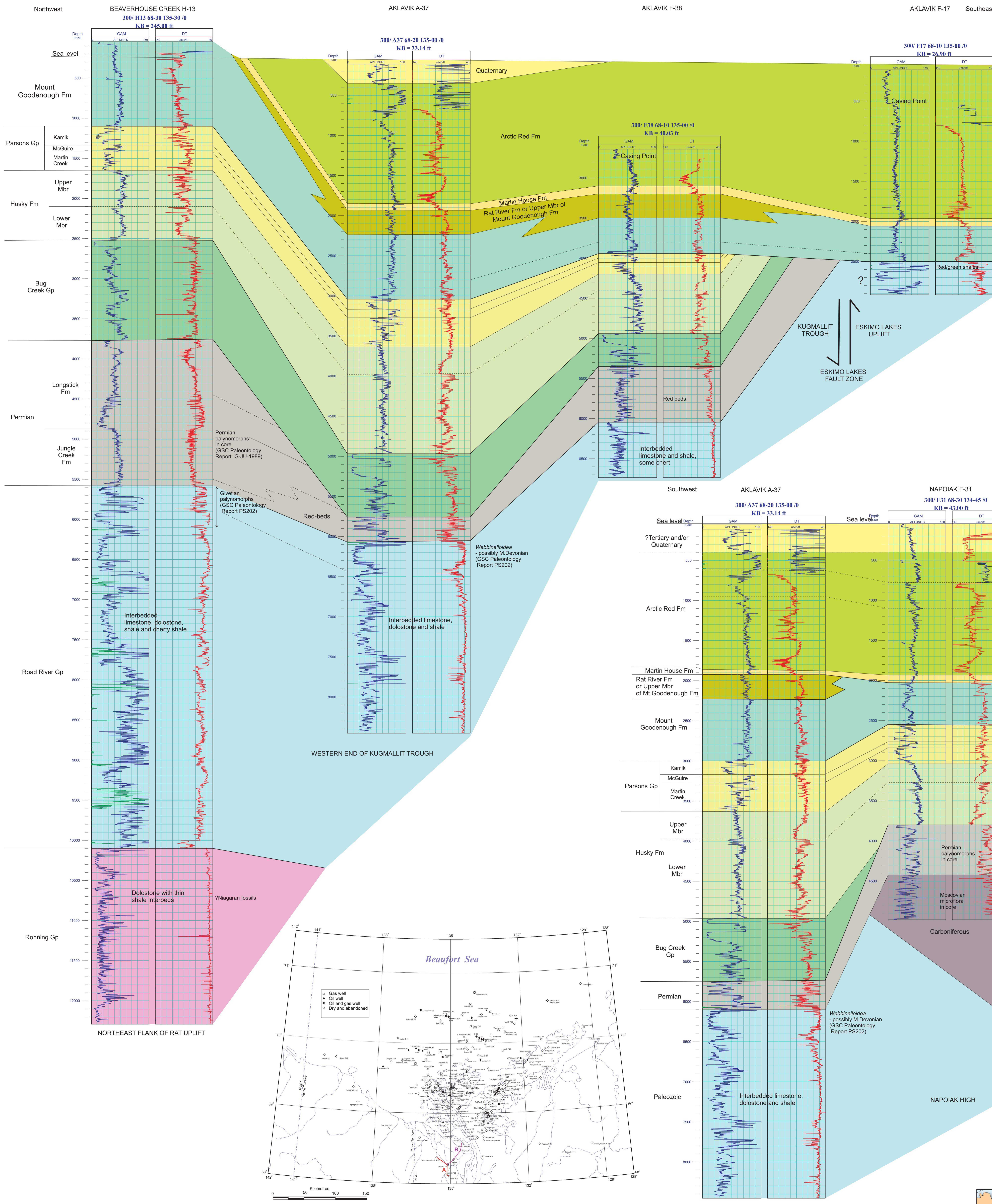


SECTION A



NOTES

The two cross sections (A and B) illustrate stratigraphic correlations between seven wells from the southernmost part of the Mackenzie Delta. Eight wells have been drilled in this area of the Delta: Aklavik A-37, F-17, and F-38, Napartok M-01 and D-04, Napoiaq F-31, Itiginkpak F-29, and Beaverhouse Creek H-13, although at the time of writing this report Napartok D-04 was not available for public viewing. These wells are situated at the southwest end of the predominantly Mesozoic Kugmallit Trough and straddle the Eskimo Lakes Fault Zone. The Aklavik A-37 and F-38, Beaverhouse Creek H-13, Napoiaq F-31, Napartok M-01 and D-04, and the Itiginkpak F-29 wells are within the trough, and Aklavik F-17 sits on the Eskimo Lakes Uplift. Beaverhouse Creek H-13 also lies on the northeast flank of Rat Uplift and is separated from the Aklavik A-37 well by the Donna River Fault Zone. None of the wells tested hydrocarbons, nor were there any indications for the presence of hydrocarbons.

The correlations illustrate the preservation of Mesozoic strata in the Trough and erosion on the Eskimo Lakes and Rat uplifts, especially at the sub-mount Goodenough unconformity (Section A). Section B also illustrates the northeastward thinning of the Jurassic Bug Creek Group, some of which is depositional but also through erosion at an intra-Bug Creek unconformity (Poulton et al., 1982). Thinning of Mesozoic strata in the Napoiaq well (Section B) reflects a minor positive element within the Kugmallit Trough, abutting the Eskimo Lakes Fault Zone, the Napoiaq High (Dixon, 1982).

Paleozoic stratigraphy is less well known but the northeastward progressive truncation to deeper stratigraphic levels is apparent on Section B.

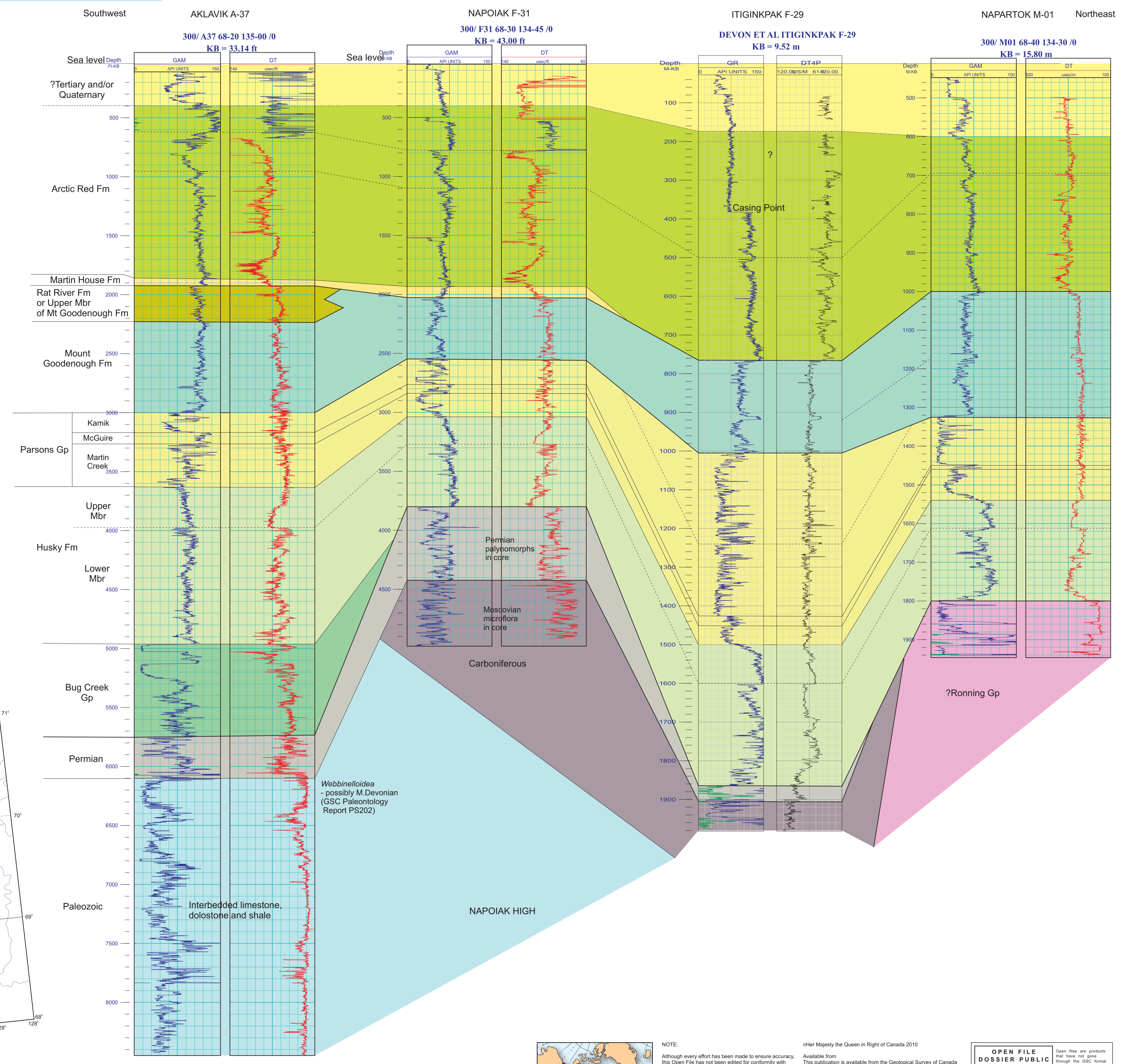
Mesozoic, Permian, and Upper Devonian strata are siliciclastic, whereas Middle Devonian and older Paleozoic strata are predominantly carbonates. Carboniferous strata tend to be a mixture of carbonates and siliciclastics.

References

Dixon, J., 1982. Jurassic and lower Cretaceous subsurface stratigraphy of the Mackenzie Delta – Tuktoyaktuk Peninsula, N.W.T.; Geological Survey of Canada, Bulletin 349, 52 p.

Poulton, T.P., Leskiv, K., and Audretsch, A., 1982. Stratigraphy and microfossils of the Jurassic Bug Creek Group of northern Richardson Mountains, northern Yukon and adjacent Northwest Territories; Geological Survey of Canada, Bulletin 325, 137 p.

SECTION B



OPEN FILE 6617: CORRELATIONS BETWEEN WELLS IN THE SOUTHERNMOST PART OF MACKENZIE DELTA, NORTHWEST TERRITORIES (Sonic and Gamma-ray logs).

J. Dixon

NOTE: Although every effort has been made to ensure accuracy, this Open File has not been edited for conformity with the Geological Survey of Canada style manual. It is available for download free of charge from GeoPub (http://geopub.mcg.ca).

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