# Open File Envelope No. 4799

## EL 992

## MORGAN CREEK

## PROGRESS AND RELINQUISHMENT REPORTS FOR THE PERIOD 12/4/82 TO 11/4/84

Submitted by

Swan Resources Ltd
1984



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PRIMARY INDUSTRIES AND RESOURCES SA

# CONTENTS ENVELOPE 4799

TENEMENT: E.L. 992 - Morgan Creek.

TENEMENT HOLDER: Swan Resources Ltd. & Freeport Of Australia Incorporated.

# EXPLORATION LICENCE 992

# ORROROO AREA, SOUTH AUSTRALIA

Quarter ended 11th July, 1982

Freeport of Australia Incorporated

and

Swan Resources Limited

W.T. MARX
Senior Geologist

October, 1982

## CONTENTS



## FIGURES

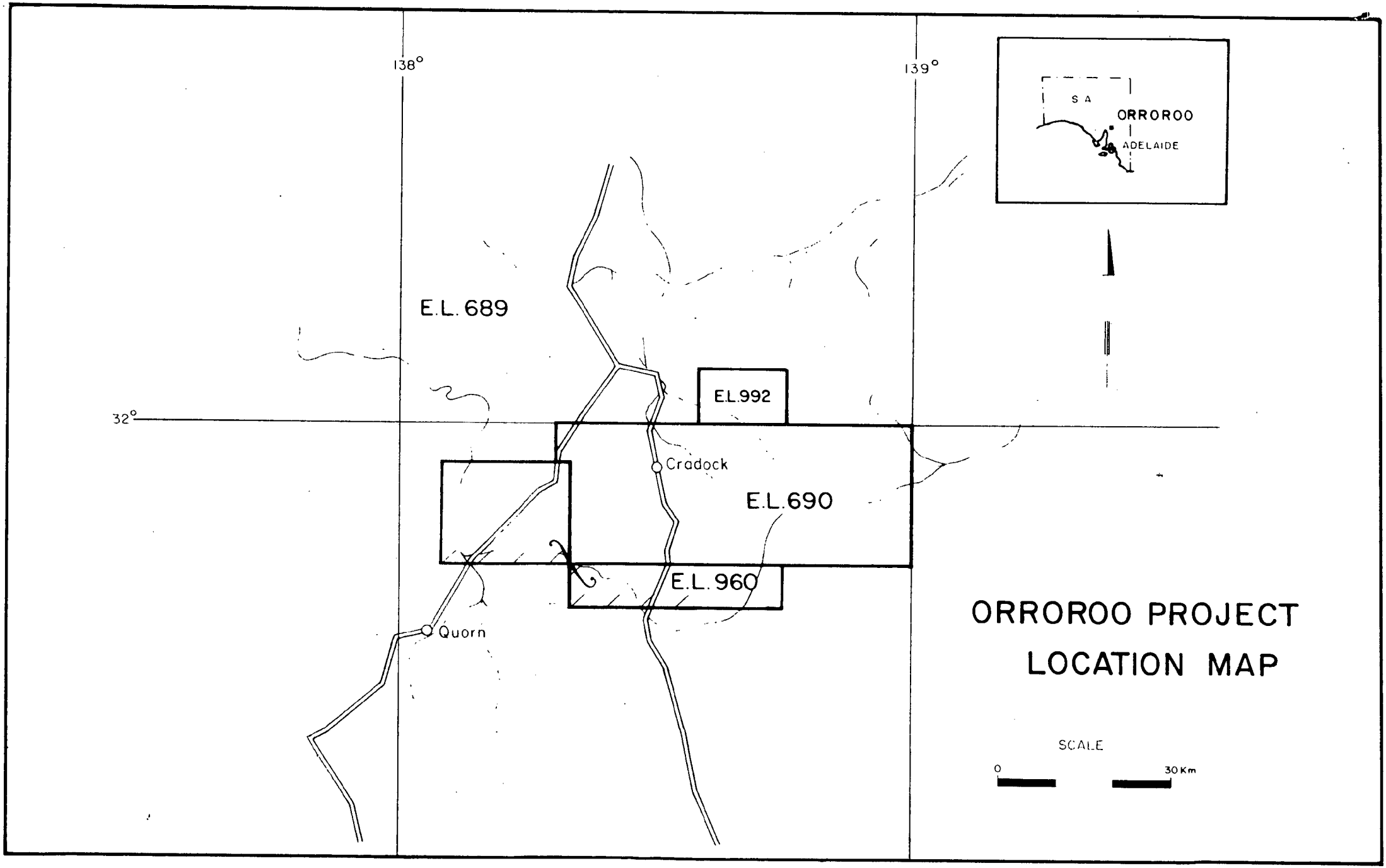
1.0 INTRODUCTION



Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 690 in which the joint venture partners have been conducting exploration for diamonds.

The licence was granted on 12th April, 1982 for a term of one year.

The area was applied for to cover the northern portion of the Worumba Diapir.


138°
139°
32°
E.L. 689
E.L.992
E.L.690
E.L. 960
Cradock
Quorn
S A
ORRORoo
ADELAIDE
ORRORoo PROJECT
LOCATION MAP
SCALE
0
30 Km

## 2.0 EXPLORATION ACTIVITIES

An airborne magnetic survey flown over Exploration Licences 960, 689 and 690 revealed high magnitude magnetic anomalies in the Worumba Diapir. These were considered to be caused by dolerite or diorite intrusions into the diapir and potential locations of base metal mineralisation.

Traces of copper mineralisation were found on field inspection of these locations, but stream sediment sampling over the diapir in E.L. 690 showed no significant mineralisation.

Field work in E.L. 992 was delayed pending the interpretation of the geochemical results of the stream sediment sampling mentioned above and the receipt of results of an intensive sampling programme to the south-west in E.L. 690 and 960 in search of kimberlitic minerals.

Some of these results have now been received and field work is being planned for the second half of the year.

## 3.0 EXPENDITURE

The expenditure by the joint venture partners during the period 12th April to 11th July was as follows:

| | |
|---|---|
| Staff Salaries | 399.50 |
| Consultants' Fees | 616.00 |
| Tenement Rental | 109.50 |
| | $1,125.00 |

# EXPLORATION LICENCE 992

# ORRORO AREA, SOUTH AUSTRALIA

QUARTER ENDED 11TH OCTOBER, 1982

Freeport of Australia Incorporated

and

Swan Resources Ltd.

W.T. MARX
Senior Geologist



November, 1982

CONTENTS

# 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 690 in which the joint venture partners have been conducting exploration for diamonds.

The licence was granted on 12th April, 1982 for a term of one year.

## 2.0 EXPLORATION ACTIVITIES

The focus of the diamond exploration effort by the joint venture partners has shifted to the Springfield Triassic Basin which is in the adjoining E.L. 690.

It is felt that the clue to the distribution of kimberlitic minerals is to be found in that location and therefore exploration in E.L. 992 is being held in abeyance.

No field work was carried out during this quarter.

# EXPLORATION LICENCE 992

# ORRORO REGION, SOUTH AUSTRALIA

# QUARTER ENDED JANUARY 11, 1983

Freeport of Australia, Incorporated

and

Swan Resources Ltd.

W.T. MARX

Senior Geologist

January 1983

CONTENTS

# 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 1059 in which the joint venture partners have been conducting exploration for diamonds.

The licence was granted on April 12, 1982 for a term of one year.

## 2.0 EXPLORATION ACTIVITIES

The exploration effort which was concentrated on the Triassic Springfield Basin during this quarter, succeeded in locating the source of the kimberlitic minerals found in samples from the Wirreanda River and its tributaries.

A palaeo-alluvial diamond deposit was found to be hosted by the basal conglomerate of the Springfield Basin.

Sedimentological studies on this unit are planned for the next quarter and this may provide a clue to the location of primary diamond deposits in the region.

The exploration in E.L. 992 is, therefore, being held in abeyance until these studies have been completed.

## 3.0 FUTURE WORK

The direction further exploration in E.L. 992 will take will be dependent upon the results of the sedimentological studies mentioned in the previous section.

## 4.0 EXPENDITURE

Expenditure in the licence area by the joint venture partners during the period August 1, 1982 to December 31, 1982 was:

| | |
|---|---|
| Tenement Rental | 884 |
| Staff Salaries | 1,636 |
| Consultants Fees | 622 |
| Laboratory Charges | 1,901 |
| Freight | 261 |
| Consumables | 705 |
| Sustenance | 843 |
| Vehicle Expenses | 542 |
| Transport | 4,363 |
| Sundry | 78 |
| Equipment Hire | 2,145 |
| Overheads | 1,594 |
| | $15,574 |

# EXPLORATION LICENCE 992

## ORRORO REGION, SOUTH AUSTRALIA

Quarter Ended April 12, 1983

Freeport of Australia, Incorporated

and

Swan Resources Limited

W.T. MARX

Senior Geologist

April, 1983

CONTENTS

## 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 1059 in which the joint venture partners have recently discovered the source of the diamonds and other kimberlitic minerals found in the area.

The licence was granted on April 12, 1982, for a term of one year, but in view of the discovery, an extension to the term of the licence has been requested.

## 2.0 EXPLORATION ACTIVITIES

The exploration effort of the joint venture partners was again concentrated in the neighbouring E.L. 1059 during this quarter.

Bulk sampling results and sedimentological studies of the basal conglomerate of the Springfield Basin, however, prompted further work in E.L. 992.

Seven 25kg stream sediment samples were collected in streams draining the licence area. This work is designed to locate kimberlitic rocks in the area which may have been the source of the diamonds found in the Springfield Basin.

The samples were pan concentrated in the field and the concentrates will be sent to Perth for examination for kimberlitic minerals.

The maps showing the locations of these samples are being prepared and will be presented in the report for the next quarter.

## 3.0 FUTURE WORK

Any future work in the licence area will be dependant on the results of the stream sediment samples which were collected during the quarter.

## 4.0 EXPENDITURE

The expenditure details are still being collated and will be included in the report for the next quarter.

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# EXPLORATION LICENCE 992

# ORRORoo REGION, SOUTH AUSTRALIA

## QUARTER ENDED JULY 12, 1983.

Freeport of Australia, Incorporated

and

Swan Resources Ltd

W. T. Marx

Senior Geologist

August, 1983.

CONTENTS

## 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 $km^2$ immediately to the north of Exploration Licence 1059 in which the joint venture partners are currently assessing a paleo-placer diamond deposit.

The licence was granted on April 12, 1982, for a term of one year, but in view of the discovery of the deposit, an extension to the term of the licence was applied for and granted.

## 2.0 EXPLORATION ACTIVITIES

During this quarter the stream sediment samples, which were collected during the previous quarter, were examined.

No kimberlitic minerals were found.

## 3.0 FUTURE WORK

Any future work in the licence area will depend on the assessment of the paleo-placer diamond deposit in the adjoining licence area.

## 4.0 EXPENDITURE

The expenditure in the licence area by the joint venture partners during the period January 1, 1983 to July 31st, 1983 was:

| | |
|---|---|
| Tenement Rental | - |
| Staff Salaries | 1,987.00 |
| Consultants Fees | 11,094.00 |
| Laboratory Charges | 1,464.00 |
| Freight | 155.00 |
| Consumables | 1,543.00 |
| Sustenance | 455.00 |
| Vehicle Expenses | 794.00 |
| Transport | 2,102.00 |
| Sundry | 384.00 |
| Equipment Hire | 2,849.00 |
| Overheads | 1,690.00 |
| | 24,517.00 |

# EXPLORATION LICENCE 992

# ORRORDO REGION, SOUTH AUSTRALIA

Quarter Ended October 12, 1983

Freeport of Australia Incorporated

and

Swan Resources Limited

W.T. MARX

Senior Geologist

November, 1983

## 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 1059 in which the joint venture partners are currently assessing a paleo-placer diamond deposit.

The Licence was granted on April 12, 1982, for a term of one year, but in view of the discovery of the deposit, an extension to the term of the Licence was applied for and granted.

No field work was carried out in the Licence area during this quarter.

## 2.0 FUTURE WORK

Any future work in E.L. 992 depends on results of work planned in the neighbouring E.L.'s 1059 and 1140.

# EXPLORATION LICENCE 992

## ORRORDO REGION, SOUTH AUSTRALIA

Quarter Ended January 12, 1984

Freeport of Australia Incorporated

and

Swan Resources Limited

W.T. MARX
Senior Geologist

January, 1984

## 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 1059 in which the joint venture partners are currently assessing a paleo-placer diamond deposit.

The Licence was granted on April 12, 1982, for a term of one year, but in view of the discovery of the deposit, an extension to the term of the Licence was applied for and granted.

No field work was carried out in the Licence area during this quarter.

## 2.0 EXPENDITURE

The expenditure incurred by the joint venture partners in the Licence area during the period 1st August to 31st December, 1983 is as follows:

| | |
|---|---|
| Tenement Rental | $ - |
| Staff Salaries | 2,031.33 |
| Consultants Fees | 1,156.51 |
| Laboratory Charges | - |
| Freight | - |
| Consumables | 76.55 |
| Sustenance | 294.65 |
| Vehicle Expenses | 119.74 |
| Transport | - |
| Sundries | - |
| Equipment Hire | 725.00 |
| Overheads | 1,783.38 |
| | $ 6,187.16 |

# EXPLORATION LICENCE 992

# ORRORO REGION, SOUTH AUSTRALIA

## RELINQUISHMENT REPORT

Freeport of Australia Incorporated

and

Swan Resources Limited

W.T. MARX
Senior Geologist

April, 1984

CONTENTS



FIGURES



APPENDIX

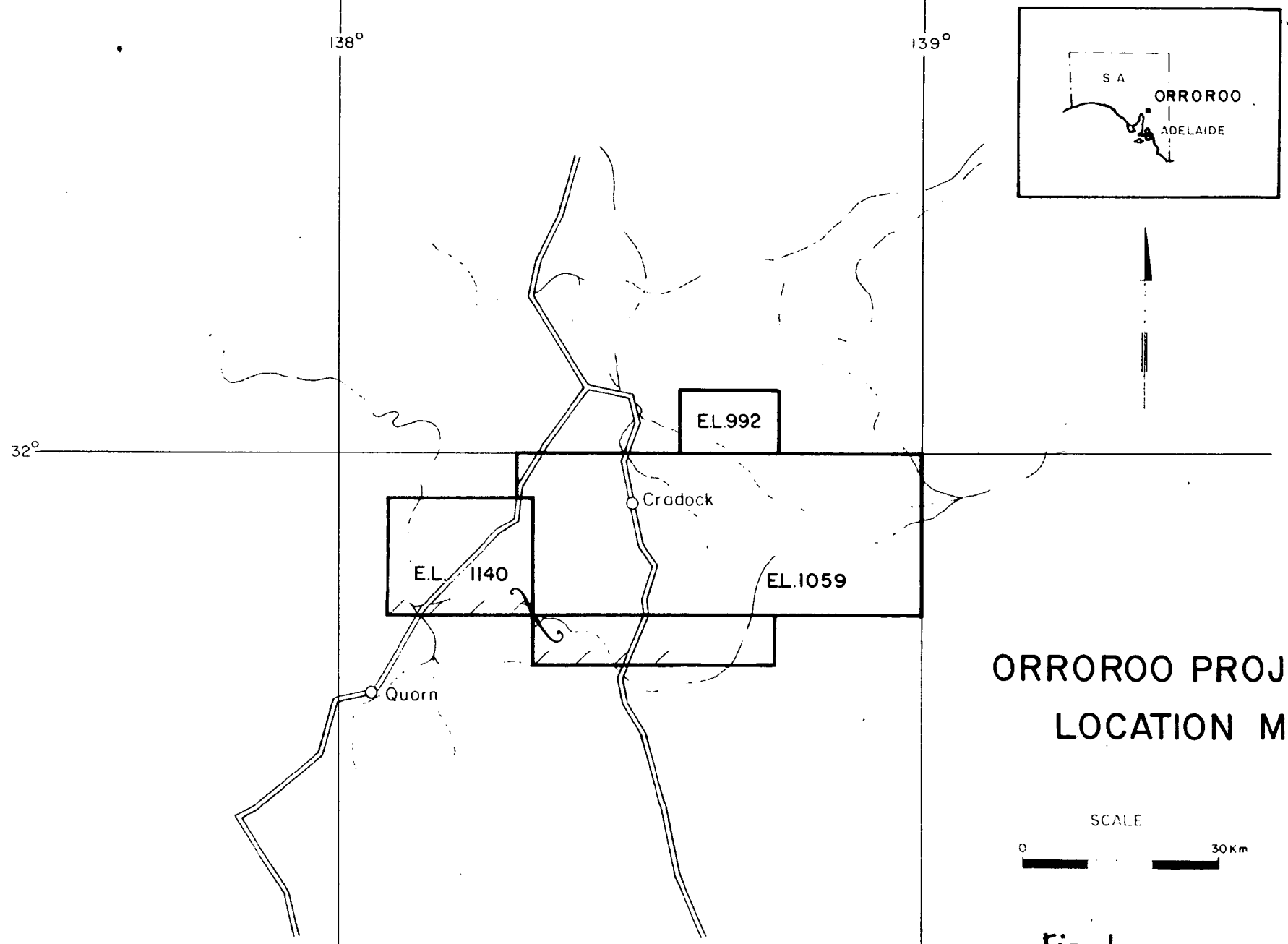
# 1.0 INTRODUCTION

Exploration Licence 992 covers an area of 146 square kilometres immediately to the north of Exploration Licence 1059 in which the joint venture partners have been conducting exploration for diamonds.

The licence was granted on 12th April, 1982, for a term of one year.

After diamonds were found in the neighbouring EL 1059, an extension to the term was applied for and granted.

No mineralisation of economic interest was found and the licence has been relinquished.




# ORRoROO PROJECT
# LOCATION MAP

Fig. 1

A4 - S5 - 56

## 2.0 EXPLORATION ACTIVITIES

An airborne magnetic survey flown over Exploration Licences 1140 and 1159 revealed high magnitude magnetic anomalies in the Worumba Diapir just south of the southern boundary of EL 992. These anomalies were considered to be caused by dolerite or diorite intrusions into the diapir and potential locations of base metal mineralisation.

Traces of copper mineralisation were found on field inspection of these locations, but stream sediment sampling in EL 1059, over the diapir showed no significant mineralisation. This downgraded the base metal potential of EL 992 and no further work was carried out on this line of search.

Shortly after the granting of EL 992, the joint venture partners discovered a palaeo-placer diamond deposit in the Triassic conglomerates of the Springfield Basin in EL 1059 to the south of the licence area. This discovery led to an exploration policy of firstly evaluating the palaeo-placer deposit and secondly searching for the primary kimberlitic source of the diamonds in the surrounding area.

As part of this wider search, 7 stream sediment samples were collected in all of the major drainages in EL 992. The samples consisted of 25kg of -¼" material collected in selected trap sites. This material was concentrated in the field on a Pleitz Jig and the concentrates were sent to a laboratory in Perth for further concentration in TBE. The microscopic examination of these final concentrates was carried out by Swan Resources staff in Perth.

No kimberlitic minerals were found.

## 3.0 EXPENDITURE

The expenditure incurred by the joint venture partners in the Licence area is as follows:

| | |
|---|---|
| Tenement Rental | $ 993.50 |
| Staff Salaries | 6,053.83 |
| Consultants Fees | 13,488.51 |
| Laboratory Charges | 3,365.00 |
| Freight | 416.00 |
| Consumables | 2,324.55 |
| Sustenance | 1,592.65 |
| Vehicle Expenses | 1,455.74 |
| Transport | 6,465.00 |
| Sundries | 462.00 |
| Equipment Hire | 5,719.00 |
| Overheads | 5,067.38 |
| | $ 47,403.16 |

# APPENDIX

## MICROPROBE ANALYSES

```
***** Cobalt Calibration *****     LIVETIME=     50
 ENERGY     RES      AREA
-   5.8    94.60     34606
 6923.8   163.10     50437
TOTAL AREA=    116473 GF=  50.038
***** CHROMITE EG42C *****         LIVETIME(spec.)=     50
 ENERGY     RES      AREA
-   5.6    95.96     35152
TOTAL AREA=     78835
......
Peak at    9.50 keV omitted?
Peak at   10.66 keV omitted?

FIT INDEX=   .93

ELMT   APP.CONC    ERROR(WT%)
 Si        .131        .057
 Ti        .321        .089
 Al       6.290        .122
 Cr      30.338        .365
 Fe      12.300        .293
 Mn        .065        .190* ( 2 sigma*
 Mg       7.375        .241
 Ca        .056        .073* ( 2 sigma*
[ 1 2 3 ZAF'S]

20.00 kV  TILT=35.00 ELEV= 6.34 AZIM=  .00 COSINE= .994

Spectrum: ***** CHROMITE EG42C *****          ** 114.0.01.32601 **

Last elmt by STOICHIOMETRY

ELMT      ZAF     %ELMT      ATOM.%     %OXIDE     FORMULA
SiK: 1   .643      .204       .191       .437       .047
TiK: 1 1.063      .302       .166       .503       .041
AlK: 1   .567    11.085     10.815     20.947      2.656
CrK: 1   .929    32.646     16.525     47.713      4.058
Fe:K 1   .915    13.435      6.332     17.283      1.555
MnK: 1   .890      .073       .035       .095       .009
MgK: 1   .898     8.208      8.887     13.610      2.182
CaK: 1 1.031      .054       .035       .075       .009
O  K: 1   .000    34.656     57.014       .000     14.000
TOTAL           100.664    100.000    100.664     10.556
-------------------------------------------------------------
```

```
***** Cobalt Calibration *****     LIVETIME=     50
 ENERGY     RES      AREA
-   5.3    96.50     34262
 6925.2   163.69     60845
TOTAL AREA=    140996 GF=  50.046
***** CHROMITE EG43 *****          LIVETIME(spec.)=     50
 ENERGY     RES      AREA
-   4.4    94.66     34786
TOTAL AREA=     95595
......

FIT INDEX=   .87

ELMT  APP.CONC    ERROR(WT%)
 Si       .088       .052* ( 2 sigma*
 Ti       .307       .081
 Al      6.779       .114
 Cr     27.733       .323
 Fe     13.836       .282
 Mn       .003       .170* ( 2 sigma*
 Mg      6.560       .213
 Ca       .001       .066* ( 2 sigma*
[ 1 2 3 ZAF'S]

20.00 kV  TILT=35.00 ELEV= 6.34 AZIM=   .00 COSINE= .994

Spectrum: ***** CHROMITE EG43 *****          ** 114.0.01.32601 **

Last elmt by STOICHIOMETRY

ELMT      ZAF     %ELMT      ATOM.%     %OXIDE     FORMULA
SiK: 1   .639       .138       .132       .295       .033
Ti:K 1 1.058       .290       .163       .483       .040
AlK: 1   .570     11.909     11.900     22.503      2.924
CrK: 1   .933     29.737     15.417     43.462      3.788
FeK: 1   .918     15.076      7.277     19.395      1.788
MnK: 1   .890       .003       .001       .004       .000
MgK: 1   .895      7.332      8.131     12.157      1.998
Ca:K 1 1.028       .000       .000       .001       .000
O K: 1   .000     33.815     56.977       .000     14.000
TOTAL            98.300    100.000     98.300     10.571
-------------------------------------------------------------
```

```
***** Cobalt Calibration *****     LIVETIME=     50
 ENERGY     RES      AREA
-    5.1    95.64     34835
 6924.0   161.45     49314
TOTAL AREA=    112817 GF=  50.035
***** CHROMITE EG41 *****          LIVETIME(spec.)=     50
 ENERGY     RES      AREA
-    5.5    94.68     35201
TOTAL AREA=     79480
.....

FIT INDEX= 1.03

ELMT  APP.CONC    ERROR(WT%)
 Si       .140       .059
 Ti       .987       .103
 Al      5.188       .116
 Cr     30.706       .376
 Fe     15.697       .331
 Mn  -    .041       .195* ( 2 sigma*
 Mg      7.523       .243
 Ca       .038       .075* ( 2 sigma*
[ 1 2 3 ZAF'S]

20.00 kV  TILT=35.00 ELEV= 6.34 AZIM=   .00 COSINE= .994

Spectrum: ***** CHROMITE EG41 *****          ** 114.0.01.32601 **

Last elmt by STOICHIOMETRY

ELMT      ZAF     %ELMT      ATOM.%     %OXIDE     FORMULA
SiK: 1   .648      .217       .201       .464       .050
Ti:K 1 1.067      .925       .504      1.543       .124
AlK: 1   .558     9.290      8.985     17.554      2.218
CrK: 1   .937    32.727     16.423     47.831      4.055
FeK: 1   .920    17.047      7.965     21.931      1.966
MnK: 1   .893      .000       .000       .000       .000
MgK: 1   .877     8.564      9.193     14.200      2.270
CaK: 1 1.036      .037       .024       .052       .006
O K: 1   .000    34.768     56.705       .000     14.000
TOTAL           103.574    100.000    103.574     10.689
-------------------------------------------------------------
```

```
***** Cobalt Calibration *****     LIVETIME=     50
 ENERGY     RES      AREA
-   5.7    93.36     34199
 6924.5   164.10     54324
TOTAL AREA=    124690 GF=  50.043
***** CHROMITE EG42A *****         LIVETIME(spec.)=     50
 ENERGY     RES      AREA
-   5.3    95.79     34955
TOTAL AREA=     87042
......

FIT INDEX=   .67

ELMT  APP.CONC    ERROR(WT%)
 Si       .086       .054* ( 2 sigma*
 Ti       .829       .097
 Al      3.878       .099
 Cr     33.250       .372
 Fe     15.093       .312
 Mn       .050       .191* ( 2 sigma*
 Mg      6.053       .212
 Ca       .111       .072* ( 2 sigma*
[ 1 2 3 ZAF'S]

20.00 kV  TILT=35.00 ELEV= 6.34 AZIM=   .00 COSINE= .994

Spectrum: ***** CHROMITE EG42A *****          ** 114.0.01.32601 **

Last elmt by STOICHIOMETRY

ELMT      ZAF     %ELMT      ATOM.%     %OXIDE     FORMULA
SiK: 1   .658       .130       .129       .279       .032
Ti:K 1 1.085       .764       .445      1.275       .110
Al:K 1   .555      6.987      7.229     13.202      1.781
CrK: 1   .942     35.294     18.947     51.584      4.667
FeK: 1   .921     16.391      8.193     21.087      2.018
MnK: 1   .899       .056       .029       .072       .007
Mg:K 1   .856      7.073      8.122     11.728      2.001
CaK: 1 1.047       .106       .074       .149       .018
O K: 1   .000     32.574     56.832       .000     14.000
TOTAL             99.376    100.000     99.376     10.634
-------------------------------------------------------------
```

***** Cobalt Calibration *****  LIVETIME=  50

| ENERGY | RES | AREA |
|---|---|---|
| - 5.7 | 94.47 | 34480 |
| 6925.1 | 164.17 | 53987 |

TOTAL AREA= 123558 GF= 50.048

***** CHROMITE EG42B *****  LIVETIME(spec.)= 50

| ENERGY | RES | AREA |
|---|---|---|
| - 5.5 | 96.08 | 35392 |

TOTAL AREA= 81940

.....

Peak at 13.58 keV omitted?

FIT INDEX= .59

| ELMT | APP.CONC | ERROR(WT%) |
|---|---|---|
| Si | .035 | .053* ( 2 sigma* |
| Ti | .373 | .086 |
| Al | 7.289 | .123 |
| Cr | 27.306 | .338 |
| Fe | 14.118 | .303 |
| Mn | .179 | .178* ( 2 sigma* |
| Mg | 6.099 | .222 |
| Ca | .040 | .069* ( 2 sigma* |

[ 1 2 3 ZAF'S]

20.00 kV TILT=35.00 ELEV= 6.34 AZIM= .00 COSINE= .994

Spectrum: ***** CHROMITE EG42B *****  ** 114.0.01.32601 **

Last elmt by STOICHIOMETRY

| ELMT | ZAF | %ELMT | ATOM.% | %OXIDE | FORMULA |
|---|---|---|---|---|---|
| SiK: 1 | .638 | .055 | .052 | .117 | .013 |
| TiK: 1 | 1.056 | .354 | .198 | .590 | .049 |
| AlK: 1 | .573 | 12.723 | 12.630 | 24.040 | 3.099 |
| CrK: 1 | .933 | 29.264 | 15.073 | 42.770 | 3.699 |
| FeK: 1 | .919 | 15.368 | 7.370 | 19.771 | 1.808 |
| MnK: 1 | .889 | .201 | .098 | .259 | .024 |
| MgK: 1 | .896 | 6.811 | 7.504 | 11.294 | 1.842 |
| CaK: 1 | 1.027 | .039 | .026 | .054 | .006 |
| O K: 1 | .000 | 34.082 | 57.050 | .000 | 14.000 |
| TOTAL | | 98.895 | 100.000 | 98.895 | 10.540 |

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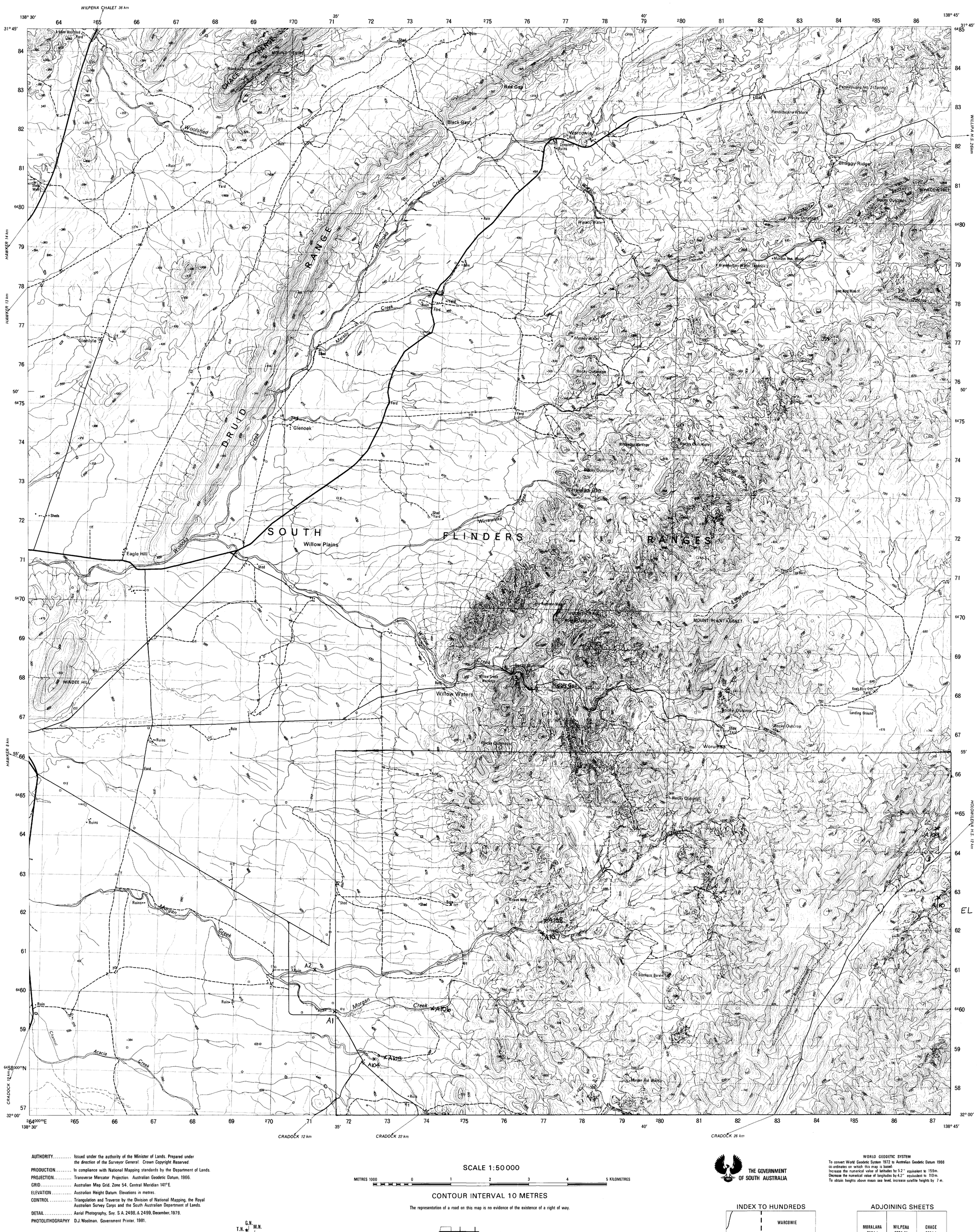
6634-III

# WARCOWIE

1:50 000 TOPOGRAPHIC SERIES

SOUTH AUSTRALIA

SECOND EDITION

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**PROJECTION**..... Transverse Mercator Projection. Australian Geodetic Datum, 1966.

**GRID**..... Australian Map Grid. Zone 54, Central Meridian 141° E.

**ELEVATION**..... Australian Height Datum. Elevations in metres.

**CONTROL**..... Triangulation and Traverse by the Division of National Mapping, the Royal Australian Survey Corps and the South Australian Department of Lands.

**DETAIL**..... Aerial Photography, Svy. S.A. 2498, & 2499, December, 1979.

**PHOTOLITHOGRAPHY** D.J. Woolman, Government Printer, 1981.

**GRID REFERENCE**

| GRID ZONE DESIGNATION: 54J | TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 100 METRES | | |
|---|---|---|---|
| 100 000 METRE SQUARE IDENTIFICATION | SAMPLE POINT △ MOUNT PLANTAGENET | | |
| TK | 1 Read letters identifying 100 000 metre square in which the point lies: | TK | |
| | 2 Locate first VERTICAL grid line to LEFT of point and read LARGE figures labelling the line in either the top or bottom margin, or on the line itself: | 80 | 6 |
| | 3 Estimate tenths from grid line to point: | | 9 |
| | 4 Locate first HORIZONTAL grid line BELOW point and read LARGE figures labelling the line in either the left or right margin, or on the line itself: | 69 | |
| | 5 Estimate tenths from grid line to point: | | 9 |
| IGNORE the SMALLER figures of any grid number; these are for finding the full co-ordinates. Use ONLY the LARGER figures of the grid number, example: 64 58 000 mN | SAMPLE REFERENCE: | TK806699 | |
| | If reporting beyond 15° in any direction, prefix Grid Zone Designation, as: | 54JTK806699 | |

Before giving a grid reference, civilian users should state the number and name of this map.




The relationship between True North, Grid North and Magnetic North is shown diagrammatically for the centre of this map. Magnetic Value is correct for 1980. Annual Change is 01' Easterly.

SCALE 1:50 000

METRES 1000 0 1 2 3 4 5 KILOMETRES

CONTOUR INTERVAL 10 METRES

The representation of a road on this map is no evidence of the existence of a right of way.

Built-up area; Parks, recreation areas.
Road, sealed surface, two or more lanes; National route marker.
Road, sealed surface, one lane.
Road, unsealed surface, two or more lanes; Bridge.
Road, unsealed surface, one lane; Gate; Cattle grid.
Vehicular track.
Railway, multiple track; Station; Siding.
Railway, single track; Cutting; Embankment.
Building; Post office; Police station; School. .PO .PS .S
Hospital; Church; Mine; Windmill. .H .C
Fence; Quarry.
Power transmission line; Levee or bank.

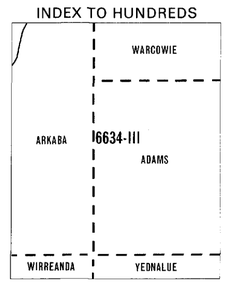
Survey beacon; Spot elevation. △ ·124
Rock, bare or awash; Reef.
Lake, perennial; Watercourse.
Lake, intermittent; Land subject to inundation.
Lake, mainly dry; Land subject to occasional flooding.
Dam or waterhole on watercourse; Tank or small dam.
Contours; Depression contours. 700
Sand; Sand ridges.
Pine plantation; Orchard or vineyard.
Windbreak.
Trees and scrub, scattered.
Trees and scrub, medium, dense.

THE GOVERNMENT OF SOUTH AUSTRALIA

**WORLD GEODETIC SYSTEM**

To convert World Geodetic System 1972 to Australian Geodetic Datum 1966 co-ordinates on which this map is based:
Increase the numerical value of latitudes by 5.2 " equivalent to 159m.
Decrease the numerical value of longitudes by 4.2" equivalent to 110m.
To obtain heights above mean sea level, increase satellite heights by 7 m.

INDEX TO HUNDREDS




ADJOINING SHEETS

| | | |
|---|---|---|
| MORALANA 6534-I | WILPENA 6634-IV | CHACE 6634-I |
| HAWKER 6534-II | WARCOWIE 6634-III | HOLOWILENA 6634-II |
| KANYAKA 6533-I | YEDNALUE 6633-IV | SIGCUS 6633-I |

4799-1

FIGURE 2 - SAMPLE LOCATION MAP



WARCOWIE
6634-III