Successful Battery Anode Tests – Amended Annoucement

Please find attached Castle Minerals Limited 'Successful Battery Anode Tests' as amended from this morning's release to include the JORC Code 2012 Edition – Table 1, section 1 and 2 tables. No other details in the announcement have changed.

This announcement has been approved for release by Jade Styants, Company Secretary.

ASX Announcement
12 March 2024

Successful Battery Anode Tests

- **Electrochemical test work confirms Kambale natural flake graphite is suitable for use in manufacture of lithium-ion and other battery formats.**
- **Range of key charging, stability and other performance benchmarks achieved.**
- **Increasing third party offtake deals between non-Chinese upstream (primary natural graphite concentrate and precursor material producers) and downstream (graphite anode, battery and EV manufacturers) highlight China supply dependency concerns.**
- **The USA and EU have established billion dollar initiatives to help develop independent supply chains of critical minerals such as graphite.**
- **Kambale is well timed and well placed to feed into these emerging supply chains as a presently uncommitted supplier of high value graphite products.**
- **Recent meetings with Ghana government confirm strong support for Project.**

Castle Managing Director, Stephen Stone said ***"We are extremely pleased that recently completed electrochemical tests have confirmed Kambale graphite's status as a very attractive base for the manufacture of lithium-ion electric vehicle battery anodes and a range of other high-value primary and secondary applications.***

Purified Kambale graphite met a range of chargeability, stability and other critical performance benchmarks during tests undertaken in an accredited facility in Germany.

In rapid succession Castle has defined a 22.4 million tonne resource grading a very respectable 8.6% TGC and shown it can be upgraded into a valuable 95% LOI graphite concentrate using a conventional flowsheet.

In February this year Castle reported that it had successfully purified this concentrate to an above industry specification of 99.97% LOI, again using a conventional process.

This is all happening at a time when the world needs considerably more fine natural flake graphite to underpin forecasts of very strong growth in the uptake of electric vehicles.

Recent third party offtake deals between non-Chinese upstream producers of primary natural graphite concentrate and downstream manufacturers of natural graphite conductive additives for anodes, cathodes and other secondary battery chemistries are evidence of a paradigm shift in markets away from a high dependency on China supply.

The USA and EU have established billion dollar initiatives to help establish independent supply chains of critical minerals such as graphite. Kambale would therefore be ideally timed and well placed to service both existing and also these new emerging markets.

Recent meetings with the Ghana government confirmed its strong support for any development at Kambale as part of a broader ambition it has to establish West Africa's first critical minerals hub.

Castle's view remains that the graphite market is fundamentally very robust and graphite is definitely a commodity to watch this year and into the longer term."

Castle Minerals Limited (ASX: CDT) ("Castle" or the "Company") advises that electrochemical tests on material from its Kambale Graphite Project, Ghana ("Project") have confirmed its high performance characteristics and suitability for use in the manufacture of lithium-ion battery anodes and in other battery chemistries and formats.

This represents another landmark development for the Project which Castle has rapidly progressed over the past two years. It has now:

- confirmed an open-ended 22.4 million tonne resource (JORC 2012) grading a very respectable 8.6% Total Graphitic Carbon ("TGC") containing 1.9 million tonnes of graphite;
- demonstrated that mined material can be upgraded using a conventional flowsheet to a valuable and saleable 95% Loss on Ignition ("LOI") concentrate; and
- purified the natural flake concentrate to an above benchmark 99.97%LOI containing no impurities of concern and again using a conventional flowsheet.

Electrochemical test work

Electrochemical test work on purified Kambale natural flake concentrate was undertaken at an accredited specialist facility in Germany under the supervision on ProGraphite GmbH ("ProGraphite"). ProGraphite had previously purified to 99.97% LOI a natural flake concentrate grading 95% LOI produced by Perth-based, Metallurgy Pty Ltd, under the supervision of Independent Metallurgical Operations Pty Ltd ("IMO").

The downstream processing tests used a sample of micronised, spheronised and purified (99.97% LOI) graphite ("SPG") provided by ProGraphite. This uncoated SPG graphite material was specially formed and a T-cell produced which was then electrochemically performance evaluated in a simulated lithium-ion battery configuration (Swagelok T-Cell).

A comprehensive range of physical and electrochemical properties were evaluated and measured under a variety of controlled conditions. These provided a series of outputs relating to the chargeability, durability, stability, reversible capacity and other parameters of Kambale flake graphite SPG material.

The Kambale SPG sample was not coated for the lab cell testing. Coating technology is the final process in producing a coated spherical graphite ("CSPG") anode product and would normally be expected to improve on the already high-quality performance results obtained. The process varies by battery original equipment manufacturer ("OEM") and is done to control BET (surface area / porosity) to end user specifications.

It is stressed that whilst these are simplified laboratory-scale tests they provide critical indicators for battery OEMs to consider when additional lab and field battery testing is completed. Individual battery OEMs usually undertake their own 'qualification' tests prior to entering into firm sales contracts that will also consider quality assurance, logistical performance and packaging integrity.

Initial Economic Assessment Underway

Using all of the valuable information obtained over the past two years Castle and its various consultants are working to identify an optimal, viable long term development strategy for Kambale. This is being guided by an understanding of the graphite market obtained from a variety of sources and also aligned with aspects of the Project's location, available infrastructure, logistics and jurisdictional environment.

Once completed, this high-level initial economic assessment will provide a platform to move the Project through various study phases to a Definitive Feasibility Study, if warranted.

At this early stage a development at Kambale at this stage is likely to take the form of a low entry capital cost, initially campaign-mined and scalable, modularised operation. This will produce a commercially qualifiable and saleable bulk natural fine flake graphite concentrate on site as well as a range of other downstream high-value specialist graphite products and bi-products.

The Project plans to utilise nearby available grid power which is fed by at least 40% hydro generated electricity. This would badge Kambale as one of just a few “green” natural flake graphite projects in the world.

WHY GRAPHITE, WHY KAMBALE?

- Electric vehicle (“EV”) lithium-ion batteries contain an anode (-ve) and a cathode (+ve).
- The anode comprises +95% graphite with 35kg-75kg of graphite in a typical EV battery pack which contains 10x -15x more graphite (by weight) than lithium (in the cathode).
- Battery anode material (“BAM”) is made from natural fine flake graphite (-100 mesh) or from a primary synthetic graphite.
- Primary synthetic graphite is made from petroleum or coal refinery residue requiring high-temperature processing and producing much high levels of CO_2 emissions.
- Mined and concentrated natural graphite is micronised, spheronised, purified (“SPG”) and then coated to become BAM.
- In most cases <40% of the original graphite concentrate becomes BAM.
- There are forecasts for an additional 100 million light EV sales to 2030 alone and a major supply deficit of natural fine flake natural graphite is expected.
- China produces ~95% of the world’s BAM with non-China anode, Li-ion battery with EV manufacturers critically dependent upon China supplies.
- China has insufficient natural fine flake graphite to meet internal demand and is importing concentrates via offtake contracts with many of the world’s new or proposed graphite mines.
- China wants to grow and protect its battery and EV business and in December 2023 introduced ‘temporary’ export licence controls on graphite, anodes and EV batteries.
- The USA Inflation Reduction Act is a multi-billion dollar initiative to stimulate in-country manufacturing of batteries and EVs by establishing reliable, independent supply chains of quality, sustainable critical minerals, including graphite. Access to IRA funds is restricted to enterprises or product inputs not associated with “countries of concern”.
- The EU is introducing a similar supply chain stimulus initiative (“Critical Raw Materials Act”) with several other countries likely to follow suit.
- The Kambale Graphite Project is strategically located and well timed to participate as an uncommitted source of natural fine flake graphite in the new critical mineral supply chains being established.
- Ghana is a highly regarded, safe, politically stable and fast-growing jurisdiction with a long history of mining by international Tier-1 companies. It has a highly skilled workforce, excellent infrastructure, international ports and well established contracting and supply sectors. It has ambitions to establish West Africa’s first critical minerals hub.

Ghana government support

Castle Managing Director, Stephen Stone, this month met with several senior Ghana government officials, local investment funds and contractors. All expressed a high level of support for the Kambale Graphite Project especially given Ghana's ambition to establish a local critical minerals based industry hub.

In this regard the Kambale Graphite Project is viewed as being strongly compatible with the Atlantic Lithium Ltd (ASX: A11) Ewoyaa lithium project on Ghana's south coast. The Ghana government, through its Mineral Income Investment Fund, recently invested a total of US$32.9M in Atlantic and its Ghanaian subsidiaries to expedite the development of Ewoyaa.

The recent commencement of development at the Cardinal Namdini Mining Ltd owned Namdini Gold Mine in northern Ghana and the likelihood of construction commencing this year at the Black Volta Gold project, just 40km north of Kambale, will see a major boost to the availability of mining contractor and other key services into the region. These will add to the already excellent infrastructure available in the vicinity of Kambale which includes 40% renewables-based grid power passing close to the Project.

ABOUT THE KAMBALE GRAPHITE PROJECT

Ghana

Ghana has a well-established mining industry including several Tier-1 gold mining operations. It is now Africa's largest gold producer and the World's sixth largest. Accordingly, it has a well-trained and very capable workforce supported by an excellent mining services and supply sector. It is a safe and politically stable jurisdiction based on the democratic Westminster system of government.

Logistics, infrastructure and licencing

The Project is located 6km west of the Upper West region capital of Wa which is 400km north, via good sealed roads, of Kumasi. From Kumasi it is approximately 240km south east by rail or road to the international port of Tema, 30km west of the capital Accra, which provides direct access to global export markets.

The Wa region has an excellent infrastructure including a commercial airport only a few kilometres from the Project, numerous well maintained sealed and unsealed roads, plenty of potable water and reliable grid power largely fed with electricity generated by the 400MWh Bui hydroelectric dam. These will all combine to represent a large saving in Project establishment capital costs.

The 149km^2 Kambale Graphite Project licence is held by 100% owned Ghanaian subsidiary, Kambale Graphite Limited ("KGL"). The Government of Ghana has the right to a 10% free carried interest in all licences and is entitled to a 5% Gross Royalty on production.

Geology

The genesis of the flake graphite in Kambale is believed to be the result of high-grade metamorphism (amphibolite-granulite facies) which has converted trapped amorphous carbon into characteristic fine crystalline layers.

The Kambale graphite deposit was identified in the 1960s by Russian geologists prospecting for manganese. They undertook a limited programme of trenching and shallow drilling.

2012 drilling

Encouraged by firm graphite prices in 2012, Castle undertook three consecutive phases of drilling comprising RAB (251 holes, 5,621m), aircore (89 holes, 2,808m) and reverse circulation (3 holes, 303m). This work confirmed several zones of moderately to steeply dipping, north-east trending graphitic schists hoisted mainly in granodiorites. A JORC Code 2006 MRE was also undertaken.

Castle also undertook a very limited programme of bench-scale test work on RC chips. Thereafter, little work was undertaken until the more recent improvement in graphite prices prompted a re-evaluation of the Project in early-2021.

Phase 1 metallurgical test work

In September 2021 Castle reported that preliminary bench-scale test work by Independent Metallurgical Operations Pty Ltd (IMO), Perth, on sub-optimal near-surface, weathered graphitic schists sourced from trenches yielded encouraging fine flake graphite concentrate grades of up to 96.4% and recoveries of up to 88%. A conventional multiple grind and flotation concentration flowsheet was used. The three composited samples provided for the test work graded 12.56%, 16.09% and 17.16% TGC.

Ground geophysics and follow-up drilling

In March 2022, a ground horizontal loop electromagnetic (HLEM) survey demonstrated a strong correlation between already drill confirmed graphite mineralisation and zones of high conductivity. Several high conductivity zones also extended well outside of drilled areas.

In late 2022, a 52-hole 5,353m RC programme was undertaken to test the interpreted steep dipping, shallow conductive plates derived from the HLEM survey. The results confirmed that the majority of the plates were associated with graphite mineralisation and that the graphite continued to depths of at least 100m.

Maiden MRE

In early-March 2023 Castle reported that robust lenses of graphitic mineralisation containing high-grade zones with excellent continuity had been delineated by a 30-hole, 2,622m RC infill and 4-hole, 365.2m diamond core drilling campaign.

In April 2023 a maiden JORC Code (2012) Mineral Resource Estimate (“MRE”) of 15.6Mt at 9.0% TGC containing 1.41Mt of graphite was provided by independent consultants, Palaris (Australia) Pty Ltd.

The MRE is hosted by sub-parallel, steep to moderately dipping graphitic schist zones. These were delineated using data from the several phases of trenching and drilling which comprised 386-holes for a combined 16,018m of RAB, aircore, RC and diamond core drilling. Of this database, 85 RC and 4 diamond core holes for a total of 8,644m were used in the actual estimation.

Mineralisation commences at or close to surface and has been drill proven to at least 120m depth and most likely even deeper.

Phase 2 test work

A 300kg sample of fresh, unweathered graphitic schist, sourced from the four diamond drill core holes drilled into various representative areas of the deposit, was delivered to IMO in late December 2022. Bench-scale and then pilot plant scale test work used 215kg of the original sample. A commercial specification bulk fine flake concentrate grade of 95.1% TGC was achieved with a recovery of 79% of the graphite to the concentrate.

Micronisation, spheronisation, purification and electrochemical test work.

The bulk fine flake concentrate has successfully undergone micronisation, spheronisation and purification test work at ProGraphite GmbH, Germany. This produced a 99.97% LOI product with no impurities of concern. Subsequent electrochemical test work has indicated that purified (uncoated) material meets a number of key charging and stability benchmark performance markers confirming its suitability to be used in the manufacture of precursor and Battery Anode Material (BAM) across a range of secondary battery chemistries and battery formats.

Loupe EM survey

A Loupe EM ground geophysical survey completed in June 2023 identified a series of targets on the boarder Kambale licence that require evaluation for the presence of additional graphitic schist mineralisation separate from the main Kambale deposit.

MRE Update

An increased JORC Code (2012) Mineral Resource Estimate ("MRE") of 22.4Mt grading 8.6% TGC containing 1.94Mt of graphite was reported in October 2023. This included 43% in the higher confidence Indicated Mineral Resource category.

Classification	Tonnes (kt)	Contained TGC (kt)	TGC (%)
Indicated	9,556	843	8.8%
Inferred	12,872	1,096	8.5%
Total	**22,438**	**1,939**	**8.6%**

5% TGC Cut-Off. TGC = Total Graphitic Carbon

The MRE update included 43 RC holes drilled in August 2023. Mineralisation has been delineated over 2.3km north-south within a corridor up to 0.5km wide by several phases of trenching and a combined 424-holes for 21,569m of RAB, Aircore, RC and diamond core drilling campaigns. It has also been confirmed to at least 150m below surface where it still remains open.

ESG and Social licence

KGL's key management has some 17 years of successfully operating in Ghana and in particular its Upper West region. It has established a good reputation for its pro-active commitment to community engagement, local employment and training and aims to apply best practise ESG standards.

KGL has ensured that its activities meet the highest expectations in regard to environmental, social and governance ("ESG") standards. Resources have been directed to ensuring that all activities are undertaken with the prior, free and fully informed consent of impacted communities.

In parallel and critical to establishing any operation at Kambale, Castle has commissioned and commenced an independent Stakeholder Engagement Programme which was scoped following an independent Stakeholder Identification and Assessment Study. These are being conducted consistent with standards, policies and guidelines of the World Bank, International Finance Corporation, International Labour Organisation and other relevant authorities.

Compensation for access and any disruptions caused is provided in close consultation with landowners, Government and other stakeholders. All site disturbances are rehabilitated immediately after use.

KGL will continue to contribute to the improvement of the well-being of its communities. It has already, at the request of the communities, installed fresh water well, pump and storage facilities and is planning to continue with other critical health improvement initiatives.

The Company's Ghana-based team is 100% Ghanaian. A key aim is to maximise local employment and include where possible 100% of locally sourced content in all aspects of its operations.

Graphite market

The graphite market is diverse across industrial, metallurgical, chemical and specialised areas with each sector requiring reliable long term supplies of graphite concentrates with very specific qualities. Deposit type, size and geometry, flake size, flake shape, grade, impurities, capital and operating costs, ability to be refined, proximity to specific markets, supply logistics, jurisdiction, fiscal regime and many other factors all combine to determine the commercial viability of a particular deposit.

The current medium to long term outlook for the broader natural fine flake concentrate market is one of escalating demand and a looming supply deficit. This is driven in particular by its use in the fast-growing EV battery and stationary power storage sectors. Kambale graphite is primarily fine flake. At present, there is no viable, high-volume substitute for graphite whether that be natural flake or its synthetically manufactured form which involves a considerably more costly and higher CO_2

generating process. Given the wide variety of uses and required specifications and volumes, the market and pricing for graphite is very opaque.

The reader is directed to numerous recent publications, conference proceedings, market research papers and corporate websites of companies engaged in graphite exploration, project development or production for informed commentary and analysis of the graphite market.

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
Outstanding Graphite Purification Results	5 February 2024
Castle Boost Kambale Graphite resource to 22.4Mt	23 October 2023
Kambale Graphite Project Delivers More High-Grade Drill Intercepts	21 September 2023
Commercial Grade Graphite Concentrate Produced At Kambale	18 September 2023
Castle Appoints International Mining Executive	6 September 2023
Additional High Grade Intercepts at Kambale Graphite project	14 August 2023
Additional Graphite Targets at Kambale	1 August 2023
Kambale Drilling, Geophysics and Metallurgical Test Work Update	27 June 2023
Castle Commences Geophysical Survey to Locate Additional Graphite Occurrences	22 May 2023
Castle Commences Resource Upgrade Drilling at Kambale	16 May 2023
Castle's Kambale Project Exceeds 1.4Mt Contained Graphite	12 April 2023
Excellent High-Grade Continuity Confirmed at Kambale Graphite Project	13 March 2023
Kambale Graphite Project RC Drilling Completed	4 January 2023
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 Programme 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
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

Headline	Date
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

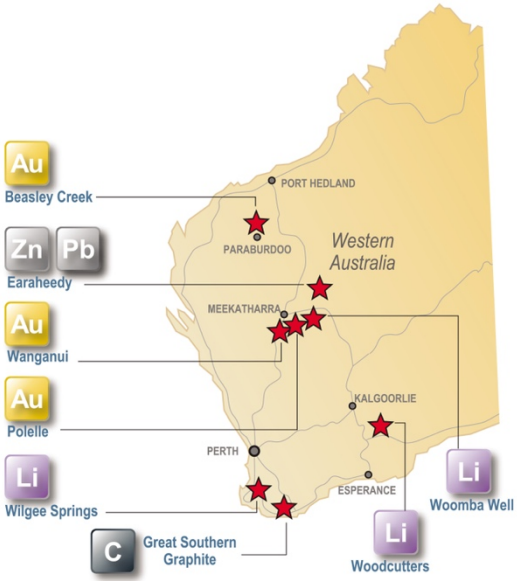
ABOUT CASTLE MINERALS

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

In Ghana, West Africa, the emerging flagship **Kambale Graphite Project** owned by 100% Ghanaian subsidiary, Kambale Graphite Limited, is progressing through technical and commercial evaluation for the production of battery grade material to be used in lithium-ion battery manufacture.

Castle's 100% owned Ghanaian subsidiary, **Carlie Mining Ltd,** holds a 2,686km^2 tenure position in the same Upper West region. This 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. It has delineated several advanced gold exploration targets including at **Kpali, Bundi** and **Kandia.** It also retains a **4% net smelter precious metal royalty** over the **Julie West** licence, a key component of Azumah Resources Limited's nearby Black Volta gold project.

In Western Australia, The **Earaheedy Basin** project comprises the **Withnell** and **Terra Rossa** sub-projects. The Withnell licence is strategically located adjacent to the evolving World-Class 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 have additional prospectivity for copper.



The **Beasley Creek** project is prospective for gold and lithium and lies on the northern flanks of the Rocklea Dome in the southern Pilbara.

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 and possibly base metals whilst the **Wanganui** project is prospective for down-plunge high-grade gold shoots. Both have been farmed-out to Great Boulder Resources Limited (ASX: GBR)

The **Wilgee** Springs project, along strike from and within the same metamorphic belt as the world-class Greenbushes lithium mine 25km to the south, is prospective for spodumene bearing pegmatites as is the Woodcutters project, 25km south east of the Bald Hill lithium mine and 25km north west of the Buldania lithium deposit. The **Woomba Well** project is similarly prospective for lithium bearing pegmatites.

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 programmes 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 Statements

The scientific and technical information in this release 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 release that relates to the geology of the deposits and exploration.

Information in this release that relates to the geological interpretation and Mineral Resources is based on information compiled by Jamie Logan, a full time employee of Palaris Australia Pty Ltd, under the direction and supervision of Dr Allan John Parker. Dr Parker is a Member of the Australasian Institute of Geoscientists, an employee of Palaris Australia Pty Ltd, Director of Geosurveys Australia Pty Ltd, a Non-Executive Director of Centrex Limited and was formerly Managing Director of Lincoln Minerals Limited. Dr Parker has sufficient experience relevant to the styles of mineralisation and to the activities which are being presented to qualify as a Competent Person as defined by the JORC code, 2012. Dr Parker consents to the release of the information compiled in this release in the form and context in which it appears.

Information in this release that relates to metallurgical test work managed by Independent Metallurgical Operations Pty Ltd ("IMO") is based on, and fairly represents, information and supporting documentation compiled and/or reviewed by Mr Peter Adamini BSc (Mineral Science and Chemistry) who is a member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of IMO who has been engaged by Castle Minerals Ltd to provide metallurgical consulting services. Mr Adamini consents to the inclusion in this release of the matters based on his information in the form and context in which it appears. Mr Adamini advises that information in this release that relates to metallurgical test work undertaken or supervised by ProGraphite GmbH is based on, and fairly represents, information and supporting documentation provided by ProGraphite GmbH and/or its subcontractors.

KAMBALE BATTERY ANODE ELECTROCHEMICAL TEST WORK – MARCH 2024
Appendix: JORC Code 2012 Edition – Table 1
Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Certified Person Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	10kg of concentrate grading 95.1% TGC graphite was used for the battery anode test work. The concentrate was produced from diamond drill core from the Kambale Graphite Deposit by Metallurgy Pty Ltd under the supervision of Independent Metallurgical Operations Pty Ltd (IMO) Perth. Refer ASX announcement 18 September 2023.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Metallurgy Pty Ltd technicians provided two 5kg bags of concentrate from the 18kg of graphite produced from the test work and forwarded this to ProGraphite GmbH for the battery anode test work.
	Aspects of the determination of mineralisation that are Material to the Public Report.	Refer to ASX announcements 23 October 2023 and 18 September 2023 for details.
	In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Refer to ASX announcement 18 September 2023 for details for the concentrate test work program.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Not applicable as no drilling is being reported.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not applicable no drilling is being reported.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	Not applicable no drilling is being reported.

Criteria	JORC Code explanation	Certified Person Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	The entire 10kg of concentrate sample was used for the battery anode test work.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Not appliciable as no assay data is reported in the anode electrochemical test work being reported.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Not applicable no drilling is being reported
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Not applicable no drilling is being reported
	Specification of the grid system used.	WGS1984 Complex UTM Zone 30N
	Quality and adequacy of topographic control.	Not applicable no drilling is being reported
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	The core holes from which the concentrate was prepared were drilled within the shell of the resource model. Holes where spaced throughout the deposit so as to give a representative sample.

Criteria	JORC Code explanation	Certified Person Commentary
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Not relevant as results of metallurgical test work on a concentrate sample are being reported. The concentrate sample was prepared from drill core samples representative of the deposit
Sample security	The measures taken to ensure sample security.	The concentrate sample was prepared and placed into two plastic bags labeled "Cleaner Conc 10" by Metallurgy Pty Ltd in Welshpool, Perth and air freighted to ProGraphite GmbH in Germany. ProGraphite did not report any issues with the packaging or material when it was delivered to their laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No reviews or audits of the sampling for the concentrate sample, or technical results were undertaken.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Certified Person Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Work was completed on PL 10/47 which is held 100% by Kambale Graphite Limited, a Ghanaian registered company 100% owned by Castle Minerals Limited. The licence contract has been issued by MINCOM, executed by KGL, all statutory payments made and executed by the Minister who administers Ghana's Mining Act. The Government of Ghana has the right to acquire a 10% free carried interest in all licences and is entitled to a 5% gross profit royalty on mineral production. There are no other encumbrances on the title. The project is on traditional lands on the outskirts of the provincial city of Wa. Much of the project area is under cultivation by subsistence farmers. Prior to undertaking works the Company negotiated suitable compensation arrangements with traditional owners and farmers for any disturbances created by the Company and upon completion rehabilitated the holes, drill sites and access ways.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The licence is considered to be secure and in good standing (refer above).
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Graphite mineralisation on the licence was initially discovered by geologists in the 1960's exploring for manganese. Work was restricted to trenching. In 2012 Castle Minerals completed air core and RC drilling programmes specifically testing the graphite occurrences on the licence and completed preliminary metallurgical test work on the ores. A maiden resource was released on the 24/07/2012 based on 54 air core and 3 RC drill holes. Due to increased interest in graphite the Company commenced re-evaluating exploration on the project in 2021. A programme of trenching and bulk sampling was completed, and detailed metallurgical

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		test work completed, the results of which were announced on 05/08/2021. The Company completed a HLEM ground geophysical survey in 2022. An initial RC programme of 52 drill holes was completed in July 2022 targeting conductor plates identified by the HLEM survey was completed. A further programme of 4 diamond drilling and 30 infill RC holes were completed in December 2022. Core from the diamond drill programme was sampled and used for test work to produce a bulk fine flake graphite concentrate. A Mineral Resource Estimate based on the RC and diamond drilling, completed in December 2022, was finalised in April 2023. A further 43 RC drill holes for 5,335m was completed infilling gaps and extending the resource model which was finalised in June 2023. An upgraded Mineral Resource Estimate incorporating the June 2023 drilling was finalised in October 2023.
Geology	• Deposit type, geological setting, and style of mineralisation.	The Kambale project lies within Paleoproterozoic supercrustal and intrusive rocks of the Birimian Supergroup (ca 2195-2135Ma). The licence area is underlain by metamorphosed volcanic, pyroclastic and sediments of the Upper Suite of the Middle Birimian suite. Granitoids of the Cape Coast Suite have intruded metasediment sequences. Close to the contact the metamorphic grade is amphibolite dropping to upper greenschist away from the contact. The precursor rocks to the graphite schist are believed to be carbonaceous shales of the Middle Suite that have been metamorphosed due to the intrusion of the granitoid.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No drill assay results are being reported in this release. All drill collar information has been released including holes that did not encounter graphite mineralisation.

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Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	No drill assay results are being reported in this release.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg. 'down hole length, true width not known').	No drill assay results are being reported in this release.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Diagrams not relevant to this release.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No drill or exploration results are being reported
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The Company has previously undertaken preliminary metallurgical test work on sub-surface oxidised graphite material which indicated a suitable grade concentrate can be achieved. It also examined flake size, gangue inclusions and other physical properties not measured by TGC assays that can have a significant bearing on economic value of graphite. Battery anode test work to achieve a purified graphite concentrate ("SPG") was completed by ProGraphite GmbH in Germany and reported in ASX release 5 February 2024. The concentrate (refer ASX release 18 September 2023) underwent various pre-treatments to obtain a thorough characterisation of the material. It was then micronised using an impact mill to generate a relatively uniform particle size range ahead of the spheronisation process where the fine graphite flakes are moulded in a special mill into rough sphere-shaped masses - SPG. This is to increase carbon density, packing density and to maximise battery charge capacity. ProGraphite used a alkaline, caustic soda based purification process which achieved a 99.97%LOI purity. Kambale SPG was subsequently provided by ProGraphite to an accredited laboratory in Germany to asses its electrochemical performance and other

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		physical attributes pertaining to its possible use as battery anode material. A purified electrode was prepared. Water-based slurries were prepared containing 95.8 wt% graphite active material(uPSG), 1wt% conductive carbon black Super C65 (Imerys, France), 1wt% sodium carboxymethyl cellulose (Sunrose Na-CMC, Nippon Paper Industries Co., Ltd., Japan), and 2wt% styrene-butadiene rubber (SBR,Nippon Zeon, Japan). Water was added to obtain a solid content of 51wt%. The final slurry was then coated onto a copper foil (11 µm, Gelon LiB Group, China) using an automatic gap bar coater (RK Print-Coat Instruments, UK). The coatings were dried at room temperature in ambient air for 3hrs. The areal capacity was 1.7 ± 0.1mAh cm-2 (based on 372 mAh g-1). A test cell was then prepared. Electrode disks were prepared using a hand-held punch (Nogamigiken, Japan) with a diameter of 10.95mm. Electrodes were dried under a dynamic vacuum at 120°C overnight. Cells were assembled in a Swagelok® T-Cell setup with the respective graphite electrodes as working electrodes, a lithium metal (Rockwood Inc., USA) counter, and a reference electrode. Two glass fiber (VWR, USA) separators were used between the working and counter electrode with 60µL of electrolyte, being 1M LiPF6 in ethylene carbonate and ethyl methylcarbonate(EC:EMC) in a weight ratio of 30:70 wt% with an additional 2 wt% vinylene carbonate (VC), abbreviated as LP572 electrolyte (Gotion Inc., China). An additional separator to the lithium reference was soaked with 30 µL LP572. Rate performance tests were performed at a battery cycler (Series 4000, Maccor, USA) in a climate chamber (Binder, Germany) at 25 °C. The rate test was performed between 10 mV to 1.5 V vs. Li+/Li.
Further work	• The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The Company has commenced a high level study to identify a preferred and optimal development option to enable, all things considered, commercialisation of the Project. This will also include a gaps analysis which will underpin a seamless transition into a series of higher confidence development assessments.