



Kambale Graphite Project RC Drilling Completed Diamond Core Metallurgical Samples Now In Perth Phase 2 Test Work About To Commence

Castle Managing Director, Stephen Stone commented ***“It’s been a very busy Christmas and a great start to 2023 with the completion at the Kambale Graphite Project in Ghana of a 30-hole, 2,290m RC drilling program and the arrival this week in Perth of 300kg of diamond drill core samples for Phase 2 metallurgical test work that will commence in coming days.”***

“Our Ghana team and drilling contractor have worked through the Christmas period to ensure we remain on schedule to tick several important Project milestones this March Quarter including to confirm if we can produce a commercial grade concentrate that can then be evaluated for possible use in the manufacture of electric vehicle battery anodes.”

“It’s going to be a very interesting year for the Project underpinned by the many forecasts for a looming graphite supply deficit on the back of the predicted increase in worldwide sales of electric vehicles and stationary power storage units.”

“With Castle also having interests in several other active battery metals projects, base metals and gold projects shareholders can look forward to a busy and exciting 2023.”

Explorer and project incubator, Castle Minerals Limited (ASX: CDT) (“Castle” or the “Company”) advises that a 30-hole, 2,290m RC drilling program has been completed at the Kambale Graphite project, Ghana (Figs 1).

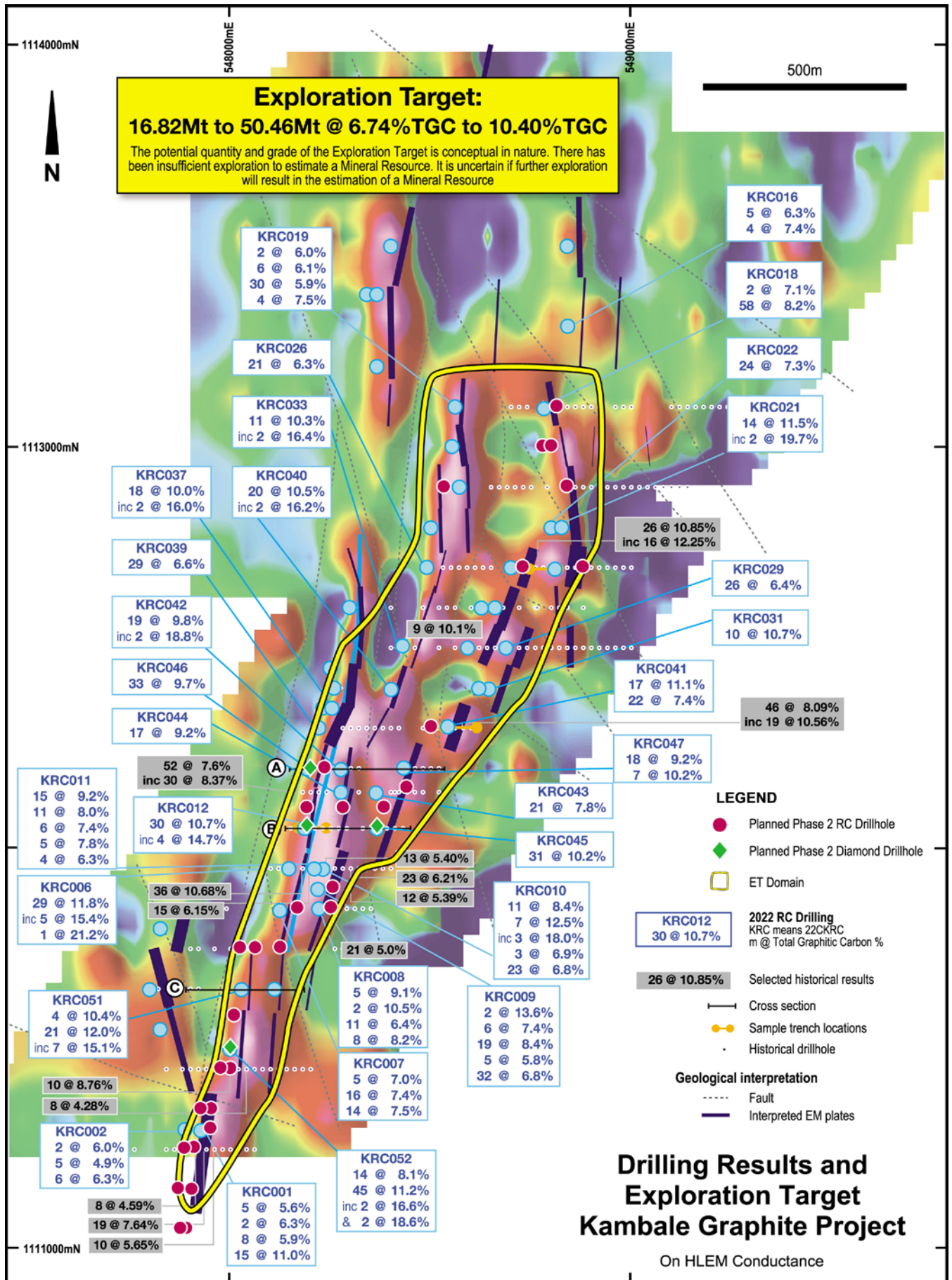
The drilling was designed primarily to better define the high grade zones intercepted in the previous round of drilling and to facilitate a maiden JORC 2012 Mineral Resource estimate scheduled for delivery around end-Q1 2023, subject to timing of receipt of assay results. The program was fast tracked with Castle’s geological team and contracted drilling crew working through the Christmas period.

A prior 52 hole, 5,353m RC drill program had extended the deposit’s foot print to 2.5km north-south over a combined width of up to 0.5km with several holes intercepting thick, multiple graphitic zones such as 14m at 8.1% TGC from 47m and 45m at 11.2% TGC from 66m in 22CKRC052.

An independently estimated JORC 2012 Exploration Target of 16.82 million tonnes to 50.46 million tonnes at a grade between 6.74%TGC and 10.40%TGC (Total Graphitic Carbon) was subsequently reported (refer ASX release 28 November 2022).

The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

Fig 1: Plan of historical and recent drill results, Exploration Target estimate outline and locations of recently completed Phase 2 diamond core metallurgical sample holes and RC drill holes.



The Exploration Target was limited to a vertical depth of 100m below surface and highlights that Kambale may have the scale, grade and other attributes to justify its continued evaluation as a possible producer of a commercially acceptable fine flake graphite concentrate.

In addition, ~300kg of half core samples from a 4-hole 365m diamond drilling program have just arrived in Perth. These will be used for Phase 2 metallurgical test work to assess the amenability of the graphitic schist to produce a fine flake graphite concentrate as a base for EV battery anode manufacture.

The test work, which will commence in coming days at the facility of Metallurgy Pty Ltd, Perth, will comprise a series of beneficiation, flotation and grinding cycles on composited core aimed at producing a quantity of as near-to commercial grade fine flake graphite concentrate as possible.

The Phase 2 concentrate produced in Perth will then be assessed by a specialist European metallurgical laboratory for its ability to be upgraded and processed (micronised, purified, spheronised and coated) into a battery-grade fine flake concentrate for possible application in electric vehicle battery anode manufacture.

The diamond drill core has been obtained from four locations to provide a broad representation of the graphitic schist material and its variability, especially below the weathering profile.

Subject to the success of the test work, the Mineral Resource estimate and other related studies and commercial factors, a development Scoping Study will be considered for Q2 2023.

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

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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
Kambale Graphite Diamond Core Drilling Completed (Amended)	23 December 2022
Kambale Graphite Diamond Core Drilling Completed	20 December 2022
Independent Exploration Target Estimate Highlights Kambale as a Large-Scale Graphite Deposit	28 November 2022
Kambale Core Drilling Underway	10 November 2022
Kambale Graphite Deposit Extended	3 November 2022
Encouraging Kambale Graphite project Interim Drill Results	29 September 2022
Kambale Graphite RC Drilling Program Completed	24 August 2022
More Graphite Zones at Kambale	11 July 2022
Drilling Campaign Launched at Kambale Graphite Project	14 June 2022
Kambale Graphite EM Survey Increases Size Expectations	31 March 2022
EM Survey Commences at Kambale Graphite Project Ghana	14 March 2022

Headline	Date
Encouraging Graphite Test Work Results	21 September 2021
Kambale Graphite Test Work Update	5 August 2021
Graphite Test Work Underway	3 June 2021
Castle to Reappraise Kambale Graphite Project, Ghana	15 March 2021
Drilling Doubles Strike length of Kambale Graphite Deposit	17 September 2012
Metallurgy Test Work Confirms Commercial Potential of Kambale Graphite Deposit	3 September 2012
High Grade Graphite intercepts Extend Kambale Deposit	24 August 2012
Maiden Resource Confirms Kambale as One of World's Largest Graphite Deposits	24 July 2012
Large High Grade Deposit Confirmed at Kambale	6 July 2012
Extensive Zones of High Grade Graphite Intersected	9 May 2012

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.

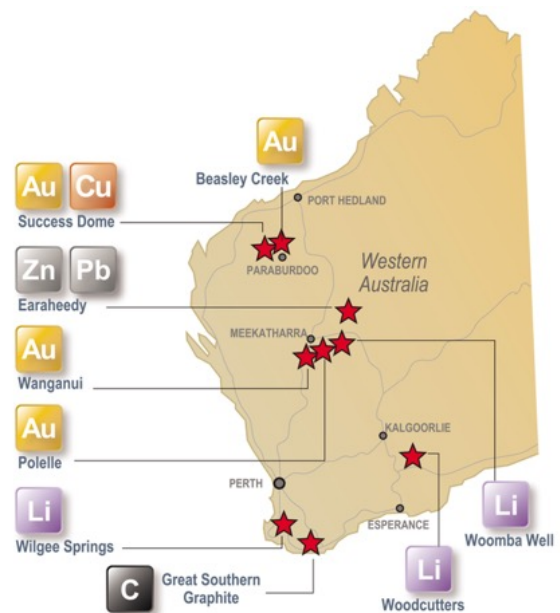
The **Earaheedy Basin** project encompasses terrane prospective for base and precious metals in the Earraheedy and Yerrida basins base metals provinces. The project comprises the **Withnell, Terra Rossa** and **Tableland** sub-projects. The Withnell licence is adjacent to the evolving Chinook-Magazine zinc-lead project of Rumble Resources Ltd (ASX: RTR) and north of the Strickland Metals Limited (ASX: STK) Iroquois prospect. The 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 **Woomba Well** project will be evaluated for lithium bearing pegmatites.

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.

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.



STATEMENTS

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.

The scientific and technical information in this Report that relates to the Exploration Target estimate is based on information compiled by Mr Michael Cantey, a Competent Person who is a member of the Australian Institute of Geoscientists (MAIG #4643). Mr Cantey is employed as a Principal Consultant at Sahara Natural Resources which provides consultancy services to Castle Minerals Limited. Mr Cantey has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Cantey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Exploration Target

The information contain in this announcement in respect to the Exploration Target is extracted from Castle's ASX release dated 28 November 2022 titled 'Independent Exploration Target Estimate Highlights Kambale as a Large-Scale Graphite Deposit' which is available to view at www.castleminerals.com/announcements ("original market announcement"). Castle confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Ghana Licencing

The Government of Ghana has the right to acquire a 10% free carried interest in all licences and is entitled to a 5% Gross Royalty on production. The Kambale Graphite Project is held by 100% owned Ghana based subsidiary, Kambale Graphite Limited. All Ghana gold licences are held by 100% owned Ghana based subsidiary, Carlie Mining Limited. Where required, Castle has lodged applications to divide certain retention licences into smaller licences, for extensions to licence terms and/or renewals under the Ghana Mining Act and, having paid and been receipted all amounts invoiced by Ghana MINCOM, is awaiting confirmation of these.