

ASX ANNOUNCEMENT

5 August 2022

CHENENE LITHIUM PROJECT - TANZANIA EXPLORATION TO START IN AUGUST

Cassius Mining Limited (“**Cassius**” or “the **Company**”) (**ASX Code: CMD**), is pleased to advise its initial exploration programme at the wholly owned Chenene Lithium Project will start in August.

- **The Project area covers ~300 km² across 4 contiguous licenses, with two initial target areas selected for highly prospective Lithium pegmatite occurrence**
- **Target #1 covers an amphibolite gneiss outcrop, with a historic Lithium pegmatite presence in this outcrop**
- **Target #2 covers an amphibolite gneiss outcrop, with known Lithium pegmatite presence in an adjacent amphibolite gneiss outcrop immediately across the border in the neighbouring license**
- **Target #2 is in close proximity to the 2017 Lithium/Tantalum discovery to the SW in similar metamorphosed outcrop along the same local margins of the Chenene hills (rock chip sampling in pegmatites, Mohanga Project, ASX: LTR)¹, with multiple results >1.5% Li₂O (Lithium Oxide) up to 3.3% Li₂O**
- **This initial exploration programme includes geological mapping and outcrop sampling**

Cassius Chairman James Arkoudis comments:

“We are excited with the Chenene Lithium Project and the potential it offers with a huge growth ahead for the Lithium-ion battery industry. We are looking forward to providing updates from our exploration programme.”

¹ Liontown Resources – ASX 5 April 2017 – “New High-Grade Lithium Discovery in Tanzania” – Tresor Prospect (Mohanga Project)

CHENENE PROJECT LOCATION

The Project area is in central Tanzania, 40 kms N of Dodoma (the capital city, easily accessible by major road).

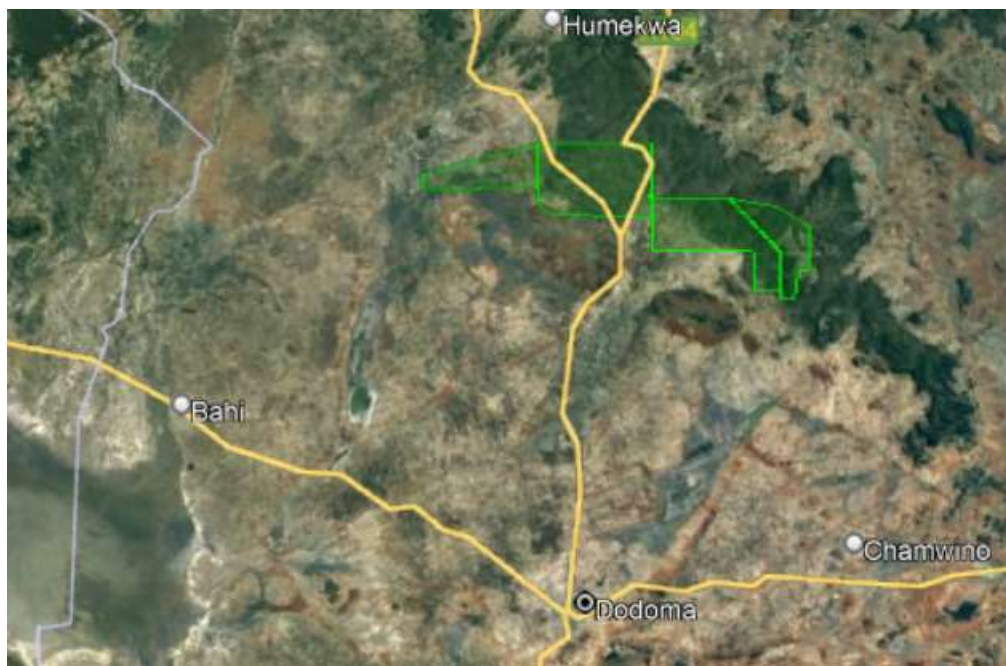


Fig 1 – Project Area (green outline) within Dodoma capital city region, with major roads in yellow

GEOLOGICAL ENVIRONMENT

The main topographic features of the area are the NW trending Chenene Mountains (1,300-1,700m elevation AMSL, formed of syn-orogenic and sheared granite) and the lower gently rolling plains (1,000-1,200m elevation AMSL, formed primarily of eroded granitic soils).

A group of metamorphosed igneous and sedimentary rocks outcrop in places along the margins of the granites. In this initial area of interest to the Company, a belt of metamorphosed amphibolite gneisses and amphibolite schists are seen to outcrop in places above the granitic soil plains². They are believed to be remnants of older rocks within the granites and conform generally with the foliations and shearing of the surrounding granite in a NW direction.

Lithium and Tantalum bearing pegmatites have previously been identified cutting this belt. The Company is initially targeting two defined areas in amphibolite gneiss outcrops (known to be host rocks of Lithium pegmatites within and immediately adjacent to the Company's Project area).

² Tanzania Geological Survey

CHENENE PROJECT AREA

The Project area consists of 4 contiguous exploration licenses totalling ~300 km² (Fig 2). Quartz-feldspathic and amphibolite gneiss outcrops occur within both PL 11921 and PL 11720 licenses, considered highly prospective for Lithium bearing pegmatites.

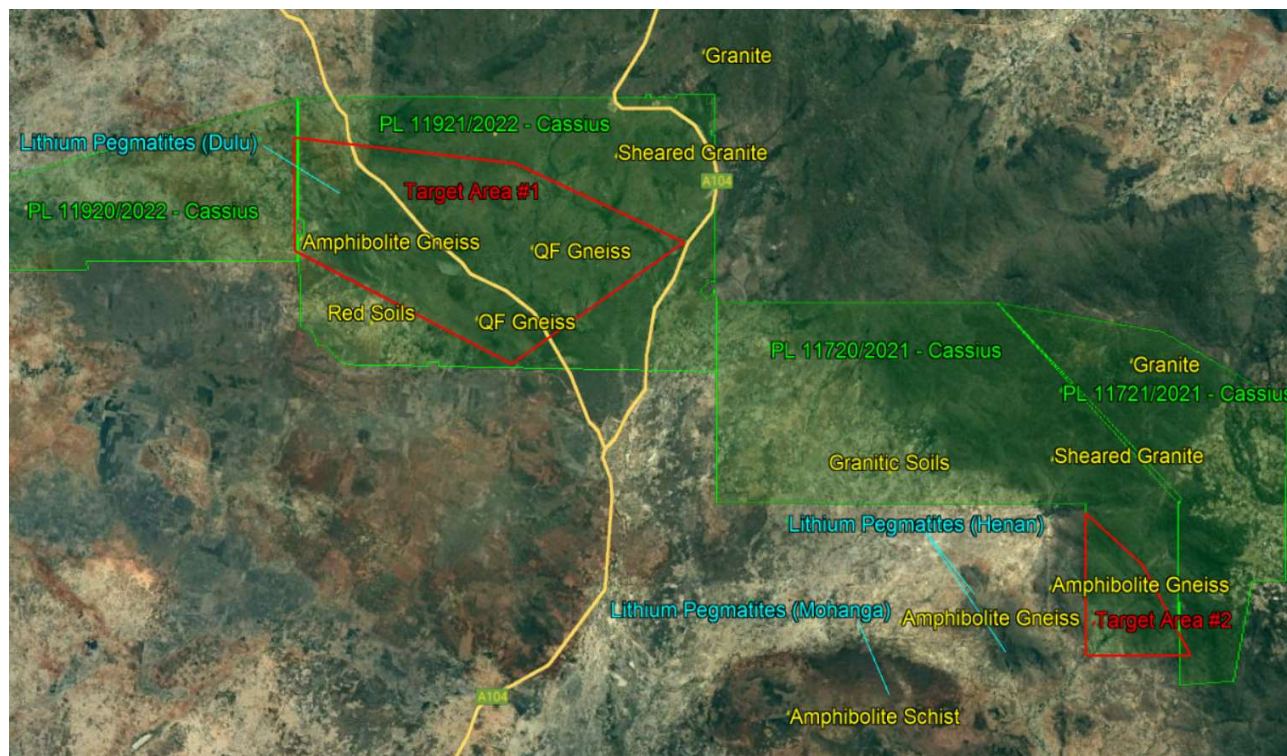


Fig 2 –Project area (green), Targets #1 and #2 (red), Rock type (yellow), known Lithium pegmatites (blue), roads (yellow)

EXPLORATION PROGRAMME

The Company and exploration programme have already been introduced to the Dodoma Regional and District Commissioners, along with the wards and villages of the local Bahi and Chamwino districts, during the community sensitization work. The exploration team will be led by two experienced geologists.

The two targets will be mapped along lines across the general trend of the gneiss outcrops (which trend NW-SE). Outcropping pegmatites will be documented with surface expressions, trends and mineralogies (including Sn (tin) and other Lithium-related pathfinder phases). Hand-held XRF scanning will be conducted and rock chips taken for later full lab analysis (selected samples).

Target #1 covers ~50 km² (Fig 3) within the western part of PL 11921, in the proximity of Dulu village. Two separate gneiss outcrops occur within the target area, of ~8 km² in the east of the target and ~10 km² in the west of the target (also with historical Lithium pegmatite occurrence). Vehicle access to Target #1 is excellent, with two major sealed roads traversing through and directly adjacent to the target site. It is estimated that the time required on Target #1 will be ~25 days.

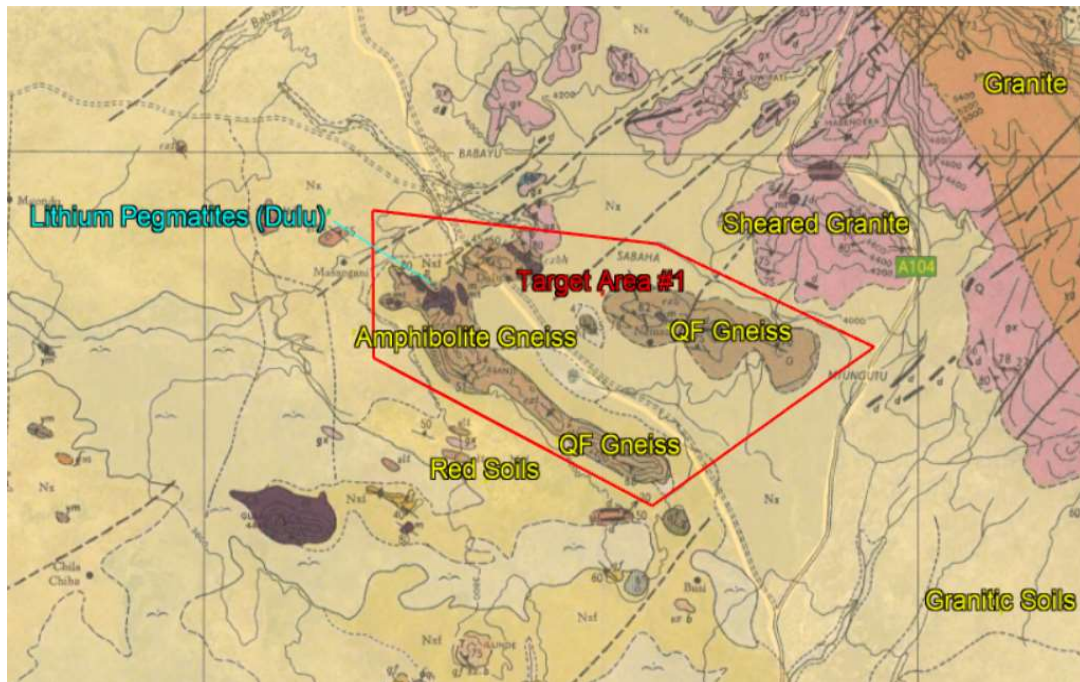


Fig 3 – Target #1 (red) in PL 11921, prospective gneiss outcrop (brown), known Lithium pegmatites (blue)

Target #2 covers ~10 km² (Fig 4) within the south-eastern part of PL 11720, in close proximity to known Lithium pegmatite occurrences in gneiss and schist outcrops. A ~7 km² similar gneiss outcrop occurs within the target area. Vehicle access to Target #2 is good, with a ~16 kms transit from the A104 Great North Rd east along tracks across lightly undulating granitic soils. It is estimated that the time required on Target #2 will be ~10 days.



Fig 4 – Target #2 (red) in PL 11720, prospective gneiss outcrop (brown), known Lithium pegmatites (blue)

This has been authorized and approved by the board for release.

FURTHER INFORMATION

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