26 April 2022



# **Kendenup Graphite Project Extended**

# Licence Application Encompasses Historical Mt. Barrow Graphite Occurrence

- Application made for 133km<sup>2</sup> exploration licence encompassing the Mt. Barrow graphite occurrence, 15km south east of Castle's Kendenup graphite project.
- Highly complementary to granted Kendenup and Martagallup licences hosting the historical Kendenup graphite mine, Martagallup workings and untested EM anomalies.
- Acquisition enables the adoption of a more regional approach to graphite exploration.
- Mt. Barrow was discovered in 1917 and described as graphite flakes contained within gossan and kaolinised rock at surface in an area of weathered, probably granitic terrane.
- The limited amount of follow-up work for graphite at Mt Barrow since its discovery presents an excellent opportunity for Castle to discover additional graphite mineralisation.
- A high-resolution ground EM survey will commence this week over areas at Kendenup-Martagullup where land access agreements have been secured.
- The extended Kendenup graphite project is a key component of Castle's evolving Battery Metals strategy which also includes the **Kambale** graphite project (Ghana) and the Wilgee Springs and Woodcutters lithium projects (Western Australia).

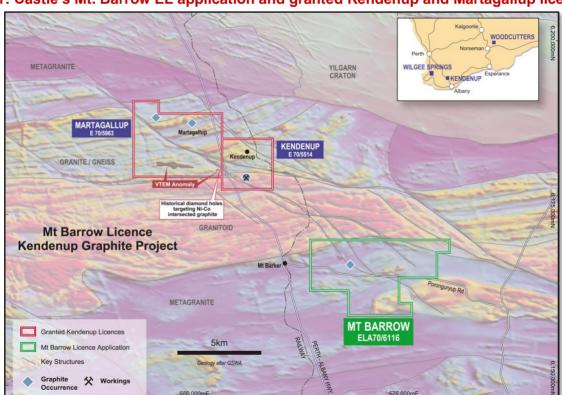


Fig 1: Castle's Mt. Barrow EL application and granted Kendenup and Martagallup licences.

Explorer and project incubator, Castle Minerals Limited (ASX: CDT) ("Castle" or the "Company"), advises that it has applied for a 133km² exploration licence encompassing the historical Mt. Barrow graphite occurrence, 15km south east of Castle's Kendenup graphite project in Western Australia's Great Southern region (ELA70/6116)(Figs 1 and 2).

The application is highly complementary to Castle's granted Kendenup and Martagallup exploration licences where the Company will shortly commence a high-resolution ground EM survey to identify possible extensions to known graphitic zones.

The addition of Mt. Barrow also enables Castle to adopt a more regional approach to graphite exploration and discovery.

Mt Barrow was discovered in 1917 and was described by Simpson<sup>1</sup> as graphite flakes contained within gossan and kaolinised rock at surface in an area of weathered, probably granite terrane.

The limited amount of follow-up work for graphite at Mt Barrow since its discovery presents an excellent opportunity for Castle to discover more extensive graphite mineralisation.

## **Growing Battery Metals portfolio**

Mt. Barrow considerably expands Castle's Battery Metals project holdings which also include the Kambale graphite project, Ghana, where a ground EM survey was recently completed and preparations are now being made for an RC drilling program.

Castle also holds the Woodcutters and Wilgee Springs lithium exploration projects where, once the licences are granted, it will embark on an initial phase of soil sampling to determine the likelihood of spodumene bearing pegmatites occurring on these properties.

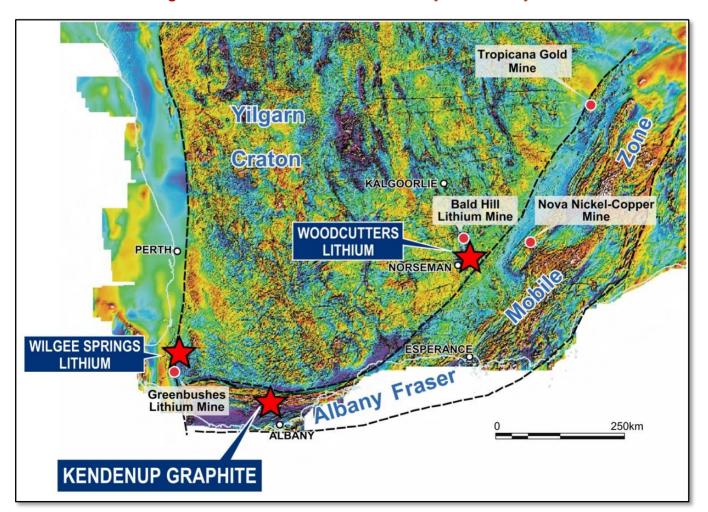


Fig 2: Castle's Western Australia 'Battery Metals' Projects

## Mt. Barrow geological setting

The Mt. Barrow graphite occurrence is situated within rocks of the Paleoproterozoic to Mesoproterozoic Fraser-Albany orogen. These rocks are adjacent to the southern margin of the Yilgarn carton, occurring in a broad east - west trending band for a distance of approximately 800km along the southern coast of Western Australia.

The Fraser-Albany rocks contain several graphite occurrences and some historical workings which commonly are found within kaolinitic iron-rich zones as observed at the historical Kendenup and Martagallup workings.

The Mt. Barrow graphite occurrence appears not to have been investigated in any detail and occurs within a similar setting along a zone of discontinuity highlighted in the regional aeromagnetic data that trends up towards both Kendenup and Martagallup.

#### **Licence access and Native Title**

The Mt. Barrow exploration licence is well serviced by infrastructure being approximately 5km east of the regional centre of Mt Barker and 45km north of the international Port of Albany.

The application area comprises mostly freehold farmland. Once granted, the exploration licence relates only to subsurface rights. There is a requirement to enter into land access agreements with individual private landowners before DMIRS will grant surface exploration rights. This is a standard requirement and is being progressed through a specialist contractor.

Regarding Native Title, the licence is affected by the Wagyl Kaip and Southern Noongar People's ILUA and as such no exploration rights may be carried out until either an Aboriginal Heritage Agreement ("AHA"), defined in the relevant ILUA with the Native Title Agreement Group has been executed (the parties have to reach agreement in 20 business days of the commencement of negotiations), or after 20 business days, the standard AHA has been executed by the Company and returned to the Native Title party. This process is also being progressed through a specialist contractor.

#### References

- (a) Simpson ES, 1951 Graphite, in Minerals of Western Australia, Government Printer Western Australia, Vol 2: P450-475.
- (b) Fetherston J,M 2015 Graphite in Western Australia Geological Survey of Western Australia Mineral Resources Bulletin 26, 84pp
- (c) Blanchford, T, 1917 The graphite deposits at Kendenup and surrounding districts, Western Australia Geological Survey, Annual Report 1916, p 12-12.

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

## **Stephen Stone**

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## PREVIOUSLY REPORTED INFORMATION RELATING TO THIS RELEASE

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

Headline	Date
Kambale Graphite EM Survey Increases Size Expectations	31 Mar 2022
EM Survey Commences at Kambale Graphite Project, Ghana	14 Mar 2022

Headline	Date
Notice given under Section 708A(5)(e) of the Corporations Act	2 Mar 2022
Widespread Anomalous Lithium at Woodcutters	23 Feb 2022
Kendenup Graphite Project's Martagallup Licence Granted	7 Feb 2022
Kendenup Graphite Project Acquired	24 Nov 2021

#### **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 zinc-lead 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 and granted licence lies in the Ashburton structural corridor and is located midway

Au Cu Success Dome PORT HEDLAND Success Dome Western Australia

Earaheedy MEEKATHARRA

Wanganui Wilgee Springs

C Kendenup Graphite

Woodcutters

between the Paulsen's and Ashburton gold deposits. It is prospective for gold and base metals. Major thrust faults and sub-parallel 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, 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 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, 15km south-west of the operating Bluebird gold mine, the opportunity is to continue 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 **Wilgee Springs** application, 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** (and Tramways) applications are 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** graphite project comprises two granted licences and one application encompassing the historical Kendenup graphite workings and the Martagallup and Mt. Barrow 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-million-ounce 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.



# **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.

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.

#### **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.