

boundary of E.L. 2/63, and is correlated with the Lower Chert in the southern section of the Mt. Lindsay Grid. The cherts do not appear south of line M.V.I., and have possibly been faulted out. Sediments within this bed consists of nodular haematitic cherts, and pink siliceous cherts. The nodules show evidence of post-depositional consolidation, as individual nodules are often oval. The haematitic cherts weather to form ferruginous ironstones, and often contain blocks of unweathered pink cherts. Good exposures of the ironstones can be seen between lines M.V.I. and M.V.2. The cherts have good magnetic expression, and the ground magnetic survey was used as a mapping tool in areas of poor outcrop.

A sequence of siltstones and shales conformably overlies the Lower Chert. These sediments are exposed along the Chert Creek road, and are several hundred metres thick. The siltstones are very similar to the sediments underlying the Lower Chert. Close to the top of this sequence of sediments, pink scree was located. This bed has been traced from lines M.V.3 to M.V.7., by its associated narrow magnetic response. The pink chert probably correlates with the Upper Chert horizon in the Mt. Lindsay - Salmon Creek area.

The siltstones are overlain by argillites and tuffs of the Crimson Creek Formation. These rocks have been discussed in more detail in the 1972-73 Annual Report and are not considered to be of economic importance in this area.

The age of the rocks in the area is uncertain - due to the lack of fossil evidence; but are now considered to be of Lower Cambrian Age - by comparison with rocks at Renison Bell.

The overall structure in the Misty Valley area is that of an east dipping sequence of sediments. To the north of the grid rocks have been folded into an almost isoclinal anticline and syncline. South of the grid, the massive quartzites are folded into a domal structure. To the west of this dome part of the sequence (chert horizons) is missing, suggesting faulting or erosion of part of the sequence.

8.3. Geophysical Surveys.

A variety of geophysical methods were tried over the