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SADME STUART SHELF PROJECT

DRILLHOLE STRATIGRAPHY COMPILATION USING DATA ACQUIRED UNTIL 31/12/1978

Submitted by
SADME Regional Geology Branch and H. Trevena
1979

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Government of South Australia
Primary Industries and Resources SA

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STUART SHELF PROJECT

DRILLHOLE STRATIGRAPHY COMPILATION, 1979

TECHNICAL REPORT

(DRAFT ONLY)

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PRIMARY INDUSTRIES AND RESOURCES SA

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ENVELOPE 9395

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SEPARATELY HELD DATA

TRANSPARENCIES (held in Document Storage Centre)

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INTRODUCTION

The Stuart Shelf is an area of flat to gently undulating Adelaidean sediments, bounded on the east by the Torrens Hinge Zone and more strongly folded Adelaide Geosyncline sediments; and to the west by the outcrop of basement rocks of the Gawler Craton. To the south, the Shelf wedges out against the Tickera Fault on Yorke Peninsula, while to the north it is buried under successively younger sediments. For the purpose of this report the small area of Adelaidean sediments south of the Tickera Fault, (on Whyalla and Burra Sheets) is considered as part of the Shelf.

Sediments of the Stuart Shelf were deposited as platform cover to the eastern portion of the Gawler Craton, (Thomson 1976) ie. in a stable shelf environment adjacent to the Adelaide Miogeosyncline. The thinner , more restricted sediments of the Stuart Shelf can be correlated with their thicker counterparts in the Miogeosyncline proper. For both regions, sedimentation was terminated by the Delamerian Orogeny in Mid Cambrian to Ordovician time. Effects of the orogeny were most marked in the geosyncline, weaker in the deeper cover areas of the eastern Stuart Shelf and almost neglible towards the western region of thinner cover.

GEOLOGY

The Older Adelaidean cover rocks of the Stuart Shelf, (with which this report is concerned) include representatives of the Callanna Beds, the Burra and Umberatana Groups.

Basal Adelaidean Cover of the Stuart Shelf is represented by the Pandurra Formation. This unit rests unconformably on pre Adelaidean cover rocks and older basement rocks of the Gawler Craton. It is equated with the Callanna Beds of the Adelaide Geosyncline.

The Pandurra Formation extends in the subsurface for the majority of the southern Stuart Shelf. (ie Torrens, Pt. Augusta

and Whyalla Sheets). Notably it is absent over most of the Andamooka Sheet, except at ~~Olympic Dam (RD 1, RD 3, RD 10) where it is barely more than a few metres thick,~~ and Deviation Dam (RL 2) where it attains a reasonable thickness, 73m+ . It is well developed also in Kennecott's Prices, Peeweena and Playford drill holes, and in L. DDH 1, LH DDH 1 and LH DDH 2 on Gairdner and Kingoonya Sheets. It is absent from all other northern areas of the Shelf.

The Pandurra Formation appears to be absent in the deeper regions of the Shelf associated with the Torrens Hinge Zone, ie SLT 103, WHD 1 on the Torrens Sheet, and in that region of Yorke Peninsula which is south of the Tickera Fault.

The Formation was eroded in part prior to the deposition of younger Adelidean units.

The interbedded Beda Volcanics and Backy Point Beds are correlated with the Upper Callanna Sequence of the Adelaide Geosyncline, ie the Wooltana Volcanics of Depot Creek.

For the most part they overly the Pandurra Formation, except in the east in SLT 103 and WHD 1 and on some parts of Northern Yorke Peninsula where they rest directly older basement.

The volcanics and their associated sediments appear to be restricted to the southern Shelf area as well as to the eastern side of the Pernatty Culmination. On Yorke Peninsula, the association is restricted to the northern side of the Tickera Fault.

Burra Group Sedimentation is generally absent on the Stuart Shelf, except on Yorke Peninsula. North of the Tickera Fault, Emeroo Range Quartzite and younger Burra Group sediments rest unconformably on either Pandurra Formation or Beda Volcanics. South of the Tickera Fault, Emeroo Range Quartzite outcrops at the

eastern abuttment to the older basement areas of Yorke Peninsula. In the subsurface it is penetrated in BDH 19 and Bute No 6.

The Umberatana Group of the Shelf is represented largely by the Tapley Hill Formation, and locally by its basal members the Woocalla Dolomite and the Mc Leay beds.

The Tapley Hill Formation is absent in northern regions of Shelf, ie north of the Torrens Sheet except possibly in BR 6. It is also absent on the Pernatty Culmination on the Torrens and Pt. Augusta Sheets. West and east of the Culmination it rests unconformably on the Pandurra Formation. Further east of the Culmination it rests unconformably on the Beda Volcanics. It is known in the subsurface on Yorke Peninsula.

The Umberatana Group is unconformably overlain by the Wilpena Group. The Wilpena Group is not considered in detail in this report.

ECONOMIC HISTORY OF THE STUART SHELF

Copper deposits adjacent to the western shores of Pernatty Lagoon have been known since 1875, and have been mined at intervals since 1898.

Renewed exploratory interest in 1965 led to the discovery in mid 1972 of the Cattle Grid Copper Ore Body. This discovery further accelerated interest in the Stuart Shelf. The Cattle Grid and associated deposits provided a model for exploration.

Known copper deposits of the Stuart Shelf generally conform to a model of flat to gently undulating stratiform bodies, concentrated along disconformities. In the case of the Cattle Grid deposit, the mineralized disconformity is that between the Whyalla Sandstone and the Pandurra Formation, with mineralization being limited to the upper fractured portion of the Pandurra Formation. The Pernatty Culmination as a positive structural

feature was considered an important influence for mineralization.

Thus favourable locii for mineralization were thought to exhibit certain controls which principally are

(1) a positive pre-Marinoan structural feature

(2) a disconformable contact for migration of fluids and favourable depositional environment.

The Myall Creek Copper Deposits (between Whyalla and Pt. Augusta) conform to this stratiform mode of mineralization concentrated along a disconformity. In this case the important disconformity is that between the Tapley Hill Formation and the Pandurra Formation with mineralization being carried at the base of the Tapley Hill Formation.

The discovery in 1976 of the Cu/U Mineralization at Olympic Dam on Roxby Downs Station has further accelerated exploratory interest of the Stuart Shelf. Mineralization is limited to the upper fractured portions of basement rocks which present a positive structural feature within units of the Tent Hill Formation.

CONTOURING

Contouring of selected disconformable levels on the Stuart Shelf began in 1977, with a view to define locii for mineralization as well as provide a comprehensive stratigraphic framework.

Data source for this project was S.A.D.M and Company Drilling both Closed and Open File, (Appendix I,II,III and IV), available to date, (Dec 31, 1978). Stratigraphic interpretations supplied by the Companies were considered as correct. Reinterpretation where necessary was conducted by B.R. Thomson.

Information was contoured relative to Mean Sea Level. Where available, drill hole levelling data is used to reduce drill hole data to M.S.L. Where drill holes have not been levelled,

an approximate RL is estimated from available topographic information. It is considered that RL's estimated in this way are adequate to display trends of contoured surfaces.

Contour intervals are 50 or 100m depending on distribution of information and closeness of contours.

Diagnostic Surfaces contoured were
(1) the Base of Sturtian Sedimentation and
(2) post Pandurra Formation cover.
Contour surfaces (1) and (2) coincide unless the Beda Volcanics and its associated sediments intervene, ie east of the Pernatty Culmination.
Resulting contours are displayed on two scales:
(1) 1:250,000 scale and (2) 1:1,000,000 scale.

The 1/4 million scale plans are the Torrens, Pt. Augusta and Whyalla/Burra (ie Yorke Peninsula) Sheets. Published geological map sheets at this scale are used as base maps. Separate plans for each of (1) Base of Sturtian Sedimentation, (Figs. 4,5 and 6) and (2) post Pandurra Formation cover, (Figs. 7,8 and 9), for the three map areas are provided.

The million scale plan covers the Torrens, Pt. Augusta, Whyalla/Burra, Andamooka, Curdimurka, Billakalina, Gairdner and Kingoonya map areas. The State Geological Map (Unpublished) was used as a base. Contours shown are the post Pandurra Formation cover, ie various erosional surfaces within the Pandurra Formation, and where the Pandurra Formation is absent, erosional surfaces within the basement complex. (see Fig. 14)

Reliability of contours is very good on the Torrens, Pt. Augusta and Whyalla/Burra Sheets, where large numbers of drill holes provide good spatial coverage at both the 1/4 million and

1 million scales. Contours on the remaining 1/4 million sheets can only be considered as interpretative at best. Drill hole spacing is sparse and scattered and there is little knowledge of the influence of buried tectonics on geology.

Drill Hole Location Plans at 1/4 million and 1 million scales are provided, (Figs. 1,2,3 and 13). Circled drill hole locations indicate that the RL for that hole is known and has been utilized as part of this survey.

Sturtian Isopachs

Isopach plans of the Sturtian at 1:250,000 for the Torrens, Pt. Augusta and Whyalla/Burra Areas are also provided, (see Figs 10,11 and 12). Data for these plans resulted from the manipulation of drill hole information for surface contour plans. The isopach plans display real thicknesses, ie are not interpretative. Contour interval is 20m for Torrens and Pt. Augusta, and 50m for the Whyalla/Burra Area.

RESULTS

STURTIAN ISOPACHS AND BASAL STURTIAN CONTOURS

Considering Figures 4,5,6,10,11 and 12, (Torrens, Pt. Augusta and Whyalla/Burra Areas), Sturtian sedimentation is absent on the Pernatty Culmination, and the western parts of the Pt. Augusta and Whyalla/Burra Areas.

West of the Pernatty Culmination, Sturtian Sedimentation is contained in a relatively shallow basin like structure which appears to deepen northward.

East of the Culmination, Sturtian Sedimentation is contained in a wedge shaped structure, striking approx. N-S. The wedge thickens eastwards and attains a maximum known thickness of approx. 500m adjacent to the Torrens Hinge Zone. Basal Sturtian contours

dip steadily towards the Hinge Zone, and reach a maximum known depth of approx. 600m.

POST PANDURRA COVER CONTOURS

Basal contours of post Pandurra Sedimentation are shown in Figs. 7,8,9 and 14.

A simplistic view of the Shelf (Fig. 14) indicates that its sediments are contained within a broad wedge shaped structure. Actually, the wedge is modified by the Pernatty Culmination and a basin like depression further westward. The wedge strikes NS-NW, and deepens eastward toward the Hinge Zone and the Geosyncline proper. On the NE shores of Lake Torrens, WWD-1 indicates depths in excess of 728m below sea level to basal post Pandurra Cover.

The Pernatty Culmination is considered to be a positive structural feature of either Pandurra Formation or underlying basement units. It extends in a line of discontinuous Pandurra Formation outcrop from the Pt. Augusta Sheet to north of Lake Windabout. Thence it continues northward in the subsurface through AD-1 as a subsurface high of Pandurra Formation. Between AD-1 and Olympic Dam, the Pandurra Formation disappears, ie has either been eroded or never deposited. However a basement high is known to underly Olympic Dam and PD1-A.

It is tentatively proposed, from the evidence of above data, that the basement high with which the Cu/U mineralization at Roxby Downs is correlated, is a subsurface structural extension of the Pernatty Culmination in a NW-NNW direction.

West of the Culmination, post Pandurra Sedimentation is contained in a basin like structure which extends northward from the Pt. Augusta Sheet area. The basin deepens northward, and attains its deepest known point of -530m in LH-L, west of Lake Windabout.

DISCUSSION OF GEOLOGICAL SECTIONS

The Cross section diagrams presented with this report serve to illustrate the basic structure and some of the stratigraphic relationships of the Stuart Shelf which have already been discussed with reference to the contour diagrams.

Fig. 15 is an approximate W to E section. It attempts to show the influence of the Pernatty Culmination in early Adelaidean sedimentation, ie the saucer like depression west of the Culmination and the absence of any Beda Volcanism within it. East of the Culmination, the increasing total thickness of the post Pandurra Sequence, the inclusion of Beda Volcanism, and the eventual disappearance of the Pandurra Formation adjacent to the Hinge Zone are demonstrated.

Fig. 16, an approximate NS section attempts to illustrate differences between PP4 and PP6-PP12, particularly the absence of Beda Volcanics in PP4 and the absence of Tapley Hill Formation in PP6-PP12. Thus the exact structural between Tapley Hill Formation and the Beda Volcanics and associated sediments on this part of Yorke Peninsula is not known, as not one of the PP series drill holes penetrates both units.

Fig.17 is a geological section across the northern part of the Stuart Shelf scanning the Kingoonya, Andamooka and Curdimurka Sheets. It illustrates the transition from thin flat lying sediments of the Shelf to the thicker, folded sediments of the Hinge Zone.

RECOMMENDATIONS

Further research of the kind this survey entailed, would be invaluable in the Northern Stuart Shelf Area, where information at present is sparse, and can only be reviewed as results of further exploration come to light.

In the Southern Stuart Shelf Area, further research is warranted in the deeper eastern and hinge zone areas, but again is limited by exploration.

ACKNOWLEDGEMENTS

Initial interest of B.P.Thomson on the Stuart Shelf Area led to the initiation of the Stuart Shelf Project. Subsequent assistance and discussion with Mr. Thomson is gratefully acknowledged.

The assistance of Companies at present involved in exploration on the Stuart Shelf, in making data available is also acknowledged.

REFERENCES

JOHNS,R.K., 1974. Base Metal Mineralization in the Pernatty Lagoon Region. G.S.S.A., Report of Investigations No 42.

MASON,M.G., THOMSON,B.P., and TONKIN,D.G., 1978. Regional Stratigraphy of the Beda Volcanics, Backy Point Beds and Pandurra Formation on the Southern Stuart Shelf, South Australia. Quart. Geol. Notes. No 66.

THOMSON,B.P., DAILY,B., COATS,R.P., and FORBES,B.G., 1976. Late Precambrian Geology of the Adelaide 'Geosyncline' and Stuart Shelf, South Australia. Excursion Guide No 33A., 25TH International Geological Congress.

LIST OF DRILL HOLES
with REFERENCE TO SOURCE.

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : WINNALLA / BURRA .

0017

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
DDH 112			North Broken Hill Ltd	1259 VI
113			"	"
117	SML 624	Wallaroo - Moonta Area	"	1786 I
119	"	"	"	"
149	EL 174	Wallaroo - Maitland Area	"	2407 II
153	"	"	"	2407 II, IV
156	"	"	"	2407 IV
187	EL 170	Kadina - Yorke Penin	"	2539 III
189	"	"	"	2539 III, X
194	"	"	"	
196	"	"	"	2539 X
201	EL 249	Kadina Area	"	2745 V, VI
202	"	"	"	"
204	"	"	"	"
205	"	"	"	2745 V, VI, VII
206	"	"	"	2745 VI
207	"	"	"	2745 VI, VII
208	"	"	"	2745 VII
209	"	"	"	"
210	"	"	"	"
211	"	"	"	2745 IX
212	"	"	"	
BOH 14	EL 248	Bute Area	North Broken Hill Ltd	2749 I
BOH 15	"	"	"	"
BOH 16	"	"	"	"
BOH 17	"	"	"	2749 I, II
BOH 18	"	"	"	2749 II
BOH 19	"	"	"	"
BOH 20	"	"	"	"
BOH 21	"	"	"	"
BOH 22	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA :

0018

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
PP 2	EL 311	Port Pirie Area	North. Broken Hill Ltd	3023 I.
PP3	"	"	"	"
PP4	"	"	"	"
PP5	"	"	"	3023 I, II
PP6	"	"	"	"
PP7	"	"	"	3023 II
PP8	"	"	"	3023 II, III
PP9	"	"	"	3023 II
PP10	"	"	"	3023 III
PP11	"	"	"	"
PP12	"	"	"	"
PP13	"	"	"	"
Bute No1	EL 207	Bute Area.	SAAM	RB 77/142.
No2	"	"	"	"
No3	"	"	"	"
No4	"	"	"	"
No5	"	"	"	"
No6	"	"	"	"
No.7	"	"	"	"
No8	"	"	"	"
No9	"	"	"	"
No 10	"	"	"	"
No 11	"	"	"	"
No 12	"	"	"	"
No.13	"	"	"	"
WR-1	"	"	"	"
WR-2	"	"	"	"
WR-3	"	"	"	"
WR-4	"	"	"	"
WR-5	"	"	"	"
WR-6	"	"	"	"
WR-7	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : WHYALLA / GULFS.

0019

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
WR-9	EL 707	Bute Area	SADM	RB 77/142
WR-10	"	"	"	"
WR-11	"	"	"	"
WR-13	"	"	"	"
WR-14	"	"	"	"
WR-15	"	"	"	"
WR-16	"	"	"	"
WR-17	"	"	"	"
WR-18	"	"	"	"
Tickera No. 1	"	"	"	"
Tickera No. 2	"	"	"	"
WOK-1	"	"	"	"
WOK-2	"	"	"	"
WOK-3	"	"	"	"
WOK-4	"	"	"	"
WOK-5	"	"	"	"
WOK-6.	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : ANDAMOOKA

0020

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
RD-1	EL 190	Andamooka Area	Western Mining Corp. Ltd	2583 I
RD-3	"	"	"	2583 II
RD-4	"	"	"	"
RD-5	"	"	"	"
RD-6	"	"	"	2583 III
RD-7	"	"	"	III
RD-8	"	"	"	2583 IV
RD-9	"	"	"	"
RD-10	"	"	"	"
RD-2	EL 190	Andamooka Area.	Western Mining Corp. Ltd	2583 I.
BD-1	EL 231	Stuart Creek Area	Western Minining Corp. Ltd.	2714
AD-1	EL 232	Arcoona Area.	"	2715 I
TD-1.	EL 233	Lake Torrens Area	"	2716 I
WWD-1	"	"	"	"
PDL-A	EL 269	Bill's Lookout Area	"	2908
TDD-1.	EL 279	Todd's Dam Area.	"	2923

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA :

0021

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
GAIRDNER				
LH DDH 1	EL 298	Lake Hart Area	Kennecott Expl. (Aust) Ltd	3022
LH DDH 2	"	"	"	"
KINGOONYA				
SR-7	EL 305	The Twins Area	Newmont P/L & Dampier Min Co Ltd	3031
SR-9	"	"	"	"
SR-15	"	"	"	"
LY DDH 1	EL 306	Lake Younghusband	Dampier Mining Co. Ltd.	3030
PEELWEENA 1				
PRICES 1				
PLAYFORD 1				
BILLAKALINA				
SR-1	EL 304	Danae Hill Area	Newmont P/L & Dampier Min. Co. Ltd	3017
SR-5	"	"	"	"
SR-16	"	"	"	"
SR-6	EL 335	Margaret Creek Area	"	3090
SR-8	"	"	"	"
SR 12	EL 327	Codna Hill Area	"	3056
SR-2	EL 303	Birthday Hill Area	"	2981
SR-3	"	"	"	"
SR-4	EL 326	Mt. Sandy Area	"	3055
SR-10	"	"	"	"
SR-13	EL 341	William Creek Area	"	3092
Warrinerck No.	EL 345	Mt. Purviss Area	Kennecott Expl. (Aust) Ltd	3137
WARRINA				
Barthana 1				
Curdimurka				
EHD-1	EL 231	Stuart Creek Area	Western Mining Corp Ltd	2714

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS.

0022

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
OK 9	EL 81			
OK 11	"		Pacminex Pty. Ltd	2330 I
OK 12	"		"	"
OK 27	"		"	2330 V
OK 28	"		"	"
OK 30	"		"	"
OK 31	"		"	"
OK 32	"		"	"
OK 35	"		"	"
OK 36	"		"	"
OK 38	"		"	"
OK 39	"		"	"
OK 41	"		"	"
OK 42	"		"	"
OK 43	"		"	"
OK 47	"		"	"
OK 48	"		"	"
OK 50	"		"	2330 VI
OK 52	"		"	"
OK 53	"		"	"
OK 54	"		"	"
OK 56	"		"	"
OK 57	EL 199	Pernatty Lagoon Area	Pacminex Pty Ltd	2627 I
OK 58	"	"	"	"
OK 59	"	"	"	"
OK 60	"	"	"	"
OK 62	"	"	"	"
OK 66	"	"	"	"
OK 67	"	"	"	"
OK 69	"	"	"	"
OK 70	"	"	"	"
OK 75	"	"	"	"
OK 76	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS.

0023

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
OK 116	EL 339	Mt Gunson Area	Pacminex Pty Ltd	3026 I
OK 117	"	"	"	"
OK 118	"	"	"	"
OK 119	"	"	"	"
OK 120	"	"	"	"
OK 121	"	"	"	"
OK 122	"	"	"	"
OK 123	"	"	"	"
OK 124	"	"	"	"
OK 125	"	"	"	"
OK 126	"	"	"	"
OK 127	"	"	"	"
OK 128	"	"	"	"
OK 129	"	"	"	"
PL 6	EL 81		Pacminex Pty Ltd.	2330 VI
PL 11	EL 199	Pernatty Lagoon Area	"	2627 IV
PL 33	EL 339	Mt Gunson Area	"	3026 I
PL 35	"	"	"	"
PL 36	"	"	"	"
PL 37	"	"	"	"
PL 38	"	"	"	"
PL 39	"	"	"	"
W1 } used in topographic determination only	EL 199	Pernatty Lagoon Area	Pacminex Pty Ltd.	2627 II
W4	"	"	"	"
W5	"	"	"	"
LW 19	EL 199	Pernatty Lagoon Area	Pacminex Pty Ltd	2627 III
LW 20	"	"	"	
LW 22	"	"	"	
LW 25	"	"	"	
LW 27	"	"	"	

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS

0024

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
LW 28	EL 199	Pernatty Lagoon Area	Pacminex Pty Ltd	2627 III
LW 29	"	"	"	"
LW 30	"	"	"	"
LW 32	"	"	"	"
LW 34	EL 339	Mt. Gunson Area	Pacminex Pty Ltd	3026 I
LW 35	"	"	"	"
LW 36	"	"	"	"
LW 37	"	"	"	"
LW 38	"	"	"	"
LW 39	"	"	"	"
LW 40	"	"	"	"
LW 41	"	"	"	"
LW 42	"	"	"	"
LW 43	"	"	"	"
LW 44	"	"	"	"
LW 47	"	"	"	"
LW 48	"	"	"	"
LW 51	"	"	"	"
LW 52	"	"	"	" 3031
LW 53	"	"	"	"
LW 54	"	"	"	"
LW 55	"	"	"	"
MF 1	EL 81		Pacminex Pty. Ltd.	2330 II
MF 2	"		"	"
MF 4	"		"	"
MF 5	"		"	"
MF 6	"		"	"
MF 7	"		"	2330 VII
MF 8	"		"	"
MF 9	"		"	"
MF 10	"		"	"
MF 12	"		"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS

0025

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
MF 13	EL 81		Pacminex Pty Ltd.	2330 VII
LD1	SML 499		Noranda Aust. Ltd.	R.I. 42/1541
LD2	"		"	"
LD3	"		"	"
LD4	"		"	"
LD5	"		"	"
LD6	"		"	"
LD7	"		"	"
LD8 6334 M1	EL 199	Pernatty Lagoon Area.	Pacminex Pty. Ltd	2627 II
LD9 " M2	"	"	"	"
LD10 " M3	"	"	"	"
LD11 " M4	"	"	"	"
LD12 " M5	"	"	"	"
LD13 " M6	"	"	"	"
LD14 " M7	"	"	"	"
LD15 " M8	"	"	"	"
LD16 " M9	"	"	"	"
LD17 " M10	"	"	"	"
LD18	"	"	"	2627 IV
LD19	"	"	"	"
LD20	"	"	"	"
LD21	"	"	"	"
LD22	"	"	"	"
LD23	"	"	"	2627 VI
LD24	"	"	"	"
LD25	"	"	"	"
LD26	EL 338	Charlinga Area.	"	3025 I
LD27	"	"	"	"
LD28	"	"	"	"
LD29	"	"	"	"
WP 5			Noranda Aust. Ltd.	RI 42.

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS

0026

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
WP 6			Noranda Aust. Ltd	RI 42
WP 7			"	"
WP 8			"	"
WP 9			"	"
WP 10			"	"
WP 11			"	"
WP 12			"	"
WP 13			"	"
WP 14			"	"
WP 16			"	"
WP 17			"	"
WP 18			"	"
WP 19			"	"
WP 20			"	"
WP 21			"	"
WP 22			"	"
WP 23			"	"
WP 24			"	"
WP 25			"	"
WP 26			"	"
WP 27			"	"
WP 28			"	"
WP 29			"	"
WP 30			"	"
WP 31	EL 199	Pernatty Lagoon Area	Pacminex Pty. Ltd.	2627 III
WP 32	"	"	"	"
WP 33	"	"	"	"
WP 34	"	"	"	"
WP 35	"	"	"	"
WP 36	"	"	"	"
WP 37	"	"	"	"
WP 38	"	"	"	"
WP 39	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA :

0027

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
WP 40	EL 199	Peroatty Lagoon Area	Pacminex Pty Ltd	2627. III
WP 41	"	"	"	"
WP 42	"	"	"	"
WP 43	"	"	"	"
WP 44	"	"	"	"
WP 45	"	"	"	"
WP 47	"	"	"	"
WP 48	"	"	"	"
WP 49	"	"	"	"
WP 50	"	"	"	"
WP 51	"	"	"	"
WP 52	EL 338	Charlinga Area	"	3025 I
WP 54	"	"	"	"
WP 55	"	"	"	"
WP 56	"	"	"	"
WP 57	"	"	"	"
WP 58	"	"	"	"
WP 59	"	"	"	"
WP 60	"	"	"	"
WP 61	"	"	"	"
WP 63	"	"	"	"
WP 64	"	"	"	"
WP 65	"	"	"	"
WP 66	"	"	"	"
WP 67	"	"	"	"
WP 69	"	"	"	"
WP 70	"	"	"	"
WP 71	"	"	"	"
WP 72	"	"	"	"
WP 73	"	"	"	"
WP 74	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS.

0028

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
BK 2	EL 338	Charlinga Area	Pacminex Pty Ltd	3025 I
BK 3	"	"	"	"
BK 4	"	"	"	"
BK 5	"	"	"	"
BK 6	"	"	"	"
BK 7	"	"	"	"
BK 8	"	"	"	"
BK 9	"	"	"	3025 II
BK 10	"	"	"	"
BK 11	"	"	"	"
BK 12	"	"	"	"
LY 2	EL 81		Pacminex Pty Ltd	2330 V
LY 3	"		"	"
PEB 21	EL 252	Emmie Bluff Area	Australian Selection (Pty) Ltd	2803
PEB 22	"	"	"	"
PEB 23	"	"	"	"
PEB 24	"	"	"	"
PEB 25	"	"	"	"
PEB 26	"	"	"	"
PEB 27	"	"	"	"
PEB 28	"	"	"	"
PEB 29	"	"	"	"
PEB 30	"	"	"	"
PEB 31	"	"	"	"
PEB 35	"	"	"	"
PEB 36	"	"	"	"
PEB 37	"	"	"	"
PEB 38	"	"	"	"
PEB 39 (SA 61)	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS

0029

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
PRL 1 (SAR-2)	EL 226	Red Lake Area	Australian Selection (Pty) Ltd.	2703
PRL 2	"	"	"	"
PRL 3 (SAR-2)	"	"	"	"
PRL 4 (SAR-3)	"	"	"	"
PRL 5 (SAR-4)	"	"	"	"
PRL 6	"	"	"	"
PRL 7 (SAR 5)	"	"	"	"
PRL 9	"	"	"	"
PRL 11 (SAR6)	"	"	"	"
PRL 12A	"	"	"	"
PRL 13A	"	"	"	"
PRL 14	"	"	"	"
PRL 15	"	"	"	"
EX 146	EL 166			2564-IV
EX 147	"			"
EX 148	"			"
EX 149	"			"
PSC 1 (SASC-1)	EL 261	Salt Creek Area	Australian Selection (Pty) Ltd.	2662
PSC-2	"	"	"	"
PSC-3	"	"	"	"
PSC-4 (SASC-2)	"	"	"	"
PSC5	"	"	"	"
PSC 6	"	"	"	"
PSC7 (SASC-3)	"	"	"	"
PSC-8	"	"	"	"
PSC-9	"	"	"	"
PSC-10	"	"	"	"
BEDA BORE			SADM 6334 000 WW 00029.	
WOOMERA BORE			Clarence River Basin Oil Co 6235	000PW00042

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : TORRENS .

0030

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
PIL 3 (SAI-1)	EL 301	Island Lagoon Area	Australian Selection (Pty) Ltd	2996
PIL 4	"	"	"	"
PIL 5	"	"	"	"
PIL 6	"	"	"	"
PIL 7	"	"	"	"
PIL 8	"	"	"	"
PIL 9	"	"	"	"
PIL 10	"	"	"	"
PIL 11	"	"	"	"
AD-2	EL 282	Arcoona Area .	Western Mining Corp Ltd .	2715
WHD-1	EL 294	Woodforde Hill Area .	"	2970
BHD-1	EL 370	Port Augusta Area		3093
BHD-2	"	"		"
BHD-3	"	"		"
BHD-4/SLT 101	"	"		"
SLT 102	"	"		"
SLT 103	"	"		"
SLT 104	"	"		"
LH-1	EL 339	Mt Gunson Area	Pacminex Pty Ltd.	3026 III

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA.

0031

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
PUB 3 (SAU-1)	EL 187	Uro Bluff Block.	Australian Selection (Pty) Ltd	2585 I
PUB 4	"	"	"	"
PUB 7	"	"	"	"
PUB 8 (SAU-2)	"	"	"	"
PUB 11 (SAU-3)	"	"	"	"
PUB 16 (SAU-6)	"	"	"	"
PUB 17 (SAU-7)	"	"	"	2585 I, II
PUB 19 (SAU-10)	"	"	"	2585 II
PUB 20 (SAU-8)	"	"	"	"
PUB 21 (SAU-14)	"	"	"	2585 II, III
PUB 22 (SAU-12)	"	"	"	"
PUB 23 (SAU-13)	"	"	"	"
PUB 24 [PUB 45, SAU 20]	"	"	"	2585 II
PUB 25 (SAU-9)	"	"	"	"
PUB 26 (SAU-11)	"	"	"	2585 II, III
PUB 27	"	"	"	2585 II
PUB 28	"	"	"	"
PUB 29 (SAU-17)	"	"	"	2585 II, III
PUB 30	"	"	"	2585 II
PUB 31	"	"	"	"
PUB 32	"	"	"	"
PUB 33 (SAU-15)	"	"	"	2585 II, III
PUB 34 (SAU-16)	"	"	"	"
PUB 36	"	"	"	2585 II
PUB 37	"	"	"	2585 III
PUB 38 (SAU-18)	"	"	"	"
PUB 39 (SAU-19)	"	"	"	"
PUB 40 (SAU-24)	"	"	"	2585 III, V
PUB 41 (SAU-25)	"	"	"	"
PUB 42 (SAU-28)	"	"	"	"
PUB 43 (SAU-22)	"	"	"	"
PUB 44A (SAU-23)	"	"	"	"
PUB 45 (SAU-20)	"	"	"	2585 III

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA .

0032

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
PUB 46 (SAU-21)	EL 187	Uro Bluff Block	Australian Selection (Pty) Ltd.	2585 III
PUB 47	"	"		2585 III, V
PUB 48 (SAU-27)	"	"		2585 V
PUB 50 (SAU-26)	"	"		2585 V
PTR-1	EL 251	Sugar Loaf Hill-Tregolana	Australian Selection (Pty) Ltd.	2784
PTR-2	"	"	"	"
PTR-3 (SAT-1)	"	"	"	"
PTR-4 (SAT-2)	"	"	"	"
PSH-1 (SAS-1)	"	"	"	"
PEB-1 (SAC-1)	EL 217	Oultana Area	"	2658
PEB-2	"	"	"	"
PEB-3	"	"	"	"
PEB 4				
YP 1	EL 352	Carlewerloo-Yudnapinna	Alcminco N.L.	3123
YP2	"	"	"	
YP3	"	"	"	
YP4	"	"	"	
YP5	"	"	"	
YP6	"	"	"	
YP7	"	"	"	
YP8	"	"	"	
YP 9	"	"	"	
YP 10	"	"	"	
YP 11	"	"	"	
POH-1	EL 302	Dinga Hill Area	Australian Selection (Pty) Ltd.	2992
POH-2	"	"	"	
POH-3	"	"	"	
POH-4	"	"	"	
POH-5	"	"	"	
POH-6	"	"	"	

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA .

0033

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
PDH-7 (SAD-1)	EL 302	Dingo Hill Area	Australian Selection (Pty) Ltd.	2992
PDH-8	"	"	"	
PDH-9	"	"	"	
PDH-10	"	"	"	
PDH-11 nl	"	"	"	
PDH-12 nl	"	"	"	
J 12	EL 332	Pandurra Area	Pacminex Pty. Ltd.	3024
J 13	"	"	"	
J 14	"	"	"	
J 15	"	"	"	
J 16	"	"	"	
J 20	"	"	"	
J 21	"	"	"	
J 22	"	"	"	
J 23	"	"	"	
J 24	"	"	"	
S1				
S2				
EX 2	EL 186	Pandurra Area.	Pacminex Pty. Ltd.	2564
EX 3	"	"	"	"
EX 4	"	"	"	"
EX 5	"	"	"	"
EX 6	"	"	"	"
EX 7	"	"	"	"
EX 10	"	"	"	"
EX 11	"	"	"	"
EX 12	"	"	"	"
EX 14	"	"	"	"
EX 15	"	"	"	"
EX 16	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA .

0034

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
EX 17	EL186	Pandurra Area	Pacminex Pty Ltd.	2564
EX 18	"	"	"	"
EX 19	"	"	"	"
EX 20	"	"	"	"
EX 22	"	"	"	"
EX 23	"	"	"	"
EX 25	"	"	"	"
EX 26	"	"	"	"
EX 28	"	"	"	"
EX 31	"	"	"	"
EX 32	"	"	"	"
EX 33	"	"	"	"
EX 34	"	"	"	"
EX 35	"	"	"	"
EX 36	"	"	"	"
EX 37	"	"	"	"
EX 38	"	"	"	"
EX 39	"	"	"	"
EX 40	"	"	"	"
EX 41	"	"	"	"
EX 42	"	"	"	"
EX 43	"	"	"	"
EX 44	"	"	"	"
EX 45	"	"	"	"
EX 46	"	"	"	"
EX 48	"	"	"	"
EX 49	"	"	"	"
EX 50	"	"	"	"
EX 51	"	"	"	"
EX 52	"	"	"	"
EX 53	"	"	"	"
EX 55	"	"	"	"
EX 59	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA .

0035

DRILL HOLE	STML or EL	AREA	COMPANY	REFERENCE
EX 61	EL186	Pandurra Area.	Pacminex Pty Ltd.	2564
EX 62	"	"	"	"
EX 63	"	"	"	"
EX 64	"	"	"	"
EX 66	"	"	"	"
EX 67	"	"	"	"
EX 68	"	"	"	"
EX 72	"	"	"	"
EX 73	"	"	"	"
EX 74	"	"	"	"
EX 75	"	"	"	"
EX 76	"	"	"	"
EX 77	"	"	"	"
EX 78	"	"	"	"
EX 80	"	"	"	"
EX 81	"	"	"	"
EX 82	"	"	"	"
EX 83	"	"	"	"
EX 84	"	"	"	"
EX 85	"	"	"	"
EX 86	"	"	"	"
EX 88	"	"	"	"
EX 90	"	"	"	"
EX 91	"	"	"	"
EX 93	"	"	"	"
EX 94	"	"	"	"
EX 95	"	"	"	"
EX 97	"	"	"	"
EX 98	"	"	"	"
EX 99	"	"	"	"
EX 101	"	"	"	"
EX 105	"	"	"	"
EX 107	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA .

0036

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
EX 108	EL 186	Pandurra Area.	Pacminex Pty. Ltd.	2564
EX 113	"	"	"	"
EX 114	"	"	"	"
EX 116	"	"	"	"
EX 117	"	"	"	"
EX 118	"	"	"	"
EX 119	"	"	"	"
EX 120	"	"	"	"
EX 121	"	"	"	"
EX 122	"	"	"	"
EX 123	"	"	"	"
EX 124	"	"	"	"
EX 125	"	"	"	"
EX126	"	"	"	"
EX 127	"	"	"	"
EX 128	"	"	"	"
EX 129	"	"	"	"
EX 130	"	"	"	"
EX 131	"	"	"	"
EX 132	"	"	"	"
EX 133	"	"	"	"
EX 134	"	"	"	"
EX 135	"	"	"	"
EX 137	"	"	"	"
EX 138	"	"	"	"
EX 139	"	"	"	"
EX 140	"	"	"	"
EX 141	"	"	"	"
EX 142	"	"	"	"
EX 143	"	"	"	"
EX 144	"	"	"	"
EX 145	"	"	"	"
EX 150	"	"	"	"
EX 152	"	"	"	"

DRILL HOLE DATA SOURCE : STUART SHELF SURVEY

MAP AREA : PORT AUGUSTA .

DRILL HOLE	SML or EL	AREA	COMPANY	REFERENCE
EX 159				
EX 160				
EX 161				
EX 162				
EX 163 .				

APPENDIX I

TORRENS 1:250000

Drill Hole Elevations
Depths to Contoured Surfaces.
Sturtian Isopachs.

NB Red figures indicate minimum possible thickness or depths.
ie actual depths & thicknesses are greater than this minimum.

NB. Only RLs written in ink are results of levelling. Pencil and Black biro RLs are estimations only.

TORRENS SHEET 1. 0039

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL. TOP DAMOURRA	BASEMENT	STURTIAN THICKNESS
OK 9	107	topographic determination only			
OK 11	116	74	74 (Sturt)	71	10
OK 12	117	-	97 (Why ss)	85	-
OK 27	89	topographic determination only			
OK 28	106	34	34 (Sturt)		15
OK 30	121	-	107 (Why ss)	105	
OK 31	126	-	114 (Why ss)	112	
OK 32	126	-	98 (Why ss)	94	
OK 35	122	72	72 (Sturt)	70	5
OK 36	125	80	80 (Sturt)		4
OK 38	86	12	12 (Sturt)		2
OK 39	102	19	19 (Sturt)		2
OK 41	107	69	69 (Sturt)		9
OK 42	105	55	55 (Sturt)		5
OK 43	106	61	61 (Sturt)	60	88
OK 47	112	64	64 (Sturt)		2
OK 48	120	56	56 (Sturt)	55	12
OK 50	3201 98	-7	-7 (Sturt)	-10	18
OK 52	111	-	73 (Why ss)	68	-
OK 53	118	-	93 (Why ss)		-
OK 54	112	-	92 (Why ss)	91	-
OK 56	108	-	72 (Why ss)	72	-
OK 57	125	-	82 (Why ss)		-
OK 58	124	-	75 (Why ss)		-
OK 59	127	-	104 (Why ss		-
OK 60	129	-	96.		-
OK 62	129	85 Mc Leay B			
OK 66	121	39 Mc Leay B			
OK 67	122	71 Mc Leay B			
OK 69	109	68 Mc Leay B			
OK 70	3201 98	8	8 (Sturt)		34
OK 75	115	77 Mc / Beds			

TORRENS SHEET 2.

DRILL HOLE	RL	BASE STURTIAN	BEDR VOL.	TOP DANDURRA	BASEMENT	STURTIAN THICKNESS
OK 76	102	37.		37 (Sturt)	34	22
OK 116	320' 98			16 (Why ss)		-
OK 117	315' 96	-26		-26 (Sturt)	-44.	32
OK 118	325' 99	-		31 (Why ss)	24	-
OK 119	330' 101	-		21 (Why ss)	-45	-
OK 120	325' 99			-28 (Yud)		
OK 121	325' 99	-		4 (Why ss)	-6	-
OK 122	320' 98	-		65 (Why ss)	32	-
OK 123	330' 101	13		13 (Sturt)	8	14
OK 124	330' 101	-		66 (Why ss)	56	-
OK 125	330' 101	-		65 (Why ss)	50	-
OK 126	330' 101	-		51 (Why ss)	38	-
OK 127	325' 99	-		33 (Why ss)	18.	-
OK 128	310' 94			-56 (Why ss)		
OK 129	340' 104	-13		-13 (Sturt)	-22	28
PL 6	119	-		76 (Why ss)	75	-
PL 11	386' 116	-		57 (?)	50	-
PL 33	340' 104	-		-5 (Why ss)	-7	-
PL 35	356' 107			17 (Why ss)		
PL 36	310' 94	-		~ -6 (Why ss)	-14	-
PL 37	330' 101	-		9 (Yud)	-4	-
PL 38	360' 108	-		58 (Why ss)	45	-
PL 39	360' 108	-		-34 (Yud)	-39	-
W1	110	} top ography determination only				
W4	119					
W5	121					
LW 19	320' 98	-		-1 (Why ss)	-5	-
LW 20	300' 91	-		22 (Why ss)	0	-
LW 22	335' 102	+51		51 (Sturt)	46	4

TORRENS SHEET 3. 0041

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT	STURTIAN THICKNESS
LW 25	210' 64			-26 (Whyss)		
LW 27	330' 101	-		41 (Why ss)	35	-
LW 28	200' 61	-		-2 (Why ss)	-5	-
LW 29	310' 94	-		49 (Treg)	40	-
LW 30	350' 107			67 (Treg)		
LW 32	350' 107	-		68 (Why ss)	59	-
LW 34	[illegible] 101	?33		?33 (Sturt)	14	?6
LW 35	340' 104			74 (Treg)		
LW 36	320' 98	-		83 (Why ss)	44	-
LW 37	330' 101	?		38 (Sturt)	23	?6
LW 38	330' 101	-7		-7 (Sturt)	-13	?6
LW 39	320' 98	-		89 (Why ss)	41	-
LW 40	320' 98	-		9 (Why ss)	-7	-
LW 41	300' 91	-		79 (Why ss)	40	-
LW 42	254' 77	-		73 (Cain)	23	-
LW 43	230' 70	-		61 (Cain)	16	-
LW 44	220' 67	-		52 (Why ss)	13	-
LW 47	200' 61			61 (Pbp)	-14	
LW 48	320' 98			98 (Pbp)	16	
LW 51	320' 98	-		84 (Why ss)	50	-
LW 52	320' 98	27		27 (Sturt)	20	11
LW 53	320' 98	-		47 (Why ss	35	-
LW 54	330' 101	-		30 (Why ss)	20	-
LW 55	350 107	-		7 (Yud)	5	-
MF 1	290' 88	+50		50 (Sturt)	-7	22
MF 2	305' 93	22		22 (Sturt)	-2	46
MF 4	350' 107	18		18 (Sturt)	15	69
MF 5	360' 110	18		18 (Sturt)	14	85
MF 6	260' 79	-26		-26 (Sturt)		6
MF 7	335' 102	36		+36 (Sturt)		19
MF 8	380' 116			16 (Yud)		

TORRENS SHEET 4

0042

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP DANDURRA	BASEMENT	STURTIAN THICKNESS
MF 9	300' 91			1 (Yud)		
MF 10	330' 101			28 (Yud)		
MF 12	350' 107	55		55 (Sturt)	53	37
MF 13	260' 85	-11		~~55~~ -11 (St)		1
LD 1	104	13		13 (Sturt)	11	12
LD 2	280' 85	-98		-98 (Sturt)	-100	130
LD 3	240' 73	-119		-119 (Sturt)	-120	93
LD 4	305' 93	-43		-43 (Sturt)	-44	83
LD 5	300' 91	8		8 (Sturt	7	22
LD 6	240' 73	7		7 (Sturt)	6	20
LD 7	390' 119	-		76 (Why ss)	44	-
LD 8	220' 67	21		21 (unnam)	17	25
LD 9	200' 61	-		34 (unnam)	28	-
LD 10	240' 73	62		62 (Sturt)	58	9
LD 11	200' 61	-		44 (Treg)	37	-
LD 12	225' 69	-		57 (unnam)	48	-
LD 13	250' 76	20		20 (Sturt)	19	35
LD 14	280' 85	25		25 (Sturt)		10
LD 15	240' 73	-		65 (Why ss)	61	-
LD 16	270' 82	-		55 (unnam)	52	-
LD 17	340' 104			32 (Yud)		
LD 18	230' 70	-		50 ?	37	-
LD 19	210' 64	4		4 (Sturt)	-5	28
LD 20	240' 73	24		24 (Sturt)	16	19
LD 21	250' 76	-		61 ?	52	-
LD 22	250' 76	-		46 ?	37	-
LD 23	270' 82	-57		-57 (Sturt)	-82	70
LD 24	330' 101	-87		-87 (Sturt)	-97	~~#~~ 122
LD 25	355' 108	-69		-69 (Sturt)	-80	# 69
LD 26	325' 99	-		94 (Cain)	87	-
LD 27	360' 110	-		101 (Cain)	94	-

TORRENS SHEET 5 .

DRILL HOLE	RL	BASE STURTIAN	BEDR VOL.	TOP BANDURRA	BASEMENT	STURTIAN THICKNESS
LD 28	310' 94	41		41 (Sturt)		9
LD 29	340' 104			71 (Ujud) .		
WP 5	350' 107	83 (~~Sturt~~)		83 (Sturt)		3
WP 6	310' 94	67		67 (Sturt)		13
WP 7	345' 105	82		82 (Sturt) .		3
WP 8	355' 108	84		84 (Sturt)		14
WP 9 .	345' 105	97 .		97 (Sturt) .		5
WP 10	340' 104	60		60 (Sturt)		40
WP 11	335' 102	73		73 (Sturt)		23
WP 13	340' 104	73		73 (Sturt)		17
WP 16	360' 110	87		87 Csturt .		14
WP 17	365' 111	69		69 (Sturt)		18
WP 18	376' 113	-		94 (why ss)		-
WP 19	375' 114	78		78 (Sturt)		>5
WP 20	355' 108	68		68 (Sturt)		13
WP 21	355' 108	85		85 (Sturt)		6
WP 22	340' 104	80		80 (Sturt)		7
WP 24	330' 101	74		74 (Sturt)		18
WP 25	345' 105	46		46 (Sturt)		33
WP 26	340' 104	48		48 (Sturt)		20
WP 31	280' 85	-21		-21 (Sturt) .	-29	3
WP 32	280' 85	-		46 (T/W/Y)	43	-
WP 33	400' 122	39		39 (Sturt))	32	10
WP 84	360' 110	-		77 (T/W/Y)	68	-
WP 35	325' 99	0.		0 (Sturt)	-7	24
WP 36	410' 125	67		67 (Sturt)	66	10
WP 37	380' 116	-		95 (T/W/Y)	92	-
WP 38	405' 123	-		81 (T/W/Y)	74	-
WP 39	370' 113	57		57 (Sturt)	50	29
WP 40	370' 113	-		101 (Cain)	95	-
WP 41	360' 110 .	57 .		57 (Sturt) .	50	23

TORRENS SHEET 6.

0044

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT	STURTIAN THICKNESS
WP 42	330' 101	59	~~59 (Sturt)~~	59 (Sturt)	56	21
WP 43	336' 101	-		81 (Cain)	75	-
WP 44	325' 99	-		93 (Cain)	89	-
WP 45	336' 101	-		71 (T/W/Y)	65	-
WP 47	325' 99	-		72 (T/W/Y)	63	-
WP 48	350' 107	74		74 (Sturt)	71	23
WP 49	340' 104	74		74 (Sturt)	92	15
WP 50	450' 137	-		89 (T/W/Y)	88	-
WP 51	260' 79	33		33 (Sturt)	24	8
WP 52	250' 76	-63		-63 (Sturt)		48
~~WP 53~~	~~280' 85~~					
WP 54	250' 76	-46		-40 (Sturt)	-53	48
WP 55	250' 76	-17		-17 (Sturt)		7
WP 56	320' 98	48		48 (Sturt)		3
WP 57	320' 98	29		29 (Sturt)	23	21
WP 58	375 114	-		104 (T/W/Y)	90	-
WP 59	390' 119	76		70 (Sturt)	62	16
WP 60	425' 130	(0.5m only) 80		80 (Sturt)	76	.5m
WP 61	370' 113	17		17 (Sturt)	11	85
WP 63	340' 104	-24		-24 (~~Sturt~~ Cain)	-34	123
WP 64	350' 107	93		93 (Sturt)	81	11
WP 65	395' 120	72		72 (Sturt)	65	7
WP 66	370 113	37		37 (Sturt)	29	16
WP 67	355' 108	- IGNEOUS DYKE from		73 (Yud). +52 → +46,	NO THK	-
WP 69	345' 105	87		87 (Sturt)	79	5
WP 70	400' 122	-		99 (Yud)	86	-
WP 71	385' 117	-		79 (Yud)	79	-
WP 72	380' 116	30		30 (Sturt)	20	16
WP 73	380' 116			106 (Whyss)		-
WP 74	375' 114	16		16 (Sturt)	9	6

TORRENS SHEET 7.

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT	STURTIAN THICKNESS	BDR V [illegible] thickness
BK 2	130' 40	-151	-162	-162		86	11
BK 3	380' 116	-39	-50	-50		55	11
BK 4	225' 69	-11	-122	-122		108	11
BK 5	320' 98	-55	-	-55 (Sturt)	-61	60	-
BK 6	380' 116	32	-	32 (Sturt)	+26	15	-
BK 7	330' 101	-39	-53	-53		51	14
BK 8	420' 128	48	-	48 (Sturt)	-98	29	-
BK 9	315' 96	-19	-28	-28		56	10
BK 10	350' 107	15	-11	~~[illegible]~~ -11	-27	34	26
BK 11	295' 90	-22	-53	~~[illegible]~~ -53	-70	54	31
BK 12	370' 113	40	-	40 (Sturt)	17	5	-
LY 2	380' 116	-	-	87 (Whg ss)	-551	-	
LY 3	330' 101	71		71 (Sturt)	66 (dyke at this level)	5	
PEB 21	135	-		25 (Treg)	11		
PEB 22	136	-		102 (Treg)	96		
PEB 23	350' 107	-		-11 (Treg)	-17		
PEB 24	420' 128	-		+54 (Treg)	48		
PEB 25	400' 122	-		72 (Treg)	68		
PEB 26	72	-		46 (Treg)			
PEB 27	74	-		-4 (Treg)	-6		
PEB 28	350' 107	-		-43 (Treg)	-53		
PEB 29	290' 88	-		50 (Treg)	48		
PEB 30	410' 125	-		7 (Treg)	1		
PEB 31	330' 101	-		5 (Treg)	-3		
PEB 35	350' 107			-91 (Treg)			
PEB 36	72	-		10 (Treg)	2		
PEB 37	450' 137	-		7 (Treg)	-5		
PEB 38	300' 91	-		-3 (Treg)	-15		
PEB 39	400' 122	-		-16 (Treg)	-101		

TORRENS SHEET 8.

0046

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT · PA	Thickness Beda V PAN
PRL1 (SAR-1)	58	-94	-110	-110		71 >18
PRL2	111	-61		-61 (Treg)		
PRL3 (SAR-2)	79	-326		-326 (Sturt)	-336	218
PRL 4 (SAR-3)	296 90.	-133		-133 (Sturt)	-197	31
PRL 5 (SAR-4)	100	-195		-195 (Sturt)	-234.	97
PRL 6	93.	-49	-67	-67		60 >18
PRL 7 (SAR-5)	180' 55	-151		-151 (Sturt)	-161.	90
PRL 8	335' 102	-8		-8 (Sturt)	-16	44
~~PRL 10~~	~~180' 55~~	~~-111~~		~~-111 (Sturt)~~		
PRL 11 (SAR-6)	190' 58.	-158		-158 (Sturt)	-188	111
PRL 12A	200' 61	-137	-144	-144		94 >10
PRL 13A	205' 62	-138		-138 (Sturt)	-144	98
PRL 14	180' 55	-131		-131 (Sturt)	-145.	91
PRL 15.	180' 55	-122		-122 (Sturt)	-142.	88
EX 146	130	84		84 (Yud)		
EX 147	121	48		48 (Sturt)	48	4
EX 148	148	-		137 (Cain)		-
EX 149	149.	41.		41 (Sturt).	41.	2.
PSC-1 (SASC-1)	255' 78	-		-240 (Whyss)	-302	-
PSC-2	265' 81			-134 (Treg)		
PSC-3	220' 67			13 (Cor)		
PSC-4 (SASC-2)	430' 131	-		-167 (Yud)	-356	-
PSC 5	265' 81			-111 (Treg)		
PSC-6	275' 84	-142		-142 (Sturt)	-150	16
PSC-7 (SASC-3)	140' 43	-		-312 (Yud)	-642.	-
PSC-8	210' 64			-145 (Treg)		
PSC-9	200' 61			-184 (Treg)		
PSC-10	470' 143			-77 (Cor)		

TORRENS SHEET 9. 0047

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANOURRA	BASEMENT · PPT	Thickness · Beda V
BEDA BORE	330' 101	-39	-234	-234		48 195
WOOMERA BORE	460' 140	-332		-332 (Sturt)	-471	127
PIL 3 (SA1-1)	350' 107	-7		-7 (Sturt)	-213	96
PIL 4	356' 107	+5		5 (Sturt)	-115	72
PIL 5	335' 102	-78/-78	Basic intrusive at this level			160
PIL 6	320' 96	-90		-90 (Sturt)	-197	60
PIL 7	315' 96	-71		-71 (Sturt)	-227	67
PIL 8	340 104	-54		-54 (Sturt)	-201	60
PIL 9	305' 93	-53		-53 (Sturt)	-110	96
PIL 10	345' 105	+9		+9 (Sturt)	-195	>38
PIL 11	360' 110	-76		-76 (Sturt)	-196	136
AD-2	450 137	-		-205 (Why ss)	-675	-
WHD-1	430 131	-302 -385	-385 -388	-	-501 -504	154 83
BDH 1	76					
BDH 2	41	-307	-512	-512		151 206
BDH 3	75	-445		-445 (Sturt)		196
BDH 4 / SLT 101	44	-556		-556 (Sturt)		15
SLT 102	31	-587	-613	-613		270 26
SLT 103	36	-263	-578	-	-578	159 306
SLT 104	44					
WP 12	346' 104	-		82 (Why ss)	81	-
WP 14	305' 93	66		66 (Sturt)		>9
WP 27	360' 110	98		98 (Sturt)		>18
WP 28	390' 119	-		104 (Why ss)	103	-
WP 29	400' 122	-		87 (Why ss)		-
WP 30	300' 91	52		52 (Sturt)		20
Pacminex · LH-1	550' 168	-530		-530 (Sturt)	-620	174

APPENDIX II

Pt AUGUSTA 1:250,000

Drill Hole Elevations, Depths to Contoured Surfaces and Surficial Isopachs

PORT AUGUSTA SHEET 1. 0049

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP DAMOURRA	BASEMENT	STURTIAN ISOPACHS Backstrip
						Eff.
PUB 3 (SAU-1)	43	-218	-232	-232		175 15+
PUB 4	47	-109				24+
~~PUB 6 [PUB 38 SAU 18]~~	~~45~~	~~-37~~		~~-39~~	~~-47~~	
PUB 7	~45	-61	-	-61	-79	94
PUB 8 (SAU-2)	33	-166	-182	-182		117 16+
PUB 11 (SAU-3)	36	-377	-458	-458		208 81+
PUB 16 (SAU-6)	69	-205	-214	-214		170 9+
PUB 17 (SAU-7)	43	-69	-	-69	-100	108
PUB 19 (SAU-10)	62	-101	-109	-109		113 8+
PUB 20 (SAU-8)	48	-15	-	-15	-19	43
PUB 21 (SAU-14)	46	-44	-61	-61		84 17+
PUB 22 (SAU-12)	53	-78	-	-78	-90	117
PUB 23 (SAU-13)	55	-100	-121	-121		137 21+
~~PUB 24 [PUB 45 SAU 30]~~	~~57~~	~~-91~~				~~114+~~
PUB 25 (SAU-9)	56	-134	-	-134	-143	126
PUB 26 (SAU-11)	53	-93	-111	-111		118 18+
PUB 27	45	-85	-	-85	-86	124
PUB 28	~50	0	-	0	-2	44
PUB 29 (SAU-17)	42	-124	-132	-132	-137	120 8
PUB 30	52	-72	-	-72	-84	12
PUB 31	58	-12	-	-12	-18	68
PUB 32	51	11	-	11	-5	28
PUB 33 (SAU-15)	52	-40	-	-40	-46	92
PUB 34 (SAU-16)	52	-96	-	-96	-109	144
PUB 36	56	-48	-80	-80		88 32+
PUB 37	59	-81	-89	-89		104 8+
PUB 38 (SAU-18)	44	-41	-47	-47		77 6+
PUB 39 (SAU-19)	52	-72	-79	-79		112 7+
PUB 40 (SAU-24)	58	-90	-103	-103		116 13+
PUB 41 (SAU-25)	54	-67	-91	-91		101 25+
PUB 42 (SAU-28)	62	-95	-132	-132		117 37+
PUB 43 (SAU-22)	49	-91	-96	-96		136 5+

PORT AUGUSTA SHEET 2.

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT	DH	THICKNESS Pdp
PUB 44A (SAU 23)	62	-112	-121	-121	-123	110 →	9
PUB 45 (SAU 20)	58	-114	-118	-118		136	3+
PUB 46 (SAU-21	75	-161	-173	-173		138	10+
PUB 47	82						
PUB 48 (SAU 27)	86	-166	-197	-197		246	31+
PUB 50 (SAU 26)	70	-150	-174	-174		134	24+
PTR-1	43	-131	–	-131	-155	182	
PTR-2	28	-102	–	-102	-120	116	
PTR 3 (SAT 1)	33	-179	–	-179	-209	157	
PTR 4 (SAT 2)	30	-181	-205	-205		144	24+-
PSH 1 (SAS-1)(?)	73	-201	-398	-398		142	197+
PFB 1 (SAC-1)	26	-205	-216	-216		151	11+
PFB 2	13	-163	–	?? -163	-169	136	
PFB 3	13						
YP 1	131	–	–	111			
YP 2	130	–	–	112			
YP 3	126	–	–	110			
YP 4	115	–	–	83			
YP 5	152	–	–	136			
YP 6	144	–	–	94			
YP 7	137	–	–	115			
YP 8	151	–	–	117			
YP 9	128	–	–	98			
YP 10	122	–	–	112 (outcrop)			
YP 11	155	–	–	153 (out crop)			
POH 1	550' 168	..	–	108 outcrop			
POH 2	450' 137	–	–	123 outcrop			
POH 3	375' 114	-12				7+	
POH 4	380' 116	52	Pcb ? 34	34	Pcr ? 34	32	

PORT AUGUSTA SHEET 3.

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT . AA.	THICKNESS	Beda V
PDH 5	580' 177	–	–	155 outcrop			
PDH 6	465' 142	–	–	118 outcrop	118 . -54 GRV		
PDH 7 (SAD-1)	375' 114	-123	–	–	-123 [illegible] GRV	95	
PDH 8	390' 119	67.	–	67		44	
PDH 9	345 105						
PDH 10	370' 113 .						
PDH 11 nl							
PDH 12 nl							
J 12	56	-67	-219	-219 (vol)	-230	120	152
J 13	66	48	Pcb 9	9		16	39+
J 14	59	8	Pcb + Beda v. -19	-19		50	26+
J 15	~58	–	–	57 outcrop .	-62	[illegible]	
J 16	203 62	-98	Pcb + Beda V -110	-110		159	11+
J 20	76	–	–	73 outcrop	10 .	[illegible]	[illegible]
J 21	59	24	-33	-33	-48 .	32	57
J 22	215 66 .	48				12+	
J 23	213 65	47 .				15 +	
J 24	185' 56	-4	Pcb + Beda v. -37 .	-37 .		55	33+
S1 (45°)	18 m			-31 (44)			
S2 (45°)	40 m			-81 (121)			

PORT AUGUSTA SHEET 4

0052

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP BANDURRA	BASEMENT	THICKNESS PA
EX 2	108	44		44 (Stuvt		44
EX 3	87	-		45 (Tert)		
EX 4	104	-		92 (Tert)		
EX 5	125	-		95 (Tert)		
EX 6	102					
EX 7	112					
EX 10	96	37		37 (Sturt)		4
EX 11	107	-		40 (Yud)		
EX 12	114					
EX 14	120					
EX 15	113	-		80 (Yud)		
EX 16	98	-		34 (Yud)		
EX 17	111	35		35 (Sturt)		12
EX 18	78	6		6 (Sturt)		46
EX 19	76	-22				68+
EX 20	68	-28				32+
EX 22	98					
EX 23	99					
EX 25	91	3		3 (Sturt)		45
EX 26	109	-		97 (Yud)		
EX 28	94	-		74 (Yud)		
EX 31	127			124 (outcrop)	73	
EX 32	122	-		-	104 (Yud)	
EX 33	121	91		91 (Sturt)	43	27
EX 34	106	85		-	85 (Sturt)	18
EX 35	118					
EX 36	105	-		-	68 (Yud)	
EX 37	111					
EX 38	119	-		-	116 (outcrop)	
EX 39	129	80		80 (Sturt)		40
EX 40	95	-		-	87 (outcrop)	
EX 41	83	49	42	42 (Pcb)	17	22

PORT AUGUSTA SHEET 5 . 0053

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT .	THICKNESS Pdl
EX 42	82	40	29	29 (Pcb) .		39 .
EX 43	86	-12				52+
EX 44	92					
EX 45	76	33	24	24 (Pcb) .		37
EX 46	97	57		16		10
EX 48	74	-5				70+
EX 49	66	-25				84+
EX 50	59	25		25 (Sturt)		31
EX 51	61	55	49	49 (Pcb)		3
EX 52	57	48		48 (Sturt)		9
EX 53	60	11	4	4 (Pcb)		49
EX 54	73	-		70 outcrop		
EX 59	73	-	51	51 (Pcb.		
EX 61	59					
EX 62	35	1		1 (Sturt) .		34
EX 63	38	0				37+
EX 64	22	-48				14+
EX 66	33	6		6 (Sturt)		21+
EX 67	52	-4				52+
EX 68	48	19				29+
EX 72	51	-		45 outcrop		
EX 73	59	-		38 outcrop		
EX 74	56	22		22 (Sturt)		2
EX 75	46	10				22+
EX 76	56	26	23	23 (Pcb)		6
EX 77	58	-	41	41 (Pcb)		
EX 78	61	-		58 outcrop		
EX 80	69	51		-3		12
EX 81	61	45		-13		15
EX 82	99	-		96 outcrop		
EX 83	92	64	52	52 Pcb .		16
EX 84	100	-		97 outcrop .		

PORT AUGUSTA SHEET 6. 0054

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT	PA THICKNESS
EX 85	84	65		65 (Sturt)		17
EX 86	69	-		41		
EX 88	79	67		16		14
EX 90	88	68		-	60 (Sturt)	18
EX 91	91					
EX 93	83					
EX 94	114					
EX 95	106	73		71		23
EX 97	99	-		-	96: outcrop	
EX 98	130	77		77 (Sturt)		52
EX 99	140	82		82 (Sturt)		55
EX 101	130	-		127 (outcrop)		
EX 105	139	-		-	134 outcrop	
EX 107	128	-		-	116 "	
EX 108	114	-		-	106 "	
EX 113	119	103		-	103 (Sturt)	7
EX 114	104	90		-	90 (Sturt).	9
EX 116	108	-		108 (outcrop)		
EX 117	97	-	53	53 (Prcb).		
EX 118	96	64		64 (Sturt).		11
EX 119	114	-		96 (Yud).		
EX 120	106					
EX 121	112					
EX 122	113	-		86 (Yud).		
EX 123	115					
EX 124	147					
EX 125	141	-		138 (outcrop)		
EX 126	139	-		114 (Tert)		
EX 127	128	-		66 (Tert)		
EX 128	122					
EX 129	132					
EX 130	110	-		56 (Tert).		

PORT AUGUSTA SHEET 7.

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT	THICKNESS. ADH
EX 131	125					
EX 132	108	-		55 (Tert)		
EX 133	117	-		93 (Yud)		
EX 134	107					
EX 135	98					
EX 137	91					
EX 138	91	39				71
EX 139	90	31				13+
EX 140	86	-		29 (Tert)		
EX 141	89	-		51 (Tert)		
EX 142	96	44		44 (Sturt)		1
EX 143	100	58		58 (Sturt)		4
EX 144	110	-		50 (Sturt)		
EX 145	97	-		97 outcrop		
EX 150	117	-		116 outcrop		
EX 152	111	-		57 (Tert).		
PEB 4	12	-144				70+
EX 159	~240' 73	-86	-127 *			88
EX. 160	?300' 91	32			3 *	31
EX 161	?300' 91	39	13	13	-9 *	46
EX 162	~430' 131	2	-50	-50	-65 *	64
EX 163	~230' 70	-176	-	-176	-202 *	223

APPENDIX III

Whyalla / Burra 1:250,000

Drill Hole Elevations, Depths to Contoured Surfaces, Sturtian Isopachs

YORKE PENINSULA SHEET NO. 1. 0057

ELEVATIONS FROM MAITLAND AND WAILARDO 1:100,000 TOPOGRAPHIC SHEETS.

DRILL HOLE	RL	BASE STURTIAN BEDA VOL.			TOP PANDURRA BASEMENT	STURTIAN THICKNESS
DDH 76	85				-90	
112	84				55	
113	84				22	
117	30.2				-6	
119	30.2				-94	
149	3.7				-16	
153	35.1				-80	
156	38.1				-102	
159	30				-14	
178	86				-2	
186	88				+5	
187	BASEMENT	OUTCROP			OUTCROP	
189	107				-160	
193	101				-76	
194	90				+37	
195	78				-62	
196	101				-81	
201	BASEMENT	OUTCROP			OUTCROP	
202	"	"			"	
203	"	"			"	
204	"	"			"	
205	90				2	
206	105				-107	
207	99				60	
208	99				-109	
209	102				-67	
210	100.6				38	
211	10.7				-28	
212	10.7				-22	
BDDH 14	138	-220	-	-	-219 (Stunt)	190
BDDH 15	162	-289	-	-	-289 (Stunt)	171

YORKE PENINSULA NO. 2.

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP DANDURRA	BASEMENT	STURTIAN THICKNESS
BODII 16	128	-159				30+
17	114	-197			-197 (Sturt)	264
18	100	-54			-54 (Sturt)	44
19	156	-		Emerco Qtz. -3 - ? (OFF)		
20	100	56			56 (Sturt)	22
21.	114	6				54+
22	114					
PP 2	11		-400	-400 (Beda V)	-478.	
PP 3	8				-425.	
PP 4	4	-459	-	-485 (Sturt).	-520.	145.
PP 5	9		-344	-	-344.	
PP 6	8	-	-356	-356 (Beda V)	-497.	
PP 7	1		-153	-153 (Beda V)	-269	
PP 8	12				-446	
PP 9	8				-211.	
PP 10	12		? -341	? -341.	-404.	
PP 11	15	-467.			-467.	113
PP 12.	8					
PP 13						
Bore No1	76	53		53 (Sturt).	-87.	23
No 2	97	-26		-	-26 (Sturt)	25
No 3	97	-88		-	-35 (Sturt)	85.
No 4	80					
No 5	113	-		-	77 (CE)	
No 6	96	-.		Emerco Qtz top. 93.	-383 (Emerco).	
No 7	157.	-262		-	-262 (Sturt)	380
No 8	91	+80				
No 9	85	+68				
No 10	84	+63				
No 11	74	+63.				
No 12	107.					

ELEVATIONS FROM BURRA 1:250,000 SHEET

ELEVATIONS FROM WHYALLA Topographic Sheet 1:100,000

YORKE PENINSULA SHEET NO. 3 0059

DRILL HOLE	RL	BASE STURTIAN BEDA VOL.		TOP PANDURRA BASEMENT	STURTIAN THICKNESS
Bute No 13	67	–		57 (Cain)	
WR -1	79.3	–		44 (Cain)	
WR-2	82	37		37 (Sturt)	15+
WR-3	83.5	26		26 (Sturt)	6+
WR-4	105			26 (Br. LS)	
WR-5	120			47 (Ang. F)	
WR-6	88			64 (Cain)	
WR-7	64			7 (Cain)	
WR-9	42.3	–		-55 (Pcb)	
WR-10	46.2	–		19 (?Pcb)	
WR-11	52			21 (?Pcb)	
WR-13	46	4			7+
WR-14	53.6				
WR-15					
WR-16	79.7			41 (Cain)	
WR-17	86.3	46		46 (Sturt)	5+
WR-18	178				
Tickera No 1	10.5			-121 (Tert)	
Tickera No 2	46	–		-73 (?Tert)	
Wok-1	91	–		66 (Cain)	
Wok-2	84	~~-135~~ -135		~~-135~~ -135	173+
Wok-3	153			-158 (Ang. F)	
Wok-4	88.2	-67		-241 (Pch)	89
Wok-5	112.8	-152		-182	120+
Wok-6	237.4			-102	

APPENDIX IV

Andamooka, Gairdner, Kingoonya
Billalcalina, Warrina, Cordimurka 1:250,000.

Drill Hole Elevations
Depths to Contoured Surfaces.

ANDAMOOKA.

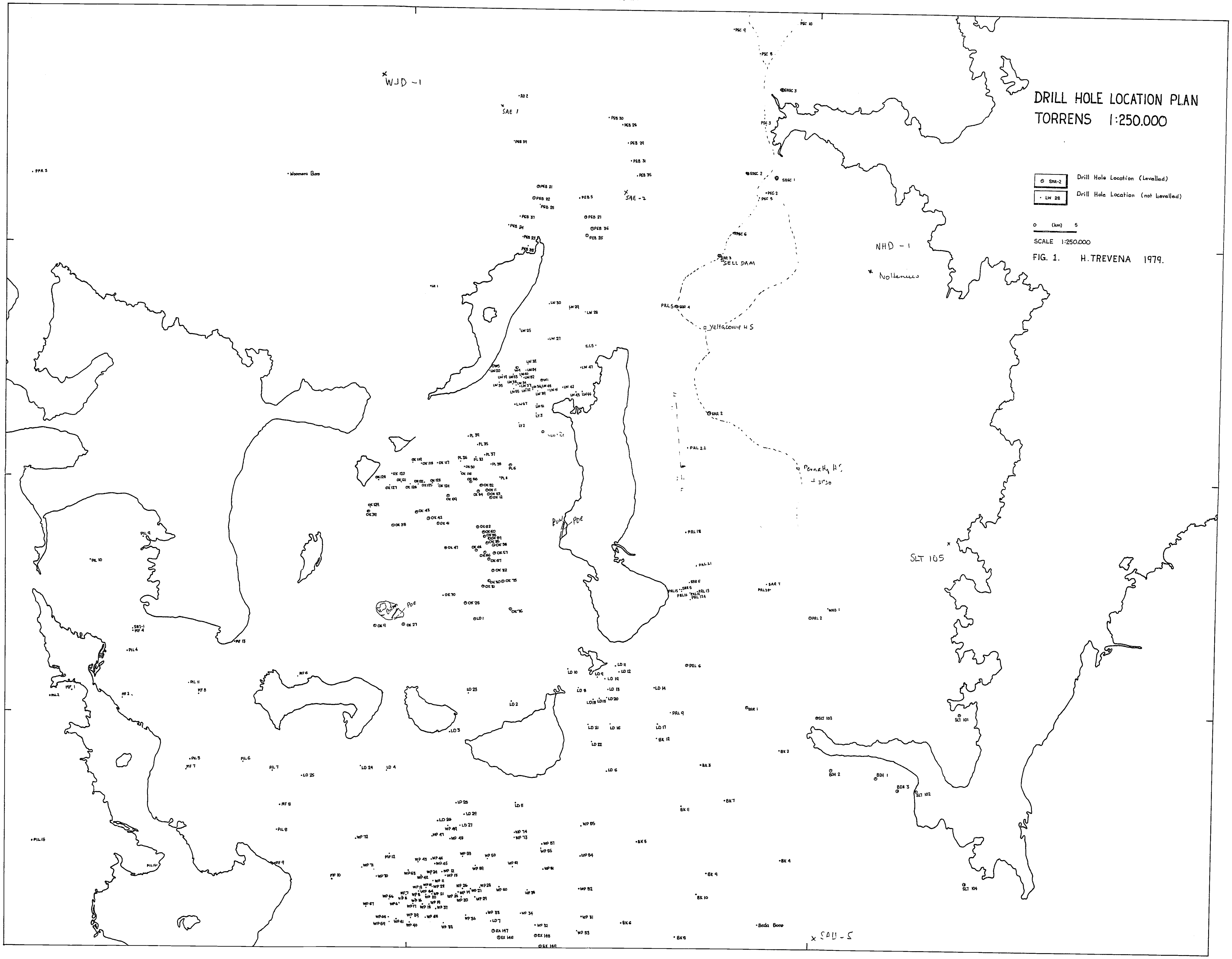
DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT.	
RD-1	306' 93	–	–	?? -234.	-234	
RD-3				unit named Pandurra is		
RD-4				surely more than a few		
RD-5 DAM.				metres thick.		
RD-6						
RD-7						
RD-8 OLYMPIC						
RD-9						
RD-10.						
RD-2	310' 94	–	–	-346	-419	
BD-1	370' 113	–	–	–	-495.	
TOD-1	305' 93	–	–	–	-435.	
PDI-A	350' 107	–	–	–	-229	
AD-1	470' 143	–	–	-8	-342.	
CD-1	96' 29	–	–	–	-384.	
WWD-1	110' 34				-328	
~~TD-3~~	~~160' 49~~					
FHD-1.	200' 61	? -683				29°48'55"
						136°42' 45"

SR 14 and 14B no locations

DRILL HOLE	RL	BASE STURTIAN	BEDA VOL.	TOP PANDURRA	BASEMENT
GAIRDNER.					
LH DDH 1	~110			15 (Corra. ss)	-333 (Ebp).
LH DDH 2.	~125			87 (Corra ss).	-382 (Ebp)
KINGOONYA.					
SR 7	~170				~~[illegible]~~ +135 (Perm).
SR 9	~173				+105 (Perm)
SR 15	~176				+72 (Perm).
LY DDH 1.	~135			135	-540.
PEEINGEENA No. 1	~115	Ebp 324.4 → 532.6 *		~~[illegible]~~ -209	~~[illegible]~~
PRICES No. 1.	~110	Ebp 363 → 409.5 *		~~[illegible]~~ -253	
PLAYFORD No. 1.	~108	Ebp 438.3 → 566 *		-330	
BILLAKALINA.					
SR 1	~165				+7 (Perm).
SR 5	~162				-34 (Perm).
SR 16	~160				-67 (?).
SR 6	~104.	-446		? -446 (Sturt)	
SR 8	~76				-24 (?).
SR 12 (& SR 11)	~107				+10 (?).
SR 2	~130				+10 (?)
SR 3	~130				-250 (Cret).
SR 4	~182				+99 (?).
SR 13	~90				+42 (?).
WARRINER CK. NO. 1	~~[illegible]~~ ~152.				-258 (Perm).
SR 10.	~185				+130 (?)
WARRINA.					
Boorthanna No. 1.	115				-1043 (Perm).
CURDIMURKA.					
FAD-1.					

App. locatns

9395-1


DRILL HOLE LOCATION PLAN
TORRENS 1:250.000
Drill Hole Location (Levelled)
Drill Hole Location (not Levelled)
0 (km) 5
SCALE 1:250.000
FIG. 1. H. TREVENA 1979.
WJD - 1
SAE 1
SAE - 2
NHD - 1
SLT 105
SELL DAM
Yeltacowie H S
Bedo Bore
SAU - 5

DRILL HOLE LOCATION PLAN
PT. AUGUSTA 1:250.000

Drill Hole Location (Levelled)

Drill Hole Location (not Levelled)

0 (Km.) 5

SCALE 1:250.000

FIG. 2. H.TREVENA 1979.

9395-2

9395-3

CONTOURS OF BASAL STURTIAN
TORRENS 1:250,000.

LEGEND

- -137 — Depth in metres to Base of Sturtian (rel. to MSL).
- -25 — Minimum depth in metres to Base of Sturtian (rel. to MSL).
- Conjectural Contours to Base of Sturtian.
- Contours of Base of Sturtian
- pre Sturtian unconformity surface.

0 (km) 5

SCALE 1:250,000

FIG. 4. H.TREVENA. 1979.

CONTOURS OF BASAL STURTIAN
PT. AUGUSTA 1:250,000

LEGEND

- -69 — Depth in metres to Base of Sturtian (rel. to MSL)
- -25 — Minnimum depth in metres to Base of Sturtian (rel. to MSL).
- -50 — Conjectural Contours to Base of Sturtian.
- -50 — Contours to Base of Sturtian.
- pre Sturtian unconformity surface.

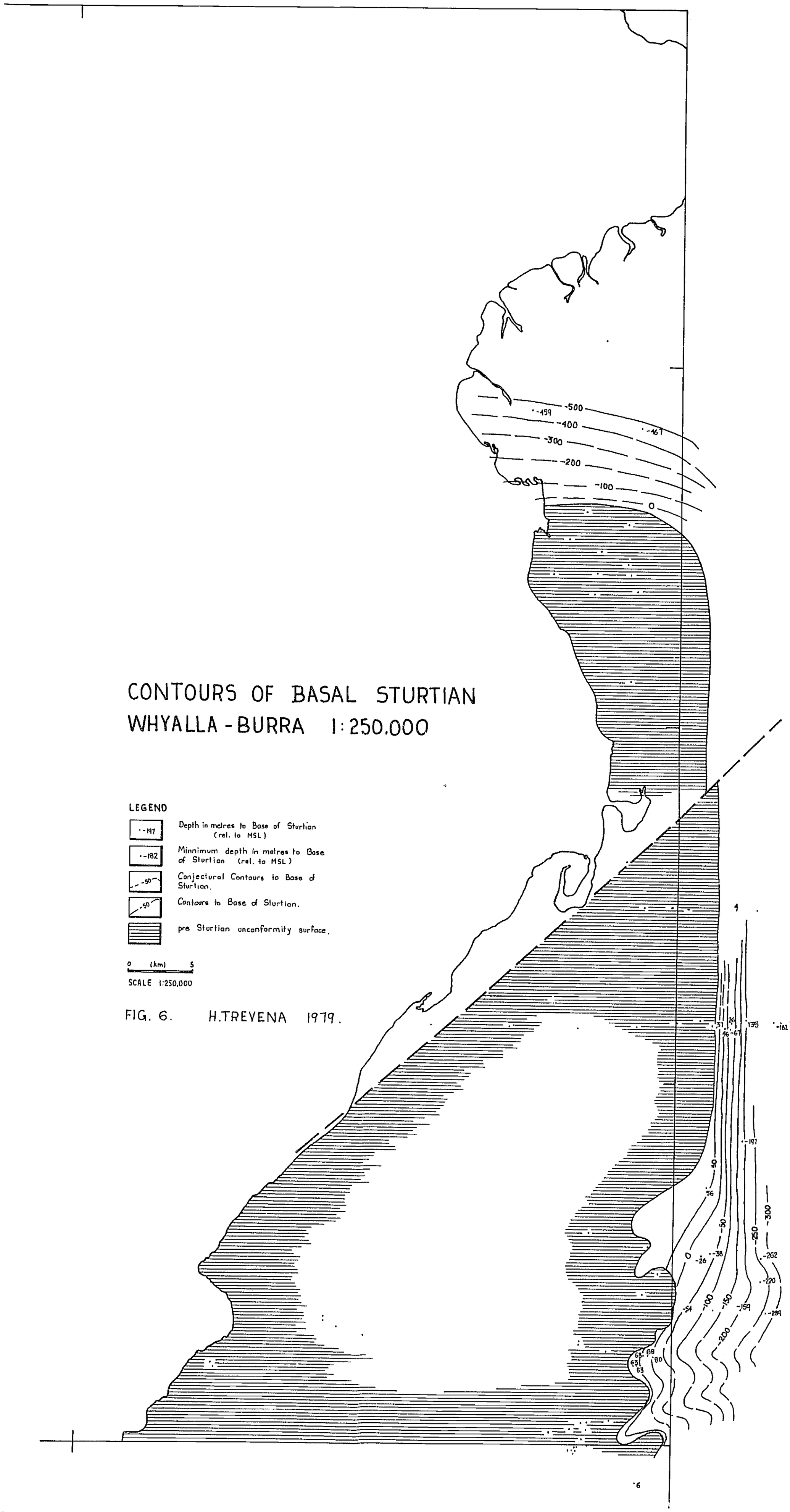
0 (km) 5

SCALE : 1:250,000

FIG. 5. H.TREVENA 1979.

9395-4

CONTOURS OF BASAL STURTIAN
WHYALLA - BURRA 1:250.000


-500
-459
-400
-461
-300
-200
-100
0
-197
-182
-50
-50
-50

9395-6

CONTOURS OF POST PANDURRA COVER
TORRENS 1:250,000

LEGEND

- -241 — Depth in metres to post Pandurra Cover. (Rel. to MSL).
- -111 — Minimum depth in metres to post Pandurra Cover (Rel. to MSL).
- -100 — Conjectural Contours of post Pandurra Cover.
- -100 — Contours of post Pandurra Cover.
- Pandurra Formation.
- Beda Volcanics (subsurface extent)

0 (km) 5

SCALE 1:250,000

FIG. 7. H.TREVENA. 1979.

CONTOURS OF POST PANDURRA COVER
PT. AUGUSTA 1:250,000

LEGEND

- -219 — Depth in metres to post Pandurra Cover. (Rel. to MSL)
- Minimum depth in metres to post Pandurra Cover. (Rel. to MSL).
- -100 — Conjectural Contours of post Pandurra Cover.
- -100 — Contours of post Pandurra Cover.
- Pandurra Formation.
- pre Adelaidean Basement.
- Pandurra Formation (probable extent of Outcrop.)
- Beda Volcanics (subsurface extent)

0 (km) 5

SCALE 1:250,000

FIG. 8. H.TREVENA 1979.

9395-7

CONTOURS OF POST PANDURRA COVER
WHYALLA - BURRA 1:250,000

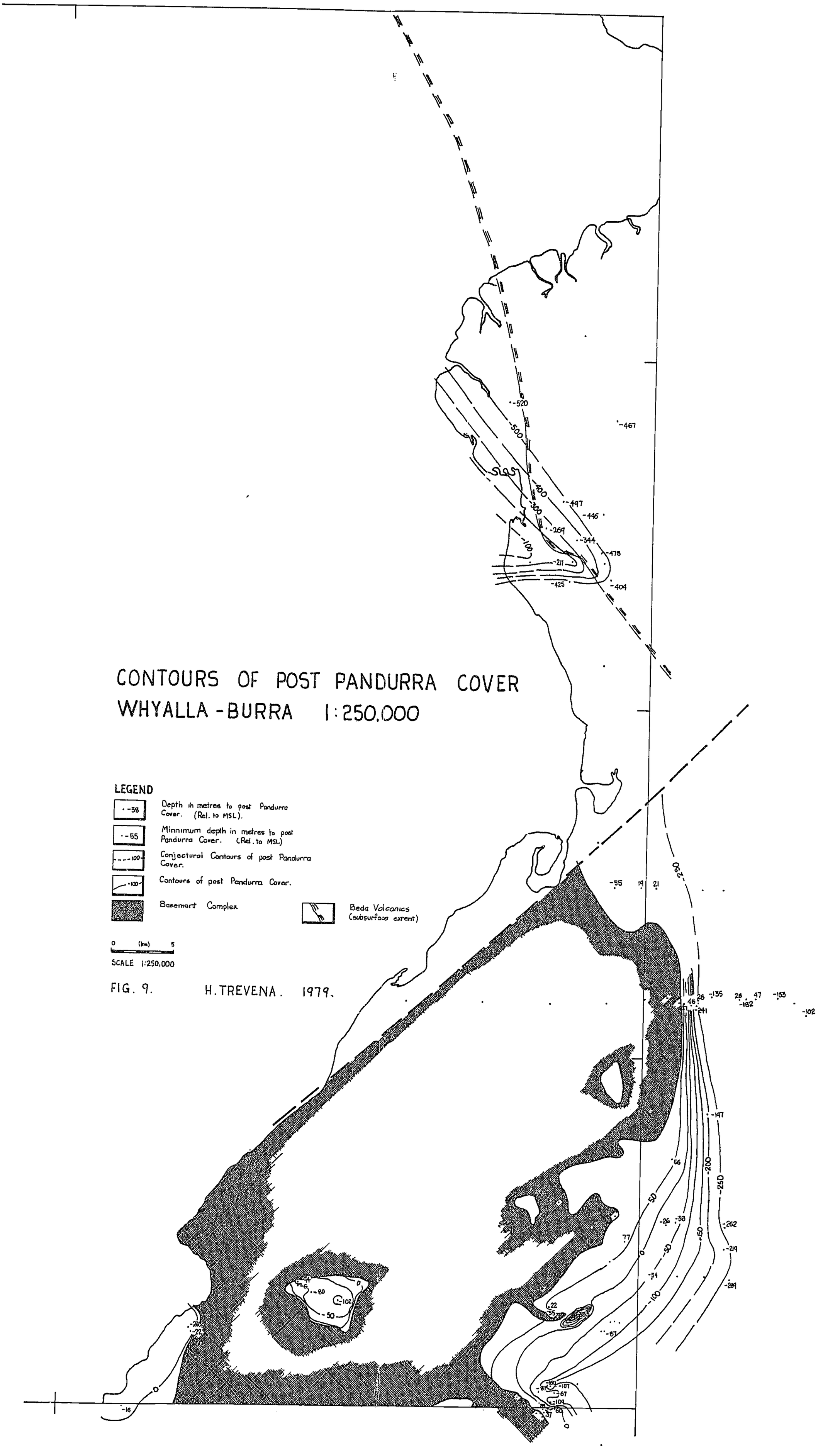


FIG. 9. H. TREVENA. 1979.

9395-8

9395-9

ISOPACHS OF STURTIAN SEDIMENTATION
TORRENS 1:250,000

LEGEND

- ·218 — Sturtian Thickness (in metres).
- ·15 — Minimum Sturtian Thickness (in metres)
- 100 — Sturtian Isopachs (Conjectural)
- 100 — Sturtian Isopachs
- pre-Sturtian Unconformity Surface

0 (km) 5

SCALE 1:250,000

FIG. 10. H.TREVENA 1979.

ISOPACHS OF STURTIAN SEDIMENTATION
PT. AUGUSTA 1:250,000

LEGEND

- ·134 — Sturtian Thickness (in metres)
- ·52 — Minnimum Sturtian Thickness (in metres)
- Sturtian Isopachs (Conjectural)
- Sturtian Isopachs
- pre-Sturtian Unconformity Surface.

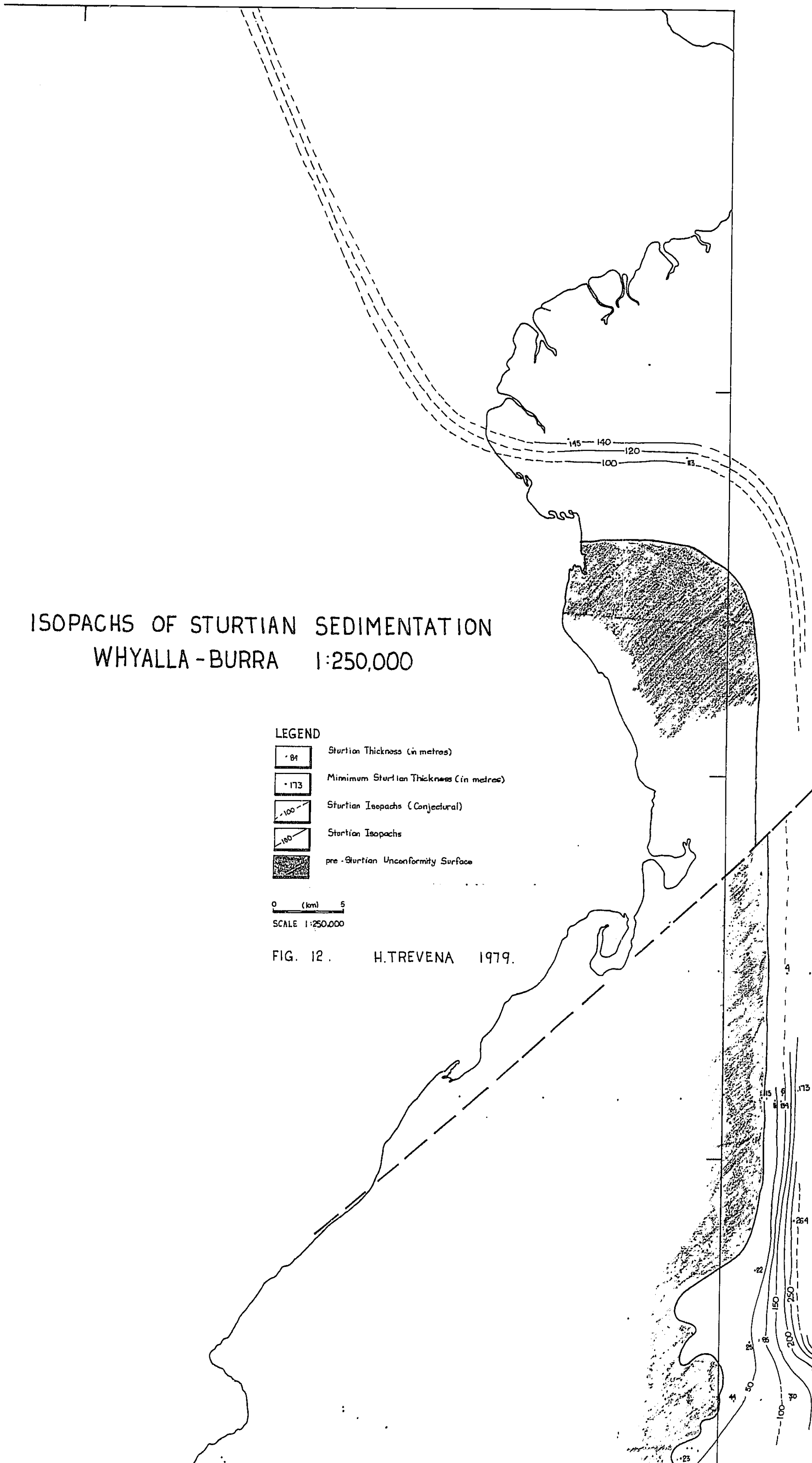
0 (km) 5

SCALE 1:250,000

FIG. 11. H.TREVENA 1979.

9395-10

ISOPACHS OF STURTIAN SEDIMENTATION
WHYALLA - BURRA 1:250,000



LEGEND

- ·84 — Sturtian Thickness (in metres)
- ·173 — Minimum Sturtian Thickness (in metres)
- ·100 — Sturtian Isopachs (Conjectural)
- ·100 — Sturtian Isopachs
- pre-Sturtian Unconformity Surface

0 (km) 5

SCALE 1:250,000

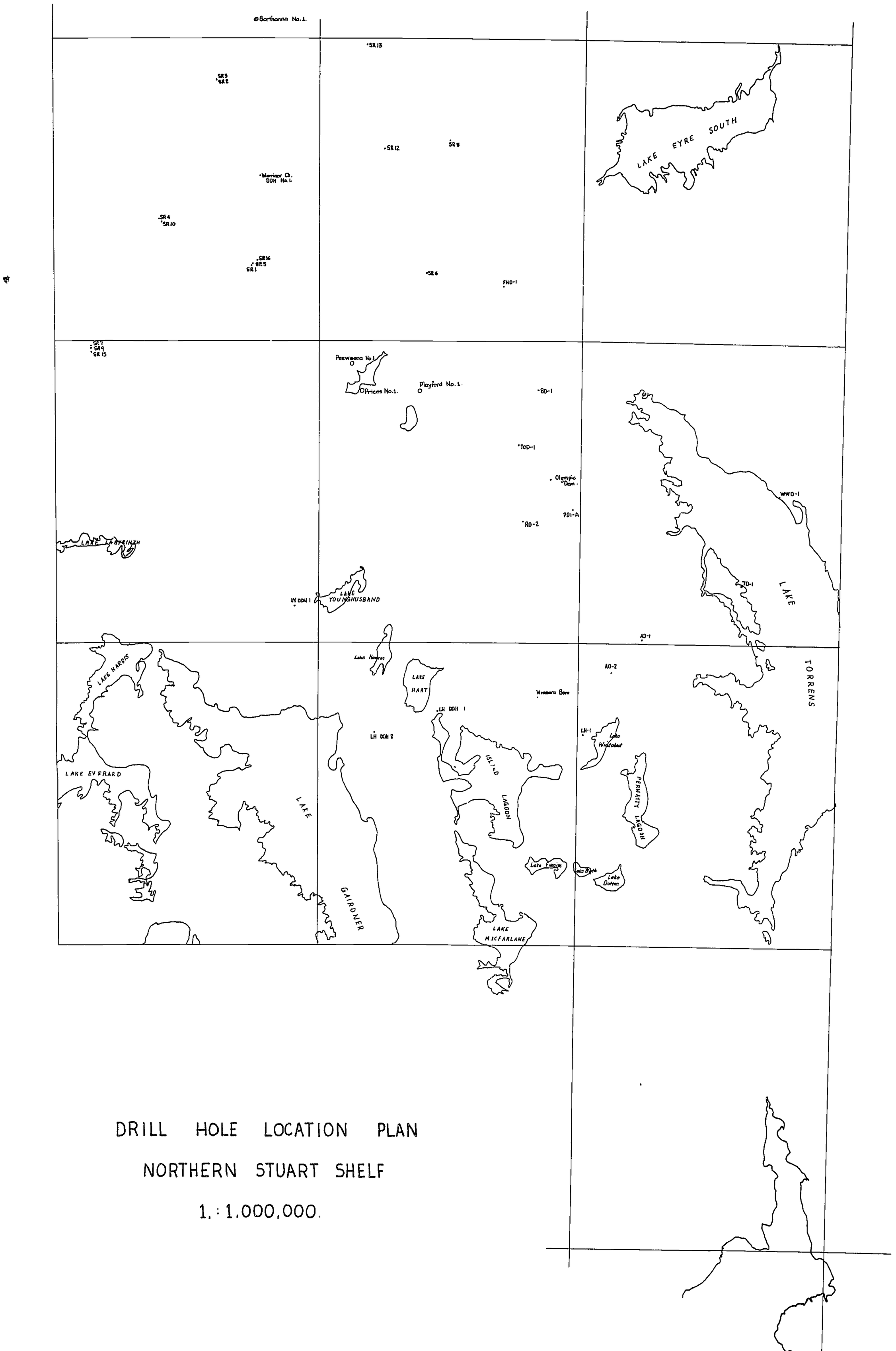
FIG. 12. H.TREVENA 1979.

9395-11

DRILL HOLE LOCATION PLAN

NORTHERN STUART SHELF

1. : 1,000,000.



LEGEND

- Bonthonna No.1 — Drill Hole (Levelled)
- • AD-1 — Drill Hole (Unlevelled)
- Prices No. 1 — Drill Hole (Location Uncertain, Unlevelled)

(Kilometres)

0 10 20 30 40 50

SCALE 1:1,000,000

FIG. 13. H. TREVENA 1979.

9395-12

CONTOURS OF POST PANDURRA COVER

STUART SHELF

1 : 1,000,000

LEGEND

- ·-205 — Drill Hole with depth in metres to post Pandurra Cover. (rel. to MSL.)
- ·-446 — Drill Hole with Minimum depth in metres to post Pandurra Cover (rel. to MSL)
- 0 -209 — Drill Hole (location uncertain) with depth in metres to post Pandurra Cover (rel. to MSL).
- -200 — Conjectural Contours of post Pandurra Cover.
- -200 — Contours of post Pandurra Cover
- Pandurra Formation.
- Pre Adelaidean Basement.
- Approximate subsurface limits of Pandurra Formation.

Kilometres

0 10 20 30 40 50

SCALE 1:1,000,000

FIG. 14. H. TREVENA 1979

9395-13