

28 September 2018

## **AIRBORNE MAGNETIC & RADIOMETRIC INTERPRETATION IDENTIFIES MAJOR PROSPECTIVE GOLD ZONE**

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### **HIGHLIGHTS**

- **Highly prospective broad gold corridor identified extending from Morila to the Batouba Sud application (Morila-Domba Shear Zone) defining a 20km long exploration target zone within Birimian tenements.**
  - **Further ground work planned to delineate high priority zones and drill targets on the gold projects.**
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Birimian Limited (ASX:BGS; **Birimian** and the **Company**) wishes to advise the results of interpretation of airborne magnetic imagery produced from the combined airborne magnetic and radiometric survey over the Company's Dankassa and Massigui tenements earlier this year. The survey, completed in April 2018, covered all of Birimian's tenements.

Imagery produced from the survey has been analysed and interpreted by consulting geologist, Dr Oliver Kreuzer, who in December 2017 reviewed the gold prospectivity of the Company's Massigui and Dankassa tenements and regions to prioritise exploration targets (*BGS; 30 Apr 2018*).

As a result of this latest analysis, a distinct structural corridor has been identified at Massigui, averaging some 5.5km in width and extending obliquely across the Birimian tenements, which regionally appears to be associated with gold deposits and occurrences. The corridor defines an exploration target zone some 20km long within Birimian's Massigui tenements and future investigations will be focussed within this prospective zone.

### **Massigui Gold Project (Tenements PR13/3125, 13/3128-9, 14/1705, 14/0390)**

Figure 1 shows the new interpretation for the Massigui Gold Project (**Massigui**) area. A key observation is the presence of two major NW-SE faults, one of which controls the location of the Morila, Domba, Koting, N'tiola and Viper deposits and prospects. These structures define a prospective NW-SE trending corridor, which has been called the Morila-Domba Shear Zone. This zone can be traced as far south as the Syama gold deposit and is clearly a regionally-significant trans-crustal structure, similar to those hosting major gold camps elsewhere in the world.

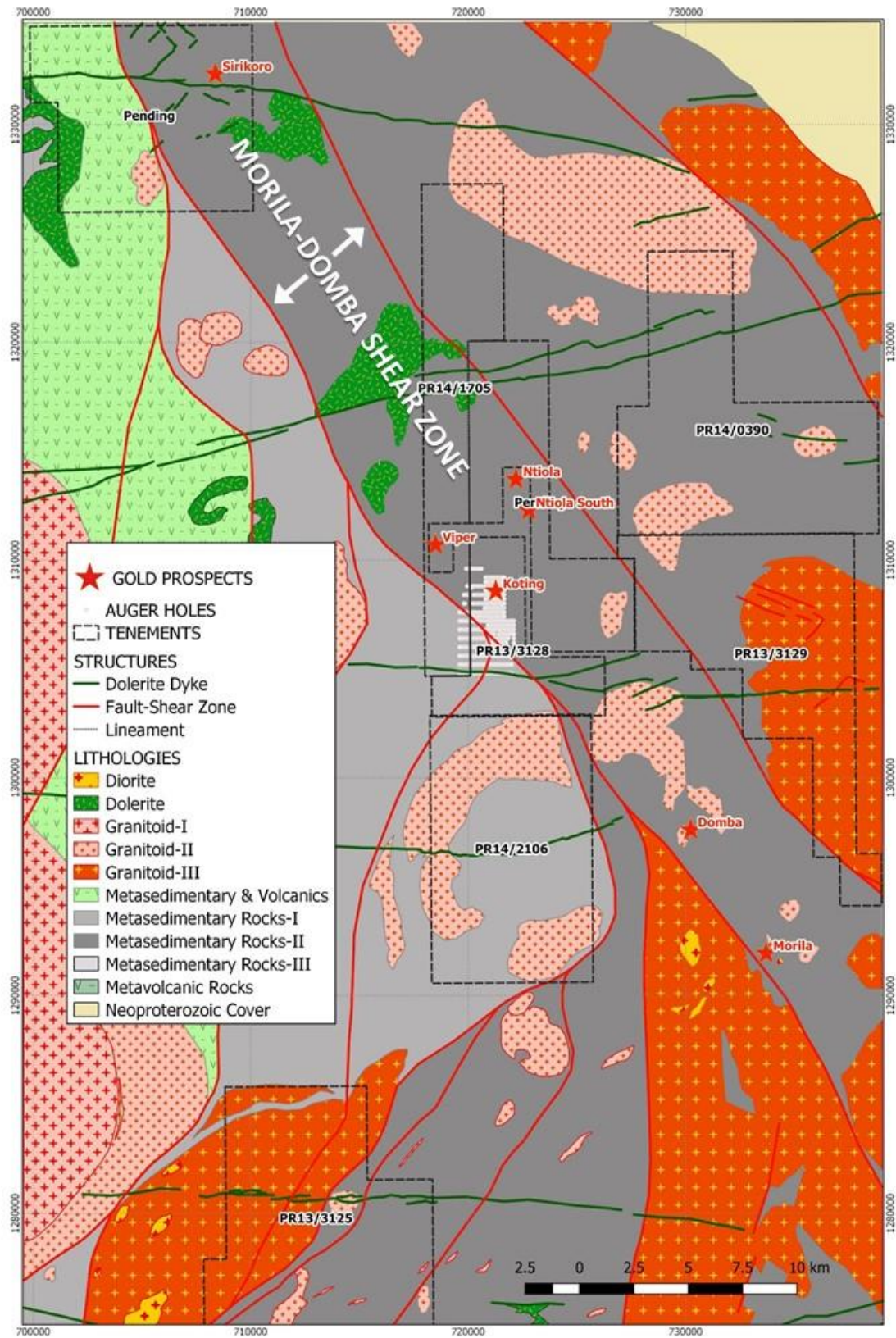


Figure 1: Interpreted lithological map of the Massigui project area, outlining regional prospective zones. The area of auger drilling at Koting is shown.



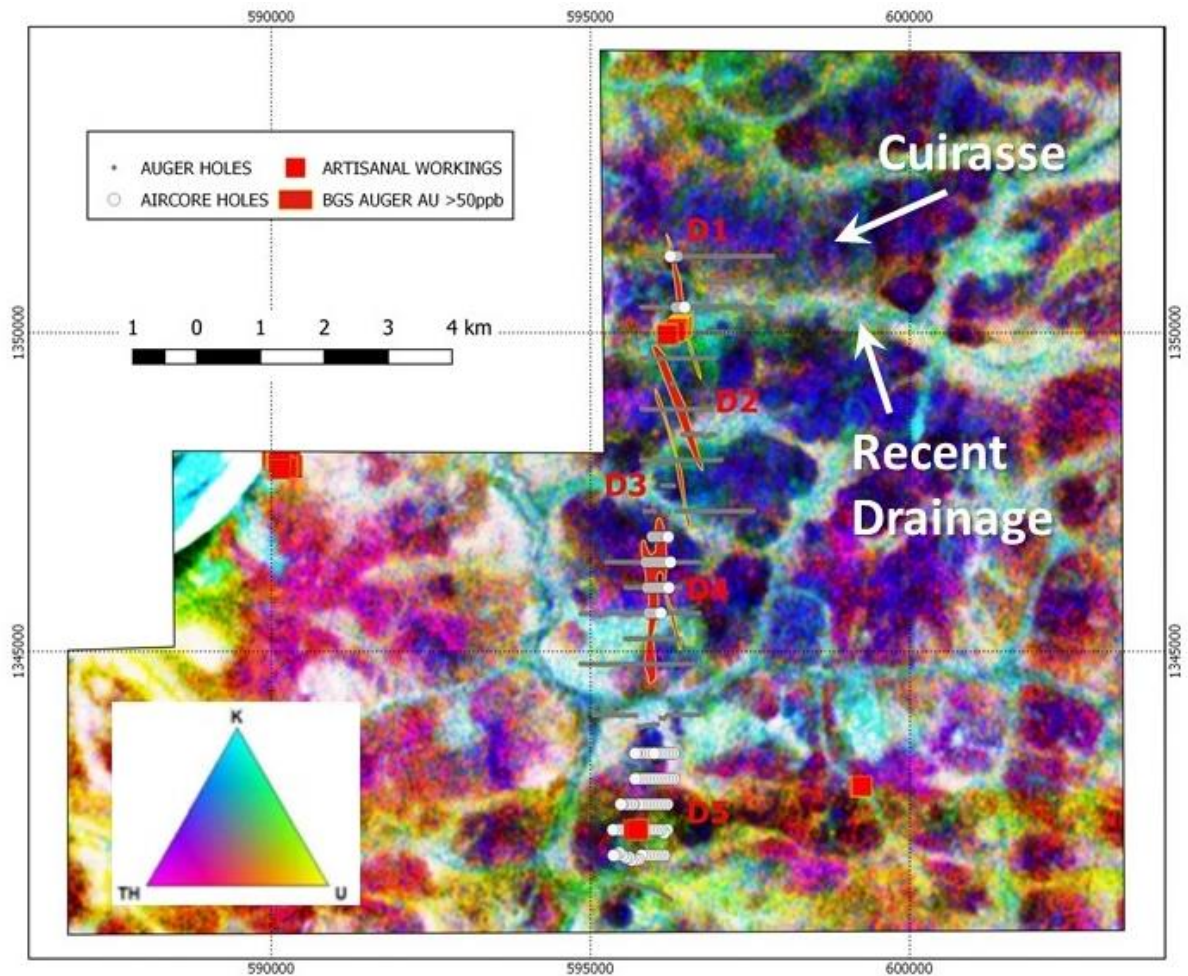


Figure 2: Ternary radiometric image of the Dankassa project area (excluding the Manabougou tenement). The colours represent various combinations of the radioelements K, U and Th as shown in the triangle in the bottom left. D1 to D5 are gold targets based on auger and aircore drilling and a cut-off of 100 ppb maximum downhole Au.

The Massigui gold deposits (Viper, N'tiola and Koting) are believed to be controlled by splays off the major bounding structures, which demarcate the Morila-Domba Shear Zone. This observation substantiates the Company's belief in the prospectivity of the Finkola and N'tiola permits and the Batouba Sud application. Further work will be targeted at the prospective corridor existing within Birimian's tenements.

#### **Dankassa Gold Project (Tenements PR13/3124,13/3126-27,16/3583)**

The magnetic survey revealed that the Dankassa Gold Project (**Dankassa**) trend, located some 110km south of Bamako, is hosted by a featureless, low susceptibility package of rocks interpreted to be metasediments. Major N-S trending faults are interpreted to the east, which separate metavolcanics rocks from these metasediments. The faults are thought to be part of the trans-crustal Siekorole Shear Zone, which is recognised over at least 200km of strike. The Dankassa gold trend occurs approximately 5km west of this shear zone and parallels it. Recognition of the prospective Siekorole Shear Zone to the east of the Dankassa Trend provides an additional high priority target for further grass-roots exploration.

The ternary radiometric imagery is also particularly useful as it allows effective mapping of regolith types, especially the iron-rich indurated ferricrete or "cuirasse" and recent fluvial sediments (Fig. 2). This in turn will facilitate better interpretation of surface geochemical data and more effective targeting.

The dark blue and magenta areas in figure 2 contain low levels of K and Th and represent ferricrete ("cuirasse") occurrences. Brighter, pale blue areas represent drainages with higher levels of K than the cuirasse and lower Th and U. It is expected that surface sampling for gold will be ineffective in these latter areas as sediments related to the drainages will mask the bedrock sources of gold or carry gold particles significant distances from their source.

#### **CEO Comment**

Birimian's Executive Director and Chief Executive Officer, Mr Greg Walker, said the new airborne magnetic imagery had confirmed the prospectivity of the Massigui project in particular. "Recognition of the substantial Morila-Domba Shear Zone provides a new focus for ongoing exploration. The airborne radiometric data have provided valuable information on the nature of the regolith in Birimian's tenements and will make ongoing surface exploration much more effective."



#### **Greg Walker**

Executive Director and Chief Executive Officer  
Birimian Limited

#### ***Competent Person's Declaration***

*The information in this announcement that relates to Exploration Results and exploration objectives is based on information compiled by Birimian's Chief Geologist, Dr Andy Wilde, a Competent Person. Dr Wilde is a Registered Professional Geoscientist and Fellow of the Australian Institute of Geoscientists. He is also a Fellow of the Society of Economic Geologists. Dr Wilde has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity 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 ('the JORC Code')". Dr Wilde consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*