

## **ASX Announcement**

## **Exploration Update**

Castle Minerals Limited (ASX: CDT), the Ghana gold explorer, is pleased to announce that interpretation of a detailed aeromagnetic survey flown by the Company on its Wa Project in north-west Ghana has identified numerous discrete circular features that may represent intrusive pipes<sup>1</sup>. Rock types that are known to occur as discrete pipes of this scale include kimberlite, lamproites and carbonatite pipes. Kimberlites and lamproites are the major source of the world's diamonds and carbonatites may host significant rare earth element mineralisation.

Field inspection showed that the anomalies are soil covered - this is consistent with expectations as these rock types are relatively soft and often have a 'negative' relief due to the effects of weathering.

Castle's Managing Director, Mr Mike Ivey, said; "these pipe like signatures are intriguing targets that have only been recognised due to the aeromagnetic survey flown by Castle. Hence this will be the first ever investigation of the anomalies and we look forward to reporting the outcome of our initial drilling".

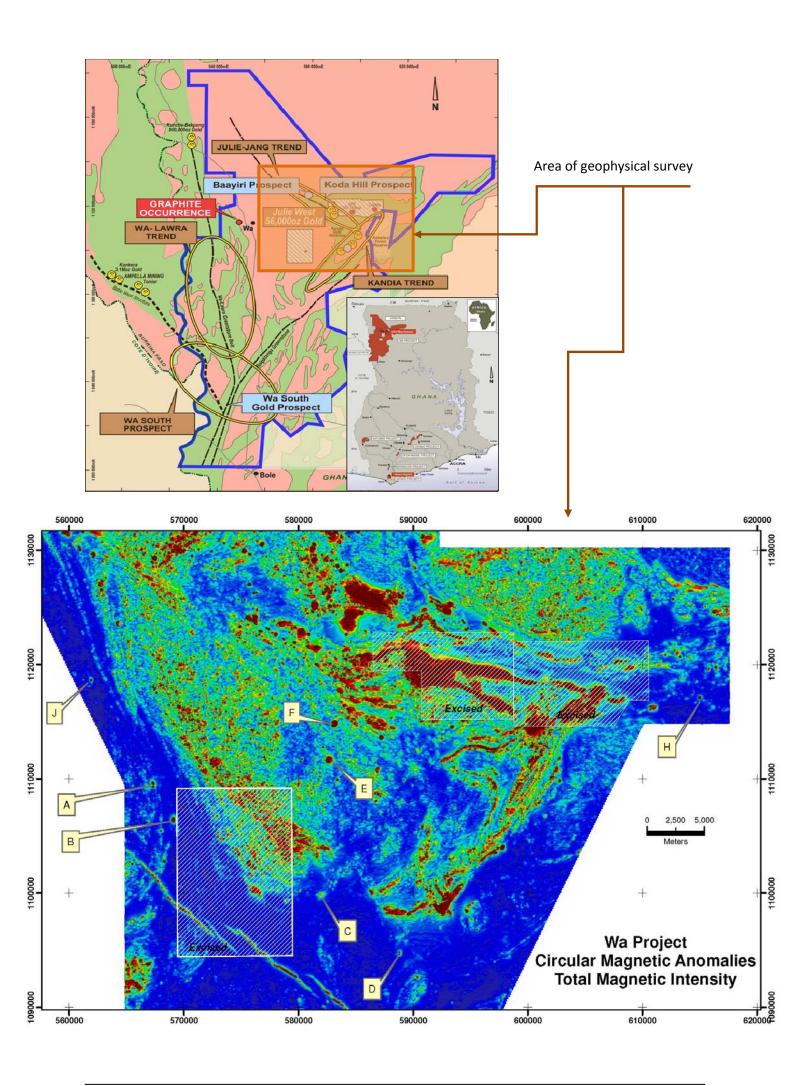
Castle has selected 8 high priority discrete features for initial drill testing (refer Figure p2.). Exploration drilling will commence about early October at the end of the wet season.

Approximately 1 in a 100 kimberlites contain an economic deposit of diamonds.<sup>2,3</sup>

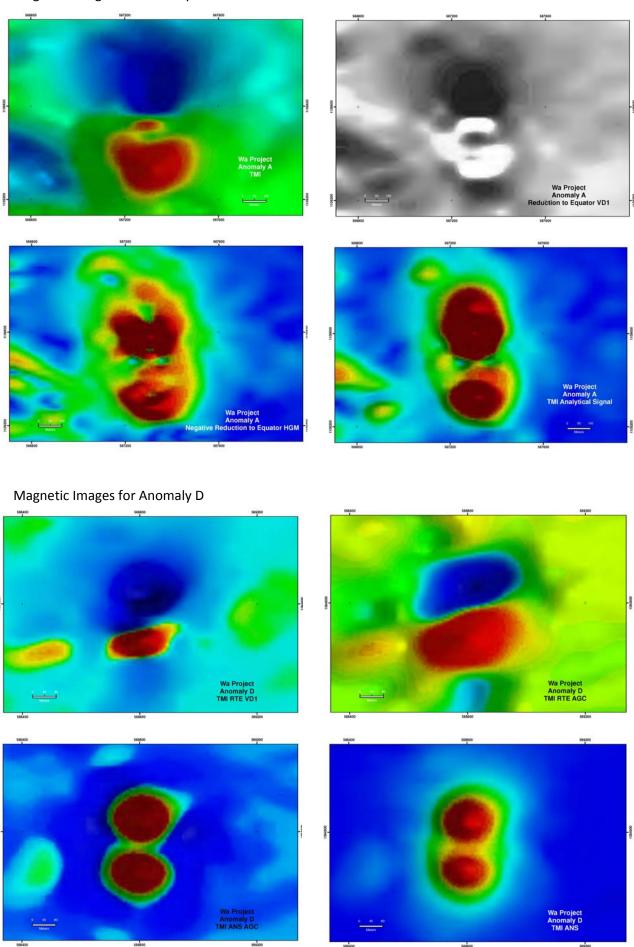
## **Gold Exploration**

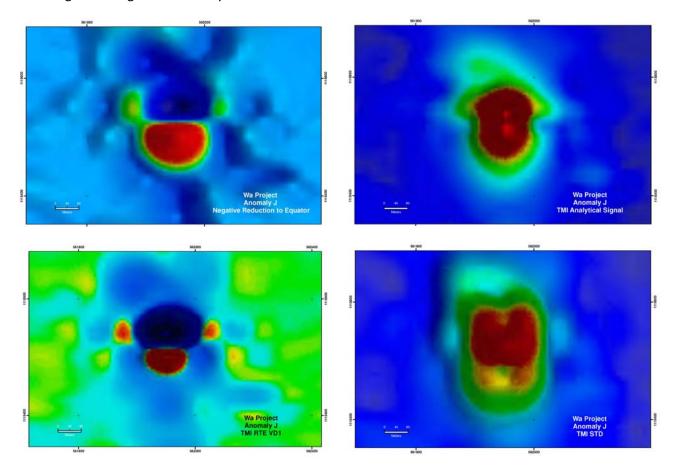
Gold exploration at the **Akoko Project** on the Ashanti Belt in southern Ghana will commence this month testing a 5km corridor south along strike from the old Akoko Mine (historic production 28,000 ozs).

On the company's **Wa Project** +40,000m of new drilling is being finalised, designed at testing numerous advanced exploration gold targets. This drilling is scheduled to commence in October 2012.



## Magnetic Images for Anomaly A





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Castle Minerals listed on the Australian Stock Exchange in May 2006 (ASX code '**CDT**') and has since acquired the rights to six mineral projects in Ghana, West Africa including Akoko, Antubia, Banso, Bondaye, Opon Mansi (application) and Wa covering more than 11,000km².

All granted projects are 100% owned by Castle Minerals (subject to Ghanaian Government right to a free-carried 10% interest). Castle's corporate objectives are exploration and development of its six projects in Ghana and the acquisition and exploration of other mineral resource opportunities, particularly in West Africa. The country of Ghana has a long history of gold mining and exploration and is Africa's second largest gold producer behind South Africa.

Information in this announcement that relates to Exploration Results is based on information compiled by Haydn Hadlow, Castle Minerals Limited Exploration Manager, who is a Member of The Australasian Institute of Mining and Metallurgy. Haydn Hadlow is a permanent employee of Castle Minerals Limited and has sufficient experience that 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 2004 JORC Code. Haydn Hadlow consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

<sup>&</sup>lt;sup>1</sup>The magnetic signature of most kimberlite pipes is, at high magnetic latitudes, a circular anomaly. At lower magnetic latitudes, it becomes asymmetric; and at the magnetic equator, the anomaly is mostly negative. The shape of the anomaly is also influenced by the presence of remanent magnetization. For a vertical cylinder, the shape of the analytic signal of the magnetic field is nearly independent of field orientation and remanence and always results in a compact, almost circular anomaly. A simple pattern recognition technique, based on a firstorder regression over a moving window, between the analytic signal of the observed magnetic field and the theoretical analytic signal of a magnetic vertical cylinder is an effective tool to identify potential targets. Results where the correlation coefficient between the analytic signal and the theoretical analytic signal within a moving window are above a certain threshold are retained, and additional criteria can later be used to refine the target selection. From GEOPHYSICS,VOL.69,NO.1(JAN-FEB2004);P.180–190, 10 FIGS., 4 TABLES. 10.1190/1.1649386 Use of the

analytic signal to identify magnetic anomalies due to kimberlite pipes Pierre Keating¤ and Pascal Sailhac.

<sup>2</sup>Brummer, J. J., 1978, Diamonds in Canada: Canadian Mining and Metallurgy Bulletin, 71, No. 798, 64–79.

<sup>&</sup>lt;sup>3</sup>Kamara, A. Y. S., 1981, Review: Geophysical methods for kimberlite prospecting: Exploration Geophysics—Bulletin of the Australian Society of Exploration Geophysicists, 12, 43–51.