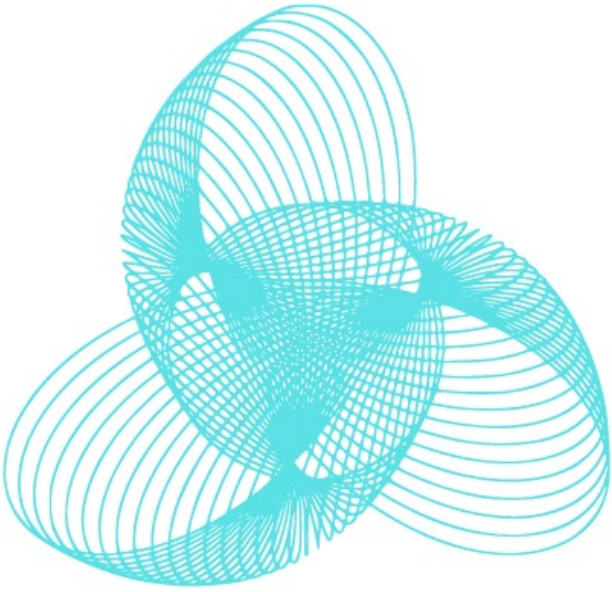
# TerraLith Metals Pty Ltd




EL33597

First and Final Exploration Report

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Reporting Period: From Grant to 28 March 2025

Relevant 250K Map Sheet: Kulgera

Relevant 100K Map Sheet: Ebenezer

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## 1.0 Abstract

Exploration Licence EL33597, held by Terralith Metals Pty Ltd, was surrendered on 28 March 2025. The tenement is located within the Amadeus Basin in the Northern Territory, approximately 250 km south-west of Alice Springs, and comprises 24 graticular blocks. It was originally acquired as part of a regional lithium brine and potash exploration strategy.

No fieldwork or desktop geological evaluation was completed during the licence's life. The tenement was relinquished due to the company's strategic refocus.

## 2.0 Location and Access

EL33597 is located in the southern Northern Territory, approximately 250km southeast of Alice Springs in the MacDonnell Shire.

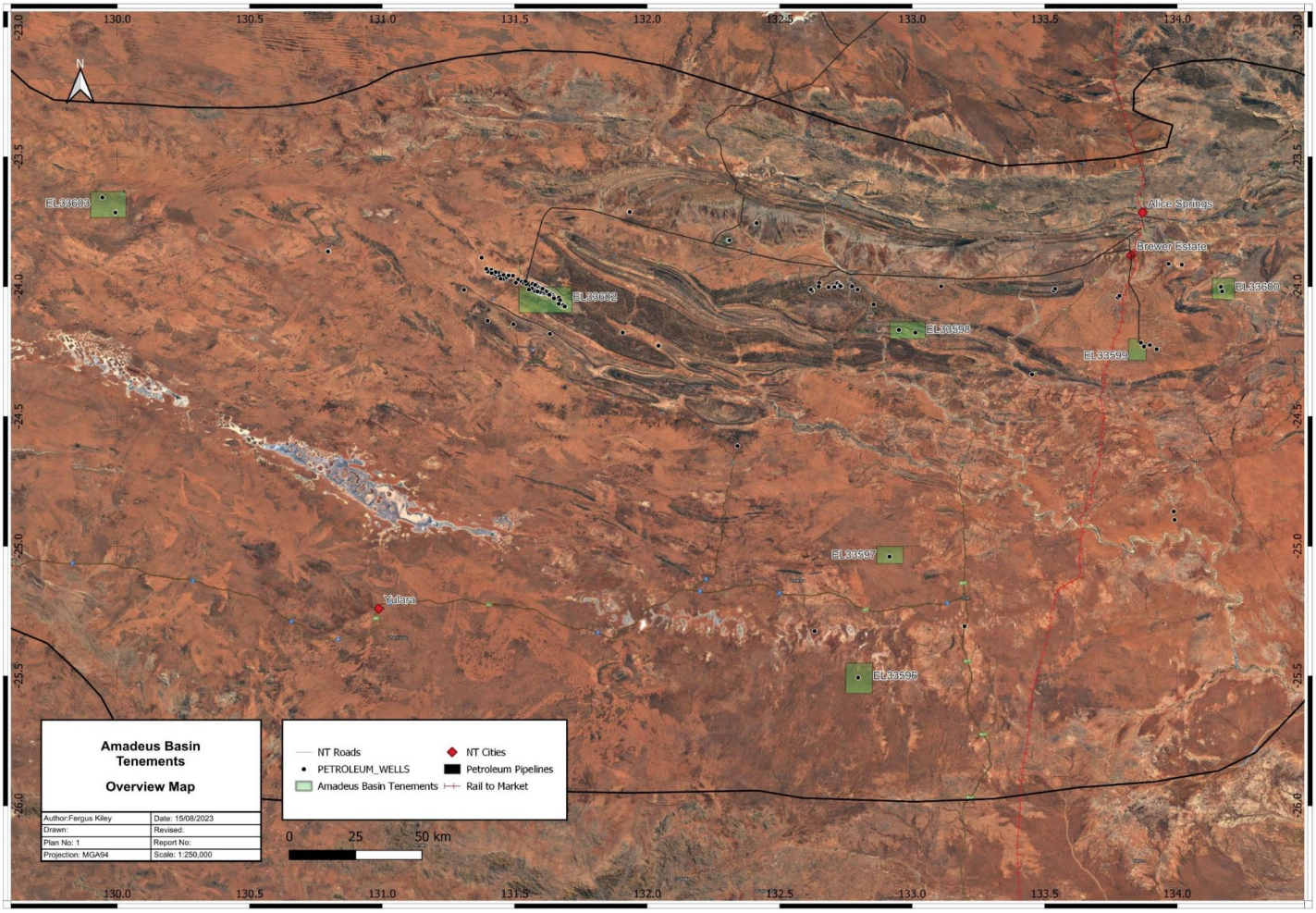


**Figure 1EL33597 Location Map**

## 2.1 Tenement Details

EL33597 is situated within the Amadeus Basin, Northern Territory, covering 24 blocks for a total of 75 km$^2$. It was held by Terralith Metals Pty Ltd from the time of grant until its surrender in March 2025.

**Table 1: Tenement Details**

| EL NUMBER | Date Granted | Term | Sub-Blocks | Size km$^2$ |
|---|---|---|---|---|
| **EL33597** | 05/04/2024 | 6 years | 24 | 75 |

## 2.2 Access

Access to the tenement area is primarily via unsealed pastoral tracks connecting to regional roads and infrastructure associated with the Amadeus Basin oil and gas network. Proximity to historic and active hydrocarbon fields such as Palm Valley and Dingo provided logistical support potential for future field programs.

Access to EL33597 is via unsealed pastoral tracks extending northwards from the Lasseter Highway, located approximately 25 km to the south of the licence.

Rail access is via the only rail line in the Northern Territory which is located approximately 200km to the east of the title.

## 2.3 Physiography

The tenement lies in a relatively flat arid terrain, dominated by aeolian sand cover with sparse outcrop. The physiography is typical of the central Amadeus Basin, characterised by intermittent drainage and dune systems.

# 3.0 Geological Setting

## 3.1 Regional Geology

EL33597 is located in the intracratonic Amadeus Basin, located in the southwest of the Northern Territory.

The Amadeus Basin is a Neoproterozoic to early Phanerozoic intracratonic sedimentary basin covering approximately 170,000 $km^2$ and includes several sub-basins and troughs, which are major depositional centres. Sediment thickness reaches a maximum of 14,000 metres.

The Amadeus Basin overlies the Warumpi and Aileron provinces to the north and the Musgrave Province to the south. The Amadeus Basin is overlain by the Eromanga and Pedirka Basins to the south-east.

The basin has at least nine recognisable megasequences separated by regional unconformities. These megasequences were instigated by major tectonic events, including the Peterman and Alice Springs Orogenies.

Periods of subsidence and uplifts coupled with sea level changes caused a series of fluviatile, glacial, marine and evaporite deposits. Though the formation of the Amadeus Basin was instigated by an extensional event, the majority of deformation that took place was compressional and transtensional (Shaw, R.D. 1991). More recently, halotectonics has been considered to be very important to the development of the basin's structure, with evaporite deposits allowing an alternate dispersion of tectonic forces and acting as reservoirs (Marshall and Dyson, 2007).

The basin is prospective for hydrocarbons and emerging lithium brine resources due to the presence of evaporite-bearing formations.

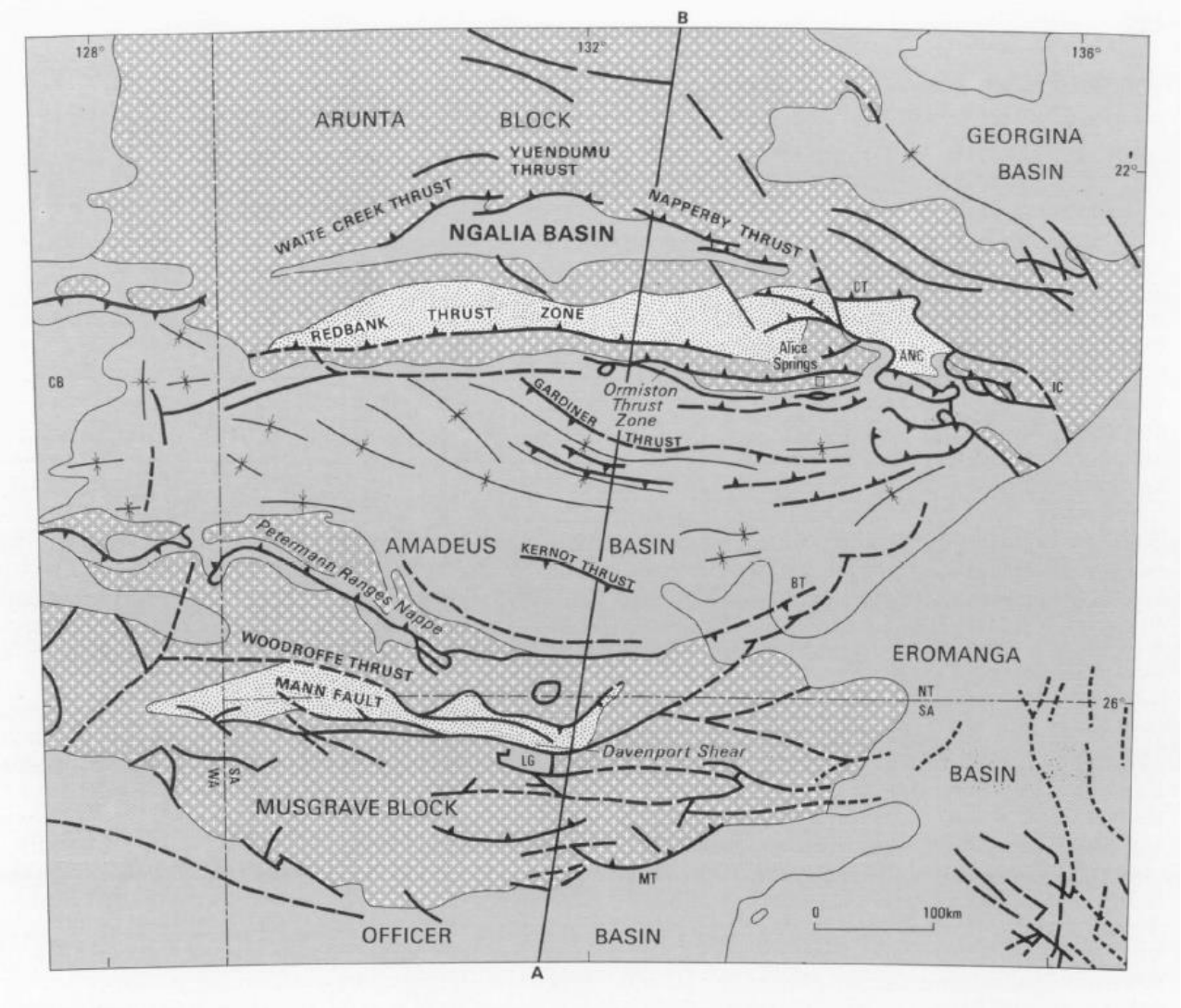


**Figure 2 Map of the Structures of the Amadeus Basin Red box depicts the location of the Amadeus West Project (Shaw, R.D. The tectonic development of the Amadeus Basin, Central Australia, BMR Bulletin 236, 1991)**

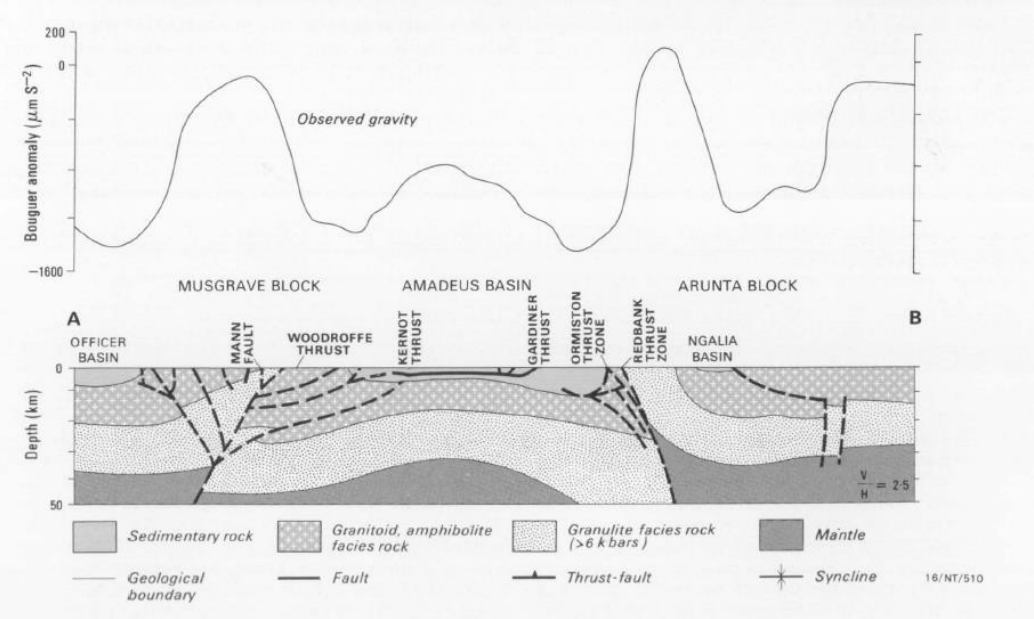


**Figure 3 Schematic cross section of the Amadeus Basin (Shaw, R.D. The tectonic development of the Amadeus Basin, Red box depicts location of Amadeus West Project, Central Australia, BMR Bulletin 236, 1991)**

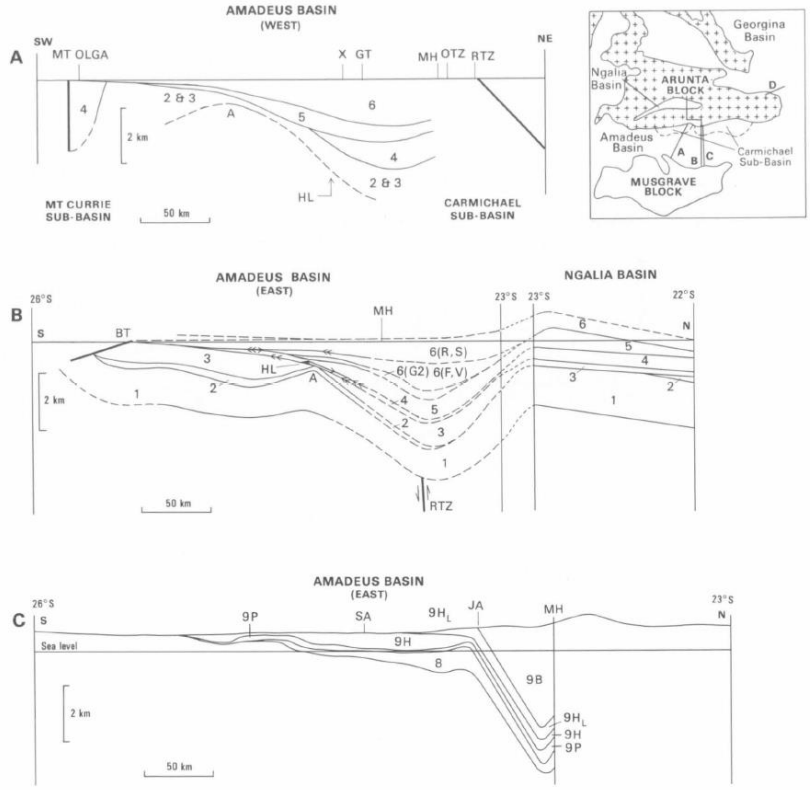


**Figure 4 Cross sections across the Amadeus Basin. The red box and dot depict the location of the Amadeus West Project (numbers correspond to the stratigraphy of the simplified cross section). Adapted after Wells and others, 1970**

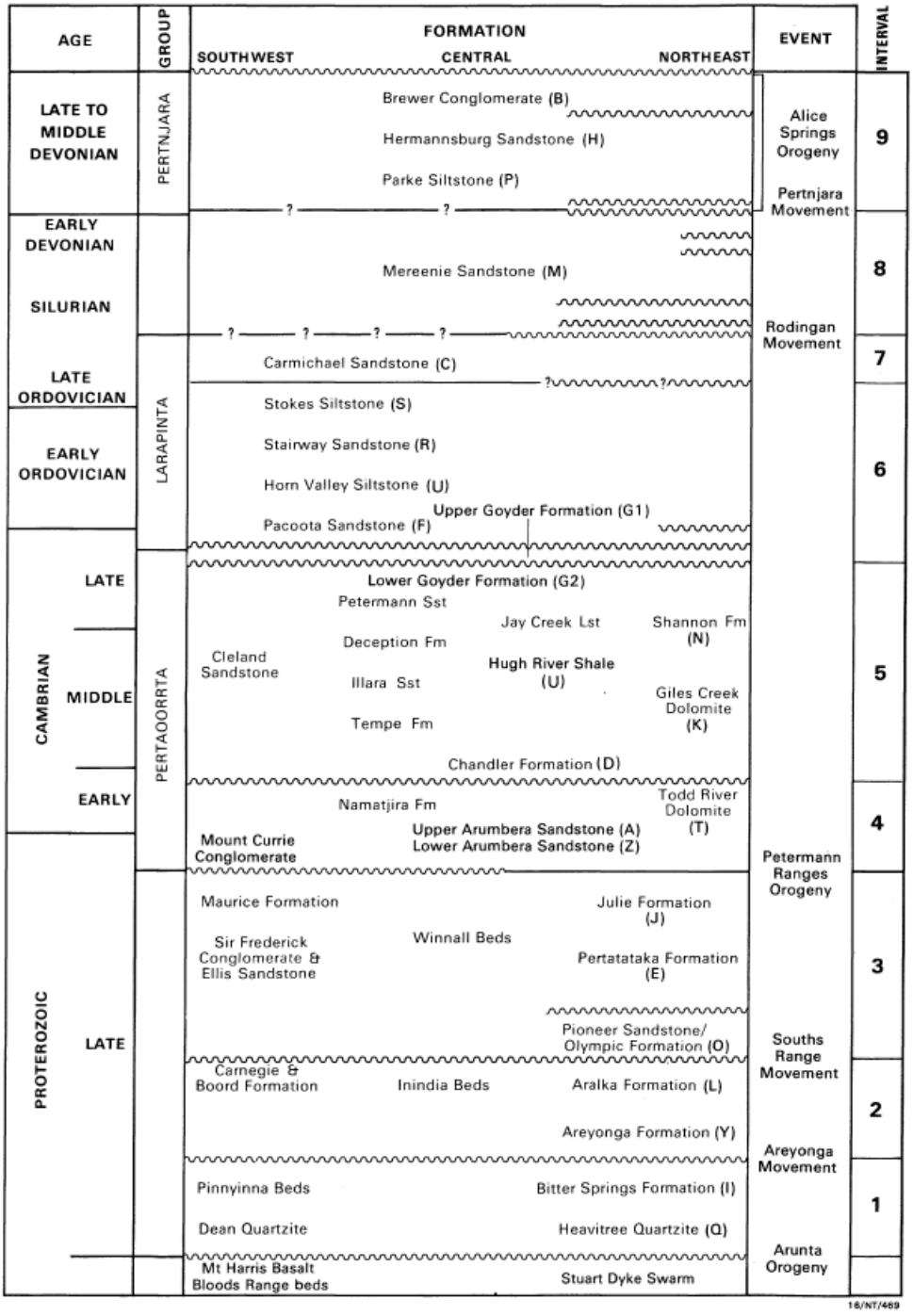


**Figure 5 Simplified Stratigraphic Column of the Amadeus Basin. Adapted after Wells and others, 1970 and Kennard and others, 1986 (Shaw, R.D. The tectonic development of the Amadeus Basin, Central Australia, BMR Bulletin 236, 1991)**

## 3.2 Local Geology

Stratigraphy within the tenement area includes the Bitter Springs and Chandler Formations (evaporite source rocks), underlying permeable units such as the Stairway Sandstone and

Pacoota Sandstone of the Larapinta Group. Structural interpretation suggests the presence of basin fault architecture suitable for brine migration and entrapment.

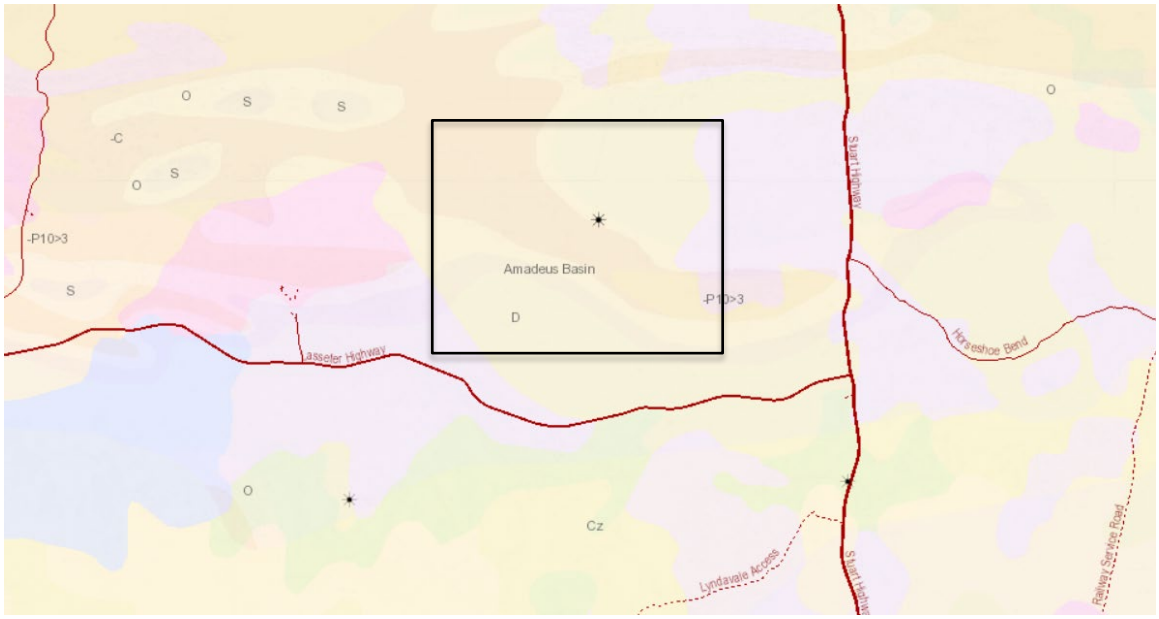


**Figure 6 Local Geology of the EL33597 location**

## 3.3 Historic Exploration

No previous exploration was recorded within EL33597 by Terralith Metals. While the broader region hosts historic hydrocarbon exploration wells, there were no past mineral exploration results applicable to lithium or related commodities in this specific area.

# 4.0 Operations Report

No field or desktop exploration activities were undertaken by Terralith Metals during the term of EL33597. As such, there are no exploration results, sampling programs, or expenditure to report.

# 5.0 Conclusion and Recommendations

The tenement was relinquished following a regional assessment of geological prospectivity. EL33597 did not meet internal prioritisation criteria for advancing exploration due to limited existing data and geoscientific evidence. Future efforts will focus on higher-confidence targets across Terralith's remaining portfolio.

# 6.0 References

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