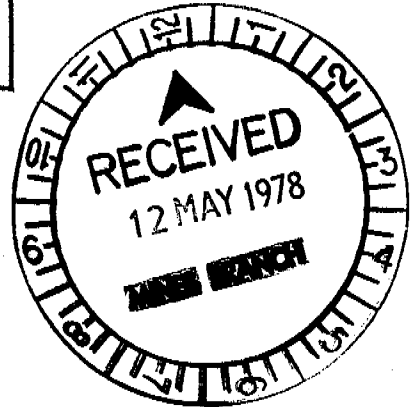


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ANNUAL REPORT

ON

EXPLORATION OVER

EXPLORATION LICENCE NO. 1465

ALICE SPRINGS AREA

NORTHERN TERRITORY

COVERING THE PERIOD

18 MARCH 1977 TO 17 MARCH 1978

CR 78/82

SUMMARY

E.L. 1465 is located 20km southeast of Alice Springs and covers an area of 56.7km². The exploration licence is one of several held by UAL in the area. This report covers work carried out in the first year of tenure.

Exploration is focussed on sandstone-type uranium deposits in the Upper Devonian Undandita Member sandstone of the Amadeus Basin.

Exploration techniques used are drilling, downhole gamma logging geochemical sampling and radon surveys. These techniques are being used to define the redox boundary and locate any associated uranium mineralization.

In the second year of tenure detailed exploration of the Pamela orebody will take place.

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- Map 2 (NT-4233-2C) Alice Springs Area,
Drilling Progress EW, P, H, J, Series Holes.

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- Table 1: Details of Percussion Drillholes for E.L. 1465.

1. INTRODUCTION

E.L. 1465 was granted to Uranerz Australia Pty. Ltd. (UAL) on 18 March 1977. The area held is 21.91 square miles (56.72km²). This is the first annual report on all operations carried out by UAL complying with section 38 O (3) of the Northern Territory Mining Ordinance. A renewal for the second year of tenure has been submitted.

The tenement is one of many contiguous exploration licences being worked in a 50:50 joint venture with Carpentaria Exploration Pty. Ltd. UAL is the operator.

2. LOCATION

The area is situated about 20km southeast of Alice Springs on the Alice Springs 1:250,000 Sheet between latitudes 23°50' - 24°00'S and longitudes 133°50' - 134°00'E. (Map 1).

3. GEOLOGY

E.L. 1465 covers an area of the Orange Creek Syncline which is a large scale structural feature in the northeastern part of the Amadeus Basin. The basin sediments range in age from Precambrian to Palaeozoic and Tertiary. The Devonian sequence is principally composed of clastic rocks. These are mainly coarse to medium-grained sandstones with occasional pebbly conglomeratic beds, siltstone and mudstone lenses. These form the Pertnjara Group of which the Undandita Member and Brewer Conglomerate are formations.

The Undandita Member sandstone is the host rock for all the known uranium mineralization. It was deposited in a fluvial, braided channel environment. Exposures throughout the area are lacking, but the sequence is estimated to attain a maximum thickness of 1,000m.

Exploration in the Missionary Syncline has outlines upper and lower margins or colour changes between a zone of grey-colour-

ed oxidized sandstone of the Undandita Member. Mapping and exploratory drilling has traced the reduced zone over a distance of approximately 70km. Three significant uranium occurrences have been located on the margins of the reduced zone.

4. INVESTIGATIONS AND RESULTS

4.1. Airborne Spectrometric Survey

E.L. 1465 was flown during the course of a detailed regional airborne spectrometric survey. A Cessna 206, chartered from Skycharter Aviation of Perth was used in conjunction with a Scintrex Gam-2 spectrometer connected to four Scintrex GDSA-64 temperature stabilized detectors with a volume of 7420 cm³.

Flight line spacing was 500m, altitude 100m and survey speed 185km/hr. Approximately 100 lines were flown in north-south directions. This involved approximately one hour of flying covering a total of 120 line-km.

No significant anomalies were found.

4.2. Gridding

An east-west baseline was surveyed with north-south offset lines every 5,000m. The surveying was conducted by R.W.R. Kingdom of Perth.

4.3. Drilling

4.3.1. Percussion Drilling

A total of 25 percussion drillholes (P 66-69, P 74-93 and P 135) were completed for a total of 1040m. The average depth was about 40m. The holes were drilled prior to the granting of the tenement. The locations of these holes are shown on Map 2. The purpose of the drilling was to outline and test the nature of the redox boundary in the Undandita Member sandstone. Details are given in Table 1.

Gamma logs were run on all holes. No significant mineralization was located but the east results were from P67 with an average maximum grade of 103 ppm over the interval 22.00 - 28.00m.

4.3.2. Vacuum Drilling

A total of 15 vacuum drillholes were drilled at 1,000m intervals along the offset lines. Spacing was 1,000m. The total metreage drilled was 148.5 m.

The purpose of the drilling was to establish the redox state and depth to the Undandita Member sandstone.

4.4. Sampling

From the bottom of each hole or anomalous (SRAT) intersection samples were taken and assayed for uranium by the neutron activation at the Australian Atomic Energy Commission establishment in Sydney.

4.5. Downhole Logging

All the drillholes were logged with a McPhar TV-5 downhole logger but no significant anomalies were located.

4.6. Track-etch Survey

Track-etch cups were placed in all the drillholes at a standard depth of 5m and exposed for a period of 30 days before shipment to Terradex Corporation, California, U.S.A. Results are not yet available.

5. FUTURE PROGRAMME

The following programme is scheduled for E.L. 1465 during the second year of tenure. The estimated minimum expenditure is \$16,000.00.

5.1. Grading

About 8km of grading is required to upgrade access in the area.

5.2. Percussion/Diamond Drilling

To complete the detailed drilling of the Pamela mineralization about 30 holes totalling 3,000m has been recommended. This will be conducted on a 800 x 1,000m grid.

5.3. Downhole Logging

All holes will be logged with a McPhar TV-5 downhole logger for a total of about 2,700m.

5.4. Sampling

5.4.1. Drillhole Samples

These will be collected from all anomalous radioactive intersections.

5.4.2. Water Samples

Water samples will be collected from all drillholes that penetrate the water table.

5.5. Track-Etch Survey

Track-Etch cups will be placed in all drillholes at a standard depth of 5m for 30 days prior to shipment to Terradex Corporation, California, U.S.A.

6. OTHER DETAILS

6.1. Personnel

Exploration Manager	Dr. D.O. Zimmerman.
Chief Geologist	Dr. K.W. Vogel.
Project Geologist	Dr. G. Ott.
Consultant Geologist	Mr. W.N. Thomas
Senior Geologist	Mr. R. Clare
Field Geologist	Mr. T. Piper
Field Assistants	Mr. J. Wilkie
	Mr. A. Payne

6.2. Instruments

- 1 Scintrex Gam-2 spectrometer
- 4 SRAT SPP2 scintillometers
- 1 McPhar TV-5 downhole logger
- 1 Nikon stereoscope
- 1 Sokkisha TM-20C theodolite

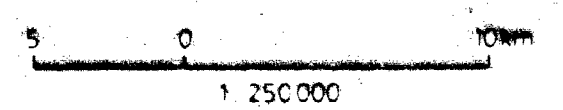
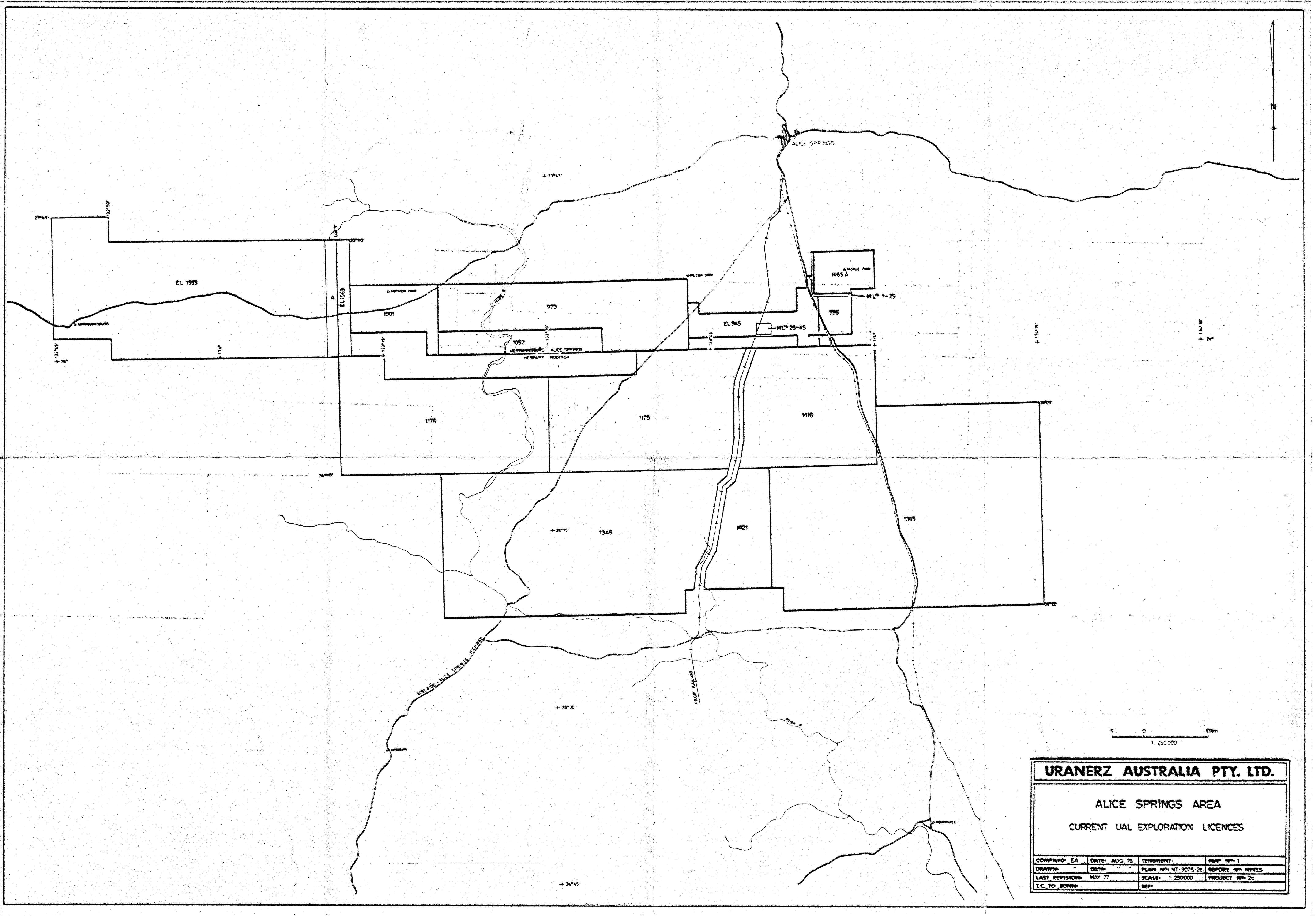
6.3. Vehicles

- 2 Toyota landcruisers long-wheel-base
- 1 Toyota landcruiser short-wheel-base
- 1 Suzuki four-wheel-drive

7. STATEMENT OF EXPENDITURE

TABLE 1: DETAILS OF PERCUSSION DRILLHOLES FOR E.L. 1465

Drillhole Number	Drilling Depth (m)	Gamma Log Depth (m)	Track-Etch (T/mm ²)	pH	U ₃ O ₈
P66	22		201.7		
67	60		247.8		
68	60		97.4		
69	22		164.4		
74	20		151.2		
75	20		48.7		
76	20		73.0		
77	50		72.0		
78	20		137.9		
79	78		79.1		
80	20	16.5	18.3		
81	60	55.3	-		
82	80	76.1	111.3	6.0	4
83	34	30.1	227.8		
84	40	39.4	278.2		
85	20	17.4	117.8		
86	60	55.5	220.9		
87	34	31.0	117.4		
88	20	17.5	117.4		
89	60	56.0	159.7		
90	110	106.7	107.0	5.0	140
91	20	17.5	125.0		
92	50	44.5	564.9		
93	10	-	33.0		
135	50	47.7	22.6		
TOTAL 1040m		606.7m			



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ALICE SPRINGS AREA			
CURRENT UAL EXPLORATION LICENCES			
COMPILED: EA	DATE: AUG 76	TERRITORY:	MAP NO: 1
DRAWN:	DATE:	PLAN NO: NT-3078-2c	REPORT NO: MINES
LAST REVISION: MAY 77	SCALE: 1:250,000	PROJECT NO: 2c	
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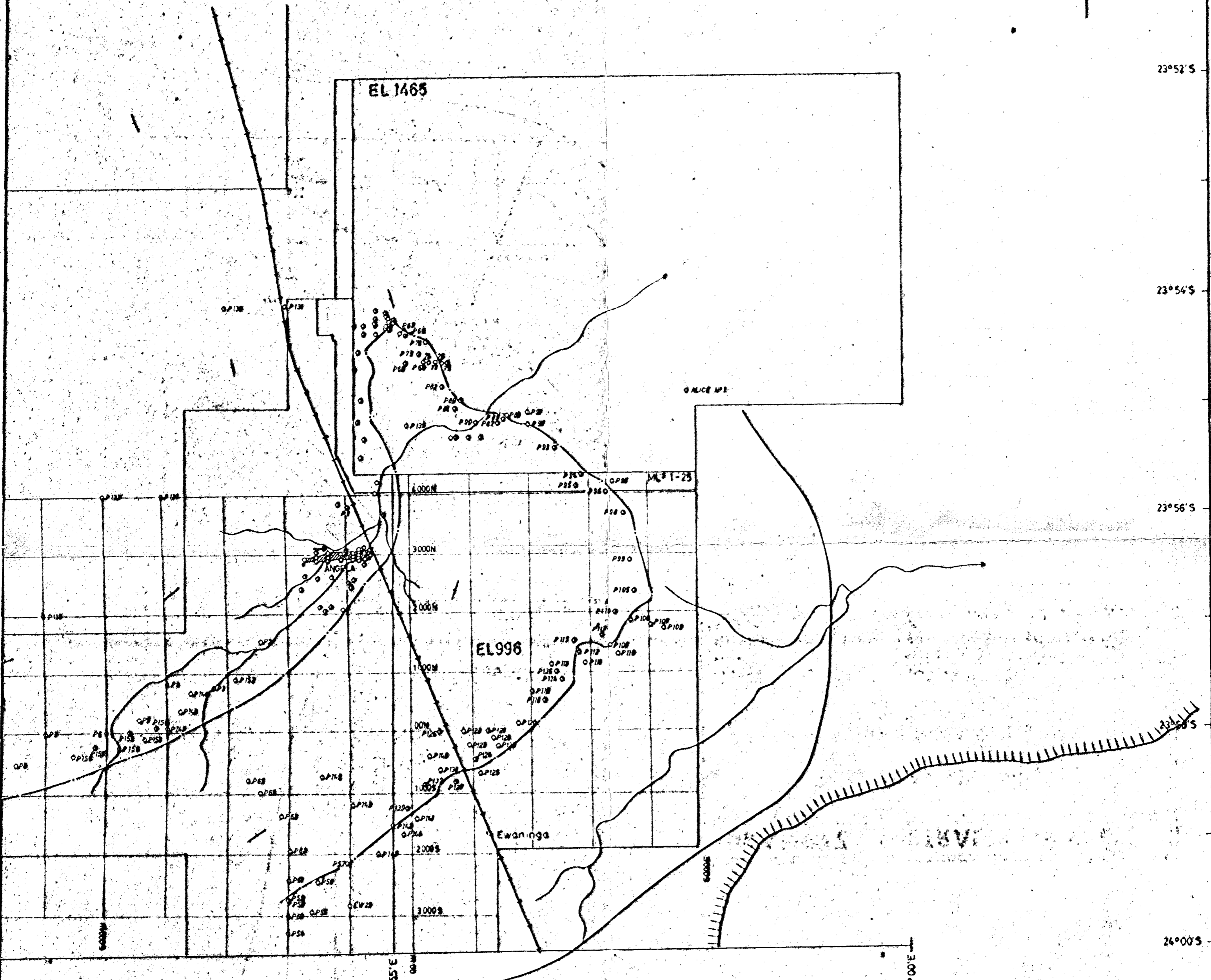
23°52'S

23°54'S

23°56'S

24°00'S

24°00'S



- Reduced / Oxidised boundary
- Boundary of Undandita / Hermannsburg sst.
- ||||| Boundary of ranges
- o Drill hole
- //// Mineralised zone

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ALICE SPRINGS AREA
EL 1465
DRILLING PROGRESS Ew, P, H, J SERIES HOLES

COMPILED:	DATE:	TENEMENT:	MAP No: 2
DRAWN: EA	DATE: FEB 77	PLAN No: NT-6233-2c	REPORT No:
LAST REVISION: 3-3-77		SCALE: 1:50,000	PROJECT No: 2c
E.C. TO BONNI		REF:	