EPENARRA PROJECT

FINAL SURRENDER REPORT for the period

4 December 2008 to 3 December 2012

Exploration License EL26776

OPERATED BY

NORTHERN MINERALS LIMITED

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TABLE OF CONTENTS

1.0 SUMMARY ........................................................................................................... 3
2.0 INTRODUCTION .................................................................................................. 3
3.0 LOCATION, ACCESS AND CLIMATE ................................................................. 4
4.0 TENURE ............................................................................................................. 6
5.0 REGIONAL GEOLOGY .......................................................................................... 6
6.0 WORK COMPLETED ............................................................................................ 7
7.0 CONCLUSIONS .................................................................................................. 8
8.0 REFERENCES ...................................................................................................... 8

TABLES
Table 1 – Tenement Schedule ..................................................................................... 6

FIGURES
Figure 1 – Tenement Location and Access Map ....................................................... 5
Figure 2 – Regional Geology Map ........................................................................... 7
1.0 SUMMARY

The Epenarra exploration license EL26776 lies approximately 130km to the south-east of the township of Tennant Creek. The license was granted to Northern Minerals on the 4th December 2008 for a period of 6 years.

The tenement originally consisted of 39 blocks and covered an area of 126km². EL26776 was reduced from 39 blocks to 33 in February 2011, and at the time of final surrender on the 3rd December 2012, covered 107km².

Northern Minerals Limited targeted Cambrian phosphorite deposits within the Georgina Basin. The data review and compilation suggest that EL26776 is in an area considered prospective for phosphate due to the Cambrian Gum Ridge Formation being interpreted to underlie parts of the license areas and is considered to be a potential host for phosphate mineralisation.

Regional bushfires burnt throughout August 2011 which delayed on-ground activities scheduled for that time. In addition, mustering activities (aerial and on-ground) surrounding the Epenarra Homestead nearby, further postponed exploration.

A second attempt in mid-November also had to be abandoned due to heavy rains in the region. As a result, it was not possible to complete the proposed mapping, sampling and drilling activities that were scheduled for 2011.

It was anticipated that the proposed exploration activities would be undertaken in 2012, however due to Northern Minerals focus on other commodities, the tenement has been surrendered despite the prospectivity of the tenement for economic phosphate mineralisation as indicated by the data review and compilation, the area covered by tenement EL26776 effectively remains untested.

2.0 INTRODUCTION

This report details exploration activities conducted by Northern Minerals Ltd on EL26776 between 4th December 2008 and 3rd December 2012.

Northern Minerals Limited targeted phosphorite deposits of the Middle Cambrian within the Georgina Basin. Major phosphate deposits within the Georgina Basin include the Wonarah deposit, which is Australia’s largest undeveloped phosphate resource. Other deposits include Arruwarra, Alexandria and Alroy deposits which are also hosted by the Middle Cambrian Wonarah Formation. The Cambrian Gum Ridge Formation has been interpreted to underlie the parts of the license areas and is considered to be a potential host for significant phosphate mineralisation.
3.0 LOCATION, ACCESS and CLIMATE

The Epenarra exploration license EL26776 lies approximately 130km to the south-east of the township of Tennant Creek. EL26776 is located on the Epenarra Pastoral Station.

Access to the exploration area is via the unsealed Wauchope-Epenarra road which passes in an easterly direction and is located to the south of EL26776. A well developed set of station tracks provides access to the north and south from this road. Off-road driving is relatively easy as most of the exploration area is flat with minor drainage. All streams flow intermittently during the ‘wet’ season and only minor amounts of rain are necessary to prevent vehicle movement and access across ‘black soils’. Vehicular access to the central tenement area is difficult, with few tracks.

The Epenarra region has a long, dry and hot summer with a cooler winter period. Rainfall is limited but can be heavy in the monsoon season (November through to March), and particularly when associated with cyclone activity. During winter strong easterly winds predominate.
Figure 1: Tenement Location and Access Map
4.0 TENURE

The exploration license area consisted of 33 blocks at the time of final surrender covering an area of 107km². The license area was granted to Northern Minerals Ltd on the 4th December 2008 for a period of 6 years.

EL26776 was reduced from 39 blocks to 33 blocks in Feb 2011.

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Tenement No.</th>
<th>Area (Blocks)</th>
<th>Blocks Relinq.</th>
<th>Grant Date</th>
<th>Expiry Date</th>
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<td>EL26776</td>
<td>33</td>
<td>6</td>
<td>04/12/2008</td>
<td>03/12/2014</td>
</tr>
</tbody>
</table>

Table 1: Tenement Schedule

5.0 REGIONAL GEOLOGY

License EL26776 lies within the Frew River 1:250,000 map sheet (SF53-3) and the Epenarra 1:100,000 map sheet (5957). The 1:250,000 explanatory notes, prepared by the NTGS, describe and map the majority of the license area as being covered by Quaternary soil, sand and alluvium cover.

The Palaeozoic rocks in the Frew River sheet area are of Cambrian age and include the shallow marine and sub-aerial sediments which overlie the earlier lithologies in the north-western part of the Georgina Sedimentary Basin. The Cambrian sediments extend from the Frew River sheet area north and east towards the Barkly Tablelands.

The Gum Ridge Formation (Figure 2), comprised of chert, shale, sandstone, conglomerate, limestone and dolomite phases at subsurface, is the oldest Cambrian unit. The Wonarah beds overlie the Gum Ridge Formation and are considered to be slightly younger in age, comprising of chert, oolitic chert and silicified coquinite. An unnamed Cambrian unit which comprises of a grey dolomitic and brown oolitic chert sub-crops in the central-east and south-east of the Frew River map sheet area. It is uncertain, but this unit may be part of the Wonarah beds.

The Lower Proterozoic rocks include the Warramunga and Hatches Creek Groups and intrusive igneous rocks. The Warramunga Group are the oldest Proterozoic rocks in the Frew River mapsheet and comprise of yellow-red-purple coloured thin bedded sandstone, greywacke and siltstone. The Hatches Creek Group overlies the Warramunga Group and comprises a grey-pink-brown, coarse grained thin to medium bedded quartz sandstone, quartz greywacke, quartzite, siltstone, shale, pebble conglomerate, basic and acid lavas.
6 WORK COMPLETED

Exploration work undertaken by Northern Minerals Limited during the period 4th December 2008 and 3rd December 2012 focused on defining exploration targets with the potential for economic phosphate mineralisation. Exploration comprised a detailed compilation, integration and review of all available geophysical, geological and geochemical data.

The data review and compilation suggest that EL26776 is in an area considered prospective for phosphate mineralisation.

During 2008-12 compilation of publicly available regional data sets such as aeromagnetics, radiometrics, gravity and geological mapping was completed. Interpretation and analysis of this data was reviewed in order to determine and prioritise initial targets and areas which warranted on-ground investigation.
In order to obtain a better regional and local understanding of the Georgina Basin depositional environment, a geophysical interpretation of the magnetic and gravity data was planned to be undertaken to determine depth to bedrock in order to determine potential phosphate targets for drilling. Phosphate deposits such as Wonarah are known to be spatially associated with basement highs reflecting palaeotopographic highs.

The geophysical work would include structural interpretation and depth modeling of windowed areas which encompassed Epenarra tenements. Previous interpretation of the regional magnetic data has identified potential targets around possible magnetic highs that are favorable depositional environments for phosphate mineralisation.

Geophysical modeling contributes valuable information which helps validate magnetic features and provides a better understanding of the basement depths that surround them.

Several attempts were made to commence on-ground exploration activities during 2011. Regional bushfires which burnt throughout August/September delayed on-ground exploration, and an attempt to get on the ground in late August/early September had to be postponed due to mustering activities (aerial and on-ground) in the area surrounding the Epenarra Homestead.

A second attempt in mid-November also had to be abandoned due to heavy rains in the region. As a result, it was not possible to complete the proposed mapping, sampling and drilling activities that were scheduled for 2011-12.

7 CONCLUSIONS

Despite the prospectivity of the tenement for economic phosphate mineralisation, as indicated by the data review and compilation, the area covered by tenement EL26776 effectively remains untested. Due to Northern Minerals focus on other commodities, the tenement has been surrendered.

8 REFERENCES

Frew River, NT 1:250,000 Geological Series Explanatory Notes, Sheet SF/53-3

Epenarra, NT 1:100,000 map sheet, Sheet 5957 (59/1)