

14 November 2013

NDONGO AIRBORNE GEOPHYSICAL SURVEY COMPLETED

HIGHLIGHTS

- **High resolution airborne geophysical survey completed over the Ndongo tenement in Ghana, West Africa**
- **Structures interpreted previously from regional magnetic data show multiple major NE-SW trending shear structures, totalling over 100 kms striking through the Cardinal tenements in Northern Ghana**
- **The 2013 magnetic data are very high quality and show a great deal of additional structural and lithological detail**
- **The high quality radiometric data will aid geological mapping and targeting potassium-rich alteration zones typical of shear zone hosted gold deposits**
- **Survey results to be integrated with Cardinal's extensive geological and sampling database to select targets for RC and diamond drilling**
- **Ground induced polarization surveys will be considered to further refine targets by identifying sulphidic and/or clay alteration zones**
- **Survey to be processed and interpreted by Southern Geoscience Consultants Pty Ltd, Perth**

Cardinal Resources Ltd (ASX: CDV) ("Cardinal" or "the Company"), is pleased to announce that the airborne geophysical survey over the Company's wholly owned Ndongo tenement has been completed.

GHANA PROJECTS

Cardinal, through its wholly owned subsidiary, Cardinal Resources Ghana Limited, holds four tenements prospective for gold mineralisation in Ghana in two NE-SW trending granite-greenstone belts; The Bolgatanga Project comprising the Ndongo, Bongo and Kungongo tenements located within the Nangodi and Bole-Bolgatanga Greenstone Belts in NE Ghana, and the Subranum Project located within the Sefwi Greenstone Belt in SW Ghana (Figure 1).

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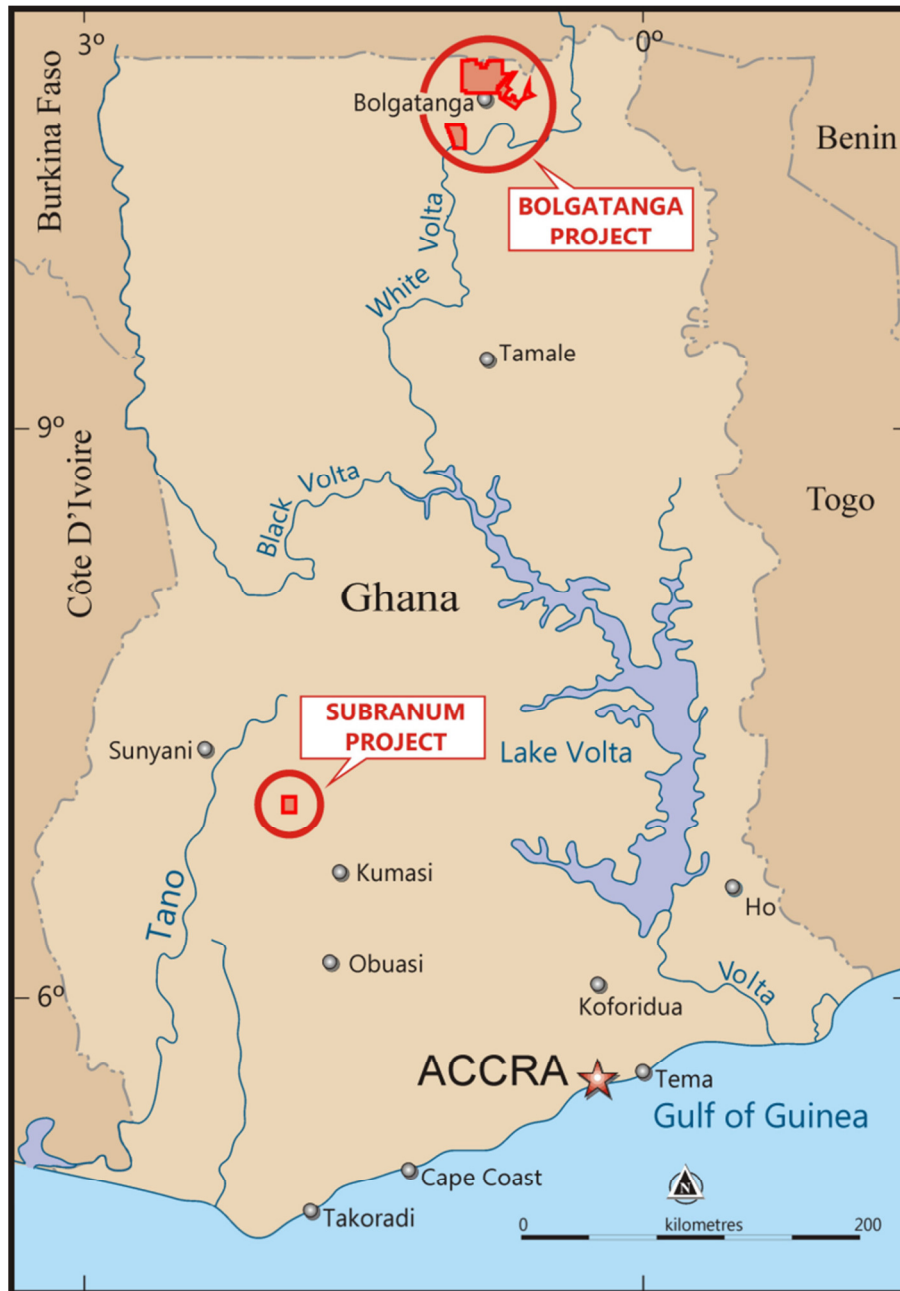


Figure 1: Ghana Regional Map showing Cardinal Projects

REGIONAL AIRBORNE GEOPHYSICAL SURVEYS

Aeromagnetic and radiometric data flown at 400m and 800m line spacing from two previously completed government sponsored surveys over the Bolgatanga Project were merged and processed by Southern Geoscience Consultants (SGC) (Figure 2).

Structures interpreted from this historical regional airborne magnetic data show multiple major NE-SW trending shear structures, **totalling over 100 kms** striking through the Cardinal tenements which will be targets for gold exploration.

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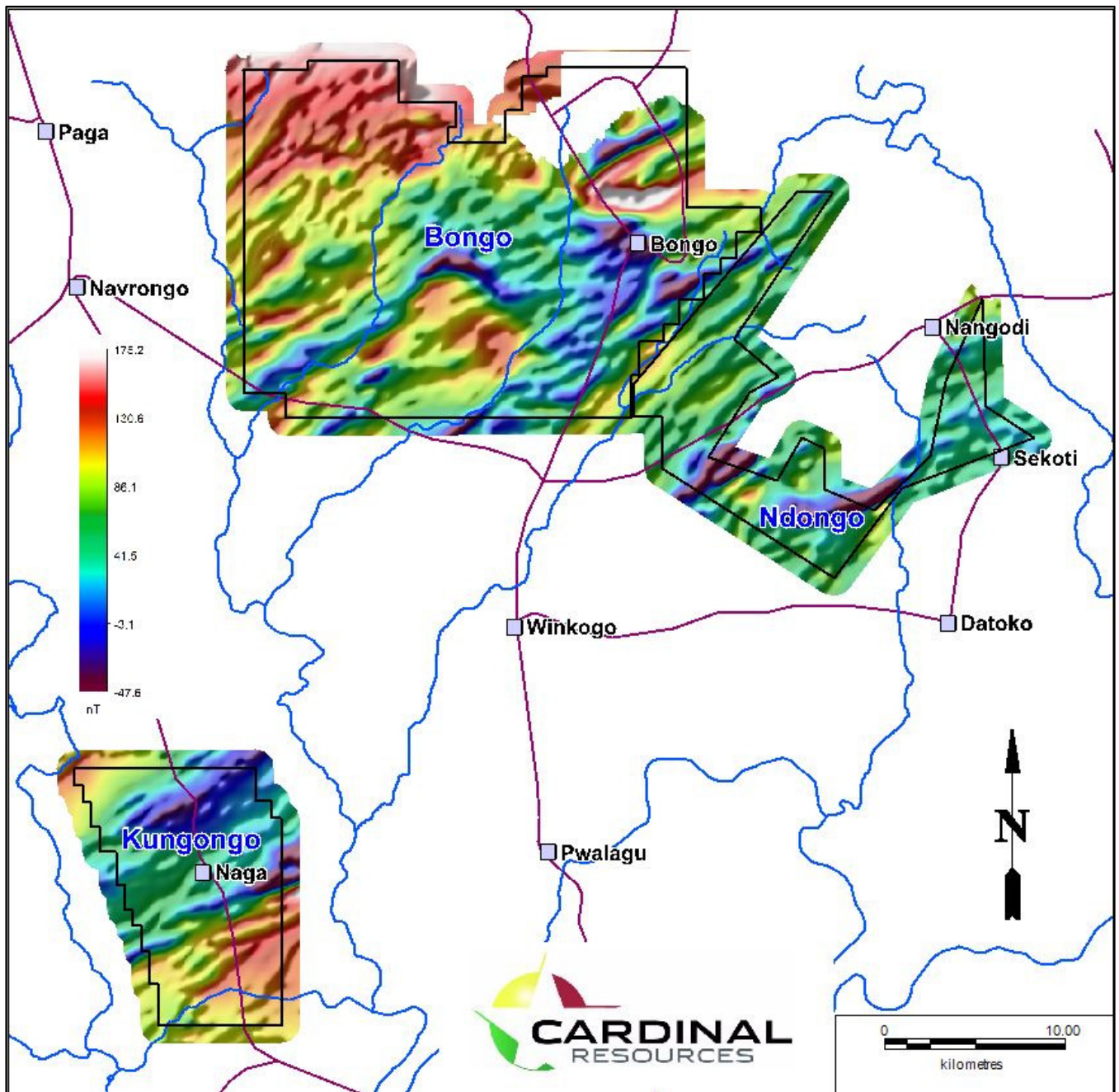


Figure 2: Bolgatanga Project – Historical Regional Airborne Magnetic Survey
Total Magnetic Intensity 400m line spacing

Although the existing government airborne survey data is very useful, in a regional context, the line spacing and the spatial resolution is relatively low for detailed exploration.

In order to significantly advance our geological understanding and provide focused exploration targets, the 2013 airborne geophysical survey that is currently underway covering all of Cardinal's tenements in Ghana has been designed with a much higher resolution and closer line spacing. The airborne survey is being undertaken by Terrascan Airborne GmbH (Figure 3) and supervised by SGC in Perth.

The 2013 airborne survey has the following parameters:

- Line Direction: NW-SE
- Line Spacing: 100m
- Flight Height: 50m
- Measured Parameters: magnetics, radiometrics and elevation



Figure 3: Terrascan survey aircraft on location, Bolgatanga, Ghana

PRELIMINARY RESULTS

At this stage only raw field data has been received and processed by SGC. Terrascan is currently levelling and correcting the data, and final data is expected shortly. Consequently the following images made from the raw data are very preliminary and contain flight line effects.

The high quality magnetic data over Ndongo (Figure 4) shows a great deal of structural and lithological detail. For comparison, the regional magnetic data over the same area is shown in Figure 5 and clearly illustrates the increased information obtained by the 2013 survey.

The 2013 survey has also collected radiometric data (Figure 6) which will be a valuable aid in geological mapping and targeting the potassium-rich alteration zones typical of shear zone hosted gold deposits.

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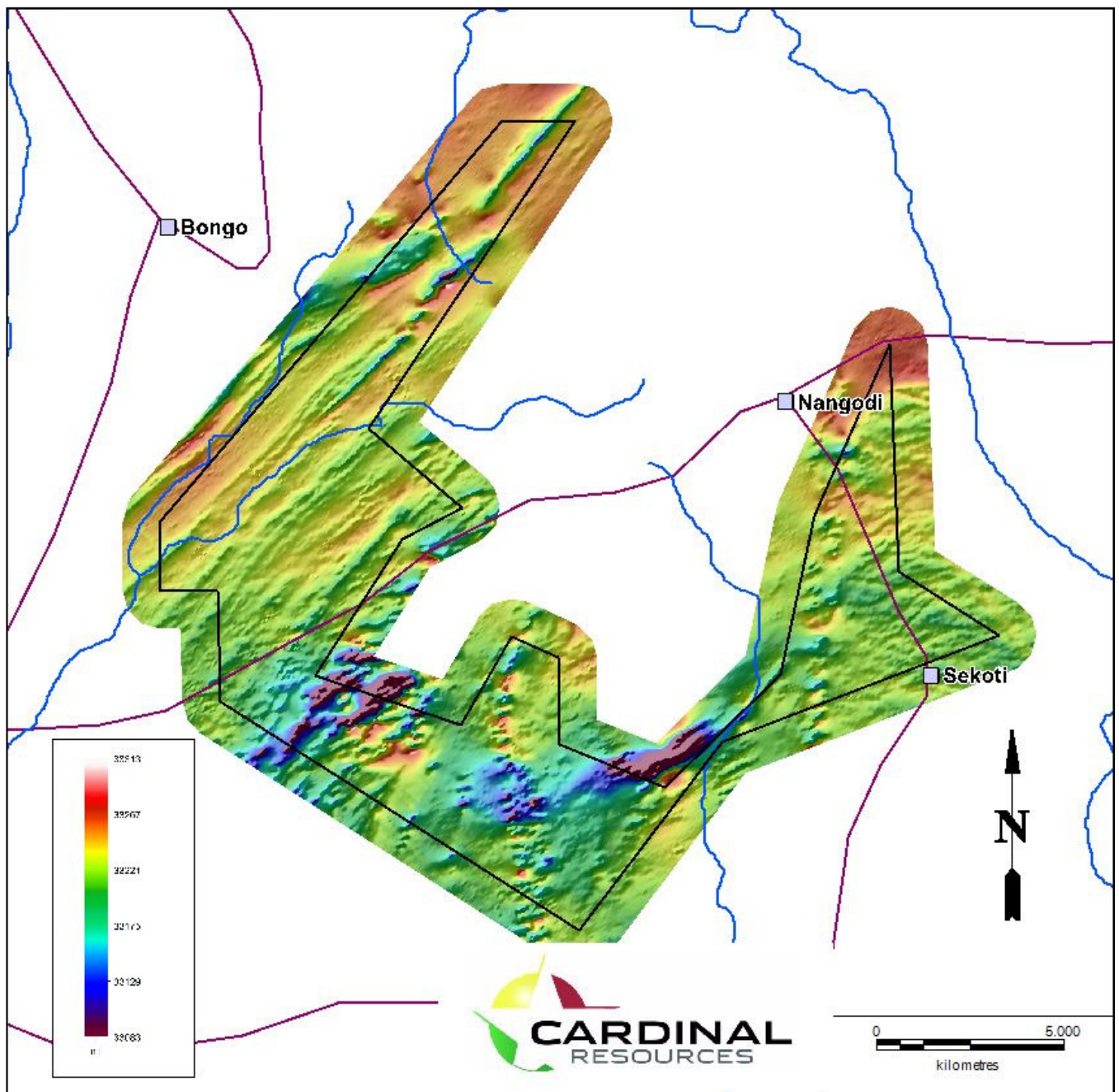
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When the final data is received, processing and interpretation will be carried out by SGC and the results integrated with Cardinal's extensive geological and sampling database to select targets for RC and diamond drilling.

Ground induced polarization surveys will be considered to further refine the targeting by identifying sulphidic and/or clay alteration zones.



**Figure 4: Ndongo Tenement 2013 Detailed Survey
Total Magnetic Intensity 100m line spacing**

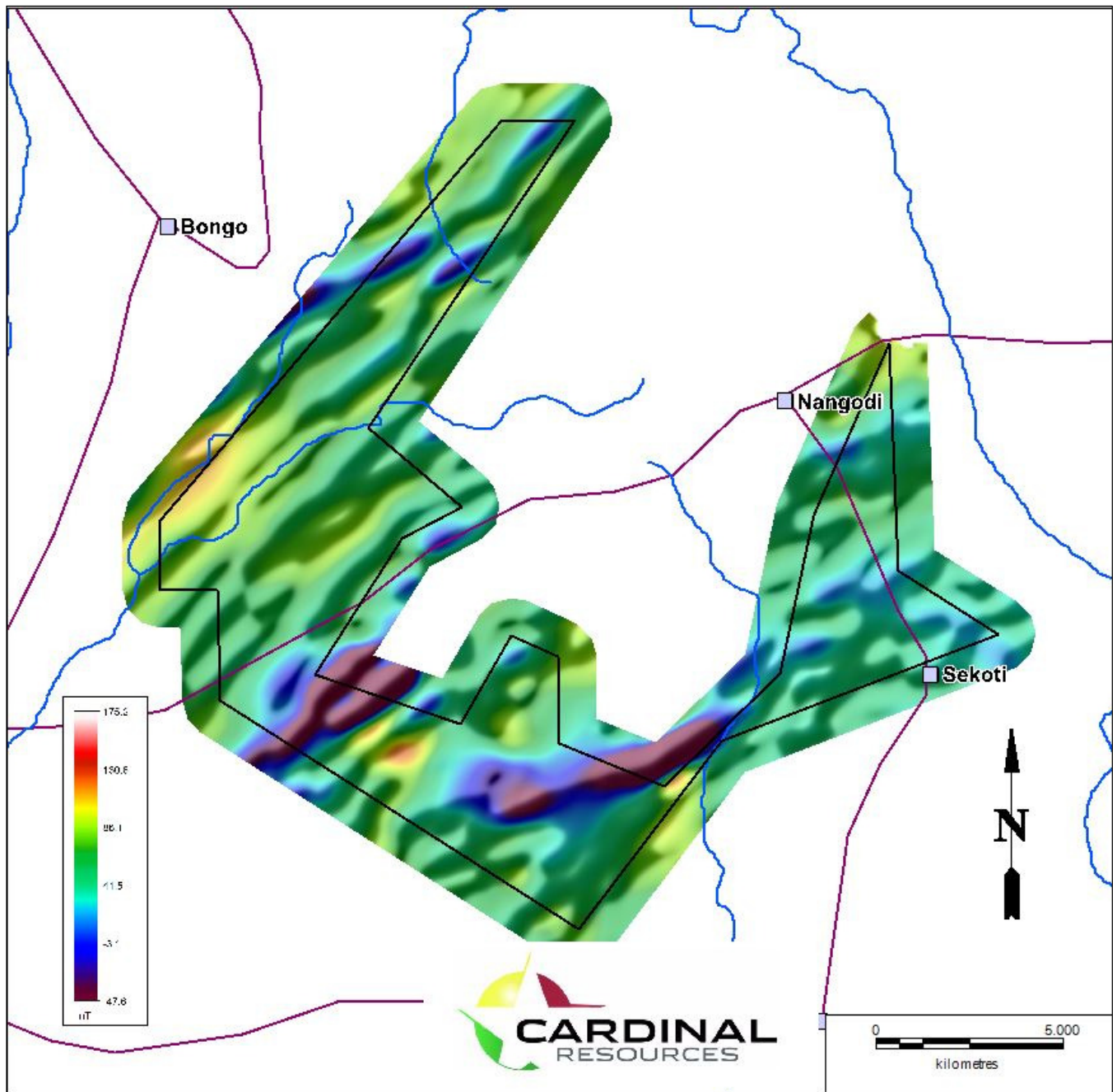


Figure 5: Ndongo Tenement – Historical Regional Government Survey
Total Magnetic Intensity 400m line spacing

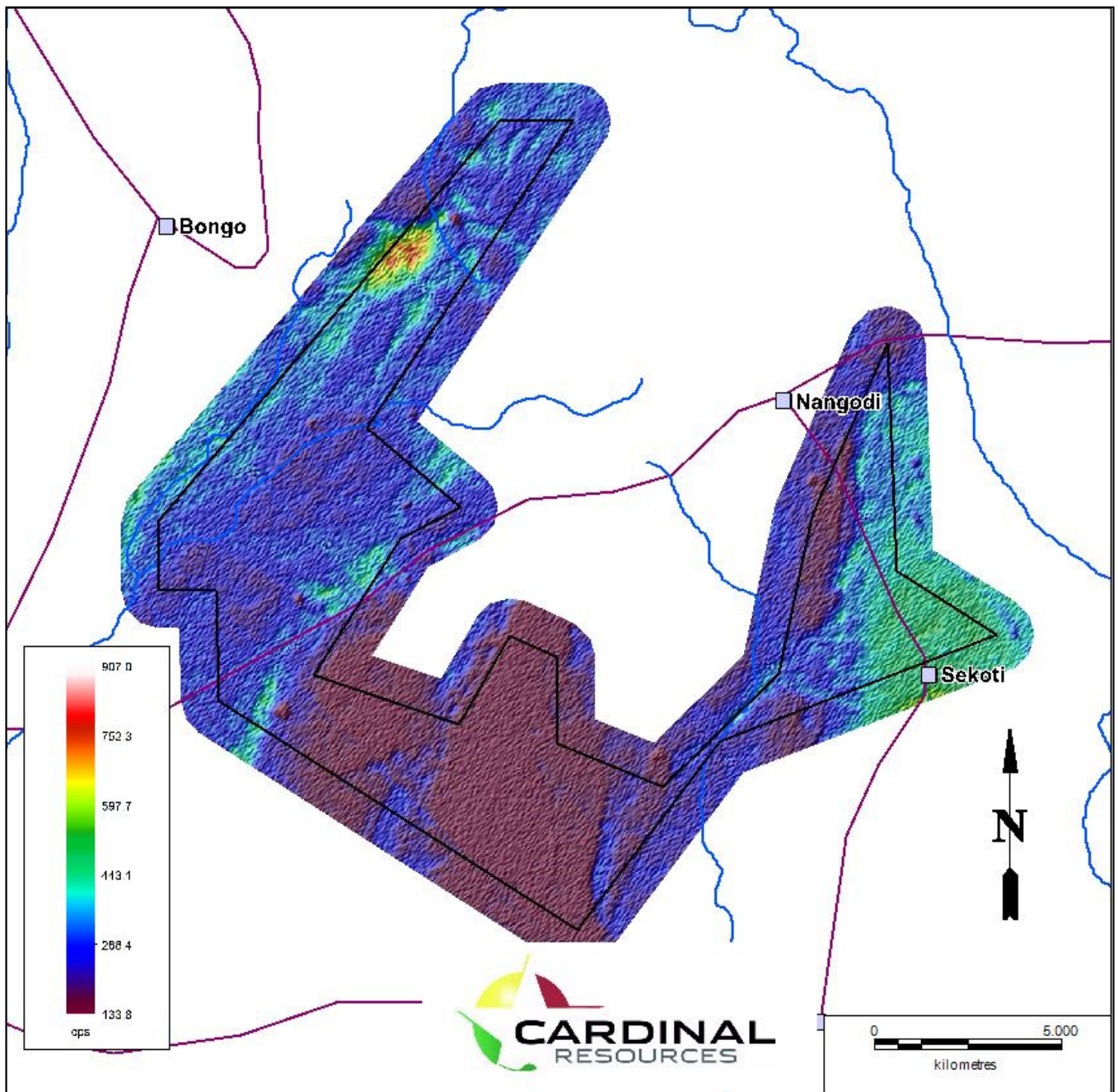


Figure 6: Ndongo Tenement 2013 Detailed Survey
Total Count Radiation 100m line spacing

Managing Director Archie Koimtsidis said, "This is a very exciting time for the Company; the airborne survey geophysical interpretation combined with our existing geological database, will enable Cardinal to prioritise and subsequently complete an initial reverse circulation and diamond drill programme on the Cardinal tenements in the second quarter of 2014."

For further information contact:

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Competent Person's Statement

The information in this report that relates to geophysical results and Interpretation is based on information compiled by Mr William Peters, a Consulting Geophysicist (Crosmin Pty Ltd) at Southern Geoscience Consultants. Mr Peters is a Fellow of the Australasian Institute of Mining and Metallurgy and Chartered Professional (Geology), and has sufficient experience which is relevant to the type of activity being undertaken to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Peters consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear.