

NOTES ON SECTIONS No-18 AND No-19

This is based on an old projection of the North vein workings, to which has been added the intersection of the "Avenue", the stratigraphy and the data given on Gwilliam's 80 scale mine plan. It has been also extended eastward to the Society Girl.

LAKESHORE AND MOYLE SHOOTS:

The axis of the major anticline lies near the shaft on the 2400 level. West of the shaft the Chubb fault is shown on its supposed projection from Glencairn Creek. The ore occurs in the area of brush-ups and reverse dips (i.e. dips to the south). In the case of the Moyle shoots these reverse dips are found up to 300 feet north of the vein and apparently form a second order syncline plunging gently to the south. Beneath these shoots there is, if we interpret Gwilliam's notes correctly, a distinct flattening in the vein dip. In the case of the upper or St. Eugene shoots, this association of flatter dip with barren areas is also apparent (see Section No-24).

The relatively small amount of exploration from the shaft levels is clearly shown. It did not extent westward even to beneath the Lake. The barren area tested by the lower levels is smaller than either of the non-productive sections between the three principal ore shoots.

On Chubb's section through the mine workings (No-31) the strata are shown dipping uniformly to the east so that the levels pass into higher horizons on proceeding eastward. This regular easterly pitch of the strata in the plane of the vein is not apparent on Gwilliam's level plans, and there is a strong suggestion that the vein strike is nearly parallel to that of the country rock with the levels continuing for long distances in approximately the same stratigraphic horizon.

A roll in the vein plunges easterly from the surface at about the 800 level to the 1800. The reversal of dip just west of the dyke on the 1800 level and a similar reversal on the 800 suggests that the area between these two levels should be explored.

UPPER MINE SHOOTS:

Here the strata strikes more north and south, so that the strike of the vein roughly parallels the dip of the strata, and the mine levels get into higher beds more rapidly than nearer the lake. The ore is in rocks much thinner bedded than those enclosing the two ore shoots on the west. The upper shoots apparently are controlled by a zone of north-south faulting, by the dyke, and occur in steeply dipping portions of the vein. On the 1800 level the area near the dyke looks promising. Stratigraphically it should be at about the same horizon as the Lakeshore shoots, the

UPPER MINE SHOOTS - contd.

vein dip is steep, and it is on the downward projection of the axis of the roll.

Offsets of the dyke by the vein fracture may indicate a rotational movement along the vein; the North wall rotating clockwise with an offset of 70 feet to the right on the surface, and 40 feet left on the 1800 level. This would be in the same direction as the movement postulated by Chubb for the Chubb fault (see No-31).

EAST OF UPPER MINE:

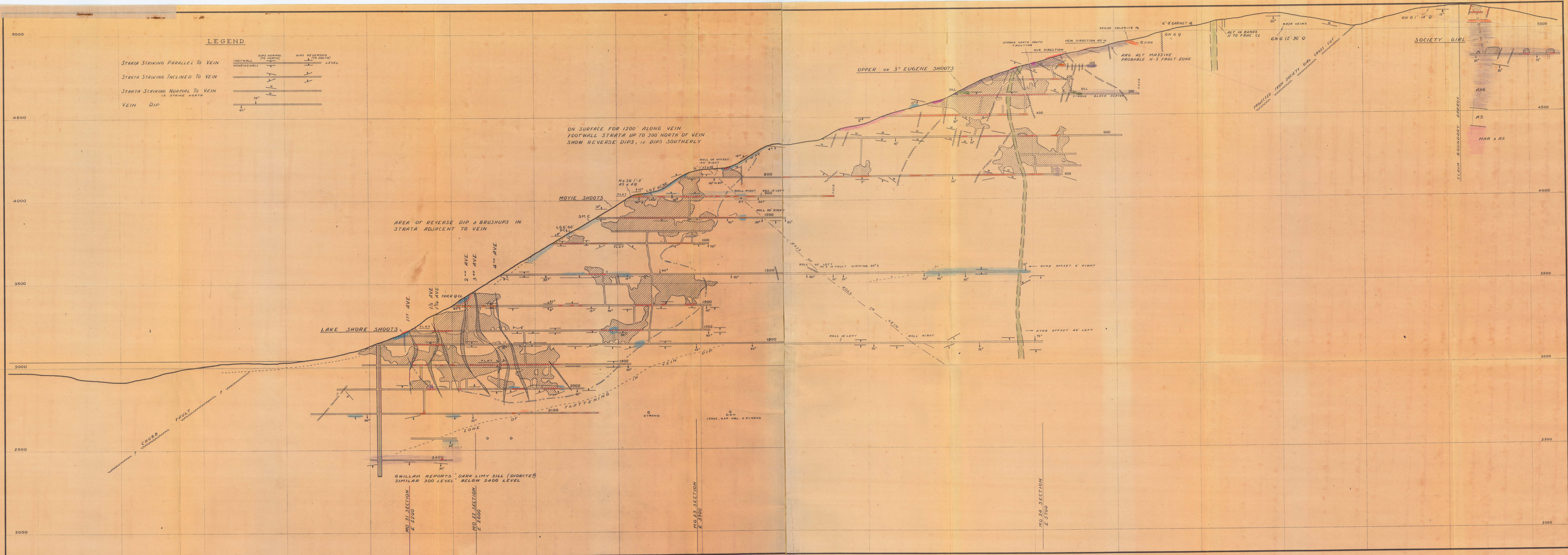
Here there has been little exploration. The Company now controls the area up to the Society Girl boundary. In this 2000 foot length are two or three zones of north-south faulting such as at the Upper mine. Associated with these are areas of vein type alteration with chlorite and garnet. Orebodies might not outcrop in this section but may be found under the massive argillite member in the same horizons as the Upper mine shoots. This would lie at depth of 200 or 300 feet below the surface, and could be systematically explored by short diamond drill holes, or by continuing the 300 level eastward. The most favorable places for ore would be where the vein intersected north-south zones of fracture or the easterly branch of the dyke. The old mine section and Chubb's Section No-31, show an eastward extension of the 300 level and a small stope in the vicinity of this dyke intersection. There is no evidence of these workings on the level plan, and it is thought that they are an inset on the section depicting workings on a cross vein.

In the lower Society Girl tunnel are a series of north-south faults dipping about 50° to the west. The projection of the principal break is shown on No-19. This roughly parallels the projection of the Chubb fault and the apparent pitch of the known orebodies parallel to the slope of the hill. That area lying between the Society Girl and this zone of faulting would appear to be particularly favorable. Our surface prospecting has indicated float ore in this section.

SOCIETY GIRL SHOOTS:

The best ore was found in thick bedded Creston quartzites above the upper tunnel. The lower tunnel is entirely in argillite, in it a few small shoots occur near reversals of dip and near the intersection of north-south faults. The workings between the two levels are inaccessible but old reports indicate that other small shoots occur.

A.S.



LEGEND

STRATA STRIKING PARALLEL TO VEIN
 STRATA STRIKING INCLINED TO VEIN
 STRATA STRIKING NORMAL TO VEIN
 VEIN DIP

ON SURFACE FOR 1200' ALONG VEIN
 FOOTWALL STRATA UP TO 300' NORTH OF VEIN
 SHOW REVERSE DIPS, i.e. DIPS SOUTHERLY

AREA OF REVERSE DIP & BRUSHUPS IN
 STRATA ADJACENT TO VEIN

GWILLAM REPORTS "DARK LIMY SILL (DIDIRITE)
 SIMILAR 300 LEVEL BELOW 2400 LEVEL

SCALE 1 INCH TO 200'

COMPANY ST EUGENE MINING CORP.
 PROPERTY ST EUGENE MINE
 LOCATION MOYIE B.C.

WORKING PLACE LAKE SHORE & MOYIE SHOOT
 NORTH VEIN WORKINGS
 TYPE OF MAP VERTICAL PROJECTION

DATE JUNE 1949
 DRAWN BY A.S.
 MAP NO. MO 18

SCALE 1 INCH TO 200'

COMPANY ST EUGENE MINING CORP.
 PROPERTY ST EUGENE MINE
 LOCATION MOYIE B.C.

WORKING PLACE UPPER MINE & SOCIETY GIRL
 NORTH VEIN WORKINGS
 TYPE OF MAP VERTICAL PROJECTION

DATE JUNE 1949
 DRAWN BY A.S.
 MAP NO. MO 19