Rheology in Practice

Applying rheological studies to your pipeline could mean everything in terms of oil output.

In order to transport oil successfully, you must first understand oils’ unique rheological properties. Why? Because heavier crude oil has a higher viscosity which impacts its’ mobility through pipelines. Less mobility hinders volume, resulting in a loss of revenue. There are various factors that can determine successful pipeline transportation under rheological observation. Identifying the pressure, temperature and time it takes to ensure a stable shear rate and strain rate can prevent pipeline problems such as pressure build up and blockage. For example,
subsea pipeline transportation of crude oil requires a comprehensive and accurate understanding of its changing environmental conditions: factors such as undersea pressure and temperature change can compromise the shear rate and result in slower volume. In the oil industry, predicting these changes is necessary for reliable oil output forecasting.

Texas OilTech has listened to these needs and opened a Rheology & Material Characterization Department in response. We are now able to characterize cements, workover fluids, produced fluids, drilling fluids, completion fluids, polyolefins, gels, adhesives and more. Equipped with our testing methods, we can assure you fast, reliable, rheological results.

by Paulina Pena

Oil & Gas News

Trade wars tip oil towards biggest monthly drop in 6 months

by staff at CNBC
May 31, 2019

The demand for oil in the US becomes increasingly low as supply drops in response to 5% tariffs imposed on all Mexican imports unless it stops illegal immigration. In addition, crude prices are not matching the decline in US stockpiles, resulting in a lost of around 300,000 barrels. Continue Reading

The Oil Market Looks Oversold

by Michael Lynch
May 31, 2019

A plethora of factors have contributed to the decline in oil prices: zero production from Venezuela, the fall in Iranian exports, and a contamination issue in the Druzhba pipeline which has indefinitely halted a major source of Russian oil. These setbacks are not only causing pressure on US oil prices, but a supply concern in European nations. Continue Reading
Meet the Expert on Rheological & Material Characterization
our staff highlight

Navid Zanganeh has been the lead rheological and material characterization lab manager at Texas OilTech Laboratories. Prior to TOL, Dr. Zanganeh worked in catalysis research at the Center for Advanced Vehicular Systems (CAVS) at Mississippi State University. Dr. Zanganeh holds a Ph.D. degree in chemical Engineering from Mississippi State University and is currently a member of AICHE and ACS. He has published seven ISI indexed peer-reviewed papers, and holds nine patents certified by the World Intellectual Property Organization (WIPO).

Upcoming Oil & Gas Events
Where to be in June: Conferences & Exhibitions

- **KPMG Global Energy Conference** Royal Sonesta Hotel Houston, June 5-9 Houston, TX
- **31st International AVL Conference “Engine & Environment”** June 6-7, Helmut-List-Halle, Graz, Austria
- **38th International Conference on Ocean, Offshore & Arctic Engineering** June 8 Crowne Plaza Hotel, Glasgow, Scotland, UK
- **16th Annual Bunker and Residual Fuel Conference** Jun 13 - 14 at the Regis in Houston, TX
- **Turbo Expo Turbomachinery Technical Conference & Exposition** Phoenix Convention Center, Phoenix, AZ Conference: June 17 - 21, Exhibition: June 18
- **20 World Drilling Conference & Exhibition** June 19-20, Milan

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