

State A Marker Oil Production within the Williston Basin of Southeast Saskatchewan (Mississippian, Frobisher Beds)

John Lake*

Geological Services Inc., Swift Current, Saskatchewan, Canada

lakegeol@saktel.net

and

Donald Kent

D.M. Kent Consulting Geologist Ltd., Regina, Saskatchewan, Canada

Abstract

Horizontal well technology has made the State A Marker a viable target for oil production in southeast Saskatchewan. The reservoir is a porous microcrystalline dolomite facies within the State A Marker. The productive interval is locally referred to as the “Frobisher Marly”. The play has not been mapped regionally to date and the upside potential of the oil-producing interval has not been evaluated.

The State A Marker was deposited as a Highstand Systems Tract on top of the Frobisher Vuggy Sequence Boundary. Hydrocarbons are trapped laterally by a stratigraphic facies change and vertically by evaporites of the Frobisher Evaporite Marine Regression. The core display will evaluate the depositional environment , facies distribution, reservoir quality and trapping potential of this resource.