TM GOLD PTY LTD

23rd November 2012 – 06th February 2015

Final Report
EL29465

Map Sheets:
1:250 000 Pine Creek SD52-8
1:100 000 Pine Creek 5270
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1. SUMMARY

The Union Extended exploration licence is situated in close proximity to the McKinley Granite, Pine Creek shear zone and Union Reefs gold deposit. While surface exploration efforts have so far revealed no outcropping primary mineralisation there remains reasonable prospectivity for economic gold mineralisation with no surface expression which has yet to be adequately tested.
2. INTRODUCTION

This report summarises exploration activities carried on EL29465 out between November 23, 2012 and February 6, 2015.

3. LOCATION AND ACCESS

EL29465 is located on pastoral leasehold land approximately 150 km south east of Darwin. The location is accessed off the unsealed Mount Wells and is in close proximity to the north–south rail, gas pipeline and trunk power lines.

Figure 1 - Location plan
3.1 Climate

The climate is tropical with warm dry winters and hot wet summers. The average annual rainfall is 1200mm with most falls in the three month wet season, usually between December and February.

3.2 Topography and Vegetation

The Spring Hill project is located within the Bonnie Ranges. Its topography comprises steep-sided hills rising to 180 metres above surrounding country separated by narrow valleys. The country is typically described as highly dissected tropical savannah. Soils are skeletal and poorly developed.

The project area lies entirely within the McKinlay River drainage system which drains to the north. Project area vegetation is classified as Low Woodland being lightly timbered with *Eucalyptus tintinnans* (Salmon Gum) with a *Sorghum* grassland understorey.

4. TENURE

<table>
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<th>Tenement</th>
<th>Area</th>
<th>Grant</th>
<th>Expiry</th>
<th>Thor Interest</th>
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<td>10.01 km²</td>
<td>23 November 2012</td>
<td></td>
<td>100%</td>
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Table 1 - Tenement summary

5. GEOLOGY

5.1 Regional Geology

The project area is located within the Palaeoproterozoic Pine Creek Orogen, which is aged between 2470-1870Ma. The Pine Creek Orogen consists of a sequence of psammitic and pelitic sediments, tuffs and minor volcanics. The sediments have been intruded by granitoids of the Cullen Batholith of Palaeoproterozoic age (Figure 2).
5.2 Local Geology

The tenement geology comprises sedimentary rocks of the Palaeo-proterozoic Burrell Creek Formation of the Finniss River Group. These rocks have undergone tight to isoclinal folding along south east plunging axes. The Pine Creek shear, a broad regional fault structure trends NW influencing the western half of the tenement.

The Mckinlay Granite of the Palaeoproterozoic Cullen Batholith outcrops immediately to the north of the tenement. The Mount Porter Granite outcrops to the south east.

A north west trending dolerite dyke which marks the eastern margin of the Pine Creek shear zone intrudes the Burrell Creek Formation in the centre of the licence area.
5.3 Mineralisation

Anomalous gold mineralisation has been detected in geochemical surveys previously undertaken by Billiton and Dominion however no primary source has been located.

Alluvial mining was undertaken between 1993 and 2006.

Figure 3 - Local geology of tenement
6. **EXPLORATION HISTORY**

Billiton held the ground via a joint venture agreement with Coronation Hill Mines NL between 1988 and 1990. Aeromag survey data was acquired and stream sediment survey work was undertaken. Anomalous stream sediment samples were followed up by field assessment and the JV subsequently ended.

Dominion held the ground between 1991 and 1994 completing stream sediment and gridded soil geochemical surveys. Anomalous gold results were thought to be influenced by surface alluvial contamination so a follow-up vacuum drill program was conducted. The tenement was subsequently relinquished.

TM Gold was granted the tenement in November 2012 and undertook a high resolution heli-mag survey over the entire EL (reported previously with the EL22957 annual report lodged in March 2013).

The geophysical surveys was flown using nominal terrain clearance of 30 m, line spacing was 50m and tie line spacing of 500m.

Although known mineralisation targets within the tenement area are not magnetic in themselves, it was intended that, associated structural features may be identified which could assist in targeting subsequent exploration. Evaluation of this data did not produce any targets for follow-up.

Due to financial constraints and other higher priorities, no further work was undertaken and the tenement was relinquished in February 2015.

10 **SUMMARY & CONCLUSION**

A concerted exploration effort by TM Gold has not been possible on this tenement due to other priorities. This situation is unlikely to change in the foreseeable future and thus the tenement has been relinquished.