

**LATE JURASSIC TO ALBIAN PALEOGEOGRAPHY
OF THE NORTHERN YUKON AND NORTHWEST-
ERN DISTRICT OF MACKENZIE, ARCTIC CANADA**

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Kimmeridgian to Albian strata in northern Yukon and northwestern District of Mackenzie consist entirely of clastic material. The succession can be divided into at least six major depositional sequences. Each sequence represents a basin-wide, regressive-transgressive megacycle, within which may be several minor cycles, generally local in distribution.

The Kimmeridgian to Aptian sequences all appear to have had their main source area to the south and east. During the Late Hauterivian to Aptian a possible local northerly to northeasterly source area may have been present north of the modern Mackenzie Delta. A westerly source area cannot be identified with certainty until Albian time, when turbidites were deposited in northern Yukon and which apparently were derived from the west. Marine strata dominate the preserved record of the depositional

sequences, although significant amounts of nonmarine strata are present in parts of the Upper Valanginian to Lower Hauterivian succession.

Oil and gas have been recovered from Cretaceous strata and the source rock for some of these hydrocarbons has been identified as the Upper Cretaceous Boundary Creek Formation, and for others, the Jurassic-Cretaceous Husky Formation. However, the overall hydrocarbon resource potential of Jurassic-Cretaceous strata is probably not high.