

EL27662 – SALT HOLE DAM

YEAR 1 ANNUAL REPORT

For the period 1^{st} June $2010 - 31^{st}$ May 2011

Compiled by

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SUMMARY

This report presents the work completed during the first year of tenure on the Salt Hole Dam Tenement (EL27662).

The tenement area has been held by numerous other companies who have explored for gold, base metals, industrial minerals and Uranium.

Mithril first applied for the ground with a view to explore for Nickel sulphide deposits whilst remaining open minded to opportunities provided by other commodities.

Exploration has focused on the Harts Range Group and in particular the Riddoch Amphibolites.

Work completed during the reporting period included:

- Data compilation and review of exploration data
- 77.1 line kms of airborne EM (VTEM)
- 5 float and rock chip samples.

There were a number of VTEM anomalies detected on the EL and these will be followed up in the next reporting period.

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- Appendix 1: Summary of Historical Work
- Appendix 2: 2010 VTEM Survey Data
- Appendix 3: 2010 VTEM Survey Logistics Report
- Appendix 4: Surface geochemical data and mapping

1.0 Introduction

This report presents the work completed on the Salt Hole Dam Tenement (EL27662) by Mithril Resources for the first reporting year which ended on the 31st May 2011.

EL27662 is located approximately 150km east of Alice Springs (Figure 1). The tenement can be accessed from the north via the Plenty Highway and station tracks or the south via the Ross Highway and station tracks. Station tacks provide for reasonable access to much of the tenement area.



Figure 1: Project Location Plan

Mithril initially targeted the area for Ni-Cu-PGE sulphide deposits associated with mafic and ultramafic magmatic rocks. This style of mineralisation has been identified on adjacent tenements. However, recent exploration on the adjacent licence (EL26942) has identified significant sulphide hosted Cu-Co mineralisation at the Basil Prospect. Drill intersections at the Basil prospect include 59.1m @ 0.63% Cu and 0.07% Co in LB035DD; and 29.0m @ 0.66%Cu and 0.07% Co in LB027DD.

2.0 Tenure

Mithril Resources Limited (ACN 099 883 922) was granted exploration licence No. 27662 for a six year period due to expire on the 31st May 2016.

3.0 Geology

3.1 Regional Geology

EL27662 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). Litho-stratigraphical 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

EL27662 contains approximately 75% outcrop and 25% subcrop with recent cover from colluvial sand and gravel (Figure 2).

Where outcrop is available the dominant stratigraphic units are the Irindina Gneiss and the Riddoch Amphibolite. The Irindina Gneiss is a quartz-feldsparbiotite +/-garnet gneiss with interbedded massive amphibolites with lesser calcsilicates and marble. The Riddoch amphibolites are massive to compositionally layered ambhibolite intervalated with garnet-biotite-feldspar-quartz gneiss and rare quartzitic units.

The area has been subjected to intense deformation and metamorphism (as outlined in regional geology above).

The area is considered prospective for;

- Ni-Cu-PGE mineralisation associated with mafic and ultramafic intrusions
- "Basil type" Cu-Co semi-massive sulphides
- Vein-style REE-Th mineralisation
- Uranium mineralisation



Figure 2: Geology of EL27662 (from published geology map sheet – Quartz 100K). Yellow dots indicate Mithril rockchip sample locations.

4.0 Historical Exploration Work Completed

Numerous companies and individuals have explored in the general area covered by EL27662.

A detailed synthesis of previous exploration work is contained in Appendix 1.

5.0 Mithril work completed 1st June 2010 – 31st May 2011.

5.1 Geophysics - VTEM

Two airborne geophysical surveys (both VTEM) were undertaken during the reporting period. The first survey flown in 2010 totalled 54.7 line km and the second flown in 2011 totalled 22.4 line km. These surveys were completed as part of larger surveys by Mithril on adjacent Huckitta Project tenements (Figure 3). Appendix 2 contains the VTEM data from the May 2010 survey and Appendix 3 contains the logistics report for this survey. At the time of writing final results from the 2011 survey were not available and will be reported at a later date.



Figure 3: Location of airborne EM and rockchips (yellow dots)

5.2 Rock chip sampling and mapping

Five rock chip samples were collected during the reporting period. No anomalous results were returned. The locations of these samples are shown in Figure 3.

All rock and samples were analysed using ALS's 'ME-ICP61' or ALS's 'ME-ICP41' and 'Au-AA25 Method'. Where Pt or Pd is reported Au, Pt and Pd were analysed using ALS's PGM-ICP23 method. These results are contained in Appendix 4.

5.3 Rehabilitation

No ground disturbing work has been undertaken and as such no rehabilitation has been required.

6.0 Conclusions / Further Work

Work completed during the reporting period has identified a number of VTEM anomalies requiring ground follow-up. These will be the focus of further work during the next reporting year.