

Instrument Summary:

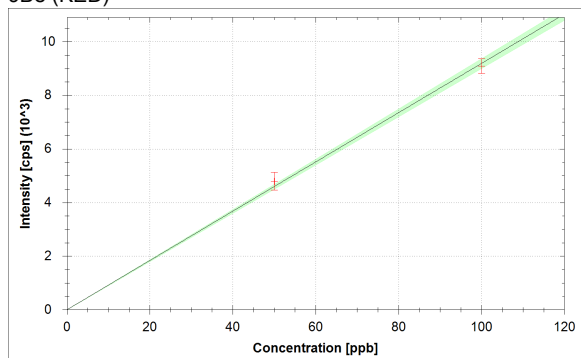
Instrument ID: iCAP Q
Serial Number: Undefined

Labbook Summary:

Path and filename: _Application Data\Workspace\LabBooks\wlw\20210923-1.imexp
Labbook created by: Administrator
Based on template:
Hardware configuration: iCAPQ1
Labbook type: eQuant
Qtegra version (last saved): 2.7.2425.154
Labbook started: 9/23/2021 3:38:52 PM
Labbook finished: 9/23/2021 5:17:02 PM

Calibration Curves:

9Be (KED)



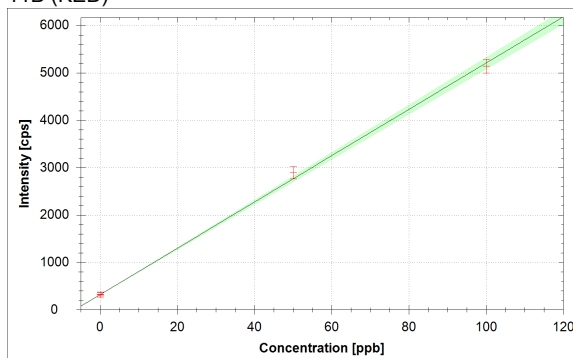
$$f(x) = 91.8761 \cdot x$$

$$R^2 = 0.9992$$

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

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

11B (KED)



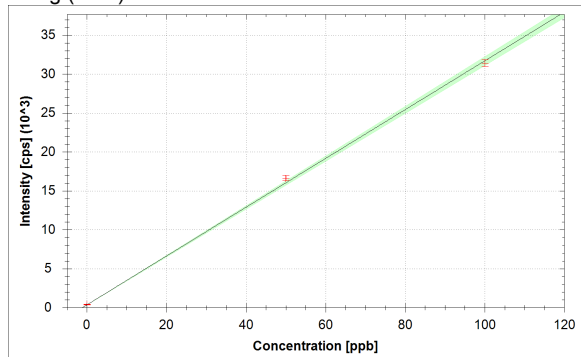
$$f(x) = 48.8658 \cdot x + 319.4717$$

$$R^2 = 0.9987$$

$$\text{BEC} = 6.538 \text{ ppb}$$

$$\text{LoD} = 2.0604 \text{ ppb}$$

24Mg (KED)



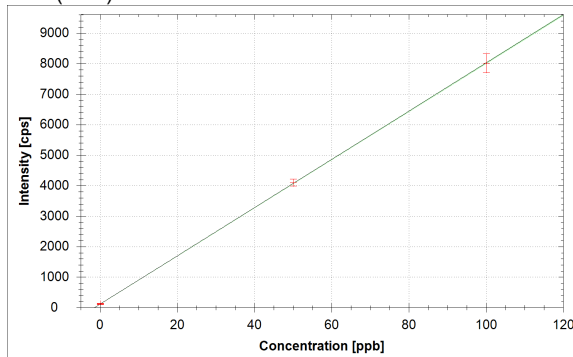
$$f(x) = 313.3845 \cdot x + 352.8878$$

$$R^2 = 0.9993$$

$$\text{BEC} = 1.126 \text{ ppb}$$

$$\text{LoD} = 0.1214 \text{ ppb}$$

27Al (KED)



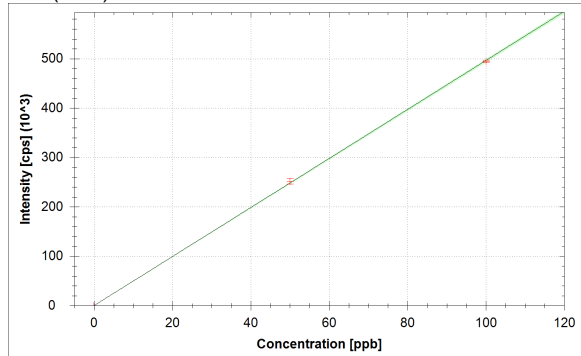
$$f(x) = 79.0834 \cdot x + 116.4351$$

$$R^2 = 1.0000$$

$$\text{BEC} = 1.472 \text{ ppb}$$

$$\text{LoD} = 0.0747 \text{ ppb}$$

51V (KED)



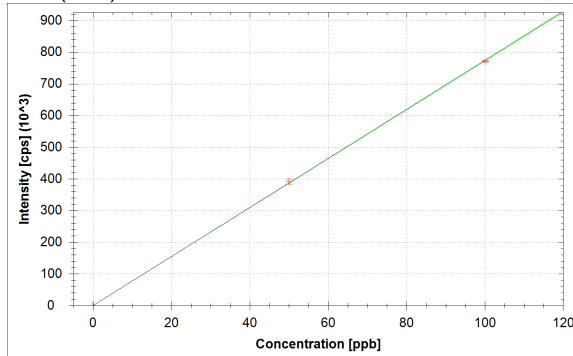
$$f(x) = 4962.9796 \cdot x + 6.5333$$

$$R^2 = 0.9999$$

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

$$\text{LoD} = 0.0061 \text{ ppb}$$

52Cr (KED)

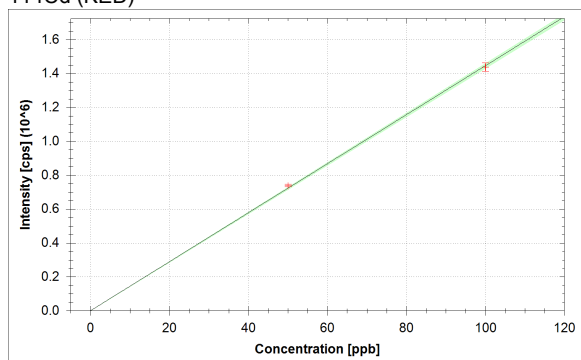


$$f(x) = 7736.5397 \cdot x + 115.3606$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.015 \text{ ppb}$$

$$\text{LoD} = 0.0075 \text{ ppb}$$

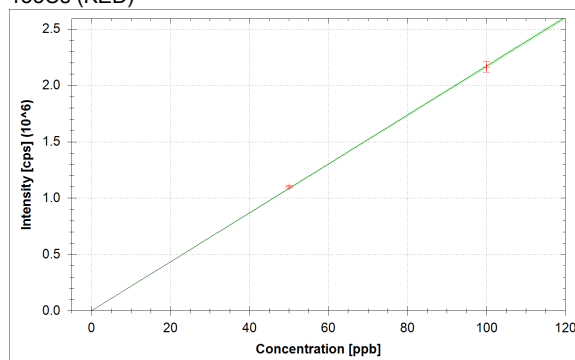
¹¹⁴Cd (KED)

$$f(x) = 14453.9274 \cdot x + 101.7178$$

$$R^2 = 0.9998$$

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

$$\text{LoD} = 0.0012 \text{ ppb}$$

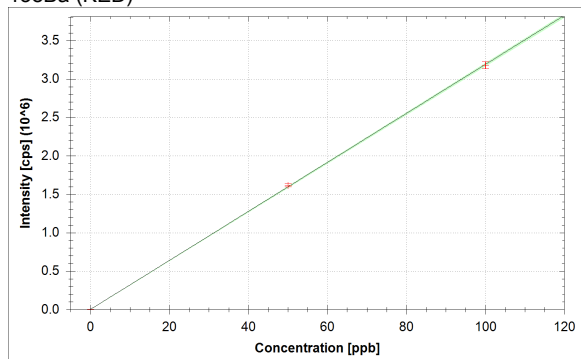
¹³³Cs (KED)

$$f(x) = 21694.3309 \cdot x + 59.4764$$

$$R^2 = 0.9999$$

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

$$\text{LoD} = 0.0012 \text{ ppb}$$

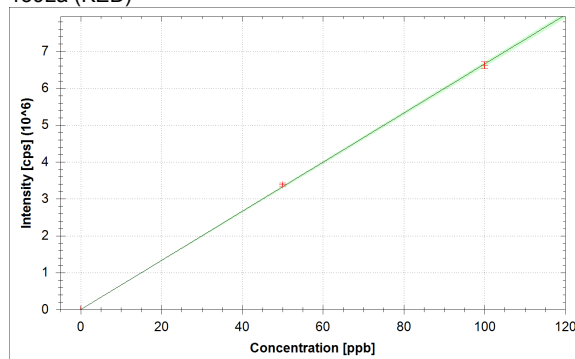
¹³⁸Ba (KED)

$$f(x) = 31866.9289 \cdot x + 2415.6309$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.076 \text{ ppb}$$

$$\text{LoD} = 0.0151 \text{ ppb}$$

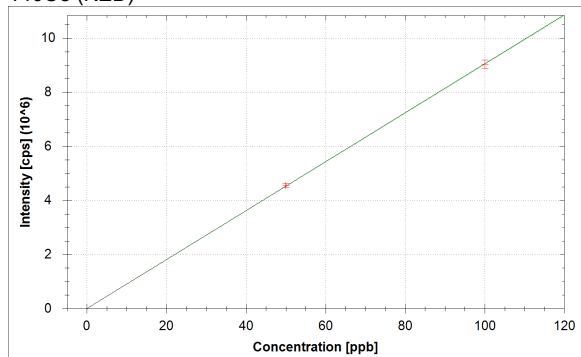
¹³⁹La (KED)

$$f(x) = 66538.7240 \cdot x + 147.9651$$

$$R^2 = 0.9998$$

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

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

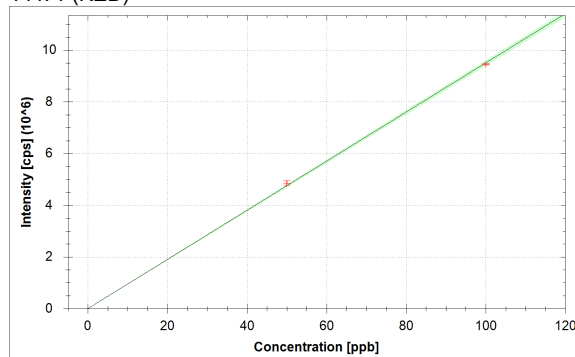
¹⁴⁰Ce (KED)

$$f(x) = 90464.8830 \cdot x + 442.6508$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.005 \text{ ppb}$$

$$\text{LoD} = 0.0014 \text{ ppb}$$

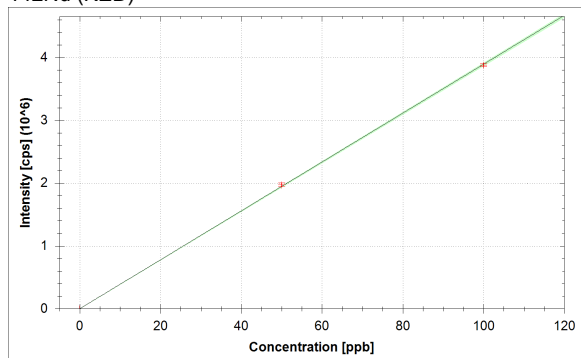
¹⁴¹Pr (KED)

$$f(x) = 95080.1055 \cdot x + 59.7900$$

$$R^2 = 0.9998$$

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

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

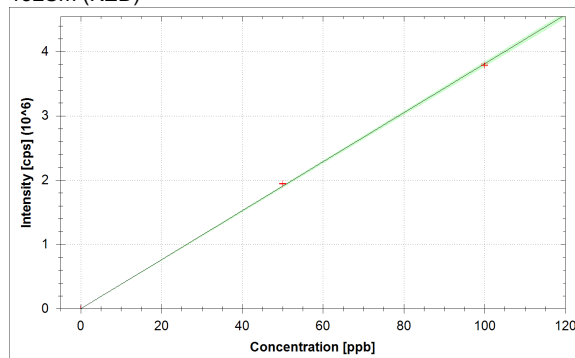
¹⁴²Nd (KED)

$$f(x) = 38910.5020 \cdot x + 111.0644$$

$$R^2 = 0.9999$$

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

$$\text{LoD} = 0.0025 \text{ ppb}$$

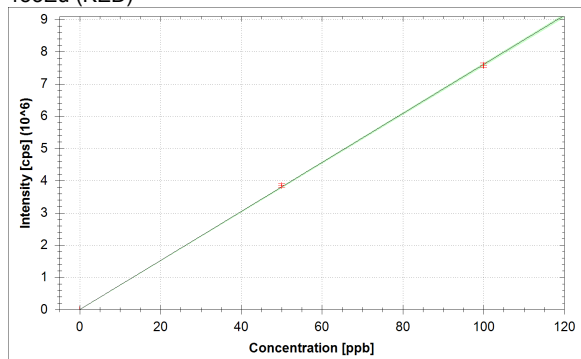
¹⁵²Sm (KED)

$$f(x) = 38081.9168 \cdot x + 15.2306$$

$$R^2 = 0.9998$$

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

$$\text{LoD} = 0.0006 \text{ ppb}$$

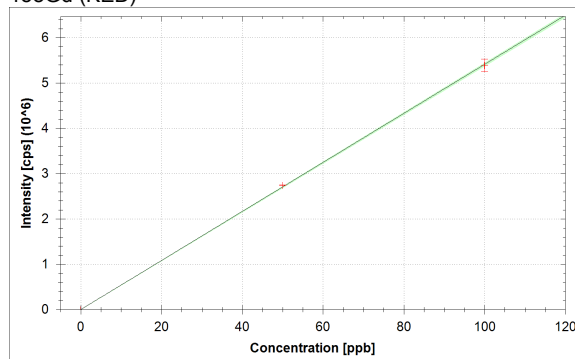
¹⁵³Eu (KED)

$$f(x) = 76042.0491 \cdot x + 9.7721$$

$$R^2 = 0.9999$$

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

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

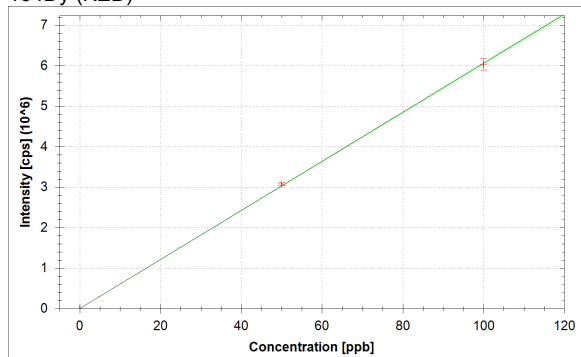
¹⁵⁸Gd (KED)

$$f(x) = 54107.6183 \cdot x + 17.4663$$

$$R^2 = 0.9999$$

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

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

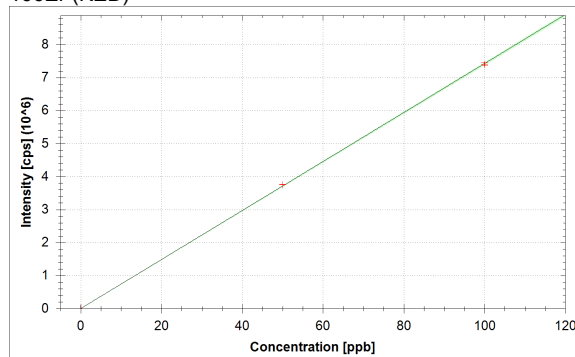
¹⁶⁴Dy (KED)

$$f(x) = 60593.5862 \cdot x + 36.8966$$

$$R^2 = 0.9999$$

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

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

¹⁶⁶Er (KED)

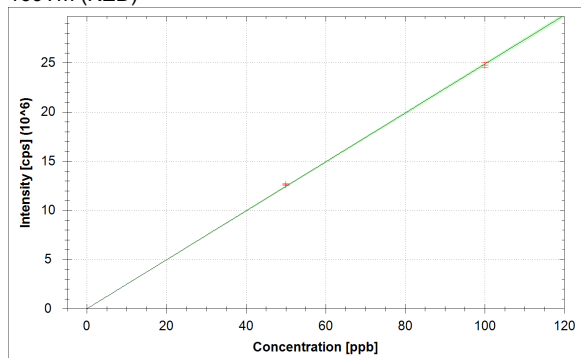
$$f(x) = 74229.0669 \cdot x + 738.4141$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.010 \text{ ppb}$$

$$\text{LoD} = 0.0019 \text{ ppb}$$

169Tm (KED)



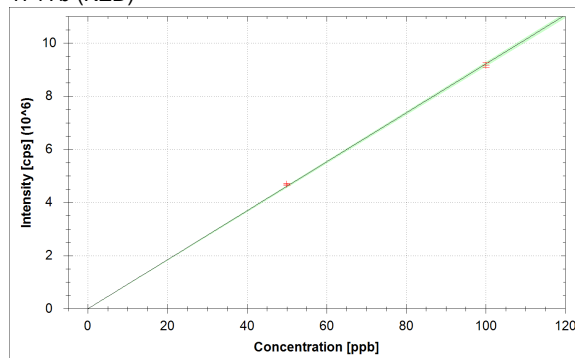
$$f(x) = 248681.1607 \cdot x + 28.2814$$

$$R^2 = 0.9999$$

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

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

174Yb (KED)



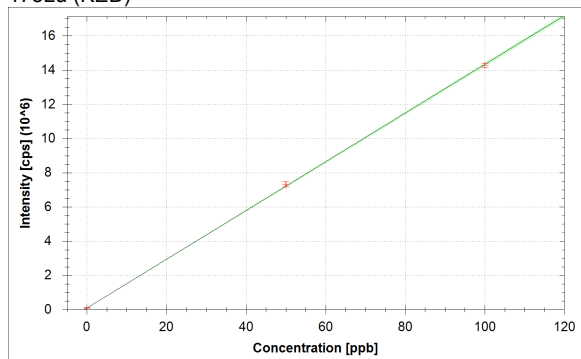
$$f(x) = 92089.9872 \cdot x + 46.6850$$

$$R^2 = 0.9999$$

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

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

175Lu (KED)



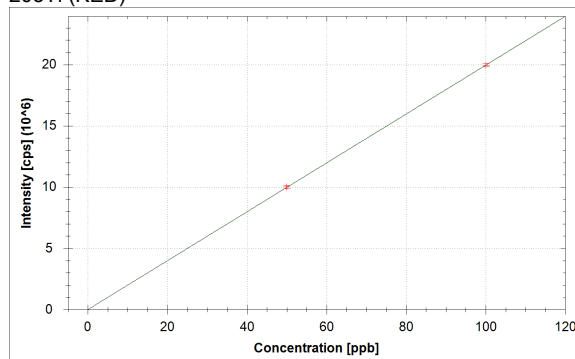
$$f(x) = 142460.9997 \cdot x + 88137.0518$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.619 \text{ ppb}$$

$$\text{LoD} = 0.0416 \text{ ppb}$$

205Tl (KED)



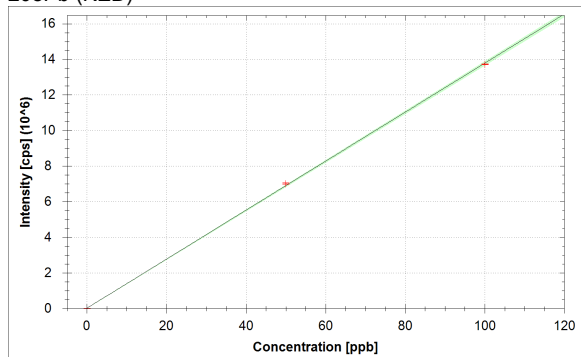
$$f(x) = 199576.6073 \cdot x + 76.1804$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.0005 \text{ ppb}$$

208Pb (KED)



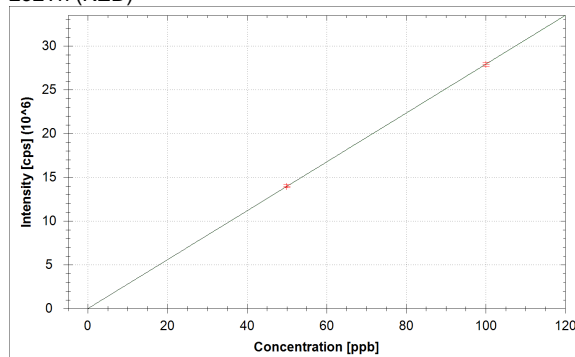
$$f(x) = 137593.6636 \cdot x + 22341.2353$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.162 \text{ ppb}$$

$$\text{LoD} = 0.0058 \text{ ppb}$$

232Th (KED)

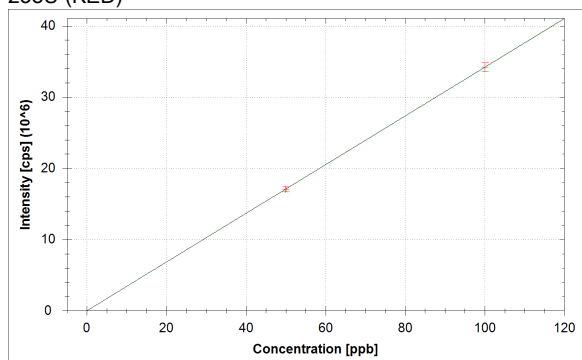


$$f(x) = 279214.7037 \cdot x + 299.1399$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.0006 \text{ ppb}$$

²³⁸U (KED)

$$f(x) = 341860.5544 \cdot x + 160.9892$$

$$R^2 = 1.0000$$

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

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

Standards:

Analysis Index: 3
 Analysis Name: 0+20
 Analysis Type: STD
 Analysis Started at: 9/23/2021 3:45:59 PM
 Standard (Stock): std0
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	102.592 %		
9Be (KED)	0.000 ppb		0.000 ppb
11B (KED)	0.000 ppb	0.2 %	0.000 ppb
24Mg (KED)	0.000 ppb	0.1 %	0.000 ppb
27Al (KED)	0.000 ppb	0.2 %	0.000 ppb
45Sc (KED)	102.096 %		
51V (KED)	0.000 ppb	0.5 %	0.000 ppb
52Cr (KED)	0.000 ppb	0.1 %	0.000 ppb
55Mn (KED)	0.000 ppb	0.2 %	0.000 ppb
56Fe (KED)	0.000 ppb	0.0 %	0.000 ppb
58Ni (KED)	0.000 ppb	0.2 %	0.000 ppb
59Co (KED)	0.000 ppb	0.2 %	0.000 ppb
63Cu (KED)	0.000 ppb	0.1 %	0.000 ppb
64Zn (KED)	0.000 ppb	0.0 %	0.000 ppb
69Ga (KED)	0.000 ppb	0.1 %	0.000 ppb
75As (KED)	0.000 ppb	0.0 %	0.000 ppb
80Se (KED)	0.000 ppb	0.0 %	0.000 ppb
85Rb (KED)	0.000 ppb	0.2 %	0.000 ppb
88Sr (KED)	0.000 ppb	0.1 %	0.000 ppb
89Y (KED)	104.591 %		
107Ag (KED)	0.000 ppb	0.2 %	0.000 ppb
114Cd (KED)	0.000 ppb	0.2 %	0.000 ppb
115In (KED)	102.730 %		
133Cs (KED)	0.000 ppb	0.2 %	0.000 ppb
138Ba (KED)	0.000 ppb	0.0 %	0.000 ppb
139La (KED)	0.000 ppb	0.1 %	0.000 ppb
140Ce (KED)	0.000 ppb	0.1 %	0.000 ppb
141Pr (KED)	0.000 ppb	0.2 %	0.000 ppb
142Nd (KED)	0.000 ppb	0.1 %	0.000 ppb
152Sm (KED)	0.000 ppb	0.1 %	0.000 ppb
153Eu (KED)	0.000 ppb	0.3 %	0.000 ppb
158Gd (KED)	0.000 ppb	0.6 %	0.000 ppb
159Tb (KED)	102.122 %		
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	0.1 %	0.000 ppb
174Yb (KED)	0.000 ppb	0.3 %	0.000 ppb
175Lu (KED)	0.000 ppb	0.0 %	0.000 ppb
205Tl (KED)	0.000 ppb	0.1 %	0.000 ppb
208Pb (KED)	0.000 ppb	0.0 %	0.000 ppb
209Bi (KED)	102.142 %		
232Th (KED)	0.000 ppb	0.0 %	0.000 ppb
238U (KED)	0.000 ppb	0.1 %	0.000 ppb

Standards:

Analysis Index: 4
 Analysis Name: 50+20
 Analysis Type: STD
 Analysis Started at: 9/23/2021 3:49:36 PM
 Standard (Stock): std1
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	103.875 %		
9Be (KED)	52.130 ppb	6.9 %	50.000 ppb
11B (KED)	52.641 ppb	5.1 %	50.000 ppb
24Mg (KED)	51.933 ppb	2.0 %	50.000 ppb
27Al (KED)	50.282 ppb	2.9 %	50.000 ppb
45Sc (KED)	106.674 %		
51V (KED)	50.660 ppb	2.3 %	50.000 ppb
52Cr (KED)	50.619 ppb	2.0 %	50.000 ppb
55Mn (KED)	50.608 ppb	2.3 %	50.000 ppb
56Fe (KED)	50.865 ppb	2.1 %	50.000 ppb
58Ni (KED)	51.075 ppb	2.2 %	50.000 ppb
59Co (KED)	51.583 ppb	1.9 %	50.000 ppb
63Cu (KED)	51.123 ppb	0.5 %	50.000 ppb
64Zn (KED)	50.575 ppb	1.0 %	50.000 ppb
69Ga (KED)	50.319 ppb	0.6 %	50.000 ppb
75As (KED)	51.026 ppb	1.0 %	50.000 ppb
80Se (KED)	51.288 ppb	1.6 %	50.000 ppb
85Rb (KED)	50.713 ppb	1.1 %	50.000 ppb
88Sr (KED)	50.774 ppb	1.7 %	50.000 ppb
89Y (KED)	106.952 %		
107Ag (KED)	51.635 ppb	0.7 %	50.000 ppb
114Cd (KED)	51.084 ppb	1.2 %	50.000 ppb
115In (KED)	104.977 %		
133Cs (KED)	50.679 ppb	1.1 %	50.000 ppb
138Ba (KED)	50.679 ppb	1.4 %	50.000 ppb
139La (KED)	50.967 ppb	1.2 %	50.000 ppb
140Ce (KED)	50.346 ppb	1.7 %	50.000 ppb
141Pr (KED)	51.104 ppb	1.7 %	50.000 ppb
142Nd (KED)	50.694 ppb	1.4 %	50.000 ppb
152Sm (KED)	51.027 ppb	0.3 %	50.000 ppb
153Eu (KED)	50.633 ppb	1.4 %	50.000 ppb
158Gd (KED)	50.721 ppb	0.2 %	50.000 ppb
159Tb (KED)	104.524 %		
164Dy (KED)	50.741 ppb	1.3 %	50.000 ppb
166Er (KED)	50.576 ppb	0.2 %	50.000 ppb
169Tm (KED)	50.785 ppb	0.6 %	50.000 ppb
174Yb (KED)	50.883 ppb	0.7 %	50.000 ppb
175Lu (KED)	50.732 ppb	1.9 %	50.000 ppb
205Tl (KED)	50.102 ppb	1.5 %	50.000 ppb
208Pb (KED)	50.868 ppb	0.6 %	50.000 ppb
209Bi (KED)	103.071 %		
232Th (KED)	50.051 ppb	1.2 %	50.000 ppb
238U (KED)	49.862 ppb	2.1 %	50.000 ppb

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Main Runs:	Survey Runs:	Start Time:	User name:
1	water	3	0	9/23/2021 3:38:58 PM	WINDOWS-UPCI4ER\Administrator
2	blk	3	0	9/23/2021 3:42:04 PM	WINDOWS-UPCI4ER\Administrator
3	0+20	3	0	9/23/2021 3:45:59 PM	WINDOWS-UPCI4ER\Administrator
4	50+20	3	0	9/23/2021 3:49:36 PM	WINDOWS-UPCI4ER\Administrator
5	100+20	3	0	9/23/2021 3:53:26 PM	WINDOWS-UPCI4ER\Administrator
6	20258jian	3	0	9/23/2021 3:57:10 PM	WINDOWS-UPCI4ER\Administrator
7	3fu	3	0	9/23/2021 4:01:11 PM	WINDOWS-UPCI4ER\Administrator
8	29977jian	3	0	9/23/2021 4:04:51 PM	WINDOWS-UPCI4ER\Administrator
9	1jian	3	0	9/23/2021 4:08:26 PM	WINDOWS-UPCI4ER\Administrator
10	28737jian	3	0	9/23/2021 4:11:57 PM	WINDOWS-UPCI4ER\Administrator
11	001jian	3	0	9/23/2021 4:15:42 PM	WINDOWS-UPCI4ER\Administrator
12	0955jian	3	0	9/23/2021 4:19:13 PM	WINDOWS-UPCI4ER\Administrator
13	028727jian	3	0	9/23/2021 4:22:56 PM	WINDOWS-UPCI4ER\Administrator
14	024982jian	3	0	9/23/2021 4:26:26 PM	WINDOWS-UPCI4ER\Administrator
15	09260jian	3	0	9/23/2021 4:30:01 PM	WINDOWS-UPCI4ER\Administrator
16	163380jian	3	0	9/23/2021 4:33:31 PM	WINDOWS-UPCI4ER\Administrator
17	024965jian	3	0	9/23/2021 4:37:06 PM	WINDOWS-UPCI4ER\Administrator
18	028728jian	3	0	9/23/2021 4:40:37 PM	WINDOWS-UPCI4ER\Administrator
19	011048jian	3	0	9/23/2021 4:44:12 PM	WINDOWS-UPCI4ER\Administrator
20	010195jian	3	0	9/23/2021 4:47:39 PM	WINDOWS-UPCI4ER\Administrator
21	029899jian	3	0	9/23/2021 4:51:10 PM	WINDOWS-UPCI4ER\Administrator
22	029767jian	3	0	9/23/2021 4:54:37 PM	WINDOWS-UPCI4ER\Administrator
23	01737jian	3	0	9/23/2021 4:58:02 PM	WINDOWS-UPCI4ER\Administrator
24	011048jian	3	0	9/23/2021 5:01:23 PM	WINDOWS-UPCI4ER\Administrator
25	010231jian	3	0	9/23/2021 5:04:48 PM	WINDOWS-UPCI4ER\Administrator
26	0960jian	1	0	9/23/2021 5:08:20 PM	WINDOWS-UPCI4ER\Administrator
27	010176jian	1	0	9/23/2021 5:10:30 PM	WINDOWS-UPCI4ER\Administrator
28	010254jian	1	0	9/23/2021 5:12:39 PM	WINDOWS-UPCI4ER\Administrator
29	011055jian	1	0	9/23/2021 5:14:50 PM	WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Intensity average	Intensity RSD
114Cd (KED)	110.014 ppb	6 cps	34.6 %
115In (KED)	0.000 %	4 cps	43.3 %
133Cs (KED)	109.950 ppb	7 cps	100.0 %
138Ba (KED)	Infinity ppb	104 cps	37.3 %
139La (KED)		1 cps	173.2 %
140Ce (KED)		8 cps	89.2 %
141Pr (KED)		1 cps	173.2 %
142Nd (KED)		1 cps	173.2 %
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)	16.838 ppb	23 cps	75.6 %
208Pb (KED)	46.059 ppb	60 cps	44.1 %
209Bi (KED)	0.002 %	146 cps	125.6 %
232Th (KED)	1.615 ppb	3 cps	0.0 %
238U (KED)	17.763 ppb	126 cps	131.9 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 2

Analysis name: blk

Analysis started at: 9/23/2021 3:42:04 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	100.000 %	
9Be (KED)	0.000 ppb	
11B (KED)	0.057 ppb	1,211.4 %
24Mg (KED)	0.222 ppb	18.3 %
27Al (KED)	0.101 ppb	24.6 %
45Sc (KED)	100.000 %	
51V (KED)	0.001 ppb	287.9 %
52Cr (KED)	-0.003 ppb	97.1 %
55Mn (KED)	0.005 ppb	126.9 %
56Fe (KED)	0.047 ppb	126.4 %
58Ni (KED)	-0.068 ppb	101.9 %
59Co (KED)	-0.001 ppb	248.1 %
63Cu (KED)	0.013 ppb	64.7 %
64Zn (KED)	0.018 ppb	585.4 %
69Ga (KED)	-0.001 ppb	1,596.7 %
75As (KED)	0.017 ppb	89.4 %
80Se (KED)	0.053 ppb	76.3 %
85Rb (KED)	0.003 ppb	150.1 %
88Sr (KED)	0.001 ppb	408.7 %
89Y (KED)	100.000 %	
107Ag (KED)	0.000 ppb	427.1 %
114Cd (KED)	0.000 ppb	213.7 %
115In (KED)	100.000 %	
133Cs (KED)	0.000 ppb	83.6 %
138Ba (KED)	0.003 ppb	159.9 %
139La (KED)	0.000 ppb	33.6 %
140Ce (KED)	0.000 ppb	185.5 %
141Pr (KED)	0.000 ppb	86.0 %
142Nd (KED)	0.000 ppb	602.5 %
152Sm (KED)	0.000 ppb	195.9 %
153Eu (KED)	0.000 ppb	278.6 %
158Gd (KED)	0.000 ppb	267.1 %
159Tb (KED)	100.000 %	
164Dy (KED)	0.000 ppb	31.1 %
166Er (KED)	0.001 ppb	75.8 %
169Tm (KED)	0.000 ppb	115.7 %
174Yb (KED)	0.000 ppb	83.7 %
175Lu (KED)	0.136 ppb	10.2 %
205Tl (KED)	0.000 ppb	13,387.3 %
208Pb (KED)	-0.001 ppb	162.4 %
209Bi (KED)	100.000 %	
232Th (KED)	0.000 ppb	106.7 %
238U (KED)	0.000 ppb	119.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	100.000 %	4,417 cps	1.7 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	0.057 ppb	322 cps	10.5 %
24Mg (KED)	0.222 ppb	422 cps	2.0 %
27Al (KED)	0.101 ppb	124 cps	1.5 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	100.000 %	54,840 cps	0.2 %
51V (KED)	0.001 ppb	10 cps	100.0 %
52Cr (KED)	-0.003 ppb	96 cps	20.1 %
55Mn (KED)	0.005 ppb	156 cps	15.2 %
56Fe (KED)	0.047 ppb	4,180 cps	9.8 %
58Ni (KED)	-0.068 ppb	3,153 cps	20.6 %
59Co (KED)	-0.001 ppb	113 cps	25.6 %
63Cu (KED)	0.013 ppb	1,088 cps	9.3 %
64Zn (KED)	0.018 ppb	5,811 cps	4.6 %
69Ga (KED)	-0.001 ppb	81 cps	37.3 %
75As (KED)	0.017 ppb	28 cps	48.5 %
80Se (KED)	0.053 ppb	594 cps	2.3 %
85Rb (KED)	0.003 ppb	34 cps	47.7 %
88Sr (KED)	0.001 ppb	262 cps	6.3 %
89Y (KED)	100.000 %	563,331 cps	0.6 %
107Ag (KED)	0.000 ppb	43 cps	42.8 %
114Cd (KED)	0.000 ppb	104 cps	6.6 %
115In (KED)	100.000 %	1,192,673 cps	1.2 %
133Cs (KED)	0.000 ppb	49 cps	17.2 %
138Ba (KED)	0.003 ppb	2,515 cps	5.3 %
139La (KED)	0.000 ppb	129 cps	4.0 %
140Ce (KED)	0.000 ppb	419 cps	8.9 %
141Pr (KED)	0.000 ppb	51 cps	13.6 %
142Nd (KED)	0.000 ppb	106 cps	30.3 %
152Sm (KED)	0.000 ppb	11 cps	75.5 %
153Eu (KED)	0.000 ppb	13 cps	75.0 %
158Gd (KED)	0.000 ppb	20 cps	33.3 %
159Tb (KED)	100.000 %	7,582,228 cps	1.4 %
164Dy (KED)	0.000 ppb	47 cps	7.1 %
166Er (KED)	0.001 ppb	799 cps	4.4 %
169Tm (KED)	0.000 ppb	21 cps	39.7 %
174Yb (KED)	0.000 ppb	57 cps	15.6 %
175Lu (KED)	0.136 ppb	107,503 cps	3.1 %
205Tl (KED)	0.000 ppb	77 cps	41.9 %
208Pb (KED)	-0.001 ppb	22,177 cps	1.5 %
209Bi (KED)	100.000 %	7,640,626 cps	1.3 %
232Th (KED)	0.000 ppb	356 cps	16.5 %
238U (KED)	0.000 ppb	182 cps	13.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 3

Analysis name: 0+20

Analysis started at: 9/23/2021 3:45:59 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	102.592 %	
9Be (KED)	0.000 ppb	
11B (KED)	0.000 ppb	0.2 %
24Mg (KED)	0.000 ppb	0.1 %
27Al (KED)	0.000 ppb	0.2 %
45Sc (KED)	102.096 %	
51V (KED)	0.000 ppb	0.5 %
52Cr (KED)	0.000 ppb	0.1 %
55Mn (KED)	0.000 ppb	0.2 %
56Fe (KED)	0.000 ppb	0.0 %
58Ni (KED)	0.000 ppb	0.2 %
59Co (KED)	0.000 ppb	0.2 %
63Cu (KED)	0.000 ppb	0.1 %
64Zn (KED)	0.000 ppb	0.0 %
69Ga (KED)	0.000 ppb	0.1 %
75As (KED)	0.000 ppb	0.0 %
80Se (KED)	0.000 ppb	0.0 %
85Rb (KED)	0.000 ppb	0.2 %
88Sr (KED)	0.000 ppb	0.1 %
89Y (KED)	104.591 %	
107Ag (KED)	0.000 ppb	0.2 %
114Cd (KED)	0.000 ppb	0.2 %
115In (KED)	102.730 %	
133Cs (KED)	0.000 ppb	0.2 %
138Ba (KED)	0.000 ppb	0.0 %
139La (KED)	0.000 ppb	0.1 %
140Ce (KED)	0.000 ppb	0.1 %
141Pr (KED)	0.000 ppb	0.2 %
142Nd (KED)	0.000 ppb	0.1 %
152Sm (KED)	0.000 ppb	0.1 %
153Eu (KED)	0.000 ppb	0.3 %
158Gd (KED)	0.000 ppb	0.6 %
159Tb (KED)	102.122 %	
164Dy (KED)	0.000 ppb	0.6 %
166Er (KED)	0.000 ppb	0.1 %
169Tm (KED)	0.000 ppb	0.1 %
174Yb (KED)	0.000 ppb	0.3 %
175Lu (KED)	0.000 ppb	0.0 %
205Tl (KED)	0.000 ppb	0.1 %
208Pb (KED)	0.000 ppb	0.0 %
209Bi (KED)	102.142 %	
232Th (KED)	0.000 ppb	0.0 %
238U (KED)	0.000 ppb	0.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	102.592 %	4,532 cps	3.9 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	0.000 ppb	327 cps	13.4 %
24Mg (KED)	0.000 ppb	361 cps	7.4 %
27Al (KED)	0.000 ppb	119 cps	20.7 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	102.096 %	55,990 cps	0.2 %
51V (KED)	0.000 ppb	7 cps	50.0 %
52Cr (KED)	0.000 ppb	118 cps	8.6 %
55Mn (KED)	0.000 ppb	140 cps	21.4 %
56Fe (KED)	0.000 ppb	3,930 cps	2.4 %
58Ni (KED)	0.000 ppb	3,868 cps	20.2 %
59Co (KED)	0.000 ppb	128 cps	17.4 %
63Cu (KED)	0.000 ppb	972 cps	9.4 %
64Zn (KED)	0.000 ppb	6,026 cps	3.4 %
69Ga (KED)	0.000 ppb	87 cps	6.7 %
75As (KED)	0.000 ppb	13 cps	0.0 %
80Se (KED)	0.000 ppb	608 cps	5.0 %
85Rb (KED)	0.000 ppb	24 cps	15.7 %
88Sr (KED)	0.000 ppb	270 cps	9.8 %
89Y (KED)	104.591 %	589,195 cps	1.2 %
107Ag (KED)	0.000 ppb	49 cps	20.8 %
114Cd (KED)	0.000 ppb	104 cps	14.7 %
115In (KED)	102.730 %	1,225,230 cps	0.5 %
133Cs (KED)	0.000 ppb	61 cps	16.7 %
138Ba (KED)	0.000 ppb	2,467 cps	3.1 %
139La (KED)	0.000 ppb	151 cps	7.7 %
140Ce (KED)	0.000 ppb	452 cps	7.4 %
141Pr (KED)	0.000 ppb	61 cps	19.2 %
142Nd (KED)	0.000 ppb	113 cps	13.5 %
152Sm (KED)	0.000 ppb	16 cps	12.4 %
153Eu (KED)	0.000 ppb	10 cps	33.3 %
158Gd (KED)	0.000 ppb	18 cps	60.3 %
159Tb (KED)	102.122 %	7,743,150 cps	1.0 %
164Dy (KED)	0.000 ppb	38 cps	57.4 %
166Er (KED)	0.000 ppb	754 cps	9.5 %
169Tm (KED)	0.000 ppb	29 cps	6.7 %
174Yb (KED)	0.000 ppb	48 cps	34.4 %
175Lu (KED)	0.000 ppb	89,989 cps	3.0 %
205Tl (KED)	0.000 ppb	78 cps	6.5 %
208Pb (KED)	0.000 ppb	22,822 cps	2.8 %
209Bi (KED)	102.142 %	7,804,308 cps	0.9 %
232Th (KED)	0.000 ppb	306 cps	1.7 %
238U (KED)	0.000 ppb	164 cps	14.4 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 4

Analysis name: 50+20

Analysis started at: 9/23/2021 3:49:36 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	103.875 %	
9Be (KED)	52.130 ppb	6.9 %
11B (KED)	52.641 ppb	5.1 %
24Mg (KED)	51.933 ppb	2.0 %
27Al (KED)	50.282 ppb	2.9 %
45Sc (KED)	106.674 %	
51V (KED)	50.660 ppb	2.3 %
52Cr (KED)	50.619 ppb	2.0 %
55Mn (KED)	50.608 ppb	2.3 %
56Fe (KED)	50.865 ppb	2.1 %
58Ni (KED)	51.075 ppb	2.2 %
59Co (KED)	51.583 ppb	1.9 %
63Cu (KED)	51.123 ppb	0.5 %
64Zn (KED)	50.575 ppb	1.0 %
69Ga (KED)	50.319 ppb	0.6 %
75As (KED)	51.026 ppb	1.0 %
80Se (KED)	51.288 ppb	1.6 %
85Rb (KED)	50.713 ppb	1.1 %
88Sr (KED)	50.774 ppb	1.7 %
89Y (KED)	106.952 %	
107Ag (KED)	51.635 ppb	0.7 %
114Cd (KED)	51.084 ppb	1.2 %
115In (KED)	104.977 %	
133Cs (KED)	50.679 ppb	1.1 %
138Ba (KED)	50.679 ppb	1.4 %
139La (KED)	50.967 ppb	1.2 %
140Ce (KED)	50.346 ppb	1.7 %
141Pr (KED)	51.104 ppb	1.7 %
142Nd (KED)	50.694 ppb	1.4 %
152Sm (KED)	51.027 ppb	0.3 %
153Eu (KED)	50.633 ppb	1.4 %
158Gd (KED)	50.721 ppb	0.2 %
159Tb (KED)	104.524 %	
164Dy (KED)	50.741 ppb	1.3 %
166Er (KED)	50.576 ppb	0.2 %
169Tm (KED)	50.785 ppb	0.6 %
174Yb (KED)	50.883 ppb	0.7 %
175Lu (KED)	50.732 ppb	1.9 %
205Tl (KED)	50.102 ppb	1.5 %
208Pb (KED)	50.868 ppb	0.6 %
209Bi (KED)	103.071 %	
232Th (KED)	50.051 ppb	1.2 %
238U (KED)	49.862 ppb	2.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	103.875 %	4,589 cps	1.7 %
9Be (KED)	52.130 ppb	4,972 cps	5.8 %
11B (KED)	52.641 ppb	3,003 cps	3.2 %
24Mg (KED)	51.933 ppb	17,269 cps	0.7 %
27Al (KED)	50.282 ppb	4,364 cps	0.8 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	106.674 %	58,500 cps	2.5 %
51V (KED)	50.660 ppb	268,109 cps	0.4 %
52Cr (KED)	50.619 ppb	417,761 cps	1.4 %
55Mn (KED)	50.608 ppb	207,412 cps	1.0 %
56Fe (KED)	50.865 ppb	390,159 cps	0.6 %
58Ni (KED)	51.075 ppb	515,359 cps	0.4 %
59Co (KED)	51.583 ppb	864,937 cps	0.6 %
63Cu (KED)	51.123 ppb	656,795 cps	0.3 %
64Zn (KED)	50.575 ppb	163,160 cps	0.6 %
69Ga (KED)	50.319 ppb	197,745 cps	0.2 %
75As (KED)	51.026 ppb	47,099 cps	0.5 %
80Se (KED)	51.288 ppb	14,699 cps	1.6 %
85Rb (KED)	50.713 ppb	198,724 cps	1.5 %
88Sr (KED)	50.774 ppb	283,705 cps	1.1 %
89Y (KED)	106.952 %	602,496 cps	0.6 %
107Ag (KED)	51.635 ppb	2,152,512 cps	0.6 %
114Cd (KED)	51.084 ppb	775,221 cps	1.3 %
115In (KED)	104.977 %	1,252,027 cps	0.2 %
133Cs (KED)	50.679 ppb	1,154,223 cps	1.2 %
138Ba (KED)	50.679 ppb	1,690,486 cps	0.9 %
139La (KED)	50.967 ppb	3,544,687 cps	0.8 %
140Ce (KED)	50.346 ppb	4,760,864 cps	1.4 %
141Pr (KED)	51.104 ppb	5,078,666 cps	1.3 %
142Nd (KED)	50.694 ppb	2,061,776 cps	1.0 %
152Sm (KED)	51.027 ppb	2,031,152 cps	0.7 %
153Eu (KED)	50.633 ppb	4,024,215 cps	0.9 %
158Gd (KED)	50.721 ppb	2,868,557 cps	0.4 %
159Tb (KED)	104.524 %	7,925,250 cps	0.6 %
164Dy (KED)	50.741 ppb	3,213,648 cps	1.3 %
166Er (KED)	50.576 ppb	3,924,814 cps	0.4 %
169Tm (KED)	50.785 ppb	13,200,406 cps	0.5 %
174Yb (KED)	50.883 ppb	4,897,966 cps	1.3 %
175Lu (KED)	50.732 ppb	7,646,331 cps	1.9 %
205Tl (KED)	50.102 ppb	10,305,067 cps	1.1 %
208Pb (KED)	50.868 ppb	7,236,681 cps	1.0 %
209Bi (KED)	103.071 %	7,875,251 cps	1.6 %
232Th (KED)	50.051 ppb	14,402,716 cps	0.4 %
238U (KED)	49.862 ppb	17,565,810 cps	0.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 5

Analysis name: 100+20

Analysis started at: 9/23/2021 3:53:26 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	107.523 %	
9Be (KED)	98.935 ppb	3.0 %
11B (KED)	98.680 ppb	3.0 %
24Mg (KED)	99.034 ppb	1.4 %
27Al (KED)	99.859 ppb	4.0 %
45Sc (KED)	107.311 %	
51V (KED)	99.670 ppb	0.4 %
52Cr (KED)	99.690 ppb	0.4 %
55Mn (KED)	99.696 ppb	0.5 %
56Fe (KED)	99.567 ppb	1.5 %
58Ni (KED)	99.463 ppb	0.5 %
59Co (KED)	99.208 ppb	0.3 %
63Cu (KED)	99.438 ppb	1.6 %
64Zn (KED)	99.712 ppb	1.5 %
69Ga (KED)	99.840 ppb	2.8 %
75As (KED)	99.487 ppb	1.2 %
80Se (KED)	99.356 ppb	1.5 %
85Rb (KED)	99.644 ppb	1.6 %
88Sr (KED)	99.613 ppb	2.0 %
89Y (KED)	106.466 %	
107Ag (KED)	99.182 ppb	1.2 %
114Cd (KED)	99.458 ppb	1.8 %
115In (KED)	105.055 %	
133Cs (KED)	99.661 ppb	2.1 %
138Ba (KED)	99.661 ppb	1.5 %
139La (KED)	99.517 ppb	1.4 %
140Ce (KED)	99.827 ppb	1.6 %
141Pr (KED)	99.448 ppb	0.3 %
142Nd (KED)	99.653 ppb	0.6 %
152Sm (KED)	99.486 ppb	0.4 %
153Eu (KED)	99.684 ppb	0.9 %
158Gd (KED)	99.639 ppb	2.6 %
159Tb (KED)	104.741 %	
164Dy (KED)	99.630 ppb	2.4 %
166Er (KED)	99.712 ppb	0.6 %
169Tm (KED)	99.608 ppb	1.1 %
174Yb (KED)	99.559 ppb	0.9 %
175Lu (KED)	99.634 ppb	0.8 %
205Tl (KED)	99.949 ppb	0.7 %
208Pb (KED)	99.566 ppb	0.1 %
209Bi (KED)	101.642 %	
232Th (KED)	99.974 ppb	0.8 %
238U (KED)	100.069 ppb	1.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	107.523 %	4,750 cps	2.2 %
9Be (KED)	98.935 ppb	9,769 cps	0.8 %
11B (KED)	98.680 ppb	5,527 cps	2.0 %
24Mg (KED)	99.034 ppb	33,743 cps	0.9 %
27Al (KED)	99.859 ppb	8,597 cps	3.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	107.311 %	58,850 cps	1.1 %
51V (KED)	99.670 ppb	530,828 cps	1.1 %
52Cr (KED)	99.690 ppb	827,777 cps	1.3 %
55Mn (KED)	99.696 ppb	411,024 cps	0.9 %
56Fe (KED)	99.567 ppb	764,584 cps	1.8 %
58Ni (KED)	99.463 ppb	1,006,130 cps	1.4 %
59Co (KED)	99.208 ppb	1,673,801 cps	0.8 %
63Cu (KED)	99.438 ppb	1,270,647 cps	1.1 %
64Zn (KED)	99.712 ppb	314,227 cps	0.6 %
69Ga (KED)	99.840 ppb	390,389 cps	1.4 %
75As (KED)	99.487 ppb	91,393 cps	0.5 %
80Se (KED)	99.356 ppb	27,762 cps	0.7 %
85Rb (KED)	99.644 ppb	388,623 cps	1.3 %
88Sr (KED)	99.613 ppb	553,755 cps	1.0 %
89Y (KED)	106.466 %	599,753 cps	1.4 %
107Ag (KED)	99.182 ppb	4,137,197 cps	0.8 %
114Cd (KED)	99.458 ppb	1,510,227 cps	1.8 %
115In (KED)	105.055 %	1,252,968 cps	1.6 %
133Cs (KED)	99.661 ppb	2,270,919 cps	0.6 %
138Ba (KED)	99.661 ppb	3,328,683 cps	0.6 %
139La (KED)	99.517 ppb	6,935,415 cps	1.1 %
140Ce (KED)	99.827 ppb	9,459,743 cps	2.1 %
141Pr (KED)	99.448 ppb	9,904,047 cps	1.2 %
142Nd (KED)	99.653 ppb	4,061,496 cps	1.1 %
152Sm (KED)	99.486 ppb	3,968,302 cps	1.1 %
153Eu (KED)	99.684 ppb	7,939,826 cps	1.7 %
158Gd (KED)	99.639 ppb	5,645,986 cps	1.7 %
159Tb (KED)	104.741 %	7,941,702 cps	0.9 %
164Dy (KED)	99.630 ppb	6,322,325 cps	1.6 %
166Er (KED)	99.712 ppb	7,753,094 cps	0.9 %
169Tm (KED)	99.608 ppb	25,944,197 cps	1.1 %
174Yb (KED)	99.559 ppb	9,602,613 cps	0.5 %
175Lu (KED)	99.634 ppb	14,959,529 cps	1.4 %
205Tl (KED)	99.949 ppb	20,273,976 cps	0.5 %
208Pb (KED)	99.566 ppb	13,947,402 cps	1.3 %
209Bi (KED)	101.642 %	7,766,103 cps	1.2 %
232Th (KED)	99.974 ppb	28,372,022 cps	1.0 %
238U (KED)	100.069 ppb	34,770,960 cps	2.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 6

Analysis name: 20258jian

Analysis started at: 9/23/2021 3:57:10 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	58.688 %	5.1 %
9Be (KED)	0.398 ppb	55.5 %
11B (KED)	41.126 ppb	11.1 %
24Mg (KED)	1,337.098 ppb	1.2 %
27Al (KED)	1,603.408 ppb	1.9 %
45Sc (KED)	59.586 %	2.9 %
51V (KED)	3.112 ppb	6.5 %
52Cr (KED)	7.111 ppb	3.8 %
55Mn (KED)	36.181 ppb	0.4 %
56Fe (KED)	1,585.886 ppb	0.8 %
58Ni (KED)	7.533 ppb	3.3 %
59Co (KED)	0.825 ppb	11.9 %
63Cu (KED)	11.194 ppb	0.3 %
64Zn (KED)	352.871 ppb	2.1 %
69Ga (KED)	3.452 ppb	4.9 %
75As (KED)	1.794 ppb	7.7 %
80Se (KED)	5.650 ppb	4.6 %
85Rb (KED)	3.944 ppb	1.5 %
88Sr (KED)	15.182 ppb	1.2 %
89Y (KED)	56.900 %	0.4 %
107Ag (KED)	0.248 ppb	17.1 %
114Cd (KED)	0.313 ppb	17.8 %
115In (KED)	52.233 %	1.2 %
133Cs (KED)	0.353 ppb	12.9 %
138Ba (KED)	13.040 ppb	2.4 %
139La (KED)	0.885 ppb	3.1 %
140Ce (KED)	1.911 ppb	1.8 %
141Pr (KED)	0.238 ppb	12.5 %
142Nd (KED)	1.179 ppb	1.2 %
152Sm (KED)	0.188 ppb	13.7 %
153Eu (KED)	0.059 ppb	45.2 %
158Gd (KED)	0.169 ppb	15.4 %
159Tb (KED)	54.715 %	0.9 %
164Dy (KED)	0.131 ppb	18.4 %
166Er (KED)	0.076 ppb	34.5 %
169Tm (KED)	0.029 ppb	98.8 %
174Yb (KED)	0.065 ppb	40.4 %
175Lu (KED)	-0.176 ppb	26.0 %
205Tl (KED)	0.060 ppb	46.8 %
208Pb (KED)	2.323 ppb	2.1 %
209Bi (KED)	49.303 %	1.5 %
232Th (KED)	0.553 ppb	31.5 %
238U (KED)	0.543 ppb	105.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	58.688 %	2,592 cps	5.1 %
9Be (KED)	0.398 ppb	21 cps	50.8 %
11B (KED)	41.126 ppb	1,365 cps	7.9 %
24Mg (KED)	1,337.098 ppb	246,043 cps	4.2 %
27Al (KED)	1,603.408 ppb	75,635 cps	4.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	59.586 %	32,677 cps	2.9 %
51V (KED)	3.112 ppb	9,198 cps	4.1 %
52Cr (KED)	7.111 ppb	32,826 cps	1.2 %
55Mn (KED)	36.181 ppb	82,877 cps	2.6 %
56Fe (KED)	1,585.886 ppb	6,726,889 cps	2.2 %
58Ni (KED)	7.533 ppb	44,377 cps	1.9 %
59Co (KED)	0.825 ppb	7,789 cps	9.0 %
63Cu (KED)	11.194 ppb	76,925 cps	0.3 %
64Zn (KED)	352.871 ppb	586,062 cps	2.1 %
69Ga (KED)	3.452 ppb	7,261 cps	4.7 %
75As (KED)	1.794 ppb	888 cps	7.6 %
80Se (KED)	5.650 ppb	1,156 cps	3.3 %
85Rb (KED)	3.944 ppb	8,234 cps	1.4 %
88Sr (KED)	15.182 ppb	45,240 cps	1.5 %
89Y (KED)	56.900 %	320,535 cps	0.4 %
107Ag (KED)	0.248 ppb	5,161 cps	15.9 %
114Cd (KED)	0.313 ppb	2,410 cps	16.2 %
115In (KED)	52.233 %	622,971 cps	1.2 %
133Cs (KED)	0.353 ppb	4,023 cps	11.6 %
138Ba (KED)	13.040 ppb	228,657 cps	1.5 %
139La (KED)	0.885 ppb	32,306 cps	3.0 %
140Ce (KED)	1.911 ppb	94,827 cps	1.8 %
141Pr (KED)	0.238 ppb	12,393 cps	12.5 %
142Nd (KED)	1.179 ppb	25,159 cps	1.4 %
152Sm (KED)	0.188 ppb	3,935 cps	14.0 %
153Eu (KED)	0.059 ppb	2,447 cps	45.2 %
158Gd (KED)	0.169 ppb	5,012 cps	15.4 %
159Tb (KED)	54.715 %	4,148,639 cps	0.9 %
164Dy (KED)	0.131 ppb	4,361 cps	18.3 %
166Er (KED)	0.076 ppb	3,497 cps	30.6 %
169Tm (KED)	0.029 ppb	3,896 cps	98.4 %
174Yb (KED)	0.065 ppb	3,290 cps	40.2 %
175Lu (KED)	-0.176 ppb	34,514 cps	10.4 %
205Tl (KED)	0.060 ppb	5,951 cps	47.4 %
208Pb (KED)	2.323 ppb	168,560 cps	1.2 %
209Bi (KED)	49.303 %	3,767,087 cps	1.5 %
232Th (KED)	0.553 ppb	76,463 cps	32.3 %
238U (KED)	0.543 ppb	92,065 cps	106.4 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	62.205 %	34,113 cps	2.3 %
51V (KED)	3.273 ppb	10,100 cps	3.2 %
52Cr (KED)	5.636 ppb	27,185 cps	0.8 %
55Mn (KED)	42.398 ppb	101,326 cps	0.8 %
56Fe (KED)	1,839.148 ppb	8,142,750 cps	0.8 %
58Ni (KED)	8.420 ppb	51,516 cps	0.6 %
59Co (KED)	0.936 ppb	9,226 cps	2.7 %
63Cu (KED)	9.727 ppb	66,157 cps	0.9 %
64Zn (KED)	396.763 ppb	651,113 cps	0.9 %
69Ga (KED)	3.079 ppb	6,406 cps	2.9 %
75As (KED)	1.977 ppb	967 cps	7.1 %
80Se (KED)	5.678 ppb	1,147 cps	6.9 %
85Rb (KED)	4.250 ppb	8,772 cps	2.1 %
88Sr (KED)	17.538 ppb	51,644 cps	2.1 %
89Y (KED)	56.259 %	316,922 cps	1.2 %
107Ag (KED)	0.212 ppb	4,256 cps	2.8 %
114Cd (KED)	0.335 ppb	2,488 cps	1.7 %
115In (KED)	50.314 %	600,088 cps	0.6 %
133Cs (KED)	0.361 ppb	3,976 cps	5.7 %
138Ba (KED)	10.700 ppb	176,280 cps	0.9 %
139La (KED)	1.030 ppb	35,255 cps	0.8 %
140Ce (KED)	2.272 ppb	105,751 cps	1.4 %
141Pr (KED)	0.258 ppb	12,626 cps	3.3 %
142Nd (KED)	1.386 ppb	27,733 cps	0.4 %
152Sm (KED)	0.199 ppb	3,898 cps	6.4 %
153Eu (KED)	0.046 ppb	1,811 cps	8.4 %
158Gd (KED)	0.179 ppb	4,988 cps	2.9 %
159Tb (KED)	51.336 %	3,892,415 cps	0.6 %
164Dy (KED)	0.129 ppb	4,034 cps	2.0 %
166Er (KED)	0.064 ppb	2,819 cps	6.0 %
169Tm (KED)	0.013 ppb	1,650 cps	44.1 %
174Yb (KED)	0.053 ppb	2,544 cps	11.1 %
175Lu (KED)	-0.240 ppb	27,699 cps	4.2 %
205Tl (KED)	0.037 ppb	3,218 cps	15.4 %
208Pb (KED)	2.202 ppb	140,482 cps	1.7 %
209Bi (KED)	43.189 %	3,299,875 cps	0.7 %
232Th (KED)	0.508 ppb	61,416 cps	0.3 %
238U (KED)	0.290 ppb	42,899 cps	3.1 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 8

Analysis name: 29977jian

Analysis started at: 9/23/2021 4:04:51 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	66.260 %	3.9 %
9Be (KED)	0.073 ppb	117.0 %
11B (KED)	38.841 ppb	6.7 %
24Mg (KED)	1,956.933 ppb	2.6 %
27Al (KED)	2,187.085 ppb	1.1 %
45Sc (KED)	66.309 %	1.8 %
51V (KED)	4.209 ppb	2.2 %
52Cr (KED)	5.973 ppb	1.6 %
55Mn (KED)	49.622 ppb	0.5 %
56Fe (KED)	2,153.767 ppb	1.0 %
58Ni (KED)	9.195 ppb	1.7 %
59Co (KED)	0.920 ppb	4.1 %
63Cu (KED)	16.833 ppb	0.4 %
64Zn (KED)	305.326 ppb	1.0 %
69Ga (KED)	5.920 ppb	0.4 %
75As (KED)	1.831 ppb	2.3 %
80Se (KED)	3.370 ppb	2.7 %
85Rb (KED)	6.328 ppb	2.2 %
88Sr (KED)	27.300 ppb	1.1 %
89Y (KED)	57.487 %	0.8 %
107Ag (KED)	0.198 ppb	4.2 %
114Cd (KED)	0.121 ppb	6.0 %
115In (KED)	49.806 %	1.0 %
133Cs (KED)	0.460 ppb	1.5 %
138Ba (KED)	20.879 ppb	1.3 %
139La (KED)	1.590 ppb	2.3 %
140Ce (KED)	3.340 ppb	1.0 %
141Pr (KED)	0.387 ppb	1.9 %
142Nd (KED)	2.011 ppb	2.0 %
152Sm (KED)	0.280 ppb	0.4 %
153Eu (KED)	0.061 ppb	6.6 %
158Gd (KED)	0.258 ppb	1.9 %
159Tb (KED)	50.085 %	0.9 %
164Dy (KED)	0.188 ppb	2.2 %
166Er (KED)	0.095 ppb	3.4 %
169Tm (KED)	0.016 ppb	7.4 %
174Yb (KED)	0.076 ppb	4.6 %
175Lu (KED)	-0.271 ppb	4.7 %
205Tl (KED)	0.043 ppb	1.4 %
208Pb (KED)	2.765 ppb	1.7 %
209Bi (KED)	40.474 %	1.7 %
232Th (KED)	0.788 ppb	2.0 %
238U (KED)	0.292 ppb	0.9 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	66.260 %	2,927 cps	3.9 %
9Be (KED)	0.073 ppb	4 cps	114.6 %
11B (KED)	38.841 ppb	1,471 cps	9.4 %
24Mg (KED)	1,956.933 ppb	406,354 cps	2.2 %
27Al (KED)	2,187.085 ppb	114,753 cps	1.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 9

Analysis name: 1jian

Analysis started at: 9/23/2021 4:08:26 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	64.977 %	1.2 %
9Be (KED)	0.130 ppb	65.1 %
11B (KED)	37.584 ppb	9.4 %
24Mg (KED)	2,217.675 ppb	3.3 %
27Al (KED)	2,080.141 ppb	1.1 %
45Sc (KED)	66.462 %	1.7 %
51V (KED)	4.332 ppb	0.7 %
52Cr (KED)	6.470 ppb	0.1 %
55Mn (KED)	57.952 ppb	0.7 %
56Fe (KED)	2,556.366 ppb	0.6 %
58Ni (KED)	11.734 ppb	8.5 %
59Co (KED)	1.190 ppb	1.5 %
63Cu (KED)	10.999 ppb	1.3 %
64Zn (KED)	344.238 ppb	1.1 %
69Ga (KED)	5.865 ppb	3.7 %
75As (KED)	2.023 ppb	3.5 %
80Se (KED)	4.231 ppb	20.4 %
85Rb (KED)	6.652 ppb	0.2 %
88Sr (KED)	27.265 ppb	0.9 %
89Y (KED)	57.237 %	0.6 %
107Ag (KED)	0.171 ppb	5.7 %
114Cd (KED)	0.157 ppb	4.2 %
115In (KED)	47.749 %	1.1 %
133Cs (KED)	0.475 ppb	5.2 %
138Ba (KED)	20.284 ppb	1.5 %
139La (KED)	1.794 ppb	0.8 %
140Ce (KED)	3.729 ppb	0.6 %
141Pr (KED)	0.432 ppb	0.4 %
142Nd (KED)	2.272 ppb	0.5 %
152Sm (KED)	0.320 ppb	3.1 %
153Eu (KED)	0.064 ppb	1.9 %
158Gd (KED)	0.295 ppb	2.8 %
159Tb (KED)	48.340 %	0.3 %
164Dy (KED)	0.210 ppb	3.1 %
166Er (KED)	0.104 ppb	2.9 %
169Tm (KED)	0.014 ppb	4.5 %
174Yb (KED)	0.078 ppb	4.0 %
175Lu (KED)	-0.279 ppb	4.5 %
205Tl (KED)	0.038 ppb	5.3 %
208Pb (KED)	2.957 ppb	1.8 %
209Bi (KED)	38.674 %	0.6 %
232Th (KED)	0.735 ppb	0.9 %
238U (KED)	0.360 ppb	1.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	64.977 %	2,870 cps	1.2 %
9Be (KED)	0.130 ppb	8 cps	65.5 %
11B (KED)	37.584 ppb	1,400 cps	6.8 %
24Mg (KED)	2,217.675 ppb	451,708 cps	2.3 %
27Al (KED)	2,080.141 ppb	109,423 cps	2.8 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	66.462 %	36,448 cps	1.7 %
51V (KED)	4.332 ppb	14,294 cps	2.2 %
52Cr (KED)	6.470 ppb	33,343 cps	1.7 %
55Mn (KED)	57.952 ppb	148,003 cps	1.0 %
56Fe (KED)	2,556.366 ppb	12,094,745 cps	1.7 %
58Ni (KED)	11.734 ppb	75,784 cps	9.6 %
59Co (KED)	1.190 ppb	12,520 cps	2.0 %
63Cu (KED)	10.999 ppb	76,040 cps	0.9 %
64Zn (KED)	344.238 ppb	575,164 cps	0.6 %
69Ga (KED)	5.865 ppb	12,376 cps	3.3 %
75As (KED)	2.023 ppb	1,007 cps	4.0 %
80Se (KED)	4.231 ppb	954 cps	13.8 %
85Rb (KED)	6.652 ppb	13,962 cps	0.8 %
88Sr (KED)	27.265 ppb	81,605 cps	1.3 %
89Y (KED)	57.237 %	322,432 cps	0.6 %
107Ag (KED)	0.171 ppb	3,263 cps	4.7 %
114Cd (KED)	0.157 ppb	1,134 cps	4.9 %
115In (KED)	47.749 %	569,492 cps	1.1 %
133Cs (KED)	0.475 ppb	4,945 cps	4.1 %
138Ba (KED)	20.284 ppb	313,622 cps	1.3 %
139La (KED)	1.794 ppb	57,777 cps	0.6 %
140Ce (KED)	3.729 ppb	163,288 cps	0.6 %
141Pr (KED)	0.432 ppb	19,867 cps	0.4 %
142Nd (KED)	2.272 ppb	42,781 cps	0.3 %
152Sm (KED)	0.320 ppb	5,895 cps	2.9 %
153Eu (KED)	0.064 ppb	2,350 cps	2.0 %
158Gd (KED)	0.295 ppb	7,737 cps	2.8 %
159Tb (KED)	48.340 %	3,665,272 cps	0.3 %
164Dy (KED)	0.210 ppb	6,180 cps	3.0 %
166Er (KED)	0.104 ppb	4,096 cps	2.8 %
169Tm (KED)	0.014 ppb	1,689 cps	4.4 %
174Yb (KED)	0.078 ppb	3,507 cps	4.1 %
175Lu (KED)	-0.279 ppb	23,388 cps	3.5 %
205Tl (KED)	0.038 ppb	2,976 cps	5.3 %
208Pb (KED)	2.957 ppb	166,002 cps	1.6 %
209Bi (KED)	38.674 %	2,954,898 cps	0.6 %
232Th (KED)	0.735 ppb	79,477 cps	1.2 %
238U (KED)	0.360 ppb	47,600 cps	1.2 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 10

Analysis name: 28737jian

Analysis started at: 9/23/2021 4:11:57 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	68.852 %	5.1 %
9Be (KED)	0.090 ppb	74.8 %
11B (KED)	39.310 ppb	8.8 %
24Mg (KED)	1,523.933 ppb	5.5 %
27Al (KED)	1,808.910 ppb	3.2 %
45Sc (KED)	67.858 %	1.4 %
51V (KED)	3.395 ppb	2.0 %
52Cr (KED)	4.833 ppb	2.4 %
55Mn (KED)	39.985 ppb	1.6 %
56Fe (KED)	1,723.445 ppb	1.8 %
58Ni (KED)	7.396 ppb	2.7 %
59Co (KED)	0.774 ppb	0.9 %
63Cu (KED)	11.199 ppb	0.7 %
64Zn (KED)	348.095 ppb	0.4 %
69Ga (KED)	4.537 ppb	5.4 %
75As (KED)	1.770 ppb	14.0 %
80Se (KED)	3.844 ppb	9.8 %
85Rb (KED)	6.044 ppb	0.7 %
88Sr (KED)	18.341 ppb	0.8 %
89Y (KED)	57.303 %	1.4 %
107Ag (KED)	0.119 ppb	1.3 %
114Cd (KED)	0.106 ppb	8.8 %
115In (KED)	49.221 %	0.8 %
133Cs (KED)	0.371 ppb	2.0 %
138Ba (KED)	15.636 ppb	2.4 %
139La (KED)	1.332 ppb	2.9 %
140Ce (KED)	2.887 ppb	1.1 %
141Pr (KED)	0.317 ppb	4.1 %
142Nd (KED)	1.704 ppb	1.7 %
152Sm (KED)	0.224 ppb	3.3 %
153Eu (KED)	0.045 ppb	6.0 %
158Gd (KED)	0.207 ppb	2.0 %
159Tb (KED)	49.157 %	1.2 %
164Dy (KED)	0.146 ppb	1.8 %
166Er (KED)	0.071 ppb	7.8 %
169Tm (KED)	0.010 ppb	9.5 %
174Yb (KED)	0.055 ppb	2.8 %
175Lu (KED)	-0.315 ppb	0.8 %
205Tl (KED)	0.033 ppb	8.9 %
208Pb (KED)	2.045 ppb	1.9 %
209Bi (KED)	39.365 %	1.7 %
232Th (KED)	0.488 ppb	2.3 %
238U (KED)	0.249 ppb	4.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	68.852 %	3,041 cps	5.1 %
9Be (KED)	0.090 ppb	6 cps	69.3 %
11B (KED)	39.310 ppb	1,539 cps	3.9 %
24Mg (KED)	1,523.933 ppb	328,439 cps	0.5 %
27Al (KED)	1,808.910 ppb	97,123 cps	1.8 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	67.858 %	37,213 cps	1.4 %
51V (KED)	3.395 ppb	11,436 cps	1.2 %
52Cr (KED)	4.833 ppb	25,446 cps	1.3 %
55Mn (KED)	39.985 ppb	104,287 cps	0.8 %
56Fe (KED)	1,723.445 ppb	8,324,836 cps	0.7 %
58Ni (KED)	7.396 ppb	49,683 cps	1.9 %
59Co (KED)	0.774 ppb	8,341 cps	0.5 %
63Cu (KED)	11.199 ppb	77,505 cps	1.9 %
64Zn (KED)	348.095 ppb	582,246 cps	1.0 %
69Ga (KED)	4.537 ppb	9,591 cps	4.1 %
75As (KED)	1.770 ppb	881 cps	12.5 %
80Se (KED)	3.844 ppb	898 cps	5.1 %
85Rb (KED)	6.044 ppb	12,701 cps	0.8 %
88Sr (KED)	18.341 ppb	55,003 cps	1.0 %
89Y (KED)	57.303 %	322,805 cps	1.4 %
107Ag (KED)	0.119 ppb	2,349 cps	0.8 %
114Cd (KED)	0.106 ppb	807 cps	7.5 %
115In (KED)	49.221 %	587,040 cps	0.8 %
133Cs (KED)	0.371 ppb	3,987 cps	1.5 %
138Ba (KED)	15.636 ppb	246,073 cps	1.3 %
139La (KED)	1.332 ppb	43,626 cps	2.7 %
140Ce (KED)	2.887 ppb	128,610 cps	1.2 %
141Pr (KED)	0.317 ppb	14,847 cps	3.1 %
142Nd (KED)	1.704 ppb	32,634 cps	0.5 %
152Sm (KED)	0.224 ppb	4,198 cps	4.1 %
153Eu (KED)	0.045 ppb	1,687 cps	4.8 %
158Gd (KED)	0.207 ppb	5,509 cps	0.8 %
159Tb (KED)	49.157 %	3,727,213 cps	1.2 %
164Dy (KED)	0.146 ppb	4,367 cps	1.3 %
166Er (KED)	0.071 ppb	2,941 cps	5.8 %
169Tm (KED)	0.010 ppb	1,262 cps	10.0 %
174Yb (KED)	0.055 ppb	2,526 cps	3.8 %
175Lu (KED)	-0.315 ppb	21,276 cps	0.4 %
205Tl (KED)	0.033 ppb	2,581 cps	7.2 %
208Pb (KED)	2.045 ppb	119,523 cps	0.8 %
209Bi (KED)	39.365 %	3,007,717 cps	1.7 %
232Th (KED)	0.488 ppb	53,747 cps	0.6 %
238U (KED)	0.249 ppb	33,530 cps	2.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 11

Analysis name: 001jian

Analysis started at: 9/23/2021 4:15:42 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	69.028 %	1.6 %
9Be (KED)	0.054 ppb	173.2 %
11B (KED)	14.113 ppb	9.7 %
24Mg (KED)	1,813.351 ppb	2.8 %
27Al (KED)	765.019 ppb	3.1 %
45Sc (KED)	65.074 %	0.8 %
51V (KED)	1.598 ppb	2.1 %
52Cr (KED)	3.082 ppb	3.0 %
55Mn (KED)	27.823 ppb	1.1 %
56Fe (KED)	880.202 ppb	1.6 %
58Ni (KED)	4.454 ppb	0.9 %
59Co (KED)	0.464 ppb	1.2 %
63Cu (KED)	15.865 ppb	1.3 %
64Zn (KED)	284.556 ppb	0.9 %
69Ga (KED)	2.372 ppb	2.7 %
75As (KED)	1.458 ppb	5.0 %
80Se (KED)	3.158 ppb	17.3 %
85Rb (KED)	2.304 ppb	2.9 %
88Sr (KED)	17.719 ppb	0.2 %
89Y (KED)	55.766 %	1.2 %
107Ag (KED)	0.202 ppb	2.9 %
114Cd (KED)	0.104 ppb	9.0 %
115In (KED)	49.131 %	0.3 %
133Cs (KED)	0.165 ppb	2.8 %
138Ba (KED)	8.477 ppb	2.7 %
139La (KED)	0.605 ppb	0.6 %
140Ce (KED)	1.286 ppb	0.3 %
141Pr (KED)	0.151 ppb	2.6 %
142Nd (KED)	0.787 ppb	2.0 %
152Sm (KED)	0.108 ppb	9.8 %
153Eu (KED)	0.023 ppb	21.4 %
158Gd (KED)	0.100 ppb	2.6 %
159Tb (KED)	48.700 %	1.1 %
164Dy (KED)	0.070 ppb	1.6 %
166Er (KED)	0.035 ppb	1.8 %
169Tm (KED)	0.005 ppb	17.5 %
174Yb (KED)	0.028 ppb	6.9 %
175Lu (KED)	-0.306 ppb	4.3 %
205Tl (KED)	0.017 ppb	6.4 %
208Pb (KED)	1.884 ppb	1.3 %
209Bi (KED)	40.051 %	0.9 %
232Th (KED)	0.234 ppb	2.1 %
238U (KED)	0.167 ppb	3.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	69.028 %	3,049 cps	1.6 %
9Be (KED)	0.054 ppb	3 cps	173.2 %
11B (KED)	14.113 ppb	697 cps	7.1 %
24Mg (KED)	1,813.351 ppb	392,401 cps	1.5 %
27Al (KED)	765.019 ppb	39,443 cps	3.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	65.074 %	35,687 cps	0.8 %
51V (KED)	1.598 ppb	5,166 cps	1.7 %
52Cr (KED)	3.082 ppb	15,590 cps	2.3 %
55Mn (KED)	27.823 ppb	69,629 cps	1.8 %
56Fe (KED)	880.202 ppb	4,079,202 cps	1.9 %
58Ni (KED)	4.454 ppb	29,679 cps	1.0 %
59Co (KED)	0.464 ppb	4,826 cps	1.8 %
63Cu (KED)	15.865 ppb	106,626 cps	0.9 %
64Zn (KED)	284.556 ppb	463,811 cps	1.5 %
69Ga (KED)	2.372 ppb	4,904 cps	3.6 %
75As (KED)	1.458 ppb	709 cps	5.7 %
80Se (KED)	3.158 ppb	776 cps	9.5 %
85Rb (KED)	2.304 ppb	4,720 cps	2.9 %
88Sr (KED)	17.719 ppb	51,723 cps	1.3 %
89Y (KED)	55.766 %	314,149 cps	1.2 %
107Ag (KED)	0.202 ppb	3,967 cps	3.0 %
114Cd (KED)	0.104 ppb	786 cps	8.3 %
115In (KED)	49.131 %	585,970 cps	0.3 %
133Cs (KED)	0.165 ppb	1,785 cps	2.7 %
138Ba (KED)	8.477 ppb	132,710 cps	1.8 %
139La (KED)	0.605 ppb	19,684 cps	1.2 %
140Ce (KED)	1.286 ppb	56,877 cps	1.1 %
141Pr (KED)	0.151 ppb	7,008 cps	1.8 %
142Nd (KED)	0.787 ppb	14,961 cps	1.6 %
152Sm (KED)	0.108 ppb	2,006 cps	9.5 %
153Eu (KED)	0.023 ppb	841 cps	21.8 %
158Gd (KED)	0.100 ppb	2,633 cps	3.6 %
159Tb (KED)	48.700 %	3,692,552 cps	1.1 %
164Dy (KED)	0.070 ppb	2,090 cps	1.7 %
166Er (KED)	0.035 ppb	1,635 cps	2.0 %
169Tm (KED)	0.005 ppb	604 cps	17.7 %
174Yb (KED)	0.028 ppb	1,283 cps	7.6 %
175Lu (KED)	-0.306 ppb	21,676 cps	5.3 %
205Tl (KED)	0.017 ppb	1,420 cps	7.1 %
208Pb (KED)	1.884 ppb	112,741 cps	0.5 %
209Bi (KED)	40.051 %	3,060,172 cps	0.9 %
232Th (KED)	0.234 ppb	26,340 cps	1.4 %
238U (KED)	0.167 ppb	22,943 cps	2.7 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 12

Analysis name: 0955jian

Analysis started at: 9/23/2021 4:19:13 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	63.292 %	4.7 %
9Be (KED)	0.075 ppb	115.7 %
11B (KED)	14.928 ppb	6.3 %
24Mg (KED)	1,581.557 ppb	4.7 %
27Al (KED)	1,067.820 ppb	0.7 %
45Sc (KED)	63.296 %	0.8 %
51V (KED)	1.920 ppb	1.8 %
52Cr (KED)	2.695 ppb	1.1 %
55Mn (KED)	27.968 ppb	0.8 %
56Fe (KED)	1,042.845 ppb	1.6 %
58Ni (KED)	4.572 ppb	2.0 %
59Co (KED)	0.500 ppb	4.9 %
63Cu (KED)	15.602 ppb	1.7 %
64Zn (KED)	327.618 ppb	0.5 %
69Ga (KED)	2.596 ppb	2.2 %
75As (KED)	1.235 ppb	3.1 %
80Se (KED)	3.285 ppb	19.8 %
85Rb (KED)	3.077 ppb	3.1 %
88Sr (KED)	15.953 ppb	1.6 %
89Y (KED)	54.898 %	1.2 %
107Ag (KED)	0.107 ppb	8.0 %
114Cd (KED)	0.080 ppb	8.6 %
115In (KED)	48.209 %	1.4 %
133Cs (KED)	0.226 ppb	5.5 %
138Ba (KED)	8.649 ppb	3.6 %
139La (KED)	0.660 ppb	1.3 %
140Ce (KED)	1.380 ppb	2.6 %
141Pr (KED)	0.158 ppb	3.1 %
142Nd (KED)	0.852 ppb	2.2 %
152Sm (KED)	0.116 ppb	2.8 %
153Eu (KED)	0.025 ppb	1.4 %
158Gd (KED)	0.103 ppb	0.4 %
159Tb (KED)	48.685 %	3.4 %
164Dy (KED)	0.074 ppb	7.5 %
166Er (KED)	0.040 ppb	6.0 %
169Tm (KED)	0.005 ppb	0.8 %
174Yb (KED)	0.028 ppb	4.8 %
175Lu (KED)	-0.332 ppb	2.9 %
205Tl (KED)	0.021 ppb	4.9 %
208Pb (KED)	1.603 ppb	2.5 %
209Bi (KED)	40.099 %	0.4 %
232Th (KED)	0.291 ppb	1.6 %
238U (KED)	0.150 ppb	2.9 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	63.292 %	2,796 cps	4.7 %
9Be (KED)	0.075 ppb	4 cps	114.6 %
11B (KED)	14.928 ppb	663 cps	4.1 %
24Mg (KED)	1,581.557 ppb	313,466 cps	0.9 %
27Al (KED)	1,067.820 ppb	53,523 cps	0.5 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	63.296 %	34,712 cps	0.8 %
51V (KED)	1.920 ppb	6,036 cps	1.1 %
52Cr (KED)	2.695 ppb	13,269 cps	1.8 %
55Mn (KED)	27.968 ppb	68,074 cps	0.5 %
56Fe (KED)	1,042.845 ppb	4,700,035 cps	0.9 %
58Ni (KED)	4.572 ppb	29,565 cps	1.0 %
59Co (KED)	0.500 ppb	5,050 cps	4.2 %
63Cu (KED)	15.602 ppb	103,230 cps	0.6 %
64Zn (KED)	327.618 ppb	525,192 cps	1.0 %
69Ga (KED)	2.596 ppb	5,281 cps	3.4 %
75As (KED)	1.235 ppb	592 cps	3.4 %
80Se (KED)	3.285 ppb	781 cps	10.7 %
85Rb (KED)	3.077 ppb	6,199 cps	2.6 %
88Sr (KED)	15.953 ppb	45,852 cps	1.1 %
89Y (KED)	54.898 %	309,259 cps	1.2 %
107Ag (KED)	0.107 ppb	2,069 cps	6.6 %
114Cd (KED)	0.080 ppb	603 cps	8.3 %
115In (KED)	48.209 %	574,982 cps	1.4 %
133Cs (KED)	0.226 ppb	2,394 cps	5.1 %
138Ba (KED)	8.649 ppb	135,251 cps	0.2 %
139La (KED)	0.660 ppb	21,432 cps	2.4 %
140Ce (KED)	1.380 ppb	60,981 cps	1.8 %
141Pr (KED)	0.158 ppb	7,343 cps	5.7 %
142Nd (KED)	0.852 ppb	16,178 cps	2.0 %
152Sm (KED)	0.116 ppb	2,166 cps	3.5 %
153Eu (KED)	0.025 ppb	948 cps	2.9 %
158Gd (KED)	0.103 ppb	2,734 cps	3.5 %
159Tb (KED)	48.685 %	3,691,394 cps	3.4 %
164Dy (KED)	0.074 ppb	2,199 cps	7.6 %
166Er (KED)	0.040 ppb	1,821 cps	2.1 %
169Tm (KED)	0.005 ppb	591 cps	4.2 %
174Yb (KED)	0.028 ppb	1,271 cps	3.7 %
175Lu (KED)	-0.332 ppb	19,862 cps	0.7 %
205Tl (KED)	0.021 ppb	1,730 cps	4.5 %
208Pb (KED)	1.603 ppb	97,415 cps	2.0 %
209Bi (KED)	40.099 %	3,063,810 cps	0.4 %
232Th (KED)	0.291 ppb	32,735 cps	1.4 %
238U (KED)	0.150 ppb	20,606 cps	2.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 13

Analysis name: 028727jian

Analysis started at: 9/23/2021 4:22:56 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	66.889 %	3.7 %
9Be (KED)	0.036 ppb	86.7 %
11B (KED)	9.313 ppb	21.8 %
24Mg (KED)	1,334.923 ppb	4.1 %
27Al (KED)	883.169 ppb	1.4 %
45Sc (KED)	64.718 %	0.7 %
51V (KED)	1.731 ppb	2.1 %
52Cr (KED)	2.768 ppb	1.4 %
55Mn (KED)	25.288 ppb	0.5 %
56Fe (KED)	1,044.909 ppb	3.2 %
58Ni (KED)	4.550 ppb	0.9 %
59Co (KED)	0.501 ppb	2.3 %
63Cu (KED)	12.100 ppb	1.5 %
64Zn (KED)	302.030 ppb	0.9 %
69Ga (KED)	2.305 ppb	3.6 %
75As (KED)	1.057 ppb	12.8 %
80Se (KED)	2.762 ppb	21.8 %
85Rb (KED)	3.147 ppb	3.3 %
88Sr (KED)	15.040 ppb	0.7 %
89Y (KED)	56.306 %	1.8 %
107Ag (KED)	0.223 ppb	3.4 %
114Cd (KED)	0.078 ppb	3.4 %
115In (KED)	49.231 %	0.9 %
133Cs (KED)	0.190 ppb	4.6 %
138Ba (KED)	8.377 ppb	1.6 %
139La (KED)	0.737 ppb	2.3 %
140Ce (KED)	1.578 ppb	2.2 %
141Pr (KED)	0.173 ppb	2.5 %
142Nd (KED)	0.946 ppb	1.7 %
152Sm (KED)	0.132 ppb	5.8 %
153Eu (KED)	0.026 ppb	2.0 %
158Gd (KED)	0.124 ppb	3.0 %
159Tb (KED)	49.836 %	1.5 %
164Dy (KED)	0.083 ppb	2.4 %
166Er (KED)	0.040 ppb	8.3 %
169Tm (KED)	0.005 ppb	5.5 %
174Yb (KED)	0.031 ppb	2.1 %
175Lu (KED)	-0.333 ppb	3.8 %
205Tl (KED)	0.021 ppb	4.6 %
208Pb (KED)	1.674 ppb	4.2 %
209Bi (KED)	40.864 %	2.4 %
232Th (KED)	0.293 ppb	2.0 %
238U (KED)	0.163 ppb	2.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	66.889 %	2,955 cps	3.7 %
9Be (KED)	0.036 ppb	2 cps	86.6 %
11B (KED)	9.313 ppb	517 cps	9.5 %
24Mg (KED)	1,334.923 ppb	279,787 cps	0.8 %
27Al (KED)	883.169 ppb	45,280 cps	2.1 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 14

Analysis name: 024982jian

Analysis started at: 9/23/2021 4:26:26 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	63.518 %	3.4 %
9Be (KED)	0.056 ppb	98.1 %
11B (KED)	43.408 ppb	6.6 %
24Mg (KED)	1,313.409 ppb	3.1 %
27Al (KED)	1,071.460 ppb	3.7 %
45Sc (KED)	60.894 %	1.5 %
51V (KED)	2.129 ppb	4.1 %
52Cr (KED)	3.950 ppb	4.1 %
55Mn (KED)	30.687 ppb	1.5 %
56Fe (KED)	1,203.594 ppb	2.3 %
58Ni (KED)	5.422 ppb	2.7 %
59Co (KED)	0.634 ppb	3.8 %
63Cu (KED)	14.218 ppb	0.3 %
64Zn (KED)	309.068 ppb	0.2 %
69Ga (KED)	2.731 ppb	2.1 %
75As (KED)	1.350 ppb	7.5 %
80Se (KED)	5.007 ppb	8.3 %
85Rb (KED)	2.675 ppb	2.7 %
88Sr (KED)	14.394 ppb	0.8 %
89Y (KED)	54.531 %	0.8 %
107Ag (KED)	0.451 ppb	0.8 %
114Cd (KED)	0.286 ppb	2.3 %
115In (KED)	48.843 %	0.3 %
133Cs (KED)	0.240 ppb	2.3 %
138Ba (KED)	9.776 ppb	1.4 %
139La (KED)	0.737 ppb	2.1 %
140Ce (KED)	1.607 ppb	2.0 %
141Pr (KED)	0.180 ppb	1.6 %
142Nd (KED)	0.961 ppb	0.7 %
152Sm (KED)	0.130 ppb	4.0 %
153Eu (KED)	0.028 ppb	2.2 %
158Gd (KED)	0.120 ppb	7.3 %
159Tb (KED)	49.736 %	0.7 %
164Dy (KED)	0.087 ppb	6.1 %
166Er (KED)	0.045 ppb	1.1 %
169Tm (KED)	0.006 ppb	4.7 %
174Yb (KED)	0.035 ppb	2.3 %
175Lu (KED)	-0.345 ppb	0.8 %
205Tl (KED)	0.020 ppb	2.7 %
208Pb (KED)	2.245 ppb	0.9 %
209Bi (KED)	42.210 %	1.0 %
232Th (KED)	0.339 ppb	1.5 %
238U (KED)	0.192 ppb	3.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	63.518 %	2,806 cps	3.4 %
9Be (KED)	0.056 ppb	3 cps	100.0 %
11B (KED)	43.408 ppb	1,549 cps	4.4 %
24Mg (KED)	1,313.409 ppb	261,513 cps	1.9 %
27Al (KED)	1,071.460 ppb	51,651 cps	2.2 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	59.785 %	32,786 cps	3.2 %
51V (KED)	1.569 ppb	4,655 cps	2.3 %
52Cr (KED)	2.700 ppb	12,552 cps	1.9 %
55Mn (KED)	33.380 ppb	76,688 cps	1.9 %
56Fe (KED)	973.664 ppb	4,143,310 cps	1.2 %
58Ni (KED)	4.264 ppb	26,179 cps	1.1 %
59Co (KED)	0.494 ppb	4,713 cps	2.7 %
63Cu (KED)	6.067 ppb	39,450 cps	2.6 %
64Zn (KED)	336.811 ppb	526,447 cps	0.8 %
69Ga (KED)	2.243 ppb	4,454 cps	3.2 %
75As (KED)	1.200 ppb	561 cps	4.8 %
80Se (KED)	3.834 ppb	838 cps	2.9 %
85Rb (KED)	2.381 ppb	4,682 cps	3.3 %
88Sr (KED)	17.077 ppb	47,864 cps	1.6 %
89Y (KED)	53.545 %	301,638 cps	1.4 %
107Ag (KED)	0.175 ppb	3,355 cps	2.0 %
114Cd (KED)	0.108 ppb	800 cps	5.0 %
115In (KED)	47.984 %	572,295 cps	0.8 %
133Cs (KED)	0.182 ppb	1,919 cps	6.9 %
138Ba (KED)	8.002 ppb	125,345 cps	1.4 %
139La (KED)	0.624 ppb	20,298 cps	2.5 %
140Ce (KED)	1.349 ppb	59,651 cps	0.3 %
141Pr (KED)	0.155 ppb	7,187 cps	0.9 %
142Nd (KED)	0.811 ppb	15,413 cps	1.8 %
152Sm (KED)	0.112 ppb	2,089 cps	1.2 %
153Eu (KED)	0.021 ppb	789 cps	3.4 %
158Gd (KED)	0.103 ppb	2,711 cps	3.8 %
159Tb (KED)	48.692 %	3,691,926 cps	0.5 %
164Dy (KED)	0.069 ppb	2,052 cps	0.7 %
166Er (KED)	0.041 ppb	1,856 cps	1.5 %
169Tm (KED)	0.004 ppb	467 cps	2.9 %
174Yb (KED)	0.027 ppb	1,249 cps	3.2 %
175Lu (KED)	-0.346 ppb	18,930 cps	2.9 %
205Tl (KED)	0.019 ppb	1,576 cps	7.0 %
208Pb (KED)	1.849 ppb	114,337 cps	1.2 %
209Bi (KED)	41.323 %	3,157,360 cps	1.0 %
232Th (KED)	0.248 ppb	28,785 cps	2.0 %
238U (KED)	0.138 ppb	19,535 cps	1.1 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 16

Analysis name: 163380jian

Analysis started at: 9/23/2021 4:33:31 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	62.864 %	2.2 %
9Be (KED)	0.000 ppb	
11B (KED)	8.991 ppb	39.0 %
24Mg (KED)	1,896.801 ppb	1.4 %
27Al (KED)	1,301.547 ppb	1.3 %
45Sc (KED)	60.356 %	1.4 %
51V (KED)	2.481 ppb	2.6 %
52Cr (KED)	3.111 ppb	1.3 %
55Mn (KED)	47.717 ppb	0.0 %
56Fe (KED)	1,343.189 ppb	1.1 %
58Ni (KED)	5.570 ppb	0.8 %
59Co (KED)	0.715 ppb	1.5 %
63Cu (KED)	7.740 ppb	0.8 %
64Zn (KED)	337.609 ppb	0.4 %
69Ga (KED)	3.830 ppb	3.7 %
75As (KED)	1.465 ppb	4.9 %
80Se (KED)	4.671 ppb	2.6 %
85Rb (KED)	3.526 ppb	2.2 %
88Sr (KED)	35.276 ppb	1.0 %
89Y (KED)	54.822 %	0.4 %
107Ag (KED)	0.215 ppb	1.5 %
114Cd (KED)	0.146 ppb	8.2 %
115In (KED)	47.523 %	0.1 %
133Cs (KED)	0.300 ppb	1.4 %
138Ba (KED)	14.437 ppb	0.3 %
139La (KED)	1.238 ppb	1.1 %
140Ce (KED)	2.486 ppb	1.7 %
141Pr (KED)	0.286 ppb	0.3 %
142Nd (KED)	1.490 ppb	1.4 %
152Sm (KED)	0.189 ppb	3.1 %
153Eu (KED)	0.035 ppb	5.8 %
158Gd (KED)	0.163 ppb	2.3 %
159Tb (KED)	49.211 %	0.6 %
164Dy (KED)	0.115 ppb	3.6 %
166Er (KED)	0.063 ppb	7.8 %
169Tm (KED)	0.007 ppb	8.5 %
174Yb (KED)	0.048 ppb	2.9 %
175Lu (KED)	-0.347 ppb	3.4 %
205Tl (KED)	0.030 ppb	2.7 %
208Pb (KED)	2.042 ppb	1.2 %
209Bi (KED)	40.771 %	2.0 %
232Th (KED)	0.422 ppb	2.2 %
238U (KED)	0.167 ppb	3.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	62.864 %	2,777 cps	2.2 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	8.991 ppb	476 cps	20.3 %
24Mg (KED)	1,896.801 ppb	373,847 cps	1.5 %
27Al (KED)	1,301.547 ppb	62,188 cps	0.2 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	60.356 %	33,099 cps	1.4 %
51V (KED)	2.481 ppb	7,436 cps	3.8 %
52Cr (KED)	3.111 ppb	14,596 cps	0.5 %
55Mn (KED)	47.717 ppb	110,692 cps	1.3 %
56Fe (KED)	1,343.189 ppb	5,772,146 cps	1.5 %
58Ni (KED)	5.570 ppb	33,849 cps	0.8 %
59Co (KED)	0.715 ppb	6,861 cps	2.7 %
63Cu (KED)	7.740 ppb	51,401 cps	0.8 %
64Zn (KED)	337.609 ppb	540,379 cps	0.7 %
69Ga (KED)	3.830 ppb	7,756 cps	3.4 %
75As (KED)	1.465 ppb	700 cps	4.6 %
80Se (KED)	4.671 ppb	976 cps	1.4 %
85Rb (KED)	3.526 ppb	7,094 cps	2.5 %
88Sr (KED)	35.276 ppb	101,087 cps	1.3 %
89Y (KED)	54.822 %	308,829 cps	0.4 %
107Ag (KED)	0.215 ppb	4,076 cps	1.4 %
114Cd (KED)	0.146 ppb	1,051 cps	7.7 %
115In (KED)	47.523 %	566,798 cps	0.1 %
133Cs (KED)	0.300 ppb	3,123 cps	1.5 %
138Ba (KED)	14.437 ppb	227,593 cps	1.0 %
139La (KED)	1.238 ppb	40,613 cps	1.7 %
140Ce (KED)	2.486 ppb	110,888 cps	1.3 %
141Pr (KED)	0.286 ppb	13,393 cps	0.4 %
142Nd (KED)	1.490 ppb	28,578 cps	0.8 %
152Sm (KED)	0.189 ppb	3,546 cps	3.5 %
153Eu (KED)	0.035 ppb	1,329 cps	5.2 %
158Gd (KED)	0.163 ppb	4,356 cps	2.0 %
159Tb (KED)	49.211 %	3,731,296 cps	0.6 %
164Dy (KED)	0.115 ppb	3,448 cps	3.8 %
166Er (KED)	0.063 ppb	2,674 cps	6.1 %
169Tm (KED)	0.007 ppb	908 cps	7.9 %
174Yb (KED)	0.048 ppb	2,184 cps	3.3 %
175Lu (KED)	-0.347 ppb	19,055 cps	3.9 %
205Tl (KED)	0.030 ppb	2,501 cps	2.4 %
208Pb (KED)	2.042 ppb	123,625 cps	1.5 %
209Bi (KED)	40.771 %	3,115,155 cps	2.0 %
232Th (KED)	0.422 ppb	48,095 cps	0.4 %
238U (KED)	0.167 ppb	23,315 cps	2.2 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 17

Analysis name: 024965jian

Analysis started at: 9/23/2021 4:37:06 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	59.367 %	1.0 %
9Be (KED)	0.040 ppb	173.2 %
11B (KED)	8.835 ppb	32.2 %
24Mg (KED)	1,825.678 ppb	1.6 %
27Al (KED)	1,515.484 ppb	1.2 %
45Sc (KED)	59.946 %	1.4 %
51V (KED)	2.904 ppb	1.7 %
52Cr (KED)	3.530 ppb	1.1 %
55Mn (KED)	40.651 ppb	1.1 %
56Fe (KED)	1,586.755 ppb	1.5 %
58Ni (KED)	6.777 ppb	2.0 %
59Co (KED)	0.742 ppb	1.1 %
63Cu (KED)	18.172 ppb	0.8 %
64Zn (KED)	299.552 ppb	1.8 %
69Ga (KED)	3.676 ppb	1.5 %
75As (KED)	1.351 ppb	12.5 %
80Se (KED)	3.435 ppb	10.8 %
85Rb (KED)	3.946 ppb	1.2 %
88Sr (KED)	19.404 ppb	1.8 %
89Y (KED)	53.481 %	0.5 %
107Ag (KED)	0.128 ppb	2.9 %
114Cd (KED)	0.073 ppb	9.2 %
115In (KED)	47.307 %	0.9 %
133Cs (KED)	0.320 ppb	0.4 %
138Ba (KED)	13.080 ppb	1.5 %
139La (KED)	0.988 ppb	1.3 %
140Ce (KED)	2.212 ppb	1.4 %
141Pr (KED)	0.235 ppb	2.2 %
142Nd (KED)	1.288 ppb	2.3 %
152Sm (KED)	0.179 ppb	1.2 %
153Eu (KED)	0.039 ppb	5.3 %
158Gd (KED)	0.154 ppb	2.5 %
159Tb (KED)	49.106 %	1.5 %
164Dy (KED)	0.115 ppb	5.0 %
166Er (KED)	0.051 ppb	2.3 %
169Tm (KED)	0.007 ppb	7.3 %
174Yb (KED)	0.045 ppb	6.0 %
175Lu (KED)	-0.349 ppb	3.2 %
205Tl (KED)	0.028 ppb	2.3 %
208Pb (KED)	2.077 ppb	1.6 %
209Bi (KED)	40.961 %	0.7 %
232Th (KED)	0.447 ppb	0.9 %
238U (KED)	0.251 ppb	0.6 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	59.367 %	2,623 cps	1.0 %
9Be (KED)	0.040 ppb	2 cps	173.2 %
11B (KED)	8.835 ppb	446 cps	17.7 %
24Mg (KED)	1,825.678 ppb	339,836 cps	0.6 %
27Al (KED)	1,515.484 ppb	71,908 cps	0.6 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	59.946 %	32,874 cps	1.4 %
51V (KED)	2.904 ppb	8,642 cps	1.9 %
52Cr (KED)	3.530 ppb	16,441 cps	1.8 %
55Mn (KED)	40.651 ppb	93,661 cps	0.3 %
56Fe (KED)	1,586.755 ppb	6,771,296 cps	0.3 %
58Ni (KED)	6.777 ppb	40,405 cps	1.2 %
59Co (KED)	0.742 ppb	7,072 cps	2.3 %
63Cu (KED)	18.172 ppb	117,064 cps	0.7 %
64Zn (KED)	299.552 ppb	468,047 cps	1.2 %
69Ga (KED)	3.676 ppb	7,264 cps	1.2 %
75As (KED)	1.351 ppb	630 cps	12.0 %
80Se (KED)	3.435 ppb	782 cps	6.7 %
85Rb (KED)	3.946 ppb	7,744 cps	1.3 %
88Sr (KED)	19.404 ppb	54,302 cps	1.5 %
89Y (KED)	53.481 %	301,273 cps	0.5 %
107Ag (KED)	0.128 ppb	2,427 cps	3.7 %
114Cd (KED)	0.073 ppb	546 cps	7.5 %
115In (KED)	47.307 %	564,217 cps	0.9 %
133Cs (KED)	0.320 ppb	3,312 cps	1.1 %
138Ba (KED)	13.080 ppb	205,834 cps	0.5 %
139La (KED)	0.988 ppb	32,339 cps	0.7 %
140Ce (KED)	2.212 ppb	98,478 cps	0.7 %
141Pr (KED)	0.235 ppb	11,023 cps	1.1 %
142Nd (KED)	1.288 ppb	24,657 cps	1.0 %
152Sm (KED)	0.179 ppb	3,348 cps	1.0 %
153Eu (KED)	0.039 ppb	1,451 cps	4.0 %
158Gd (KED)	0.154 ppb	4,096 cps	3.0 %
159Tb (KED)	49.106 %	3,723,311 cps	1.5 %
164Dy (KED)	0.115 ppb	3,434 cps	4.2 %
166Er (KED)	0.051 ppb	2,220 cps	1.8 %
169Tm (KED)	0.007 ppb	907 cps	6.2 %
174Yb (KED)	0.045 ppb	2,064 cps	5.4 %
175Lu (KED)	-0.349 ppb	18,860 cps	5.2 %
205Tl (KED)	0.028 ppb	2,311 cps	2.8 %
208Pb (KED)	2.077 ppb	126,180 cps	0.7 %
209Bi (KED)	40.961 %	3,129,673 cps	0.7 %
232Th (KED)	0.447 ppb	51,289 cps	1.4 %
238U (KED)	0.251 ppb	35,161 cps	0.6 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 18

Analysis name: 028728jian

Analysis started at: 9/23/2021 4:40:37 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	59.241 %	4.2 %
9Be (KED)	0.063 ppb	100.3 %
11B (KED)	10.321 ppb	5.5 %
24Mg (KED)	961.680 ppb	3.2 %
27Al (KED)	658.135 ppb	0.8 %
45Sc (KED)	58.536 %	0.6 %
51V (KED)	1.268 ppb	4.2 %
52Cr (KED)	2.491 ppb	1.5 %
55Mn (KED)	19.851 ppb	0.6 %
56Fe (KED)	776.026 ppb	2.0 %
58Ni (KED)	3.447 ppb	2.0 %
59Co (KED)	0.367 ppb	3.4 %
63Cu (KED)	11.354 ppb	1.2 %
64Zn (KED)	303.492 ppb	1.3 %
69Ga (KED)	1.593 ppb	6.7 %
75As (KED)	0.911 ppb	6.5 %
80Se (KED)	2.825 ppb	8.7 %
85Rb (KED)	2.166 ppb	3.4 %
88Sr (KED)	9.955 ppb	1.9 %
89Y (KED)	53.279 %	1.1 %
107Ag (KED)	0.187 ppb	4.9 %
114Cd (KED)	0.071 ppb	9.8 %
115In (KED)	48.163 %	1.5 %
133Cs (KED)	0.152 ppb	6.0 %
138Ba (KED)	5.858 ppb	2.0 %
139La (KED)	0.492 ppb	0.6 %
140Ce (KED)	1.043 ppb	2.9 %
141Pr (KED)	0.123 ppb	3.6 %
142Nd (KED)	0.660 ppb	0.3 %
152Sm (KED)	0.090 ppb	2.8 %
153Eu (KED)	0.018 ppb	5.7 %
158Gd (KED)	0.084 ppb	7.8 %
159Tb (KED)	49.842 %	2.4 %
164Dy (KED)	0.056 ppb	0.1 %
166Er (KED)	0.030 ppb	5.4 %
169Tm (KED)	0.003 ppb	8.1 %
174Yb (KED)	0.024 ppb	2.1 %
175Lu (KED)	-0.358 ppb	2.3 %
205Tl (KED)	0.016 ppb	6.0 %
208Pb (KED)	1.266 ppb	1.5 %
209Bi (KED)	41.481 %	1.4 %
232Th (KED)	0.214 ppb	1.7 %
238U (KED)	0.127 ppb	1.2 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	59.241 %	2,617 cps	4.2 %
9Be (KED)	0.063 ppb	3 cps	100.0 %
11B (KED)	10.321 ppb	488 cps	3.8 %
24Mg (KED)	961.680 ppb	178,586 cps	1.0 %
27Al (KED)	658.135 ppb	30,535 cps	1.1 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	58.536 %	32,101 cps	0.6 %
51V (KED)	1.268 ppb	3,687 cps	3.9 %
52Cr (KED)	2.491 ppb	11,350 cps	1.0 %
55Mn (KED)	19.851 ppb	44,707 cps	0.1 %
56Fe (KED)	776.026 ppb	3,235,079 cps	1.5 %
58Ni (KED)	3.447 ppb	21,158 cps	1.3 %
59Co (KED)	0.367 ppb	3,453 cps	3.2 %
63Cu (KED)	11.354 ppb	73,047 cps	0.4 %
64Zn (KED)	303.492 ppb	472,361 cps	0.3 %
69Ga (KED)	1.593 ppb	3,160 cps	5.8 %
75As (KED)	0.911 ppb	426 cps	5.5 %
80Se (KED)	2.825 ppb	696 cps	4.0 %
85Rb (KED)	2.166 ppb	4,240 cps	2.4 %
88Sr (KED)	9.955 ppb	27,822 cps	2.1 %
89Y (KED)	53.279 %	300,138 cps	1.1 %
107Ag (KED)	0.187 ppb	3,598 cps	5.1 %
114Cd (KED)	0.071 ppb	542 cps	9.2 %
115In (KED)	48.163 %	574,433 cps	1.5 %
133Cs (KED)	0.152 ppb	1,621 cps	6.5 %
138Ba (KED)	5.858 ppb	94,222 cps	0.7 %
139La (KED)	0.492 ppb	16,377 cps	2.4 %
140Ce (KED)	1.043 ppb	47,217 cps	1.1 %
141Pr (KED)	0.123 ppb	5,832 cps	1.7 %
142Nd (KED)	0.660 ppb	12,852 cps	2.3 %
152Sm (KED)	0.090 ppb	1,717 cps	3.2 %
153Eu (KED)	0.018 ppb	693 cps	4.4 %
158Gd (KED)	0.084 ppb	2,268 cps	5.9 %
159Tb (KED)	49.842 %	3,779,115 cps	2.4 %
164Dy (KED)	0.056 ppb	1,712 cps	2.4 %
166Er (KED)	0.030 ppb	1,461 cps	2.8 %
169Tm (KED)	0.003 ppb	447 cps	6.0 %
174Yb (KED)	0.024 ppb	1,106 cps	1.0 %
175Lu (KED)	-0.358 ppb	18,469 cps	0.9 %
205Tl (KED)	0.016 ppb	1,328 cps	4.7 %
208Pb (KED)	1.266 ppb	81,506 cps	2.1 %
209Bi (KED)	41.481 %	3,169,395 cps	1.4 %
232Th (KED)	0.214 ppb	24,929 cps	1.2 %
238U (KED)	0.127 ppb	18,099 cps	1.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 19

Analysis name: 011048jian

Analysis started at: 9/23/2021 4:44:12 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	60.499 %	1.7 %
9Be (KED)	0.000 ppb	
11B (KED)	12.522 ppb	9.9 %
24Mg (KED)	1,565.865 ppb	2.8 %
27Al (KED)	1,053.393 ppb	1.8 %
45Sc (KED)	57.049 %	1.2 %
51V (KED)	2.070 ppb	0.7 %
52Cr (KED)	4.297 ppb	1.0 %
55Mn (KED)	29.795 ppb	1.9 %
56Fe (KED)	1,181.079 ppb	0.9 %
58Ni (KED)	5.113 ppb	1.4 %
59Co (KED)	0.589 ppb	4.3 %
63Cu (KED)	8.991 ppb	2.4 %
64Zn (KED)	320.016 ppb	0.8 %
69Ga (KED)	2.602 ppb	3.2 %
75As (KED)	1.832 ppb	5.5 %
80Se (KED)	4.500 ppb	8.4 %
85Rb (KED)	2.806 ppb	3.3 %
88Sr (KED)	17.603 ppb	1.0 %
89Y (KED)	52.716 %	1.5 %
107Ag (KED)	0.246 ppb	0.4 %
114Cd (KED)	0.200 ppb	4.6 %
115In (KED)	47.535 %	2.3 %
133Cs (KED)	0.229 ppb	4.8 %
138Ba (KED)	9.972 ppb	2.0 %
139La (KED)	0.839 ppb	2.5 %
140Ce (KED)	1.743 ppb	2.7 %
141Pr (KED)	0.196 ppb	5.9 %
142Nd (KED)	1.073 ppb	2.7 %
152Sm (KED)	0.142 ppb	5.9 %
153Eu (KED)	0.030 ppb	2.6 %
158Gd (KED)	0.130 ppb	3.0 %
159Tb (KED)	49.282 %	1.8 %
164Dy (KED)	0.089 ppb	2.9 %
166Er (KED)	0.046 ppb	2.8 %
169Tm (KED)	0.005 ppb	6.2 %
174Yb (KED)	0.034 ppb	6.4 %
175Lu (KED)	-0.355 ppb	1.3 %
205Tl (KED)	0.019 ppb	2.9 %
208Pb (KED)	2.007 ppb	1.0 %
209Bi (KED)	43.449 %	0.9 %
232Th (KED)	0.293 ppb	1.1 %
238U (KED)	0.155 ppb	0.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	60.499 %	2,673 cps	1.7 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	12.522 ppb	563 cps	6.3 %
24Mg (KED)	1,565.865 ppb	296,999 cps	1.2 %
27Al (KED)	1,053.393 ppb	47,585 cps	0.7 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	57.049 %	31,286 cps	1.2 %
51V (KED)	2.070 ppb	5,864 cps	1.6 %
52Cr (KED)	4.297 ppb	19,033 cps	1.8 %
55Mn (KED)	29.795 ppb	65,354 cps	1.6 %
56Fe (KED)	1,181.079 ppb	4,797,535 cps	0.8 %
58Ni (KED)	5.113 ppb	29,543 cps	0.3 %
59Co (KED)	0.589 ppb	5,350 cps	4.2 %
63Cu (KED)	8.991 ppb	57,326 cps	1.2 %
64Zn (KED)	320.016 ppb	492,662 cps	0.8 %
69Ga (KED)	2.602 ppb	5,081 cps	3.7 %
75As (KED)	1.832 ppb	840 cps	5.2 %
80Se (KED)	4.500 ppb	914 cps	4.2 %
85Rb (KED)	2.806 ppb	5,431 cps	3.4 %
88Sr (KED)	17.603 ppb	48,570 cps	0.8 %
89Y (KED)	52.716 %	296,966 cps	1.5 %
107Ag (KED)	0.246 ppb	4,673 cps	2.6 %
114Cd (KED)	0.200 ppb	1,422 cps	6.3 %
115In (KED)	47.535 %	566,939 cps	2.3 %
133Cs (KED)	0.229 ppb	2,387 cps	3.3 %
138Ba (KED)	9.972 ppb	157,764 cps	0.3 %
139La (KED)	0.839 ppb	27,570 cps	0.7 %
140Ce (KED)	1.743 ppb	77,923 cps	1.3 %
141Pr (KED)	0.196 ppb	9,218 cps	4.9 %
142Nd (KED)	1.073 ppb	20,623 cps	1.1 %
152Sm (KED)	0.142 ppb	2,669 cps	4.9 %
153Eu (KED)	0.030 ppb	1,128 cps	2.5 %
158Gd (KED)	0.130 ppb	3,485 cps	2.2 %
159Tb (KED)	49.282 %	3,736,704 cps	1.8 %
164Dy (KED)	0.089 ppb	2,688 cps	2.6 %
166Er (KED)	0.046 ppb	2,039 cps	3.1 %
169Tm (KED)	0.005 ppb	684 cps	5.8 %
174Yb (KED)	0.034 ppb	1,567 cps	5.5 %
175Lu (KED)	-0.355 ppb	18,495 cps	1.3 %
205Tl (KED)	0.019 ppb	1,652 cps	2.7 %
208Pb (KED)	2.007 ppb	129,669 cps	1.0 %
209Bi (KED)	43.449 %	3,319,779 cps	0.9 %
232Th (KED)	0.293 ppb	35,675 cps	0.2 %
238U (KED)	0.155 ppb	23,150 cps	1.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 20

Analysis name: 010195jian

Analysis started at: 9/23/2021 4:47:39 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	60.574 %	1.6 %
9Be (KED)	0.000 ppb	
11B (KED)	7.617 ppb	7.1 %
24Mg (KED)	1,223.558 ppb	1.5 %
27Al (KED)	723.671 ppb	1.0 %
45Sc (KED)	59.074 %	2.9 %
51V (KED)	1.450 ppb	1.7 %
52Cr (KED)	2.389 ppb	2.8 %
55Mn (KED)	23.699 ppb	2.2 %
56Fe (KED)	811.993 ppb	3.1 %
58Ni (KED)	3.953 ppb	3.8 %
59Co (KED)	0.447 ppb	0.3 %
63Cu (KED)	9.307 ppb	1.6 %
64Zn (KED)	335.632 ppb	0.6 %
69Ga (KED)	1.980 ppb	1.2 %
75As (KED)	1.462 ppb	2.4 %
80Se (KED)	4.188 ppb	1.6 %
85Rb (KED)	2.606 ppb	0.1 %
88Sr (KED)	15.453 ppb	1.2 %
89Y (KED)	53.284 %	0.2 %
107Ag (KED)	0.134 ppb	2.0 %
114Cd (KED)	0.107 ppb	11.7 %
115In (KED)	47.969 %	0.7 %
133Cs (KED)	0.157 ppb	1.3 %
138Ba (KED)	7.147 ppb	2.1 %
139La (KED)	0.531 ppb	0.1 %
140Ce (KED)	1.396 ppb	1.2 %
141Pr (KED)	0.131 ppb	3.5 %
142Nd (KED)	0.781 ppb	2.5 %
152Sm (KED)	0.097 ppb	2.4 %
153Eu (KED)	0.020 ppb	8.1 %
158Gd (KED)	0.090 ppb	5.1 %
159Tb (KED)	50.084 %	0.8 %
164Dy (KED)	0.060 ppb	6.6 %
166Er (KED)	0.033 ppb	3.5 %
169Tm (KED)	0.004 ppb	15.8 %
174Yb (KED)	0.023 ppb	1.7 %
175Lu (KED)	-0.358 ppb	2.4 %
205Tl (KED)	0.019 ppb	4.3 %
208Pb (KED)	2.131 ppb	2.8 %
209Bi (KED)	42.073 %	1.8 %
232Th (KED)	0.222 ppb	1.8 %
238U (KED)	0.124 ppb	1.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	60.574 %	2,676 cps	1.6 %
9Be (KED)	0.000 ppb	0 cps	
11B (KED)	7.617 ppb	419 cps	3.3 %
24Mg (KED)	1,223.558 ppb	232,458 cps	1.3 %
27Al (KED)	723.671 ppb	33,875 cps	2.7 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	59.074 %	32,396 cps	2.9 %
51V (KED)	1.450 ppb	4,256 cps	4.6 %
52Cr (KED)	2.389 ppb	10,980 cps	0.2 %
55Mn (KED)	23.699 ppb	53,827 cps	1.0 %
56Fe (KED)	811.993 ppb	3,414,275 cps	0.3 %
58Ni (KED)	3.953 ppb	24,144 cps	0.6 %
59Co (KED)	0.447 ppb	4,223 cps	3.0 %
63Cu (KED)	9.307 ppb	59,976 cps	1.8 %
64Zn (KED)	335.632 ppb	522,160 cps	0.6 %
69Ga (KED)	1.980 ppb	3,918 cps	1.3 %
75As (KED)	1.462 ppb	679 cps	2.5 %
80Se (KED)	4.188 ppb	882 cps	1.0 %
85Rb (KED)	2.606 ppb	5,100 cps	0.2 %
88Sr (KED)	15.453 ppb	43,116 cps	1.0 %
89Y (KED)	53.284 %	300,168 cps	0.2 %
107Ag (KED)	0.134 ppb	2,574 cps	2.6 %
114Cd (KED)	0.107 ppb	792 cps	10.8 %
115In (KED)	47.969 %	572,115 cps	0.7 %
133Cs (KED)	0.157 ppb	1,663 cps	1.8 %
138Ba (KED)	7.147 ppb	115,275 cps	1.8 %
139La (KED)	0.531 ppb	17,755 cps	0.8 %
140Ce (KED)	1.396 ppb	63,477 cps	0.4 %
141Pr (KED)	0.131 ppb	6,288 cps	2.8 %
142Nd (KED)	0.781 ppb	15,278 cps	1.7 %
152Sm (KED)	0.097 ppb	1,851 cps	2.9 %
153Eu (KED)	0.020 ppb	779 cps	7.9 %
158Gd (KED)	0.090 ppb	2,448 cps	4.6 %
159Tb (KED)	50.084 %	3,797,505 cps	0.8 %
164Dy (KED)	0.060 ppb	1,849 cps	6.2 %
166Er (KED)	0.033 ppb	1,579 cps	2.1 %
169Tm (KED)	0.004 ppb	512 cps	15.4 %
174Yb (KED)	0.023 ppb	1,099 cps	1.0 %
175Lu (KED)	-0.358 ppb	18,623 cps	2.6 %
205Tl (KED)	0.019 ppb	1,596 cps	5.2 %
208Pb (KED)	2.131 ppb	132,753 cps	1.3 %
209Bi (KED)	42.073 %	3,214,621 cps	1.8 %
232Th (KED)	0.222 ppb	26,147 cps	1.0 %
238U (KED)	0.124 ppb	17,872 cps	3.0 %

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	58.524 %	32,095 cps	
51V (KED)	2.507 ppb	7,285 cps	
52Cr (KED)	3.776 ppb	17,165 cps	
55Mn (KED)	41.185 ppb	92,649 cps	
56Fe (KED)	1,544.596 ppb	6,435,972 cps	
58Ni (KED)	6.412 ppb	37,446 cps	
59Co (KED)	0.819 ppb	7,609 cps	
63Cu (KED)	11.480 ppb	75,306 cps	
64Zn (KED)	317.814 ppb	504,240 cps	
69Ga (KED)	3.298 ppb	6,625 cps	
75As (KED)	1.457 ppb	690 cps	
80Se (KED)	6.536 ppb	1,227 cps	
85Rb (KED)	3.427 ppb	6,832 cps	
88Sr (KED)	23.614 ppb	67,097 cps	
89Y (KED)	54.323 %	306,016 cps	
107Ag (KED)	0.191 ppb	3,664 cps	
114Cd (KED)	0.329 ppb	2,337 cps	
115In (KED)	48.073 %	573,353 cps	
133Cs (KED)	0.312 ppb	3,280 cps	
138Ba (KED)	12.855 ppb	201,821 cps	
139La (KED)	1.229 ppb	40,111 cps	
140Ce (KED)	2.459 ppb	109,162 cps	
141Pr (KED)	0.286 ppb	13,344 cps	
142Nd (KED)	1.505 ppb	28,743 cps	
152Sm (KED)	0.194 ppb	3,631 cps	
153Eu (KED)	0.038 ppb	1,433 cps	
158Gd (KED)	0.185 ppb	4,901 cps	
159Tb (KED)	48.979 %	3,713,680 cps	
164Dy (KED)	0.124 ppb	3,701 cps	
166Er (KED)	0.060 ppb	2,550 cps	
169Tm (KED)	0.007 ppb	913 cps	
174Yb (KED)	0.046 ppb	2,084 cps	
175Lu (KED)	-0.359 ppb	18,087 cps	
205Tl (KED)	0.024 ppb	2,170 cps	
208Pb (KED)	2.441 ppb	161,023 cps	
209Bi (KED)	44.946 %	3,434,155 cps	
232Th (KED)	0.428 ppb	53,869 cps	
238U (KED)	0.195 ppb	30,086 cps	

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	60.681 %	33,278 cps	
51V (KED)	2.080 ppb	6,268 cps	
52Cr (KED)	3.818 ppb	17,993 cps	
55Mn (KED)	32.027 ppb	74,723 cps	
56Fe (KED)	1,127.361 ppb	4,871,248 cps	
58Ni (KED)	4.765 ppb	29,445 cps	
59Co (KED)	0.591 ppb	5,711 cps	
63Cu (KED)	11.856 ppb	79,653 cps	
64Zn (KED)	319.355 ppb	519,045 cps	
69Ga (KED)	2.522 ppb	5,201 cps	
75As (KED)	1.339 ppb	650 cps	
80Se (KED)	3.595 ppb	837 cps	
85Rb (KED)	2.623 ppb	5,361 cps	
88Sr (KED)	21.288 ppb	61,980 cps	
89Y (KED)	55.649 %	313,490 cps	
107Ag (KED)	0.127 ppb	2,570 cps	
114Cd (KED)	0.107 ppb	830 cps	
115In (KED)	50.453 %	601,737 cps	
133Cs (KED)	0.231 ppb	2,554 cps	
138Ba (KED)	10.146 ppb	163,894 cps	
139La (KED)	0.868 ppb	29,121 cps	
140Ce (KED)	1.800 ppb	82,176 cps	
141Pr (KED)	0.205 ppb	9,817 cps	
142Nd (KED)	1.134 ppb	22,257 cps	
152Sm (KED)	0.156 ppb	2,997 cps	
153Eu (KED)	0.031 ppb	1,203 cps	
158Gd (KED)	0.140 ppb	3,824 cps	
159Tb (KED)	50.316 %	3,815,087 cps	
164Dy (KED)	0.094 ppb	2,894 cps	
166Er (KED)	0.041 ppb	1,887 cps	
169Tm (KED)	0.006 ppb	740 cps	
174Yb (KED)	0.038 ppb	1,787 cps	
175Lu (KED)	-0.363 ppb	18,344 cps	
205Tl (KED)	0.017 ppb	1,490 cps	
208Pb (KED)	1.952 ppb	124,832 cps	
209Bi (KED)	42.909 %	3,278,493 cps	
232Th (KED)	0.300 ppb	36,019 cps	
238U (KED)	0.220 ppb	32,389 cps	