

Optimized Gel Permeation Chromatography Configuration for Characterizing Fluid Properties from Drill Cutting Extracts

Friday 24th October, 1 pm-2 pm

ABSTRACT

Drill cuttings are routinely collected from all wells and represent a valuable opportunity for characterizing reservoir fluid properties, even in the presence of oil-based mud contamination. These samples enable the estimation of fluid properties along the wellbore, particularly in intervals where conventional fluid samples are unavailable.

Gel Permeation Chromatography (GPC) is a liquid chromatography technique that separates and analyzes compounds based on their size, which correlates with molecular weight. GPC system was used to analyze a broad set of fluid samples and drill cutting extracts. These included samples contaminated with both oil-based and water-based muds, enabling robust evaluation of the method's performance across diverse drilling environments.

BIO

Gulnar Yerkinkyzy is a principal subsurface engineer at Equinor. She graduated from the University of Stavanger with a master's degree in petroleum engineering.

Gulnar started her career as a production engineer in 2012. After that, she joined PVT and Fluid Analysis group in 2018.

Since 2020, she has been involved in several research projects, including fluid property prediction using Advanced Mud Gas and Standard Mud Gas. Currently, she is a member of the fluid property prediction from drill cutting research team.

