

Table 1. Composition of brine from Weber Sandstone used to create a synthetic injection brine for laboratory experiments (Modified from Quillinan and McLaughlin 2013).

Species	Measured Conc. (mg L ⁻¹)	Species	Measured Conc. (mg L ⁻¹)
pH	6.48 at 25 °C	Fe ²⁺	44
Density (kg L ⁻¹ , calc.)	1.079	K ⁺	1910
Cl ⁻	57,400	Na ⁺	36,500
SO ₄ ²⁻	6,030	Sr ²⁺	14
HCO ₃ ⁻	3,996	F ⁻	6.1
HS ⁻ as H ₂ S	127	B	72
Si	45	Br ⁻	99
Al ³⁺	3.5	Ba ²⁺	14
Ca ²⁺	539	Li ⁺	91
Mg ²⁺	45	NH ₃ (as N)	33