

Additional High-Grade Intercepts at Kambale Graphite Project Including 55m at 12.6% TGC and 8m at 17.2% TGC

- Additional multiple, wide, high-grade, near-surface intercepts from initial 22 holes of recent 43-hole RC drilling campaign.
- Campaign designed to increase drill density of newly discovered mineralisation to enable its inclusion into an upcoming Mineral Resource Estimate (“MRE”) update.
- Mineralisation extends for 2.5km and to >120m depth with excellent grade continuity.
- Metallurgical test work to produce a bulk fine flake concentrate meeting commercial specifications is nearing completion with Scoping Study to commence later in 2023.
- **Highlights include: 55m at 12.6% TGC** from 11m incl. **14m at 15.4% TGC** from 43m (23CKRC083), **18m at 12% TGC** from 14m incl. **8.0m at 17.2% TGC** from 18m (23CKRC086), **34m at 11.1% TGC** from 121m incl. **10m at 14.0% TGC** from 137m (23CKRC092) and **27m at 10.7% TGC** from 39m incl. **5m at 16.7% TGC** from 49m (23CKRC100):

Table 1: Better intercepts from first 22 of 43 RC holes

Hole Number	Width	Total Graphitic Carbon	From
23CKRC083	55m	12.6%	11m
and	3m	19.0%	25m
also	14m	15.4%	43m
23CKRC086	18m	12.0%	14m
incl	8m	17.2%	18m
23CKRC088	39m	8.5%	40m
incl	7m	13.1%	54m
23CKRC089	20m	9.3%	25m
23CKRC090	10m	12.8%	1m
incl	4m	15.2%	4m
also	19m	7.7%	102m
23CKRC092	34m	11.1%	121m
incl	10m	14.0%	137m
23CKRC096	19m	7.8%	126m
23CKRC100	27m	10.7%	39m
incl	5m	16.7%	49m
also	9m	11.0%	57m

5% TGC cut-off.
Min 2m width.
2m max internal dilution.
Not true widths.

Refer Tables A and B for full details.

- Results bolster an already impressive inventory of intercepts from 21,367m of drilling.
- EM geophysics has proven to be a highly effective discovery tool and the next programme at Kambale will auger test 13 priority-one EM anomalies recently identified on the broader 149km² licence area.

Castle Managing Director, Stephen Stone, commented “These results from the first 22 holes of the recently completed 43-hole, 5,335m RC drilling programme at the Kambale Graphite Project bode very well for the upcoming update to the already robust 15.6Mt Mineral Resource grading 9.0% TGC containing 1.41Mt of graphite.

Kambale continues to deliver multiple, broad, near-surface intercepts of excellent grade highlighting the good quality and continuity of the deposit.

Better intercepts from this latest batch of results include 55m at 12.6% TGC from 11m incl. 14m at 15.4% TGC from 43m, 18m at 12% TGC from 14m incl. 8.0m at 17.2% TGC from 18m, 34m at 11.1% TGC from 121m incl. 10m at 14.0% TGC from 137m and 27m at 10.7% TGC from 39m incl. 5m at 16.7% TGC from 49m.

The project is rapidly emerging as a credible, strategically located and well-timed opportunity to service the forecast surging graphite demand and looming supply deficit driven by the increasing demand for electric vehicles and stationary power storage units. These rely on lithium-ion batteries of which graphite is a key constituent.

A very positive indicator for the Project is the multi-billion dollar initiatives of the USA, EU, Korea and Japan to competitively secure reliable, long term, non-China dependent sources of Critical Minerals. This includes quality graphite concentrates and high-value battery anode material to feed a proliferation of battery giga-factories.

The majority of these new holes were designed to improve the drill density in areas where mineralisation had only recently been successfully identified using EM geophysics and to enable it to be incorporated into an upcoming Mineral Resource Estimate.

So, knowing that EM is a very effective discovery tool we are naturally looking forward to testing the new bank of 13 high-priority EM anomalies that we recently delineated on the broader 149km² Kambale licence.

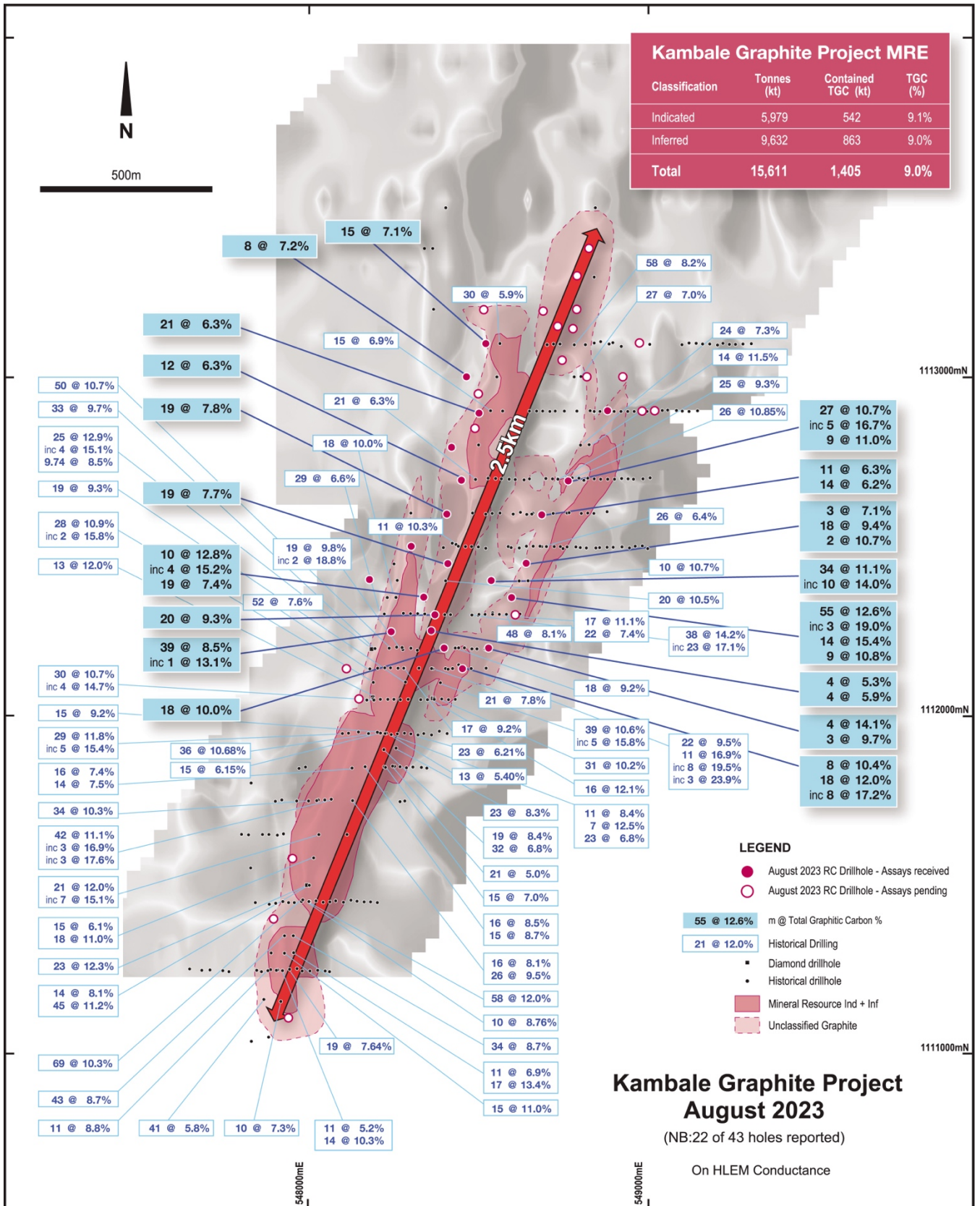
With the next phase of metallurgical test work nearing completion we will be in a position later this year to commence an evaluation of the technical and commercial merits of producing a fine flake graphite bulk concentrate of commercial specifications and possibly added-value precursor products.”

Next steps at Kambale

1. Receive remaining assay results from outstanding 21 RC drill holes;
2. Update the current JORC 2012 MRE;
3. Complete the current phase of test work to produce a bulk, fine flake graphite concentrate of commercial specifications;
4. Ship the bulk concentrate to Germany for evaluation of its capability to produce Battery Anode Material (“BAM”);
5. Commence a high-level technical and commercial scoping study level evaluation; and
6. Position to secure an end-user offtake / project development partner.

Castle Minerals Limited (ASX: CDT) (“Castle” or the “Company”) is pleased to report excellent intercepts from the first 22 holes of the recently completed 43-hole, 5,335m infill RC drilling programme at the rapidly advancing Kambale Graphite Project, Ghana (“Project”)(Figs 1 and 2. Tables 1, 2, A and B)(JORC Appendix).

Fig 1: Plan showing historical and recent interim RC drill results at Kambale.



Better intercepts from this latest batch of results include **55m at 12.6% TGC** from 11m incl. **14m at 15.4% TGC** from 43m (23CKRC083), **18m at 12% TGC** from 14m incl. **8.0m at 17.2% TGC** from 18m (23CKRC086), **34m at 11.1% TGC** from 121m incl. **10m at 14.0% TGC** from 137m (23CKRC092) and **27m at 10.7% TGC** from 39m incl. **5m at 16.7% TGC %** from 49m (23CKRC100).

These intercepts bode very well for the upcoming update to the already robust Kambale MRE of **15.6Mt grading 9.0% TGC containing 1.41Mt of graphite**.

The majority of these new holes were designed to better define zones of mineralisation whose presence had only recently been successfully confirmed by just one or two prior RC holes drilled to test a series of HLEM geophysical conductor anomalies (ASX release 31 March 2022).

Increasing the drill density of this mineralisation will enable it to be included in the MRE update and, given its coverage, management is expecting to report a material increase.

Assays for the 21 outstanding holes, whose samples were prepared in the accredited Ghana laboratory of Intertek (Ghana) Limited prior to shipping to Intertek's Perth assay facility, are being reported to Castle in a series of batches and are expected to all be available in coming weeks, subject to laboratory turnaround times.

Castle has now completed 21,367m metres of drilling at Kambale, much of it within the past 18 months. This has comprised 13,614m of RC, 365m of diamond coring, 2,809m of aircore and 4,579m of RAB drilling.

Metallurgical test work

Metallurgical test work under the supervision of consultants, IMO Pty Ltd, at its affiliated Perth laboratory, Metallurgy Pty Ltd, whilst behind schedule is expected to be completed in coming weeks with analysis and reporting to be completed shortly after.

The bulk concentrate produced will then be shipped to a specialist metallurgical service in Germany where it will be micronised, spheronised, purified and coated and evaluated for its use in the manufacture of BAM.

Expanding Kambale's footprint

In addition to the planned MRE update, Castle's next programme at Kambale will be to auger drill test 13 priority-one Loupe EM conductor targets that were recently delineated as part of an initiative to evaluate more distal areas of the 149km² Kambale prospecting licence.

As mentioned above, a prior ground HLEM survey was very successful in highlighting the presence of graphitic schist below the soil covered surface in the vicinity of the main Kambale deposit.

KAMBALE PROJECT BACKGROUND

Geology

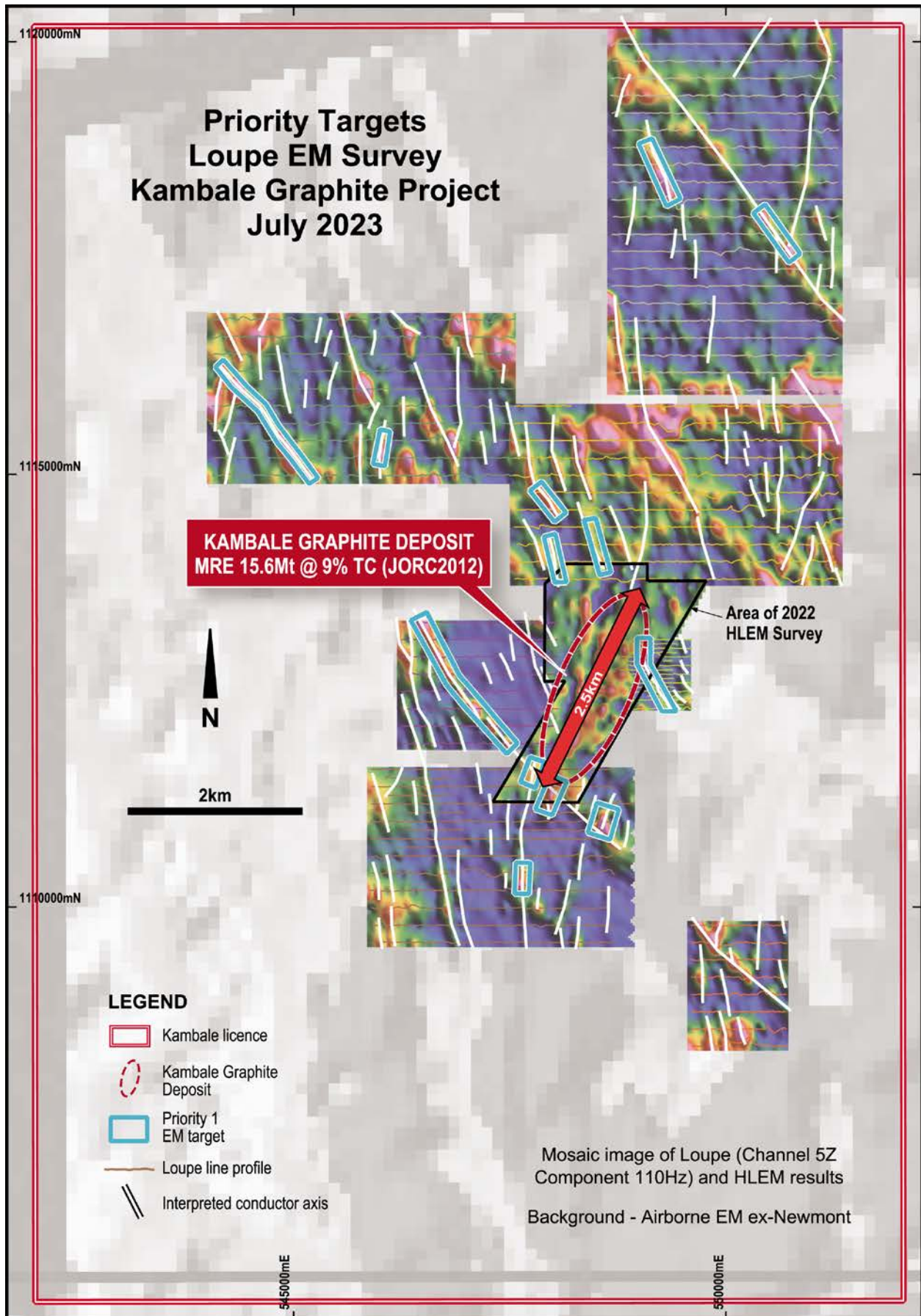
The Kambale graphite deposit was identified in the 1960s by Russian geologists prospecting for manganese. They undertook a limited programme of trenching and shallow drilling.

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.

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).

Fig 2: Map showing the outline of the Kambale MRE, its close association with an HLEM anomaly and recently identified, yet to be tested, priority-one EM anomalies.



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.

A review of a wide-spaced, regional-scale electromagnetic survey dataset inherited by Castle from previous licence holder, Newmont Limited, outlined a roughly elongate, north-south orientated, ~10km-long region that could be considered prospective for graphitic schist horizons.

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 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.

The MRE is hosted by twelve modelled, 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.

Table 2: Summary JORC Code (2012) Mineral Resource Estimate (5% TGC cut-Off):

Classification	Tonnes (kt)	Contained TGC (kt)	TGC (%)
Indicated	5,979	542	9.1%
Inferred	9,632	863	9.0%
Total	15,611	1,405	9.0%

Mineralisation commences at or close to surface and extends to at least 120m below surface and most likely even deeper. The MRE excluded any mineralisation below the 200mRL, or approximately 100m below the topographic surface. A substantial proportion of mineralisation intersected by drilling, in particular that new mineralisation highlighted by the HLEM survey, did not qualify for inclusion in the MRE due to a low drilling density.

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. It is presently undergoing testing to produce a bulk concentrate meeting commercial specifications. This will then be sent to a specialist facility in Europe that will assess its ability to be used in the manufacture of precursor and Battery Anode Material (BAM).

ADDITIONAL INFORMATION

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. 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 Westminster system of government.

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.

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.

Social licence

Castle management has some 16 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.

Prior to embarking on any specific exploration programme the Company's Ghanaian team conducts comprehensive discussions and information sessions in local dialects 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 in close consultation with landowners. All site disturbances are rehabilitated immediately after use.

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 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 high-volume substitute for graphite whether that be natural flake or its synthetically manufactured form which involves a considerably more costly and higher CO₂ 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
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
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 (zinc, lead and copper) and gold.

The **Earaheedy Basin** project comprises the **Withnell and Terra Rossa** 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 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 **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.

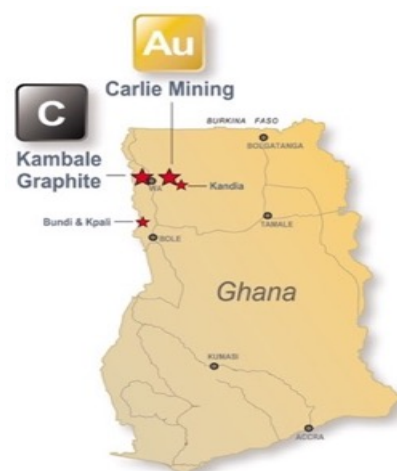
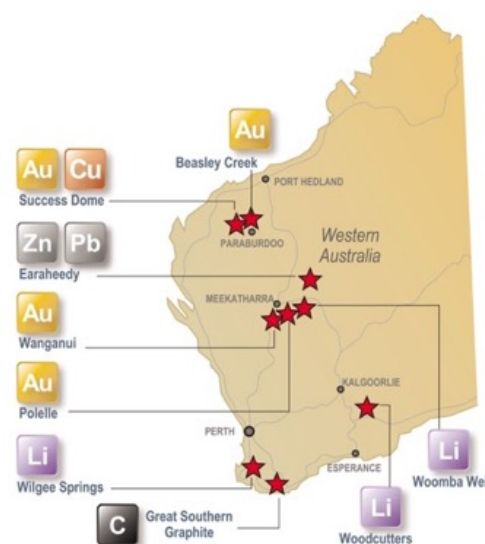
The **Polelle** project, 7km southeast of the operating Bluebird gold mine near Meekatharra, hosts a mainly obscured and minimally explored greenstone belt prospective for gold and possibly base metals whilst the **Wanganui** project is prospective for down-plunge high-grade gold shoots.

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 south east of the Bald Hill lithium mine and 25km north west 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 flagship **Kambale Graphite Project** lies within 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 are considered to be of grass roots or of relatively early-stage exploration status. Other than for the Ghana projects, 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 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.

Table A: Drill Hole Collar Information
(Pink shading = Initial 22 of a total 43 RC holes being reported in this release)

DH Hole	North	East	RL	Total Depth (m)	Azimuth	Dip
23CKRC083	1112350.38	548596.16	315.77	122	90	-60
23CKRC084	1112201.41	548528.33	318.10	79	90	-60
23CKRC085	1112200.18	548399.02	315.59	102	90	-60
23CKRC086	1112141.70	548454.64	318.46	90	90	-60
23CKRC087	1112250.70	548359.41	313.33	100	90	-60
23CKRC088	1112249.35	548244.96	308.58	105	90	-60
23CKRC089	1112297.83	548373.09	311.72	66	90	-60
23CKRC090	1112350.74	548339.81	309.37	127	90	-60
23CKRC091	1112401.71	548176.43	304.71	225	90	-60
23CKRC092	1112399.84	548533.25	313.01	165	90	-60
23CKRC093	1112450.93	548408.76	309.39	114	90	-60
23CKRC094	1112502.27	548301.51	305.68	90	90	-60
23CKRC095	1112449.79	548638.45	315.36	130	90	-60
23CKRC096	1112595.32	548404.41	307.01	147	90	-60
23CKRC097	1112695.54	548448.98	307.03	125	90	-60
23CKRC098	1112792.96	548419.56	305.09	180	90	-60
23CKRC099	1112596.45	548683.76	315.08	140	90	-60
23CKRC100	1112693.73	548762.63	318.90	110	90	-60
23CKRC101	1112891.14	548502.26	306.64	162	90	-60
23CKRC102	1112999.79	548463.85	305.37	166	90	-60
23CKRC103	1113101.25	548521.94	302.65	113	90	-60
23CKRC104	1112901.74	548879.81	314.22	75	90	-60
23CKRC105	1113001.28	548821.24	311.25	50	90	-60
23CKRC106	1113049.88	548745.41	307.92	110	90	-60
23CKRC107	1113149.27	548735.06	306.35	150	90	-60
23CKRC108	1113199.54	548789.85	308.46	80	90	-60
23CKRC109	1113193.16	548688.57	306.59	171	90	-60
23CKRC110	1113198.11	548514.32	302.04	115	90	-60
23CKRC111	1113299.41	548788.92	312.54	90	90	-60
23CKRC112	1113379.19	548824.48	315.54	72	90	-60

DH Hole	North	East	RL	Total Depth (m)	Azimuth	Dip
23CKRC113	1113101.08	548974.44	311.71	103	90	-60
23CKRC114	1113142.05	548778.75	308.84	103	90	-60
23CKRC115	1113000.51	548921.93	313.14	123	90	-60
23CKRC116	1112898.44	549018.87	314.10	103	90	-60
23CKRC117	1112898.81	548980.63	314.45	105	90	-60
23CKRC118	1112847.98	548486.43	306.35	161	90	-60
23CKRC119	1112952.07	548500.21	306.61	150	90	-60
23CKRC120	1112298.80	548608.10	317.04	166	90	-60
23CKRC121	1112137.72	548110.04	310.18	230	90	-60
23CKRC122	1112050.01	548146.94	312.62	130	90	-60
23CKRC123	1111580.41	547950.63	307.34	175	90	-60
23CKRC124	1111401.76	547893.93	302.17	115	90	-60
23CKRC125	1111109.99	547920.21	309.41	100	90	-60

Table B: Summary of intercepts from first 22 holes of 43-hole RC drilling programme July 2023
(5%TGC cut-off. 2m min width. 2m max internal dilution)

Hole Number	From (m)	To (m)	Width (m)	TGC%
23CKRC083	11	66	55	12.6
incl	12	14	2	18.2
and	18	22	4	15.1
and	25	28	3	19.0
and	43	57	14	15.4
and	111	120	9	10.8
23CKRC084	23	28	4	14.1
incl	24	27	3	16.7
and	32	34	3	9.7
23CKRC085	17	24	7	4.9
and	71	89	18	10.0
incl	71	75	4	12.6
23CKRC086	1	9	8	10.4
and	14	32	18	12.0
incl	18	26	8	17.2
23CRKC087	28	32	4	5.3
and	80	84	4	5.9
23CKRC088	31	37	6	9.6
and	40	79	39	8.5
incl	54	61	7	13.1
23CKRC089	17	20	3	8.4
and	25	45	20	9.3
23CKRC090	1	11	10	12.8
incl	4	8	4	15.2
and	95	99	4	8.1
and	102	121	19	7.7
23CKRC091	No significant assays			
23CKRC092	34	37	3	6.4
and	121	155	34	11.1

Hole Number	From (m)	To (m)	Width (m)	TGC%
incl	137	147	10	14.0
23CKRC093	41	43	2	7.0
and	49	52	3	6.5
and	57	76	19	7.7
23CKRC094	25	29	4	7.6
and	36	38	2	8.1
23CKRC095	31	34	3	7.1
and	101	119	18	9.4
and	123	125	2	10.7
23CKRC096	88	90	2	6.0
and	126	144	19	7.8
incl	139	142	3	12.7
23CKRC097	91	93	2	6.0
and	96	108	12	6.3
23CKRC098	No significant assays			
23CKRC099	12	23	11	6.3
and	28	32	4	5.8
and	35	49	14	6.2
	110	114	4	8.6
23CKRC100	39	66	27	10.7
incl	49	54	5	16.7
also	57	66	9	11.0
23CKRC101	48	69	21	6.3
and	144	147	3	5.2
and	155	159	4	4.7
23CKRC102	111	114	3	5.4
	122	130	8	7.2
and	160	163	3	6.4
23CKRC103	24	39	15	7.1
	50	52	2	7.0
and	94	104	10	6.0
23CKRC104	20	22	2	5.9
and	26	28	2	6.1

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 	<p>For RC drilling only intervals visually logged as graphite schist were submitted for analysis. Host rock lithologies were not submitted for TGC analysis.</p> <p>The sampling for the RC drilling was completed in a uniform 1m interval. 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 1m intervals using a riffle splitter to produce</p>

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	<p>appropriate calibration of any measurement tools or systems used.</p> <ul style="list-style-type: none"> 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>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>
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 program utilise a multipurpose track mounted rig supplied by GTS Drilling Limited. The reverse circulation drilling was completed with a 110mm face sampling hammer.</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>Sample recoveries were recorded for each metre sampled by the rig geologist. Drill sample recoveries were considered good, with the majority of the samples remaining dry. Sample recovers dropped in intervals of high water inflow.</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>There does not appear to be a relationship between sample recovery and grade.</p>
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 was 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.</p> <p>Chip trays were collected for each RC hole and photographed.</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>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 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	<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. 	<p>The samples were analysed by Intertek Laboratories Perth for Total Graphitic Carbon ("TGC"), and Sulfur ("S").</p>

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laboratory tests	<ul style="list-style-type: none"> 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>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>
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>Data on collar position, sampling intervals and drill hole lithology were recorded in the field on a standard MSoffice 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 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. 	Data locations are supplied in WGS84 datum, UTM Zone 30N projection.
	<ul style="list-style-type: none"> 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>A Drone LIDAR survey over the entire Kambale Prospect was undertaken by a licensed surveyor.</p> <p>The drilling program was designed to infill and extend graphite mineralisation within the existing resource shell. Drill holes were positioned along existing E-W drill lines to fill gaps in existing drill coverage.. Holes were drilled perpendicular to the strike of the mineralisation. Along the lines, holes have targeted specific graphitic shears to intersect the shear between 40m and 150m 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>

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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.</p> <p>Samples were aggregated in bulka-bags and picked up from the Wa facility by Intertek Laboratories (Ghana) 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 to the Intertek Laboratory facility in Maddington Western Australia.</p> <p>No discrepancies in sample numbers, or lost sample have been recorded.</p>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<p>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.</p>

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 held 100% by Kambale Graphite Limited, a Ghanaian registered company 100% owned by Castle Minerals Limited.</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. 	<p>The licence is a granted prospecting licence approved by the Minister who has custody of the operation of the Ghana Minerals Act (refer above)</p>
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</p>

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		<p>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 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> <p>Based on the drilling completed to the end of December 2022 the company released a MRE for the Kambale Graphite Deposit in April 2023</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. For the purposes of reporting results, a lower- cut-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>

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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 oxidised graphitic schists 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 all the data for the current drill program is collated and interpreted a revised MRE for the Kambale Graphite Deposit will be calculated .</p> <p>This revised MRE, and results of the metallurgical test work will form the basis for a scoping study examining the options for the development of the Kambale Deposit.</p> <p>The company is commencing stakeholder engagement with government and community groups likely to be impacted by any further development of the project .</p>