

Supplementary Table. ICP-MS analyses

	248/587.3	91/58.9	91/64.3	91/106.1	89b/15.6Fe	89b/15.6Ss	111764
Li	13.9	20.8	14.5	10.1	21.8	14.5	18.00
Be	1.74	2.74	1.96	1.21	2.25	2.08	1.05
Sc	5.54	16.6	12.0	4.52	22.4	8.69	21.80
Cr	65.4	300	143	132	749	112	262.00
Co	23.1	8.45	4.91	5.25	19.8	7.75	19.40
Ni	44.5	47.8	36.1	34.1	76.3	62.2	36.50
Cu	497	712	146000	87500	497	502	1064.00
Zn	95.8	70.2	79.3	55.3	193	197	70.80
Ga	9.96	16.1	11.1	7.69	15.5	11.8	14.00
As	8.25	172	349	151	841	1326	7.88
Se	<2.50	<2.50	<2.50	2.84	4.53	3.59	1.57
Rb	94.4	151.6	83.6	72.7	120	102	88.30
Sr	136	116	69.7	183	154	120	99.60
Y	8.16	24.4	22.6	11.7	93.7	15.6	29.20
Nb	5.26	14.6	11.4	7.50	45.9	3.63	2.35
Mo	4.08	1.88	1.34	1.97	4.30	2.81	0.84
Cd	0.185	0.68	0.43	0.35	1.93	0.99	0.48
Sn	1.47	1.5	17.2	11.8	24.7	67.1	2.93
Sb	0.53	0.84	6.85	3.13	3.50	2.98	1.85
Te	<0.30	<0.30	<0.30	<0.30	0.32	<0.30	<0.3
Cs	1.69	3.22	1.78	1.70	3.53	2.18	2.52
Ba	776	1152	908	584	980	975	796.00
Hf	1.89	16.0	6.51	2.15	34.2	1.74	13.50
Ta	0.84	2.83	1.65	0.69	6.48	0.32	1.46
W	1.08	6.82	14.2	5.51	44.7	42.1	36.30
Tl	0.85	0.75	0.55	0.37	0.66	0.56	0.47
Pb	19.5	53.5	34.6	62.5	361	288	12.00
Bi	1.11	0.45	2.26	1.50	3.94	3.99	0.21
Th	7.70	104	38.6	9.17	208	8.68	83.10
U	1.18	22.8	7.00	5.61	58.0	2.31	13.80

248/587.3	Udokan	sandstone without sulphides
91/58.9	Udokan	ironstone
91/64.3	Udokan	copperstone with magnetite impregnations
91/106.1	Udokan	copperstone with magnetite impregnations
89b/15.6Fe	Udokan	iron oxides layer
89b/15.6Ss	Udokan	sandstone without iron oxides
111764	Unkur	ironstone