

Article

Effect of Asphaltenes and Asphaltene Dispersants on Wax Precipitation and Treatment

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Supporting Information

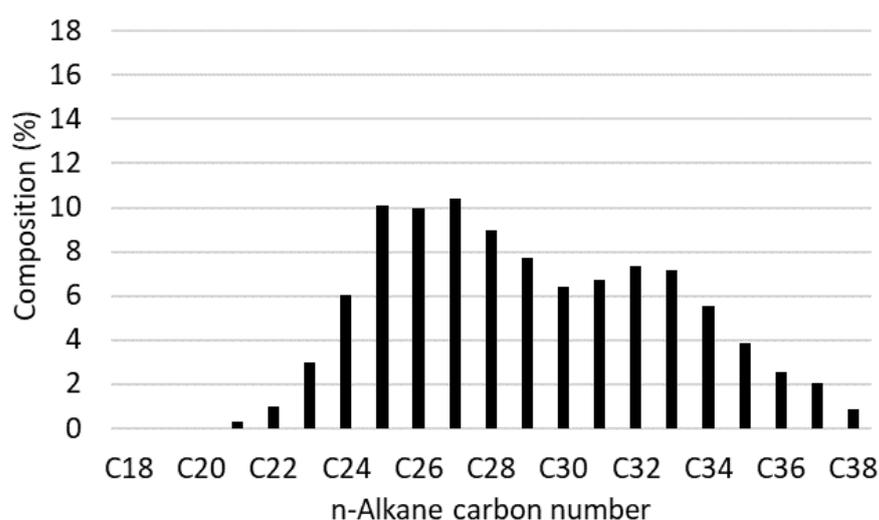


Figure S1. n-Alkane carbon number distribution of wax blend employed in experiments. Average carbon number equals 29.1 ± 3.8 .

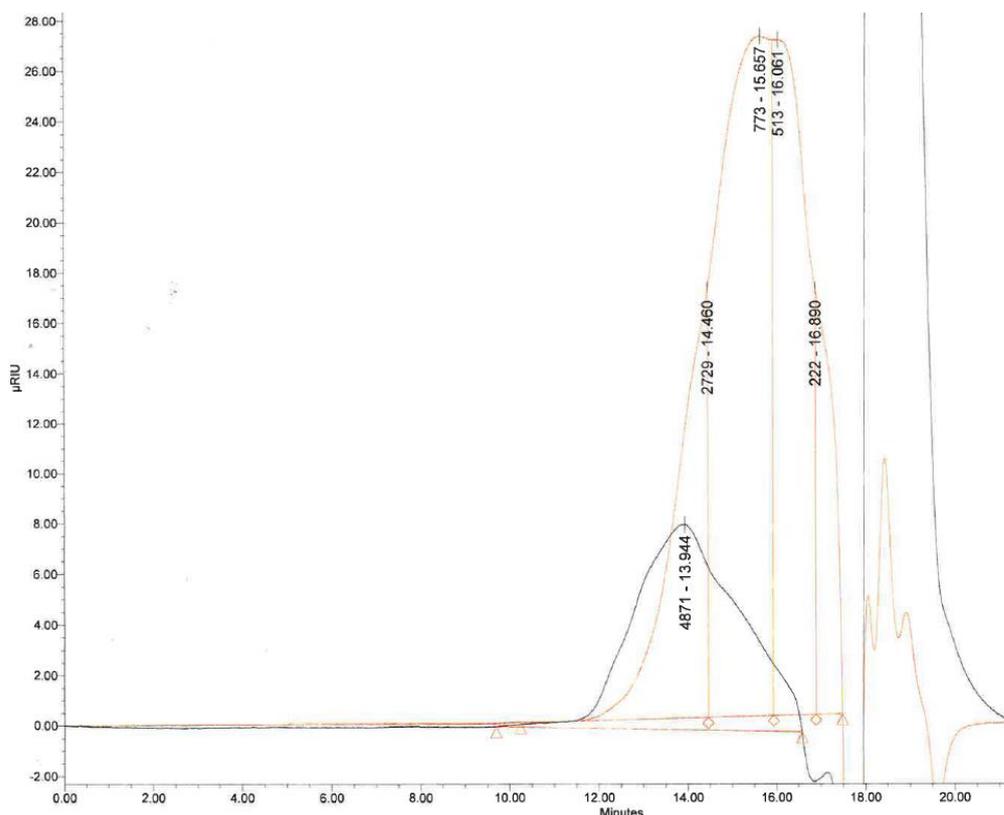
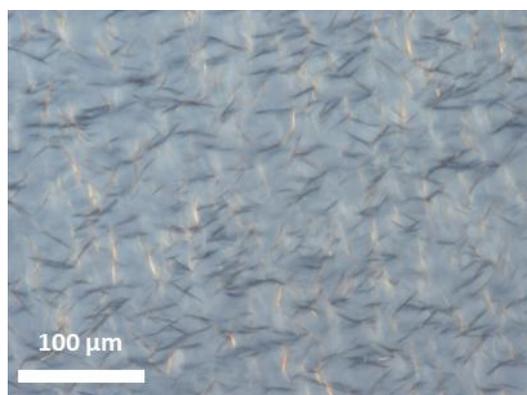
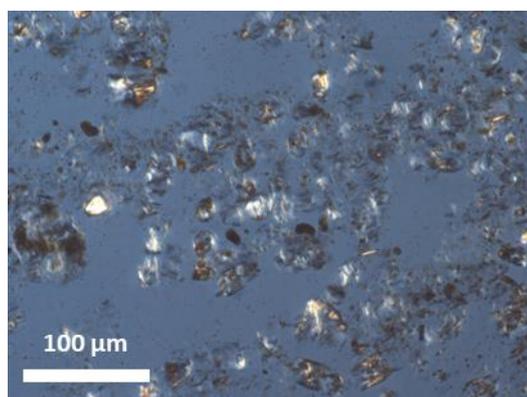


Figure S2. Refractive index vs. elution time gel permeation chromatograms of asphaltic crude (orange) and isolated asphaltenes in toluene (black) with peak and shoulder molecular weights, which represent nanoaggregates and clusters rather than individual molecules, noted.

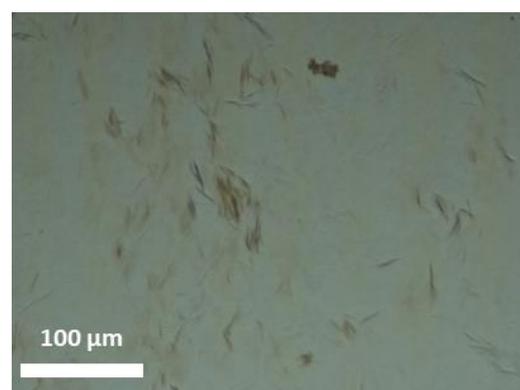


(a)

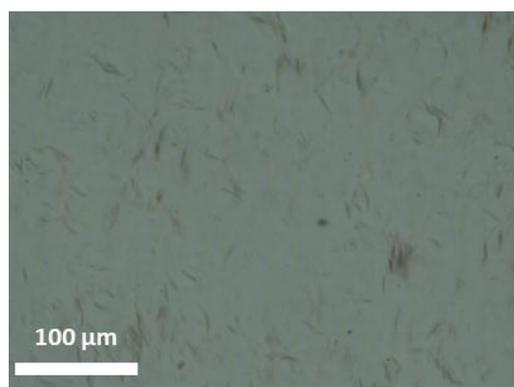


(b)

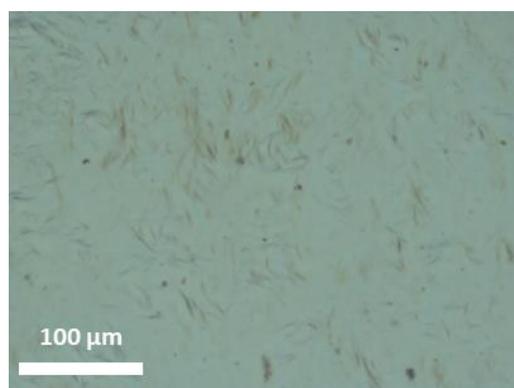
Figure S3. CPM images, taken following equilibration at 20°C, of oils (a) D_w and (b) D_w-1A.



(a)



(b)



(c)

Figure S4. CPM images, taken following equilibration at 20°C, of oils (a) **WT_w**, (b) **WT_w-AD3** and (c) **WT_w-AD4**.

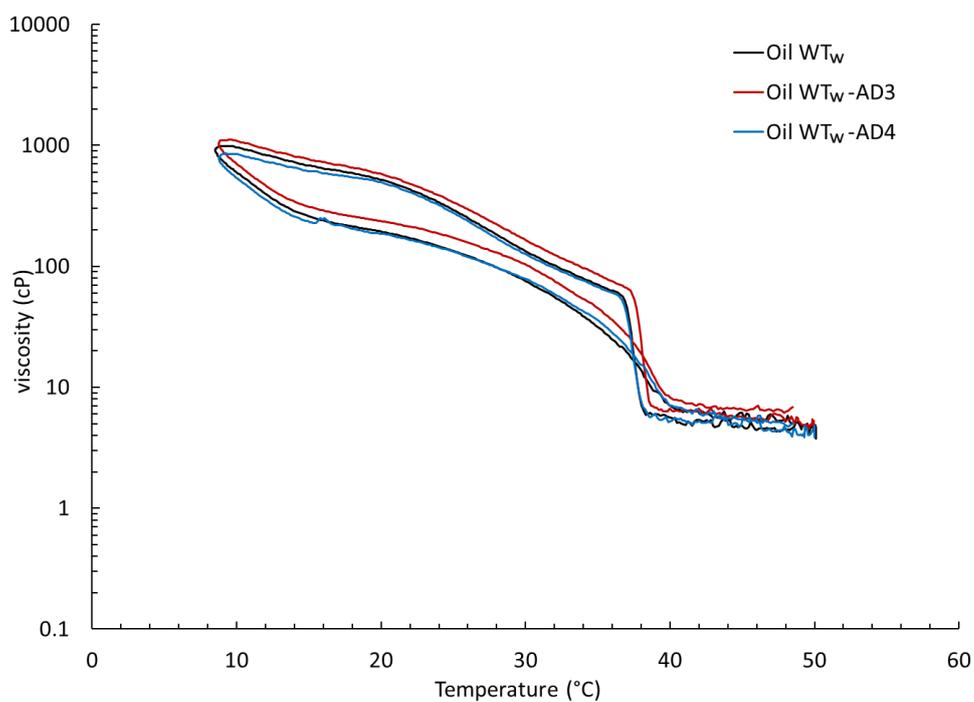


Figure S5. 50°C → 8°C → 50°C cooling-heating viscosity profiles (cP) of oils **WT** (black), **WT-AD3** (red), and **WT-AD4** (blue), each containing 10 wt. % wax.