MOSQUITO CREEK PROJECT

FINAL REPORT

For the Period:

29 November 2012

to

2 October 2019

Exploration Licence 29616

TENEMENT:	EL29616
OPERATOR:	HORN RESOURCES PTY LTD
TITLE HOLDER:	HORN RESOURCES PTY LTD
PREPARED BY:	Neil Scholtz
DATE:	7 February 2020

ABSTRACT

Title History
The tenement was held and operated by Horn Resources Pty Ltd (Horn). The project was purchased from Northern Minerals Limited and transfer took place on 2 October 2014. The area was reduced to 33 blocks and was granted on the 2nd of December 2014. Two licence renewals for EL29616 were applied for and granted with the expiry date extended to 28 November 2020.

Target Commodity
The Project was centred around the Mosquito Creek Tungsten Field (also referred to as the Hill of Leaders workings). Local geology is dominated by the sheared Hill of Leaders Granite with zones of greisen. Pervasive lithium anomalism is scattered throughout the tenement. Tungsten, together with lithium were the focus of exploration efforts.

Exploration Rationale
The Mosquito Creek project was based upon a large number of small tungsten mines and prospects hosted in the Hill of Leaders Granite near Tennant Creek in the Northern Territory. The tungsten mineralisation is associated with poorly exposed greisen and quartz veins which also hold the potential for lithium mineralisation. Recent work has centred on reviewing the previous exploration geochemical, drilling, and geophysical data to define anomalous zones of lithium and tungsten mineralisation.

Geology
The tenement area was located along the eastern margin of the Tennant Creek Inlier. This is an intensely folded, early Proterozoic intra-cratonic basin succession of mainly sedimentary and minor felsic volcanic rocks, intruded by younger granitoids. The Tennant Creek Inlier forms a north-northwesterly trending belt some 700 km in length, centred on the town of Tennant Creek and comprises Paleoproterozoic sediments of the Warramunga Group, the Hatches Group and the Tomkinson Creek Beds. The tenement area is dominated by the Hills of Leaders Granite.

Exploration Activities Undertaken
Detailed review of historical data over the tenement and its surrounding areas was undertaken by Northern Minerals Limited (NTU) and Horn Resources Pty Ltd (HRN). HRN used the revised interpretations of the geology and the structural controls on the mineralisation to further define targets for tungsten and lithium mineralisation. HRN applied for an Authority Certificate from the Aboriginal Areas Protection Authority on 14 November 2016. The certificate was finally received on 22 September 2017 and was followed by field-reconnaissance work.

Results and Conclusions
Historical data was used to generate targets over the Mosquito Creek licence EL29616. These targets were inspected through field-reconnaissance. Targets proved to be of insignificant economic value and as a consequence of this HRN surrendered the licence. No further work is recommended.

Table of Contents

List of Figures

SUMMARY

This report is the Final Report for tenement EL29616 to the Northern Territory Department of Mines and Energy. The report details the exploration activities between 29 November 2012 and 2 October 2019.

INTRODUCTION

The Mosquito Creek project was based upon a large number of small tungsten mines and prospects hosted in the Hill of Leaders Granite near Tennant Creek in the Northern Territory. The tungsten mineralisation is associated with poorly exposed greisen and quartz veins which also hold the potential for lithium mineralisation. This report details exploration activities carried out on the Mosquito Creek Project during the life of grant until EL29616 was surrendered on 2 October 2019.

LOCATION AND ACCESS

The Mosquito Creek Project was located 90 km southeast of Tennant Creek in the Northern Territory (Figure 1). Access to the surrendered licence from Tennant Creek was 80 km south via the Stuart Highway, then some 70 km east to the Kurundi Station homestead by way of the main station access road. Access within the tenement was via mine roads and well-maintained tracks. The project was covered by the Ooradidgee 1:100,000 map sheet of (5857) and the Bonney Well 1:250,000 map sheet (SF 53-02).

TENURE

The tenement was held and operated by Horn Resources Pty Ltd (Horn). The project was purchased from Northern Minerals Limited and transfer took place on 2 October 2014. The area was reduced to 33 blocks and was granted on the 2nd of December 2014. Two licence renewals for EL29616 were applied for and granted with the expiry date extended to 28 November 2020.

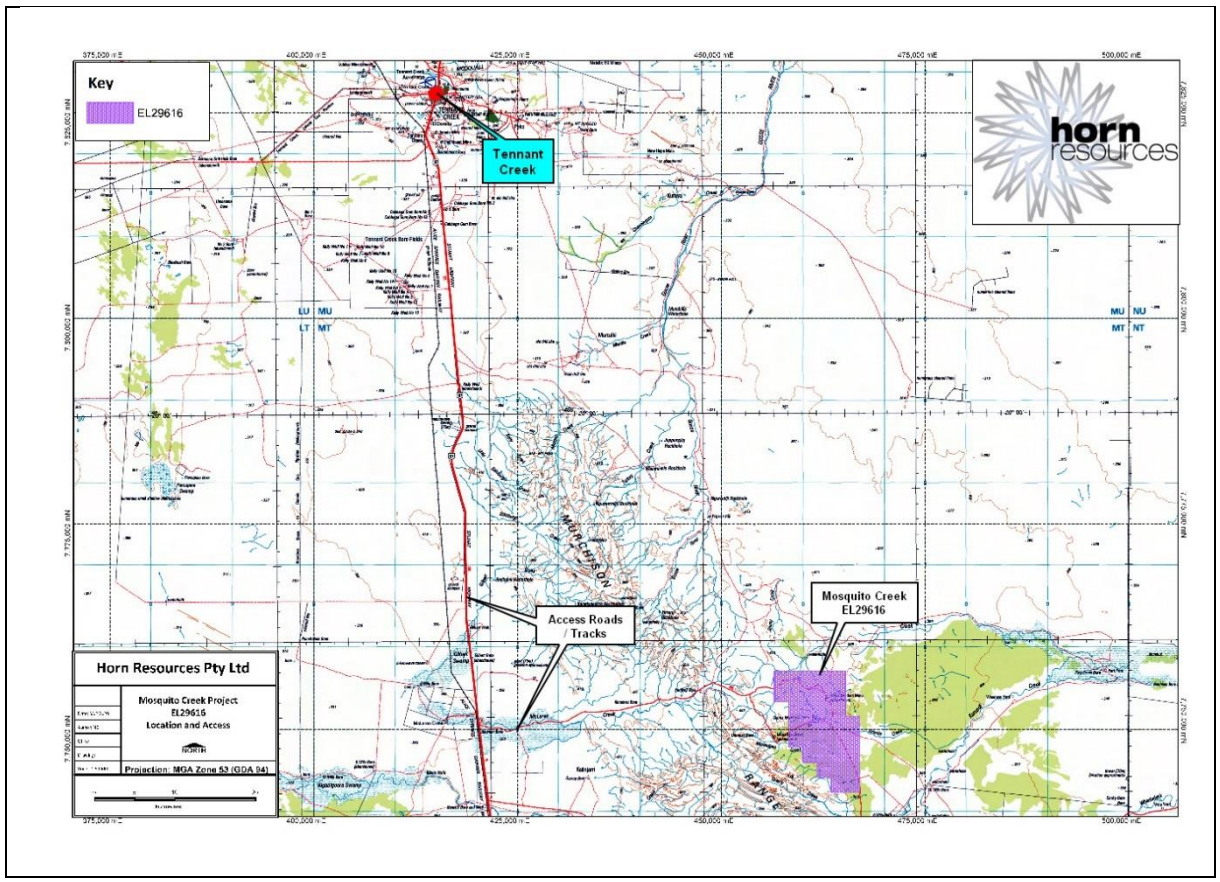

Figure 1: Location and Access EL29616

REGIONAL AND PROJECT GEOLOGY

The tenement area was located along the eastern margin of the Tennant Creek Inlier. This is an intensely folded, early Proterozoic intra-cratonic basin succession of mainly sedimentary and minor felsic volcanic rocks, intruded by younger granitoids. The Tennant Creek Inlier forms a north-northwesterly trending belt some 700 km in length, centred on the town of Tennant Creek and comprises Paleoproterozoic sediments of the Warramunga Group, the Hatches Group and the Tomkinson Creek Beds (Figure 2).

The Warramunga Group, which contains all the economically viable deposits currently mined in the Tennant Creek region, consists of a sequence of argillaceous sedimentary rocks, including siliceous greywacke, siltstone and shale. Quartz-feldspar porphyry lenses occur as both crosscutting and conformable units within the sedimentary sequences. The Warramunga Group has been the subject of at least three deformational episodes.

Apart from the southwest of the Project, in which small exposures of the Warramunga Group are exposed, the remainder of the tenement was dominated by the porphyritic muscovite-biotite granite of the Hill of Leaders Granite. This granite is the host of a series of small tungsten mines and prospects collectively termed the Mosquito Creek Tungsten Field. The tungsten mineralisation is associated with poorly exposed greisen and quartz veins in the topographic "shadows" of outcrops of unaltered granite. Geological mapping has defined a broad sheared granite with small greisen zones within the Hill of Leaders Granite. These structurally complex zones represented the primary exploration target for lithium and tungsten mineralisation.

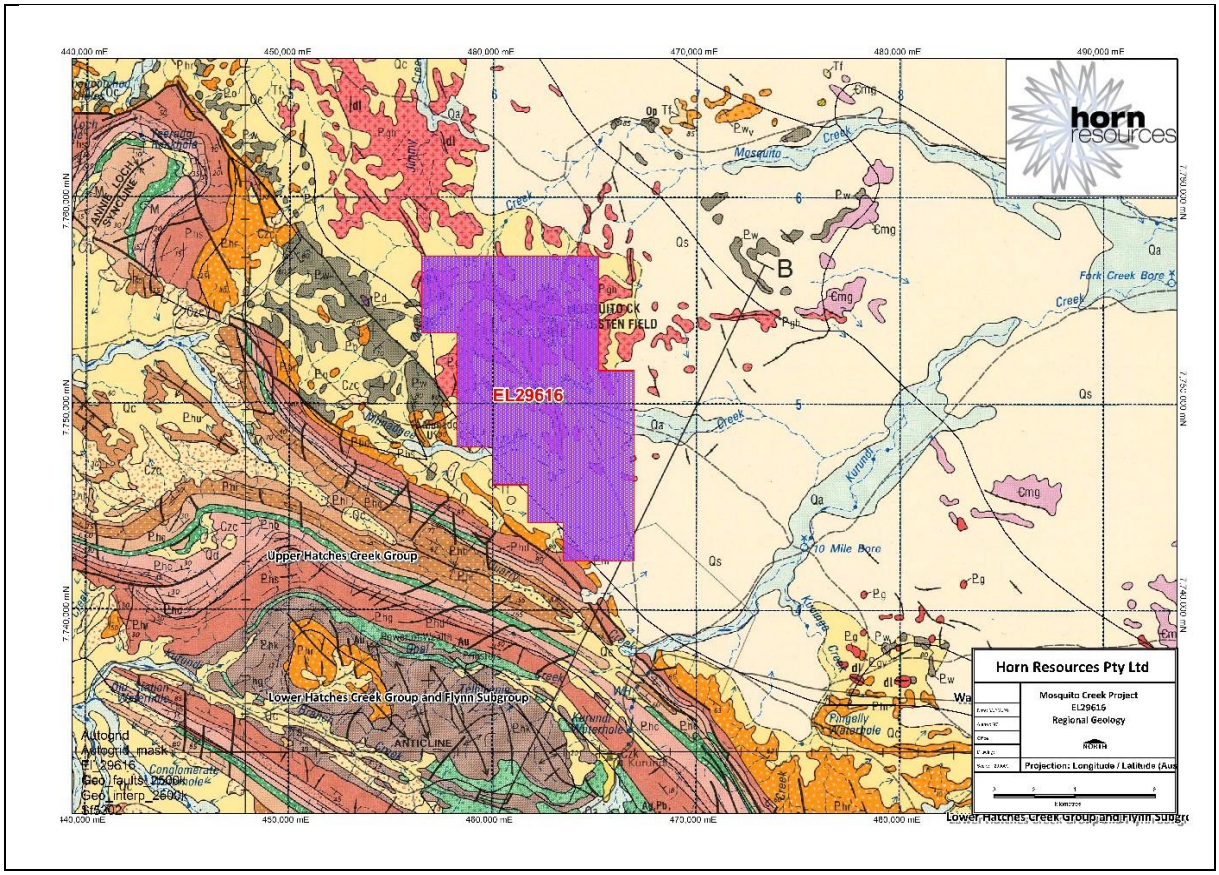

Figure 2: Regional Geology

EXPLORATION COMPLETED BY HORN RESOURCES PTY LTD AND NORTHERN MINERALS LTD

A detailed review of the historical data over the tenement and its surrounding areas was undertaken by NTU during the 2013 reporting year. The open-file geophysical data was collected over the area, and has been reprocessed and interpreted. The reprocessed magnetics form the basis of a revised structural interpretation. Radiometrics, thorium and uranium counts were processed and compared with the 1:250,000 mapping sheets to understand the composition of the underlying geology.

HRN purchased the project from NTU and the transfer took place on 2 October 2014. The area was reduced to 33 blocks and was granted on the 2nd of December 2014. Since then HRN has used the revised interpretations of the geology and the structural controls on the mineralisation to further define targets for tungsten and lithium mineralisation.

Tungsten mineralisation, as both wolframite and scheelite, occurs at several locations regionally. At the Mosquito Creek deposits the tungsten mineralisation is associated with poorly exposed greisen and quartz veins in the topographic "shadows "of outcrops of unaltered granite. From NTGS regional mapping and airborne geophysical surveys, there are extensive areas of granitic bedrock masked by comparatively thin Quaternary deposits.

HRN applied for an Authority Certificate from the Aboriginal Areas Protection Authority on 14 November 2016 and the certificate was finally received on 22 September 2017. Targets generated were inspected through field-reconnaissance and proved to be of insignificant economic value (Figure 3).

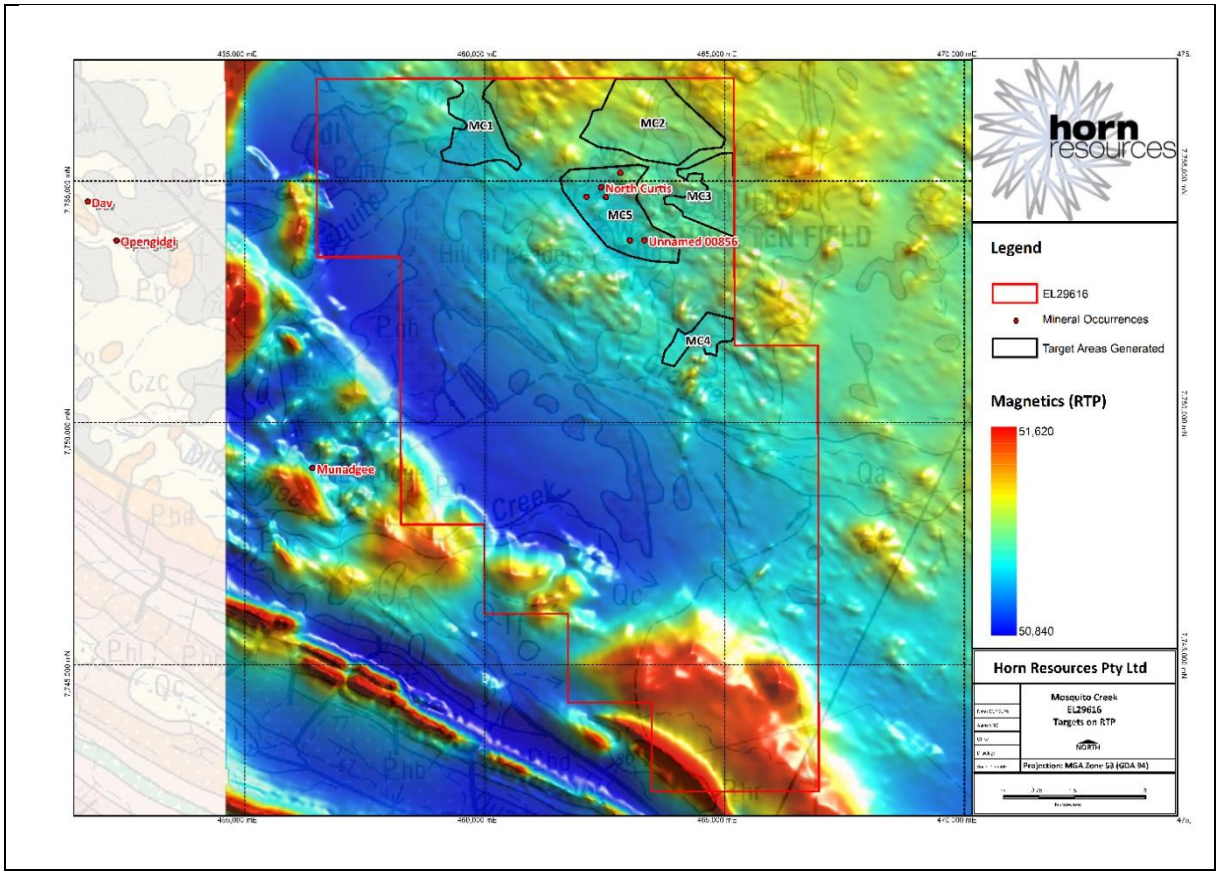

Figure 3: Target Areas Generated on Magnetic (RTP) Image

CONCLUSIONS & RECOMMENDATIONS

Historical data was used to generate targets over the Mosquito Creek licence EL29616. These targets were inspected through field-reconnaissance. Targets proved to be of insignificant economic value and as a consequence of this HRN surrendered the licence. No further work is recommended.

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