Petrophysics of the Greybull Sandstone: Old Log Foundation for Further Exploration

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ABSTRACT

This poster session considers some petrophysical characteristics of the Lower Cretaceous (Albian) Greybull formation along the Nye-Bowler lineament in south-central Montana. This session studies the petrophysical characteristics of producing wells within this field. This field, along with the nearby Golden Dome Field, produces higher gravity low-sulfur crude, unlike the other fields along the lineament, which produce low-gravity black oil from the Greybull. Since the oil from this field is a higher quality crude, the Greybull sand here is a higher quality objective and a better subject for further study. This session uses log, production and formation top data from the Montana Oil and Gas Commission to delineate the characteristics of a productive Greybull reservoir containing high-quality crude and furnish a guide to further exploration for other similar reservoirs. The logs used in this study range very old Electric Surveys (ES), Induction- Electric Surveys (IES) and Dual Induction surveys (DIL) from a variety of service companies. These surveys provide the majority of the log data within the field and provide useful data despite their age.