SECOND & FINAL ANNUAL REPORT
EXPLORATION LICENCE 29688
“RIDDOCK”

For the period:
19th July 2013 – 28th July 2015

Author: Colin Skidmore
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Tenement Holders: DBL Blues Pty Ltd 100%
Tenement: EL29688 “Riddoch”
Reporting Period: 19th July 2013 – 28th July 2015 (Year 2)
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Riddoch 1:100,000 sheet (5851)
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CONTENTS

1.0 Summary
2.0 Introduction
3.0 Tenure
4.0 Geology & Mineralisation
5.0 Previous Exploration
6.0 Year 2 & Final Exploration Activities
7.0 Rehabilitation
8.0 Conclusions and Recommendations
9.0 References

LIST OF TABLES

Table No  Title
3.1    Tenure Details

LIST OF FIGURES

Figure No  Title
1.1  Location Map of EL29688
1.2  Exploration Index Map
4.1  Extract from Alice Springs 1:250,000 Geology
5.1  Ag in soil anomaly on EL 29688.
5.2  Pb in soil anomaly on EL 29688.
5.3  Pb in soil anomaly outline and location of rock chip samples with Pb in ppm on EL 29688.

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1.0 Summary

EL29688 “Riddoch” is located approximately 100 km’s northeast of Alice Springs, north of the Arltunga Historical Reserve and Claraville Homestead. Access from Alice Springs is by way of the Ross Highway for 70 km, thence northeast towards Arltunga, and then heading north to Claraville Homestead. Travel time is just under two hours by road from the township (Figure 1.1).

During the reporting period Core continued to assess the results of the mapping and rock chip sampling undertaken during the previous reporting period of the Pb-Ag soil anomalism. Core believes that the soil anomaly extends over both locally transported sediments and outcropping geology. Whilst the rock chip sampling identified calc-silicates with elevated Pb it is unclear if these units are solely responsible for the soil Pb and Ag anomalism, although no mineralized veins or regional alteration assemblages were identified during the mapping.

No active exploration was undertaken on EL29688 during the second and final year of tenure (Figure 1.2). Following a comprehensive review and prospectivity analysis Core has decided to surrender this licence.
Figure 1.1: Location Map of EL29688
Figure 1.2: Exploration Index Map for EL29688
2.0 Introduction

This report details second and final year exploration conducted within Exploration Licence 29668 “Riddoch”. The tenement is held by DBL Blues Pty Ltd (100%), a subsidiary of Core Exploration Limited. The tenement is located approximately 100 km’s northeast of Alice Springs just north of the Arltunga Historical Reserve and Claraville Homestead. Travel time is just under two hours by road from the township (Figure 1.1). Access from Alice Springs is by way of the Ross Highway for 70 km, thence northeast towards Arltunga and then heading north to Claraville Homestead.

Access within the tenement is limited; the general area is hilly with only a few vehicle tracks available. Due to seasonal rains, much of the area is overgrown inhibiting detailed ground. The rivers are prone to flooding during heavy rainfalls over the summer. Accommodation can be found at Ambalindum Station (30min drive) or Ross River (45min drive). The climate is typical of central Australia, hot summers and mild winters.

3.0 Tenure

Exploration Licence 29688 was granted to DBL Blues on the 19th July 2013. The tenement overlaps pastoral leases PPL1124 (Ambalindum Station). Tenure details are summarised in Table 3.1. At the start of 2015, EL 29688 was included as part of GR359 “Albarta North”.

Table 3.1 Summary tenement detail for EL 29688

<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 29688</td>
<td>DBL Blues Pty Ltd 100%</td>
<td>19/07/2013</td>
<td>6 Years</td>
<td>8 blocks 25.20 km²</td>
<td>$549</td>
<td>$12,000</td>
</tr>
</tbody>
</table>
4.0 Geology and Mineralisation

EL29688 is located in the Proterozoic Aileron Province of the Central Arunta Region. The rocks dominantly comprise variably metamorphosed sediments, volcanics, calc-silicates, amphibolites and granite (Figure 4.1). The dominant structures appear to trend northeast.

The area is underlain by the Palaeoproterozoic Strangways Metamorphic Complex, which forms part of the Aileron Province. The main part of the area is underlain by the Cadney Metamorphics, a sequence of calc-silicates, marble and gneisses. The rest of the area is underlain by the Ongeva Granulite. The south eastern portion the tenement is covered by younger sediments of the Hale River Basin, dominantly the Hale Formation a Tertiary sandstone.

5.0 Previous Exploration

5.1 Historical Exploration

The earliest modern exploration in the area was conducted on EL49 by Centamin Ltd during the early 1970’s. Alcoa Australia explored the Hale River Basin from 1979 to 1983 under EL1860. Exploration was undertaken for roll-front uranium deposits (Howard, 1980 and 1981). Some zones of uneconomic uranium mineralisation were discovered in the area.
EL3558 was held by Uranerz Australia during 1982. Some reconnaissance work was done for uranium within the strongly sheared retrogressed zones in the basement, no anomalies were found (Booth et al, 1983).

EL4674 was explored from 1985 to 1989. Exploration for gold was undertaken by two local prospectors (G. Bohning and E. Bowman). Initial work included prospecting and metal detecting (Carthew, 1986). Further prospecting of the Cavenagh Range area was undertaken during the second year. The John Bull prospect was also visited and sampled (Carthew, 1988). A drilling programme was undertaken in late 1987-early 1988 to test the Pattersons Gully (John Bull) prospect and the Cavanagh Range/Whites Gully area (Murrell, 1988). Thirty seven RC percussion holes were completed. The best results were from hole PG-3 at Pattersons Gully with 3m at 1.9g/t Au from 46m downhole. This hole also had elevated base metal values (Pb up to 0.11%). No work was undertaken in the final year and the EL was surrendered (Murrell, 1989).

EL5100 was held by Conapaira Metals. Some reconnaissance activities were carried out during 1988 but nothing substantial was achieved (Garside, 1988).

Ramsgate Resources explored EL5486 during 1988 (James, 1988). Some rock chip sampling was completed however Ramsgate concentrated their activities on the Mordor Complex.

EL5809 was explored by White Industries from 1988 to 1990. Stream sediment sampling (-80#, heavy mineral and BLEG) was undertaken but the results were disappointing. Some reconnaissance rock chip sampling also proved discouraging (Stidolph, 1989).

In 1990 White Industries was granted EL6596 which covered the same ground previously held under EL4674. A field inspection of the Cavenagh Range area was carried out, however the most prospective ground was held under claim and the EL was surrendered (Murrell, 1991).

Shandona Pty Ltd (Alice Springs prospectors) held EL8785 from 1996 to 1998. Some stream sediment samples were collected and panned for gold with poor results. The reports on this work were not available.

CRA Exploration explored the Mordor complex under EL9371 from 1995 to 1997. CRA followed up a GEOTEM conductive anomaly near the fault contact between basement and Heavitree Quartzite (McCoy et al, 1997). Limonitic float in the vicinity returned 0.12% Cu. CRA postulated that the anomaly might be related to mineralisation within the Amadeus Basin sequence (?Bitter Springs Formation). No further work was done.

EL22625 was held by Tanami Exploration from 2001 to 2005. Little exploration was carried out by Tanami during this period. Minor rock chip sampling was carried out during a visit to the John Bulls Surprise gold prospect. The best result was 3.5g/t Au from a sample of the mullock (Rohde, 2005).

Cullen Resources undertook some reconnaissance work in the area during 2008 under EL25620. The Pattersons Gully prospect was visited and rock chip samples collected which returned low values for gold – maximum 45ppb Au (Hamilton et al, 2008).

Core Exploration completed a thorough review of historical exploration work completed within the Riddoch tenements during the 2013-2014 reporting period, in conjunction with Joint Venture tenement EL 27709. The Artunga-Winnecke Goldfields have been extensively explored for gold by various companies, including well-funded modern gold explorers Normandy NFM and Tanami Gold. The gold at Artunga and Winncke is contained within massive white quartz veins which contain pyrite and rare chalcopyrite. The veins are hosted by various rock units in the Arunta basement and overlying Amadeus Basin. Their emplacement has been interpreted to be related to the ca.320 Ma Alice Springs orogeny. These auriferous veins extend beyond and between the two known goldfields, including at Pattersons (also known as John Bulls Surprise). The greatest problem with this gold system is the extreme variability of results from the same vein and between adjacent prospects. Rock chips from known prospects can frequently return >10 g/t Au, but drilling results have consistently failed to return economic grades and widths, despite intersecting the veins.

Core Exploration undertook a detailed review of GIS datasets and mineral potential modeling based on epigenetic vein hosted gold systems.
A number of geological features were identified has potentially having an important role in the development of gold bearing epigenetic quartz veins:

- North-easterly structures
- Retrogressive alteration
- Outcropping quartz dominant vein systems
- Contacts between the Heavitree Quartzite and Palaeo-Proterozoic basement
- Zones of dilation along regional structures including inflections and fault jogs
- Zones of demagnetization associated with retrogressive alteration

Each of these features were identified within various datasets (Landsat, Google Earth, regional magnetics, Aster data) and incorporated into a mineral potential model within the company’s GIS system. Each geological feature was given a weighting according to how likely it is to influence the development of the targeted epithermal quartz veins. A comparison was then made between known occurrences of epithermal gold mineralisation, elevated gold in rock chip samples from previous explorers and the geological environment as determined from the interpretation exercise. The results indicated a number of areas that were previously unidentified as target areas for further work including soil sampling, rock chip sampling and mapping.

Core’s work program on EL 29688 was part to its broad program also covering EL 27369 and EL 28546 termed the “Greater Paradise Well Project”. Core’s exploration program at Greater Paradise Well is focused on the Cu-Au potential of the Aileron Province. The company’s initial target was IOCG style mineralisation, although little evidence of this style of mineralisation has been observed in the area during mapping. When found, copper appears to be either remobilized in structures or disseminated within coarse-grained garnet rich carbonate bearing units, often adjacent to amphibolites.

The exploration program competed has utilised both soil sampling and rock chip sampling. On EL29688, 343 soil samples were collected at 200m and 100m grid spacing. No outcropping copper bearing rocks were identified within EL 29688.

The most encouraging result within EL29688 is an approximately 1.2km northeast striking zone bearing coincident Ag and Pb in soil anomaly (Figures 5.1, 5.2 and 5.3). This anomaly covers both outcropping Cadney Metamorphics as well as alluvial/colluvial sedimentary cover. Reconnaissance rock chip sampling of the anomaly identified a number of different lithologies including calc-silicates and dolomites (possibly carbonatites) however, did not resolve the source of the soil anomalism. The most encouraging rock chip result was 0.6% Pb from an epidote + hematite-bearing calc-silicate.

Core Exploration submitted a Variation of Covenant application to the Northern Territory Department of Mines and Energy on 1st September 2014 to reduce the second year covenant for EL 29688 for the benchmark minimum amount of $12,000. Market conditions have changed since application for the Licence and, although the Licence remains an integral part of the Holder’s strategy toward securing an economic and environmentally sustainable mining operation, it has become necessary to prioritise expenditure and maintain strategic cash reserves until conditions improve.

The Variation of Covenant application was successfully approved by the Department of Mines and Petroleum on the 12th September 2014.
Figure 5.1: Ag in soil anomaly on EL 29688.
Figure 5.2: Pb in soil anomaly on EL 29688.
Figure 5.3: Pb in soil anomaly outline and location of rock chip samples with Pb in ppm on EL 29688.
6.0 Second & Final Year Exploration Activities

During the reporting period Core continued to assess the results of the mapping and rock chip sampling undertaken during the previous reporting period of the Pb-Ag soil anomalism. Core believes that the soil anomaly extends over both locally transported sediments and outcropping geology. Whilst the rock chip sampling identified calc-silicates with elevated Pb it is unclear if these units are solely responsible for the soil Pb and Ag anomalism, although no mineralized veins or regional alteration assemblages were identified during the mapping.

No active exploration was undertaken on EL29668 during the final year of tenure.

7.0 Rehabilitation

There were no earth disturbing activities on the tenement. No rehabilitation was required.

8.0 Conclusions and Recommendations

EL 29688 was acquired as part of a large tenement package in the Albarta Block that is considered prospective for copper, gold and uranium. The Pb and Ag soil anomalies identified within EL29688 during the previous reporting period may still be worthy of further exploration through follow up mapping and infill soils however, having undertaken comprehensive desktop studies and prospectivity analysis, the company has decided to surrender this tenement as it is considered to have lower priority in a tough financial environment.
9.0 References


