



**MITHRIL**  
RESOURCES LTD

## **ASCOT BORE**

**EL 27435**  
ANNUAL TECHNICAL REPORT FOR  
PERIOD 13th April 2010 to 12th April 2011

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**April 2011**

**MAP REFERENCE:**  
Illogwa Creek 250K Sheet SG53/15

## **SUMMARY**

This report summarises work completed on Mithril Resources Ascot Bore Exploration Licence (EL27435) for the year ending the 12<sup>th</sup> April 2011

The project area is located approximately 200 km east northeast of Alice Springs, south of the Plenty Highway as forms part of Mithril's larger Huckitta project.

No field work was conducted on the tenement during the reporting period primarily due to excessive rain over the project area during the year making 4wd access for much of the year difficult over station tracks. In addition to this Mithril made a number of significant discoveries elsewhere on the Huckitta Project and exploration resources were focussed here.

During the 2011-12 exploration year Mithril plans to complete geological reconnaissance mapping and sampling over the tenement area followed by ground or airborne geophysics (magnetics and/or EM).

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Table 1: Tenement Status

## 1.0 Introduction

This report summarises work completed on Mithril Resources Ascot Bore Exploration Licence (EL27435) for the year ending 12<sup>th</sup> April 2011. This tenement forms part of the larger Huckitta Project.

The tenement is located approximately 200 km east-northeast of Alice Springs. Access to the area is via the Plenty Highway and then via a network of station roads and tracks on Huckitta and Indiana stations.

Mithril interpret that intrusive mafic and ultramafic rocks of Irindina age may extend onto the tenement and that these rocks are prospective for magmatic Ni/Cu/PGE sulphides. In addition the tenement is also prospective for Cu-Co and gold mineralisation as these have also been discovered recently on other portions of the Huckitta Project by Mithril.

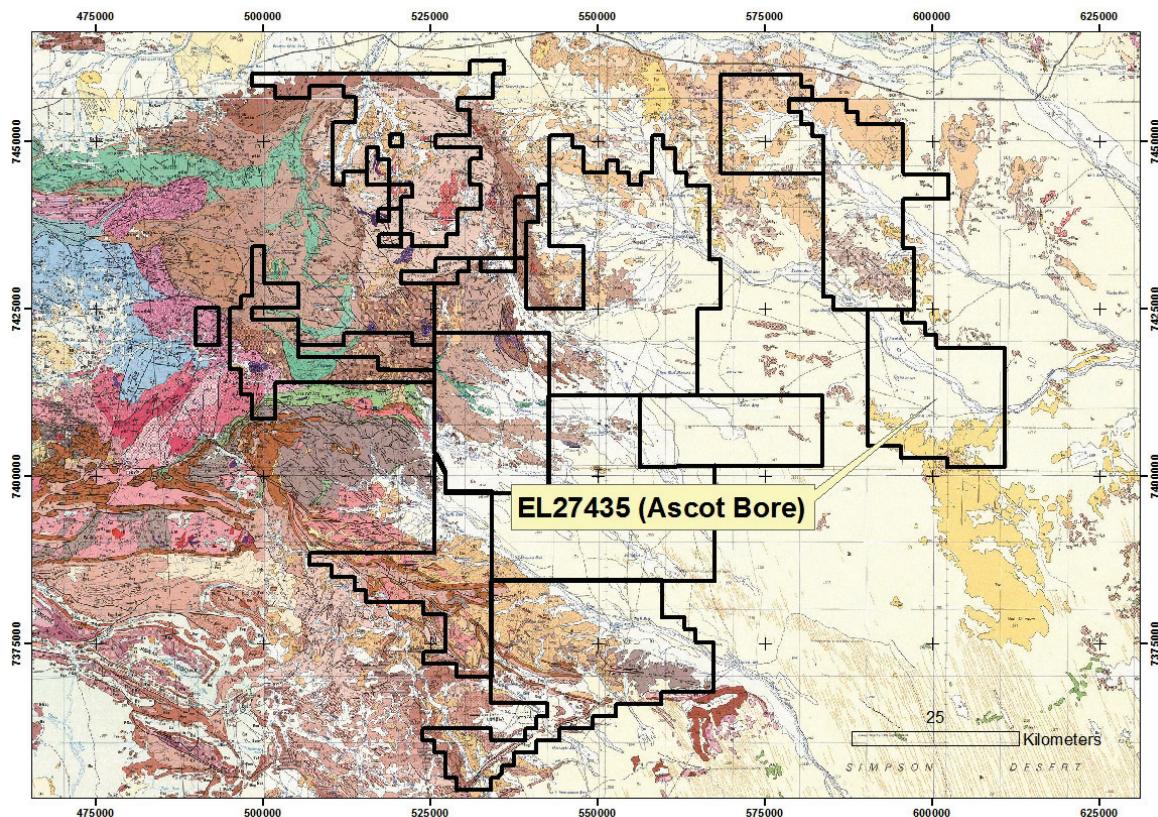


Figure 1: Location of EL27435 in relation to larger Huckitta Project on 250k published geology

## 2.0 Tenure

Leasing details for the project are detailed in Table 1 below.

Tenement	Grant date	Original size (blocks)
EL24735	13/4/2010	124 (386sqkm)

### **3.0 Geology**

#### **3.1 Regional Geology**

The Project lies within the Irindina Province (also known as the Harts Range Metamorphic Complex) of the south-eastern Arunta Inlier. The Irindina Province comprises the Harts Range Group, a volcanosedimentary succession that was metamorphosed to granulite facies during the Ordovician Larapinta Event (475-460 Ma). Lithostratigraphical and geochronological data indicate that the Harts Range Group correlates with Neoproterozoic to Cambrian sediments of the adjacent Amadeus and Georgina Basins. Therefore, the Harts Range Group was probably deposited in a basin contiguous with, and possibly linking, the Amadeus and Georgina Basins.

While the Harts Range Group was metamorphosed to granulite-facies, however, sedimentation continued in the Amadeus and Georgina Basins. Structural and lithological evidence suggest that the Larapinta Event was extensional, with very deep burial required for the measured metamorphic conditions (30-35 km). Such an event was probably associated with mantle melting. The numerous mafic and ultramafic units found throughout the Irindina Province, although their timing is poorly constrained, may have intruded during the Larapinta Event. These intrusions are considered prospective for Ni-Cu-PGE sulphide deposits.

The Harts Range Group and Amadeus and Georgina Basins were structurally inverted and brought to the surface during the mid-Palaeozoic Alice Springs Orogeny (450-300 Ma).

#### **3.2 Project Geology**

The tenement area is predominantly covered by a veneer of aeolian and colluvial sand and gravel. Strongly weathered biotite, garnet-biotite and quartzofeldspathic gneiss, calcsilicate rocks and amphibolite are rarely sporadically exposed. There are numerous ferricrete, calcrete and silcrete rises, some of which may be indicative of the targeted mafic and ultramafic rocks. No detailed mapping has been undertaken in the area with the best regional maps compiled prior to detailed aeromagnetics and the current understanding of the geological history.

The area is considered prospective for Ni-Cu-PGE mineralisation associated with mafic and ultramafic intrusions. Vein-style REE-Th-U mineralisation has also been identified in the area as well as multiple occurrences of mica.

## **4.0 Exploration Work Completed**

### **4.1 Historical Exploration**

Numerous companies and individuals have explored in the general area covered by EL27435 but nothing systematic. This historical exploration is summarised in Appendix 1. No targets were generated from the historical report.

### **4.2 Mithril Resources Work Completed 2010-11**

No field work was completed during the year. Work was limited to reviewing historical exploration over the tenement. This was largely related to 4wd access problems given the extraordinary heavy and consistent rain throughout the year.

## **5.0 Planned Work 2011-12**

Planned work on the tenement for Year two will focus on determining the amount of basement outcrop over the tenement area through geological mapping and geochemical sampling. This work will be followed by geophysical programs such as magnetic and electromagnetic surveys (airborne and/or ground) where warranted.

## **6.0 Appendix**

Appendix 1: Historical Exploration – EL27435.