



Occurrence Details

Occurrence Number: 105D 042

Occurrence Name: Whitehorse Coal

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 12/16/2025 5:06:12 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.

[illegible]