## ANNUAL REPORT OF THE MINISTER OF MINES FOR 1937

Part C -- Special Report by Douglas Lay.

Three Star Group:

This group consists of 5 claims owned by Lawrence Kylling of Topley. It is situated mainly on the right bank of Finlay Creek, and covers the ground formerly occupied by the lapsed Sheila m.c., extending eastwards from the Snowshoe mc.

The property is at present reached by a foot-trail from the Golden Eagle camp about  $\frac{3}{4}$  mile in length, Finlay Creek being crossed by a foot bridge. A wagon-road about  $1\frac{1}{2}$  miles long is now being constructed to this property from the end of the motor-road from Topley to the Topley and Richfield groups, which will be a more convenient means of access.

The group is on the southern slopes of Tachak mountain which rise from Finlay creek at about 30 degrees flattening somewhat at higher points. Although outcrops of the epidotized andesite formation are not infrequent, the intervening region is overlain by glacial debris and covered with standing dead timber, windfalls, and second-growth timber.

within a width of 50 feet, 3 shear-zones are exposed in the epidotized andesite. Of chief importance is one from 6 to 8 feet in width, which strikes north 86 degrees east and dips north-west. On the hanging-wall and on the foot-wall occur mineralized bands of quartz. The hanging-wall band is from 10 to 15 inches in width and is sparsely mineralized, the foot-wall band is from 9 to 18 inches in width and is

93LO17-07 PROPERTY FILE well-mineralized, intensely oxidized, and heavily stained with manganese dioxide. Mineralization consists of quartz sphalerite, pyrite, chalcopyrite, specularite, azurite and malachite, and manganese dioxide. Between the quartz bands the filling consists of silicified and bleached formation.

The showings now under investigation by the owner were discovered by him during the present year.

The surface showings lie in a direction north 26 degrees west of the Golden Eagle No. 2 shaft. At elevation 3750 feet. 90 feet above Finlay creek, on the north slope of the creek valley, an open-cut 21 feet long, 4.5 feet deep, and 9 feet wide, exposes a shear-zone from 6 to 8 feet in width striking north 86 degrees east. The foot-wall dips from 25 to 34 degrees, and the hanging-wall from 46 to 56 degrees to the north-west. The occurrence may, therefore, be that of two intersecting closely-adjacent shears, rather than one shear. On the hanging-wall is a somewhat oxidized sparsely mineralized band of quartz from 10 to 15 inches in width, and on the footwall a quartz band from 9 to 18 inches in width intensely oxidized and heavily stained with manganese dioxide. mineralization is as described. Between the quartz bands the filling consists of silicified and bleached formation. Distant 29 feet in a direction south 36 degrees west another shear-zone with a small band of quartz is exposed by an open-cut at a somewhat lower elevation. This shear-zone strikes due east and west and dips north at a steep angle. Distant 20 feet from the first-mentioned open-cut in a direction north 24 degrees east, and 20 feet higher in elevation, open-cutting discloses another shear-zone with a small quartz band, striking north 66 degrees west and dipping north-east.

The following samples were taken in the large open-cut disclosing the shear-zone of chief importance; - a sample taken at the west end across 9 inches of heavily oxidized material on the foot-wall assayed: Gold, 0.08 oz. per ton; silver, 2.4 oz. per ton. A sample taken across 18 inches on the foot-wall at a point 8 feet east of the above sample, assayed: Gold, 0.06 oz. per ton; silver, 16.0 oz. per ton; copper, 0.2 per cent; lead, nil; zinc, 5.0 per cent. A sample taken across 18 inches 5 feet east of the last-mentioned sample, assayed: Gold, 0.02 oz. per ton, silver, 1.8 oz. per ton; copper, trace; lead, nil; zinc, 4.0 per cent. A sample taken across the best part of the hanging-wall seam assayed: Gold, 0.03 oz. per ton; silver, trace.

The intention of the owner is to endeavour to find the point of intersection of this shear-zone and the one exposed somewhat to the north.

A small dump of vein-material has been accumulated beside the large open-cut, in weight about \( \frac{1}{2} \) ton. A grab sample of this assayed: Gold, 0.22 oz. per ton; silver, \( \frac{1}{2} \) to per ton; copper, trace; lead, nil; zinc, 3.0 per cent.