DEPARTMENT OF MINES
SOUTH AUSTRALIA

GEOLOGICAL SURVEY
ENGINEERING DIVISION

WINTINNA 1:250 000 SHEET

WATER WELL SURVEY

by

P.D. HERRAMAN

and

J. SAFTA
FIELD ASSISTANTS
GROUNDWATER SECTION

Rept.Bk.No. 77/70
G.S. No. 5895
Eng. Geol 77/55
D.M. No. 349/77

CONTENTS

FIGURES

DEPARTMENT OF MINES
SOUTH AUSTRALIA

Rept.Bk.No. 77/70
G.S. No. 5895
Eng. Geol. 77/55
D.M. No. 349/77

WINTINNA 1:250 000 SHEET WATER WELL SURVEY

ABSTRACT

Approximately 100 water wells were visited and photographed. Most wells are equipped with windmills and are used for stock supply purposes.

Salinities range from 500 mg/l to 16 000 mg/l but most fall within the range 1 000 to 5 000 mg/l. Standing water levels vary from 6 m to 152 m. There are no flowing wells.

There are three aquifer systems. The first is the Algebuckina Sandstone/Cadna-owie Formation which is the main aquifer; within it salinities are variable, ranging from 190 to 12 000 mg/l. Standing water levels range from 6 to 152 m below the surface. Overlying these formations is the Bulldog Shale which generally has good quality water (100-1 000 mg/l) at shallow depth (0-30 m); supplies are limited. Nitrate may be present in small quantities as it is leached from the roots of legumes. The third aquifer system is the shallow Quaternary sediments which are associated with drainage lines.

Recharge to these systems occurs through downward percolation of rainfall which is concentrated along drainage lines. Thunderstorm activity, a common phenomenon in the area, is probably an important source of recharge. Under normal rainfall events recharge would be small.

INTRODUCTION

A water well survey of the WINTINNA map was carried out at the same time as the compilation of the geological map. Part of the area was surveyed in October, 1975 when a water well survey of the adjacent Murloocoppie 1:250 000 sheet was completed. The remainder was completed during the period August-October, 1976.

A total of 100 water wells were visited excluding those drilled for the Tarcoola-Alice Springs Railway. These were plotted on aerial

photographs or pastoral plans and later transferred to a base plan in Adelaide. All available details were obtained on the wells. Photographs were taken of the well, headworks and environs.

LOCATION

The Wintinna 1:250 000 sheet lies in the far north of the State between latitudes 27°00' and 28°00', longitudes 133°30' and pastoral stations within the Wintinna sheet are Mt. Willoughby, Wintinna, Welbourne Hill, Todmorden, Arckaringa, Copper Hills, Evelyn Downs and Lambina (Fig. 3).

TOPOGRAPHY

The sheet can be divided into 3 main areas. These are:-

(1) low confused sandhills in the south western and north eastern portions of the sheet,

(2) rugged, eroded hills, consisting of Bulldog Shale in the central portion,

(3) scattered monadnocks in a very flat area (Peneplain) in the east part of the sheet.

CLIMATE

The region has an arid climate with hot dry summers and cooler dry winters. There is no dominant seasonal pattern of rainfall which is mainly due to thunderstorm activity occurring more frequently from October to March. Annual rainfall for Coober Pedy is shown on Figure 2. The highest recorded rainfall at Coober Pedy was in 1973 (428 mm) and the lowest was in 1929 (30 mm).

SURFACE HYDROLOGY

All creeks in the area are ephemeral and are local in origin except for the Alberga River which rises in the Musgrave Ranges north west of Wintinna. Drainage is mostly to the east-southeast with the creeks originating in the central highlands. The main creeks are the Coongra, Olarinna, north and south branches of the Neales, Arckaringa, Evelyn and Wintinna Creeks. Water may be found all year round in water holes which are numerous on these creeks. In the western section of the sheet, small creeks terminate in clay pans or just die out.

There are no known springs in the area.

VEGETATION AND LAND USE

River gums and gidgea trees line the drainage channels, while most of the area is covered by fairly thick stunted scrubby growth except for the south eastern part which is covered only by low, sparse native grasses which also occur throughout most of the sheet.

Land use of the area is generally confined to cattle grazing with minor sheep grazing to the south on Copper Hills and Evelyn Downs Stations.

GEOLOGY

The water well survey was undertaken to provide additional data for the geological base map and no discussion of the geology is presented.

HYDROGEOLOGY

General

Groundwater is readily available throughout the entire area but aquifer type, salinities, depth, water level and yield vary considerably (Figs. 5 and 6).

The three main aquifers are:-

1. The Algebuckina sandstone, together with the overlying Cadna-owie formation. Both units are lithologically similar, with the Algebuckina sandstone being a poorly cemented, white to pale brown, fine to coarse grained quartz sandstone. It is kaolinitic in the lower part, with pebble horizons. Minor siltstone and shale interbeds are frequent.

The Cadna-owie formation is a very fine to medium grain sandstone with micaceous siltstones and shale. Thin calcareous sandstones, cone in cone limestones, and coarse pebbly, quartz sandstones commonly occur and are ferruginised in part. Coarse sandstone with rounded and smoothed exotic (Adelaidean) boulders are common.

Most wells on Wintinna are completed in these formations, which are Mesozoic in age.

2. Overlying the Algebuckina Sandstone/Cadna-owie Formation is the Bulldog Shale which is generally a blue grey claystone to shale, with lenses of fine grained silty sandstone (particularly near its upper and lower

boundaries) and lenses and concretions of fossiliferous limestone. Scattered Adelaidean cobbles and boulders occur throughout. It is generally strongly altered, bleached and gypsified in outcrop.

3. Overlying the Bulldog Shale in the NE & SW parts of the sheet are Quaternary sediments consisting of low confused sandhills and sediments of modern drainage channels. These sediments form a low grade aquifer of limited yield.

Salinity

Groundwater quality is quite variable. Good quality water, 150 - 1 000 milligrams per litre (mg/l), is obtainable in several areas, one being west of Mt. Willoughby Station in the vicinity of Cadney Park Well and Middle Well. Here, the water is withdrawn from the Bulldog Shale as well as the Cadna-owie Formation/Algebuckina Sandstone. These formations are at a relatively shallow depth, (20 m). An area from Hawks Nest Well to Marla Bore also yields groundwater within the salinity range of 100 - 1 000 mg/l. This groundwater is within the Algebuckina/Cadna-owie Formations. The salinity of most groundwater within the sheet is of the order of 1 000 - 5 000 mg/l. An area around Copper Hill Station contains groundwater of 5 000 - 6 250 mg/l while north of Arckaringa the salinity rises to 7 000 - 12 000 mg/l in isolated areas. The highest salinity recorded within Wintinna was 16 000 mg/l in an abandoned well west of Christmas Well.

Standing Water Levels

The standing water levels of wells are quite variable and range from 6 m to 152 m below ground level. Shallow groundwater (1 - 10 m) is available in the region of Mt. Willoughby Station to Hawks Nest Well and in isolated areas around Mirackina Bore and Mundarinna Well.

Reasonably shallow groundwater (10 - 20 m) is available in areas around Marla Bore, Oongadinna Bore to Ethel Well and Shiela Wells. Over the greater portion of Wintinna water levels are quite deep (40-150m).

Groundwater Use

As the area is used entirely for grazing purposes, nearly all wells

were drilled for stock watering purposes. Around homesteads domestic supplies are also obtained from wells.

Well Yields

As most wells are drilled for stock use, large supplies are not needed and most wells are equipped with windmills, which commonly have a pumping capacity of up to 1 l/sec. The Tarcoola-Alice Springs railway requires supplies of water for compaction which is to be supplied from water wells. Supplies of almost 2 l/sec. were procured from drilling into the Bulldog Shale and the Algebuckina Sandstone/Cadna-owie Formation.

Construction of Wells

All older water wells were hand dug and timber lined to below the water level. Recently, auger holes of approximately 1 m in diameter were drilled on Wintinna and Welbourn Hill for stock supplies of groundwater. These wells were completed with a cement collar to prevent collapse at the surface.

The drilled wells are all fitted with steel casing which is slotted in older wells. More recent wells have sand screens placed adjacent to the appropriate sand intervals. Sand problems have led to the abandonment of some unscreened water wells.

Equipment

Most of the water wells still in use are equipped with windmills, the size depending on the depth from which the water must be pumped. Some wells were also equipped with pump jacks to provide water during "wind droughts" or mechanical break downs. The use of Mono helical rotor pumps is increasing especially where there are sand problems with wells.

Recharge

The Cadna-owie Formation which is one of the main aquifers of the Great Artesian Basin outcrops in the northwest of the sheet. Recharge here would be taking place by the downward percolation of rainfall. Ward (1946) suggests groundwater movement is in an easterly direction from this region.

The Bulldog Shale also outcrops throughout the sheet and recharge

would also be taking place by the downward percolation of rainfall falling directly on outcrop or on thin overlying Quaternary sediments.

The Quaternary aquifers would also be recharged in this manner especially along creek channels after heavy rains.

HISTORICAL TRENDS

Salinity of some wells show marked differences between the present survey and previous surveys. In some instances the variation may be up to 1 000 mg/l. This could be attributed to the sampling method, i.e. tank, bailed or pumped sample, to the elapse of time between sampling and analysis and to the time of year, or the type of seasons experienced prior to sampling.

Water levels have generally risen and this could be a direct result of record rainfalls recorded in 1973-74.

OBSERVATION BORE NETWORK

Two water wells were selected on the Wintinna sheet, Junction Well on Welbourn Hill and McLeods Bore at Arckaringa Homestead. These are to be in the T.C.W.Q. sampling network. These wells will be monitored at selected intervals for changes in water quality.

Acknowledgements

Station personnel were very helpful in supplying information on water wells and accessibility of the area.

P.D. HERRAMAN

J. SAFTA

Bibliography

HERRAMAN, P.D. 1976. Water Well Survey Murloocoppie 1 - 250 000 sheet (unpub.) S. Aust. Dept. Mines Rept. Bk. No. 50/76.

WARD, L. KEITH, 1946. The occurrence, composition, testing and utilization of underground water in South Aust., and the search for further supplies Bull. Geol. Surv. S. Aust. 23.

Aquifer Materials	Description of Aquifer Materials for Column 6 of summary
Qra	Fluviatile silts, sands & gravels of modern drainage lines.
Qr5	Aeolian Sand
T-Q	Ferruginous and Calcareous caprocks.
Klb	Blue grey and grey claystones and shales.
Klc	Very fine to medium grained impure quartz sandstones.
Jua	Poorly cemented, fine to coarse grained quartz sandstone.

100 000 sheets in the Wintinna 1 250 000 sheet.

5643	5743	5843
5642	5742	5842

APPENDIX I

Summary of Water Wells

SUMMARY OF WATER WELLS 1:100 000 SHEET 5642

UNIT NO.	TOTAL DEPTH (m)	S.W.L. (m)	SALINITY mg/l	YIELD kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS
5642000WW00001	178	149	3123	Large	Klc/Sua	167/176	-	Wintinna	Well abandoned.
5642000WW00002	30	Dry			Klb?			Eagle Hawk Plain	Not located 1976
5642000WW00003	45.7				Klc/Jua?				Not located 1976
5642000WW00004	135+	135	3070					Blue Bonnet	Not in use in 1976
5642000WW00005	106.7	106	2915	80		152/106.7	W/M & Pump Jack	Relief Bore	Not in use in 1976
5642000WW00006	151	97.5	3810	35	Klc/Jua	152/122	-	Manya No. 1	Not in use in 1976
5642000EWW00007-16	Various								Bridge foundations Aust. Nat. Railways
5642000WW00017	85				Klc				Abandoned water well Aust. Nat. Railways
5642000WW00018	170				Klc	127/46.2			Abandoned water well Aust. Nat. Railways
5642000WW00019	181	152	1391		Klc	152/157			Completed Water Well Aust. Nat. Railways
5642000WW00020	136	126	3590		Klc	152/136			Completed water well Aust. Nat. Railways
5642000WW00021	35	27	306			127/?			Stock well

SUMMARY OF WATER WELLS 1:100 000 SHEET NO. 5643

UNIT NO.	TOTAL DEPTH (m)	S.W.L. (m)	SALINITY mg/l	YIELD kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS etc.
5643000WW00001	29.8	27.8	1010	22			Windmill & Jack Pump	Christmas	Well on level ground, stock yards adjacent, bailed sample.
5643000WW00002	36.4	19.8	1260	Poor			Windmill	Towalunginna	Well on right bank of Yoolperlunna creek, bailed sample
5643000WW00003	45.7	-	-	-			-	-	Not located during survey 6-9-76
5643000WW00004	103.3	15.7	1340	65			Windmill	Marla	In level ground by bend in road. Pumped Sample.
5643000WW00005	-	5.6?	1365	-		152/?	Windmill	Parakilya Bore	Well located in sand dunes. Sample from inside column.
5643000WW00006	152	-	-	-			-	-	Not located during survey Aug.76
5643000WW00007	54.5	48.2	585	-		152/53.3	Unequipped	-	Well located in level ground. Bailed sample.
5643000WW00008	-	DRY	-	-			-	-	Abandoned, not located during survey in August 1976.
5643000WW00009	18	17	950	65		152/15.8	Jack Pump	Oongudinna No. 1	Well on flat scrubby ground west of creek. Bailed sample.
5643000WW00010	18.2	16.9	950	65		152/15.2	Windmill	Oongadinna No. 2	Well alongside No. 1. Unused.
5643000WW00011	106	-	-	-			-	Marza No. 1	Stratigraphic drilling. Not located in Survey Aug. 1976.
5643000WW00012	-	-	-	-			-	-	Not located in Survey Aug. 1976.
5643000WW00013	-	-	-	-			-	-	Not located in Survey Aug. 1976.
5643000WW00014	83.5	-	-	-			-	-	Abandoned water well, non productive.
5643000WW00015	-	-	2335	-		152/?	Windmill	Box Hole No. 1	Well on level scrubby ground. Pumps to adjacent dam.
5643000WW00016	30	12.5	125	108		152/20.2	-	-	Bottom length of casing is slotted. Complete water productive.
5643000WW00017	40	DRY	-	-			-	-	Abandoned - non productive.
5643000WW00018	27	12	299	130		150/24.9	-	-	Tarcoola-Alice Springs Railway Bore. Productive.
5643000WW00019	28	11.8	435	95		150/?	-	-	Tarcoola-Alice Springs Railway Bore. Productive.
5643000WW00020	37	17.5	385	66		150/29	-	-	Tarcoola-Alice Springs Railway Bore. Productive.
5643000WW00021	40	-	-	3			-	-	Tarcoola-Alice Springs Railway Bore. Abandoned & Backfilled.
5643000WW00022	18.7	14.2	275	-			Unequipped	Lauries	1 000 mm diam open hole level ground near dam, boiled sample.
5643000WW00023	23.8	-	-	-		152/23.8	Jack Pump	Lauries Bore	Not sampled, located in scrubby ground near dam.

SUMMARY OF WATER WELLS 1:100 000 SHEET NO. 5643 (Continued)

UNIT NO.	TOTAL DEPTH (m)	S.W.L. (m)	SALINITY mg/l	YIELD kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS etc.
5643000WW00024	17.3	16.3	950	33			Fire Fighting Pump	Oongudinna No. 3	Well on scrubby ground we creek.
5643000WW00025	69	DRY	-	-		152/?	Unequipped	-	Dry well in level ground.
5643000WW00026	25.8	9.35	735	-		900 mm uncased auger hole	Unequipped	Marla Well	Well in level scrubby cour Bailer sample.
5643000WW00027	-	16.3	2840	-		1000 m open hole cemented at top	Portable Jet	Box Hole No. 2	Well in level scrubby cour Pumped sample.
5643000WW00028	32.2	31	2300	-		152/?	Windmill	Rock Hill	Well in level ground betwe hill & creek, Tanks and st yard adjacent.
5643000WW00029	34.9	32.4	1600	-			Unequipped	-	Abandoned well in undulati ground.

SUMMARY OF WATER WELLS 1:100 000 SHEET NO. 5742

UNIT NO.	TOTAL DEPTH (m)	S.W.L. (m)	SALINITY mg/l	YIELD kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS
5742000WW00001	29	18.3	2225	20		Nil	Nil	Marble Well	Abandoned and collapsed.
5742000WW00002	33.5	-	-	65	Klb	-	-	Giles Bore	Not located in Survey 1976
5742000WW00003	18	-	2350	-		152/?		Browns Bore	
5742000WW00004	8.8	1.14	-	-	Klb	2 x 1.2m	-	Salt Well	Hand dug well now abandoned not located in 1976.
5742000WW00005	10.9	10.4	1420	good	Tq	-	-	Station Well	Now disused. Now
5742000WW00006	11	9.62	2650	60	Tq	-	2" onga pump & W/M	Station well	Located near house
5742000WW00007	115	107	5200	good	Klb/Klc	-	Pump Jack	Bore No. 2	100 m north of creek.
5742000WW00008	58.8	Dry	-	-	-	-	-		Dry and abandoned.
5742000WW00009	118	100	5790	good	Klb/Klc	-	Mono Pump	Bore No. 1	By road near shed.
5742000WW00010	117.4	97.5	6250	-	Klb/klc	-	-	Patricia Bore	Now not used.
5742000WW00011	122	91.4	-	large	Klb/klc	-	-	Timothy Bore	Abandoned & casing with-drawn.
5742000WW00012	16.1	10.0	-	-		-	-	Hawlks Nest	Timber lined well.
5742000WW00013	11.5	6.9	1040	35	-	-	W/M	Junction Well	TCWQ obs Bore 63.
5742000WW00014	41.6	15.5	-	20	-	-	-	-	Drilled well in a dug well.
5742000WW00015	223	27.4	-	-	Klc/Jua	127/? With-drawn	-		Bore abandoned.
5742000WW00016	31	-	-	-			Nil	Howards Well	Not located believed to be washed in.
5742000WW00017	142	104	4150	-	Klc	152/141 & 202/93.6	W/M	Warranarrea	Also known as Camel Creek Bore.
5742000WW00018	14.5	7.62	1785	30	Klb		W/M	Ethel Well	
5742000WW00019	12.2		good	110				John Well	On left bank of Wintinna Creek filled in.
5742000WW00020	30		good	10			Nil	Rosevear	Not located in Survey believed to be filled in.
5742000WW00021	30	6.9	930	20			Nil	Christmas Well	Located south of Wintinna H/S.
5742000WW00022	25.6		1830	good			W/M & Pump Jack	Stans Well	Located at Wintinna H/S.
5742000WW00023	110	97.2	5411	-	Klc	152/106 & 202/68.3	-	Appreetinna Bore	Not located in Survey 1976
5742000WW00024	10.6		1450	40			W/M	Joyce's Well	Timber Lined well.
5742000WW00025	13.7	8.95	4270	40			W/M & Pump Jack	Carmen Well	Timber Lined well.
5742000WW00026	94.5		good	large	Klc	727/87.5	-	Vera's Bore	Now abandoned.
5742000WW00027									Railway Bore
5742000WW00028	28						W/M	Cadney Pk. Bore	

SUMMARY OF WATER WELLS 1:100 000 SHEET NO. 5742 (Continued)

UNIT NO.	TOTAL DEPTH (m)	S.W.L. (m)	SALINITY mg/l	YIELD kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS
5742000WW00029	122							Waddikee Dam	Abandoned.
5742000WW00030	444							Lambina No. 1	Abandoned.
5742000WW00031	640							Mt. Willoughby No. 1	Dry and abandoned.
5742000MW00031-72	Various								Ballast Investigations a Well.
5742000MW00073-91	Various								Ballast Investigations a Willoughby.
5742000MW00092-152	Various								Ballast Investigations
5742000WW00153									Aust. Nat. Railways Bore
5742000WW00154	9.7	8.92	365			152/?	-	Rodriguez Bore	Now abandoned.
5742000WW00155	15.3		175			1000 open hole	W/M		Pumps into a dam.
5742000WW00156	17		459			152/?	-		Now abandoned.
5742000WW00157	19	8.8				1000 open hole	fire fighter		
5742000WW00158	75	20	1336	100	Klb	152/71 & 127/75			Completed productive Hol Aust. Nat. Railways
5742000WW00159	195	141	5530		Klc	152/154			Completed productive hol Aust. Nat. Railways
5742000WW00160	27	18	2175			152/?	-	Marble Bore	Abandoned.
5742000WW00161	2.6	Dry						Marble Well	Abandoned well.
5742000WW00162	7.4	Dry						Marble Well	Abandoned well.
5742000WW00163	19.3	9.0					W/M	Hawks Nest	Timber Lined well.
5742000WW00164	18	7.0	730					Hawks Nest Well	
5742000WW00165	43.3	17.8	2219			152/?	-	Marble Bore	
5742000WW00166	15	7	197			152/?		Corries Bore	Pumps in a dam.
5742000WW00167	16.9	6.8	163			1000 open hole		Corries Well	

SUMMARY OF WATER WELLS 1:100 000 SHEET NO. 5743

UNIT NO.	TOTAL DEPTH M	SWL (m)	SALINITY mg/l	YIELD Kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS
5743000WW00001	30	-	good	-	-	-	-	Bracelet Well	Not located in survey 1976.
5743000WW00002	173.1	-	-	-	Klc/Jua	-	-	-	All casing pulled out.
5743000WW00003	2.4	0.6	765	-	-	-	W/M	Ruby Well	On bank of Henrietta Creek.
5743000WW00004	162	128	2970	120	Klc/Jua	-	-	-	Not located in survey 1976.
5743000WW00005	243.8	48.8	1070	85	Klc	152/?	W/M & Pump Jack	Appatinna Bore	On sandy ground 100m south Alberga River.
5743000WW00006	100	-	2220	75	Klc	-	Mono & W/M	Top Bore	W/M disconnected mono pumps dam.
5743000WW00007	36	-	Excellent	35	-	-	-	Willow Well	On Henrietta creek 5 miles Welbourn Hill
5743000WW00008	30	18	-	Seepage	Klb	-	-		
5743000WW00009	now 17.5 5	Dry	-	10	-	-	-	Henrietta Well	On Henrietta Creek 8 miles of Welbourn Hill
5743000WW000010	161.5	134	3590	65	Klc/Jua	152/158.8	-	Todmorden Bore	Was equipped with Southern Pump Jack.
5743000WW000011	201	76.2	2991	20	Klb?	NIL	NIL		Abandoned well 20 miles wes Welbourn Hill
5743000WW000012		127.3	7500			127/?	W/M	Jamieson Bore	Pump pulled out of well.
5743000WW000013			2210						Not located in Survey 1976.
5743000WW000014			1590			152/?	W/M	New Lambina	Located in a stock yard 15(from the Alberga River
5743000WW000015	52	Dry				152/?	-	Gutsache	On southern side of Coongra
5743000WW000016	105	Dry				127/? 152/?	-	-	Well in a small creek at fo scrubby bluff.
5743000WW000017	22.2	18.4	1385				W/M	-	At Welbourn Hill homestead timbered well.
5743000WW000018	25.2	19.85	1150				W/M & Pump Jack		At Welbourn Hill homestead timbered well
5743000WW000019	75.3	70.7		20	Klc?				

SUMMARY OF WATER WELLS 1:100 000 SHEET NO. 5842

UNIT NO.	TOTAL DEPTH (m)	SWL (m)	SALINITY mg/l	YIELD kl/Day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS
5842000WW00001	244	73.2	7179	85	-	152/?	NIL	GYPSUM	Well now fille 2m.
5842000WW00002	105.2	41.3	5790	40	klc/Jua ?	127/104.9	W/M	IMBITCHA	Well not used . east of Arckar Creek
5842000WW00003	80.5	22.9	12040	?	-	-	-	No. 2 Well	Not located in
5842000WW00004	79.3	14.7	3250	25	-	127/?	W/M	McLeods	TCWQ OBS Bore Arckaringa H/
5842000WW00005	162	8.7	3240	50	-	127/?	W/M	Mirackina	Drilled well i well stock use
5842000WW00006	222	-	-	-	-	-	-	-	Not located in in 1976.
5842000WW00007			3837						Not located in in 1976.

SUMMARY OF WATER WELLS 1:100 000 SHEET 5843

UNIT NO.	TOTAL DEPTH (m)	S.W.L. (m)	SALINITY mg/l	YIELD kl/day	AQUIFER	CASING DIAM mm / DEPTH m	EQUIPMENT	WELL NAME	REMARKS
5843000WW00001	61	54	2071	40			W/M, P.J.	Mothers Bore	
5843000WW00002	30	27.4	1565				W/M, P.J.	Homestead Well	Between Alberga River and stead
5843000WW00003	208	46	1640	150	Klc/Jua?	200/174	W/M, P.J.	Murdoarinna Bore	
5843000WW00004	29	27.4	2235	40	Qra/Qrs	152/32.3	Mono Pump	Station Bore	
5843000WW00005	21.3	15	15000				W/M	Niddrie Well	Timbered Well
5843000WW00006	24.4	15.2	4490	80	Qra/Qrs	152/24.4	W/M	Shiela Bore	
5843000WW00007	30	25.9	5790	70			W/M, P.J.	Mary Well	Timbered Well
5843000WW00008	28.1		1830	60	Qrs		-	Barneys Bore	Not used
5843000WW00009		18				152/?	P.J.	Sheila Bore	
5843000WW00010	6	Dry						Shiela Well	Abandoned
5843000WW00011	6.2	3.9	2490					Murdarinna	Abandoned well
5843000WW00012	12.5	4.8	7500				-	Murdarinna	Abandoned well
5843000WW00013	39.7	22.9	1850	25		152/39.7	Mono Pump	Garage Bore	
5843000WW00014		23.0	2680			152/?	W/M	Barney's Bore	Pumps into a dam

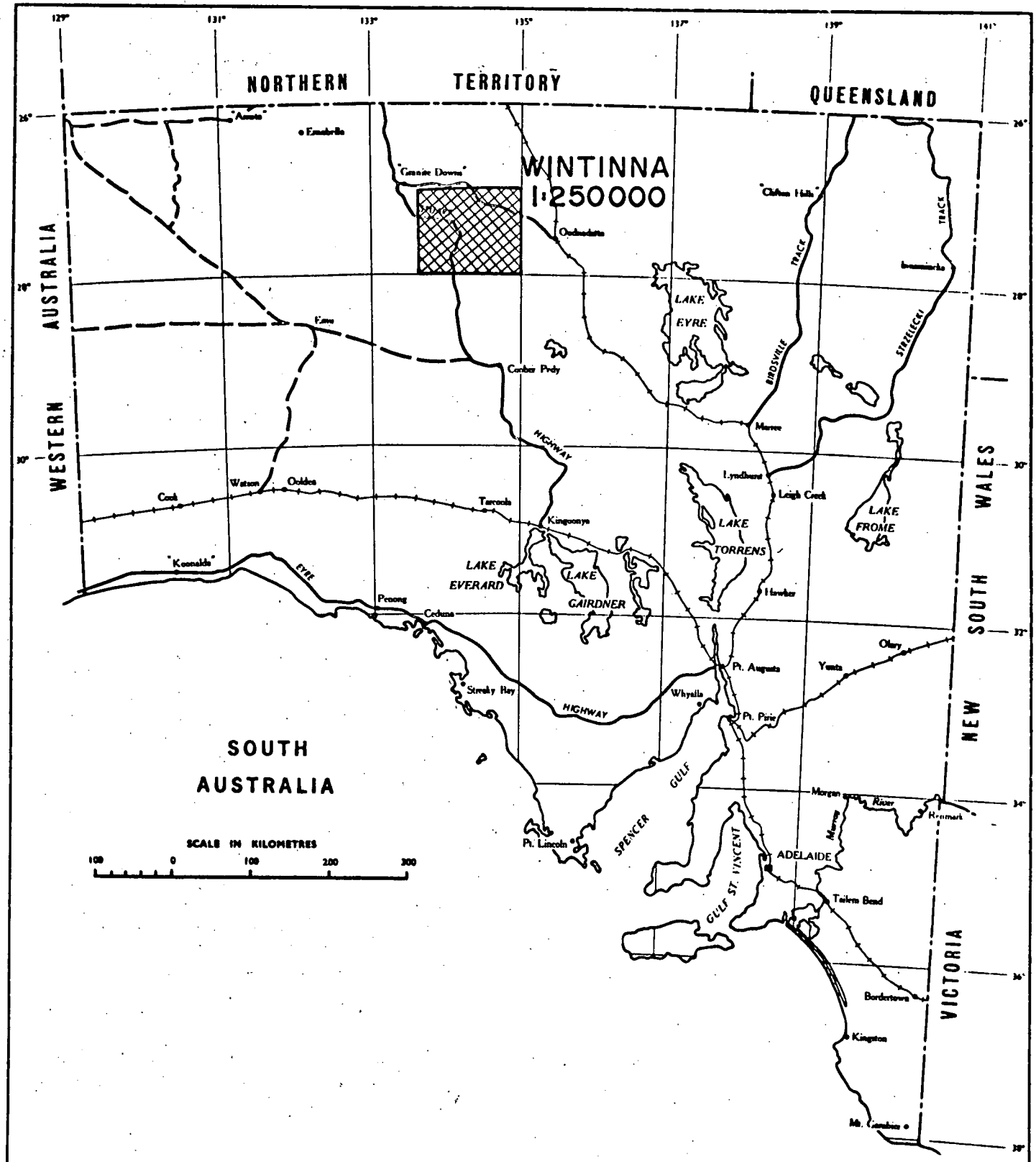


Fig. 1

DEPARTMENT OF MINES — SOUTH AUSTRALIA

Compiled.	WINTINNA 1:250000 WATER WELL SURVEY	Date:
Drn. / Chd.	LOCALITY PLAN	Drg. No. S12772

P.P. No. 55850 994.2

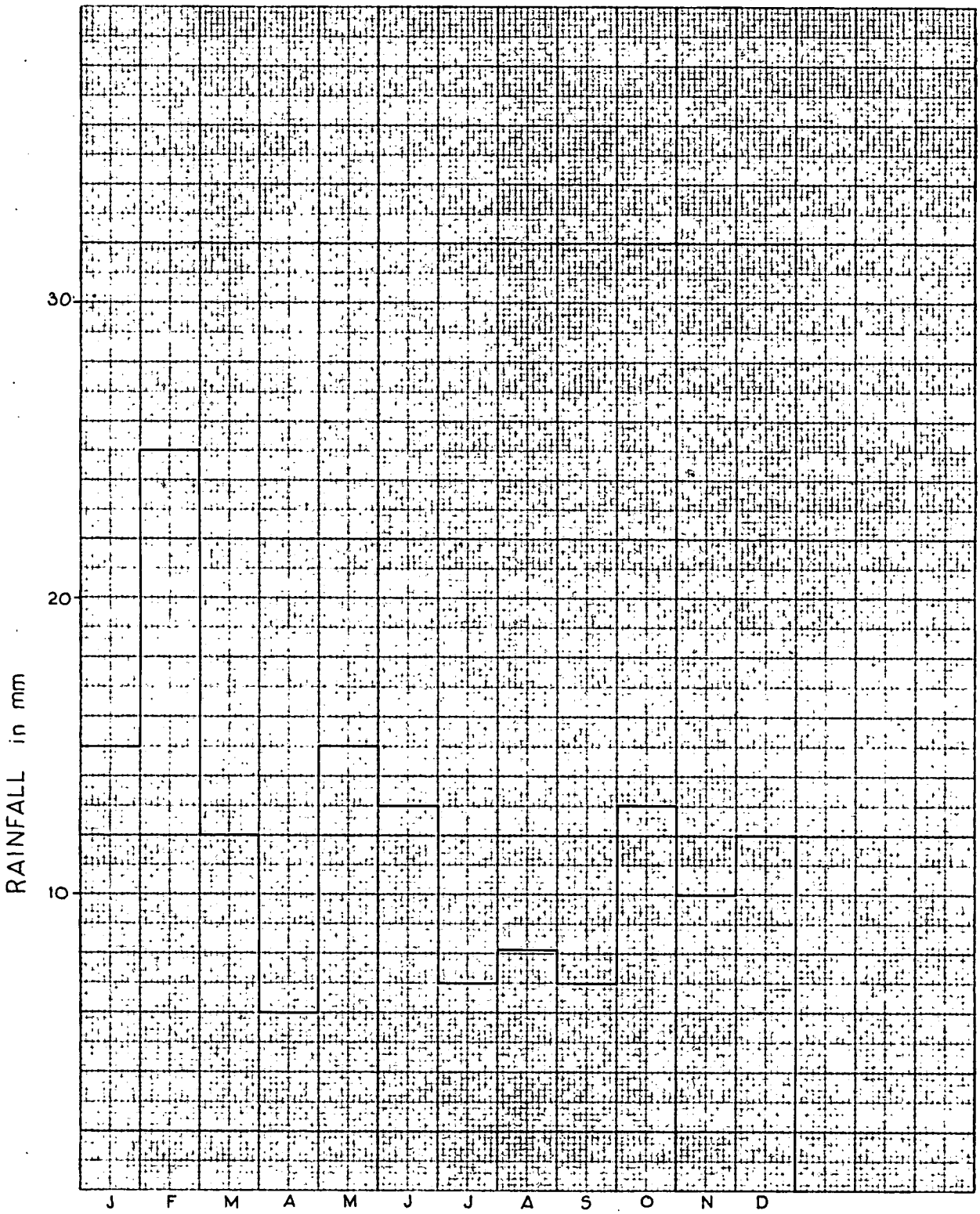


Fig. 2

	DEPARTMENT OF MINES – SOUTH AUSTRALIA	Scale:
Compiled:	WINTINNA 1:250000 WATER WELL SURVEY	Date:
Drn. | Ckd.	AVERAGE MONTHLY RAINFALL	Drg. No. S12774
	COOBER PEDY	

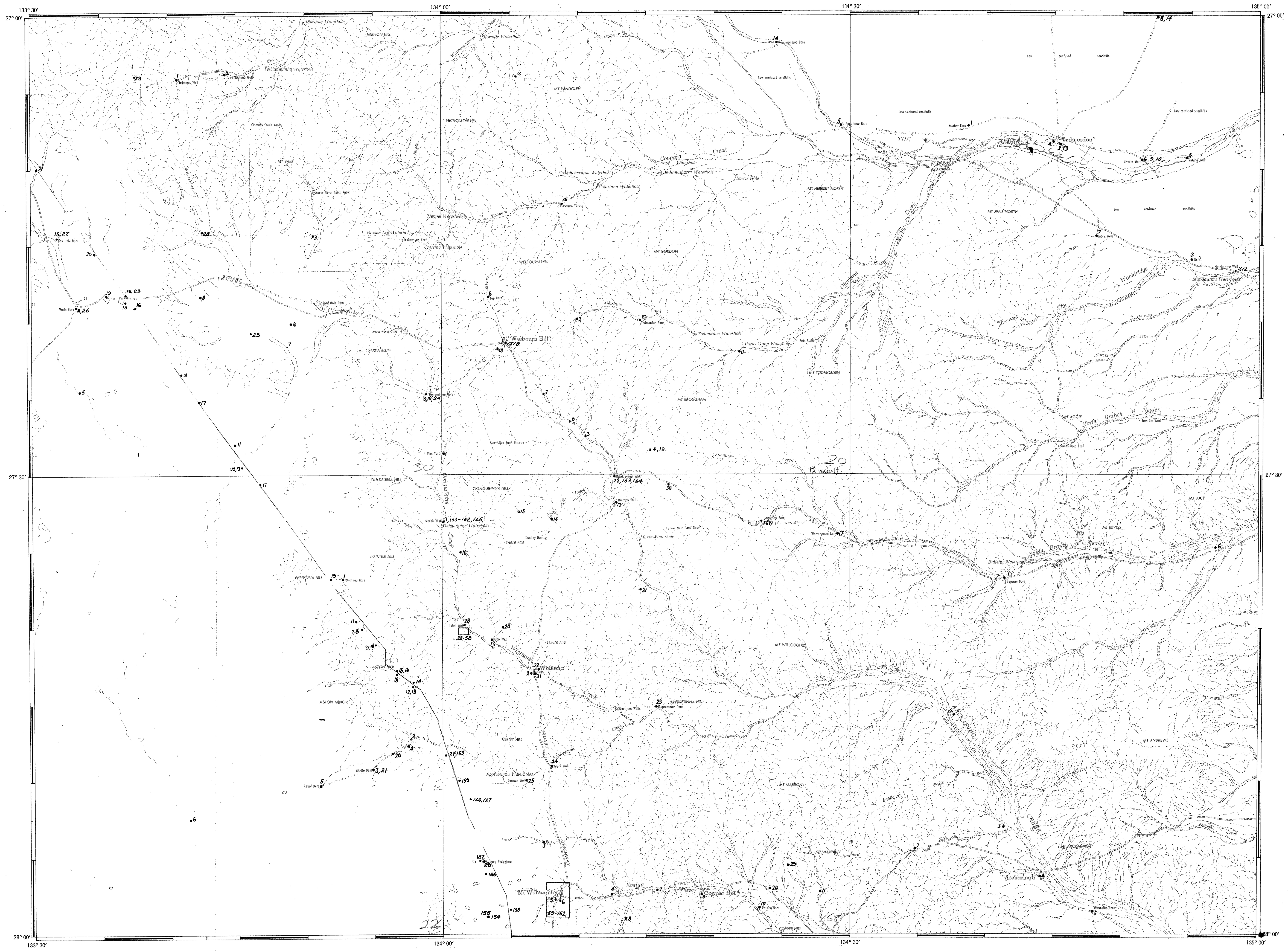
P.F. N° S 7852 M

WINTINNA

DEPARTMENT OF MINES—SOUTH AUSTRALIA

AUSTRALIA 1:250,000

BORE LOCATION SERIES



5742 – Bores 32-58 see plan 71-823 & 71-748
" " 59-152 " " 71-736 & 71-737

REFERENCE

Bore, well
Tank
Dam
Main Road
Road
Track
Railway
Ephemeral Stream
Ephemeral Swamp
Claypan
Triangulation Station
Astronomical Station
Mine

The location of bores on this plan is derived from Departmental and private sources.
Bore detail may be available from Departmental records upon application.

Base compilation from Division of National Mapping published map.

ADJOINING 1:250,000 SHEETS

ALBERGA	ABMINGA	DALHOUSIE
EVERARD	WINTINNA	OODNADATTA
GILES	MURLOOCOPPIE	WARRINA

SCALE
1:250,000

KILOMETRES 5 0 5 10 15 20 25 KILOMETRES

MILES 2 1 0 2 4 6 8 10 12 14 16 18 20 MILES

1:100,000 ENLARGEMENTS

5643	5743	5843
5642	5742	5842

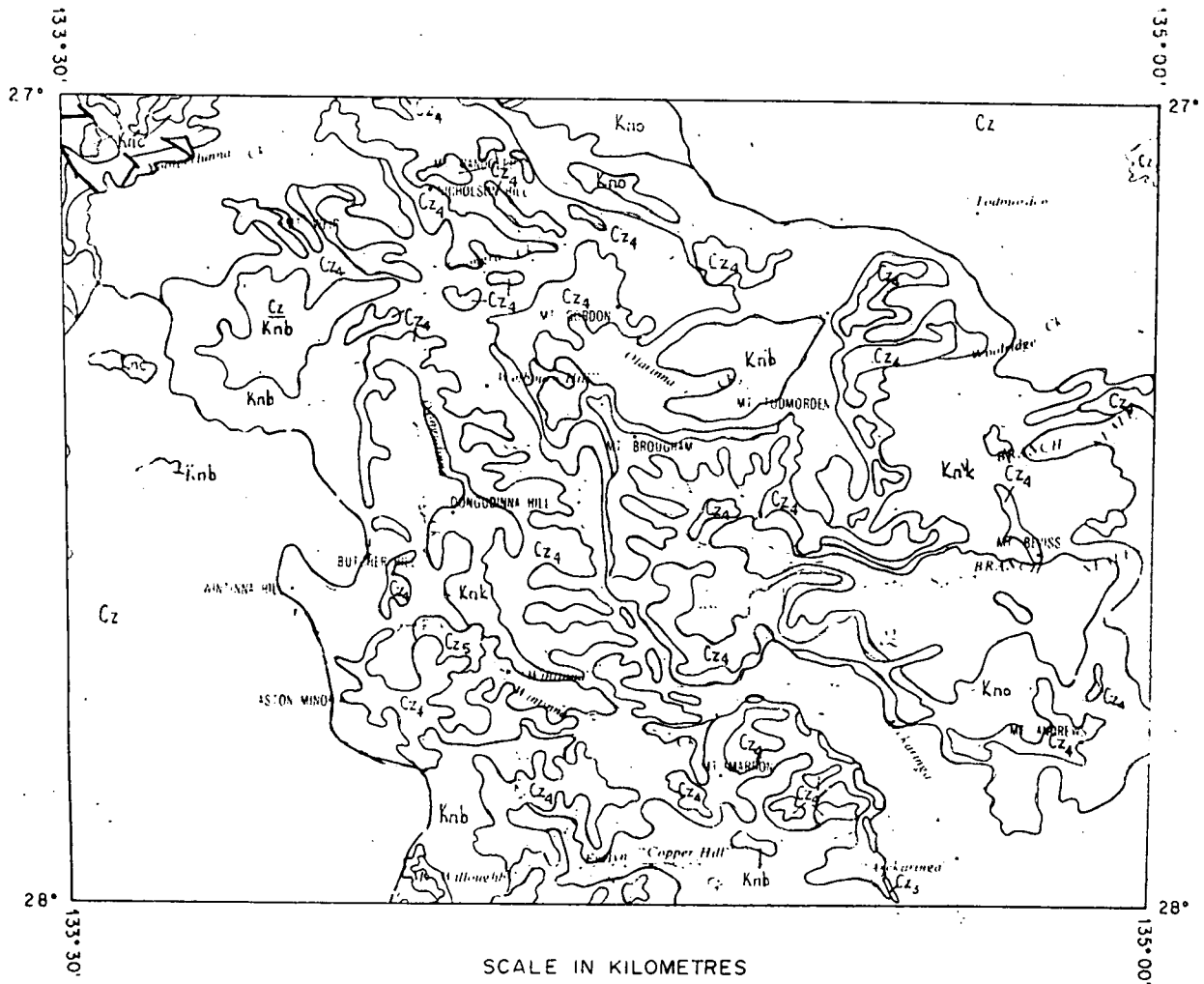
DEPARTMENT OF MINES—SOUTH AUSTRALIA

BORE LOCATION PLAN

WINTINNA

SG 53-14

Fig. 3



Cz	UNDIFFERENTIATED CAINOZOIC UNITS.
Cz5 / Cz4 / Cz3	
Kno	OODNADATTA FORMATION
Knk	COORIKIANA SANDSTONE MEMBER
Knb	BULLDOG SHALE
Knc	CADNA-OWIE FORMATION

Fig. 4

	DEPARTMENT OF MINES—SOUTH AUSTRALIA	SCALE.
COMPILED:	WINTINNA 1:250000 WATER WELL SURVEY	DATE:
DRN: CKD.	GENERALIZED GEOLOGY	PLAN NUMBER: S12773