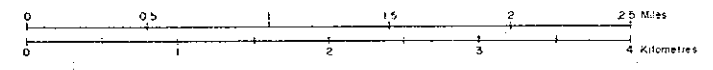
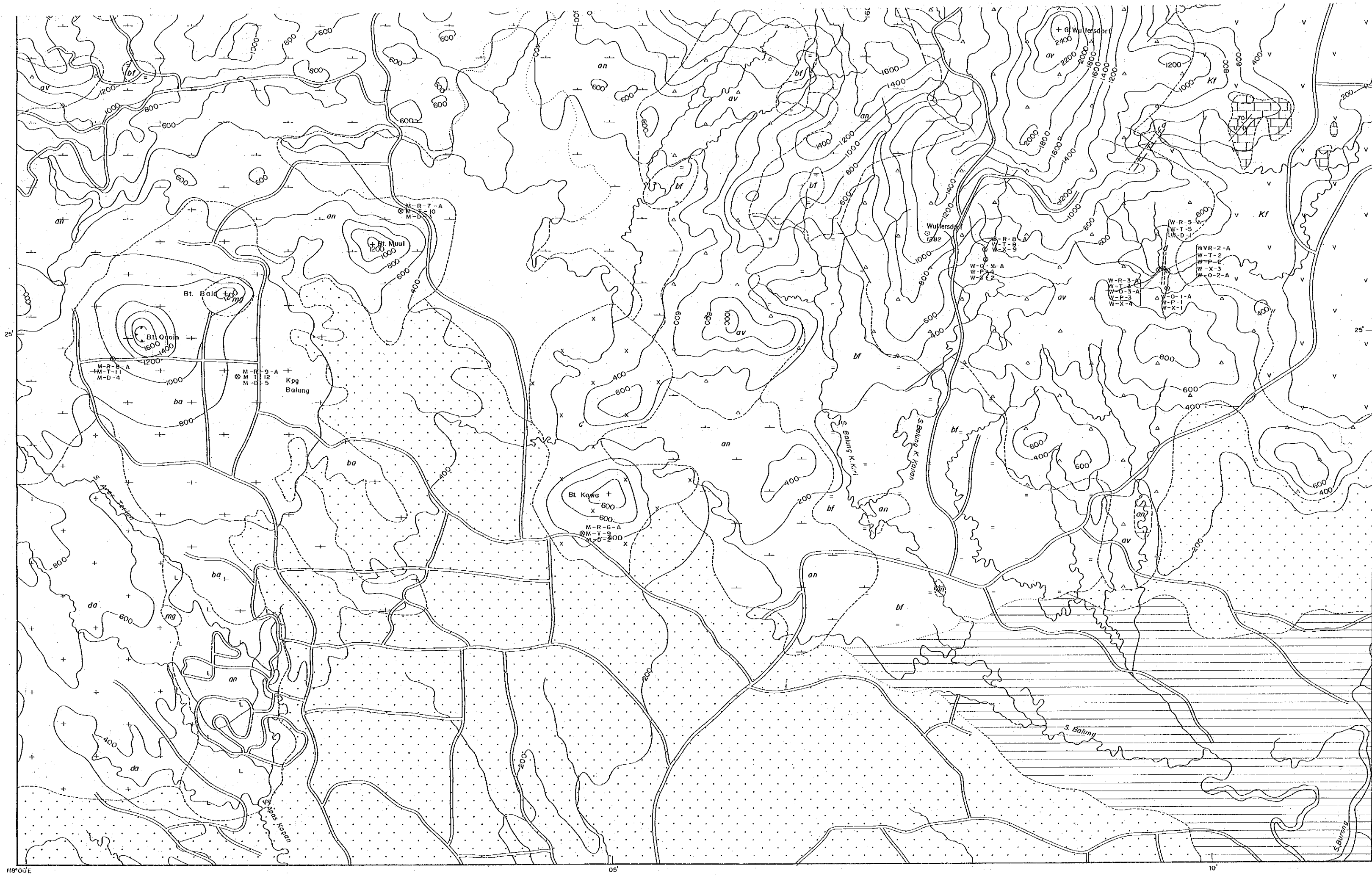


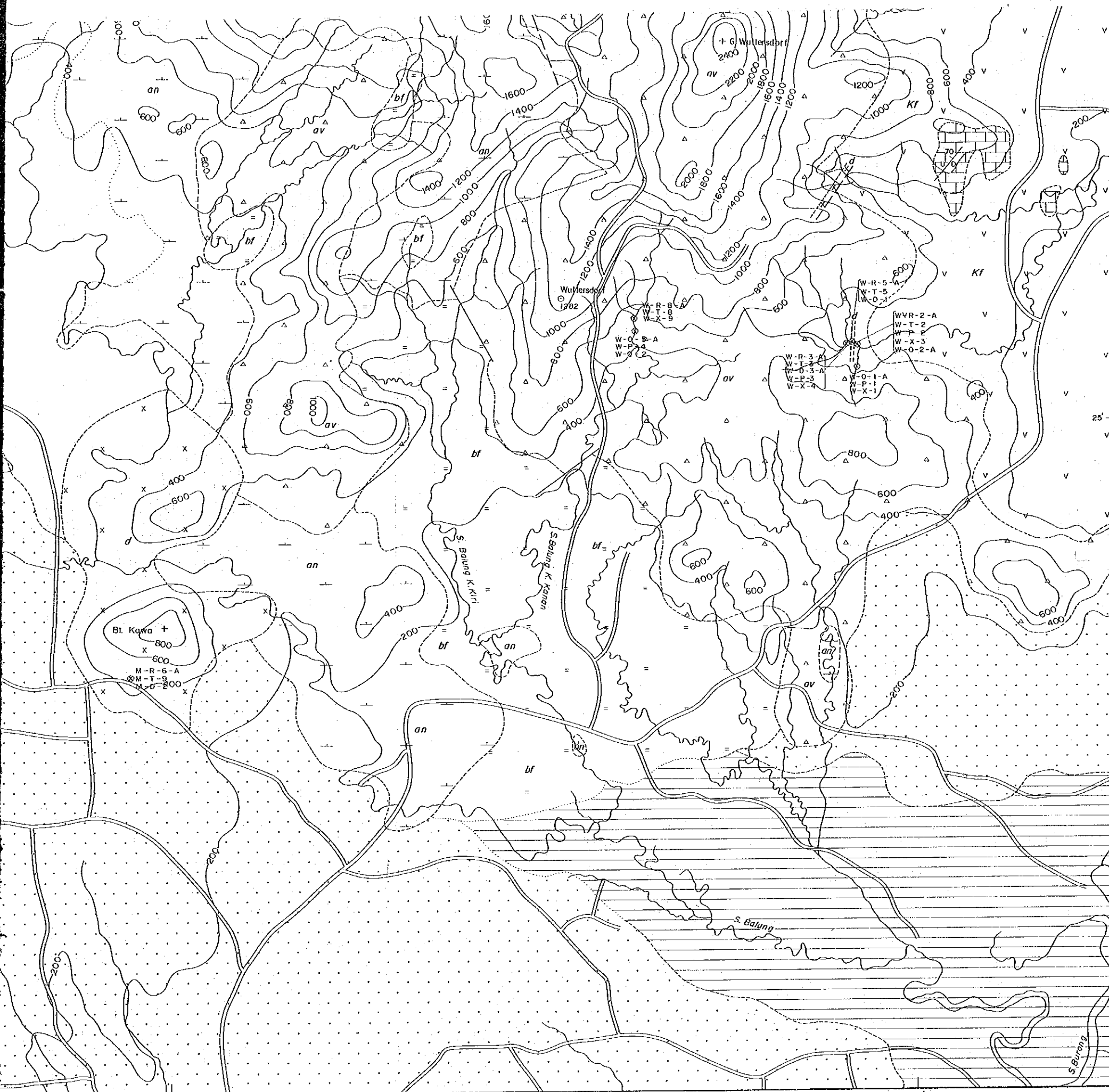
(Appendix-7)  
**FIG. II-2-5 SAMPLE LOCALITY MAP WITH GEOLOGY OF MANTRI-WULLERSDORF AREA, SEMPORNA PENINSULA, SABAH**

Scale 1 : 25,000



- SEDIMENTARY AND VOLCANIC ROCKS**
- QUATERNARY**
- RECENT ALLUVIUM: Unconsolidated clay, sand and silt.
  - ISLAND VALLEY DEPOSITS: Mainly silty mudstone, volcanic detritus and organic remains.
  - HIGH LEVEL ALLUVIUM: Tuffaceous sand, volcanic boulder beds, ash, clay and organic remains.
  - Basalt lava erupted from Bukit Quoin
  - Andesite lava, probably erupted from Bukit Quoin
  - Dacite lava and tuff erupted from Gunung Maris
- PLIOCENE/MIOCENE**
- Hydrothermally altered acidic to intermediate volcanic and pyroclastic rocks
  - Andesite lava, agglomerate and tuff
- MIDDLE UPPER MIOCENE**
- BALING FORMATION: Volcanic ash, mudstone, tuff, shale, thin coal seams and abundant plant remains.
- LOWER MIDDLE MIOCENE**
- KALUMPANG FORMATION: Tuff, tuffite, shale, tuffaceous sandstone, mudstone, conglomerate and limestone.
- INTRUSIVE ROCKS**
- Stocks of microgranodiorite porphyry
  - Intermediate intrusive rock
- GEOLOGICAL SYMBOLS**
- Geological boundary (defined, approximate, inferred)
  - Fault: Observed or reasonably certain
  - : Inferred
  - : Observed fault with dip of fault plane (U = upthrown side, D = downthrown side)
  - Locality of sample with number
- TOPOGRAPHICAL SYMBOLS**
- Road
  - Contours (interval 200 feet)
  - Crater (size exaggerated)
  - Trigonometrical stations (tertiary) with height in feet
  - River
  - Kampung (village)
  - Sungai (river)



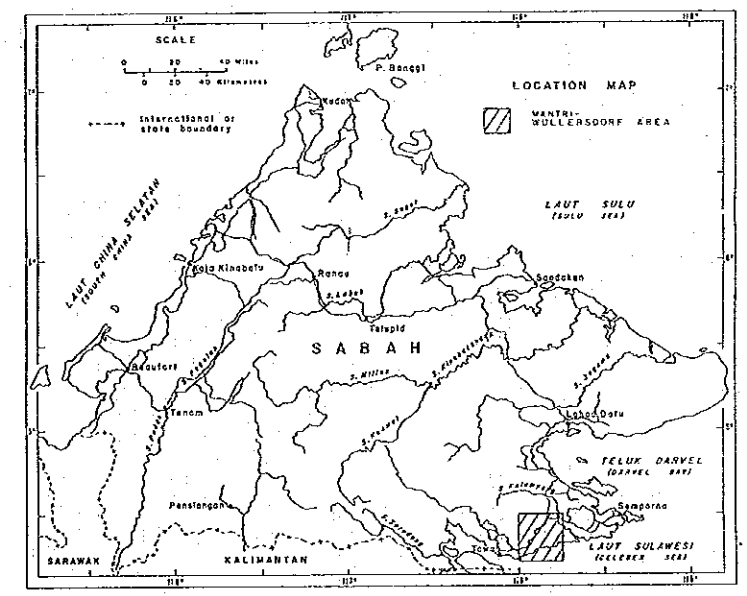


- SEDIMENTARY AND VOLCANIC ROCKS**
- QUATERNARY**
- RECENT ALLUVIUM: Unconsolidated clay, sand and silt.
  - INLAND VALLEY DEPOSITS: Mainly silty mudstone, volcanic detritus and organic remains.
  - HIGH LEVEL ALLUVIUM: Tuffaceous sand, volcanic boulder beds, ash, clay and organic remains.
  - Basalt lava erupted from Bukit Quoin.
  - Andesite lava, probably erupted from Bukit Quoin.
  - Basaltic lava and tuff erupted from Gunung Masa.
- PLEISTOCENE-MIOCENE**
- Hydrothermally altered acidic to intermediate volcanic and pyroclastic rocks.
  - Andesite lava, agglomerate and tuff.
- MIDDLE UPPER MIOCENE**
- Baling Formation: Volcanic ash, mudstone, tuff, shale, thin coal seams and abundant plant remains.
- LOWER MIDDLE MIOCENE**
- Kalumpang Formation: Tuff, tuffite, shale, tuffaceous sandstone, mudstone, conglomerate and limestone.
- INTRUSIVE ROCKS**
- Stocks of microgranodiorite porphyry.
  - Intermediate intrusive rock.

- GEOLOGICAL SYMBOLS**
- Geological boundary (defined, approximate, inferred)
  - Fault: Observed or reasonably certain
  - : Inferred
  - : Observed fault with dip of fault plane (U = upthrown side, D = downthrown side)
  - Locality of sample with number ⊗ M-R-1-A

- TOPOGRAPHICAL SYMBOLS**
- Road
  - Contours (interval 200 feet)
  - Crater (size exaggerated)
  - Trigonometrical stations (tertiary) with height in feet
  - River
  - Kampung (village)
  - Sungai (river)
  - Gunung, Bukit (mountain, hill)

(Geology is modified from "Geologic Map of Wullersdorf Area, Sabah, Malaysia" by P.S. Lim, 1981)



118° 15'

20° E

25'

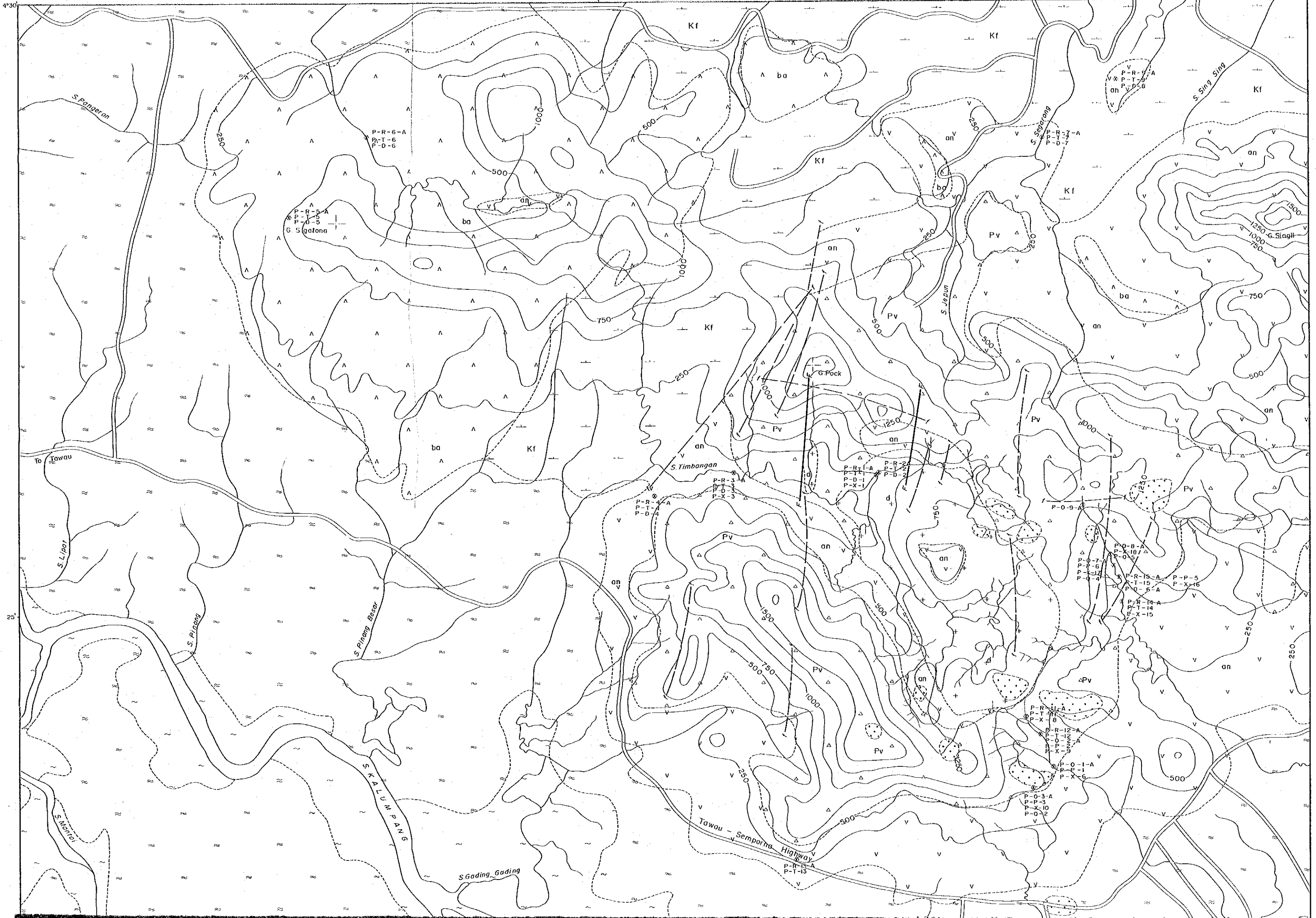


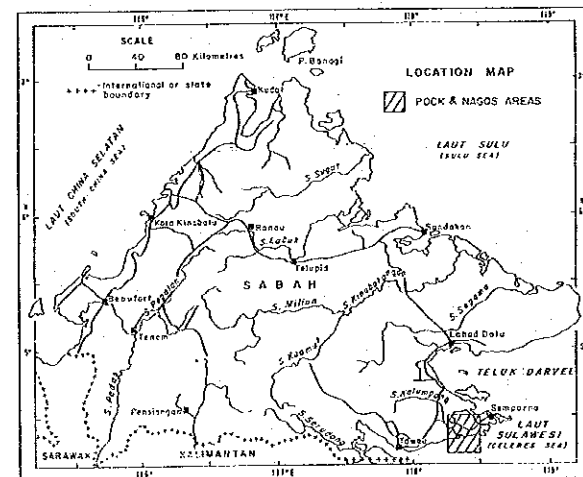


FIG. II-2-6 SAMPLE LOCALITY MAP WITH GEOLOGY OF G. POCK AND G. NAGOS AREAS, SEMPORNA PENINSULA, SABAH (Appendix-8)

- SEDIMENTARY AND VOLCANIC ROCKS**
- QUATERNARY**
- ~ RECENT ALLUVIUM: Mainly clay, silt, sand and peat materials
  - as HIGH-LEVEL ALLUVIUM: Mainly gravel, sand, silt, clay, ash and plant remains
- PLIOCENE-MIOCENE**
- pv Δ Prophyllite, acid to intermediate volcanic and pyroclastic rocks
  - an v Andesite lava, agglomerate, breccia and tuff
  - bo Δ Basaltic andesite lava, agglomerate and breccia
- MIocene**
- kf KALUMPANG FORMATION: Sandstone, shale, tuff, tuffite and minor amount of limestone
- INTRUSIVE ROCKS**
- d Intermediate intrusive rock

Scale 1:25,000 0 0.5 1 1.5 2km

- GEOLOGICAL SYMBOLS**
- Geological boundary (approximate)
  - Fault (Observed, inferred from airphoto)
  - Strongly silicified zone
  - Sample locality with sample number
- GEOGRAPHICAL SYMBOLS**
- Road
  - Contour (Interval 250 feet)
  - Trigonometrical station
  - Gunung (Mountain) Bukit (Hill)
  - Pulau (Island)
  - Tanjung (Headland)
  - Sungai (S) (River)
- (Geology is modified from "Geologic Map of Gunung Pock Area, Semporna Peninsula, Sabah" by D.T.C. Lee, 1988)

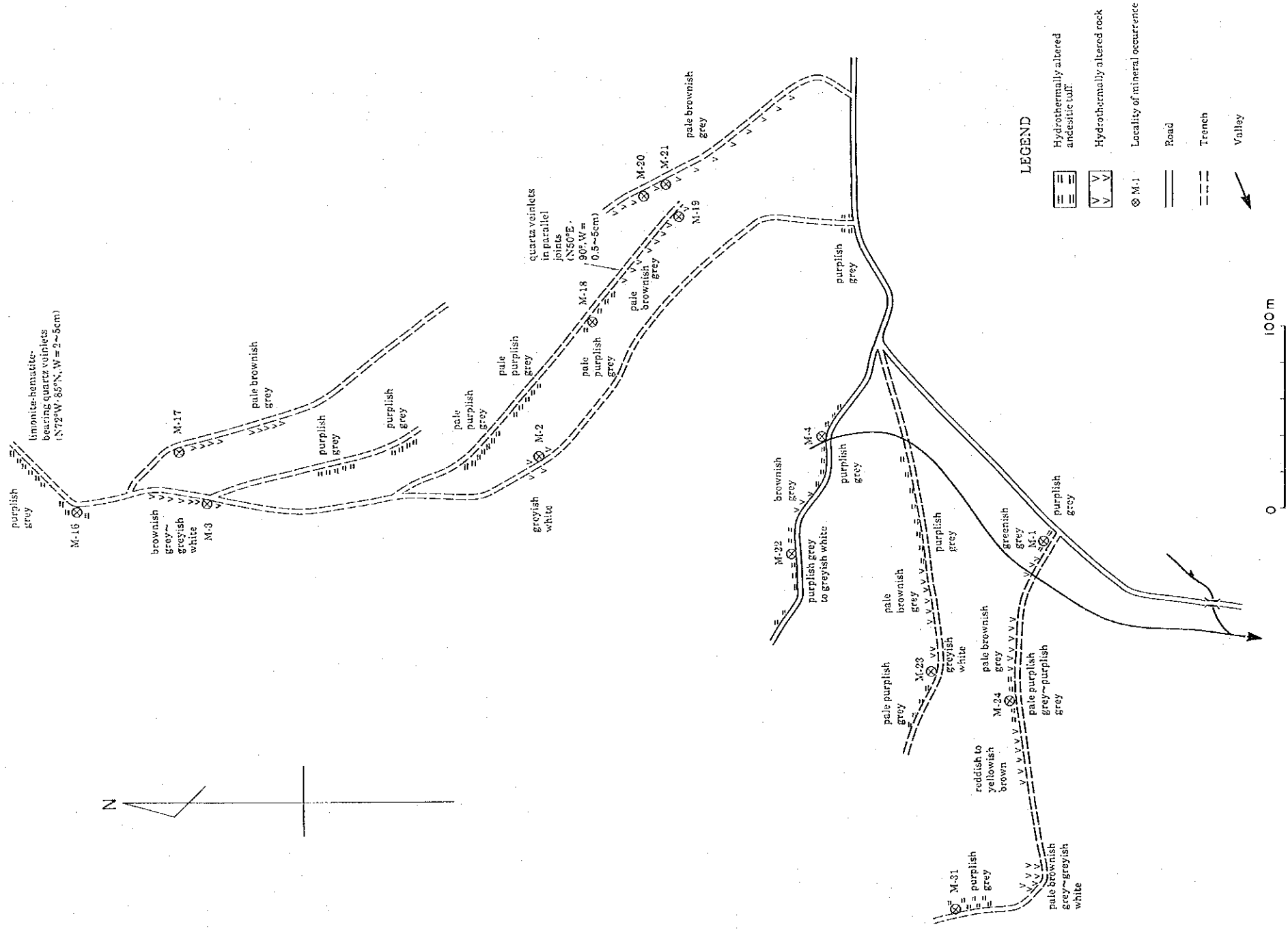




(Appendix-9)

Fig. II-2-17 Route Map of the Mantri Area

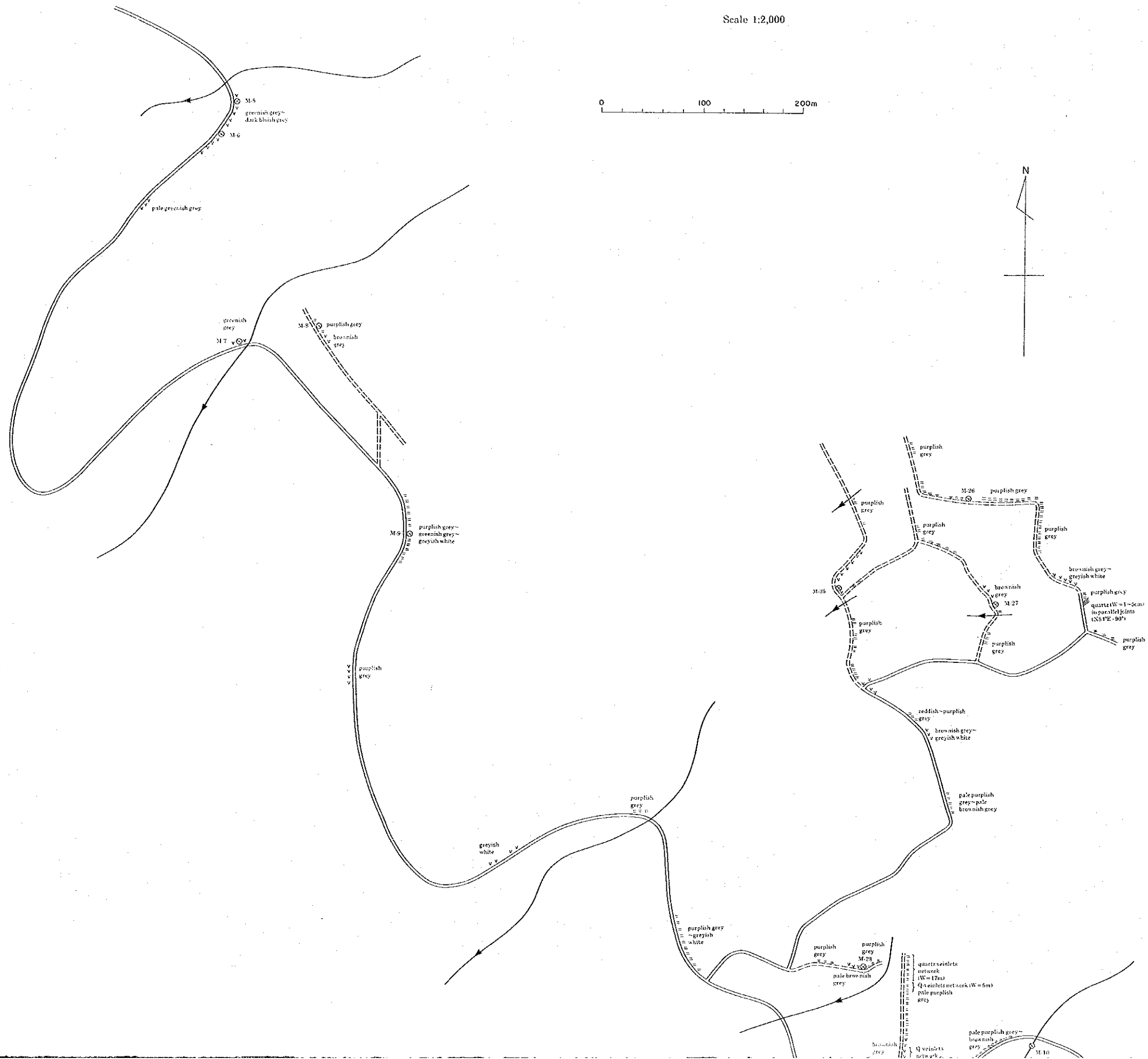
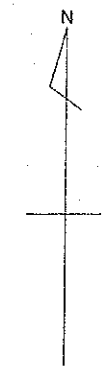
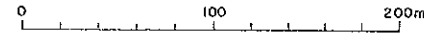
Scale 1:2,000



(Appendix-10)

Fig. II-2-18 Route Map between Mantri & Wullersdorf

Scale 1:2,000



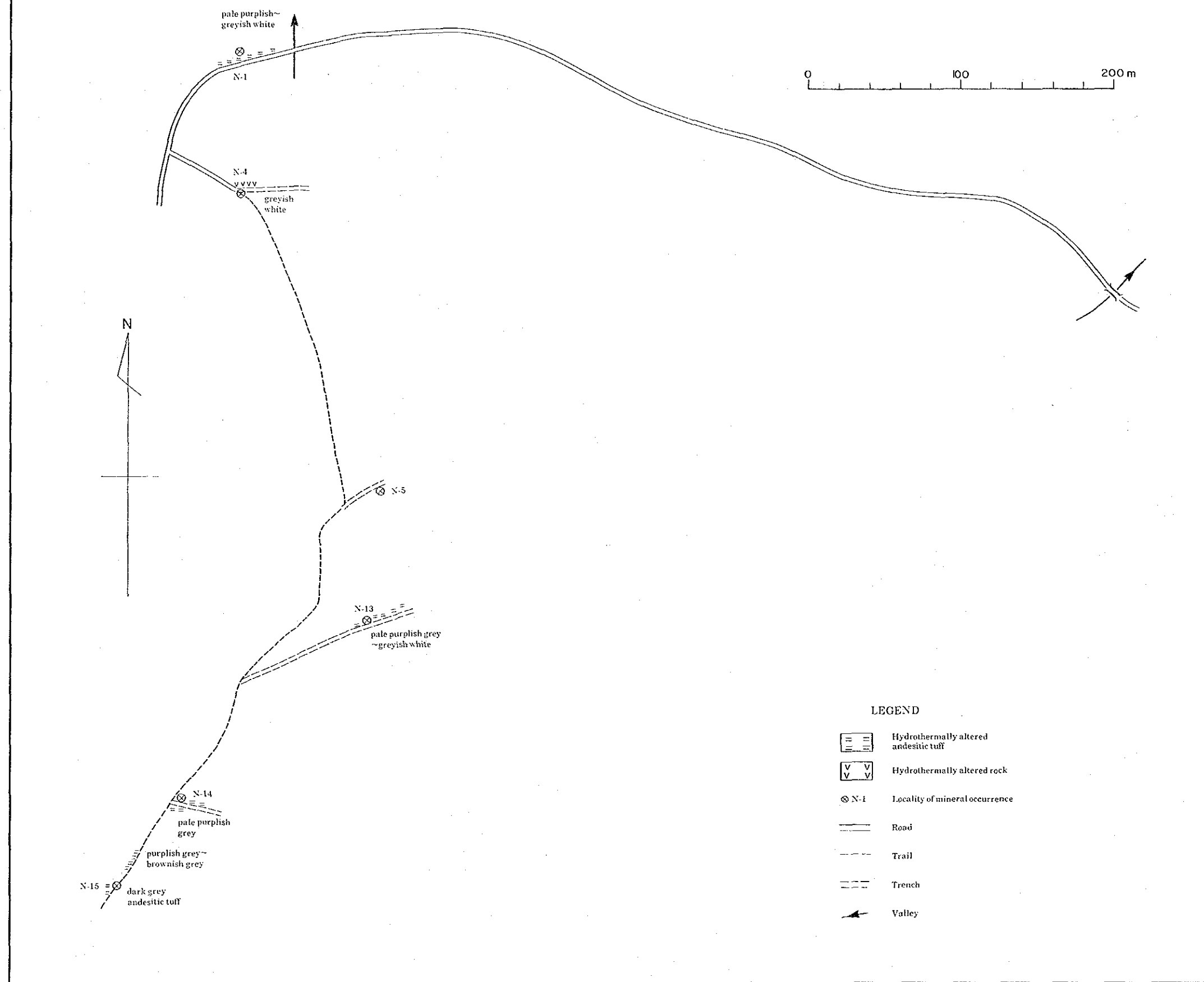




(Appendix-11)

Fig. II-2-26 Route Map of the Nagos Area

Scale 1:2,000





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