

## APPENDIX 2

### Trace element compositions of Igdekoy-Doganlar borates [ppm]

Sample	DS-3	DS-4	DS-5	DS-6	DS-8	DS-9	DS-10	DS-11	DS-12	DS-15	DS-19	DS-20	DS-24	DS-28	DS-36	DS-37	DS-41	Average	ECA(1)	AA(2)	FWA(3)
Ni	16.0	13.4	<0.1	1.6	1.5	0.1	0.8	0.1	4.2	<0.1	1.8	3.5	2.8	1.2	0.3	<0.1	<0.1	3.6	75	55	0.3.10 <sup>-3</sup>
Co	2.3	2.2	1.2	0.5	0.5	<0.2	0.4	<0.2	0.6	0.3	<0.2	1.0	0.8	<0.2	0.3	0.5	0.7	0.9	22	10	0.05 .10 <sup>-3</sup>
Cu	3.3	2.0	0.1	0.6	1.2	0.3	0.3	0.3	2.1	0.2	1.0	2.4	2.6	1.3	0.7	0.7	0.3	1.1	50	35	1.8.10 <sup>-3</sup>
Pb	31.6	10.5	0.3	3.4	2.8	0.4	0.3	0.5	6.8	0.1	2.4	8.2	5.0	2.6	0.9	1.2	0.4	4.6	12.5	15	0.2 .10 <sup>-3</sup>
Mo	0.01	7.42	0.07	2.68	0.99	0.20	0.04	<0.01	0.44	0.02	0.50	3.42	0.58	0.47	1.21	0.64	0.23	1.2	1.5	0.9	1.10 <sup>-3</sup>
S(%)	0.27	0.27	<0.02	0.19	0.40	0.05	0.04	<0.02	0.20	<0.02	0.06	0.74	>10.00	>10.00	0.24	0.26	2.46	0.4	0.03	0.02	*
As	117.7	8249.6	472.6	5896.2	159.4	47.2	417.8	6.6	788.1	6.9	903.3	129.9	4003.1	416.7	58.7	102.3	4107.7	1522.6	1.8	1.9	2 .10 <sup>-3</sup>
Se	19.5	16.9	16.3	19.9	17.1	8.8	9.4	11.1	9.1	15.6	12.8	12.0	0.3	0.3	12.2	16.5	21.4	12.9	0.05	0.05	0.1.10 <sup>-3</sup>
Sb	3.57	1.68	0.03	0.52	0.13	0.03	<0.02	0.03	0.18	<0.02	0.11	0.66	0.67	0.31	0.03	0.17	2.78	0.7	0.2	0.2	0.1.10 <sup>-3</sup>
Te	0.05	0.08	0.07	0.03	0.29	0.03	<0.02	0.05	0.10	<0.02	<0.02	0.10	0.03	0.05	0.09	0.11	0.12	0.1	*	*	*
Ag	37.0	11.0	4.0	20.0	10.0	3.0	4.0	2.0	42.0	4.0	4.0	16.0	22.0	14.0	12.0	7.0	4.0	12.7	70	70	0.3.10 <sup>-6</sup>
Rb	28.3	29.6	1.0	4.8	17.3	2.3	3.8	6.3	23.0	1.1	9.8	32.1	51.2	16.7	15.0	17.3	1.2	15.3	90	72	*
Ba	27.0	54.0	6.0	3.0	63.0	16.0	6.0	9.0	49.0	2.0	15.0	45.0	82.0	21.0	27.0	81.0	39.0	32.1	500	714	10 .10 <sup>-3</sup>
Sr	1435.7	2432.3	1771.4	1298.5	13153.7	1611.6	947.8	113.3	4672.1	459.1	957.8	6222.3	4856.1	5568.5	5238.9	5900.3	4675.7	3606.8	375	800	50.10 <sup>-3</sup>
Cs	41.2	89.0	2.2	13.9	50.3	6.1	13.0	5.3	61.3	4.8	25.7	122.3	81.8	49.2	100.7	82.2	11.9	44.8	3	2.3	1.8.10 <sup>-3</sup> (4)
Li	20.6	72.3	5.2	17.0	156.0	32.7	58.3	3.7	179.7	6.6	18.8	259.8	55.0	51.9	240.4	295.5	78.1	91.3	20	20	1 .10 <sup>-3</sup>
Nb	0.6	1.1	<0.1	0.2	0.6	0.1	<0.1	0.6	0.5	<0.1	<0.1	0.4	0.6	<0.1	<0.1	<0.1	<0.1	0.5	20	20	*
Zr	4.8	4.8	2.0	1.1	5.7	0.7	1.3	6.8	5.1	0.8	1.2	4.6	5.5	11.2	3.1	0.4	0.8	3.5	165	260	*
Y	8.3	3.2	1.8	2.5	1.0	1.2	0.6	3.6	2.6	0.5	3.1	1.4	1.1	0.7	0.1	0.2	0.2	1.9	35	25	*
Th	1.1	1.4	<0.2	<0.2	0.6	<0.2	<0.2	<0.2	1.0	<0.2	0.4	0.5	0.8	<0.2	<0.2	<0.2	<0.2	0.8	8.5	7	*
U	0.2	3.9	0.3	0.1	0.7	0.1	0.2	<0.1	0.4	<0.1	0.7	1.0	0.3	0.3	1.0	0.6	1.6	0.8	2.7	1.8	0.05 .10 <sup>-3</sup>

ECA = earth crust, values after Krauskopf (1979); AA = andesite, values after Schroll (1975); FWA =fresh water, values after Abollino et al. (2004); (4) Şahinci (1991); \* = not analysed