

## ASX ANNOUNCEMENT

7 July 2022

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# 32 Nickel Targets Identified in the East African Nickel Belt

## Highlights

- An additional 16 Nickel sulphide targets have been identified on the remaining 40% of the survey area within Adavale's southern Nickel licence portfolio
- 24,000 gravity readings over ~1,000 sq km have generated a total of 32 newly discovered and unexplored sulphide nickel targets
- These targets are now the focus of Adavale's future drilling programs and ongoing exploration
- The number and order of magnitude of the gravity targets generated confirms the prospectivity and large-scale nickel exploration potential of Adavale's licences within the globally significant East African Nickel Belt
- Heli-borne Electro Magnetic (EM) survey will be flown in July in order to identify conductors within these gravity targets
- EM conductors will be tested with Reverse Circulation and Diamond Drilling campaigns scheduled to commence from August 2022

Adavale Resources Limited (**ASX: ADD**) ("Adavale" or "the Company") is pleased to confirm the completion of its ground-based gravity survey program in Tanzania which has identified a total of 32 discrete gravity targets including the 16 target areas previously announced (refer to ASX announcement "*Outstanding Success with Multiple Nickel Targets Discovered*" dated 9 June 2022).

All 32 gravity targets are interpreted to potentially reflect underlying mafic-ultramafic intrusions which are capable of hosting significant nickel sulphide mineralisation. The targets sit within the Company's 100% owned Kabanga Jirani Nickel Project ("Kabanga") and the farmed-in Luhuma Nickel Project ("Luhuma") areas, both located within the regionally significant and highly prospective East African Nickel belt.

The completed gravity survey encompassed the collection of approximately 24,000 gravity readings covering the Company's southern licence portfolio comprising Kabanga NE, North, East, Kabanga West

## ASX: ADD

### DIRECTORS & OFFICERS

**GRANT PIERCE**  
CHAIRMAN

**DAVID RIEKIE**  
EXECUTIVE DIRECTOR

**JOHN HICKS**  
DIRECTOR

**ALLAN RICHIE**  
CHIEF EXECUTIVE OFFICER

**LEONARD MATH**  
CFO & COMPANY SECRETARY

### ISSUED CAPITAL

Shares: ~357 million  
Unlisted options: 26.5 million  
Performance rights: 17 million

### ABOUT ADAVALE

Adavale Resources is an ASX-listed exploration company targeting projects in the 'battery materials' space. The company is currently focused on both its 100% owned Kabanga Jirani Nickel Project and 2 Farm-in 'Luhuma' licences adjacent and along strike from the world's largest undeveloped high grade NiS resource of 58Mt @ 2.62% Ni. Adavale is also progressing exploration on its 100% owned uranium tenements in South Australia



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and the Luhuma farm-in tenements, a combined area in excess of 1,000 sq kms. The combined strike length of the 32 identified gravity targets is approximately 55kms.

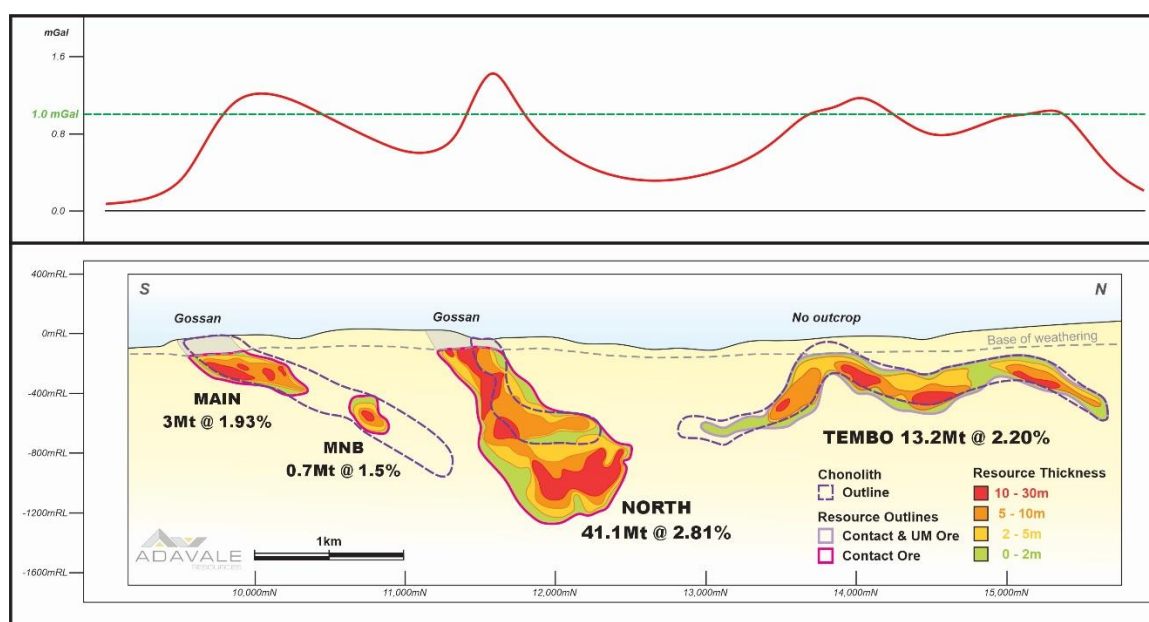
### Commenting on the program, Adavale's Executive Director, David Riekie said:

*"The measure of the success of this gravity program is quite simply a reflection of the large number of high-quality targets that have been generated. Without the gravity survey technique these targets would have otherwise remained undiscovered. This is because the targets do not have a recognisable surface expression and mostly remain completely hidden under the 50+ metres of thick cover of highly weathered lithologies and soils that covers much of our ground holdings.*

*We have always maintained that we are in the right prospective geological setting for new nickel sulphide discoveries. With the benefit of our historical regional scale EM and magnetic data, together with our more recent soil geochemical, drilling and gravity as well as the soon to be completed deep penetrating EM data we are now well armed to focus our next drill campaign in ways to maximise our chances of making new discoveries. We are now at this value catalyst point in the timeline. We look forward to providing regular updates on these important activities and outcomes over the coming weeks"*

### Pathfinder Strategy and Rationale

Selection of gravity targets is based on the Company's forward modelling of the theoretical gravity response that would have been generated by conducting a gravity survey across the mafic-ultramafic intrusions hosting the 58 million tonnes Kabanga deposit (Figure1). This modelling, using public domain information, clearly demonstrates that these outcropping and near surface non-outcropping intrusions would have been expressed as gravity anomalies in excess of 1mGal and detectable by Adavale's regional gravity survey.



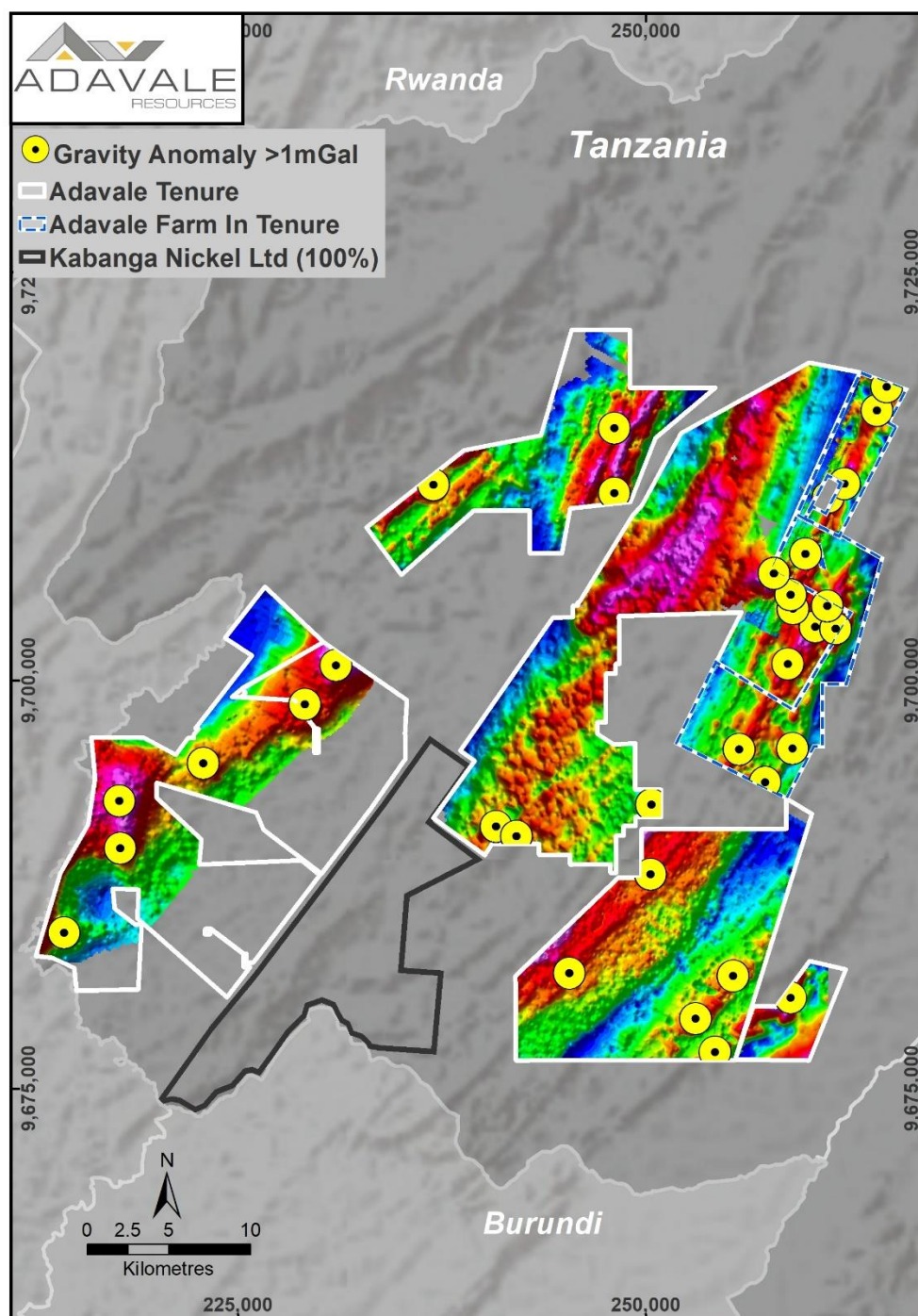
**Figure 1:** Forward modelled theoretical Gravity signatures (mGal) over known nickel resources

Processing, interpretation and prioritisation of gravity targets for follow-up exploration is ongoing and will be finalised over the next few weeks.

\* Evans, D. M., Hunt, J. P. P. M. and Simmonds, J. R., 2016. An overview of nickel mineralisation in Africa with emphasis on the Mesoproterozoic East African Nickel belt (EANB). Episodes, 39/2, 319-333. DOI: 10.18814/epiugs/2016/v39i2/95780

## Gravity Survey Details

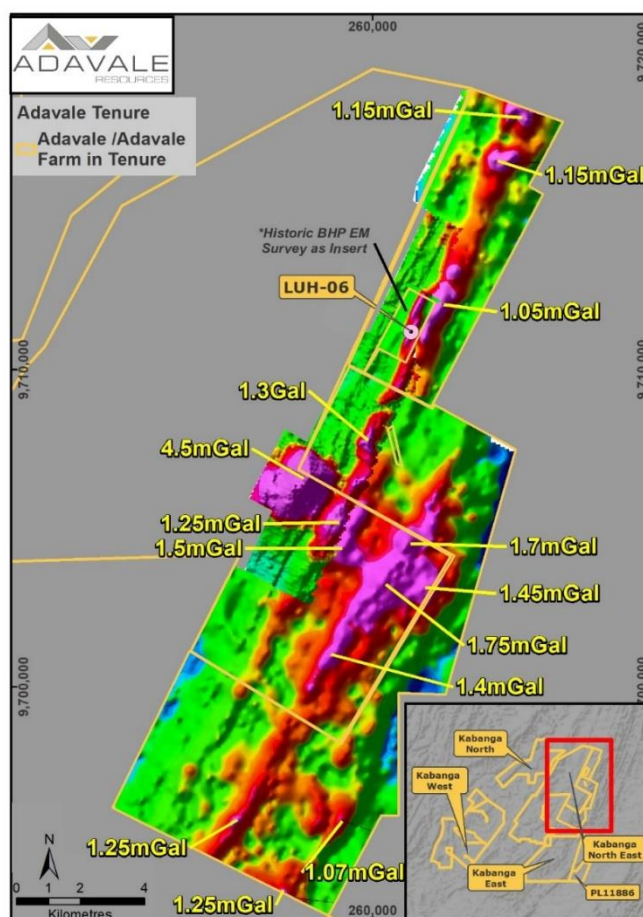
The regional ground-based gravity survey which commenced in March 2022 was completed on 6 July 2022. During this time, up to four field survey teams were employed to cover the 1,000 sq km survey area using a 400m line by 100m station spacing. In excess of 24,000 gravity readings were collected and has resulted in the identification of discrete strong gravity anomalies over each of Adavale's four main southern License areas, as well as the Luhuma Nickel Project (farm in). In total 32 strong (>1mGal) anomalies have been identified as shown in Figure 2.



**Figure 2:** Regional gravity survey areas showing location of identified targets



Three target areas were previously identified within the Luhuma Nickel Project (farm-in) area, (Refer to ASX announcement “*Outstanding Success with Multiple Nickel Targets Discovered*” dated 9 June 2022), together with a series of new targets identified further to the SW to form a broader swathe of ground referred to as the Luhuma Nickel corridor. This Corridor is defined by a series of extensive gravity highs along strike from the historic drill hole LUH06 which intersected 1.14% Ni over 8m\*. The large, extensive eastern most anomaly in the corridor shown in Figure 3 is particularly exciting as it has not been recognised previously and therefore never been tested.



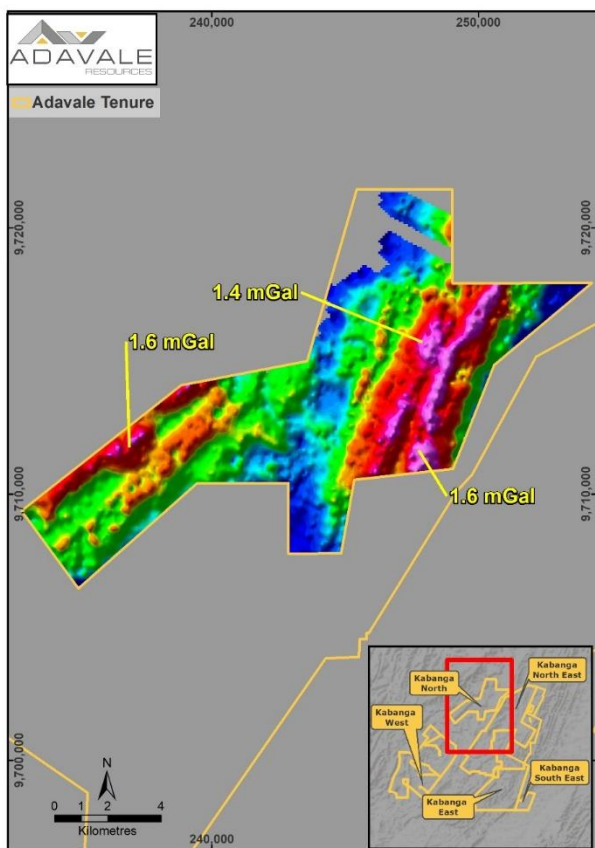
**Figure 3:** Gravity image Luhuma Farm-in area of showing anomalies along Luhuma Corridor

In addition to the gravity targets identified along the Luhuma Nickel Corridor, high quality targets have also been identified within Adavale’s Kabanga North, West and East Licences (respectively Figures 4, 5 and 6). These targets together with the geochemical anomalies identified within the “Enigma Anomaly” are currently being ranked by Adavale using all available geological data.

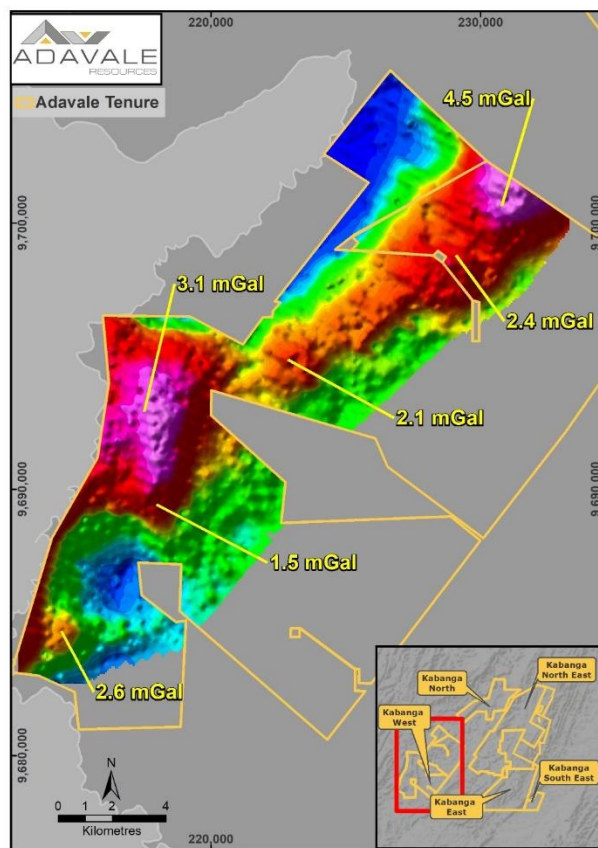
The prioritised target areas are to be surveyed with deep penetrating Heli-borne EM surveys using a 100m line spacing for detailed resolution. An initial 2,000 line km Heli-borne EM survey program has been budgeted for this purpose and scheduled to commence in July. The anticipated duration of the survey is between 10 and 14 days. Community consultation and awareness programs for the survey have already been conducted.

Once completed and processed, the Heli EM data in conjunction all other data sets (geophysical and geochemical) will be used to rank and prioritise targets for drill testing. It is anticipated drill testing will commence from late August.

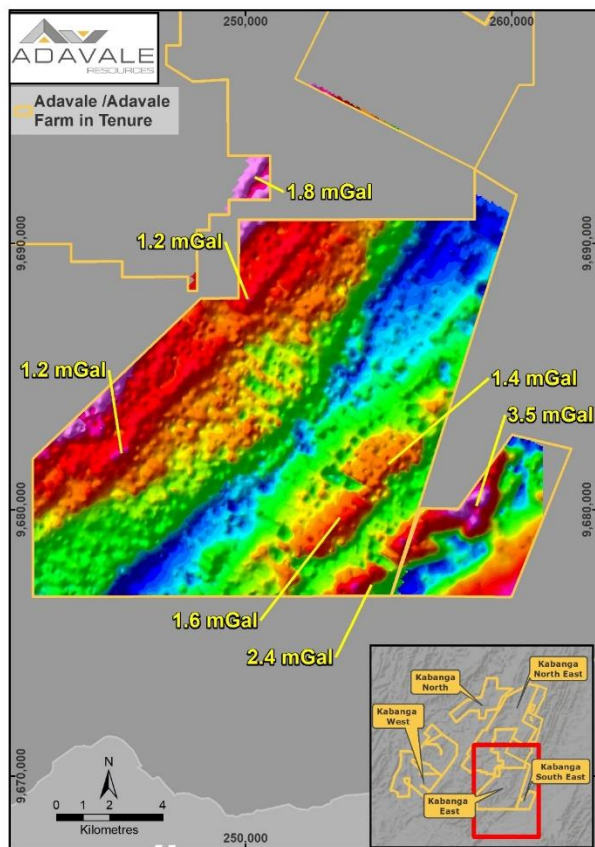
\* Evans, D. M., Hunt, J. P. P. M. and Simmonds, J. R., 2016. An overview of nickel mineralisation in Africa with emphasis on the Mesoproterozoic East African Nickel belt (EANB). Episodes, 39/2, 319-333. DOI: 10.18814/epiugs/2016/v39i2/95780



**Fig 4 : Gravity image Kabanga North Licence area**



**Fig 5: Gravity image Kabanga West Licence area**



**Fig 6: Gravity image Kabanga East Licence area**

## Next Steps and Progress milestones

In summary, over the months of July and August the Company will be undertaking a number of important exploration workstreams.

Milestones	Date
The priority gravity targets will be systematically surveyed using a high-powered Heli-borne, time domain EM (TDEM) and magnetic survey system. New Resolution Geophysics (NRG) have been contracted to fly the surveys in July	July 2022
Receival and interpretation of final TDEM data	August 2022
Selection and prioritisation of targets for drill testing	August 2022
Drill test priority targets (commencing)	End August 2022

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

### Further information:

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### Competent Persons 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.

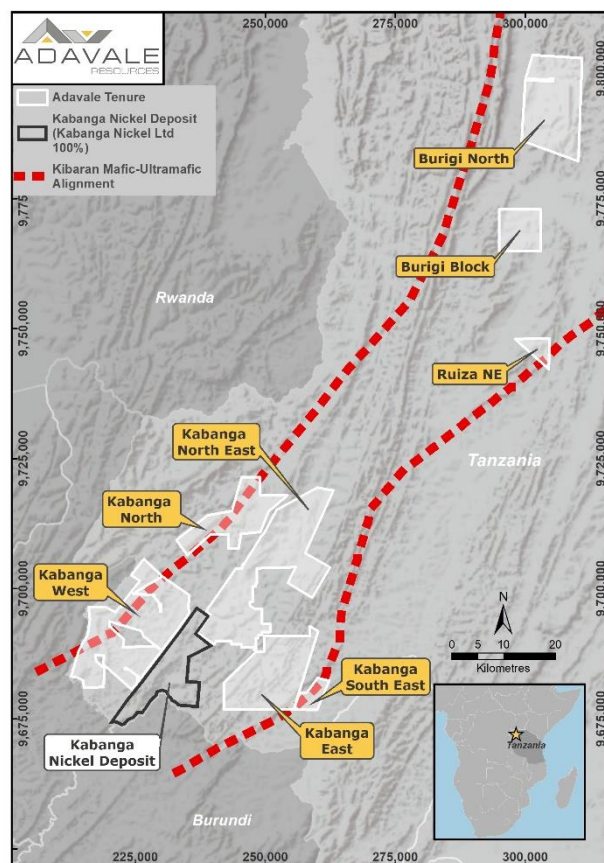
### Forward looking statements

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 document will actually occur.



## About Adavale

Adavale Resources Limited (ASX:ADD) is a nickel sulphide exploration company that holds 100% of the Kabanga Jirani Nickel Project, a portfolio of 7 highly prospective granted licences covering ~ 1,145km<sup>2</sup> along the Karagwe-Ankolean belt in Tanzania. The four southernmost licences are proximal to the world class Kabanga Nickel Deposit (58Mt @ 2.62% Ni). Adavale has Farmed-in to two more highly prospective licences contiguous to our 4 southernmost licences, adding a further 99km<sup>2</sup> to the portfolio. Adavale's licences were selected based on their strong geochemical and geophysical signatures from previous exploration undertaken by BHP Billiton.



Adavale also holds three exploration licences for their sedimentary uranium potential within the northern part of the highly prospective Lake Frome Embayment in South Australia.

## JORC Code Edition 2012: Table 1

### Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p>Soil sampling undertaken with a line spacing of 500m and a station spacing of 50m conducted perpendicular to the regional strike direction.</p> <p>Samples taken from beneath the upper organic horizon. Any remaining organic and coarse material removed by sieving.</p> <p>Line and station spacing of gravity survey detailed under "Data spacing and distribution".</p>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Not applicable to current work program and announcement on gravity survey.
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Not applicable to current work program and announcement on gravity survey.
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Not applicable to current work program and announcement on gravity survey.



Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>Quality control measures have been implemented as follows for the Gravity Survey:</p> <p>Auto –rejection of bad readings and spikes, constant monitoring of Standard deviation and tilts in field. Any readings with high SD or tilts outside of -10 to +10 arc.seconds are re-taken.</p> <p>For GPS quality control, each station is held until 2-5cm accuracy obtained and the no. of satellites is monitored.</p> <p>During processing, Bouguer density corrections are run from 2.2 – 3.0 g/cc at 0.1 g/cc intervals to check the correlation with topography and the appropriate dataset is then used.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<p>For Gravity Survey: Scintrex CG5 Autogravs instrument used.</p> <p>Readings are taken for 60 seconds per station and drift calibrations done in Tanzania on arrival. Visits to the main camp base station are conducted twice a day and to local base stations 2 times a day. At least 5 readings are taken at each base visit.</p> <p>For soil samples pXRF Olympus VANTA portable XRF VCA was used.</p> <p>QAQC measures include periodically measuring CRM's, blanks and duplicates 5% of all analyses are for QAQC purposes. pXRF calibrated if discrepancies arise.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p>Data is captured daily and emailed to geophysicist daily.</p> <p>Data is stored at two locations on PC, and on DropBox in the cloud.</p>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys),</li> </ul>	<p>For Gravity Survey: UTM36S Arc1960 Tanzania is the projection used.</p>


Criteria	JORC Code Explanation	Commentary
	<p><i>trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<p>An RTK differential GPS is used with local base stations and up to 25 satellites visible from 4 different networks.</p> <p>2-5cm vertical accuracy is obtained at all times.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<p>For Gravity Survey Readings have been taken using a 150m line spacing and a 100m station spacing. The Ultramafic bodies of interest show kilometres of strike length and hundreds of metres width, so this is considered a good resolution in comparison.</p> <p>For Soil Sampling a line spacing of 400 m and station spacing of 50m was used.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<p>Gravity readings have been conducted along NW-SE orientated traverse lines which are perpendicular to the regional strike.</p> <p>Soil sampling conducted along NW-SE orientated lines perpendicular to the regional strike</p>
Sample security	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<p>Soil samples stored in secure building.</p>
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>Two geophysicists are engaged in the gravity programme who cross-check and validate the data and ensure there are no QAQC issues.</p>

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<p>The Kabanga Jirani Nickel Project covering 1,145km<sup>2</sup> comprises of 7 granted licences, all are 100% owned by Adavale Resources as follows:</p> <p>PL 11405/2020 113.84 km<sup>2</sup> Kabanga North, Tanzania PL 11406/2020 298.02 km<sup>2</sup> Kabanga North East, Tanzania PL 11537/2021 194.08 km<sup>2</sup> Burigi North, Tanzania PL 11538/2021 64.08 km<sup>2</sup> Burigi, Tanzania PL 11590/2021 273.27 km<sup>2</sup> Kabanga West, Tanzania PL 11591/2021 181.74 km<sup>2</sup> Kabanga East, Tanzania PL 11592/2021 19.4 km<sup>2</sup> Ruiza North East, Tanzania</p>

		Adavale Resources has a farm-in agreement with Mr Ally Mbarak Nahdi for the Luhuma Nickel Project for 2 licences to earn up to 80%: PL 11692/2021 26.01 km <sup>2</sup> Extension of Kabanga North East, Tanzania PL 11693/2021 72.88 km <sup>2</sup> Extension of Kabanga North East, Tanzania
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Not applicable, not referred to.
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The exploration target is massive or disseminated sulphides hosted within mafic/ultramafic rocks akin to the Kabanga Deposit.
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Not applicable as no drilling results reported.
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Soil sample results are presented as percentiles.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	No drill core results reported.
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Gravity maps include a scalebar and labels to show strength of gravity.





Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	Gravity anomalies over area surveyed has been reported on.
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	No other exploration data is material to the current report.
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Detailed planning of further surveys still to be determined but plans to conduct airborne EM and drilling have been outlined.