EL32853

Annual Technical Report

for the period

5 April 2022 – 4 April 2023

Title Holder	Pegmatite One Pty Ltd
Project Operator	Zinciferous Limited
Titles/Tenements	EL32853
Report Author	Dr Qingtao Zeng Australasian Metals Limited
Tenement Manager/Agent	AMETS
Grant Date	5 April 2022
Expiry Date	4 April 2028
Report Date	Revision 1 submitted 26 July 2023
Target Commodity or Commodities	Lithium, tin and tantalum
Datum/Zone	GDA94/MGA Zone 53
1:250 000 Map Sheet	Napperby SF5309
1:100 000 Map Sheet	Denison 5353
Contact Details	NT@amets.com.au

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- Zinciferous Limited

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Abstract

This report describes exploration activity conducted over EL32853 during the reporting period from 5 April 2022 to 4 April 2023. EL32853 is one of 21 titles that make up the Zinciferous Project north of Alice Springs. The area has a history of tin prospectivity. Target minerals are lithium, tin and tantalum. During the reporting period Zinciferous conducted field reconnaissance across its tenure package. Hyperspectral survey was conducted across the Zinciferous tenure, and high-quality data was acquired and processed. During the upcoming reporting period Zinciferous intends to investigate and review the results of the hyperspectral survey to determine prospective areas for exploration.

1 Introduction

This report describes exploration activity conducted over Exploration Licence (EL) 32853 during the reporting period from 5 April 2022 to 4 April 2023. EL32853 is held by Pegmatite One Pty Ltd, and operated by Zinciferous Limited (Zinciferous, or the Company). Pegmatite One Pty Ltd is a wholly owned subsidiary of Zinciferous Limited. EL32853 is one of 21 titles that make up the Zinciferous Project (see Figure 1).

1.1 Location, Physiography and Access

EL32853 is located approximately 250 km northwest of Alice Springs, in the Northern Territory (see Figure 1). It covers 8 blocks, (25.45 km^2). Access is via the Stuart Highway, then via Mt Denison Road, which runs past the northern boundary of the title, then via a series of unsealed farm tracks. The title lies on relatively low-lying land, and is cut by seasonal watercourses draining northwards towards Cockatoo Creek (see Figure 2).

1.2 Tenure

EL32853 was granted on 5 April 2022 for a six year term; the title currently has an expiry date of 4 April 2028. Title details are shown in Table 1.

The title overlies part of NT Portion (000) – Parcel 312, privately owned as Mount Denison Station.

Table 1: Title Details

Title	Holder	Grant Date	Expiry Date	Area
EL32853	Pegmatite One Pty Ltd	05/04/2022	04/04/2028	8 blocks 25.45 km^2

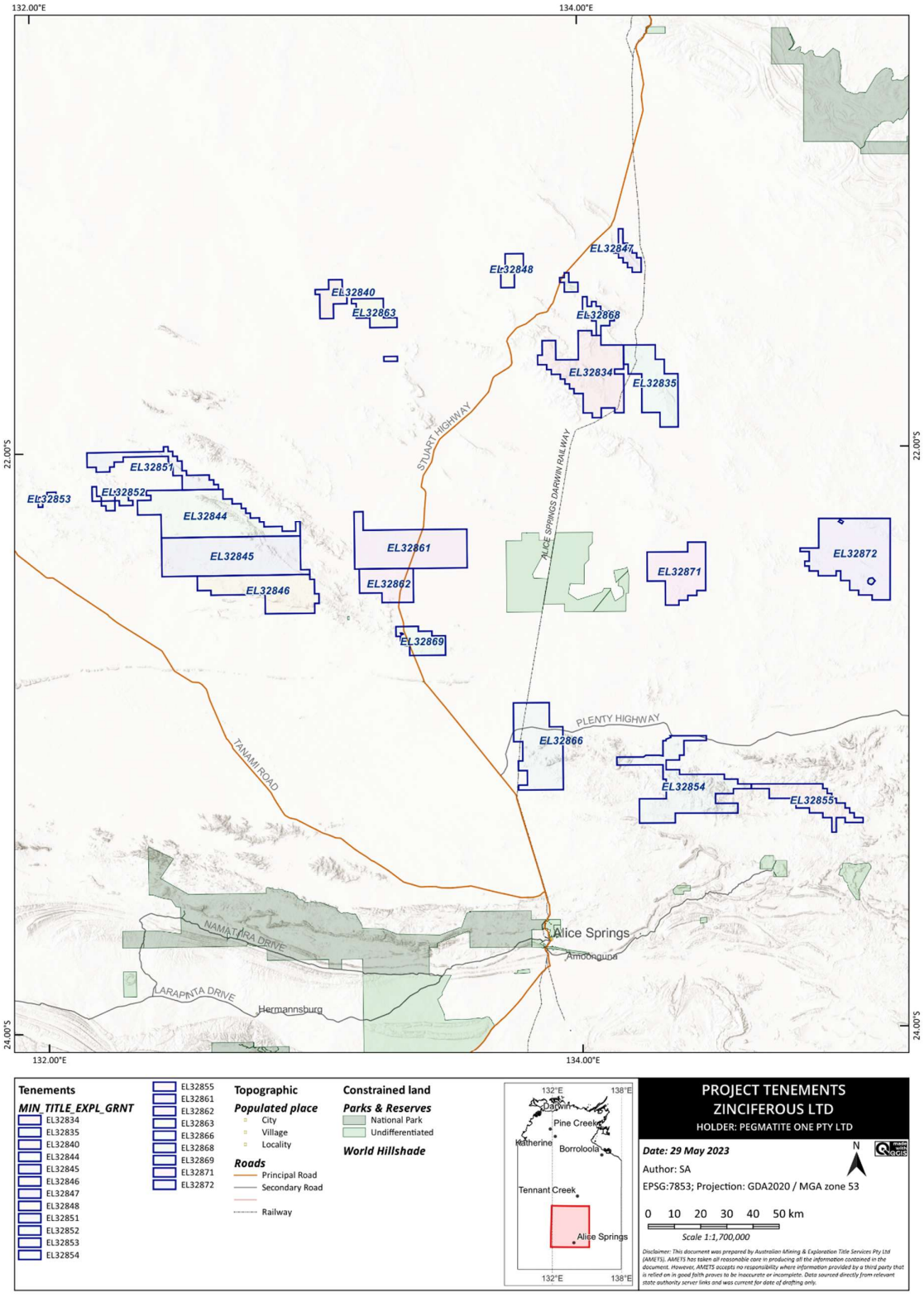

Figure 1: Zinciferous titles location plan

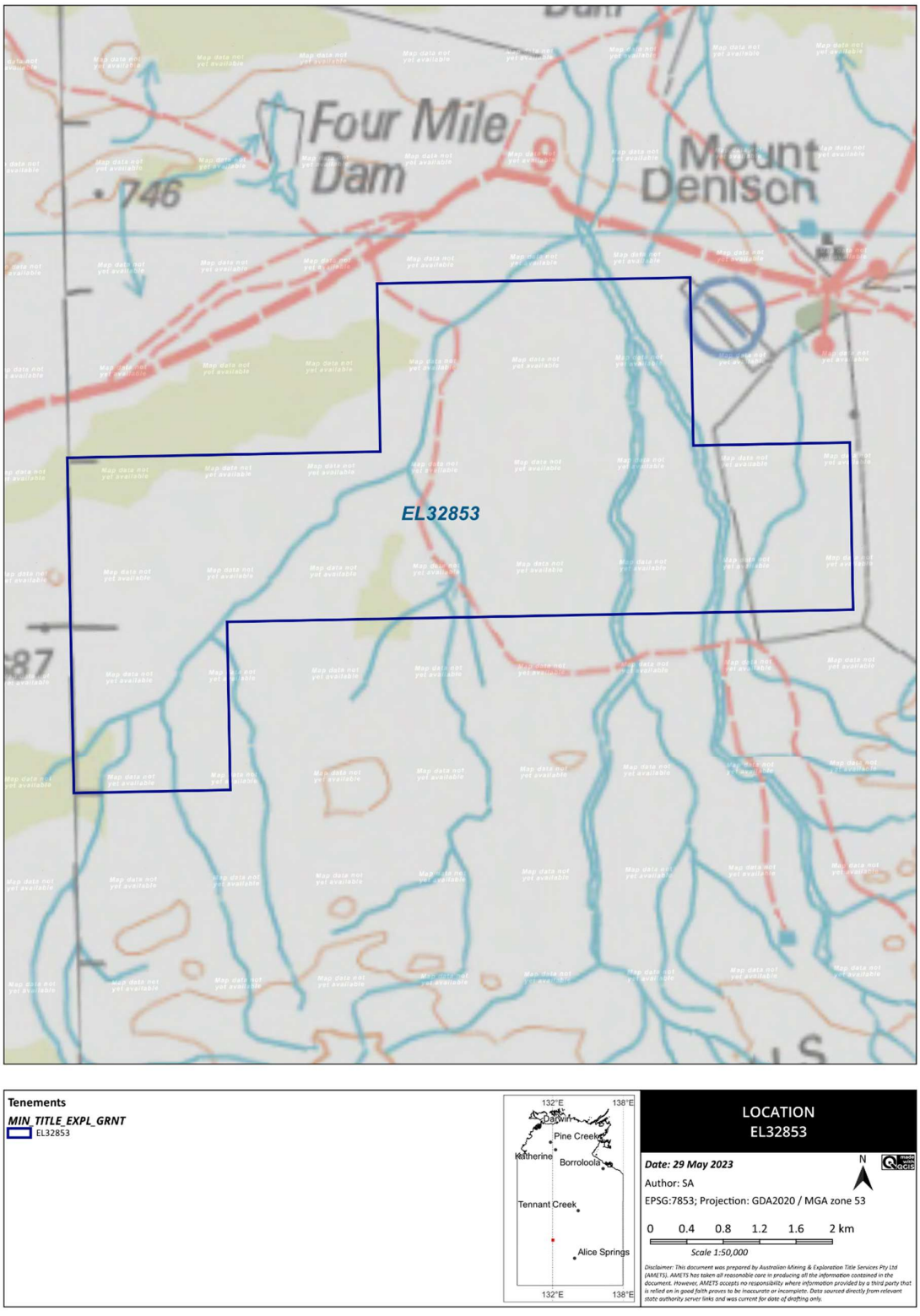

Figure 2: EL32853 location plan

2 Geological Setting

The Project covers Palaeoproterozoic metasediments and intrusives in the central Aileron Province of the Arunta region of the NT. The surface geology has been mapped and described by the Northern Territory Geological Survey (NTGS) in the 1:250,000 scale Napperby (SF53-09) sheet, and in more detail by the Bureau of Mineral Resources on the special edition Reynolds Range Region 1:100,000 scale geological map.

Precambrian igneous and metamorphic rocks of the northern Arunta Block underlie the north and south of the project area; the centre is underlain by Proterozoic to Palaeozoic sedimentary rocks of the Ngalia Basin. Thin Cainozoic sediments conceal much of the outcrop.

The rocks forming the Arunta Block are grouped in three divisions (Shaw & Stewart, 1975b). Division l (the oldest) is characterised by mafic and felsic rocks, metamorphosed to granulite facies. Division 2 is characterised by pelitic, calcareous, or psammitic rocks; metamorphic facies ranges from greenschist to granulite. Division 3 (the youngest, called the Reynolds Range Group), overlies Division 2 with an angular unconformity, and comprises mature quartzite, pelite, and carbonate, also ranging from greenschist to granulite facies.

An interpretation of the early Proterozoic geological evolution of the northern Arunta Block in terms of the three divisions is shown in Figure 3; the final episode of folding, metamorphism, and granite emplacement is shown in a diagram on the map sheet.

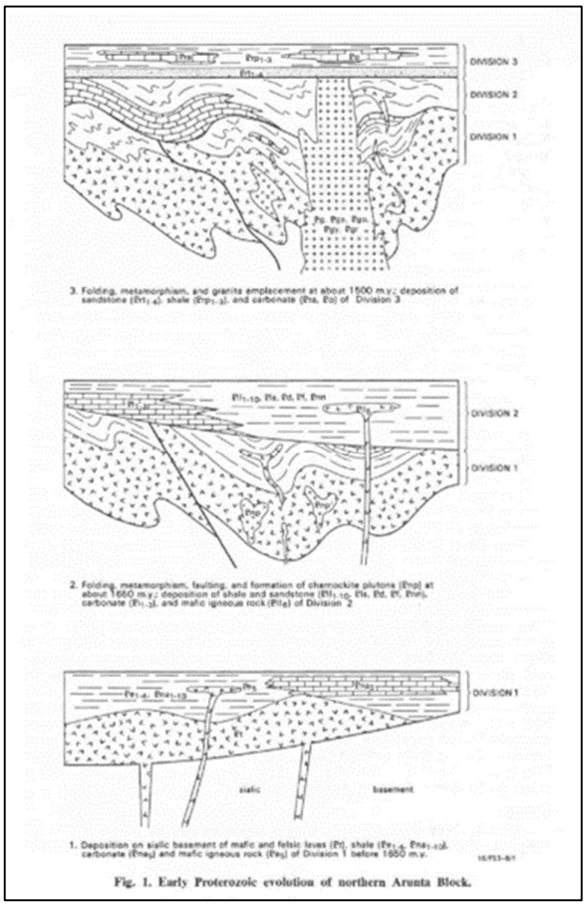

Figure 3: Early Proterozoic geological evolution of the northern Arunta Block

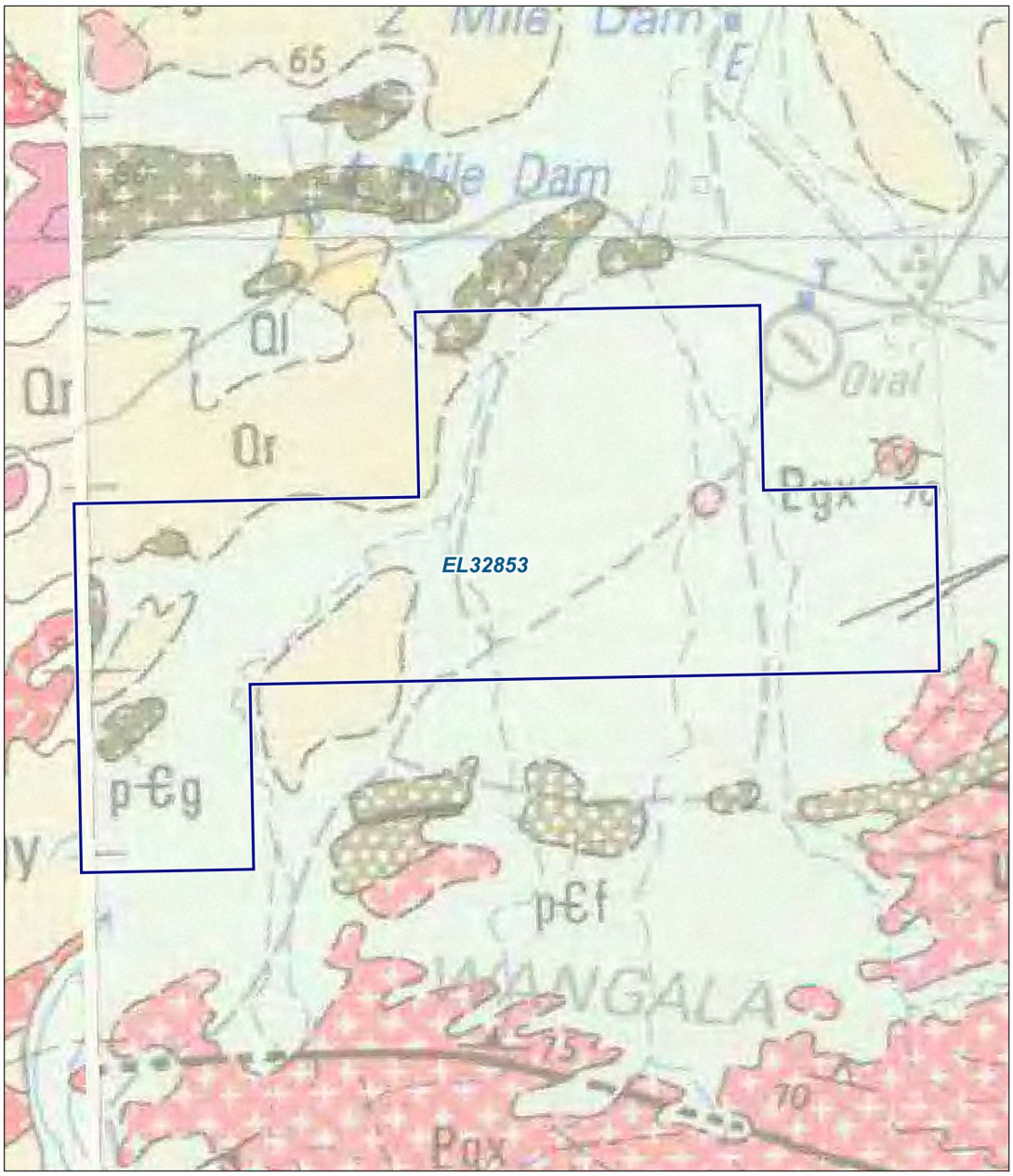

Figure 4: EL32853 geology

3 Exploration History

Available accounts of previous exploration over the area now covered by EL32853 are summarised in Table 2.

Table 2: Previous Exploration

Title	Owner	Period	Overlap	Notes
EL8420	Anthappi	1994-2000	Western EL32853	268 vacuum holes totalling 1,331.5 m. 104 RAB holes totalling 1,364 m. 153 soil samples.
EL10248	Hawthorn Resources	2002-2003	Most of EL32853	510 stream sediment samples, 70 rock chip samples, 14 base of slope samples (across 24 titles).
EL27181	Callabonna Resources	2009-2013	Most of EL32853	3 shallow diamond holes for 2.06 m. 7 auger holes for 7.5 m. 8 auger samples. 35 rock chip samples. 634 soil samples.

4 Exploration Rationale

The area has a history of tin prospectivity. Target minerals are lithium, tin and tantalum.

5 Exploration during the Reporting Period

During the first year of tenure Zinciferous focused exploration activities elsewhere within its tenure package, specifically soil sampling programs on EL32848.

During the reporting period Zinciferous conducted field reconnaissance across its tenure package.

Hyperspectral survey was conducted across the Zinciferous tenure, and high-quality data was acquired and processed. Zinciferous has engaged a consultant to interpret the data. At the time of writing this interpretation is ongoing; it is anticipated to be reported in the 2024 Annual Report.

6 Conclusion and Recommendations

During the upcoming reporting period Zinciferous intends to investigate and review the results of the hyperspectral survey to determine prospective areas for exploration.

References

SHAW. R.D., & STEWART, A. J., I 975b- Towards a stratigraphy of the Arunta Block. First Australian Geological Convention - Proterozoic Geology - Geological Society of Australia, Adelaide. May 1975.Abstracts, 35.