

REGIONAL MEMBERS OF THE "WHITE" GRANITE

- a) Exposures confined to -
- coastal plain, North Heemskirk Spur and South Gap Peak
  - S.E. contact with sediments - vicinity of the Globe
  - Federation north to 1.2 km west of Mt. Agnew (highest level of "White" granite).

From this distribution the "White" granite is assumed to completely underly the "Red".

- b) Layering is absent except for an increase in grainsize away from contacts with "Red" granite (assuming contact shallow dipping). Contacts between different grainsizes are gradational, approximate thicknesses of layers see Dwg. 3 a, b

fine 75-100 metres  
medium 75-100 metres  
coarse + 200 metres

- c) Contacts with "Red" granite

- "White" granites underly "Red", contacts aren't obviously intrusive. In the South Heemskirk area fine "W" is in direct contact with coarse R/W (marked by aplite and pegmatite lenses). Further north it is more common for fine-medium R/W and R/R granites to overly the "W", contacts are accentuated by color change and nodule rich layers with only slight grainsize changes. Only the former type of contact may be intrusive.

- Contacts conform to layering in the "Red" granite, with the exception of narrow aplite dykes transgressive intrusive granite contacts haven't been mapped. The greatest departure from regional layering is the cupola of "white" E.E. of Federation see Dwg. 3b, this the highest level of "White" granite.

- d) Possible third granite phase.

It may be possible that coarse "White" is +200m. thick forming the major part of the batholith at depth. Alternatively a third phase may exist which doesn't outcrop. Basis for this

- aplites/microgranites in the white confined to the area west of North Heemskirk Spur, this localization indicating the possible presence of a finer phase at shallow depth in this area.

- griesenisation of "White" is ubiquitous, when compared to alteration "dykes" in the "Red" localized above the "Red-white" contact, may suggest a third phase generating "White dykes" in the white granite.