

## LINKING GEMOLOGY AND SPECTRAL GEOLOGY: A CASE STUDY OF ELBAITES FROM THE SERIDÓ PEGMATITE PROVINCE, NORTHEASTERN BRAZIL

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Table A.5. Averaged EPMA data of colorless elbaite samples (Barreto 1999).

Oxides (wt. %)	Samples			Average of the colorless group
	S18C	S19C	S20C	
<b>SiO<sub>2</sub></b>	38.383	35.246	37.955	37.195
<b>TiO<sub>2</sub></b>	0.013	0.013	0.028	0.018
<b>B<sub>2</sub>O<sub>3</sub></b>	11.788	13.737	15.632	13.719
<b>Al<sub>2</sub>O<sub>3</sub></b>	39.274	39.443	38.678	39.132
<b>Bi<sub>2</sub>O<sub>3</sub></b>	0.034	0.007	0.006	0.016
<b>MgO</b>	0.013	0.010	0.005	0.009
<b>CaO</b>	0.584	0.283	0.402	0.423
<b>MnO</b>	2.870	2.416	2.279	2.522
<b>FeO</b>	0.488	0.409	0.386	0.428
<b>CuO</b>	0.076	0.077	0.080	0.078
<b>ZnO</b>	0.244	0.229	0.181	0.218
<b>Na<sub>2</sub>O</b>	2.078	2.007	1.445	1.843
<b>H<sub>2</sub>O</b>	3.774	3.404	3.333	3.504
<b>F</b>	bdl	0.353	1.217	0.523
<b>O=F</b>	bdl	0.149	0.512	0.220
<b>SUM</b>	99.619	97.485	101.115	99.406
<b>No. analyses</b>	4	5	5	-
<b>Si*</b>	6.099	5.656	5.765	
<b>Ti</b>	0.001	0.002	0.003	
<b>B</b>	3.232	3.804	4.098	
<b>Al</b>	7.357	7.463	6.927	
<b>Bi</b>	0.001	0	0	
<b>Mg</b>	0.003	0.002	0.001	
<b>Ca</b>	0.099	0.049	0.065	
<b>Mn</b>	0.386	0.328	0.293	
<b>Fe</b>	0.065	0.055	0.049	
<b>Cu</b>	0.005	0.005	0.005	
<b>Zn</b>	0.029	0.027	0.020	
<b>Na</b>	0.640	0.625	0.426	
<b>OH</b>	3.999	3.643	3.377	
<b>F</b>	0	0.178	0.584	

bdl: below detection limit.

\* The analyses were carried out for 28 oxygens. The values of H<sub>2</sub>O were quantified by the loss of water obtained from the TGA-DTA method, considering standard samples of structural chemical formulas. Li values were obtained by ICP-MS, and B values by stoichiometric calculus. The F was analyzed by EPMA (Barreto 1999).