EL32835

Annual Technical Report

for the period

5 April 2022 – 4 April 2023

Title Holder	Pegmatite One Pty Ltd
Project Operator	Zinciferous Limited
Titles/Tenements	EL32835
Report Author	Dr Qingtao Zeng Australasian Metals Limited
Tenement Manager/Agent	AMETS
Grant Date	5 April 2022
Expiry Date	4 April 2028
Report Date	14 June 2023
Target Commodity or Commodities	Lithium, tin and tantalum
Datum/Zone	GDA94/MGA Zone 53
1:250 000 Map Sheet	Barrow Creek SF5306
1:100 000 Map Sheet	Home of Bullion 5754
Contact Details	NT@amets.com.au

DISTRIBUTION:

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- Zinciferous Limited

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Abstract

This report describes exploration activity conducted over EL32835 during the reporting period from 5 April 2022 to 4 April 2023. EL32835 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) 32835 during the reporting period from 5 April 2022 to 4 April 2023. EL32835 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. EL32835 is one of 21 titles that make up the Zinciferous Project (see Figure 1).

1.1 Location, Physiography and Access

EL32835 is located approximately 220 km north of Alice Springs, in the Northern Territory (see Figure 1). It covers 122 blocks, (389.09 km^2). Access is via the Stuart Highway. The title is dominated by a peak of the Spring Range, with a maximum altitude of 647 m (see Figure 2).

1.2 Tenure

EL32835 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 parts of NT Portion (000) – Parcel 3375, privately owned as Neutral Junction Station, NT Portion (000) – Parcel 655, privately owned as Stirling Station and NT Portion (000) – Parcel 704, privately owned as Mount Skinner Station.

Table 1: Title Details

Title	Holder	Grant Date	Expiry Date	Area
EL32835	Pegmatite One Pty Ltd	05/04/2022	04/04/2028	122 blocks 389.09 km^2

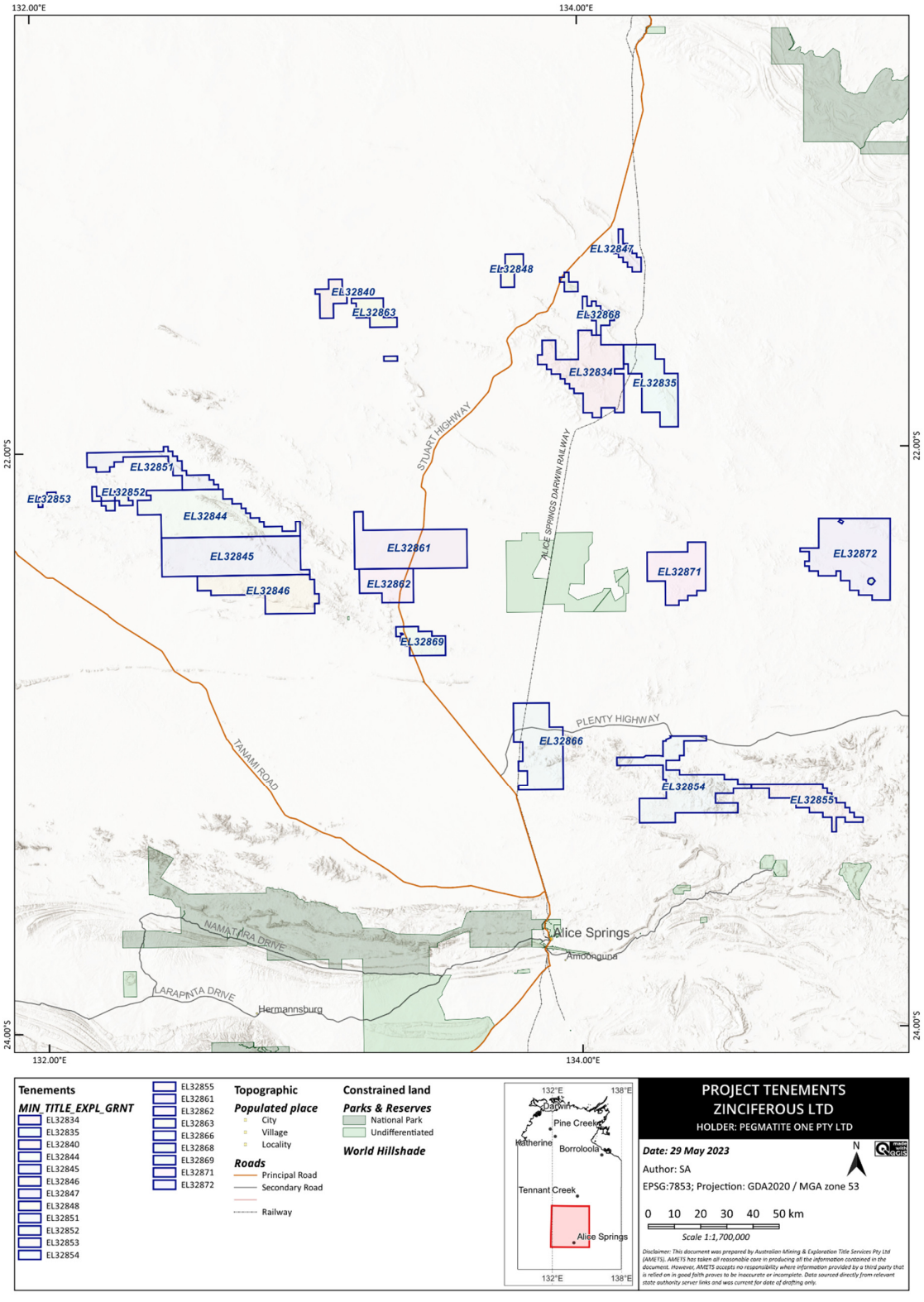

Figure 1: Zinciferous titles location plan

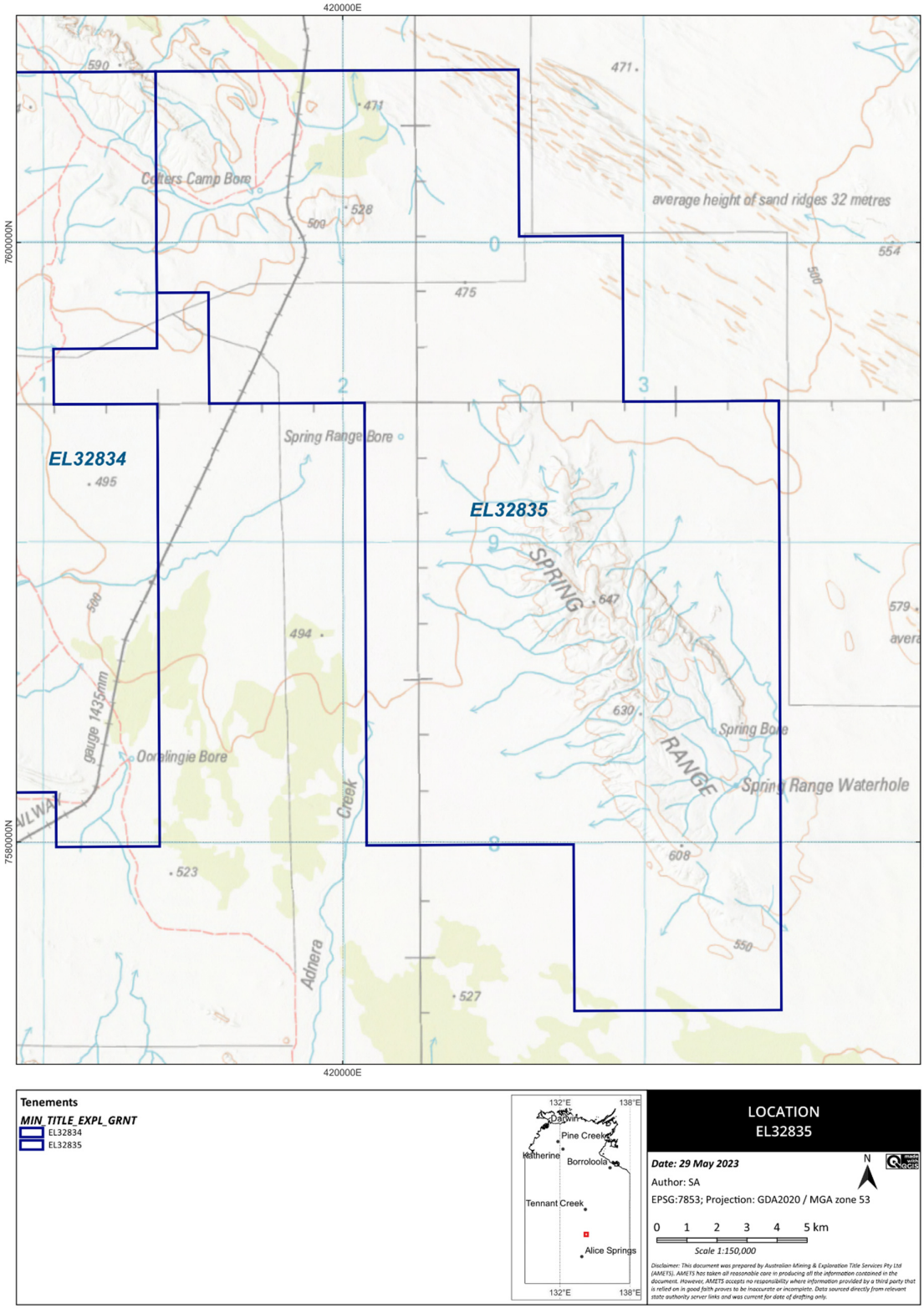

Figure 2: EL32835 location plan

2 Geological Setting

The oldest rocks in the project area are metamorphosed arenites, pelites, carbonates and volcanics of the Arunta Inlier. The age of the sediments is uncertain, but possible correlations with the Warramunga Group and Lander Rock beds suggest that they may have been deposited about 1,870 Ma or earlier (Black, 1984; Blake and Page, 1988).

These rocks were deformed and regionally metamorphosed to upper greenschist and lower amphibolite facies possibly between 1,810 and 1,750 Ma, the postulated ages of the metamorphism of the Warramunga Group and the Lander Rock beds respectively (Black, 1981; Stewart and others, 1984).

The Hatches Creek Group comprises fluvial to shallow marine sediments, and felsic to mafic volcanics. Deposition of sediments proceeded in two distinct stages: first the deposition of relatively immature sandstones and pelites; followed by the deposition of more mature ·cross-bedded and ripple-marked arenites and siltstones. This change in facies probably represents a change from generally fluvial and deltaic conditions as reflected by the Ooradidgee Subgroup, to shallow marine, intertidal and some fluvial deposition in the Wauchope Subgroup. Volcanism in these subgroups was probably largely subaerial, and extrusion occurred contemporaneously with sedimentation. The overlying Hanlon Subgroup, generally lacking volcanics, was deposited as a series of blanket sands and interbedded silts on intertidal flats and in adjoining subtidal marine environments.

After deposition, the Hatches Creek Group was tightly to isoclinally folded about northwest-trending axes and metamorphosed, in places possibly as high as lower amphibolite facies. The Ooralingie Granite and other foliated granitoids were possibly intruded at this time, or during the earlier 1,810-1,750 Ma deformation event described above. There is some evidence of a later open folding episode about more north-trending axes.

The Arunta Inlier and Hatches Creek Group were then extensively intruded by granite, at least some of which may have taken place around 1,660 Ma, the age of the Elkedra Granite to the east in the Elkedra 1:250,000 map area (Blake and others, 1987).

Rocks of the Arunta Inlier are interpreted as at least partly correlative with sedimentary and volcanic sequences of the adjacent Tennant Creek and Granites-Tanami Inliers to the north and northwest respectively. The Hatches Creek Group of the Davenport Province, Tennant Creek Inlier, overlies Division 2 Arunta Inlier rocks with a probable unconformity adjacent to the project area.

The project area lies on the southwestern margin of the Late Proterozoic to Palaeozoic Georgina Basin, sediments of which cover Arunta Inlier and Davenport Province rocks over about half of the area. The Georgina and several other sedimentary basins in central Australia share a similar depositional history and were apparently interconnected during deposition, but subsequently separated by Palaeozoic tectonic events (Lindsay and others, 1987). A Cambrian link between the Georgina Basin and the predominantly Palaeozoic Wiso Basin is preserved north of the project.

A thin Quaternary veneer of soil, sand and gravel now covers most of the lowland areas of the project area.

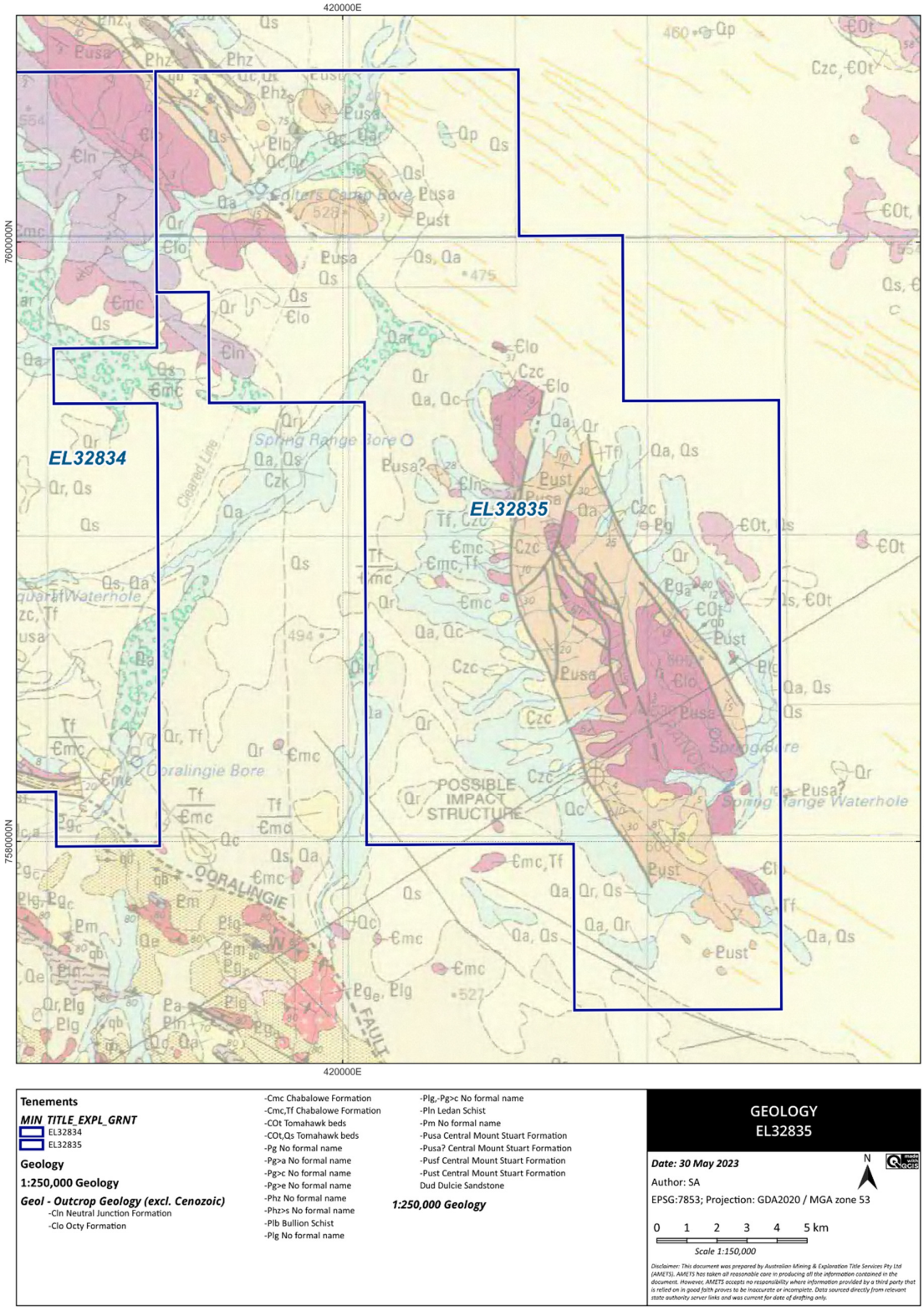

Figure 3: EL32835 geology

3 Exploration History

Available accounts of previous exploration over the area now covered by EL32835 are summarised in Table 2.

Table 2: Previous Exploration

Title	Owner	Period	Overlap	Notes
EL6955	Eaton & Holewa	1990-1996	Northwest corner of EL32835	40 km of ground traverses using metal detectors, panning. No visible gold.
EL8151	Rio Tinto Ex	1994-2000	Most of EL23835	19 reconnaissance gravel samples negative for kimberlitic indicators.
EL23187	Goldstake, Imperial Granite & Minerals	2002-2003	Most of EL23835	Search of public data.
EL26977	Fertoz	2009-2012	Most of EL23835	Desktop study exploring for phosphate. Transported soils effectively blanket underlying rocks.
EL29736	Wuhua Mining Corp	2013-2015	Western EL32835	Desktop study indicated low prospectivity.
EL29726	Wuhua Mining Corp	2013-2015	Most of EL23835	Desktop study indicated low prospectivity.

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 a soil sampling program 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.

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