YUKON COAL POTENTIAL

The information below is summarised from the following references:

Long DGF (1986) Coal in yukon. In: Morin JA (ed.) Mineral deposits of northern Cordillera. Canadian Institute of Mining and metallurgy Special Paper 37, pp. 362-371.

Wright JL and Miller DC (1986) Rock River coal basin: geology, gravity survey and interpretation. In: Morin JA (ed.) Mineral deposits of northern Cordillera. Canadian Institute of Mining and metallurgy Special Paper 37, pp. 362-371.

Hunt JA (1994) Yukon coal inventory 1994. Prepared for Energy and Mines Branch, Economic Development, Yukon Territorial Government, 168p.

Area	Location	Ash content*	Sulphur content#	Type (rank) of Coal	Resource (million tonnes)	Potential for development
BONNET PLUME BASIN	**South: Illtyd, Wernecke, Airstrip, Wind, West Illtyd, Garlic Ring, Spaceship**	moderate	low (avg. ~ 0.33%)	HVB C	~ 660	**MODERATE TO HIGH** Good quality thermal coal, low sulphur. Ash content can be reduced by washing and blending to produce a product with avg. 15% ash content. Sufficient coal is present to fuel a mine-mouth thermal power plant of 210 megawatts capacity and to provide 10-15 MT/year for export. (Disadvantages - Remote, inaccessible area. High ash content. Presence of frozen overburden)
	North	unknown	unknown	lignite	unknown	LOW? Seams of lignite up to 9 m thick (Disadvantages - Unknown quality and extent of the coal)
ROCK RIVER BASIN	**Rock River**	low to high	low to high	lignite A to sub-bituminous C	~ 56 (within 80 m of surface)	**MODERATE** Several thick coal seams amenable to strip mining are present. Coal found to date is suitable for: electrical power generation, thermal uses, chemical uses, production of synthetic fuel. Sufficient reserves are indicated to sustain a 200 megawatt power plant for about 40 years. (Disadvantages - High sulphur and ash content, rapid lateral facies changes)

Area	Location	Ash content*	Sulphur content#	Type (rank) of Coal	Resource (million tonnes)	Potential for development
WHITEHORSE TROUGH	**Whitehorse Coal deposit**	moderate to high	low	dominantly semi-anthracite to anthracite	Zone A: 26.4	**LOW TO MODERATE** Possible mine mouth power generation and/or local domestic and industrial heating. (Disadvantages - Discontinuous coal seams, high ash content)
	Whitehorse area: Other	high	low	anthracite	unknown	LOW (Disadvantages - Discontinuous coal seams, high ash content)
	Braeburn area: Division Mountain	moderate to high	low	HVB B/C	~ 45	**MODERATE** Possible use as thermal coal for domestic, commercial and industrial heating or for use in a small-scale thermal power plant. (Disadvantages - Small size of deposit, relatively high ash content)
	Carmacks area: Tantalus Butte mine	low to moderate	low	HVB A to C; dominantly HVB B	unknown, but substantial reserves likely remain	**MODERATE** Substantial reserves of relatively good quality thermal coal with low sulphur and moderate ash contents are likely present. Could supply small-scale local market for domestic, commercial or industrial use or supply a small-scale local power station. (Disadvantages - The most accessible coal has been mined out. Structural complexity. The thickness, lateral extent and quality of coal seams is variable)
	Carmacks area: Five Fingers and Tantalus mines	moderate to high	low	HVB A to meta anthracite	unknown	**MODERATE** Non-coking and coking coals are present. The coal does not form a good coke on its own but if washed could be blended with other western Canadian coals to produce a metallurgical quality coke. Some potential for use as thermal coal for local domestic and commercial purposes. (Disadvantages - Highly varied composition, rank and quality of coal)
	Carmacks area: Other	low to high	low	sub-bituminous A to C and anthracite	unknown	LOW (Disadvantages - Limited extent of coal seams, variable ash content, alteration by heat from volcanic rocks and/or intrusions)

Area	Location	Ash content*	Sulphur content#	Type (rank) of Coal	Resource (million tonnes)	Potential for development
TINTINA TRENCH	**Dawson area: Rock Creek mine, Coal Creek, Cliff Creek mine**	low to moderate	low	lignite A to sub-bituminous C	unknown	**LOW TO MODERATE** Relatively thick coal seams. (Disadvantages - Restricted lateral extent, lateral variability & structural complexity)
	Ross River block	moderate	low	LVB to semi-anthracite	few hundred thousand tonnes	**MODERATE** Small potentially mineable deposits of coal suitable for thermal uses. (Disadvantages - Locally thick surficial deposits may limit the possibility of surface mining)
	Six areas around the town of Watson Lake	low to high	low	lignite to sub-bituminous B	~ 5 to 10 (at a minimum depth of 56 m)	**LOW TO MODERATE** Coal seams of mineable thickness are present beneath poorly consolidated sedimentary cover (Disadvantages - Laterally discontinuous coal seams, structural complexity, thick surficial cover, low rank of coal, variable ash content,)
NORTHERN YUKON	**Hoidahl Dome**	low	low	semi-anthracite to anthracite	unknown	**LOW?** Seams up to 6 m thick with low ash and sulphur content are present. (Disadvantages - Unknown extent of coal seams, remote location.)
	Moose Channel Mine	high	unknown	sub-bituminous A to HVB C	unknown	**LOW?** Two seams of coal 7 m and 3.7 m thick were mined until 1956 and supplied fuel for domestic use in the Aklavik area. (Disadvantages - Unknown extent of coal seams, vertical beds, high ash content, remote location)
KLUANE	Burwash & Bates Lake basins; White River	low	low	lignite, sub-bituminous A to C	unknown	LOW (Disadvantages - Thin, discontinuous coal seams in/near Kluane National Park & Reserve)

* Ash: low < 10%; moderate = 10 to 25%; high > 25%; # sulphur: low < 0.75%; high > 1.0%