

**EL 28029 (“Blueys Folley”)**  
**Partial Relinquishment Report**

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Date:	4 <sup>th</sup> August 2014
Tenement Holders:	DBL Blues Pty Ltd (100%)
Tenement:	EL28029 “Blueys Folley”
Reporting Period:	Partial Relinquishment 11 <sup>th</sup> June 2014
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Map Sheet:	Alice Springs 1:250,000 sheet (SF5314) Fergusson Range 1:100 000 sheet (5850): Riddock 1:100,000 sheet (5851)
Target Commodity:	Copper, lead, silver, REE
Keywords:	Exploration review, Iron oxide copper-gold, REE

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## 1 Location & Access

EL 28029 “Blueys Folley” lies 110 km east-north-east of Alice Springs between the Amarata Range and Hale River. The eastern margin of the tenement is constrained by the Ruby Gap Nature Park. Travel time is just under 2 hours from the township (Figure 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. 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.

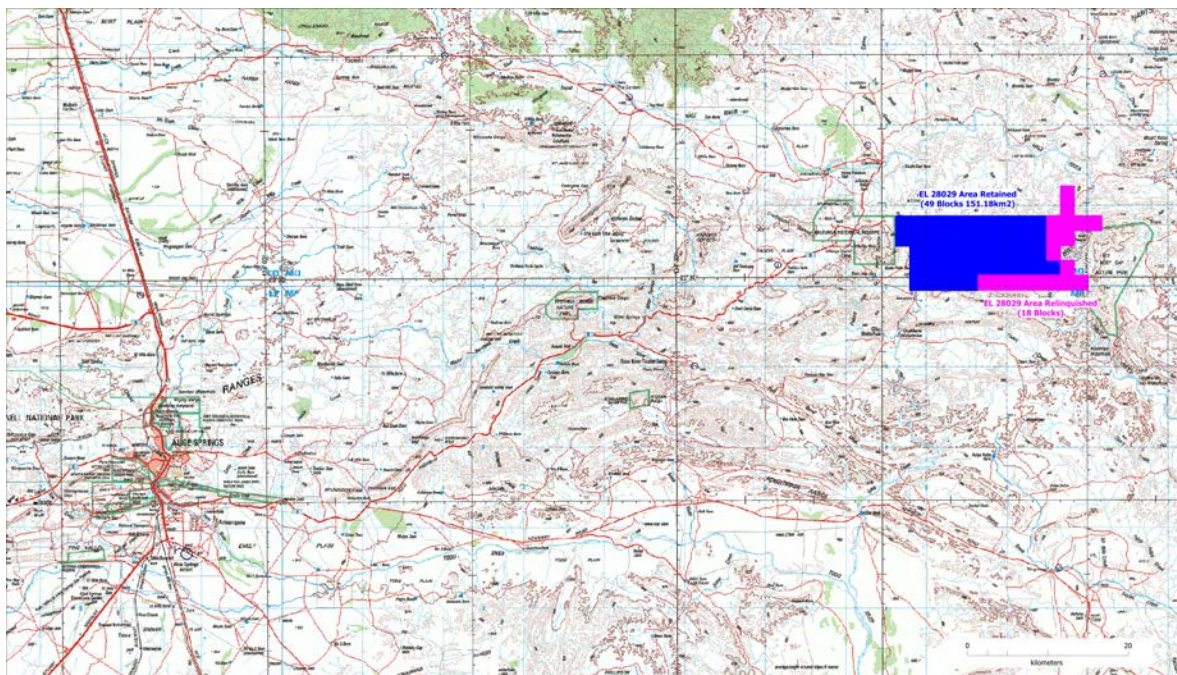


Figure 1 Location Map of EL 28029

## 2 Tenure

EL 28029, comprising 67 Blocks, was granted on the 20 November 2011 to Gempart NT Pty Ltd for a 6 year period. The tenement lies on pastoral leases PPL1124 (Ambalindum Station) and PPL995 (Loves Creek/CLC).

In October 2012 Gempart entered into a joint venture with DBL Blues Pty Ltd (DBL) a 100% owned subsidiary of Core Exploration Ltd (CXO) where DBL had the right to earn at least 51% over 2 years. This joint venture agreement covers a number of leases in the Arltunga area, which included EL 28029. In 2014, CXO negotiated to purchase 100% of EL 28029 from Gempart NT Pty Ltd. The transfer of tenure process is currently in progress.

On 11 June 2014, 18 Blocks of EL 28029 were cancelled due to limited expenditure during the first two years. As detailed below and illustrated in Figure 2, 18 Blocks were nominated for cancellation:

- SF 53 2916: Y
- SF 53 2988: D,H,J,K,N,O,S,Y
- SF 53 2989: F
- SF 53 3060: A,B,C,D,E
- SF 53 3059: C,D,E

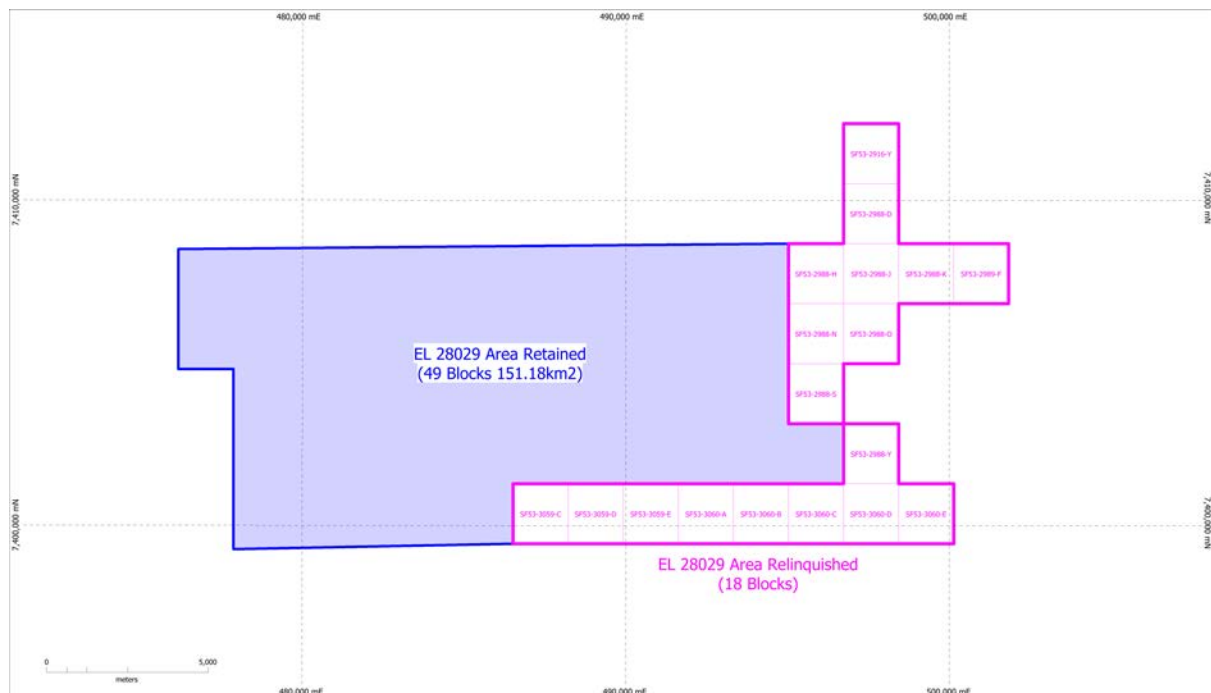


Figure 2: EL 28029 Area Retained and Blocks Relinquished

### **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 (Figure 3). 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 pegmatites (Murrell, 1988). Murrell estimated that Blueys Folly contained several million tonnes of 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 EL 28029 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. Along the eastern side of EL 28029 in the area relinquished, lower sequences of Amadeus Basin sediments including Bitter Springs Formation and Heavitree Quartzite are mapped associated with retrogressive shear zones.

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.

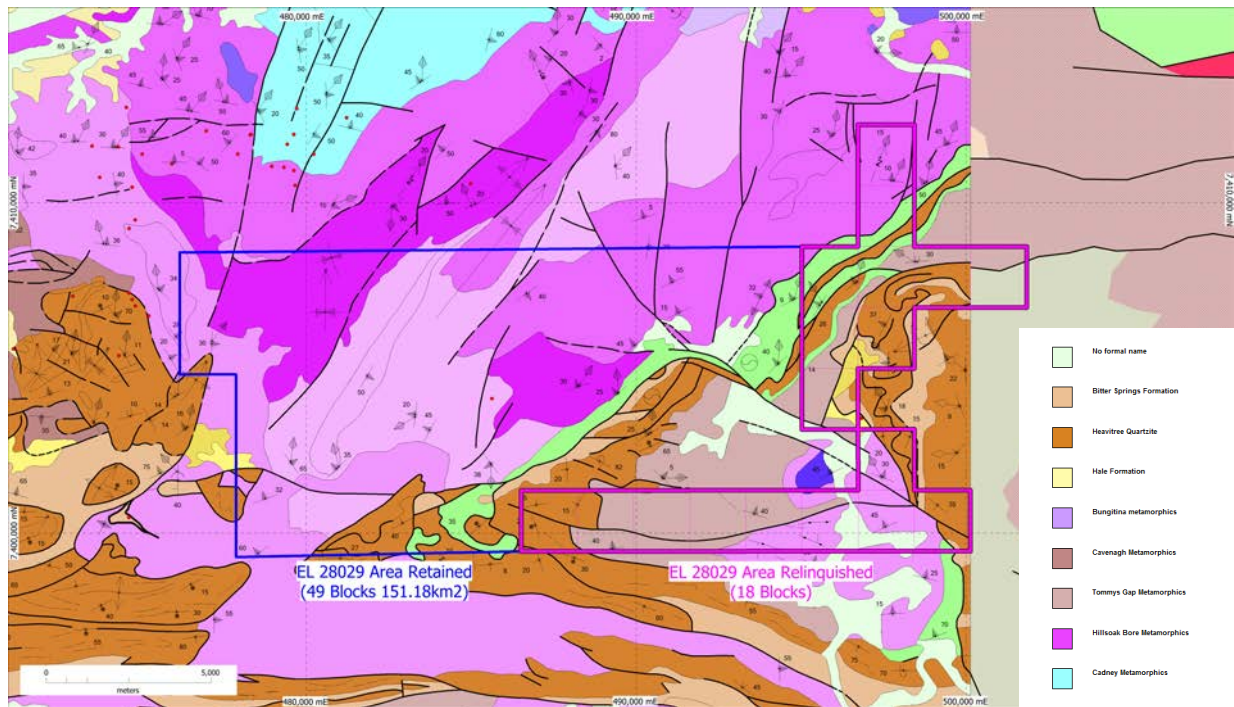


Figure 3 Extract from Alice Springs 1:250,000 Geology

#### 4.0 Previous Exploration

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.

Currently little is known about the previous exploration at the "Valley View" Prospect.

Exploration activities by the current tenement holder has been restricted to desktop studies including reviews of past exploration, reprocessing of available geophysical datasets and the collection of a high resolution Heli-magnetic and radiometric survey over the Blueys Folley REE prospect in May 2012 by Daishsat Pty Ltd (100m flight lines orientated 045/225°), however this entire survey lies outside of the relinquished area.

In the area being relinquished, very little previous exploration work is known to have been undertaken aside from the collection of 21 of stream sediment samples by Pancontinental in 1988 (CR1990-0005), which showed only low-level gold anomalism (See attached plans).

Geophysical coverage over the relinquished portion of EL 28029 is limited to the 1997 WGC Alcoota/Alice Springs regional aeromagnetic and radiometric survey (400m spaced N-S traverses) and regional coarse spaced gravity coverage (see attached plans). Aster satellite imagery has been acquired with a number of representative images included in the attached plans.

## 5 Expenditure

The partial relinquishment of EL 28029 is due to limited tenement expenditure by Gemtree and DBL in the second and third years of tenure:

Proposed Expenditure Commitment:	\$130,800
Actual Expenditure:	\$57,634
Total Underspent:	\$73,166

## 6 Conclusion

The relinquished areas of EL 28029 were selected on the eastern margin of the tenement abutting the Ruby Gap Nature Reserve. The geology of this area is dominated by lower sequences of the Amadeus Basin with only limited Proterozoic Aileron Province Basement. The relinquished area is partially coincident with precipitous topographic relief that restricts access for exploration activities.

## 7 References

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