

896121

92H/8E

92H/SE-38

Nickel Plate Ecology

NICKEL PLATE MINE GEOLOGY

(Company mapping)

PLATE 1 - Self explanatory

General Notes on All Plates:-

The color convention used on the plates for Geological features is as follows:

| | | |
|-------------|---|---|
| dark green | - | gabbro-diorite porphyry. |
| light green | - | skarn |
| yellow | - | cherty or siliceous |
| red | - | ore (except where orebodies filled in black) |
| light blue | - | limestone |
| black | - | andesite dikes |
| brown | - | brown dikes |
| dark blue | - | faults (in the photography the faults turned out black, but should be recognized; as in PL. 10) |

All plates illustrate the main physical features and controls of ore.

PLATE 2 - This is a production chart to the end of 1954 for all the orebodies and companies on N.P. mountain. The black dots represent grade with the scale on left. The numbers in each box represent annual tonnage milled in "thousands of tons" with its scale on right.

Total Production from all sources between 1904 and 1954 has been 3,826,380 Tons @ 0.43 oz/ton.

Morning production was 190,000 T @ 0.67 oz/ton.

Sunnyside 4 $\frac{1}{2}$ " " 160,000 T @ 0.91

Other Sunnysides about 200,000 T @ 0.60 - 0.65

PLATE 3 - Plan of all known orebodies. Illustrates crescentic outline due to shape of Marble line. Attempts by contours to illustrate the gentle northwest-plunging Nickel plate folds which control ore. Shows position of Mascot Fraction.

PLATE 4 - General crosssection parallel to "flange" dike through the main nickel plate orebodies. Midway-Hot sill is stippled differently than sill porphyries. Shows Sunnyside 4 $\frac{1}{2}$ orebody and all N.P. beds from Lower Yellow through to the Violet Steep Morning orebodies shown low down close to Mascot Fr. with their dragfold crumple control.

PLATE 5 - Typical plan of an ore bed in the main Nickel Plate system. This bed has produced to date 300,000 Tons @ 0.297 oz/ton. The bed lies just N. of Flange dike, extending from elevation 5300' on the left (near Mascot Fr) to 5720' on the right. It was drilled on the

Mascot Fr but was non productive. None of this ore bed was mined prior to Kelowna Mines operations. It has an average thickness of 20-30 ft. Drill hole intersections are shown but not too legible. The northern boundary of the stopes is the Marble Line.

PLATE 6 - A typical Nickel Plate Blister stope, illustrating mapping methods which are done on 15 scale. The best ore was on a tight nose structure. The ore band was only a few feet wide between porphyry sills but was high grade. Average grade of broken muck was 0.50 to 0.60 oz./ton.

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PLATE 8 - A typical cross section of Sunnyside 4¹/₂ ore bodies showing the alteration keel along both N. & S. dikes. No. 1 sill is the thick upper sheet, the Flipper sill is the thin lower sheet. The latter is believed to occupy a thrust slice. Production from these orebodies has been 160,000 Tons plus at a grade of 0.91 oz/ton. They are about 300' long and 50 to 150' high. The ground is hard and the stopes are standing open.

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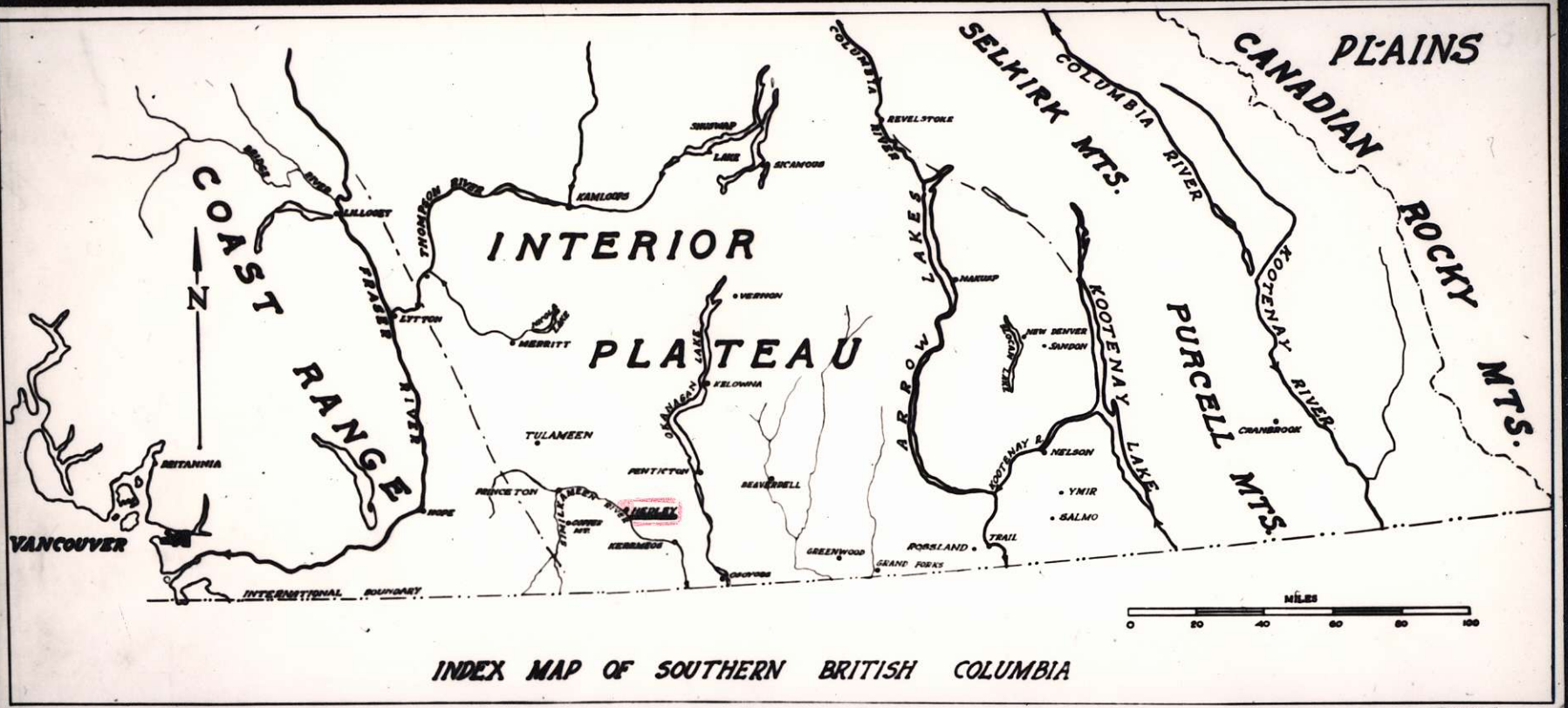
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INDEX MAP OF SOUTHERN BRITISH COLUMBIA

Figure 1

KELOWNA EXPLORATION COMPANY LTD

DALY ESTATE
\$ 1,151,000 profit

HEDLEY GOLD MINING COMPANY LTD.
\$ 2,698,033 profit

\$ 322,919 loss

HEDLEY C-MASCOT CO
\$ 1,300,000 profit \$ 200,000 loss

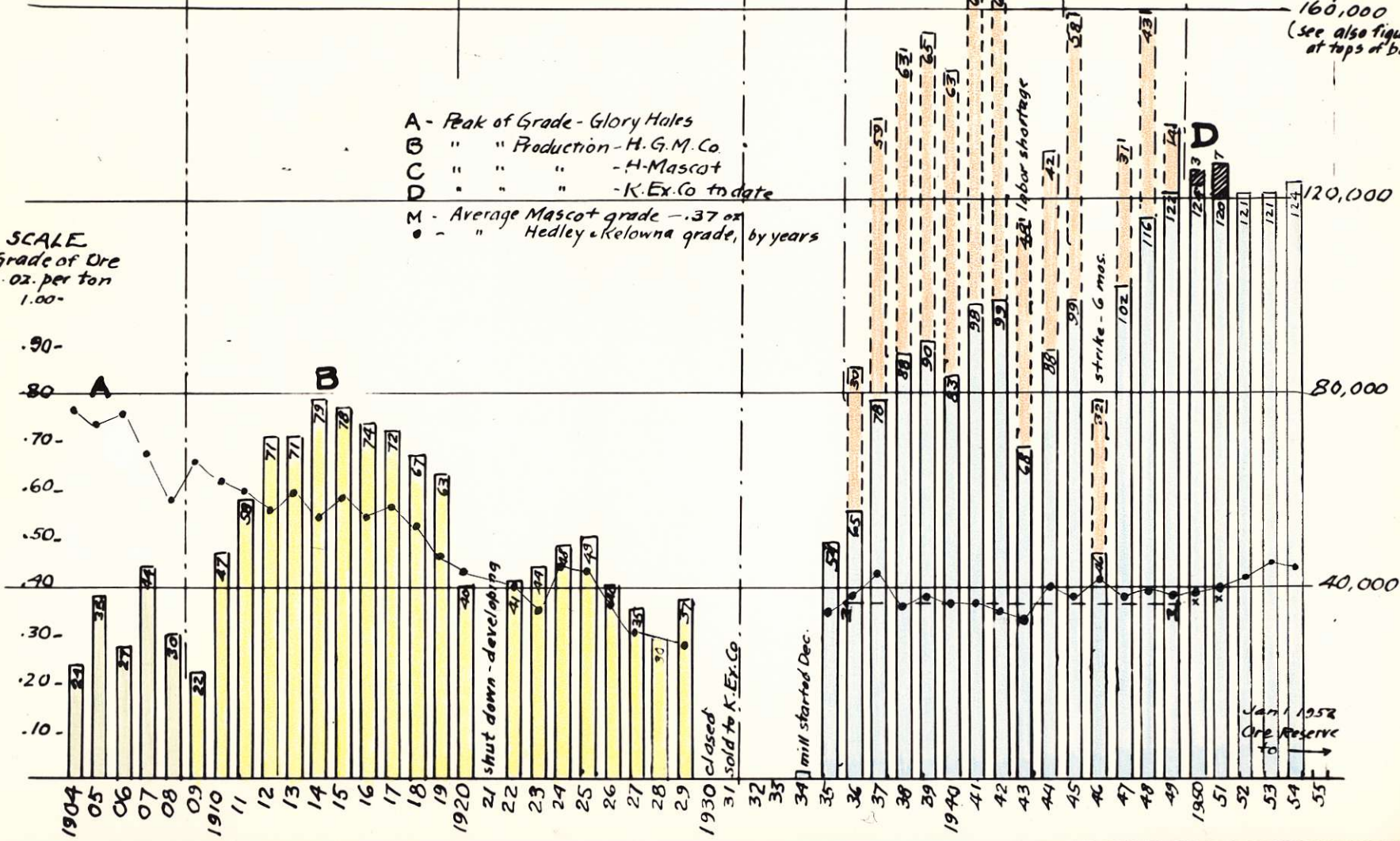
SCALE
Tons per Year
160,000
(see also figures at tops of bars)

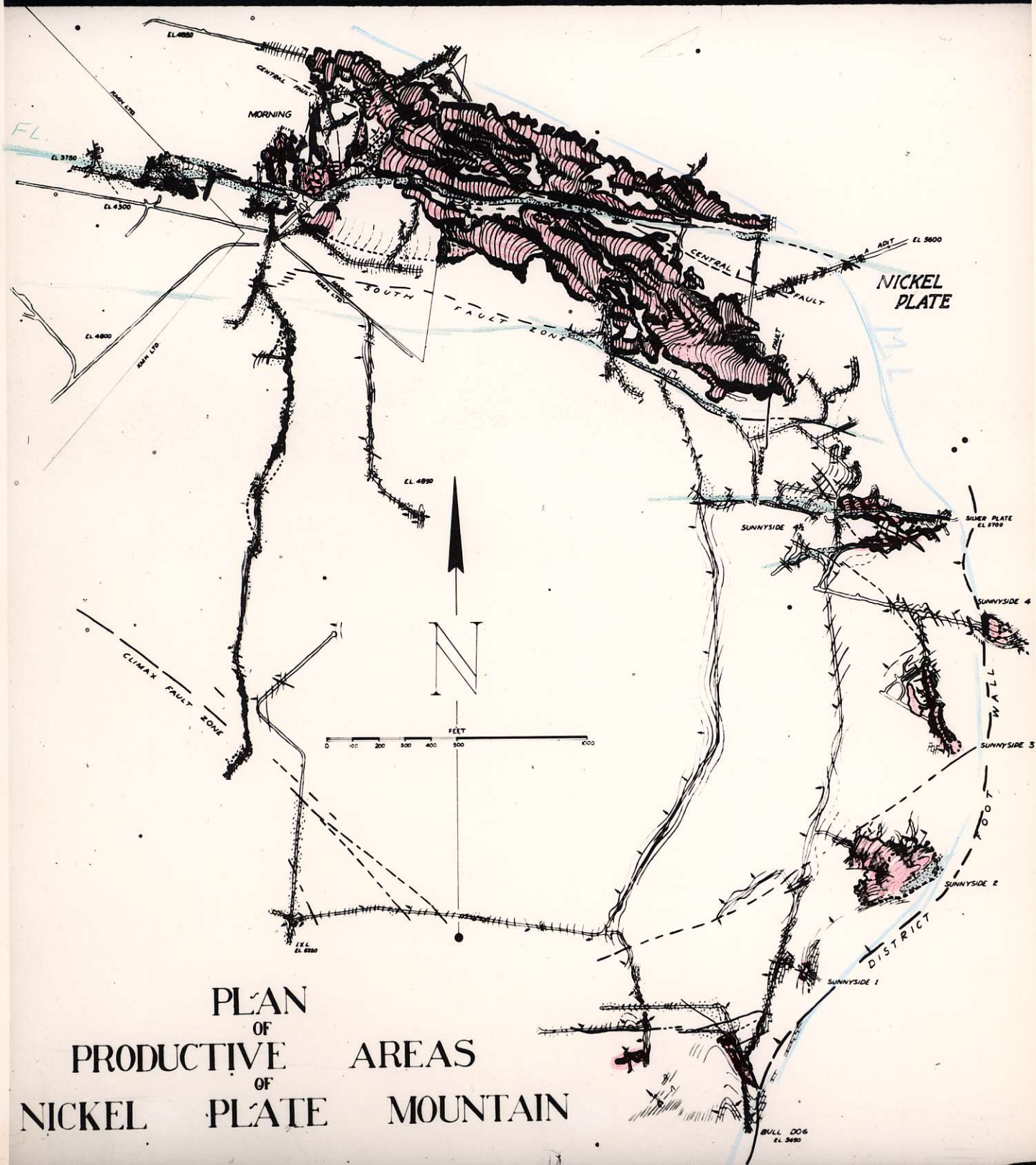
- A - Peak of Grade - Glory Hales
- B - " " Production - H.G.M. Co.
- C - " " " - H-Mascot
- D - " " " - K.Ex.Co to date
- M - Average Mascot grade - .37 oz
- - " Hedley-Kelowna grade, by years

SCALE
Grade of Ore
Au. oz. per ton
1.00-

.90-
.80-
.70-
.60-
.50-
.40-
.30-
.20-
.10-

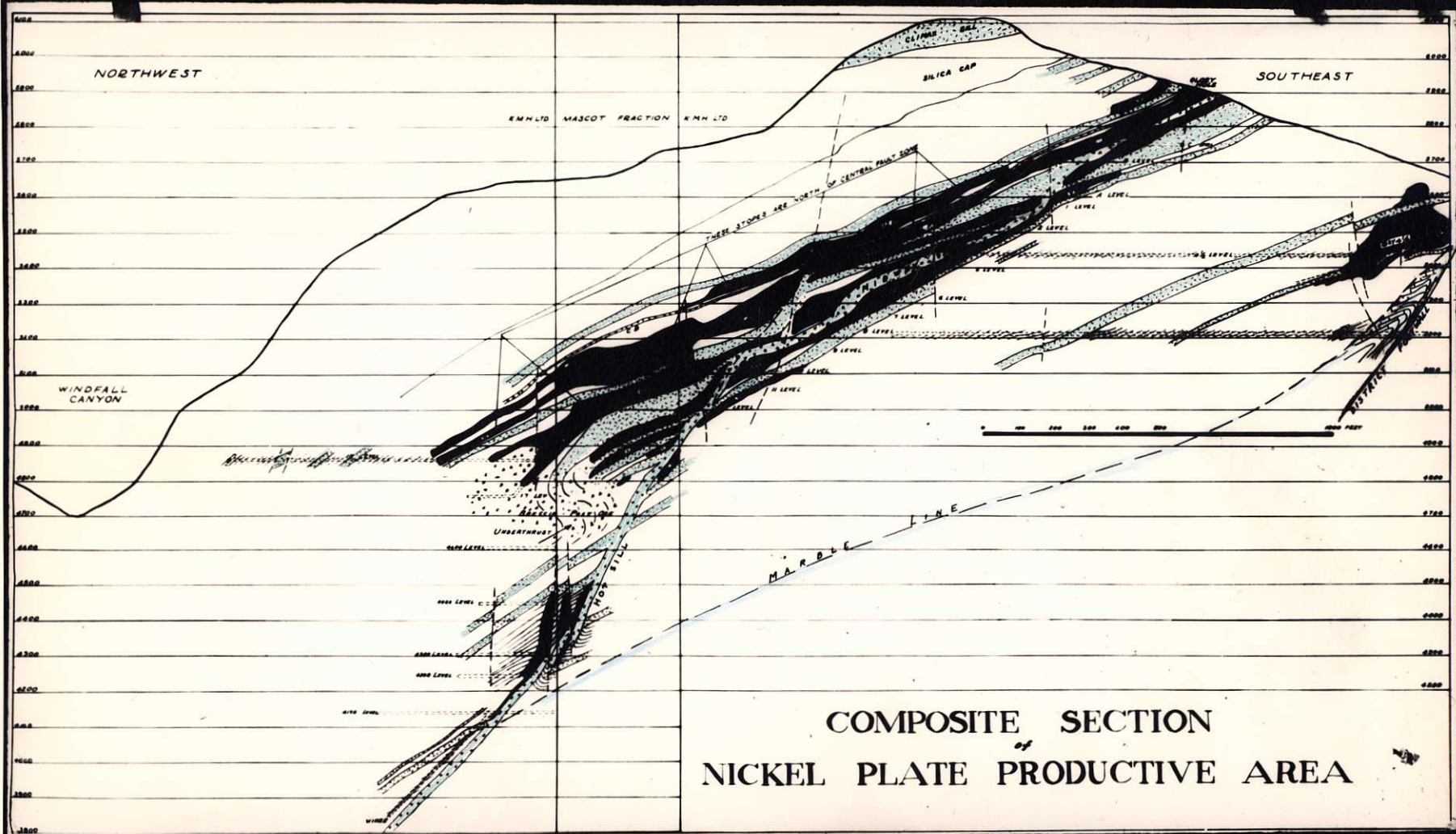
160,000
80,000
40,000



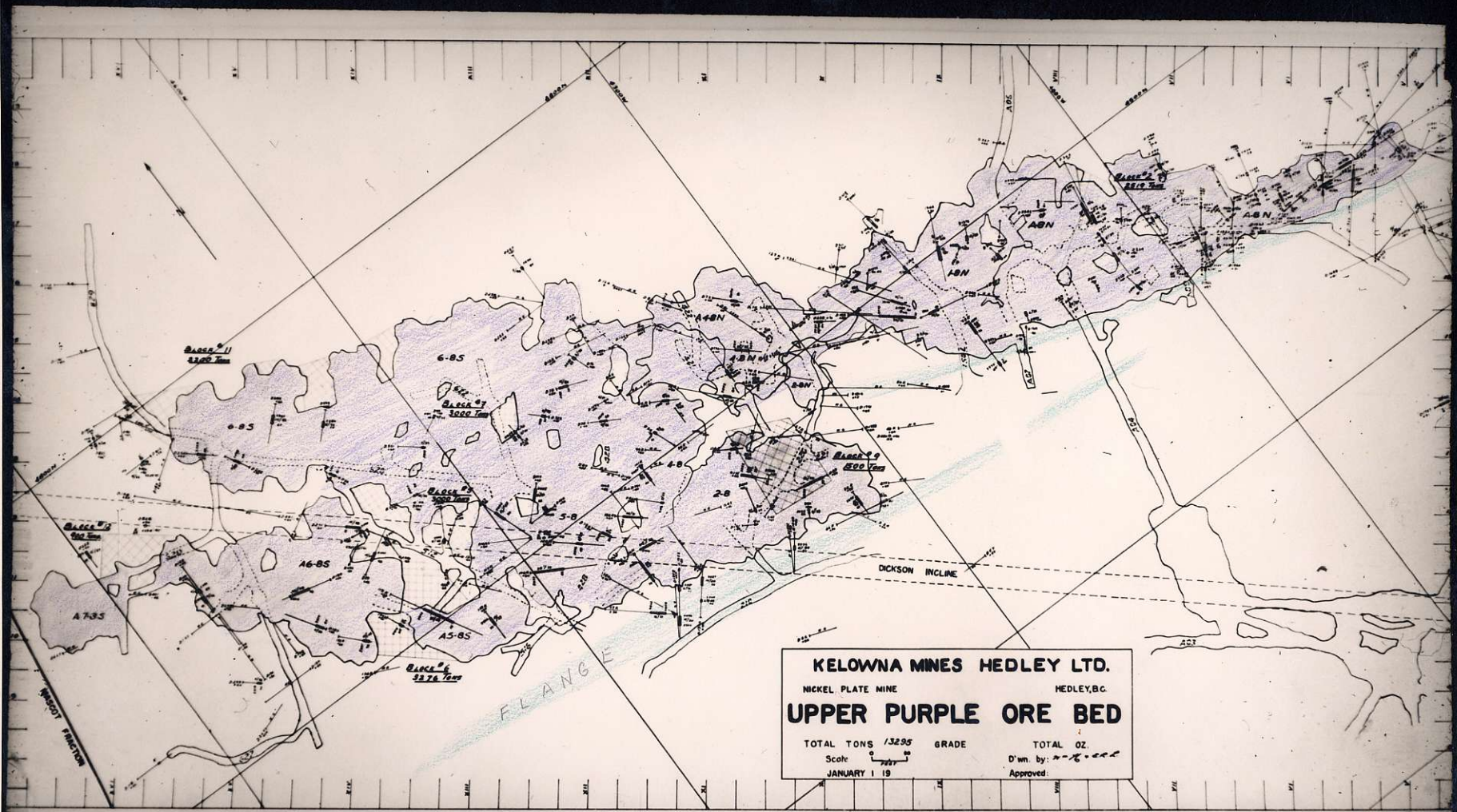


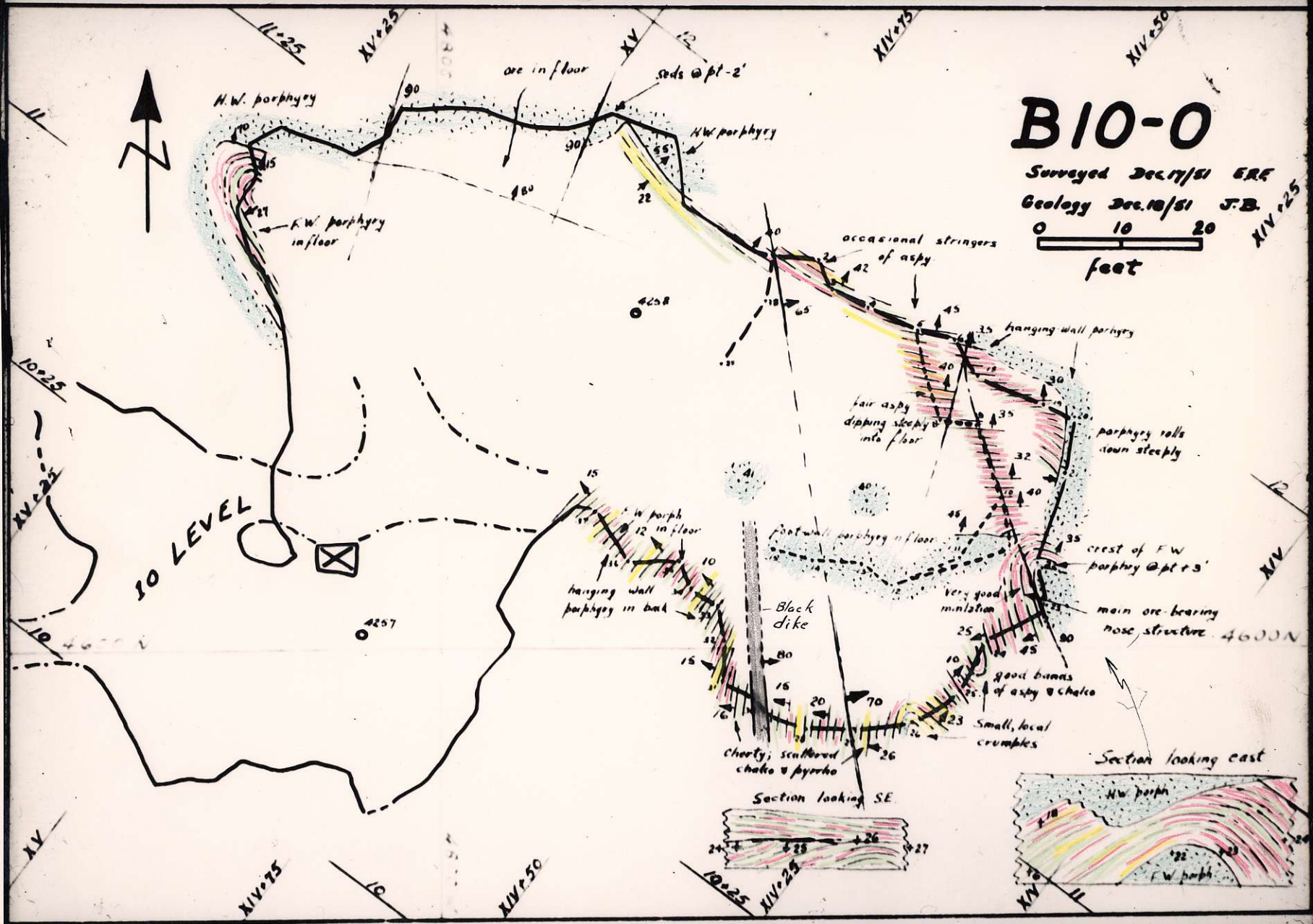
PLAN
OF
PRODUCTIVE AREAS
OF
NICKEL PLATE MOUNTAIN

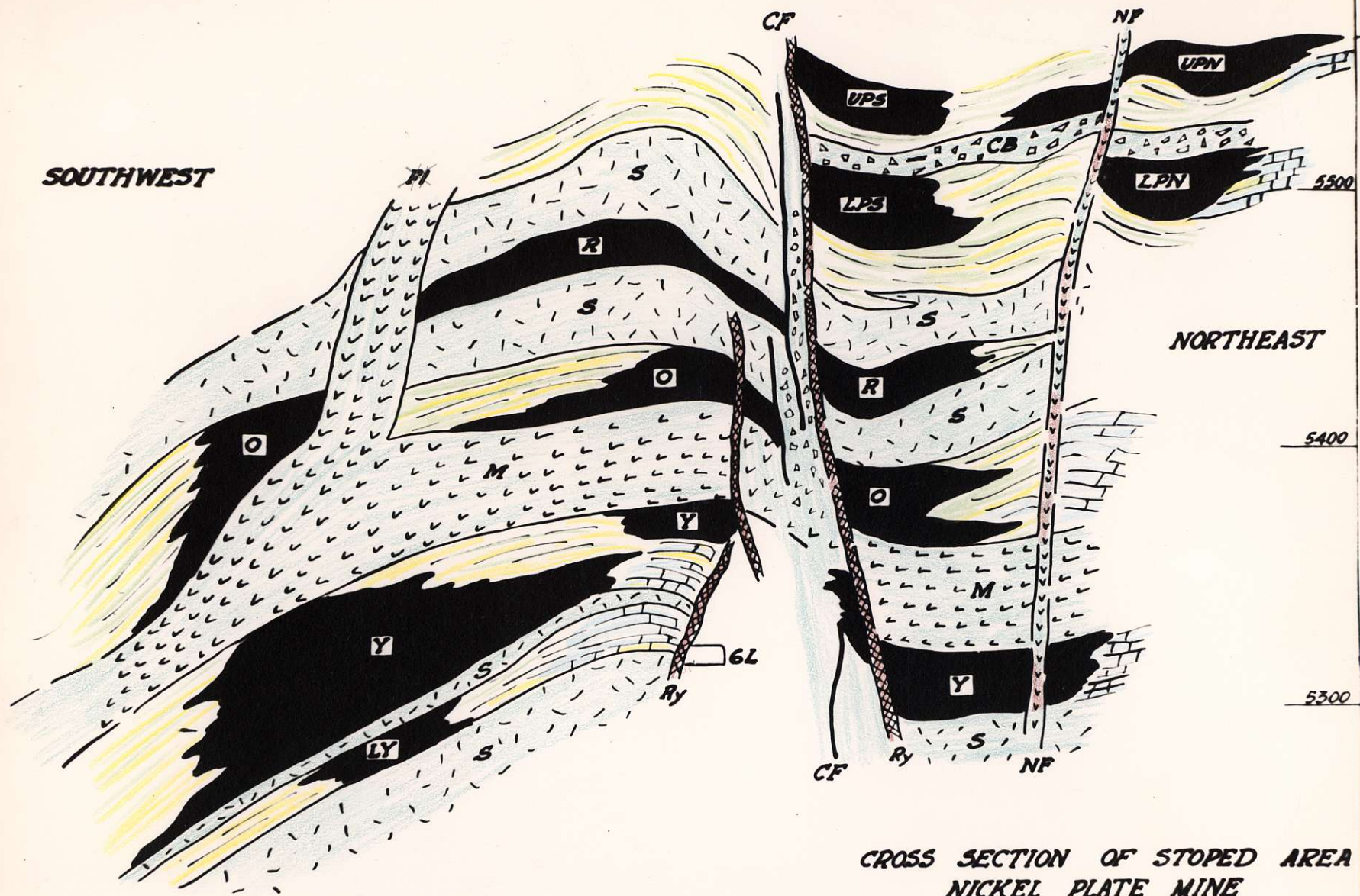
BULL DOG
EL. 5400



COMPOSITE SECTION
of
NICKEL PLATE PRODUCTIVE AREA







CROSS SECTION OF STOPED AREA
NICKEL PLATE MINE

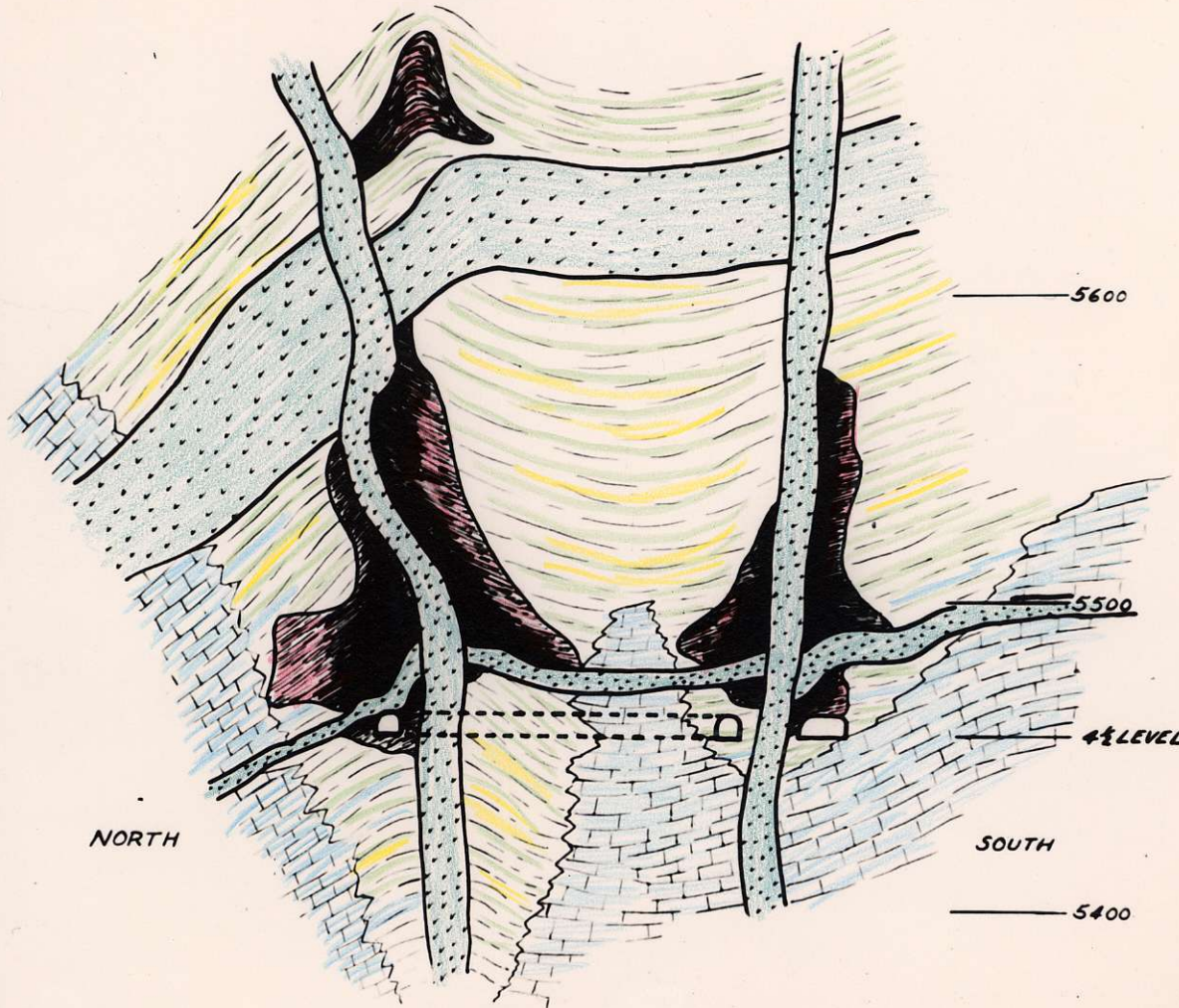


SURFACE LINE

CROSS SECTION
OF
SUNNYSIDE 4½ OREBODIES

SILVER PLATE □

5700



5600

5500

4½ LEVEL

NORTH

SOUTH

5400

ALTERATION
KEEL
(200 feet deep)

0 50 100 150 200 feet

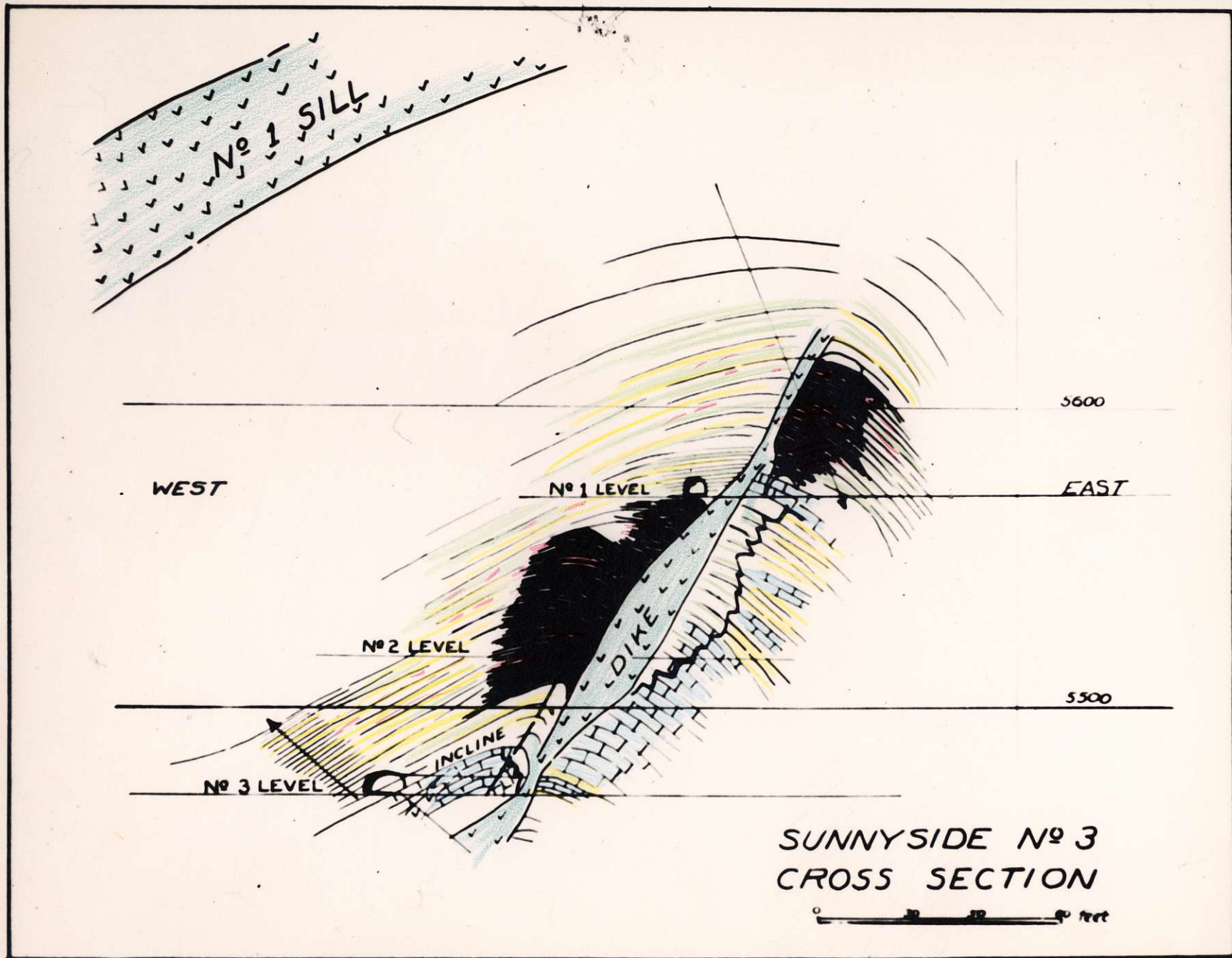


FIGURE 17

PLAN
OF
MORNING CRUMPLE
AND
MIDWAY SILL
NICKEL PLATE MINE

