Geochemistry: Another Tool for Predicting Steam Chamber Development in SAGD

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Summary

Monitoring and evaluating SAGD steam chamber development is an essential part of SAGD operations. Several tools are utilized to accomplish this, including observation well temperature and pressure information, along with 4D seismic, and must be integrated with existing background geological datasets to understand the full life cycle of a SAGD steam chamber. Geochemistry data is one such dataset that can provide an understanding of reservoir quality and how SAGD operations may be impacted. Suncor will present a McMurray Formation reservoir core that contains all 3 above mentioned datasets: temperature data, 4D seismic, and Geochemistry information within an active SAGD area of MacKay River. Our findings will be presented with the intent to discuss the benefits and challenges of utilizing geochemistry data in this manner.