

**ZEPHYR MINERALS N.L.**

**ANNUAL REPORT**

**FOR**

**EL 8324**

**KEEP RIVER**

**NORTHERN TERRITORY**

**FOR THE PERIOD JULY 15, 1996 TO JULY 14, 1997**

**CR 98 / 216**

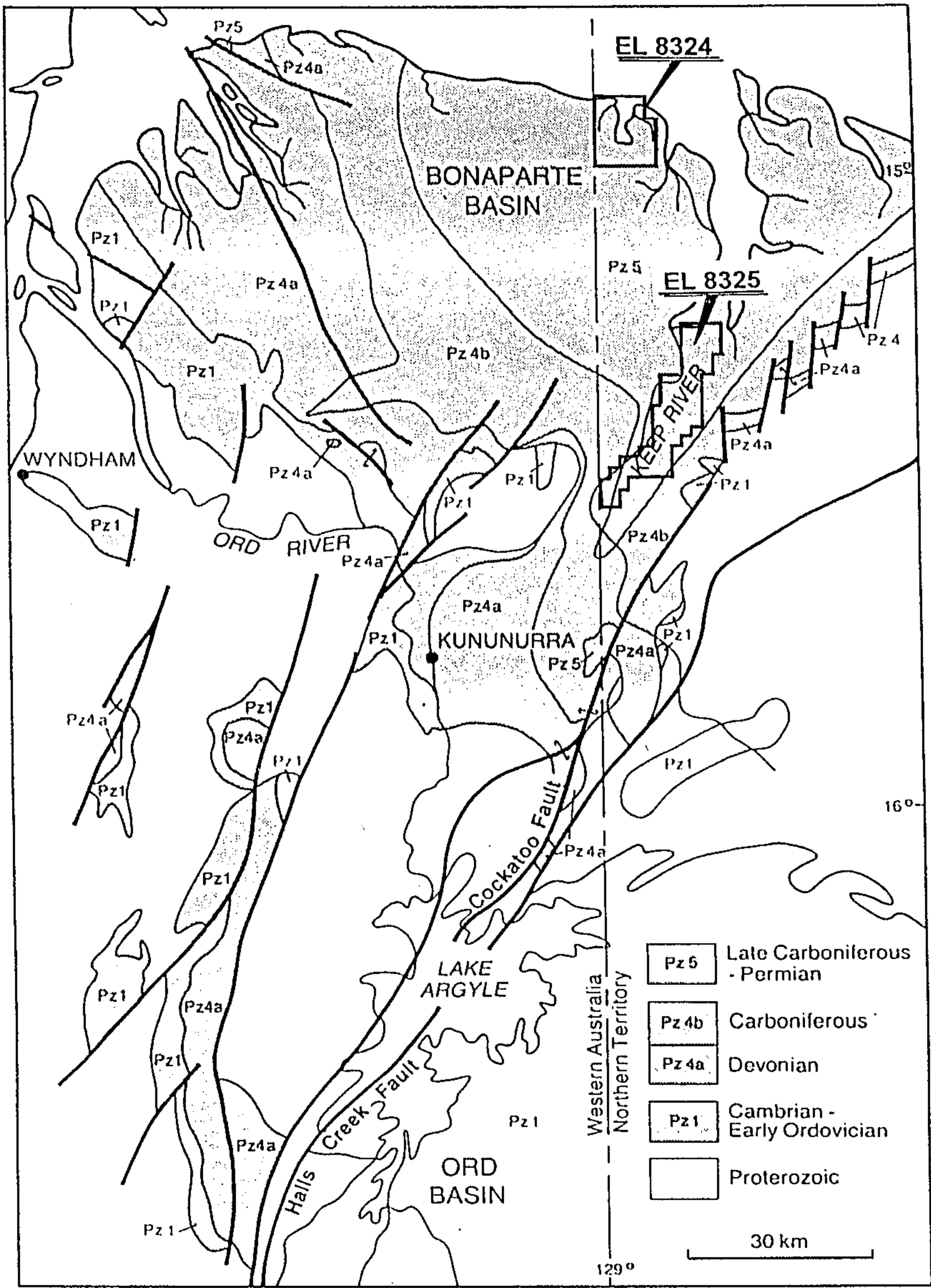
**W. GIFFORD  
January 1998  
PERTH**

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GSWA 24021

Solid (pre-Cainozoic) geology of the onshore Bonaparte Basin.

ZEPHYR  
TENEMENTS

FIGURE 1.

## 1.0 INTRODUCTION

### 1.1 General

Exploration Licence 8324 – Keep River, forms part of a semi-continuous group of Exploration Licences held by Zephyr Minerals NL in the Kununarra – Keep River region specifically for diamond exploration. The tenements located south and south-east of EL 8324 are considered to be prospective for kimberlite diatremes and diamondiferous gravels within a paleochannel of the ancestral Ord River system.

EL 8324 was obtained to cover the coastline west of the mouth of the Keep River, to the NT-WA border, and covers tidal flats and mangrove swamps and is relatively difficult to access.

The area was selected because in the event of the discovery of diamonds in the tenements to the south there is a possibility that alluvial diamonds might have been deposited in the shoreline apron around the mouth of the Keep River.

### 1.2 Location

The tenement is located on the western end of the Northern Territory coastline, approximately 100 kilometres northeast of Kununurra (Figure 1).

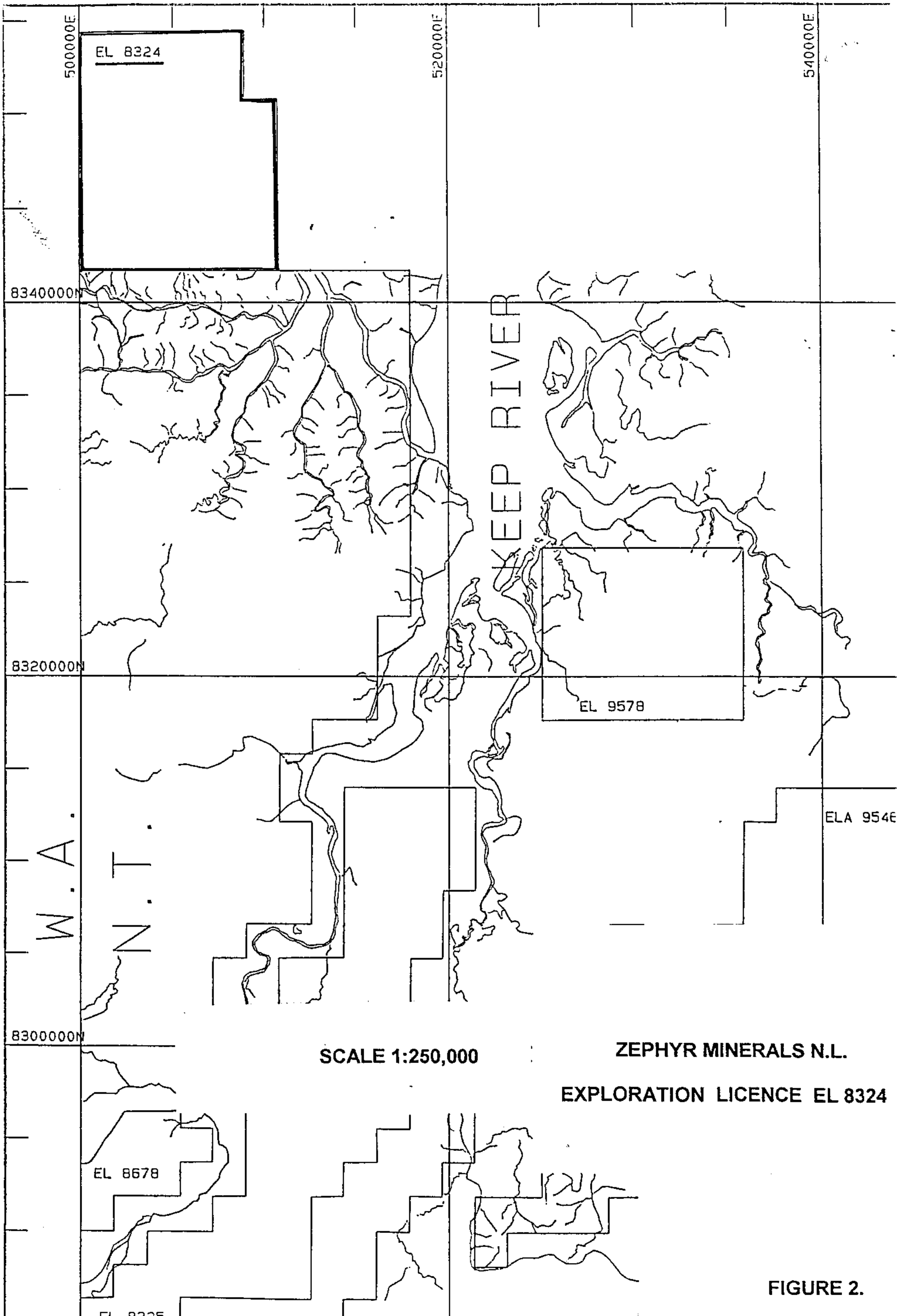
### 1.3 Tenure

EL 8324 comprises 40 blocks covering 129 km<sup>2</sup> (Figures 1, 2 & 3).

The tenement was granted to Zephyr Minerals N.L. (100%) on July 15, 1996 for a period of six years.

The tenement details are:-

Tenement No.	Date of Grant	Expiry Date	Area	Minimum Annual Expenditure
EL 8324	15/7/1996	14/7/2002	129 km <sup>2</sup> (40 blks)	\$15,000



EL 8324

500000E

520000E

540000E

8340000N

8320000N

8300000N

W.A.  
N.T.

KEELE RIVER

EL 9578

ELA 9546

EL 8678

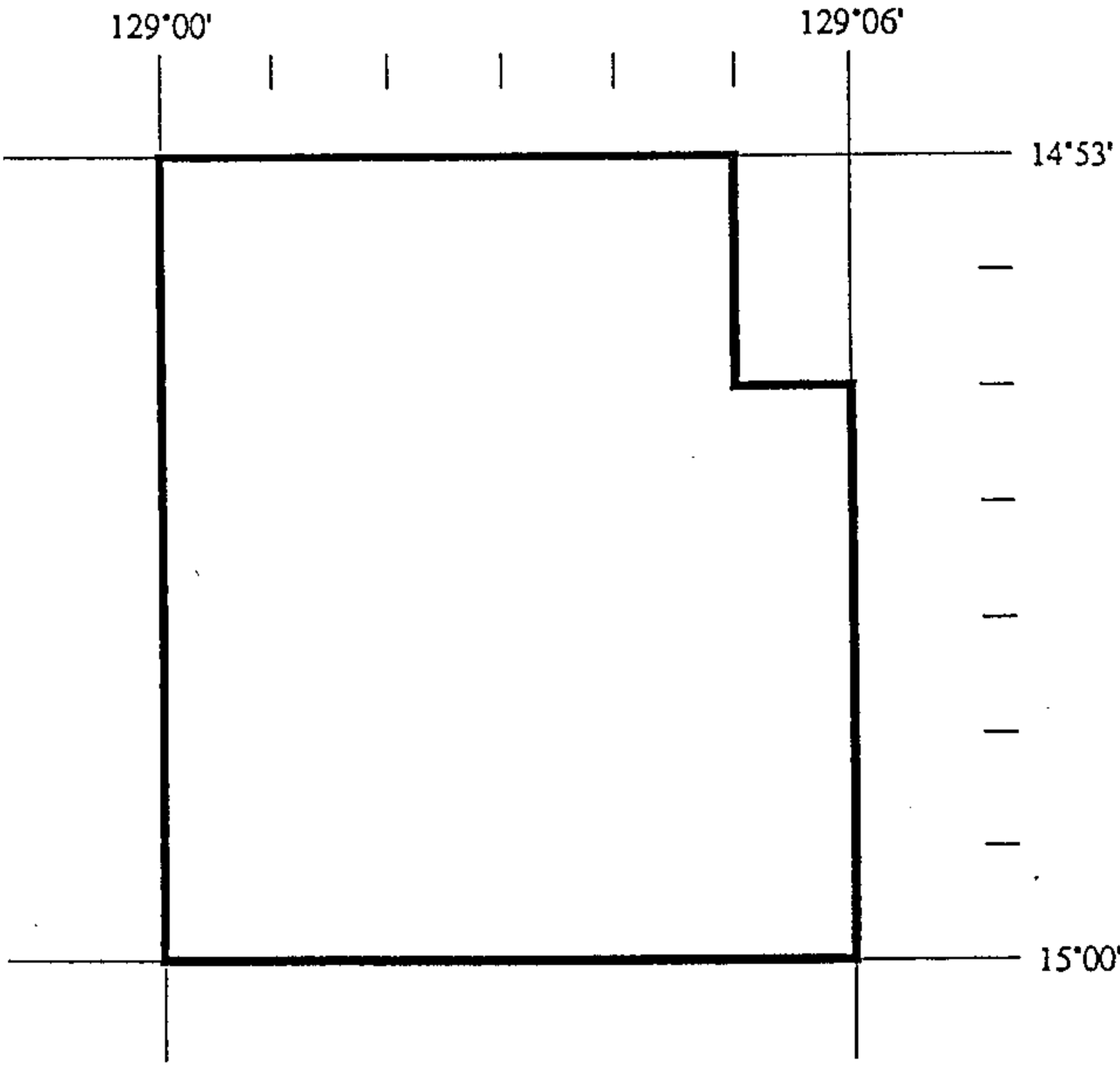
EL 8325

SCALE 1:250,000

ZEPHYR MINERALS N.L.  
EXPLORATION LICENCE EL 8324

FIGURE 2.

SECOND SCHEDULE  
(Plan of Area)



**EL8324**  
40 BLOCKS  
129 sq kms

**ZEPHYR MINERALS N.L.**  
EXPLORATION LICENCE EL 8324

FIGURE 3.

## 2.0 GEOLOGY

The project tenement is situated over the coastal portion of the Bonaparte Basin in the Northern Territory, adjacent to the Western Australian-Northern Territory Border (Figure 1).

The Bonaparte Basin contains sediments ranging in age from Cambrian to Cainozoic and the greater part is located offshore extending northwest from the Joseph Bonaparte Gulf to the vicinity of Timor.

The onshore area of the Basin essentially forms a north plunging syncline with the western limb in Western Australia and the eastern limb in the Northern Territory.

The basement to the Basin, in the project area is believed to be composed of Proterozoic sediments, but no exposures are present. The flood plain of the Keep River comprises recent alluvial sediments and the project area is dominated by marine and alluvial coastal deposits of mud, silt and evaporites.

## 3.0 CONCLUSIONS AND RECOMMENDATIONS

No fieldwork was undertaken in the tenement during the reporting period for two reasons:

- A: the area is very difficult to explore on foot and the perceived diamond potential of the area depended upon locating diamond sources further to the south in the Keep River drainage basin. This did not eventuate during the period.
- B: In early 1997 Capital Energy NL completed a takeover of Zephyr's parent company Stirling Resources NL. As a result of this change of management, staff contracts were terminated and the company's administration was relocated to Sydney.

This left Zephyr with no qualified diamond explorationists on staff.

Following a review, in late 1997 of all the Keep River tenements held by Zephyr it was concluded that EL 8324 does not warrant being retained and should be relinquished.

#### 4.0 EXPENDITURE

Expenditure for the period is calculated to be:

Office administration (incl. o'heads)	\$2,500.00
Map and data purchases	\$150.00
Tenement management fees	<u>\$156.84</u>
Total	<u>\$2,806.84</u>