

82KNW030

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True Fissure Mine Area

The TF mine area is on the E end of Gt. Nor. mtn. It includes the TF, S.B., St. Elmo, & Gt. Nor. mines. The Bdown mine is to the S, across Bdown rd. The Gt. Nor. & adjoining C.G. <sup>mine</sup> claims are owned by the estate of the late Donald McDonald of Victoria. The TF, Grace Fiac, St. Elmo, Yankee, Don Fiac, Blue Bell, & Park Fiac C.G. MC are owned by Columbia Metals Corp. Ltd. NPL: company office, c/o Yellowknife Bear mines Ltd NPL, Suite 1002, 80 Richmond St. W, Toronto, Ont.; <sup>D. J. O'Leary, mng'r</sup> J. S. ~~Director, mng'r~~; capital, 4 m. s.d., \$1.00 par value.

The mine area lies across the upper part of Fissure sh. & extends S over a spur of Gt Nor. mtn. The sh. beds in <sup>a</sup> ~~away~~ <sup>roughly</sup> ~~roughly~~ <sup>in</sup> ~~covered~~ <sup>covered</sup> W of the area. For the most part slopes are mod, & outc. is extensive. Timber is genly thin, but underbrush is thick. A 3 1/2 mi rd chmbrs fr Ferguson to the TF camp at 5,000' elev, & a branch rd leads to a lower level of the mine.

The 1st <sup>mine whgs</sup> shng is reptd. to have been f in 1899, on ground subsequently located as the Gt. Nor. claim. Other discoveries soon fall'd, & the entire vein system was loc'd off the turn of the century. Small-scale exploration & dev't was carried on by the locators & a number of landholders. The St. Elmo vein was mined & the B.B. (then Silver Queen) upper adit was driven in the period 1898-1901. Most of the work on the Gt. Nor. was done af 1897; additional work in 1913, 1917, & 1928-30 was largely confined to No. 6 adit.

The TF M&M Co. Ltd. - - - - - no further work was done

Geol. geology - The geol. geol. & most of the whgs are shown in Fig. a. Surface mapping was by planimeter & tape & compass, at both 40 & 100' to the", using mine co-ords & elevs. Ordg. mapping was plotted on copies of level plans <sup>prep'd</sup> ~~arranged~~ by the granby C.M.S.P. Co. Ltd.

The country rocks are grits & gchls of the ~~middle div~~ <sup>middle div</sup> of the Bdown fm. They have been folded on at least one medium-sized <sup>alc</sup> ~~alc~~ & ~~are~~ <sup>are</sup> closely ~~drop~~ <sup>drop</sup> folded. Three major fault zones have split the E part of Gt. Nor. mtn. into four structural blocks, as shown in Fig. b. The bay sh fault zone (see pp. 111-118) is inferred fr <sup>acc't</sup> ~~acc't~~ <sup>expos.</sup> ~~expos.~~ <sup>to pass</sup> ~~to pass~~ <sup>just N</sup> ~~just N~~ <sup>of the</sup> ~~of the <sup>mine</sup> ~~mine <sup>area</sup>. The N block is downthrown on the fault, & the rocks exp. are higher in the Bdown fm than are rocks S of the fault. The Bdown fault essentially follows the valley of Bdown rd, S of the TF mine area but N of the Bdown mine. It also has thrown down the rocks on the N. The Gt. Nor. fault dips E or NE at 45° & strikes N 15° W over most of its length, <sup>but may swing</sup> ~~swinging~~ <sup>to</sup> ~~to~~ <sup>N 70° W</sup> ~~N 70° W~~ at its N end. The sinuous trace of the fault on Figs. a & b <sup>results partly fr topographic effect and partly fr thinning</sup> ~~results partly fr topographic effect and partly fr thinning~~ <sup>and</sup> ~~and~~ <sup>evidence presented below suggests that the EW has moved down relative to the</sup> ~~evidence presented below suggests that the EW has moved down relative to the~~ <sup>HW</sup> ~~HW~~ <sup>ext</sup> ~~ext <sup>the</sup> ~~the <sup>Bdown</sup> ~~Bdown <sup>mine</sup> ~~mine <sup>a</sup> ~~a~~ <sup>when</sup> ~~when <sup>mgd</sup> ~~mgd~~ <sup>gone</sup> ~~gone~~ <sup>may</sup> ~~may~~ <sup>represent</sup> ~~represent <sup>a</sup> ~~a~~ <sup>situation</sup> ~~situation~~ <sup>of</sup> ~~of <sup>the</sup> ~~the <sup>Gt. Nor. fault.</sup> ~~Gt. Nor. fault.~~~~~~~~~~~~~~~~~~~~~~

The rocks of the mine area all belong to the middle div. of the Bdown fm. Distinct members were not found, i. e. the fold structure cannot be

The fold structure has not been fully established. S of the Bdown fault a large df on the SW flank of the S.C. <sup>is</sup> ~~is~~ <sup>outlined</sup> ~~outlined~~ <sup>by</sup> ~~by~~ <sup>the</sup> ~~the <sup>pyroclastic</sup> ~~pyroclastic <sup>member</sup> ~~member <sup>at</sup> ~~at <sup>the</sup> ~~the <sup>top</sup> ~~top <sup>of</sup> ~~of <sup>the</sup> ~~the <sup>L.B.</sup> ~~L.B. <sup>&</sup> ~~& <sup>is</sup> ~~is~~ <sup>indicated</sup> ~~indicated <sup>on</sup> ~~on~~ <sup>Fig. b</sup> ~~Fig. b <sup>by</sup> ~~by~~ <sup>1/4</sup> ~~1/4~~ <sup>&</sup> ~~& <sup>1/4</sup> ~~1/4~~ <sup>areas.</sup> ~~areas.~~ N of the Bdown fault the L.B. is buried & no distinct~~~~~~~~~~~~~~~~~~~~~~~~~~

W block

E block

1/6 dk grey grit & blk phyl.

lyt brn to reddish brn micac grit

Blk phyl.

Lk grey grit

Blk phyl.

Lk grey grit

lyt to med greenish grey grit.

axis dropped 1200' to 1500' in W block.