



Occurrence Details

Occurrence Number: 105D 042
Occurrence Name: Whitehorse Coal
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 4/28/2025 4:37:20 PM

General Information

Primary Commodities: coal
Aliases: Black Diamond
Deposit Type(s): Coal
Location(s): 60°29'50" N - -135°17'8" W
NTS Mapsheet(s): 105D06
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Discovered in 1899 by a Mr Johnson and staked as coal lease 1239 in Sep/1900 by Robert Lowe. Lease 1473 was staked the following month by J.E. Beatty, assistant engineer for the White Pass & Yukon Railway. The leases were acquired by Whitehorse Coal CL, which drove a 18 m adit and another short tunnel on two seams exposed in a creek gulch (now called the Fisher Creek showing) and an open cut on a second showing (now the Main Showing of Whitehorse Coal Corp) about 0.8 km east, all in 1901. The coal from the adit was hauled to Whitehorse and tested by the railway.

The property was idle until 1969 when it was examined by Luscar L as part of Coal Exploration Licence 3, although the U.S. Army reportedly investigated it about 1943. It was later acquired as Coal Mining Leases 2989-2991 in Jun/81 by Whitehorse Coal Corp (Echo Developers L), which performed road construction, trenching and open cut mining in 1982 and 1983, rotary drilling in 1985 (225 m in 6 holes), and mined 1885 tonnes in 1986 and 2721 tonnes in 1988, part of which was tested in Whitehorse.

Capsule Geology

Coal seams occur interlayered with siltstone and mudstone in Early Cretaceous Tantalus Formation non-marine braided alluvial material deposited in a graben. This sequence has been intruded by rhyolite sills up to 15 cm wide which have converted much of the coal to anthracite.

A lower seam at least 3.3 m wide on surface has been traced for 1 km and an upper seam at least 1.8 m wide on surface, about 50 m higher in the section, has been traced for 2 km. At Fisher Creek, a north-trending fault has displaced the upper seam 100 m. Both seams strike west to west-northwest, dip 30 to 50°N and are deformed by large open north-plunging folds. In Sep/69 Luscar Ltd roughly estimated underground reserves of 2 381 384 tonnes containing an ash content of approximately 46% and an energy value of 13 355 kJ/kg.

Analyses of samples taken in 1982 indicated the coal is ranked as a meta-anthracite with 3.5% moisture, 38.2% ash and a calorific content of 19.8 MJ/kg. The 1985 drill hole cut from 2 to 7 coal bands in the lower seam over an overall width ranging from 18.9 to 33.5 m. The widest individual coal band was 13.1 m. In 1985 Carlyle estimated open pit reserves at approximately 182 198 tonnes containing an ash content of approximately 22.48% and an energy value of 25 198 kJ/kg.

Test mining at the Main Zone in 1986 was complicated by the folding and a bulk sample had a higher ash content (45.4%) than expected. Testing indicated that the ash content could not be significantly reduced by crushing, screening and washing.

References

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

BREMNER, T.J., 1988. Geology of the Whitehorse Coal Deposit. In: Yukon Geology Vol. 2, Exploration and Geological Services Division, DIAND, p. 1-7.

BREWER, W.M., 1 Feb/02. Whitehorse Mining District, Y.T. EMJ p. 167-8.

GEOLOGICAL SURVEY OF CANADA Annual Rept 1900, Part A, p. 48.

GEOLOGICAL SURVEY OF CANADA Summary Report 1906, Part A, p. 28.

LUSCAR LTD, Sep/69. Assessment Report #060580 by R. Spence Taylor.

MINERAL INDUSTRY REPORT 1969-1970, p. 158.

WHITEHORSE COAL CORPORATION, Mar/87. Assessment Reports #062171 by J.H. Perry.

WHITEHORSE COAL CORPORATION, Mar/87. Assessment Reports #092024 by J.H. Perry.

WHITEHORSE COAL CORPORATION, 1986. Construction summary for excavation of Pit No 1. Assessment Report #092045 by D. Clark.

WHITEHORSE COAL CORPORATION, 1986. Prospecting and Examination Report #061734 by A.T. Savage.

WHITEHORSE COAL CORPORATION, Nov/85. Assessment Report #092012 by L. Carlyle.

WHITEHORSE COAL CORPORATION, 1983. Assessment Report #062148 by R.P. Hill.

YUKON EXPLORATION 1984, p. 72.

YUKON NEWS, 29 Aug/83.

YUKON MINING AND EXPLORATION OVERVIEW 1988, p. 4.

Work History

Date	Work Type	Comment
12/31/1988	Other	
12/31/1986	Other	
12/31/1985	Drilling	Number of holes drilled: 6 Amount of work done: 225 METRES
12/31/1982	Development, Surface	
12/31/1982	Trenching	
12/31/1982	Other	
12/31/1969	Geology	
12/31/1969	Other	
12/31/1901	Other	Amount of work done: 18.3 METRES Drove adit.
12/31/1899	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
062171	1983	Report on the Whitehorse Coal Property	Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Metallurgical Tests - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Property Evaluation - Other, Mechanical - Trenching		
062148	1982	Whitehorse Coal Corporation Coal Leases 2989,2990,2991	Rock - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Hand - Trenching		
061735	1975	Watson Coal Prospects, Report 1	Property Evaluation - Other, Data Compilation - Pre-existing Data		
060580	1969	The Whitehorse Coal Area, Yukon Territory	Rock - Geochemistry, Bedrock Mapping - Geology, Property Evaluation - Other, Prospecting - Other, Research/Summarize - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC020307	Prospectus report on Whitehorse Coal property - Whitehorse Mining District, Yukon - May, 1989		Property File Collection	Report
ARMC020318	Report on Braeburn coal area, Carmacks North coal area, Carmacks South coal area, Kotaneelee coal area, Lone Pine Mountain coal occurrence, Porter's coal, Guder's coal, Whitehorse coal area, and Bush Mountain coal area - File 164		Property File Collection	Report

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
1985	WHITEHORSE COAL - OPEN PIT RESERVES (OPEN PIT)	Historical Estimate	coal	25198 kJ/kg	182,198		No	No	Unknown

Assumes minimum width of seam = 1.22 m. Used retangular blocks. Rough estimate. Assumes average ash content of 22.48 % and BTU/lb value of 10,833, from sample information.; Assessment Report #092012, p. 13. This calculation was for area that could be mined by open pit.

1969	WHITEHORSE COAL - UNDERGROUND RESERVES (UNDERGROUND)	Historical Estimate	coal	13355 kJ/kg	2,381,384		No	No	Unknown
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This is a rough estimate of underground reserves. Ash value is around 46%. Assumes average BTU value (taken from sample information) of 5,742.; Assessment Report #060580, p. 24 and in summary. This calculation was for area that would have been mined by underground methods.