

REPORT ON

GEOPHYSICAL SURVEY OF GRAY ROCK

IN THE GOLDBRIDGE AREA, B.C.

SEPTEMBER, 1976

Vancouver, B.C. September, 1976 S. Presunka

B. Manchuk

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INTRODUCTION

Two separate grids (north and south) consisting of a total of line miles was established by chain and transit over the Gray Rock property. An EM-16 and magnetometer survey was carried out by Presunka Geophysical Surveys in late August of 1976 to test for

a) possible extensions of the known mineralization
and,
b) to test for structural repetitions of the known
mineralization in a talus covered area.

A Ronka EM-17 (Horizontal Loop) was used to further qualify the EM-16 anomalies.

As shown on the accompanying maps, the south grid lies on the side of a very steep dipping north slope, the western portion of which extends across known mineralized veins; the purpose of which was to establish if possible a geophysical signature for the veins. The base line of the south grid has an azimuth of 080[°] and extends for a length of 1000' from L.4E to L.14#. Cross lines were run at 200' intervals along the base line mostly to the north to cover the proposed extension of the veins. In this way some 2700' of line was geophysically surveyed electromagnetically and magnetically with the Ronka EM-16 Ser. No. 2 and M.F.I. Fluxgate, Ser. No. 905454.

.../2

The magnetometer survey was carried out by Peter Presunka, an employee of Presunka Geophysics. Base stations were established along the base line for diurnal control, and readings were taken at 25' intervals along the cross lines. The corrected magnetometer readings were plotted and contoured on a scale of one inch to two hundred feet. The EM.16 survey was conducted by Steve Presunka using two V.L.F. stations 18.6 MHz and 23.4 MHz. V.L.F. readings as well as topographic slope directions were taken every 50 ft. along the lines. The V.L.F. results were plotted on the same scale as the magnetic results, with each V.L.F. station being profiled and contoured.

Both V.L.F. stations have high inphase results due to the conductivity of the host rock. The magnetic range was from -30 to just over 1000 gammas.

SOUTH GRID

Magnetometer Survey

The magnetometer was adjusted to read 500 gammas for background. The magnetic trend is more or less in E.W. direction, similar to that of the vein which is exposed on line 4E some 25 ft. north. At L-10E the magnetic trend swings in a southerly direction. The narrow vein exposed on L-10E at 325 ft. north strikes in a N.E. direction which is in magnetic low.

EM.16 - Survey

With the V.L.F., ST.18.6 delineated a N.W. trend, while the V.L.F. station 23.4 showed a N.E. trend. This is the result of the

-2-

slope effect of the conductive rock type. A weak secondary conductor was picked up by V.L.F. St.23.4 on L-12E at 440 ft. north, indicating a narrow shear. The EM.16 did not respond over the veins as it was hoped, as stibnite is not a conductor, and other conductive sulphides occur only in minor amounts.

NORTH GRID

A split base line was established with azimuth 090. The 0+00N base line extends from 8E to 28E. The second base line was offset 700 ft. to the north, and extends from 8E to 0. The total length of the base lines is 2800 ft. Cross lines were run at 200' intervals along the base line and in this way approximately 12,800 ft. of line was established.

Magnetometer Survey Inst. M.F. 1 Fluxgate Ser. No. 905454 - Operator P. Presunka

The most significant magnetic feature is the nearly N.S. magnetic trend located between Lines 18E and 22E. This very likely is due to a wide basic dyke. The magnetic high in the S.W. corner of the grid is likely due to some basic rock which strikes in north-west direction. A slight rise in mangetic values from L-24 to 28E is probably higher ground. The entire north grid is covered by heavy talus.

Electromagnetic Survey - Inst. Ronka EM.16 Ser. No. 2 - Operator S. Presunka V.L.F. ST.18.6

Two plans on a scale of one inch to two hundred feet were made for V.L.F. ST.18.6, one was contoured, and the other profiled. The E.M. trend on the eastern portion is to the N.E. while the western portion is to the N.W. The EM.16 responded favourably on this north grid. Delineating 3 conductors numbered 1, 2, 3 on the maps.

No.1 a N.W. striking conductor is a two-station anomaly which makes it the better of the three conductors. This anomaly starts on line 14E at 6N and striking in N.W. direction crosses L-6E at 100 ft. north. A similar weaker magnetic trend follows this conductive zone. This conductor is likely due to sulphides.

Conductor No.3 located on Line 20E some 50 ft. south, strikes in a N.W. direction to continue as a secondary conductor to L-8E at 550 ft. north. The conductor crosses the magnetic high between Lines 20 and 22E south of the base line. Depth to this conductor is about 175 ft. Conductor 3 likely is eastern extension of No.1 The estimated depth to the conductor on L.20E at 550 N is about 200 feet.

EM.16 V.L.F. ST.23.4 Hawaii

The No.1 and No.2 conductors shown on the NW. portion of the grid are defined by two V.L.F. stations.

No.l conductors starts on Line 14E at 6+25N and strikes in a W-N.W. direction to cross line 8E at 0+50N. This conductor has a weak horizontal loop response.

No.2 starts on L.12E at 2+75N, strikes in a N.W. direction to cross L.8E at 5+25N and the base line at 5+00E. The conductor likely due to a shear with minor amounts of sulphide.

-4-

Horizontal Loop Survey. Inst. Ronka EM.17 Ser. No. 0017 - Operators: P. Presunka and S. Presunka

The horizontal loop survey was used to further qualify the EM.16 anomalies. Two and three hundred foot cable separations were used.

The horizontal loop responded weakly over the EM.16 conductors The response over the No.1 conductor was weak. Considering the type of mineralization in this area any response with the horizontal loop could be considered favourable. The most interesting conductor located on L.14E at 6+00N responded to the horizontal loop (No.1), and could be considered a likely drill target. A diamond drill hole spotted on L.14E at 5+00N would intercept the conductor. Should drill results of Hole #1 be encouraging, then a second hole could be spotted on the base line at 8+00E and drilled to the north to delineate this conductor.

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-5-