ANNUAL TECHNICAL REPORT
EXPLORATION LICENCE 29304
“Brumby Dam”

For the reporting period:
27th August 2013 – 26th August 2014 (Year 2)

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Tenement Holders: Gempart (NT) Pty Ltd 100%
Tenement: EL29304 “Brumby Dam”
Reporting Period: 27 August 2013 – 26 August 2014 (Year 2)
Distribution: Gempart NT Pty Ltd (1)
Core Exploration Ltd (1)
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Riddoch 1:100,000 sheet (5851),
Target Commodity: Copper, Uranium, REE
Keywords: Literature review, Iron oxide copper-gold, Uranium, REE
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1.0 Summary

EL29304 “Brumby Dam” is located approximately 125 km northeast of Alice Springs. Vehicle access to the project area is reasonable, via the Ross Highway through the Arltunga Historical Reserve and Claraville Homestead, and then by station tracks. Light vehicle travel time to the project is approximately 2 hours from the township of Alice Springs.

During the reporting period Core Exploration completed a comprehensive review of historical exploration data focusing on the Palaeoproterozoic Aileron Province’s potential for iron-oxide copper gold (IOCG) affinities. Core has an active IOCG targeted exploration program adjacent to EL29304 termed the Greater Paradise Well Project on which the company has used surface geochemistry and mapping to explore for IOCG indicators. Whilst exploration targets defined within the Greater Paradise Well Project do not currently extend into the EL29304 licence area, exploration review has focused on equivalent geological packages which extend into EL29304 that would become a focus in any expansion of the project.

EL29304 is held in a Joint Venture (JV) between Core Exploration and Gempart (NT) Pty Ltd, in conjunction with EL28853, EL28854, EL28852, EL29304, EL29347, EL29389, EL29512, EL29514 and EL29280. During the reporting period Core Exploration has been in discussions with Gempart initially about Core meeting the first stage requirements of the JV, followed by Core’s proposition to purchase Gempart’s share in the JV through a share transaction, on which terms were eventually agreed, but were not finalised during the reporting period.

Core believes that further mapping and rock chip sampling is required within the tenure to properly evaluate IOCG and uranium with REE prospective areas.
Figure 1.1: Exploration Index Map
2.0 Introduction

This report details exploration activities completed within Exploration EL29304 “Brumby Dam” during the second year of tenure, 27th August 2013 to 26th August 2014. The tenement is owned by Gempart (NT) Pty Ltd, and Core Exploration Ltd (DBL Blues Pty Ltd) is currently managing and exploring the tenement under a Joint vVenture (JV) agreement.

The tenement is located approximately 125 km northeast of Alice Springs. Vehicle access to the project area is reasonable, via the Ross Highway through the Arltunga Historical Reserve and Claraville Homestead, and then by station tracks (Figure 2.1). Light vehicle travel time to the project is approximately 2 hours from the township of Alice Springs.

Vehicle access within the tenement is limited. The general area is hilly with only a few vehicle tracks available. The rivers are prone to flooding during heavy rainfalls over the summer. Accommodation can be found at the old Ambalindum Station Homestead (approximate half hour drive). The climate is typical of central Australia, hot summers and mild winters.

Figure 2.1: Location Map of EL29304

3.0 Geology and Mineralisation

EL 29304 is located within the Proterozoic Aileron Province of the Central Arunta Region. The rocks within the region are mostly comprised of variably metamorphosed sediments, volcanics, calc-silicates, amphibolites and granite. Dominant structural features appear to trend northwest within the region. Detailed geology of the region is covered by Murrell (1989) and Zhao & Cooper (1992).
The northern area is underlain by the Palaeoproterozoic Strangways Metamorphic Complex which form part of the Aileron Province and Irindina Gneisses, of the Neoproterozoic Irindina Province. The southeastern portion of the project area is underlain by the Cadney Metamorphics, a sequence of calc silicates, marble and gneisses of the Aileron Province.

Core Exploration is particularly interested in the main northwesterly structural trend, separating units of the Cadney Metamorphics to the southeast from the Irindina Genisses to the northeast. This structural zone is interpreted to be a major geological boundary, which Core Exploration believes may be prospective for Iron Oxide Copper-Gold (IOCG) mineralisation.

**Figure 3.1: Extract from Alice Springs 1:250,000 Geology**

4.0 **Tenure**

EL29304 was granted on the 27th August 2012 for a period of six (6) years. The tenement overlies pastoral lease PPL1124 (Ambalindum Station). In October 2012 a joint venture (JV) agreement was entered into between Gempart (NT) Pty Ltd and Core Exploration Ltd covering a number of leases.
within the Arltunga area, including EL 29304. As part of the JV agreement Core Exploration manages all exploration activities completed within the tenure. Tenement details are summarised in Table 4.1 below.

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Owner</th>
<th>Date Granted</th>
<th>Tenure</th>
<th>Size</th>
<th>Rent (Year 2)</th>
<th>Expenditure Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 29304</td>
<td>Gempart (NT) Pty Ltd 100%</td>
<td>27/8/2012</td>
<td>6 Years</td>
<td>15 sq. blocks</td>
<td>$1,297</td>
<td>$14,500</td>
</tr>
</tbody>
</table>

**Table 4.1: Tenement Summary**

5.0 Previous Exploration

The eastern part of EL29304 was held by PNC Exploration under EL 7990 from 1993 to 1996. PNC explored the tenement for uranium and flew airborne radiometric surveys with ground follow-up of anomalies. The Brumby and Bantam prospects (Bantam is within EL29304) were discovered and tested by rock chipping and some trenching.

Historical exploration by PNC Exploration (Australia) Pty Ltd, in 1995, at the Bantam prospect identified rock chip samples of up to 46% uranium along with highly elevated REE’s and base metals. These results are worthy of follow up exploration.

Recent exploration in the area has been conducted by Newera Uranium Ltd on ELs 25169 and 25700, Uranium Oil and Gas on ELs 25329 and 25894, and Iron Mountain Mining Ltd on ELs 28217, 28228 and 28228.

EL 25700 covered the Brumby uranium prospect and little work was done on it during its tenure. EL 25329 covered the same ground as EL 29304; it was also explored by Uranium Oil and Gas (United Orogen) with results recorded as not encouraging.

Iron Mountain Mining Ltd held three tenements (ELs 28217, 28227 and 28228) surrounding but not covering the Brumby uranium prospect. No field work was carried out on these tenements.

Within EL29304 only rock chip samples collected by PNC Exploration are captured in the publically available rock chips database.

6.0 Year 2 Work Summary & Discussion

During the second year of tenure, 27th August 2013 to 26th August 2014, Core Exploration as managers of EL 29304 completed a thorough review of historical exploration work previously completed within the Brumby Dam tenement.

Core continued to undertake desktop assessments of EL29304 to ascertain its likelihood to contain IOCG style affinities to determine if undertaking exploration strategies (soil sampling, rock chip sampling and ground reconnaissance) could be effectively used within EL29304. These exploration tools have been used within Core Explorations adjacent Greater Paradise Well Project and have identified a number of previously unknown copper occurrences in the area.
Core still believes that the uranium and REE results from within EL29304 identified by PNC Exploration in 1995 are worthy of follow-up exploration. Core Exploration’s activities during the Year 2 exploration period for the tenement has focused on the base metal potential in the Aileron Province. However, it is expected that the potential for uranium mineralisation within EL29304 will become more of a focus during the Year 3 reporting period.

No on ground exploration was completed by Core Exploration within EL29304 during the Year 2 reporting period.

7.0 Rehabilitation

No earth disturbing activities were completed within the tenement during the reporting period. No rehabilitation was required.

8.0 Year 3 Proposed Exploration Activities

The company is actively exploring for Iron-Oxide Copper-Gold (IOCG) mineralisation within the eastern Arunta region, in conjunction with the potential for economic base metal, and uranium and REE mineralisation within EL29304. As part of a Joint Venture agreement between DBL Blues Pty Ltd and Gempart (NT) Pty Ltd, DBL Blues plans to undertake the following exploration activities within EL29304 during the third year of tenure:

- Soil and/or rock chip sampling
- Prospect-scale induced polarisation (IP) geophysical surveying
- Interpretation and/or modelling of IP data
- Target generation work
- Report preparation, including the development of drilling proposals

9.0 References


