

EL27178 – LIZZIE CREEK

YEAR 4 ANNUAL REPORT

For the Period

6 November 2012 to 5 November 2013

Compiled By

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MAP REFERENCE: Alice Springs 250K - Sheet SF53/14 Illogwa Creek 250K - Sheet SF53/15

Target Commodities: Nickel and Copper

Report submitted on: 18 December 2013 All data provided is of GDA94 Datum, Zone 53.

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SUMMARY

This report presents work completed during the fourth year of tenure on the Lizzie Creek Tenement (EL27178), granted to Mithril Resources Ltd (Mithril) on 6 November 2009.

EL27178 is centred approximately 125 km east, northeast of Alice Springs. 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 Riddock Amphibolites.

Work completed during the reporting period included:

- Data compilation and review of exploration data
- Heritage survey
- Rock chip and geochemical sampling/resampling/QA/QC.
- Reconnaissance field work for drill track and pad clearing

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Appendix 2:	Rock chip geochemical QAQC data Digital file: EL27178_2013_A_03_SurfaceQAQC.txt
Appendix 3:	File listing information Digital file: EL27178_2013_A_04_FileListings.txt

1.0 INTRODUCTION

This report presents work completed on the Lizzie Creek Tenement (EL27178) by Mithril for the fourth reporting year, ending 5 November 2013.

EL 27178 is located approximately 125 km east, northeast of Alice Springs (Figure 1). The tenement can be accessed from the north via the Plenty Highway and station tracks or the east via the Ross Highway and station tracks. Station tracks provide for reasonable access to much of the tenement area.



Figure 1: Location of EL27178 (Lizzie Creek).

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 (EL 26942) 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 license EL27178 for a six year period due to expire 5 November 2015. MMG Ltd entered into a "Nickel Only" joint venture in October 2011 whereby MMG can earn up to an 80% interest in the tenement.

Project	Tenement	Tenement	Application	Grant	Area	Grant	Grant
	Name	No	Date	Blocks	(km ²)	Date	Period
Huckitta	Lizzie Creek	27178	25/02/2009	69	218	6/11/2009	6 years

Table 1: EL27178 (Lizzie Creek) tenure.

3.0 GEOLOGY

3.1 Regional Geology

EL27178 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, 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

EL27178 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 Irinndina Gneiss and the Riddock Amphibolite. The Irindina Gneiss is a quartz-feldspar-biotite +/-garnet gneiss with interbedded massive amphibolites with lesser calc-silicates and marble. The Riddock amphibolite is massive to compositionally layered amphibolite 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 EL27178 (from published 1:250K geology map sheet).

4.0 HISTORICAL EXPLORATION WORK COMPLETED

Numerous companies and individuals have explored in the general area covered by EL27178.

A detailed synthesis of previous exploration work was contained in the first annual report.

4.1 Work Completed During 2011-2012

- Data compilation and review of exploration data
- 18 VTEM anomalies field checked
- 5 rock chip samples collected and assayed
- 95 stream sediment samples collected

5.0 WORK COMPLETED DURING THE REPORTING PERIOD

5.1 Data Compilation and Review of Exploration Data

Analysis of geochemical data obtained from 2012 stream sediment samples and rock chip samples collected during late 2012.

5.2 Rock Chip Sampling

10 samples of the Mt Ruby amphibolite that were collected by Mithril in 2010 were re-assayed for MEXRF26, PGMMS23 and ME-MS61 (ultratrace for Cr, Cu, Ni, Se) for lower detection limits of several elements of interest (Figure 3). These samples were used as part of a larger lithogeochemistry study of mafic rocks in the region. No significant or anomalous assay results were detected in these samples (see Appendix 1 for assay data).



Figure 3: Locations of re-assayed samples within the Mt Ruby amphibolite of EL272178.

5.3 Heritage Surveys

Two areas within EL27178 were heritage cleared over two geochemical anomalies identified during the 2012 stream sed., sampling program (Figure 4). Ground EM and follow up rock-chip/soil sampling were planned for this year; however work on our eastern tenements took precedence and this work has been postponed.



Figure 4: Location map of heritage cleared area of EL27178

5.4 Field Reconnaissance

In July 2013, helicopter based reconnaissance was conducted over the tenement in order to field check several VTEM anomalies that were missed during the 2012 reconnaissance due to time constraints. No obvious conductors were identified, with most anomalies associated with thick monotonous sequences of thinly banded/garnet-rich amphibolite. The best locations for possible access tracks and drill pads were also scouted.

6.0 CONCLUSIONS AND PLANNED WORK 2013-14

The Mt. Ruby amphibolite contains several interesting VTEM anomalies that are not evident at the surface and will require further ground based EM or drilling to determine their geological sources. At this stage there are no significant or anomalous assays that have been returned from any mafic rocks in the tenement.

Recommendations for further work on EL27178 will be dependent on the results of 2014 exploration activities on several adjacent tenements.

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