

## **Elongate tidal bar, amalgamated sub-tidal channel and estuarine point-bar successions of a sand-dominated open estuarine system; integration of outcrop and subsurface data, McMurray Formation, Ft. McKay, Alberta**

**Rudy Strobl<sup>1</sup>, Milovan Fustic<sup>1</sup> and Bryce Jablonski<sup>1</sup>**

<sup>1</sup>*Statoil Canada Ltd, Calgary, Alberta*

### **Abstract**

The Viewpoint and Amphitheatre outcrops near Ft. McKay, Alberta are visited frequently by geoscience and engineering staff on oil-sands field seminars, but interpretation is usually restricted to the lateral extent of the outcrops themselves. This paper integrates outcrop with subsurface borehole data to (i) map and interpret the reservoir quality on a well-pad scale, which can be used to further refine SAGD geomodels to help with mapping the 3-D geometries and (ii) demonstrate utility of outcrops for interpreting geology from core data. Comprehensive descriptions of these two outcrops are provided by Wightman et al., (1992), Wightman and Pemberton (1997) and Hein et al., (2001). Flach (1984). Wightman and Pemberton (1997) and Strobl et al., (1997) introduce the concept of paleo-topography, highlands on the Devonian surface and associated salt-dissolution as possible controls on depositional systems in the Ft. McKay area.