Occurrence Details

Occurrence Number: 115G 009
Occurrence Name: Windgap
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 3:05:42 AM

General Information

Secondary Commodities: coal
Deposit Type(s): Coal
Location(s): 61°15'44" N - -139°7'15" W
NTS Mapsheet(s): 115G06
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Coal was found in this area about 1952 by the GSC and was mapped and trenched in 1970-71 by N.H. Ursel & Assoc. L. while evaluating Coal Exploration Licences 14 and 18.

Capsule Geology

The occurrence is located in Wrangellia, an accreted terrane extending 2340 km from Alaska to southern B.C.. In the area of the occurrence, Wrangellia is bounded to the northeast by the Denali Fault System and to the southwest by the Duke River Fault. The oldest Wrangellian rocks in the region are the Pennsylvanian to Permian Skolai Group volcanic and sedimentary rocks. The Skolai Group is stratigraphically overlain by Middle(?) Triassic phyllite, Upper Triassic Nikolai formation basalt and Upper Triassic McCarthy Formation Limestone and phyllite. Tertiary volcanic and sedimentary rocks unconformably overlie the sequence.
Two major suites of intrusive rocks are present in the belt. The oldest is Triassic and includes gabbro, peridotite, dunite and clinopyroxenite of the Kluane mafic-ultramafic complex and gabbro sills and dykes of the Maple Creek Gabbro. The Maple Creek gabbro is though to be coeval with the Kluane mafic-ultramafic complex and to have acted as a feeder to the Nikolai formation. The Cretaceous Kluane Ranges suite are dioritic to granodioritic in composition and occur throughout northern Wrangellia. Minor Tertiary sills, dykes and stocks of felsic to intermediate composition are also present.
The occurrence lies within the Eocene-Oligocene Amphitheatre Formation, a package of terrestrial sediments and coal deposited in structurally controlled basins related to the Denali fault system. Coal seams have been located in three separate areas within the Amphitheatre Formation. The northwestern location, which is the one originally described by the GSC, consists of two seams 0.9 and 1.8 m thick separated by 4 m of shale. Float occurrences suggest that as many as four seams may be present. Sampling in 1970 indicated that both seams are Sub-Bituminous C and non-coking.
A similar section consisting of 3 seams aggregating 4.0 m of coal in a 15 m interval was measured 4 km to the south at approximately the same stratigraphic level. Another 4.3 m seam with claystone interbeds that occurs about 238 m lower in the section is separated by a 1 m thick porphyritic sill and the coal has been altered to natural coke on either side. Sampling in 1970 indicated it to be Sub-Bituminous A and non-coking.
The third area, situated about 3.2 km southeast of the first, was discovered in 1971. It consists of two seams 2.0 m and 0.8 m thick located about 600 m apart at approximately the same stratigraphic level. All the coal seams in the district contain pale yellow lump resin that may be suitable for the manufacture of printing ink.

References

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DODDS, C.J., AND CAMPBELL, R.B., 1992. Overview, legend and mineral deposit tabulations for Geological Survey of Canada Open Files 2188, 2189, 2190 and 2191.

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ISRAEL, S. and VAN ZEYL, D., 2004. Preliminary bedrock geology of the Quill Creek area (parts of NTS 115G/5, 6, 12), southwest Yukon (1:50 000 scale). Yukon Geological Survey, Open File 2004-2.

ISRAEL, S., TIZZARD, A. and MAJOR, J., 2005. Geological map of the Duke River area (parts of NTS 115G/2, 3, 5, 6, 7), Yukon (1:50,000 scale). Yukon Geological Survey, Open File 2005-11.

MINERAL INDUSTRY REPORT 1969-70, p. 153-154.

N.H. URSEL AND ASSOCIATES LTD, Oct/70. Assessment Report *#060989 by E.L. Speelman.

N.H. URSEL AND ASSOCIATES LTD, 1971. Assessment Report *#019866 by E.L. Speelman.

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READ, P.B. and MONGER, J.W.H., 1976. Pre-Cenozoic assemblages of the Kluane and Alsek Ranges, southwest Yukon Territory. Geological Survey of Canada, Open File 381, 96 p.

Work History

Date	Work Type	Comment
12/31/1970	Geology	

12/31/1970	Trenching	
12/31/1952	Geology	Originally found by Geological Survey of Canada.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
060988	1971	Report on Niamodlaoc Mountain Coal Prospect	Rock - Geochemistry, Silt - Geochemistry, Prospecting - Other		
019866	1971	[Report on Reconnaissance of Burwash Creek and Niamodlaoc Mountain Coal Prospect]	Prospecting - Other		
060989	1970	Report on Niamodlaoc Mountain Coal Prospect, 1970 Field Season	Rock - Geochemistry		