

Supporting Information

Investigation of spontaneous imbibition by using a surfactant-free active silica water-based nanofluid for enhanced oil recovery

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Table 1S Core parameters

Core parameters	Length (mm)	Diameter (mm)	Permeability (mD)	Porosity (%)
1 wt% nanofluid	25.1	25.1	0.613	14.1
0.5 wt% nanofluid	25.0	25.2	0.608	13.9
0.1 wt% nanofluid	25.3	24.9	0.621	14.3
0.05 wt% nanofluid	24.9	25.0	0.594	13.8
0.01 wt% nanofluid	25.1	25.2	0.609	14.2
0.005 wt% nanofluid	24.8	25.1	0.589	14.4
0.001 wt% nanofluid	25.2	24.9	0.614	13.9
Brine	25.0	25.1	0.602	14.5

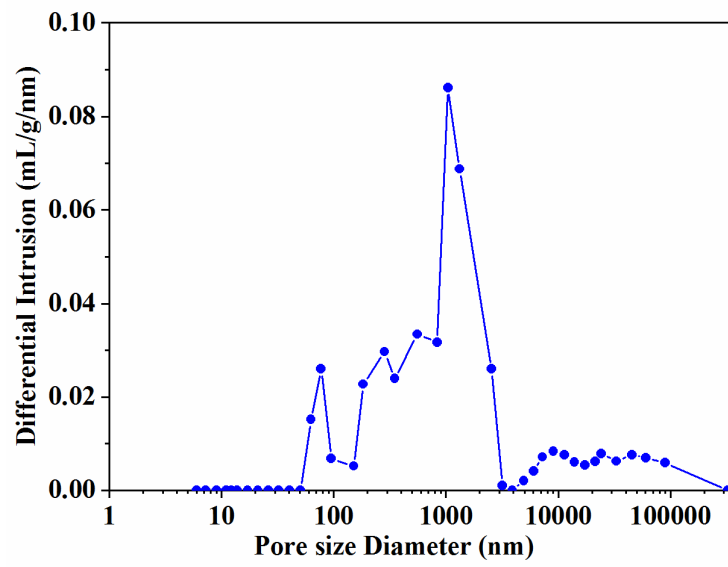


Figure 1S Pore size distribution of the sandstone core.

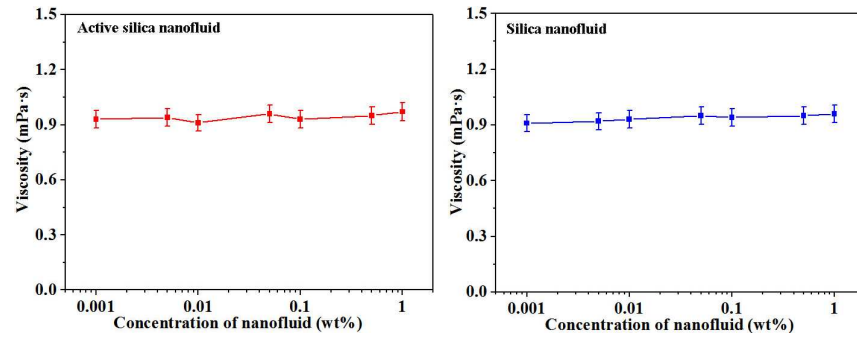


Figure 2S The viscosity of nanofluid at different concentrations (60°C).