015192

Endako Mine.

Location: 2½ miles N of François Lake, 4 miles W of its E end. 5 m. SW of Endako station on CNR 115 miles W of Pr. George.

Size of orebody: 5000' WNW × 600' (aver).

locally drilled to 1000' depth (deepest drilling), but ~~generally~~ the ore as known all lies above 650' (Rotherham pers. co.)

Surface elevation about 3500'.

Hist^y: Staked claims 1926–.

In 1962-4 surface drilling totalled over 80,000 ft (82,877') in 190 holes.

(1964 drilling 19 holes totalling 7,329'). Geochem. delineation of min^d area accomp^d by DDs.

Moly float outlines much of the orebody, in gravels locally derived.

Bulk sampling from u/gd workings was required to confirm the grade, which is stated as 0.21% MoS_2. (0.14% Mo)

Total ore reserves are stated as 66½ mill tons of 0.21% MoS_2 (allowing for mining dil^n Assuming 0.15% MoS_2 cut-off)

Waste: ore ratio about 1½:1.

~~Geology~~ In 1964 the orebody was prepared for mining by open pit, plant was partly erected & prod^n scheduled to start at 10,000 tpd in mid-1965. The W^n part of the orebody will first be mined, the pit said to be 1500' long & 1000' wide, with working benches 30' in height.

Geology. Host rock is m-gr^d somewhat porph red G belonging to the Topley Intrusions, which extend for about 120 miles NW & are partly covered by later rocks. The S edge of the G ~~is~~ at François Lake, about 2½ m S of the mine.

At the mine ~~the~~ G is intruded by narrow NW^ly trending dykes of ~~placite~~-P & rhyolite P & by aplite stringers, which ~~are~~ min^d. Lamprophyre dykes are ~~post-mineral~~ unmineralized & occur in ~~gougy~~ faults, which are numerous.

The metallic minerals ~~occur~~ are moly, pyrite & locally mgt & specular hematite. Cp is very rare. Sulphides amount to only 1% of the orebody. They are mainly in near Qz veins which are up to 5' wide ~~but~~ (ca N65-80E/55-65°SE) ~~with~~ are frequently as narrow as 1/8". Many of the Q veins strike ENE & dip SE though ~~the~~ others follow different directions. Some of the wider veins can be followed for 100 feet or more along their strike (170' in drift); they are thinner & irregular in the dykes (may precede them), & are locally offset a few feet by ~~...~~ small faults, some of which are pyritized & slightly copper-stained.

~~Pyrite~~ The qz veins are dark with moly, which is mostly f-gr^d but is locally coarse on the vein walls. Pyrite is mostly dissem^d in the alt^d rocks adjoining the veins, & also occurs in fractures with qz & moly. Pyrite extends strongly W of the orebody, accomp^d by some Q and only minor amounts of moly.

The rocks are strongly fract^d, & the Qz veins in places are disrupted & torn to pieces. The host-rocks looks fresh but this is deceptive as the OR of the rock is partly 2^ndy & was re-X^d about the time much of this fracturing took place, probably before mineralization occurred.

Alt^n in the G includes seric^n, ~~kaolin~~ & silic^n, chlor^n & kaolin^n. Many of the Fs have moved late, & kaolin is apparently assoc^d with this phase of post-mineral deform^n.

Py

Possibly the strike of the orebody (WSW) differs from the strike of most of the veins because of post-min offsetting right handed. (!)

More than one ~~Several~~ ages of Q, possibly some is after the moly & others before it. Py later than moly.

Maps & Air Photos

1) Spartan 1964 (Dominion) 30,000' photos (1:50,000 approx.) south of 54°N only (ordered) — if localities re-plotted to these they can be given 3-coord. position by Topo. Div. (to nearest 10').

2) Get H.S. to write C & S Andrews saying we are working in the area & would welcome a 40-chain contoured map of the indexed area, w. especial ref. to the indexed area. (This may swing the job along). Likewise for Babine Lake area.

3) McMynn says radial line plotter not advisable if only about 6 localities per overlap area to be plotted — instead use radial-arm protractor & punch the photo centres over the prints & maps to fit a stud mounted on the Table (say, 1/8").

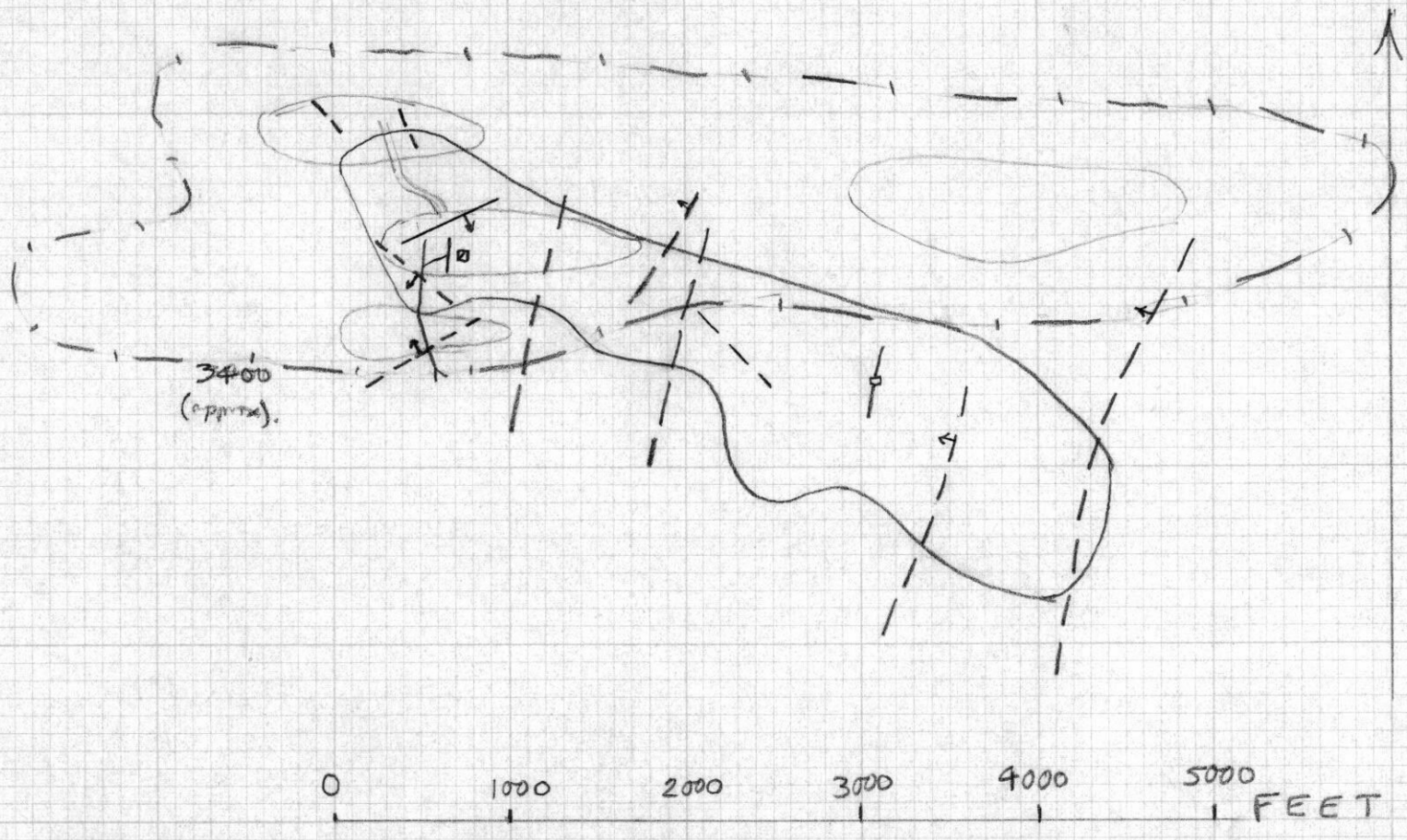
4) Transfer 20-chain photo centres (plus any extra detail) from the 20-chain Forest Cover "topographic" sheets to the 40-chain interim antopositos, using lat-long coords (7' sheet corners) on Map-o-graph.

5) Forest Cover Map Sales (Mr Harris; Mr Colville): the forest cover "topogr." sheets (20- & 40-chain) differ from the interim maps in having more forest cover detail added; the base map used in their construction is generally the same. "We like to think ours are better maps". The Ootsa district ones will be ready in 4 to 6 weeks — order 20-chain ozalid prints then (for photo-centre transfer). Order (later) 20-chain Forest Cover sheets 93F/13 g and h, 93F/14 all sheets } tot. 10 sheets.

[93F/13 and 14 are the only part of the area within the Ootsa district (new flown area).]

Δ antopositive reduction at 40 chains. — Harris will inform me when available.

See Memos. to Andrews, Feb 25 & to Harris, March 9 '65.



overlay # 73019.