ASX Announcement

15 March 2021

Castle to Reappraise Kambale Graphite Project, Ghana

- **Bulk sampling to provide material for test work will commence shortly**
- **Preliminary process flowsheet development and concentrate characterisation will assist identification of possible commercialisation options**
- **Reappraisal driven by firm prices and positive graphite market outlook**
- **Maiden Inferred Mineral Resource over 1.25km strike of 14.4Mt at 7.2% (graphitic carbon) for 1.03Mt contained graphite (JORC 2004)(Refer ASX release 24 July 2012)*(1)***
- **Drilling subsequently extended mineralisation to 2km strike with fieldwork and geophysics indicating strong likelihood to extend**
- **Infill and step-out drilling to confirm existing Inferred Mineral Resource, to better understand graphite distribution and extend mineralisation is subject to results of test work and follow-on studies**
- **Kambale located 6km west of Upper West region's capital, Wa, with grid power, water, good roads and commercial air services available**
- **Ghana is an established and safe mining jurisdiction with a highly skilled workforce, a strong mining services sector and excellent infrastructure**

Castle Managing Director, Stephen Stone said **"The Kambale graphite project in northern Ghana is a sleeper asset within Castle which now warrants a reappraisal given the relatively strong present and positive long term outlook for graphite concentrate prices."**

"Drilling, a maiden Mineral Resource estimation and preliminary metallurgical test work in 2012 was encouraging enough that we will now excavate bulk samples to produce flotation concentrates for flowsheet design, concentrate characterisation, market positioning and project benchmarking studies. We will then be in a position to make an informed decision as to how best we should take Kambale forward."

Castle Minerals Limited (ASX: CDT) ("Castle" or the "Company") advises that it is preparing to collect bulk samples for test work to enable the Company to identify possible commercial options for its Kambale graphite project in Ghana's Upper West region ("Project")(Figure 1).

The reappraisal of the Kambale graphite project is consistent with improved market prices for graphite concentrates and a positive longer term outlook for the commodity. These are underpinned by its use in the manufacture of lithium-ion batteries which are being increasingly used in electric vehicles, consumer electronics and other electricity storage applications.

(1) This information was prepared and first disclosed in 2012 under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Substantial work is required in order to bring the resource into compliance with JORC Code 2012. A timeline and budget for this work has not been established. Several factors not limited to geology, metallurgy, environment, heritage, licencing and permitting, commodity price and market conditions will singularly or in combination impact on decisions to undertake and complete this work.

Encouraged by elevated graphite prices in 2012, three consecutive phases of RAB, aircore and reverse circulation (RC) drilling were completed at Kambale.

Following the completion of the first two phases of drilling an independent Mineral Resource estimate defined a maiden Inferred Resource (JORC 2004) of 14.4Mt at 7.2%C (graphitic carbon) for 1.03Mt contained graphite, including 6.0Mt @ 8.6%C for 0.52Mt contained graphite (JORC 2004)[(1)](refer ASX release 24 July 2012). This extended over a strike of 1.25km and to a maximum depth of 110m.

The third phase of drilling extended mineralisation to a total strike of 2km. Mapping and geophysics indicate that there is considerable scope to extend the deposit as drilling has only tested a small section of the interpreted graphitic schist horizon host (Figures 2 and 3).

Figure 1: Kambale Graphite Project Location

Table 1: Kambale Deposit Inferred Mineral Resource Estimate (5%C cut-off grade) (JORC 2004) (Refer ASX release 24 July 2012)[(1)]

Type	Tonnes (Mt)	Graphitic Carbon (%)	Contained Carbon (t)
Oxide Material	3.4	7.1	243,000
Fresh Material	11.0	7.2	793,000
Total	**14.5**	**7.2**	**1,036,000**

NB: Errors may occur due to rounding

The Mineral Resource estimate was made in July 2012 and complied with recommendations in the Australasian Code for Reporting of Mineral Resources and Ore Reserves (2004) by the Joint Ore Reserves Committee (JORC). Castle is not aware of any new information or data that materially affects the information included in the JORC 2004 Mineral Resource estimate and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply.

The resource estimate released in July 2012 did not include any assumptions about mining, mining dilution, metallurgy or processing methods. No bulk density measurements were undertaken.

The Mineral Resource estimate is not compliant with Australian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves - 2012 edition. No additional technical work has been done since the Mineral Resource estimate was made. There is insufficient information available for the resource to be re-estimated to be compliant with the Australian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves - 2012 edition. It is possible that following additional technical work, and should a Competent Person be able to undertake a re-estimation of the Mineral Resource to comply with JORC Code 2012, that the Mineral Resource may materially change and/or reduce.

Photo 1: RAB drilling in 2012 (Hole KBRB031)
Graphitic schist intersected 13m down the hole

Figure 2: Kambale project: Plan of better intercepts from Western Zone drill traverses
(refer to and extracted from ASX release 17 September 2012)
(NB: "Recent Intercept" refers to third phase drilling programme – September 2012)
Intercepts quoted are for Total Carbon (includes elemental, organic and carbonate carbon)

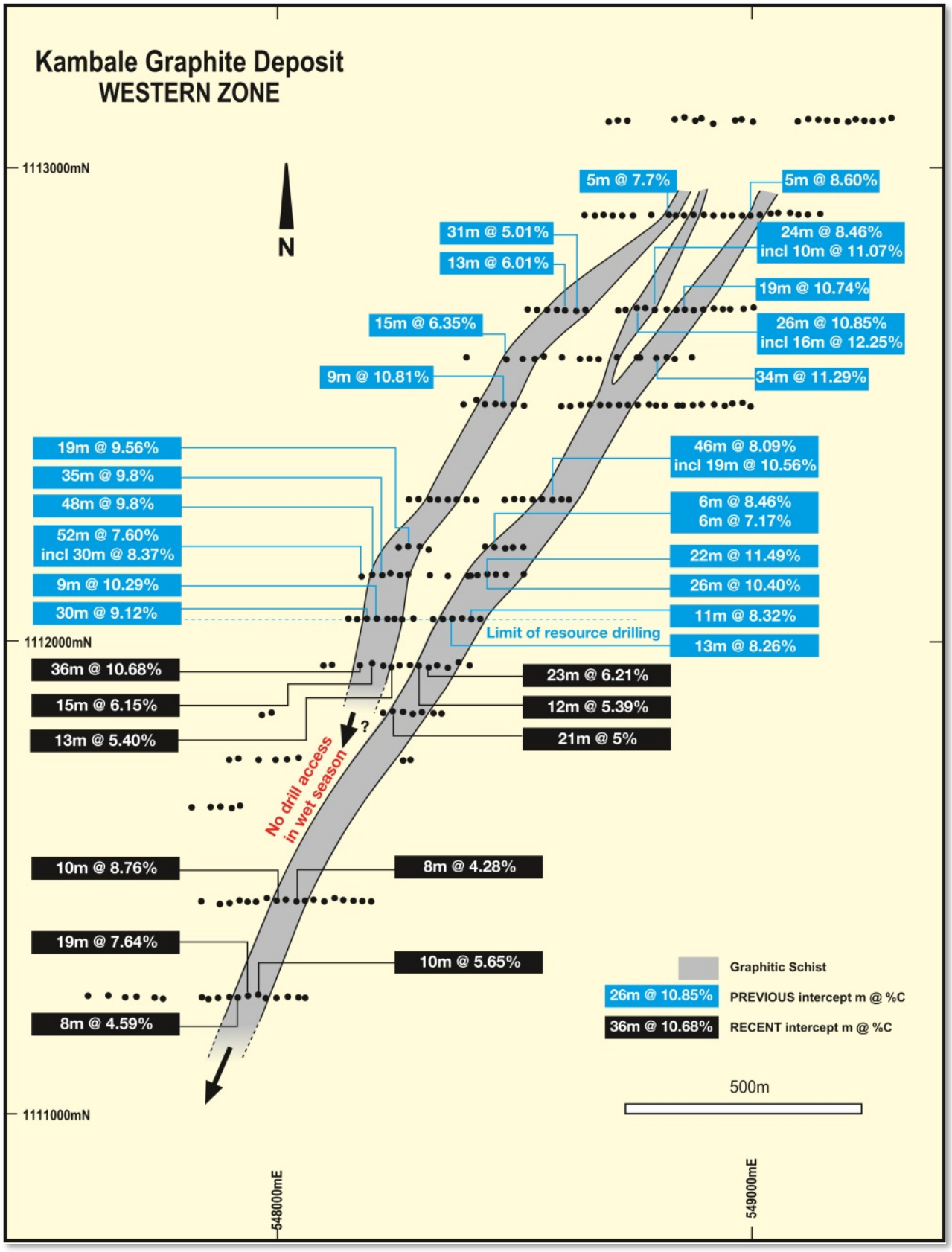
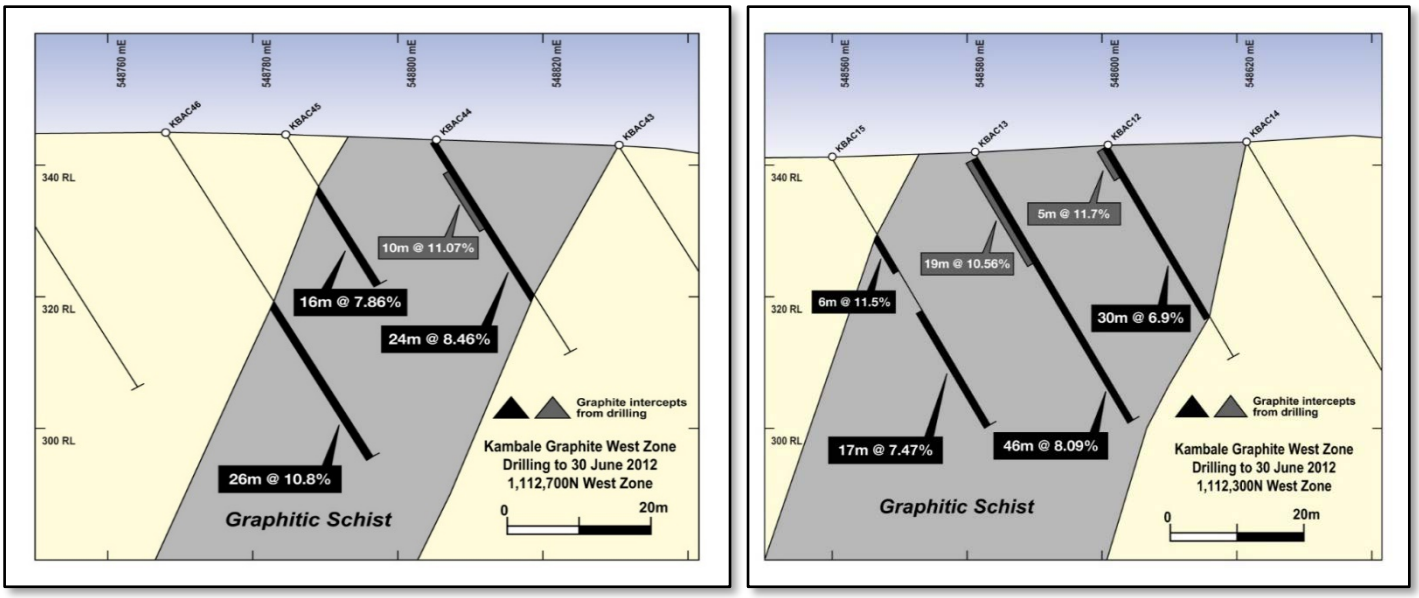


Figure 3: RC drill cross sections of the Western Zone of Kambale Prospect with significant graphite intercepts
(refer to and extracted from ASX release 24 August 2012)
(Carbon grades % are Total Graphite Content)



Preliminary metallurgical test work

Preliminary and very limited metallurgical test work in 2012, using a small quantity of RC drill chip samples of oxide and fresh material collected from several drill holes, indicated that it should be possible to produce and upgrade a graphite concentrate (refer ASX release 3 September 2012).

Extensive additional test work and flotation concentrate optimisation, using excavator retrieved bulk samples of mineralisation extracted from various locations along the deposit's strike, will commence shortly. This will provide more reliable data on flotation performance, likely concentrate specifications, where products might be positioned in the graphite market and project benchmarking against other developed and undeveloped deposits. This work will be undertaken in Perth and Germany.

Infill and step-out drilling to confirm the existing Inferred Mineral Resource[(1)], to better understand graphite distribution and characteristics within the deposit and to extend mineralisation, is subject to the results of these studies.

ADDITIONAL INFORMATION

Geology

Kambale mineralisation consists of north-east trending, sub-parallel zones of meta-sediment hosted graphite, steeply dipping to the north west. Mineralisation is hosted within Lower Proterozoic Birimian (~2.2Ma) meta-sediments within the Wa-Lawra greenstone belt. Metasedimentary rocks, namely phyllites, and quartz - biotite schists generally trend north-easterly and dip between 50^{o} and 75^{o} to the south west.

The genesis of the flake graphite in Kambale is believed to be a result of high-grade metamorphism (amphibolite-granulite facies).

Using trenching, drilling and Ghana Geological Survey regional electromagnetic (EM) survey data, Castle identified in 2012 a roughly elongate, north-south orientated, ~10km long region considered prospective for graphitic schist horizons, the host to multiple lenses of graphite mineralisation. The horizons can be up to 50m wide and are weathered (oxidised) to variable depths before they transition into fresh material.

Infrastructure and logistics

The project is located close to the Upper West regional capital of Wa which is 400km north by good sealed roads of a major rail head at Kumasi. It is then approximately 240km by rail to the international port of Tema, 30km west of the capital Accra, which provides direct access to global export markets (Figure 1). An alternative Port of Sekondi-Takoradi is located approximately 230km west of Accra.

Ghana is an established and safe mining jurisdiction with a well-trained and very capable industry workforce. Its mining services and supply sector is strong and the national and local infrastructure is generally excellent with grid power, water, sealed roads and commercial air services locally at WA.

Licencing

The Project is secured by a 137km^2 prospecting licence (PL10/47) granted to Carlie Mining Limited ("Carlie"), a 100% owned subsidiary of Castle, registered in Ghana. The Government of Ghana has the right to acquire a 10% free carried interest in all licenses in Ghana and is entitled to a 5% Gross Royalty on production. The Kambale licence is currently progressing through a renewal process.

Graphite price and market

Graphite's unique physical and chemical properties make it a major component of many established industrial products and increasingly so in developing technologies. Whilst the markets for its traditional uses continue to grow, so to are the rapidly emerging markets for its usage in lithium-ion batteries used in electric vehicles, consumer electronics and other electricity storage applications, aircraft wings, nuclear reactors, wind and solar power generation and semi-conductors. It has been declared a strategic mineral / critical raw material by both the European Union and the United States.

The graphite price is governed by a complex interaction of supply and demand factors with the overall medium to long term outlook for its price appearing to be positive according to a majority of informed commentators.

This positive outlook for graphite demand is a key driver for Castle deciding to reappraise the Kambale project and to determine if it could underpin a commercially sustainable operation.

For further information on graphite and its market outlook readers are directed to independent commentaries on the graphite market that are available on various digital information platforms.

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

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PREVIOUSLY REPORTED INFORMATION

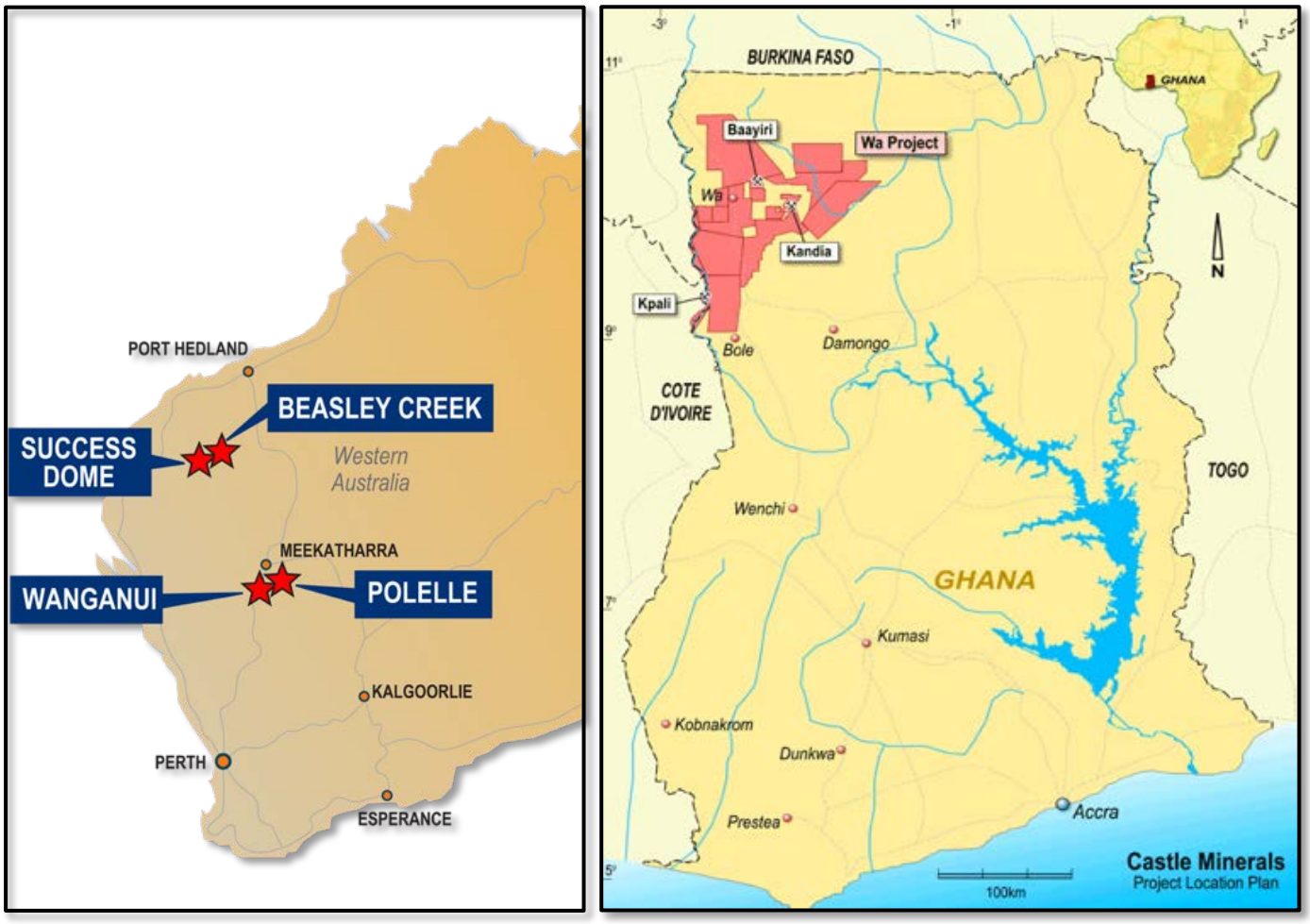
The Company has made several disclosures to ASX specifically concerning the Kambale Graphite project as listed below (Table 2). All of these occurred in 2012 and were at the time compliant with ASX Listing Rules and the Australian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves - 2004 edition. The reader is referred to these reports and contained disclosures to obtain more information on the status of the Project as it was at the time of those disclosures (www.castleminerals.com).

Table 2: Previous releases to ASX related to Kambale Graphite Project

Date	ASX Release Headline
17.09.12	Drilling doubles strike length of Kambale Graphite deposit
03.09.12	Metallurgical test work confirms commercial potential of Kambale graphite deposit
24.08.12	High-grade graphite intercepts extend Kambale deposit
24.07.12	Maiden resource confirms Kambale as one of the World's largest graphite deposits
21.03.12	Wide zones of graphite intersected on Wa project
06.07.12	Large high-grade graphite deposit confirmed at Kambale

About Castle Minerals Limited

Castle Minerals is an Australian Stock Exchange (ASX: CDT) listed and Perth, Western Australia headquartered company with interests in several projects in Western Australia and Ghana that are prospective for gold and other minerals.

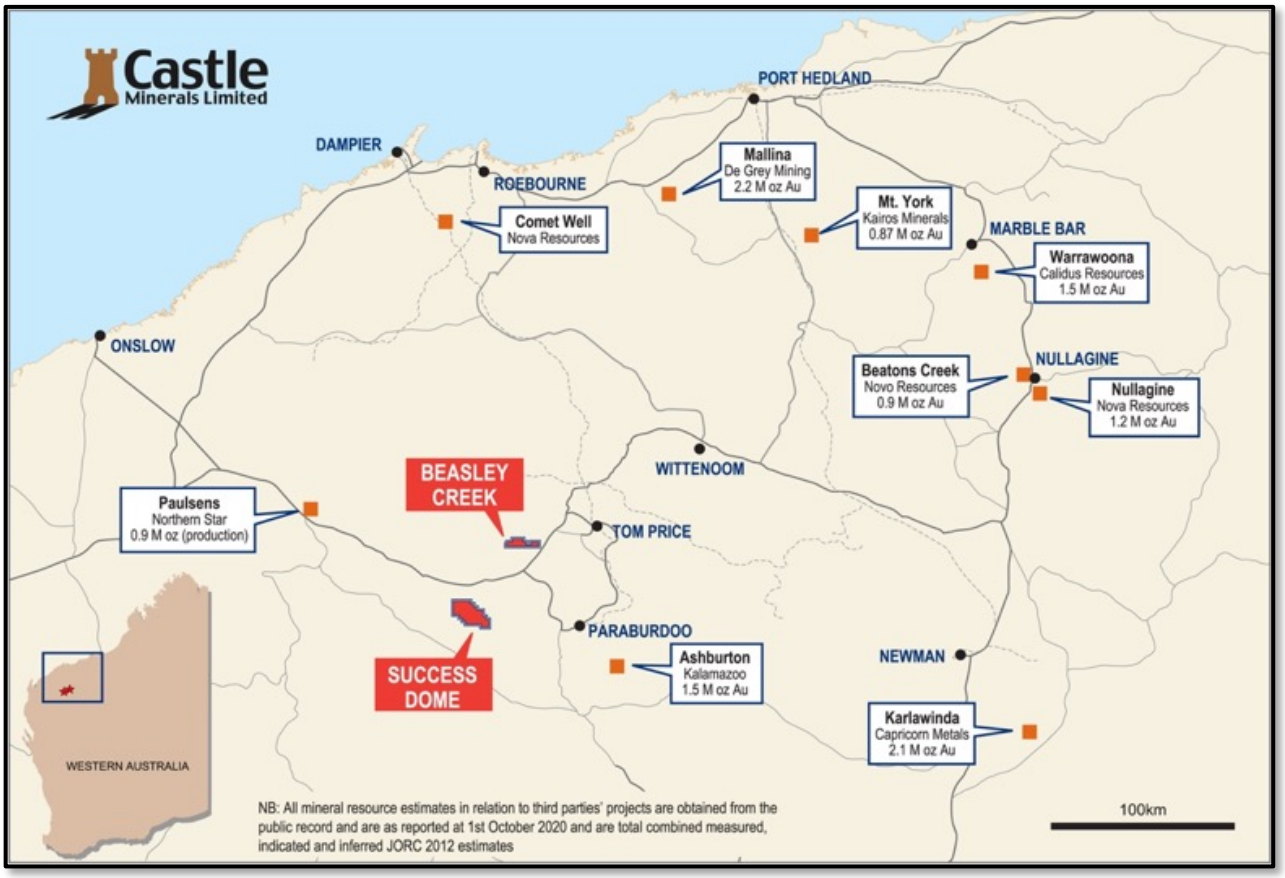


At the **Wanganui project** (E51/1703, 18.4km^2), 33km south-west of the active Meekatharra mining centre and 15km south-west of the operating Bluebird gold mine, the opportunity is to test for down-plunge and along strike extensions to the existing Main Lode North and South deposits, as well as for other similar targets. The Main Lode mineralisation, which can be intermittently traced for at least 1km, is one of at least four structurally related mineralised zones.

The **Polelle project** (E51/1843, 162.5km^2), 25km south of Meekatharra and 7km southeast of the operating Bluebird Mine, hosts a mainly obscured and minimally explored greenstone belt. The belt is comprised of a combination of prospective lithological units and major structural features including the Albury Heath shear which hosts the Albury Heath deposit (Inferred Resource of 528,000t at 2.09g/t Au for 35,479oz Au) immediately adjacent to the east boundary of Castle's licence. Aeromagnetics have indicated that the southwest trending Albury Heath shear is traceable onto the Polelle project area for some 7.5km.

The **Beasley Creek** project lies on the northern flanks of the Rocklea Dome in the southern Pilbara. The strategy is to define structurally controlled gold targets within the various Archean sequences. These lie immediately above and below the 16km east-west striking conglomerate horizons which had been the initial focus of exploration by Castle. The sheared granite - greenstone contact and the "Paulsen Gold Mine" type setting within the gabbro/dolerite units, that intrude the Hardy Sandstone in the northern part of the project area, are of particular interest.

The **Success Dome** project is a recent application for an exploration licence in the Ashburton structural corridor and is located midway between the Paulsen's and Ashburton gold deposits. It is prospective for gold and base metals. More locally, Success Dome lies immediately adjacent to the southern margin of the Hamersley Basin and 40km southwest of Castle's Beasley Creek gold project. Major thrust faults and sub-parallel shear zones highlighted in the regional magnetic and gravity data, combined with additional detailed geophysics data from previous explorers, brought this available area to Castle's attention.



In **West Africa**, Castle has a substantial and contiguous tenure position in Ghana's Upper West region. Ghana has a long history of gold exploration and mining with several world-class gold mining operations owned by Tier 1 mining companies. Castle's Ghana licence holdings encompass extensive tracts of highly prospective Birimian geological terrane, the host to many of West Africa's and Ghana's multi-million-ounce gold mines. The project is also host to the Kambale graphite project.

Castle also retains a 4% net smelter precious metal royalty over the adjacent Julie West licence which comprises a key component of Azumah's Wa Gold Project.

Cautionary Statement

All of Castle's projects in Australia are considered to be of grass roots or of relatively early stage exploration status. There has been insufficient exploration to define a Mineral Resource. No Competent Person has done sufficient work in accordance with JORC Code 2012 to conclusively determine or to estimate in what quantities gold or other minerals are present. It is possible that following further evaluation and/or exploration work that the confidence in the information used to identify areas of interest may be reduced when reported under JORC Code 2012.

The Kambale project is considered to be at a very early stage of exploration, technical and commercial assessment. No Competent Person has done sufficient work in accordance with Australian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves - 2012 Edition to conclusively determine or to estimate in what quantities graphite or any 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, to extract samples and to undertake preliminary test work may be reduced when reported under the 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 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 results.