

NORTHERN MINING LIMITED

ACN 113 654 229

Partial Relinquishment Report for
'MOUNT WATT'
EL 24503

For the period
13/10/2005 to 12/10/2009

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250,000 sheets: Finke SG53-06

100,000 sheets: Idracowra (5647)

Commodities: Uranium, manganese

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Northern Mining Limited



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1.0 Summary

EL 24503 is part of Northern Mining Limited’s ‘Finke Project’ in Central Australia and is considered prospective for various styles of mineralisation:

- stratiform lead-zinc, manganese, phosphate and potash,
- unconformity uranium, and
- sandstone-hosted uranium (Angela-style).

At the end of the 4th year of tenure, 74 blocks were identified to be relinquished (the subject of this report), leaving only 72 blocks within EL 24503.

2.0 Introduction

EL 24503 ‘Mount Watt’ is located 180 km south of Alice Springs, 40 km east of the Adelaide-Alice Springs Railway and 30 km west of the Finke River (Figure 1). It is part of the Finke Project, along with EL 24467, which has its border only 6 km to the northeast. Access is difficult with no station tracks crossing the tenement and many sand-dunes within the tenement. This report covers the work completed on 74 sub-blocks recently relinquished on EL 24503.

3.0 Tenure

EL 24503 was granted to Lockett Consulting Services Pty Ltd (90 %) and Imperial Granite & Minerals Pty Ltd (10 %) on 13 October 2005. Agreement to transfer the tenement to Northern Mining Limited was completed during the first year of tenure; formal transfer of ownership was not completed until the following year. Originally, the tenement comprised 297 sub-blocks overlying NT Portions 2958, 259 and 659, which are part of the Idracowra, Lilla Creek and Horseshoe Bend perpetual pastoral leases, respectively.

A waiver to reduce the tenement was approved at the end of the second year of tenure. At the end of the third year of tenure, the northernmost 151 sub-blocks were relinquished leaving 146 sub-blocks. At the end of the fourth year of tenure, the westernmost 74 blocks were relinquished leaving 72 sub-blocks. The remaining sub-blocks are within the Lilla Creek perpetual pastoral lease.

Tenement	Ten no.	Blocks Granted	Blocks Relinq.	Blocks Retain	Grant Date	Expiry Date
Mount Watt	24503	297	225	72	13 Oct 2005	12 Oct 2011

Table 1: Tenement details



4.0 Geology/Prospectivity

The Finke Project covers the southernmost part of the Amadeus Basin; a large intracratonic basin with a complex Neoproterozoic to Carboniferous depositional history, and the northeast margin of the Mesoproterozoic Musgrave Block. In the Finke area, the Musgrave Block probably forms the basement to the Amadeus Basin, although the nearest outcrops of the Musgrave Block - felsic gneiss, granite and dolerite dykes are 25 km south of EL 24503. Interpretation of aeromagnetic data suggests that the Amadeus Basin and other overlying sediments are relatively shallow in the southern part of the project area with large northeast-trending faults, subparallel to the Black Hills Range, controlling basin depth.

The Finke Project area is dominated by Palaeozoic Finke Group sediments and the northeast-trending Black Hill Range (Neoproterozoic Winnall Beds). These sediments have been deformed and eroded, and then unconformably overlain by flat-lying Mesozoic sediments (Jurassic De Souza Sandstone, Cretaceous Rumbalara Shale) and Quaternary alluvial outwash, colluvium and aeolian sand, including abundant north- to northwest-trending sand dunes. Some minor Tertiary sediments have been mapped in the area (Wells *et al.*, 1969), though subsequent mapping by explorers has highlighted a greater extent of these outcrops.

Previous exploration within EL 24503 has been limited and included:

- Groundwater analyses,
- Airborne magnetic and radiometric surveys, and
- Ground reconnaissance of exposed geology.

Anomalous uranium results were obtained from water derived from bores penetrating the Polly Conglomerate (basal Finke Group), and are consistent with other uranium results across the southern Amadeus Basin. RAB drilling east of EL 24503 suggests that the Langra Formation is most prospective for uranium, though no mineralisation has been delineated.

In 1940, a rock sample collected by a station worker from Horseshoe Bend Station was analysed by Broken Hill Propriety (BHP) Limited in Newcastle. The sample returned 52.45 % Mn, 0.78 % Fe, 0.068 % P and 11.75 % insolubles (see 2nd Annual Report EL 24467 for original correspondence). The sample site has never been rediscovered and no other manganese mineralisation has been reported in the immediate area. However, the directions on the original correspondence suggest that the sample was probably collected from the Winnall Beds within EL 24467 or EL 24503.



5.0 Northern Mining Limited Work

5.1 Year 1

In the first year of tenure, work on EL 24503 was limited to producing the prospectus for Northern Mining Limited. This work involved a major desktop study by an independent geological consultant, and included compilation and interpretation of public-domain geophysics. No field work was undertaken.

5.2 Year 2

In the second year of tenure, a reconnaissance field trip was undertaken to check the field expression of certain geological features and discuss logistics with the station owner at Horseshoe Bend. No samples were collected from the relinquished portion of EL 24503.

5.3 Years 3 & 4

No further work was completed in the relinquished portion of EL 24503.

6.0 Environmental

No ground disturbing work has been undertaken on EL 24503.

7.0 Bibliography

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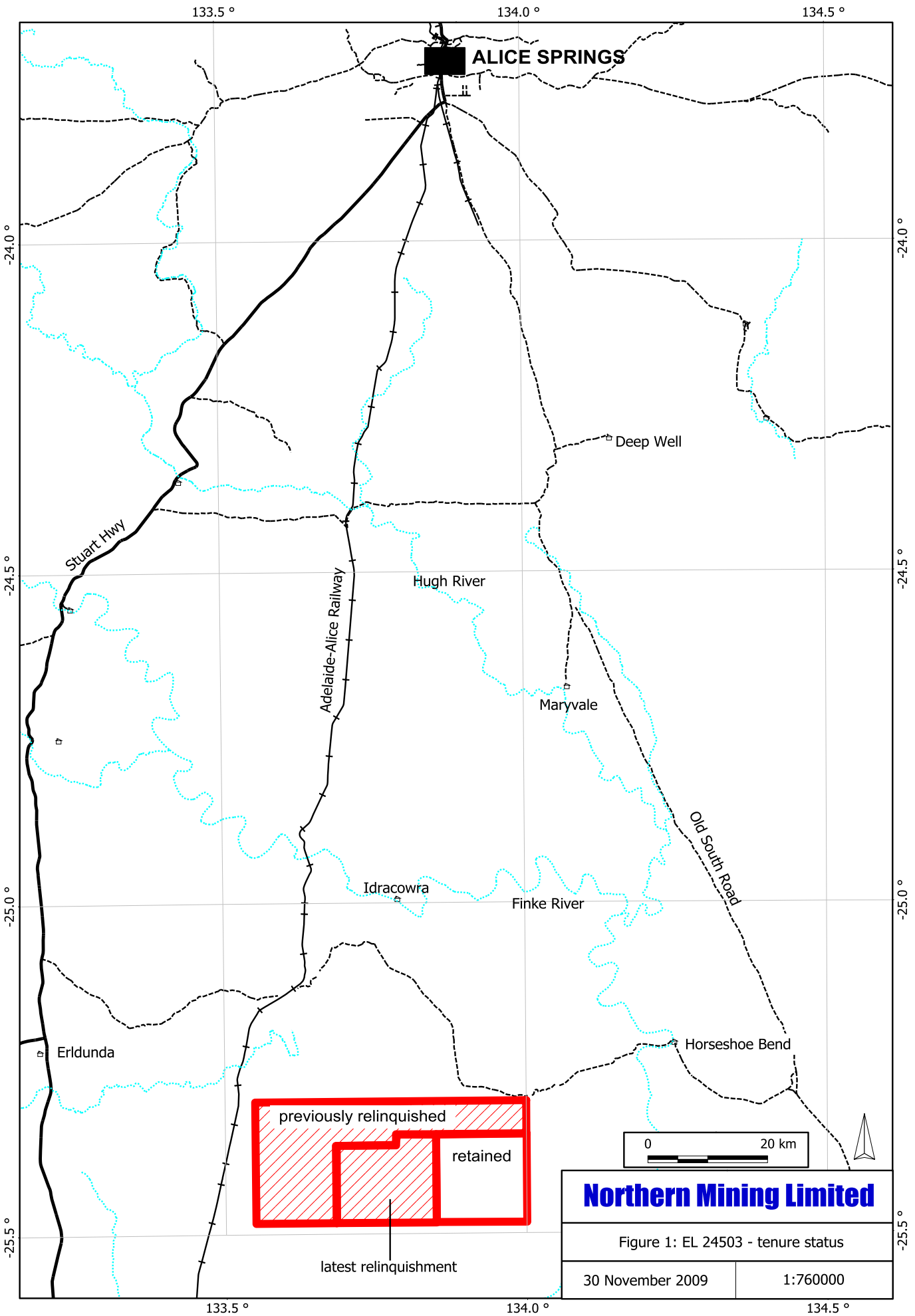
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Figure 1: EL 24503 - tenure status

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