

BOLD

RIDGE GRID GEOLOGY

Kobau Group

The Kobau Group quartzite is the predominant rock in the grid area. It is a grey to green fine to medium grained foliated rock. The foliation is commonly overprinted with various degrees of silicification. The northern third of the Ridge grid exhibits a high degree of silicification especially where it lies close to the intrusive rocks. The local trend of the foliation is northwest to north. The quartzites on the southern half of the grid are more strongly foliated.

Quartz veining is common in the quartzite. It is randomly oriented and occurs as veinlets up to 20 cm wide. The veins do not carry mineralization in this unit.

The phyllite unit is light to ^adark green, fine grained, strongly foliated, chloritic rock. Silicification is common, making contacts with the quartzite gradational. Foliation trends northwest with occasional ~~locally~~ tightly folded foliations trending in every direction.

Quartz veining is common although not as common as in the quartzites. The veins are up to 10 cm in width and are mostly discordant. Occasionally they contain pyrite mineralization. The gossans located between lines 4+00 E and 5+00E are believed to be part of the phyllite unit, or at least of volcanic origin. All original textures have been obliterated. They are quartz veined and in one location are mineralized with pyrite and pyrrhotite.

Nelson Plutonic Suite: A large outcropping of the Triassic Nelson rocks is found in the centre of the west side of the grid. The rocks are gradational from granodiorites to monzonites and diorites.

The granodiorite is fine to medium grained with biotite and hornblende occurring as accessory minerals. It displays the highest degree of weathering of the intrusive rocks. The monzonite and diorite appear similar to one another in the field. They are fresher than the granodiorite and occur as fine grained, green hornblende porphyrys. Narrow dykes occur around the main body of the intrusive.

The intrusive occasionally carries minor pyrite mineralization and may be mildly gossanous. Silicification is common and may occur to such an extent as to make the intrusive indistinguishable from the quartzite.

Two small occurrences of intrusive rocks are located at the northeast corner of the grid. They appear as amphibolitic diorites with subparallel alignment of the phenocrysts. They are a separate intrusive episode from the Nelson Plutonic Suite.

→ line
Structure: Local foliation within the grid is coincident with

regional foliation. It strikes northwest and dips both east and west. Tight isoclinal and overturned multiple folds occur but are ~~separately~~ small and complex. Two fault sets occur in the Ridge Grid area, a north-south trending set and an east-west trending set. The north trending set occurs along the ridge and is marked in one case by a recessive draw and in another with a fault scarp. Both north-south faults display a high degree of silicification along the eastern border of the grid. The western extension of the east-west faults, which trace Hester Creek, enter the ridge area. They are marked with deeply cut topography at the creek beds.

Mineralization: Mineralization in the Ridge area occurs in two ways. The first, least important, is as minor disseminated pyrite in the intrusive rocks and rarely in the phyllite unit. The second is pyrite and pyrrhotite mineralization in gossanous outcrops. The pyrite and pyrrhotite occur separately but in the same outcrops. They both are hosted in between the micaceous layers in a highly foliated greenstone. Further mineralization is expected to exist beneath the oxidized surface of the other nearby gossans as was found to be the case with the Testalinden gossans.

Table.... lists ~~six rock samples~~ with their descriptions and analysis results. All of these samples were taken from within the Testalinden grid and ran anomalous gold. Sample locations are shown in Figure