

Supplementary Materials

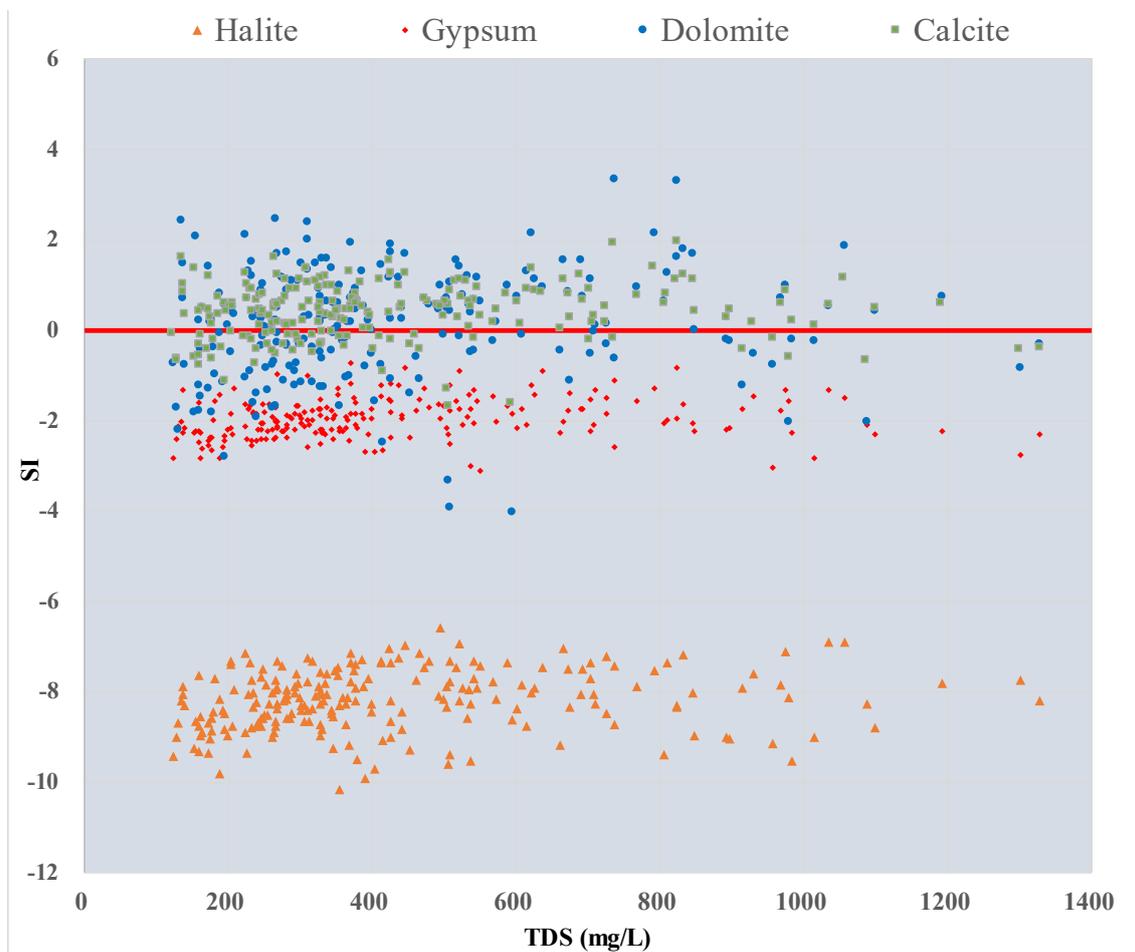


Figure S1. Saturation index map of four minerals in the study area.

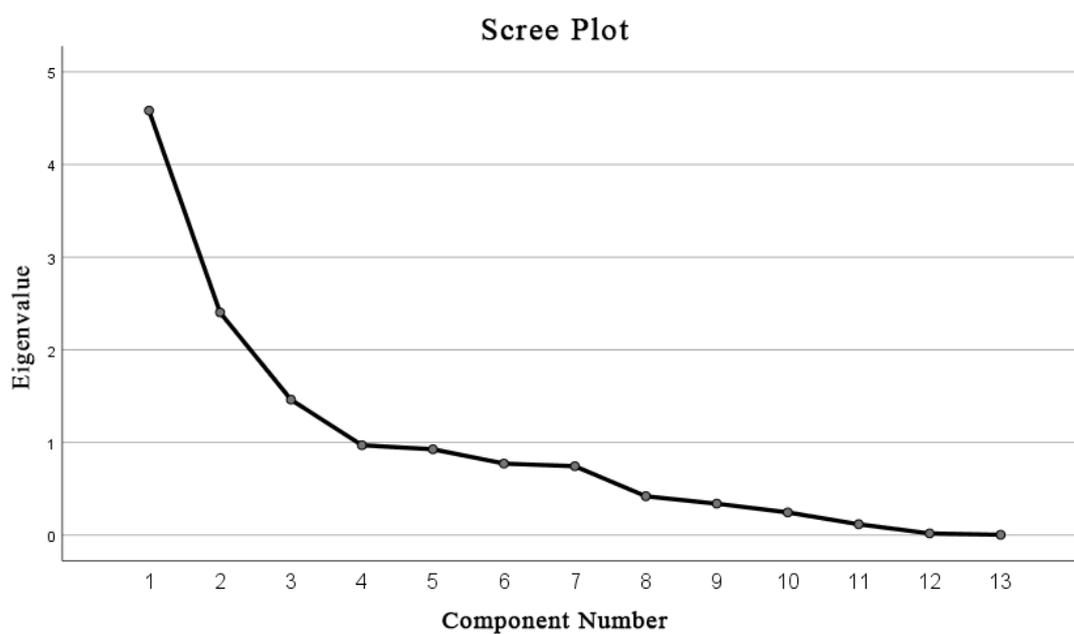


Figure S2. Scree Plot for PCA.

Table S1. Evaluation standards for each ion.

Grade	I	II	III	IV	V
As ³⁺	0.001	0.001	0.01	0.05	0.05
Fe ³⁺	0.1	0.2	0.3	2	2
Mn ²⁺	0.05	0.05	0.1	1.5	1.5
F ⁻	1	1	1	2	2
Cl ⁻	50	150	250	350	350
NO ₃ ⁻	2	5	20	30	30
SO ₄ ²⁻	50	150	250	350	350
TDS	300	500	1000	2000	2000
TH	150	300	450	650	650
oxygen consumption	1	2	3	10	10
ammonia nitrogen	0.02	0.1	0.5	1.5	1.5
NO ₂ ⁻	0.01	0.1	1	4.8	4.8
Na ⁻	100	150	200	400	400

The unit of each parameter is mg/L.