

Excellent High-Grade Continuity Confirmed at Kambale Graphite Project

Maiden JORC 2012 Resource Estimate on Schedule for end-March 2023

Phase 2 Metallurgical Test Work Progressing

Highlights

- Excellent continuity of multiple, wide, high-grade, near-surface graphitic schist lenses confirmed by recently completed 30-hole, 2,622m infill RC and 4-hole, 365.2m diamond core drilling campaign.
- Better intercepts, including some of the best ever obtained at Kambale, include:

Hole	Width	Total Graphitic Carbon	From
22CKRC055	41m	5.8%	97m
22CKRC058	17m	13.4%	18m
22CKRC059	34m	8.7%	9m
22CKRC060	43m	8.7%	35m
22CKRC061	58m	12.0%	37m
22CKRC062	69m	10.3%	62m
22CKRC065	42m	11.1%	54m
22CKRC066	34m	10.3%	96m
22CKRC070	11m	16.9%	36m
22CKRC070	3m	23.9%	41m
22CKRC071	39m	10.6%	34m
22CKRC074	50m	10.7%	14m
22CKRC075	23m	17.1%	74m
22CKDD002	25m	12.9%	73m
22CKDD004	23m	12.3%	83m

5% TGC cut-off. 2m max internal dilution. Not true widths. Refer Table A and Table B for all results.

- At least 10 distinct, robust, high-grade graphitic schist zones identified.
- Maiden JORC 2012 Mineral Resource estimate scheduled for end Q1 2023.
- Reconnaissance mapping underway to identify additional graphite occurrences in the region.
- Test work progressing with the initial objective of producing a bulk graphite concentrate of commercially acceptable specifications.
- Scoping Study expected to commence Q2 2023.

Castle Managing Director, Stephen Stone commented ***“The excellent continuity of high-grade zones within the broader 2.5km long Kambale graphite deposit has been confirmed by the recently completed, 30-hole, 2,662m RC infill and 4-hole, 365.2m diamond core drilling campaign.***

Many holes returned impressive, multiple, thick, high-grade intercepts, several of which are the best yet obtained. These included 58m at 12.0% TGC (22CKR061), 69m at 10.3% TGC (22CKR062), 11m at 16.9% TGC (22CKR070) including 3m at 23.9%, 50.0m @ 10.7% TGC (22CKRR074), 23m at 17.1% TGC (22CKR075) and 25m at 12.9% TGC (22CKDD002).

The drill data is now in the hands of independent geologists who are on schedule to deliver a maiden JORC 2012 Mineral Resource estimate by the end of this month.

Test work aimed at producing a bulk concentrate of commercially acceptable specifications is also well underway in Perth.

The fast-track approach being undertaken at Kambale recognises that China dominates world graphite production and especially Battery Anode Material supply upon which most of the world’s gigafactories are almost totally reliant. China’s burgeoning electric vehicle market means it will require an increasing proportion of its production to meet internal demand.

This is propagating increasingly fierce international competition to secure non-China dependent, geostrategic, reliable and sustainable sources of graphite, which accounts for more than 30% of an EV battery’s content.

Graphite’s “Critical Mineral” status amongst those nations striving to achieve legislated clean energy objectives has become clearly evident.

Kambale is emerging as a credible and well-timed graphite project ultimately aiming to service the expected surging demand and looming supply deficit.”

Next key steps at Kambale

- 1. Deliver a JORC 2012 Mineral Resource estimate by end Q1 2023;**
 - 2. Receive Phase 2 test work results and preliminary process flow sheet design Q2 2023;**
 - 3. Provide a bulk concentrate sample generated by current test work to Germany-based specialist consultants for evaluation of its capability to produce Battery Anode Material (“BAM”);**
 - 4. Commence ESG benchmarking;**
 - 5. Undertake a high-level project development scoping study;**
 - 6. Secure an end-user offtake / project development partner; and**
 - 7. Close up drilling and upgrade Mineral Resource.**
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Explorer and project incubator, Castle Minerals Limited (ASX: CDT) (“Castle” or the “Company”) advises that at least ten robust lenses of graphitic mineralisation containing high-grade zones with excellent continuity have been confirmed by a 30-hole, 2,622m RC infill and 4-hole, 365.2m diamond core drilling campaign at the rapidly emerging Kambale Graphite Project, Ghana (“Project”)(Figs 1, 2 and 3)(Tables A and B).

Many holes returned impressive, multiple, thick, high-grade intercepts including 58m at 12.0% TGC (22CKR061), 69m at 10.3% TGC (22CKR062), 11m at 16.9% TGC (22CKR070) including 3m at 23.9%, 50m @ 10.7% TGC (22CKRR074), 23m at 17.1% TGC (22CKR075) and 25m at 12.9% TGC (22CKDD002).

Fig 2: Section A; 1,112,200mN

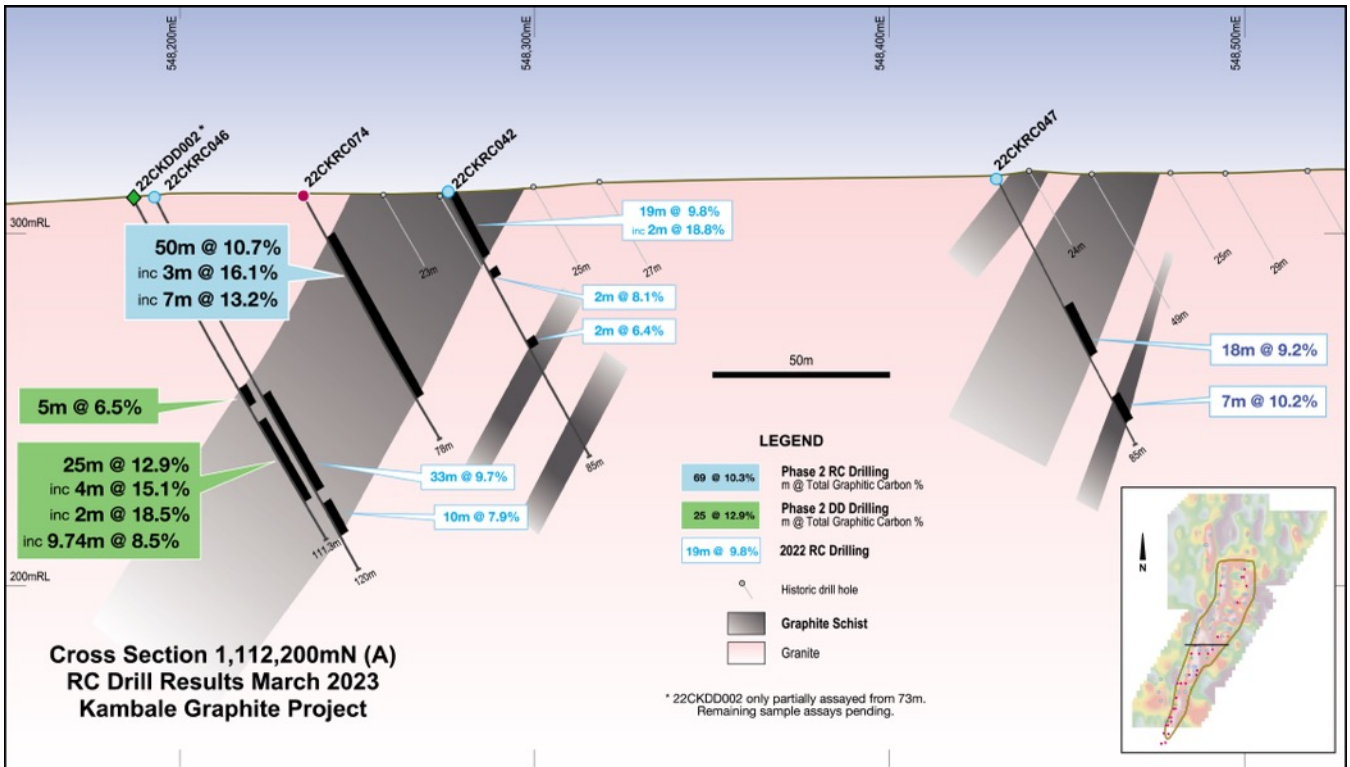
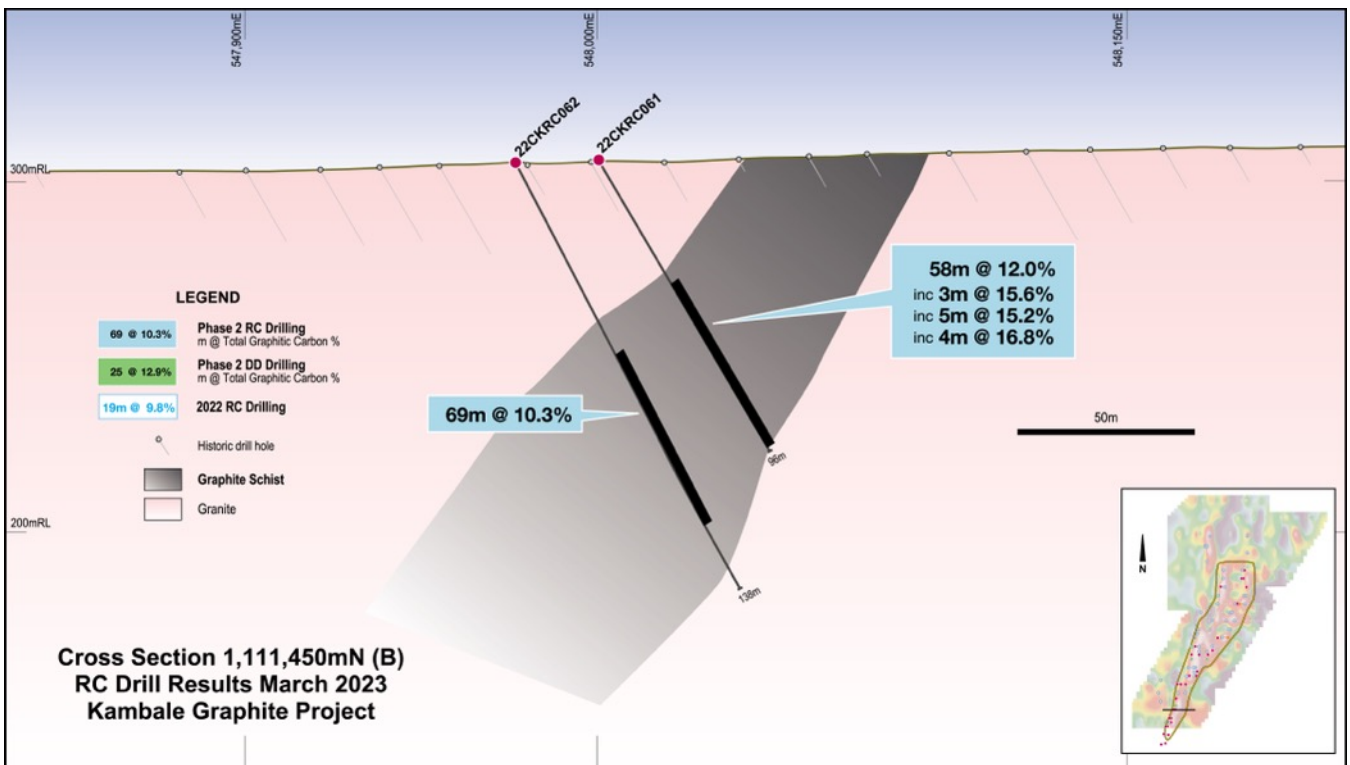


Fig 3: Section B: 1,111,450mN



The lenses, which extend from surface to at least 100m depth, can now be clearly delineated and will form the basis for a maiden JORC 2012 Mineral resource estimate expected to be complete by end-March 2023.

Kambale is emerging as a credible flagship deposit of quality, dominantly fine-flake graphite justifying the fast-track evaluation adopted by Castle over the past twelve months. This is in response to the widely forecast and looming supply deficit expected for this “Critical Mineral” as the World rushes to meet its clean energy ambitions.

The latest rounds of RC and diamond drilling follow completion of:

- a ground electromagnetic HLEM survey that identified several conductor plates expected to be correlated with graphitic schist mineralisation already known to be present in the area from former trenching and RAB drilling (refer ASX release 31 March 2022);
- a prior maiden 52-hole, 5,353m RC drill program that successfully confirmed the correlation between the HLEM conductor plate targets and graphitic mineralisation and which also demonstrated that the overall foot print of the deposit extends at least 2.5km north-south over a combined width of up to 0.5km (refer ASX release 3 November 2023); and
- 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 (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.

Expanding Kambale’s footprint

The recent drilling has also provided a much better understanding on the geological and structural controls of the graphite mineralisation. This will greatly assist continuing efforts to expand the deposit’s local footprint but also regionally within the 149km² Kambale prospecting licence.

A regional mapping campaign is underway guided also by historical reports and maps which have highlighted a broad northwest trending corridor of primary interest.

Test work progressing

Four diamond core holes drilled to provide a 300kg representative sample for Phase 2 metallurgical test work at the Metallurgy Pty Ltd owned laboratory, Perth, also confirmed the integrity of the RC holes which they were designed to twin.

The test work will comprise a series of beneficiation, flotation and grinding cycles on composited core aimed at producing a bulk quantity of as near-to commercial grade fine flake graphite concentrate as possible.

This concentrate will then be transported to a specialist laboratory in Germany to determine its suitability to be upgraded into Battery Anode Material to be used in electric vehicle lithium-ion battery manufacturing. The concentrate will be assessed for its ability to be micronised, spheronised, purified and then coated along with several other critical performance parameters.

Summary of diamond core metallurgical drill hole intercepts*

Hole	Width	Total Graphitic Carbon	From
22CKDD001*	16m	12.1%	27m
22CKDD002*	25m	12.9%	73m
22CKDD003*	13m	12.0%	44m
22CKDD004*	23m	12.3%	83m

*Assays have only been received for core selected for metallurgical test work. Assays for the remainder of the intercepts are awaited.



Diamond core samples laid out in January 2023 at the Metallurgy Pty Ltd laboratory for inspection and compositing ahead of test work

Scoping study

Subject to the success of test work, the Mineral Resource estimate and other related studies along with commercial factors, it is intended that a development Scoping Study will commence in Q2 2023.

Streamlining of project portfolio

Consistent with its incubator strategy, Castle has successfully generated and acquired several quality early-stage opportunities and advanced these to a stage where drill targets for a variety of metals have been identified. To facilitate a more focused application of management resources and funds, the Company has commenced farm-out discussions with several parties.

KAMBALE PROJECT BACKGROUND

The Kambale graphite deposit was identified in the 1960s by Russian geologists prospecting for manganese. They undertook a program of trenching and drilled 25 holes to a maximum depth of 25m.

The mineralisation consists of north-east trending, sub-parallel zones of meta-sediment which is host to the graphitic schists. The Lower Proterozoic Birimian (~2.2Ma) meta sedimentary rocks, namely phyllites, and quartz - biotite schists, generally trend north-easterly and dip between 50° and 75° to the north west. The schists are hosted mainly in granodiorite.

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 the characteristic fine crystalline layers.

Castle reviewed the historical work and a wide-spaced, regional-scale electromagnetic survey dataset inherited from previous licence holder, Newmont Limited. This work outlined a roughly elongate, north-south orientated, ~10km-long region considered prospective for graphitic schist horizons which may host multiple lenses of graphite mineralisation, similar to what is already outlined from drilling and trenching at Kambale. These lenses or horizons can vary in length and be up to 50m wide, creating substantial deposits of graphite.

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). Mapping noted occasional outcrops of manganese and graphitic schist as well as graphite in termite mounds.

In 2012 Castle undertook a very limited program 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.

In September 2021 Castle's new management team reported that preliminary test work on sub-optimal near-surface, weathered graphitic schists yielded very encouraging fine flake graphite concentrate grades of up to 96.4% and recoveries of 88%. A conventional multiple grind and flotation concentration flowsheet was used. Three excavated and composited samples provided for the test work graded 12.56%, 16.09% and 17.16% total carbon.

In March 2022, a ground electromagnetic (HLEM) survey demonstrated a strong correlation between drill confirmed graphite mineralisation and zones of high conductivity. Several high conductivity zones extending well outside of the existing Inferred Resource boundary were highlighted indicating the possibility of extensions of the known graphitic schists into sparsely or undrilled areas.

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

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.

The Exploration Target confirmed that the Kambale represents a credible graphite deposit and provided added impetus for the accelerated evaluation approach now being taken.

Logistics and infrastructure

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. An alternative international port at Sekondi - Takoradi is located approximately 230km west of Accra.

The Wa region has an excellent infrastructure comprising a commercial airport with daily flights, reliable grid power supplied partly by a hydroelectric dam at Bui, river (Black Volta River) and artesian water and many other useful services.

Ghana

Ghana has a well-established mining industry including several Tier-1 mining operations. It is now Africa's largest gold producer and the World's sixth largest and accordingly 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 Westminster system and has a workable Mining Act and fiscal regime.

Social licence

Castle management has spent over 14 years successfully operating in Ghana and in particular its Upper West region. The Company has established an excellent reputation for its pro-active commitment to community engagement, local employment and training, the promotion of youth and women's development initiatives, maintaining the highest environmental operating standards and overall operating ethically and sustainably whilst carefully managing community expectations.

Prior to embarking on any specific exploration program the Company's Ghanaian team conducts comprehensive discussions with all stakeholders to fully inform them as to the Company's activities and to identify sites of cultural, religious, social and economic sensitivity and to appropriately mitigate any matters of concern. Compensation for access and any disruptions caused is provided at a minimum as per Ghana Mining Act guidelines. All site disturbances are rehabilitated immediately after use and in close consultation with landowners.

Graphite market

The graphite market is diverse across industrial, metallurgical, chemical and specialised areas with each sector requiring graphite concentrates with 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 graphite concentrates market is one of escalating demand and a looming supply deficit driven in particular by its use in the fast-growing EV battery and stationary power storage sectors. At present, there is no viable substitute for graphite.

There is an increasing proportion of natural graphite, over high CO₂ generating synthetic graphite, being used in battery anode manufacture which also requires a fine flake graphite as the primary raw material. Hence, prices for fine flake graphite concentrates have shown a steady upwards trend in the past year.

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
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 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
Encouraging Graphite Test Work Results	21 September 2021

Headline	Date
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 comprises the **Withnell**, **Terra Rossa** and **Tableland** sub-projects with the Withnell licence 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 are east of the Thaduna copper deposit.

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

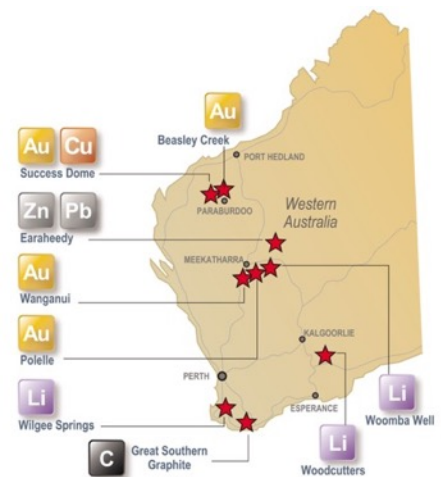
The **Success Dome** project lies in the Ashburton structural corridor midway between the Paulsen's and Ashburton gold deposits and is prospective for gold and base metals.

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 and possibly base metals whilst its partner , **Wanganui** project, is prospective for down-plunge high-grade gold shoots.

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 southeast of the Bald Hill lithium mine and 25km northwest of the Buldania lithium deposit. The **Woomba Well** project will also be evaluated for lithium bearing pegmatites.

The **Great Southern Graphite** project comprises 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.

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 to be held by Castle’s 100% owned Ghana based subsidiary, Kambale Graphite Limited. All invoiced statutory amounts for the issue of the Kambale Prospecting Licence following its conversion from a Retention Licence have been paid to and received by Ghana MINCOM, with the final executed licence contract now awaiting Ministerial sign-off.

Table A: Drill Hole Collar Information

DH Hole	North	East	RL	Total Depth (m)	Azimuth	Dip
22CKDD001	1112052.84	548369.32	317.26	70	90	-60
22CKDD002	1112198.46	548186.53	309.08	111.3	90	-60
22CKDD003	1112055.41	548191.66	312.97	70	90	-60
22CKDD004	1111500.14	548001.93	306.87	113.9	90	-60
22CKRC053	1111050.95	547883.07	310.69	60	90	-60
22CKRC054	1111153.35	547915.88	308.27	78	90	-60
22CKRC055	1111164.48	547864.18	307.18	144	90	-60
22CKRC056	1111251.97	547905.72	304.77	93	90	-60
22CKRC057	1111251.13	547886.92	304.71	126	90	-60
22CKRC058	1111301.58	547952.14	303.38	57	90	-60
22CKRC059	1111351.34	547951.75	302.88	60	90	-60
22CKRC060	1111350.82	547926.38	302.56	83	90	-60
22CKRC061	1111452.64	548000.34	305.90	96	90	-60
22CKRC062	1111451.79	547976.63	305.44	138	90	-60
22CKRC063	1111582.07	548009.30	308.54	102	90	-60
22CKRC064	1111752.88	548120.23	312.84	84	90	-60
22CKRC065	1111752.57	548065.60	311.79	108	90	-60
22CKRC066	1111751.47	548022.93	310.85	144	90	-60
22CKRC067	1111849.14	548247.86	316.54	54	90	-60
22CKRC068	1111849.41	548163.59	314.41	80	90	-60
22CKRC069	1111903.88	548257.74	316.65	60	90	-60
22CKRC070	1112150.58	548439.56	318.09	54	90	-60
22CKRC071	1112098.72	548382.70	316.93	80	90	-60
22CKRC072	1112098.45	548280.19	313.11	73	90	-60
22CKRC073	1112100.07	548188.85	311.62	84	90	-60
22CKRC074	1112199.25	548234.70	310.09	78	90	-60
22CKRC075	1112297.09	548497.68	315.09	114	90	-60
22CKRC076	1112700.84	548727.94	316.52	114	90	-60
22CKRC077	1112898.46	548838.13	312.71	66	90	-60
22CKRC078	1112902.50	548532.30	307.41	90	90	-60
22CKRC079	1113001.53	548796.81	310.17	66	90	-60
22CKRC080	1113002.33	548779.62	309.40	84	90	-60
22CKRC081	1113096.89	548815.65	310.87	62	90	-60
22CKRC082	1111039.74	547835.09	310.58	90	90	-60

Table B: Assay results from 30-hole, 2,622m RC and 4-hole DDH drilling program.
(5%TGC cut-off. 2m max internal dilution)

(NB: Diamond holes 22CKDD001 – 22CKDD004 twinned pre-existing RC holes and were drilled primarily to obtain metallurgical samples. Assays have only been received for core selected for metallurgical test work. Assays for the remainder of the intercepts are awaited).

Hole Number	From (m)	To (m)	Width (m)	TGC%
22CKDD001	27	43	16	12.1
incl.	28	32	4	13.8
and	37	39	2	16.3
and	48	53	5	8.7
22CKDD002	63	68	5	6.5
and	73	98	25	12.9
incl.	77	81	4	15.1
and	86	88	2	18.5
and	93	95	2	17.3
and	101.26	111	9.74	8.5
22CKDD003	44	57	13	12.0
incl.	50	53	3	15.2
22CKDD004	83	106	23	12.3
incl.	85	94	9	14.4
22CKRC053	No Significant Results			
22CKRC054	34	36	2	5.9
and	49	59	10	7.3
and	67	75	8	8.0
22CKRC055	60	64	4	6.5
and	97	138	41	5.8
and	141	144	3	6.0
22CKRC056	25	27	2	8.7
and	30	35	5	6.2
and	51	62	11	5.2
and	65	79	14	10.3
and	83	85	2	6.4
22CKRC057	49	53	4	6.1
and	74	83	9	5.8
and	86	97	11	8.8
and	102	105	3	4.6
and	112	123	11	5.2
22CKRC058	1	12	11	6.9
and	18	35	17	13.4
22CKRC059	9	43	34	8.7
22CKRC060	35	78	43	8.7
22CKRC061	37	95	58	12.0
incl.	54	57	3	15.6
incl.	70	75	5	15.2
incl.	83	87	4	16.8
22CKRC062	55	59	4	7.2
and	62	131	69	10.3
22CKRC063	42	57	15	6.1
and	76	94	18	11.0
incl.	81	88	7	13.4
and	97	102	5	6.4

Hole Number	From (m)	To (m)	Width (m)	TGC%
22CKRC064	2	18	16	8.1
incl.	4	6	2	15.9
and	22	25	3	8.0
and	35	61	26	9.5
and	64	68	4	6.3
and	75	80	5	6.9
22CKRC065	54	96	42	11.1
incl.	54	57	3	16.9
incl.	60	63	3	17.6
incl.	66	68	2	16.3
incl.	71	73	2	16.7
and	99	105	6	7.4
22CKRC066	82	93	11	10.5
and	96	130	34	10.3
incl.	112	119	7	13.1
and	135	139	4	13.1
22CKRC067	10	25	15	7.0
and	29	36	7	6.2
22CKRC068	11	27	16	8.5
and	52	67	15	8.7
and	70	72	2	6.8
22CKRC069	6	9	3	9.1
and	14	18	4	4.5
and	21	28	7	6.9
and	31	54	23	8.3
22CKRC070	8	30	22	9.5
and	34	45	11	16.9
incl.	36	44	8	19.5
incl.	41	44	3	23.9
22CKRC071	8	10	2	7.7
and	19	22	3	5.0
and	34	73	39	10.6
incl.	66	71	5	15.8
22CKRC072	3	9	6	7.8
and	27	46	19	9.3
22CKRC073	8	36	28	10.9
incl.	34	36	2	15.8
	67	83	16	11.2
22CKRC074	14	64	50	10.7
incl.	16	19	3	16.1
incl.	48	55	7	13.2
22CKRC075	74	112	38	14.2
incl.	74	97	23	17.1
22CKRC076	87	112	25	9.3
22CKRC077	No Significant Results			
22CKRC078	1	16	15	6.9
and	21	24	3	9.0
and	75	81	6	4.9
22CKRC079	37	64	27	7.0
22CKRC080	No Significant Results			
22CKRC081	4	8	4	5.2
22CKRC082	No Significant Results			

Kambale Graphite Project RC Drilling (Commenced Nov 2022. Completed Dec 2022)

Appendix: JORC Code 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Certified Person Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be simple (e.g., 'reverse circulation drilling was used to obtain 1 m 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. 	<p>For RC drilling only intervals visually logged as graphite schist were submitted for analysis. Host rock lithologies were not submitted for TGC analysis. For diamond hole drilling ("DDH") only intervals to be submitted for metallurgical analysis were submitted for analysis.</p> <p>The sampling for the RC drilling was completed in a uniform 1 metre interval and for the diamond drilling the samples were predominately sampled at 1 metre intervals. The sampling methods employed are standard industry practice and were supervised by qualified and experienced geological personnel employed by Castle Minerals.</p> <p>Reverse circulation drilling produced samples that were collected at 1 metre intervals using a riffle splitter to produce an approximate 3kg sample which is considered representative of the full drilled metre. Surplus sample material was collected in a separate plastic bag for reference.</p> <p>Diamond drilling was predominately HQ diameter, The diamond holes were primarily drilled for metallurgical samples and twinned existing RC holes. Only intervals of core that were sent for metallurgical testing were analysed. The core was cut in half with one half bagged in 1 metre intervals for metallurgical test work. The remaining half was quarter cored with one quarter bagged in 1 metre intervals identical to the samples collected for metallurgy. This produced approximately 2 kg of material, which is considered representative of the metre drilled. The remainder was kept for reference.</p>
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g., 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.). 	<p>The drilling completed in the 2022 program utilised a Sandvik DE820 multipurpose track mounted rig supplied by GTS Drilling Limited. The drilling was completed with a 110mm face sampling hammer.</p> <p>DD holes were drilled from surface. Holes were collared in PQ and once stable ground was intersected reverted to HQ diameter core.</p>
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>RC drill sample recoveries were considered good, with the majority of the samples remaining dry.</p> <p>Recoveries for the DD holes were recorded for each core run. The average core recovery over the four holes was 98% which is considered excellent.</p> <p>In the RC drilling, the cyclone and sample hose were regularly purged and cleaned during drill operations in order to minimize contamination.</p> <p>For DD holes core runs were shortened to ensure good recoveries.</p> <p>There does not appear to be a relationship between sample recovery and grade.</p>

Criteria	JORC Code explanation	Certified Person Commentary
Logging	<ul style="list-style-type: none"> 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. 	<p>Geological logging of the drill chips and drill core were completed by a qualified geologist using a company standard logging code. The logging included descriptions for on color, lithology, mineralogy, structure, grain size, alteration, alteration intensity, weathering.</p> <p>RC logging is considered to be semi qualitative, given the nature of the rock chip fragments. DD drilling is considered to be qualitative.</p> <p>Chip trays were collected for each RC hole and photographed. Drill core was photographed prior to cutting.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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 insitu 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. 	<p>Drill core was cut into quarters and each used for sampling. For RC samples sent for assay, samples were run through a 3-way sample splitter with a 2- 3 kg sample collected and the remainder placed in the bulk sample bag.</p> <p>Quality Control and Quality Assurance procedures implemented to check sampling and assay precision included duplicate samples using the same subsampling method, blanks, and Certified Reference Material which were inserted in the sample stream on site. In addition, internal laboratory checks including repeats, blanks and CRM standards were completed by the contract laboratory.</p> <p>Samples from the RC and DD drilling were sent to Intertek Laboratory's in Ghana for sample preparation before being air freighted to Intertek Perth for analysis. Samples were prepared by drying, crushing and pulverizing to a nominal 85% passing <75 microns. A 30 – 50g and a 250g sub samples were collected in paper geochemical bags. The smaller sample was for analysis and the larger sample stored in reserve. .</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<p>For the 2022 drill programs Intertek Laboratories analysis was of Total Graphitic Carbon ("TGC"), and Sulfur ("S").</p> <p>S analysis is performed in an induction furnace analysed by Infrared spectrometry, laboratory code CSA.</p> <p>TGC is calculated by driving off other forms of carbon. The sample is dissolved in HCl to remove CO₃. The remaining residue is collected in filter paper and dried in an oven at 420° to remove remaining organic carbon. The dried sample contains only carbon bearing material which analysed by Infrared Spectrometry Laboratory sample code C73/CSA for TGC not applicable.</p> <p>A program of field duplicates (1 in 20 samples), blanks (1 in 50 samples) and CRM standards (1 in 50 samples) were inserted into the sample stream in the field.</p> <p>Checks on the QAQC results revealed no significant issues.</p> <p>No umpire laboratory checks have been undertaken.</p>

Criteria	JORC Code explanation	Certified Person Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<p>No independent or alternative company has been engaged to verify the results.</p> <p>Four diamond holes, which were drilled to collect metallurgical samples, twinned existing RC holes where the TGC results were known. For the diamond holes only the interval submitted for metallurgical analysis was analysed. The correlation of major geological contacts and geochemistry were considered good.</p> <p>Data on collar position, sampling intervals and drill hole lithology were recorded in the field on a standard office excel worksheet in. The data was updated to a cloud server for security. The field data was sent to the company's contract database manager who collated and validated the data into a relational database maintained by the contractor.</p> <p>No adjustment has been made to assay data.</p>
Location of data points	<ul style="list-style-type: none"> 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. 	<p>The location of drill collars was recorded by hand-held GPS on completion of the hole by the rig geologist. At the conclusion of the drill program the location of all drill collars were recorded by an independent survey contractor using a DGPS recorder.</p> <p>For the RC and DD holes drilled in 2022, downhole surveys were completed with a Ezitrack survey tool supplied by the drill contractor.</p>
Location of data points Data spacing and distribution	<ul style="list-style-type: none"> Specification of the grid system used. Quality and adequacy of topographic control. 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. 	<p>Data locations are supplied in WGS84 datum, UTM Zone 30N projection.</p> <p>A Drone LIDAR survey over the entire Kambale Prospect was undertaken by a licensed surveyor.</p> <p>Drilling has been completed on E-W drill lines spaced between approx. 100m and 200m apart which is approx. perpendicular to the strike of the mineralisation. Along the lines, holes have targeted specific graphitic shears to intersect the shear between 40m and 100m below surface.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of 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. 	<p>Ground HLEM survey undertaken by the Company in 2022 defined a series of conductor plates across the Kambale area. Drilling has shown that many of these conductor plates define graphitic shears. Drilling has been completed perpendicular to the strike of these plates in order to obtain a representative sample across the horizon.</p>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<p>RC drill samples were removed daily from the field and stored at the Company's field house at Wa. Diamond core was transported to the Company house for logging and photography. Intervals for cutting were transported to a nearby core processing facility for cutting and sampling which was completed by Company personnel.</p> <p>Samples were aggregated in bulka-bags and picked up from the Wa facility by Intertek personnel and transported to the Intertek sample preparation facility at Tarkwa Ghana. After sample preparation was completed, Intertek organized for a commercial freight company to pick up the pulp samples and deliver them</p>

Criteria	JORC Code explanation	Certified Person Commentary
		to the Intertek Laboratory facility in Maddington Western Australia. No discrepancies in sample numbers, or lost sample have been recorded.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	No independent audits of the current program were undertaken. The Company had previously engaged consultant to review procedures for the earlier drill programs and no major issues were reported.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Certified Person Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<p>Work was completed on PL 10/47 which is to be held 100% by Kambale Graphite Limited, a Ghanaian registered company 100% owned by Castle Minerals Limited. The licence is a conversion of a Retention Licence and the licence contract has been issued by MINCOM, executed by KGL, all statutory payments made and is awaiting the signature of the Minister who administers the country’s Mining Act.</p> <p>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.</p> <p>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.</p>
	<ul style="list-style-type: none"> 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 a conversion to a Prospecting Licence from an original Retention Licence and is considered to be secure and in good standing (refer above).
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>Graphite mineralisation on the tenement was initially discovered by geologists in the 1960’s exploring for manganese. Work was restricted to trenching. In 2012 Castle Minerals completed programs of air core and RC drilling specifically testing the graphite occurrences on the tenement 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.</p> <p>Due to increased interest in graphite the Company commenced re-evaluating exploration on the project in 2021. A program of trenching and bulk sampling was completed, and detailed metallurgical test work completed, the results of which were announced on 05/08/2021.</p> <p>The Company completed a HLEM ground geophysical survey in 2022. An initial RC program of 52 drill holes was completed in July 2022 targeting conductor plates identified by the HLEM survey was completed.</p> <p>Based on the interpretation of the HLEM and RC drill results, the 2012 Inferred Resource was considered</p>

Criteria	JORC Code explanation	Certified Person Commentary
		<p>outdated and an Exploration Target for the Kambale Deposit was estimated by an independent geologist.</p> <p>A further program of 4 DD and 30 infill RC holes were completed in December 2022.</p> <p>Core from the diamond program is currently undergoing metallurgical test work.</p>
Geology	<ul style="list-style-type: none"> • Deposit type, geological setting, and style of mineralisation. 	<p>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.</p> <p>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.</p>
Drill hole Information	<ul style="list-style-type: none"> • 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. 	<p>All drill collar information has been released including holes that did not intersect graphite mineralisation.</p>
Data aggregation methods	<ul style="list-style-type: none"> • 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. 	<p>Sampling was completed on standard 1m intervals (except for one DD interval). For the purposes of reporting results, a lower- ut-off grade of 5% TGC was selected. Internal waste was included with no more than two consecutive metres of material below 5% TGC included in the calculation. Multiple zones of internal waste could be included in a reported intersection provided the average grade of the intersection was above 5% TGC.</p> <p>No metal equivalent values are reported.</p>

Criteria	JORC Code explanation	Certified Person Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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'). 	<p>Any drill intersections reported are downhole intervals The graphite units are interpreted to strike roughly north south and dip 50°-70° to the west Holes were drilled perpendicular to the assumed strike of the graphite schist units at a dip of -60 to provide a representative intersection of the graphite bearing material.</p>
Diagrams	<ul style="list-style-type: none"> • 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. 	<p>Appropriate maps are provided in the body of the report.</p>
Balanced reporting	<ul style="list-style-type: none"> • 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. 	<p>All holes drilled in the program, including holes that failed to intersect graphite mineralisation or returned intersections below cut off grades, have been reported.</p>
Other substantive exploration data	<ul style="list-style-type: none"> • 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. 	<p>The Company has completed a surface Horizontal Loop Electromagnetic survey over the area to define graphite schist units. The Company has done preliminary metallurgical test work on oxides graphite ores which indicate a suitable grade concentrate can be achieved, however further work is required to determine what material can be economically exploited. Factors including flake size, gangue inclusions in the ores and other physical properties not measured by TGC assays have a significant bearing on economic value of graphite.</p>
Further work	<ul style="list-style-type: none"> • 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. 	<p>The Company has in process a program of metallurgical test work of drill core samples collected from the 2022 drill program. This work will be released to the ASX when results are received.</p> <p>Once results of the metallurgical test work are known further infill and extensional RC and DD drilling will be completed to expand and improve confidence in the deposit.</p>