

PMK

007758

TO: W. M. SIROLA
 FROM: F. CHOW
 SUBJECT: Glenlyon Project Progress Report,
 Period Ending September 4th, 1969.

Read 8/18/69

J.H.S.
P.M.K. ✓
R.D.S.
B.C.B.
I.D.B.
G.M.H.
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<u>J</u>

During the past two weeks, about six days were spent on prospecting the Tay River area and the remaining time on staking, silt and soil sampling, plus prospecting the Lynda Creek area.

Reconnaissance Traverses:

After the initial staking program, the three field parties continued investigating the airborne magnetic anomalies.

No economic minerals were found. The ground over most of the anomalies was found wanting of rock outcrops. Therefore, the explanation of the magnetics will have to be surmised in most cases, but the silt and soil samples may indicate the presence of mineralization.

Geochemical Sampling Results:

Only one magnetic area showed higher than average geochemical values. This is located on one of three isolated anomalies which lie on a northwest trend, situated about 0.5 miles southwest of the Anvil Mine road turn-off. A few other high values occur near a fourth (isolated) magnetic anomaly, located about 3 miles southeast of the first mentioned one.

Area 1 (62°11'/133°26'):

Four soil samples on a westerly line, along the nose of a

hill, assayed from 68 to 750 ppm Pb and from 43 to 553 ppm Zn. No samples were taken north of this line and no samples were taken beyond the 2800' of the traversed line. Samples taken south of the line, for a distance of two miles or more, showed an average about 25 ppm Pb and 55 ppm Zn. Average of the four high assays are: 275 ppm Pb and 312 ppm Zn.

Area 2 (62°9'/ 133°22'):

Four continuous soil and silt samples, along a 6000' traverse (northwest), assayed 26 to 110 ppm Pb and 300 to 625 ppm Zn. The Pb values are low but the Zn values are about three times the threshold value. This area is open for investigation towards the southwest and southeast.

Mineralization:

From the results of the geochemical sampling so far, it appears that Unit 2 of the Cambrian strata contain a higher content of the heavy metals. This horizon likely encompasses the region between Buttle Creek and Magundy River, and probably extend north to the Pelly River and south to parts of the Quiet Lake map area (Unit A). This is only a general statement as there are areas which show a low metal content.

The higher geochemical values obtained on the Lynda Creek area and northwestward, parallel to the Tintina Fault, is not likely caused by an intrusive contact, nor the Unit 2 horizon alone bearing a concentration of the sulphide minerals. The most probable cause is

fault striking near parallel to the Tintina Fault. The heavy metals within Unit 2 may be re-mobilized adjacent to this "imaginary" fault.

Evidence to support this theory are:

- 1) Shearing and folding in the outcrop on Lynda Creek,
 - 2) Minor sulphide mineralization within the sheared rocks, and
 - 3) Mineralized Pb-Zn "float" found on the bank of Goodwin Creek
- show shearing and shattering.

Mineralized Float:

Lead-zinc mineralized float was found (yesterday) buried in soil and rock rubble about 15' above the waters of "Goodwin Creek", at 56+00N/172+00W. (Second Creek northwest of Lynda Creek).

Since John and I were staking the ground we did not spend any time to do any prospecting. This will be a good spot for Wilf and Cap to commence prospecting because the area shows a geochemical "high" according to the total heavy metals field tests (Jens Mogensen Geo-chemical Kit).

Five to 6 pieces of the mineral bearing rock were picked out from the one soil sample hole. It is a limestone, sheared and shattered, with final movement occurring after mineralization.

The rocks are semi-angular, rusted and coated. Upon breaking to a new surface, the galena stands out well - massive, fine-grained, and similar to the United Keno Hill ore. The sphalerite is also massive, often showing one to two cleavages.

Other rocks from the same hole show sharply angular, flat slabs of buff-coloured silty limestone.

Total Heavy Metal Geochemical Kits:

The new field kits you sent us are working well for us. Although we cannot follow his colour determinations throughout, we have developed a colour scheme of our own which will suffice for the time being. As we obtain more correlation with known assays from samples sent to the lab, we should be able to define the value of samples taken in the field. Nearly all recent samples have been field tested.

Enclosed is a sketch showing the combined lab and field assays in 200, 300, and 400 ppm contours of Zn.

(signed)

Fred Chow.

FC/1k

Encl.