ANNUAL AND FINAL REPORT
YEAR 6

EL 27154
CALVERT RIVER PROJECT

FOR PERIOD ENDING 13 OCTOBER 2015

Robinson River SE 53-4  1:250,000
Robinson 6365  1:100,000

Titleholder: Carpentaria Minerals Pty Ltd

By L. Petrella
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1. SUMMARY

EL 27154 is situated approximately 120km SE of Borroloola, near the southern coast of the Gulf of Carpentaria and close to the border with Queensland (Figure 1). Access to the area is via a gravel road linking Borroloola to Doomadgee in Queensland, and the tenement can be accessed via Seven Emu Station tracks or helicopter. Topography for the tenement is hilly along sandstone ridges with flat flood plans and alluvial areas to the east and west of the tenement.

Historical exploration in the region has primarily been undertaken by CRA/Rio Tinto. Exploration has been completed for diamonds, base metals (sediment, strata-bound and breccia hosted copper) and phosphate.

Exploration on EL27154 was planned in conjunction with the diamond drilling program on adjacent tenement EL25397 ‘Calvert’. Unfortunately despite significant track access construction and maintenance costs for access to both tenements, drilling was cancelled due to parts of the tracks being inaccessible for drill rigs.

Administratively TUC Resources Ltd (previously Territory Uranium Company Pty Ltd) the former holder passed the EL27154 licence to its wholly owned subsidiary Carpentaria Minerals Pty Ltd in October 2012. This and the neighbouring EL25397 licence were also grouped to form GR268-12, approved in December 2012.

At the end of year 6 Carpentaria Minerals Pty Ltd decided to surrender EL27154. This report details exploration completed on the relinquished ground (no drilling and no samples).
2. LOCATION AND ACCESS

EL 27154 is situated approximately 120km SE of Borroloola, near the southern coast of the Gulf of Carpentaria and close to the border with Queensland (Figure 1). Access to the area is via a gravel road linking Borroloola to Doomadgee in Queensland, and the tenement be accessed via Seven Emu Station tracks or helicopter.

Topography for the tenement is hilly along sandstone ridges with flat flood plans and alluvial areas to the east and west of the tenement. The geomorphic provinces are described as ‘G5’ (gentle erosional slopes on coastward side of sandstone ridges) which covers most of the Licence (Rawlings, 2006). The tenement has numerous creeks which can flood in heavy rains during the wet season. Major creeks include the Calvert River to the south of the tenement and Stockyard Creek to the north.

3. TENEMENT STATUS AND OWNERSHIP

Tenement status details for EL27154 are given in table 1 below:

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Owner</th>
<th>Date Granted</th>
<th>Expiry Date</th>
<th>Blocks</th>
<th>Area (Km²)</th>
<th>Covenant Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL27154</td>
<td>Carpentaria</td>
<td>14/10/2009</td>
<td>13/10/2015</td>
<td>10</td>
<td>32.94</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

There are no other mining leases or mineral claims shown within the Licence boundaries. Underlying cadastre is all perpetual pastoral lease stations owned by several parties, including:

PPL 1651 (NT Portion 773) Seven Emu Station, covering the northern part of the licence;
PPL 1352 (NT Portion 774) Pungalina Station, covering the southwestern corner of the licence.

An AAPA certificate and an MMP were applied for during the 2010. The MMP was approved, the AAPA certificate showed no RWA areas within the lease.

Year 2 compulsory relinquishment was completed with 53 blocks dropped of the original 73.

Year 4 compulsory relinquishment was completed with 10 blocks dropped of 20 kept in Year 2.

Year 6 the license is completely relinquished.

This report details exploration that was completed on the EL27154.
Figure 1 Tenement Location Map at Surrender
4. GEOLOGY

EL 27154 is situated within the tectonically stable Wearyan Shelf, on the southeastern margin of the McArthur Basin. The Wearyan Shelf is defined as a “thick platform cover” succession of mostly unmetamorphosed sedimentary and lesser volcanic rocks deposited on the North Australian Craton (Plumb, 1979). A full description of the geology and stratigraphy of the North Australian Craton can be found in several texts, including Plumb et al., (1990). The 1:250,000 geological series map and notes of Robinson River covers the tenement area (Rawlings, 2006).

The tenement is covered largely by Cenozoic alluvium and colluvium, with outcropping sandstone and siltstone of the Tawallah Group forming hills and ridges (Figure 2). Rawlings (2006) refers to the Tawallah Group as part of ‘Redbank depositional package’ that consists of a regionally extensive platform of shallow marine to fluviatile sediments with bimodal volcanic and high-level intrusive rocks of age 1815-1710Ma. Original mapping and sampling by previous workers identified the ‘Masterton Formation’ (part of the Tawallah Group) which is now called the Echo Sandstone. No outcrops of the Gold Creek Volcanics have been mapped in the tenement.

Northwest-trending faults and lineaments in the area are named the ‘Calvert Fault trend’ and can be identified in airborne magnetics and Landsat (Rawlings 2006).

Rawlings (2006) noted ‘unusual, circular 20 – 100m diameter sandstone knobs (‘Pungalina pipe set’) during mapping, which was interpreted as the surface expression of pipe-shaped collapse structures. The knobs are ‘untested and represent excellent base metal targets’ and are in the north eastern corner of EL27154.

These circular features are interpreted as the surface expression of a series of breccia pipes, such as those that host mineralisation at the nearby copper mine at Redbank. During exploration, many more of such features have been noted, ranging in diameter from 20m to 500m.

A summary of the interpretive geological history of the area is depicted on the diagram in Figure 3, pictorially demonstrating timing of events relative to the relevant geology and within the basin context.
Figure 2 Tenement Geology at Surrender (NTGS 1:250K Map, SE 53-4)
Figure 3 Stratigraphic column and Interpretive Geological History, including stages of known mineralisation
5. PREVIOUS EXPLORATION

Historical exploration in the region has primarily been undertaken by CRA/Rio Tinto. Exploration has been completed for diamonds, base metals (sediment, strata-bound and breccia hosted copper) and phosphate. The tables below summarise some of the exploration that has been undertaken on EL27154. A full review of historical exploration on EL27154 has not yet been completed.

Table 2: Summary of some geochemical exploration over/close to EL27154

<table>
<thead>
<tr>
<th>Period or lease #</th>
<th>Company (ies)</th>
<th>Commodity</th>
<th>Focus</th>
<th>Data Available</th>
<th>Result of Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL7314</td>
<td>CRA Exploration</td>
<td>Cu</td>
<td>Stratabound Cu Mineralisation in GCV</td>
<td>-Helicopter rock chip sampling -Low density stream sediment sampling</td>
<td>-No elevated base metal results. -Best results within EL25397 being 30ppm Cr and Co (in separate samples). Zn, Cu and Pb were all 10ppm or less.</td>
</tr>
<tr>
<td>1994-1998 (EL8533 &amp; EL8856)</td>
<td>CRA/ Rio Tinto</td>
<td>Cu</td>
<td>GCV for Breccia-hosted Cu mineralisation</td>
<td>-~144 stream sediment samples -7 geochemical samples @ 50m spacing across &quot;Calvert 1&quot; anomaly -32 infill stream samples -73 soil samples around 'Barra', 'Archer' &amp; 'Calvert 1' anomalies -4 rock chip samples -22 helicopter assisted stream sediment samples</td>
<td>-Identified 2 high anomalous Cu/Zn stream sediment values in north of current EL25397 (175ppm Cu and 115ppm Cu). -One iron rich rock chip sample at Calvert 1: 275ppm Cu, 51ppm Pb, 8ppm Zn, 10.5%Fe.</td>
</tr>
<tr>
<td>EL9204</td>
<td>BHP</td>
<td>Cu</td>
<td>Sediment Hosted Cu Mineralisation</td>
<td>Regional Stream Sediment sampling program, 4 samples inside EL25397</td>
<td>No samples recorded anomalous results, although it is possible that the analysis wasn't suitable for the sample type.</td>
</tr>
</tbody>
</table>

Table 3: Summary of some geophysical exploration over/close to EL27154

<table>
<thead>
<tr>
<th>Period or lease #</th>
<th>Company (ies)</th>
<th>Commodity</th>
<th>Focus</th>
<th>Data Available</th>
<th>Result of Exploration</th>
</tr>
</thead>
</table>
6. PREVIOUS EXPLORATION ON EL27154

1) Year 1
Exploration during Year 1 was restricted due the diamond drill program on adjoining tenement EL25397 being delayed until 2011. Geochemical sampling and reconnaissance mapping was intended to be completed in conjunction with drilling on EL25397 whilst exploration crews were operating in the area. Even so some helicopter reconnaissance work was completed. Access to the tenement was assessed for subsequent visits and a number of sites were geologically reviewed to check stratigraphic settings and test for anomalous uranium readings with a hand held spectrometer. No significant results were measured, no samples were taken.

2) Year 2
During the second year Exploration on EL27154 was planned in conjunction with the diamond drilling program on adjacent tenement EL25397 ‘Calvert’. Unfortunately despite significant track access construction and maintenance costs for access to both tenements, drilling was cancelled due to parts of the tracks being inaccessible for drill rigs.

3) Year 3
During the third year, due to allocation of its resources elsewhere within its tenement portfolio no field work was undertaken over the relinquished area. Carpentaria’s exploration was limited to office studies such as data compilation and drill programme planning.

4) Year 4
Ten blocks were relinquished in February 2013 as they had not had any exploration work undertaken on them during the last period and had previously been interpreted as having a low exploration priority. Carpentaria therefore dropped the ground to focus on higher priority areas.

5) Year 5
During the third year, due to allocation of its resources elsewhere within its tenement portfolio no field work was undertaken over the relinquished area. Carpentaria’s exploration was limited to office studies such as data compilation and drill programme planning.

6) Year 6
During the sixth year, no work was undertaken on EL27154 consequently Carpentaria Minerals decided to fully relinquish the tenement. The tenement expired on 13 October 2015.
Figure 4: HyVista Survey over EL27154 relinquished area only
7. CONCLUSIONS

EL27154 has the potential for a wide range of mineralisation styles. Several NW-trending faults exist in the area, which appear to be associated with the regional “Calvert Fault Trend”, thought to be active from the Paleoproterozoic to the Phanerozoic. Moreover Carpentaria Minerals have also mapped a series of basin growth and transform faults in the region, thought to have formed during extensional phases of basin development. Mapping in EL21754 have identified a number of circular topographical and aerial photo features ranging in diameter from 20m to 500m, some of which occur at the intersection of these growth and transform faults. These circular features are interpreted as the surface expression of a series of breccia pipes, such as those that host mineralisation at the nearby copper mine at Redbank. Carpentaria thinks that they represent excellent base metal targets and they remain untested.

8. CONFIDENTIALITY STATEMENT

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9. REFERENCES


