

account for the substantial off-setting of correlatable units. No evidence for these faults has been seen on the ground, and they must be regarded as interpretive.

8.3. Mineralisation exposed in costeaning at East Chester is associated with a strongly silicified acid fragmental unit, overlain by a distinctive massive quartz felspar porphyry. It is interpreted as being on the west limb of the north-east plunging Burns Peak Syncline, possibly the time equivalent of the black pyritic mudstones exposed in the east limb costeans. The mineralisation is probably related to hydrothermal fluids precipitating out in unconsolidated material immediately beneath the bedrock-water interface. This would indicate that this horizon presents a favourable target along strike, where exhalative material has entered the overlying water, and any associated sulphides may have been precipitated as stratiform bodies in favourable structural and chemical traps.

8.4. Geophysical methods have not been fully utilised, due mainly to budgetary restraints. Self Potential surveys are a valid mapping tool, and should be carried out as a standard procedure. Ground magnetic surveys do not appear to be a feasible mapping tool, as there is little variation in response from the different lithological units in East Chester. However, it is a rapid test of the ground, and does give some finite responses, the cause of which need to be investigated.

Induced Polarisation is a significant exploration tool, and has successfully delineated the pyritic black shales and mudstones in East Chester. Detailed interpretation of the results in relation to the geology may outline other responses that may be due to sulphide mineralisation rather than lithological response.

8.5. AO geochemical sampling appears to have been successful in East Chester in outlining zones of above background values in bedrock. It is not of itself a definitive tool for precisely locating sources of anomalies, but used as part of a total exploration programme, it is a useful technique.