

A major fault was intersected between the felsic pyroclastics and a strongly pyritic black shale sequence which has been interpreted as part of the Chamberlain Shale. The shales are intensely deformed with isoclinal folds and intra-formational breccias and has a drilled thickness of 65m. The mineralization appears to be ultra-fine grained syngenetic pyrite with minor pyrrhotite and locally forms up to 30% of the drill core. This unit adequately explains the strong IP anomaly identified in this vicinity during the 1983 dipole-dipole IP survey by EZ Company. A similar strong anomaly was first identified in the early 1970's to the west of the Rosebery footwall sequence within the Mine Lease south of Bobadil. This anomaly had not been previously tested.

The inferred Chamberlain Shales pass conformably down-hole into a sequence of grey pyritic quartzites with interbedded black shale bands varying between 0.1m and 1.2m in thickness. This sequence has been tentatively correlated with the Stitt Quartzite.

An examination of the drill section for DDH BD1 (Figure 18) and the geological map (Figure 14) suggests that a prominent WNW fault structure cuts the area in the vicinity of the drill hole. Evidence for such a structure is provided by the apparent offset of a shale lens between lines 10,700N and 11,100N, and a similar offset of the geochemical anomaly across line 11,500N (See Figure 15). It is possible that because of this fault, and the inferred east-dipping faulted Rosebery Group contact that the soil anomaly may not have been tested by DDH BD1.

5.5. Conclusions

A strong zinc in soil anomaly has been outlined at least 600m long and up to 150m wide, close to the Mt. Read Volcanics - Rosebery Group contact, 3km north along strike from the Rosebery deposit.

Two mineralized shale lenses carrying minor veinlet sphalerite were intersected within a dacitic pyroclastic sequence in DDH BD1 drilled to test the soil anomaly.