

# **Success Dome Licence Granted**

- 70-block, ~220km<sup>2</sup> exploration licence encompasses the Success Dome base and precious metals targets.
- Centrally located in the increasingly active northern margin of the Ashburton Basin region of Western Australia.
- Midway between Northern Star (ASX: NSR) Paulsen's gold deposit and the Kalamazoo Resources Limited (ASX: KZR) owned Ashburton Gold Project (incl. Mt Olympus deposit) with minimal exploration of the intervening 220km.
- Licence take-ups in the immediate region by Castle, Cazaly Resources Limited (ASX: CAZ), Tambourah Metals Ltd (ASX: TMB) and Aruma Resources Limited (ASX: AAJ) highlight a reappraisal is underway for large mineralised systems along major regional-scale structures.
- Castle review work has identified several specific areas favourable for structurally-controlled base and precious metals mineralisation.
- Planned field work will comprise soil and rock chip sampling of priority targets followed by drilling where warranted.

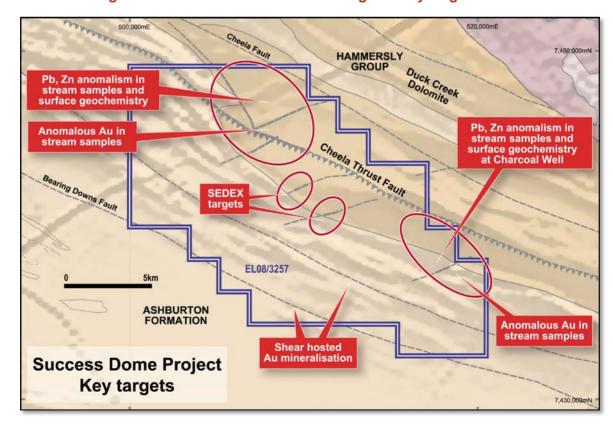


Fig 1: Success Dome structural setting and key targets

Castle Managing Director, Stephen Stone commented "The now granted Success Dome licence lies at the heart of the Ashburton region where there has been a recent multi-company take-up of licences in the search for structurally-controlled base and precious metals deposits."

"We have already identified priority targets from the reprocessing and review of available aeromagnetic and gravity data, GSWA mapping, historical reports, third party geochemical datasets and are very keen to commence soil and rock chip sampling as a first step in unlocking the area's prospectivity."

Junior explorer and project incubator, Castle Minerals Limited (ASX: CDT) ("Castle" or the "Company"), advises that its 70-block, ~220km² Success Dome exploration licence (E08/3257) in the under-explored northern margin of the Ashburton Basin is now granted enabling the company to commence field work at priority targets for structurally-controlled base and precious metals ("Project")(Figs 1 and 2).

The licence lies midway along the 220km separating the Northern Star Limited (ASX: NST) owned Paulsen's gold deposit to the west and Kalamazoo Resources Limited (ASX: KZR) Ashburton deposit to the east. Other than regional exploration campaigns, minimal prospect-scale exploration has been undertaken on Castle's licence area.

### **Project background**

Success Dome lies adjacent to the southern margin of the Hamersley Basin and 40km southwest of Castle's Beasley Creek gold–lithium project situated on the northern flank of the Rocklea Dome.

The Success licence area is characterised by a series of northwest trending faults on the contact between the Ashburton and Hammersley geological Provinces.

The Cheela Fault strikes diagonally across the northern part of the project and the Baring Downs fault, as mapped by the GSWA, lies immediately south of the project. A series of broad, open folds strike parallel to the major fault structures.

Dominant lithologies in the area comprise the Duck Creek Dolomite in the north and Ashburton Group sediments to the south.

The Duck Creek Dolomite and Ashburton Formation extend for some 20km on the licence. The Duck Creek Dolomite has been specifically targeted for gold mineralisation by third parties including BP Minerals Limited, SIPA Resources Limited and Newcrest Limited ("Newcrest"). Newcreat employed close-spaced stream sediment sampling to highlight consistently anomalous gold values in the southeast corner of the licence at Charcoal Well.

Newcrest then completed a program of 48 x 15m-to-128m vertical RAB holes to test the anomalous stream sediment geochemistry with drill lines spaced between 400m and 600m and holes drilled at 100m centres along these.

Whilst no strongly anomalous gold was returned from the program, the drilling did intersect broad zones of anomalous zinc and lead mineralisation plus arsenic. This may indicate a SEDEX stye mineralisation setting.

Northern Star was the first company to recognise a major magnetic high and coincident gravity anomaly which it interpreted to be a near surface inlier of Hamersley Group sediments. It named this Success Dome and interpreted it to have been emplaced by a thrust fault parallel with the Cheela Fault and to be a possibly source of mineralising fluids. However, despite its prospectivity, no subsequent work was undertaken.

### Work by Castle

Castle has digitised all of the historical mapping and sampling data and had reprocessed and interpreted by Terra Resources P/L the available aeromagnetic and gravity data. This has identified two areas of particular interest:

- Target 1 is at the intersection of the regionally dominant Cheela Thrust Fault and a subsidiary shear zone, and
- Target 2 is an area of deformation and offset of Ashburton Formation sedimentary rocks.

Castle intends to undertake broad spaced rock and soil sampling to complement and verify previous sampling with closer spaced sampling directed at the Target 1 and 2 areas.

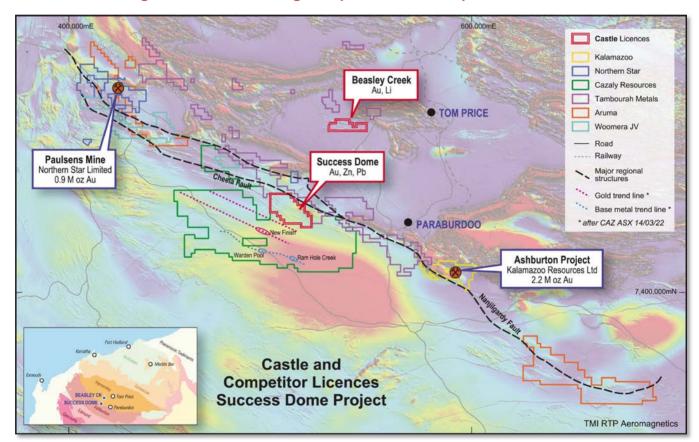


Fig 2: Success Dome regional position and competitor licences

# **Competitor activity**

Kalamazoo Resources Limited (ASX: KZR) is focused in the area on drilling in the vicinity of existing resources to justify re-establishing the mothballed **Olympus Mine** whilst the **Paulsen's Gold Mine** of **Northern Star Limited** remains on care and maintenance.

**Cazaly Resources Limited** (ASX: CAZ) has applied for an expansive tenure immediately south of Castle's Success Dome and along strike to the north west.

**Aruma Resources Limited** (ASX: AAJ) has two large exploration projects in the immediate area: The Melrose Project to the northwest surrounds the Paulsen's Gold Mine and the Saltwater Gold project to the south east.

Both Cazaly and Aruma are targeting gold mineralisation in Wyloo Group stratigraphy associated with the regional-scale Naniilgardy Fault and splay structures off the main fault.

At the Saltwater Well Project, recent wide-spaced RC drilling by Aruma Resources targeted the Duck Creek Dolomite and McGrath Formation for gold mineralisation on or near the contact between the formations and returned anomalous intersections (ASX 17/02/2021 "Drilling Suggests New Gold Camp at Saltwater Gold Project").

**Tambourah Metals Limited** (ASX: TMB) holds the Cheela Project immediately north of Success Dome. It is targeting structural positions along the Nanjilgardy Fault for gold mineralisation. Previous exploration has identified a number of targets the company intends to follow-up.

#### Infrastructure

Success Dome is logistically well located southwest of the iron ore town of Paraburdoo and west of Tom Price in a region with excellent road, rail and air infrastructure plus mining support services. The Goldfields Gas Pipeline runs across the north west of the licence.

#### **Native title**

The project is within the lands of the Jurruru People. Castle has recently signed standard land access and heritage agreements with the Jurruru and Jurruru #1 (Part B) claim groups. A heritage survey is required before Castle can commence field operations.

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

### Stephen Stone

Managing Director stone@castleminerals.com +61 (0)418 804 564

### PREVIOUSLY REPORTED INFORMATION RELATING TO THIS RELEASE

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

Headline	Date
December 2021 Quarterly Report & Appendix 5B	31 Jan 2022
Success Dome Application	7 Oct 2020

#### **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 application 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 four Terra Rossa applications are east of the Thaduna copper deposits.

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. 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 also of particular interest.

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. Major thrust faults and subparallel 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, 162.5km<sup>2</sup>), 25km south of Meekatharra and 7km southeast of the operating Bluebird Mine, hosts a mainly obscured and minimally

Au Cu Success Dome

Zn Pb

PARABURDOO Western
Australia

Earaheedy

MEEKATHARRA

Wanganui

Polelle

PERTH

Woodcutters

Woodcutters

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 immediately adjacent to the east boundary of Castle's licence. Aeromagnetic surveys 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.

The **Wilgee Springs** project (ELA70/5880, 120km²), along strike from and within the same metamorphic belt as the World-Class Greenbushes lithium mine, 25km to the south in Western Australia's South-Western region, provides an opportunity to explore using the latest geochemical and geophysical techniques for spodumene bearing pegmatites beneath a lateritic cover that has previously hampered exploration.

The **Woodcutters** project (ELA15/1847/1847, 242km²) is prospective for lithium bearing pegmatites, 25km southeast of the Bald Hill lithium mine in the Bald Hill pegmatite field region and 25km northwest of the Buldania lithium deposit.

The **Kendenup** project (EL70/5514/5963) comprises two granted licences encompassing the historical Kendenup graphite workings and the adjacent Martigallup graphite occurrences.

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-millionounce gold mines. The project area is also host to the open-ended **Kambale** graphite project for which test work on near-surface samples produced a 96.4% total carbon fine flake graphite concentrate.

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.

The **Kambale graphite deposit** is at an early stage in its evaluation with little known about how extensive the deposit is or how the graphite quality varies within it. Work to date has been undertaken on an easily accessible area which may or may not be representative of the broader deposit once that is known.

To date, the area investigated at Kambale has produced from weathered samples a fine flake size concentrate of a potentially commercially acceptable grade at a reasonably high recovery. Definitive test work on fresh material and material from other parts of the deposit has yet to be undertaken.

## **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.