Annual Technical Report EL 28029 ("Blueys Folley")

Year 3 (2012-2013)

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Tenement Holders:	Gempart NT Pty Ltd (100%)
Tenement:	EL28029 "Blueys Folley"
Reporting Period:	30 November 2012 – 29 November 2013 (Year 3)
Distribution:	Gempart (NT) Pty Ltd (1)
	Core Exploration Ltd (1)
	Geoscience.Info (Dept Resources - Minerals & Energy,1)
Map Sheet:	Alice Springs 1:250,000 sheet (SF5314)
	Fergusson Range 1:100 000 sheet (5850): Riddock 1:100,000 sheet (5851)
Target	Copper, lead, silver, REE
Keywords:	Exploration review, Iron oxide copper-gold, REE

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Copyright Statement

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1.0 Summary

EL 28029 "Blueys Folley" lies 110 km east-north-east of Alice Springs between the Amarata Range and Hale River. Travel time is just under 2 hours from the township (Figure 2.1). Access from Alice Springs is by way of Ross Highway for 70 km, then northeast towards Arltunga and then heading south east to east along the Ruby Gorge track. During the reporting period Core Exploration undertook a comprehensive review of historical exploration data and reconnaissance field trip of the area. Core believes that further mapping and rock chip sampling is warranted to properly evaluate the prospects.

2.0 Introduction

This report covers the third year of exploration conducted at EL 28029 "Blueys Folley". The tenement is owned by Gempart (NT) Pty Ltd. Core Exploration (DBL Blues Pty Ltd) is currently exploring the tenement under a joint venture agreement. EL 28029 "Blueys Folley" lies 110 km east-north-east of Alice Springs between the Amarata Range and Hale River. The tenement has had little historical exploration. There are no known resources present on EL 28029. Target commodities included rare earth minerals, gold, copper, molybdenum and silver. Travel time is just under 2 hours from Alice Springs (Figure 2.1) via the Ross Highway, north east to Arltunga then south east along the Ruby Gorge track.

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 Ambalindum Station (45 minute drive). The climate is typical of central Australia, hot summers and mild winters.



Figure 2.1 Location Map of EL 28029

3.0 Geology and Mineralisation

EL 28029 is located in the Proterozoic Aileron province of the Central Arunta Region. The rocks here comprise variably metamorphosed sediments, volcanic rocks, calcsilicates, amphibolites and granite. The dominant structures appear to trend north-east and are associated with the Illogawa Schist zone. Some apparently reactivated later structures trend north-west. Most of the interest in the immediate area has focused on the rare earth mineralisation (REE) at Blueys Folly within EL 28029. Here allanite is often associated with a rare earth bearing thorium. It can in a number of settings, local examples being pegmatite dykes (plug-like to lenticular subvertical bodies and sheet-like apophysis that intrude the surrounding amphibolite facies metamorphic rocks and within amphibolite and marble (calcsilicate?) units adjacent to these pegmatite grading about of 0.4% allanite. This is a sub-economic grade. The north-east strike extent of the Blueys Folly REE geology continues up EL 28029, where two anomalous areas are identified. Further to the south west of the tenement is Blueys Cu-Ag prospect. Mineralisation at Blueys comprises secondary lead, copper and silver in association with pyrite, barite, quartz veining and replacement minerals. Rocks hosting mineralisation are dolomite and dolomitic siltstones belonging to the Bitter Springs Formation. This sedimentary unit is not observed on EL 28029.

To the west of EL 28029 some work has gone on exploring for quartz vein hosted gold similar to the Arltunga workings. Some of this has been drilled (e.g. Duffer workings), but in most cases the veins are thin (<1m) with poor continuity.



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

4.0 Tenure

EL 28029 was granted on the 30 November 2010. The tenement lies on pastoral leases PPL1124 (Ambalindum Station) and PPL995 (Loves Creek/CLC). Tenure details are shown below. In October 2012 a joint venture was entered into with Core Exploration Ltd. The agreement covers a number of leases in the Arltunga area, which included EL 28029. Core has the right to earn at least 51% over 2 years.

Tenement	Owner	Date Granted	Tenure	Size	Rent Yr 2	Expenditure Commitment
EL 28029	Gempart NT Pty Ltd 100%	20/11/11	6 Years	67 sq. blocks	\$2947	\$89,800

Table 4.1 Tenure Details for Year 3

5.0 Year 3 Work Summary & Discussion

Exploration Review

Bluey's Allanite Prospect (also known as Bluey's Folly) is located in the middle of EL 28029. An area about 2.5 x 3.0 km was identified where pegmatite and amphibolite units have unusually high abundances of allanite. In CR1988-0452, a non-JORC resource estimate of 200,000 tonnes at >1 % allanite, or several million tonnes at >0.4 % allanite is reported. Allanite is an important source of REE at Arafura Resources' Nolans Bore Project.

The archive information about Bluey's Allanite Prospect is very patchy. There was clearly a lot of work preceding the first report about the prospect (CR1988-0452). There are reams of very detailed information, including two comprehensive CSIRO reports about the mineralogy (S-series of rock chips; includes probe work), but basic information, such as sample locations and useful maps, is limited. A number of samples are described in these reports as carbonatites. The only data for the area in STRIKE are the stream sediment samples, although widespread and detailed rock chip sampling and Airtrack (34 holes REAT-1 to -34), RC (26 holes RERC-1 to -26), RAB and diamond (1 hole REDDH-1) drilling were completed.

Mr Pu Yuan completed his PhD thesis in 2002 at James Cook University; A study of allanite mineralogy and mineralisation in Bluey's Folly, Arltunga area, Central Australia (supervisor Professor PJ Stevenson). The thesis is listed on the JCU library website. None of Pu's work is in the historic report archive except for three 1:500-scale geology maps covering Bluey's Folly (CR1990-0005; Section 35). The maps show the detailed geology, but also the location of rock chip samples (D-series) and RAB drill holes (RAB08-24). Unfortunately the map has a local grid, but given the amount of detail it would be possible to relocate the map and recover the data. Moreover, if the local grid can be reclaimed into UTM then much of the previous work could be reclaimed.

The ASTER multi-spectral imagery does not show anything distinct in any channel for the general Bluey's Allanite Prospect, though this should be revisited once the actual mineralised outcrops have been located.

Nothing is known about the "Valley View" Prospect.

6.0 Rehabilitation

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

7.0 Year 3 Expenditure

Admissible Expenditure	Specify the work undertaken		\$AU Claimed	
A. Geological Activities and Prospecting	Ground reconnaissance, m	apping	\$15,174	
B. Geochemical Activities				
C. Geophysical and Remote Sensing Activities	Geophysical processing, hi	storic and recent data	\$4,200	
D. Drilling				
E. Bulk Sampling and Earthworks				
F. Rehabilitation				
G. Pre-feasibility inc. Metallurgical and Environmental				
H. Office Studies	Literature Review		\$3,786	
I. Overheads (not to exceed 15% of the sum of A to H above)	Administration		\$3,474	
J. (Preliminary Exploration – Yr 1)				
K. Total Expenditure Claimed			\$26,634	
L. Covenant for this reporting period	\$89,800			

Details are summarised below. A formal statement has been lodged.

8.0 Year 4 Proposed Expenditure

As taken from the annual expenditure report. Cores plan is to generate drill targets for year 4-5. Year 4 will focus on ground testing particular areas with cheap surface exploration.

PROPOSED ACTIVITIES FOR THE NEXT 12 MONTHS

Provide a general description of exploration activities planned for the next 12 months:

DBL Blues Pty Ltd (owned by Core Exploration) have recently taken over management of the operations of the tenement and would like to request a waiver of reduction as the organisation plans to undertake significant exploration in the near future.

The company is actively exploring for silver +/- base metal mineralisation associated with the Alice Springs Orogeny (Blueys Prospect) and Iron-oxide Copper-Gold mineralisation within the eastern Arunta region. As part of a recently established Joint Venture agreement DBL Blues Pty Ltd plans to undertake the following activities across EL28029 which is part of a larger package of tenements included within the Joint Venture Agreement. As Core has undertaken on the adjacent EL28136, the company would like to extend exploration onto EL28029 as it believes it has the same prospective geology as that found at the Blueys and Inkheart Prospects. Following the successful discovery of significant silver and base metal mineralisation nearby Core would propose extending its exploration program onto EL28029 in the coming calendar year and therefore proposed the following exploration program.

- Detailed mapping and rock chip sampling of the prospective contact between the Palaeoproterozoic basement and Neoproterozoic Amadeus Basin sediments.
- Extending the 100m x 100m soil survey from EL 28136 onto EL 28029
- Induced polarisation traverses over anomalous soils and rock chip samples.
- Reverse circulation drilling to test geochemical and geophysical targets.
- The company plans to drill on its neighbouring exploration licence in April 2014 subject to approvals and would like to include any potential targets generated on EL28029 in this program.

Admissible Expenditure	Specify the work to be undertaken	\$AU Proposed
A. Geological Activities and Prospecting		
B. Geochemical Activities	Soil and rock chip sampling – March 2014	16,750
C. Geophysical and Remote Sensing Activities		
D. Drilling	RC Drilling of IOCG targets – April 2014	40,000
E. Bulk Sampling and Earthworks		
F. Rehabilitation		
G. Pre-feasibility inc. Metallurgical and Environmental		
H. Office Studies		
I. Overheads (not to exceed 15% of the sum of A to H above)		8,250
J. Covenant for next reporting period		65,000

ACTIVITY DETAILS FOR THE NEXT REPORTING PERIOD