Re-using old Formation MicroScanner logs to help understand reservoir and fracture development at the Dover East Field, SW Ontario, Canada

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Abstract

Schlumberger ran three FMS (Formation MicroScanner) logs in 1988 over the Black River oil bearing reservoir section in the Dover East 7-5-VE field. Microresistivity variations recorded by the FMS tool were converted into digital color images using standard processing parameters. At the instruction of Liberty Oil & Gas the main objective was to provide a continuous log of interpreted dip results and near-wellbore images and to answer the following:

- Do we see systematic trend(s) to the fracture orientation?
- Can we determine fracture distribution and orientation (single and multi-wells)?
- Is there a relationship between fractures orientation/density and production?