

23-3-71

STRATIGRAPHIC AND STRUCTURAL DEVELOPMENT  
OF THE ST. VINCENT TERTIARY BASIN, SOUTH AUSTRALIA



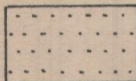
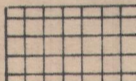

by  
William J. Stuart

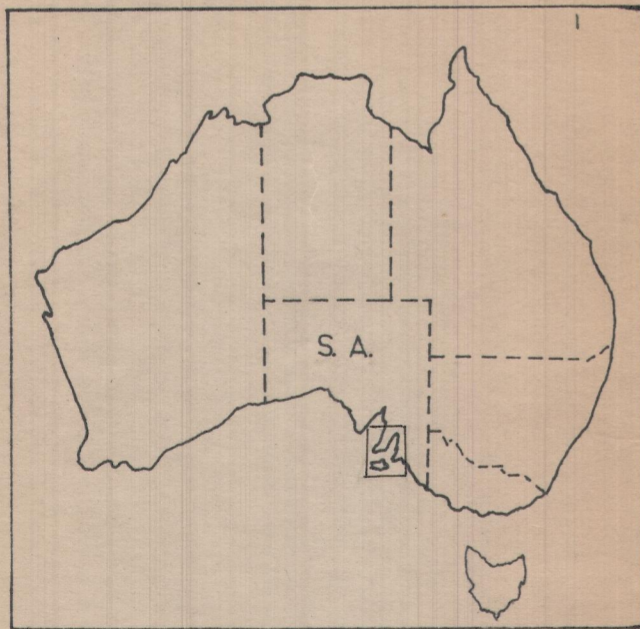
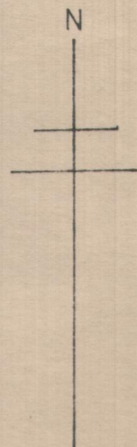
A Thesis  
Submitted to the University of Adelaide  
in Fulfilment of Requirements  
for the Degree of  
Doctor of Philosophy

University of Adelaide  
Adelaide, South Australia  
September, 1969

# PRE - TERTIARY SUBCROP MAP

Modified after Sprigg (1965)

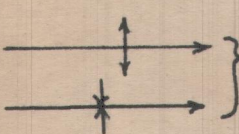
-  PERMIAN
-  KANMANTOO GROUP  
CAMBRIAN
-  U. PRECAMBRIAN  
ADELAIDE SUPERGROUP
-  L. PRECAMBRIAN  
ARCHAEAN
-  INTRUSIVE GRANITE



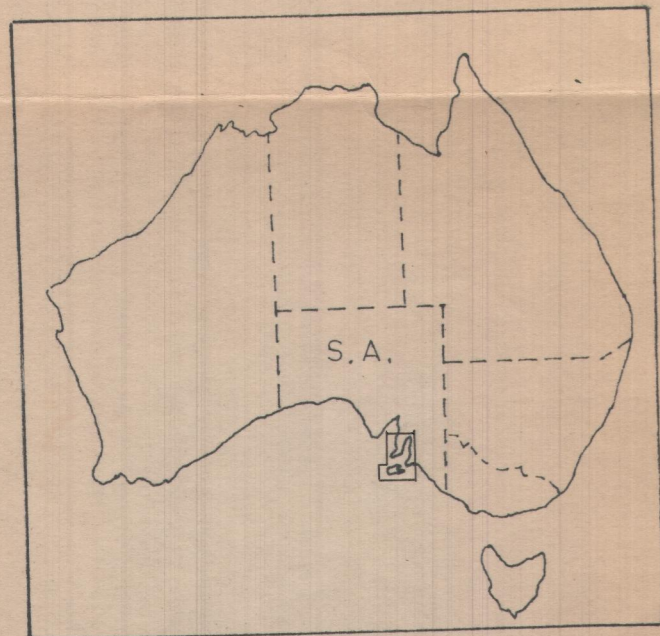
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# TECTONIC FRAMEWORK

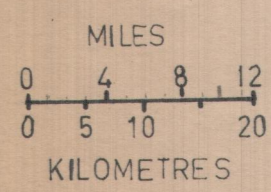
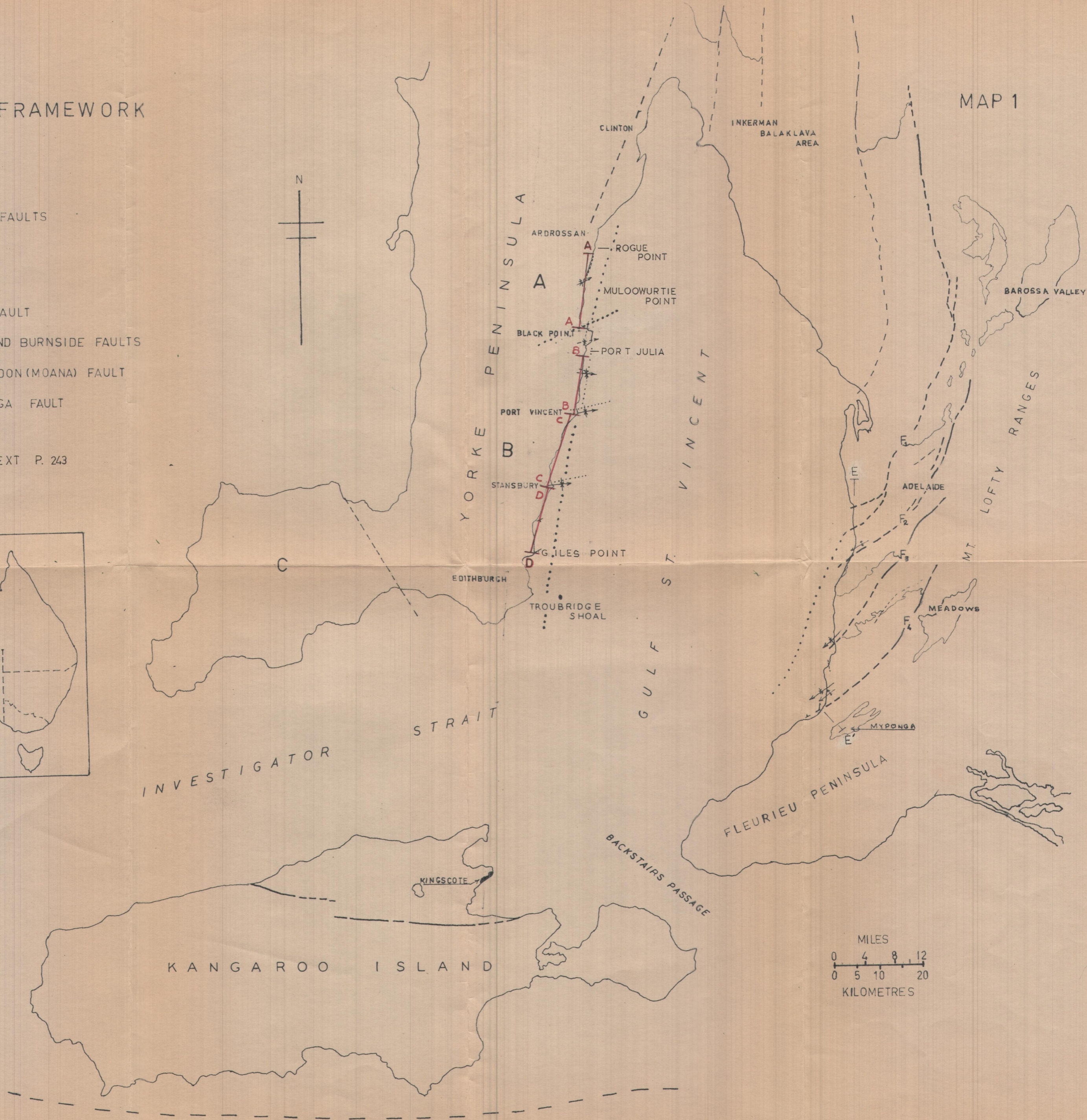
MAP 1

- FAULTS
- ..... INFERRED FAULTS
-  FOLDS
- F<sub>1</sub> PARA FAULT
- F<sub>2</sub> EDEN AND BURNSIDE FAULTS
- F<sub>3</sub> CLARENDON (MOANA) FAULT
- F<sub>4</sub> WILLUNGA FAULT

ABC  
SEE TEXT P. 243



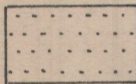




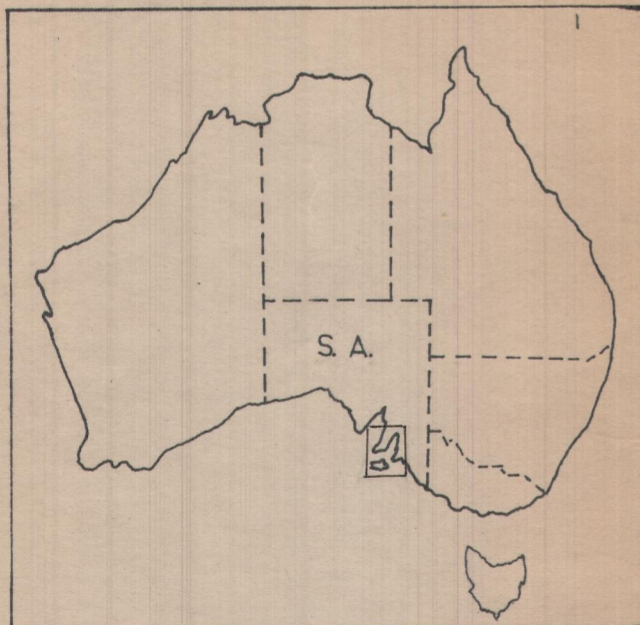
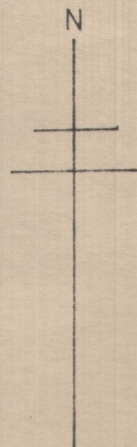
W.J.S. 1969



# PRE-TERTIARY SUBCROP MAP

Modified after Sprigg (1965)

-  PERMIAN
-  KANMANTOO GROUP  
CAMBRIAN
-  U. PRECAMBRIAN  
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-  L. PRECAMBRIAN  
ARCHAEAN
-  INTRUSIVE GRANITE



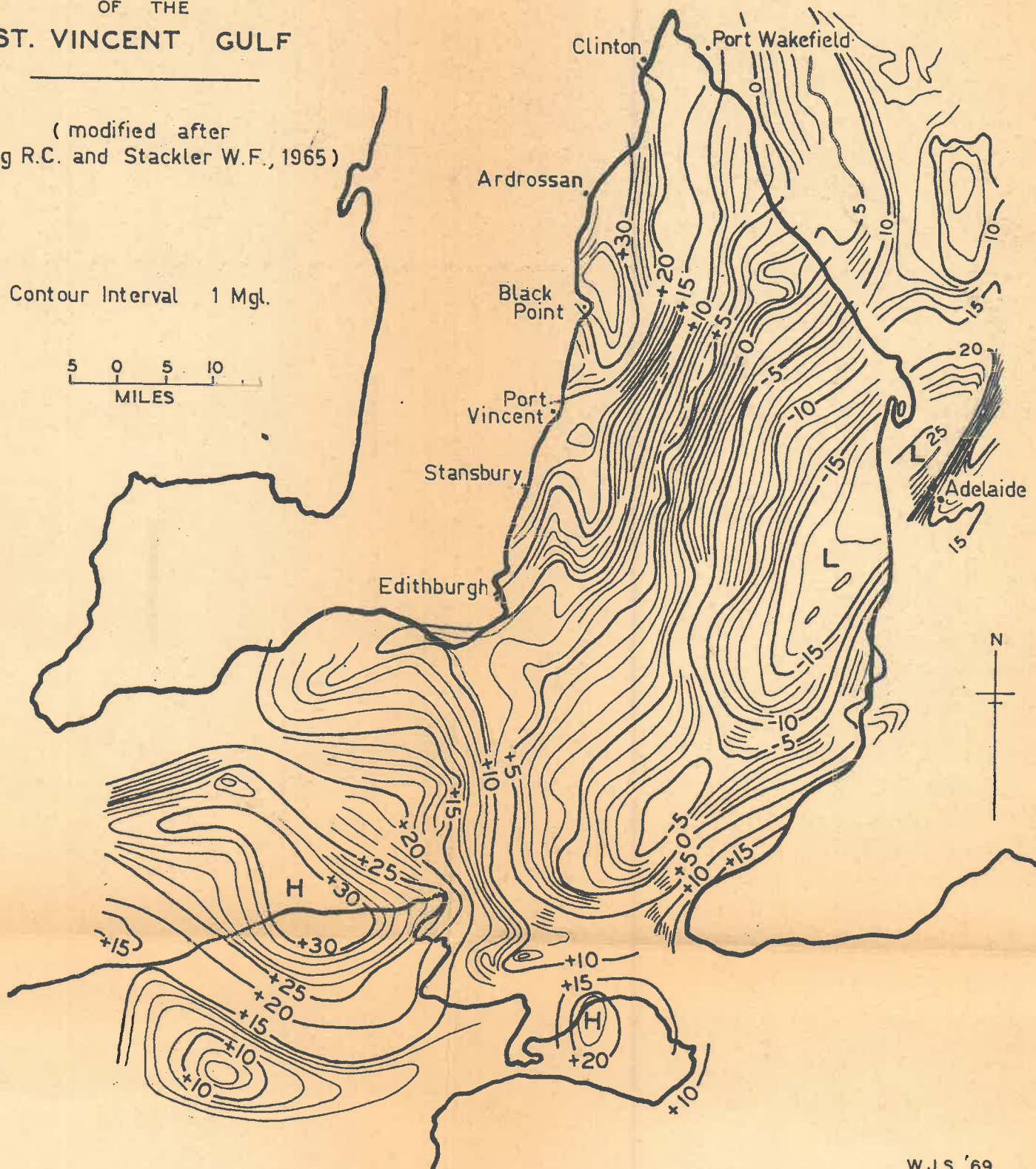
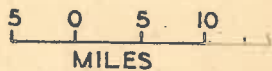
W.J.S. 1969

BOUGER ANOMALY MAP  
OF THE  
ST. VINCENT GULF

MAP 3


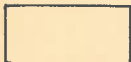

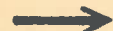


(modified after  
Sprigg R.C. and Stackler W.F., 1965)

Contour Interval 1 Mgl.



# DISTRIBUTION OF THE NORTH MASLIN SANDS

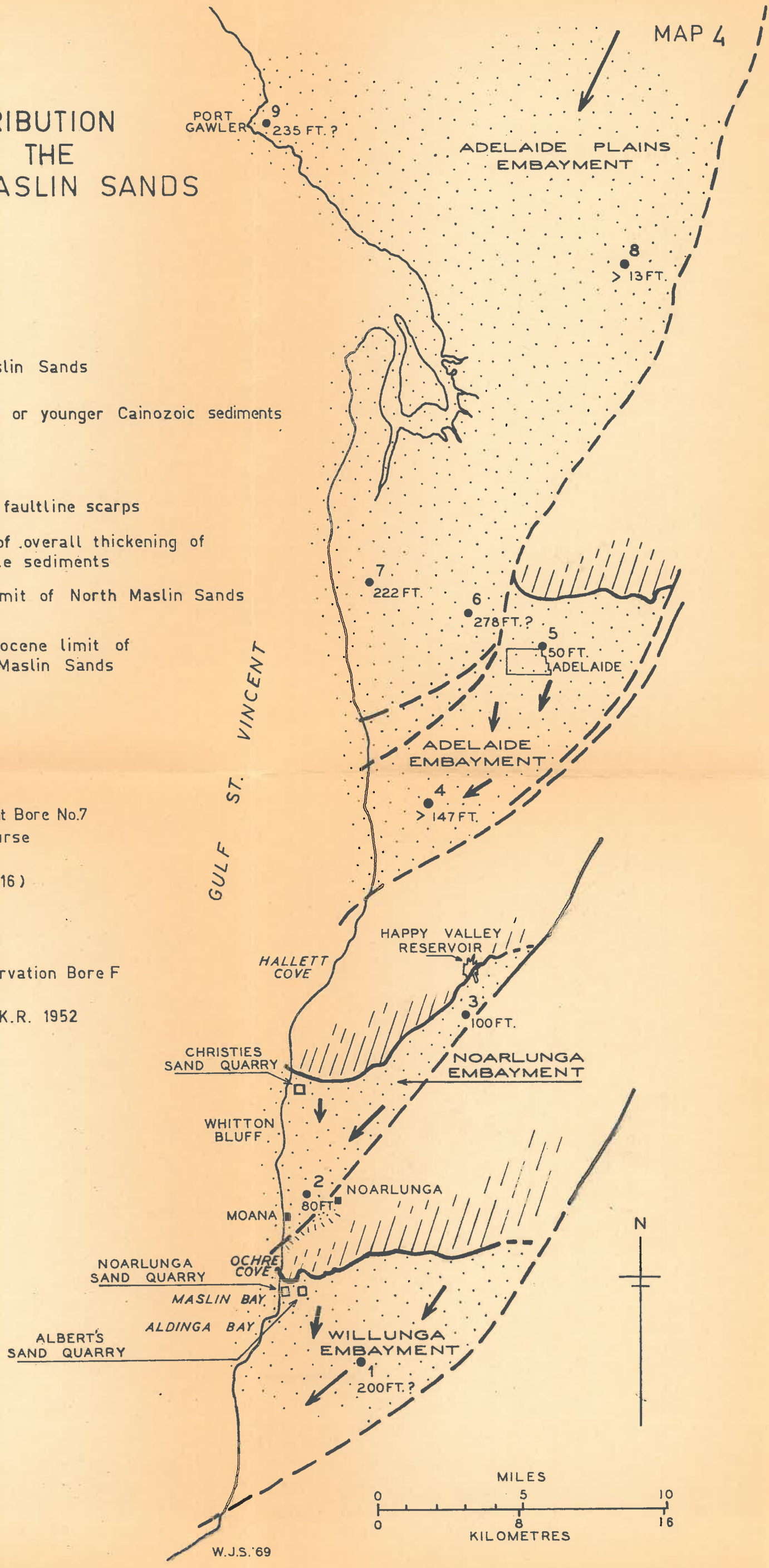
MAP 4

-  North Maslin Sands
-  Basement, or younger Cainozoic sediments
-  Fault and faultline scarps
-  Direction of overall thickening of fluvial sediments
-  Present limit of North Maslin Sands
-  Inferred Eocene limit of North Maslin Sands

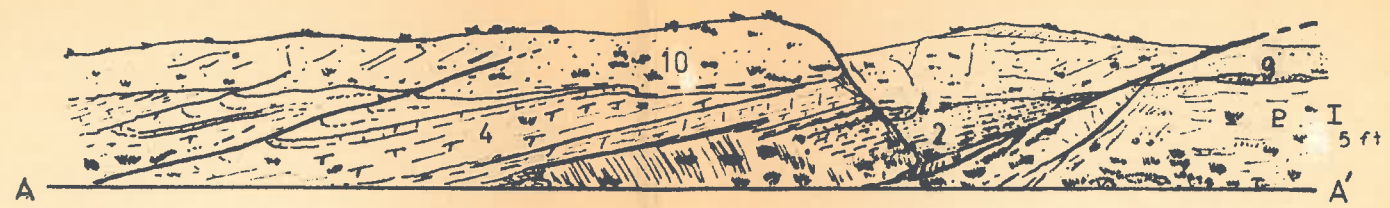
## Bores

1. Willunga Bore No.1
2. Noarlunga Embayment Bore No.7
3. New Marino Golf Course
4. Taite Bore (214)
5. Kent Town Bore (216)
6. Croydon Bore No.2
7. Grange No.1 Well
8. Elizabeth Oval bore
9. Dept. of Mines Observation Bore F

( ) after Miles K.R. 1952

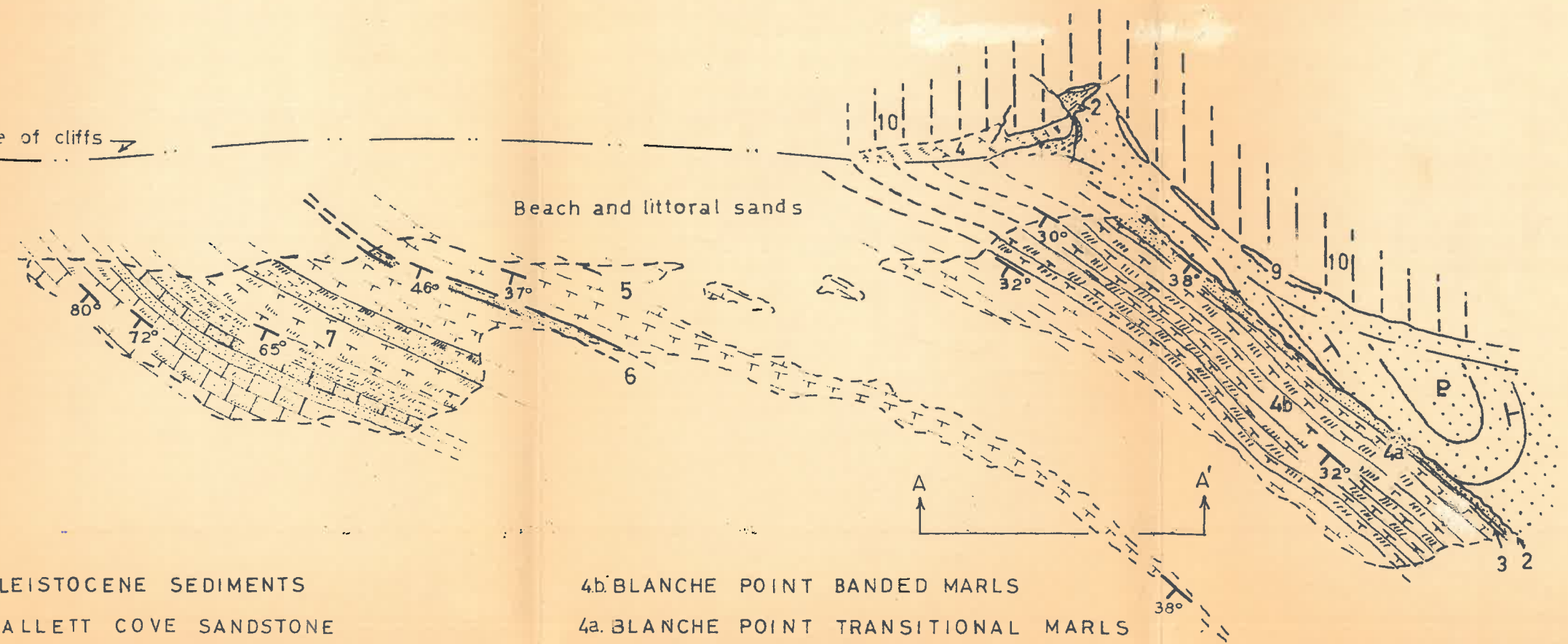


WAVE-CUT PLATFORM  
 1 MILE SOUTH OF MOANA  
 INSET: COASTAL PROFILE A-A'



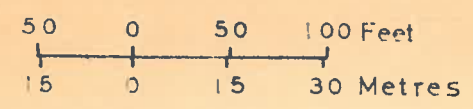
Base of cliffs →

Beach and littoral sands



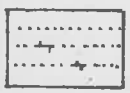

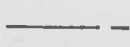




- 10. PLEISTOCENE SEDIMENTS
- 9. HALLETT COVE SANDSTONE
- 7. PORT WILLUNGA BEDS
- 6. CHINAMAN'S GULLY BEDS
- 5. BLANCHE POINT SOFT MARLS

- 4b. BLANCHE POINT BANDED MARLS
- 4a. BLANCHE POINT TRANSITIONAL MARLS
- 3. TORTACHILLA LIMESTONE
- 2. SOUTH MASLIN SANDS
- P. PROTEROZOIC STRATA



# FACIES DISTRIBUTION OF THE BLANCHE POINT MARLS

-  Siliceous limestones
-  Calcareous clays and silts
-  Marine and shoreline quartz sands
-  Basement, or younger Cainozoic sediments
-  Present limit of Blanche Point Marls and equivalents
-  Inferred marine shoreline
-  Bores

