

NTS QUADRANGLE 115

NTS MAP SHEET: 115I Carmacks

MAP. NO 44

LATITUDE: $62^{\circ}05'N$ (general coordinates)

LONGITUDE: $136^{\circ}15'W$

TYPE OF LOCALITY: Subsurface

LOCATION DESCRIPTION: Immediately north and east of Carmacks,
east and south of Yukon River (license blocks).

NAME: Tantalus Fm. and Laberge Group.

NATURE OF SEAMS, STRATIGRAPHY: Exposure is poor. Coal seams and partings intersected in two holes; license #15 partings and lenses up to 0.1 m; intersection of the 'Teslin' seam at 3.2 m in #17. Five seams in ^{the} Laberge also intersected 1.6 km south of Tantalus Mine. Strata tightly folded along northwest axes.

RANK:

RESERVES:

HISTORY OF EXPLORATION OR MINING: Exploratory drilling undertaken by Teslin Explotation Ltd. inc ^{and 1973} 1971 in License blocks 15, 16, and 17. EM and IP surveys also conducted (45)

REFERENCES: 45

NTS QUADRANGLE 115

NTS MAP SHEET: 115I Carmacks

MAP. NO 45

LATITUDE: 62°04'N

LONGITUDE: 136°15'W

TYPE OF LOCALITY: Mainly subsurface

LOCATION DESCRIPTION: 1.6 km southeast of Carmacks, south of
Yukon River

NAME: Laberge Group, Jurassic

NATURE OF SEAMS, STRATIGRAPHY: Coals are contained within sandstone
and minor shale and conglomerate.

RANK:

RESERVES:

HISTORY OF EXPLORATION OR MINING: Geophysical surveys delineated
an important seam, allowing the identification of drilling
targets, (1977, Cyprus Anvil Corp. and Teslin Exploration
held leases). As of 1981 all leases held by Cyprus Anvil.

REFERENCES: 8, 9, 46

NTS QUADRANGLE 115

NTS MAP SHEET: 115I Carmacks

MAP.NO 46

LATITUDE: 62°08'N

LONGITUDE: 136°15'W

TYPE OF LOCALITY: ~~Mine~~ Tantalus Butte Mine

LOCATION DESCRIPTION: The mine and storage facilities are located 6.4 km north of Carmacks on the right bank of Yukon River, about 1 km from the Whitehorse-Mayo Road.

NAME: Tantalus Formation, Lower Cretaceous

NATURE OF SEAMS, STRATIGRAPHY: The sequence is dominated by conglomerate with subordinate amounts of sandstone, shale and coal. The main seam measures 3.1-4.3 m thick in the mine, dips 45-70° and is offset by as much as 12.2 m vertically by faults. Several tonsteins occur in ~~the~~ the main seam. (46, 48)

RANK: High volatile bituminous B. Calorific values range from 11,000-12700 BTU/lb. Typical analyses are :(as rec'd) moisture 4%, ash 13.5, volatiles 31.7, fixed carbon 50.8 sulphur 0.4, calorific value 11,445 BTU/lb, (47, 49).

RESERVES:

HISTORY OF EXPLORATION OR MINING: The mine began operation in 1923; supplying coal to Carmacks, Dawson and United Keno Hills Mine; supply to Cyprus Anvil Mine began in 1969 where it was used for drying Pb-Zn concentrates. Operations ceased 1978 because of underground fire, nor was it operated in 1982 because of sufficient ~~existing~~ stockpiles. All leases as of 1981 owned by Cyprus Anvil.

REFERENCES: 8, 9, 25, 46, 47, 48, 49.

NTS QUADRANGLE 115

NTS MAP SHEET: 115I Carmacks

MAP. NO 47

LATITUDE: $62^{\circ}12'N$

LONGITUDE: $136^{\circ}19'W$

TYPE OF LOCALITY: Outcrop

LOCATION DESCRIPTION: 12.9 km north of Carmacks and south of the old Five Fingers Mine (see map no. 48).

NAME: Laberge Group, Jurassic.

NATURE OF SEAMS, STRATIGRAPHY:

RANK:

RESERVES:

HISTORY OF EXPLORATION OR MINING: Leases and lots obtained by Cyprus Anvil Mining Corp. and Teslin Exploration Ltd. and in 1977 had mapped the area on a scale of 1:50,000.

NTS QUADRANGLE 115

NTS MAP SHEET: 115I Carmacks

MAP. NO 48

LATITUDE: $62^{\circ}12'N$

LONGITUDE: $136^{\circ}19'W$

TYPE OF LOCALITY: Five Fingers Mine

LOCATION DESCRIPTION: About 5 km north of Tantalus Butte Mine and the same distance above the Five Finger Rapids on Yukon River. A second mine site was established about a kilometre south in 1906.

NAME: Laberge Group, Jurassic

NATURE OF SEAMS, STRATIGRAPHY: The best seam is 1-1.2 m thick and dips east at 16° at both mine sites, with other minor seams present. At the first mine access to the seam was via a slope sunk about 107 m; in the second slope was sunk 239 m to a seam about 0.5 m thick. (49).

RANK: ^{Three} Early analyses give the following results: moisture 5.95, 5.29, 4.26; volatiles 40.46, 36.14, 40.26, fixed carbon 45.16, 40.12, 44.67, ash 8.43, 18.45, 10.81. (49, 50).

RESERVES:

HISTORY OF EXPLORATION OR MINING: The area around the mine was first staked in 1898, and mined in 1905, coal being shipped to Carmacks. Unstable ground led to closure in 1907, with the second mine opened up 1 km south, but this too closed in 1908.

REFERENCES: " 25, 49, 50

NTS QUADRANGLE 115

NTS MAP SHEET: 115I Carmacks

MAP. NO 49

LATITUDE: 62°05'N

LONGITUDE: 136°05'W

TYPE OF LOCALITY: Tantalus Mine

LOCATION DESCRIPTION: Situated on the south side of Yukon (Lewes) River, 1.5 km upstream from Carmacks

NAME: Tantalus Formation, Lower Cretaceous

NATURE OF SEAMS, STRATIGRAPHY: Three main seams were opened up in the mine, averaging 2.3 m, 2.0 m, 0.9 m thick, and separated by less than 1-2 m of host rock. The two thickest seams were worked by adits.

RANK: Bituminous.

Analyses for each of the upper, middle and lower seams are as follows (as rec'd).

moisture 0.9, 0.7, 0.7

fixed carbon 58.0, 54.1, 56.0

volatiles 25.0, 26.7, 27.8

ash 17.0, 19.2, 16.2 ; sulphur 0.5, 0.5, 0.5

calorific value cal/gm. 6.70, 6.31, 6.79

RESERVES:

HISTORY OF EXPLORATION OR MINING: First staked in 1903, the mine was operated by Five Finger Coal Company from 1905-1922.

A maximum of 8500 tons per year were produced, mostly used by local river steamers.

REFERENCES: ~~25~~ 25, 50