DEWAR CREEK PROJECT REPORT

May 26 to June 23, 1971

During the period between May 26 and June 23 the work done on the Dewar Creek project consisted of setting up base camp, completing aeromagnetic survey and the placement of field crews within the St. Mary Lake map-area for prospecting and checking magnetic anomalies.

To date, nothing of interest has been found. The aeromagnetic survey outlined a few obvious anomalies and probably more as the detail contour map is completed. The first two geochemical sample returns do not show a high metal content in the areas prospected.

Base Camp

Base camp is located on White Creek, 1,000' northeast of the junction with Dewar Creek. It is at Mile 25 on the St. Mary Leke road.

The above road was repaired and made possible for truck traffic by the crew on May 28. Camp buildings and interior work was completed on June 1.

The chartered helicopter from Okanagan Helicopters arrived in camp on June 2.

Field Work and Reconnaissance

The two student parties were sent out by helicopter on June 3 for a 'break-in' traverse to test both men and equipment. Wilf Christian and the writer made a reconnaissance fly-trip over the prospecting areas.

On June 4 all the field crews were dispatched to their assigned exploration areas by helicopter and car to their fly camps.

Ted LaRose arrived on June 4 and installed and tested the Elsec magnetometer.

Aeromagnetic Survey

The survey commenced on June 5 and was completed on June 20. Six days were lost due to bad weather and instrument problems. A total of 61.5 hours were flown on the survey.

In the main, all three map-areas show a flat magnetic response on the 1250 gamma scale. The St. Mary Lake and Dewar Creek map-areas indicate a background reading of about 58,260 gammas, and the Finlay Creek map-area shows a reading of 58,380 gammas. The latter area gave fewer magnetic anomalies than the first two.

Dewar Creek Project Report May 26 to June 23, 1971.

Page 2

Test flights over the Sullivan Mine and the Stemwinder deposit did not show any anomaly on the 1250 gamma full-chart scale. One successful flight was made over the above properties with the recorder set at 500 gamma full-chart. Magnetic anomalies were obtained. Unfortunately, the recorder was unable to function properly at this setting.

Magnetic anomalies within the St. Mary Lake map-area are being investigated. So far, magnetite is found to be the chief cause. It occurs as isolated concentrations in the Moyie diorite sills, as disseminations in green argillites in the White and Dewar Creek south area and as fracture fillings in sediments along and near the St. Mary Lake Fault. Pyrrhotite is yet to be found to be the main cause of a magnetic anomaly, although the writer has heard from local prospectors of pyrrhotite mineralization in certain locations in which we have obtained magnetic anomalies.

Plotting of magnetic values on 1" = $\frac{1}{2}$ mile contour maps is now near completion for the St. Mary Lake sheet. Drafting the same on the Dewar Creek and Finlay Creek sheets is in progress and is estimated to take about 5-7 days for completion. If the necessary material is available locally, then ozalid prints would be made in base camp and forwarded to you.

Prospecting and Exploration

According to my estimate, the exploration area as proposed is too small for the three field parties and time on hand. Therefore, I have taken the liberty of enlarging the total area to include all of Unit 2, middle division of the Aldridge Formation. (see 1A, 2A and 4A areas in the accompanying map.) Another factor in this decision is the low snow level within the upper (north) half of the prospect area. There is a difference of nearly 2,000' between the two valley floors.

To date Area 1 is 2/3 explored, Area 2 is 9/10 completed, Area 1A is 1/2 completed and Area 2A is explored. Isolated high regions within each area will be prospected when the snow melts away. One crew will be moved into the southern part of Areas 3 and 4 next week.

Other Activities in Immediate Area

Texas Gulf is doing work on their claim group(s) adjoining Cominco on the south (Area 1 east boundary).

Imperial Oil has moved into the Granite Creek or Morigeau Creek area (adjoins northwest corner of Area 4).

Cominco has started 12,000' (?) surface D.D. hole on the west side of Sullivan Fault near Mark Creek (to probe for down-faulted block?). Plans also call for mapping of Skookumchuk Creek area (probably Buhl Creek north of the mine).

Dewar Creek Project Report May 26 to June 23, 1971.

Page 3

Weather

Thunder and lightning storms have commenced, signifying the approach of the normal dry, hot summer. Days are warm but nights remain cool at freezing or near freezing temperatures.

Camp Life

Camp Life is approaching a normal pace, with the urgency and tension of the first three weeks left behind.

Our naturalist neighbours have not yet accepted our invitation to use our shower fecilities. Likely because of the see-through walls.

Respectfully submitted,

Fred Chow.

* This sentence should be reworded as follows:

Magnetic anomalies in the order of 200 gammas were obtained. For the bulk of the exploration area, however, the magnetometer is too sensitive when set at 500 gammas f.s.d. In this range the magnetic gradients are too steep for the instrument.

