Supplemental Table S1. Experimental results of indirect precipitation of kurnakovite from 1.0 mol•kg^{-1} $MgCl_2$ + 1.0 mol•kg^{-1} NaCl solutions at 22.5 ± 0.5 °C.

Experimental No.	Experimental Duration (day)	pH_m*	Total magnesium molality, $m_{\sum Mg}$, mol•kg^{-1}	Total boron molality, $m_{\sum B}$, mol•kg^{-1}	Total sodium molality, $m_{\sum Na}$, mol•kg^{-1}	Total chloride molality, $m_{\sum Cl}$, mol•kg^{-1}
SYN-Boracite-2	957	8.15	1.112	1.199	1.14	3.083
	1204	8.25	1.125	1.220	1.00	3.054
	1266	8.16	1.130	1.180	1.13	3.016
	1289	8.18	1.138	1.233	1.14	3.072
	1322	8.14	1.130	1.197	N/A	3.055
	1470	8.16	1.146	1.191	N/A	3.137
	1582	8.25	1.167	1.091	1.09	3.094
	1629	8.15	1.049	1.030	1.18	3.028

*pcH values were first calculated based on pH readings and correction factors for $MgCl_2$ solutions from Hansen (2001), and were then converted to pH_m based on the equation from Xiong et al. (2010). As the experimental solutions contain significant amounts of sodium and borate as well as the supporting medium, $MgCl_2$, the pH_m's calculated based on the correction factor for pure $MgCl_2$ might have additional experimental uncertainties. The uncertainties for pH_m by using the correction factor for pure $MgCl_2$ wereestimated to be less than ± 0.08 according to the comparison with the correction factors for NaCl used in Xiong (2008) at the ionic strengths of the experiments in this work. In the thermodynamic calculations, the uncertainties include those for pH_m.