Supplementary Materials: Chemical Force Microscopy Study on the Interactions of COOH Functional Groups with Kaolinite Surfaces: Implications for Enhanced Oil Recovery

Nipada Santha, Pablo Cubillas, Adrian Saw, Harry Brooksbank and Hugh Christopher Greenwell

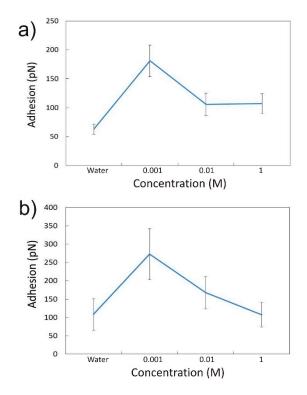


Figure S1. Adhesion graphs for experiments kao-Si-9 (a) and kao-Si-10 (b), performed with a –COOH probe over the siloxane face of kaolinite and in the presence of CaCl₂ of various concentrations (0.001, 0.01 and 1 M). Both graphs show a decrease in adhesion as the CaCl₂ is increased.

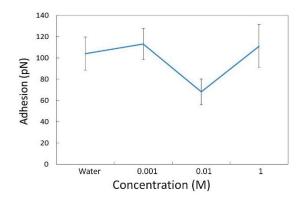


Figure S2. Adhesion graph for experiments kao-Si-9 performed with a –COOH probe over the siloxane face of kaolinite and in the presence of NaCl of various concentrations (0.001, 0.01 and 1 M). No clear trend on the measured adhesion is observed when varying the NaCl concentration.