

Occurrence Details

Occurrence Number: 116B 005 Occurrence Name: Colliery Occurrence Type: Hard-rock

Status: Deposit

Date printed: 12/18/2025 12:03:06 PM

General Information

Secondary Commodities: coal Deposit Type(s): Coal

Location(s): 64°8'1" N - -138°56'34" W

NTS Mapsheet(s): 116B02 Location Comments: .5 Kilometres Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as coal lease 209 in Aug/98 by Mimosa J. Gates, which triggered a small staking rush. Development was commenced by Alaska ECL about 1899. Workings consisted of a 122 m decline and a short drift from the 69 m point. The mine operated for about four years and supplied coal for domestic heating in Dawson City and the Klondike District. The Eureka quartz claim (12535) was staked nearby in Oct/15.

In 1937, J.D. Simpson and associates reopened the old mine and drove some short exploratory workings. The property was idle in 1938 but was worked in late 1939 and 1940 by D.W. Ballentine, who sold a few tonnes in Dawson.

In Sept/93, L. Carlyle staked coal leases Y-455 and Y-456 on map sheet 116 B-2. These leases included the Gates Mine. In Jun/94, Carlyle cut out a helicopter pad and carried out prospecting and a small VLF-EM geophysical program. In Jun/95 Carlyle attempted to reopen the adit and dug two hand trenches. In Sep/95 Carlyle terminated the leases.

Capsule Geology

The Gates Mine produced lignite that outcrops with micaceous sandstone in the bank of a low, rounded hill. Two seams are present, an upper bed 0.6 m to 0.9 m thick separated by 0.1 m of claystone from a lower seam 0.9 m thick. Analysis gave 40.99% fixed carbon and 5.9% ash on the upper seam and 37.5% fixed carbon and 9.3% ash on the lower seam, and a gross calorific value between 7.95 and 13.31 MJ/kg from both.

A nearby 20 cm thick coal seam analyzed by the GSC in 1979 contained 16.8% ash, 31.5% volatile matter, 26.8% fixed carbon and 0.55% sulphur. This seam is subbituminous C coal with a gross calorific value of 16.49 M1/kg.

In 1994 Carlyle found the mine portal covered by a slump and filled with ice. A sample of coal collected by Carlyle from an exposed seam returned values similar to those obtained by the GSC in 1979. In 1995 Carlyle uncovered enough of the portal to determine that the mine had sustained a large fire such that the previous owners had been forced to flood the mine in order to extinguish it. Two trenches were dug on the hilltop above the mine in an attempt to locate outcropping coal seams but neither located any coal.

References

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

CARLYLE, L.W., Oct/94. Assessment Report #093240 by L. Carlyle.

CARLYLE, L.W., Sep/95. Assessment Report #093367 by L. Carlyle.

GEOLOGICAL SURVEY OF CANADA Annual Report 1900, Part A, p. 37-52.

GEOLOGICAL SURVEY OF CANADA Memoir 218, p. 13-15.

GEOLOGICAL SURVEY OF CANADA Memoir 234, p. 27.

GEOLOGICAL SURVEY OF CANADA Paper 79-32, p. 8, 13, 15, 19.

OGILVIE, WILLIAM, Jan/1897. Correspondence to Department of the Interior, Ottawa, 18 Aug/1896. Reprinted in: Information Respecting the Yukon District, etc., Department of the Interior, p. 62.

Work History

Date	Work Type	Comment	
12/31/1995	Trenching		
12/31/1994	Ground Geophysics	Also VLF survey.	
12/31/1994	Other		
12/31/1940	Development, Underground	Minor amount of coal mined and sold in Dawson.	
12/31/1939	Development, Underground	Small scale mining. No production records.	

12/31/1899	Development, Underground	A 122 m decline and a short drift at the 69 m point on the decline.	
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Assessment Reports that overlap occurrence							
Report Number	Year Little		Worktypes	Holes Drilled	Meters Drilled		
093367	1995	Report on the 1995 Work Program Coal Exploration Licences Y-455 and Y-456	95 Work Program Coal Exploration Licences Y-455 Rehabilitation - Development, Underground, Hand - Trenching				
093240	1994 Report on the 1994 Work Program Coal Exploration Licences Y-455 and Y-456		Rehabilitation - Development, Underground, Rock - Geochemistry, EM - Ground Geophysics, Cursory Property Visit - Other, Line Cutting - Other, Prospecting - Other				

Related References						
Number	Title	Page(s)	Reference Type	Document Type		
ARMC016773	Geology map - 116B/2 - Rabbit Creek		Property File Collection	Geoscience Map (Geological - Bedrock)		