

PIT GEOLOGY

000745

The following stratigraphic sequence has been defined in the pit:
 1000 feet of ...
 feet ...

| | <u>Rock Type</u> | <u>Thickness</u> |
|---------------------------|---|---------------------------|
| Stratigraphic Top | | |
| | Calo-silicate schist | > 500' (top not exposed) |
| First deformational event | ----- | |
| below | Biotite schist with graphitic schist interbands | 100' |
| Event | ----- | |
| D ₁ folded | Muscovite, biotite schist | 100' |
| D ₂ | ----- | |
| | Quartzite | 0 - 15' |
| | ----- | |
| | Massive sulfides | 150' Avg. |
| D ₃ | ----- | |
| | Quartzite | 0 - 15' |
| | ----- | |
| D ₄ | Muscovite, Biotite schist | > 100' (base not exposed) |
| Stratigraphic Base | | |
| | ---- = gradational contact | _____ = sharp contact |

D₅ (youngest)

In accordance with Templeman-Kluit, the base of the section was chosen as those units exposed in the core of the Anvil Arch. All lithologic units recognized in the pit are subdivisions of Templeman-Kluit's Unit 3 with the lowest six units forming part of his 1000 foot thick siliceous phyllite sequence at the base of Unit 3. The upper unit in the pit represents the base of his less siliceous calcareous tuffaceous sequence forming the upper 3000 feet of Unit 3. The Faro orebodies lie approximately 300 feet below this tuffaceous sequence.

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Structural Geology:

Five deformational events have been recognized in the pit. An abbreviated summary of these events is given in tabular form below:

| <u>Event</u> | <u>Features Produced</u> |
|---------------------------|---|
| D ₁ (oldest) | Earliest penetrative bedding plane foliation, S ₁ |
| D ₂ | Main penetrative metamorphic foliation S ₂ which cuts and folds S ₁ into F ₂ folds (little data on geometry of these folds due to paucity of development). S ₂ strikes 110° dips 30° SW. |
| D ₃ | Strong, penetrative crenulation lineation, L ₃ , which is the axis of F ₃ folds on S ₂ trending 150° plunging 20° SE. S ₃ foliation is axial planar to these folds and is weakly developed. |
| D ₄ | Well developed crenulation lineation parallel to axes of F ₄ folds in S ₂ which trend 110° and plunge 0° to 20° NW. S ₄ foliation is axial planar to these folds and is weakly developed. Thrust faulting along existing D ₂ axisotropy with accompanying warping of L ₃ lineation around D ₂ boudin lines trending 110° and plunging 0° to 20° NW. |
| D ₅ (youngest) | Sporadically developed F ₅ folds in S ₂ . These folds trend ~60° and plunge shallowly NE on SW. A crenulation lineation often parallels the axes of these folds. |