

3.6 VOYAGER 31

i) Geology and Rock Geochemistry

The name Voyager 31 refers to the general environs of lead-zinc-silver mineralization discovered in the bank of Copper Creek at about 5,250,700N (AMG) during reconnaissance mapping and stream sediment sampling in March, 1981.

Copper Creek more or less follows the contact of the Sassy Creek Argillites with the Wart Hill Pyroclastics. The contact is generally sharp and apparently conformable with layering in the argillites, suggesting a depositional rather than faulted boundary. It is considered that the contact is broadly conformable with minor local disconformities.

Mapping has so far been confined to the main stream of Copper Creek north of 5,248,000N and a major tributary stream, Pleasant Creek, which drains the northern edge of the Voyager 19 grid (plan 65). The Wart Hill Pyroclastics are represented by siliceous and commonly chloritic lithic and crystal tuffs rather similar to those found on the western part of the Voyager 19 grid. The argillites are typically grey to black, massive to finely laminated phyllites, slates and siltstones, often containing minor pyrite. They invariably have a strong cleavage striking NNE sub-parallel to layering and are locally tightly crenulated with minor fold axes plunging moderately to steeply to the north. The tuffaceous siltstones, sandstones and conglomerates in Pleasant Creek are considered to 'belong' to the Sassy Creek Argillite group and were probably deposited in localized shallow-water facies at the onset of clastic sedimentation.

Regional geol, outcrop pattern
& style of mineralization
suggest Wart Hill Pyroclastic-
Sassy Cr Argillite contact
may be a major fault!