

4. Ground E.M.

Six line sections were surveyed with Scintrex's new ground E.M. System, SE-88, "Genie" (Table 13, Figure 37). The system was used in the 'Slingram' mode with coil separations of 50 m and 100 m and station intervals varying between 10m and 40m but usually 20m.

The receiver measured the field strength of three signal frequencies (315, 945 and 2836Hz) as a ratio (in percent of the (transmitted) reference frequency (105Hz)). The lines were surveyed by Scintrex Pty. Ltd. on 18th, 19th, 20th and 27th March, 1982. During the survey the 2835 Hz frequency was not correctly zeroed but this should not have affected the results.

There were no anomalies recorded although known mineralisation at 240N, 100mE (disseminated pyrite) and at 152N 793mW (magnetite-hematite-pyrite veins) produced very weak responses. Responses on the eastern ends of the profiles on lines 152N and 128N may be due to steep slopes although "Genie" was designed to minimise such responses (whatever the cause, they are not large). There was no response from the Western Pyrite zone on line 128N (2700'W-2400'W, 900mW-800mW). (A response was obtained by the Max-Min system in 1980-81, however this used a coil spacing of 150m (Hutton, 1981). Nevertheless, the comparative data from Basin Lake (see section 2.6.4 this report) suggests that "Genie" will not detect very poor conductors.

2.2.6 Diamond Drilling

1. Drilling

One diamond drill hole, LS8, was drilled by Associated Diamond Drillers to test the extent of mineralisation and stratigraphic setting of the Eastern Pyrite zone on line 184N (Figure 32).

DDH LS8

Collar Location: 184N, 580mE. Approximately 5364575N,
386195E, A.M.G.
Collar R.L. : About 360m A.S.L.
Bearing : 250° A.M.G.
Inclination : -60°
Length : 355.2m
Commenced : 14th September, 1981
Completed : 30th September, 1981
Contractors : Associated Diamond Drillers, Zeehan
Machine : Mindrill 10L, skid-mounted

2. Summary of LS8 Core

0.0 - 8.8 m : Glacial scree
8.8 - 23.6 m : Orange/dark green brecciated rhyolite
23.6 -171.4 m : Schistose quartz crystal-vitric-(lithic)
tuff with shaley interbeds
171.4 -221.0 m : Dark green altered crystal-vitric-lithic
tuff
221.0 -225.9 m : Grey/pink/green strongly deformed quartz-
sericite-chlorite-pyrite schist (Eastern
Pyrite Zone)
225.9 -292.2 m : Green/brown quartz-sericite-chlorite schist
with variable magnetite-pyrite