



Occurrence Details

Occurrence Number: 106E 021

Occurrence Name: Pole

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 4/29/2025 2:18:55 AM

General Information

Primary Commodities: coal

Aliases: Wernecke

Deposit Type(s): Coal

Location(s): 65°12'25" N - -135°1'33" W

NTS Mapsheet(s): 106E03

Location Comments: 1 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Acquired as Coal Exploration Licence #77 in Nov/77 by Pan Ocean Oil Ltd, which staked the mineral rights as Pole cl (YA30733) in Jun/78, and carried out geological mapping and drilled 1 hole (117 m) in 1978 and 2 holes (660 m) in 1980. The area was relicensed as #134 in Nov/80; #366 in Nov/83; and CYM0012 by P. Wheelton in Dec/2001.

Capsule Geology

Three coal seams outcrop 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 deposit occurs within a 25 to 35°, south-dipping monocline that is well defined for a length of 4.5 km and partially defined for an additional 2.5 km. The coal-bearing sequence is fault bounded on both sides. Only the two upper seams were intersected in drillholes and included in reserves.

The uppermost (#1), which has been correlated with the upper seam at the Iltyd deposit (Minfile Occurrence #106E 035), contained an average of 5.7 m of mineable coal within an 8.5 m thick seam. It has a conglomerate hanging wall and a shale footwall. The #2 seam lies 30 m beneath the #1 seam and averages 9.5 m thick, with similar wallrocks.

The coal has the following specifications: yield 67.8%, moisture 4.6%, ash 11.1%, volatiles 36.0%, fixed carbon 48.4% and specific energy of 23 297.2 kJ/kg. Indicated and inferred in-situ reserves are estimated at 104 650 000 and 28 930 000 tonnes, respectively, 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 1980, Open File 715.

GEOLOGICAL SURVEY OF CANADA Paper 76-8; Paper 78-1A, p. 399-401.

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, 1978. Assessment Report *#061805 by J.S. McKinney.

PAN OCEAN OIL LTD, 1978. Assessment Report *#061806 by Z. Kolisnyk.

PAN OCEAN OIL LTD, 1978. Assessment Report *#061807 by J.S. McKinney.

PAN OCEAN OIL LTD, 1979. Assessment Report *#061887 by O.R. Cullingham and D. Hope.

PAN OCEAN OIL LTD, 1979. Assessment Report *#061888 by O.R. Cullingham and D. Hope.

PAN OCEAN OIL LTD, 1979. Assessment Report *#061889 by D.E. Nutter.

PAN OCEAN OIL LTD, Feb/80. Assessment Report #061966 by O.R. Cullingham.

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: 2 Amount of work done: 660 METRES
12/31/1978	Drilling	Number of holes drilled: 1 Amount of work done: 117 METRES
12/31/1978	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095603	2006	Assessment Report Describing Airborne Geophysics and Digital Data Compilation at the Win Property	Magnetic - Airborne Geophysics, Data Compilation - Pre-existing Data		
095826	2004	Wind River Coalfield Assessment Report	Property Evaluation - Other		
062149	1982	Summary of Environmental Programs Completed 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 Illyd Creek Deposit Bonnet Plume Coalfield	Pre-feasibility - Studies		
062055	1980	Report on Geology an Exploration of the Bonnet Plume Basin Yukon Territory	Diamond - Drilling, Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Environmental Assessment/Impact - Studies, Resource Estimate - Studies	53	10700
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	POLE (OPEN PIT)	Historical Estimate	coal	23297.2 kJ/kg	28,930,000		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.									
1980	POLE (OPEN PIT)	Historical Estimate	coal	23297.2 kJ/kg	104,650,000		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.									