

The purpose of the costeans was to expose bedrock and to collect bedrock channel samples to relate the C-horizon soil anomalies to host lithology.

Costean No. 1                      Line 13300N 10074E - 10088E

This costean was excavated from the aforementioned 'discovery' pit east along the grid line to intersect the massive sulphide lense north of the gossan outcrop (fig 4). The costean exposed a sequence of kaolinised and iron stained, quartz crystal, lapilli tuffs and a 6 meter wide sequence of well cleaved, dark-grey, chloritic, tuffaceous shales which contain three lenses of massive sphalerite-galena pyrite mineralization. The main lense is over 1m in width and comprises of competent brown to dark grey weathering banded sulphides. On a macro scale the sulphides display a mineral banding with honey-coloured, fine grained, 10-30mm thick sphalerite rich layers alternating with narrow 1-2mm wide coarsely crystalline bands of galena.

This banding parallels the regional cleavage which is near vertical throughout the costean. Bedding is readily apparent and is manifested on a macro-scale by the overall conformity of the sulphide lense with its host rocks. In hand specimen, relict bedding can be observed as irregular linear cavities which show evidence of primary slumping (plan 28).

Dips are everywhere near vertical and possibly indicate the sulphide lense occurs in the hinge zone of a minor antiform. At 10080E a minor sulphide lense displays bedding normal to the dominant cleavage in the hinge zone of a minor fold structure. Lineations produced by bedding cleavage intersections suggest a southerly plunge to the mineralized lenses.