

Contradictory Approaches in Borehole Imaging of Oil Sands Plays

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Summary

Since the first Oil Sands FMS was recorded for Syncrude in 1987, borehole image logs have illuminated and enhanced our understanding of subsurface stratigraphic geometries and geology. Although our understanding of these environments has developed significantly in the intervening years, there is still a wide range in how operators use borehole image data in developing oil sands plays. For example, some operators core every well and some core in the neighborhood of one in twenty of their in-situ wells. Some record image logs on every well and some log images in some fraction of the wells in a field. Such a wide variety of practices from operator to operator in a mature play leads to some pointed questions:

- Why do some operators core every well and log images on just a few; why do some do the opposite?
- Why are some companies adding acoustic image tools for imaging cap rock fracturing when electrical images are traditionally considered superior to acoustic images tools for fracture determination?
- What is the difference between interpretations derived from core and those derived from image logs?
- Why do some images fail and others look great?