Occurrence Details

Occurrence Number: 106E 013
Occurrence Name: Marathon
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 12/16/2025 7:35:46 AM

General Information

Primary Commodities: coal
Aliases: Airstrip
Deposit Type(s): Coal
Location(s): 65°13'4" N - -135°16'42" W
NTS Mapsheet(s): 106E03
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The presence of coal float on the bars of Wind River, about 15 km downstream, was noted by the Geological Survey of Canada in 1905. This target was acquired as Coal Exploration Licence #79 in Nov/77 by Pan Ocean Oil Ltd, which carried out geological mapping and drilled 1 hole (111 m) in 1979 and 1 hole (276 m) in 1980.
The area was relicensed as #136 in Nov/80; as #368 in Nov/83; and as CYM0011 to P. Wheelton in Dec/2001.

Capsule Geology

Three coal seams are present in a Late Cretaceous (Cenomanian to Maastrichtian) section of conglomerate, sandstone and shale that forms the middle unit of the Bonnet Plume Formation. The coarse clastic rocks were laid down in wet alluvial fans and braided rivers while the associated silt, mud and coal were deposited in lacustrine, paludal and overbank flood plain environments and were preserved by rapid progradation of conglomeratic fluvial sequences.
The coal deposit occurs within a WNW-trending syncline about 5.5 km long and 3.5 km wide. The steepest dips of up to 30 or 40 degrees occur on the northeast flank. Three seams outcrop along the Wind River but only the upper two were intersected by drilling. They have been correlated with the upper 3 seams at the Illtyd deposit (Minfile Occurrence #106E 035). The upper (#1) seam averages 5.5 m thick. Shale and conglomerate form the hanging wall and shale only forms the footwall. The #2 seam lies 58 m beneath the #1 seam. It is 4.9 m thick and is interbedded with shale. Inferred in-situ reserves are 18 400 000 tonnes of high volatile, bituminous C non-coking coal.

References

AURUM GEOLOGICAL CONSULTANTS INC., 1994. Yukon Coal Inventory 1994. Energy and Mines Branch, Economic Development, Yukon Territorial Government, 169 p.

GEOLOGICAL SURVEY OF CANADA Annual Report 1905, Vol. 16, Part C, p. 30.

GEOLOGICAL SURVEY OF CANADA Paper 76-6; Paper 78-1A, p. 339-401.

GEOLOGICAL SURVEY OF CANADA 1980, Open File 715.

NORRIS, D.K., ET AL., 1993. The geology, mineral and hydrocarbon potential of the Northern Yukon Territory and Northwestern District of Mackenzie. Geological Survey of Canada Memoir, in press.

PAN OCEAN OIL LTD, COAL DEPT, Jan/81. Assessment Report #062055 by O.R. Cullingham, G. Germscheid, D. Garrison, J.S. McKinney, A. Hargrave and D.C. Hope.

Work History

Date	Work Type	Comment
12/31/1980	Drilling	Number of holes drilled: 1 Amount of work done: 276 METRES
12/31/1979	Drilling	Number of holes drilled: 1 Amount of work done: 111 METRES
12/31/1979	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095826	2004	Wind River Caolfield Assessment Report	Property Evaluation - Other		
062149	1982	Summary of Environmental Programs Competed in 1981, and an Outline of Projects Planned for 1982	Research/Summarize - Pre-existing Data, Environmental Assessment/Impact - Studies		
062143	1982	Bonnet Plume 1982 Water Sampling Program	Environmental Assessment/Impact - Studies		
062142	1982	Bonnet Plume 1982 Environmental Programmes	Environmental Assessment/Impact - Studies		

062150	1981	An Overview of the Vegetation, Wildlife and Fish Resources of the Bonnet Plume Lease, Northeastern Yukon Territory	Research/Summarize - Pre-existing Data, Biophysical Mapping - Studies, Environmental Assessment/Impact - Studies, Pre-feasibility - Studies		
062114	1981	Preliminary Feasibility Mining Study Illtyd Creek Deposit Bonnet Plume Coalfield	Pre-feasibility - Studies		
061966	1980	Report on Geology an Exploration of the Bonnet Plume Basin Yukon Territory	Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Resource Estimate - Studies		
061888	1979	Report Reserves and Grade of Coal in the Bonnet Plume Basin	Feasibility - Studies, Preliminary Economic Assessment - Studies		
061889	1979	Economic, Environmental & Socio-Economic Considerations	Environmental Assessment/Impact - Studies, Preliminary Economic Assessment - Studies		
061805	1979	Report on the Geology of the Bonnet Plume Basin Yukon Territory as Determined by the 1978 Field Season	Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology		
061807	1978	Bonnet Plume Coalfield Tonnages and Grade of Coal in Support of a Proposed Thermal Generating Station in the Yukon Territory	Feasibility - Studies		
061806	1978	Yukon Thermal Power Generating Study for Pan Ocean Oil Limited	Feasibility - Studies		

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
1980	MARATHON (OPEN PIT)	Historical Estimate	coal	23297.2 kJ/kg	18,400,000		No	No	Unknown
High quality thermal coal ranked as volatile C bituminous. Weighted average proximate analysis of 14.3% Ash.; Assessment Report #062055 by O.R. Cullingham.									