7 September 2021



Geophysics Prioritises Targets at Earaheedy

- High priority targets highlighted on Withnell and Terra Rossa licences by a review of multiple geophysical and geological datasets.
- Several targets have a basin margin setting and structural architecture consistent with SEDEX-style exploration models.
- Similar study underway on recent Tableland licence applications.
- Castle's geologists have just completed a field orientation site visit to Withnell and Terra Rossa to prepare for the first phase of exploration.

Castle Managing Director, Stephen Stone commented "The geophysicists have confirmed that Castle's Withnell and Terra Rossa projects have in several areas the right structural architecture and lithologies for targeting SEDEX-style base metals mineralisation."

"This is reinforced by historical geochemical sampling and drilling that identified multiple base metals anomalies, so our discovery expectations for our 870.5km² strategic footprint in the region continue to grow."

Castle Minerals Limited (ASX: CDT) ("Castle", the "Company") advises that a review of available government and open-file geophysical datasets in combination with other geological data has delineated several high-priority targets for base metals on its Withnell and Terra Rossa projects in the Earaheedy Basin of Western Australia (Figs 1, 2, 3 and 4)(Photo 1).

The Earaheedy Basin, where Castle has accumulated a strategic position totalling 870.5km², is fast emerging as a major base metal province following the discovery by Rumble Resources Limited (ASX: RTR) of the SEDEX-style Chinook-Magazine zinc-lead-silver-manganese deposits (Refer RTR releases 8 and 19 April 2021 and 2 June 2021)(refer CDT releases 11 August and 7 June 2021).

The review of geophysics by leading consultants, Terra Resources Pty Ltd, compiled, reprocessed and reinterpreted aeromagnetic, gravity, radiometric, airborne EM (incl VTEM and TEMPEST surveys) in conjunction with ASTER and Landsat imagery and GSWA regional mapped geology.

It has highlighted a number of regional-scale structures that could have acted as conduits for mineralised fluids and as a control for mineral deposition in the sedimentary basin margins, a typical characteristic of SEDEX-style deposits.

On the **Withnell** licence, the targeting study has confirmed the presence of the important Frere Formation - Yelma Formation unconformity which hosts the Chinook-Magazine mineralisation immediately to the north. This unconformity strikes for several kilometres through the southern part of Castle's licence and is coincident with the Sioux prospect which was first identified by RGC Exploration, as were also Chinook, Magazine and several others.

The study has also outlined prominent interpreted north-south basement faults and associated splay structures which pass through the Castle tenure and cross-cut the stratigraphy, hence presenting a focus for possible mineralisation to locally form.

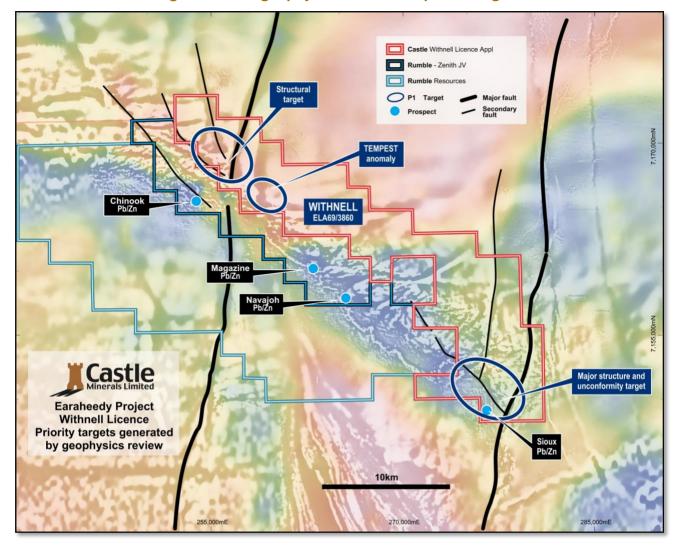


Fig 1: Withnell geophysics based interpreted targets

On the **Terra Rossa** licences, several targets in particular have been identified using the Geoscience Australia Capricorn 2013 AEM TEMPEST survey and open-file airborne VTEM surveys. An especially high priority target occurs along an interpreted basin extension fault that intersects a wedge of Frere Formation sediments overlying Yelma Formation units. This geological setting is analogous to that of the Chinook-Magazine discoveries as well as Castle's Sioux prospect.

Terra Resources is now compiling and evaluating the available datasets on Castle's two recent **Tableland** licence applications. These are located in the southeast margin of the Paleoproterozoic Earaheedy Basin where it overlies Archean granite-greenstone terranes. Encouragingly, the applications encompass Yelma Formation and Frere Formation stratigraphic units and their associated unconformity which, as previously noted, has been shown elsewhere in the Earaheedy Basin to be prospective for SEDEX-style base and precious metal mineralisation.

Orientation and reconnaissance site visit

The Company's geological team recently completed an orientation and reconnaissance site visit as a precursor to the design and implementation of Castle's exploration program to test priority targets. The Company will commence field operations once the licences are granted.

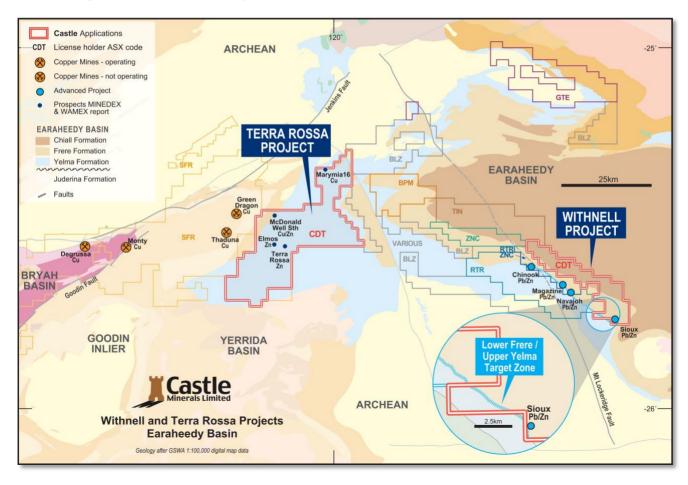
180,000mE 200,000mE Castle Terra Rossa Licence Appl **Frere Formation** adjacent to Copper Mines - not operating Prospects MINEDEX & WAMEX report regional fault P1 Target Major fault Secondary TEMPEST Ch 25 P1 anomaly Marymia16 Cu 7,190,000mN Region of VTEM anomalism Frere **Formation** Green Dragon Cu ELA52/3928 **TERRA ROSSA** Formation Thaduna Cu ELA52/3930 Elmos Zn Terra Rossa Zn Yelma **Formation** 15km ELA52/3927 ELA52/3931 **Earaheedy Project** Terra Rossa Licences Geoscience Aus TEMPEST **Priority targets from** survey lines geophysics review

Fig 2: Terra Rossa geophysics based interpreted targets incl. TEMPEST Channel-25 amplitude image depth slices

Photo 1: Aerial view of Terra Rossa area and access track



Fig 3: Castle's Earaheedy Basin Withnell and Terra Rossa licence applications



Free / Yelma Unconformity Continuation of Unconformity I contact Inferred from magnetics Formation

Archean Greenstone/Granite

TABLELAND PROJECT

Yelma Formation

Yelma Formation

Archean Greenstone/Granite

TABLELAND PROJECT

Yelma Formation

Yelma Formation

TABLELAND PROJECT

Yelma Formation

TABLELAND PROJECT

Yelma Formation

Fig 4: Castle's Tableland licence applications in the SE margin of the Earaheedy Basin

Summary of Earaheedy Project exploration licence applications

Licence Name	Licence	Blocks	Area (km²)	Mineral Field
Withnell	ELA69/3860	65	200	Warburton
Terra Rosa	ELA52/3927	70	218	Peak Hill
Terra Rosa East	ELA52/3930	34	106	Peak Hill
Terra Rosa South	ELA52/3931	39	121	Peak Hill
Marymia	ELA52/3928	70	218	Peak Hill
Tableland	ELA38/3641	18	6	Mt Margaret
Tableland	ELA38/3642	3	1	Mt Margaret

PREVIOUSLY REPORTED INFORMATION RELATING TO THIS RELEASE

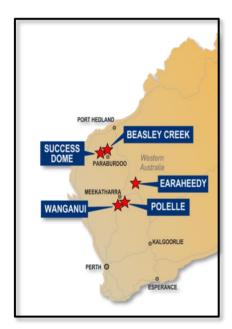
Additional details, where applicable, can be found in the ASX releases referenced in this document and/or in the following releases lodged by the Company with the ASX:

Headline	Date
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

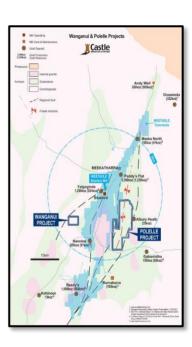
Authorised for release to ASX by the Board of Castle Minerals Limited:

Stephen Stone

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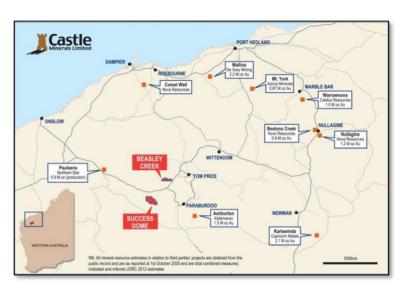
About Castle Minerals Limited

Castle Minerals 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 gold, base metals, graphite and other minerals.

The Earaheedy Basin project comprises applications for seven exploration licence encompassing 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 application is adjacent to the evolving Chinook-Magazine zinc-lead project of Rumble Resources Ltd (ASX: RTR). The four Terra Rossa applications are immediately east of the Thaduna copper deposit.

The Beasley Creek project lies on the northern flanks of the Rocklea Dome in the southern Pilbara. The strategy is to define orogenic-style, structurally controlled gold targets within the various Archean sequences. These lie immediately above and below the 16km east-west striking conglomerate horizons which had been the initial focus of exploration by Castle. The sheared granite - greenstone contact and the "Paulsen Gold Mine" type setting within the gabbro/dolerite units that intrude the Hardey Sandstone in the northern part of the project area, are of particular interest.

The **Success Dome** project is a recent application for an exploration licence 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. More locally, Success Dome immediately adjacent to the southern margin of the Hamersley Basin and 40km southwest of Castle's Beasley Creek gold project. Major thrust faults sub-parallel and shear zones highlighted in the regional magnetic and gravity data, combined with additional detailed geophysics data from previous explorers, brought this available area to Castle's attention.



The **Polelle** project (E51/1843, 162.5km²), 25km south of Meekatharra and 7km southeast of the operating Bluebird Mine, hosts a mainly obscured and minimally explored greenstone belt. The belt is comprised of a combination of prospective lithological units and major structural features including the Albury Heath shear which hosts the Albury Heath deposit (Inferred Resource of 528,000t at 2.09g/t Au for 35,479oz Au) immediately adjacent to the east boundary of Castle's licence. Aeromagnetics have indicated that the southwest trending Albury Heath shear and a splay structure are traceable onto the Polelle project area for some 12km.

At the Wanganui project (E51/1703, 18.4km²), 33km south-west of the active Meekatharra mining centre and 15km south-west of the operating Bluebird gold mine, the opportunity is to test for down-plunge and along strike extensions to the existing Main Lode North and South deposits, as well as for other similar targets. The Main Lode mineralisation, which can be intermittently traced for at least 1km, is one of at least four structurally related mineralised zones.

In Ghana, West Africa, Castle has a substantial and contiguous tenure position in the country's Upper West region. Ghana has a long history of gold exploration and mining with several world-class gold mining operations owned by Tier 1 mining companies. Castle's Ghana licence holdings encompass large tracts of highly prospective Birimian geological terrane, the host to many of West Africa's and Ghana's multi-million-ounce gold mines. The project area is also host to the Kambale graphite project.

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

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 results.