EL 29024

FINAL EXPLORATION REPORT

FOR THE PERIOD


By Company Geologists

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May 28 2014
# TABLE OF CONTENT

Summary.................................................................................................................3  
Introduction...........................................................................................................4  
Tenure Details........................................................................................................4  
Geological Setting .................................................................................................4  
Mineralisation .......................................................................................................5  
Field Reconnaissance Works ...............................................................................6  
Conclusion ............................................................................................................7  

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Summary

Exploration title EL29024 was granted to Darwin Mining & Exploration PTY LTD on 6 June 2012. During the period, a detailed review of the previous exploration work has been conducted; this has revealed that the title area has less potential for base metal mineralisations, with an exception of low temperature stratabound base metal minerals, such as stratabound lean-zinc mineralisation. Two copper mineral occurrences (01995 and 05374) located in the northeast and southeast of the EL29024 have been mentioned in previous reports. Unfortunately, the company geologists still could not find the mineral occurrences or any interesting spots in their third ground geological investigation in November 2013. No low temperature copper, such as malachite or azurite, has been identified during the period of field work in the areas. Remote sensing interpretation had been carried out. It is likely that two major faults striking in NW are present in the area of EL29024 and its adjacent area with some minor faults striking in NNE. No mineralisation along these faults had been identified in the investigations. Therefore, Darwin Mining and Exploration Pty Ltd would like to surrender the mineral title.
Introduction

Exploration Licence 29024 was granted to DARWIN MINING & EXPLORATION PTY LTD by NT State DEPARTMENT OF MINES AND ENERGY on 5 April 2012 for a period of six years. This report is the final exploration report for EL29024 and the mineral title was surrendered by the company on 14 February 2014.

Tenure details

EL29024, total of 35 units (Table 1), is located about 234km southwest of Katherine, accessing by Buchanan Highway and local 4WD tracks (Fig. 1).

![DME Prospect area 5](image)

**Figure 1** EL29024 Location Diagram

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<tr>
<th>Table 1  EL29024 units</th>
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<td>BLOCK NO</td>
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<td>SD52 203</td>
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Geological Setting

Geologically the area of EL29024 is located in the Mesoproterozoic-Palaeoproterozoic Birrindudu sedimentary basin which unconformably overlies the Pine Creek Orogen in the north and Tanami Region in the south and unconformably overlain by the Victoria Basin, Daly Basin and Kalkarindji
Province. Also this sedimentary basin is relatively undeformed correlated with the McArthur Basin. Major rock types of the sedimentary basin include sublithic arenite, quartz arenite, siltstone, shale, conglomerate, stromatolitic chert, limestone, glauconitic sandstone. Limited exploration has been carried out in the area, even the sedimentary basin.

**Mineralisation**

Generally it is uncertain for mineralisation in the whole basin as insufficient exploration. A few diamond deposits are near Timber Creek, which are associated Jurassic-age (179 Ma) diamond-bearing kimberlite pipes and dykes intruding into the basin sediments. Minor base metal, such as Pb-Ag, occurrences scatter in the basin. Two copper mineral occurrences (01995 and 05374) located in the northeast and southeast of the EL29024 respectively have been mentioned in the previous reports and NT Strike (Fig. 2).

**Fig. 2** Mineral occurrences in the area of EL29024.
Field Reconnaissance Works

Outcrop of the rocks occurs in the area of EL29024 are dominantly limestone (could be dolomite from point of the view of its texture) and conglomerate. Remote sensing interpretation had been carried out (Figs. 3 & 4). It is likely that two major faults striking in NW are present in the area of EL29024 and its adjacent area with some minor faults striking in NNE. A third field investigation had been undertaken in Oct. 2013. Unfortunately, no mineralisation along these faults had been identified in the investigations and the company geologists still could not find the mineral occurrences mentioned in previous reports.

Fig. 3 Remote sensing image of EL29024
Conclusion

Darwin Mining and Exploration Pty Ltd have surrendered the mineral title due to no mineral occurrences being found in the last one and half years of exploration.