#### **EL28801 THIRD AND FINAL ANNUAL REPORT**

# For period from 21/12/2011 to 12/09/2014 'PINE CREEK WEST' PROJECT NT

Pine Creek SD5208 1:250,000

Titleholder: Tropical Resources Pty. Ltd

Report No. 2014-023 Tropical Resources Pty. Ltd By Mingjin HOU November 11, 2014

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### 1. SUMMARY

EL 28801 is 21km west of the Pine Creek Township within the Pine Creek Orogeny. Tropical Resources Pty. Ltd applied for EL28801 primarily to explore for vein-hosted Au mineralization and secondly to evaluate the potential for other types of economic mineralization such as Cu.

Work during Year 1 of tenure consisted of a review of NTGS data and Open File Company reports (geological and geophysical), and short field trip.

Work during Year 2 included field reconnaissance and data.

Work during Year 3 included field reconnaissance and data evaluation.

### 2. LOCATION AND ACCESS

EL28801 is located approximately 21km west of the Pine Creek Township and 160km SSE of Darwin, NT. (Figure 1). Access is along the Oolloo Road toward Douglas Daly to Butterfly George from Hayes Creek via Stuart Highway from Darwin. There are several rough road can be reach to the Lease from north along the Oolloo Road or along Umbrawarra Road from southwest via Pine Creek Township. Topography is plains with some hills but the relative elevation is less 50m, several rivers cross the land. Topography is undulating hills with well-defined drainage, with higher relief in the NW corner of the Licence. Access is advisable in the dry season only.

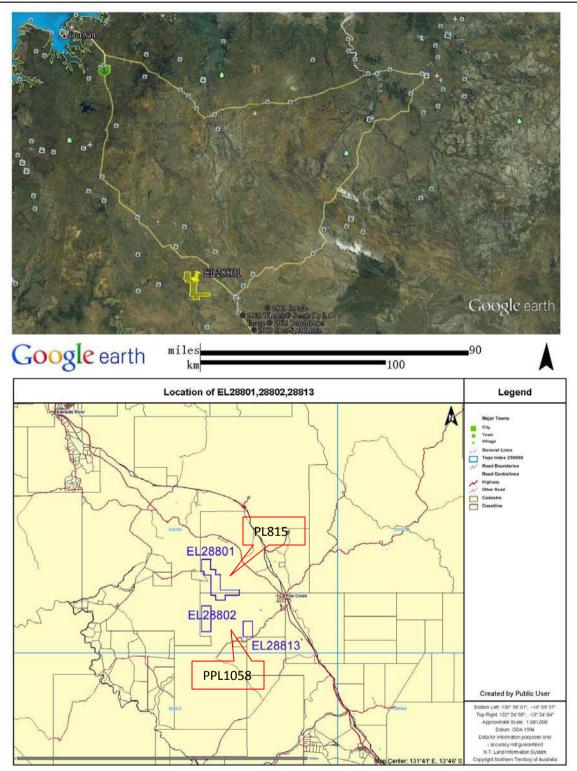


Figure 1 Tenement Location Map of EL 28801

### 3. TENEMENT STATUS AND OWNERSHIP

EL 28801 was granted on 21th December 2011 for a term of six years and expires on 20th December 2017. It comprises 21 graticular blocks (68.92 sq km). There are no other mining leases or mineral claims shown within the Licence boundaries.

After data review and field trips, at the end of year two, TRC decided to reduce the northern part, from 21 blocks to 11 blocks (36.69 sq km), because of a lack of interesting outcrop to do field work. Relinquished 10 blocks (Figure 2).

After the third year, TRC decided to surrender the remaining blocks due to the low potential for an economic deposit.

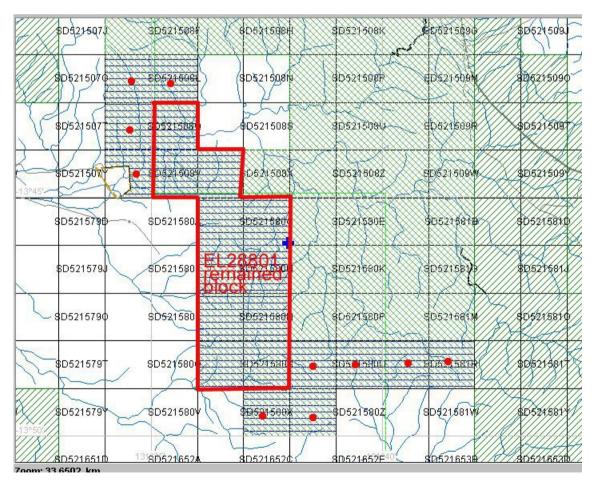


Figure 2 Blocks remaining at the end of year two (red polygon)

Underlying cadastre is mainly Pastoral Lease. Landholders show below: 1-NT Portion 1630, Pastoral Lease 815, Douglas Daly; 2-NT Portion 709, Perpetual Pastoral Lease 1058, Douglas Daly (Figure 1).

# 4. GEOLOGY

EL 28801 is situated within the Pine Creek Geosyncline, a tightly folded sequence of Lower Proterozoic rocks. A full description of the geology and stratigraphy of the Pine Creek Geosyncline can be found in several texts, including Ahmad et al., (1993; Ahmad, 1998), which covers the 1:250,000 Pine Creek Sheet. More detailed mapping and explanatory notes cover the 1:100,000 Tipperary sheet (Whitehead B.R., Mulder, C.A., 1988).

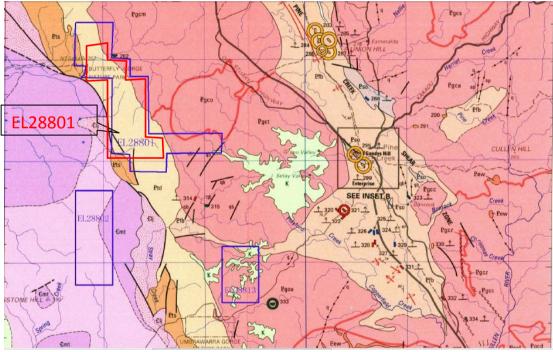


Figure 3 Geology map of EL28801

The middle part of tenement area overlies the Tolmer Group sediments: Depot Creek Sandstone; Stray Creek Formation: thick bed fine sandstone, Micaceous siltstone, dolomitic siltstone, shallow marine.

The eastern part of EL28801 is dominated by the Mcminns Bluff Granite, which is a pink, coarse and predominately porphyritic biotite-hornblende granite dominated

pluton (Wyborn, 2002). All of the metasediments display contact metamorphism, with mapped isograds within EL 28801 ranging from hornblende hornfels (covering most of the metasediments) with albit-epidote (subdivided into 'biotite in' phase) covering the metasediments near the western and south-western parts of EL 28801.

The Pine Creek Shear Zone transects the tenement and is a major regional structure mapped as a D3 fault (Ahmad et al., 1993). The metasediments within the shear zone are chloritic and show vertical cleavage, while granites in the shear zone have discrete fault breccias and mylonite zones. There is evidence of movement along the Pine Creek Shear Zone after granite emplacement. Mapping by Goldfields Exploration noted the area is dominated by relatively tight, south-plunging folds. The Bonrook fault is adjacent to the Bonrook Granite and is characterized by a 2-3m quartz vein.

### **5. PREVIOUS EXPLORATION**

Exploration has been carried out in the area since 1979 by C.R.A Exploration Pty. Ltd. Several companies worked on this area (Table 1). Exploration primarily involved rock chip, soil and stream sampling (Stockdale Prospecting Ltd., EL7673, 1993-1998) for gold and some base metal analysis.

EL Number	Expiry Date	Company Reports
EL1566	22/03/1977	CR1979-0080
EL2436	16/02/1982	CR1984-0113 CR1983-0128 CR1986-0162 CR1985-0283 CR1982- 0398
EL5297	30/09/1993	CR1989-0827 CR1988-0409
EL7673	12/04/1998	CR1993-0497 CR1994-0308

Table 1 List of the previous exploration Licenses

# 6. EXPLORATION DURING YEAR 1

During the first year of tenement exploration consisted of historic data compilation including tenure, datasets, open file reports and geo-referencing of relevant maps. Field reconnaissance was also completed. This enabled an informed review of the tenements prospectively in regards to Gold, Cooper and base metal.



Photos1-2, Field trip to Butterfly George at the gate of Douglas Station

### 7. EXPLORATION DURING YEAR 2

In 2013, Tropical Resources exploration consisted of historic data compilation including tenure, datasets, open file reports and geo-referencing of relevant maps. Field reconnaissance was also completed.

### 8. EXPLORATION DURING YEAR 3

In 2014, Tropical Resources exploration consisted of historic data compilation including tenure, datasets, open file reports and geo-referencing of relevant maps.

#### 9. EXPENDITURE

Expenditure during all of three years is \$62,000

year works	1	2	3
Ground Geological survey	\$2,000.00	\$6,000.00	\$2,000.00
Office studies	\$11,000.00	\$22,000.00	\$13,000.00
Overheads	\$1,000.00	\$4,000.00	\$1,000.00
TOTAL	\$62,000.00		

Table 2 Expenditure on EL28801

## **10. CONCLUSION AND RECOMMENDATION**

After a review of all the data and field trips, TRC has decided to surrender this tenement due to the low potential for an economic deposit.

### 11. REFERENCES

Carson, C. Scrimgeour, I., Goldberg, A., Stern, R., and Worden, K., 2006. Western Pine Creek Orogen (Litchfield Province) – recent advances and regional correlations. Annual Geoscience Exploration Seminar (AGES) 2006, *Record of Abstracts. Northern Territory Geological Survey, Record 2006-002.* 

Ahmad, M., Wygralak, A.S., Ferenczi, P.A., and Bajwah, Z.U. 1993. Explanatory Notes and Mineral Deposit Data Sheets. *1:250,000 Metallogenic Map Series, Department of Mines and Energy, Northern Territory Geological Survey* 

Whitehead B.R., Mulder, C.A., 1988. Tipperary 5170 Explanatory Notes. 1:100,000 Geological Map Series, Northern Territory Geological Survey.

Pietsch, B.A., and Edgoose, C.J., 1988. The Stratigraphy, Metamorphism, and Tectonics of the Early Proterozoic Litchfield Province and Western Pine Creek Geosyncline, Northern Territory. Precambrian Research, Vol 40/41, pp 565 – 588.

Wyborn, L.A.I., 2002. Granites and Copper Gold Metallogenesis in the Australian Proterozoic. Geoscience Australia Record 2001/12.

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