Supporting Information

for

Synergistic Effects between Different Types of Surfactants and an Associating Polymer on Surfactant-Polymer Flooding under Hightemperature and High-salinity Conditions

Shaohua Chen,^{1,*} Ming Han,² Abdulkareem M AlSofi²

¹ Beijing Research Center, Aramco Asia, Beijing, 100102, People's Republic of China

² EXPEC Advanced Research Center, Saudi Aramco, Dhahran, 31311, Saudi Arabia

* Corresponding Author:

Dr. Shaohua Chen

E-mail: shaohua.chen@aramcoasia.com

Phone: +86-10-6502 8428

ORCID: 0000-0001-8783-3977



Figure SI.1. Viscosity of the HAPAM polymer in the high salinity water at 2 g/L as a function of shear rate at 25 °C (circle), 50 °C (diamond) and 90 °C (square).



Figure SI.2. Zero-shear viscosity of the HAPAM polymer in the high salinity water as a function of polymer concentration at 25 °C (square) and 90 °C (circle).



Figure SI.3. Throat size distribution of the micromodel.



Figure SI.4. Pictures of two solutions after 24 hours in an oven at 90 °C for (A) the HAPAM at 2 g/L and (B) the HAPAM/SDS at a polymer and surfactant concentration of 2 g/L and 5 g/L, respectively.