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PROPOSAL FOR A SÉPCIAL PROJECT

TP CLAIM GROUP

WILLOW RIVER AREA 93G

November 1st, 1968

J.C. Stephen

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TP CLAIM GROUP

SUMMARY:

Prospecting on the TP claim group indicated an area of basic intrusive rock with local chalcopyrite mineralization. Soil sampling of a reconnaissance nature has outlined a number of areas with anomalous copper content. An attempt at geological mapping of the claim group was ^{not} ~~un~~successful due to the ^{and the general} ~~in~~experience of the geologist, and the difficult ground conditions. This proposal presents the current information, together with cost estimates for further work to include line cutting, magnetometer surveying, further soil sampling and geological mapping. Estimated cost of this program is \$8,850.

INTRODUCTION:

Presence of a strong aeromagnetic anomaly in an area underlain by Triassic formations and cut by major faulting, prompted investigation by prospecting and soil sampling, early in July 1968. Figure I shows the outline of the aeromagnetic anomaly, and the TP claim group.

LOCATION & ACCESS:

The ³⁶claim group lies south of the Willow River approximately forty miles south east of Prince George. It can be reached by following the Buckhorn Lake road easterly from Highway 97. The area of interest lies about two miles south of the end of present logging roads.

Rock exposures and anomalous areas occur on a heavily wooded hillside, at elevations ranging from 3,500 to 4,700 feet. The access road along the Willow River is at the 3,000 foot elevation.

GEOLOGY AND GEOPHYSICS:

The area is shown on geology map 49-1960 Prince George 93G to be underlain by Triassic formations. Prospecting indicates a 'hornbl^εndite' intrusive of somewhat variable composition surrounded by sediments and minor volcanics. Some of these surrounding rocks are altered to hornfels near the intrusive contact.

Outcrop is relatively sparse.

Mineralization so far encountered consists of ⁱdesseminated pyrite and/or chalcopyrite in the hornbl^εndite. Specimen A is from rubble in the vicinity of geochemical anomaly 2. A specimen of this material assayed ^A0.38% Cu.

No outcrop has been observed in the vicinity of anomalies 4, 5 or 6.

No ground geophysics have ^sbeen done as yet. Aero-magnetic maps show a north west trend^{ing} magnetic high which may indicate similar basic rocks to the north west

GEOLOGY AND GEOPHISICS (continued)

of the claim group. This has not been investigated.

The sharp eastern termination of the magnetic anomaly together with a north south trending magnetic low, suggests a major fault zone. See Figures I and II. It is along this zone at the eastern end of the hornblende^E intrusive that the best geochemical results have been found.

GEOCHEMISTRY:

Soil samples were taken on an irregular grid pattern by pace and compass using claim lines as base lines. Samples were tested in the field for copper content by the rubcanic acid method and were then submitted to Bondar-Clegg & Co. Ltd. for determination of copper content by Lot ^HHNO₃- HCl extraction. Results are plotted on Figure III. Soil sample spacing varies from 200' x 200' to 200' x 800'. A number of anomalous zones are indicated as listed below.

SAMPLES

| <u>Zone</u> | <u>Dimensions</u> | <u>Number of Soil</u> | <u>Trend of Zone</u> |
|-------------|-------------------|-----------------------|----------------------|
| 1 | 600' x 300' | 5 | Northeast |
| 2 | 600' x 400' | 4 | North |
| 2A | 700' x 200' | 2 | North |
| 3 | 1500' x 200' | 3 | North |
| 4 | 900' x 500' | 3 | North |
| 5 | 3000' x 600' | 20 | North |
| 6 | 1800' x 300' | 5 | Northerly |

Moreover this should be done before Xmas, in order to take advantage of the local logging situation which will be able to put in an access road at an estimated cost of only \$500.

RECOMMENDATIONS:

Further claims should be staked to the north and east of the present holdings. Line cutting should be carried out in the areas of interest as indicated on Figure III. Due to heavy underbrush and windfall this can be done more cheaply during the winter. A Magnetometer survey should be carried out on these ^{grid} lines.

After spring break up, these lines ^{can} should be used for a more thorough geochemical survey and for geological mapping.

150
20
300
1250
20

COST ESTIMATES:

Winter Program

| | | |
|-------------------------------------|--|--------------------------------------|
| Base lines | 11,600' @ \$240/mile = | \$ 530 |
| Picket lines | 82,800' @ \$180/mile = | <u>\$2820</u> |
| | | \$3350 ✓ +v |
| Rental - magnetometer | | 300 |
| Supervision and magnetometer survey | | 750 |
| Food supplies | BOARD AT LOGGING CAMP @ \$7/man/day | 500 |
| Mobilization and transportation | | 400 800 |
| | | 5550 |
| | | \$5700 |
| Staking and recording 20 claims | | <u>150</u> |
| Total | | 5700 \$5850 |
| | | 570 |
| <u>TOTAL</u> | | <u>\$6270</u> |

COST ESTIMATES (Continued)

Summer Program

| | |
|-----------------------------------|---------------|
| Mobilization and transportation | \$ 500 |
| Soil sampling | 600 |
| Geological mapping | 550 |
| Sample determination 900 x \$1.50 | <u>1350</u> |
| Total | \$3000 |
| <i>Contingencies</i> | <u>300</u> |
| | <u>\$3300</u> |

Respectfully submitted,

J.C. Stephen

JCS/cb