

Soil sampling in the Tyndall Mine area showed no significant anomalies. However soil sampling over crystal lithic tuffs containing hematitic fragments gave Ag values of 2 g/t and 3 g/t at line 26.6N, 2450'W and 2500'W respectively. These values, although not significant, may indicate a possible extension to the north of silver mineralisation occurring within hematitic, carbonate rich tuffs of unit 8, (see Section 2.1.6 and Figure 19).

Assays for soil sampling from line 16N showed no significant values.

3. Rock Chip Geochemistry

Rock chips were collected during routine mapping traverses in the line 30N pit area and on line 16N. Samples were routinely assayed for Cu, Pb, Zn, Ag, Mn, and "soluble" Ba by AAS following perchloric acid/nitric acid digestion. Rock chip analyses and sample locations are presented in figure 9 and assay data is tabulated in Appendix C.

Rock chip samples from outcrops on line 16N showed no significant anomalous values. The highest values were 215 ppm Cu, 690 ppm Pb, 460 ppm Zn and 200 ppm Ba from line 16N, 425E.

The line 30N pit and a smaller pit 20 m to the north were resampled and gave similar, moderately anomalous, results to that of Drake in Reid, et al, 1979. A sample from an outcrop of silicified andesitic crystal tuff with disseminated pyrite and chlorite at line 30N, 3750'W gave assays of 3000 ppm Cu, 400 ppm Zn, 6 ppm Ag. This unit appears to be on strike with the line 30N pit. Assays from other outcrops in the area showed no significant anomalous values.

4. Stream Sediments

Stream sediment sampling in the vicinity of the Tyndall Mine and the line 30N pit showed no anomalous values except at the Tyndall Mine (where a sphalerite and galena vein outcrops in the creek) and immediately below the Tyndall Mine. Maximum values of 170 ppm Cu, 110 ppm Pb, 730 ppm Zn, 250 ppm Mn were obtained at line 27N, 2390'W (Tyndall Mine) decreasing downstream to 10 ppm Cu, 30 ppm Pb, 25 ppm Zn, 550 ppm Mn at line 26N, 2190'W. Assays and sample locations are shown on Figure 8.

2.2.4 Geophysics

1. Gradient Array I.P.

Scintrex Pty. Ltd. carried out a 50 ft. spaced gradient array I.P. survey on seven 200 ft. spaced lines in the Tyndall Mine Area (see Appendix D for details). Chargeability and resistivity contour plans are shown on Figure 21 and Figure 22 respectively. The survey gave no significant anomalies except for a single chargeability peak of 40 mV/V (against a background of 15-20 mV/V) and a corresponding resistivity low, directly above the Tyndall Mine. The results show that the chargeable mineralisation is limited in extent and warrants no further follow-up.

2. Dipole-Dipole I.P.

Scintrex Pty. Ltd. carried out a 50 m spaced dipole-dipole I.P. survey in two areas south of line 19N, i.e. lines 18N to 15N and lines 8N to 2N (see Appendix D for details). Chargeability and resistivity data is presented on pseudo profiles (see Figures 23, 24 and 25). The survey was designed to further delineate anomalies located during a previous gradient array survey (Howland-Rose, 1975) and an earlier 200 ft. spaced dipole-dipole survey (see McPhar, 1968).