



27 November 2023

Companies Announcement Office  
ASX Limited

**Adavale Resources Limited** (ASX: ADD) (“Adavale” or “Company”) refers to the ASX announcement released today titled "Satellite Imagery Identifies Palaeochannels for Uranium Exploration".

The Company provides an updated announcement with Section 1 of the JORC Table included under Appendix 1 of the announcement. While Section 1 is not applicable to the announcement, the Company has provided an ‘if not why not basis’ response to each criteria listed under Section 1 of the JORC Table.

By order of the Board,

A handwritten signature in black ink, appearing to read "L. Math", is positioned above the name of the signatory.

**Leonard Math**  
**CFO & Company Secretary**

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



## ASX ANNOUNCEMENT/MEDIA RELEASE

27 November 2023

# Satellite Imagery Identifies Palaeochannels for Uranium Exploration – South Australia

- High-resolution satellite imagery identified significant palaeochannel system on the northwestern edge of the Flinders Ranges.
- Gravity data correlated with the imagery identified where potentially buried channel zones may be located.
- EM data from the Frome Survey, in conjunction with gravity and satellite imagery, to be used to provide additional collaborating evidence for the presence of buried channels.
- High priority targets for uranium exploration to be generated by combining all three lines of evidence over the coming weeks.

Adavale Resources Limited (ASX: ADD) (“Adavale or the Company”) is pleased to advise that an initial interpretation of the Company’s South Australian uranium projects at Lake Surprise and Mundowdna using Sentinel 2 satellite imagery has been completed. Numerous new palaeochannel systems have been highlighted for further investigation.

Public domain geophysical datasets are now being used to define areas of interest for ongoing systematic uranium exploration of the Company’s extensive granted and under application licence holdings over 1,680sq km.

### Adavale’s Executive Director, David Riekie commented:

*“The Sentinel 2 satellite imagery has provided the Company with a rich set of multispectral data that has enabled our technical team to quickly identify areas of greatest uranium potential within our large South Australian licence holding. These interpreted palaeochannel systems will be the foundations for Adavale to overlay publicly available EM datasets to identify potentially buried channel systems within our licences and facilitate our ongoing efforts to systematically explore for uranium in South Australia.”*

### Next Steps to Prepare to Advance Exploration

- Identification and ranking of priority drill targets based on current survey data
- Assessment of infill gravity and EM surveys areas
- Heritage clearances in consultation with Traditional Custodians
- Finalisation of exploration and drilling programs
- Notification to South Australian Mine Department of intended work programs and approvals

## ASX: ADD

### DIRECTORS & OFFICERS

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EXECUTIVE DIRECTOR

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DIRECTOR

**ALLAN RITCHIE**  
CHIEF EXECUTIVE OFFICER

**LEONARD MATH**  
CFO & COMPANY SECRETARY

### 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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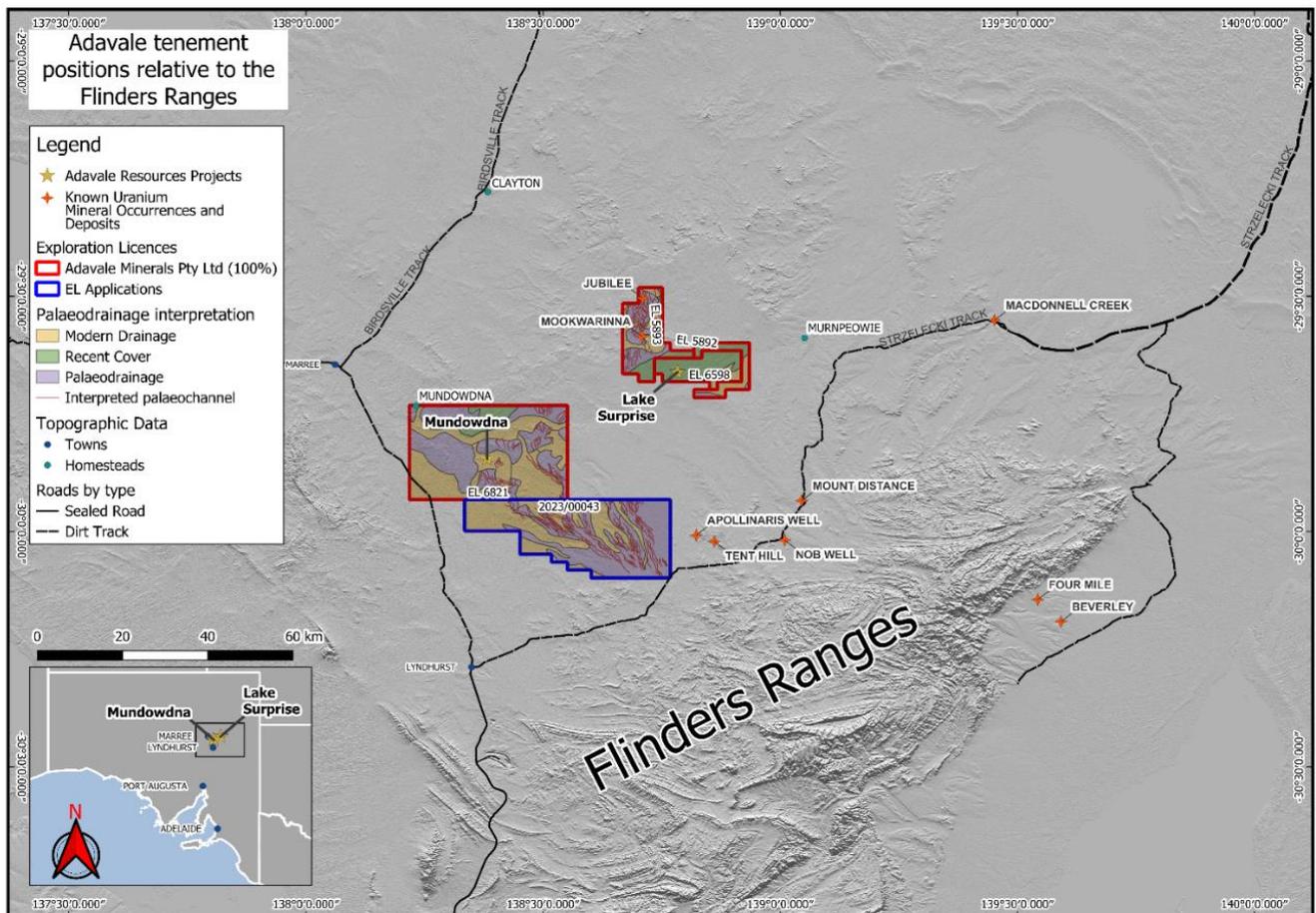
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## Location of tenement packages

Adavale's South Australian uranium tenement package is ideally located near the northern edge of the Flinders Ranges. The latest licence, ELA2023/00043, is within 20km of the change from a narrow channel in the ranges to a broad fluvial outwash system.

The Flinders Ranges are the well-established source of the uranium that is mobilised into and eventually deposited into palaeochannel systems by saline groundwater shedding from the Ranges. These Flinders Ranges palaeochannel systems are host to several world class sandstone uranium deposits such as Beverly, Four Mile, Junction Dam, Gould's Dam and Honeymoon. Figure 1 provides an overview of the northern Flinders Ranges, showing the position of Adavale's tenements and nearby uranium deposits and other known occurrences.



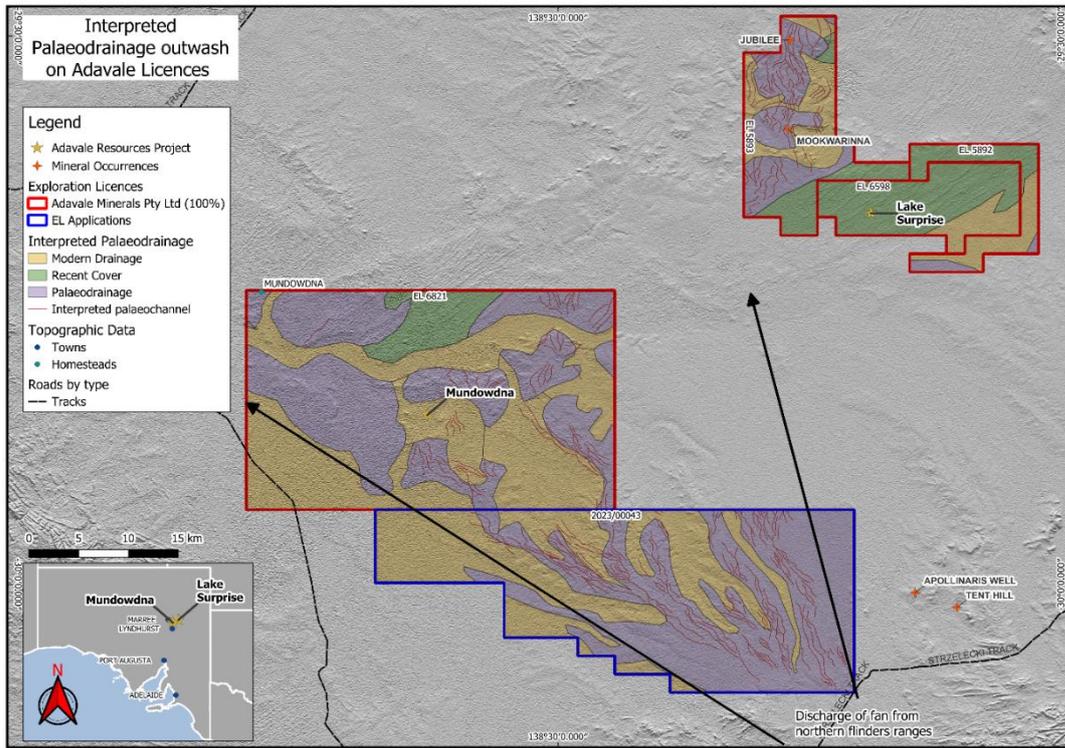
**Figure 1:** Overview of Adavale Resources tenements in relation to known uranium deposits and mineral occurrences proximal to the Flinders Ranges.

## Interpretation of Sentinel 2 Satellite Imagery

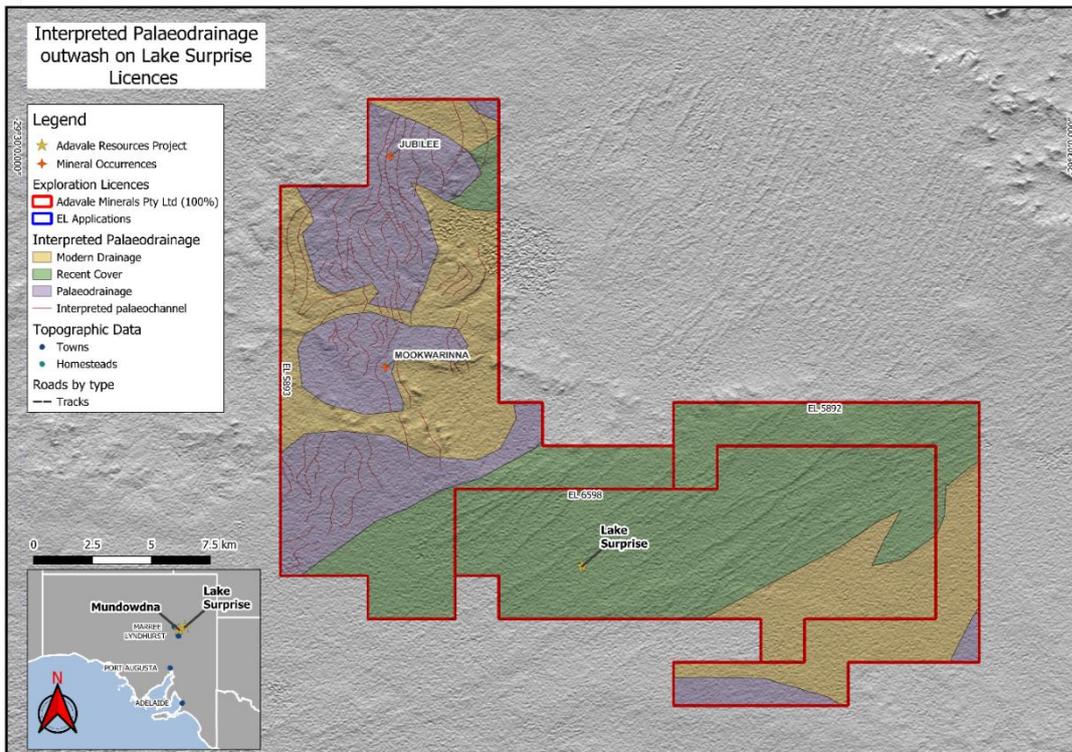
European Space Agency Sentinel 2 satellite imagery was obtained from the Copernicus hub. The high-resolution satellite data is widely used for mapping and provides several spectral bands that are particularly useful for delineating subtle changes in surface features. It has been used widely in India and the Middle East to map palaeochannel systems by using a “decorrelation stretching” technique that highlights the often subtle differences between modern surface features and the palaeodrainage.

By using the decorrelation stretch technique, the surface expression of the palaeochannels in the outwash fans shedding from the Flinders Ranges have been mapped. Figures 2 – 4 show the result

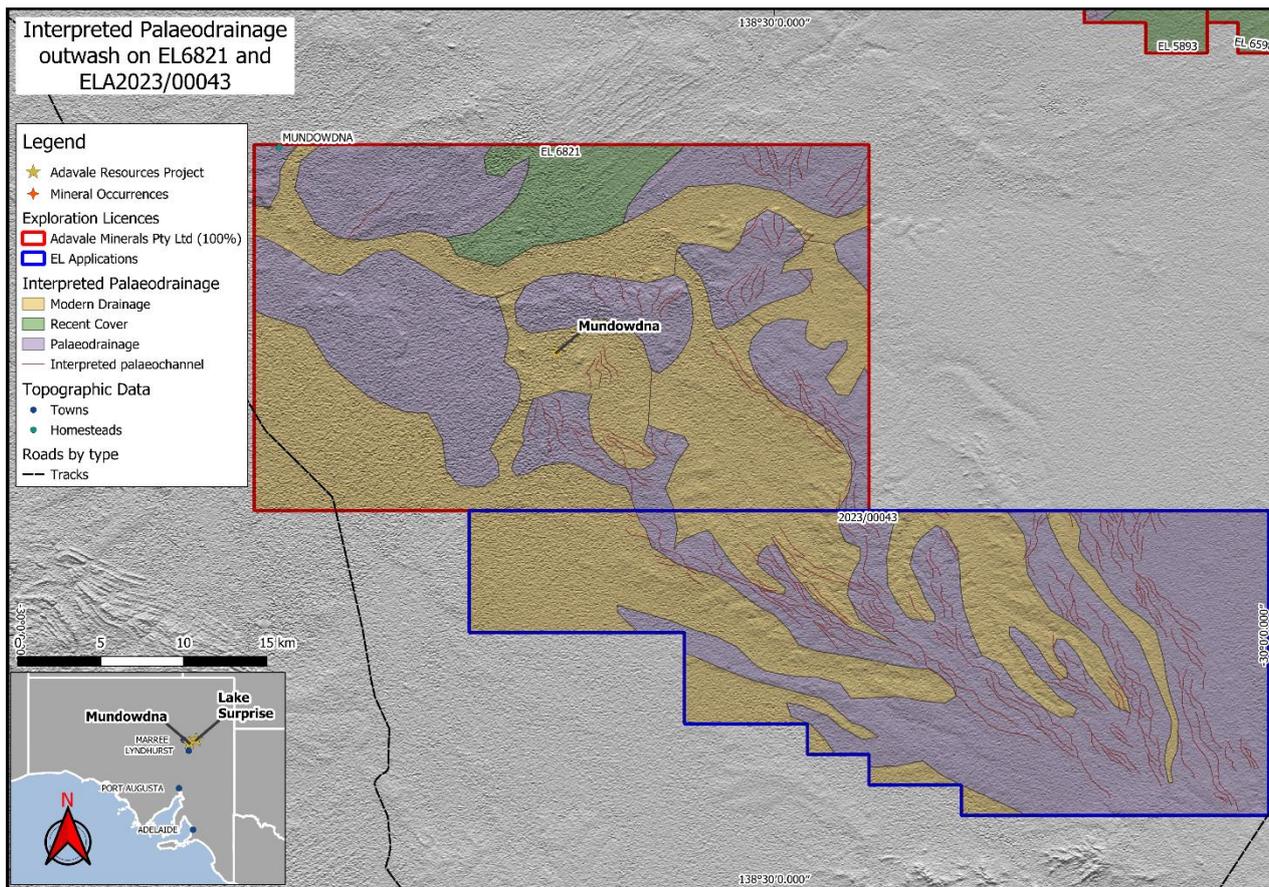
of the palaeochannel mapping within Adavale's tenements and indicates where the surface palaeochannels are located.



**Figure 2:** Overview of interpreted Palaeodrainage and palaeochannels at surface with modern drainage overprinting sections of the outwash fans.



**Figure 3:** Interpreted palaeochannels at surface in the Lake Surprise Project Licence package. A large portion of the Palaeodrainage is overlain by sand dunes and modern windblown sediments.



**Figure 4:** The Mundowdna tenements showing interpreted palaeochannels at surface.

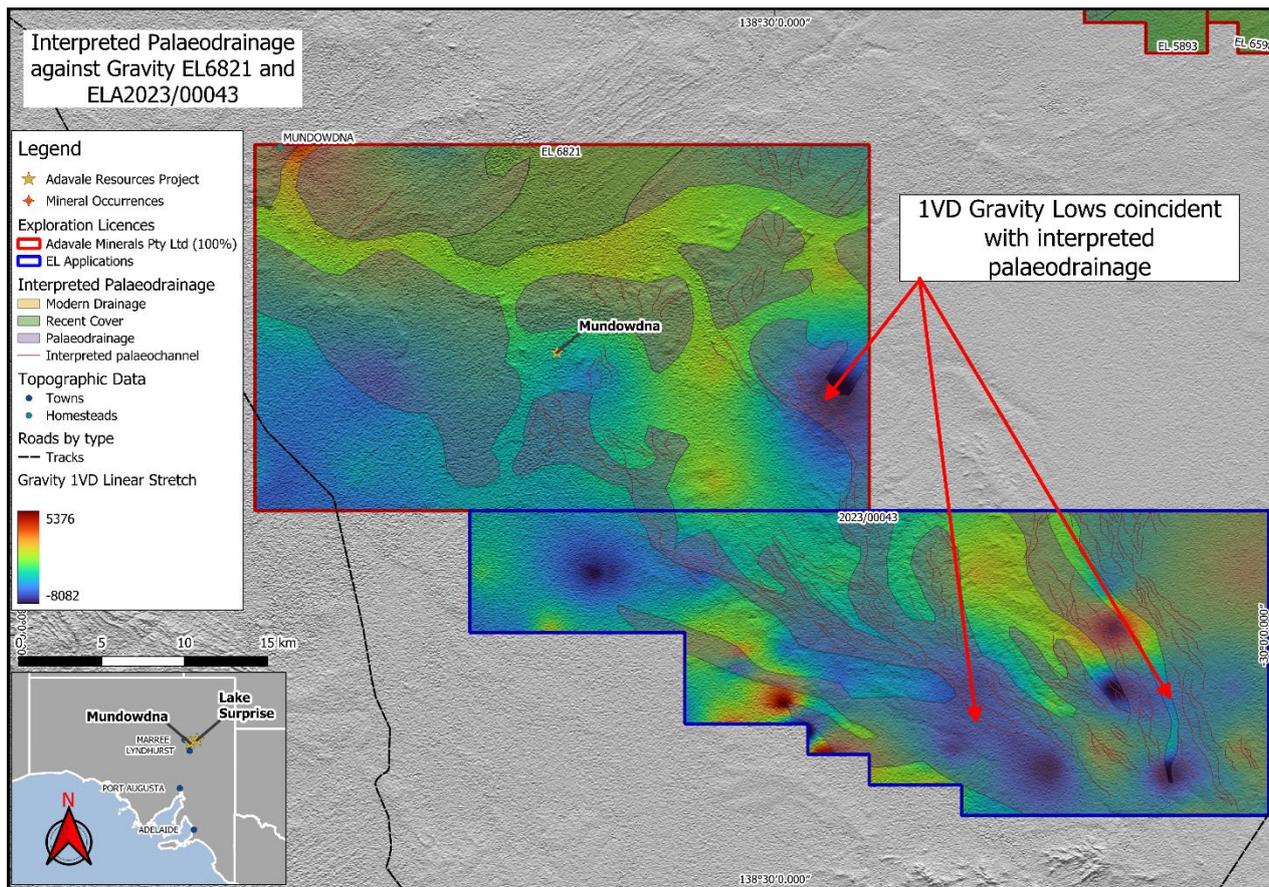
### Gravity data and correlation with drainage

The gravity data obtained from Geoscience Australia was processed from all datasets available from the 1940's until 2019. This information was compiled into a dataset that covers Australia at a resolution of approximately 430m. Gravity data indicates density contrasts between rock types. Various processing techniques have been applied to the data, including the application of a 1<sup>st</sup> vertical derivative.

The 1<sup>st</sup> vertical derivative (1VD) has been used in this instance as it shows smaller contrasts between similar rock types and is useful where lithologies are approximately the same density. This similarity is seen in the outwash fan on ELA2023/00043 and EL6821 (Figure 5). The 1VD over the southern portion of the outwash fan shows a 1VD gravity low is present and correlates with the mapped palaeodrainage.

The lower density of the sediments within palaeochannels has been noted at Goulds Dam on the Billeroo Palaeochannel during gravity surveys to the south of the deposit, conducted by the South Australian Mines Department in 1971. The work conducted by the department aimed at determining if this was a viable method for mapping palaeochannel systems.

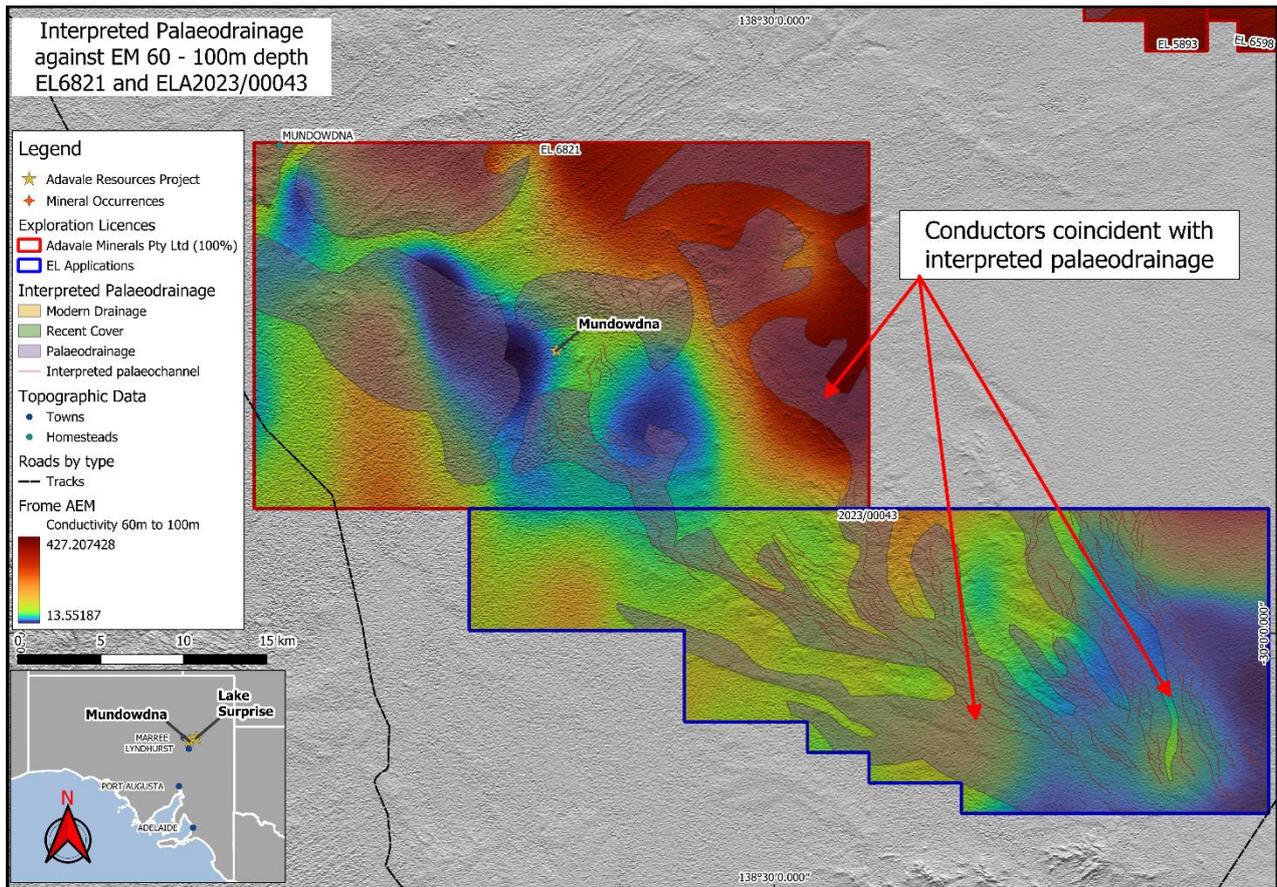
Figure 5 shows the 1VD gravity data over Adavale's Mundowdna EL and ELA, with the palaeochannel mapping overlaid in the data. The image shows the correlation between the gravity data and the mapped palaeodrainage identified from the Sentinel 2 imagery.



**Figure 5:** Correlation of mapped surface palaeochannels and gravity data, indicating gravity lows, which is consistent with lighter sandy sediments within channel systems.

### Electromagnetic data and correlation with drainage

Airborne Tempest EM Surveying was conducted by Geoscience Australia over much of the Flinders Ranges in 2010. This project aimed at providing industry with a high-resolution dataset for improved exploration throughout the Frome Embayment and areas proximal to the Flinders Ranges. The saline groundwater in the palaeodrainage systems shedding from the Ranges acts as a conductor and therefore responds well to EM surveying. The EM response shown in Figure 6, which reflects a conductivity depth slice of 60 – 100m depth are broadly coincident with both the gravity lows and the mapped palaeochannels discussed above.



**Figure 6:** Correlation of mapped surface palaeochannels and EM data, indicating conductors where palaeochannels are mapped.

The compilation of this data and the mapping of the palaeochannels described in this announcement are the key first steps in advancing Adavale’s Uranium Projects in South Australia.

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

**Acknowledgements to traditional owners**

Adavale acknowledges the Dieri as Traditional Custodians of the land on which our current works are located. With respect to Elders past, present and emerging, Adavale is committed to conducting its activities with respect to the communities in which it operates.

**Further information:**

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## Competent Persons Statement

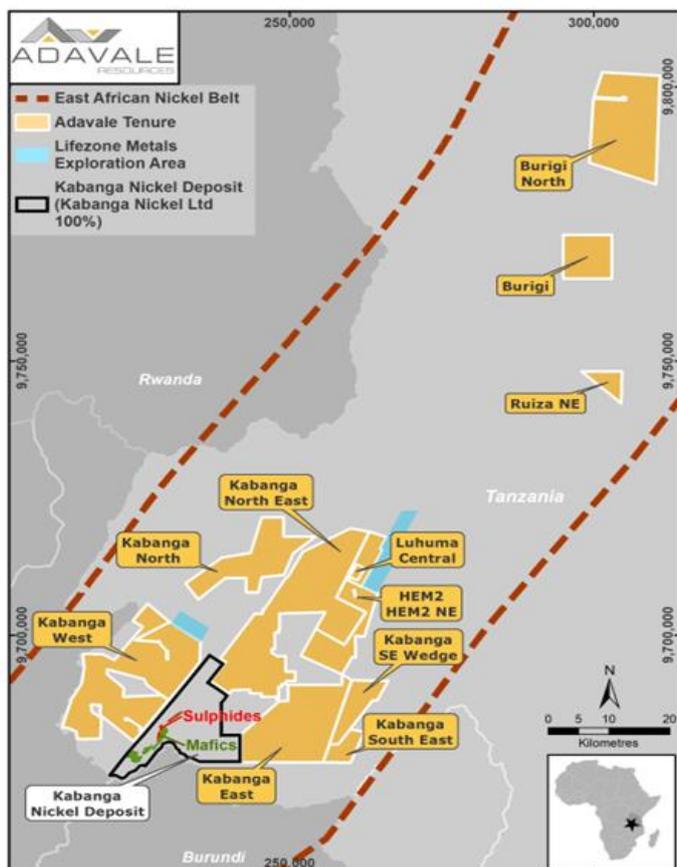
The information in this release that relates to “exploration results” for the Project is based on information compiled or reviewed by Mr Patrick Harvey MAppSci, Australia. Mr Harvey is a consultant for Adavale Resources Limited and is a member of the AIG. Mr Harvey has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration as well as to the activity that is being undertaken to qualify as a Competent Person under the ASX Listing Rules. Mr Harvey 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 12 highly prospective granted licences covering ~1,216km<sup>2</sup> along the Karagwe-Ankolean belt in Tanzania. The six 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 seven southernmost licences, adding a further 99km<sup>2</sup> to the portfolio (1,315sq km). Adavale's licences were selected based on their strong geochemical and geophysical signatures from the previous exploration undertaken by BHP.



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



## Appendix 1

### Adavale Resources Limited – Lake Surprise and Mundowdna Projects, South Australia JORC Code Edition 2012: Table 1

#### Section 1: Sampling Techniques and Date

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>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.</i></li> </ul>	Not applicable as no sampling or drilling results included in this announcement.
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	Not applicable as no drilling results included in this announcement.

Criteria	JORC Code Explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	Not applicable as no drilling results included in this announcement.
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	Not applicable as no drilling results included in this announcement.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	Not applicable as no drilling results included in this announcement.

Criteria	JORC Code Explanation	Commentary
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 (i.e. lack of bias) and precision have been established.</li> </ul>	Not applicable as no drilling results included in this announcement.
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>	Not applicable as no drilling results included in this announcement.
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), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	Not applicable as no drilling results included in this announcement.
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> </ul>	Not applicable as no drilling results included in this announcement.

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Not applicable as no drilling results included in this announcement.
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	Not applicable as no drilling results included in this announcement.
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Not applicable as no drilling results included in this announcement.

## Section 2: Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p>The Lake Surprise Uranium Project covers an area of 396km<sup>2</sup>. The tenement package is located in the North-East Pastoral District of South Australia. It is 100% owned and operated by Adavale Resources.</p> <p>Tenement ID's are: EL5892, EL5893 and EL6589</p> <p>The Native Title holder for the area is the Dieri People.</p> <p>The tenements cross the boundary of Clayton Station and Murnpeowie Station.</p> <p>The Mundowdna Project comprises: EL6821 (682 km<sup>2</sup>) and ELA2023/00043 (591km<sup>2</sup>)</p> <p>These licences are centred approximately 45 km south east of Marree and are on the pastoral leases of Farina, Mundowdna and Mount Lyndhurst.</p> <p>EL6821 is 100% owned and operated by Adavale Resources, While at the time of writing, ELA2023/00043 is still under consideration for grant by the department.</p>

Criteria	Explanation	Commentary
		Native Title on the licences is held by The Arabana People, The Adnyamathanha People and The Dieri People.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	Not applicable, not referred to.
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	The exploration target is a sandstone hosted palaeochannel deposit of uranium within sediment outwash from the Northern Flinders Ranges.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	Not applicable as no drilling was conducted.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	Not applicable as no such information was referred to.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear</i></li> </ul>	Not applicable as no drilling was conducted.

Criteria	Explanation	Commentary
	<i>statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	Not applicable as no drilling was conducted.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	Not applicable as no drilling was conducted.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	Images of Satellite imagery interpretation after the use of decorrelation stretching to provide better contrast between bands of similar intensity are shown in this release. These mapped the surface expression of palaeovalleys that were part of the outwash from the Northern Flinders Ranges.
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	Further work to follow up on other available geophysical data and determine the correlation between the surface palaeovalleys and deeper palaeodrainage will be completed in the future