

## Supporting Information

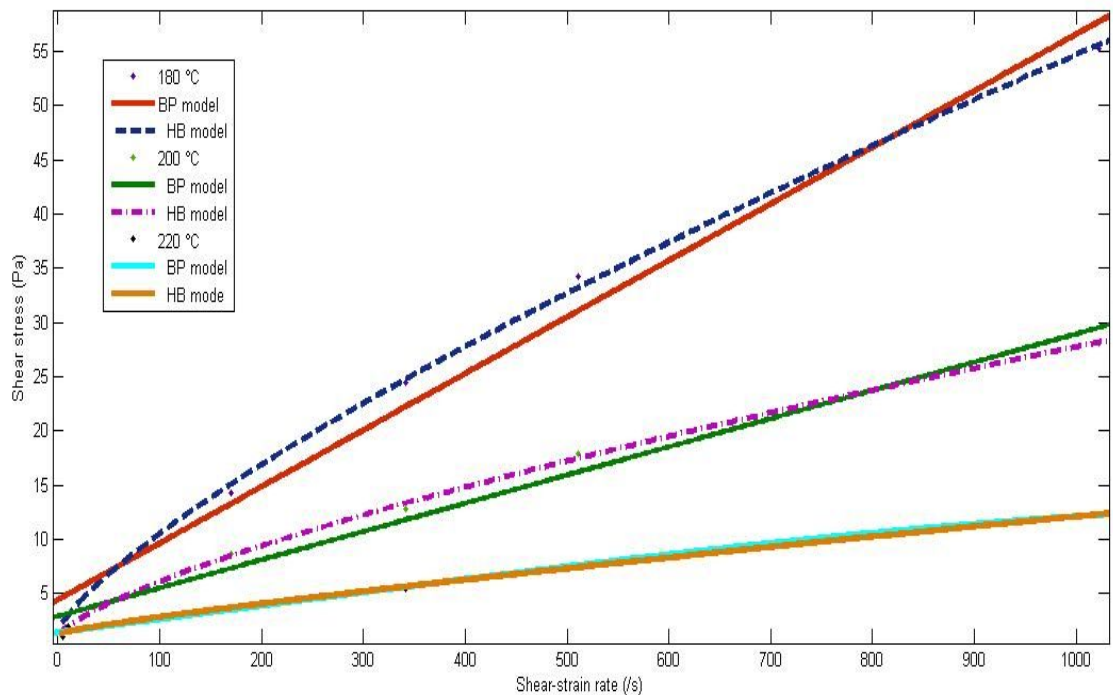
### A novel amphoteric polymer as a rheology enhancer and fluid-loss control agent for water-based drilling mud at elevated temperatures

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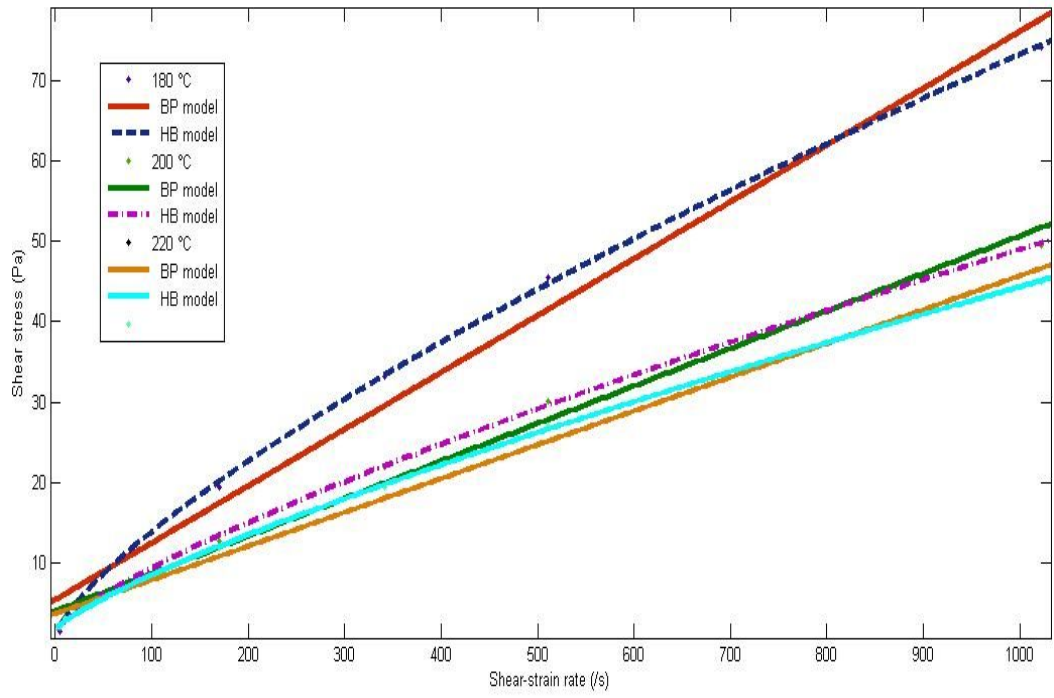
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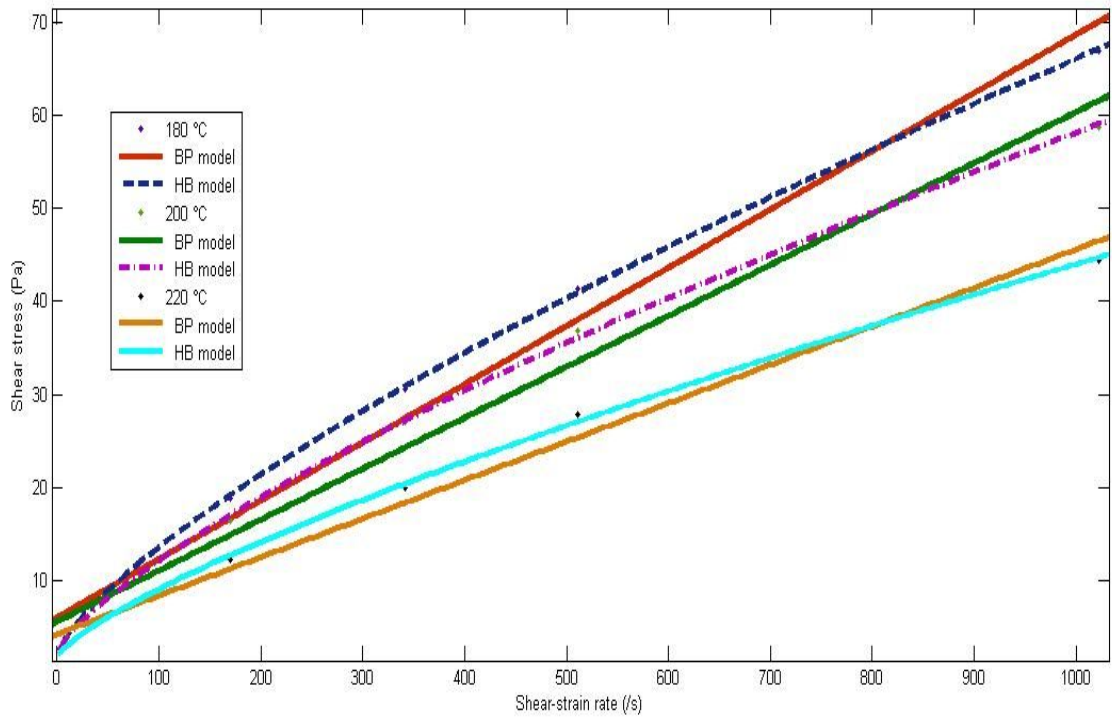
The MATLAB plots for the Bingham Plastic and Herschel-Bulkley models fittings for drilling muds studied are shown below.



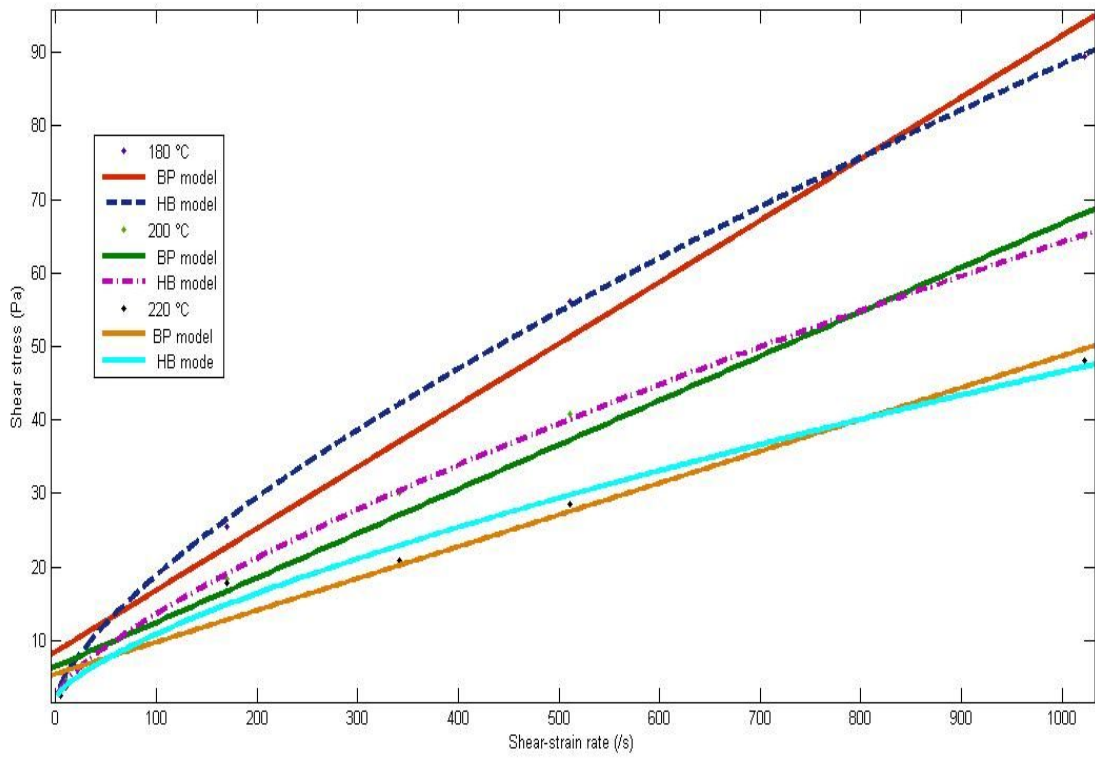
**Figure S1:** Shear stress versus shear strain rate of base fluid at different temperature



**Figure S2:** Shear stress versus shear strain rate of PAC-LV drilling fluid at different temperature



**Figure S3:** Shear stress versus shear strain rate of PAM-drilling fluid at different temperature



**Figure S4:** Shear stress versus shear-strain rate of PEX-drilling fluid at different temperatures