

# **Earaheedy Base Metals Project Expanded**

## **Woomba Well Licence Application Targets Lithium in Pegmatites**

## Terra Rossa (Earaheedy Basin – base metals)

- Two exploration licence applications expand the Terra Rossa sub-project within Castle's broader Earaheedy base and precious metals project.
- Applications encompass interpreted extensions of Basin's prospective Yelma and Frere Formations, their associated unconformity plus the eastern margin of the Yerrida Basin.
- Geology and prospectivity consistent with Rumble Resources Limited's (ASX: RTR) provincial-scale Earaheedy discovery.
- Castle's field team has completed a 671-sample fine-fraction soils campaign to advance priority targets on two recently granted Terra Rossa licences. Results awaited.
- Management site visit undertaken to plan logistics for proposed RC drill program.

## **Woomba Well (lithium pegmatites)**

 Woomba Well exploration licence application covers terrain prospective for lithium bearing pegmatites.

## Kambale (graphite)

Interim results from recent drilling will be reported shortly.



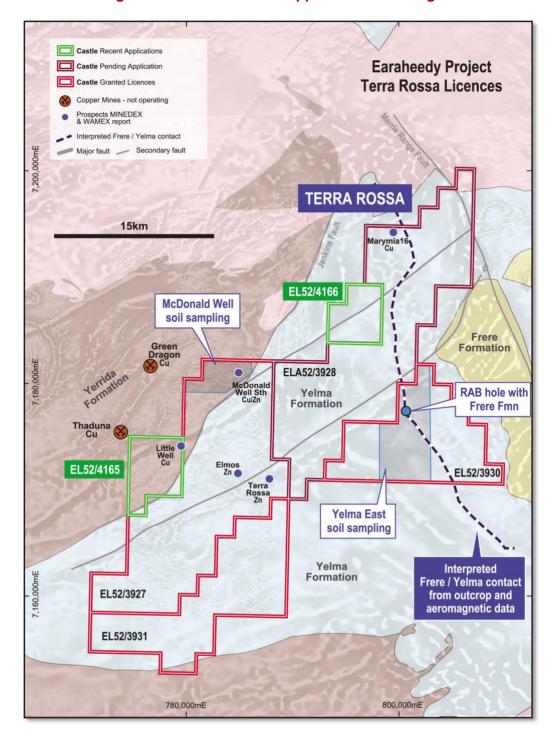


Fig 1: Recent Terra Rossa applications and targets.

Castle Managing Director, Stephen Stone commented "The two latest applications at Terra Rossa expand Castle's exposure to the emerging Earaheedy Basin base metals province where neighbour Rumble Resources Ltd has latched onto a major discovery.

Recent and historical work on Castle's tenure has confirmed that it has the right structural architecture and stratigraphy for base metals and we are keenly awaiting results from a recently completed fine-fraction soil sampling campaign to validate that.

The Woomba Well application comes after the area was highlighted by a detailed analysis of a GSWA critical minerals dataset with the area surprisingly still available.

On the graphite front, we expect to report shortly on interim results from recently completed drilling at Castle's Kambale graphite project, Ghana."

Junior explorer and project incubator, Castle Minerals Limited (ASX: CDT) ("Castle" or the "Company"), advises that it has applied for two exploration licences (ELA52/4165 and ELA52/4166) adjacent to its Terra Rossa sub-project within its broader Earaheedy base metals project, Western Australia (Figs 1 and 2. Table 1. Photo 1) and a third application (ELA51/2124) covering an area at Woomba Well considered prospective for lithium bearing pegmatites (Fig 3).

The Earaheedy Basin project, where Castle has now accumulated a ~930km² strategic position, is in part adjacent to the similarly named Rumble Resources Limited (ASX: RTR) project which it describes as "an emerging world-class scale Pb-Zn-Ag-Cu base metal system" (Refer RTR ASX release 30 August 2022).

Castle's two new applications complement its four existing Terra Rossa licences (three granted, one pending) that form a contiguous area overlapping the rocks of the Paleoproterozoic Earaheedy and Yerrida Basins. These areas have undergone several generations of regional-style exploration consisting of soil sampling, RAB and RC drilling.

Historical targeting has been directed towards structurally controlled base metal mineralisation associated with regional structural development within both Basins and towards shear-hosted gold mineralisation within the underlying Archean basement.

The Yerrida Basin rocks also present an opportunity to target copper and lead-zinc mineralisation given the relatively close proximity to the west of the Thaduna and Green Dragon deposits. These deposits are located within the Thaduna Formation. Whilst this does not appear to cross into the Castle tenure, the Juderina Formation, which occurs in the western part of the licence, does host several copper-lead-zinc occurrences. These include on Castle's tenure the McDonald's Well and Little Well prospects.

## Fine fraction soil sampling program completed

As previously reported (ASX release 7 September 2021), a detailed review of historical work and the reprocessing and interpretation of available open file airborne EM and magnetic data confirmed that several areas at Terra Rossa and in particular in the vicinity of the McDonald Well base metals occurrence present high priority targets analogous to those of Rumble's Chinook-Magazine discoveries as well as Castle's own Sioux prospect on its Withnell licence to the east.

The high amount of transported and in-situ cover over the general tenement area has meant that historical exploration has generally been sporadic and results disappointing with only minor amounts of anomalism encountered during various campaigns.

To overcome this impediment, Castle designed and undertook at two priority areas, McDonald Well and Yelma East, soil sampling utilising the fine fraction and CSIRO developed Ultra Fine assay technique. This can be effective in generating gold and base metal anomalies where there is large amount of overburden. Results are awaited.

## McDonald Well Soil Sample Grid

Soil sampling at McDonald Well was designed to cover the priority 1 VTEM anomaly targets derived from the reprocessing by Terra Resources P/L of open file geophysics data. The sampling was undertaken on a 200m x 160m grid. Subject to the sampling results, the plan is to then undertake an RC drilling campaign. Castle management recently inspected the area to consider the logistics for such a program.

#### Yelma East Soil Sample Grid

A 400m x 400m broad-spaced sampling campaign over the Yelma East target covers the central region of E52/3930 where it lies over the interpreted prospective contact between the Yelma and Freer formations and in the vicinity of historical RAB holes. Subject to results, an infill soil sampling will be undertaken to define targets for proposed RC drilling.

## **Native Title**

Negotiations to conclude Native Title Land Access and Mineral Exploration Agreements ("NTLAEA") are in progress with the relevant parties holding Native Title rights to each of Castle's Earaheedy licence areas. These agreements, in addition to other statutory requirements, are a pre-requisite to enable exploration to take place on the various licences. Whilst these negotiations are at an advanced stage it is not possible to determine when they will be finalised and agreements executed whereupon a heritage

and site assessment survey will need to be taken in conjunction with the Native Title party and its representatives to consider and approve each specific program proposed by Castle.

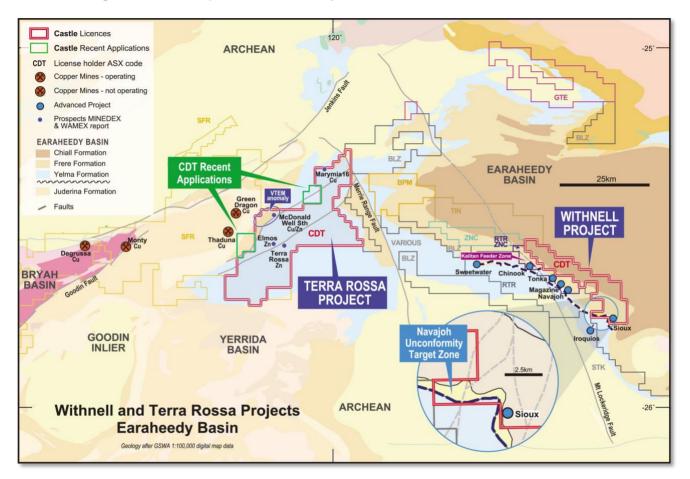


Fig 2: Castle's expanded Earaheedy Basin Withnell and Terra Rossa tenure

**Table 1: Summary of expanded Earaheedy Project tenure** 

Licence Name	Licence	Blocks	Area (km²)	Mineral Field	Status	NTLAMEA*
Withnell	EL69/3860	65	200	Warburton	Granted	Negotiating
Terra Rossa	EL52/3927	70	218	Peak Hill	Granted	Negotiating
Terra Rossa East	EL52/3930	34	106	Peak Hill	Granted	Negotiating
Terra Rossa South	EL52/3931	39	121	Peak Hill	Granted	Negotiating
Marymia	ELA52/3928	70	218	Peak Hill	Pending	Negotiating
Ned's Creek	ELA52/4165	10	31	Peak Hill	Pending	ТВА
Marymia	ELA52/4166	8	25	Peak Hill	Pending	ТВА
Tableland	EL38/3641	6	18	Mt Margaret	Granted	Negotiating
Tableland	EL38/3642	1	3	Mt Margaret	Granted	Negotiating

\*NTLAEA: Native Title Land Access and Mineral Exploration Agreement

#### Woomba Well License Application.

The GSWA critical minerals dataset (Report 233. SW Yilgarn Laterite 2020 Critical Metals digital data) was intensively interrogated to determine areas in Western Australia prospective for buried LCT (lithium, caesium, tantalum) pegmatites hosting possible undiscovered areas of lithium mineralisation.

Data was analysed for the suite of indicator elements considered characteristic of fractionated LCT pegmatites in order to finger print areas suitable for further follow-up and ranking. Elements such as lithium, beryllium, caesium, niobium, rubidium, tin and tantalum were statistically analysed to produce a prospectivity map outlining areas of interest.

The Woomba Well license area ranked extremely highly and was surprisingly still available for application.

The area applied for lies along the northern margins of the Gum Creek Greenstone Belt within felsic intrusives of the Tuckanarra Suite and Yilgarn granites. Once granted, initial exploration of the area will consist of a surface geochemical program comprising soil sampling and possible air core drilling.

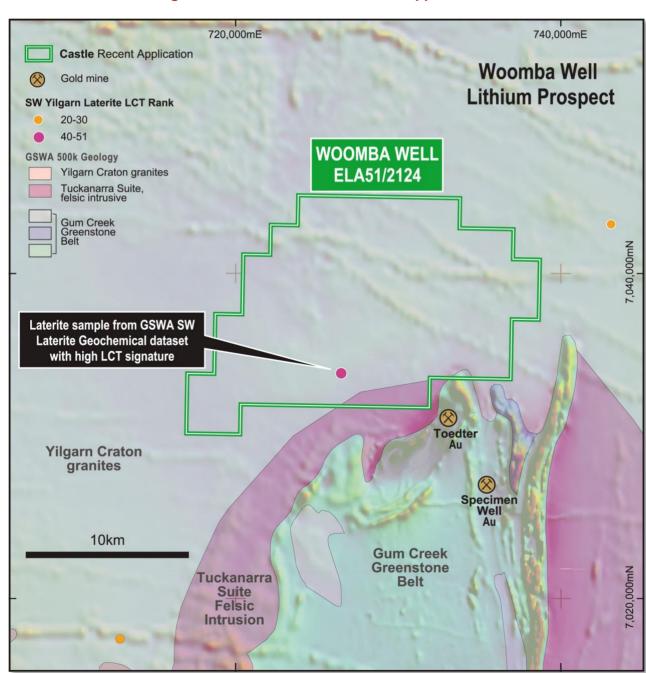


Fig 3: Woomba Well lithium licence application

#### Kambale graphite project, Ghana

Results from approximately half of the 52-hole, 5,323m RC program completed recently at Castle's Kambale graphite project, Ghana, have been received and will be reported shortly.

#### PREVIOUSLY REPORTED INFORMATION RELATING TO THIS RELEASE

Additional details, where applicable, can be found in the ASX releases referenced in this document and/or in the following releases lodged by the Company with the ASX:

Headline	Date	
Geophysics prioritises targets at Earaheedy	7 September 2021	
Castle increases Earaheedy Basin footprint	11 August 2021	
Base Metals Confirmed at Earaheedy Basin Project	17 June 2021	
Additional Earaheedy Basin Licence Applications	28 April 2021	
Earaheedy Basin Licence Applications	19 April 2021	

Authorised for release to ASX by the Board of Castle Minerals Limited:

## **Stephen Stone**

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#### **About Castle Minerals Limited**

Castle Minerals Limited is an Australian Securities Exchange (ASX: CDT) listed and Perth, Western Australia headquartered company with interests in several projects in Western Australia and Ghana that are prospective for battery metals (lithium and graphite), base metals and gold.

The **Earaheedy Basin** project encompasses terrane prospective for base and precious metals in the Earaheedy and Yerrida basins base metals provinces. The project comprises the **Withnell, Terra Rossa** and **Tableland** sub-projects. The Withnell licence is adjacent to the evolving Chinook-Magazine zinclead project of Rumble Resources Ltd (ASX: RTR) and north of the Strickland Metals Limited (ASX: STK) Iroquois prospect. The Terra Rossa licences are east of the Thaduna copper deposit.

The **Beasley Creek** project lies on the northern flanks of the Rocklea Dome in the southern Pilbara where orogenic-style, structurally controlled gold targets within the various Archean sequences are being targeted. Unexpected lithium anomalism is also being followed-up.

The **Success Dome** project lies in the Ashburton structural corridor and is located midway between the Paulsen's and Ashburton gold deposits. It is prospective for gold and base metals.

The **Polelle** project, 7km southeast of the operating Bluebird gold mine near Meekatharra, hosts a mainly obscured and minimally explored greenstone belt prospective for gold.

The **Wanganui** project, 15km south-west of the operating Bluebird gold mine, presents an opportunity to test for down-plunge and along strike extensions to the existing Main Lode North and South deposits and similar targets.

The Wilgee Springs project, along strike from and within the same metamorphic belt as the world-class Greenbushes lithium mine 25km to the south, provides an opportunity to explore for spodumene bearing pegmatites beneath a lateritic cover that has previously hampered exploration.

The **Woodcutters** project, is prospective for lithium bearing pegmatites, 25km southeast of the Bald Hill lithium mine and 25km northwest of the Buldania lithium deposit.

The **Great Southern Graphite** project comprises two granted licences encompassing the historical **Kendenup** graphite workings and the adjacent **Martagallup** graphite occurrences and one application covering a graphite occurrence at **Mt. Barrow**.

In Ghana, West Africa, Castle's substantial and contiguous tenure position in the country's Upper West region encompasses large tracts of highly prospective Birimian geological terrane, the host to many of West Africa's and Ghana's multi-million-ounce gold mines.

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Au Cu Success Dome

Zn Pb

PARABURDOO Western
Australia

Au

Wanganui

Au

Wanganui

Au

Wilgee Springs

C Great Southern
Graphite

Woodcutters

The emerging **Kambale** graphite project also lies on the Ghana tenure. Drilling and test work to date have indicated that it is a sizable open-ended deposit with several favourable attributes to warrant its advance.

Castle retains a 4% net smelter precious metal royalty over the Julie West licence, a key component of Azumah Resources Limited's Wa Gold Project, Upper West region, Ghana.

#### **Cautionary Statement**

All of Castle's projects in Australia are considered to be of grass roots or of relatively early-stage exploration status. There has been insufficient exploration to define a Mineral Resource. No Competent Person has done sufficient work in accordance with JORC Code 2012 to conclusively determine or to estimate in what quantities gold or other minerals are present. It is possible that following further evaluation and/or exploration work that the confidence in the information used to identify areas of interest may be reduced when reported under JORC Code 2012.

## **Forward Looking Statement**

Statements regarding Castle's plans, forecasts and projections with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that Castle's plans for development of its mineral properties will proceed. There can be no assurance that Castle will be able to confirm the presence of Mineral Resources or Ore Reserves, that any mineralisation will prove to be economic or that a mine will be successfully developed on any of Castle's mineral properties. The performance of Castle may be influenced by a number of factors which are outside the control of the Company, its Directors, staff or contractors.



## **Competent Persons Statement**

The scientific and technical information in this Report that relates to the geology of the deposits and exploration results is based on information compiled by Mr Stephen Stone, who is Managing Director of Castle Minerals Limited. Mr Stone is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Stone is the Qualified Person overseeing Castle's exploration projects and has reviewed and approved the disclosure of all scientific or technical information contained in this announcement that relates to the geology of the deposits and exploration.