

17/9/76

**GRANITIC AND MIGMATITIC ROCKS  
OF THE COOKE HILL AREA, SOUTH AUSTRALIA  
AND THEIR STRUCTURAL SETTING**

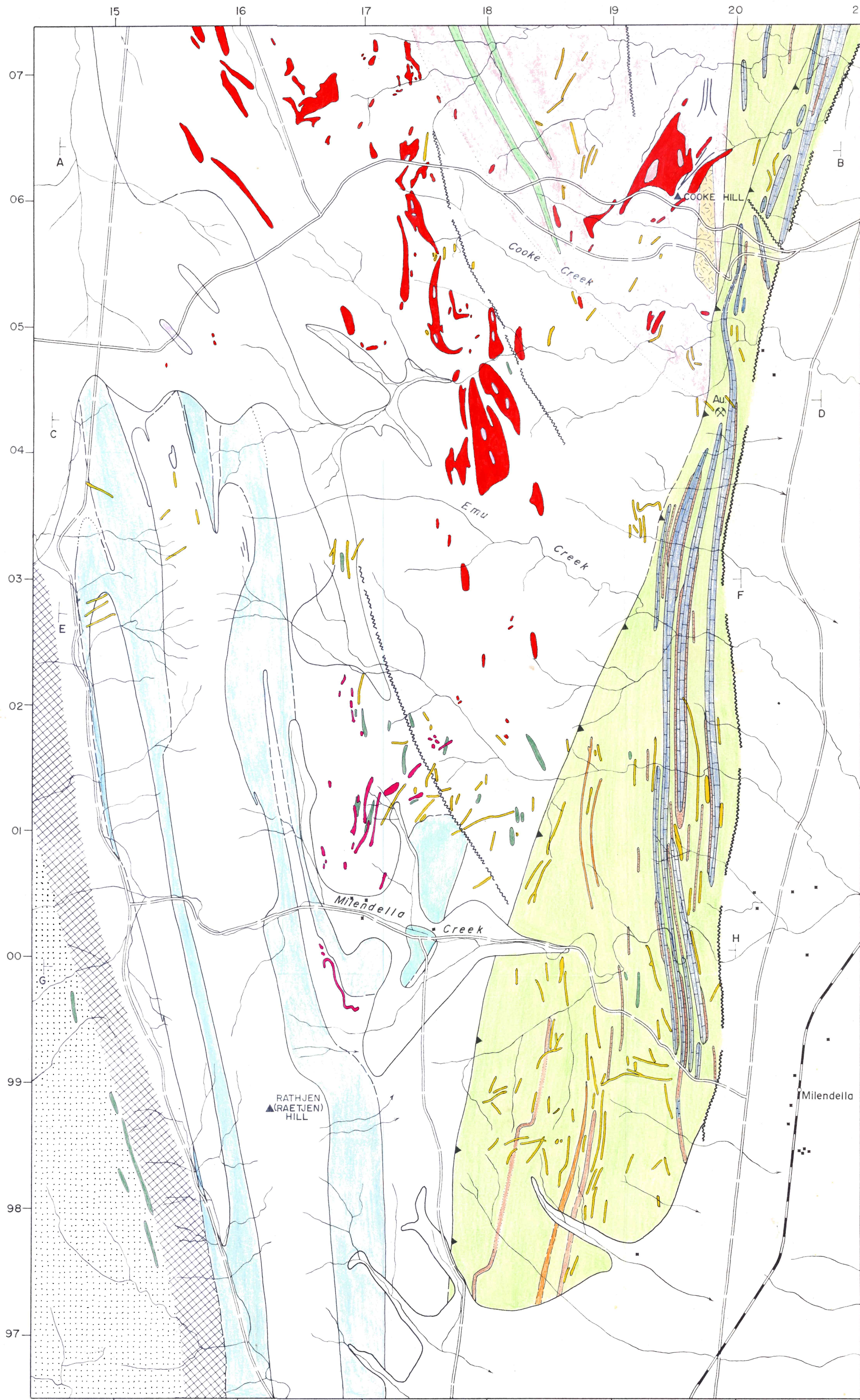
by  
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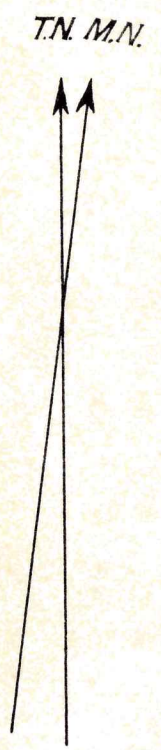
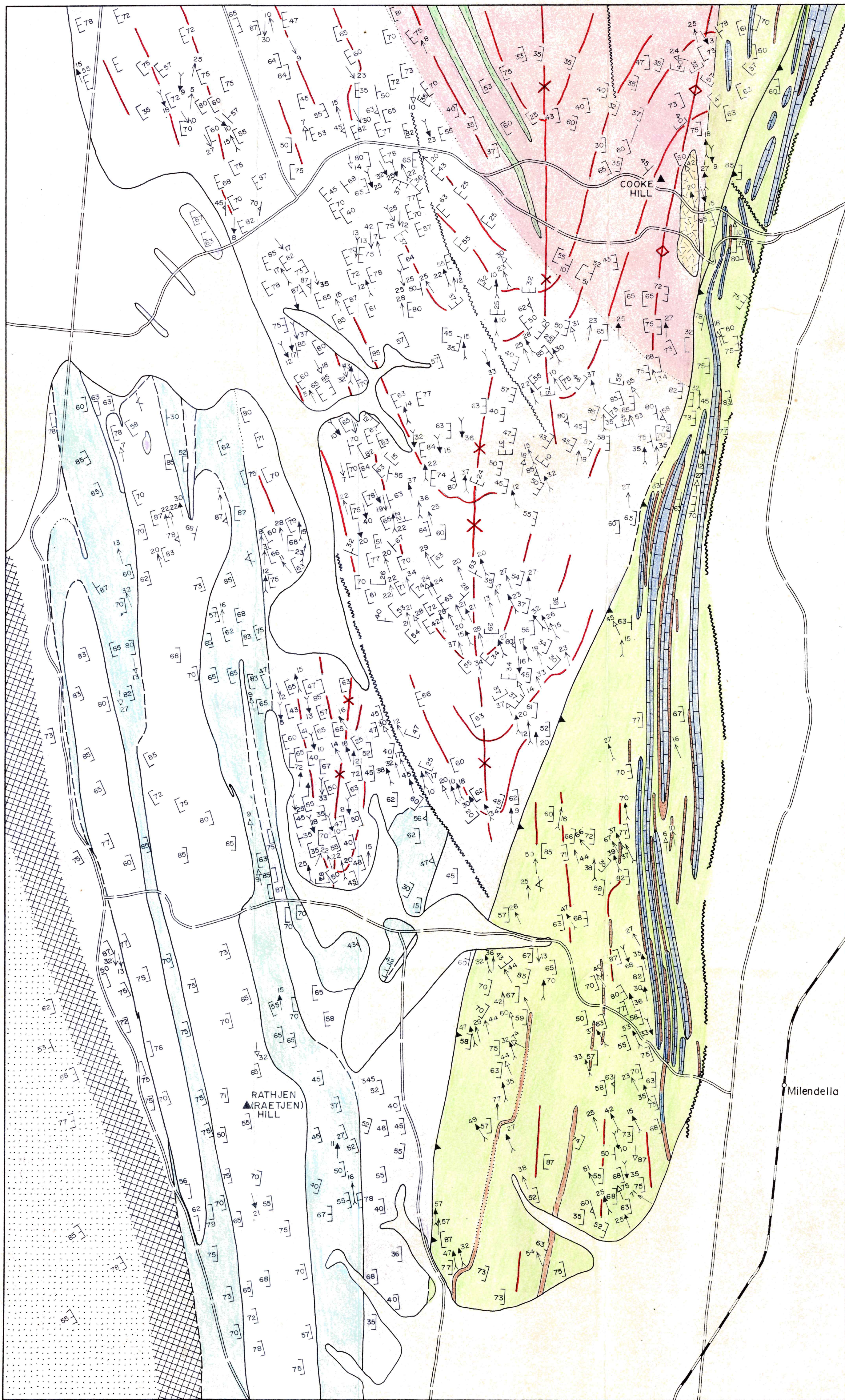
# GEOLOGICAL MAP OF THE COOKE HILL AREA



## LEGEND

- Metadolerites
  - Cooke Hill — tonalites — granodiorites
  - Massive tonalites
  - Pegmatites
  - Foliated pegmatites
  - Quartz veins
  - Quaternary
  - Quartzo-feldspathic gneisses
  - Diopside gneisses
  - Actinolite-tremolite schists
  - Quartzo-feldspathic gneisses with migmatites
  - Quartzo-feldspathic schists with granitic gneisses and mica schists
  - Quartzo-feldspathic gneisses with calc-silicates
  - Quartzo-feldspathic gneisses with impure marble and calc-silicates
  - Observed geological boundary
  - Approximate geological boundary
  - Inferred geological boundary
  - Faults
  - Cooke Hill fault
  - Crush zone
  - Sealed road
  - Unsealed road
  - Railway
  - Geological section
- SCALE  
 Mile 0 0.5 1.0 Mile  
 0 0.5 1.0 Kilometre
- TN

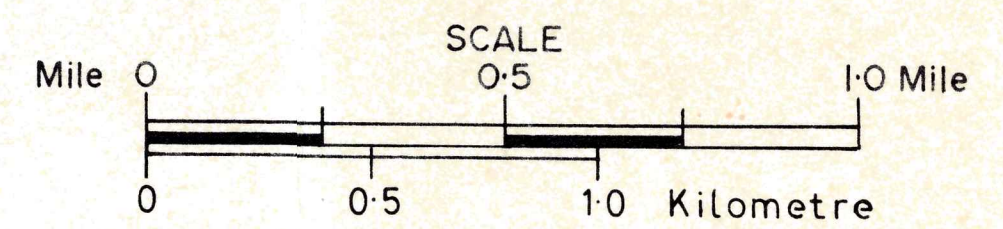




## STRUCTURE MAP OF THE COOKE HILL AREA

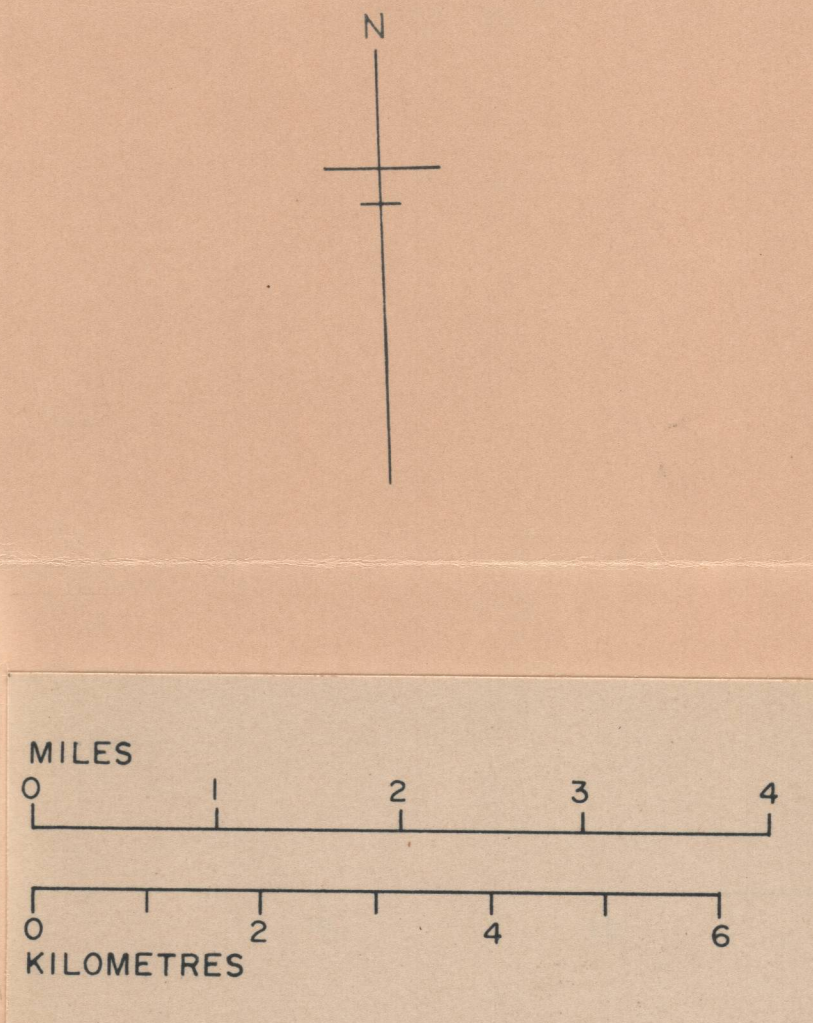
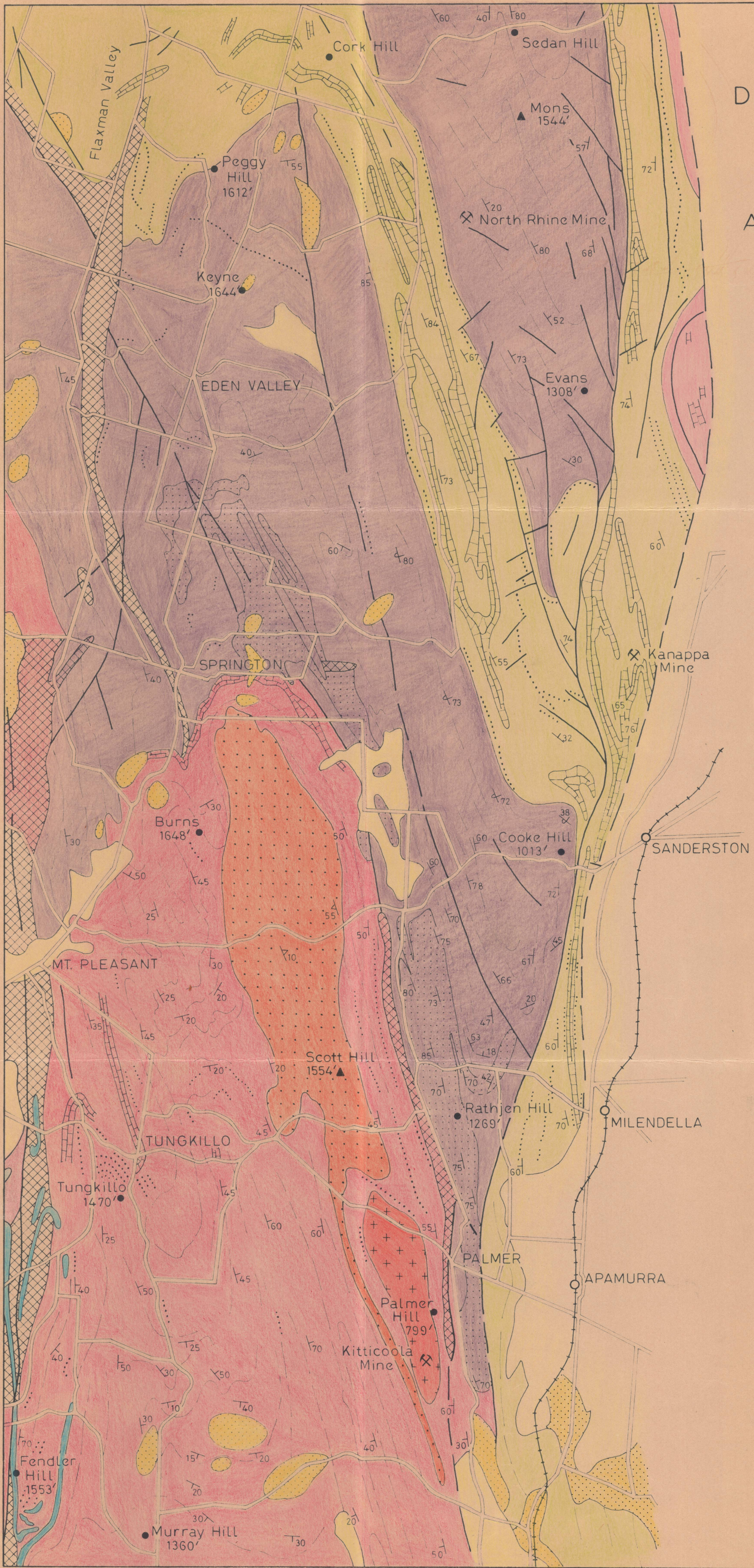
### LEGEND

- |  |   |                              |
|--|---|------------------------------|
|  | Quaternary  |                              |
|  | Quartzo-feldspathic gneisses  |                              |
|  | Diopside gneisses   |                              |
|  | Actinolite-tremolite schists  |                              |
|  | Quartzo-feldspathic gneisses with migmatites                        |                              |
|  | Quartzo-feldspathic schists with granitic gneisses and mica schists |                              |
|  | Quartzo-feldspathic gneisses with calc-silicates                    |                              |
|  | Quartzo-feldspathic gneisses with impure marble and calc-silicates  |                              |
|  | Dip and strike of compositional layering (bedding)                  |                              |
|  | Dip and strike of S <sub>1</sub> schistosity                        |                              |
|  | Dip and strike of compositional layering with S <sub>1</sub>        |                              |
|  | Dip and strike of S <sub>2</sub>                                    |                              |
|  | Undifferentiated lineation  |                              |
|  | L <sub>1</sub> lineation  | Antiform axial trace         |
|  | L <sub>2</sub> lineation  | Synform axial trace          |
|  | F <sub>1</sub> fold axis  | Trend line of S <sub>1</sub> |
|  | F <sub>2</sub> fold axis  |                              |
|  | Observed geological boundary  |                              |
|  | Approximate geological boundary                                     |                              |
|  | Inferred geological boundary  |                              |
|  | Faults  |                              |
|  | Cooke Hill fault  |                              |
|  | Crush zone  |                              |
|  | Sealed road   |                              |
|  | Unsealed road   |                              |
|  | Railway   |                              |





DISTRIBUTION OF THE  
KANMANTOO GROUP  
METASEDIMENTS  
IN THE COOKE HILL  
AND ADJACENT AREAS



- Quaternary soil
- Tertiary sands, clays and marls
- Palmer Granite
- Rathjen Gneiss
- KANMANTOO GROUP.. Metasediments**
- BRUKUNGA FORMATION  
Metasiltstones and metagreywackes
- Pyritic schists
- Tungkillo Marble Member
- Nairne Pyrite Member
- INMAN HILL FORMATION  
Calc-schists and calc-gneisses
- Meta-arkoses and metagreywackes
- Calc-silicate rocks
- STRANGWAY HILL FORMATION  
Metasiltstones meta-arkoses-greywackes
- Milendella Marble Member
- Calc-silicate rocks
- HAWKER GROUP EQUIVALENT**
- Carbonaceous slates and calcareous siltstones etc.
- Faults
- Crush zone
- Dip of bedding, cleavage or schistosity
- Dip of gneissosity
- Trend of bedding or foliation
- Triangulation station

Based on S.A. Mines Dept. Geological Survey Sheet S154-9 with modifications after K.J.Mills (1964) and S.A.F.Abbas



