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## **EL28790 FIRST ANNUAL REPORT**

**For period from 02/04/2012 to 01/04/2013  
GEORGINA BASIN PROJECT NT**

<b>Brunette Downs</b>	<b>SE5311</b>	<b>1:250,000</b>
<b>Paradise Bore</b>	<b>6161</b>	<b>1:100,00</b>

**Commodity: Diamond, Gold, Iron, Phosphate**

**Titleholder: Tropical Resources Pty. Ltd**

**Report No. 2013-011  
Tropical Resources Pty. Ltd  
By Mingjin HOU  
28<sup>th</sup> May 2013**

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## **1. SUMMARY**

EL 28790 is about 30km just east of the Tableland Highway (No.11) and 3km south side of Calvert Road. Tropical Resources Pty Ltd applied for EL 28790 primarily to explore for Diamond, Gold and secondly to evaluate the potential for other types of economic mineralisation such as Iron and Phosphate. Work during Year 1 of tenure consisted of a review of NTGS data and Open File Company reports (geological and geophysical), and a short field trip.

Work during Year 2 will include field reconnaissance, data evaluation and progressing to geological and geophysical survey.

## **2. LOCATION AND ACCESS**

EL 28790 is about 850Km of SSE138° of Darwin, and about 250km of NEE56° of Tennant Creek, about 160km of north side of the Barkly Highway (Figure 1). There is just about 30km east side of Tableland Highway (No.11) and Calvert Road (No.16). Access is along the Tableland Highway via Barkly Highway and Stuart Highway from Darwin. There are several rough road can be reach to the Lease. Topography is plains with some hills but the relative elevation is less 50m, several rivers cross the land. Access is advisable in the dry season only.

The tenement has numerous creeks which can flood in heavy rains during the wet season.

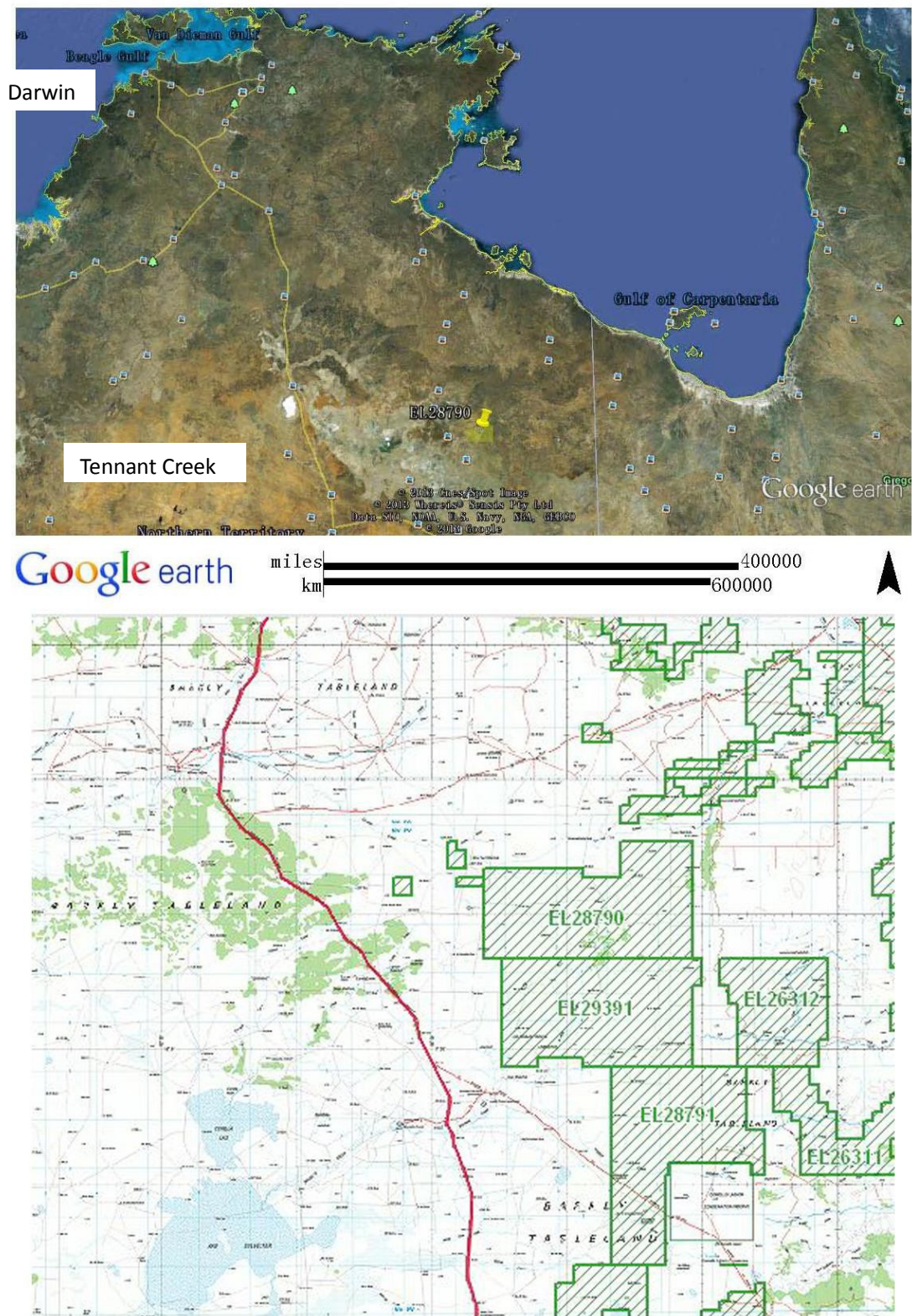


Figure 1 Location of EL28790 in Topography

### 3. TENEMENT STATUS AND OWNERSHIP

EL 28790 was granted on 2<sup>nd</sup> April 2012 and expires on 1<sup>st</sup> April 2018 for a term of six years. It comprises 250 graticular blocks (815.72 sq km). There are no other mining leases or mineral claims shown within the License boundaries.

Underlying cadastre is mainly Pastoral Lease. Landholders show below: 1-NT Portion 1163, Perpetual Pastoral Lease 1014,Creswell; 2-NT Portion 1483, Perpetual Pastoral Lease 925,Nicholson; 3-NT Portion 963, Perpetual Pastoral Lease 963,Creswell;) (Figure 2).

The expenditure covenant set for the first year was \$48,000.

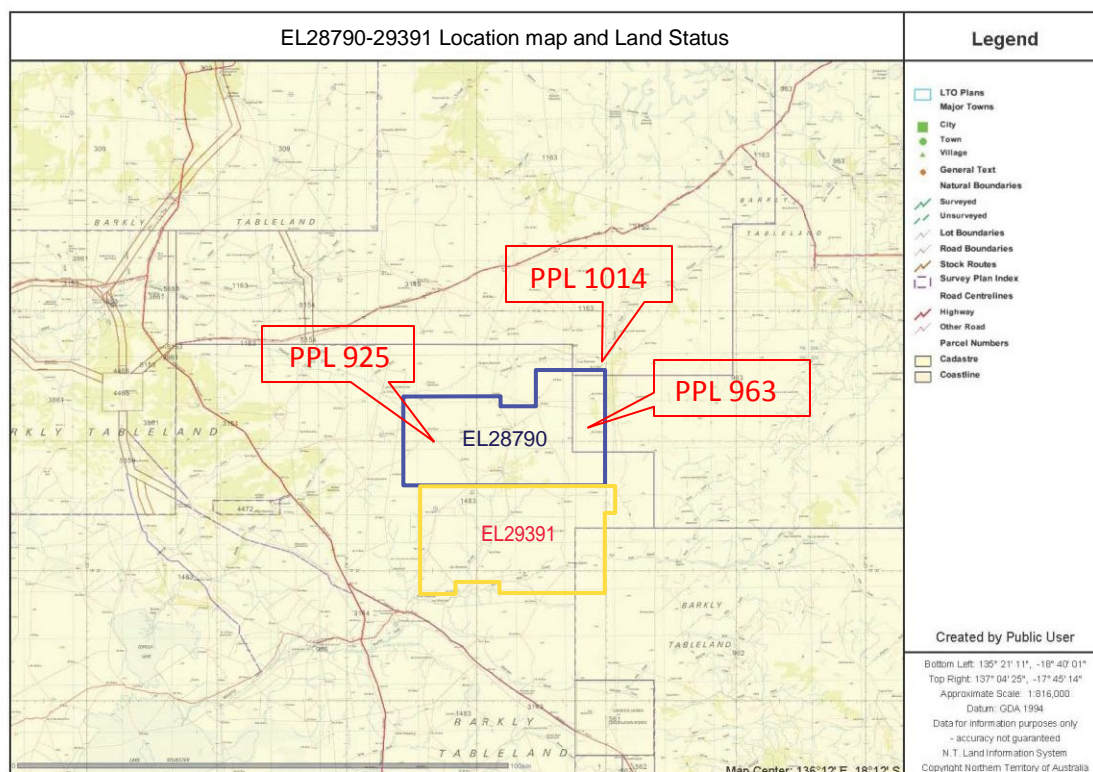


Figure 2 Landholders and Lease Numbers displayed inside EL 28790



## 4. GEOLOGY

EL28790 is situated within the Georgina Basin, a wildly folded sequence of Cambrian rocks. The 1:250,000 Geological map cover the tenement area (Brunette Downs, 1966 ) (Figure 3).

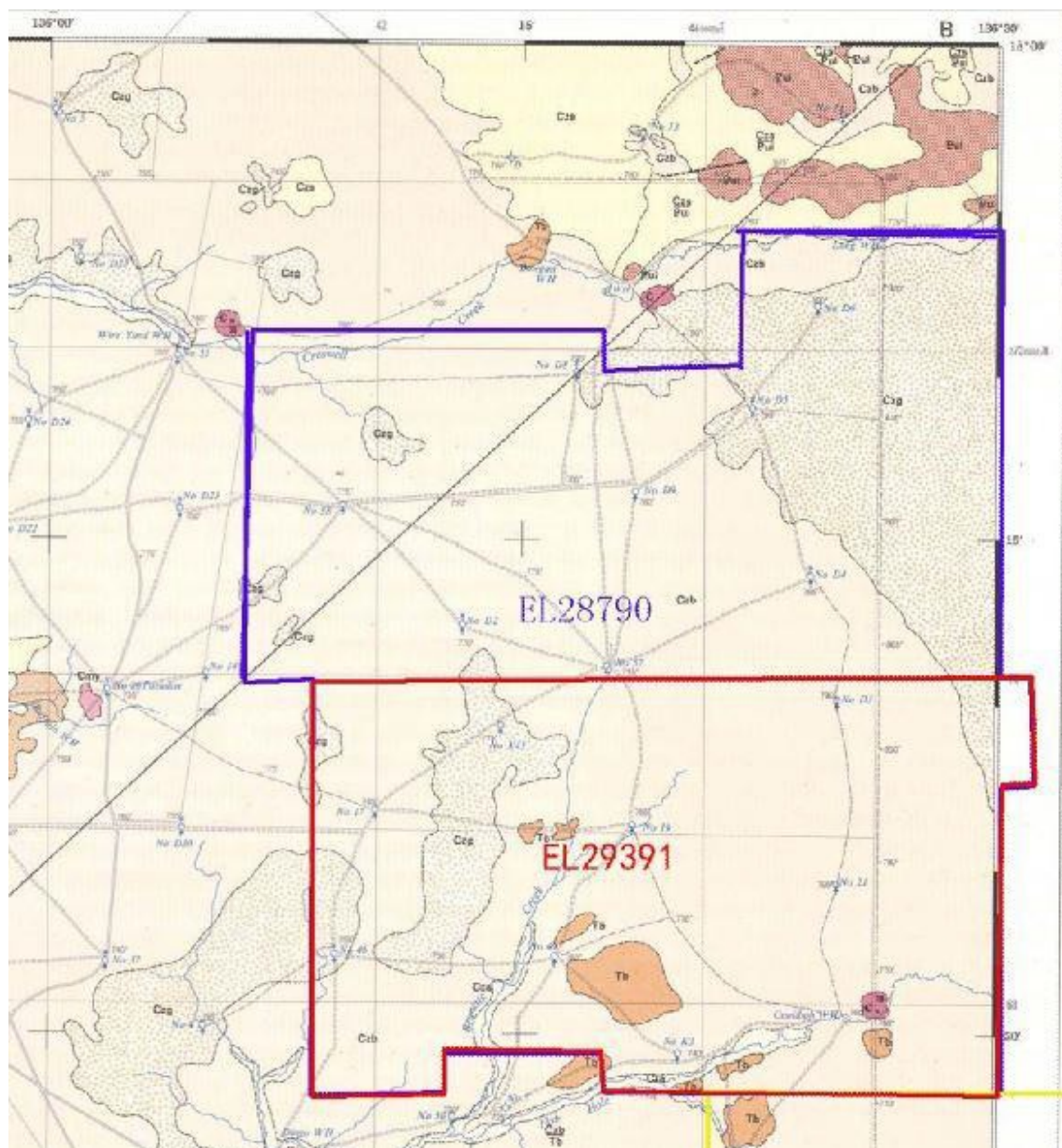


Figure 3 Geological Map of EL 28790 from 1:250000 geologic map of the sheet  
of Brunette Downs

All of the economic diamond deposits and other significantly diamondiferous occurrences in Australia occur on the North Australian Craton (“NAC”). The NAC underlies the Kimberley region of northern WA, the northern two thirds of the NT and the north western part of Queensland. It is also host to many significant base metal, gold and uranium deposits. The NAC was formed at about 1850Ma during the Barramundi Orogeny by the amalgamation of Archaean and early Proterozoic rocks which now form the basement rocks to the younger sequence. Proterozoic (1820-1600Ma) platform cover sediments, Palaeozoic volcanics and sediments, and Mesozoic sediments cover these basement rocks.

The Georgina Basin is one such platform cover which developed above the NAC between 1800-1500Ma. Its sedimentary package consists of unmetamorphosed and less intensely deformed rocks of carbonate, siliciclastic and interbedded volcanics deposited in a shallow intracratonic basin.

The Georgina Basin is overlain by the remnants of the Cambrian Karkly Group Ranken Formation Limestone: Bioclast, bioclast rudestone; Grey Biological Dolomite, rudestone, Sandstone; and Cambrian Helen Springs Volcanic Rocks. There is a widespread distribution of Cenozoic Limestone, dolomite; and sandy soil, laterite and alluvium cover.

## **5. PREVIOUS EXPLORATION**

Exploration has been carried out in the area since 1978 with several companies working on this area (Some of them show in Table 1). Exploration primarily involved rock chip, soil and stream sampling for Diamond, gold and some base metal analysis.

Table 1 List of the previous exploration Licenses

EL Number	Expiry Date	Company Reports
EL1427		CR1978-0138 CR1980-0118
EL4335	25/08/1989	CR1987-0217 CR1984-0226 CR1985-0235
EL4342	25/08/1989	CR1987-0201 CR1988-0344 CR1989-0288 CR1989-0289 CR1989-0652 CR1984-0229 CR1985-0231 CR1986-0258
EL4334	25/08/1989	CR1986-0259 CR1987-0216 CR1984-0227 CR1985-0234
EL8998	20/02/2001	CR1996-0239 CR1997-0325 CR1997-0260
EL7273	20/02/1997	CR1992-0093 CR1995-0245 CR1996-0234 CR1997-0203 CR1995-0370 CR1994-0232 CR1993-0330 CR1996-0441 CR1999-0239 CR1998-0250 CR1994-0362

## 6. EXPLORATION DURING YEAR 1

During 2012/2013, Tropical Resources exploration consisted of historic data compilation including tenure, datasets, open file reports and geo-referencing of relevant maps. This enabled an informed review of the tenements prospectively in regards to Diamond and Gold, Iron and Phosphate. Also field reconnaissance also completed.

## 7. PREPARING EXPLORATION FOR YEAR 2

Working program for Year 2 included:

- a) Some geological surveying
- b) Proposal Geophysical survey after Geological survey
- c) Proposal IP Section survey

Expenditure is expected to be at least \$74,000.

## 8. EXPENDITURE

Expenditure consisted of:



Table 2 Expenditure on EL28790

Ground Geological survey	\$2,000.00
Office studys	\$44,000.00
Overheads	\$4,000.00
<b>TOTAL</b>	<b>\$50,000.00</b>

## 9. CONCLUSION AND RECOMMENDATION

The exploration target is Diamond and Gold, Iron, Phosphate. However through analysis of historical exploration data and superficial traversing of EL 28790, there is no large scale host rock of Diamond occurrence. Next year, TRC geologist plan to do a geophysical survey with a focus on the basement rocks, phosphate and Iron.

## 10. REFERENCES

Rawlings DJ, Sweet IP and Kruse PD, 2006. Mount Drummond, Norten Terotory (Second Edition). 1:250,000 Geological map series, SE 53-12. Northern Territory Geological Survey, Darwin.