

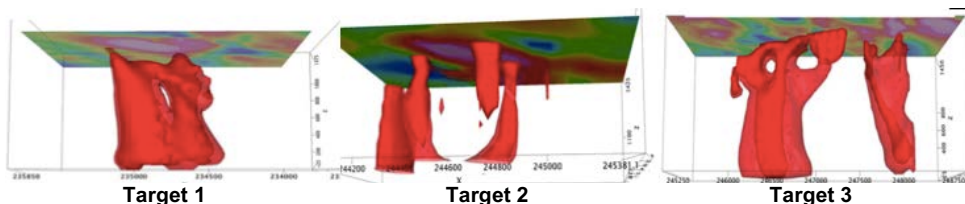
17 May 2021



## AMT Surveys Reveal Strong Conductors: 3D Models Exhibit Geometries Indicative of Ultramafic Intrusions

### Highlights:

- Audio-frequency Magnetotelluric (AMT) surveys have commenced.
- Six (6) grids have been surveyed, including with three (3) grids in Kabanga N, and the initial three (3) grids in Kabanga NE (see below and Figure 1).
- AMT surveys reveal conductors at every Kabanga N targets have shown to coincide broadly with magnetic lows and favourable nickel and/or copper soil anomalies.
- All targets will be followed- up with ground electromagnetic surveys (EMs) to delineate discrete drill targets.



- Of the 11,115 soil samples collected to date:
  - 2,227 samples taken from Kabanga N are completed
  - 7,267 samples taken from Kabanga NE are completed
  - 1,621 samples from the Kabanga W are still being collected.
  - Sampling from Kabanga E has been scheduled.

Adavale Resources (ASX: ADD) is pleased to provide an update on its exploration work to refine drill targets for the Phase 1 drilling program, on track to commence in June.

### Adavale Chairman Grant Pierce commented:

“Excellent conductivity in our first few AMT surveys already, particularly at Targets 1 and 3 have produced 3D models that exhibit geometries typical of ultramafic intrusions making the possibility of a significant discovery very real.

Our methodical approach is paying dividends. Through using this multi-vector validation of targets and our 3D models, the Adavale team is building a suite of drill positions to provide us with the maximum chance of success. Based on the BHP data and work done to date, we have some expectation that additional targets will also be identified when undertaking the AMT surveys of our remaining four (4) licences.

**ASX: ADD**

### DIRECTORS

**GRANT PIERCE**  
CHAIRMAN

**ALLAN RITCHIE**  
CEO

**STEVEN GEORGIADIS**  
DIRECTOR

**ROD CHITTENDEN**  
DIRECTOR

**GEOFF BRAYSHAW**  
CFO

**JULIAN ROCKETT**  
LEGAL & COMPANY SECRETARY

### ISSUED CAPITAL

Shares: 285.5 million  
Unlisted options: 17.5 million

### ABOUT ADAVALE

Adavale Resources is an ASX-listed exploration company targeting projects in the 'battery materials' space. The company is currently focussed on its 100% owned Kabanga Jirani Nickel Project adjacent and along strike from the world's largest undeveloped nickel sulphide resource.

### MORE INFORMATION

[adavaleresources.com](http://adavaleresources.com)

### CONTACT

Adavale Resources Limited  
Level 7,  
6 Underwood Street  
Sydney NSW 2000  
+61 2 8003 6733  
[investor@adavaleresources.com](mailto:investor@adavaleresources.com)



It is our hope and belief that the world class 58Mt (@ 2.62% Ni) Kabanga Nickel Deposit will not be the only major nickel deposit in this incredibly geologically rich region”.

### Exploration Update

The Target areas (shown in the Figure 1) were first identified with broad spaced soil and rockchip sampling in November and December 2020 that was quickly followed up with more detailed infill sampling grids, using a 400m line spacing and 50m station spacing. Now this infill geochemical soil sampling program is completed at Kabanga N and Kabanga NE (see Figure 1).

Fifteen (15) discrete geophysical targets were then identified using the extensive historical BHP magnetic and electromagnetic database acquired by Adavale. These are depicted in the red squares in the image below. Some of the more distinct magnetic lows are shown below as pale blue polygons which in some instances were coincident with the EM/Mag targets in red.

The deliberately sequenced AMT surveys provide a clearer understanding of how the targets look beneath the surface. This is achieved through using naturally occurring electrical currents to map conductive geological features down to depths of 500 meters and sometimes more.

The planned AMT surveys are shown as Targets 1 to 7 in Figure 1, starting at Kabanga N licence. Approximately, three (3) AMT traverses will be conducted across each of the EM/Mag targets (in red) - many of which are selected because they are coincident with geochemical anomalies.

In addition there are selected geochemical anomalies which are not coincident with geophysical targets that will still be followed up with AMT surveys due to other promising characteristics. AMT data acquired from two (2) of the Kabanga NE targets have not yet been modelled.

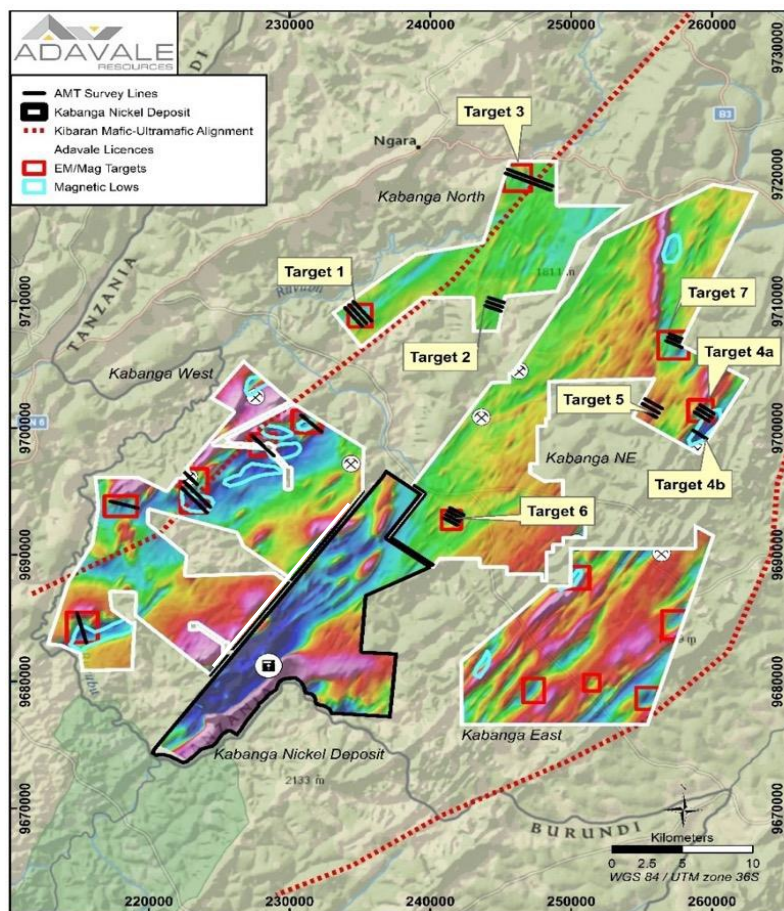


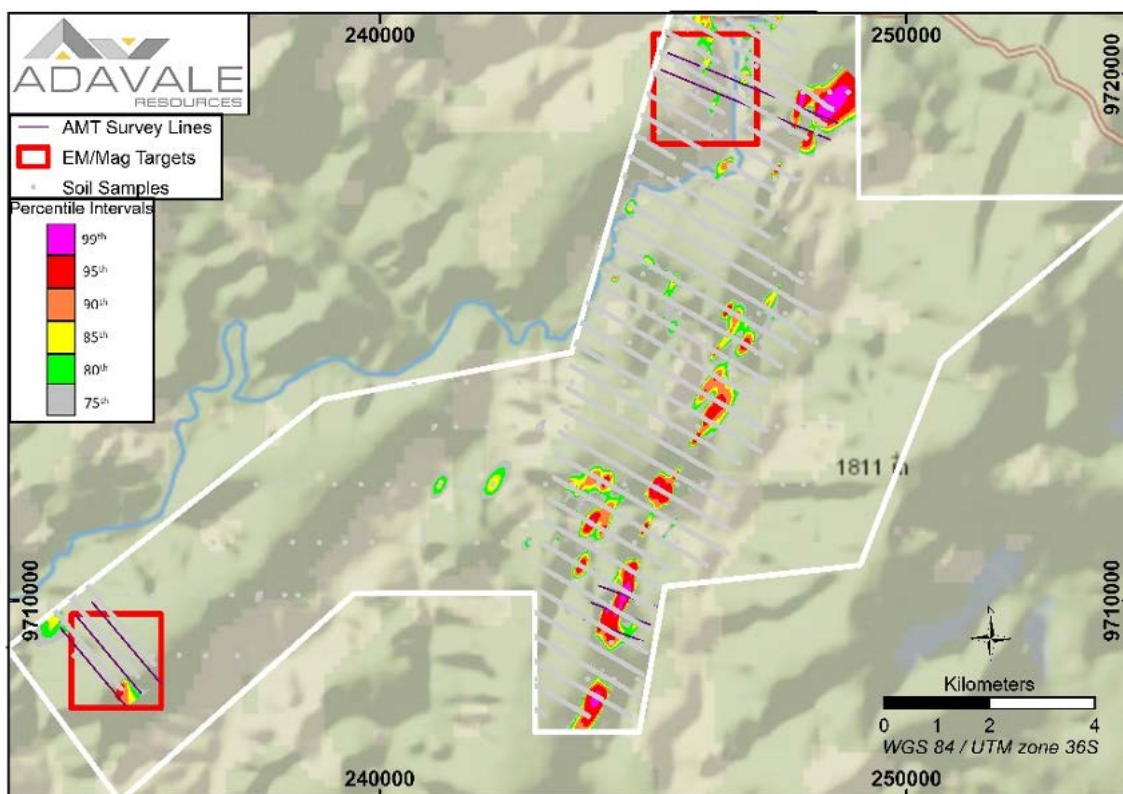
Figure 1: Location of AMT Targets relative to airborne magnetics and the 15 identified geophysical targets

## AMT Survey

The completed AMT surveys of the three AMT grids at Kabanga N (see Figure 2) resulted in **favourable nickel and/or copper soil** anomalies being detected at each target. The three (3) AMT anomalies are all steeply dipping, which was expected as the project area is characterised by subvertical sediments. Intrusions are expected to also be vertical/subvertical as their emplacement is controlled by the sediments. Intrusions can potentially host mineralised sulphides that are more conductive than their surrounding sediments. This helps them to be detected through the use of AMT surveys.

## Kabanga North Prospecting Licence

*Soil Samples Overlain On Copper Anomaly Grid*



*Figure 2: Location of AMT targets 1, 2 and 3 overlying Ni soil anomalies.  
AMT survey lines are shown as black lines*

The modelled AMT data indicates such intrusions. These three (3) targets will be followed up with ground EM surveys to determine if more discrete zones of higher conductivity can be identified. To offer the reader the best 3D images below, the darker red colour was chosen for low Ohm.m (i.e. 10 or 50 Ohm.m for shell with high conductivity) whilst the outer paler coloured pink shell shows higher Ohm.m (which is conductive) in each instance.

**Target 1** is associated with a strong vertical conductor as shown in Figure 3. This conductor underlies a Ni anomaly as well as a magnetic low (see Figure 4).

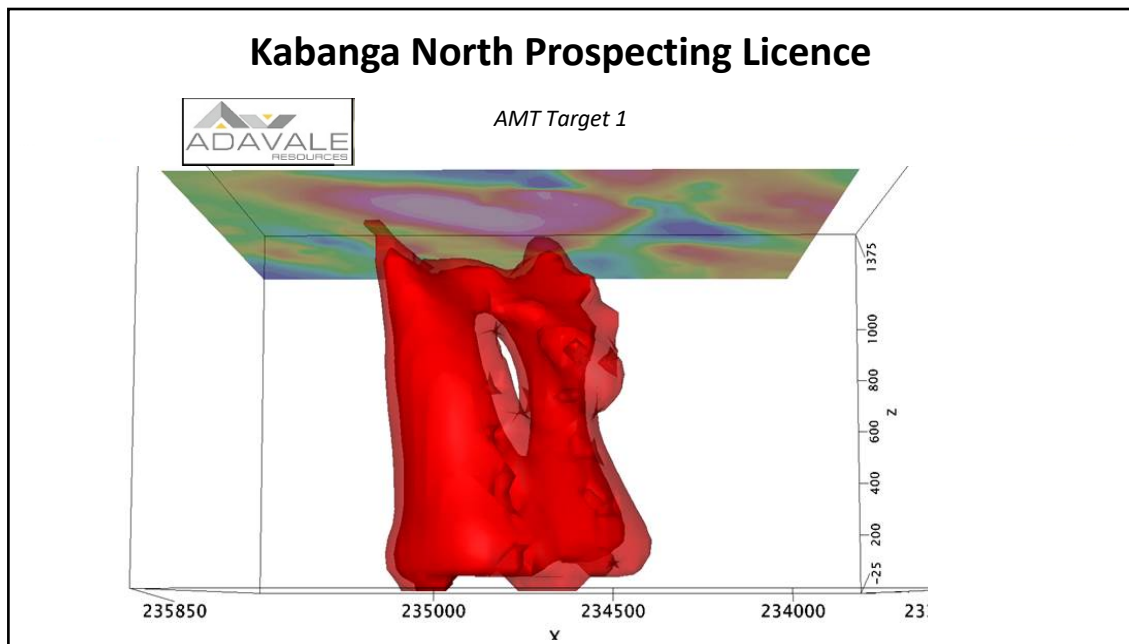


Figure 3: 3D Depiction of AMT Target 1 – the darker red shows the 10 Ohm.m shell and the paler pink the 100 Ohm.m shell. The surface shows gridded Ni values. The z axis measures metres above sea level

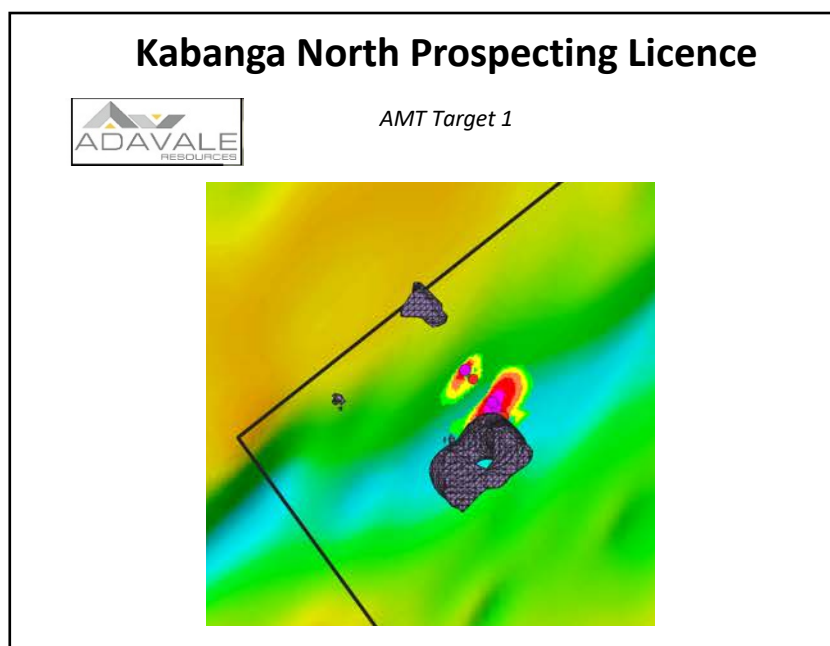


Figure 4: 3D bird's eye view of AMT model (shown as dark wireframes) overlying a magnetic low and Ni anomaly (multicoloured gridded image)

The 3D AMT model of **Target 2** shown in Figure 5, is associated with a Ni and Cu anomaly further shown in Figure 6.

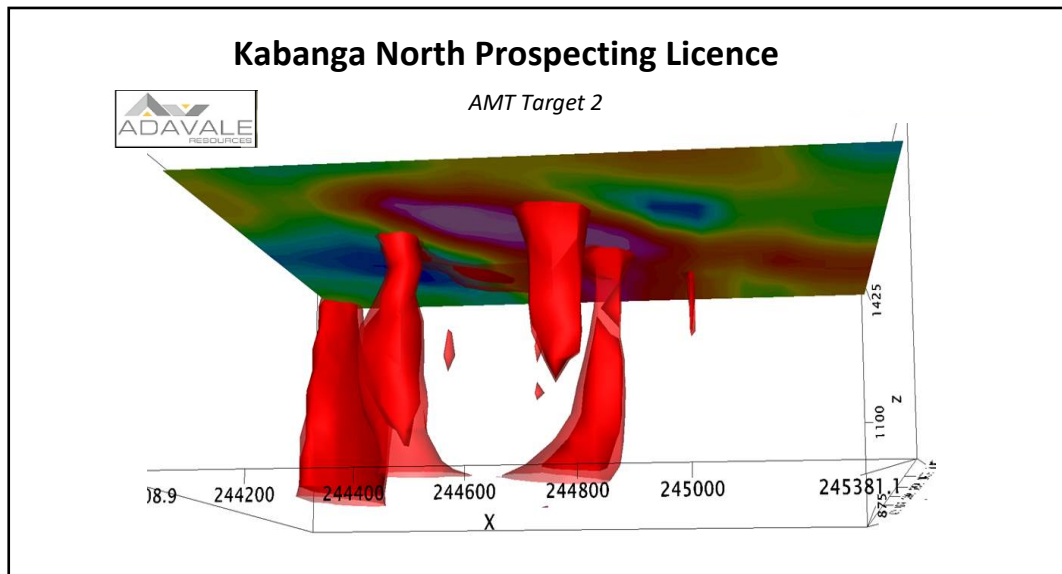


Figure 5: 3D Depiction of AMT Target 2 – the darker red shows the 10 Ohm.m shell and the paler pink the 1000 Ohm.m shell. The surface shows gridded Ni values. The z axis measures metres above sea level

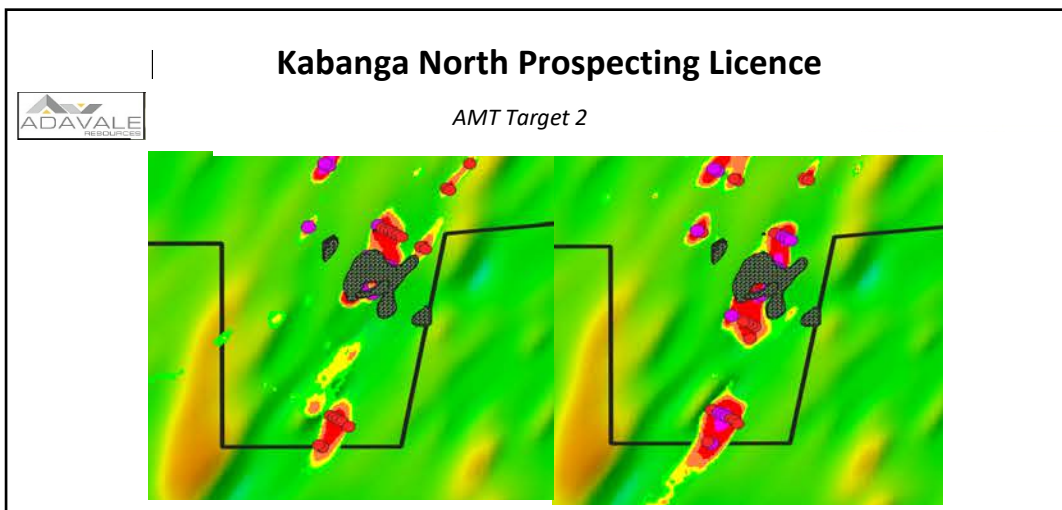


Figure 6: A bird's eye view of AMT anomaly (shown as wireframes) overlying a Ni soil anomaly on the left and Cu anomaly on the right

**Target 3** is shown in 3D perspective in the image below.

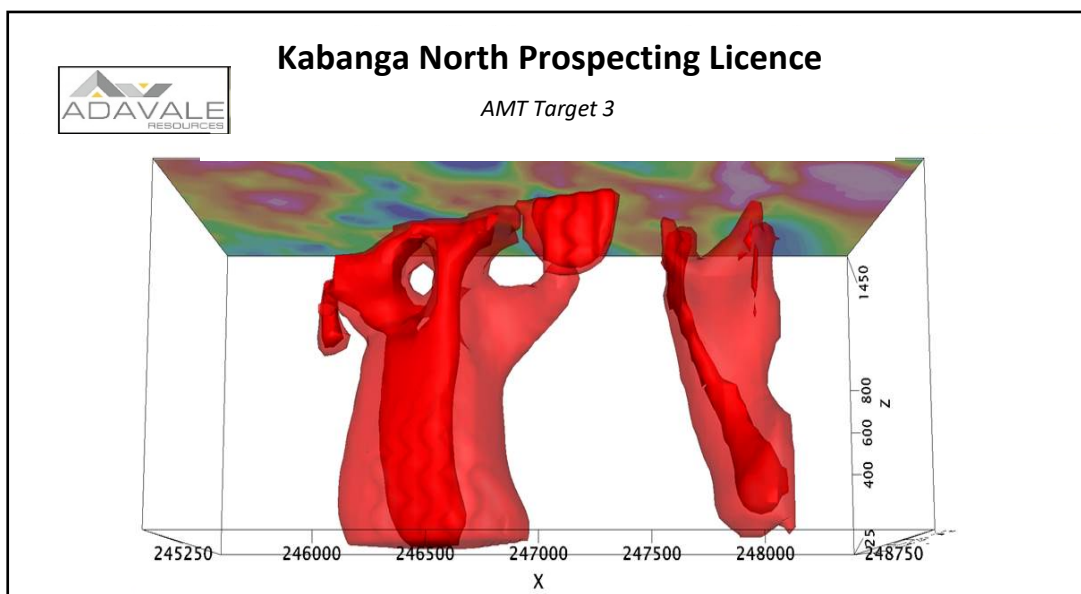


Figure 7: 3D Depiction of AMT Target 3 – the darker red shows the 50 Ohm.m shell and the paler pink the 1000 Ohm.m shell. The surface shows gridded Ni values. The z axis measures metres above sea level

Target 3 shows a strong conductor that is associated with a Cu anomaly on its eastern extremity (see Figure 8).

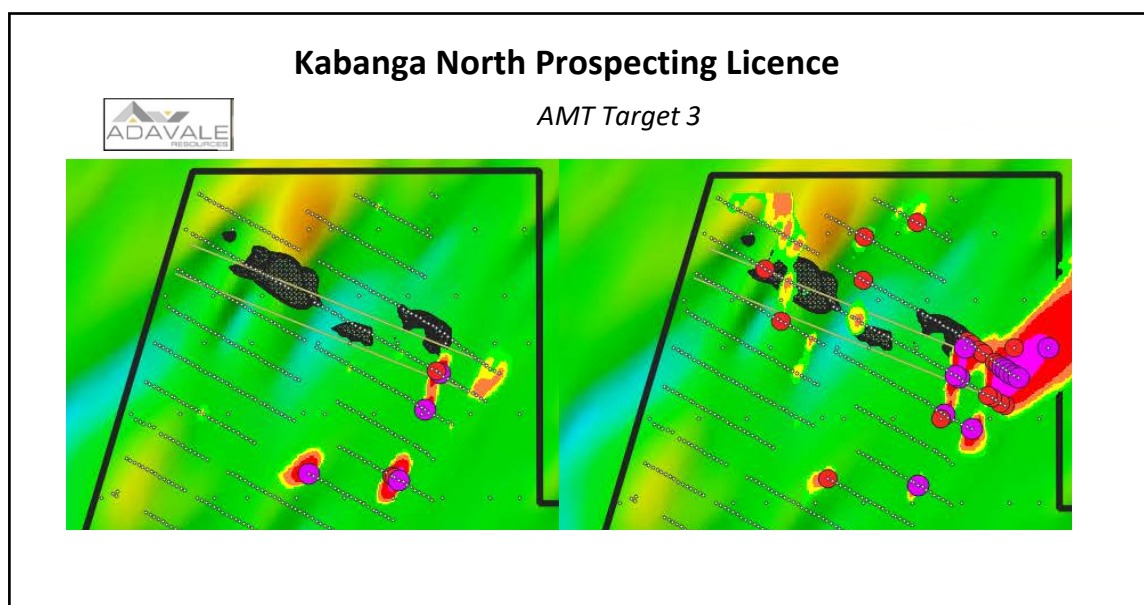


Figure 8: AMT Target 3 shown in bird's eye view with Ni anomalies on the left side and Cu anomalies on the right side.

### Geochemical Surveys

Now that the infill geochemical sampling on the Kabanga N and NE licences are completed, the dataset has been evaluated in its entirety, and their anomalies have been identified and prioritised in relation to the entire dataset (rather than in only in relation to the local grid).

As both licences are underlain by the same geology (iron laterites and phyllite) it is considered appropriate not to subset the data according to underlying lithotypes.

Sample values were determined by taking the average of three pXRF readings per sieved sample. QA/QC shows that the Cu and Ni values for standards fall within an acceptable range although the pXRF does underreport Cu. On the whole the Ni and Cu values within blanks are acceptable and the dataset is considered to be of acceptable quality to use for identifying anomalies.

10% of samples will be submitted to an accredited laboratory and pXRF values will be reconciled against the laboratory results. The results reported on in this announcement have not yet been verified against laboratory results and simply reflect the values obtained from pXRF readings. Anomalies are shown by sample values that exceed the 90<sup>th</sup> percentile and will be interrogated further by additional desktop studies and ground truthing.

At Kabanga North the linear nature of the coincident Ni and Cu anomalies appears to be reflecting an underlying lithology, perhaps a dyke, and individual anomalies along this feature could possibly be reflecting mineralisation and are still to be ground truthed. The black lines show where AMT surveys have been conducted and the red squares are part of the 15 geophysical targets. What is of particular interest is the coincident Ni and Cu anomaly outlined in red in Figure 9 (this corresponds to AMT Target 2).

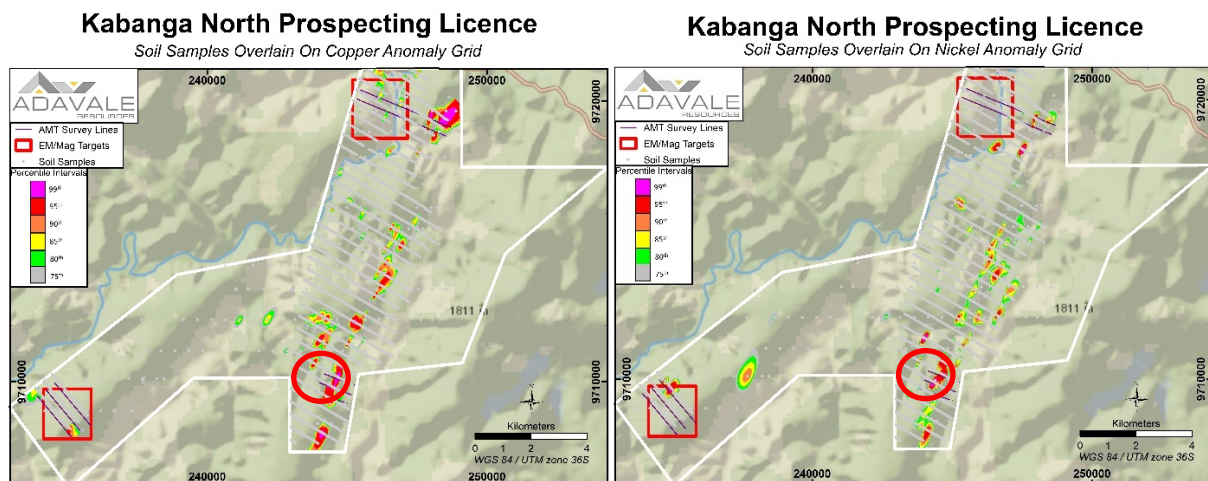


Figure 9: Cu and Ni anomalies identified at Kabanga N

The Ni and Cu values in Figure 10 reflect values that exceed the 90<sup>th</sup> percentile overlying the airborne magnetic survey.

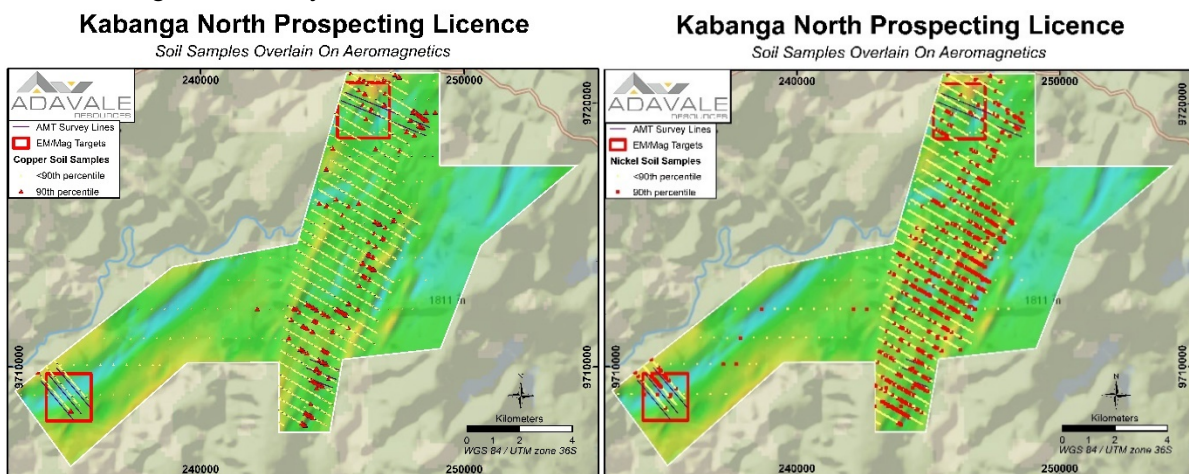


Figure 10: Cu and Ni values reflecting samples that exceed the 90<sup>th</sup> percentile overlying airborne magnetics

Kabanga NE shows numerous Ni and Cu anomalies (Figure 11) and these will be ground truthed and ranked and selected anomalies will be followed up with AMT surveys. The large circular Ni anomaly has been field checked and gabbroic intrusives have been identified at this location.

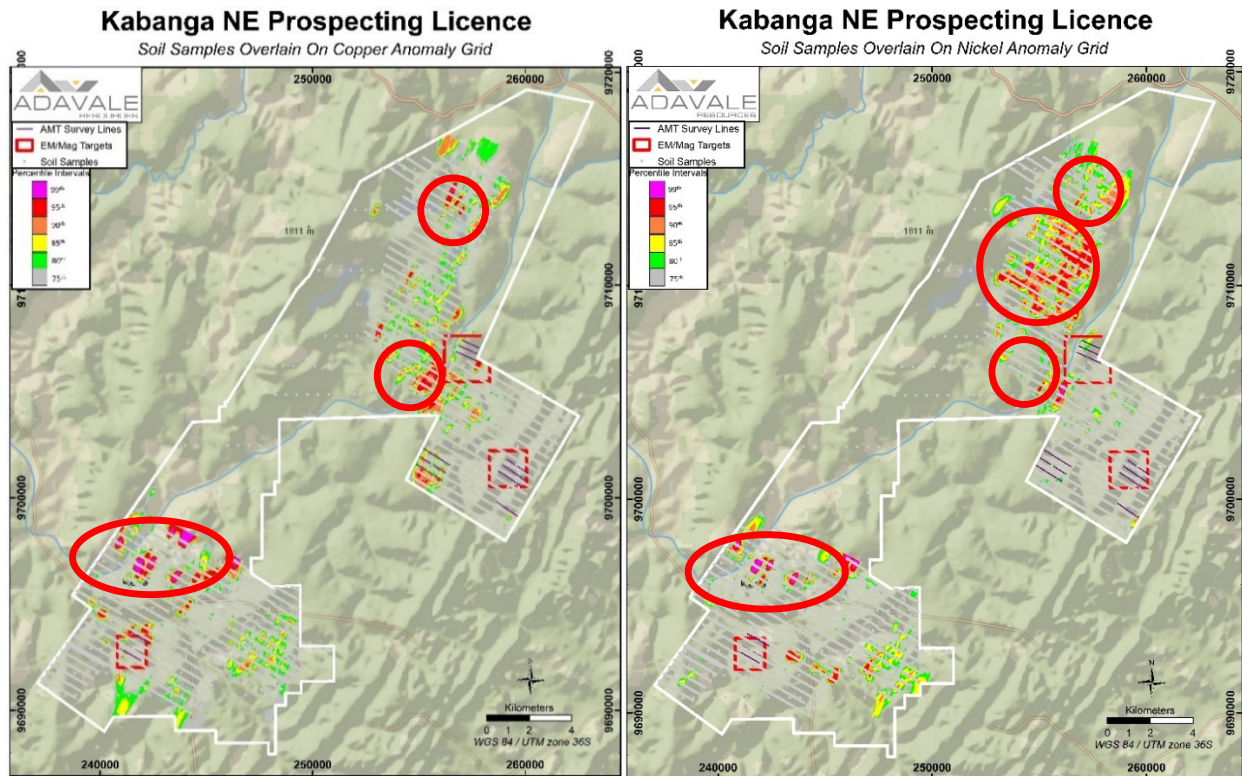


Figure 11: Ni and Cu Soil Anomalies at Kabanga NE

The Ni and Cu values in Figure 12 reflect those exceeding the 90<sup>th</sup> percentile overlying the airborne magnetics. The large circular Ni anomaly depicted in Figure 11 is cut by a distinctive magnetic N-S trending feature (Figure 12) but this feature does not control the distribution of anomalous Ni results so is probably not related to their formation.

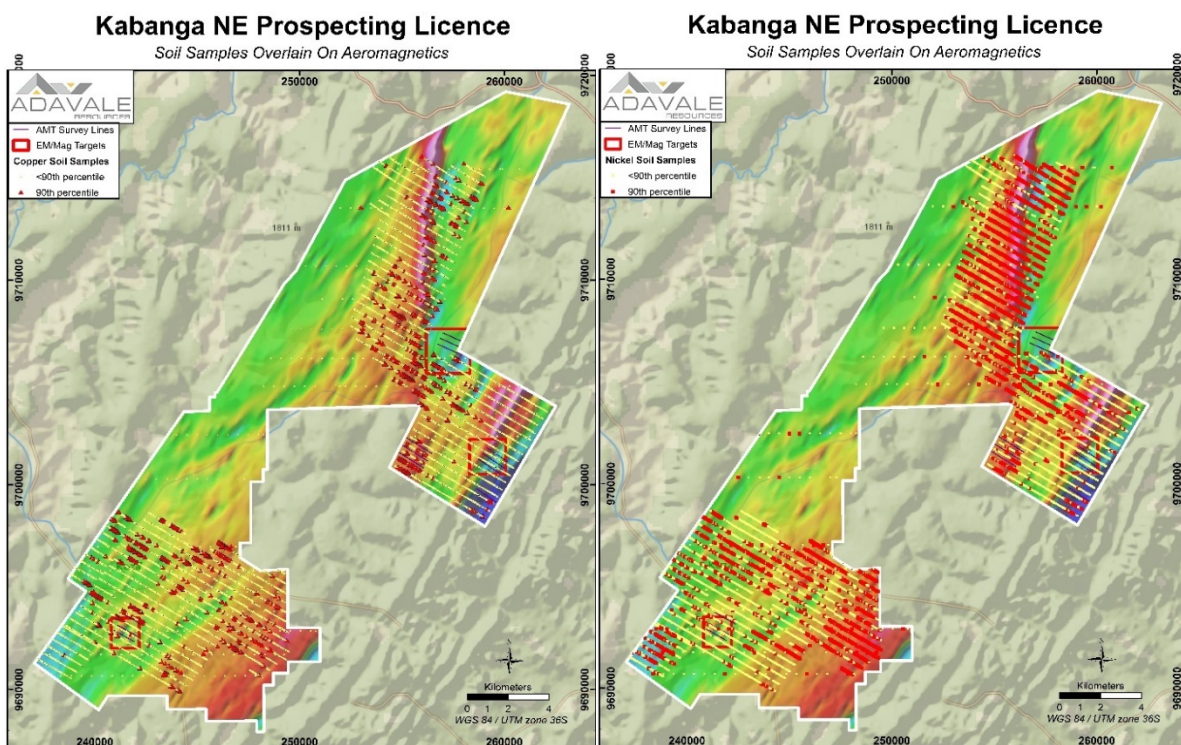


Figure 12: Ni and Cu soil anomalies at Kabanga NE overlying airborne magnetics

## Ongoing Program

- Soil sampling is continuing across Kabanga W and Kabanga E
- EM starts next week at Kabanga N
- AMT continues at Kabanga NE
- 10% of samples have been selected for submission to an accredited laboratory
- 3D modeling of airborne magnetics covering selected AMT targets to commence

*This announcement has been authorised for release by the Board of Adavale Resources Limited.*

To contact the Company about this announcement please email Julian Rockett, [julian@adavaleresources.com](mailto:julian@adavaleresources.com). For further information on the Company and our projects please visit [www.adavaleresources.com](http://www.adavaleresources.com)

## Competent Person Statement

The information in this release that relates to “exploration results” for the Project is based on information compiled or reviewed by Mr David Dodd of MSA, South Africa. Mr Dodd is a consultant for Adavale Resources Limited and is a member of the SACNASP. Mr Dodd has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration as well as to the activity that is being undertaking to qualify as a Competent Person under the ASX Listing Rules. Mr Dodd consents to this release in the form and context in which it appears.

## Forward looking statements

This document contains forward looking statements concerning Adavale. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward looking statements in this document are based on Adavale's beliefs, opinions and estimates of Adavale as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. Although management believes that the assumptions made by the Company and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Forward-looking information involves known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of nickel, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. Readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws. No representation, warranty or undertaking, express or implied, is given or made by the Company that the occurrence of the events expressed or implied in any forward- looking statements in this presentation will actually occur.

## About Adavale Resources

Adavale Resources Limited (ASX: ADD) is a nickel sulphide exploration company with a portfolio of highly prospective prospecting licences in the Kagera Region of the United Republic of Tanzania. All Adavale's tenements are situated within 110km of the world class Kabanga Nickel Deposit and were selected based on their strong geochemical and geophysical signatures from previous exploration undertaken by BHP.

Adavale also holds three exploration licences within part of the highly prospective sedimentary uranium province within the northern part of the Lake Frome Embayment.

