

## Castle Commences Drilling at Kpali Gold Project

- 1,000m RC drilling programme underway at Kpali Gold Project.
- Phase one of a broader 3,500m, multi-prospect, Proof-of-Concept testing for a new West African gold exploration camp.
- Previous Castle intercepts at Kpali confirmed shallow, high-grade gold mineralisation over a combined 850m strike to 100m depth:
  - 22m at 2.85 g/t Au from 87m incl.
    - 17m at 3.40 g/t Au from 89m and
    - 7m at 6.03 g/t Au from 90m (13SWRC049);
  - 10m at 2.84 g/t Au from 92m (13SWRC053);
  - 14m at 2.29 g/t Au from 98m incl.
    - 5m at 4.53 g/t Au from 99m (13SWRC054);
  - 16m at 3.23 g/t Au from 9m (13SWRC057);
  - 10m at 2.01 g/t Au from 22m and
    - 10m at 1.45 g/t Au from 49m (13SWRC059).
- Kpali Gold Project lies within Castle's broader 2,686km<sup>2</sup> Wa Gold Project hosting several additional gold prospects.
- Strategically located in highly-prospective Birimian terrane which hosts world-class deposits in same region and generally within Ghana and West Africa.
- Kpali reactivation coincides with record gold prices and increasing investor interest in West African gold exploration.

Castle Executive Chairman, Stephen Stone, commented *"We are very pleased to be drilling again at the highly prospective Kpali Gold Project which was a totally virgin discovery by Castle following its recognition as a favourable geological and structural focal point in one of the world's most well-endowed gold regions."*

*Our immediate aim is to demonstrate that Kpali could be an indicator of a new West African mining camp with initial Castle RC drilling providing a great start to doing that having returned intercepts of 22m at 2.85 g/t Au from 87m including 7m at 6.03 g/t Au from 90m, 5m at 4.53 g/t Au from 99m and 16m at 3.23 g/t Au from 9m.*

*Historically high gold prices and increasing investor interest in West African gold exploration are two other good reasons to be reactivating this previously under-the-radar and compelling Castle asset.*



Castle Minerals Limited (“Castle” or the “Company”) advises that drilling is now underway at its Kpali Gold Project in Ghana’s Upper West Region (“Project”, “Kpali”) where an initial 7-hole, 1,000m RC programme will test for down-dip and strike extensions to high-grade gold mineralisation discovered by the Company in a previously unexplored area (Figs 1, 2 and 3).

Assaying is being undertaken in-country at the accredited Intertek laboratory with results expected to be available within this current third Quarter.

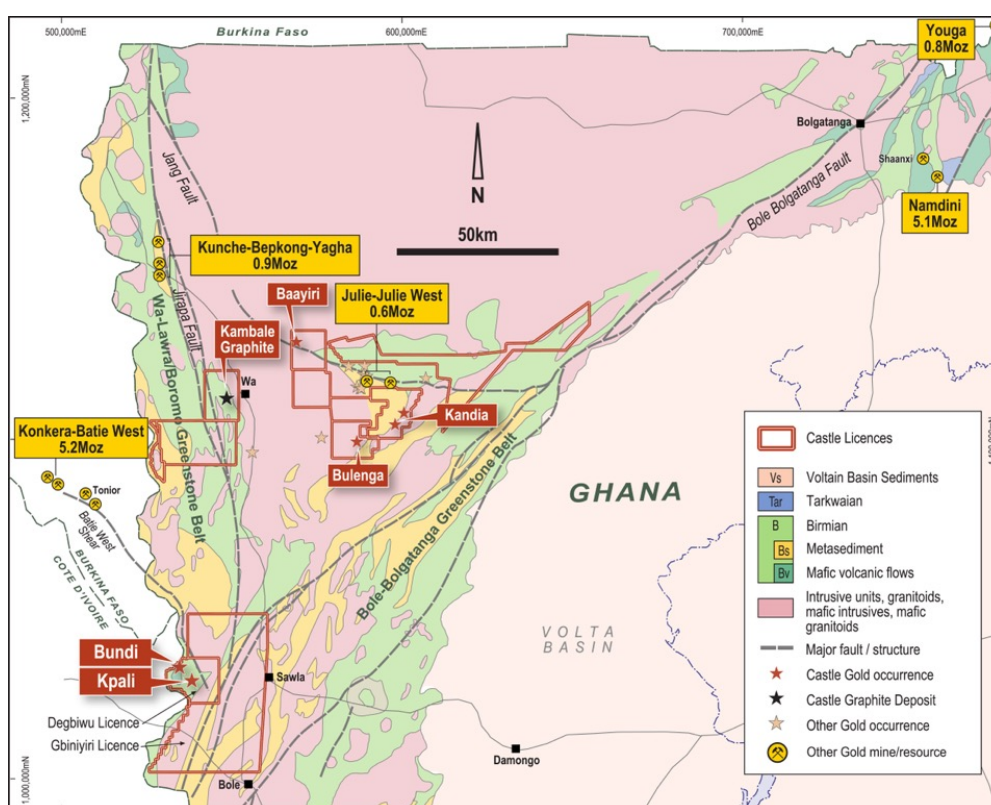
This drilling is the initial phase of a planned multi-phase, multi-prospect 3,500m programme that, subject to results, will test Kpali and several other prospects in the area such as Kpali East, Bundi, Wa South and Wa East prospects with the aim of confirming a possibly new West African mining camp.

Previous drilling at these latter prospects has also confirmed similarly structurally-controlled, orogenic-style gold mineralisation in the sought-after and highly prospective Birimian geological terrane. This is the same geological setting as that hosting several world class gold mining operations in the immediate region and across Ghana and West Africa generally.

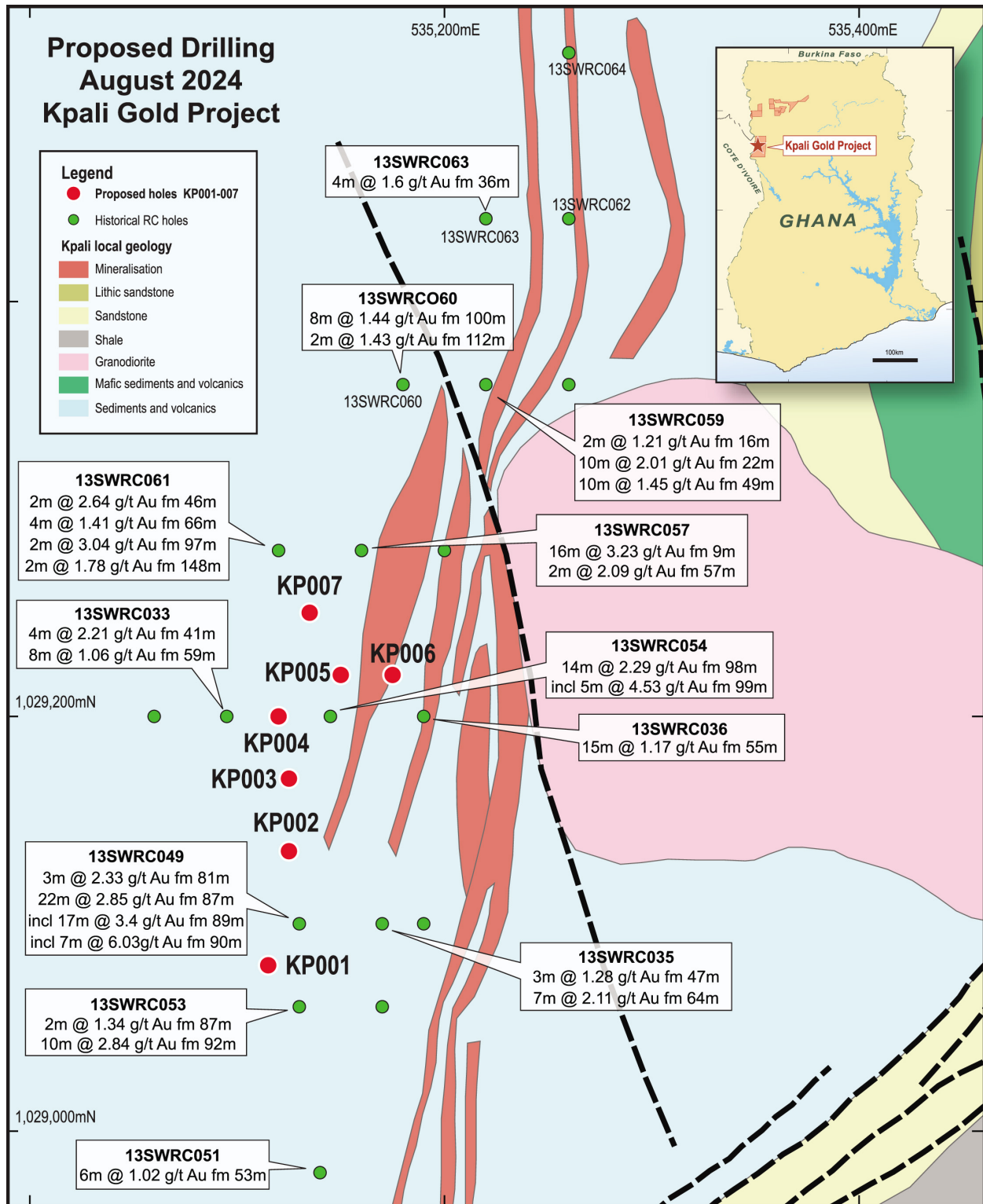
### Proof of Concept

The main exploration driver for investigating the Kpali area is the extremely strong geological focal point provided by the convergence of two major greenstone belts (Bole-Bolgatanga and Wa-Lawra/Boromo) and three traversing regional-scale structures. These are individually associated with several major gold deposits in the region:

- 30km of the Batie West Shear, host to the 5.2Moz Konkera deposit, 60km to the north west across the border in Burkina Faso;
- 15km of the Wa-Lawra shear zone, host to the 1.8Moz Kunch/Bepkong/Yagha deposits, 110km to the north and now awaiting a development decision; and
- 53km of the Bole-Bolgatanga shear zone, host to the 5.1Moz Namdini deposit, 300km to the north east and where mine development has commenced.



**Fig 1: Ghana's Upper West Region showing convergence on Castle's Degbiwu and Gbiniyiri licences of the Wa-Lawra and Bole-Bolgatanga Birimian greenstone belts and three major structures associated with several major gold deposits in the same region.**



**Fig 2: Proposed initial 7-hole Kpali RC drilling programme on simplified interpreted sub-surface geology. Planned hole collar locations and details subject to change..**

## KPALI GOLD PROJECT BACKGROUND

The Kpali Gold Project, comprising the Kpali prospect, the nearby Bundi prospect plus several satellite discoveries, lies within Castle's broader 2,686km<sup>2</sup> Wa Gold Project which is largely underlain by prospective Birimian greenstones.



Kpali, ~30km west of the regional town of Sawla, is situated within the 170km<sup>2</sup> Degbiwu prospecting licence (PL 10/26) which is surrounded by the 1,033km<sup>2</sup> Gbiniyiri retention licence (RL 8/27). The western border of each licence is the Black Volta River which also borders with Burkina Faso. Both licences are owned 100% by Castle through its wholly owned Ghanaian subsidiary, Carlie Mining Limited.

### **Virgin discovery**

Several wide-spaced reconnaissance geochemical soil surveys by Castle in the region identified the Kpali anomaly (refer ASX release 19 May 2011). In 2013, this was confirmed as a bona-fide discovery by systematic, wide-spaced RAB drilling and power-auger geochemical sampling beneath a veneer of transported soil cover. Some 2,711 RAB holes have since been drilled in the Kpali-Bundi area.

During 2013-2014, 20 RC holes drilled on eight sections at Kpali delineated a mineralised corridor associated with a ~30m to 50m wide zone of structural deformation (refer ASX release 18 January 2014).

The RC drilling returned a series of wide, high-grade intercepts and confirmed the presence of hydrothermal lode-style mineralisation over a combined strike of at least 850m and to a depth of up to 100m. Intercepts included:

- 22m at 2.85 g/t Au from 87m incl.
  - 17m at 3.40 g/t Au from 89m and
  - 7m at 6.03 g/t Au from 90m (13SWRC049);
- 10m at 2.84 g/t Au from 92m (13SWRC053);
- 14m at 2.29 g/t Au from 98m incl.
- 5m at 4.53 g/t Au from 99m (13SWRC054);
- 16m at 3.23 g/t Au from 9m (13SWRC057);
- 10m at 2.01 g/t Au from 22m and
  - 10m at 1.45 g/t Au from 49m (13SWRC059).

The geology at Kpali is dominated by low-grade metamorphosed sediments and volcanoclastics, with a lesser amount of mafic volcanoclastics. This sequence is intruded by a coarse-grained felsic circular body that demarcates the eastern boundary of the mineralisation.

Mineralisation runs north-south and is generally steeply dipping, occurring as a number of distinct, individual, more or less planar-lodes, that vary between 2m to 20m in thickness. These lodes are mostly continuous and were consistently intersected in drilling along an established central trend of some ~500m that remains open to the south and possibly also to the north.

### **Kpali East Prospect**

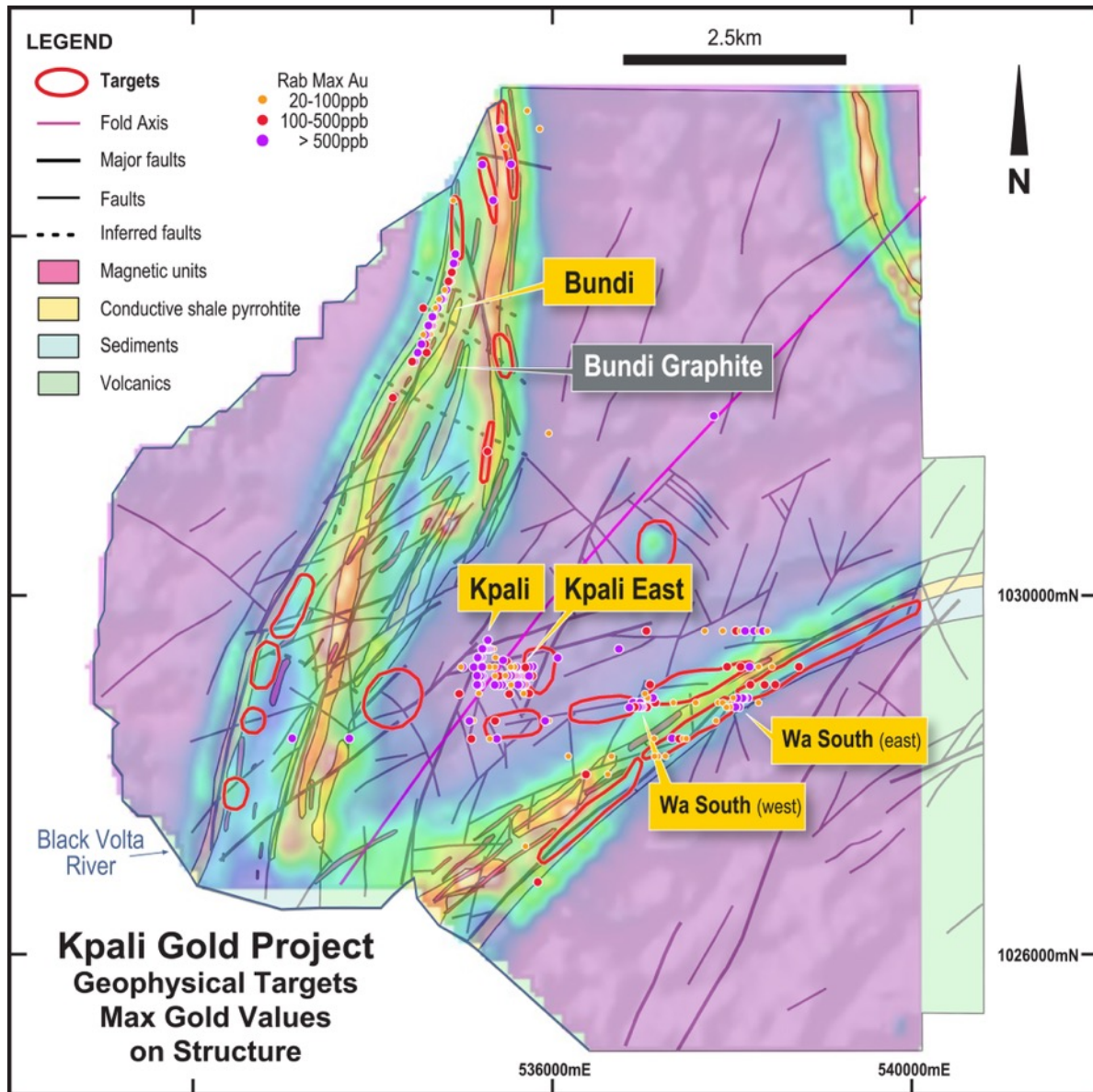
The Kpali East prospect, 500m east of Kpali, was identified by soil sampling and regional RAB drilling undertaken in 2013 and 2014. This tested a de-magnetised zone delineated by interpretation of historical aeromagnetic data acquired by Castle.

The RAB intercepts overlie the east side of the Kpali granite and are aligned with the de-magnetised corridor which trends east-southeast across the southern portion of Castle's licence area. Initial follow-up with RC drilling in mid-2014 produced some encouraging anomalous intersections. Further work is definitely required with the aim of locating similar structurally-controlled gold mineralisation as seen at Kpali.

### **Bundi Prospect**

The Bundi prospect, situated 4km north-northwest of Kpali, was discovered by Castle in 2013 perkoa following reconnaissance soil sampling, auger drilling and RAB drilling. Later in 2013 and 2014, 16 of 20 RC drill holes reported mineralisation (refer below).

Interestingly, there also appears to be an association of zinc sulphides with the gold mineralisation (refer ASX release 23 May 2013) suggesting that Bundi may represent the distal expression of a volcanogenic massive sulphide horizon. This is not totally surprising as the Perkoa zinc mine lies on the same Wa-Lawra / Boromo greenstone belt where it extends to the north into Burkina Faso. Further exploration and study work is required to verify this hypothesis but it is not a priority at present.



**Fig 3: Reprocessing and interpretation by geophysical consultants, Terra Resources P/L, of Castle ground magnetic and VTEM data superimposed with max-gold values in drill holes highlights the strong structural association of mineralisation at the Kpali Gold Project**

The Bundi prospect comprises linear, continuous vertically dipping mineralisation over a strike of ~1,400m and to at least 100m depth. It also remains open in both directions.

The mineralisation is hosted within altered Birimian shales and sediments. Gold mineralisation is associated with quartz-sericite schist (metamorphosed felsic volcanic) with sericite alteration and 1-3% disseminated sulphides (incl. sphalerite).

Intercepts from RC drilling at Bundi include (refer ASX release 17 June 2013 and 29 April 2014):

- 4m at 2.57g/t Au from 24m (13SWRC026);
- 6m at 3.32g/t Au from 37m (13SWRC027);
- 8m at 2.16g/t Au from 40m (13SWRC028);
- 2m at 9.09g/t Au from 68m (13SWRC032); and
- 5m at 1.40g/t Au from 209m (14SWRC066)

## SYNERGIES

The Kpali Project is just one of several gold discoveries within Castle's nine-licence, 2,689km<sup>2</sup> Wa Gold Project. Whilst being one of the largest tenures held by a West African junior explorer, it was formerly a plus-12,000km<sup>2</sup> holding that has since been reduced following the expenditure by Castle of several million dollars on systematic geological evaluation and rigorous filtering by its geologists.

With the Kpali Gold Project and the Company's Kambale Graphite Project in the same region, there arise a number of operational and logistical benefits underpinned by an excellent infrastructure which includes a major sealed international highway and an array of good quality unsealed roads, largely hydro-dam generated grid power and a commercial airport at Wa with daily flights.

Ghana stands out amongst its 54 other African counterparts as a favourable democratic, Westminster government based jurisdiction with an 80-year history of mining, a very workable mining act and legislative system. It is the world's sixth and Africa's second largest gold producer and has a well trained workforce and established supply sector.

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

### Stephen Stone

Executive Chairman

stone@castleminerals.com

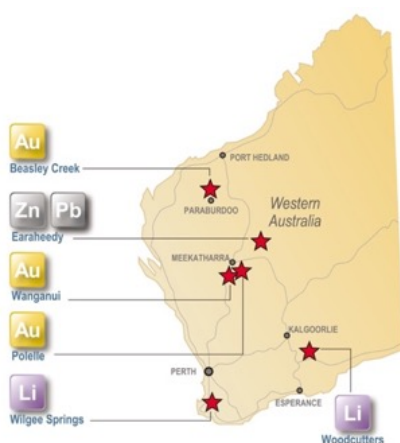
+61 (0)418 804 564

## ABOUT CASTLE MINERALS

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

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

Castle's 100% owned Ghanaian subsidiary, Carlie Mining Ltd, holds a 2,686km<sup>2</sup> tenure position in the same Upper West region. This encompasses large tracts of highly prospective Birimian geological terrane, the host to many of West Africa's and Ghana's multi-million-ounce gold mines. It has delineated several advanced gold exploration targets including at **Kpali, Bundi and Kandia**.



In Western Australia, The **Earaheedy Basin Project** comprises the Withnell and Terra Rossa sub-projects. The **Withnell** licence is strategically located adjacent to the evolving World-Class Chinook-Magazine zinc-lead project of Rumble Resources Ltd (ASX: RTR) and north of the Strickland Metals Limited (ASX: STK) Iroquois prospect. The **Terra Rossa** licences have additional prospectivity for copper.

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

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

high-grade gold shoots. Both have been optioned to Great Boulder Resources Limited (ASX: GBR) for possible incorporation into its emerging Side Well project.

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.

## STATEMENTS

### Cautionary Statement

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

### Forward Looking Statement

Statements regarding Castle's plans, forecasts and projections with respect to its mineral properties and programmes are forward-looking statements. There can be no assurance that Castle's plans for development of its mineral properties will proceed. There can be no assurance that Castle will be able to confirm the presence of Mineral Resources or Ore Reserves, that any mineralisation will prove to be economic or that a mine will be successfully developed on any of Castle's mineral properties. The performance of Castle may be influenced by a number of factors which are outside the control of the Company, its Directors, staff or contractors.

## PREVIOUSLY REPORTED INFORMATION RELATING TO THIS RELEASE

Additional details, where applicable, can be found in the releases referenced in this Report and/or in releases lodged by the Company with the ASX, including the following:

Headline	Date
Reprocessed Geophysics and Historical Intercepts to Drive Ghana Gold Expansion	11 June 2024
US\$11.7 Million Farm-Out Agreement, Degbiwu and Gbiniyiri Licences, Ghana	14 August 2019
New Graphite Discovery in Ghana	30 July 2014
Maiden Resource Estimate for the Kpali Gold Prospect	2 July 2014
New Gold Zone Intersected at Kpali	20 March 2014
High Grade Gold Intersected at Bundi Prospect	31 January 2014
Kpali Gold Discovery	28 January 2014
Kpali Drill Results	18 January 2014
Multiple EM targets identified at Bundi Prospect	28 October 2013
Geophysical Survey Commences at Bundi and Kpali	13 August 2013
Drilling Extends Kpali Gold Discovery	4 July 2013
High Grade Gold Horizon Defined at Bundi Prospect	17 June 2013
New Gold Discovery at Kpali Prospect in Ghana	24 May 2013
RC Drilling Confirms Gold and Zinc Discovery at Bundi Prospect	23 May 2013
New 600m Long Gold Zone Defined – Kpali Prospect	20 May 2013
New Gold Hits South of Bundi Prospect RC drilling Commences	6 May 2013
Bundi Gold Target Increases to 1,400m	22 April 2013
Drilling Confirms Gold Mineralisation at Wa South and New Prospect Identified	26 September 2012
Auger Drilling Defines Large Gold Anomaly at Wa South	19 May 2011