

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

OPEN FILE

REPT.BK.NO. 81/46
REGIONAL GROUNDWATER SURVEY IN
THE VICINITY OF THE INKERMANN-
BALAKLAVA AND WHITWARTA
COALFIELDS

GEOLOGICAL SURVEY

BY

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ABSTRACT

A detailed water-well survey of the Inkerman-Balaklava and southern Whitwarta coal field areas was undertaken to provide base line data on the groundwater resources of the area in the event of any future dewatering operations. A total of 196 wells were visited of which 35% have been backfilled; 31% are not used, leaving 34% currently in use. The dominant well use is for stock watering but on a regional scale most groundwater is extracted in the Balaklava area for oval and golf club watering.

The groundwater is extracted dominantly from confined Tertiary aquifers, probably within the Rogue Formation. Minor Quaternary aquifers are utilised adjacent to the Wakefield River. Groundwater movement is in a westerly to southwesterly direction although no attempt has been made to differentiate sub-aquifers within the Tertiary sediments. Regional faulting which has affected the configuration of Tertiary sedimentation conceivably will locally affect groundwater movement.

Groundwater salinities increase in a westerly direction with the lowest salinity groundwater (less than 3 000 mg/l) occurring in a generally semi-circular zone centred just south of Balaklava. Salinities increase radially from this zone, exceeding 50,000 mg/l close to the coast.

LOCATION

This regional groundwater survey covers portions of the Hundreds of Balaklava, Stow, Hall, Inkerman and Dalkey, over an area approximately 120 km north of Adelaide (Fig. 1).

In addition, a strip approximately 1 km either side of the Wakefield River was surveyed running from Bowmans to the coast at Port Wakefield. This completed the survey area of about 670 sq km. (Fig. 2).

INTRODUCTION

The Inkerman-Balaklava and southern Whitwarta coal field areas have been the subject of a detailed water-well survey, to provide base-line data on the groundwater resources of the area, to aid in the prediction of the effects of any future dewatering operations on groundwater users and the groundwater resource.

The survey has gathered information from all water wells within the area. Where possible, data collected included total depths, standing water levels, field conductivity analysis on water samples, and a general description of the wells present, their status, usage, condition, and pumping equipment.

Little groundwater investigation work has been done in this area recently apart from a water-well survey of the Hundred of Inkerman (Safta, 1978). In that survey a total of 11 water wells were located. Apart from this, previous records are generally old and out of date, with only sketchy information available for all Hundreds within the survey area.

TOPOGRAPHY

The survey area in the east consists of rolling hills, the Alma Ranges, which fall gradually towards the central region to form the low lying Inkerman-Balaklava plains.

These monotonous plains, with little relief, dominate the majority of the survey area and continue through to the coast at Pt. Wakefield. This landscape is only broken by isolated areas of semi-permanent sand dunes, mainly near the coast, and several areas of slightly elevated ground rising from the flat plains, mainly in the east nearing the Ranges.

CLIMATE

The survey area is characterised by a harsh mediterranean climate: warm to hot summers with little rain and cool generally wet winters with the majority of the rainfall falling between May and September. The area suffers from an erratic annual rainfall but falls usually increase from the coast in the west towards the Ranges in the east due to the gradual uplift of moist air.

Summer thunderstorms are also common.

Average annual rainfall for Balaklava is 390mm and for Pt. Wakefield 334 mm. Recorded average monthly rainfall, average rain days, and annual rainfalls for both towns are given in Figure 3.

Average monthly Class A Pan evaporation figures are also shown on Figure 3. These values have been obtained from published maps and the Bureau of Meteorology. These figures are representative of the survey area and show the high evaporation to rainfall ratio in summer. On average, monthly evaporation exceeds rainfall even in winter (compare graphs in Fig 3).

NATURAL VEGETATION

The majority of natural vegetation has been cleared in the area giving way to grazing and cropping land.

The most common remaining natural vegetation is patches of dwarf gums, mainly in the western regions.

A noticeable feature is the thin line of tall River Gums following the course of the Wakefield River.. These gradually diminish in size and number as the river nears the coast, west of Balaklava.

All areas are plentiful in native grasses and small shrubs but these too diminish in number towards the coast where salt bush and other salt tolerant plants dominate the vegetation.

LAND USE

Approximately 80% of the survey area is grazing and cropping land and in most instances is subject to bi-annual rotation between the two. The remaining land-usages can be broken up into three catagories: firstly, stud properties for horses and beef cattle; secondly, intensive poultry and pig farming; and finally, a relatively small area for the growing of fodder crops such as lucerne and sudex. These are seldom grown due to insect pest problems and the high salinity of ground water in most areas.

A unique land use is a small 4 hectare vineyard in Balaklava. However, the problem of high salinity ground water again has caused problems of stress on these low salt tolerance plants.

SURFACE HYDROLOGY

Surface drainage is from east to west with flow starting in the eastern ranges. Only one river exists in the area, the Wakefield River, which is by far the main source of discharge.

Several small washes extend from the gullies in the ranges. However, any flow is quickly spread and lost within a short distance on entering the plains.

Flow in the Wakefield River is confined mainly to the winter period. However, summer thunderstorms have resulted in periods of minor flooding. Flow rapidly diminishes after leaving the ranges suggesting that the river gravel beds are an efficient means of recharge in the area. The wide range in annual flow in the Wakefield River is demonstrated by recorded flows at the E. & W.S. Department gauging site 10 km south-west of Auburn from 1953 to 1965 inclusive (Fig. 4).

The steeply graded banks of the river gradually lessen as it continues towards the coast, until the river becomes a small drainage channel only.

When flow reaches these coastal plains, it is held in several large flood basins and efficiently absorbed and evaporated, resulting in little flow ever reaching the coast.

Water salinity in these low areas is generally high as salt laden soils and high evaporation rates increase salinity levels considerably.

No use is made of river water below Balaklava but regular use is made of deep pools in upper reaches located in the foothills. These permanent pools, with salinity levels generally around 3 000 mg/l, are pumped regularly for stock and irrigation purposes.

GEOLOGY

The generalised geology of the area is discussed briefly in this report and summarised in Figure 5. Detailed discussion can be found in Meyer (1976) and Springbett (1980).

The area is underlain by a variable thickness of Tertiary-Quaternary sediments overlying Adelaidean and Cambrian basement rocks. These basement rocks are dominantly weathered shales with quartzites and quartz sandstones more common in areas of shallow bedrock. The surface on these rocks is undulating and relief has been further accentuated by Tertiary faulting.

The lowermost Tertiary unit is the Clinton Coal Measures, a very variable group of unconsolidated, carbonaceous sands, silts and clays with interbedded coals. Average thickness is 50 m but up to 80 m has been intersected, however the unit is missing in areas of shallow basement.

The remaining Tertiary sediments above this unit vary considerably in thickness and lithology.

Much more work on vertical and lateral facies changes has to be undertaken before this sequence can be fully correlated with the regional Tertiary sequence in Fig. 5.

The Quaternary Hindmarsh Clay, a 10 to 20 m thick sequence of multi-coloured mottled and interbedded clay and sandy clays caps the Tertiary sediments, followed by minor thin Pleistocene-Holocene units.

GROUNDWATER RESOURCES

General

No regional definition of aquifer and confining layer configurations has been undertaken but a representative hydro-geological section obtained at the Bowmans Trial Pit excavated to the coal horizon in 1980 by the Electricity Trust is given on Figure 6.

The Hindmarsh Clay acts as a confining layer although it is probable that the water table in many areas is contained within the underlying sands (Aquifer 'A' in Fig. 6).

Between the base of the Hindmarsh Clay and the top of the coal in the Trial Pit two aquifers have been noted, nominally called aquifer 'A' and aquifer 'B' separated by a semi-confining layer of about 12 m thickness (Fig. 6). Aquifer 'B' has been subdivided into an upper sub-aquifer with high permeability at its top decreasing to its base (total thickness about 9 m) and a lower sub-aquifer of low permeability. Between the two sub-aquifers is a thin (2-3 m) confining layer of extremely low permeability, made up of a carbonaceous fine sand.

These Tertiary aquifers are confined, but experience during dewatering the Trial Pit shows that they exhibit leaky characteristics. No pre-pumping head data is available but it is considered that heads in each aquifer approximated one another.

Groundwater Movement

An attempt has been made at defining the direction of groundwater movement and the gradients existing on the confined aquifers' pressure surface. The confined aquifers have not been differentiated and it has been assumed that there is no head difference between sub-aquifers and also the water-table aquifer. Potentiometric surface contours have been prepared (Fig. 7) using measured depths to water in wells and ground surface levels obtained from the best available contour maps.

These contours indicate that groundwater movement is in a westerly to southwesterly direction. Gradients are quite steep in the ranges east of Balkalava but these rapidly flatten on the plains, although there appears to be some steepening in the vicinity of regional faults (Fig. 7). These faults have affected the configuration of Tertiary sedimentation and thus conceivably will locally affect groundwater movement.

Groundwater salinity

During the water well field survey water samples were collected wherever possible and water conductivities measured in the field using a portable meter (E.I.L. Portable Conductivity Measuring Bridge Type MC3). Where samples could not be obtained, for example in the case of a well now abandoned and backfilled, historical data was inspected. Again the Quaternary-Tertiary (confined) aquifers were not differentiated but wells assumed to enter the basement (fractured-rock) aquifers were excluded. The only area where it is felt that Quaternary-Recent aquifers may

exist is adjacent to the River Wakefield where gravel/sand beds could occur and here the occurrence of lower salinity water in such aquifers is possible. This is born out by the few analyses available close to the river (Fig. 7). Elsewhere Quaternary-Recent sediments of the Hindmarsh Clay Formation form a confining layer.

In general groundwater salinity increases in a westerly direction (Fig. 7). The lowest salinity groundwater, ie less than 3 000 milligrams per litre (mg/l), occurs in a generally semi-circular zone centred just south of Balaklava with the eastern boundary formed by the Alma Ranges. Salinity increases radially exceeding 50 000 mg/l close to the coast, probably in areas where evaporation from the water table is taking place.

Water Levels

Water levels are topographically related ranging from over 40 metres below ground level in the Alma Ranges east of Balaklava to around 2 metres below ground level near the coast. Thus from the edge of the Alma Ranges to the coast there is almost a linear decrease in the depth to water as measured in wells.

Groundwater Usage

The majority of water wells in the area are stock supply wells usually equipped with windmills which supply storage tanks, in turn discharging to troughs (Figs 8 to 11 and Appendix A).

Although these represent approximately 78% of all water wells in use, yields are generally small and groundwater consumption would be well below 50% of the total used in the area. The greatest yields are from the irrigation wells mainly surrounding Balaklava.

Balaklava Golf Club pumps an estimated 63 megalitres annually and similarly the Balaklava Racing Club, Show Grounds,

and High School consume significant volumes of groundwater for irrigation of grassed areas. Thus whilst these represent only 4% of the total number of water wells in the survey they also represent the largest usage of groundwater.

The remainder of water wells are varied in their usage from fodder crop irrigation and farming purposes such as chickens and pigs, to a very small number of domestic and garden water wells. The number of wells is constantly diminishing due to ongoing connection of reticulated water in most areas. The functional wells represent only 34% of the 196 water wells surveyed. Of the remaining 66%, 31% are disused and 35% backfilled.

Well Construction

Of all water wells visited 62% were hand dug with the vast majority of these being bricked completely. Very few wood lined wells were noted. These bricked wells are old with construction dating from the late 1800s into the mid 1900s.

About 31% of visited wells are drilled and completed with various diameters of steel casing. The remainder are combination wells, where an original hand dug well had a well drilled in its base and steel casing inserted. Equipment for pumping varies from the common windmill (78% approximately of all water wells) to turbine and submersible pumps on the large yielding water wells, to small centrifugal and jet pumps, mainly on domestic and garden wells.

Pollution

There seems to be no potential regional sources for groundwater pollution in the survey area.

Several isolated incidents of pollution were noted, these being stock supply water wells contaminated by sheep carcasses. However, these effects are temporary only.

One instance of a water well, polluted with diesel fuel was noted, caused by a leaking fuel tank over the well. This was later corrected by pumping and dispersing the pollutant over a large area.

A large number of water wells have over the years been backfilled with household rubbish. Whilst this may locally affect the groundwater resource the small number and the area involved does not present them as a threat to regional resources.

SK:MAC:AF


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- Safta, J. 1978. Hundred of Inkerman, Water Well Survey. S. Aust. Dept. Mines report 78/146 (unpublished).
- Springbett, G. 1980. Northern St. Vincent Basin Coalfield, South Australia. Geological Report. The Electricity Trust of South Australia.

APPENDIX A

WATER WELL DATA SUMMARY
FOR 1:100 000 SHEET 6529

THE BORE GENERAL INDEX

The following tabulation is for all wells on the 1:100 000 sheet 6529 stored within the Department's record system. It is a one-line summary of the most recent selected information available on each well. Consequently data on wells outside of the survey area referred to in this report may be dated and not necessarily correct. An explanation of the columns used is given below.

Unit Number: A plotting number unique to each well. The first four digits represent the 1:100 000 sheet, in this case 6529, whilst the next number indicated the 1:50 000 sheet on which the well is plotted. For this report the 1:50 000 sheet 6529-1 is given as Figure 8, 6529-2 as Figure 9, 6529-3 as Figure 10 and 6529-4 as Figure 11. The final five digits indicate the plotting number assigned to the well and shown on the respective 1:50 000 sheet.

Depth: Depth of well in metres below ground level and the date on which it was measured.

SWD: Depth to water in well in metres and the date on which it was measured.

SAMP: Sampling method to obtain water sample i.e. UNKN=unknown; Bail=bailed; Pump=pumped sample.

ATS: Total dissolved solids where M=milligrams per litre and C=conductivity in microsiemens/cm at 25°C.

SUPPLY: Supply in kilolitres per day; EST=estimated supply.

METH: Method of testing supply PUMP=pumped; WMLL=Windmill in operation.

LOG: Geological log available and samples logged by
GEOL=geologist; DRIL=driller.

STATUS: Use to which well was being put when last visited.

UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS
6529 4PW00001	40.54									GEOL	ABANDONED *WAKEFIELD-PROSP OIL
6529 2PW00002	165.51	27AUG969	UNKN	271M		21AUG924					ABANDONED *MALLALA-LIGNITE -BORE
6529 4PW00003	157.53	20JUL956								GEOL	UNKNOWN *PT CLINTON-NO.1 STRATIGRAPHIC-BORE PETROLE
6529 2WW00004	32.31	10SEP980	26.63	10SEP980	BAIL	3250M		10SEP980		PUMP	UNKNOWN
6529 2SP00005	5.00	27MAY977									ABANDONED *REDBANKS MALLALA AREA SEISMIC INVESTIGATION
6529 2WW00006	1.67	18SEP980									UNKNOWN
6529 2WW00007	22.67	18SEP980	20.23	18SEP980	UNKN	9600M		18SEP980			NOT IN USE
6529 2SP00008	99.58	11MAY977			UNKN	407M	9.2	23MAY977		GEOL	ABANDONED *REDBANK-MALLALA -AREA SEISMIC INVESTIGATION
6529 2SP00009	5.00	27MAY977									ABANDONED *REDBANK-MALLALA -AREA SEISMIC INVESTIGATION
6529 2SP00010	5.00	27MAY977								GEOL	ABANDONED *REDBANKS-MALLALA A-AREA SEISMIC INVESTIGATION
6529 2WW00011	21.95	26MAY955	19.51	26MAY955		7568M		26MAY955			UNKNOWN
6529 2WW00012					UNKN	11181M					NOT IN USE
6529 2WW00013	21.34	12MAY955	17.98	12MAY955	UNKN	5198M		12MAY955			NOT IN USE
6529 2WW00014	20.86	18SEP980	14.39	18SEP980	BAIL	17000M		18SEP980			ABANDONED *REDBANK-MALLALA -AREA SEISMIC INVESTIGATION
6529 2SP00015	95.00	28APR977	20.00	28APR977	UNKN	2300M	8.1	09MAY977		GEOL	ABANDONED *REDBANK-MALLALA -AREA SEISMIC INVESTIGATION
6529 2WW00016	3.44	16SEP980									DRY HOLE
6529 2WW00017	17.37		11.28		UNKN	7226M					UNKNOWN
6529 2WW00018	1.87	18SEP980	17.07	02JUN955	UNKN	21420M		02JUN955		WMLL	UNKNOWN
6529 2WW00019	12.19										DRY HOLE
6529 2WW00020	28.41	16SEP980	21.48	16SEP980	BAIL	8000M		16SEP980		WMLL	STOCK
6529 2WW00021	21.34										UNKNOWN
6529 2WW00022	16.46	20APR955	12.50	20APR955	UNKN	1614M		20APR955			NOT IN USE
6529 2SW00023	22.80	18APR977			UNKN	11000M	7.8	14MAR977			UNKNOWN *REDBANKS MALLALA A-AREA STRATIGRAPHIC
6529 2WW00024	21.03	19APR955	20.12	19APR955	UNKN	5369M		19APR955			NOT IN USE
6529 2WW00025	18.90	21AUG969	18.29	21AUG969	UNKN	5755M	8.0	21AUG969			UNEQUIPPED
6529 2WW00026	13.41	20APR955									NOT IN USE
6529 2WW00027	50.90	12JAN949			UNKN	4598M		28MAR939	11 EST	1949 WMLL	UNEQUIPPED
6529 2WW00028	20.42	21AUG969			UNKN	6670M	7.5	21AUG969	11 EST	1969 PUMP	IRRIGATION
6529 2WW00029	24.38	09JAN973			UNKN	6300M		09JAN973			UNKNOWN
6529 2WW00030	34.14		17.37								DRY HOLE
6529 2WW00031	15.24	09DEC954	9.14	09DEC954	UNKN	6765M		09DEC954			UNKNOWN
6529 2SW00032	151.20	16JUN977									*REDBANKS-MALLALA A-AREA STRATIGRAPHIC OBSERV
6529 2WW00033	21.95	03JUL915	11.89	03JUL915	UNKN	9409M		03JUL915			UNKNOWN
6529 2WW00034	7.92	27APR955									DRY HOLE
6529 2WW00035	3.05	26NOV954	1.83	26NOV954	UNKN	1850M		25NOV954	21 EST	1954 PUMP	UNKNOWN
6529 2WW00036	2.44	25NOV954	1.83	25NOV954	UNKN	34272M		25NOV954		PUMP	NOT IN USE
6529 2WW00037					UNKN	111670M		25NOV954			NOT IN USE
6529 2WW00038	2.13	24NOV954	.68	24NOV954	UNKN	24310M		24NOV954			UNKNOWN
6529 2WW00039	40.84	24NOV954	.38	24NOV955	UNKN	17850M		24NOV954			UNKNOWN
6529 2WW00040	64.62										ABANDONED
6529 2WW00041	3.05	05MAY972	1.22	05MAY972	UNKN	40000M		05MAY972			STOCK
6529 2WW00042	3.05	05MAY972	1.22	05MAY972	UNKN	42000M		05MAY972			UNKNOWN
6529 2WW00043	15.54	05MAY972	2.44	05MAY972	UNKN	25300M		05MAY972			UNKNOWN
6529 2WW00044	119.48		26.82						19 EST		UNKNOWN
6529 2WW00045	4.57	26NOV954	2.74	26NOV954	UNKN	37128M		26NOV954			NOT IN USE
6529 2WW00046	119.48		26.82						436 EST		ABANDONED

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UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS
6529	2EW00047	27.43	13AUG962							GEOL	ABANDONED *LONG-PLAINS-RAIL LWAY-SIDING FOUNDATION TEST
6529	2EW00048	7.62	15AUG962							GEOL	ABANDONED *LONG-PLAIN-RAIL WAY-SIDING FOUNDATION TESTI NOT IN USE
6529	2WV00049	40.84	19APR955	14.63	19APR955	UNKN	17422M	22APR955		GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00050	30.48	28SEP959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00051	42.67	25AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00052	33.53	31AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00053	56.39	26AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00054	22.86	10AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00055	39.10	11AUG959							GEOL	UNKNOWN *TWO-WELL SEISMI C INVESTIGATIONS
6529	2SP00056	38.10	12AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00057	39.71	12AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00058	42.67	12AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00059	60.96	13AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00060	60.96	13AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00061	33.53	14AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00062	32.31	14AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00063	18.29	18AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00064	33.53	01SEP959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00065	15.24	18AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00066	15.24	18AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2WV00067	8.00	18FEB975	4.20	18FEB975	UNKN	21000M	7.2	18FEB975	GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00068	12.50	19AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00069	12.50	19AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00070	33.53	01SEP959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00071	12.50	19AUG956							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00072	12.50	19AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00073	10.67	19AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00074	12.50	19AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
6529	2SP00075	15.24	20AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS

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UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS
529	2SP00076	15.24	20AUG959								ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00077	15.24	20AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00078	15.24	20AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00079	15.24	20AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00080	15.24	20AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00091	15.24	21AUG959								ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00092	12.50	21AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2WW00083	177.70									UNKNOWN
529	2SP00094	40.84	21AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SR00095	41.15	24AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2SP00086	30.48	25AUG959							GEOL	ABANDONED *TWO-WELLS SEISM IC INVESTIGATIONS
529	2WP00087										UNKNOWN
529	2WW00088	23.77	18MAY955	10.06	18MAY955	UNKN	6397M	18MAY955		WMLL	UNKNOWN
529	2WW00089	8.25	20SEP978	8.05	20SEP978	UNKN	7283M	18MAY955			UNKNOWN
529	2WW00090	15.24	01DEC948	10.67	01DEC948						UNKNOWN
529	2WW00091	91.44	23OCT929							GEOL	UNKNOWN *INKERMAN-BROWN- COAL-FIELDS LIGNITE
529	2MW00092	95.55	15SEP933							GEOL	UNKNOWN *INKERMAN-BROWN- COAL-FIELDS COAL
529	2MW00093	93.88	16NOV933							GEOL	UNKNOWN *INKERMAN-BROWN- COAL-FIELDS COAL
529	2MW00094	97.84	28AUG929							GEOL	UNKNOWN *LIGNITE-BROWN-C OAL-FIELDS COAL
529	2MW00095	96.62	20SEP929							GEOL	UNKNOWN *INKERMAN-BROWN COAL FIELDS COAL
529	2WW00096	10.97	18MAY955	10.36	18MAY955	UNKN	1242M	18MAY955			NOT IN USE
529	2WW00098	23.54	09SEP944	17.40	09SEP944						UNKNOWN
529	2WW00099	23.16	26APR955	16.76	26APR955	UNKN	9282M	26APR955			NOT IN USE
529	2WW00100	26.21	26APR955	18.29	26APR955	UNKN	4227M	26APR955			NOT IN USE
529	2WW00101	24.62	23SEP980	16.59	23SEP980	BAIL	8800M	23SEP980			UNKNOWN
529	2WW00102	.44	23SEP980								UNKNOWN
529	3MW00103	159.86									UNKNOWN
529	1WW00104									GEOL	UNKNOWN *INKERMAN-AREA UNKNOWN
529	1WW00105	19.81	10JAN949	17.68	10JAN949	UNKN	1956M	10JAN949	11 EST	1949 WMLL	STOCK
529	1WW00106	30.49	10JAN949	17.68	10JAN949	UNKN	1371M	10JAN949	54 EST	1949 WMLL	STOCK+IRR
529	1WW00107	21.95	10JAN949	17.37	10JAN949	UNKN	2028M	10JAN949	11 EST	1949 WMLL	UNKNOWN
529	1WW00108	23.77	10JAN949	16.46	10JAN949	UNKN	2228M	10JAN949	11 EST	1949 WMLL	UNKNOWN
529	1WW00109	21.87	12NOV980	12.20	12NOV980	BAIL	6300M	12NOV980	108 EST	1949 PUMP	UNKNOWN
529	1WW00110	124.97	03JUN965	28.04	03JUN965	PUMP	6050M	12NOV980	1637 EST	1965 PUMP	IRRIGATION
529	1WW00111	23.89	12NOV980	14.04	12NOV980	BAIL	4100M	12NOV980		PUMP	UNKNOWN
529	1WW00112	26.71	15OCT980	15.79	15OCT980	BAIL	3800M	15OCT980	11 EST	1949 PUMP	UNKNOWN
529	1WW00113	40.84		14.63		UNKN	17422M				UNKNOWN
529	1WW00114	59.88	11NOV980	15.38	11NOV980	BAIL	3050M	8.0 11NOV980	82 EST	6HRS 1976 PUMP	DRIL
529	1WW00115	21.72	14OCT980	16.28	14OCT980	BAIL	5500M	14OCT980	11 EST	1949	UNKNOWN
529	1WW00116	23.92	14OCT980	15.54	14OCT980	BAIL	3350M	14OCT980	1418 EST	1980 PUMP	UNKNOWN
529	1WW00117	22.86	06JAN960	17.07	06JAN960	UNKN	3284M	06JAN960			UNKNOWN

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UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS &	REMARKS
6529	1WW00118	1.03	14OCT980	24.38	11JAN949	UNKN	2156M	11JAN949	54 EST	1949	WMLL	STOCK+IRR
6529	1WW00119	26.82	14OCT980	18.62	14OCT980	PUMP	4850C	14OCT980	21 EST	1949		UNKNOWN
6529	1WW00120	44.00	10SEP976	20.11	14OCT980	BAIL	2550C	14OCT980	1080 EST	1976	PUMP	UNKNOWN
6529	1WW00121	28.80	09SEP980	16.08	09SEP980	PUMP	6250C	09SEP980	273 EST	1980	PUMP	UNKNOWN
6529	1WW00122	33.64	09OCT980	20.27	09OCT980	BAIL	4250C	09OCT980	11 EST	1949	WMLL	UNKNOWN
6529	1WW00123	18.29	25MAR960	13.72	25MAR960	UNKN	3684M	28MAR960	54 EST	1960		IRRIGATION
6529	1WW00124	34.68	09OCT980	23.98	09OCT980	BAIL	8400C	09OCT980	108 EST	1949	PUMP	STOCK+IRR
6529	1WW00125	30.09	09SEP980	20.27	09SEP980	PUMP	6100C	09SEP980	436 EST	1980	PUMP	STOCK+DOM
6529	1WW00126	.20	09OCT980	28.96	10JAN949	UNKN	2085M	16FEB949	54 EST	1949	WMLL	STOCK+IRR
6529	1WW00127	35.14	09OCT980	26.38	09OCT980	BAIL	3750C	09OCT980	44 EST	1949	WMLL	UNKNOWN
6529	1WW00129	40.23	10JAN949	36.58	10JAN949	UNKN	1357M	16FEB949	54 EST	1949	WMLL	STOCK
6529	1WW00129	46.49	16SEP980	33.28	16SEP980	PUMP	5500C	16SEP980			WMLL	UNKNOWN
6529	1WW00130	48.77	11JAN949	36.58	11JAN949	UNKN	1385M	11JAN949	11 EST	1949	PUMP	UNKNOWN
6529	1WW00131	31.88	09SEP980	23.39	09SEP980	BAIL	4850C	09SEP980				UNKNOWN
6529	1WW00132	31.87	09SEP980	22.11	09SEP980	BAIL	5500C	09SEP980	54 EST	1948	WMLL	STOCK
6529	1SP00133	5.00	27MAY977									UNKNOWN *REDBANK-MALLALA -AREA SEISMIC HOLE
6529	1WW00134											UNKNOWN
6529	1WW00135	36.75	10SEP980	29.70	10SEP980	BAIL	3000C	10SEP980			PUMP	NOT IN USE
6529	1WW00136	37.70	16SEP980	28.95	16SEP980	BAIL	4450C	16SEP980			WMLL	NOT IN USE
6529	1MW00137	53.34	31JAN951								GEOL	UNKNOWN *WHITWARTA-COAL FIELDS COAL
6529	1MW00138	49.99	19JAN951									UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1MW00139	50.60	08FEB951								GEOL	UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1MW00140	49.38	28JUL949									UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1MW00141	44.81	01AUG949								GEOL	UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1MW00142	54.86	22JUL949			UNKN	52122M	05AUG949			GEOL	UNKNOWN *WHITWARTA-COAL- FIELD COAL
6529	1WW00143	11.05	30OCT980	7.64	30OCT980	BAIL	8400C	30OCT980	11 EST	1948	WMLL	STOCK
6529	1MW00144	37.19	11JUL949			UNKN	2620M	15JUL959			GEOL	UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1MW00145	49.07	24JUL949								GEOL	UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1WW00146			11.27	28OCT980	PUMP	6100C	28OCT980			WMLL	UNKNOWN
6529	1WP00147					UNKN	928M	20JUL955				UNKNOWN
6529	1WW00148	17.79	28OCT980	10.01	28OCT980	PUMP	4850C	28OCT980	44 EST	1948	WMLL	UNKNOWN
6529	1WW00149	20.12	04JUL960	9.75	04JUL960	UNKN	2670M	04JUL960			WMLL	UNKNOWN
6529	1MW00150	47.85	04JUL949			UNKN	3770M	08SEP979			GEOL	UNKNOWN *WHITWARTA-COAL FIELDS COAL
6529	1WW00151	30.48	06JAN949	15.24	06JAN949	UNKN	3727M	06JAN949	44 EST	1949	WMLL	UNKNOWN
6529	1WW00152	24.38	06JAN949	18.29	06JAN949	UNKN	2528M	06JAN949	109 EST	1949	PUMP	STOCK+IRR
6529	1WW00153	20.20	08NOV980	12.45	08NOV980	UNKN	2685M	11JAN949	87 EST	1949	PUMP	IRRIGATION
6529	1WW00154	71.63	01OCT972	33.53	01OCT972	BAIL	3450C	08NOV980	982 EST	1972	PUMP	STOCK+IRR
6529	1WW00155	71.63	08MAY972	18.29	08MAY972	UNKN	1955M	08MAY972	1091 EST	1972		UNKNOWN
6529	1WW00156	18.29	02DEC948	4.57	02DEC948	UNKN	14823M	02DEC948	11 EST	1948	WMLL	STOCK
6529	1MW00157	44.81	09JUN949								GEOL	UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1WW00158	15.85	02DEC948	7.62	02DEC948	UNKN	3941M	02DEC948	11 EST	1948		STOCK
6529	1MW00159	42.21	14JUL949								GEOL	UNKNOWN *WHITWARTA-COAL- FIELDS COAL
6529	1WW00160	18.29	08DEC948	6.10	08DEC948	UNKN	3656M	08DEC948				UNKNOWN
6529	1MW00161	42.93	02JUN949			UNKN	4998M	24JUN949			GEOL	UNKNOWN *WHITWARTA-COAL- FIELD COAL

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UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS &	REMARKS
6529 1W000162	12.19 04JUL960		PUMP	7200C		29OCT980			WMLL		UNKNOWN	
6529 1W000163	17.15 29OCT980	8.15 29OCT980	PUMP	9200C		29OCT980	87 EST	1960	WMLL		UNKNOWN	
6529 1W000164	7.05 29OCT980	6.72 29OCT980	PUMP	7100C		29OCT980	11		WMLL		UNKNOWN	
6529 1W000165	49.38										UNKNOWN	
6529 1W000166	5.03 29OCT980	5.25 29OCT980	UNKN	4013M		02DEC948	11 EST	1949	WMLL		STOCK	
6529 1W000167	10.57 02DEC948	6.10 02DEC948	UNKN	3070M		02DEC948	2	1948	WMLL			
6529 1W000168	6.81 29OCT980	5.85 29OCT980	PUMP	7700C		29OCT980	11 EST	1948	WMLL		UNKNOWN	
6529 1W000169	50.29 10JUN949		UNKN	1457M		26AUG949				GEOL	UNKNOWN	*WHITWARTA-COAL-
											FIELD COAL	
6529 1W000170	14.65 29OCT980	7.69 29OCT980	PUMP	8250C		29OCT980			WMLL		UNKNOWN	
6529 1W000171	8.02 28AUG980	7.92 03DEC948	UNKN	2613M		16FEB949	32 EST	1948	WMLL		STOCK	
6529 1W000172	13.73 30OCT980	10.21 30OCT980	RAIL	7200C		30OCT980	54 EST	1948	WMLL		STOCK	
6529 1W000173	27.43		UNKN	1429M							UNKNOWN	
6529 1W000174	27.43		UNKN	1429M							UNKNOWN	
6529 1W000175	15.35 29OCT980	9.73 29OCT980	RAIL	7450C		29OCT980	21 EST	1948	WMLL		STOCK	
6529 1W000176	14.55 29OCT980	10.65 29OCT980	RAIL	4850C		29OCT980			PUMP		UNKNOWN	
6529 1W000177	15.74 29OCT980	10.69 29OCT980	RAIL	5300C		29OCT980			PUMP		UNKNOWN	
6529 1W000178	21.13 21AUG980	7.34 21AUG980	RAIL	6200C		21AUG980	21 EST	1948	WMLL		STOCK	
6529 1W000179	1.13 21AUG980	7.62 18JAN974	UNKN	4145M	7.4	18JAN974					STOCK+IRR	
6529 1W000180	99.06 11DEC973	15.24 11DEC973	UNKN	9970M	7.0	11DEC973			PUMP		IRRIGATION	
6529 1W000181	10.09 21AUG980	10.02 21AUG980	UNKN	5184M		01DEC948	11 EST	1949	WMLL		UNKNOWN	
6529 1W000182	52.73 11JUL949		UNKN	4284M		05AUG949					UNKNOWN	*WHITWARTA-COAL-
											FIELDS COAL	
6529 1W000183	103.63 15APR929									GEOL	UNKNOWN	*BALAKLAVA-AREA
											COAL	
6529 1W000184	56.45 18MAY929									GEOL	UNKNOWN	*BALAKLAVA-AREA
											COAL	
6529 1W000185	90.83 20JUN929									GEOL	UNKNOWN	*BALAKLAVA-AREA
											COAL	
6529 1W000186	98.45 25JUL929									GEOL	UNKNOWN	*BALAKLAVA-AREA
											COAL	
6529 1W000187	43.82 22SEP959	21.34 22SEP959	UNKN	9853M		22SEP959	37 EST	1959	GEOL		UNKNOWN	*BALAKLAVA-AREA
											COAL	
6529 1W000188	8.51 28AUG980	7.77 28AUG980	RAIL	3600C	7.0	28AUG980					UNKNOWN	
6529 1W000189	27.13 10MAR970	9.14 10MAR970	RAIL	2700C	5.5	28AUG980	9	1970	PUMP		DOMESTIC	
6529 1W000190	27.43 10MAR970	9.14 10MAR970	UNKN	6300M	7.0	10MAR970			WMLL		UNKNOWN	
6529 1W000191	12.13 22JAN959		UNKN	400M		22JAN959						
6529 1W000192	11.26 28AUG980	9.86 28AUG980	RAIL	4400C		28AUG980			WMLL		UNKNOWN	
6529 1W000193	38.01 28AUG980	8.54 28AUG980	RAIL	2850C	7.5	28AUG980					STOCK+DOM	
6529 1W000194	17.48 28AUG980	11.57 28AUG980	PUMP	3150C		28AUG980	19 EST	1980	WMLL		UNKNOWN	
6529 1W000195	48.77 01MAR972	27.43 01MAR972	UNKN	7145M	7.5	01MAR972			WMLL		UNKNOWN	
6529 1W000196	15.74 28AUG980	10.22 28AUG980	RAIL	3100C		28AUG980			WMLL		UNKNOWN	
6529 1W000197	22.22 28AUG980	12.19 28AUG980	RAIL	3250C	7.0	28AUG980	50 EST	1980	PUMP		STOCK+IRR	
6529 1W000198	129.54 19MAR973	10.35 03SEP980	PUMP	6450C	5.0	03SEP980	648 EST	1973	PUMP		UNKNOWN	
6529 1W000201	122.23 19MAR973	14.94 19MAR973	PUMP	5500C	8.0	03SEP980	993 EST	1973	PUMP		UNKNOWN	
6529 1W000202	13.29 03APR965										ABANDONED	*BALAKLAVA-RAILW
											AY-SILO-SITE FOUNDATIONS	
6529 1W000203	29.73 10JAN949	16.76 10JAN949	UNKN	1956M		10JAN949	54 EST	1949	WMLL		DOMESTIC	
6529 1W000204	9.45 07APR965									GEOL	ABANDONED	*BALAKLAVA-SILO-
											SITE-RAILWAY FOUNDATIONS	
6529 1W000205	21.34 06JAN949	16.76 06JAN949	UNKN	3970M		06JAN949	11 EST	1949	PUMP		IRRIGATION	
6529 1W000206	20.06 12NOV980	12.34 12NOV980	RAIL	6800C		12NOV980	103 EST	1949	PUMP		DOMESTIC	
6529 1W000207	27.43 06JAN949	22.86 06JAN949					11 EST	1949	WMLL		UNKNOWN	
6529 1W000208	40.92 10JUL969	15.45 10JUL969	UNKN	2485M	7.0	08JUL969	327 EST	17HRS 1969	PUMP	GEOL	PUB/MUNIC	
6529 1W000209	32.00 13DEC948	18.29 13DEC948	UNKN	2542M		13DEC948	11 EST	1949	PUMP		IRRIGATION	
6529 1W000210	32.00 13DEC948	18.29 13DEC948	UNKN	1014M		13DEC948	108 EST	1948	PUMP		UNKNOWN	

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UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS			
6529	1WW00211	22.75	11NOV980	14.34	11NOV980	BAIL	4650C	11NOV980	11 EST	1948	PUMP	UNKNOWN		
6529	1WW00212	243.34	12DEC967	15.24	14DEC967	UNKN	3170M	7.0	14DEC967	218 EST	1967	PUMP	UNKNOWN	
6529	1WW00213	246.89	04OCT960	16.76	04OCT960	UNKN	3213M		04OCT960	452 EST	1960		UNKNOWN	
6529	1WW00214	25.91	08DEC948	18.29	08DEC948	UNKN	1899M		08DEC948	44 EST	1948	WMLL	IRRIGATION	
6529	1WW00215	213.36											UNKNOWN	
6529	1WW00216	19.81	13DEC948	16.15	13DEC948	UNKN	2156M		13DEC948				UNKNOWN	
6529	1WW00217	76.20	14DEC967	14.45	11NOV980	BAIL	4250C	6.7	11NOV980	546 EST	1967	PUMP	UNKNOWN	
6529	1WW00218	21.34											UNKNOWN	
6529	1WW00219	18.85	09SEP980	16.73	09SEP980	BAIL	6600C		09SEP980	32 EST		WMLL	UNKNOWN	
6529	1WW00220	25.91	10MAR970	7.92	10MAR970	UNKN	7445M	6.5	10MAR970				UNKNOWN	
6529	1WW00221	23.19	09SEP980	15.54	09SEP980	BAIL	4100C		09SEP980			WMLL	UNKNOWN	
6529	1WW00222	35.66	11JUL960	15.24	11JUL960	UNKN	1771M		04JUL960	108 EST	1960	PUMP	UNKNOWN	
6529	1WW00223	13.36	03SEP980	23.16	08DEC961	UNKN	4770M		08DEC948	76 EST	1961	PUMP	UNKNOWN	
6529	1WW00224	17.06	03SEP980	13.41	03SEP980	BAIL	4450C		03SEP980	11 EST	1948	WMLL	STOCK	
6529	1WW00225	14.62	28AUG980	11.68	28AUG980	BAIL	3450C		28AUG980	5 EST	1948	WMLL	STOCK	
													*INKERMAN-NO 37	
6529	1WW00226	44.81	24AUG971			PUMP	9200C	7.5	28AUG980	327 EST	971HRS	1971	WMLL	MINERAL INVESTIGATIONS
6529	1WW00227	33.53	19MAR971			UNKN	1830M		19MAR971					STOCK
6529	1WW00228	19.10	28AUG980	10.60	28AUG980	BAIL	3650C		28AUG980	11 EST	1948	WMLL	UNKNOWN	
6529	1WW00229	11.01	28AUG980	9.41	28AUG980	BAIL	7250C		28AUG980	11 EST	1948	WMLL	UNKNOWN	
6529	1WW00230	19.27	28AUG980	13.61	28AUG980	BAIL	3850C		28AUG980	218 EST	1948	WMLL	UNKNOWN	
6529	1WW00231	16.10	28AUG980	12.48	28AUG980	BAIL	6050C		28AUG980	98 EST	1948	PUMP	UNKNOWN	
6529	1WW00232	26.21	07DEC948	20.12	07DEC948	UNKN	4704M		07DEC948	21 EST	1948	WMLL	UNKNOWN	
6529	1WW00233	21.05	28AUG980	16.89	28AUG980	PUMP	14600C		28AUG980	11 EST	1948	WMLL	STOCK	
6529	1SP00234	5.00	27MAY977											ABANDONED *REHBANDS-MALLAL
														A-AREA SEISMIC INVESTIGATION
6529	1WW00235	1.04	28AUG980	22.86	08DEC948	UNKN	5290M		08DEC948	11 EST	1948			STOCK
6529	1SP00236	5.00	27MAY977											ABANDONED *REDBANKS-MALLAL
														A-AREA SEISMIC INVESTIGATION
6529	1WW00237	27.21	10SEP980	16.43	10SEP980	BAIL	10200C		10SEP980	11 EST	1949	WMLL	UNKNOWN	
6529	1WW00238	28.96	08DEC948	24.08	08DEC948	UNKN	2800M		07DEC948	16 EST	1948			STOCK
6529	1SP00239	5.00	27MAY977											ABANDONED *REDBANK-MALLALA
														-AREA SEISMIC INVESTIGATION
6529	1SP00240													
6529	1WW00241	20.96	10SEP980	18.87	10SEP980	BAIL	9700C		10SEP980	11 EST	1949	WMLL	UNKNOWN	
6529	1SP00242	5.00	27MAY977											ABANDONED *REDBANK-MALLALA
														-AREA SEISMIC INVESTIGATION
6529	1SP00243	5.00	27MAY977											ABANDONED *REDBANKS-MALLAL
														ABANDONED *REDBANKS-MALLAL
6529	1SP00244	5.00	27MAY977											A-AREA SEISMIC INVESTIGATION
														UNKNOWN *REDBANKS-MALLAL
6529	1SP00245	5.00	27MAY977											A-AREA SEISMIC INVESTIGATION
														ABANDONED *REDBANKS-MALLAL
6529	1SP00246	5.00	27MAY977											A-AREA SEISMIC INVESTIGATION
														ABANDONED *REDBANKS-MALLAL
6529	1SP00247	5.00	27MAY977											A-AREA SEISMIC INVESTIGATION
														ABANDONED *REDBANKS-MALLAL
6529	1SP00248	5.00	27MAY977											A-AREA SEISMIC INVESTIGATION
														ABANDONED *REDBANKS-MALLAL
6529	1SP00249	5.00	27MAY977											A-AREA SEISMIC INVESTIGATION
														ABANDONED *REDBANKS-MALLAL
6529	1WW00250	6.22	12SEP980											A-AREA SEISMIC INVESTIGATION
6529	1SP00251	5.00	27MAY977											UNKNOWN
														ABANDONED *REDBANKS-MALLAL
6529	1WW00252	55.84	22JUN949			UNKN	8382M		15JUL949					A-AREA SEISMIC INVESTIGATION
														UNKNOWN *WHITWARTA-COAL
														FIELDS COAL

GEOLOGICAL

GEOLOGICAL

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UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS
6529	1MW00253	110.00	02JUN978							GEOL	BACKFILLED *ST.VINCENT-BASI N-COAL-FIELD COAL
6529	1MW00254	7.80	06APR978								ABANDONED *ST.VINCENT-BASI N-COAL-FIELDS COAL
6529	1MW00256	99.06	27AUG959	UNKN	17136M	17AUG959				GEOL	UNKNOWN *INKERMAN-AREA C DAL
6529	1MW00257	104.55	06FEB923							GEOL	UNKNOWN *INKERMAN-AREA C DAL
6529	1MW00258	99.67	29MAR923							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00259	94.49	1923							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00260	102.12	C1922							GEOL	UNKNOWN *INKERMAN-BORE C DAL
6529	1MW00261	106.98	08DEC931							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00262	95.10	23FEB932							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00263	114.70	03JUL975								*INKERMAN-NO 48 MINERAL INVESTIGATION
6529	1MW00264	93.27	13JUN932								UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00265	94.73	10AUG932							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00266	91.44	25NOV932							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00267	28.06	29JUN975							GEOL	ABANDONED *INKERMAN NO 14A MINERAL INVESTIGATIONS
6529	1MW00268	98.70	12FEB933								UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00269	94.79	30APR923							GEOL	UNKNOWN *INKERMAN-COAL F IELDS COAL
6529	1MW00270	133.80	10OCT947	UNKN	42240M	06OCT949				GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00271	100.28	16APR932							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00272	95.10	20SEP932								UNKNOWN *INKERMAN-BALAKL AVA-COAL-FIELDS COAL
6529	1MW00274	110.34	22AUG923							GEOL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529	1MW00275	99.97	27OCT931							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00276	77.72	04SEP931							GEOL	UNKNOWN *BALAKLAVA-COAL- FIELDS COAL
6529	1MW00277	1.00	20SEP978	UNKN	7426M	19MAY955					BACKFILLED
6529	1MW00278	34.17	20SEP978	17.44	20SEP978	BAIL	925M	9.1	20SEP978	WMLL	ABANDONED
6529	1MW00279	45.72	26APR949								UNKNOWN *WHITWARTA-COALF IELD COAL
6529	1MW00280	94.49	20MAR953	33.53	20MAR953	UNKN	30274M	20MAR953			STOCK
6529	1MW00281	64.62	07APR949							GEOL	UNKNOWN *WHITWARTA-COAL- FIELD COAL
6529	1MW00282	44.81	11MAY949								UNKNOWN *WHITWARTA-COAL- FIELD COAL
6529	1MW00283			UNKN	111384M	20JUN955					UNKNOWN
6529	1MW00284	40.54	25MAY949							GEOL	UNKNOWN *WHATWARTA-COAL- FIELDS COAL

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6529	1MW00285	100.89	17MAR949	UNKN	30988M	04MAR949					GEOL	UNKNOWN *WHATWARTA-COAL-FIELDS' COAL
6529	1MW00286	2.44									DRIL	UNKNOWN *DIAMOND-LAKE GY PSUM DEPOSITS
6529	1MW00287	53.95	06OCT950								GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS' COAL
6529	1MW00288	33.53	13OCT959								GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS' COAL
6529	1MW00289	34.14	25OCT950								GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS' COAL
6529	1MW00290	2.44	01955								DRIL	UNKNOWN *DIAMOND-LAKE GY PSUM DEPOSITS
6529	1MW00291	50.29	29NOV950								GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS' COAL
6529	1MW00292	58.52	18FEB949								GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS' COAL
6529	1MW00293	45.72	29JUL949									UNKNOWN *WHITWARTA-COAL-FIELDS'
6529	1MW00294	40.54										UNKNOWN
6529	1MW00295	42.37	11MAY949	UNKN	8597M	03JUN949					GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS' COAL
6529	1MW00296	45.26	26MAY949	UNKN	2356M	24JUN948					GEOL	UNKNOWN *WHITWARTA-COAL-FIELDS'
6529	1MW00297	18.29	29JUN955	BAIL	9850C	28OCT980						UNKNOWN
6529	1MW00298	8.08	23OCT980	BAIL	5050C	23OCT980	11 EST	1949		WMLL		STOCK
6529	1MW00299	9.53	23OCT980	UNKN	7740M	10JAN949	32 EST	1949		WMLL		STOCK
6529	1MW00300	38.18	28OCT980	UNKN	13750C	28OCT980					GEOL	STOCK+IRR
6529	1MW00301	17.98	29JUN955	UNKN	4198M	29JUN955				WMLL		UNKNOWN
6529	1MW00302	19.12	28OCT980	BAIL	6550C	28OCT980				WMLL		IRRIGATION
6529	1MW00303	13.33	28OCT980	BAIL	4850C	28OCT980				WMLL		UNKNOWN
6529	1MW00304	17.51	23OCT980	BAIL	5550C	23OCT980	11 EST	1949		WMLL		STOCK
6529	1MW00305	20.73	10JAN949		3384M	16FEB949	11 EST	1949		WMLL		STOCK
6529	1MW00306	10.30	23OCT980	UNKN	3334M	10JAN949	108 EST	1949				NOT IN USE
6529	1MW00307	11.39	28OCT980	UNKN	2756M	06JAN949	11 EST	1949		WMLL		STOCK
6529	1MW00308	30.42	24SEP980	UNKN	2528M	06JAN949	108	1949				STOCK
6529	1MW00309	19.81	12SEP968	UNKN	48338M	12SEP968	872 EST	1968				IRRIGATION
6529	1MW00310	24.10	15SEP980	BAIL	5250C	15SEP980				PUMP		GENERAL
6529	1MW00311	27.33	15OCT980	BAIL	5100C	15OCT980	108 EST	1949		WMLL		STOCK
6529	1MW00312	19.88	15SEP980	BAIL	4850C	15SEP980	54 EST			WMLL		STOCK
6529	1MW00313	29.33	15OCT980	BAIL	4500C	15OCT980	108 EST	1949		WMLL		STOCK
6529	1MW00314	61.50	18JAN977	UNKN	5200M	18JAN977	864 EST	10HRS 1977			DRIL	UNKNOWN
6529	1MW00315	24.38	06JAN949	UNKN	2071M	06JAN949	11 EST	1949		WMLL		STOCK
6529	1MW00316	1.45	15OCT980		27.43	06JAN949	32 EST	1949		WMLL		STOCK
6529	1MW00317	24.37	15OCT980	BAIL	4600C	15OCT980	11 EST	1949		PUMP		UNKNOWN
6529	1MW00318	1.10	15OCT980	UNKN	5898M	16FEB949	21 EST	1949		WMLL		STOCK
6529	1MW00319	16.74	16OCT980	UNKN	30388M	17NOV977	32 EST	1949		WMLL		UNKNOWN
6529	1MW00320	73.15	16JUL973	PUMP	3950C	16OCT980	4 EST	1973		PUMP		UNKNOWN
6529	1MW00321	16.38	16OCT980	BAIL	3650C	16OCT980	32 EST	1949		PUMP		
6529	1MW00322	3.65	16OCT980	UNKN	3313M	06JAN949	21 EST	1949		WMLL		UNKNOWN
6529	1MW00323	1.20	16OCT980	UNKN	5669M	06JAN949	11 EST	1949		WMLL		UNKNOWN
6529	1MW00324	15.28	16OCT980	UNKN	2756M	06JAN949	11 EST	1949		WMLL		UNKNOWN
6529	4MW00325	111.56	17JUL975									ABANDONED *TNKERNAN-NO41A MINERAL INVESTIGATION
6529	4MW00326	76.81	23NOV951								GEOL	UNKNOWN *CLINTON-AREA CO AL EXPLORATION
6529	4MW00327	78.33	05DEC961								GEOL	UNKNOWN *CLINTON-AREA CO AL EXPLORATION

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6529	4WW00328	62.49									DRY HOLE
6529	4WW00329	79.25	06JUL955								UNKNOWN
6529	4WW00330	118.26	19SEP960							GEOL	UNKNOWN *KULPARA-AREA GE
6529	4WW00331	64.01									OCEMICAL SAMPLING
6529	4WW00332	74.30	19OCT946							DRIL	DRY HOLE *KULPARA-AREA DO
6529	4WW00333	120.06	08DEC969								LIMITE
6529	4WW00334	118.87	06NOV961	UNKN	685M	03NOV961				GEOL	UNKNOWN *KULPARA-AREA GE
6529	4WW00335	91.74	28OCT959	63.70	28OCT959	UNKN	1200M	20OCT959	131 EST	1959	OCEMICAL SAMPLING
6529	4WW00336	79.86	05MAR962							GEOL	UNKNOWN *PT.CLINTON-AREA
6529	4WW00337	57.91	22FEB971	51.82	22FEB971	UNKN	9930M	7.5	18FEB971		COAL EXPLORATION
6529	4WW00338	129.24								GEOL	ABANDONED *PT.CLINTON-AREA
6529	4WW00339	99.06	18JAN922								COAL EXPLORATION
6529	4WW00340	82.70	24NOV922							GEOL	UNKNOWN *PT.CLINTON-AREA
6529	4WW00341	105.23	03NOV922							GEOL	UNKNOWN *PT.CLINTON-BROW
6529	4WW00342	100.39	23JAN923							GEOL	N-COAL-FIELDS COAL
6529	4WW00343	120.24	26SEP922							GEOL	UNKNOWN *PT.CLINTON-BROW
6529	4WW00344	93.52	10JUL922							GEOL	N-COAL-FIELDS COAL
6529	4WW00345	35.66	21JUN922							GEOL	UNKNOWN *PT.CLINTON-BROW
6529	4WW00346	137.23	22AUG975							GEOL	N-COAL-FIELDS COAL
6529	4WW00347	86.56	20SEP921							GEOL	UNKNOWN *CLINTON-AREA-BR
6529	4WW00348	128.47	11MAY922							GEOL	OWN-COAL-FIELDS COAL
6529	4WW00349	120.54	25AUG922							GEOL	UNKNOWN *CLINTON-AREA BR
6529	4WW00350	140.51	20DEC922							GEOL	OWN-COAL-FIELDS COAL
6529	4WW00351	138.99	15FEB923							GEOL	UNKNOWN *CLINTON-AREA-BR
6529	4WW00352	120.70	28FEB923							GEOL	OWN-COAL-FIELDS COAL
6529	4WW00353	145.69	30MAR922							GEOL	UNKNOWN *CLINTON-AREA-BR
6529	4WW00354	105.00	02AUG921							GEOL	OWN-COAL-FIELDS COAL
6529	4WW00355			UNKN	29702M	28MAY972				GEOL	UNKNOWN *CLINTON-AREA-BR
6529	4WW00356	68.58	12JUN922							GEOL	OWN-COAL-FIELDS COAL
6529	4WW00357	35.97	27MAY922							GEOL	UNKNOWN *CLINTON-AREA-BR
6529	4WW00358	38.40	27JUL922							GEOL	OWN-COAL-FIELDS COAL

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6529 4EW00359	21.34 22JUN956	10.97 22JUN956								GEOL	UNKNOWN *NANTAWARRA-SILO FOUNDATION TESTING
6529 4EW00360	16.91 24JUL956	9.14 24JUL956								GEOL	UNKNOWN *NANTAWARRA-SILO FOUNDATION TESTING
6529 4WP00361			UNKN	9800M		03JUN944					IRRIGATION
6529 4MW00362	29.69 29JAN972									GEOL	UNKNOWN *ADELAIDE-PT. PI RIE-RAILWAY RALLAST INVESTI
6529 4MW00363	16.91 20AUG980	14.05 20AUG980	BAIL	5650C		20AUG980				WMLL	
6529 4MW00364	12.23 20AUG980	10.16 20AUG980	BAIL	6950C	8.0	20AUG980				WMLL	NOT IN USE
6529 4MW00365	14.44 20AUG980	4.09 20AUG980	BAIL	6750C		20AUG980	11 EST	1949		WMLL	ABANDONED
6529 4MW00366	11.97 20AUG980	7.13 20AUG980	BAIL	1200C	7.6	20AUG980					UNEQUIPPED
6529 4DW00368	53.95 14JUN966	1.52 14JUN966	UNKN	15000M	5.7	16JUN966	21 EST	1966		GEOL	DRAINAGE
6529 4MW00369	92.96 24JUN959	9.14 24JUN959	UNKN	17136M		10JUN959	21 EST	1959		GEOL	UNKNOWN *BALAKLAVA-COAL-FIELD COAL EXPLORATIONS
6529 4MW00370	106.78 11JUN975										ABANDONED *INKERMAN-NO 38 MINERAL INVESTIGATIONS
6529 4MW00371	74.18 19MAY959	5.49 18MAY959	UNKN	1200M		19MAY959	25 BAIL	1959		GEOL	UNKNOWN *BALAKLAVA-COAL-FIELD COAL EXPLORATIONS
6529 4MW00372	87.48 02FEB949	2.44 02FEB949	UNKN	37271M		04FEB949				GEOL	UNKNOWN *BALAKLAVA-COAL-FIELDS COAL
6529 4MW00373	90.00 13DEC974	7.00 13DEC974	UNKN	32369M	5.9	27SEP974	483 EST	1974		GEOL	BACKFILLED *INKERMAN-AREA D EWATERING
6529 4MW00374	97.54 06APR959	11.58 06APR959								GEOL	UNKNOWN *BALAKLAVA-AREA COAL EXPLORATION
6529 4DW00375	104.30 25JUL974	3.37 25JUL974	UNKN	8500M	11.6	22JUL974				GEOL	UNKNOWN *INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4DW00376	78.00 02AUG974	4.98 02AUG974								GEOL	UNKNOWN *INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4DW00377	49.00 06AUG974	6.75 06AUG974	UNKN	24191M	8.1	06AUG974				GEOL	UNKNOWN *INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4DW00378	29.00 07AUG974	7.37 07AUG974	UNKN	21000M	9.2	07AUG974				GEOL	UNKNOWN *INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4MW00379	96.32 30JUL959	9.14 30JUL959	UNKN	17136M		30JUL959	44	1959		GEOL	*BALAKLAVA-COAL-FIELDS COAL EXPLORATION
6529 4MW00380	99.57 21JUN923									GEOL	UNKNOWN *INKERMAN-AREA L IGNITE DEPOSITS
6529 4MW00381	103.02 07JUN923									GEOL	UNKNOWN *INKERMAN-COAL-FIELDS COAL
6529 4MW00382	86.26 01DEC947	11.58 01DEC947	UNKN	39998M		11NOV947	163 EST	1947		DRIL	UNKNOWN *INKERMAN-COAL-FIELDS COAL
6529 4MW00383	83.82 06FEB948		UNKN	1830M		06FEB948	436 EST	1948			UNKNOWN *INKERMAN-COAL-FIELDS COAL
6529 4DW00384	82.00 22JUL975	3.62 22JUL975	UNKN	33750M	6.8	21JUL975				GEOL	ABANDONED *INKERMAN-AREA M INERAL INVESTIGATION
6529 4DW00385	61.44 24JUL975	3.68 24JUL975	UNKN	36050M	7.6	24JUL975				GEOL	*INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4DW00386	35.00 29JUL975	3.83 29JUL975	UNKN	36750M	8.0	29JUL975				GEOL	ABANDONED *INKERMAN-AREA M INERAL INVESTIGATION
6529 4DW00387	107.30 05AUG975	3.79 05AUG975	UNKN	30800M	7.6	05AUG975					ABANDONED *INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4DW00388	84.00 08AUG975	4.30 08AUG975	UNKN	35700M	8.0	08AUG975					ABANDONED *INKERMAN-AREA M INERAL INVESTIGATIONS
6529 4DW00389	61.50 12AUG975	3.41 12AUG975	UNKN	37450M	7.9	12AUG975					ABANDONED *INKERMAN-AREA M INERALS INVESTIGATIONS
6529 4DW00390	33.80 14AUG975	3.14 14AUG975	UNKN	33250M	9.4	14AUG975					ABANDONED *INKERMAN-AREA M INERAL INVESTIGATIONS

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6529 40W00391	12.00 09FEB976	3.10 09FEB976	UNKN	49000M	2.8 FEB976						ABANDONED *INKERMAN-AREA M MINERAL INVESTIGATIONS
6529 44W00392	103.00		UNKN	39708M	6.5 09DEC975						ABANDONED
6529 44W00393	92.96 21MAY948	9.75 21MAY948								DRIL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00394	99.67 24JUN948	8.23 24JUN948	UNKN	50237M	28MAY948	218 EST		1948		DRIL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00395	116.13 13OCT948	12.80 13OCT948	UNKN	57120M	15OCT949					GEOL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00396	93.57 04AUG948	9.45 04AUG948	UNKN	42369M	05JUL948					DRIL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00397	97.53 03SEP948	1.37 03SEP948	UNKN	17136M	03SEP948					DRIL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00398	86.86 08DEC948	1.67 08DEC948	UNKN	3550M	08DEC948					GEOL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00399	108.00 24JUN975									GEOL	ABANDONED *INKERMAN-NO 39 MINERAL INVESTIGATIONS
6529 44W00400	86.50 13APR976									GEOL	UNKNOWN *INKERMAN-AREA M MINERAL INVESTIGATIONS
6529 44W00401	86.00 11JUN978									GEOL	UNKNOWN *INKERMAN-NO42B MINERAL INVESTIGATIONS
6529 44W00402	96.00 11MAR976	11.55 11MAR976	UNKN	35000M	6.7 11MAR977					GEOL	UNKNOWN *INKERMAN-NO42C MINERAL INVESTIGATIONS
6529 44W00403	94.00 03MAY976									GEOL	UNKNOWN *INKERMAN-NO 42C MINERAL INVESTIGATIONS
6529 44W00404	90.22 10NOV948	5.79 10NOV948	UNKN	44982M	21OCT948					GEOL	UNKNOWN *INKERMAN-COAL-F IELDS COAL
6529 44W00405	233.17									DRIL	DRY HOLE
6529 14W00406	69.00 06SEP979	16.50 06SEP979	BAIL	3450C	7.5 09NOV980	1080 EST	17HRS	1979	PUMP	DRIL	UNKNOWN
6529 14W00408	72.00 28MAR980	15.00 28MAR980	PUMP	4500C	7.1 03SEP980	1080 EST	26HRS	1980	PUMP	DRIL	IRRIGATION
6529 24W00409	34.00 28APR980	20.00 28APR980				1080 EST		190		DRIL	UNKNOWN
6529 14W00410	39.00 21SEP979	7.38 29OCT980	PUMP	5600C	7.3 29OCT980	86 EST		1979	WMLL	DRIL	UNKNOWN
6529 4EW00411	25.00 13MAY980									GEOL	BACKFILLED *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00412	15.20 07MAY980									GEOL	UNKNOWN *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00413	15.00 11MAR980									GEOL	BACKFILLED *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00414	51.50 10MAY980									GEOL	BACKFILLED *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00415	25.00 10MAY980									GEOL	UNKNOWN *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00416	16.00 07MAY980									GEOL	BACKFILLED *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00417	31.15 09MAY980									GEOL	BACKFILLED *INKERMAN-BALAKL AVA-COAL-FIELDS GROUNDWATER
6529 4EW00418	7.14 21MAR980										DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529 4EW00419	7.14 21MAR980										DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529 4EW00420	7.14 21MAR980										DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529 4EW00421	7.14 21MAR980										DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529 4EW00422	7.14 21MAR980										DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING

UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS
6529	4EW00423	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00424	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00425	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00426	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00427	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00428	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00429	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00430	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00431	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00432	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00433	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00434	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00435	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00436	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00437	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00438	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00439	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00440	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00441	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00442	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00443	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00444	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00445	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00446	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00447	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00448	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00449	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00450	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING

DEPARTMENT OF MINES & ENERGY -BORE GENERAL INDEX MOST RECENT DATA

16/03/81.

UNIT NUMBER	DEPTH	SWD	SAMP	ATS	PH	SUPPLY(KL/D)	TIME	YEAR	METH	LOG	STATUS & REMARKS
6529	4EW00451	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00452	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00453	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00454	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00455	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00456	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00457	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00458	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00459	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00460	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4EW00461	7.14	21MAR980								DEWATERING *BOWMANS-TRIAL-P ITS DEWATERING
6529	4WP00464	1.50	20AUG980		8ATL	13500		20AUG980			STOCK DAM
6529	1WW00465	31.11	09SEP980	22.14	09SEP980	8ATL	74000	09SEP980		PUMP	STOCK+DOM
6529	1WW00466	23.61	09SEP980	19.48	09SEP980	8ATL	38500	09SEP980	95 EST	1980	PUMP DOMESTIC
6529	1WW00467	57.91	1973						240 EST	1980	PUMP IRRIGATION
6529	1WW00469	30.45	10SEP980	22.92	10SEP980	8ATL	76000	10SEP980			UNEQUIPPED
6529	1WW00469	25.60	21AUG980	9.12	21AUG980	GPUM	56000	21AUG980			STOCK
6529	1WW00470	12.69	28AUG980	7.66	28AUG980	8ATL	34000	28AUG980			UNEQUIPPED
6529	1WW00471	14.49	28AUG980	8.69	28AUG980	8ATL	33500	28AUG980			NOT IN USE
6529	1WW00472			10.48	28AUG980	GPUM	38000	28AUG980	48 EST	1980	STOCK
6529	1WW00473	24.38	28AUG980	9.97	28AUG980	8ATL	10800	28AUG980			STOCK
6529	1WW00474	57.50	07NOV980	12.35	07NOV980	8ATL	55500	07NOV980			UNEQUIPPED
6529	1WW00475	21.00	31980	7.08	29OCT980	GPUM	71000	29OCT980			STOCK
6529	1WW00476	18.04	28OCT980	9.10	28OCT980	8ATL	41500	28OCT980			UNEQUIPPED
6529	1WW00477	14.40	28OCT980	12.04	28OCT980	8ATL	79750	28OCT980			DILAPIDATO
6529	1WW00478	24.38	1950			GPUM	39500	15OCT980			STOCK
6529	1WW00479	24.78	24SEP980	16.58	24SEP980	GPUM	37000	24SEP980			STOCK
6529	1WW00480	45.72	1974			GPUM	39000	14OCT980	383 EST	1980	PUMP STOCK+IRR
6529	1WW00481	39.52	1974			GPUM	44000	14OCT980			PUMP STOCK
6529	1WW00482	14.07	28OCT980	9.24	28OCT980	8ATL	18500	28OCT980			UNEQUIPPED
6529	1WW00483	20.62	1958			8ATL	49500	28OCT980			STOCK+IRR
6529	1WW00484	18.34	08NOV980	11.24	08NOV980	8ATL	88000	08NOV980			NOT IN USE
6529	1WW00485	20.38	21AUG980	10.04	21AUG980	8ATL	64500	21AUG980			STOCK

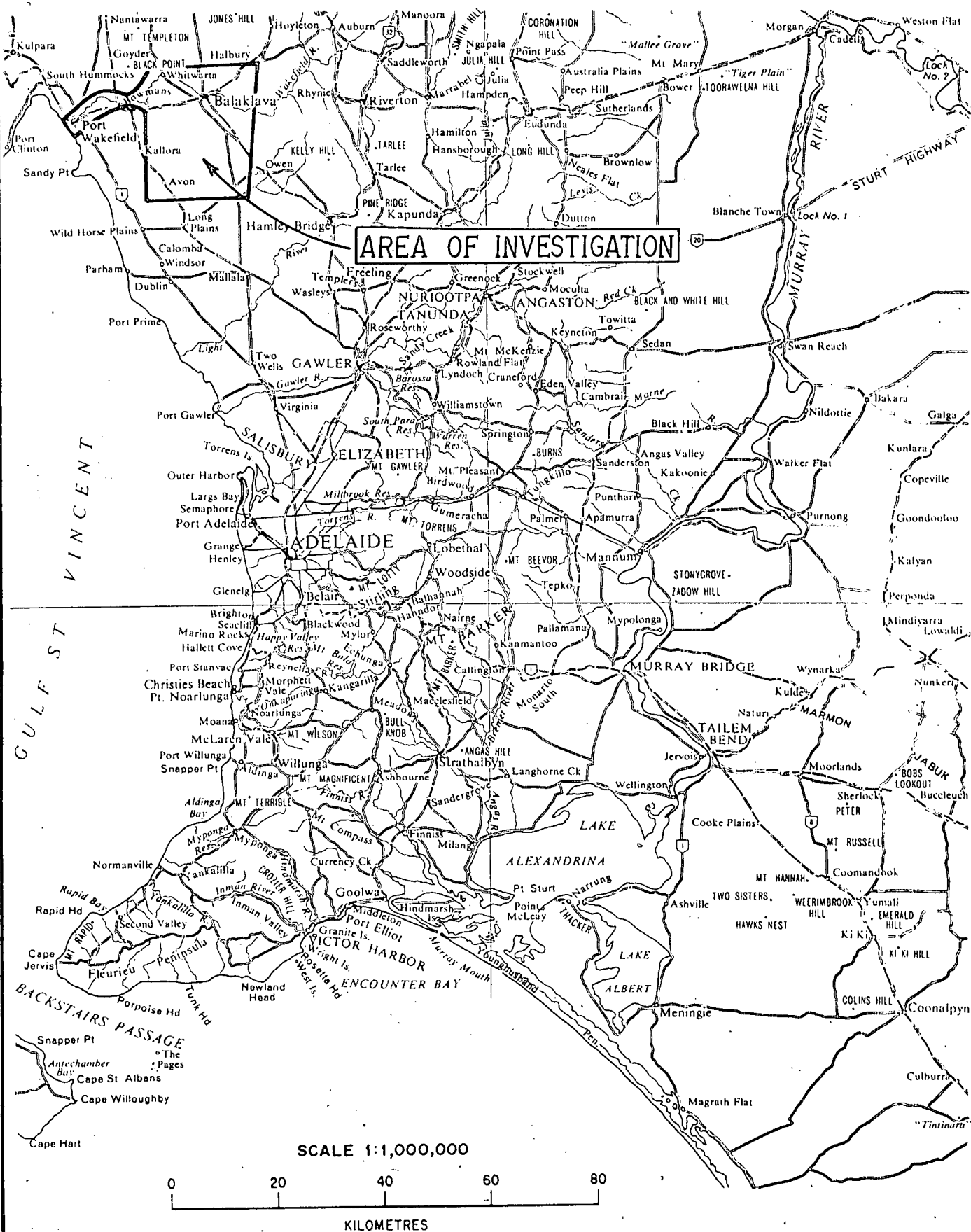
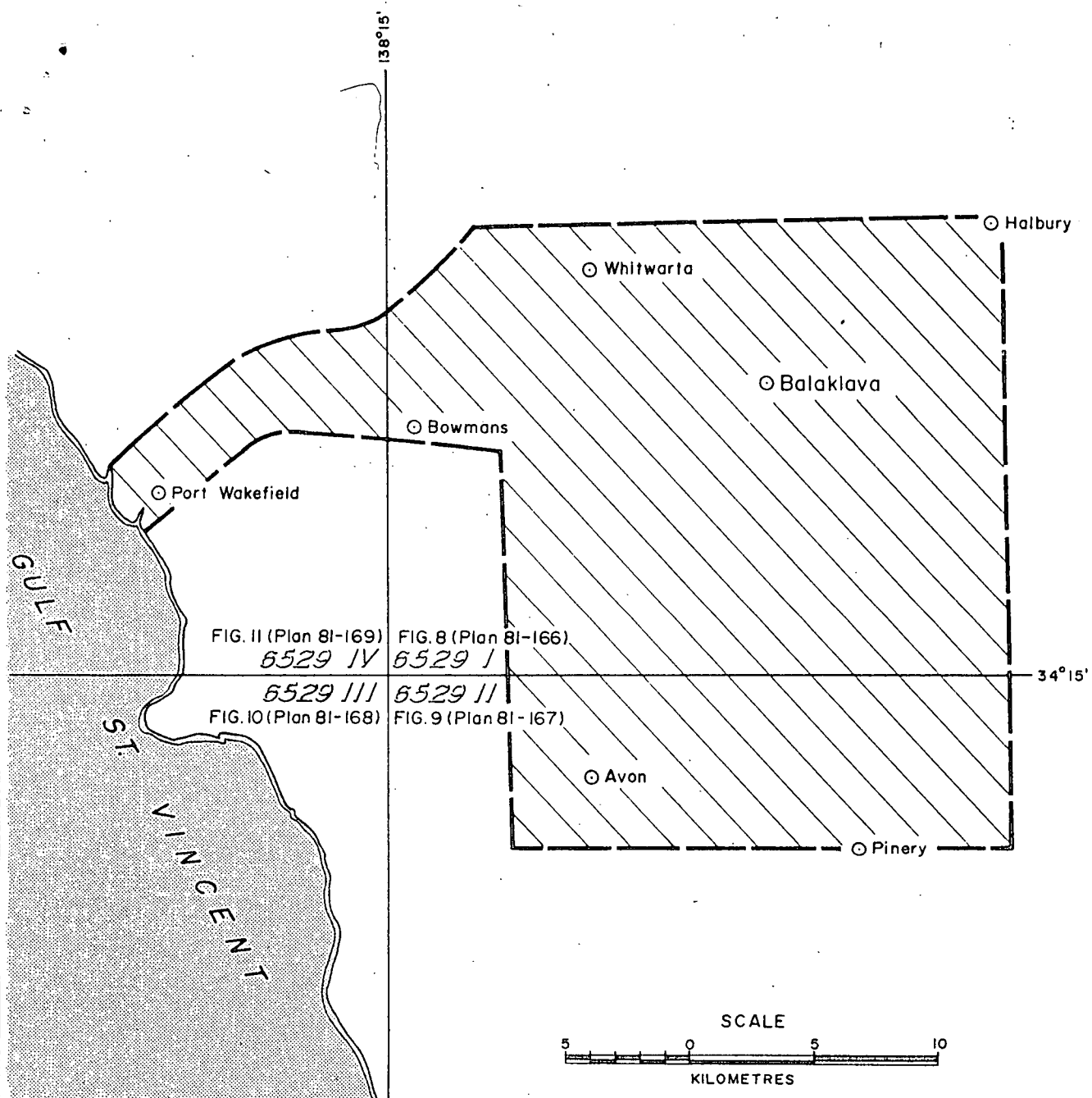


FIG. 1

DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA		SCALE 1:1 000 000
INKERMAN - BALAKLAVA REGIONAL GROUNDWATER SURVEY LOCALITY PLAN		DATE 27/3/80
COMPILED: M. Cobb		PLAN NUMBER
DRN. E.C. CKD.		S 15346

2274



REFERENCE

6529 III

1:50,000 sheet number



Approximate limit of current
water well survey

FIG. 2

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY
AREA OF INVESTIGATION

COMPILED
M. Cobb

C.D.O. DATE

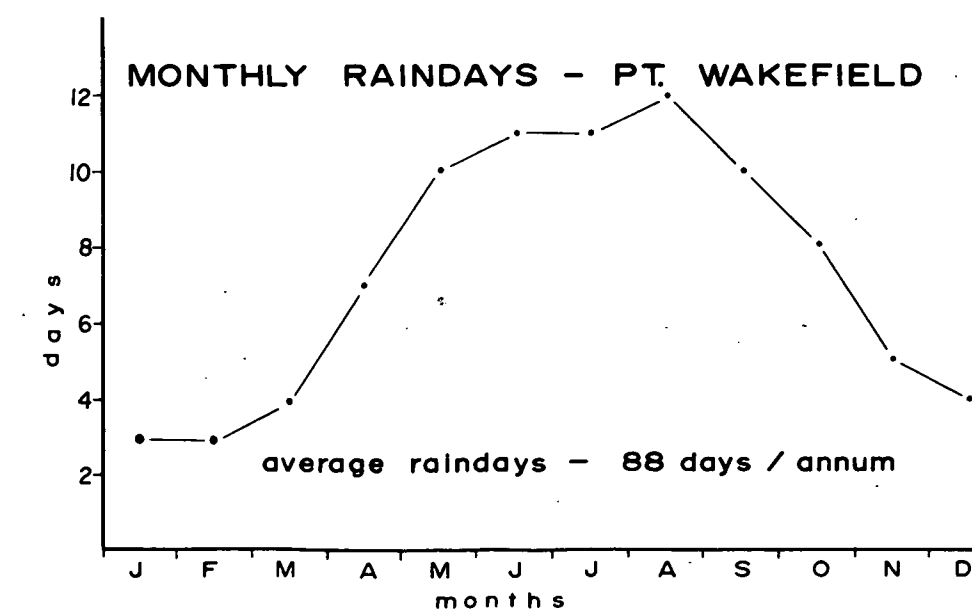
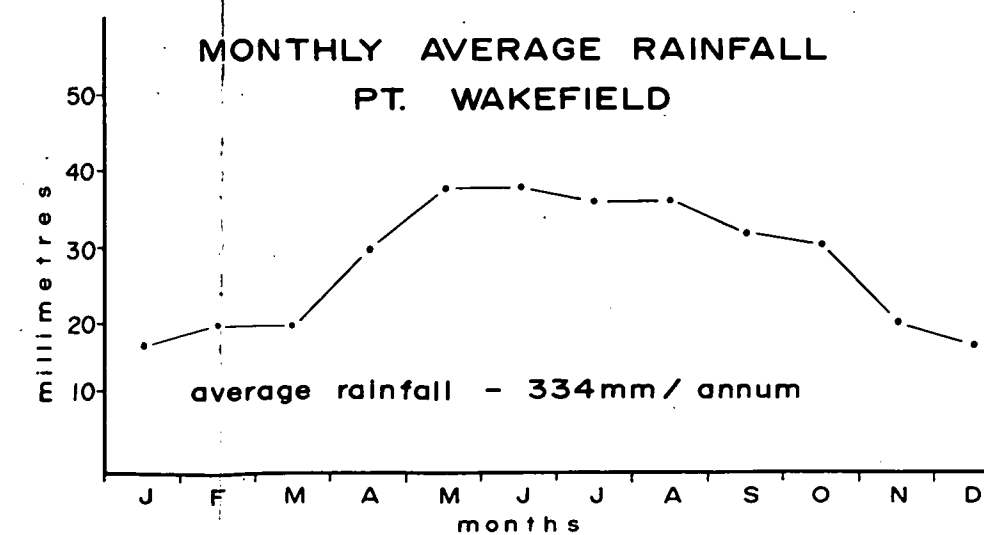
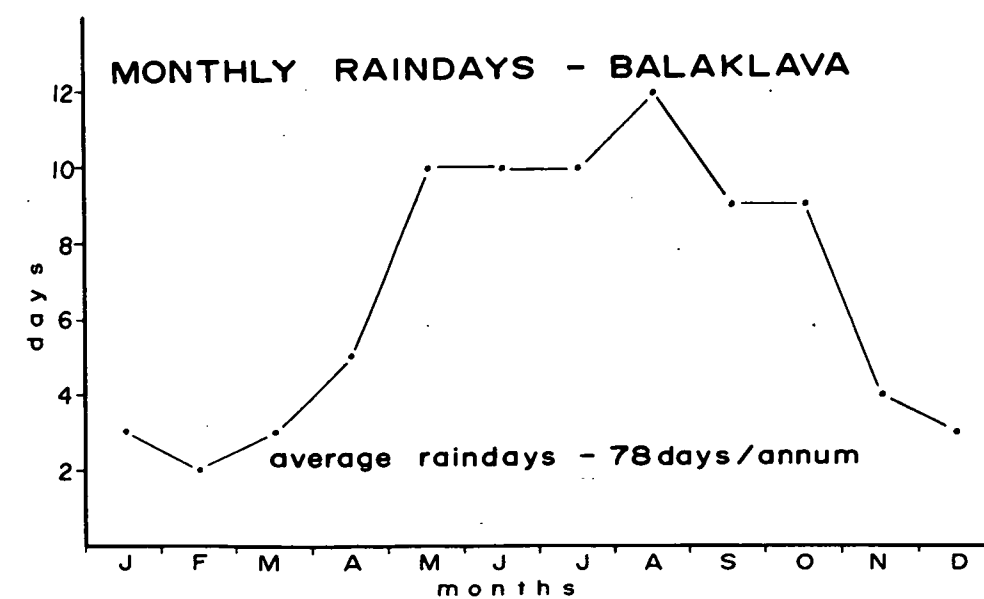
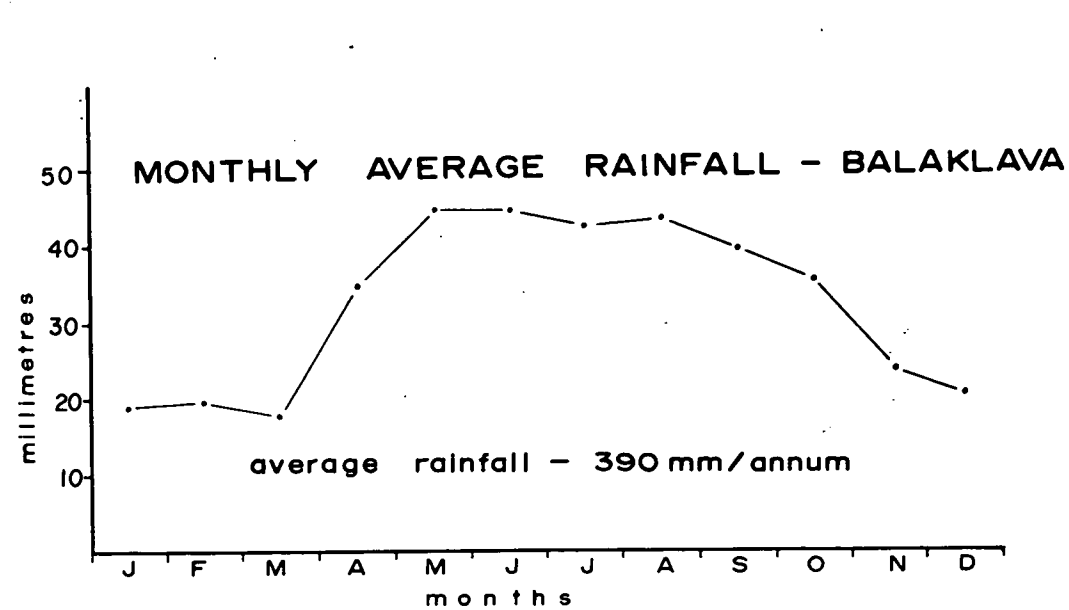
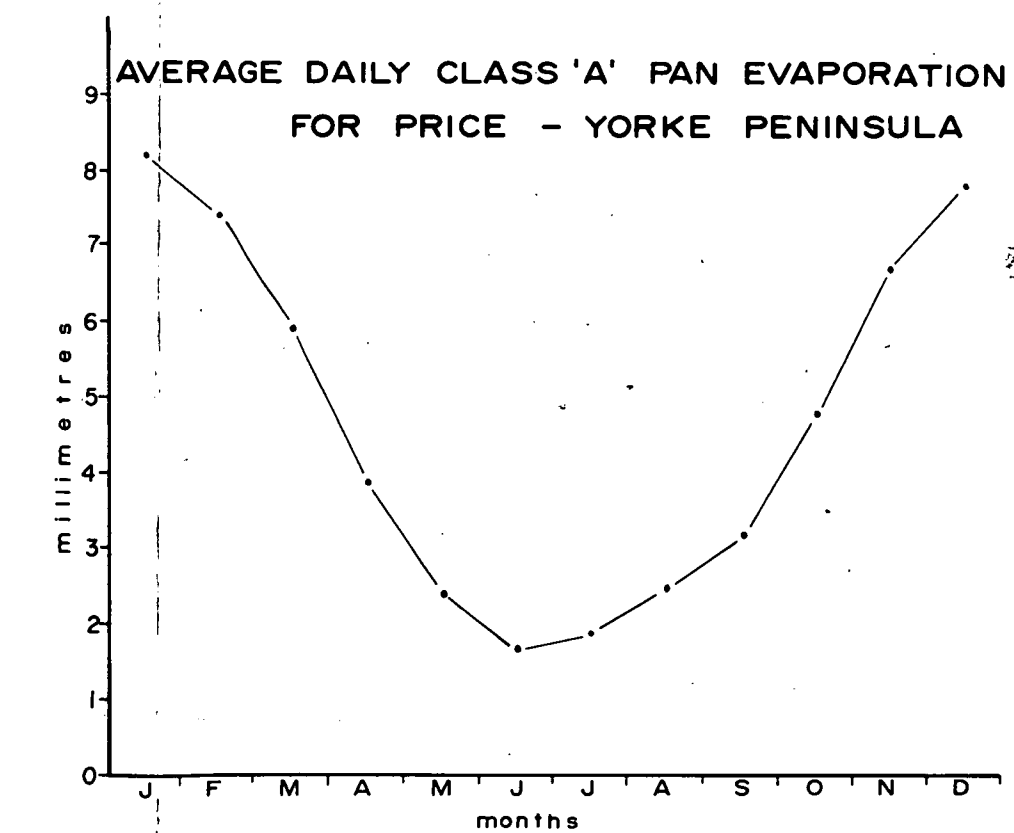
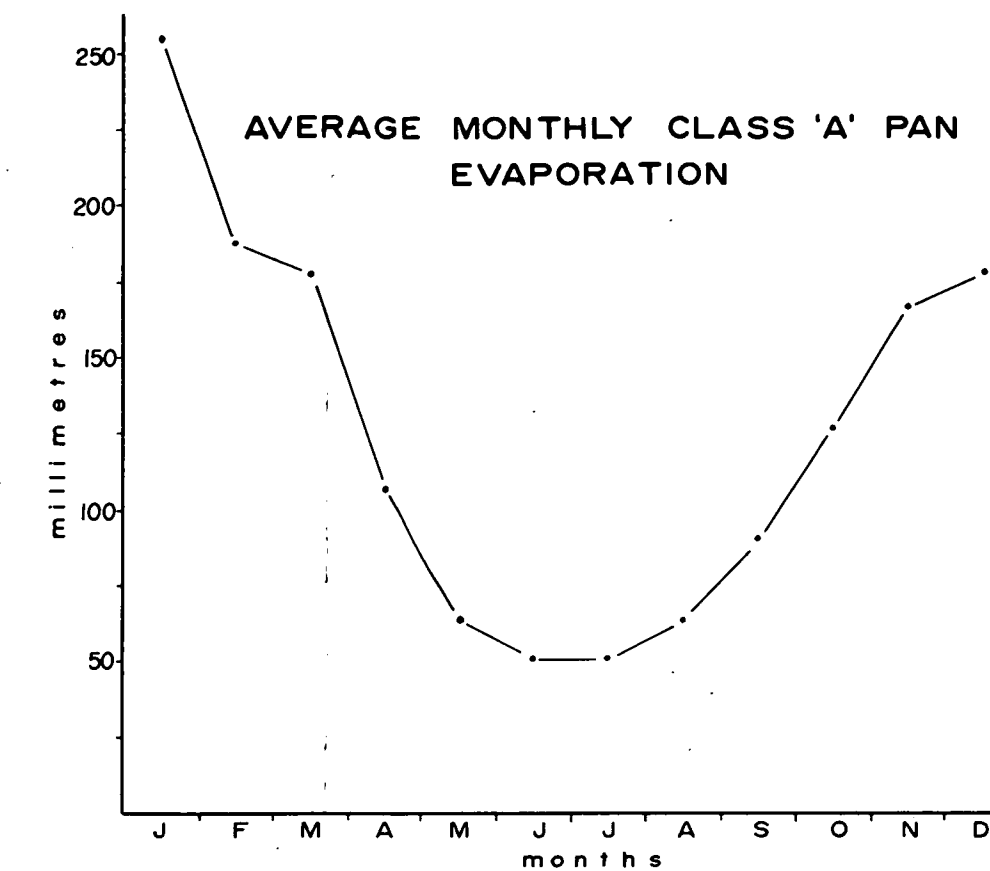
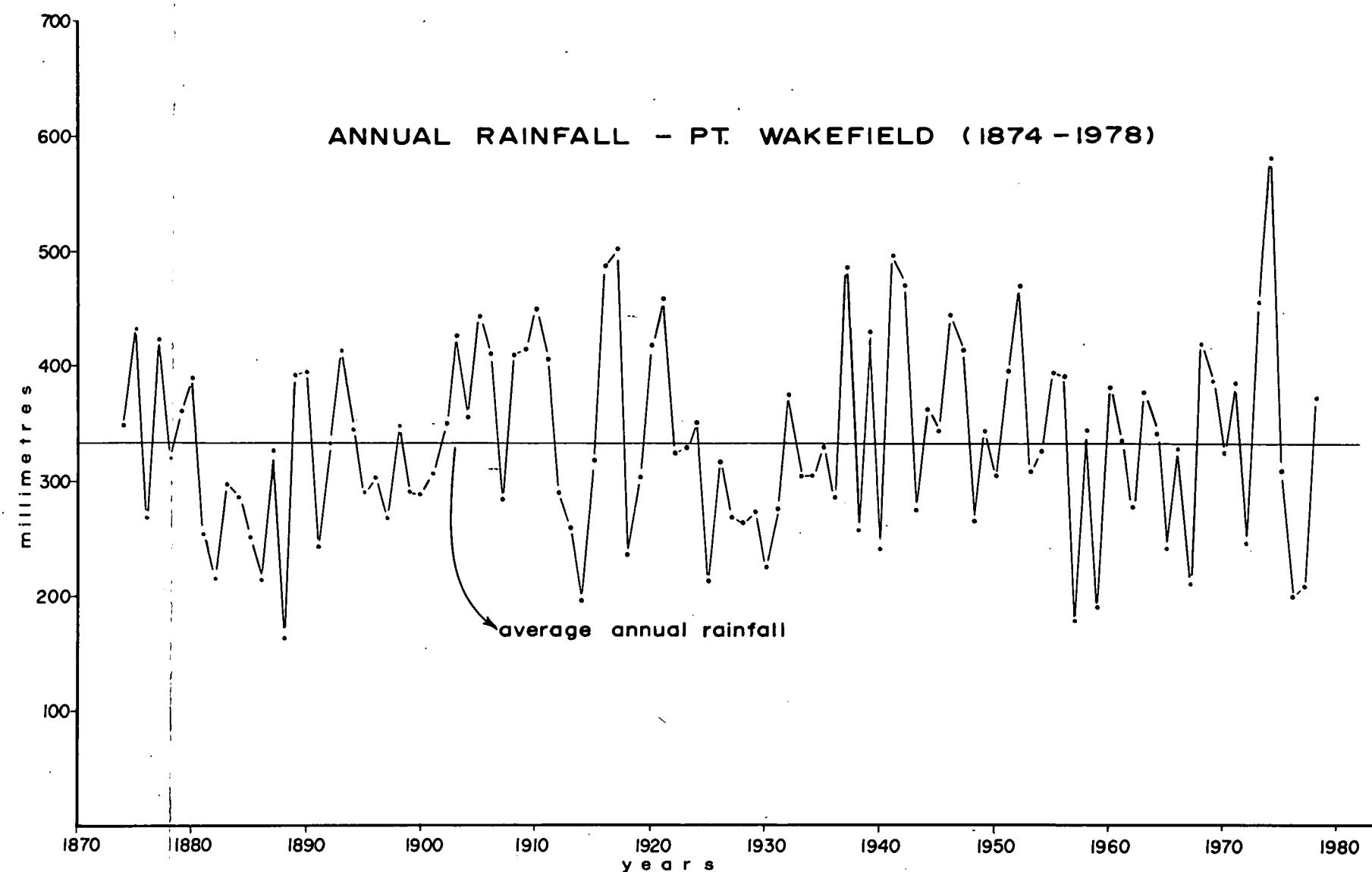
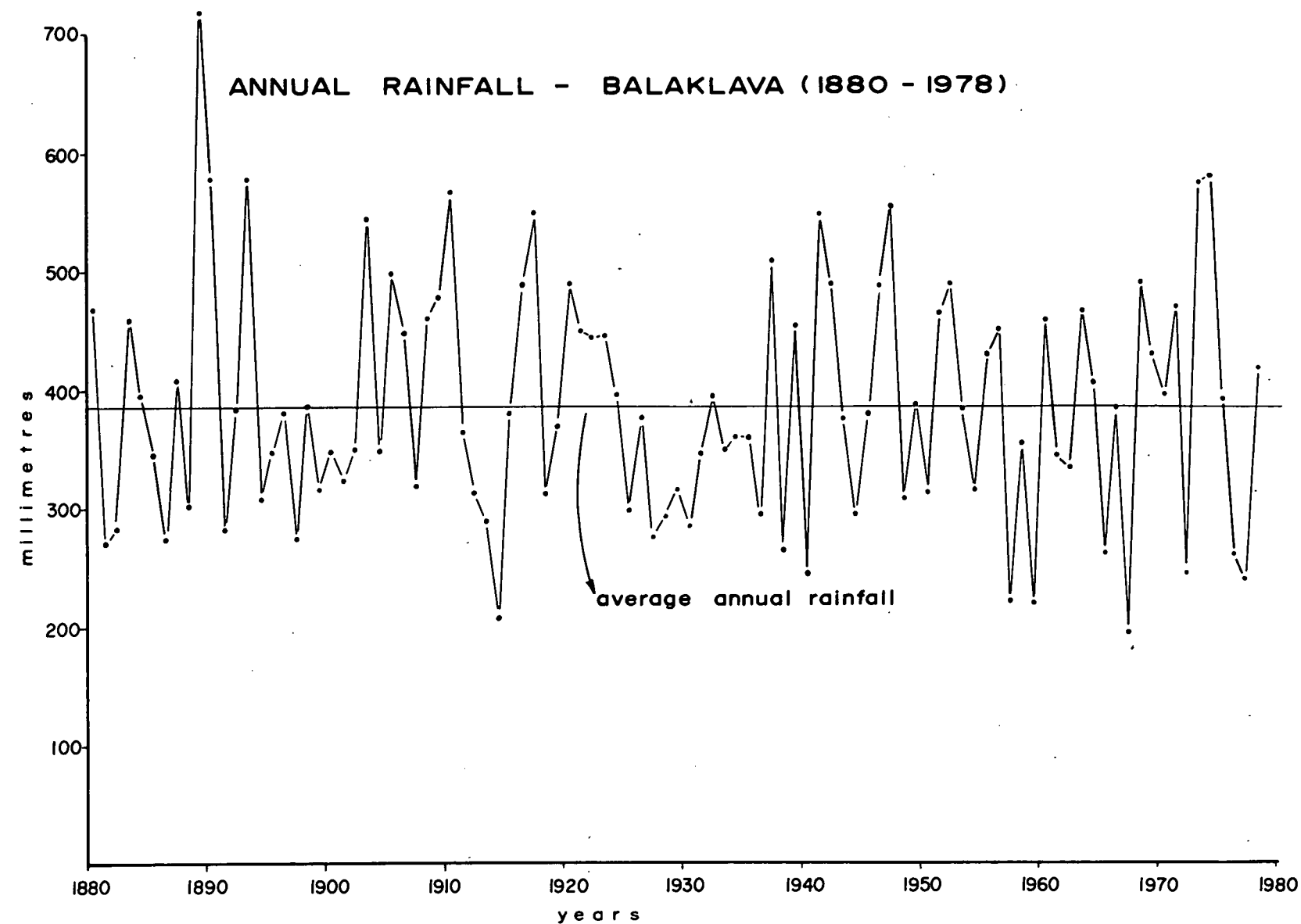
DRAWN
E.C.

SCALE 1:250,000

DATE
12 / 5 / 81
CHECKED

PLAN NUMBER

S 15521



		COMPILED S. Kallieske	DATE 24/4/81
INKERMAN - BALAKLAVA REGIONAL GROUNDWATER SURVEY RAINFALL AND EVAPORATION STATISTICS		DRAWN E. C.	SCALE
DATE 13/ 4/ 81 CHECKED		PLAN NUMBER 81-164	

FIG. 3

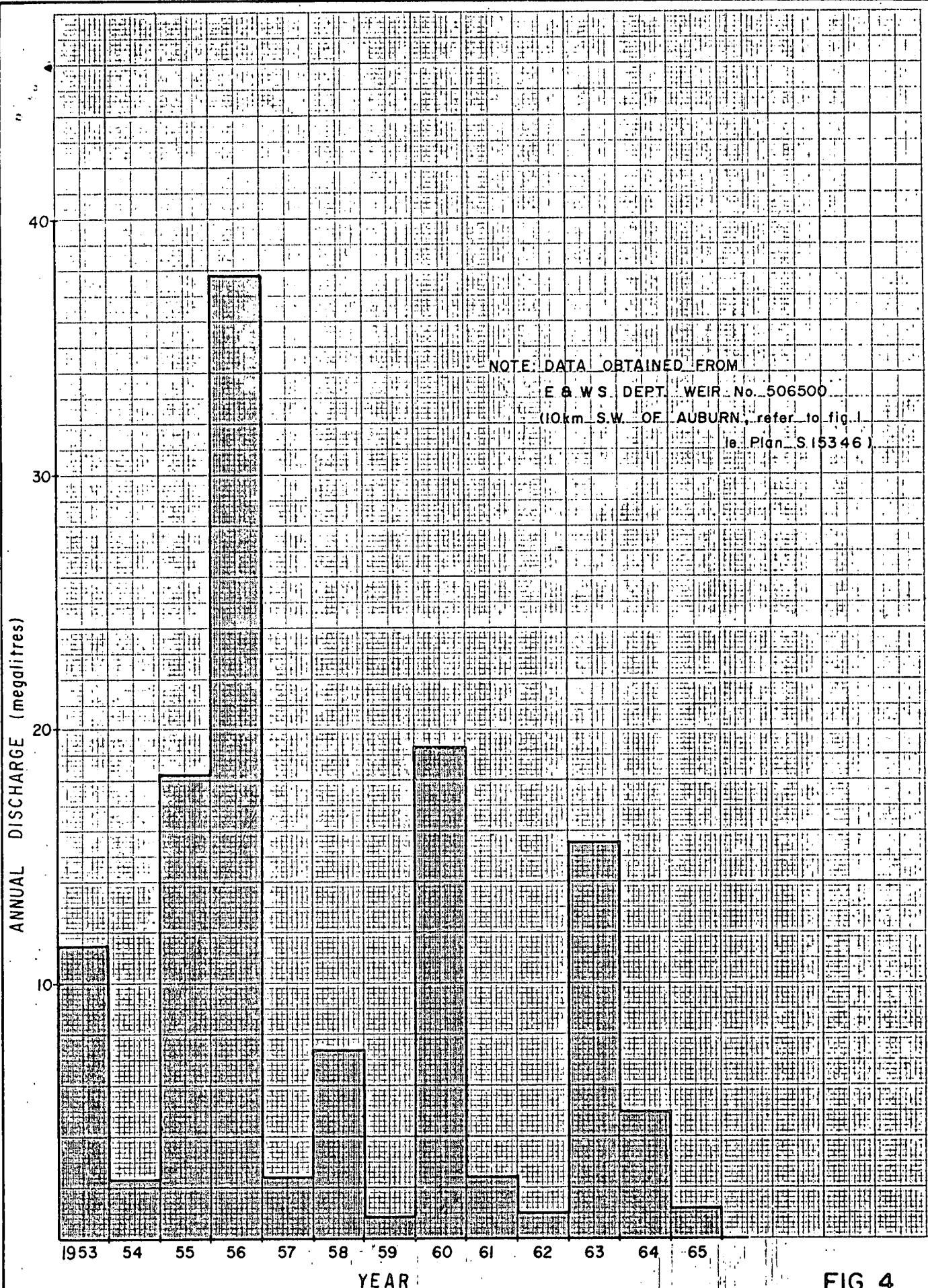


FIG. 4



DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

COMPILED
B. Thompson

C.D.O. DATE

DRAWN
E.C.

SCALE

DATE
30/3/81
CHECKED

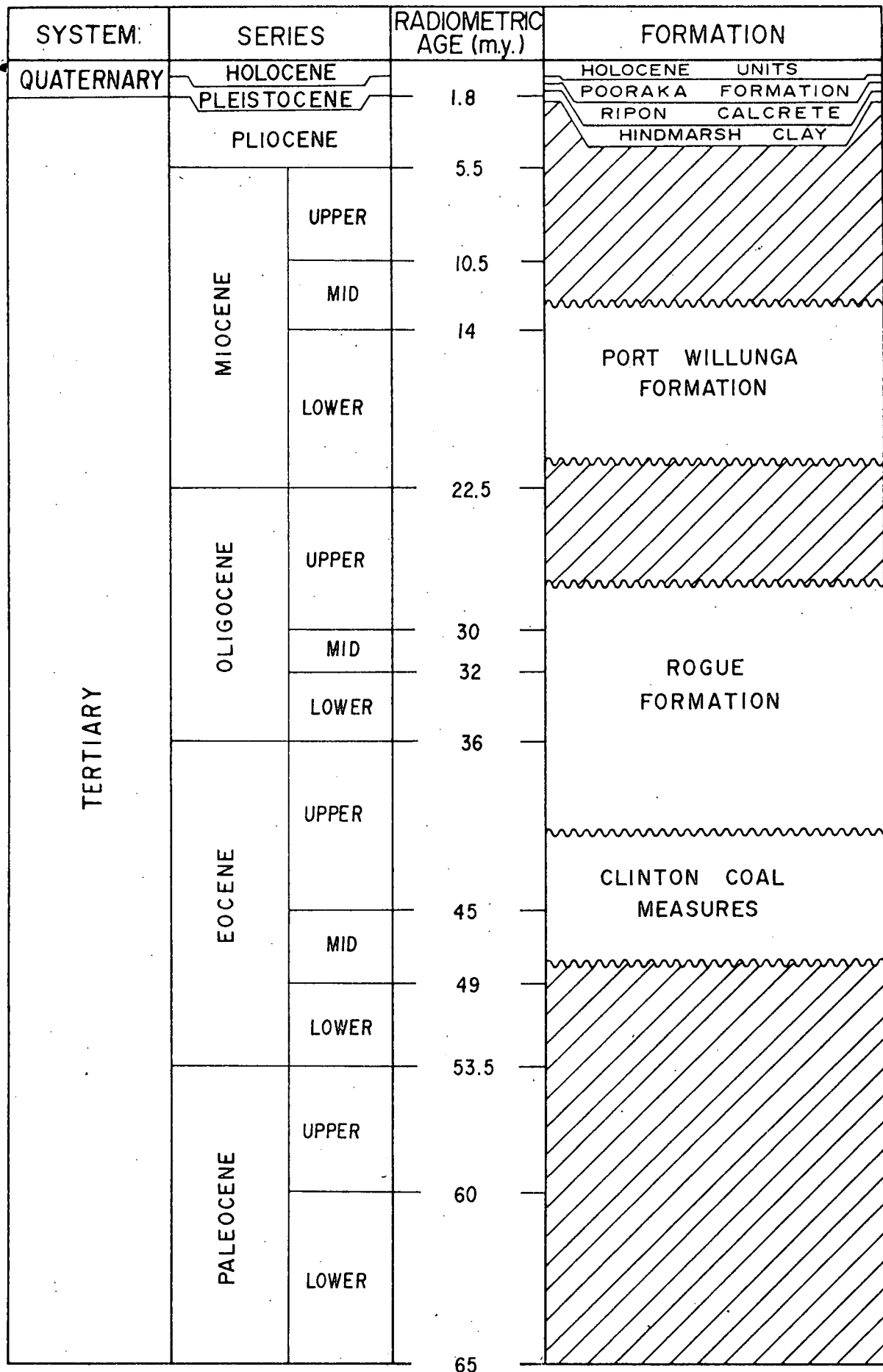
PLAN NUMBER

S15347

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY

ANNUAL DISCHARGE - WAKEFIELD RIVER

2274



Source: Springbett, G. 1980

FIG. 5



DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

COMPILED
M. Cobb

C.D.O. DATE

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY
GEOLOGICAL SEQUENCE

DRAWN
E.C.

SCALE

DATE
30/ 3/81
CHECKED

PLAN NUMBER
S 15348

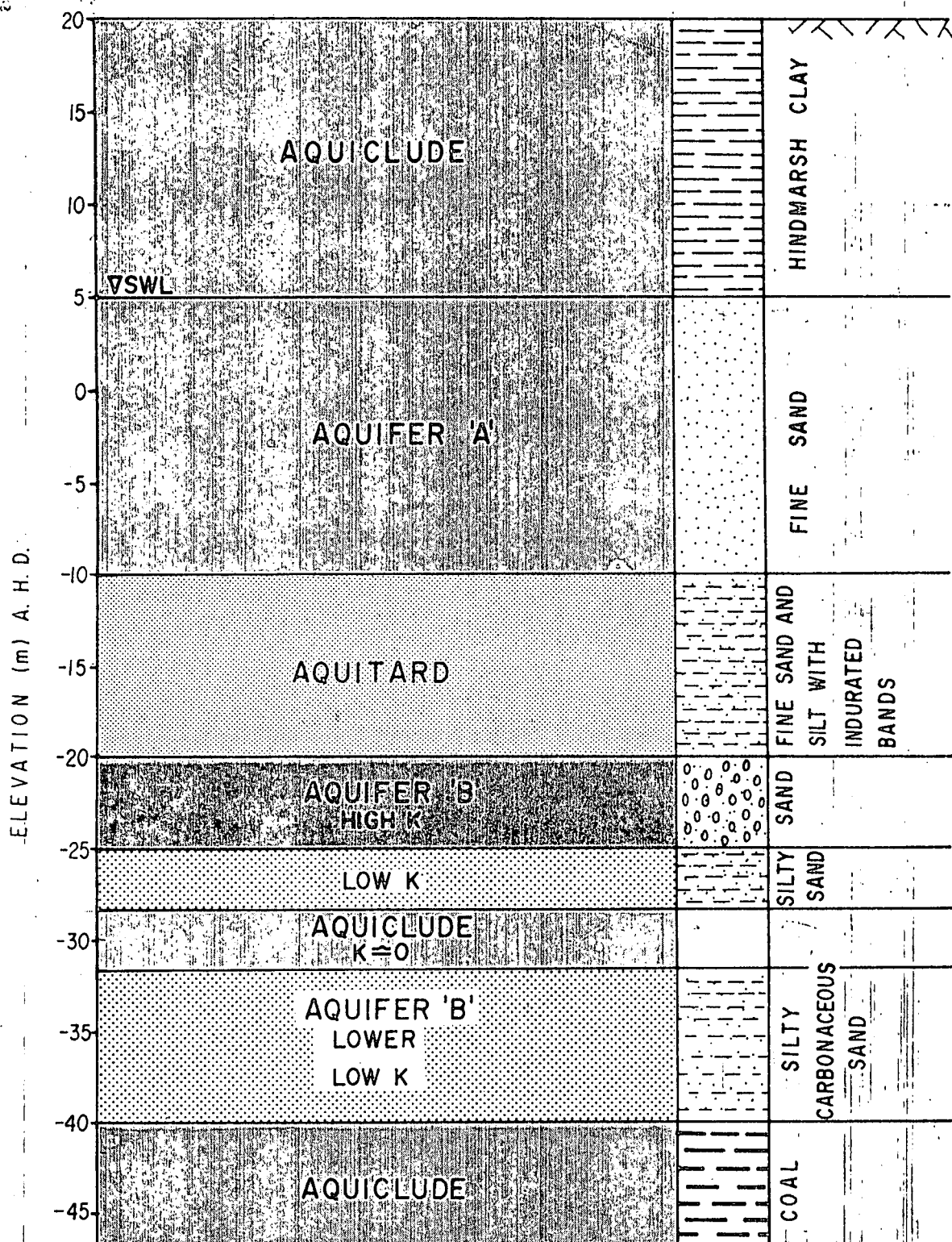


FIG. 6



DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

COMPILED
D. Armstrong

C.O.O. DATE

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY

DRAWN
E.C.

SCALE

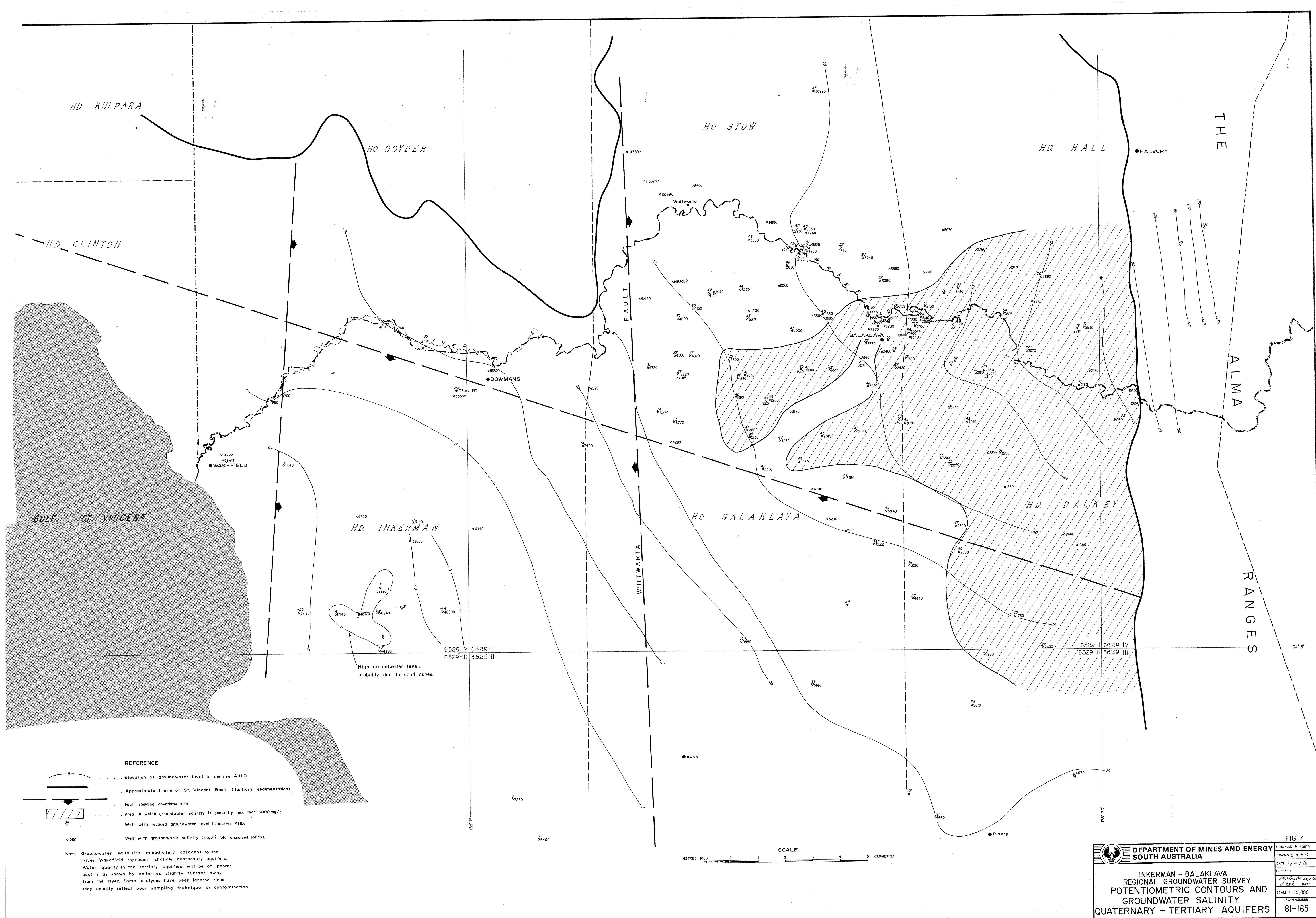
DATE
31/3/81

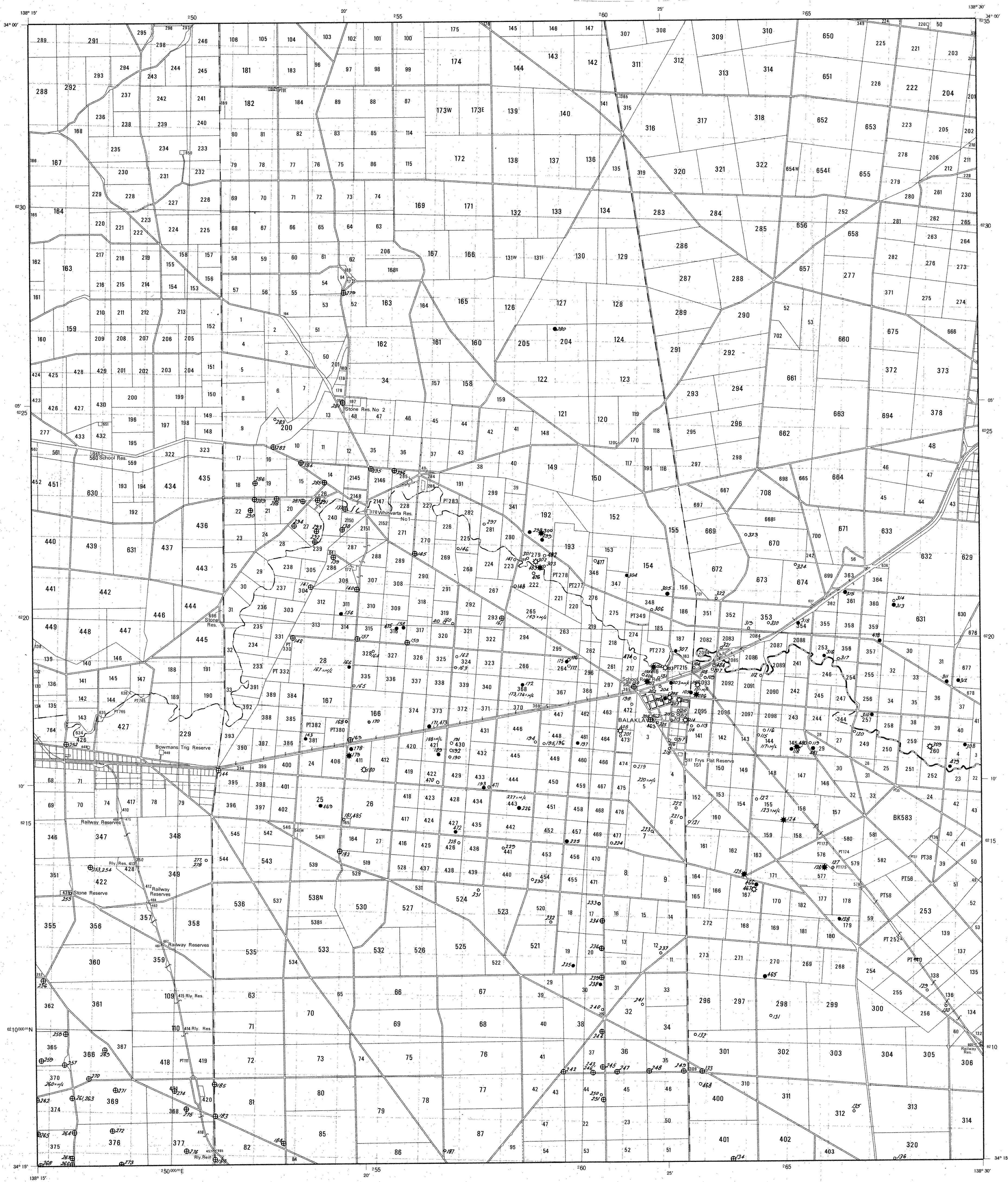
PLAN NUMBER

CHECKED

S15349

BOWMANS TRIAL PIT - HYDROGEOLOGICAL SECT.





REFERENCE

- Stock and/or domestic well. ●
- Mineral exploration well (coal, seismic, mineral). ⊕
- Abandoned well (not known; not used). ○
- Irrigation well. ☆
- Well number. 275

NOTE: To obtain full unit number, prefix well number with 652900IOW.

SCALE

METRES 1000 0 1 2 3 4 5 KILOMETRES

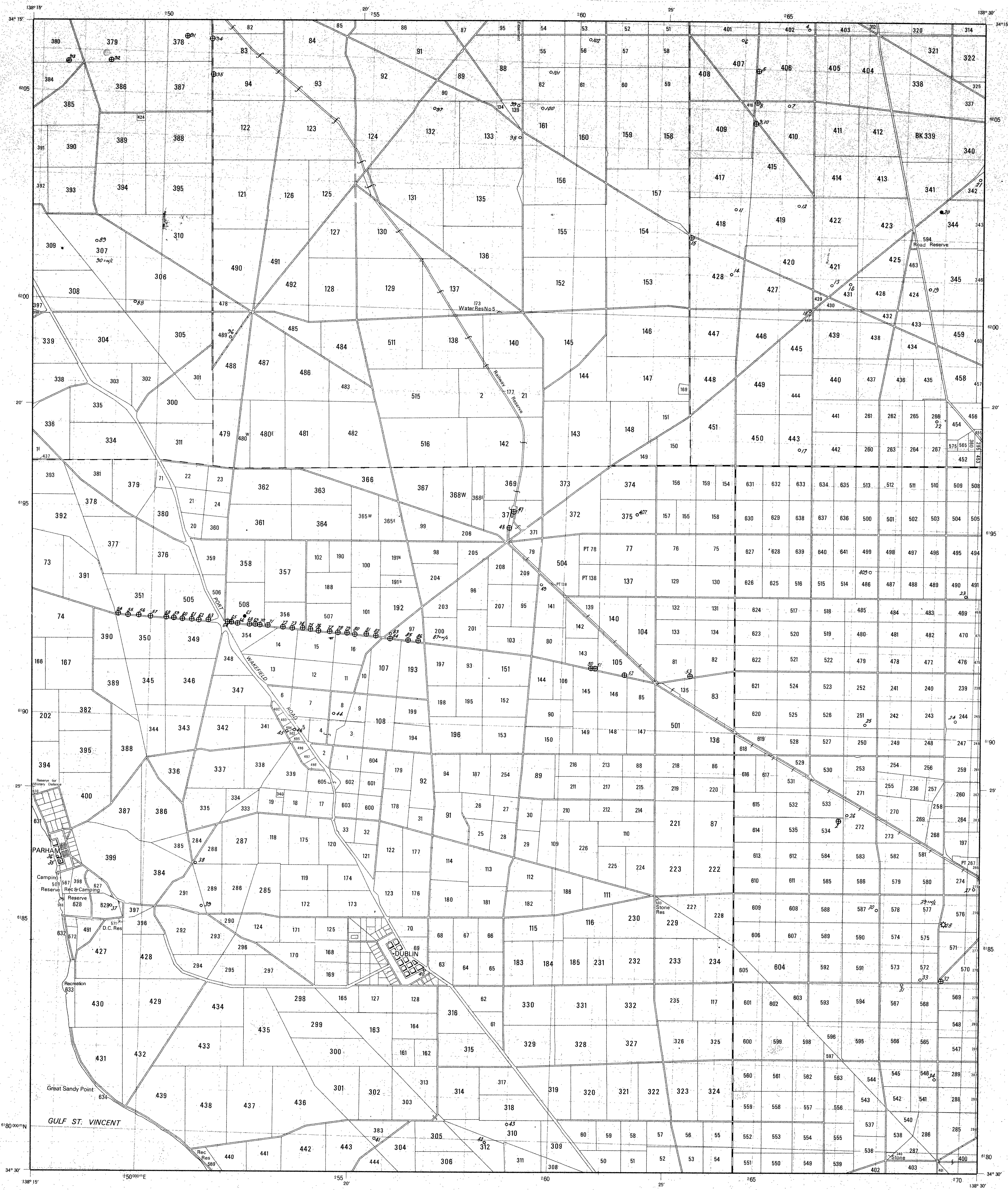


DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY
WELL STATUS - 6529 I

FIG. 8

COMPILED S. Kallieske
DRAWN E.C.
DATE 15 / 4 / 81
CHECKED
20/10/81 J.A.L.
for C.D.O. DATE
SCALE 1:50,000
PLAN NUMBER
81-166

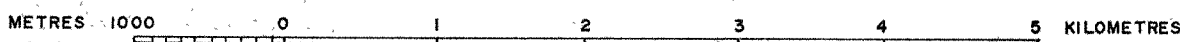


REFERENCE

- Stock and/or domestic well ●
- Mineral exploration well
(coal; seismic; mineral). ⊕
- Abandoned well (not known; not used) ○
- Irrigation well. ⚙
- Well number 66

NOTE: TO OBTAIN FULL UNIT NUMBER, PREFIX WELL NUMBER WITH 65290020W

SCALE



DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY
WELL STATUS - 6529 II

FIG. 9

COMPILED S. Kalleske

DRAWN E.C.

DATE 15 / 4 / 81

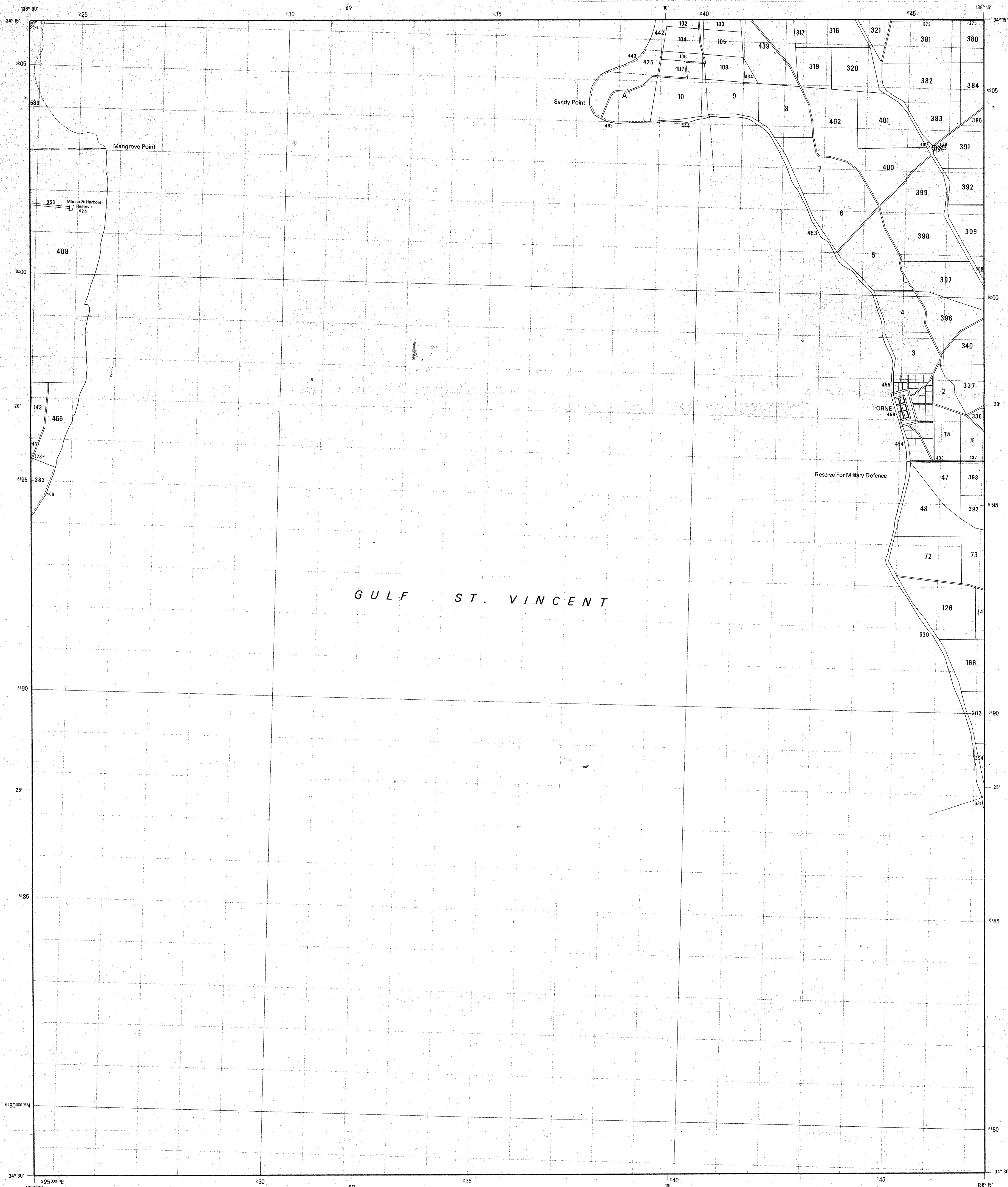
CHECKED

[Signature] DATE

SCALE 1:50 000

PLAN NUMBER

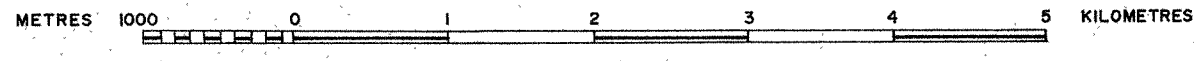
81-167



REFERENCE

- Stock and/or domestic well. •
 - Mineral exploration well
(coal; seismic; mineral). ⊕
 - Abandoned well (not known; not used) ○
 - Irrigation well. ⚙
 - Well number 103
- NOTE: TO OBTAIN FULL UNIT NUMBER, PREFIX NUMBER WITH 65290030W_____.

SCALE





**DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA**

**INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY
WELL STATUS - 6529 III**

FIG. 10

COMPILED S. Kalleske

DRAWN E. C.

DATE 15 / 4 / 81

CHECKED

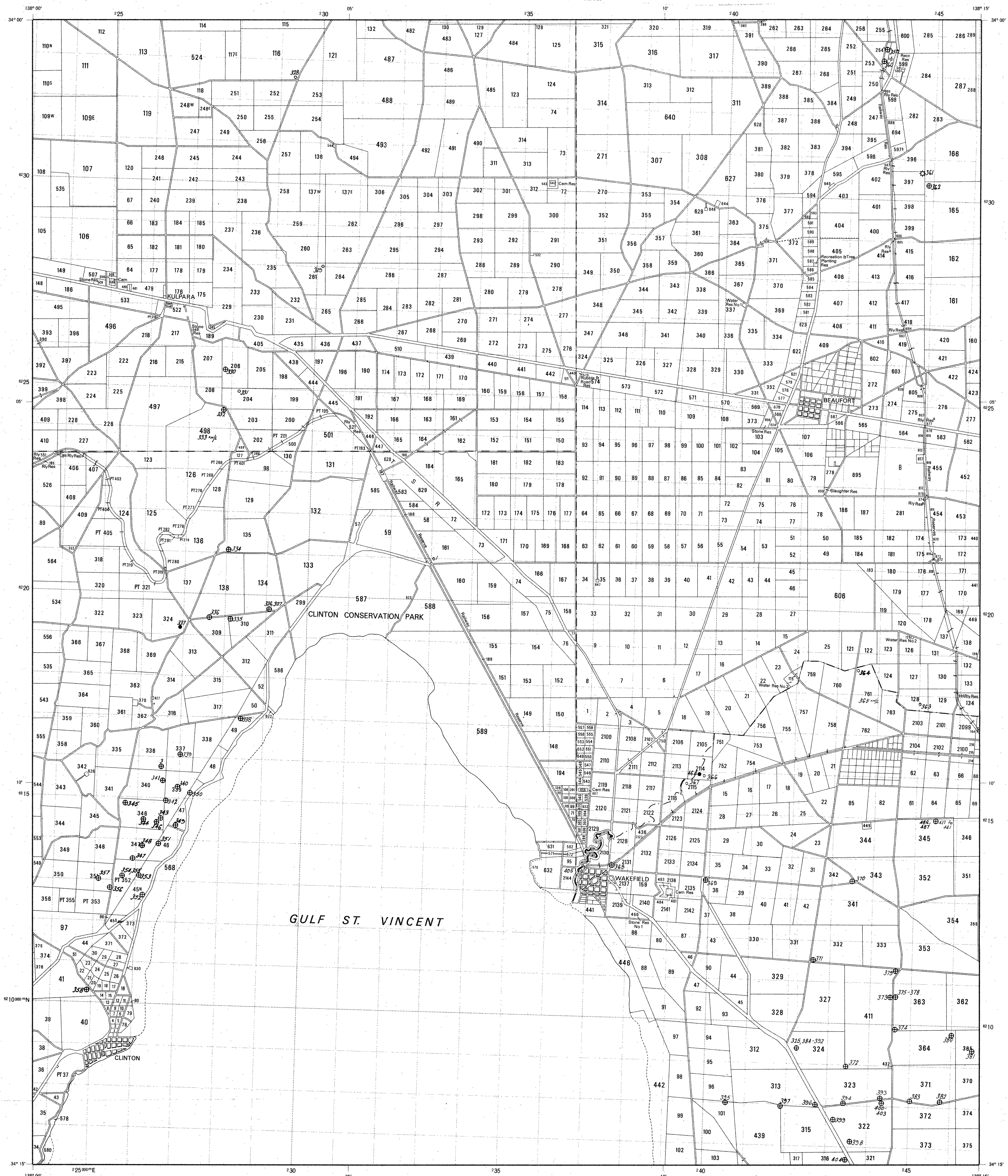
[Signature] 24/4/81

for D.O. DATE

SCALE 1:50 000

PLAN NUMBER

81-168



REFERENCE

Stock and/or domestic well.

Mineral exploration well
(coal; seismic; mineral)

Abandoned well (not known; not used)

Irrigation well

Well number

NOTE: TO OBTAIN FULL UNIT NUMBER, PREFIX WELL NUMBER WITH 65290040W

SCALE

METRES 1000 0 1 2 3 4 5 KILOMETRES



DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

INKERMAN - BALAKLAVA
REGIONAL GROUNDWATER SURVEY
WELL STATUS - 6529 IV

FIG. II

COMPILED S. Kaleske

DRAWN E. C.

DATE 15 / 4 / 81

CHECKED

20/04/81 24/4/81
J.M.C.D. DATE

SCALE 1:50,000

PLAN NUMBER

81-169