

Instrument Summary:

Instrument ID: iCAP Q
Serial Number: Undefined

Labbook Summary:

Path and filename: _Application Data\Workspace\LabBooks\wlw\20211020-1.imexp
Labbook created by: Administrator
Based on template:
Hardware configuration: iCAPQ1
Labbook type: eQuant
Qtegra version (last saved): 2.7.2425.154
Labbook started: 10/20/2021 3:37:28 PM
Labbook finished: 10/20/2021 6:11:14 PM

Method Summary:

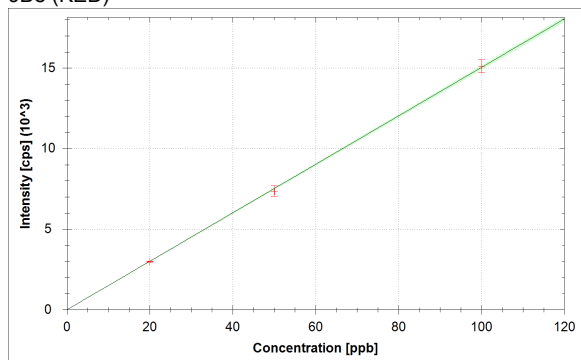
Isotope	Mode	Dwell time (s)	# of Channels	Spacing	Resolution	IS
6Li (KED)	KED	0.03	3	0.1	Normal	
9Be (KED)	KED	0.03	3	0.1	Normal	6Li (KED)
11B (KED)	KED	0.03	3	0.1	Normal	6Li (KED)
24Mg (KED)	KED	0.03	3	0.1	Normal	6Li (KED)
27Al (KED)	KED	0.03	3	0.1	Normal	45Sc (KED)
45Sc (KED)	KED	0.03	3	0.1	Normal	
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)



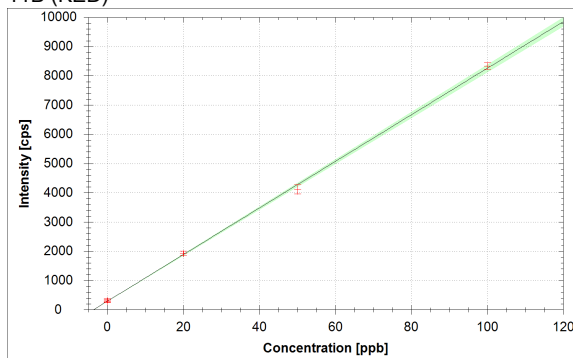
$$f(x) = 150.3300 \cdot x + 0.9877$$

$$R^2 = 0.9998$$

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

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

11B (KED)



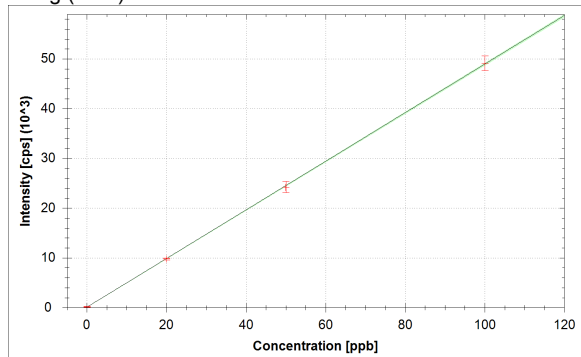
$$f(x) = 79.6607 \cdot x + 292.7883$$

$$R^2 = 0.9992$$

$$\text{BEC} = 3.675 \text{ ppb}$$

$$\text{LoD} = 2.2970 \text{ ppb}$$

24Mg (KED)



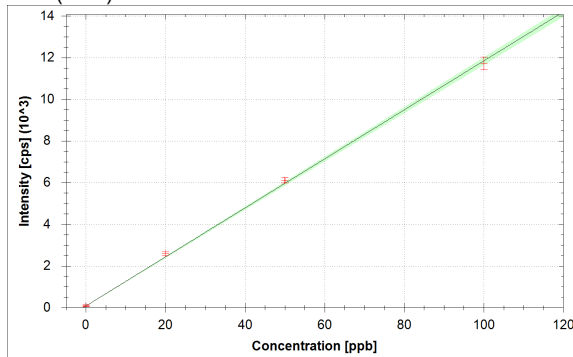
$$f(x) = 488.6312 \cdot x + 84.5955$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.173 \text{ ppb}$$

$$\text{LoD} = 0.3212 \text{ ppb}$$

27Al (KED)



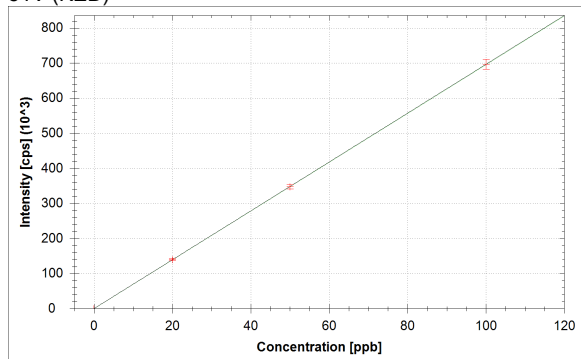
$$f(x) = 117.6172 \cdot x + 77.0852$$

$$R^2 = 0.9993$$

$$\text{BEC} = 0.655 \text{ ppb}$$

$$\text{LoD} = 1.1447 \text{ ppb}$$

51V (KED)



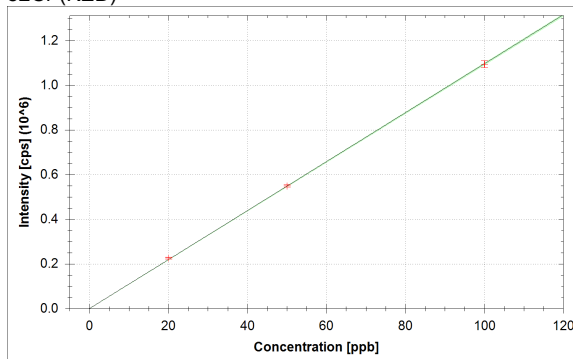
$$f(x) = 6965.1448 \cdot x + 4.5457$$

$$R^2 = 1.0000$$

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

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

52Cr (KED)



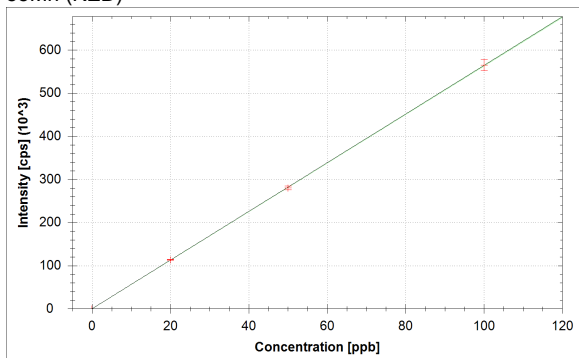
$$f(x) = 10959.6435 \cdot x + 53.5119$$

$$R^2 = 0.9999$$

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

$$\text{LoD} = 0.0054 \text{ ppb}$$

55Mn (KED)



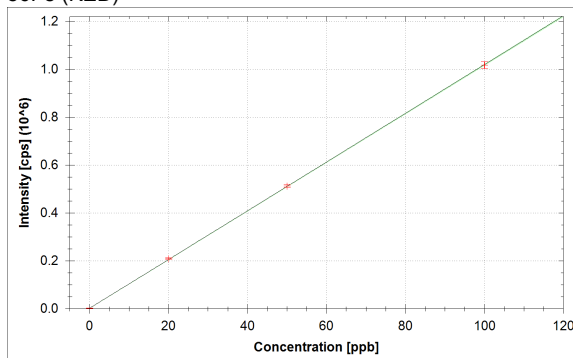
$$f(x) = 5641.0756 \cdot x + 38.0521$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.0115 \text{ ppb}$$

56Fe (KED)



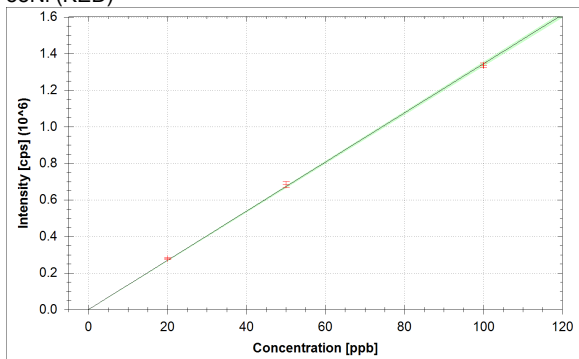
$$f(x) = 10179.3748 \cdot x + 1649.1066$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.1381 \text{ ppb}$$

58Ni (KED)



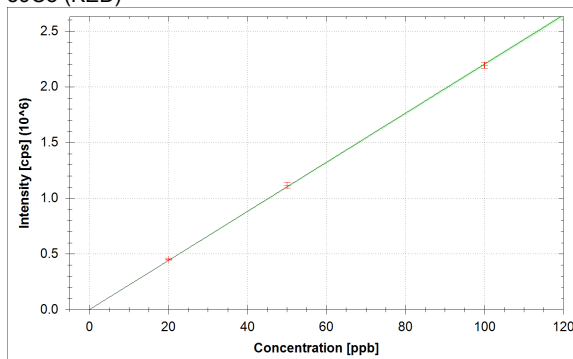
$$f(x) = 13436.7108 \cdot x + 290.2889$$

$$R^2 = 0.9998$$

$$\text{BEC} = 0.022 \text{ ppb}$$

$$\text{LoD} = 0.0121 \text{ ppb}$$

59Co (KED)



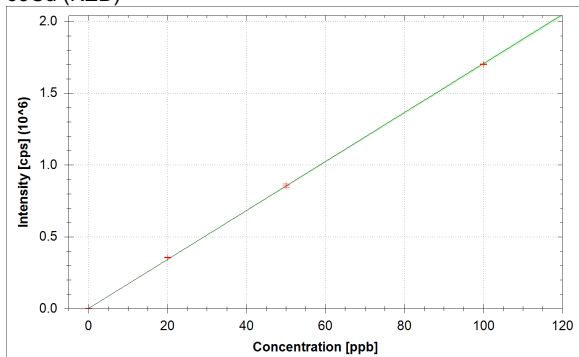
$$f(x) = 22023.4369 \cdot x + 23.5860$$

$$R^2 = 0.9999$$

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

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

63Cu (KED)



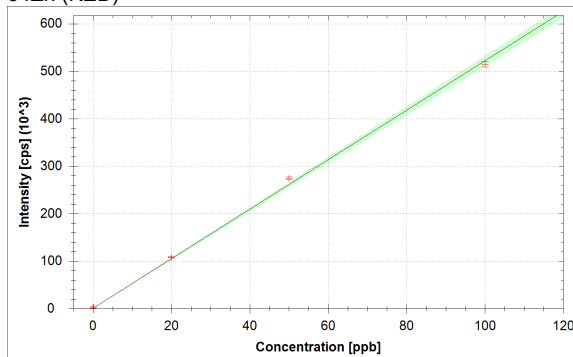
$$f(x) = 17046.4339 \cdot x + 660.3821$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.039 \text{ ppb}$$

$$\text{LoD} = 0.2056 \text{ ppb}$$

64Zn (KED)



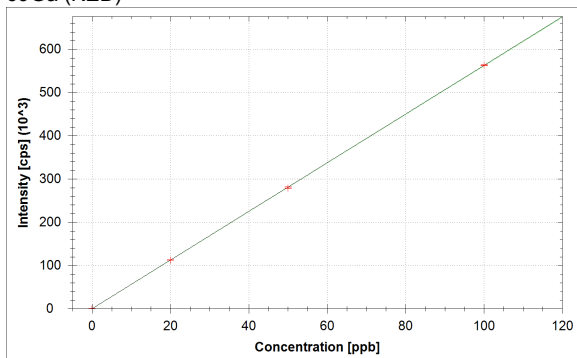
$$f(x) = 5212.2088 \cdot x + 828.9371$$

$$R^2 = 0.9987$$

$$\text{BEC} = 0.159 \text{ ppb}$$

$$\text{LoD} = 1.0351 \text{ ppb}$$

69Ga (KED)



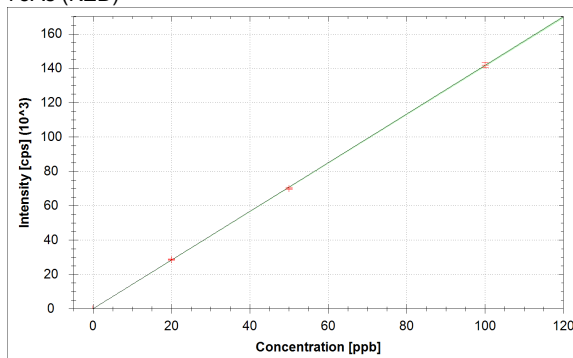
$$f(x) = 5624.4468x + 69.5491$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.0562 \text{ ppb}$$

75As (KED)



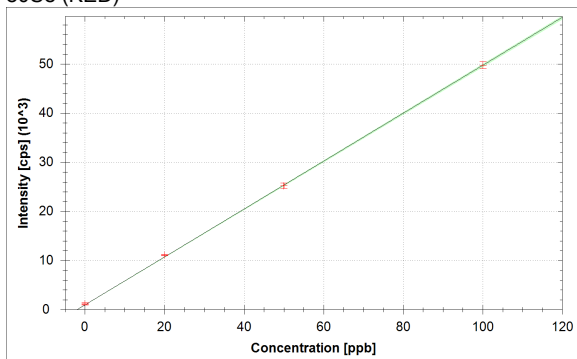
$$f(x) = 1415.5941x + 17.3832$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.0132 \text{ ppb}$$

80Se (KED)



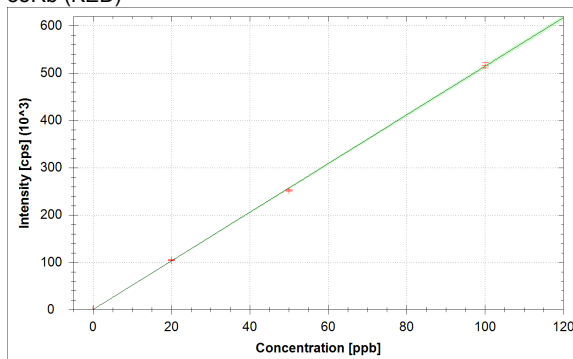
$$f(x) = 488.1072x + 939.7962$$

$$R^2 = 0.9999$$

$$\text{BEC} = 1.925 \text{ ppb}$$

$$\text{LoD} = 1.4472 \text{ ppb}$$

85Rb (KED)



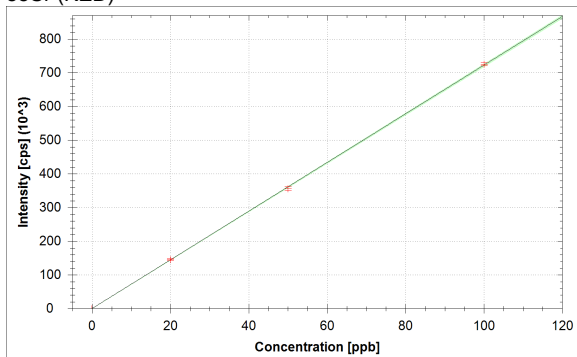
$$f(x) = 5142.8909x + 13.7286$$

$$R^2 = 0.9998$$

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

$$\text{LoD} = 0.0070 \text{ ppb}$$

88Sr (KED)



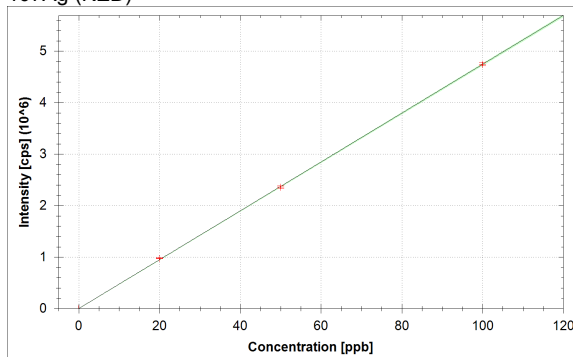
$$f(x) = 7226.3080x + 172.0551$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.024 \text{ ppb}$$

$$\text{LoD} = 0.0083 \text{ ppb}$$

107Ag (KED)



$$f(x) = 47438.8466x + 12.8161$$

$$R^2 = 0.9999$$

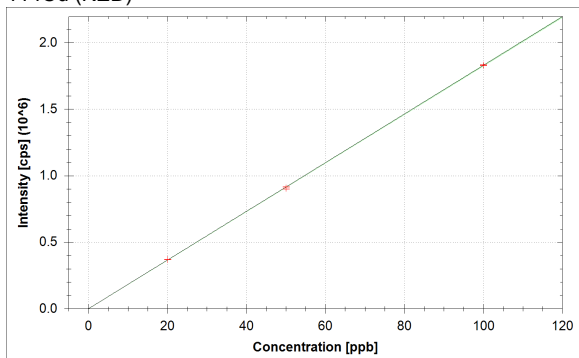
$$\text{BEC} = 0.000 \text{ ppb}$$

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

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¹¹⁴Cd (KED)



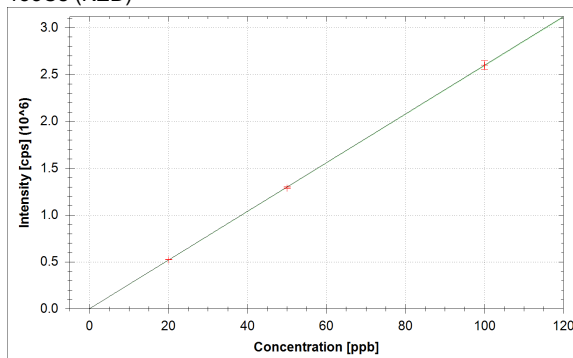
$$f(x) = 18290.0049 \cdot x + 45.7965$$

$$R^2 = 1.0000$$

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

$$\text{LoD} = 0.0038 \text{ ppb}$$

¹³³Cs (KED)



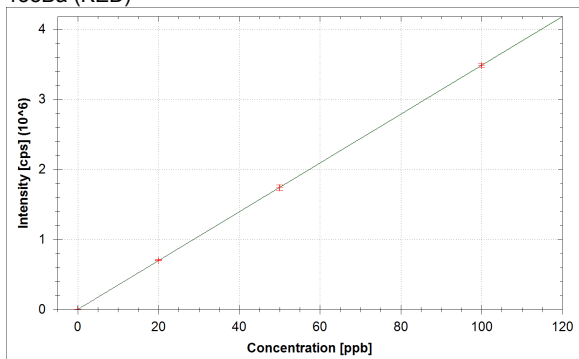
$$f(x) = 25962.2994 \cdot x + 15.5677$$

$$R^2 = 1.0000$$

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

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

¹³⁸Ba (KED)



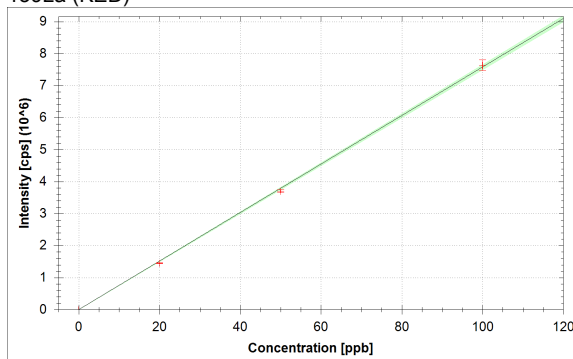
$$f(x) = 34843.8097 \cdot x + 1393.0260$$

$$R^2 = 1.0000$$

$$\text{BEC} = 0.040 \text{ ppb}$$

$$\text{LoD} = 0.0800 \text{ ppb}$$

¹³⁹La (KED)



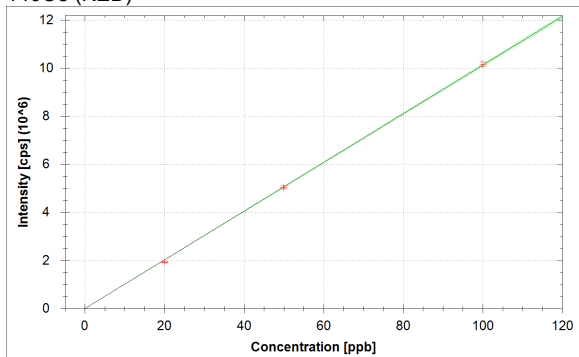
$$f(x) = 75801.0521 \cdot x + 27.1423$$

$$R^2 = 0.9996$$

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

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

¹⁴⁰Ce (KED)



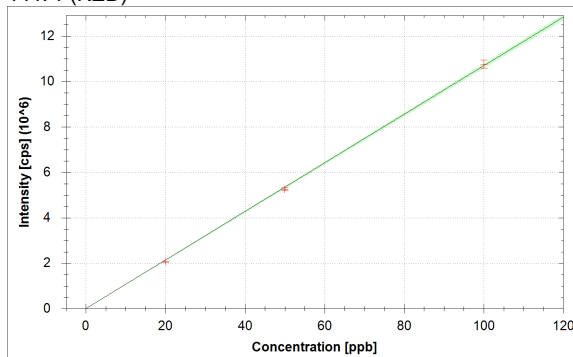
$$f(x) = 101252.0441 \cdot x + 95.0632$$

$$R^2 = 0.9998$$

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

$$\text{LoD} = 0.0015 \text{ ppb}$$

¹⁴¹Pr (KED)

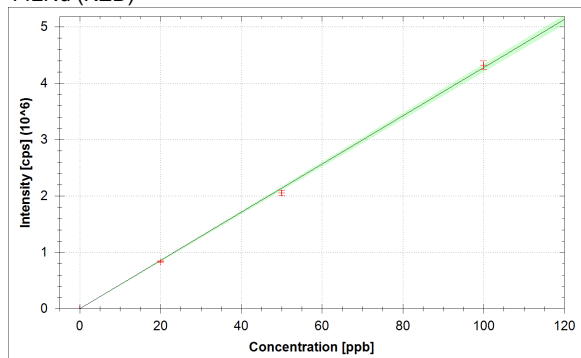


$$f(x) = 106942.5426 \cdot x + 3.7364$$

$$R^2 = 0.9997$$

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

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

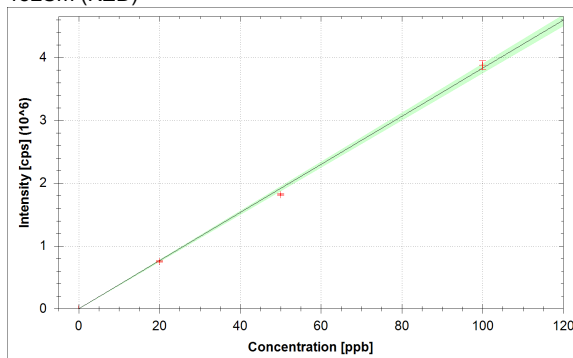
¹⁴²Nd (KED)

$$f(x) = 42734.3073 \cdot x + 16.7401$$

$$R^2 = 0.9993$$

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

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

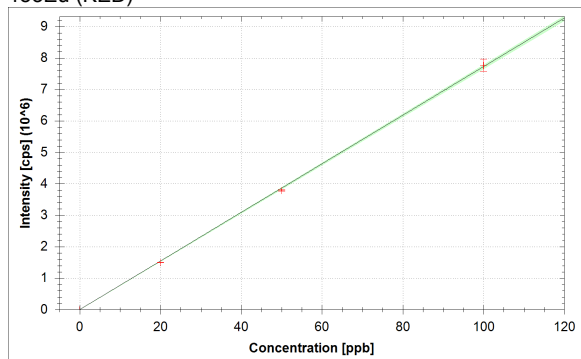
¹⁵²Sm (KED)

$$f(x) = 38286.6297 \cdot x + 2.7956$$

$$R^2 = 0.9989$$

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

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

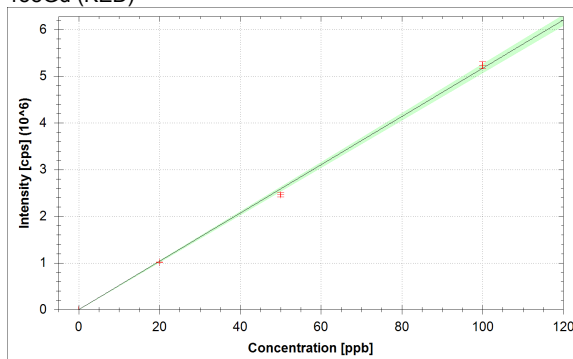
¹⁵³Eu (KED)

$$f(x) = 77250.3315 \cdot x + 5.5843$$

$$R^2 = 0.9998$$

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

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

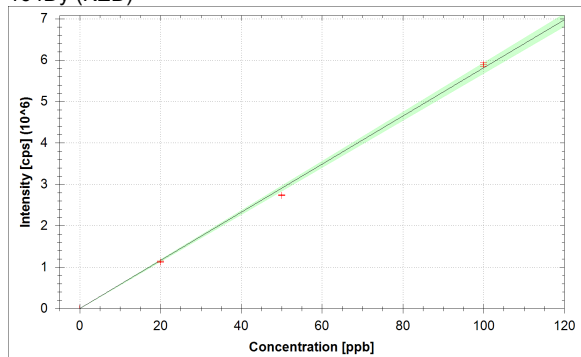
¹⁵⁸Gd (KED)

$$f(x) = 51702.8253 \cdot x + 7.4391$$

$$R^2 = 0.9990$$

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

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

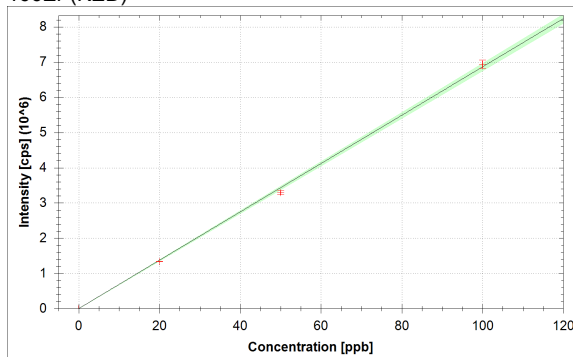
¹⁶⁴Dy (KED)

$$f(x) = 58091.9761 \cdot x + 19.6359$$

$$R^2 = 0.9985$$

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

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

¹⁶⁶Er (KED)

$$f(x) = 68627.5473 \cdot x + 439.9136$$

$$R^2 = 0.9992$$

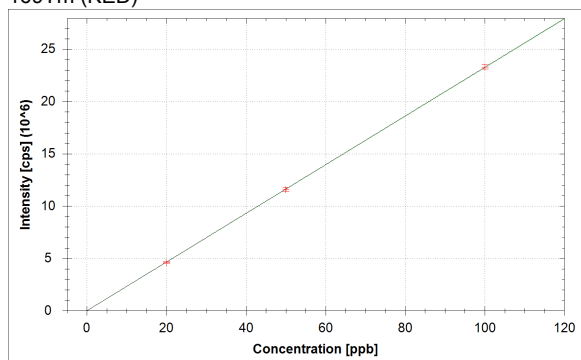
$$\text{BEC} = 0.006 \text{ ppb}$$

$$\text{LoD} = 0.0026 \text{ ppb}$$

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¹⁶⁹Tm (KED)



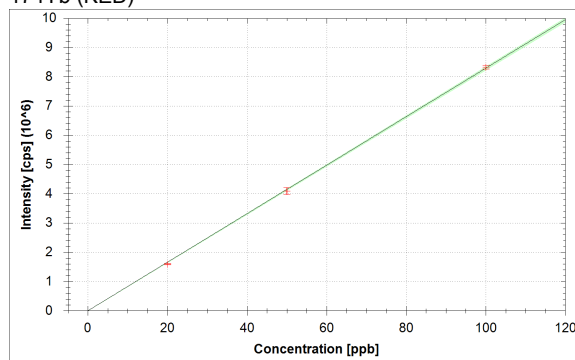
$$f(x) = 232590.7446 \cdot x + 4.6772$$

$$R^2 = 1.0000$$

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

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

¹⁷⁴Yb (KED)



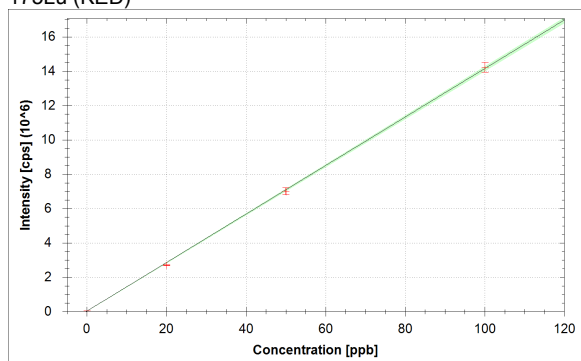
$$f(x) = 82885.4674 \cdot x + 23.3186$$

$$R^2 = 0.9998$$

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

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

¹⁷⁵Lu (KED)



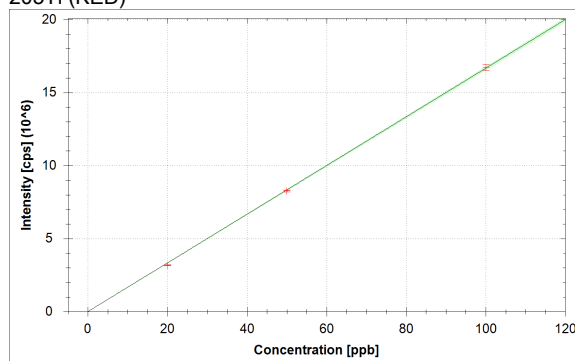
$$f(x) = 141241.6573 \cdot x + 29028.0452$$

$$R^2 = 0.9997$$

$$\text{BEC} = 0.206 \text{ ppb}$$

$$\text{LoD} = 0.0301 \text{ ppb}$$

²⁰⁵Tl (KED)



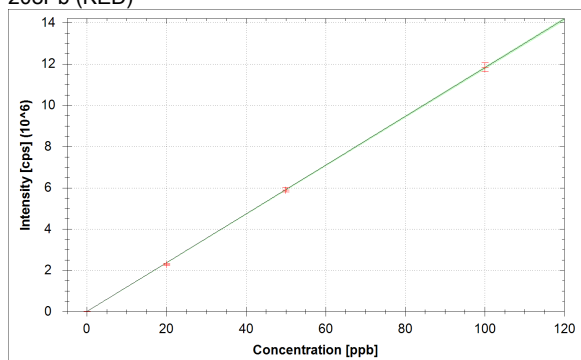
$$f(x) = 166664.3925 \cdot x + 13.9252$$

$$R^2 = 0.9998$$

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

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

²⁰⁸Pb (KED)



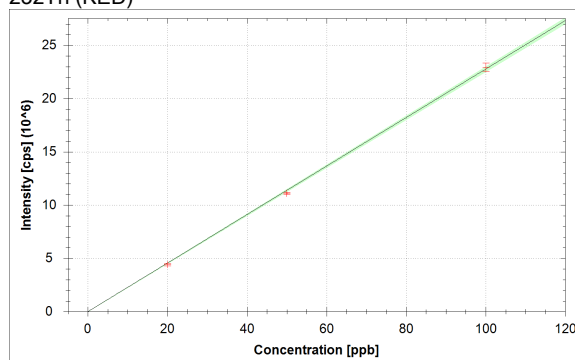
$$f(x) = 118141.5198 \cdot x + 4815.7484$$

$$R^2 = 0.9999$$

$$\text{BEC} = 0.041 \text{ ppb}$$

$$\text{LoD} = 0.0378 \text{ ppb}$$

²³²Th (KED)



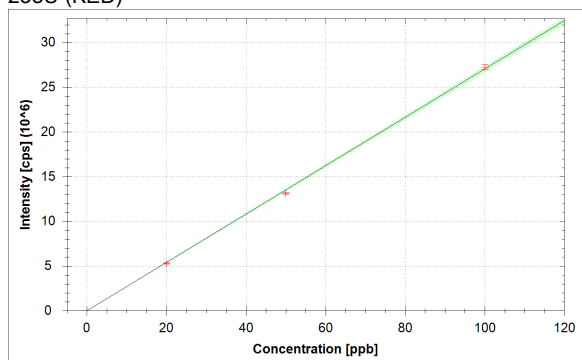
$$f(x) = 227687.6676 \cdot x + 68.7444$$

$$R^2 = 0.9997$$

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

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

238U (KED)



$$f(x) = 270497.8528 \cdot x + 77.0787$$

$$R^2 = 0.9996$$

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

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

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Standards:

Analysis Index: 3
Analysis Name: 0+20
Analysis Type: STD
Analysis Started at: 10/20/2021 3:44:15 PM
Standard (Stock): std0
Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	117.827 %		
9Be (KED)	0.000 ppb	1.7 %	0.000 ppb
11B (KED)	0.000 ppb	0.2 %	0.000 ppb
24Mg (KED)	0.000 ppb	0.2 %	0.000 ppb
27Al (KED)	0.000 ppb	0.3 %	0.000 ppb
45Sc (KED)	122.504 %		
51V (KED)	0.000 ppb	0.9 %	0.000 ppb
52Cr (KED)	0.000 ppb	0.2 %	0.000 ppb
55Mn (KED)	0.000 ppb	0.4 %	0.000 ppb
56Fe (KED)	0.000 ppb	0.0 %	0.000 ppb
58Ni (KED)	0.000 ppb	0.1 %	0.000 ppb
59Co (KED)	0.000 ppb	0.2 %	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	0.2 %	0.000 ppb
75As (KED)	0.000 ppb	0.2 %	0.000 ppb
80Se (KED)	0.000 ppb	0.0 %	0.000 ppb
85Rb (KED)	0.000 ppb	0.9 %	0.000 ppb
88Sr (KED)	0.000 ppb	0.1 %	0.000 ppb
89Y (KED)	121.428 %		
107Ag (KED)	0.000 ppb	0.2 %	0.000 ppb
114Cd (KED)	0.000 ppb	0.1 %	0.000 ppb
115In (KED)	121.334 %		
133Cs (KED)	0.000 ppb	0.1 %	0.000 ppb
138Ba (KED)	0.000 ppb	0.0 %	0.000 ppb
139La (KED)	0.000 ppb	0.8 %	0.000 ppb
140Ce (KED)	0.000 ppb	0.1 %	0.000 ppb
141Pr (KED)	0.000 ppb	0.4 %	0.000 ppb
142Nd (KED)	0.000 ppb	0.3 %	0.000 ppb
152Sm (KED)	0.000 ppb	0.0 %	0.000 ppb
153Eu (KED)	0.000 ppb	0.5 %	0.000 ppb
158Gd (KED)	0.000 ppb	0.6 %	0.000 ppb
159Tb (KED)	119.246 %		
164Dy (KED)	0.000 ppb	0.5 %	0.000 ppb
166Er (KED)	0.000 ppb	0.0 %	0.000 ppb
169Tm (KED)	0.000 ppb	0.7 %	0.000 ppb
174Yb (KED)	0.000 ppb	0.1 %	0.000 ppb
175Lu (KED)	0.000 ppb	0.0 %	0.000 ppb
205Tl (KED)	0.000 ppb	0.3 %	0.000 ppb
208Pb (KED)	0.000 ppb	0.0 %	0.000 ppb
209Bi (KED)	119.655 %		
232Th (KED)	0.000 ppb	0.3 %	0.000 ppb
238U (KED)	0.000 ppb	0.4 %	0.000 ppb

Standards:

Analysis Index: 4
 Analysis Name: 20+20
 Analysis Type: STD
 Analysis Started at: 10/20/2021 3:47:45 PM
 Standard (Stock): std3
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	119.757 %		
9Be (KED)	19.800 ppb	0.9 %	20.000 ppb
11B (KED)	20.508 ppb	4.4 %	20.000 ppb
24Mg (KED)	19.783 ppb	2.3 %	20.000 ppb
27Al (KED)	21.374 ppb	3.4 %	20.000 ppb
45Sc (KED)	127.806 %		
51V (KED)	20.119 ppb	2.4 %	20.000 ppb
52Cr (KED)	20.631 ppb	2.1 %	20.000 ppb
55Mn (KED)	20.036 ppb	1.5 %	20.000 ppb
56Fe (KED)	20.355 ppb	2.0 %	20.000 ppb
58Ni (KED)	20.727 ppb	2.0 %	20.000 ppb
59Co (KED)	20.551 ppb	2.1 %	20.000 ppb
63Cu (KED)	20.817 ppb	0.5 %	20.000 ppb
64Zn (KED)	20.548 ppb	1.2 %	20.000 ppb
69Ga (KED)	19.979 ppb	0.4 %	20.000 ppb
75As (KED)	20.246 ppb	1.3 %	20.000 ppb
80Se (KED)	20.744 ppb	1.1 %	20.000 ppb
85Rb (KED)	20.268 ppb	1.2 %	20.000 ppb
88Sr (KED)	20.132 ppb	1.9 %	20.000 ppb
89Y (KED)	126.498 %		
107Ag (KED)	20.583 ppb	1.1 %	20.000 ppb
114Cd (KED)	20.205 ppb	0.7 %	20.000 ppb
115In (KED)	124.268 %		
133Cs (KED)	20.128 ppb	0.3 %	20.000 ppb
138Ba (KED)	20.173 ppb	1.7 %	20.000 ppb
139La (KED)	19.116 ppb	1.0 %	20.000 ppb
140Ce (KED)	19.029 ppb	1.7 %	20.000 ppb
141Pr (KED)	19.180 ppb	0.8 %	20.000 ppb
142Nd (KED)	19.494 ppb	1.5 %	20.000 ppb
152Sm (KED)	19.690 ppb	1.7 %	20.000 ppb
153Eu (KED)	19.337 ppb	0.6 %	20.000 ppb
158Gd (KED)	19.648 ppb	0.6 %	20.000 ppb
159Tb (KED)	124.376 %		
164Dy (KED)	19.381 ppb	1.7 %	20.000 ppb
166Er (KED)	19.422 ppb	0.5 %	20.000 ppb
169Tm (KED)	19.809 ppb	1.7 %	20.000 ppb
174Yb (KED)	19.231 ppb	1.9 %	20.000 ppb
175Lu (KED)	18.915 ppb	0.6 %	20.000 ppb
205Tl (KED)	19.128 ppb	1.1 %	20.000 ppb
208Pb (KED)	19.293 ppb	2.2 %	20.000 ppb
209Bi (KED)	121.252 %		
232Th (KED)	19.399 ppb	2.9 %	20.000 ppb
238U (KED)	19.636 ppb	1.7 %	20.000 ppb

Comprehensive

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Standards:

Analysis Index: 5
Analysis Name: 50+20
Analysis Type: STD
Analysis Started at: 10/20/2021 3:51:51 PM
Standard (Stock): std1
Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	118.415 %		
9Be (KED)	48.957 ppb	4.5 %	50.000 ppb
11B (KED)	47.970 ppb	4.2 %	50.000 ppb
24Mg (KED)	49.398 ppb	4.7 %	50.000 ppb
27Al (KED)	51.347 ppb	2.1 %	50.000 ppb
45Sc (KED)	130.545 %		
51V (KED)	49.858 ppb	1.7 %	50.000 ppb
52Cr (KED)	50.126 ppb	1.1 %	50.000 ppb
55Mn (KED)	49.651 ppb	1.7 %	50.000 ppb
56Fe (KED)	50.198 ppb	1.3 %	50.000 ppb
58Ni (KED)	50.846 ppb	2.4 %	50.000 ppb
59Co (KED)	50.604 ppb	2.2 %	50.000 ppb
63Cu (KED)	50.130 ppb	1.3 %	50.000 ppb
64Zn (KED)	52.545 ppb	1.0 %	50.000 ppb
69Ga (KED)	49.691 ppb	0.7 %	50.000 ppb
75As (KED)	49.532 ppb	0.9 %	50.000 ppb
80Se (KED)	49.684 ppb	2.3 %	50.000 ppb
85Rb (KED)	48.993 ppb	0.6 %	50.000 ppb
88Sr (KED)	49.208 ppb	1.7 %	50.000 ppb
89Y (KED)	130.592 %		
107Ag (KED)	49.730 ppb	1.1 %	50.000 ppb
114Cd (KED)	49.666 ppb	1.1 %	50.000 ppb
115In (KED)	128.175 %		
133Cs (KED)	49.701 ppb	0.8 %	50.000 ppb
138Ba (KED)	49.858 ppb	2.2 %	50.000 ppb
139La (KED)	48.878 ppb	1.3 %	50.000 ppb
140Ce (KED)	49.701 ppb	1.3 %	50.000 ppb
141Pr (KED)	49.110 ppb	1.2 %	50.000 ppb
142Nd (KED)	48.022 ppb	2.2 %	50.000 ppb
152Sm (KED)	47.484 ppb	0.9 %	50.000 ppb
153Eu (KED)	49.120 ppb	0.7 %	50.000 ppb
158Gd (KED)	47.597 ppb	1.9 %	50.000 ppb
159Tb (KED)	127.417 %		
164Dy (KED)	47.156 ppb	0.6 %	50.000 ppb
166Er (KED)	48.025 ppb	1.7 %	50.000 ppb
169Tm (KED)	49.851 ppb	1.8 %	50.000 ppb
174Yb (KED)	49.370 ppb	2.9 %	50.000 ppb
175Lu (KED)	49.351 ppb	2.9 %	50.000 ppb
205Tl (KED)	49.567 ppb	0.8 %	50.000 ppb
208Pb (KED)	49.882 ppb	1.7 %	50.000 ppb
209Bi (KED)	122.750 %		
232Th (KED)	48.751 ppb	0.9 %	50.000 ppb
238U (KED)	48.576 ppb	0.9 %	50.000 ppb

Standards:

Analysis Index: 6
 Analysis Name: 100+20
 Analysis Type: STD
 Analysis Started at: 10/20/2021 3:56:00 PM
 Standard (Stock): std2
 Standard DF: 1

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (KED)	118.121 %		
9Be (KED)	100.562 ppb	2.7 %	100.000 ppb
11B (KED)	100.913 ppb	1.5 %	100.000 ppb
24Mg (KED)	100.344 ppb	3.0 %	100.000 ppb
27Al (KED)	99.052 ppb	2.6 %	100.000 ppb
45Sc (KED)	131.508 %		
51V (KED)	100.047 ppb	2.1 %	100.000 ppb
52Cr (KED)	99.811 ppb	1.3 %	100.000 ppb
55Mn (KED)	100.167 ppb	2.3 %	100.000 ppb
56Fe (KED)	99.830 ppb	1.5 %	100.000 ppb
58Ni (KED)	99.432 ppb	0.9 %	100.000 ppb
59Co (KED)	99.588 ppb	1.2 %	100.000 ppb
63Cu (KED)	99.772 ppb	0.2 %	100.000 ppb
64Zn (KED)	98.618 ppb	1.1 %	100.000 ppb
69Ga (KED)	100.159 ppb	0.2 %	100.000 ppb
75As (KED)	100.185 ppb	1.0 %	100.000 ppb
80Se (KED)	100.009 ppb	1.4 %	100.000 ppb
85Rb (KED)	100.450 ppb	1.2 %	100.000 ppb
88Sr (KED)	100.370 ppb	0.7 %	100.000 ppb
89Y (KED)	130.145 %		
107Ag (KED)	100.018 ppb	0.6 %	100.000 ppb
114Cd (KED)	100.126 ppb	0.2 %	100.000 ppb
115In (KED)	127.259 %		
133Cs (KED)	100.124 ppb	1.8 %	100.000 ppb
138Ba (KED)	100.037 ppb	0.8 %	100.000 ppb
139La (KED)	100.738 ppb	2.1 %	100.000 ppb
140Ce (KED)	100.344 ppb	0.9 %	100.000 ppb
141Pr (KED)	100.609 ppb	1.7 %	100.000 ppb
142Nd (KED)	101.090 ppb	1.8 %	100.000 ppb
152Sm (KED)	101.320 ppb	1.8 %	100.000 ppb
153Eu (KED)	100.573 ppb	2.6 %	100.000 ppb
158Gd (KED)	101.272 ppb	1.4 %	100.000 ppb
159Tb (KED)	127.381 %		
164Dy (KED)	101.546 ppb	0.7 %	100.000 ppb
166Er (KED)	101.103 ppb	1.8 %	100.000 ppb
169Tm (KED)	100.113 ppb	0.9 %	100.000 ppb
174Yb (KED)	100.469 ppb	0.7 %	100.000 ppb
175Lu (KED)	100.542 ppb	2.1 %	100.000 ppb
205Tl (KED)	100.391 ppb	1.2 %	100.000 ppb
208Pb (KED)	100.200 ppb	1.8 %	100.000 ppb
209Bi (KED)	122.391 %		
232Th (KED)	100.745 ppb	1.8 %	100.000 ppb
238U (KED)	100.785 ppb	0.9 %	100.000 ppb

Comprehensive

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Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Main Runs:	Survey Runs:	Start Time:	User name:
1	water	3	0	10/20/2021 3:37:34 PM	WINDOWS-UPCI4ER\Administrator
2	blk	3	0	10/20/2021 3:40:36 PM	WINDOWS-UPCI4ER\Administrator
3	0+20	3	0	10/20/2021 3:44:15 PM	WINDOWS-UPCI4ER\Administrator
4	20+20	3	0	10/20/2021 3:47:45 PM	WINDOWS-UPCI4ER\Administrator
5	50+20	3	0	10/20/2021 3:51:51 PM	WINDOWS-UPCI4ER\Administrator
6	100+20	3	0	10/20/2021 3:56:00 PM	WINDOWS-UPCI4ER\Administrator
7	191083ti	3	0	10/20/2021 4:00:23 PM	WINDOWS-UPCI4ER\Administrator
8	191077ti	3	0	10/20/2021 4:04:51 PM	WINDOWS-UPCI4ER\Administrator
9	191063ti	3	0	10/20/2021 4:09:09 PM	WINDOWS-UPCI4ER\Administrator
10	w122ti	3	0	10/20/2021 4:13:24 PM	WINDOWS-UPCI4ER\Administrator
11	191082ti	3	0	10/20/2021 4:17:29 PM	WINDOWS-UPCI4ER\Administrator
12	w100ti	3	0	10/20/2021 4:21:57 PM	WINDOWS-UPCI4ER\Administrator
13	29690ti	3	0	10/20/2021 4:26:09 PM	WINDOWS-UPCI4ER\Administrator
14	1805068ti	3	0	10/20/2021 4:30:13 PM	WINDOWS-UPCI4ER\Administrator
15	191128ti	3	0	10/20/2021 4:34:23 PM	WINDOWS-UPCI4ER\Administrator
16	19196ti	3	0	10/20/2021 4:38:29 PM	WINDOWS-UPCI4ER\Administrator
17	191117ti	3	0	10/20/2021 4:42:45 PM	WINDOWS-UPCI4ER\Administrator
18	1855y ti	3	0	10/20/2021 4:46:51 PM	WINDOWS-UPCI4ER\Administrator
19	29682ti	3	0	10/20/2021 4:50:55 PM	WINDOWS-UPCI4ER\Administrator
20	03050jian	3	0	10/20/2021 4:54:50 PM	WINDOWS-UPCI4ER\Administrator
21	03470jian	3	0	10/20/2021 4:59:17 PM	WINDOWS-UPCI4ER\Administrator
22	03266jian	3	0	10/20/2021 5:03:14 PM	WINDOWS-UPCI4ER\Administrator
23	3343jian	3	0	10/20/2021 5:06:34 PM	WINDOWS-UPCI4ER\Administrator
24	03260jian	3	0	10/20/2021 5:09:53 PM	WINDOWS-UPCI4ER\Administrator
25	03271jian	3	0	10/20/2021 5:13:12 PM	WINDOWS-UPCI4ER\Administrator
26	03272jian	3	0	10/20/2021 5:16:31 PM	WINDOWS-UPCI4ER\Administrator
27	w29jian	3	0	10/20/2021 5:19:47 PM	WINDOWS-UPCI4ER\Administrator
28	03273jian	3	0	10/20/2021 5:23:00 PM	WINDOWS-UPCI4ER\Administrator
29	00025jian	3	0	10/20/2021 5:26:16 PM	WINDOWS-UPCI4ER\Administrator
30	03049jian	3	0	10/20/2021 5:29:26 PM	WINDOWS-UPCI4ER\Administrator
31	30013jian	1	0	10/20/2021 5:32:41 PM	WINDOWS-UPCI4ER\Administrator
32	0078jian	1	0	10/20/2021 5:34:33 PM	WINDOWS-UPCI4ER\Administrator
33	03045jian	1	0	10/20/2021 5:36:32 PM	WINDOWS-UPCI4ER\Administrator
34	03263ti	1	0	10/20/2021 5:38:25 PM	WINDOWS-UPCI4ER\Administrator
35	03255ti	1	0	10/20/2021 5:40:28 PM	WINDOWS-UPCI4ER\Administrator
36	03028ti	1	0	10/20/2021 5:42:24 PM	WINDOWS-UPCI4ER\Administrator
37	03252ti	1	0	10/20/2021 5:44:27 PM	WINDOWS-UPCI4ER\Administrator
38	03035ti	1	0	10/20/2021 5:46:21 PM	WINDOWS-UPCI4ER\Administrator
39	03262ti	1	0	10/20/2021 5:48:15 PM	WINDOWS-UPCI4ER\Administrator
40	03253ti	1	0	10/20/2021 5:50:14 PM	WINDOWS-UPCI4ER\Administrator
41	03032ti	1	0	10/20/2021 5:52:11 PM	WINDOWS-UPCI4ER\Administrator
42	03025ti	1	0	10/20/2021 5:54:12 PM	WINDOWS-UPCI4ER\Administrator
43	03251ti	1	0	10/20/2021 5:56:05 PM	WINDOWS-UPCI4ER\Administrator
44	03261ti	1	0	10/20/2021 5:58:02 PM	WINDOWS-UPCI4ER\Administrator
45	03010ti	1	0	10/20/2021 5:59:57 PM	WINDOWS-UPCI4ER\Administrator
46	03264ti	1	0	10/20/2021 6:01:49 PM	WINDOWS-UPCI4ER\Administrator
47	03254ti	1	0	10/20/2021 6:03:38 PM	WINDOWS-UPCI4ER\Administrator
48	03258ti	1	0	10/20/2021 6:05:30 PM	WINDOWS-UPCI4ER\Administrator
49	03038ti	1	0	10/20/2021 6:07:33 PM	WINDOWS-UPCI4ER\Administrator
50	03037ti	1	0	10/20/2021 6:09:22 PM	WINDOWS-UPCI4ER\Administrator

Sample Summary

Instrument ID: iCAP Q

Analysis index: 1

Analysis name: water

Analysis started at: 10/20/2021 3:37:34 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	0.042 %	173.2 %
11B (KED)	Infinity ppb	
24Mg (KED)	Infinity ppb	
27Al (KED)	19.746 ppb	92.7 %
45Sc (KED)	0.186 %	16.4 %
51V (KED)	0.334 ppb	26.6 %
52Cr (KED)	0.690 ppb	52.8 %
55Mn (KED)	0.506 ppb	98.9 %
56Fe (KED)	9.974 ppb	14.5 %
58Ni (KED)	6.481 ppb	37.2 %
59Co (KED)	0.027 ppb	180.0 %
63Cu (KED)	Infinity ppb	
64Zn (KED)	Infinity ppb	
80Se (KED)	Infinity ppb	
89Y (KED)	0.000 %	
114Cd (KED)	Infinity ppb	
115In (KED)	0.000 %	
138Ba (KED)	Infinity ppb	
159Tb (KED)	0.000 %	173.2 %
205Tl (KED)	4.807 ppb	70.8 %
208Pb (KED)	18.750 ppb	72.7 %
209Bi (KED)	0.002 %	82.0 %
232Th (KED)	0.000 ppb	0.0 %
238U (KED)	2.516 ppb	134.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	0.042 %	1 cps	173.2 %
9Be (KED)		0 cps	
11B (KED)	Infinity ppb	12 cps	83.3 %
24Mg (KED)	Infinity ppb	4 cps	43.3 %
27Al (KED)	19.746 ppb	4 cps	86.6 %
45Sc (KED)	0.186 %	73 cps	16.4 %
51V (KED)	0.334 ppb	4 cps	43.3 %
52Cr (KED)	0.690 ppb	13 cps	43.3 %
55Mn (KED)	0.506 ppb	6 cps	91.7 %
56Fe (KED)	9.974 ppb	189 cps	8.0 %
58Ni (KED)	6.481 ppb	157 cps	28.8 %
59Co (KED)	0.027 ppb	1 cps	173.2 %
63Cu (KED)	Infinity ppb	36 cps	28.6 %
64Zn (KED)	Infinity ppb	246 cps	11.1 %
69Ga (KED)		1 cps	173.2 %
75As (KED)		10 cps	88.2 %
80Se (KED)	Infinity ppb	957 cps	5.7 %
85Rb (KED)		2 cps	86.6 %
88Sr (KED)		2 cps	173.2 %
89Y (KED)	0.000 %	0 cps	
107Ag (KED)		2 cps	173.2 %
114Cd (KED)	Infinity ppb	3 cps	0.0 %
115In (KED)	0.000 %	0 cps	
133Cs (KED)		1 cps	173.2 %

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Category	Concentration average	Intensity average	Intensity RSD
138Ba (KED)	Infinity ppb	14 cps	93.3 %
139La (KED)		0 cps	
140Ce (KED)		0 cps	
141Pr (KED)		0 cps	
142Nd (KED)		0 cps	
152Sm (KED)		0 cps	
153Eu (KED)		0 cps	
158Gd (KED)		0 cps	
159Tb (KED)	0.000 %	1 cps	173.2 %
164Dy (KED)		0 cps	
166Er (KED)		0 cps	
169Tm (KED)		0 cps	
174Yb (KED)		0 cps	
175Lu (KED)		0 cps	
205Tl (KED)	4.807 ppb	10 cps	33.3 %
208Pb (KED)	18.750 ppb	29 cps	33.3 %
209Bi (KED)	0.002 %	63 cps	82.0 %
232Th (KED)	0.000 ppb	0 cps	
238U (KED)	2.516 ppb	23 cps	161.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 2

Analysis name: blk

Analysis started at: 10/20/2021 3:40:36 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	100.000 %	
9Be (KED)	-0.007 ppb	0.0 %
11B (KED)	0.386 ppb	198.5 %
24Mg (KED)	0.125 ppb	85.5 %
27Al (KED)	0.294 ppb	129.8 %
45Sc (KED)	100.000 %	
51V (KED)	0.000 ppb	130.4 %
52Cr (KED)	0.001 ppb	154.2 %
55Mn (KED)	0.003 ppb	148.4 %
56Fe (KED)	0.055 ppb	83.2 %
58Ni (KED)	0.005 ppb	88.5 %
59Co (KED)	0.000 ppb	97.7 %
63Cu (KED)	0.050 ppb	137.6 %
64Zn (KED)	0.278 ppb	124.0 %
69Ga (KED)	0.011 ppb	167.7 %
75As (KED)	-0.005 ppb	87.5 %
80Se (KED)	0.386 ppb	125.1 %
85Rb (KED)	0.000 ppb	601.3 %
88Sr (KED)	0.006 ppb	48.3 %
89Y (KED)	100.000 %	
107Ag (KED)	0.000 ppb	105.9 %
114Cd (KED)	0.000 ppb	707.4 %
115In (KED)	100.000 %	
133Cs (KED)	0.000 ppb	2,176.2 %
138Ba (KED)	0.024 ppb	112.0 %
139La (KED)	0.000 ppb	3,559.6 %
140Ce (KED)	0.001 ppb	68.2 %
141Pr (KED)	0.000 ppb	148.2 %
142Nd (KED)	0.000 ppb	131.9 %
152Sm (KED)	0.000 ppb	269.0 %
153Eu (KED)	0.000 ppb	1,800.3 %
158Gd (KED)	0.000 ppb	367.8 %
159Tb (KED)	100.000 %	
164Dy (KED)	0.000 ppb	147.9 %
166Er (KED)	0.001 ppb	80.6 %
169Tm (KED)	0.000 ppb	106.6 %
174Yb (KED)	0.000 ppb	123.7 %
175Lu (KED)	0.033 ppb	30.6 %
205Tl (KED)	0.000 ppb	172.8 %
208Pb (KED)	0.011 ppb	112.4 %
209Bi (KED)	100.000 %	
232Th (KED)	0.000 ppb	3,517.6 %
238U (KED)	0.000 ppb	37.2 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	100.000 %	2,649 cps	21.3 %
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	0.386 ppb	316 cps	8.6 %
24Mg (KED)	0.125 ppb	141 cps	33.1 %
27Al (KED)	0.294 ppb	106 cps	19.0 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	100.000 %	39,512 cps	20.6 %
51V (KED)	0.000 ppb	6 cps	34.6 %
52Cr (KED)	0.001 ppb	64 cps	25.5 %
55Mn (KED)	0.003 ppb	50 cps	30.6 %
56Fe (KED)	0.055 ppb	2,150 cps	3.6 %
58Ni (KED)	0.005 ppb	346 cps	12.1 %
59Co (KED)	0.000 ppb	16 cps	68.9 %
63Cu (KED)	0.050 ppb	1,400 cps	61.2 %
64Zn (KED)	0.278 ppb	2,098 cps	62.6 %
69Ga (KED)	0.011 ppb	121 cps	63.6 %
75As (KED)	-0.005 ppb	10 cps	57.7 %
80Se (KED)	0.386 ppb	1,100 cps	5.7 %
85Rb (KED)	0.000 ppb	11 cps	91.7 %
88Sr (KED)	0.006 ppb	211 cps	10.5 %
89Y (KED)	100.000 %	367,354 cps	19.2 %
107Ag (KED)	0.000 ppb	19 cps	44.4 %
114Cd (KED)	0.000 ppb	47 cps	32.7 %
115In (KED)	100.000 %	695,617 cps	16.6 %
133Cs (KED)	0.000 ppb	17 cps	80.0 %
138Ba (KED)	0.024 ppb	2,164 cps	33.0 %
139La (KED)	0.000 ppb	26 cps	49.4 %
140Ce (KED)	0.001 ppb	162 cps	17.5 %
141Pr (KED)	0.000 ppb	11 cps	96.4 %
142Nd (KED)	0.000 ppb	21 cps	32.9 %
152Sm (KED)	0.000 ppb	4 cps	114.6 %
153Eu (KED)	0.000 ppb	6 cps	69.3 %
158Gd (KED)	0.000 ppb	10 cps	88.2 %
159Tb (KED)	100.000 %	3,563,809 cps	15.1 %
164Dy (KED)	0.000 ppb	14 cps	35.3 %
166Er (KED)	0.001 ppb	508 cps	5.3 %
169Tm (KED)	0.000 ppb	9 cps	43.3 %
174Yb (KED)	0.000 ppb	18 cps	21.7 %
175Lu (KED)	0.033 ppb	33,608 cps	13.8 %
205Tl (KED)	0.000 ppb	18 cps	47.2 %
208Pb (KED)	0.011 ppb	6,070 cps	20.4 %
209Bi (KED)	100.000 %	3,187,736 cps	15.6 %
232Th (KED)	0.000 ppb	71 cps	63.6 %
238U (KED)	0.000 ppb	132 cps	8.9 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 3

Analysis name: 0+20

Analysis started at: 10/20/2021 3:44:15 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	117.827 %	
9Be (KED)	0.000 ppb	1.7 %
11B (KED)	0.000 ppb	0.2 %
24Mg (KED)	0.000 ppb	0.2 %
27Al (KED)	0.000 ppb	0.3 %
45Sc (KED)	122.504 %	
51V (KED)	0.000 ppb	0.9 %
52Cr (KED)	0.000 ppb	0.2 %
55Mn (KED)	0.000 ppb	0.4 %
56Fe (KED)	0.000 ppb	0.0 %
58Ni (KED)	0.000 ppb	0.1 %
59Co (KED)	0.000 ppb	0.2 %
63Cu (KED)	0.000 ppb	0.2 %
64Zn (KED)	0.000 ppb	0.1 %
69Ga (KED)	0.000 ppb	0.2 %
75As (KED)	0.000 ppb	0.2 %
80Se (KED)	0.000 ppb	0.0 %
85Rb (KED)	0.000 ppb	0.9 %
88Sr (KED)	0.000 ppb	0.1 %
89Y (KED)	121.428 %	
107Ag (KED)	0.000 ppb	0.2 %
114Cd (KED)	0.000 ppb	0.1 %
115In (KED)	121.334 %	
133Cs (KED)	0.000 ppb	0.1 %
138Ba (KED)	0.000 ppb	0.0 %
139La (KED)	0.000 ppb	0.8 %
140Ce (KED)	0.000 ppb	0.1 %
141Pr (KED)	0.000 ppb	0.4 %
142Nd (KED)	0.000 ppb	0.3 %
152Sm (KED)	0.000 ppb	0.0 %
153Eu (KED)	0.000 ppb	0.5 %
158Gd (KED)	0.000 ppb	0.6 %
159Tb (KED)	119.246 %	
164Dy (KED)	0.000 ppb	0.5 %
166Er (KED)	0.000 ppb	0.0 %
169Tm (KED)	0.000 ppb	0.7 %
174Yb (KED)	0.000 ppb	0.1 %
175Lu (KED)	0.000 ppb	0.0 %
205Tl (KED)	0.000 ppb	0.3 %
208Pb (KED)	0.000 ppb	0.0 %
209Bi (KED)	119.655 %	
232Th (KED)	0.000 ppb	0.3 %
238U (KED)	0.000 ppb	0.4 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	117.827 %	3,122 cps	4.1 %
9Be (KED)	0.000 ppb	1 cps	173.2 %
11B (KED)	0.000 ppb	343 cps	13.1 %
24Mg (KED)	0.000 ppb	100 cps	23.3 %
27Al (KED)	0.000 ppb	94 cps	30.8 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	122.504 %	48,404 cps	0.5 %
51V (KED)	0.000 ppb	6 cps	91.7 %
52Cr (KED)	0.000 ppb	66 cps	20.5 %
55Mn (KED)	0.000 ppb	47 cps	42.9 %
56Fe (KED)	0.000 ppb	2,020 cps	1.3 %
58Ni (KED)	0.000 ppb	356 cps	10.5 %
59Co (KED)	0.000 ppb	29 cps	17.6 %
63Cu (KED)	0.000 ppb	802 cps	23.2 %
64Zn (KED)	0.000 ppb	1,007 cps	7.8 %
69Ga (KED)	0.000 ppb	84 cps	18.7 %
75As (KED)	0.000 ppb	21 cps	24.1 %
80Se (KED)	0.000 ppb	1,141 cps	4.4 %
85Rb (KED)	0.000 ppb	17 cps	87.2 %
88Sr (KED)	0.000 ppb	209 cps	9.4 %
89Y (KED)	121.428 %	446,069 cps	0.3 %
107Ag (KED)	0.000 ppb	16 cps	24.7 %
114Cd (KED)	0.000 ppb	56 cps	13.9 %
115In (KED)	121.334 %	844,019 cps	0.2 %
133Cs (KED)	0.000 ppb	19 cps	10.2 %
138Ba (KED)	0.000 ppb	1,661 cps	3.4 %
139La (KED)	0.000 ppb	32 cps	74.8 %
140Ce (KED)	0.000 ppb	113 cps	5.9 %
141Pr (KED)	0.000 ppb	4 cps	43.3 %
142Nd (KED)	0.000 ppb	20 cps	28.9 %
152Sm (KED)	0.000 ppb	3 cps	0.0 %
153Eu (KED)	0.000 ppb	7 cps	50.0 %
158Gd (KED)	0.000 ppb	9 cps	57.3 %
159Tb (KED)	119.246 %	4,249,706 cps	1.1 %
164Dy (KED)	0.000 ppb	23 cps	51.5 %
166Er (KED)	0.000 ppb	524 cps	2.4 %
169Tm (KED)	0.000 ppb	6 cps	69.3 %
174Yb (KED)	0.000 ppb	28 cps	13.9 %
175Lu (KED)	0.000 ppb	34,605 cps	3.2 %
205Tl (KED)	0.000 ppb	17 cps	34.6 %
208Pb (KED)	0.000 ppb	5,762 cps	1.9 %
209Bi (KED)	119.655 %	3,814,275 cps	0.3 %
232Th (KED)	0.000 ppb	82 cps	28.8 %
238U (KED)	0.000 ppb	92 cps	43.4 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 4

Analysis name: 20+20

Analysis started at: 10/20/2021 3:47:45 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	119.757 %	
9Be (KED)	19.800 ppb	0.9 %
11B (KED)	20.508 ppb	4.4 %
24Mg (KED)	19.783 ppb	2.3 %
27Al (KED)	21.374 ppb	3.4 %
45Sc (KED)	127.806 %	
51V (KED)	20.119 ppb	2.4 %
52Cr (KED)	20.631 ppb	2.1 %
55Mn (KED)	20.036 ppb	1.5 %
56Fe (KED)	20.355 ppb	2.0 %
58Ni (KED)	20.727 ppb	2.0 %
59Co (KED)	20.551 ppb	2.1 %
63Cu (KED)	20.817 ppb	0.5 %
64Zn (KED)	20.548 ppb	1.2 %
69Ga (KED)	19.979 ppb	0.4 %
75As (KED)	20.246 ppb	1.3 %
80Se (KED)	20.744 ppb	1.1 %
85Rb (KED)	20.268 ppb	1.2 %
88Sr (KED)	20.132 ppb	1.9 %
89Y (KED)	126.498 %	
107Ag (KED)	20.583 ppb	1.1 %
114Cd (KED)	20.205 ppb	0.7 %
115In (KED)	124.268 %	
133Cs (KED)	20.128 ppb	0.3 %
138Ba (KED)	20.173 ppb	1.7 %
139La (KED)	19.116 ppb	1.0 %
140Ce (KED)	19.029 ppb	1.7 %
141Pr (KED)	19.180 ppb	0.8 %
142Nd (KED)	19.494 ppb	1.5 %
152Sm (KED)	19.690 ppb	1.7 %
153Eu (KED)	19.337 ppb	0.6 %
158Gd (KED)	19.648 ppb	0.6 %
159Tb (KED)	124.376 %	
164Dy (KED)	19.381 ppb	1.7 %
166Er (KED)	19.422 ppb	0.5 %
169Tm (KED)	19.809 ppb	1.7 %
174Yb (KED)	19.231 ppb	1.9 %
175Lu (KED)	18.915 ppb	0.6 %
205Tl (KED)	19.128 ppb	1.1 %
208Pb (KED)	19.293 ppb	2.2 %
209Bi (KED)	121.252 %	
232Th (KED)	19.399 ppb	2.9 %
238U (KED)	19.636 ppb	1.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	119.757 %	3,173 cps	1.2 %
9Be (KED)	19.800 ppb	3,566 cps	2.2 %
11B (KED)	20.508 ppb	2,307 cps	3.5 %
24Mg (KED)	19.783 ppb	11,677 cps	2.0 %
27Al (KED)	21.374 ppb	3,310 cps	2.0 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	127.806 %	50,499 cps	1.6 %
51V (KED)	20.119 ppb	179,060 cps	0.8 %
52Cr (KED)	20.631 ppb	288,978 cps	0.6 %
55Mn (KED)	20.036 ppb	144,480 cps	0.4 %
56Fe (KED)	20.355 ppb	266,874 cps	0.8 %
58Ni (KED)	20.727 ppb	356,247 cps	0.5 %
59Co (KED)	20.551 ppb	578,367 cps	0.7 %
63Cu (KED)	20.817 ppb	449,721 cps	0.7 %
64Zn (KED)	20.548 ppb	136,524 cps	0.6 %
69Ga (KED)	19.979 ppb	142,234 cps	0.4 %
75As (KED)	20.246 ppb	36,275 cps	0.7 %
80Se (KED)	20.744 ppb	13,998 cps	1.6 %
85Rb (KED)	20.268 ppb	131,869 cps	0.6 %
88Sr (KED)	20.132 ppb	184,238 cps	1.5 %
89Y (KED)	126.498 %	464,697 cps	0.6 %
107Ag (KED)	20.583 ppb	1,213,315 cps	0.6 %
114Cd (KED)	20.205 ppb	459,281 cps	1.0 %
115In (KED)	124.268 %	864,429 cps	1.2 %
133Cs (KED)	20.128 ppb	649,374 cps	0.9 %
138Ba (KED)	20.173 ppb	875,847 cps	0.6 %
139La (KED)	19.116 ppb	1,802,129 cps	0.3 %
140Ce (KED)	19.029 ppb	2,396,241 cps	0.5 %
141Pr (KED)	19.180 ppb	2,551,024 cps	0.7 %
142Nd (KED)	19.494 ppb	1,036,027 cps	0.8 %
152Sm (KED)	19.690 ppb	937,484 cps	0.6 %
153Eu (KED)	19.337 ppb	1,857,829 cps	0.7 %
158Gd (KED)	19.648 ppb	1,263,445 cps	0.7 %
159Tb (KED)	124.376 %	4,432,522 cps	1.2 %
164Dy (KED)	19.381 ppb	1,400,183 cps	0.7 %
166Er (KED)	19.422 ppb	1,658,355 cps	1.3 %
169Tm (KED)	19.809 ppb	5,729,688 cps	0.6 %
174Yb (KED)	19.231 ppb	1,982,284 cps	0.7 %
175Lu (KED)	18.915 ppb	3,358,796 cps	0.6 %
205Tl (KED)	19.128 ppb	3,865,078 cps	1.7 %
208Pb (KED)	19.293 ppb	2,768,756 cps	0.2 %
209Bi (KED)	121.252 %	3,865,184 cps	2.1 %
232Th (KED)	19.399 ppb	5,353,712 cps	1.2 %
238U (KED)	19.636 ppb	6,438,739 cps	0.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 5

Analysis name: 50+20

Analysis started at: 10/20/2021 3:51:51 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	118.415 %	
9Be (KED)	48.957 ppb	4.5 %
11B (KED)	47.970 ppb	4.2 %
24Mg (KED)	49.398 ppb	4.7 %
27Al (KED)	51.347 ppb	2.1 %
45Sc (KED)	130.545 %	
51V (KED)	49.858 ppb	1.7 %
52Cr (KED)	50.126 ppb	1.1 %
55Mn (KED)	49.651 ppb	1.7 %
56Fe (KED)	50.198 ppb	1.3 %
58Ni (KED)	50.846 ppb	2.4 %
59Co (KED)	50.604 ppb	2.2 %
63Cu (KED)	50.130 ppb	1.3 %
64Zn (KED)	52.545 ppb	1.0 %
69Ga (KED)	49.691 ppb	0.7 %
75As (KED)	49.532 ppb	0.9 %
80Se (KED)	49.684 ppb	2.3 %
85Rb (KED)	48.993 ppb	0.6 %
88Sr (KED)	49.208 ppb	1.7 %
89Y (KED)	130.592 %	
107Ag (KED)	49.730 ppb	1.1 %
114Cd (KED)	49.666 ppb	1.1 %
115In (KED)	128.175 %	
133Cs (KED)	49.701 ppb	0.8 %
138Ba (KED)	49.858 ppb	2.2 %
139La (KED)	48.878 ppb	1.3 %
140Ce (KED)	49.701 ppb	1.3 %
141Pr (KED)	49.110 ppb	1.2 %
142Nd (KED)	48.022 ppb	2.2 %
152Sm (KED)	47.484 ppb	0.9 %
153Eu (KED)	49.120 ppb	0.7 %
158Gd (KED)	47.597 ppb	1.9 %
159Tb (KED)	127.417 %	
164Dy (KED)	47.156 ppb	0.6 %
166Er (KED)	48.025 ppb	1.7 %
169Tm (KED)	49.851 ppb	1.8 %
174Yb (KED)	49.370 ppb	2.9 %
175Lu (KED)	49.351 ppb	2.9 %
205Tl (KED)	49.567 ppb	0.8 %
208Pb (KED)	49.882 ppb	1.7 %
209Bi (KED)	122.750 %	
232Th (KED)	48.751 ppb	0.9 %
238U (KED)	48.576 ppb	0.9 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	118.415 %	3,137 cps	3.2 %
9Be (KED)	48.957 ppb	8,709 cps	2.2 %
11B (KED)	47.970 ppb	4,868 cps	0.7 %
24Mg (KED)	49.398 ppb	28,654 cps	1.6 %
27Al (KED)	51.347 ppb	7,983 cps	0.5 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	130.545 %	51,581 cps	1.8 %
51V (KED)	49.858 ppb	453,259 cps	0.8 %
52Cr (KED)	50.126 ppb	717,141 cps	0.8 %
55Mn (KED)	49.651 ppb	365,615 cps	0.2 %
56Fe (KED)	50.198 ppb	669,112 cps	0.6 %
58Ni (KED)	50.846 ppb	892,003 cps	0.6 %
59Co (KED)	50.604 ppb	1,454,556 cps	0.8 %
63Cu (KED)	50.130 ppb	1,116,723 cps	0.5 %
64Zn (KED)	52.545 ppb	358,717 cps	0.6 %
69Ga (KED)	49.691 ppb	365,055 cps	0.3 %
75As (KED)	49.532 ppb	91,585 cps	0.6 %
80Se (KED)	49.684 ppb	32,892 cps	1.2 %
85Rb (KED)	48.993 ppb	329,051 cps	0.5 %
88Sr (KED)	49.208 ppb	464,573 cps	1.5 %
89Y (KED)	130.592 %	479,734 cps	1.1 %
107Ag (KED)	49.730 ppb	3,023,923 cps	1.4 %
114Cd (KED)	49.666 ppb	1,164,389 cps	1.2 %
115In (KED)	128.175 %	891,607 cps	0.4 %
133Cs (KED)	49.701 ppb	1,653,963 cps	1.2 %
138Ba (KED)	49.858 ppb	2,214,947 cps	1.4 %
139La (KED)	48.878 ppb	4,720,281 cps	0.4 %
140Ce (KED)	49.701 ppb	6,411,480 cps	0.7 %
141Pr (KED)	49.110 ppb	6,691,367 cps	1.0 %
142Nd (KED)	48.022 ppb	2,614,386 cps	1.0 %
152Sm (KED)	47.484 ppb	2,316,287 cps	0.7 %
153Eu (KED)	49.120 ppb	4,834,632 cps	1.0 %
158Gd (KED)	47.597 ppb	3,135,154 cps	1.0 %
159Tb (KED)	127.417 %	4,540,883 cps	1.4 %
164Dy (KED)	47.156 ppb	3,490,535 cps	1.7 %
166Er (KED)	48.025 ppb	4,199,363 cps	0.7 %
169Tm (KED)	49.851 ppb	14,772,021 cps	1.2 %
174Yb (KED)	49.370 ppb	5,212,646 cps	1.7 %
175Lu (KED)	49.351 ppb	8,916,135 cps	1.6 %
205Tl (KED)	49.567 ppb	10,140,272 cps	0.5 %
208Pb (KED)	49.882 ppb	7,239,896 cps	2.0 %
209Bi (KED)	122.750 %	3,912,952 cps	0.3 %
232Th (KED)	48.751 ppb	13,625,533 cps	1.0 %
238U (KED)	48.576 ppb	16,128,902 cps	0.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 6

Analysis name: 100+20

Analysis started at: 10/20/2021 3:56:00 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	118.121 %	
9Be (KED)	100.562 ppb	2.7 %
11B (KED)	100.913 ppb	1.5 %
24Mg (KED)	100.344 ppb	3.0 %
27Al (KED)	99.052 ppb	2.6 %
45Sc (KED)	131.508 %	
51V (KED)	100.047 ppb	2.1 %
52Cr (KED)	99.811 ppb	1.3 %
55Mn (KED)	100.167 ppb	2.3 %
56Fe (KED)	99.830 ppb	1.5 %
58Ni (KED)	99.432 ppb	0.9 %
59Co (KED)	99.588 ppb	1.2 %
63Cu (KED)	99.772 ppb	0.2 %
64Zn (KED)	98.618 ppb	1.1 %
69Ga (KED)	100.159 ppb	0.2 %
75As (KED)	100.185 ppb	1.0 %
80Se (KED)	100.009 ppb	1.4 %
85Rb (KED)	100.450 ppb	1.2 %
88Sr (KED)	100.370 ppb	0.7 %
89Y (KED)	130.145 %	
107Ag (KED)	100.018 ppb	0.6 %
114Cd (KED)	100.126 ppb	0.2 %
115In (KED)	127.259 %	
133Cs (KED)	100.124 ppb	1.8 %
138Ba (KED)	100.037 ppb	0.8 %
139La (KED)	100.738 ppb	2.1 %
140Ce (KED)	100.344 ppb	0.9 %
141Pr (KED)	100.609 ppb	1.7 %
142Nd (KED)	101.090 ppb	1.8 %
152Sm (KED)	101.320 ppb	1.8 %
153Eu (KED)	100.573 ppb	2.6 %
158Gd (KED)	101.272 ppb	1.4 %
159Tb (KED)	127.381 %	
164Dy (KED)	101.546 ppb	0.7 %
166Er (KED)	101.103 ppb	1.8 %
169Tm (KED)	100.113 ppb	0.9 %
174Yb (KED)	100.469 ppb	0.7 %
175Lu (KED)	100.542 ppb	2.1 %
205Tl (KED)	100.391 ppb	1.2 %
208Pb (KED)	100.200 ppb	1.8 %
209Bi (KED)	122.391 %	
232Th (KED)	100.745 ppb	1.8 %
238U (KED)	100.785 ppb	0.9 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	118.121 %	3,129 cps	2.0 %
9Be (KED)	100.562 ppb	17,852 cps	0.9 %
11B (KED)	100.913 ppb	9,839 cps	0.6 %
24Mg (KED)	100.344 ppb	57,997 cps	1.6 %
27Al (KED)	99.052 ppb	15,417 cps	0.7 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	131.508 %	51,961 cps	1.9 %
51V (KED)	100.047 ppb	916,188 cps	0.7 %
52Cr (KED)	99.811 ppb	1,438,382 cps	0.6 %
55Mn (KED)	100.167 ppb	742,932 cps	0.9 %
56Fe (KED)	99.830 ppb	1,338,375 cps	1.3 %
58Ni (KED)	99.432 ppb	1,757,173 cps	1.0 %
59Co (KED)	99.588 ppb	2,883,935 cps	0.8 %
63Cu (KED)	99.772 ppb	2,214,273 cps	1.1 %
64Zn (KED)	98.618 ppb	669,986 cps	0.3 %
69Ga (KED)	100.159 ppb	733,239 cps	1.2 %
75As (KED)	100.185 ppb	184,583 cps	0.7 %
80Se (KED)	100.009 ppb	64,753 cps	1.9 %
85Rb (KED)	100.450 ppb	672,281 cps	0.1 %
88Sr (KED)	100.370 ppb	944,119 cps	0.7 %
89Y (KED)	130.145 %	478,094 cps	1.3 %
107Ag (KED)	100.018 ppb	6,038,080 cps	0.3 %
114Cd (KED)	100.126 ppb	2,330,554 cps	0.1 %
115In (KED)	127.259 %	885,237 cps	0.3 %
133Cs (KED)	100.124 ppb	3,308,072 cps	1.9 %
138Ba (KED)	100.037 ppb	4,441,626 cps	0.9 %
139La (KED)	100.738 ppb	9,725,232 cps	1.0 %
140Ce (KED)	100.344 ppb	12,941,195 cps	0.7 %
141Pr (KED)	100.609 ppb	13,704,139 cps	1.3 %
142Nd (KED)	101.090 ppb	5,502,094 cps	0.5 %
152Sm (KED)	101.320 ppb	4,941,580 cps	2.5 %
153Eu (KED)	100.573 ppb	9,894,468 cps	1.3 %
158Gd (KED)	101.272 ppb	6,669,012 cps	0.4 %
159Tb (KED)	127.381 %	4,539,625 cps	1.3 %
164Dy (KED)	101.546 ppb	7,513,954 cps	1.0 %
166Er (KED)	101.103 ppb	8,837,557 cps	0.5 %
169Tm (KED)	100.113 ppb	29,663,049 cps	2.1 %
174Yb (KED)	100.469 ppb	10,607,279 cps	1.1 %
175Lu (KED)	100.542 ppb	18,122,754 cps	0.9 %
205Tl (KED)	100.391 ppb	20,476,416 cps	0.9 %
208Pb (KED)	100.200 ppb	14,492,225 cps	0.8 %
209Bi (KED)	122.391 %	3,901,498 cps	1.3 %
232Th (KED)	100.745 ppb	28,070,224 cps	0.5 %
238U (KED)	100.785 ppb	33,363,994 cps	0.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 7

Analysis name: 191083ti

Analysis started at: 10/20/2021 4:00:23 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	116.443 %	4.1 %
9Be (KED)	0.058 ppb	111.1 %
11B (KED)	6.894 ppb	15.5 %
24Mg (KED)	111.095 ppb	4.7 %
27Al (KED)	71.441 ppb	2.4 %
45Sc (KED)	121.084 %	1.9 %
51V (KED)	0.147 ppb	14.9 %
52Cr (KED)	0.610 ppb	6.9 %
55Mn (KED)	2.493 ppb	2.3 %
56Fe (KED)	81.377 ppb	0.5 %
58Ni (KED)	0.600 ppb	3.8 %
59Co (KED)	0.054 ppb	29.4 %
63Cu (KED)	2.355 ppb	1.5 %
64Zn (KED)	56.905 ppb	1.1 %
69Ga (KED)	0.403 ppb	4.8 %
75As (KED)	0.046 ppb	14.4 %
80Se (KED)	0.094 ppb	117.0 %
85Rb (KED)	0.950 ppb	3.8 %
88Sr (KED)	2.243 ppb	2.7 %
89Y (KED)	122.965 %	2.5 %
107Ag (KED)	0.062 ppb	16.5 %
114Cd (KED)	0.007 ppb	42.3 %
115In (KED)	120.597 %	1.7 %
133Cs (KED)	0.022 ppb	13.0 %
138Ba (KED)	1.438 ppb	1.9 %
139La (KED)	0.069 ppb	1.1 %
140Ce (KED)	0.164 ppb	0.7 %
141Pr (KED)	0.019 ppb	9.2 %
142Nd (KED)	0.097 ppb	1.4 %
152Sm (KED)	0.013 ppb	6.5 %
153Eu (KED)	0.004 ppb	33.3 %
158Gd (KED)	0.012 ppb	5.9 %
159Tb (KED)	121.837 %	3.3 %
164Dy (KED)	0.153 ppb	163.8 %
166Er (KED)	0.147 ppb	168.8 %
169Tm (KED)	0.123 ppb	171.0 %
174Yb (KED)	0.111 ppb	167.7 %
175Lu (KED)	0.009 ppb	1,643.8 %
205Tl (KED)	0.071 ppb	159.0 %
208Pb (KED)	0.399 ppb	25.0 %
209Bi (KED)	117.153 %	0.5 %
232Th (KED)	0.141 ppb	54.4 %
238U (KED)	0.041 ppb	139.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	116.443 %	3,085 cps	4.1 %
9Be (KED)	0.058 ppb	11 cps	96.4 %
11B (KED)	6.894 ppb	978 cps	6.1 %
24Mg (KED)	111.095 ppb	63,229 cps	0.8 %
27Al (KED)	71.441 ppb	10,268 cps	3.0 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	121.084 %	47,843 cps	1.9 %
51V (KED)	0.147 ppb	1,247 cps	13.2 %
52Cr (KED)	0.610 ppb	8,152 cps	5.8 %
55Mn (KED)	2.493 ppb	17,067 cps	1.2 %
56Fe (KED)	81.377 ppb	1,005,044 cps	2.2 %
58Ni (KED)	0.600 ppb	10,102 cps	1.9 %
59Co (KED)	0.054 ppb	1,462 cps	27.4 %
63Cu (KED)	2.355 ppb	50,157 cps	1.0 %
64Zn (KED)	56.905 ppb	365,671 cps	1.4 %
69Ga (KED)	0.403 ppb	2,869 cps	3.5 %
75As (KED)	0.046 ppb	102 cps	11.5 %
80Se (KED)	0.094 ppb	1,211 cps	3.8 %
85Rb (KED)	0.950 ppb	6,024 cps	1.5 %
88Sr (KED)	2.243 ppb	20,131 cps	1.0 %
89Y (KED)	122.965 %	451,717 cps	2.5 %
107Ag (KED)	0.062 ppb	3,553 cps	16.2 %
114Cd (KED)	0.007 ppb	217 cps	31.6 %
115In (KED)	120.597 %	838,891 cps	1.7 %
133Cs (KED)	0.022 ppb	704 cps	11.7 %
138Ba (KED)	1.438 ppb	62,724 cps	1.5 %
139La (KED)	0.069 ppb	6,401 cps	2.7 %
140Ce (KED)	0.164 ppb	20,382 cps	3.3 %
141Pr (KED)	0.019 ppb	2,471 cps	9.9 %
142Nd (KED)	0.097 ppb	5,057 cps	2.9 %
152Sm (KED)	0.013 ppb	623 cps	6.8 %
153Eu (KED)	0.004 ppb	373 cps	33.6 %
158Gd (KED)	0.012 ppb	764 cps	6.6 %
159Tb (KED)	121.837 %	4,342,025 cps	3.3 %
164Dy (KED)	0.153 ppb	10,879 cps	163.5 %
166Er (KED)	0.147 ppb	12,831 cps	161.8 %
169Tm (KED)	0.123 ppb	34,895 cps	171.0 %
174Yb (KED)	0.111 ppb	11,195 cps	167.3 %
175Lu (KED)	0.009 ppb	36,894 cps	68.3 %
205Tl (KED)	0.071 ppb	13,986 cps	158.8 %
208Pb (KED)	0.399 ppb	60,846 cps	22.8 %
209Bi (KED)	117.153 %	3,734,513 cps	0.5 %
232Th (KED)	0.141 ppb	37,622 cps	54.4 %
238U (KED)	0.041 ppb	13,246 cps	138.3 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 8

Analysis name: 191077ti

Analysis started at: 10/20/2021 4:04:51 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	120.177 %	2.7 %
9Be (KED)	0.037 ppb	161.6 %
11B (KED)	5.513 ppb	11.5 %
24Mg (KED)	100.275 ppb	0.4 %
27Al (KED)	64.501 ppb	0.9 %
45Sc (KED)	121.897 %	1.7 %
51V (KED)	0.121 ppb	4.2 %
52Cr (KED)	0.612 ppb	4.5 %
55Mn (KED)	2.604 ppb	2.9 %
56Fe (KED)	83.123 ppb	1.7 %
58Ni (KED)	0.514 ppb	1.5 %
59Co (KED)	0.050 ppb	0.9 %
63Cu (KED)	2.829 ppb	0.9 %
64Zn (KED)	63.649 ppb	1.5 %
69Ga (KED)	0.367 ppb	3.7 %
75As (KED)	0.059 ppb	4.6 %
80Se (KED)	0.068 ppb	280.5 %
85Rb (KED)	0.677 ppb	2.3 %
88Sr (KED)	2.024 ppb	0.8 %
89Y (KED)	121.865 %	1.6 %
107Ag (KED)	0.032 ppb	7.1 %
114Cd (KED)	0.012 ppb	2.8 %
115In (KED)	118.605 %	0.5 %
133Cs (KED)	0.019 ppb	4.7 %
138Ba (KED)	1.326 ppb	1.8 %
139La (KED)	0.067 ppb	2.1 %
140Ce (KED)	0.151 ppb	2.1 %
141Pr (KED)	0.017 ppb	1.3 %
142Nd (KED)	0.093 ppb	2.2 %
152Sm (KED)	0.013 ppb	1.1 %
153Eu (KED)	0.003 ppb	5.2 %
158Gd (KED)	0.010 ppb	12.6 %
159Tb (KED)	120.589 %	1.8 %
164Dy (KED)	0.007 ppb	12.7 %
166Er (KED)	0.001 ppb	52.1 %
169Tm (KED)	0.001 ppb	14.2 %
174Yb (KED)	0.003 ppb	2.1 %
175Lu (KED)	-0.083 ppb	3.6 %
205Tl (KED)	0.004 ppb	12.3 %
208Pb (KED)	0.580 ppb	1.4 %
209Bi (KED)	116.068 %	0.6 %
232Th (KED)	0.031 ppb	11.3 %
238U (KED)	0.006 ppb	5.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	120.177 %	3,184 cps	2.7 %
9Be (KED)	0.037 ppb	8 cps	137.8 %
11B (KED)	5.513 ppb	879 cps	5.6 %
24Mg (KED)	100.275 ppb	58,989 cps	3.1 %
27Al (KED)	64.501 ppb	9,342 cps	2.5 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	121.897 %	48,164 cps	1.7 %
51V (KED)	0.121 ppb	1,030 cps	4.4 %
52Cr (KED)	0.612 ppb	8,246 cps	4.5 %
55Mn (KED)	2.604 ppb	17,958 cps	4.5 %
56Fe (KED)	83.123 ppb	1,033,505 cps	2.9 %
58Ni (KED)	0.514 ppb	8,780 cps	2.7 %
59Co (KED)	0.050 ppb	1,368 cps	0.9 %
63Cu (KED)	2.829 ppb	59,571 cps	0.7 %
64Zn (KED)	63.649 ppb	405,267 cps	1.6 %
69Ga (KED)	0.367 ppb	2,601 cps	4.9 %
75As (KED)	0.059 ppb	123 cps	2.7 %
80Se (KED)	0.068 ppb	1,185 cps	8.4 %
85Rb (KED)	0.677 ppb	4,256 cps	1.1 %
88Sr (KED)	2.024 ppb	18,033 cps	0.8 %
89Y (KED)	121.865 %	447,676 cps	1.6 %
107Ag (KED)	0.032 ppb	1,806 cps	7.1 %
114Cd (KED)	0.012 ppb	317 cps	2.1 %
115In (KED)	118.605 %	825,035 cps	0.5 %
133Cs (KED)	0.019 ppb	597 cps	5.0 %
138Ba (KED)	1.326 ppb	57,400 cps	3.4 %
139La (KED)	0.067 ppb	6,168 cps	2.1 %
140Ce (KED)	0.151 ppb	18,523 cps	3.8 %
141Pr (KED)	0.017 ppb	2,132 cps	1.9 %
142Nd (KED)	0.093 ppb	4,818 cps	1.9 %
152Sm (KED)	0.013 ppb	584 cps	2.9 %
153Eu (KED)	0.003 ppb	282 cps	5.9 %
158Gd (KED)	0.010 ppb	619 cps	13.9 %
159Tb (KED)	120.589 %	4,297,566 cps	1.8 %
164Dy (KED)	0.007 ppb	507 cps	13.7 %
166Er (KED)	0.001 ppb	647 cps	10.8 %
169Tm (KED)	0.001 ppb	183 cps	14.4 %
174Yb (KED)	0.003 ppb	348 cps	3.6 %
175Lu (KED)	-0.083 ppb	20,872 cps	1.0 %
205Tl (KED)	0.004 ppb	714 cps	11.8 %
208Pb (KED)	0.580 ppb	85,179 cps	1.8 %
209Bi (KED)	116.068 %	3,699,927 cps	0.6 %
232Th (KED)	0.031 ppb	8,329 cps	11.3 %
238U (KED)	0.006 ppb	1,849 cps	4.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 9

Analysis name: 191063ti

Analysis started at: 10/20/2021 4:09:09 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	124.372 %	1.6 %
9Be (KED)	0.023 ppb	44.8 %
11B (KED)	15.762 ppb	2.1 %
24Mg (KED)	323.152 ppb	1.9 %
27Al (KED)	299.883 ppb	2.8 %
45Sc (KED)	131.386 %	1.8 %
51V (KED)	0.543 ppb	3.8 %
52Cr (KED)	0.801 ppb	1.8 %
55Mn (KED)	9.398 ppb	1.8 %
56Fe (KED)	335.354 ppb	2.1 %
58Ni (KED)	1.428 ppb	1.2 %
59Co (KED)	0.156 ppb	2.5 %
63Cu (KED)	2.576 ppb	0.5 %
64Zn (KED)	56.701 ppb	0.3 %
69Ga (KED)	1.250 ppb	0.7 %
75As (KED)	0.176 ppb	15.4 %
80Se (KED)	0.131 ppb	53.3 %
85Rb (KED)	1.825 ppb	1.6 %
88Sr (KED)	6.486 ppb	0.5 %
89Y (KED)	127.393 %	1.7 %
107Ag (KED)	0.030 ppb	3.7 %
114Cd (KED)	0.015 ppb	21.0 %
115In (KED)	122.775 %	0.8 %
133Cs (KED)	0.061 ppb	3.7 %
138Ba (KED)	4.388 ppb	1.0 %
139La (KED)	0.340 ppb	2.6 %
140Ce (KED)	0.711 ppb	0.1 %
141Pr (KED)	0.085 ppb	3.8 %
142Nd (KED)	0.445 ppb	0.9 %
152Sm (KED)	0.058 ppb	3.0 %
153Eu (KED)	0.011 ppb	2.1 %
158Gd (KED)	0.051 ppb	7.0 %
159Tb (KED)	126.910 %	1.7 %
164Dy (KED)	0.034 ppb	2.7 %
166Er (KED)	0.016 ppb	1.6 %
169Tm (KED)	0.002 ppb	12.2 %
174Yb (KED)	0.013 ppb	2.8 %
175Lu (KED)	-0.086 ppb	1.9 %
205Tl (KED)	0.007 ppb	7.6 %
208Pb (KED)	0.563 ppb	1.5 %
209Bi (KED)	118.754 %	0.5 %
232Th (KED)	0.094 ppb	1.3 %
238U (KED)	0.017 ppb	3.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	124.372 %	3,295 cps	1.6 %
9Be (KED)	0.023 ppb	6 cps	34.6 %
11B (KED)	15.762 ppb	1,926 cps	2.1 %
24Mg (KED)	323.152 ppb	196,449 cps	0.3 %
27Al (KED)	299.883 ppb	46,441 cps	3.2 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	131.386 %	51,913 cps	1.8 %
51V (KED)	0.543 ppb	4,972 cps	3.0 %
52Cr (KED)	0.801 ppb	11,600 cps	3.2 %
55Mn (KED)	9.398 ppb	69,710 cps	2.9 %
56Fe (KED)	335.354 ppb	4,486,634 cps	1.8 %
58Ni (KED)	1.428 ppb	25,585 cps	1.3 %
59Co (KED)	0.156 ppb	4,545 cps	3.5 %
63Cu (KED)	2.576 ppb	56,774 cps	1.5 %
64Zn (KED)	56.701 ppb	377,547 cps	1.6 %
69Ga (KED)	1.250 ppb	9,047 cps	1.8 %
75As (KED)	0.176 ppb	339 cps	12.7 %
80Se (KED)	0.131 ppb	1,279 cps	3.7 %
85Rb (KED)	1.825 ppb	11,976 cps	3.1 %
88Sr (KED)	6.486 ppb	59,933 cps	2.1 %
89Y (KED)	127.393 %	467,985 cps	1.7 %
107Ag (KED)	0.030 ppb	1,735 cps	3.5 %
114Cd (KED)	0.015 ppb	394 cps	17.8 %
115In (KED)	122.775 %	854,047 cps	0.8 %
133Cs (KED)	0.061 ppb	1,955 cps	4.0 %
138Ba (KED)	4.388 ppb	195,785 cps	1.5 %
139La (KED)	0.340 ppb	32,752 cps	1.6 %
140Ce (KED)	0.711 ppb	91,521 cps	1.8 %
141Pr (KED)	0.085 ppb	11,603 cps	4.0 %
142Nd (KED)	0.445 ppb	24,158 cps	0.8 %
152Sm (KED)	0.058 ppb	2,846 cps	3.7 %
153Eu (KED)	0.011 ppb	1,094 cps	3.7 %
158Gd (KED)	0.051 ppb	3,363 cps	7.7 %
159Tb (KED)	126.910 %	4,522,837 cps	1.7 %
164Dy (KED)	0.034 ppb	2,525 cps	1.3 %
166Er (KED)	0.016 ppb	1,912 cps	2.7 %
169Tm (KED)	0.002 ppb	649 cps	11.9 %
174Yb (KED)	0.013 ppb	1,357 cps	4.3 %
175Lu (KED)	-0.086 ppb	21,459 cps	2.3 %
205Tl (KED)	0.007 ppb	1,342 cps	7.9 %
208Pb (KED)	0.563 ppb	84,648 cps	1.6 %
209Bi (KED)	118.754 %	3,785,579 cps	0.5 %
232Th (KED)	0.094 ppb	25,532 cps	1.8 %
238U (KED)	0.017 ppb	5,508 cps	2.8 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 10

Analysis name: w122ti

Analysis started at: 10/20/2021 4:13:24 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	128.315 %	1.2 %
9Be (KED)	-0.001 ppb	1,105.9 %
11B (KED)	0.489 ppb	69.4 %
24Mg (KED)	65.155 ppb	2.6 %
27Al (KED)	38.940 ppb	1.5 %
45Sc (KED)	136.673 %	1.9 %
51V (KED)	0.073 ppb	6.1 %
52Cr (KED)	0.694 ppb	2.9 %
55Mn (KED)	1.888 ppb	15.0 %
56Fe (KED)	54.862 ppb	1.0 %
58Ni (KED)	0.402 ppb	4.4 %
59Co (KED)	0.039 ppb	1.5 %
63Cu (KED)	2.274 ppb	1.1 %
64Zn (KED)	48.672 ppb	0.7 %
69Ga (KED)	0.277 ppb	1.3 %
75As (KED)	0.035 ppb	23.1 %
80Se (KED)	-0.010 ppb	1,504.2 %
85Rb (KED)	0.389 ppb	1.1 %
88Sr (KED)	1.478 ppb	2.9 %
89Y (KED)	132.646 %	2.4 %
107Ag (KED)	0.010 ppb	4.2 %
114Cd (KED)	0.006 ppb	16.2 %
115In (KED)	128.097 %	0.6 %
133Cs (KED)	0.010 ppb	14.0 %
138Ba (KED)	0.916 ppb	2.2 %
139La (KED)	0.042 ppb	2.6 %
140Ce (KED)	0.102 ppb	0.5 %
141Pr (KED)	0.010 ppb	0.8 %
142Nd (KED)	0.059 ppb	5.1 %
152Sm (KED)	0.007 ppb	4.4 %
153Eu (KED)	0.002 ppb	20.3 %
158Gd (KED)	0.006 ppb	2.2 %
159Tb (KED)	137.712 %	3.5 %
164Dy (KED)	0.004 ppb	1.4 %
166Er (KED)	0.000 ppb	173.8 %
169Tm (KED)	0.000 ppb	23.8 %
174Yb (KED)	0.002 ppb	22.0 %
175Lu (KED)	-0.098 ppb	3.8 %
205Tl (KED)	0.002 ppb	12.6 %
208Pb (KED)	0.283 ppb	1.4 %
209Bi (KED)	123.667 %	2.0 %
232Th (KED)	0.015 ppb	3.1 %
238U (KED)	0.004 ppb	11.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	128.315 %	3,399 cps	1.2 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	0.489 ppb	426 cps	7.9 %
24Mg (KED)	65.155 ppb	40,955 cps	2.1 %
27Al (KED)	38.940 ppb	6,366 cps	3.3 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	136.673 %	54,002 cps	1.9 %
51V (KED)	0.073 ppb	706 cps	6.3 %
52Cr (KED)	0.694 ppb	10,473 cps	3.6 %
55Mn (KED)	1.888 ppb	14,625 cps	16.1 %
56Fe (KED)	54.862 ppb	765,513 cps	2.1 %
58Ni (KED)	0.402 ppb	7,781 cps	2.3 %
59Co (KED)	0.039 ppb	1,197 cps	2.6 %
63Cu (KED)	2.274 ppb	52,296 cps	1.4 %
64Zn (KED)	48.672 ppb	337,578 cps	2.0 %
69Ga (KED)	0.277 ppb	2,157 cps	2.1 %
75As (KED)	0.035 ppb	89 cps	15.2 %
80Se (KED)	-0.010 ppb	1,239 cps	5.1 %
85Rb (KED)	0.389 ppb	2,669 cps	1.4 %
88Sr (KED)	1.478 ppb	14,393 cps	1.4 %
89Y (KED)	132.646 %	487,280 cps	2.4 %
107Ag (KED)	0.010 ppb	638 cps	4.7 %
114Cd (KED)	0.006 ppb	207 cps	11.6 %
115In (KED)	128.097 %	891,066 cps	0.6 %
133Cs (KED)	0.010 ppb	357 cps	13.1 %
138Ba (KED)	0.916 ppb	45,885 cps	3.5 %
139La (KED)	0.042 ppb	4,401 cps	5.2 %
140Ce (KED)	0.102 ppb	14,386 cps	3.2 %
141Pr (KED)	0.010 ppb	1,497 cps	2.7 %
142Nd (KED)	0.059 ppb	3,497 cps	6.0 %
152Sm (KED)	0.007 ppb	391 cps	2.1 %
153Eu (KED)	0.002 ppb	174 cps	19.1 %
158Gd (KED)	0.006 ppb	466 cps	1.5 %
159Tb (KED)	137.712 %	4,907,783 cps	3.5 %
164Dy (KED)	0.004 ppb	381 cps	3.1 %
166Er (KED)	0.000 ppb	581 cps	11.1 %
169Tm (KED)	0.000 ppb	118 cps	26.3 %
174Yb (KED)	0.002 ppb	226 cps	20.1 %
175Lu (KED)	-0.098 ppb	20,997 cps	4.4 %
205Tl (KED)	0.002 ppb	377 cps	10.7 %
208Pb (KED)	0.283 ppb	47,263 cps	3.0 %
209Bi (KED)	123.667 %	3,942,188 cps	2.0 %
232Th (KED)	0.015 ppb	4,194 cps	4.5 %
238U (KED)	0.004 ppb	1,331 cps	11.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 11

Analysis name: 191082ti

Analysis started at: 10/20/2021 4:17:29 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	138.929 %	4.6 %
9Be (KED)	0.004 ppb	228.8 %
11B (KED)	13.709 ppb	6.5 %
24Mg (KED)	121.336 ppb	3.1 %
27Al (KED)	59.258 ppb	1.3 %
45Sc (KED)	136.325 %	1.8 %
51V (KED)	0.105 ppb	3.9 %
52Cr (KED)	0.424 ppb	0.3 %
55Mn (KED)	2.768 ppb	1.3 %
56Fe (KED)	66.745 ppb	1.6 %
58Ni (KED)	0.401 ppb	1.4 %
59Co (KED)	0.037 ppb	4.8 %
63Cu (KED)	1.890 ppb	2.0 %
64Zn (KED)	52.217 ppb	1.6 %
69Ga (KED)	0.378 ppb	4.4 %
75As (KED)	0.046 ppb	23.3 %
80Se (KED)	0.106 ppb	51.0 %
85Rb (KED)	0.617 ppb	2.2 %
88Sr (KED)	2.507 ppb	1.5 %
89Y (KED)	132.665 %	0.9 %
107Ag (KED)	0.022 ppb	3.4 %
114Cd (KED)	0.009 ppb	4.6 %
115In (KED)	128.920 %	1.3 %
133Cs (KED)	0.013 ppb	1.5 %
138Ba (KED)	1.256 ppb	1.1 %
139La (KED)	0.053 ppb	2.2 %
140Ce (KED)	0.118 ppb	2.9 %
141Pr (KED)	0.012 ppb	9.6 %
142Nd (KED)	0.074 ppb	1.6 %
152Sm (KED)	0.010 ppb	6.5 %
153Eu (KED)	0.002 ppb	7.1 %
158Gd (KED)	0.008 ppb	14.2 %
159Tb (KED)	135.937 %	2.0 %
164Dy (KED)	0.006 ppb	7.0 %
166Er (KED)	0.000 ppb	696.2 %
169Tm (KED)	0.000 ppb	16.9 %
174Yb (KED)	0.003 ppb	8.9 %
175Lu (KED)	-0.101 ppb	4.9 %
205Tl (KED)	0.002 ppb	6.5 %
208Pb (KED)	0.287 ppb	1.6 %
209Bi (KED)	122.378 %	0.2 %
232Th (KED)	0.017 ppb	2.5 %
238U (KED)	0.004 ppb	8.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	138.929 %	3,681 cps	4.6 %
9Be (KED)	0.004 ppb	2 cps	86.6 %
11B (KED)	13.709 ppb	1,921 cps	2.1 %
24Mg (KED)	121.336 ppb	82,410 cps	1.8 %
27Al (KED)	59.258 ppb	9,606 cps	1.6 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	136.325 %	53,865 cps	1.8 %
51V (KED)	0.105 ppb	1,007 cps	3.3 %
52Cr (KED)	0.424 ppb	6,414 cps	2.0 %
55Mn (KED)	2.768 ppb	21,343 cps	3.1 %
56Fe (KED)	66.745 ppb	928,299 cps	0.2 %
58Ni (KED)	0.401 ppb	7,739 cps	0.7 %
59Co (KED)	0.037 ppb	1,131 cps	5.3 %
63Cu (KED)	1.890 ppb	43,622 cps	2.3 %
64Zn (KED)	52.217 ppb	362,154 cps	1.5 %
69Ga (KED)	0.378 ppb	2,911 cps	3.7 %
75As (KED)	0.046 ppb	109 cps	17.7 %
80Se (KED)	0.106 ppb	1,316 cps	2.4 %
85Rb (KED)	0.617 ppb	4,230 cps	1.9 %
88Sr (KED)	2.507 ppb	24,262 cps	1.1 %
89Y (KED)	132.665 %	487,351 cps	0.9 %
107Ag (KED)	0.022 ppb	1,365 cps	3.9 %
114Cd (KED)	0.009 ppb	263 cps	4.6 %
115In (KED)	128.920 %	896,793 cps	1.3 %
133Cs (KED)	0.013 ppb	464 cps	0.4 %
138Ba (KED)	1.256 ppb	61,373 cps	1.8 %
139La (KED)	0.053 ppb	5,500 cps	0.5 %
140Ce (KED)	0.118 ppb	16,427 cps	1.7 %
141Pr (KED)	0.012 ppb	1,801 cps	8.2 %
142Nd (KED)	0.074 ppb	4,294 cps	2.5 %
152Sm (KED)	0.010 ppb	546 cps	5.1 %
153Eu (KED)	0.002 ppb	231 cps	5.8 %
158Gd (KED)	0.008 ppb	600 cps	13.1 %
159Tb (KED)	135.937 %	4,844,526 cps	2.0 %
164Dy (KED)	0.006 ppb	521 cps	5.8 %
166Er (KED)	0.000 ppb	603 cps	5.6 %
169Tm (KED)	0.000 ppb	160 cps	15.0 %
174Yb (KED)	0.003 ppb	318 cps	9.5 %
175Lu (KED)	-0.101 ppb	20,028 cps	4.9 %
205Tl (KED)	0.002 ppb	510 cps	6.4 %
208Pb (KED)	0.287 ppb	47,346 cps	1.5 %
209Bi (KED)	122.378 %	3,901,089 cps	0.2 %
232Th (KED)	0.017 ppb	4,763 cps	2.6 %
238U (KED)	0.004 ppb	1,558 cps	8.5 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 12

Analysis name: w100ti

Analysis started at: 10/20/2021 4:21:57 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	138.845 %	3.6 %
9Be (KED)	-0.007 ppb	0.0 %
11B (KED)	19.515 ppb	2.6 %
24Mg (KED)	110.089 ppb	3.3 %
27Al (KED)	80.021 ppb	2.3 %
45Sc (KED)	142.884 %	1.7 %
51V (KED)	0.143 ppb	10.4 %
52Cr (KED)	0.508 ppb	4.0 %
55Mn (KED)	2.775 ppb	3.8 %
56Fe (KED)	94.499 ppb	0.8 %
58Ni (KED)	0.607 ppb	1.7 %
59Co (KED)	0.046 ppb	2.8 %
63Cu (KED)	1.630 ppb	0.9 %
64Zn (KED)	50.964 ppb	0.9 %
69Ga (KED)	0.425 ppb	6.2 %
75As (KED)	0.075 ppb	7.6 %
80Se (KED)	0.045 ppb	324.8 %
85Rb (KED)	0.639 ppb	3.6 %
88Sr (KED)	1.672 ppb	1.4 %
89Y (KED)	138.195 %	1.6 %
107Ag (KED)	0.025 ppb	2.0 %
114Cd (KED)	0.008 ppb	10.4 %
115In (KED)	131.865 %	2.3 %
133Cs (KED)	0.015 ppb	3.4 %
138Ba (KED)	1.405 ppb	1.7 %
139La (KED)	0.080 ppb	2.3 %
140Ce (KED)	0.178 ppb	1.4 %
141Pr (KED)	0.020 ppb	7.5 %
142Nd (KED)	0.109 ppb	1.7 %
152Sm (KED)	0.014 ppb	4.3 %
153Eu (KED)	0.003 ppb	6.4 %
158Gd (KED)	0.013 ppb	3.5 %
159Tb (KED)	141.239 %	2.3 %
164Dy (KED)	0.009 ppb	10.9 %
166Er (KED)	0.002 ppb	56.1 %
169Tm (KED)	0.001 ppb	16.5 %
174Yb (KED)	0.003 ppb	6.9 %
175Lu (KED)	-0.104 ppb	2.1 %
205Tl (KED)	0.002 ppb	5.1 %
208Pb (KED)	0.325 ppb	2.0 %
209Bi (KED)	125.289 %	1.5 %
232Th (KED)	0.019 ppb	1.5 %
238U (KED)	0.005 ppb	1.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	138.845 %	3,678 cps	3.6 %
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	19.515 ppb	2,564 cps	1.4 %
24Mg (KED)	110.089 ppb	74,763 cps	2.5 %
27Al (KED)	80.021 ppb	13,561 cps	3.7 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	142.884 %	56,456 cps	1.7 %
51V (KED)	0.143 ppb	1,428 cps	9.8 %
52Cr (KED)	0.508 ppb	8,041 cps	5.7 %
55Mn (KED)	2.775 ppb	22,409 cps	2.0 %
56Fe (KED)	94.499 ppb	1,376,930 cps	2.5 %
58Ni (KED)	0.607 ppb	12,059 cps	0.6 %
59Co (KED)	0.046 ppb	1,493 cps	4.0 %
63Cu (KED)	1.630 ppb	39,302 cps	1.5 %
64Zn (KED)	50.964 ppb	368,210 cps	1.0 %
69Ga (KED)	0.425 ppb	3,398 cps	5.7 %
75As (KED)	0.075 ppb	170 cps	7.8 %
80Se (KED)	0.045 ppb	1,328 cps	5.9 %
85Rb (KED)	0.639 ppb	4,560 cps	3.9 %
88Sr (KED)	1.672 ppb	16,936 cps	1.4 %
89Y (KED)	138.195 %	507,666 cps	1.6 %
107Ag (KED)	0.025 ppb	1,557 cps	0.4 %
114Cd (KED)	0.008 ppb	250 cps	8.0 %
115In (KED)	131.865 %	917,277 cps	2.3 %
133Cs (KED)	0.015 ppb	528 cps	3.7 %
138Ba (KED)	1.405 ppb	71,109 cps	1.8 %
139La (KED)	0.080 ppb	8,643 cps	1.5 %
140Ce (KED)	0.178 ppb	25,655 cps	0.9 %
141Pr (KED)	0.020 ppb	2,973 cps	7.0 %
142Nd (KED)	0.109 ppb	6,595 cps	3.6 %
152Sm (KED)	0.014 ppb	781 cps	2.1 %
153Eu (KED)	0.003 ppb	354 cps	6.8 %
158Gd (KED)	0.013 ppb	927 cps	4.4 %
159Tb (KED)	141.239 %	5,033,494 cps	2.3 %
164Dy (KED)	0.009 ppb	729 cps	12.9 %
166Er (KED)	0.002 ppb	797 cps	11.3 %
169Tm (KED)	0.001 ppb	180 cps	18.2 %
174Yb (KED)	0.003 ppb	408 cps	7.3 %
175Lu (KED)	-0.104 ppb	20,179 cps	3.4 %
205Tl (KED)	0.002 ppb	472 cps	5.7 %
208Pb (KED)	0.325 ppb	54,169 cps	1.9 %
209Bi (KED)	125.289 %	3,993,867 cps	1.5 %
232Th (KED)	0.019 ppb	5,471 cps	1.1 %
238U (KED)	0.005 ppb	1,880 cps	2.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 13

Analysis name: 29690ti

Analysis started at: 10/20/2021 4:26:09 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	126.637 %	3.8 %
9Be (KED)	0.011 ppb	158.0 %
11B (KED)	4.458 ppb	25.3 %
24Mg (KED)	132.932 ppb	3.9 %
27Al (KED)	135.359 ppb	1.2 %
45Sc (KED)	134.696 %	2.5 %
51V (KED)	0.238 ppb	8.0 %
52Cr (KED)	0.528 ppb	0.7 %
55Mn (KED)	3.194 ppb	2.7 %
56Fe (KED)	134.915 ppb	3.4 %
58Ni (KED)	0.705 ppb	1.6 %
59Co (KED)	0.064 ppb	8.2 %
63Cu (KED)	2.114 ppb	2.1 %
64Zn (KED)	47.879 ppb	0.1 %
69Ga (KED)	0.566 ppb	4.3 %
75As (KED)	0.103 ppb	15.8 %
80Se (KED)	0.254 ppb	18.9 %
85Rb (KED)	0.561 ppb	2.5 %
88Sr (KED)	2.078 ppb	2.4 %
89Y (KED)	128.908 %	0.9 %
107Ag (KED)	0.014 ppb	7.3 %
114Cd (KED)	0.006 ppb	20.0 %
115In (KED)	122.510 %	0.4 %
133Cs (KED)	0.019 ppb	3.9 %
138Ba (KED)	1.920 ppb	3.3 %
139La (KED)	0.138 ppb	2.0 %
140Ce (KED)	0.305 ppb	4.2 %
141Pr (KED)	0.035 ppb	7.1 %
142Nd (KED)	0.190 ppb	0.8 %
152Sm (KED)	0.023 ppb	3.7 %
153Eu (KED)	0.005 ppb	5.2 %
158Gd (KED)	0.019 ppb	2.0 %
159Tb (KED)	125.694 %	2.1 %
164Dy (KED)	0.014 ppb	2.2 %
166Er (KED)	0.004 ppb	24.1 %
169Tm (KED)	0.001 ppb	21.4 %
174Yb (KED)	0.005 ppb	9.7 %
175Lu (KED)	-0.100 ppb	2.5 %
205Tl (KED)	0.003 ppb	5.6 %
208Pb (KED)	0.325 ppb	1.0 %
209Bi (KED)	116.360 %	1.6 %
232Th (KED)	0.034 ppb	0.9 %
238U (KED)	0.009 ppb	1.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	126.637 %	3,355 cps	3.8 %
9Be (KED)	0.011 ppb	3 cps	100.0 %
11B (KED)	4.458 ppb	818 cps	10.5 %
24Mg (KED)	132.932 ppb	82,286 cps	1.0 %
27Al (KED)	135.359 ppb	21,544 cps	1.5 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	134.696 %	53,221 cps	2.5 %
51V (KED)	0.238 ppb	2,237 cps	5.6 %
52Cr (KED)	0.528 ppb	7,869 cps	1.9 %
55Mn (KED)	3.194 ppb	24,309 cps	0.5 %
56Fe (KED)	134.915 ppb	1,851,033 cps	1.0 %
58Ni (KED)	0.705 ppb	13,156 cps	2.4 %
59Co (KED)	0.064 ppb	1,935 cps	5.6 %
63Cu (KED)	2.114 ppb	47,310 cps	1.2 %
64Zn (KED)	47.879 ppb	322,765 cps	0.7 %
69Ga (KED)	0.566 ppb	4,190 cps	4.1 %
75As (KED)	0.103 ppb	211 cps	15.0 %
80Se (KED)	0.254 ppb	1,371 cps	2.3 %
85Rb (KED)	0.561 ppb	3,737 cps	3.0 %
88Sr (KED)	2.078 ppb	19,582 cps	2.4 %
89Y (KED)	128.908 %	473,548 cps	0.9 %
107Ag (KED)	0.014 ppb	821 cps	7.3 %
114Cd (KED)	0.006 ppb	193 cps	13.8 %
115In (KED)	122.510 %	852,201 cps	0.4 %
133Cs (KED)	0.019 ppb	623 cps	3.7 %
138Ba (KED)	1.920 ppb	85,816 cps	1.2 %
139La (KED)	0.138 ppb	13,174 cps	1.5 %
140Ce (KED)	0.305 ppb	38,890 cps	2.2 %
141Pr (KED)	0.035 ppb	4,701 cps	5.0 %
142Nd (KED)	0.190 ppb	10,236 cps	1.4 %
152Sm (KED)	0.023 ppb	1,123 cps	3.3 %
153Eu (KED)	0.005 ppb	449 cps	5.6 %
158Gd (KED)	0.019 ppb	1,270 cps	0.3 %
159Tb (KED)	125.694 %	4,479,494 cps	2.1 %
164Dy (KED)	0.014 ppb	1,048 cps	4.2 %
166Er (KED)	0.004 ppb	920 cps	7.7 %
169Tm (KED)	0.001 ppb	240 cps	20.7 %
174Yb (KED)	0.005 ppb	601 cps	8.2 %
175Lu (KED)	-0.100 ppb	18,729 cps	1.2 %
205Tl (KED)	0.003 ppb	547 cps	5.9 %
208Pb (KED)	0.325 ppb	50,232 cps	1.4 %
209Bi (KED)	116.360 %	3,709,254 cps	1.6 %
232Th (KED)	0.034 ppb	9,176 cps	1.1 %
238U (KED)	0.009 ppb	2,988 cps	3.2 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 14

Analysis name: 1805068ti

Analysis started at: 10/20/2021 4:30:13 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	133.182 %	0.7 %
9Be (KED)	0.010 ppb	164.5 %
11B (KED)	5.105 ppb	16.8 %
24Mg (KED)	139.044 ppb	0.9 %
27Al (KED)	100.530 ppb	1.1 %
45Sc (KED)	136.707 %	0.1 %
51V (KED)	0.187 ppb	4.7 %
52Cr (KED)	0.468 ppb	2.2 %
55Mn (KED)	3.310 ppb	1.2 %
56Fe (KED)	122.900 ppb	0.2 %
58Ni (KED)	0.808 ppb	3.2 %
59Co (KED)	0.063 ppb	2.0 %
63Cu (KED)	2.219 ppb	0.2 %
64Zn (KED)	48.856 ppb	0.4 %
69Ga (KED)	0.556 ppb	4.0 %
75As (KED)	0.068 ppb	17.5 %
80Se (KED)	0.154 ppb	50.1 %
85Rb (KED)	0.950 ppb	2.1 %
88Sr (KED)	2.426 ppb	2.8 %
89Y (KED)	131.030 %	0.3 %
107Ag (KED)	0.050 ppb	3.2 %
114Cd (KED)	0.006 ppb	24.4 %
115In (KED)	127.269 %	2.0 %
133Cs (KED)	0.018 ppb	1.7 %
138Ba (KED)	1.864 ppb	1.4 %
139La (KED)	0.113 ppb	2.3 %
140Ce (KED)	0.235 ppb	1.7 %
141Pr (KED)	0.027 ppb	2.3 %
142Nd (KED)	0.145 ppb	0.7 %
152Sm (KED)	0.020 ppb	5.0 %
153Eu (KED)	0.004 ppb	10.8 %
158Gd (KED)	0.018 ppb	9.5 %
159Tb (KED)	128.713 %	0.8 %
164Dy (KED)	0.012 ppb	6.1 %
166Er (KED)	0.003 ppb	18.0 %
169Tm (KED)	0.001 ppb	4.6 %
174Yb (KED)	0.005 ppb	2.4 %
175Lu (KED)	-0.102 ppb	2.1 %
205Tl (KED)	0.002 ppb	6.4 %
208Pb (KED)	0.286 ppb	2.8 %
209Bi (KED)	118.246 %	1.3 %
232Th (KED)	0.027 ppb	3.4 %
238U (KED)	0.007 ppb	4.8 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	133.182 %	3,528 cps	0.7 %
9Be (KED)	0.010 ppb	3 cps	100.0 %
11B (KED)	5.105 ppb	931 cps	9.1 %
24Mg (KED)	139.044 ppb	90,594 cps	0.4 %
27Al (KED)	100.530 ppb	16,270 cps	1.0 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	136.707 %	54,016 cps	0.1 %
51V (KED)	0.187 ppb	1,787 cps	4.7 %
52Cr (KED)	0.468 ppb	7,084 cps	2.3 %
55Mn (KED)	3.310 ppb	25,577 cps	1.3 %
56Fe (KED)	122.900 ppb	1,712,516 cps	0.3 %
58Ni (KED)	0.808 ppb	15,233 cps	3.2 %
59Co (KED)	0.063 ppb	1,939 cps	1.9 %
63Cu (KED)	2.219 ppb	50,420 cps	0.5 %
64Zn (KED)	48.856 ppb	334,752 cps	0.4 %
69Ga (KED)	0.556 ppb	4,190 cps	3.8 %
75As (KED)	0.068 ppb	149 cps	14.6 %
80Se (KED)	0.154 ppb	1,330 cps	4.0 %
85Rb (KED)	0.950 ppb	6,419 cps	1.9 %
88Sr (KED)	2.426 ppb	23,193 cps	2.5 %
89Y (KED)	131.030 %	481,343 cps	0.3 %
107Ag (KED)	0.050 ppb	3,040 cps	2.3 %
114Cd (KED)	0.006 ppb	189 cps	15.4 %
115In (KED)	127.269 %	885,305 cps	2.0 %
133Cs (KED)	0.018 ppb	628 cps	0.3 %
138Ba (KED)	1.864 ppb	85,381 cps	0.6 %
139La (KED)	0.113 ppb	11,072 cps	2.6 %
140Ce (KED)	0.235 ppb	30,750 cps	1.0 %
141Pr (KED)	0.027 ppb	3,699 cps	2.6 %
142Nd (KED)	0.145 ppb	7,980 cps	0.7 %
152Sm (KED)	0.020 ppb	982 cps	4.2 %
153Eu (KED)	0.004 ppb	392 cps	10.3 %
158Gd (KED)	0.018 ppb	1,205 cps	8.8 %
159Tb (KED)	128.713 %	4,587,097 cps	0.8 %
164Dy (KED)	0.012 ppb	907 cps	5.2 %
166Er (KED)	0.003 ppb	812 cps	4.9 %
169Tm (KED)	0.001 ppb	259 cps	5.2 %
174Yb (KED)	0.005 ppb	550 cps	3.0 %
175Lu (KED)	-0.102 ppb	18,834 cps	2.6 %
205Tl (KED)	0.002 ppb	438 cps	5.1 %
208Pb (KED)	0.286 ppb	45,686 cps	1.8 %
209Bi (KED)	118.246 %	3,769,367 cps	1.3 %
232Th (KED)	0.027 ppb	7,343 cps	2.1 %
238U (KED)	0.007 ppb	2,254 cps	4.1 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 15

Analysis name: 191128ti

Analysis started at: 10/20/2021 4:34:23 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	135.699 %	1.1 %
9Be (KED)	-0.001 ppb	905.4 %
11B (KED)	0.096 ppb	396.5 %
24Mg (KED)	156.527 ppb	0.9 %
27Al (KED)	139.736 ppb	2.1 %
45Sc (KED)	138.410 %	2.7 %
51V (KED)	0.270 ppb	7.8 %
52Cr (KED)	0.681 ppb	1.9 %
55Mn (KED)	4.244 ppb	0.1 %
56Fe (KED)	155.594 ppb	2.4 %
58Ni (KED)	0.803 ppb	3.4 %
59Co (KED)	0.083 ppb	4.5 %
63Cu (KED)	2.036 ppb	0.4 %
64Zn (KED)	47.819 ppb	1.0 %
69Ga (KED)	0.661 ppb	5.7 %
75As (KED)	0.117 ppb	5.8 %
80Se (KED)	0.206 ppb	75.2 %
85Rb (KED)	1.331 ppb	2.0 %
88Sr (KED)	2.582 ppb	0.8 %
89Y (KED)	131.426 %	1.2 %
107Ag (KED)	0.022 ppb	3.1 %
114Cd (KED)	0.008 ppb	14.3 %
115In (KED)	125.903 %	1.1 %
133Cs (KED)	0.025 ppb	7.0 %
138Ba (KED)	2.288 ppb	2.6 %
139La (KED)	0.172 ppb	2.4 %
140Ce (KED)	0.348 ppb	2.8 %
141Pr (KED)	0.042 ppb	1.1 %
142Nd (KED)	0.216 ppb	3.5 %
152Sm (KED)	0.028 ppb	4.9 %
153Eu (KED)	0.005 ppb	3.2 %
158Gd (KED)	0.024 ppb	5.7 %
159Tb (KED)	128.201 %	1.6 %
164Dy (KED)	0.016 ppb	3.1 %
166Er (KED)	0.005 ppb	11.1 %
169Tm (KED)	0.001 ppb	1.7 %
174Yb (KED)	0.006 ppb	9.1 %
175Lu (KED)	-0.102 ppb	1.2 %
205Tl (KED)	0.003 ppb	13.1 %
208Pb (KED)	0.339 ppb	1.8 %
209Bi (KED)	117.334 %	0.7 %
232Th (KED)	0.036 ppb	3.1 %
238U (KED)	0.009 ppb	4.3 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	135.699 %	3,595 cps	1.1 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	0.096 ppb	408 cps	10.4 %
24Mg (KED)	156.527 ppb	103,897 cps	0.6 %
27Al (KED)	139.736 ppb	22,846 cps	0.8 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	138.410 %	54,688 cps	2.7 %
51V (KED)	0.270 ppb	2,606 cps	6.1 %
52Cr (KED)	0.681 ppb	10,399 cps	2.3 %
55Mn (KED)	4.244 ppb	33,192 cps	2.8 %
56Fe (KED)	155.594 ppb	2,193,539 cps	0.3 %
58Ni (KED)	0.803 ppb	15,328 cps	0.8 %
59Co (KED)	0.083 ppb	2,550 cps	1.8 %
63Cu (KED)	2.036 ppb	46,483 cps	1.6 %
64Zn (KED)	47.819 ppb	328,637 cps	0.3 %
69Ga (KED)	0.661 ppb	4,975 cps	4.6 %
75As (KED)	0.117 ppb	241 cps	4.2 %
80Se (KED)	0.206 ppb	1,367 cps	6.5 %
85Rb (KED)	1.331 ppb	9,017 cps	2.7 %
88Sr (KED)	2.582 ppb	24,750 cps	1.0 %
89Y (KED)	131.426 %	482,799 cps	1.2 %
107Ag (KED)	0.022 ppb	1,313 cps	4.0 %
114Cd (KED)	0.008 ppb	247 cps	12.0 %
115In (KED)	125.903 %	875,802 cps	1.1 %
133Cs (KED)	0.025 ppb	824 cps	5.7 %
138Ba (KED)	2.288 ppb	104,001 cps	2.6 %
139La (KED)	0.172 ppb	16,782 cps	1.1 %
140Ce (KED)	0.348 ppb	45,253 cps	1.7 %
141Pr (KED)	0.042 ppb	5,696 cps	1.3 %
142Nd (KED)	0.216 ppb	11,875 cps	3.5 %
152Sm (KED)	0.028 ppb	1,382 cps	4.1 %
153Eu (KED)	0.005 ppb	512 cps	3.1 %
158Gd (KED)	0.024 ppb	1,576 cps	5.0 %
159Tb (KED)	128.201 %	4,568,830 cps	1.6 %
164Dy (KED)	0.016 ppb	1,236 cps	2.6 %
166Er (KED)	0.005 ppb	961 cps	3.1 %
169Tm (KED)	0.001 ppb	351 cps	2.9 %
174Yb (KED)	0.006 ppb	644 cps	9.9 %
175Lu (KED)	-0.102 ppb	18,822 cps	2.7 %
205Tl (KED)	0.003 ppb	570 cps	13.2 %
208Pb (KED)	0.339 ppb	52,635 cps	1.3 %
209Bi (KED)	117.334 %	3,740,310 cps	0.7 %
232Th (KED)	0.036 ppb	9,809 cps	3.6 %
238U (KED)	0.009 ppb	3,049 cps	4.0 %

Sample Summary

Instrument ID: iCAP Q

Analysis index: 16

Analysis name: 19196ti

Analysis started at: 10/20/2021 4:38:29 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	143.167 %	2.3 %
9Be (KED)	-0.007 ppb	0.0 %
11B (KED)	4.987 ppb	15.8 %
24Mg (KED)	120.832 ppb	2.6 %
27Al (KED)	85.471 ppb	2.4 %
45Sc (KED)	147.517 %	0.8 %
51V (KED)	0.153 ppb	5.4 %
52Cr (KED)	0.512 ppb	2.4 %
55Mn (KED)	2.997 ppb	0.9 %
56Fe (KED)	101.885 ppb	1.3 %
58Ni (KED)	58.723 ppb	1.5 %
59Co (KED)	0.055 ppb	2.6 %
63Cu (KED)	2.349 ppb	0.9 %
64Zn (KED)	42.805 ppb	1.4 %
69Ga (KED)	0.460 ppb	5.1 %
75As (KED)	0.076 ppb	7.1 %
80Se (KED)	0.043 ppb	432.0 %
85Rb (KED)	0.491 ppb	3.2 %
88Sr (KED)	2.010 ppb	1.8 %
89Y (KED)	140.353 %	1.9 %
107Ag (KED)	0.011 ppb	10.8 %
114Cd (KED)	0.005 ppb	46.3 %
115In (KED)	133.118 %	2.2 %
133Cs (KED)	0.016 ppb	11.2 %
138Ba (KED)	1.545 ppb	5.1 %
139La (KED)	0.093 ppb	2.5 %
140Ce (KED)	0.206 ppb	1.5 %
141Pr (KED)	0.023 ppb	4.5 %
142Nd (KED)	0.127 ppb	4.3 %
152Sm (KED)	0.017 ppb	2.8 %
153Eu (KED)	0.003 ppb	15.5 %
158Gd (KED)	0.013 ppb	7.7 %
159Tb (KED)	138.895 %	1.7 %
164Dy (KED)	0.010 ppb	7.2 %
166Er (KED)	0.002 ppb	7.0 %
169Tm (KED)	0.001 ppb	1.7 %
174Yb (KED)	0.004 ppb	5.4 %
175Lu (KED)	-0.106 ppb	2.7 %
205Tl (KED)	0.002 ppb	7.6 %
208Pb (KED)	0.343 ppb	6.8 %
209Bi (KED)	124.271 %	0.5 %
232Th (KED)	0.021 ppb	6.5 %
238U (KED)	0.005 ppb	0.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	143.167 %	3,793 cps	2.3 %
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	4.987 ppb	987 cps	7.0 %
24Mg (KED)	120.832 ppb	84,619 cps	1.0 %
27Al (KED)	85.471 ppb	14,945 cps	2.9 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	147.517 %	58,287 cps	0.8 %
51V (KED)	0.153 ppb	1,582 cps	5.8 %
52Cr (KED)	0.512 ppb	8,361 cps	3.1 %
55Mn (KED)	2.997 ppb	24,997 cps	1.6 %
56Fe (KED)	101.885 ppb	1,532,460 cps	2.1 %
58Ni (KED)	58.723 ppb	1,164,481 cps	2.3 %
59Co (KED)	0.055 ppb	1,830 cps	2.1 %
63Cu (KED)	2.349 ppb	57,126 cps	2.3 %
64Zn (KED)	42.805 ppb	314,258 cps	1.2 %
69Ga (KED)	0.460 ppb	3,728 cps	3.4 %
75As (KED)	0.076 ppb	176 cps	7.9 %
80Se (KED)	0.043 ppb	1,350 cps	11.2 %
85Rb (KED)	0.491 ppb	3,562 cps	2.5 %
88Sr (KED)	2.010 ppb	20,627 cps	3.3 %
89Y (KED)	140.353 %	515,591 cps	1.9 %
107Ag (KED)	0.011 ppb	706 cps	8.3 %
114Cd (KED)	0.005 ppb	180 cps	29.1 %
115In (KED)	133.118 %	925,990 cps	2.2 %
133Cs (KED)	0.016 ppb	557 cps	10.6 %
138Ba (KED)	1.545 ppb	76,737 cps	6.7 %
139La (KED)	0.093 ppb	9,858 cps	4.2 %
140Ce (KED)	0.206 ppb	29,088 cps	1.4 %
141Pr (KED)	0.023 ppb	3,493 cps	6.1 %
142Nd (KED)	0.127 ppb	7,581 cps	3.2 %
152Sm (KED)	0.017 ppb	886 cps	4.4 %
153Eu (KED)	0.003 ppb	367 cps	16.5 %
158Gd (KED)	0.013 ppb	944 cps	9.3 %
159Tb (KED)	138.895 %	4,949,942 cps	1.7 %
164Dy (KED)	0.010 ppb	800 cps	8.4 %
166Er (KED)	0.002 ppb	767 cps	3.0 %
169Tm (KED)	0.001 ppb	199 cps	2.6 %
174Yb (KED)	0.004 ppb	479 cps	6.2 %
175Lu (KED)	-0.106 ppb	19,495 cps	4.3 %
205Tl (KED)	0.002 ppb	418 cps	7.7 %
208Pb (KED)	0.343 ppb	56,277 cps	5.6 %
209Bi (KED)	124.271 %	3,961,443 cps	0.5 %
232Th (KED)	0.021 ppb	6,069 cps	6.0 %
238U (KED)	0.005 ppb	1,888 cps	0.2 %

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 17

Analysis name: 191117ti

Analysis started at: 10/20/2021 4:42:45 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	129.406 %	5.6 %
9Be (KED)	0.011 ppb	9.1 %
11B (KED)	20.208 ppb	5.2 %
24Mg (KED)	159.497 ppb	1.8 %
27Al (KED)	139.619 ppb	1.1 %
45Sc (KED)	135.984 %	1.3 %
51V (KED)	0.243 ppb	3.8 %
52Cr (KED)	0.536 ppb	3.5 %
55Mn (KED)	4.301 ppb	2.8 %
56Fe (KED)	146.001 ppb	0.7 %
58Ni (KED)	1.000 ppb	0.8 %
59Co (KED)	0.072 ppb	1.9 %
63Cu (KED)	1.589 ppb	0.8 %
64Zn (KED)	52.164 ppb	2.6 %
69Ga (KED)	0.657 ppb	1.1 %
75As (KED)	0.104 ppb	14.9 %
80Se (KED)	0.167 ppb	59.2 %
85Rb (KED)	0.868 ppb	2.1 %
88Sr (KED)	2.354 ppb	2.7 %
89Y (KED)	129.232 %	1.8 %
107Ag (KED)	0.015 ppb	6.0 %
114Cd (KED)	0.008 ppb	12.2 %
115In (KED)	124.469 %	1.4 %
133Cs (KED)	0.024 ppb	2.3 %
138Ba (KED)	2.306 ppb	1.0 %
139La (KED)	0.132 ppb	2.1 %
140Ce (KED)	0.296 ppb	1.8 %
141Pr (KED)	0.033 ppb	1.9 %
142Nd (KED)	0.180 ppb	1.6 %
152Sm (KED)	0.025 ppb	12.7 %
153Eu (KED)	0.005 ppb	1.8 %
158Gd (KED)	0.021 ppb	9.8 %
159Tb (KED)	125.787 %	0.3 %
164Dy (KED)	0.015 ppb	4.4 %
166Er (KED)	0.004 ppb	25.1 %
169Tm (KED)	0.001 ppb	7.4 %
174Yb (KED)	0.006 ppb	3.2 %
175Lu (KED)	-0.102 ppb	3.9 %
205Tl (KED)	0.003 ppb	8.6 %
208Pb (KED)	0.329 ppb	1.7 %
209Bi (KED)	116.663 %	1.6 %
232Th (KED)	0.035 ppb	2.4 %
238U (KED)	0.007 ppb	3.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	129.406 %	3,428 cps	5.6 %
9Be (KED)	0.011 ppb	3 cps	0.0 %
11B (KED)	20.208 ppb	2,458 cps	1.5 %
24Mg (KED)	159.497 ppb	100,917 cps	4.6 %
27Al (KED)	139.619 ppb	22,436 cps	1.8 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	135.984 %	53,730 cps	1.3 %
51V (KED)	0.243 ppb	2,311 cps	4.4 %
52Cr (KED)	0.536 ppb	8,058 cps	4.2 %
55Mn (KED)	4.301 ppb	33,043 cps	2.7 %
56Fe (KED)	146.001 ppb	2,023,304 cps	1.8 %
58Ni (KED)	1.000 ppb	18,670 cps	1.3 %
59Co (KED)	0.072 ppb	2,204 cps	3.2 %
63Cu (KED)	1.589 ppb	35,850 cps	1.5 %
64Zn (KED)	52.164 ppb	352,341 cps	1.2 %
69Ga (KED)	0.657 ppb	4,867 cps	2.1 %
75As (KED)	0.104 ppb	212 cps	11.8 %
80Se (KED)	0.167 ppb	1,320 cps	6.1 %
85Rb (KED)	0.868 ppb	5,789 cps	2.4 %
88Sr (KED)	2.354 ppb	22,202 cps	3.1 %
89Y (KED)	129.232 %	474,738 cps	1.8 %
107Ag (KED)	0.015 ppb	879 cps	6.5 %
114Cd (KED)	0.008 ppb	232 cps	7.9 %
115In (KED)	124.469 %	865,825 cps	1.4 %
133Cs (KED)	0.024 ppb	781 cps	0.9 %
138Ba (KED)	2.306 ppb	102,813 cps	1.1 %
139La (KED)	0.132 ppb	12,664 cps	1.9 %
140Ce (KED)	0.296 ppb	37,875 cps	1.8 %
141Pr (KED)	0.033 ppb	4,471 cps	2.1 %
142Nd (KED)	0.180 ppb	9,690 cps	1.6 %
152Sm (KED)	0.025 ppb	1,207 cps	12.4 %
153Eu (KED)	0.005 ppb	486 cps	2.1 %
158Gd (KED)	0.021 ppb	1,376 cps	9.8 %
159Tb (KED)	125.787 %	4,482,796 cps	0.3 %
164Dy (KED)	0.015 ppb	1,100 cps	4.1 %
166Er (KED)	0.004 ppb	897 cps	9.9 %
169Tm (KED)	0.001 ppb	279 cps	7.0 %
174Yb (KED)	0.006 ppb	649 cps	3.3 %
175Lu (KED)	-0.102 ppb	18,318 cps	3.8 %
205Tl (KED)	0.003 ppb	560 cps	8.0 %
208Pb (KED)	0.329 ppb	50,916 cps	3.1 %
209Bi (KED)	116.663 %	3,718,903 cps	1.6 %
232Th (KED)	0.035 ppb	9,332 cps	1.3 %
238U (KED)	0.007 ppb	2,437 cps	3.2 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 18

Analysis name: 1855y ti

Analysis started at: 10/20/2021 4:46:51 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	120.806 %	3.2 %
9Be (KED)	-0.001 ppb	1,800.3 %
11B (KED)	3.057 ppb	16.7 %
24Mg (KED)	110.725 ppb	2.0 %
27Al (KED)	111.409 ppb	1.1 %
45Sc (KED)	125.767 %	2.5 %
51V (KED)	0.197 ppb	2.4 %
52Cr (KED)	0.489 ppb	3.0 %
55Mn (KED)	3.407 ppb	0.4 %
56Fe (KED)	118.783 ppb	1.7 %
58Ni (KED)	0.732 ppb	2.0 %
59Co (KED)	0.060 ppb	4.6 %
63Cu (KED)	1.944 ppb	1.6 %
64Zn (KED)	59.101 ppb	1.7 %
69Ga (KED)	0.572 ppb	1.8 %
75As (KED)	0.098 ppb	3.9 %
80Se (KED)	0.542 ppb	7.9 %
85Rb (KED)	0.724 ppb	7.4 %
88Sr (KED)	1.739 ppb	1.2 %
89Y (KED)	120.691 %	1.2 %
107Ag (KED)	0.008 ppb	9.3 %
114Cd (KED)	0.008 ppb	29.4 %
115In (KED)	114.432 %	1.0 %
133Cs (KED)	0.020 ppb	9.5 %
138Ba (KED)	1.967 ppb	2.9 %
139La (KED)	0.107 ppb	3.6 %
140Ce (KED)	0.298 ppb	2.2 %
141Pr (KED)	0.026 ppb	0.6 %
142Nd (KED)	0.165 ppb	3.0 %
152Sm (KED)	0.021 ppb	4.0 %
153Eu (KED)	0.004 ppb	3.9 %
158Gd (KED)	0.018 ppb	6.5 %
159Tb (KED)	112.943 %	0.6 %
164Dy (KED)	0.013 ppb	6.6 %
166Er (KED)	0.005 ppb	6.5 %
169Tm (KED)	0.001 ppb	21.8 %
174Yb (KED)	0.005 ppb	1.5 %
175Lu (KED)	-0.102 ppb	0.7 %
205Tl (KED)	0.002 ppb	6.7 %
208Pb (KED)	0.307 ppb	2.5 %
209Bi (KED)	106.564 %	1.1 %
232Th (KED)	0.025 ppb	2.9 %
238U (KED)	0.006 ppb	1.2 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	120.806 %	3,200 cps	3.2 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	3.057 ppb	649 cps	10.6 %
24Mg (KED)	110.725 ppb	65,437 cps	1.4 %
27Al (KED)	111.409 ppb	16,577 cps	2.6 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	125.767 %	49,693 cps	2.5 %
51V (KED)	0.197 ppb	1,730 cps	2.8 %
52Cr (KED)	0.489 ppb	6,813 cps	4.5 %
55Mn (KED)	3.407 ppb	24,220 cps	2.2 %
56Fe (KED)	118.783 ppb	1,522,534 cps	2.1 %
58Ni (KED)	0.732 ppb	12,739 cps	1.8 %
59Co (KED)	0.060 ppb	1,680 cps	2.2 %
63Cu (KED)	1.944 ppb	40,801 cps	1.9 %
64Zn (KED)	59.101 ppb	372,798 cps	2.2 %
69Ga (KED)	0.572 ppb	3,965 cps	1.1 %
75As (KED)	0.098 ppb	188 cps	4.5 %
80Se (KED)	0.542 ppb	1,453 cps	2.0 %
85Rb (KED)	0.724 ppb	4,510 cps	6.8 %
88Sr (KED)	1.739 ppb	15,375 cps	1.5 %
89Y (KED)	120.691 %	443,365 cps	1.2 %
107Ag (KED)	0.008 ppb	474 cps	8.8 %
114Cd (KED)	0.008 ppb	223 cps	23.3 %
115In (KED)	114.432 %	796,006 cps	1.0 %
133Cs (KED)	0.020 ppb	599 cps	9.4 %
138Ba (KED)	1.967 ppb	78,975 cps	2.4 %
139La (KED)	0.107 ppb	9,187 cps	3.7 %
140Ce (KED)	0.298 ppb	34,141 cps	1.6 %
141Pr (KED)	0.026 ppb	3,169 cps	1.2 %
142Nd (KED)	0.165 ppb	8,005 cps	3.0 %
152Sm (KED)	0.021 ppb	897 cps	4.4 %
153Eu (KED)	0.004 ppb	370 cps	4.1 %
158Gd (KED)	0.018 ppb	1,060 cps	6.6 %
159Tb (KED)	112.943 %	4,025,081 cps	0.6 %
164Dy (KED)	0.013 ppb	899 cps	5.9 %
166Er (KED)	0.005 ppb	858 cps	3.3 %
169Tm (KED)	0.001 ppb	206 cps	21.1 %
174Yb (KED)	0.005 ppb	517 cps	1.7 %
175Lu (KED)	-0.102 ppb	16,560 cps	0.8 %
205Tl (KED)	0.002 ppb	426 cps	6.8 %
208Pb (KED)	0.307 ppb	43,786 cps	2.5 %
209Bi (KED)	106.564 %	3,396,984 cps	1.1 %
232Th (KED)	0.025 ppb	6,144 cps	3.9 %
238U (KED)	0.006 ppb	1,830 cps	1.6 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 19

Analysis name: 29682ti

Analysis started at: 10/20/2021 4:50:55 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	114.975 %	1.4 %
9Be (KED)	0.000 ppb	25,809.3 %
11B (KED)	28.996 ppb	1.1 %
24Mg (KED)	91.604 ppb	2.4 %
27Al (KED)	56.245 ppb	0.3 %
45Sc (KED)	123.599 %	1.6 %
51V (KED)	0.114 ppb	9.0 %
52Cr (KED)	0.387 ppb	5.0 %
55Mn (KED)	1.907 ppb	2.9 %
56Fe (KED)	67.544 ppb	1.0 %
58Ni (KED)	0.498 ppb	1.1 %
59Co (KED)	0.033 ppb	7.0 %
63Cu (KED)	1.645 ppb	1.7 %
64Zn (KED)	51.847 ppb	0.8 %
69Ga (KED)	0.371 ppb	9.4 %
75As (KED)	0.092 ppb	14.6 %
80Se (KED)	0.644 ppb	31.3 %
85Rb (KED)	0.756 ppb	1.7 %
88Sr (KED)	1.336 ppb	1.6 %
89Y (KED)	116.442 %	2.1 %
107Ag (KED)	0.010 ppb	6.9 %
114Cd (KED)	0.009 ppb	27.5 %
115In (KED)	111.043 %	1.0 %
133Cs (KED)	0.015 ppb	6.4 %
138Ba (KED)	1.400 ppb	1.2 %
139La (KED)	0.063 ppb	4.4 %
140Ce (KED)	0.201 ppb	1.7 %
141Pr (KED)	0.015 ppb	8.6 %
142Nd (KED)	0.107 ppb	2.8 %
152Sm (KED)	0.012 ppb	6.8 %
153Eu (KED)	0.002 ppb	3.8 %
158Gd (KED)	0.010 ppb	10.5 %
159Tb (KED)	109.901 %	2.1 %
164Dy (KED)	0.007 ppb	4.0 %
166Er (KED)	0.002 ppb	19.3 %
169Tm (KED)	0.000 ppb	33.8 %
174Yb (KED)	0.002 ppb	15.9 %
175Lu (KED)	-0.106 ppb	2.5 %
205Tl (KED)	0.002 ppb	15.0 %
208Pb (KED)	0.241 ppb	0.1 %
209Bi (KED)	103.537 %	1.5 %
232Th (KED)	0.015 ppb	0.1 %
238U (KED)	0.005 ppb	4.2 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	114.975 %	3,046 cps	1.4 %
9Be (KED)	0.000 ppb	1 cps	173.2 %
11B (KED)	28.996 ppb	2,993 cps	2.3 %
24Mg (KED)	91.604 ppb	51,553 cps	1.7 %
27Al (KED)	56.245 ppb	8,272 cps	1.3 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	123.599 %	48,836 cps	1.6 %
51V (KED)	0.114 ppb	991 cps	10.4 %
52Cr (KED)	0.387 ppb	5,312 cps	5.6 %
55Mn (KED)	1.907 ppb	13,349 cps	4.2 %
56Fe (KED)	67.544 ppb	851,831 cps	1.7 %
58Ni (KED)	0.498 ppb	8,626 cps	0.6 %
59Co (KED)	0.033 ppb	924 cps	5.2 %
63Cu (KED)	1.645 ppb	33,418 cps	1.3 %
64Zn (KED)	51.847 ppb	315,628 cps	2.1 %
69Ga (KED)	0.371 ppb	2,514 cps	11.3 %
75As (KED)	0.092 ppb	172 cps	14.7 %
80Se (KED)	0.644 ppb	1,460 cps	8.0 %
85Rb (KED)	0.756 ppb	4,540 cps	1.5 %
88Sr (KED)	1.336 ppb	11,444 cps	2.8 %
89Y (KED)	116.442 %	427,756 cps	2.1 %
107Ag (KED)	0.010 ppb	563 cps	7.7 %
114Cd (KED)	0.009 ppb	231 cps	22.4 %
115In (KED)	111.043 %	772,434 cps	1.0 %
133Cs (KED)	0.015 ppb	452 cps	5.2 %
138Ba (KED)	1.400 ppb	55,142 cps	0.9 %
139La (KED)	0.063 ppb	5,244 cps	2.5 %
140Ce (KED)	0.201 ppb	22,480 cps	3.3 %
141Pr (KED)	0.015 ppb	1,767 cps	9.1 %
142Nd (KED)	0.107 ppb	5,047 cps	4.5 %
152Sm (KED)	0.012 ppb	490 cps	4.8 %
153Eu (KED)	0.002 ppb	193 cps	1.7 %
158Gd (KED)	0.010 ppb	587 cps	8.4 %
159Tb (KED)	109.901 %	3,916,657 cps	2.1 %
164Dy (KED)	0.007 ppb	460 cps	5.5 %
166Er (KED)	0.002 ppb	626 cps	2.4 %
169Tm (KED)	0.000 ppb	94 cps	30.8 %
174Yb (KED)	0.002 ppb	248 cps	12.5 %
175Lu (KED)	-0.106 ppb	15,481 cps	1.9 %
205Tl (KED)	0.002 ppb	327 cps	13.7 %
208Pb (KED)	0.241 ppb	34,409 cps	1.4 %
209Bi (KED)	103.537 %	3,300,495 cps	1.5 %
232Th (KED)	0.015 ppb	3,622 cps	1.6 %
238U (KED)	0.005 ppb	1,452 cps	5.4 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 20

Analysis name: 03050jian

Analysis started at: 10/20/2021 4:54:50 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	104.655 %	0.7 %
9Be (KED)	0.029 ppb	213.0 %
11B (KED)	5.229 ppb	7.0 %
24Mg (KED)	576.970 ppb	1.1 %
27Al (KED)	416.907 ppb	0.9 %
45Sc (KED)	114.191 %	0.2 %
51V (KED)	0.765 ppb	2.8 %
52Cr (KED)	1.056 ppb	1.5 %
55Mn (KED)	12.219 ppb	2.3 %
56Fe (KED)	509.611 ppb	0.9 %
58Ni (KED)	2.037 ppb	2.3 %
59Co (KED)	0.221 ppb	5.8 %
63Cu (KED)	2.950 ppb	0.6 %
64Zn (KED)	61.483 ppb	0.4 %
69Ga (KED)	1.959 ppb	2.3 %
75As (KED)	0.266 ppb	5.7 %
80Se (KED)	0.766 ppb	12.1 %
85Rb (KED)	1.664 ppb	1.2 %
88Sr (KED)	12.967 ppb	0.3 %
89Y (KED)	108.540 %	1.2 %
107Ag (KED)	0.016 ppb	7.1 %
114Cd (KED)	0.015 ppb	18.7 %
115In (KED)	103.804 %	1.6 %
133Cs (KED)	0.063 ppb	3.4 %
138Ba (KED)	6.928 ppb	2.2 %
139La (KED)	0.475 ppb	1.9 %
140Ce (KED)	0.994 ppb	2.2 %
141Pr (KED)	0.115 ppb	4.6 %
142Nd (KED)	0.614 ppb	3.3 %
152Sm (KED)	0.081 ppb	8.6 %
153Eu (KED)	0.016 ppb	4.2 %
158Gd (KED)	0.067 ppb	6.3 %
159Tb (KED)	102.753 %	2.4 %
164Dy (KED)	0.047 ppb	4.3 %
166Er (KED)	0.022 ppb	12.3 %
169Tm (KED)	0.003 ppb	8.0 %
174Yb (KED)	0.018 ppb	5.7 %
175Lu (KED)	-0.100 ppb	3.1 %
205Tl (KED)	0.007 ppb	2.9 %
208Pb (KED)	0.569 ppb	2.1 %
209Bi (KED)	96.701 %	2.4 %
232Th (KED)	0.114 ppb	2.3 %
238U (KED)	0.027 ppb	2.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	104.655 %	2,773 cps	0.7 %
9Be (KED)	0.029 ppb	6 cps	173.2 %
11B (KED)	5.229 ppb	742 cps	3.8 %
24Mg (KED)	576.970 ppb	295,142 cps	1.5 %
27Al (KED)	416.907 ppb	56,082 cps	1.0 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	114.191 %	45,119 cps	0.2 %
51V (KED)	0.765 ppb	6,094 cps	3.0 %
52Cr (KED)	1.056 ppb	13,280 cps	1.4 %
55Mn (KED)	12.219 ppb	78,755 cps	2.4 %
56Fe (KED)	509.611 ppb	5,925,558 cps	0.9 %
58Ni (KED)	2.037 ppb	31,589 cps	2.1 %
59Co (KED)	0.221 ppb	5,583 cps	6.0 %
63Cu (KED)	2.950 ppb	55,297 cps	0.6 %
64Zn (KED)	61.483 ppb	348,719 cps	0.8 %
69Ga (KED)	1.959 ppb	12,035 cps	1.4 %
75As (KED)	0.266 ppb	428 cps	5.2 %
80Se (KED)	0.766 ppb	1,426 cps	2.8 %
85Rb (KED)	1.664 ppb	9,303 cps	1.9 %
88Sr (KED)	12.967 ppb	101,898 cps	1.4 %
89Y (KED)	108.540 %	398,728 cps	1.2 %
107Ag (KED)	0.016 ppb	813 cps	8.5 %
114Cd (KED)	0.015 ppb	327 cps	16.4 %
115In (KED)	103.804 %	722,079 cps	1.6 %
133Cs (KED)	0.063 ppb	1,721 cps	4.9 %
138Ba (KED)	6.928 ppb	249,455 cps	2.5 %
139La (KED)	0.475 ppb	37,053 cps	1.2 %
140Ce (KED)	0.994 ppb	103,502 cps	1.9 %
141Pr (KED)	0.115 ppb	12,606 cps	2.4 %
142Nd (KED)	0.614 ppb	26,970 cps	1.0 %
152Sm (KED)	0.081 ppb	3,206 cps	7.3 %
153Eu (KED)	0.016 ppb	1,239 cps	6.3 %
158Gd (KED)	0.067 ppb	3,569 cps	5.4 %
159Tb (KED)	102.753 %	3,661,935 cps	2.4 %
164Dy (KED)	0.047 ppb	2,796 cps	2.2 %
166Er (KED)	0.022 ppb	2,028 cps	9.4 %
169Tm (KED)	0.003 ppb	782 cps	5.7 %
174Yb (KED)	0.018 ppb	1,591 cps	5.6 %
175Lu (KED)	-0.100 ppb	15,278 cps	2.2 %
205Tl (KED)	0.007 ppb	1,138 cps	3.5 %
208Pb (KED)	0.569 ppb	69,678 cps	0.9 %
209Bi (KED)	96.701 %	3,082,563 cps	2.4 %
232Th (KED)	0.114 ppb	25,112 cps	1.1 %
238U (KED)	0.027 ppb	7,062 cps	1.4 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 21

Analysis name: 03470jian

Analysis started at: 10/20/2021 4:59:17 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	102.641 %	5.7 %
9Be (KED)	0.000 ppb	4,691.6 %
11B (KED)	12.767 ppb	9.7 %
24Mg (KED)	330.020 ppb	4.6 %
27Al (KED)	305.376 ppb	1.3 %
45Sc (KED)	109.430 %	1.1 %
51V (KED)	0.564 ppb	3.0 %
52Cr (KED)	1.219 ppb	3.4 %
55Mn (KED)	7.335 ppb	2.0 %
56Fe (KED)	315.815 ppb	1.2 %
58Ni (KED)	1.488 ppb	1.0 %
59Co (KED)	0.149 ppb	3.8 %
63Cu (KED)	3.918 ppb	1.5 %
64Zn (KED)	66.158 ppb	1.1 %
69Ga (KED)	1.530 ppb	0.3 %
75As (KED)	0.236 ppb	11.1 %
80Se (KED)	0.911 ppb	10.2 %
85Rb (KED)	0.993 ppb	3.4 %
88Sr (KED)	5.751 ppb	0.9 %
89Y (KED)	101.570 %	2.2 %
107Ag (KED)	0.065 ppb	2.5 %
114Cd (KED)	0.012 ppb	3.1 %
115In (KED)	96.980 %	1.7 %
133Cs (KED)	0.042 ppb	5.9 %
138Ba (KED)	5.433 ppb	1.8 %
139La (KED)	0.329 ppb	1.9 %
140Ce (KED)	0.705 ppb	1.4 %
141Pr (KED)	0.083 ppb	3.8 %
142Nd (KED)	0.442 ppb	0.8 %
152Sm (KED)	0.058 ppb	3.4 %
153Eu (KED)	0.011 ppb	5.9 %
158Gd (KED)	0.047 ppb	4.6 %
159Tb (KED)	94.549 %	0.8 %
164Dy (KED)	0.033 ppb	2.6 %
166Er (KED)	0.013 ppb	9.6 %
169Tm (KED)	0.002 ppb	7.0 %
174Yb (KED)	0.013 ppb	8.0 %
175Lu (KED)	-0.100 ppb	2.9 %
205Tl (KED)	0.004 ppb	5.7 %
208Pb (KED)	0.710 ppb	1.7 %
209Bi (KED)	89.929 %	1.2 %
232Th (KED)	0.071 ppb	2.9 %
238U (KED)	0.021 ppb	0.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	102.641 %	2,719 cps	5.7 %
9Be (KED)	0.000 ppb	1 cps	173.2 %
11B (KED)	12.767 ppb	1,342 cps	6.6 %
24Mg (KED)	330.020 ppb	165,315 cps	1.2 %
27Al (KED)	305.376 ppb	39,385 cps	0.3 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	109.430 %	43,238 cps	1.1 %
51V (KED)	0.564 ppb	4,303 cps	3.7 %
52Cr (KED)	1.219 ppb	14,684 cps	4.0 %
55Mn (KED)	7.335 ppb	45,329 cps	3.0 %
56Fe (KED)	315.815 ppb	3,519,725 cps	1.5 %
58Ni (KED)	1.488 ppb	22,194 cps	1.4 %
59Co (KED)	0.149 ppb	3,618 cps	3.1 %
63Cu (KED)	3.918 ppb	68,521 cps	3.6 %
64Zn (KED)	66.158 ppb	351,054 cps	1.8 %
69Ga (KED)	1.530 ppb	8,810 cps	2.1 %
75As (KED)	0.236 ppb	357 cps	8.3 %
80Se (KED)	0.911 ppb	1,407 cps	5.2 %
85Rb (KED)	0.993 ppb	5,201 cps	1.6 %
88Sr (KED)	5.751 ppb	42,385 cps	2.0 %
89Y (KED)	101.570 %	373,122 cps	2.2 %
107Ag (KED)	0.065 ppb	2,993 cps	3.3 %
114Cd (KED)	0.012 ppb	266 cps	1.9 %
115In (KED)	96.980 %	674,608 cps	1.7 %
133Cs (KED)	0.042 ppb	1,066 cps	4.2 %
138Ba (KED)	5.433 ppb	180,312 cps	2.2 %
139La (KED)	0.329 ppb	23,637 cps	2.2 %
140Ce (KED)	0.705 ppb	67,590 cps	2.0 %
141Pr (KED)	0.083 ppb	8,411 cps	4.5 %
142Nd (KED)	0.442 ppb	17,881 cps	0.5 %
152Sm (KED)	0.058 ppb	2,090 cps	4.2 %
153Eu (KED)	0.011 ppb	781 cps	6.5 %
158Gd (KED)	0.047 ppb	2,322 cps	4.8 %
159Tb (KED)	94.549 %	3,369,541 cps	0.8 %
164Dy (KED)	0.033 ppb	1,808 cps	3.3 %
166Er (KED)	0.013 ppb	1,231 cps	7.2 %
169Tm (KED)	0.002 ppb	460 cps	6.3 %
174Yb (KED)	0.013 ppb	1,038 cps	7.0 %
175Lu (KED)	-0.100 ppb	14,041 cps	3.6 %
205Tl (KED)	0.004 ppb	596 cps	4.7 %
208Pb (KED)	0.710 ppb	79,761 cps	1.5 %
209Bi (KED)	89.929 %	2,866,696 cps	1.2 %
232Th (KED)	0.071 ppb	14,668 cps	2.2 %
238U (KED)	0.021 ppb	5,104 cps	1.7 %

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 22

Analysis name: 03266jian

Analysis started at: 10/20/2021 5:03:14 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	128.735 %	3.1 %
9Be (KED)	-0.007 ppb	0.0 %
11B (KED)	9.165 ppb	1.1 %
24Mg (KED)	135.405 ppb	3.8 %
27Al (KED)	100.270 ppb	1.4 %
45Sc (KED)	142.528 %	2.0 %
51V (KED)	0.187 ppb	1.9 %
52Cr (KED)	0.461 ppb	2.7 %
55Mn (KED)	2.656 ppb	1.4 %
56Fe (KED)	108.335 ppb	1.4 %
58Ni (KED)	0.671 ppb	3.4 %
59Co (KED)	0.054 ppb	8.4 %
63Cu (KED)	2.571 ppb	2.4 %
64Zn (KED)	48.938 ppb	0.4 %
69Ga (KED)	0.518 ppb	1.2 %
75As (KED)	0.070 ppb	39.8 %
80Se (KED)	0.164 ppb	119.1 %
85Rb (KED)	0.368 ppb	5.8 %
88Sr (KED)	2.470 ppb	1.3 %
89Y (KED)	135.315 %	0.2 %
107Ag (KED)	0.014 ppb	5.8 %
114Cd (KED)	0.007 ppb	13.8 %
115In (KED)	129.987 %	2.7 %
133Cs (KED)	0.013 ppb	7.1 %
138Ba (KED)	1.770 ppb	1.4 %
139La (KED)	0.093 ppb	1.8 %
140Ce (KED)	0.212 ppb	1.7 %
141Pr (KED)	0.024 ppb	5.5 %
142Nd (KED)	0.128 ppb	2.9 %
152Sm (KED)	0.016 ppb	10.3 %
153Eu (KED)	0.003 ppb	6.5 %
158Gd (KED)	0.014 ppb	13.0 %
159Tb (KED)	133.271 %	1.8 %
164Dy (KED)	0.011 ppb	3.5 %
166Er (KED)	0.001 ppb	32.8 %
169Tm (KED)	0.001 ppb	15.8 %
174Yb (KED)	0.004 ppb	20.2 %
175Lu (KED)	-0.109 ppb	1.5 %
205Tl (KED)	0.002 ppb	19.8 %
208Pb (KED)	0.340 ppb	2.1 %
209Bi (KED)	119.797 %	1.2 %
232Th (KED)	0.024 ppb	2.3 %
238U (KED)	0.007 ppb	2.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	128.735 %	3,410 cps	3.1 %
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	9.165 ppb	1,317 cps	3.1 %
24Mg (KED)	135.405 ppb	85,218 cps	0.7 %
27Al (KED)	100.270 ppb	16,916 cps	0.7 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	142.528 %	56,316 cps	2.0 %
51V (KED)	0.187 ppb	1,860 cps	3.9 %
52Cr (KED)	0.461 ppb	7,282 cps	2.5 %
55Mn (KED)	2.656 ppb	21,403 cps	1.2 %
56Fe (KED)	108.335 ppb	1,573,853 cps	0.8 %
58Ni (KED)	0.671 ppb	13,258 cps	2.5 %
59Co (KED)	0.054 ppb	1,739 cps	7.4 %
63Cu (KED)	2.571 ppb	60,193 cps	2.6 %
64Zn (KED)	48.938 ppb	346,281 cps	0.7 %
69Ga (KED)	0.518 ppb	4,038 cps	1.4 %
75As (KED)	0.070 ppb	158 cps	33.7 %
80Se (KED)	0.164 ppb	1,380 cps	9.2 %
85Rb (KED)	0.368 ppb	2,578 cps	5.5 %
88Sr (KED)	2.470 ppb	24,388 cps	1.1 %
89Y (KED)	135.315 %	497,086 cps	0.2 %
107Ag (KED)	0.014 ppb	900 cps	4.6 %
114Cd (KED)	0.007 ppb	230 cps	12.9 %
115In (KED)	129.987 %	904,212 cps	2.7 %
133Cs (KED)	0.013 ppb	457 cps	7.4 %
138Ba (KED)	1.770 ppb	84,020 cps	0.6 %
139La (KED)	0.093 ppb	9,412 cps	1.5 %
140Ce (KED)	0.212 ppb	28,704 cps	0.2 %
141Pr (KED)	0.024 ppb	3,477 cps	6.5 %
142Nd (KED)	0.128 ppb	7,315 cps	1.5 %
152Sm (KED)	0.016 ppb	824 cps	9.2 %
153Eu (KED)	0.003 ppb	352 cps	4.5 %
158Gd (KED)	0.014 ppb	983 cps	11.0 %
159Tb (KED)	133.271 %	4,749,509 cps	1.8 %
164Dy (KED)	0.011 ppb	843 cps	5.0 %
166Er (KED)	0.001 ppb	702 cps	3.6 %
169Tm (KED)	0.001 ppb	227 cps	15.9 %
174Yb (KED)	0.004 ppb	429 cps	16.9 %
175Lu (KED)	-0.109 ppb	18,232 cps	3.5 %
205Tl (KED)	0.002 ppb	318 cps	20.0 %
208Pb (KED)	0.340 ppb	53,859 cps	0.7 %
209Bi (KED)	119.797 %	3,818,799 cps	1.2 %
232Th (KED)	0.024 ppb	6,552 cps	1.4 %
238U (KED)	0.007 ppb	2,356 cps	3.3 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 23

Analysis name: 3343jian

Analysis started at: 10/20/2021 5:06:34 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	141.405 %	2.1 %
9Be (KED)	-0.001 ppb	658.8 %
11B (KED)	7.303 ppb	7.3 %
24Mg (KED)	228.111 ppb	1.5 %
27Al (KED)	156.484 ppb	0.4 %
45Sc (KED)	147.169 %	2.4 %
51V (KED)	0.301 ppb	1.7 %
52Cr (KED)	0.616 ppb	3.5 %
55Mn (KED)	4.767 ppb	0.6 %
56Fe (KED)	179.626 ppb	1.3 %
58Ni (KED)	0.892 ppb	2.5 %
59Co (KED)	0.095 ppb	5.4 %
63Cu (KED)	2.585 ppb	0.6 %
64Zn (KED)	43.168 ppb	0.8 %
69Ga (KED)	0.874 ppb	7.1 %
75As (KED)	0.121 ppb	6.4 %
80Se (KED)	0.143 ppb	80.7 %
85Rb (KED)	0.927 ppb	2.2 %
88Sr (KED)	4.803 ppb	1.6 %
89Y (KED)	139.835 %	2.0 %
107Ag (KED)	0.017 ppb	5.8 %
114Cd (KED)	0.007 ppb	20.2 %
115In (KED)	132.555 %	1.4 %
133Cs (KED)	0.021 ppb	3.4 %
138Ba (KED)	2.988 ppb	2.8 %
139La (KED)	0.193 ppb	2.5 %
140Ce (KED)	0.421 ppb	0.8 %
141Pr (KED)	0.048 ppb	2.3 %
142Nd (KED)	0.263 ppb	0.4 %
152Sm (KED)	0.032 ppb	4.2 %
153Eu (KED)	0.006 ppb	5.5 %
158Gd (KED)	0.027 ppb	4.0 %
159Tb (KED)	137.630 %	2.0 %
164Dy (KED)	0.018 ppb	5.5 %
166Er (KED)	0.005 ppb	10.8 %
169Tm (KED)	0.001 ppb	4.4 %
174Yb (KED)	0.007 ppb	7.6 %
175Lu (KED)	-0.107 ppb	1.1 %
205Tl (KED)	0.003 ppb	8.8 %
208Pb (KED)	0.425 ppb	2.7 %
209Bi (KED)	122.496 %	2.1 %
232Th (KED)	0.045 ppb	2.6 %
238U (KED)	0.012 ppb	2.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	141.405 %	3,746 cps	2.1 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	7.303 ppb	1,237 cps	5.6 %
24Mg (KED)	228.111 ppb	157,733 cps	2.6 %
27Al (KED)	156.484 ppb	27,199 cps	2.0 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	147.169 %	58,150 cps	2.4 %
51V (KED)	0.301 ppb	3,087 cps	2.6 %
52Cr (KED)	0.616 ppb	10,004 cps	1.2 %
55Mn (KED)	4.767 ppb	39,631 cps	2.8 %
56Fe (KED)	179.626 ppb	2,693,029 cps	1.9 %
58Ni (KED)	0.892 ppb	18,052 cps	0.4 %
59Co (KED)	0.095 ppb	3,096 cps	3.9 %
63Cu (KED)	2.585 ppb	62,540 cps	2.3 %
64Zn (KED)	43.168 ppb	315,764 cps	1.4 %
69Ga (KED)	0.874 ppb	6,974 cps	8.7 %
75As (KED)	0.121 ppb	263 cps	6.7 %
80Se (KED)	0.143 ppb	1,411 cps	4.9 %
85Rb (KED)	0.927 ppb	6,685 cps	0.9 %
88Sr (KED)	4.803 ppb	48,777 cps	2.7 %
89Y (KED)	139.835 %	513,690 cps	2.0 %
107Ag (KED)	0.017 ppb	1,117 cps	4.7 %
114Cd (KED)	0.007 ppb	231 cps	14.4 %
115In (KED)	132.555 %	922,076 cps	1.4 %
133Cs (KED)	0.021 ppb	750 cps	4.6 %
138Ba (KED)	2.988 ppb	145,187 cps	2.4 %
139La (KED)	0.193 ppb	20,124 cps	3.3 %
140Ce (KED)	0.421 ppb	58,734 cps	1.4 %
141Pr (KED)	0.048 ppb	7,014 cps	1.8 %
142Nd (KED)	0.263 ppb	15,491 cps	2.2 %
152Sm (KED)	0.032 ppb	1,667 cps	5.1 %
153Eu (KED)	0.006 ppb	662 cps	6.5 %
158Gd (KED)	0.027 ppb	1,898 cps	2.2 %
159Tb (KED)	137.630 %	4,904,870 cps	2.0 %
164Dy (KED)	0.018 ppb	1,499 cps	5.2 %
166Er (KED)	0.005 ppb	1,107 cps	6.8 %
169Tm (KED)	0.001 ppb	356 cps	6.2 %
174Yb (KED)	0.007 ppb	826 cps	6.1 %
175Lu (KED)	-0.107 ppb	19,224 cps	1.4 %
205Tl (KED)	0.003 ppb	618 cps	7.8 %
208Pb (KED)	0.425 ppb	67,389 cps	0.9 %
209Bi (KED)	122.496 %	3,904,841 cps	2.1 %
232Th (KED)	0.045 ppb	12,661 cps	3.8 %
238U (KED)	0.012 ppb	3,943 cps	3.1 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 24

Analysis name: 03260jian

Analysis started at: 10/20/2021 5:09:53 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	131.462 %	2.2 %
9Be (KED)	-0.001 ppb	879.7 %
11B (KED)	9.020 ppb	4.0 %
24Mg (KED)	139.605 ppb	0.4 %
27Al (KED)	83.182 ppb	3.9 %
45Sc (KED)	140.181 %	1.8 %
51V (KED)	0.161 ppb	3.7 %
52Cr (KED)	0.793 ppb	1.7 %
55Mn (KED)	2.669 ppb	2.6 %
56Fe (KED)	93.805 ppb	1.7 %
58Ni (KED)	0.584 ppb	2.4 %
59Co (KED)	0.051 ppb	2.9 %
63Cu (KED)	2.149 ppb	0.2 %
64Zn (KED)	46.070 ppb	1.2 %
69Ga (KED)	0.460 ppb	6.8 %
75As (KED)	0.069 ppb	7.0 %
80Se (KED)	0.274 ppb	8.4 %
85Rb (KED)	0.555 ppb	1.5 %
88Sr (KED)	3.303 ppb	1.3 %
89Y (KED)	132.668 %	0.6 %
107Ag (KED)	0.030 ppb	1.9 %
114Cd (KED)	0.013 ppb	8.6 %
115In (KED)	126.686 %	1.8 %
133Cs (KED)	0.012 ppb	9.7 %
138Ba (KED)	1.589 ppb	2.1 %
139La (KED)	0.082 ppb	1.0 %
140Ce (KED)	0.189 ppb	1.2 %
141Pr (KED)	0.019 ppb	1.3 %
142Nd (KED)	0.116 ppb	3.6 %
152Sm (KED)	0.013 ppb	5.4 %
153Eu (KED)	0.003 ppb	13.1 %
158Gd (KED)	0.012 ppb	6.0 %
159Tb (KED)	131.728 %	2.9 %
164Dy (KED)	0.008 ppb	1.0 %
166Er (KED)	0.000 ppb	64.0 %
169Tm (KED)	0.001 ppb	7.7 %
174Yb (KED)	0.003 ppb	7.2 %
175Lu (KED)	-0.110 ppb	3.0 %
205Tl (KED)	0.002 ppb	2.5 %
208Pb (KED)	0.317 ppb	2.4 %
209Bi (KED)	117.640 %	2.2 %
232Th (KED)	0.021 ppb	1.4 %
238U (KED)	0.007 ppb	5.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	131.462 %	3,483 cps	2.2 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	9.020 ppb	1,330 cps	5.1 %
24Mg (KED)	139.605 ppb	89,784 cps	1.9 %
27Al (KED)	83.182 ppb	13,824 cps	4.6 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	140.181 %	55,388 cps	1.8 %
51V (KED)	0.161 ppb	1,573 cps	2.0 %
52Cr (KED)	0.793 ppb	12,262 cps	0.3 %
55Mn (KED)	2.669 ppb	21,159 cps	3.7 %
56Fe (KED)	93.805 ppb	1,340,837 cps	2.3 %
58Ni (KED)	0.584 ppb	11,409 cps	3.3 %
59Co (KED)	0.051 ppb	1,607 cps	3.3 %
63Cu (KED)	2.149 ppb	49,478 cps	0.7 %
64Zn (KED)	46.070 ppb	319,686 cps	1.8 %
69Ga (KED)	0.460 ppb	3,525 cps	7.2 %
75As (KED)	0.069 ppb	152 cps	5.5 %
80Se (KED)	0.274 ppb	1,425 cps	1.1 %
85Rb (KED)	0.555 ppb	3,807 cps	2.0 %
88Sr (KED)	3.303 ppb	31,893 cps	1.4 %
89Y (KED)	132.668 %	487,363 cps	0.6 %
107Ag (KED)	0.030 ppb	1,813 cps	0.7 %
114Cd (KED)	0.013 ppb	352 cps	8.5 %
115In (KED)	126.686 %	881,250 cps	1.8 %
133Cs (KED)	0.012 ppb	431 cps	10.5 %
138Ba (KED)	1.589 ppb	74,742 cps	1.5 %
139La (KED)	0.082 ppb	8,208 cps	2.0 %
140Ce (KED)	0.189 ppb	25,395 cps	2.0 %
141Pr (KED)	0.019 ppb	2,730 cps	3.2 %
142Nd (KED)	0.116 ppb	6,540 cps	4.4 %
152Sm (KED)	0.013 ppb	654 cps	7.7 %
153Eu (KED)	0.003 ppb	287 cps	13.4 %
158Gd (KED)	0.012 ppb	853 cps	3.1 %
159Tb (KED)	131.728 %	4,694,543 cps	2.9 %
164Dy (KED)	0.008 ppb	630 cps	3.7 %
166Er (KED)	0.000 ppb	609 cps	0.3 %
169Tm (KED)	0.001 ppb	179 cps	7.5 %
174Yb (KED)	0.003 ppb	384 cps	4.8 %
175Lu (KED)	-0.110 ppb	17,824 cps	0.4 %
205Tl (KED)	0.002 ppb	452 cps	3.7 %
208Pb (KED)	0.317 ppb	49,752 cps	0.8 %
209Bi (KED)	117.640 %	3,750,067 cps	2.2 %
232Th (KED)	0.021 ppb	5,657 cps	2.6 %
238U (KED)	0.007 ppb	2,181 cps	6.5 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 25

Analysis name: 03271jian

Analysis started at: 10/20/2021 5:13:12 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	130.203 %	4.8 %
9Be (KED)	-0.001 ppb	874.7 %
11B (KED)	23.213 ppb	5.6 %
24Mg (KED)	128.905 ppb	2.9 %
27Al (KED)	93.106 ppb	1.9 %
45Sc (KED)	137.760 %	1.9 %
51V (KED)	0.174 ppb	2.6 %
52Cr (KED)	0.530 ppb	4.8 %
55Mn (KED)	2.701 ppb	1.2 %
56Fe (KED)	102.911 ppb	0.5 %
58Ni (KED)	0.634 ppb	1.2 %
59Co (KED)	0.049 ppb	2.4 %
63Cu (KED)	1.963 ppb	1.4 %
64Zn (KED)	46.227 ppb	0.4 %
69Ga (KED)	0.517 ppb	2.0 %
75As (KED)	0.093 ppb	12.1 %
80Se (KED)	0.150 ppb	58.9 %
85Rb (KED)	0.474 ppb	5.9 %
88Sr (KED)	2.356 ppb	1.6 %
89Y (KED)	132.452 %	1.5 %
107Ag (KED)	0.035 ppb	5.0 %
114Cd (KED)	0.004 ppb	43.3 %
115In (KED)	124.798 %	1.6 %
133Cs (KED)	0.012 ppb	12.1 %
138Ba (KED)	1.827 ppb	4.2 %
139La (KED)	0.093 ppb	1.3 %
140Ce (KED)	0.209 ppb	1.6 %
141Pr (KED)	0.024 ppb	2.6 %
142Nd (KED)	0.133 ppb	2.5 %
152Sm (KED)	0.018 ppb	6.2 %
153Eu (KED)	0.004 ppb	4.5 %
158Gd (KED)	0.015 ppb	4.4 %
159Tb (KED)	129.940 %	3.4 %
164Dy (KED)	0.011 ppb	12.1 %
166Er (KED)	0.001 ppb	75.1 %
169Tm (KED)	0.001 ppb	17.6 %
174Yb (KED)	0.004 ppb	4.6 %
175Lu (KED)	-0.110 ppb	3.5 %
205Tl (KED)	0.001 ppb	8.7 %
208Pb (KED)	0.236 ppb	2.8 %
209Bi (KED)	117.471 %	1.4 %
232Th (KED)	0.024 ppb	1.4 %
238U (KED)	0.007 ppb	5.0 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	130.203 %	3,449 cps	4.8 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	23.213 ppb	2,787 cps	5.2 %
24Mg (KED)	128.905 ppb	82,046 cps	2.1 %
27Al (KED)	93.106 ppb	15,189 cps	1.2 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	137.760 %	54,432 cps	1.9 %
51V (KED)	0.174 ppb	1,678 cps	1.0 %
52Cr (KED)	0.530 ppb	8,084 cps	6.6 %
55Mn (KED)	2.701 ppb	21,041 cps	2.5 %
56Fe (KED)	102.911 ppb	1,445,342 cps	1.7 %
58Ni (KED)	0.634 ppb	12,136 cps	1.9 %
59Co (KED)	0.049 ppb	1,518 cps	0.5 %
63Cu (KED)	1.963 ppb	45,184 cps	1.2 %
64Zn (KED)	46.227 ppb	320,226 cps	1.2 %
69Ga (KED)	0.517 ppb	3,945 cps	3.5 %
75As (KED)	0.093 ppb	198 cps	9.3 %
80Se (KED)	0.150 ppb	1,342 cps	5.2 %
85Rb (KED)	0.474 ppb	3,250 cps	6.1 %
88Sr (KED)	2.356 ppb	22,781 cps	2.6 %
89Y (KED)	132.452 %	486,569 cps	1.5 %
107Ag (KED)	0.035 ppb	2,115 cps	4.5 %
114Cd (KED)	0.004 ppb	158 cps	26.4 %
115In (KED)	124.798 %	868,116 cps	1.6 %
133Cs (KED)	0.012 ppb	423 cps	12.7 %
138Ba (KED)	1.827 ppb	84,469 cps	1.3 %
139La (KED)	0.093 ppb	9,209 cps	2.8 %
140Ce (KED)	0.209 ppb	27,635 cps	1.8 %
141Pr (KED)	0.024 ppb	3,343 cps	1.3 %
142Nd (KED)	0.133 ppb	7,392 cps	0.9 %
152Sm (KED)	0.018 ppb	913 cps	9.4 %
153Eu (KED)	0.004 ppb	388 cps	1.8 %
158Gd (KED)	0.015 ppb	1,050 cps	4.7 %
159Tb (KED)	129.940 %	4,630,823 cps	3.4 %
164Dy (KED)	0.011 ppb	826 cps	8.4 %
166Er (KED)	0.001 ppb	697 cps	10.4 %
169Tm (KED)	0.001 ppb	198 cps	16.4 %
174Yb (KED)	0.004 ppb	443 cps	3.4 %
175Lu (KED)	-0.110 ppb	17,579 cps	0.5 %
205Tl (KED)	0.001 ppb	300 cps	7.8 %
208Pb (KED)	0.236 ppb	38,399 cps	1.6 %
209Bi (KED)	117.471 %	3,744,676 cps	1.4 %
232Th (KED)	0.024 ppb	6,387 cps	0.9 %
238U (KED)	0.007 ppb	2,445 cps	6.2 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 26

Analysis name: 03272jian

Analysis started at: 10/20/2021 5:16:31 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	134.231 %	3.3 %
9Be (KED)	0.004 ppb	213.9 %
11B (KED)	27.528 ppb	4.5 %
24Mg (KED)	138.478 ppb	5.3 %
27Al (KED)	90.266 ppb	2.0 %
45Sc (KED)	141.175 %	1.9 %
51V (KED)	0.198 ppb	3.5 %
52Cr (KED)	1.309 ppb	16.2 %
55Mn (KED)	3.063 ppb	2.5 %
56Fe (KED)	107.861 ppb	3.4 %
58Ni (KED)	0.612 ppb	4.9 %
59Co (KED)	0.058 ppb	9.7 %
63Cu (KED)	1.928 ppb	2.1 %
64Zn (KED)	53.312 ppb	3.9 %
69Ga (KED)	0.479 ppb	0.9 %
75As (KED)	0.109 ppb	11.2 %
80Se (KED)	0.103 ppb	150.4 %
85Rb (KED)	0.565 ppb	0.7 %
88Sr (KED)	3.748 ppb	0.5 %
89Y (KED)	133.969 %	1.3 %
107Ag (KED)	0.012 ppb	8.6 %
114Cd (KED)	0.007 ppb	26.9 %
115In (KED)	127.871 %	1.0 %
133Cs (KED)	0.014 ppb	4.2 %
138Ba (KED)	1.653 ppb	1.0 %
139La (KED)	0.107 ppb	3.5 %
140Ce (KED)	0.229 ppb	3.3 %
141Pr (KED)	0.027 ppb	4.2 %
142Nd (KED)	0.145 ppb	5.3 %
152Sm (KED)	0.019 ppb	4.9 %
153Eu (KED)	0.004 ppb	6.8 %
158Gd (KED)	0.016 ppb	4.5 %
159Tb (KED)	133.308 %	2.8 %
164Dy (KED)	0.011 ppb	2.6 %
166Er (KED)	0.001 ppb	48.8 %
169Tm (KED)	0.001 ppb	22.5 %
174Yb (KED)	0.005 ppb	3.4 %
175Lu (KED)	-0.114 ppb	0.5 %
205Tl (KED)	0.003 ppb	3.7 %
208Pb (KED)	0.274 ppb	5.7 %
209Bi (KED)	119.135 %	2.0 %
232Th (KED)	0.022 ppb	1.3 %
238U (KED)	0.007 ppb	4.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	134.231 %	3,556 cps	3.3 %
9Be (KED)	0.004 ppb	2 cps	86.6 %
11B (KED)	27.528 ppb	3,334 cps	1.4 %
24Mg (KED)	138.478 ppb	90,839 cps	2.2 %
27Al (KED)	90.266 ppb	15,096 cps	2.2 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	141.175 %	55,781 cps	1.9 %
51V (KED)	0.198 ppb	1,959 cps	5.4 %
52Cr (KED)	1.309 ppb	20,363 cps	18.1 %
55Mn (KED)	3.063 ppb	24,454 cps	4.1 %
56Fe (KED)	107.861 ppb	1,552,797 cps	4.8 %
58Ni (KED)	0.612 ppb	12,026 cps	5.4 %
59Co (KED)	0.058 ppb	1,826 cps	11.3 %
63Cu (KED)	1.928 ppb	44,927 cps	3.2 %
64Zn (KED)	53.312 ppb	373,485 cps	5.0 %
69Ga (KED)	0.479 ppb	3,703 cps	1.5 %
75As (KED)	0.109 ppb	230 cps	9.1 %
80Se (KED)	0.103 ppb	1,326 cps	6.4 %
85Rb (KED)	0.565 ppb	3,908 cps	1.4 %
88Sr (KED)	3.748 ppb	36,514 cps	1.4 %
89Y (KED)	133.969 %	492,140 cps	1.3 %
107Ag (KED)	0.012 ppb	727 cps	7.4 %
114Cd (KED)	0.007 ppb	213 cps	19.0 %
115In (KED)	127.871 %	889,496 cps	1.0 %
133Cs (KED)	0.014 ppb	481 cps	3.1 %
138Ba (KED)	1.653 ppb	78,642 cps	1.9 %
139La (KED)	0.107 ppb	10,875 cps	6.2 %
140Ce (KED)	0.229 ppb	31,101 cps	6.1 %
141Pr (KED)	0.027 ppb	3,816 cps	6.9 %
142Nd (KED)	0.145 ppb	8,317 cps	7.9 %
152Sm (KED)	0.019 ppb	959 cps	7.6 %
153Eu (KED)	0.004 ppb	376 cps	8.9 %
158Gd (KED)	0.016 ppb	1,128 cps	7.0 %
159Tb (KED)	133.308 %	4,750,832 cps	2.8 %
164Dy (KED)	0.011 ppb	914 cps	5.2 %
166Er (KED)	0.001 ppb	709 cps	10.7 %
169Tm (KED)	0.001 ppb	232 cps	19.0 %
174Yb (KED)	0.005 ppb	561 cps	5.9 %
175Lu (KED)	-0.114 ppb	17,319 cps	3.2 %
205Tl (KED)	0.003 ppb	563 cps	3.1 %
208Pb (KED)	0.274 ppb	44,390 cps	6.9 %
209Bi (KED)	119.135 %	3,797,706 cps	2.0 %
232Th (KED)	0.022 ppb	5,989 cps	2.5 %
238U (KED)	0.007 ppb	2,390 cps	5.9 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 27

Analysis name: w29jian

Analysis started at: 10/20/2021 5:19:47 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	132.930 %	3.6 %
9Be (KED)	-0.001 ppb	1,238.6 %
11B (KED)	6.438 ppb	12.9 %
24Mg (KED)	120.115 ppb	4.3 %
27Al (KED)	72.924 ppb	0.7 %
45Sc (KED)	140.178 %	2.2 %
51V (KED)	0.138 ppb	5.8 %
52Cr (KED)	1.236 ppb	3.8 %
55Mn (KED)	2.406 ppb	0.5 %
56Fe (KED)	84.201 ppb	2.2 %
58Ni (KED)	0.624 ppb	4.6 %
59Co (KED)	0.056 ppb	4.8 %
63Cu (KED)	2.642 ppb	1.1 %
64Zn (KED)	56.675 ppb	1.1 %
69Ga (KED)	0.494 ppb	3.2 %
75As (KED)	0.071 ppb	10.4 %
80Se (KED)	0.211 ppb	17.2 %
85Rb (KED)	0.698 ppb	2.9 %
88Sr (KED)	3.204 ppb	5.0 %
89Y (KED)	134.006 %	2.1 %
107Ag (KED)	0.010 ppb	2.6 %
114Cd (KED)	0.007 ppb	26.1 %
115In (KED)	127.567 %	0.9 %
133Cs (KED)	0.012 ppb	5.7 %
138Ba (KED)	1.690 ppb	2.6 %
139La (KED)	0.084 ppb	3.8 %
140Ce (KED)	0.172 ppb	4.9 %
141Pr (KED)	0.021 ppb	4.4 %
142Nd (KED)	0.111 ppb	5.2 %
152Sm (KED)	0.013 ppb	4.2 %
153Eu (KED)	0.003 ppb	9.3 %
158Gd (KED)	0.012 ppb	4.3 %
159Tb (KED)	131.262 %	2.9 %
164Dy (KED)	0.007 ppb	11.8 %
166Er (KED)	0.000 ppb	435.2 %
169Tm (KED)	0.001 ppb	5.1 %
174Yb (KED)	0.003 ppb	8.6 %
175Lu (KED)	-0.109 ppb	5.2 %
205Tl (KED)	0.003 ppb	8.1 %
208Pb (KED)	0.238 ppb	2.1 %
209Bi (KED)	118.338 %	0.9 %
232Th (KED)	0.018 ppb	2.5 %
238U (KED)	0.006 ppb	4.1 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	132.930 %	3,522 cps	3.6 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	6.438 ppb	1,069 cps	4.8 %
24Mg (KED)	120.115 ppb	78,052 cps	1.0 %
27Al (KED)	72.924 ppb	12,130 cps	1.7 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	140.178 %	55,387 cps	2.2 %
51V (KED)	0.138 ppb	1,355 cps	7.5 %
52Cr (KED)	1.236 ppb	19,075 cps	5.9 %
55Mn (KED)	2.406 ppb	19,078 cps	2.4 %
56Fe (KED)	84.201 ppb	1,203,426 cps	0.4 %
58Ni (KED)	0.624 ppb	12,150 cps	2.2 %
59Co (KED)	0.056 ppb	1,771 cps	4.3 %
63Cu (KED)	2.642 ppb	61,222 cps	1.0 %
64Zn (KED)	56.675 ppb	396,932 cps	1.8 %
69Ga (KED)	0.494 ppb	3,814 cps	3.2 %
75As (KED)	0.071 ppb	158 cps	8.0 %
80Se (KED)	0.211 ppb	1,397 cps	0.4 %
85Rb (KED)	0.698 ppb	4,826 cps	2.5 %
88Sr (KED)	3.204 ppb	31,240 cps	2.9 %
89Y (KED)	134.006 %	492,275 cps	2.1 %
107Ag (KED)	0.010 ppb	624 cps	3.5 %
114Cd (KED)	0.007 ppb	216 cps	18.9 %
115In (KED)	127.567 %	887,377 cps	0.9 %
133Cs (KED)	0.012 ppb	409 cps	4.5 %
138Ba (KED)	1.690 ppb	79,102 cps	0.3 %
139La (KED)	0.084 ppb	8,341 cps	1.0 %
140Ce (KED)	0.172 ppb	22,951 cps	3.6 %
141Pr (KED)	0.021 ppb	2,938 cps	1.7 %
142Nd (KED)	0.111 ppb	6,232 cps	3.3 %
152Sm (KED)	0.013 ppb	674 cps	1.7 %
153Eu (KED)	0.003 ppb	270 cps	6.4 %
158Gd (KED)	0.012 ppb	801 cps	3.7 %
159Tb (KED)	131.262 %	4,677,928 cps	2.9 %
164Dy (KED)	0.007 ppb	563 cps	8.6 %
166Er (KED)	0.000 ppb	560 cps	9.8 %
169Tm (KED)	0.001 ppb	166 cps	5.1 %
174Yb (KED)	0.003 ppb	350 cps	6.2 %
175Lu (KED)	-0.109 ppb	17,798 cps	3.7 %
205Tl (KED)	0.003 ppb	584 cps	8.3 %
208Pb (KED)	0.238 ppb	38,983 cps	2.3 %
209Bi (KED)	118.338 %	3,772,313 cps	0.9 %
232Th (KED)	0.018 ppb	5,054 cps	1.9 %
238U (KED)	0.006 ppb	2,077 cps	4.4 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 28

Analysis name: 03273jian

Analysis started at: 10/20/2021 5:23:00 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	137.839 %	4.5 %
9Be (KED)	-0.001 ppb	685.1 %
11B (KED)	8.233 ppb	11.4 %
24Mg (KED)	136.389 ppb	4.5 %
27Al (KED)	67.091 ppb	0.6 %
45Sc (KED)	145.426 %	2.5 %
51V (KED)	0.135 ppb	0.5 %
52Cr (KED)	0.354 ppb	2.9 %
55Mn (KED)	2.472 ppb	2.2 %
56Fe (KED)	78.512 ppb	2.9 %
58Ni (KED)	0.469 ppb	3.1 %
59Co (KED)	0.045 ppb	7.2 %
63Cu (KED)	2.152 ppb	2.4 %
64Zn (KED)	46.135 ppb	2.1 %
69Ga (KED)	0.433 ppb	5.2 %
75As (KED)	0.098 ppb	10.3 %
80Se (KED)	0.195 ppb	6.1 %
85Rb (KED)	0.608 ppb	3.5 %
88Sr (KED)	3.754 ppb	1.4 %
89Y (KED)	138.041 %	2.0 %
107Ag (KED)	0.009 ppb	11.2 %
114Cd (KED)	0.009 ppb	2.1 %
115In (KED)	132.531 %	1.7 %
133Cs (KED)	0.010 ppb	7.6 %
138Ba (KED)	1.528 ppb	0.9 %
139La (KED)	0.082 ppb	1.7 %
140Ce (KED)	0.177 ppb	2.0 %
141Pr (KED)	0.018 ppb	1.0 %
142Nd (KED)	0.102 ppb	2.2 %
152Sm (KED)	0.012 ppb	11.4 %
153Eu (KED)	0.002 ppb	4.4 %
158Gd (KED)	0.010 ppb	1.0 %
159Tb (KED)	137.909 %	0.5 %
164Dy (KED)	0.007 ppb	9.8 %
166Er (KED)	0.000 ppb	80.8 %
169Tm (KED)	0.000 ppb	8.5 %
174Yb (KED)	0.003 ppb	22.5 %
175Lu (KED)	-0.113 ppb	4.8 %
205Tl (KED)	0.003 ppb	10.2 %
208Pb (KED)	0.218 ppb	1.2 %
209Bi (KED)	123.025 %	1.0 %
232Th (KED)	0.019 ppb	4.3 %
238U (KED)	0.005 ppb	4.7 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	137.839 %	3,652 cps	4.5 %
9Be (KED)	-0.001 ppb	1 cps	173.2 %
11B (KED)	8.233 ppb	1,305 cps	3.2 %
24Mg (KED)	136.389 ppb	91,859 cps	1.1 %
27Al (KED)	67.091 ppb	11,588 cps	2.5 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	145.426 %	57,461 cps	2.5 %
51V (KED)	0.135 ppb	1,373 cps	2.6 %
52Cr (KED)	0.354 ppb	5,717 cps	4.0 %
55Mn (KED)	2.472 ppb	20,332 cps	1.3 %
56Fe (KED)	78.512 ppb	1,164,087 cps	0.3 %
58Ni (KED)	0.469 ppb	9,585 cps	0.6 %
59Co (KED)	0.045 ppb	1,460 cps	5.3 %
63Cu (KED)	2.152 ppb	51,541 cps	0.5 %
64Zn (KED)	46.135 ppb	332,991 cps	0.1 %
69Ga (KED)	0.433 ppb	3,458 cps	3.0 %
75As (KED)	0.098 ppb	216 cps	9.3 %
80Se (KED)	0.195 ppb	1,429 cps	2.4 %
85Rb (KED)	0.608 ppb	4,333 cps	3.8 %
88Sr (KED)	3.754 ppb	37,681 cps	1.5 %
89Y (KED)	138.041 %	507,099 cps	2.0 %
107Ag (KED)	0.009 ppb	600 cps	9.5 %
114Cd (KED)	0.009 ppb	281 cps	3.0 %
115In (KED)	132.531 %	921,912 cps	1.7 %
133Cs (KED)	0.010 ppb	371 cps	6.7 %
138Ba (KED)	1.528 ppb	75,330 cps	1.4 %
139La (KED)	0.082 ppb	8,604 cps	1.2 %
140Ce (KED)	0.177 ppb	24,802 cps	2.4 %
141Pr (KED)	0.018 ppb	2,703 cps	1.2 %
142Nd (KED)	0.102 ppb	6,053 cps	2.6 %
152Sm (KED)	0.012 ppb	653 cps	11.9 %
153Eu (KED)	0.002 ppb	257 cps	3.9 %
158Gd (KED)	0.010 ppb	710 cps	0.9 %
159Tb (KED)	137.909 %	4,914,822 cps	0.5 %
164Dy (KED)	0.007 ppb	586 cps	9.8 %
166Er (KED)	0.000 ppb	647 cps	4.5 %
169Tm (KED)	0.000 ppb	166 cps	8.4 %
174Yb (KED)	0.003 ppb	381 cps	20.6 %
175Lu (KED)	-0.113 ppb	18,121 cps	6.1 %
205Tl (KED)	0.003 ppb	607 cps	11.0 %
208Pb (KED)	0.218 ppb	37,544 cps	1.2 %
209Bi (KED)	123.025 %	3,921,714 cps	1.0 %
232Th (KED)	0.019 ppb	5,500 cps	3.5 %
238U (KED)	0.005 ppb	1,819 cps	4.2 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 29

Analysis name: 00025jian

Analysis started at: 10/20/2021 5:26:16 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	132.678 %	1.8 %
9Be (KED)	0.010 ppb	165.0 %
11B (KED)	18.859 ppb	6.8 %
24Mg (KED)	175.581 ppb	0.6 %
27Al (KED)	94.037 ppb	1.6 %
45Sc (KED)	143.121 %	0.7 %
51V (KED)	0.172 ppb	6.0 %
52Cr (KED)	0.500 ppb	2.6 %
55Mn (KED)	3.156 ppb	3.0 %
56Fe (KED)	104.235 ppb	2.4 %
58Ni (KED)	0.666 ppb	4.0 %
59Co (KED)	0.059 ppb	3.5 %
63Cu (KED)	2.228 ppb	1.8 %
64Zn (KED)	45.369 ppb	2.0 %
69Ga (KED)	0.620 ppb	4.7 %
75As (KED)	0.087 ppb	12.0 %
80Se (KED)	0.232 ppb	64.5 %
85Rb (KED)	0.694 ppb	3.5 %
88Sr (KED)	4.806 ppb	1.7 %
89Y (KED)	136.320 %	1.8 %
107Ag (KED)	0.013 ppb	7.4 %
114Cd (KED)	0.010 ppb	3.0 %
115In (KED)	129.376 %	1.2 %
133Cs (KED)	0.014 ppb	8.3 %
138Ba (KED)	2.047 ppb	0.5 %
139La (KED)	0.099 ppb	2.3 %
140Ce (KED)	0.207 ppb	1.5 %
141Pr (KED)	0.023 ppb	2.3 %
142Nd (KED)	0.128 ppb	1.5 %
152Sm (KED)	0.016 ppb	6.7 %
153Eu (KED)	0.003 ppb	5.4 %
158Gd (KED)	0.014 ppb	4.5 %
159Tb (KED)	136.866 %	2.0 %
164Dy (KED)	0.010 ppb	2.2 %
166Er (KED)	0.001 ppb	87.7 %
169Tm (KED)	0.001 ppb	13.8 %
174Yb (KED)	0.004 ppb	8.7 %
175Lu (KED)	-0.116 ppb	2.7 %
205Tl (KED)	0.003 ppb	2.3 %
208Pb (KED)	0.254 ppb	1.5 %
209Bi (KED)	121.103 %	1.9 %
232Th (KED)	0.024 ppb	3.5 %
238U (KED)	0.007 ppb	3.5 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	132.678 %	3,515 cps	1.8 %
9Be (KED)	0.010 ppb	3 cps	100.0 %
11B (KED)	18.859 ppb	2,380 cps	4.0 %
24Mg (KED)	175.581 ppb	113,944 cps	1.9 %
27Al (KED)	94.037 ppb	15,940 cps	1.8 %

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	143.121 %	56,550 cps	0.7 %
51V (KED)	0.172 ppb	1,720 cps	5.6 %
52Cr (KED)	0.500 ppb	7,919 cps	3.1 %
55Mn (KED)	3.156 ppb	25,533 cps	2.8 %
56Fe (KED)	104.235 ppb	1,520,845 cps	2.1 %
58Ni (KED)	0.666 ppb	13,224 cps	3.3 %
59Co (KED)	0.059 ppb	1,909 cps	3.3 %
63Cu (KED)	2.228 ppb	52,681 cps	2.2 %
64Zn (KED)	45.369 ppb	323,420 cps	1.1 %
69Ga (KED)	0.620 ppb	4,843 cps	3.4 %
75As (KED)	0.087 ppb	191 cps	10.5 %
80Se (KED)	0.232 ppb	1,435 cps	5.5 %
85Rb (KED)	0.694 ppb	4,881 cps	1.7 %
88Sr (KED)	4.806 ppb	47,568 cps	0.1 %
89Y (KED)	136.320 %	500,775 cps	1.8 %
107Ag (KED)	0.013 ppb	818 cps	6.5 %
114Cd (KED)	0.010 ppb	298 cps	1.3 %
115In (KED)	129.376 %	899,962 cps	1.2 %
133Cs (KED)	0.014 ppb	476 cps	7.4 %
138Ba (KED)	2.047 ppb	99,511 cps	2.0 %
139La (KED)	0.099 ppb	10,301 cps	1.1 %
140Ce (KED)	0.207 ppb	28,873 cps	2.2 %
141Pr (KED)	0.023 ppb	3,358 cps	0.5 %
142Nd (KED)	0.128 ppb	7,514 cps	3.0 %
152Sm (KED)	0.016 ppb	851 cps	7.3 %
153Eu (KED)	0.003 ppb	356 cps	7.2 %
158Gd (KED)	0.014 ppb	1,011 cps	5.3 %
159Tb (KED)	136.866 %	4,877,648 cps	2.0 %
164Dy (KED)	0.010 ppb	836 cps	4.1 %
166Er (KED)	0.001 ppb	672 cps	8.4 %
169Tm (KED)	0.001 ppb	267 cps	15.2 %
174Yb (KED)	0.004 ppb	439 cps	8.1 %
175Lu (KED)	-0.116 ppb	17,293 cps	1.5 %
205Tl (KED)	0.003 ppb	533 cps	3.9 %
208Pb (KED)	0.254 ppb	42,112 cps	2.2 %
209Bi (KED)	121.103 %	3,860,449 cps	1.9 %
232Th (KED)	0.024 ppb	6,702 cps	2.1 %
238U (KED)	0.007 ppb	2,525 cps	4.1 %

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 30

Analysis name: 03049jian

Analysis started at: 10/20/2021 5:29:26 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	138.971 %	1.5 %
9Be (KED)	0.004 ppb	225.4 %
11B (KED)	21.365 ppb	2.6 %
24Mg (KED)	186.110 ppb	2.0 %
27Al (KED)	108.451 ppb	0.3 %
45Sc (KED)	146.963 %	1.9 %
51V (KED)	0.210 ppb	4.9 %
52Cr (KED)	0.945 ppb	2.5 %
55Mn (KED)	3.803 ppb	0.7 %
56Fe (KED)	129.682 ppb	0.8 %
58Ni (KED)	0.738 ppb	2.6 %
59Co (KED)	0.064 ppb	7.7 %
63Cu (KED)	2.714 ppb	1.8 %
64Zn (KED)	46.940 ppb	0.9 %
69Ga (KED)	0.671 ppb	3.3 %
75As (KED)	0.114 ppb	14.8 %
80Se (KED)	0.145 ppb	58.6 %
85Rb (KED)	0.609 ppb	2.5 %
88Sr (KED)	3.948 ppb	0.5 %
89Y (KED)	139.827 %	1.0 %
107Ag (KED)	0.084 ppb	2.3 %
114Cd (KED)	0.011 ppb	13.3 %
115In (KED)	130.460 %	1.3 %
133Cs (KED)	0.016 ppb	17.5 %
138Ba (KED)	2.285 ppb	1.6 %
139La (KED)	0.120 ppb	0.6 %
140Ce (KED)	0.363 ppb	1.1 %
141Pr (KED)	0.030 ppb	1.9 %
142Nd (KED)	0.193 ppb	2.7 %
152Sm (KED)	0.018 ppb	3.2 %
153Eu (KED)	0.004 ppb	9.4 %
158Gd (KED)	0.018 ppb	12.2 %
159Tb (KED)	138.643 %	0.7 %
164Dy (KED)	0.012 ppb	2.3 %
166Er (KED)	0.006 ppb	15.9 %
169Tm (KED)	0.001 ppb	16.5 %
174Yb (KED)	0.005 ppb	0.9 %
175Lu (KED)	-0.112 ppb	2.6 %
205Tl (KED)	0.002 ppb	12.3 %
208Pb (KED)	0.429 ppb	2.3 %
209Bi (KED)	122.418 %	1.3 %
232Th (KED)	0.032 ppb	1.8 %
238U (KED)	0.009 ppb	3.4 %

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	138.971 %	3,682 cps	1.5 %
9Be (KED)	0.004 ppb	2 cps	86.6 %
11B (KED)	21.365 ppb	2,773 cps	3.5 %
24Mg (KED)	186.110 ppb	126,476 cps	1.0 %
27Al (KED)	108.451 ppb	18,860 cps	2.1 %

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	146.963 %	58,068 cps	1.9 %
51V (KED)	0.210 ppb	2,155 cps	6.5 %
52Cr (KED)	0.945 ppb	15,298 cps	4.3 %
55Mn (KED)	3.803 ppb	31,580 cps	1.6 %
56Fe (KED)	129.682 ppb	1,942,327 cps	1.5 %
58Ni (KED)	0.738 ppb	14,990 cps	0.6 %
59Co (KED)	0.064 ppb	2,115 cps	9.4 %
63Cu (KED)	2.714 ppb	65,619 cps	2.3 %
64Zn (KED)	46.940 ppb	343,282 cps	1.9 %
69Ga (KED)	0.671 ppb	5,378 cps	3.3 %
75As (KED)	0.114 ppb	250 cps	13.9 %
80Se (KED)	0.145 ppb	1,413 cps	4.5 %
85Rb (KED)	0.609 ppb	4,402 cps	3.3 %
88Sr (KED)	3.948 ppb	40,134 cps	1.3 %
89Y (KED)	139.827 %	513,660 cps	1.0 %
107Ag (KED)	0.084 ppb	5,197 cps	3.1 %
114Cd (KED)	0.011 ppb	328 cps	9.7 %
115In (KED)	130.460 %	907,502 cps	1.3 %
133Cs (KED)	0.016 ppb	546 cps	16.3 %
138Ba (KED)	2.285 ppb	112,325 cps	1.4 %
139La (KED)	0.120 ppb	12,628 cps	1.3 %
140Ce (KED)	0.363 ppb	51,098 cps	1.7 %
141Pr (KED)	0.030 ppb	4,399 cps	1.8 %
142Nd (KED)	0.193 ppb	11,459 cps	2.1 %
152Sm (KED)	0.018 ppb	983 cps	3.9 %
153Eu (KED)	0.004 ppb	404 cps	9.8 %
158Gd (KED)	0.018 ppb	1,283 cps	12.8 %
159Tb (KED)	138.643 %	4,940,961 cps	0.7 %
164Dy (KED)	0.012 ppb	984 cps	1.7 %
166Er (KED)	0.006 ppb	1,215 cps	7.8 %
169Tm (KED)	0.001 ppb	238 cps	15.4 %
174Yb (KED)	0.005 ppb	569 cps	1.5 %
175Lu (KED)	-0.112 ppb	18,348 cps	3.3 %
205Tl (KED)	0.002 ppb	506 cps	12.9 %
208Pb (KED)	0.429 ppb	67,997 cps	3.4 %
209Bi (KED)	122.418 %	3,902,374 cps	1.3 %
232Th (KED)	0.032 ppb	8,942 cps	1.2 %
238U (KED)	0.009 ppb	3,217 cps	4.0 %

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 31

Analysis name: 30013jian

Analysis started at: 10/20/2021 5:32:41 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	130.119 %	
9Be (KED)	-0.007 ppb	
11B (KED)	7.902 ppb	
24Mg (KED)	230.791 ppb	
27Al (KED)	194.676 ppb	
45Sc (KED)	146.505 %	
51V (KED)	0.383 ppb	
52Cr (KED)	0.957 ppb	
55Mn (KED)	5.765 ppb	
56Fe (KED)	209.380 ppb	
58Ni (KED)	1.068 ppb	
59Co (KED)	0.094 ppb	
63Cu (KED)	2.334 ppb	
64Zn (KED)	55.855 ppb	
69Ga (KED)	0.849 ppb	
75As (KED)	0.165 ppb	
80Se (KED)	0.039 ppb	
85Rb (KED)	0.831 ppb	
88Sr (KED)	4.294 ppb	
89Y (KED)	140.454 %	
107Ag (KED)	0.022 ppb	
114Cd (KED)	0.010 ppb	
115In (KED)	130.765 %	
133Cs (KED)	0.029 ppb	
138Ba (KED)	2.877 ppb	
139La (KED)	0.214 ppb	
140Ce (KED)	0.465 ppb	
141Pr (KED)	0.050 ppb	
142Nd (KED)	0.289 ppb	
152Sm (KED)	0.037 ppb	
153Eu (KED)	0.007 ppb	
158Gd (KED)	0.029 ppb	
159Tb (KED)	140.887 %	
164Dy (KED)	0.020 ppb	
166Er (KED)	0.007 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.007 ppb	
175Lu (KED)	-0.111 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.399 ppb	
209Bi (KED)	121.962 %	
232Th (KED)	0.054 ppb	
238U (KED)	0.012 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	130.119 %	3,447 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	7.902 ppb	1,200 cps	
24Mg (KED)	230.791 ppb	146,848 cps	
27Al (KED)	194.676 ppb	33,659 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	146.505 %	57,887 cps	
51V (KED)	0.383 ppb	3,914 cps	
52Cr (KED)	0.957 ppb	15,443 cps	
55Mn (KED)	5.765 ppb	47,704 cps	
56Fe (KED)	209.380 ppb	3,124,963 cps	
58Ni (KED)	1.068 ppb	21,458 cps	
59Co (KED)	0.094 ppb	3,054 cps	
63Cu (KED)	2.334 ppb	56,806 cps	
64Zn (KED)	55.855 ppb	410,064 cps	
69Ga (KED)	0.849 ppb	6,805 cps	
75As (KED)	0.165 ppb	353 cps	
80Se (KED)	0.039 ppb	1,347 cps	
85Rb (KED)	0.831 ppb	6,021 cps	
88Sr (KED)	4.294 ppb	43,823 cps	
89Y (KED)	140.454 %	515,963 cps	
107Ag (KED)	0.022 ppb	1,377 cps	
114Cd (KED)	0.010 ppb	290 cps	
115In (KED)	130.765 %	909,622 cps	
133Cs (KED)	0.029 ppb	1,003 cps	
138Ba (KED)	2.877 ppb	143,207 cps	
139La (KED)	0.214 ppb	22,941 cps	
140Ce (KED)	0.465 ppb	66,510 cps	
141Pr (KED)	0.050 ppb	7,612 cps	
142Nd (KED)	0.289 ppb	17,439 cps	
152Sm (KED)	0.037 ppb	1,987 cps	
153Eu (KED)	0.007 ppb	760 cps	
158Gd (KED)	0.029 ppb	2,104 cps	
159Tb (KED)	140.887 %	5,020,928 cps	
164Dy (KED)	0.020 ppb	1,633 cps	
166Er (KED)	0.007 ppb	1,320 cps	
169Tm (KED)	0.001 ppb	457 cps	
174Yb (KED)	0.007 ppb	850 cps	
175Lu (KED)	-0.111 ppb	18,781 cps	
205Tl (KED)	0.003 ppb	593 cps	
208Pb (KED)	0.399 ppb	63,297 cps	
209Bi (KED)	121.962 %	3,887,832 cps	
232Th (KED)	0.054 ppb	15,032 cps	
238U (KED)	0.012 ppb	4,111 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 32

Analysis name: 0078jian

Analysis started at: 10/20/2021 5:34:33 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	130.245 %	
9Be (KED)	0.027 ppb	
11B (KED)	11.200 ppb	
24Mg (KED)	239.172 ppb	
27Al (KED)	125.595 ppb	
45Sc (KED)	139.607 %	
51V (KED)	0.247 ppb	
52Cr (KED)	0.407 ppb	
55Mn (KED)	3.787 ppb	
56Fe (KED)	137.195 ppb	
58Ni (KED)	0.835 ppb	
59Co (KED)	0.064 ppb	
63Cu (KED)	2.114 ppb	
64Zn (KED)	50.971 ppb	
69Ga (KED)	0.502 ppb	
75As (KED)	0.095 ppb	
80Se (KED)	0.228 ppb	
85Rb (KED)	0.699 ppb	
88Sr (KED)	3.265 ppb	
89Y (KED)	134.133 %	
107Ag (KED)	0.011 ppb	
114Cd (KED)	0.003 ppb	
115In (KED)	126.921 %	
133Cs (KED)	0.020 ppb	
138Ba (KED)	1.858 ppb	
139La (KED)	0.155 ppb	
140Ce (KED)	0.391 ppb	
141Pr (KED)	0.038 ppb	
142Nd (KED)	0.208 ppb	
152Sm (KED)	0.023 ppb	
153Eu (KED)	0.004 ppb	
158Gd (KED)	0.019 ppb	
159Tb (KED)	126.956 %	
164Dy (KED)	0.014 ppb	
166Er (KED)	0.006 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.005 ppb	
175Lu (KED)	-0.105 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.275 ppb	
209Bi (KED)	118.969 %	
232Th (KED)	0.034 ppb	
238U (KED)	0.011 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	130.245 %	3,450 cps	
9Be (KED)	0.027 ppb	7 cps	
11B (KED)	11.200 ppb	1,543 cps	
24Mg (KED)	239.172 ppb	152,324 cps	
27Al (KED)	125.595 ppb	20,731 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	139.607 %	55,162 cps	
51V (KED)	0.247 ppb	2,404 cps	
52Cr (KED)	0.407 ppb	6,295 cps	
55Mn (KED)	3.787 ppb	29,876 cps	
56Fe (KED)	137.195 ppb	1,951,997 cps	
58Ni (KED)	0.835 ppb	16,074 cps	
59Co (KED)	0.064 ppb	2,003 cps	
63Cu (KED)	2.114 ppb	49,227 cps	
64Zn (KED)	50.971 ppb	357,469 cps	
69Ga (KED)	0.502 ppb	3,877 cps	
75As (KED)	0.095 ppb	203 cps	
80Se (KED)	0.228 ppb	1,410 cps	
85Rb (KED)	0.699 ppb	4,838 cps	
88Sr (KED)	3.265 ppb	31,874 cps	
89Y (KED)	134.133 %	492,745 cps	
107Ag (KED)	0.011 ppb	703 cps	
114Cd (KED)	0.003 ppb	127 cps	
115In (KED)	126.921 %	882,882 cps	
133Cs (KED)	0.020 ppb	663 cps	
138Ba (KED)	1.858 ppb	83,939 cps	
139La (KED)	0.155 ppb	14,942 cps	
140Ce (KED)	0.391 ppb	50,435 cps	
141Pr (KED)	0.038 ppb	5,138 cps	
142Nd (KED)	0.208 ppb	11,302 cps	
152Sm (KED)	0.023 ppb	1,100 cps	
153Eu (KED)	0.004 ppb	427 cps	
158Gd (KED)	0.019 ppb	1,273 cps	
159Tb (KED)	126.956 %	4,524,477 cps	
164Dy (KED)	0.014 ppb	1,070 cps	
166Er (KED)	0.006 ppb	1,100 cps	
169Tm (KED)	0.001 ppb	267 cps	
174Yb (KED)	0.005 ppb	567 cps	
175Lu (KED)	-0.105 ppb	18,090 cps	
205Tl (KED)	0.003 ppb	617 cps	
208Pb (KED)	0.275 ppb	44,345 cps	
209Bi (KED)	118.969 %	3,792,418 cps	
232Th (KED)	0.034 ppb	9,400 cps	
238U (KED)	0.011 ppb	3,697 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 33

Analysis name: 03045jian

Analysis started at: 10/20/2021 5:36:32 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	129.490 %	
9Be (KED)	-0.007 ppb	
11B (KED)	16.103 ppb	
24Mg (KED)	204.248 ppb	
27Al (KED)	139.252 ppb	
45Sc (KED)	139.920 %	
51V (KED)	0.251 ppb	
52Cr (KED)	0.413 ppb	
55Mn (KED)	4.098 ppb	
56Fe (KED)	155.705 ppb	
58Ni (KED)	0.997 ppb	
59Co (KED)	0.081 ppb	
63Cu (KED)	2.229 ppb	
64Zn (KED)	48.507 ppb	
69Ga (KED)	0.650 ppb	
75As (KED)	0.091 ppb	
80Se (KED)	0.212 ppb	
85Rb (KED)	0.659 ppb	
88Sr (KED)	4.361 ppb	
89Y (KED)	136.740 %	
107Ag (KED)	0.013 ppb	
114Cd (KED)	0.007 ppb	
115In (KED)	129.330 %	
133Cs (KED)	0.021 ppb	
138Ba (KED)	2.185 ppb	
139La (KED)	0.148 ppb	
140Ce (KED)	0.398 ppb	
141Pr (KED)	0.034 ppb	
142Nd (KED)	0.221 ppb	
152Sm (KED)	0.021 ppb	
153Eu (KED)	0.005 ppb	
158Gd (KED)	0.019 ppb	
159Tb (KED)	138.914 %	
164Dy (KED)	0.014 ppb	
166Er (KED)	0.007 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.006 ppb	
175Lu (KED)	-0.111 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.260 ppb	
209Bi (KED)	120.568 %	
232Th (KED)	0.036 ppb	
238U (KED)	0.011 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	129.490 %	3,430 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	16.103 ppb	2,040 cps	
24Mg (KED)	204.248 ppb	129,343 cps	
27Al (KED)	139.252 ppb	23,025 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	139.920 %	55,285 cps	
51V (KED)	0.251 ppb	2,454 cps	
52Cr (KED)	0.413 ppb	6,412 cps	
55Mn (KED)	4.098 ppb	32,395 cps	
56Fe (KED)	155.705 ppb	2,220,023 cps	
58Ni (KED)	0.997 ppb	19,155 cps	
59Co (KED)	0.081 ppb	2,530 cps	
63Cu (KED)	2.229 ppb	52,862 cps	
64Zn (KED)	48.507 ppb	346,853 cps	
69Ga (KED)	0.650 ppb	5,098 cps	
75As (KED)	0.091 ppb	200 cps	
80Se (KED)	0.212 ppb	1,427 cps	
85Rb (KED)	0.659 ppb	4,651 cps	
88Sr (KED)	4.361 ppb	43,328 cps	
89Y (KED)	136.740 %	502,321 cps	
107Ag (KED)	0.013 ppb	827 cps	
114Cd (KED)	0.007 ppb	227 cps	
115In (KED)	129.330 %	899,640 cps	
133Cs (KED)	0.021 ppb	710 cps	
138Ba (KED)	2.185 ppb	107,679 cps	
139La (KED)	0.148 ppb	15,580 cps	
140Ce (KED)	0.398 ppb	56,126 cps	
141Pr (KED)	0.034 ppb	5,084 cps	
142Nd (KED)	0.221 ppb	13,130 cps	
152Sm (KED)	0.021 ppb	1,147 cps	
153Eu (KED)	0.005 ppb	503 cps	
158Gd (KED)	0.019 ppb	1,350 cps	
159Tb (KED)	138.914 %	4,950,632 cps	
164Dy (KED)	0.014 ppb	1,163 cps	
166Er (KED)	0.007 ppb	1,283 cps	
169Tm (KED)	0.001 ppb	290 cps	
174Yb (KED)	0.006 ppb	700 cps	
175Lu (KED)	-0.111 ppb	18,614 cps	
205Tl (KED)	0.003 ppb	640 cps	
208Pb (KED)	0.260 ppb	42,860 cps	
209Bi (KED)	120.568 %	3,843,405 cps	
232Th (KED)	0.036 ppb	9,971 cps	
238U (KED)	0.011 ppb	3,671 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 34

Analysis name: 03263ti

Analysis started at: 10/20/2021 5:38:25 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	131.000 %	
9Be (KED)	-0.007 ppb	
11B (KED)	9.070 ppb	
24Mg (KED)	213.317 ppb	
27Al (KED)	211.249 ppb	
45Sc (KED)	137.421 %	
51V (KED)	0.423 ppb	
52Cr (KED)	0.604 ppb	
55Mn (KED)	5.159 ppb	
56Fe (KED)	237.510 ppb	
58Ni (KED)	1.159 ppb	
59Co (KED)	0.110 ppb	
63Cu (KED)	2.175 ppb	
64Zn (KED)	53.726 ppb	
69Ga (KED)	0.995 ppb	
75As (KED)	0.154 ppb	
80Se (KED)	0.019 ppb	
85Rb (KED)	0.537 ppb	
88Sr (KED)	3.439 ppb	
89Y (KED)	133.133 %	
107Ag (KED)	0.028 ppb	
114Cd (KED)	0.007 ppb	
115In (KED)	126.620 %	
133Cs (KED)	0.029 ppb	
138Ba (KED)	3.478 ppb	
139La (KED)	0.263 ppb	
140Ce (KED)	0.590 ppb	
141Pr (KED)	0.065 ppb	
142Nd (KED)	0.365 ppb	
152Sm (KED)	0.043 ppb	
153Eu (KED)	0.008 ppb	
158Gd (KED)	0.037 ppb	
159Tb (KED)	126.389 %	
164Dy (KED)	0.024 ppb	
166Er (KED)	0.009 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.008 ppb	
175Lu (KED)	-0.107 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.396 ppb	
209Bi (KED)	115.386 %	
232Th (KED)	0.055 ppb	
238U (KED)	0.014 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	131.000 %	3,470 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	9.070 ppb	1,330 cps	
24Mg (KED)	213.317 ppb	136,657 cps	
27Al (KED)	211.249 ppb	34,250 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	137.421 %	54,298 cps	
51V (KED)	0.423 ppb	4,051 cps	
52Cr (KED)	0.604 ppb	9,173 cps	
55Mn (KED)	5.159 ppb	40,047 cps	
56Fe (KED)	237.510 ppb	3,324,702 cps	
58Ni (KED)	1.159 ppb	21,806 cps	
59Co (KED)	0.110 ppb	3,357 cps	
63Cu (KED)	2.175 ppb	50,238 cps	
64Zn (KED)	53.726 ppb	373,916 cps	
69Ga (KED)	0.995 ppb	7,546 cps	
75As (KED)	0.154 ppb	313 cps	
80Se (KED)	0.019 ppb	1,263 cps	
85Rb (KED)	0.537 ppb	3,697 cps	
88Sr (KED)	3.439 ppb	33,318 cps	
89Y (KED)	133.133 %	489,068 cps	
107Ag (KED)	0.028 ppb	1,690 cps	
114Cd (KED)	0.007 ppb	217 cps	
115In (KED)	126.620 %	880,790 cps	
133Cs (KED)	0.029 ppb	957 cps	
138Ba (KED)	3.478 ppb	154,945 cps	
139La (KED)	0.263 ppb	25,235 cps	
140Ce (KED)	0.590 ppb	75,638 cps	
141Pr (KED)	0.065 ppb	8,783 cps	
142Nd (KED)	0.365 ppb	19,742 cps	
152Sm (KED)	0.043 ppb	2,097 cps	
153Eu (KED)	0.008 ppb	783 cps	
158Gd (KED)	0.037 ppb	2,430 cps	
159Tb (KED)	126.389 %	4,504,250 cps	
164Dy (KED)	0.024 ppb	1,780 cps	
166Er (KED)	0.009 ppb	1,293 cps	
169Tm (KED)	0.001 ppb	420 cps	
174Yb (KED)	0.008 ppb	883 cps	
175Lu (KED)	-0.107 ppb	17,526 cps	
205Tl (KED)	0.003 ppb	510 cps	
208Pb (KED)	0.396 ppb	59,495 cps	
209Bi (KED)	115.386 %	3,678,200 cps	
232Th (KED)	0.055 ppb	14,585 cps	
238U (KED)	0.014 ppb	4,341 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 35

Analysis name: 03255ti

Analysis started at: 10/20/2021 5:40:28 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	127.099 %	
9Be (KED)	-0.007 ppb	
11B (KED)	17.825 ppb	
24Mg (KED)	144.030 ppb	
27Al (KED)	79.411 ppb	
45Sc (KED)	138.650 %	
51V (KED)	0.161 ppb	
52Cr (KED)	0.324 ppb	
55Mn (KED)	2.890 ppb	
56Fe (KED)	88.372 ppb	
58Ni (KED)	0.661 ppb	
59Co (KED)	0.059 ppb	
63Cu (KED)	2.118 ppb	
64Zn (KED)	58.172 ppb	
69Ga (KED)	0.487 ppb	
75As (KED)	0.254 ppb	
80Se (KED)	0.330 ppb	
85Rb (KED)	0.840 ppb	
88Sr (KED)	2.458 ppb	
89Y (KED)	127.175 %	
107Ag (KED)	0.012 ppb	
114Cd (KED)	0.008 ppb	
115In (KED)	121.619 %	
133Cs (KED)	0.010 ppb	
138Ba (KED)	1.701 ppb	
139La (KED)	0.102 ppb	
140Ce (KED)	0.266 ppb	
141Pr (KED)	0.023 ppb	
142Nd (KED)	0.150 ppb	
152Sm (KED)	0.016 ppb	
153Eu (KED)	0.003 ppb	
158Gd (KED)	0.012 ppb	
159Tb (KED)	123.948 %	
164Dy (KED)	0.007 ppb	
166Er (KED)	0.001 ppb	
169Tm (KED)	0.000 ppb	
174Yb (KED)	0.003 ppb	
175Lu (KED)	-0.110 ppb	
205Tl (KED)	0.002 ppb	
208Pb (KED)	0.190 ppb	
209Bi (KED)	110.588 %	
232Th (KED)	0.023 ppb	
238U (KED)	0.007 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	127.099 %	3,367 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	17.825 ppb	2,177 cps	
24Mg (KED)	144.030 ppb	89,557 cps	
27Al (KED)	79.411 ppb	13,057 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	138.650 %	54,783 cps	
51V (KED)	0.161 ppb	1,560 cps	
52Cr (KED)	0.324 ppb	5,004 cps	
55Mn (KED)	2.890 ppb	22,657 cps	
56Fe (KED)	88.372 ppb	1,249,532 cps	
58Ni (KED)	0.661 ppb	12,710 cps	
59Co (KED)	0.059 ppb	1,823 cps	
63Cu (KED)	2.118 ppb	46,754 cps	
64Zn (KED)	58.172 ppb	386,657 cps	
69Ga (KED)	0.487 ppb	3,574 cps	
75As (KED)	0.254 ppb	480 cps	
80Se (KED)	0.330 ppb	1,400 cps	
85Rb (KED)	0.840 ppb	5,511 cps	
88Sr (KED)	2.458 ppb	22,804 cps	
89Y (KED)	127.175 %	467,183 cps	
107Ag (KED)	0.012 ppb	730 cps	
114Cd (KED)	0.008 ppb	230 cps	
115In (KED)	121.619 %	846,000 cps	
133Cs (KED)	0.010 ppb	343 cps	
138Ba (KED)	1.701 ppb	75,193 cps	
139La (KED)	0.102 ppb	9,597 cps	
140Ce (KED)	0.266 ppb	33,555 cps	
141Pr (KED)	0.023 ppb	3,027 cps	
142Nd (KED)	0.150 ppb	7,976 cps	
152Sm (KED)	0.016 ppb	763 cps	
153Eu (KED)	0.003 ppb	290 cps	
158Gd (KED)	0.012 ppb	757 cps	
159Tb (KED)	123.948 %	4,417,260 cps	
164Dy (KED)	0.007 ppb	547 cps	
166Er (KED)	0.001 ppb	670 cps	
169Tm (KED)	0.000 ppb	147 cps	
174Yb (KED)	0.003 ppb	327 cps	
175Lu (KED)	-0.110 ppb	16,738 cps	
205Tl (KED)	0.002 ppb	373 cps	
208Pb (KED)	0.190 ppb	30,110 cps	
209Bi (KED)	110.588 %	3,525,256 cps	
232Th (KED)	0.023 ppb	5,775 cps	
238U (KED)	0.007 ppb	2,207 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 36

Analysis name: 03028ti

Analysis started at: 10/20/2021 5:42:24 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	131.630 %	
9Be (KED)	-0.007 ppb	
11B (KED)	57.058 ppb	
24Mg (KED)	112.651 ppb	
27Al (KED)	84.603 ppb	
45Sc (KED)	139.556 %	
51V (KED)	0.162 ppb	
52Cr (KED)	0.431 ppb	
55Mn (KED)	2.300 ppb	
56Fe (KED)	90.096 ppb	
58Ni (KED)	0.612 ppb	
59Co (KED)	0.053 ppb	
63Cu (KED)	2.431 ppb	
64Zn (KED)	56.813 ppb	
69Ga (KED)	0.655 ppb	
75As (KED)	0.110 ppb	
80Se (KED)	0.237 ppb	
85Rb (KED)	0.623 ppb	
88Sr (KED)	1.950 ppb	
89Y (KED)	131.371 %	
107Ag (KED)	0.010 ppb	
114Cd (KED)	0.007 ppb	
115In (KED)	125.428 %	
133Cs (KED)	0.014 ppb	
138Ba (KED)	2.211 ppb	
139La (KED)	0.113 ppb	
140Ce (KED)	0.253 ppb	
141Pr (KED)	0.030 ppb	
142Nd (KED)	0.157 ppb	
152Sm (KED)	0.019 ppb	
153Eu (KED)	0.003 ppb	
158Gd (KED)	0.014 ppb	
159Tb (KED)	125.070 %	
164Dy (KED)	0.009 ppb	
166Er (KED)	0.002 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.003 ppb	
175Lu (KED)	-0.102 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.229 ppb	
209Bi (KED)	114.915 %	
232Th (KED)	0.023 ppb	
238U (KED)	0.006 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	131.630 %	3,487 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	57.058 ppb	6,368 cps	
24Mg (KED)	112.651 ppb	72,567 cps	
27Al (KED)	84.603 ppb	13,995 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	139.556 %	55,141 cps	
51V (KED)	0.162 ppb	1,580 cps	
52Cr (KED)	0.431 ppb	6,662 cps	
55Mn (KED)	2.300 ppb	18,163 cps	
56Fe (KED)	90.096 ppb	1,282,195 cps	
58Ni (KED)	0.612 ppb	11,882 cps	
59Co (KED)	0.053 ppb	1,653 cps	
63Cu (KED)	2.431 ppb	55,302 cps	
64Zn (KED)	56.813 ppb	390,107 cps	
69Ga (KED)	0.655 ppb	4,928 cps	
75As (KED)	0.110 ppb	227 cps	
80Se (KED)	0.237 ppb	1,387 cps	
85Rb (KED)	0.623 ppb	4,224 cps	
88Sr (KED)	1.950 ppb	18,741 cps	
89Y (KED)	131.371 %	482,597 cps	
107Ag (KED)	0.010 ppb	607 cps	
114Cd (KED)	0.007 ppb	227 cps	
115In (KED)	125.428 %	872,502 cps	
133Cs (KED)	0.014 ppb	463 cps	
138Ba (KED)	2.211 ppb	98,094 cps	
139La (KED)	0.113 ppb	10,791 cps	
140Ce (KED)	0.253 ppb	32,158 cps	
141Pr (KED)	0.030 ppb	4,051 cps	
142Nd (KED)	0.157 ppb	8,436 cps	
152Sm (KED)	0.019 ppb	923 cps	
153Eu (KED)	0.003 ppb	293 cps	
158Gd (KED)	0.014 ppb	897 cps	
159Tb (KED)	125.070 %	4,457,249 cps	
164Dy (KED)	0.009 ppb	710 cps	
166Er (KED)	0.002 ppb	750 cps	
169Tm (KED)	0.001 ppb	157 cps	
174Yb (KED)	0.003 ppb	370 cps	
175Lu (KED)	-0.102 ppb	18,270 cps	
205Tl (KED)	0.003 ppb	510 cps	
208Pb (KED)	0.229 ppb	36,654 cps	
209Bi (KED)	114.915 %	3,663,180 cps	
232Th (KED)	0.023 ppb	6,091 cps	
238U (KED)	0.006 ppb	1,883 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 37

Analysis name: 03252ti

Analysis started at: 10/20/2021 5:44:27 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	129.616 %	
9Be (KED)	-0.007 ppb	
11B (KED)	14.986 ppb	
24Mg (KED)	154.889 ppb	
27Al (KED)	110.913 ppb	
45Sc (KED)	135.515 %	
51V (KED)	0.220 ppb	
52Cr (KED)	0.582 ppb	
55Mn (KED)	3.340 ppb	
56Fe (KED)	133.410 ppb	
58Ni (KED)	0.792 ppb	
59Co (KED)	0.061 ppb	
63Cu (KED)	3.104 ppb	
64Zn (KED)	51.373 ppb	
69Ga (KED)	0.679 ppb	
75As (KED)	0.114 ppb	
80Se (KED)	0.242 ppb	
85Rb (KED)	0.993 ppb	
88Sr (KED)	2.666 ppb	
89Y (KED)	128.547 %	
107Ag (KED)	0.013 ppb	
114Cd (KED)	0.008 ppb	
115In (KED)	120.636 %	
133Cs (KED)	0.016 ppb	
138Ba (KED)	2.507 ppb	
139La (KED)	0.151 ppb	
140Ce (KED)	0.315 ppb	
141Pr (KED)	0.038 ppb	
142Nd (KED)	0.190 ppb	
152Sm (KED)	0.022 ppb	
153Eu (KED)	0.004 ppb	
158Gd (KED)	0.018 ppb	
159Tb (KED)	120.031 %	
164Dy (KED)	0.012 ppb	
166Er (KED)	0.002 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.006 ppb	
175Lu (KED)	-0.109 ppb	
205Tl (KED)	0.002 ppb	
208Pb (KED)	0.415 ppb	
209Bi (KED)	110.824 %	
232Th (KED)	0.032 ppb	
238U (KED)	0.009 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	129.616 %	3,434 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	14.986 ppb	1,927 cps	
24Mg (KED)	154.889 ppb	98,208 cps	
27Al (KED)	110.913 ppb	17,783 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	135.515 %	53,545 cps	
51V (KED)	0.220 ppb	2,084 cps	
52Cr (KED)	0.582 ppb	8,710 cps	
55Mn (KED)	3.340 ppb	25,583 cps	
56Fe (KED)	133.410 ppb	1,842,560 cps	
58Ni (KED)	0.792 ppb	14,815 cps	
59Co (KED)	0.061 ppb	1,853 cps	
63Cu (KED)	3.104 ppb	68,869 cps	
64Zn (KED)	51.373 ppb	345,270 cps	
69Ga (KED)	0.679 ppb	5,001 cps	
75As (KED)	0.114 ppb	230 cps	
80Se (KED)	0.242 ppb	1,360 cps	
85Rb (KED)	0.993 ppb	6,582 cps	
88Sr (KED)	2.666 ppb	24,982 cps	
89Y (KED)	128.547 %	472,224 cps	
107Ag (KED)	0.013 ppb	740 cps	
114Cd (KED)	0.008 ppb	233 cps	
115In (KED)	120.636 %	839,164 cps	
133Cs (KED)	0.016 ppb	527 cps	
138Ba (KED)	2.507 ppb	106,523 cps	
139La (KED)	0.151 ppb	13,781 cps	
140Ce (KED)	0.315 ppb	38,409 cps	
141Pr (KED)	0.038 ppb	4,854 cps	
142Nd (KED)	0.190 ppb	9,764 cps	
152Sm (KED)	0.022 ppb	1,013 cps	
153Eu (KED)	0.004 ppb	417 cps	
158Gd (KED)	0.018 ppb	1,097 cps	
159Tb (KED)	120.031 %	4,277,666 cps	
164Dy (KED)	0.012 ppb	880 cps	
166Er (KED)	0.002 ppb	670 cps	
169Tm (KED)	0.001 ppb	273 cps	
174Yb (KED)	0.006 ppb	623 cps	
175Lu (KED)	-0.109 ppb	16,311 cps	
205Tl (KED)	0.002 ppb	463 cps	
208Pb (KED)	0.415 ppb	59,619 cps	
209Bi (KED)	110.824 %	3,532,790 cps	
232Th (KED)	0.032 ppb	8,276 cps	
238U (KED)	0.009 ppb	2,804 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 38

Analysis name: 03035ti

Analysis started at: 10/20/2021 5:46:21 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	135.783 %	
9Be (KED)	0.010 ppb	
11B (KED)	11.703 ppb	
24Mg (KED)	173.578 ppb	
27Al (KED)	153.736 ppb	
45Sc (KED)	149.031 %	
51V (KED)	0.299 ppb	
52Cr (KED)	0.509 ppb	
55Mn (KED)	3.898 ppb	
56Fe (KED)	164.231 ppb	
58Ni (KED)	0.995 ppb	
59Co (KED)	0.075 ppb	
63Cu (KED)	1.989 ppb	
64Zn (KED)	45.111 ppb	
69Ga (KED)	0.788 ppb	
75As (KED)	0.111 ppb	
80Se (KED)	0.406 ppb	
85Rb (KED)	0.462 ppb	
88Sr (KED)	3.300 ppb	
89Y (KED)	137.681 %	
107Ag (KED)	0.016 ppb	
114Cd (KED)	0.003 ppb	
115In (KED)	125.887 %	
133Cs (KED)	0.019 ppb	
138Ba (KED)	2.613 ppb	
139La (KED)	0.169 ppb	
140Ce (KED)	0.376 ppb	
141Pr (KED)	0.044 ppb	
142Nd (KED)	0.223 ppb	
152Sm (KED)	0.026 ppb	
153Eu (KED)	0.006 ppb	
158Gd (KED)	0.022 ppb	
159Tb (KED)	132.085 %	
164Dy (KED)	0.015 ppb	
166Er (KED)	0.004 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.005 ppb	
175Lu (KED)	-0.116 ppb	
205Tl (KED)	0.002 ppb	
208Pb (KED)	0.355 ppb	
209Bi (KED)	107.383 %	
232Th (KED)	0.047 ppb	
238U (KED)	0.010 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	135.783 %	3,597 cps	
9Be (KED)	0.010 ppb	3 cps	
11B (KED)	11.703 ppb	1,663 cps	
24Mg (KED)	173.578 ppb	115,280 cps	
27Al (KED)	153.736 ppb	27,063 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	149.031 %	58,885 cps	
51V (KED)	0.299 ppb	3,107 cps	
52Cr (KED)	0.509 ppb	8,389 cps	
55Mn (KED)	3.898 ppb	32,827 cps	
56Fe (KED)	164.231 ppb	2,493,911 cps	
58Ni (KED)	0.995 ppb	20,353 cps	
59Co (KED)	0.075 ppb	2,497 cps	
63Cu (KED)	1.989 ppb	47,587 cps	
64Zn (KED)	45.111 ppb	324,864 cps	
69Ga (KED)	0.788 ppb	6,195 cps	
75As (KED)	0.111 ppb	240 cps	
80Se (KED)	0.406 ppb	1,567 cps	
85Rb (KED)	0.462 ppb	3,287 cps	
88Sr (KED)	3.300 ppb	33,067 cps	
89Y (KED)	137.681 %	505,776 cps	
107Ag (KED)	0.016 ppb	997 cps	
114Cd (KED)	0.003 ppb	123 cps	
115In (KED)	125.887 %	875,691 cps	
133Cs (KED)	0.019 ppb	657 cps	
138Ba (KED)	2.613 ppb	122,109 cps	
139La (KED)	0.169 ppb	16,945 cps	
140Ce (KED)	0.376 ppb	50,429 cps	
141Pr (KED)	0.044 ppb	6,288 cps	
142Nd (KED)	0.223 ppb	12,593 cps	
152Sm (KED)	0.026 ppb	1,323 cps	
153Eu (KED)	0.006 ppb	587 cps	
158Gd (KED)	0.022 ppb	1,520 cps	
159Tb (KED)	132.085 %	4,707,258 cps	
164Dy (KED)	0.015 ppb	1,187 cps	
166Er (KED)	0.004 ppb	900 cps	
169Tm (KED)	0.001 ppb	333 cps	
174Yb (KED)	0.005 ppb	613 cps	
175Lu (KED)	-0.116 ppb	16,721 cps	
205Tl (KED)	0.002 ppb	373 cps	
208Pb (KED)	0.355 ppb	50,235 cps	
209Bi (KED)	107.383 %	3,423,095 cps	
232Th (KED)	0.047 ppb	11,662 cps	
238U (KED)	0.010 ppb	3,080 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 39

Analysis name: 03262ti

Analysis started at: 10/20/2021 5:48:15 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	133.392 %	
9Be (KED)	-0.007 ppb	
11B (KED)	4.418 ppb	
24Mg (KED)	134.168 ppb	
27Al (KED)	104.778 ppb	
45Sc (KED)	154.948 %	
51V (KED)	0.214 ppb	
52Cr (KED)	0.517 ppb	
55Mn (KED)	2.924 ppb	
56Fe (KED)	116.659 ppb	
58Ni (KED)	0.703 ppb	
59Co (KED)	0.050 ppb	
63Cu (KED)	2.335 ppb	
64Zn (KED)	40.215 ppb	
69Ga (KED)	0.492 ppb	
75As (KED)	0.103 ppb	
80Se (KED)	0.460 ppb	
85Rb (KED)	0.515 ppb	
88Sr (KED)	2.125 ppb	
89Y (KED)	141.127 %	
107Ag (KED)	0.017 ppb	
114Cd (KED)	0.003 ppb	
115In (KED)	130.612 %	
133Cs (KED)	0.014 ppb	
138Ba (KED)	1.826 ppb	
139La (KED)	0.131 ppb	
140Ce (KED)	0.314 ppb	
141Pr (KED)	0.032 ppb	
142Nd (KED)	0.185 ppb	
152Sm (KED)	0.020 ppb	
153Eu (KED)	0.004 ppb	
158Gd (KED)	0.017 ppb	
159Tb (KED)	133.103 %	
164Dy (KED)	0.010 ppb	
166Er (KED)	0.004 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.003 ppb	
175Lu (KED)	-0.109 ppb	
205Tl (KED)	0.002 ppb	
208Pb (KED)	0.225 ppb	
209Bi (KED)	109.870 %	
232Th (KED)	0.031 ppb	
238U (KED)	0.008 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	133.392 %	3,534 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	4.418 ppb	860 cps	
24Mg (KED)	134.168 ppb	87,563 cps	
27Al (KED)	104.778 ppb	19,215 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	154.948 %	61,223 cps	
51V (KED)	0.214 ppb	2,317 cps	
52Cr (KED)	0.517 ppb	8,863 cps	
55Mn (KED)	2.924 ppb	25,616 cps	
56Fe (KED)	116.659 ppb	1,842,594 cps	
58Ni (KED)	0.703 ppb	15,089 cps	
59Co (KED)	0.050 ppb	1,757 cps	
63Cu (KED)	2.335 ppb	57,104 cps	
64Zn (KED)	40.215 ppb	296,986 cps	
69Ga (KED)	0.492 ppb	4,001 cps	
75As (KED)	0.103 ppb	230 cps	
80Se (KED)	0.460 ppb	1,643 cps	
85Rb (KED)	0.515 ppb	3,761 cps	
88Sr (KED)	2.125 ppb	21,909 cps	
89Y (KED)	141.127 %	518,436 cps	
107Ag (KED)	0.017 ppb	1,073 cps	
114Cd (KED)	0.003 ppb	140 cps	
115In (KED)	130.612 %	908,561 cps	
133Cs (KED)	0.014 ppb	510 cps	
138Ba (KED)	1.826 ppb	86,529 cps	
139La (KED)	0.131 ppb	13,207 cps	
140Ce (KED)	0.314 ppb	42,509 cps	
141Pr (KED)	0.032 ppb	4,524 cps	
142Nd (KED)	0.185 ppb	10,531 cps	
152Sm (KED)	0.020 ppb	1,013 cps	
153Eu (KED)	0.004 ppb	427 cps	
158Gd (KED)	0.017 ppb	1,150 cps	
159Tb (KED)	133.103 %	4,743,554 cps	
164Dy (KED)	0.010 ppb	800 cps	
166Er (KED)	0.004 ppb	927 cps	
169Tm (KED)	0.001 ppb	227 cps	
174Yb (KED)	0.003 ppb	413 cps	
175Lu (KED)	-0.109 ppb	18,210 cps	
205Tl (KED)	0.002 ppb	370 cps	
208Pb (KED)	0.225 ppb	34,461 cps	
209Bi (KED)	109.870 %	3,502,380 cps	
232Th (KED)	0.031 ppb	7,742 cps	
238U (KED)	0.008 ppb	2,560 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 40

Analysis name: 03253ti

Analysis started at: 10/20/2021 5:50:14 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	132.007 %	
9Be (KED)	-0.007 ppb	
11B (KED)	24.254 ppb	
24Mg (KED)	170.559 ppb	
27Al (KED)	138.017 ppb	
45Sc (KED)	148.845 %	
51V (KED)	0.287 ppb	
52Cr (KED)	0.511 ppb	
55Mn (KED)	3.440 ppb	
56Fe (KED)	159.872 ppb	
58Ni (KED)	0.760 ppb	
59Co (KED)	0.078 ppb	
63Cu (KED)	2.436 ppb	
64Zn (KED)	38.503 ppb	
69Ga (KED)	0.660 ppb	
75As (KED)	0.081 ppb	
80Se (KED)	0.399 ppb	
85Rb (KED)	0.847 ppb	
88Sr (KED)	2.448 ppb	
89Y (KED)	136.647 %	
107Ag (KED)	0.008 ppb	
114Cd (KED)	0.005 ppb	
115In (KED)	127.525 %	
133Cs (KED)	0.023 ppb	
138Ba (KED)	2.394 ppb	
139La (KED)	0.181 ppb	
140Ce (KED)	0.376 ppb	
141Pr (KED)	0.044 ppb	
142Nd (KED)	0.220 ppb	
152Sm (KED)	0.026 ppb	
153Eu (KED)	0.006 ppb	
158Gd (KED)	0.021 ppb	
159Tb (KED)	131.780 %	
164Dy (KED)	0.014 ppb	
166Er (KED)	0.004 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.005 ppb	
175Lu (KED)	-0.112 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.243 ppb	
209Bi (KED)	102.728 %	
232Th (KED)	0.042 ppb	
238U (KED)	0.011 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	132.007 %	3,497 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	24.254 ppb	2,937 cps	
24Mg (KED)	170.559 ppb	110,127 cps	
27Al (KED)	138.017 ppb	24,277 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	148.845 %	58,812 cps	
51V (KED)	0.287 ppb	2,984 cps	
52Cr (KED)	0.511 ppb	8,420 cps	
55Mn (KED)	3.440 ppb	28,940 cps	
56Fe (KED)	159.872 ppb	2,424,750 cps	
58Ni (KED)	0.760 ppb	15,623 cps	
59Co (KED)	0.078 ppb	2,584 cps	
63Cu (KED)	2.436 ppb	57,643 cps	
64Zn (KED)	38.503 ppb	275,368 cps	
69Ga (KED)	0.660 ppb	5,168 cps	
75As (KED)	0.081 ppb	180 cps	
80Se (KED)	0.399 ppb	1,550 cps	
85Rb (KED)	0.847 ppb	5,971 cps	
88Sr (KED)	2.448 ppb	24,411 cps	
89Y (KED)	136.647 %	501,980 cps	
107Ag (KED)	0.008 ppb	503 cps	
114Cd (KED)	0.005 ppb	173 cps	
115In (KED)	127.525 %	887,088 cps	
133Cs (KED)	0.023 ppb	790 cps	
138Ba (KED)	2.394 ppb	111,767 cps	
139La (KED)	0.181 ppb	18,083 cps	
140Ce (KED)	0.376 ppb	50,341 cps	
141Pr (KED)	0.044 ppb	6,145 cps	
142Nd (KED)	0.220 ppb	12,430 cps	
152Sm (KED)	0.026 ppb	1,330 cps	
153Eu (KED)	0.006 ppb	617 cps	
158Gd (KED)	0.021 ppb	1,443 cps	
159Tb (KED)	131.780 %	4,696,391 cps	
164Dy (KED)	0.014 ppb	1,097 cps	
166Er (KED)	0.004 ppb	927 cps	
169Tm (KED)	0.001 ppb	303 cps	
174Yb (KED)	0.005 ppb	590 cps	
175Lu (KED)	-0.112 ppb	17,366 cps	
205Tl (KED)	0.003 ppb	503 cps	
208Pb (KED)	0.243 ppb	34,387 cps	
209Bi (KED)	102.728 %	3,274,688 cps	
232Th (KED)	0.042 ppb	9,841 cps	
238U (KED)	0.011 ppb	2,997 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 41

Analysis name: 03032ti

Analysis started at: 10/20/2021 5:52:11 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	137.923 %	
9Be (KED)	-0.007 ppb	
11B (KED)	11.374 ppb	
24Mg (KED)	137.820 ppb	
27Al (KED)	114.252 ppb	
45Sc (KED)	152.820 %	
51V (KED)	0.282 ppb	
52Cr (KED)	6.846 ppb	
55Mn (KED)	3.141 ppb	
56Fe (KED)	127.334 ppb	
58Ni (KED)	0.927 ppb	
59Co (KED)	0.063 ppb	
63Cu (KED)	2.115 ppb	
64Zn (KED)	67.564 ppb	
69Ga (KED)	0.523 ppb	
75As (KED)	0.066 ppb	
80Se (KED)	0.284 ppb	
85Rb (KED)	0.541 ppb	
88Sr (KED)	2.303 ppb	
89Y (KED)	144.953 %	
107Ag (KED)	0.010 ppb	
114Cd (KED)	0.006 ppb	
115In (KED)	134.529 %	
133Cs (KED)	0.015 ppb	
138Ba (KED)	1.864 ppb	
139La (KED)	0.138 ppb	
140Ce (KED)	0.289 ppb	
141Pr (KED)	0.031 ppb	
142Nd (KED)	0.173 ppb	
152Sm (KED)	0.018 ppb	
153Eu (KED)	0.004 ppb	
158Gd (KED)	0.015 ppb	
159Tb (KED)	136.511 %	
164Dy (KED)	0.011 ppb	
166Er (KED)	0.002 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.004 ppb	
175Lu (KED)	-0.113 ppb	
205Tl (KED)	0.002 ppb	
208Pb (KED)	0.555 ppb	
209Bi (KED)	109.909 %	
232Th (KED)	0.033 ppb	
238U (KED)	0.012 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	137.923 %	3,654 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	11.374 ppb	1,653 cps	
24Mg (KED)	137.820 ppb	92,998 cps	
27Al (KED)	114.252 ppb	20,654 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	152.820 %	60,382 cps	
51V (KED)	0.282 ppb	3,004 cps	
52Cr (KED)	6.846 ppb	114,745 cps	
55Mn (KED)	3.141 ppb	27,133 cps	
56Fe (KED)	127.334 ppb	1,983,340 cps	
58Ni (KED)	0.927 ppb	19,475 cps	
59Co (KED)	0.063 ppb	2,160 cps	
63Cu (KED)	2.115 ppb	53,220 cps	
64Zn (KED)	67.564 ppb	511,661 cps	
69Ga (KED)	0.523 ppb	4,361 cps	
75As (KED)	0.066 ppb	160 cps	
80Se (KED)	0.284 ppb	1,563 cps	
85Rb (KED)	0.541 ppb	4,054 cps	
88Sr (KED)	2.303 ppb	24,374 cps	
89Y (KED)	144.953 %	532,490 cps	
107Ag (KED)	0.010 ppb	653 cps	
114Cd (KED)	0.006 ppb	200 cps	
115In (KED)	134.529 %	935,806 cps	
133Cs (KED)	0.015 ppb	553 cps	
138Ba (KED)	1.864 ppb	90,581 cps	
139La (KED)	0.138 ppb	14,348 cps	
140Ce (KED)	0.289 ppb	40,131 cps	
141Pr (KED)	0.031 ppb	4,574 cps	
142Nd (KED)	0.173 ppb	10,091 cps	
152Sm (KED)	0.018 ppb	960 cps	
153Eu (KED)	0.004 ppb	417 cps	
158Gd (KED)	0.015 ppb	1,100 cps	
159Tb (KED)	136.511 %	4,864,989 cps	
164Dy (KED)	0.011 ppb	880 cps	
166Er (KED)	0.002 ppb	820 cps	
169Tm (KED)	0.001 ppb	230 cps	
174Yb (KED)	0.004 ppb	510 cps	
175Lu (KED)	-0.113 ppb	17,793 cps	
205Tl (KED)	0.002 ppb	327 cps	
208Pb (KED)	0.555 ppb	77,416 cps	
209Bi (KED)	109.909 %	3,503,624 cps	
232Th (KED)	0.033 ppb	8,279 cps	
238U (KED)	0.012 ppb	3,510 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 42

Analysis name: 03025ti

Analysis started at: 10/20/2021 5:54:12 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	123.826 %	
9Be (KED)	-0.007 ppb	
11B (KED)	11.532 ppb	
24Mg (KED)	159.452 ppb	
27Al (KED)	132.355 ppb	
45Sc (KED)	145.853 %	
51V (KED)	0.258 ppb	
52Cr (KED)	0.507 ppb	
55Mn (KED)	3.357 ppb	
56Fe (KED)	145.652 ppb	
58Ni (KED)	0.827 ppb	
59Co (KED)	0.080 ppb	
63Cu (KED)	2.856 ppb	
64Zn (KED)	41.716 ppb	
69Ga (KED)	0.830 ppb	
75As (KED)	0.120 ppb	
80Se (KED)	0.797 ppb	
85Rb (KED)	0.571 ppb	
88Sr (KED)	2.207 ppb	
89Y (KED)	133.711 %	
107Ag (KED)	0.025 ppb	
114Cd (KED)	0.004 ppb	
115In (KED)	128.018 %	
133Cs (KED)	0.017 ppb	
138Ba (KED)	2.879 ppb	
139La (KED)	0.196 ppb	
140Ce (KED)	0.423 ppb	
141Pr (KED)	0.047 ppb	
142Nd (KED)	0.270 ppb	
152Sm (KED)	0.026 ppb	
153Eu (KED)	0.005 ppb	
158Gd (KED)	0.020 ppb	
159Tb (KED)	131.969 %	
164Dy (KED)	0.012 ppb	
166Er (KED)	0.003 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.005 ppb	
175Lu (KED)	-0.117 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.342 ppb	
209Bi (KED)	106.771 %	
232Th (KED)	0.040 ppb	
238U (KED)	0.009 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	123.826 %	3,280 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	11.532 ppb	1,500 cps	
24Mg (KED)	159.452 ppb	96,582 cps	
27Al (KED)	132.355 ppb	22,818 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	145.853 %	57,629 cps	
51V (KED)	0.258 ppb	2,627 cps	
52Cr (KED)	0.507 ppb	8,179 cps	
55Mn (KED)	3.357 ppb	27,677 cps	
56Fe (KED)	145.652 ppb	2,164,889 cps	
58Ni (KED)	0.827 ppb	16,634 cps	
59Co (KED)	0.080 ppb	2,600 cps	
63Cu (KED)	2.856 ppb	65,991 cps	
64Zn (KED)	41.716 ppb	291,839 cps	
69Ga (KED)	0.830 ppb	6,338 cps	
75As (KED)	0.120 ppb	250 cps	
80Se (KED)	0.797 ppb	1,777 cps	
85Rb (KED)	0.571 ppb	3,947 cps	
88Sr (KED)	2.207 ppb	21,555 cps	
89Y (KED)	133.711 %	491,193 cps	
107Ag (KED)	0.025 ppb	1,520 cps	
114Cd (KED)	0.004 ppb	160 cps	
115In (KED)	128.018 %	890,519 cps	
133Cs (KED)	0.017 ppb	593 cps	
138Ba (KED)	2.879 ppb	134,202 cps	
139La (KED)	0.196 ppb	19,595 cps	
140Ce (KED)	0.423 ppb	56,665 cps	
141Pr (KED)	0.047 ppb	6,708 cps	
142Nd (KED)	0.270 ppb	15,263 cps	
152Sm (KED)	0.026 ppb	1,297 cps	
153Eu (KED)	0.005 ppb	557 cps	
158Gd (KED)	0.020 ppb	1,360 cps	
159Tb (KED)	131.969 %	4,703,113 cps	
164Dy (KED)	0.012 ppb	977 cps	
166Er (KED)	0.003 ppb	883 cps	
169Tm (KED)	0.001 ppb	290 cps	
174Yb (KED)	0.005 ppb	560 cps	
175Lu (KED)	-0.117 ppb	16,531 cps	
205Tl (KED)	0.003 ppb	490 cps	
208Pb (KED)	0.342 ppb	48,314 cps	
209Bi (KED)	106.771 %	3,403,567 cps	
232Th (KED)	0.040 ppb	9,914 cps	
238U (KED)	0.009 ppb	2,807 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 43

Analysis name: 03251ti

Analysis started at: 10/20/2021 5:56:05 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	128.106 %	
9Be (KED)	0.011 ppb	
11B (KED)	7.267 ppb	
24Mg (KED)	218.740 ppb	
27Al (KED)	183.631 ppb	
45Sc (KED)	146.590 %	
51V (KED)	0.377 ppb	
52Cr (KED)	0.611 ppb	
55Mn (KED)	5.015 ppb	
56Fe (KED)	210.372 ppb	
58Ni (KED)	1.037 ppb	
59Co (KED)	0.099 ppb	
63Cu (KED)	2.451 ppb	
64Zn (KED)	43.809 ppb	
69Ga (KED)	0.905 ppb	
75As (KED)	0.165 ppb	
80Se (KED)	0.654 ppb	
85Rb (KED)	0.922 ppb	
88Sr (KED)	3.595 ppb	
89Y (KED)	132.906 %	
107Ag (KED)	0.011 ppb	
114Cd (KED)	0.006 ppb	
115In (KED)	124.273 %	
133Cs (KED)	0.021 ppb	
138Ba (KED)	3.500 ppb	
139La (KED)	0.230 ppb	
140Ce (KED)	0.479 ppb	
141Pr (KED)	0.057 ppb	
142Nd (KED)	0.293 ppb	
152Sm (KED)	0.035 ppb	
153Eu (KED)	0.007 ppb	
158Gd (KED)	0.028 ppb	
159Tb (KED)	122.867 %	
164Dy (KED)	0.021 ppb	
166Er (KED)	0.006 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.008 ppb	
175Lu (KED)	-0.109 ppb	
205Tl (KED)	0.003 ppb	
208Pb (KED)	0.391 ppb	
209Bi (KED)	103.640 %	
232Th (KED)	0.053 ppb	
238U (KED)	0.013 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	128.106 %	3,394 cps	
9Be (KED)	0.011 ppb	3 cps	
11B (KED)	7.267 ppb	1,117 cps	
24Mg (KED)	218.740 ppb	137,032 cps	
27Al (KED)	183.631 ppb	31,774 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	146.590 %	57,921 cps	
51V (KED)	0.377 ppb	3,857 cps	
52Cr (KED)	0.611 ppb	9,894 cps	
55Mn (KED)	5.015 ppb	41,526 cps	
56Fe (KED)	210.372 ppb	3,141,580 cps	
58Ni (KED)	1.037 ppb	20,851 cps	
59Co (KED)	0.099 ppb	3,240 cps	
63Cu (KED)	2.451 ppb	56,400 cps	
64Zn (KED)	43.809 ppb	304,579 cps	
69Ga (KED)	0.905 ppb	6,859 cps	
75As (KED)	0.165 ppb	333 cps	
80Se (KED)	0.654 ppb	1,673 cps	
85Rb (KED)	0.922 ppb	6,318 cps	
88Sr (KED)	3.595 ppb	34,752 cps	
89Y (KED)	132.906 %	488,236 cps	
107Ag (KED)	0.011 ppb	637 cps	
114Cd (KED)	0.006 ppb	197 cps	
115In (KED)	124.273 %	864,466 cps	
133Cs (KED)	0.021 ppb	697 cps	
138Ba (KED)	3.500 ppb	151,534 cps	
139La (KED)	0.230 ppb	21,495 cps	
140Ce (KED)	0.479 ppb	59,666 cps	
141Pr (KED)	0.057 ppb	7,452 cps	
142Nd (KED)	0.293 ppb	15,390 cps	
152Sm (KED)	0.035 ppb	1,663 cps	
153Eu (KED)	0.007 ppb	683 cps	
158Gd (KED)	0.028 ppb	1,807 cps	
159Tb (KED)	122.867 %	4,378,763 cps	
164Dy (KED)	0.021 ppb	1,517 cps	
166Er (KED)	0.006 ppb	1,073 cps	
169Tm (KED)	0.001 ppb	347 cps	
174Yb (KED)	0.008 ppb	813 cps	
175Lu (KED)	-0.109 ppb	16,755 cps	
205Tl (KED)	0.003 ppb	567 cps	
208Pb (KED)	0.391 ppb	52,862 cps	
209Bi (KED)	103.640 %	3,303,780 cps	
232Th (KED)	0.053 ppb	12,463 cps	
238U (KED)	0.013 ppb	3,694 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 44

Analysis name: 03261ti

Analysis started at: 10/20/2021 5:58:02 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	122.442 %	
9Be (KED)	-0.007 ppb	
11B (KED)	4.766 ppb	
24Mg (KED)	149.498 ppb	
27Al (KED)	103.027 ppb	
45Sc (KED)	143.166 %	
51V (KED)	0.207 ppb	
52Cr (KED)	0.386 ppb	
55Mn (KED)	2.845 ppb	
56Fe (KED)	112.536 ppb	
58Ni (KED)	0.845 ppb	
59Co (KED)	0.062 ppb	
63Cu (KED)	2.575 ppb	
64Zn (KED)	42.665 ppb	
69Ga (KED)	0.536 ppb	
75As (KED)	0.085 ppb	
80Se (KED)	0.420 ppb	
85Rb (KED)	0.619 ppb	
88Sr (KED)	2.566 ppb	
89Y (KED)	133.097 %	
107Ag (KED)	0.043 ppb	
114Cd (KED)	0.005 ppb	
115In (KED)	122.299 %	
133Cs (KED)	0.014 ppb	
138Ba (KED)	1.988 ppb	
139La (KED)	0.119 ppb	
140Ce (KED)	0.246 ppb	
141Pr (KED)	0.028 ppb	
142Nd (KED)	0.154 ppb	
152Sm (KED)	0.019 ppb	
153Eu (KED)	0.004 ppb	
158Gd (KED)	0.014 ppb	
159Tb (KED)	122.103 %	
164Dy (KED)	0.009 ppb	
166Er (KED)	0.001 ppb	
169Tm (KED)	0.001 ppb	
174Yb (KED)	0.004 ppb	
175Lu (KED)	-0.113 ppb	
205Tl (KED)	0.002 ppb	
208Pb (KED)	0.407 ppb	
209Bi (KED)	103.633 %	
232Th (KED)	0.029 ppb	
238U (KED)	0.008 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	122.442 %	3,244 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	4.766 ppb	823 cps	
24Mg (KED)	149.498 ppb	89,547 cps	
27Al (KED)	103.027 ppb	17,459 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	143.166 %	56,568 cps	
51V (KED)	0.207 ppb	2,067 cps	
52Cr (KED)	0.386 ppb	6,138 cps	
55Mn (KED)	2.845 ppb	23,028 cps	
56Fe (KED)	112.536 ppb	1,642,402 cps	
58Ni (KED)	0.845 ppb	16,661 cps	
59Co (KED)	0.062 ppb	2,000 cps	
63Cu (KED)	2.575 ppb	59,307 cps	
64Zn (KED)	42.665 ppb	297,082 cps	
69Ga (KED)	0.536 ppb	4,104 cps	
75As (KED)	0.085 ppb	183 cps	
80Se (KED)	0.420 ppb	1,523 cps	
85Rb (KED)	0.619 ppb	4,254 cps	
88Sr (KED)	2.566 ppb	24,912 cps	
89Y (KED)	133.097 %	488,937 cps	
107Ag (KED)	0.043 ppb	2,510 cps	
114Cd (KED)	0.005 ppb	167 cps	
115In (KED)	122.299 %	850,733 cps	
133Cs (KED)	0.014 ppb	453 cps	
138Ba (KED)	1.988 ppb	86,268 cps	
139La (KED)	0.119 ppb	11,022 cps	
140Ce (KED)	0.246 ppb	30,561 cps	
141Pr (KED)	0.028 ppb	3,691 cps	
142Nd (KED)	0.154 ppb	8,046 cps	
152Sm (KED)	0.019 ppb	877 cps	
153Eu (KED)	0.004 ppb	343 cps	
158Gd (KED)	0.014 ppb	890 cps	
159Tb (KED)	122.103 %	4,351,501 cps	
164Dy (KED)	0.009 ppb	697 cps	
166Er (KED)	0.001 ppb	640 cps	
169Tm (KED)	0.001 ppb	203 cps	
174Yb (KED)	0.004 ppb	427 cps	
175Lu (KED)	-0.113 ppb	15,964 cps	
205Tl (KED)	0.002 ppb	340 cps	
208Pb (KED)	0.407 ppb	54,780 cps	
209Bi (KED)	103.633 %	3,303,554 cps	
232Th (KED)	0.029 ppb	6,962 cps	
238U (KED)	0.008 ppb	2,450 cps	

Comprehensive

10/20/2021 6:11:31 PM

Sample Summary

Instrument ID: iCAP Q

Analysis index: 45

Analysis name: 03010ti

Analysis started at: 10/20/2021 5:59:57 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	64.300 %	
9Be (KED)	-0.007 ppb	
11B (KED)	-0.422 ppb	
24Mg (KED)	443.319 ppb	
27Al (KED)	388.616 ppb	
45Sc (KED)	76.398 %	
51V (KED)	0.786 ppb	
52Cr (KED)	1.006 ppb	
55Mn (KED)	11.035 ppb	
56Fe (KED)	421.620 ppb	
58Ni (KED)	2.040 ppb	
59Co (KED)	0.200 ppb	
63Cu (KED)	4.722 ppb	
64Zn (KED)	73.985 ppb	
69Ga (KED)	1.673 ppb	
75As (KED)	0.165 ppb	
80Se (KED)	2.740 ppb	
85Rb (KED)	1.142 ppb	
88Sr (KED)	7.648 ppb	
89Y (KED)	70.413 %	
107Ag (KED)	0.015 ppb	
114Cd (KED)	0.016 ppb	
115In (KED)	64.429 %	
133Cs (KED)	0.057 ppb	
138Ba (KED)	6.357 ppb	
139La (KED)	0.526 ppb	
140Ce (KED)	1.047 ppb	
141Pr (KED)	0.122 ppb	
142Nd (KED)	0.645 ppb	
152Sm (KED)	0.079 ppb	
153Eu (KED)	0.015 ppb	
158Gd (KED)	0.059 ppb	
159Tb (KED)	62.131 %	
164Dy (KED)	0.044 ppb	
166Er (KED)	0.019 ppb	
169Tm (KED)	0.003 ppb	
174Yb (KED)	0.016 ppb	
175Lu (KED)	-0.104 ppb	
205Tl (KED)	0.005 ppb	
208Pb (KED)	0.746 ppb	
209Bi (KED)	54.025 %	
232Th (KED)	0.124 ppb	
238U (KED)	0.024 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	64.300 %	1,703 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	-0.422 ppb	167 cps	
24Mg (KED)	443.319 ppb	139,341 cps	
27Al (KED)	388.616 ppb	34,979 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	76.398 %	30,186 cps	
51V (KED)	0.786 ppb	4,187 cps	
52Cr (KED)	1.006 ppb	8,466 cps	
55Mn (KED)	11.035 ppb	47,587 cps	
56Fe (KED)	421.620 ppb	3,280,139 cps	
58Ni (KED)	2.040 ppb	21,168 cps	
59Co (KED)	0.200 ppb	3,390 cps	
63Cu (KED)	4.722 ppb	57,147 cps	
64Zn (KED)	73.985 ppb	272,115 cps	
69Ga (KED)	1.673 ppb	6,675 cps	
75As (KED)	0.165 ppb	177 cps	
80Se (KED)	2.740 ppb	1,603 cps	
85Rb (KED)	1.142 ppb	4,144 cps	
88Sr (KED)	7.648 ppb	39,034 cps	
89Y (KED)	70.413 %	258,666 cps	
107Ag (KED)	0.015 ppb	457 cps	
114Cd (KED)	0.016 ppb	213 cps	
115In (KED)	64.429 %	448,179 cps	
133Cs (KED)	0.057 ppb	957 cps	
138Ba (KED)	6.357 ppb	138,479 cps	
139La (KED)	0.526 ppb	24,788 cps	
140Ce (KED)	1.047 ppb	65,907 cps	
141Pr (KED)	0.122 ppb	8,109 cps	
142Nd (KED)	0.645 ppb	17,138 cps	
152Sm (KED)	0.079 ppb	1,873 cps	
153Eu (KED)	0.015 ppb	733 cps	
158Gd (KED)	0.059 ppb	1,913 cps	
159Tb (KED)	62.131 %	2,214,244 cps	
164Dy (KED)	0.044 ppb	1,590 cps	
166Er (KED)	0.019 ppb	1,077 cps	
169Tm (KED)	0.003 ppb	427 cps	
174Yb (KED)	0.016 ppb	813 cps	
175Lu (KED)	-0.104 ppb	8,897 cps	
205Tl (KED)	0.005 ppb	453 cps	
208Pb (KED)	0.746 ppb	50,238 cps	
209Bi (KED)	54.025 %	1,722,183 cps	
232Th (KED)	0.124 ppb	15,339 cps	
238U (KED)	0.024 ppb	3,611 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 46

Analysis name: 03264ti

Analysis started at: 10/20/2021 6:01:49 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	59.392 %	
9Be (KED)	0.031 ppb	
11B (KED)	0.270 ppb	
24Mg (KED)	417.010 ppb	
27Al (KED)	355.060 ppb	
45Sc (KED)	78.293 %	
51V (KED)	0.680 ppb	
52Cr (KED)	1.672 ppb	
55Mn (KED)	8.400 ppb	
56Fe (KED)	393.552 ppb	
58Ni (KED)	2.015 ppb	
59Co (KED)	0.187 ppb	
63Cu (KED)	5.052 ppb	
64Zn (KED)	71.005 ppb	
69Ga (KED)	1.620 ppb	
75As (KED)	0.310 ppb	
80Se (KED)	2.613 ppb	
85Rb (KED)	1.157 ppb	
88Sr (KED)	5.581 ppb	
89Y (KED)	71.633 %	
107Ag (KED)	0.067 ppb	
114Cd (KED)	0.013 ppb	
115In (KED)	66.588 %	
133Cs (KED)	0.040 ppb	
138Ba (KED)	6.398 ppb	
139La (KED)	0.465 ppb	
140Ce (KED)	0.928 ppb	
141Pr (KED)	0.110 ppb	
142Nd (KED)	0.569 ppb	
152Sm (KED)	0.065 ppb	
153Eu (KED)	0.013 ppb	
158Gd (KED)	0.050 ppb	
159Tb (KED)	63.918 %	
164Dy (KED)	0.037 ppb	
166Er (KED)	0.016 ppb	
169Tm (KED)	0.002 ppb	
174Yb (KED)	0.014 ppb	
175Lu (KED)	-0.111 ppb	
205Tl (KED)	0.005 ppb	
208Pb (KED)	0.680 ppb	
209Bi (KED)	55.312 %	
232Th (KED)	0.097 ppb	
238U (KED)	0.027 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	59.392 %	1,573 cps	
9Be (KED)	0.031 ppb	3 cps	
11B (KED)	0.270 ppb	187 cps	
24Mg (KED)	417.010 ppb	121,071 cps	
27Al (KED)	355.060 ppb	32,756 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	78.293 %	30,935 cps	
51V (KED)	0.680 ppb	3,711 cps	
52Cr (KED)	1.672 ppb	14,385 cps	
55Mn (KED)	8.400 ppb	37,128 cps	
56Fe (KED)	393.552 ppb	3,137,779 cps	
58Ni (KED)	2.015 ppb	21,428 cps	
59Co (KED)	0.187 ppb	3,244 cps	
63Cu (KED)	5.052 ppb	62,161 cps	
64Zn (KED)	71.005 ppb	265,703 cps	
69Ga (KED)	1.620 ppb	6,578 cps	
75As (KED)	0.310 ppb	327 cps	
80Se (KED)	2.613 ppb	1,587 cps	
85Rb (KED)	1.157 ppb	4,271 cps	
88Sr (KED)	5.581 ppb	29,014 cps	
89Y (KED)	71.633 %	263,147 cps	
107Ag (KED)	0.067 ppb	2,130 cps	
114Cd (KED)	0.013 ppb	190 cps	
115In (KED)	66.588 %	463,198 cps	
133Cs (KED)	0.040 ppb	700 cps	
138Ba (KED)	6.398 ppb	143,380 cps	
139La (KED)	0.465 ppb	22,547 cps	
140Ce (KED)	0.928 ppb	60,104 cps	
141Pr (KED)	0.110 ppb	7,516 cps	
142Nd (KED)	0.569 ppb	15,553 cps	
152Sm (KED)	0.065 ppb	1,587 cps	
153Eu (KED)	0.013 ppb	630 cps	
158Gd (KED)	0.050 ppb	1,657 cps	
159Tb (KED)	63.918 %	2,277,916 cps	
164Dy (KED)	0.037 ppb	1,380 cps	
166Er (KED)	0.016 ppb	970 cps	
169Tm (KED)	0.002 ppb	367 cps	
174Yb (KED)	0.014 ppb	770 cps	
175Lu (KED)	-0.111 ppb	8,500 cps	
205Tl (KED)	0.005 ppb	493 cps	
208Pb (KED)	0.680 ppb	47,122 cps	
209Bi (KED)	55.312 %	1,763,189 cps	
232Th (KED)	0.097 ppb	12,223 cps	
238U (KED)	0.027 ppb	4,017 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 47

Analysis name: 03254ti

Analysis started at: 10/20/2021 6:03:38 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	70.592 %	
9Be (KED)	-0.007 ppb	
11B (KED)	2.193 ppb	
24Mg (KED)	332.443 ppb	
27Al (KED)	279.534 ppb	
45Sc (KED)	78.978 %	
51V (KED)	0.584 ppb	
52Cr (KED)	0.769 ppb	
55Mn (KED)	7.244 ppb	
56Fe (KED)	324.987 ppb	
58Ni (KED)	1.469 ppb	
59Co (KED)	0.138 ppb	
63Cu (KED)	4.195 ppb	
64Zn (KED)	75.356 ppb	
69Ga (KED)	1.622 ppb	
75As (KED)	0.263 ppb	
80Se (KED)	2.548 ppb	
85Rb (KED)	1.514 ppb	
88Sr (KED)	5.383 ppb	
89Y (KED)	72.817 %	
107Ag (KED)	0.020 ppb	
114Cd (KED)	0.010 ppb	
115In (KED)	66.567 %	
133Cs (KED)	0.045 ppb	
138Ba (KED)	5.839 ppb	
139La (KED)	0.411 ppb	
140Ce (KED)	0.831 ppb	
141Pr (KED)	0.098 ppb	
142Nd (KED)	0.495 ppb	
152Sm (KED)	0.058 ppb	
153Eu (KED)	0.011 ppb	
158Gd (KED)	0.047 ppb	
159Tb (KED)	66.955 %	
164Dy (KED)	0.032 ppb	
166Er (KED)	0.015 ppb	
169Tm (KED)	0.002 ppb	
174Yb (KED)	0.013 ppb	
175Lu (KED)	-0.107 ppb	
205Tl (KED)	0.007 ppb	
208Pb (KED)	0.564 ppb	
209Bi (KED)	56.694 %	
232Th (KED)	0.089 ppb	
238U (KED)	0.022 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	70.592 %	1,870 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	2.193 ppb	330 cps	
24Mg (KED)	332.443 ppb	114,731 cps	
27Al (KED)	279.534 ppb	26,027 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	78.978 %	31,206 cps	
51V (KED)	0.584 ppb	3,214 cps	
52Cr (KED)	0.769 ppb	6,698 cps	
55Mn (KED)	7.244 ppb	32,302 cps	
56Fe (KED)	324.987 ppb	2,614,014 cps	
58Ni (KED)	1.469 ppb	15,817 cps	
59Co (KED)	0.138 ppb	2,427 cps	
63Cu (KED)	4.195 ppb	52,547 cps	
64Zn (KED)	75.356 ppb	286,609 cps	
69Ga (KED)	1.622 ppb	6,695 cps	
75As (KED)	0.263 ppb	283 cps	
80Se (KED)	2.548 ppb	1,590 cps	
85Rb (KED)	1.514 ppb	5,678 cps	
88Sr (KED)	5.383 ppb	28,452 cps	
89Y (KED)	72.817 %	267,497 cps	
107Ag (KED)	0.020 ppb	633 cps	
114Cd (KED)	0.010 ppb	157 cps	
115In (KED)	66.567 %	463,052 cps	
133Cs (KED)	0.045 ppb	783 cps	
138Ba (KED)	5.839 ppb	137,156 cps	
139La (KED)	0.411 ppb	20,871 cps	
140Ce (KED)	0.831 ppb	56,377 cps	
141Pr (KED)	0.098 ppb	7,035 cps	
142Nd (KED)	0.495 ppb	14,185 cps	
152Sm (KED)	0.058 ppb	1,477 cps	
153Eu (KED)	0.011 ppb	590 cps	
158Gd (KED)	0.047 ppb	1,633 cps	
159Tb (KED)	66.955 %	2,386,141 cps	
164Dy (KED)	0.032 ppb	1,263 cps	
166Er (KED)	0.015 ppb	983 cps	
169Tm (KED)	0.002 ppb	363 cps	
174Yb (KED)	0.013 ppb	717 cps	
175Lu (KED)	-0.107 ppb	9,293 cps	
205Tl (KED)	0.007 ppb	623 cps	
208Pb (KED)	0.564 ppb	40,476 cps	
209Bi (KED)	56.694 %	1,807,255 cps	
232Th (KED)	0.089 ppb	11,519 cps	
238U (KED)	0.022 ppb	3,357 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 48

Analysis name: 03258ti

Analysis started at: 10/20/2021 6:05:30 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	67.572 %	
9Be (KED)	0.026 ppb	
11B (KED)	1.093 ppb	
24Mg (KED)	480.875 ppb	
27Al (KED)	525.233 ppb	
45Sc (KED)	75.172 %	
51V (KED)	1.035 ppb	
52Cr (KED)	1.318 ppb	
55Mn (KED)	12.751 ppb	
56Fe (KED)	609.078 ppb	
58Ni (KED)	2.265 ppb	
59Co (KED)	0.238 ppb	
63Cu (KED)	3.867 ppb	
64Zn (KED)	71.531 ppb	
69Ga (KED)	1.850 ppb	
75As (KED)	0.241 ppb	
80Se (KED)	2.591 ppb	
85Rb (KED)	1.467 ppb	
88Sr (KED)	7.708 ppb	
89Y (KED)	70.763 %	
107Ag (KED)	0.018 ppb	
114Cd (KED)	0.018 ppb	
115In (KED)	64.551 %	
133Cs (KED)	0.068 ppb	
138Ba (KED)	7.361 ppb	
139La (KED)	0.578 ppb	
140Ce (KED)	1.206 ppb	
141Pr (KED)	0.145 ppb	
142Nd (KED)	0.763 ppb	
152Sm (KED)	0.105 ppb	
153Eu (KED)	0.022 ppb	
158Gd (KED)	0.081 ppb	
159Tb (KED)	60.609 %	
164Dy (KED)	0.062 ppb	
166Er (KED)	0.028 ppb	
169Tm (KED)	0.004 ppb	
174Yb (KED)	0.021 ppb	
175Lu (KED)	-0.103 ppb	
205Tl (KED)	0.007 ppb	
208Pb (KED)	0.615 ppb	
209Bi (KED)	53.486 %	
232Th (KED)	0.145 ppb	
238U (KED)	0.033 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	67.572 %	1,790 cps	
9Be (KED)	0.026 ppb	3 cps	
11B (KED)	1.093 ppb	257 cps	
24Mg (KED)	480.875 ppb	158,831 cps	
27Al (KED)	525.233 ppb	46,497 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	75.172 %	29,702 cps	
51V (KED)	1.035 ppb	5,421 cps	
52Cr (KED)	1.318 ppb	10,901 cps	
55Mn (KED)	12.751 ppb	54,100 cps	
56Fe (KED)	609.078 ppb	4,661,932 cps	
58Ni (KED)	2.265 ppb	23,091 cps	
59Co (KED)	0.238 ppb	3,964 cps	
63Cu (KED)	3.867 ppb	47,119 cps	
64Zn (KED)	71.531 ppb	264,418 cps	
69Ga (KED)	1.850 ppb	7,412 cps	
75As (KED)	0.241 ppb	253 cps	
80Se (KED)	2.591 ppb	1,560 cps	
85Rb (KED)	1.467 ppb	5,348 cps	
88Sr (KED)	7.708 ppb	39,536 cps	
89Y (KED)	70.763 %	259,952 cps	
107Ag (KED)	0.018 ppb	557 cps	
114Cd (KED)	0.018 ppb	240 cps	
115In (KED)	64.551 %	449,029 cps	
133Cs (KED)	0.068 ppb	1,143 cps	
138Ba (KED)	7.361 ppb	156,296 cps	
139La (KED)	0.578 ppb	26,582 cps	
140Ce (KED)	1.206 ppb	74,076 cps	
141Pr (KED)	0.145 ppb	9,427 cps	
142Nd (KED)	0.763 ppb	19,779 cps	
152Sm (KED)	0.105 ppb	2,440 cps	
153Eu (KED)	0.022 ppb	1,013 cps	
158Gd (KED)	0.081 ppb	2,554 cps	
159Tb (KED)	60.609 %	2,159,980 cps	
164Dy (KED)	0.062 ppb	2,187 cps	
166Er (KED)	0.028 ppb	1,417 cps	
169Tm (KED)	0.004 ppb	620 cps	
174Yb (KED)	0.021 ppb	1,053 cps	
175Lu (KED)	-0.103 ppb	8,776 cps	
205Tl (KED)	0.007 ppb	607 cps	
208Pb (KED)	0.615 ppb	41,462 cps	
209Bi (KED)	53.486 %	1,705,000 cps	
232Th (KED)	0.145 ppb	17,706 cps	
238U (KED)	0.033 ppb	4,834 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 49

Analysis name: 03038ti

Analysis started at: 10/20/2021 6:07:33 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	68.579 %	
9Be (KED)	0.026 ppb	
11B (KED)	1.328 ppb	
24Mg (KED)	373.494 ppb	
27Al (KED)	334.208 ppb	
45Sc (KED)	76.635 %	
51V (KED)	0.652 ppb	
52Cr (KED)	1.180 ppb	
55Mn (KED)	7.927 ppb	
56Fe (KED)	364.196 ppb	
58Ni (KED)	1.889 ppb	
59Co (KED)	0.177 ppb	
63Cu (KED)	4.970 ppb	
64Zn (KED)	78.613 ppb	
69Ga (KED)	1.396 ppb	
75As (KED)	0.247 ppb	
80Se (KED)	2.576 ppb	
85Rb (KED)	1.861 ppb	
88Sr (KED)	5.560 ppb	
89Y (KED)	73.577 %	
107Ag (KED)	0.022 ppb	
114Cd (KED)	0.012 ppb	
115In (KED)	67.344 %	
133Cs (KED)	0.042 ppb	
138Ba (KED)	5.536 ppb	
139La (KED)	0.409 ppb	
140Ce (KED)	0.899 ppb	
141Pr (KED)	0.105 ppb	
142Nd (KED)	0.547 ppb	
152Sm (KED)	0.067 ppb	
153Eu (KED)	0.012 ppb	
158Gd (KED)	0.050 ppb	
159Tb (KED)	62.829 %	
164Dy (KED)	0.040 ppb	
166Er (KED)	0.015 ppb	
169Tm (KED)	0.003 ppb	
174Yb (KED)	0.013 ppb	
175Lu (KED)	-0.106 ppb	
205Tl (KED)	0.005 ppb	
208Pb (KED)	0.614 ppb	
209Bi (KED)	56.451 %	
232Th (KED)	0.088 ppb	
238U (KED)	0.020 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	68.579 %	1,817 cps	
9Be (KED)	0.026 ppb	3 cps	
11B (KED)	1.328 ppb	273 cps	
24Mg (KED)	373.494 ppb	125,215 cps	
27Al (KED)	334.208 ppb	30,183 cps	

Comprehensive

10/20/2021 6:11:31 PM

Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	76.635 %	30,280 cps	
51V (KED)	0.652 ppb	3,484 cps	
52Cr (KED)	1.180 ppb	9,954 cps	
55Mn (KED)	7.927 ppb	34,297 cps	
56Fe (KED)	364.196 ppb	2,842,344 cps	
58Ni (KED)	1.889 ppb	19,679 cps	
59Co (KED)	0.177 ppb	3,007 cps	
63Cu (KED)	4.970 ppb	62,818 cps	
64Zn (KED)	78.613 ppb	302,090 cps	
69Ga (KED)	1.396 ppb	5,828 cps	
75As (KED)	0.247 ppb	270 cps	
80Se (KED)	2.576 ppb	1,617 cps	
85Rb (KED)	1.861 ppb	7,052 cps	
88Sr (KED)	5.560 ppb	29,689 cps	
89Y (KED)	73.577 %	270,288 cps	
107Ag (KED)	0.022 ppb	710 cps	
114Cd (KED)	0.012 ppb	183 cps	
115In (KED)	67.344 %	468,455 cps	
133Cs (KED)	0.042 ppb	753 cps	
138Ba (KED)	5.536 ppb	122,067 cps	
139La (KED)	0.409 ppb	19,515 cps	
140Ce (KED)	0.899 ppb	57,248 cps	
141Pr (KED)	0.105 ppb	7,055 cps	
142Nd (KED)	0.547 ppb	14,695 cps	
152Sm (KED)	0.067 ppb	1,613 cps	
153Eu (KED)	0.012 ppb	573 cps	
158Gd (KED)	0.050 ppb	1,623 cps	
159Tb (KED)	62.829 %	2,239,123 cps	
164Dy (KED)	0.040 ppb	1,477 cps	
166Er (KED)	0.015 ppb	917 cps	
169Tm (KED)	0.003 ppb	390 cps	
174Yb (KED)	0.013 ppb	677 cps	
175Lu (KED)	-0.106 ppb	8,846 cps	
205Tl (KED)	0.005 ppb	483 cps	
208Pb (KED)	0.614 ppb	43,646 cps	
209Bi (KED)	56.451 %	1,799,519 cps	
232Th (KED)	0.088 ppb	11,328 cps	
238U (KED)	0.020 ppb	3,154 cps	

Comprehensive

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Sample Summary

Instrument ID: iCAP Q

Analysis index: 50

Analysis name: 03037ti

Analysis started at: 10/20/2021 6:09:22 PM

User name: WINDOWS-UPCI4ER\Administrator

Category	Concentration average	Concentration RSD
6Li (KED)	66.314 %	
9Be (KED)	-0.007 ppb	
11B (KED)	3.203 ppb	
24Mg (KED)	533.020 ppb	
27Al (KED)	544.434 ppb	
45Sc (KED)	75.781 %	
51V (KED)	1.047 ppb	
52Cr (KED)	1.369 ppb	
55Mn (KED)	12.250 ppb	
56Fe (KED)	631.825 ppb	
58Ni (KED)	3.166 ppb	
59Co (KED)	0.241 ppb	
63Cu (KED)	5.795 ppb	
64Zn (KED)	74.789 ppb	
69Ga (KED)	2.407 ppb	
75As (KED)	0.212 ppb	
80Se (KED)	2.648 ppb	
85Rb (KED)	2.301 ppb	
88Sr (KED)	7.981 ppb	
89Y (KED)	69.289 %	
107Ag (KED)	0.106 ppb	
114Cd (KED)	0.011 ppb	
115In (KED)	64.451 %	
133Cs (KED)	0.065 ppb	
138Ba (KED)	9.061 ppb	
139La (KED)	0.762 ppb	
140Ce (KED)	1.530 ppb	
141Pr (KED)	0.183 ppb	
142Nd (KED)	0.966 ppb	
152Sm (KED)	0.118 ppb	
153Eu (KED)	0.019 ppb	
158Gd (KED)	0.091 ppb	
159Tb (KED)	62.163 %	
164Dy (KED)	0.061 ppb	
166Er (KED)	0.029 ppb	
169Tm (KED)	0.004 ppb	
174Yb (KED)	0.021 ppb	
175Lu (KED)	-0.103 ppb	
205Tl (KED)	0.006 ppb	
208Pb (KED)	0.633 ppb	
209Bi (KED)	54.404 %	
232Th (KED)	0.145 ppb	
238U (KED)	0.033 ppb	

Category	Concentration average	Intensity average	Intensity RSD
6Li (KED)	66.314 %	1,757 cps	
9Be (KED)	-0.007 ppb	0 cps	
11B (KED)	3.203 ppb	363 cps	
24Mg (KED)	533.020 ppb	172,770 cps	
27Al (KED)	544.434 ppb	48,584 cps	

Comprehensive

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Category	Concentration average	Intensity average	Intensity RSD
45Sc (KED)	75.781 %	29,943 cps	
51V (KED)	1.047 ppb	5,531 cps	
52Cr (KED)	1.369 ppb	11,412 cps	
55Mn (KED)	12.250 ppb	52,397 cps	
56Fe (KED)	631.825 ppb	4,875,156 cps	
58Ni (KED)	3.166 ppb	32,459 cps	
59Co (KED)	0.241 ppb	4,041 cps	
63Cu (KED)	5.795 ppb	68,899 cps	
64Zn (KED)	74.789 ppb	270,676 cps	
69Ga (KED)	2.407 ppb	9,430 cps	
75As (KED)	0.212 ppb	220 cps	
80Se (KED)	2.648 ppb	1,547 cps	
85Rb (KED)	2.301 ppb	8,209 cps	
88Sr (KED)	7.981 ppb	40,081 cps	
89Y (KED)	69.289 %	254,536 cps	
107Ag (KED)	0.106 ppb	3,257 cps	
114Cd (KED)	0.011 ppb	163 cps	
115In (KED)	64.451 %	448,329 cps	
133Cs (KED)	0.065 ppb	1,100 cps	
138Ba (KED)	9.061 ppb	197,130 cps	
139La (KED)	0.762 ppb	35,905 cps	
140Ce (KED)	1.530 ppb	96,337 cps	
141Pr (KED)	0.183 ppb	12,186 cps	
142Nd (KED)	0.966 ppb	25,663 cps	
152Sm (KED)	0.118 ppb	2,810 cps	
153Eu (KED)	0.019 ppb	933 cps	
158Gd (KED)	0.091 ppb	2,924 cps	
159Tb (KED)	62.163 %	2,215,378 cps	
164Dy (KED)	0.061 ppb	2,200 cps	
166Er (KED)	0.029 ppb	1,500 cps	
169Tm (KED)	0.004 ppb	593 cps	
174Yb (KED)	0.021 ppb	1,110 cps	
175Lu (KED)	-0.103 ppb	8,970 cps	
205Tl (KED)	0.006 ppb	577 cps	
208Pb (KED)	0.633 ppb	43,292 cps	
209Bi (KED)	54.404 %	1,734,262 cps	
232Th (KED)	0.145 ppb	17,953 cps	
238U (KED)	0.033 ppb	4,834 cps	