

TRINEX MINERALS

TODD RIVER METALS PTY LTD

MOUNT HARDY PROJECT

FINAL ANNUAL AND SURRENDER REPORT

EL 33284 – 6/04/23 to 2/04/25

Tenement/s	EL 33284	1:250 000 Sheet Name	Mt Theo (SF5208) Mt Doreen (SF5212)
Holder	Todd River Metals Pty Ltd	1:100 000 Sheet Name	Yuendumu (5253) Turners Dome (5254)
Manager	NA	Datum	GDA94-52
Operator	Todd River Metals Pty Ltd		
Commodity	Cu, Pb, Zn, Ag, Au, Li		
Elements Analysed			
Keywords	Mt Hardy, Stream Sediment Sampling, Heavy Mineral Analysis, Lander Group.		
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Distribution	Trinex Minerals Limited		(1)
	Department of Mining and Energy		(1)

Executive Summary

EL33284 formed part of the Mount Hardy project along with EL27892 and EL29219. The project is located approximately 300km north-west of Alice Springs in Northern Territory, within the Aileron Province of the northern Arunta region.

The project area contains the historical Mount Hardy Copper Field where known copper mineralisation exists within the highly prospective Lander Group. The project area is accessed via the Tanami Road and is situated on the Mount Doreen pastoral lease (NT Portion 1947 under Perpetual Pastoral Lease 1035).

EL33284 has been surrendered at its second anniversary after preliminary reviews and heavy mineral sampling results returned nothing of significance.

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1. INTRODUCTION

EL33284 was part of the Mount Hardy project along with EL29892 and EL29219. The project is located approximately 300km north-west of Alice Springs in Northern Territory and lies within the Aileron Province of the northern Arunta region.

The project area contains the historical Mt Hardy Copper Field where known copper mineralisation exists within the highly prospective Lander Group. The project area is accessed via the Tanami Road and is situated on the Mount Doreen pastoral lease (NT Portion 1947 under Perpetual Pastoral Lease 1035).

EL33284 has been surrendered prior to its second anniversary and this is the Final Annual and Surrender Report for the licence.

2. LOCATION AND ACCESS

The Mount Hardy project is located approximately 300km north-west of Alice Springs in Northern Territory (Figure 1). The project comprises three exploration licences covering a total area of 266.73 km². The project area is accessed via the Tanami Road and is situated on the Mount Doreen pastoral lease (NT Portion 1947 under Perpetual Pastoral Lease 1035). The project area falls on the Mount Doreen (SF5212) 250K mapsheet.

3. TENURE

EL33284 was part of the Mount Hardy Project area together with EL 27892 and EL 29219. Details of tenure are shown in Table 1 and Figure 1. EL 33284 has been surrendered just prior to its second anniversary and this is the final report for the licence.

Table 1: Mount Hardy Project tenure details.

TITLE	AREA (blocks)	AREA (km2)	GRANT DATE	EXPIRY/SURRENDER DATE
EL 27892	32	107.76	04/08/2010	03/08/2026
EL 29219	34	105.96	17/09/2012	16/09/2026
EL 33284	17	53.01	6/04/2023	2/04/2025

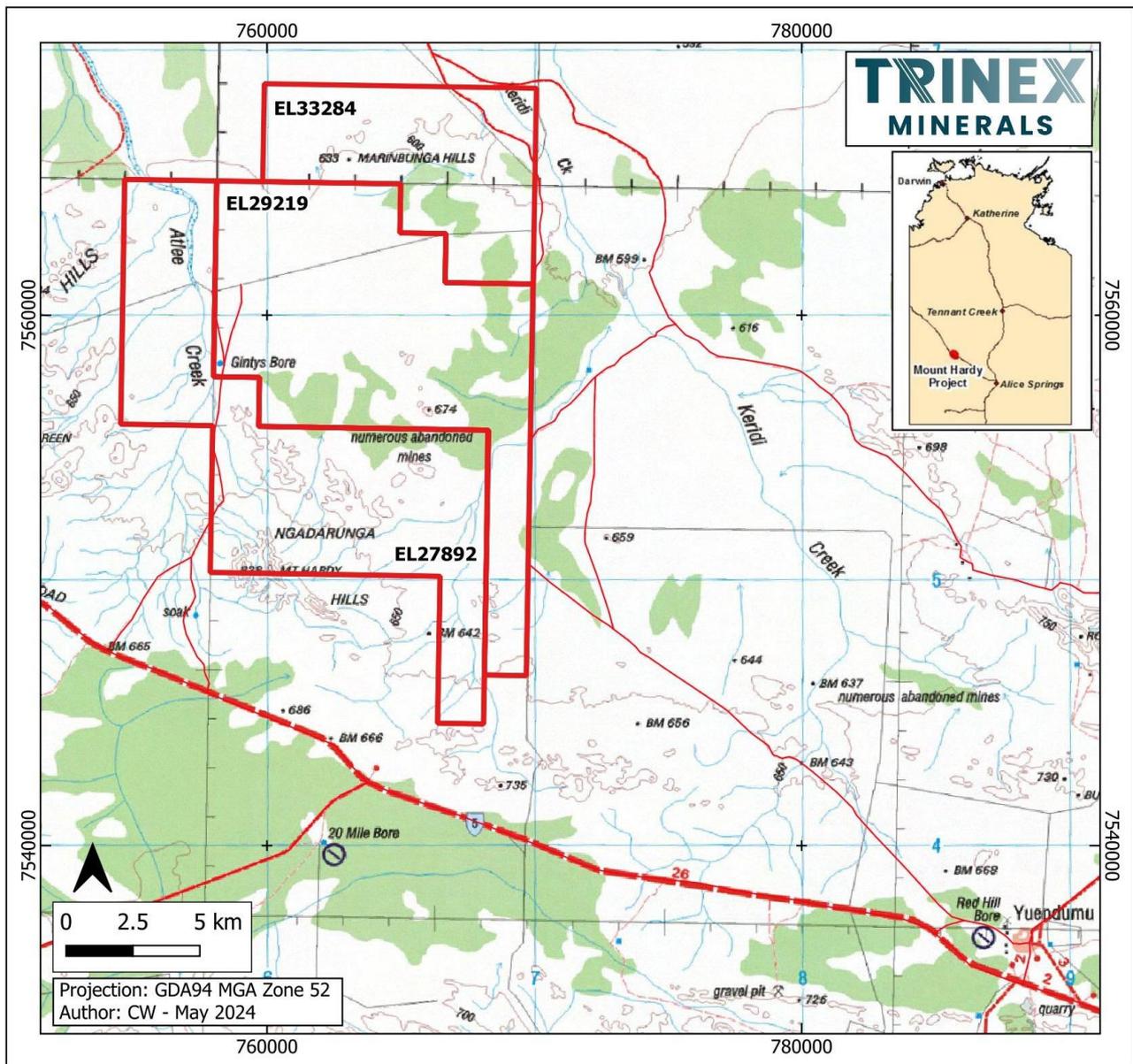


Figure 1: Location of Mount Hardy project area.

4. GEOLOGY

The Mount Hardy Project (Figure 2) area lies within the Aileron Province of the northern Arunta region. The oldest rocks in the area are metamorphosed Palaeoproterozoic siliciclastic sediments of the c.1840 Ma Lander Group (Rohde, 2005). These sediments were multiply deformed and variably metamorphosed during the c.1810 Ma Stafford Event and numerous subsequent events. The previously reported magmatic age of 1880 Ma for the Ngadarunga Granite and consequent older age for the Lander Group and proposed Yuendumu Tectonic Event has been re-evaluated and is now interpreted to be much younger (Rohde, 2005).

The Lander Group is interpreted to be stratigraphically equivalent to the Tanami Group, which hosts significant gold mineralisation at The Granites, Dead Bullock Soak and Coyote. As such, the Lander Group metasediments are considered prospective for gold mineralisation.

Rare amphibolite and metagabbro occurs within the Lander Group and are interpreted to be metamorphosed dolerite sills. Volcanic units have not been identified in the Lander Group. There are other Palaeoproterozoic volcanosedimentary successions in the Mount Doreen area,

including the ~1770-1790 Ma Reynolds Range Group, Patmungala and Nicker beds, but these are relatively insignificant (Rohde, 2005).

There have been two main periods of granite intrusion in the Mount Doreen area; the c.1780 Ma Carrington Suite and the c.1580 Ma Southwark Suite. The Southwark Suite has geochemical affinities with granite associated with Proterozoic Au-Cu mineralisation elsewhere in Australia (Wyborn, 1998). Correlatives of the 1820-1790 Ma granites in the Tanami region (Frederick and Grimwade Suites) are unknown in the Mount Hardy area and may have implications for mineralisation models (Rohde, 2005).

Neoproterozoic to Palaeozoic sedimentary rocks of the Ngalia Basin overlie the Palaeoproterozoic to Mesoproterozoic Arunta basement in the central part of the Mount Doreen 1:250,000 sheet (Rohde, 2005).

4.1 Local Geology and Mineralisation

The Mount Hardy copper workings are hosted within the Lander Group (Figure 2) and are dominated by psammite and lesser pelite, which have been metamorphosed to amphibolite-facies mica schist and andalusite(?) porphyroblastic schist. Complex mesoscopic-scale folding of schistosity/bedding is observable. Greenschist facies Lander Group schists and Reynolds Range Group quartzites lie to the south of the workings separated from the higher grade schists by a major east-west fault. Dolerite and pegmatite stocks and dykes are common in the area, the pegmatites most likely related to granite plutons of the Southwark and Carrington suites lying to the west and south of the Ngadarunga Hills (Rohde, 2005).

The copper workings display strong structural controls, being hosted within quartz veined shear zones. Surficial mineralization comprises copper carbonates and gossans within sheared mica-schist wallrocks and boudinaged and brecciated quartz veins. Quartz veins range for tabular and consistently strike over 10 to 100's of metres to complexly fractured and folded plunging rocks (Rohde, 2005).

Two main structural trends are evident from the distribution of the workings and lineations observable in Landsat imagery and aeromagnetics: NW to WNW (parallel to trans-Tanami regional scale structures in the region), and ENE-WSW (Rohde, 2005).

EL33284 was applied for because Lander Group geology (Plr) lies within the licence area.

- Bruce and Mules' explored the Silver King area for gold and base metals from 1988-1991.
- MIM/Roebuck Resources Joint Venture targeted magnetic highs in the early 1990s and explored the silver King deposit.
- Yuendumu Mining Company/Posgold explored the western parts of the Mount Doreen area from 1992 to 1996, particularly Terry's Find, other targets were 'Buger' and 'Grasshopper'.
- BMR completed airborne magnetic and radiometric surveys in 1993.
- BHP tested the northern Mount Doreen and southern Mount Theo mapsheets for Cu-Au in the late 1990s, but concluded that no major deposits were likely.
- Tanami Gold NL explored for Tanami-style gold mineralization and Tennant Creek-style copper mineralization in the Mount Doreen area from 2001 to 2005. The main target areas were the Terry's Find, Mount Hardy and Pyramid Hill Prospects. 7 Rock chip samples returned copper assays of 7032 ppm to 217972 ppm.
- Deep Yellow conducted exploration for uranium in the Mount Hardy area in 2009 and 2010. No other commodities were investigated.

6. EXPLORATION COMPLETED, 2023-2025

Stream sediment sampling was completed in late April 2023. Two samples were collected (S00806-807) from within EL33284 and laboratory analysis completed. These samples were also sent to the John De Laeter Centre at Curtin University for heavy mineral analysis (HM075-076).

HM075 and HM076 are from greenschist to amphibolite facies rocks with local garnet, cordierite and tourmaline noted.

Particular interest was placed in the presence of gahnite ($ZnAl_2O_4$) a resistive zinc spinel associated with metamorphic zinc sulphide deposits. Samples from within EL33284 contained 1 and 2 grains of gahnite, which may represent increased prospectivity but is most likely just background level from barren metasediments.

Sample locations are shown on Figure 3 and results are included in Appendix 1.

A redacted version of the Heavy Mineral Analysis Report is included in Appendix 2.

A cursory lithium review of the project was also completed but EL33284 was deemed as being of limited prospectivity.

7. CONCLUSION

No results of significance have been received from the work carried out within EL33284 and the licence has been surrendered just prior to its second anniversary.

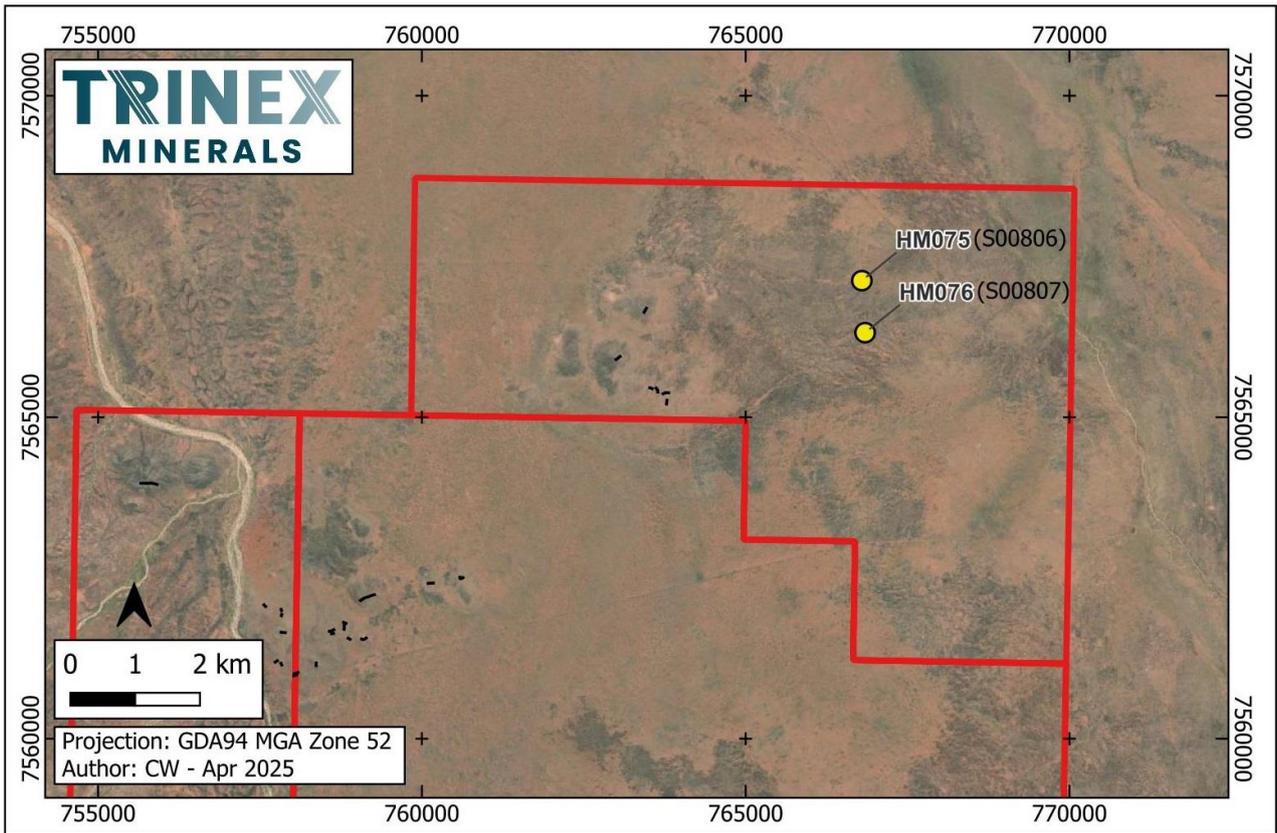


Figure 3: Location of heavy minerals samples HM075-076 (S00806-807) within EL33284.

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