7 %
85Rb (KED)	1.061 ppb	6,968 cps	1.7 %
88Sr (KED)	3.548 ppb	32,837 cps	1.9 %
89Y (KED)	111.198 %	478,305 cps	0.7 %
107Ag (KED)	0.013 ppb	813 cps	4.6 %
114Cd (KED)	0.005 ppb	210 cps	11.1 %
115In (KED)	106.088 %	856,864 cps	1.0 %
133Cs (KED)	0.025 ppb	810 cps	10.2 %
138Ba (KED)	2.361 ppb	103,295 cps	1.7 %
139La (KED)	0.163 ppb	15,246 cps	1.9 %
140Ce (KED)	0.329 ppb	41,521 cps	1.7 %
141Pr (KED)	0.037 ppb	4,903 cps	2.7 %
142Nd (KED)	0.205 ppb	10,756 cps	3.8 %
152Sm (KED)	0.026 ppb	1,248 cps	12.4 %
153Eu (KED)	0.005 ppb	483 cps	9.0 %
158Gd (KED)	0.023 ppb	1,468 cps	3.0 %
159Tb (KED)	109.307 %	4,424,151 cps	2.5 %
164Dy (KED)	0.015 ppb	1,092 cps	3.8 %
166Er (KED)	0.003 ppb	832 cps	5.5 %
169Tm (KED)	0.001 ppb	259 cps	6.6 %
174Yb (KED)	0.006 ppb	618 cps	2.7 %
175Lu (KED)	-0.128 ppb	17,863 cps	3.0 %
205Tl (KED)	0.003 ppb	538 cps	6.9 %
208Pb (KED)	0.223 ppb	37,330 cps	2.2 %
209Bi (KED)	100.292 %	3,703,847 cps	1.7 %
232Th (KED)	0.041 ppb	10,965 cps	0.9 %
238U (KED)	0.008 ppb	2,649 cps	1.7 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 29

Analysis name: 191079ti

Analysis started at: 10/18/2021 4:51:09 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	105.857 %	2.6 %
9Be (KED)	0.000 ppb	
11B (KED)	-0.335 ppb	65.2 %
24Mg (KED)	82.269 ppb	2.5 %
27Al (KED)	46.233 ppb	3.0 %
45Sc (KED)	113.220 %	0.3 %
51V (KED)	0.077 ppb	1.5 %
52Cr (KED)	0.507 ppb	3.0 %
55Mn (KED)	1.807 ppb	3.0 %
56Fe (KED)	68.105 ppb	0.2 %
58Ni (KED)	0.375 ppb	3.4 %
59Co (KED)	0.051 ppb	3.3 %
63Cu (KED)	2.304 ppb	2.9 %
64Zn (KED)	49.486 ppb	1.6 %
69Ga (KED)	0.283 ppb	4.7 %
75As (KED)	0.041 ppb	13.1 %
80Se (KED)	0.429 ppb	26.9 %
85Rb (KED)	0.443 ppb	0.9 %
88Sr (KED)	1.458 ppb	2.0 %
89Y (KED)	109.700 %	1.8 %
107Ag (KED)	0.008 ppb	5.2 %
114Cd (KED)	0.010 ppb	5.3 %
115In (KED)	105.344 %	0.1 %
133Cs (KED)	0.008 ppb	2.7 %
138Ba (KED)	0.915 ppb	2.9 %
139La (KED)	0.041 ppb	4.9 %
140Ce (KED)	0.086 ppb	4.5 %
141Pr (KED)	0.010 ppb	7.9 %
142Nd (KED)	0.056 ppb	3.3 %
152Sm (KED)	0.007 ppb	11.2 %
153Eu (KED)	0.001 ppb	8.5 %
158Gd (KED)	0.006 ppb	6.5 %
159Tb (KED)	111.361 %	2.3 %
164Dy (KED)	0.004 ppb	10.9 %
166Er (KED)	-0.002 ppb	28.6 %
169Tm (KED)	0.000 ppb	45.0 %
174Yb (KED)	0.002 ppb	10.0 %
175Lu (KED)	-0.131 ppb	3.2 %
205Tl (KED)	0.001 ppb	13.0 %
208Pb (KED)	0.590 ppb	1.9 %
209Bi (KED)	100.498 %	1.3 %
232Th (KED)	0.014 ppb	4.0 %
238U (KED)	0.004 ppb	7.4 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	105.857 %	3,174 cps	2.6 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	-0.335 ppb	474 cps	4.9 %
24Mg (KED)	82.269 ppb	48,391 cps	0.4 %
27Al (KED)	46.233 ppb	7,189 cps	3.3 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	113.220 %	53,064 cps	0.3 %
51V (KED)	0.077 ppb	718 cps	1.5 %
52Cr (KED)	0.507 ppb	7,441 cps	3.2 %
55Mn (KED)	1.807 ppb	13,399 cps	3.3 %
56Fe (KED)	68.105 ppb	915,459 cps	0.5 %
58Ni (KED)	0.375 ppb	6,884 cps	2.9 %
59Co (KED)	0.051 ppb	1,481 cps	3.4 %
63Cu (KED)	2.304 ppb	58,862 cps	0.6 %
64Zn (KED)	49.486 ppb	325,693 cps	0.7 %
69Ga (KED)	0.283 ppb	2,039 cps	6.1 %
75As (KED)	0.041 ppb	89 cps	12.1 %
80Se (KED)	0.429 ppb	1,398 cps	4.7 %
85Rb (KED)	0.443 ppb	2,876 cps	2.5 %
88Sr (KED)	1.458 ppb	13,376 cps	2.1 %
89Y (KED)	109.700 %	471,859 cps	1.8 %
107Ag (KED)	0.008 ppb	481 cps	4.6 %
114Cd (KED)	0.010 ppb	312 cps	3.7 %
115In (KED)	105.344 %	850,852 cps	0.1 %
133Cs (KED)	0.008 ppb	273 cps	2.4 %
138Ba (KED)	0.915 ppb	41,718 cps	0.5 %
139La (KED)	0.041 ppb	3,902 cps	3.1 %
140Ce (KED)	0.086 ppb	11,353 cps	2.0 %
141Pr (KED)	0.010 ppb	1,381 cps	5.9 %
142Nd (KED)	0.056 ppb	3,006 cps	4.8 %
152Sm (KED)	0.007 ppb	342 cps	12.2 %
153Eu (KED)	0.001 ppb	141 cps	8.9 %
158Gd (KED)	0.006 ppb	431 cps	8.3 %
159Tb (KED)	111.361 %	4,507,281 cps	2.3 %
164Dy (KED)	0.004 ppb	322 cps	8.3 %
166Er (KED)	-0.002 ppb	416 cps	14.8 %
169Tm (KED)	0.000 ppb	86 cps	23.8 %
174Yb (KED)	0.002 ppb	227 cps	6.4 %
175Lu (KED)	-0.131 ppb	17,537 cps	3.7 %
205Tl (KED)	0.001 ppb	251 cps	10.7 %
208Pb (KED)	0.590 ppb	86,646 cps	3.0 %
209Bi (KED)	100.498 %	3,711,465 cps	1.3 %
232Th (KED)	0.014 ppb	3,761 cps	2.6 %
238U (KED)	0.004 ppb	1,248 cps	5.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 30

Analysis name: 1806100ti

Analysis started at: 10/18/2021 4:55:03 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	36.061 %	6.1 %
9Be (KED)	0.037 ppb	87.1 %
11B (KED)	23.170 ppb	6.4 %
24Mg (KED)	269.324 ppb	6.2 %
27Al (KED)	184.301 ppb	2.1 %
45Sc (KED)	36.259 %	2.4 %
51V (KED)	0.323 ppb	7.0 %
52Cr (KED)	1.422 ppb	3.9 %
55Mn (KED)	7.135 ppb	0.9 %
56Fe (KED)	305.114 ppb	2.6 %
58Ni (KED)	1.883 ppb	4.2 %
59Co (KED)	0.150 ppb	6.9 %
63Cu (KED)	5.316 ppb	1.3 %
64Zn (KED)	159.219 ppb	2.3 %
69Ga (KED)	0.955 ppb	7.8 %
75As (KED)	0.210 ppb	32.7 %
80Se (KED)	5.405 ppb	5.0 %
85Rb (KED)	1.468 ppb	8.1 %
88Sr (KED)	6.400 ppb	1.8 %
89Y (KED)	34.615 %	1.6 %
107Ag (KED)	0.077 ppb	2.0 %
114Cd (KED)	0.023 ppb	18.3 %
115In (KED)	33.758 %	0.3 %
133Cs (KED)	0.039 ppb	7.9 %
138Ba (KED)	3.223 ppb	1.3 %
139La (KED)	0.166 ppb	2.0 %
140Ce (KED)	0.365 ppb	1.7 %
141Pr (KED)	0.040 ppb	2.0 %
142Nd (KED)	0.224 ppb	2.2 %
152Sm (KED)	0.030 ppb	6.0 %
153Eu (KED)	0.005 ppb	1.2 %
158Gd (KED)	0.028 ppb	3.4 %
159Tb (KED)	35.052 %	1.1 %
164Dy (KED)	0.018 ppb	4.2 %
166Er (KED)	0.005 ppb	14.4 %
169Tm (KED)	0.001 ppb	13.6 %
174Yb (KED)	0.008 ppb	11.1 %
175Lu (KED)	-0.131 ppb	3.9 %
205Tl (KED)	0.004 ppb	20.6 %
208Pb (KED)	0.429 ppb	1.3 %
209Bi (KED)	32.348 %	0.3 %
232Th (KED)	0.046 ppb	3.0 %
238U (KED)	0.011 ppb	2.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	36.061 %	1,081 cps	6.1 %
9Be (KED)	0.037 ppb	2 cps	86.6 %
11B (KED)	23.170 ppb	927 cps	4.0 %
24Mg (KED)	269.324 ppb	53,772 cps	0.1 %
27Al (KED)	184.301 ppb	9,112 cps	0.6 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	36.259 %	16,994 cps	2.4 %
51V (KED)	0.323 ppb	956 cps	5.3 %
52Cr (KED)	1.422 ppb	6,626 cps	1.6 %
55Mn (KED)	7.135 ppb	16,897 cps	1.7 %
56Fe (KED)	305.114 ppb	1,310,472 cps	0.8 %
58Ni (KED)	1.883 ppb	10,678 cps	1.9 %
59Co (KED)	0.150 ppb	1,373 cps	4.8 %
63Cu (KED)	5.316 ppb	38,679 cps	0.6 %
64Zn (KED)	159.219 ppb	328,055 cps	0.7 %
69Ga (KED)	0.955 ppb	2,117 cps	6.4 %
75As (KED)	0.210 ppb	122 cps	30.0 %
80Se (KED)	5.405 ppb	1,386 cps	3.5 %
85Rb (KED)	1.468 ppb	2,997 cps	6.5 %
88Sr (KED)	6.400 ppb	18,408 cps	0.3 %
89Y (KED)	34.615 %	148,890 cps	1.6 %
107Ag (KED)	0.077 ppb	1,423 cps	1.8 %
114Cd (KED)	0.023 ppb	190 cps	15.3 %
115In (KED)	33.758 %	272,662 cps	0.3 %
133Cs (KED)	0.039 ppb	394 cps	7.6 %
138Ba (KED)	3.223 ppb	45,057 cps	1.1 %
139La (KED)	0.166 ppb	4,968 cps	1.1 %
140Ce (KED)	0.365 ppb	14,764 cps	1.3 %
141Pr (KED)	0.040 ppb	1,685 cps	0.9 %
142Nd (KED)	0.224 ppb	3,768 cps	2.8 %
152Sm (KED)	0.030 ppb	452 cps	6.8 %
153Eu (KED)	0.005 ppb	173 cps	0.0 %
158Gd (KED)	0.028 ppb	573 cps	2.3 %
159Tb (KED)	35.052 %	1,418,714 cps	1.1 %
164Dy (KED)	0.018 ppb	426 cps	3.5 %
166Er (KED)	0.005 ppb	329 cps	7.2 %
169Tm (KED)	0.001 ppb	108 cps	11.7 %
174Yb (KED)	0.008 ppb	266 cps	11.6 %
175Lu (KED)	-0.131 ppb	5,533 cps	4.4 %
205Tl (KED)	0.004 ppb	251 cps	19.9 %
208Pb (KED)	0.429 ppb	20,939 cps	1.3 %
209Bi (KED)	32.348 %	1,194,630 cps	0.3 %
232Th (KED)	0.046 ppb	3,960 cps	2.8 %
238U (KED)	0.011 ppb	1,162 cps	2.7 %