A Geological Comparison of Six Projects in the Athabasca Oil Sands

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Abstract

Several projects in the Athabasca Oil Sands are in the pilot stage or early stages of commercial production using Steam Assisted Gravity Drainage (SAGD). Information on the projects may be gleaned from EUB applications, annual reports and conference presentations. Production data is also becoming available and cores from each project are now in the public domain. A search and compilation of available data provides a basis for the geological comparison of six of the most advanced projects. The projects selected for this comparison are: Suncor Firebag, Petro-Canada MacKay, ConocoPhillips Surmont, EnCana Foster Creek, OPTI/Nexen Long Lake and EnCana Christina Lake. All of these projects are located in areas where there is good development of multiple stacked channels and estuarine sands within the middle member of the Lower Cretaceous McMurray Formation.