

## RECENT OIL SHALE EXPLORATION RESULTS IN NEW BRUNSWICK, CANADA

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Extensive kerogen-rich shale and mudstone intervals occur in the southeast portion of the province of New Brunswick in eastern Canada. These are the best studied and feature some of the highest yields of shale oil among the documented occurrences of oil shale in Canada.

The oil shale occurs within the Lower Carboniferous Albert Formation in the Moncton sub-basin, which is part of the Maritimes Basin in Atlantic Canada. Oil shale been studied in some detail near the village of Albert Mines, where a potentially significant resource is apparent but has not been reliably quantified to date. Interest in the Albert Mines area began in the 1840's with the discovery and subsequent mining of a solid vein of bitumen that is hosted by oil shale.

Limited previous exploration in the Albert Mines area indicates that oil shale yielding in the range of 50 to 100 litres per tonne occurs over a significant area. The host sequence to the oil shale horizons consist of thin-bedded sandstone, siltstone, laminated dolomitic mudstone and minor intraformational conglomerate. These units are interpreted to have been deposited in a continental lacustrine to fluvial-lacustrine deltaic setting within a northeast trending, regional half-graben. Subsequent basin inversion resulted from initial regional transpression and strike slip fault movement followed by development of a fold-thrust belt.

A recently completed exploration drilling program has allowed construction of a preliminary three-dimensional geological model of the Albert Mines area, which shows thick multiple oil shale horizons are upright and disposed within a southwest plunging anticline.