17 December 2021

Majority of Gamma Results Between 5 and 40 Times Background Radiation Levels at Adavale's Uranium Licences

- **400km of the planned 1,100 line-kilometre gamma survey completed at Lake Surprise Uranium Project, South Australia**
- **Survey targeted the strongest gamma signals at the surface to better define the extent of the anomalies and provide targets for rock chip sampling**
- **Minimum values more than 5 times background radiation levels at 390 Counts Per Second ("CPS")**
- **Maximum value attained are more than 40 times background radiation levels at 3100 CPS**
- **28 rock chip samples were collected and are being sent for analysis**
- **Awaiting results of geological sampling to corroborate the relationship between gamma and uranium content**
- **Survey will continue in the New Year**

Adavale Resources Limited (ASX:ADD) ("**Adavale**" or "**the Company**") is pleased to announce results from the recent work program on its 100% owned Lake Surprise Uranium Project tenements (EL5892, EL5893 and EL6598) in South Australia.

Adavale CEO Allan Ritchie commented, "Results from the recent field survey are well beyond our expectations. Gamma readings in the range of 390 to 3100 counts per second (CPS) are some of the highest Adavale's Uranium geologist Pat Harvey has seen in his career.

Rock chip samples were taken at these high gamma locations and we are awaiting assays to benchmark the relationship between the gamma readings from hand-held devices used during sampling and the uranium content in the rocks. The initial gamma reading in the surface outcrop, is the highest we have ever seen so we are ecstatic to be progressing these works."

ADAVALE RESOURCES

ASX: ADD

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ISSUED CAPITAL

Shares: 351 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 and a Farm-In Project 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

MORE INFORMATION

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Gamma Survey Results

The gamma survey undertaken by Adavale's geological team, targeted the strongest known radioactive signatures at surface from the historic regional data provided online by the South Australian Department of Energy and Mining.

Gamma radiation is used as a guide to identify locations where there are concentrations of radioactive elements. This method uses the daughter products of the uranium decay series as a proxy for where uranium is expected to be concentrated.

Adavale used a continuous read gamma spectrometer to undertake the survey at Lake Surprise. The spectrometer provides a georeferenced reading every second and outputs the data collected into a table for processing. The results were fed into System for Automated Geoscientific Analysis (SAGA) GIS software and processed into an image that was used to target rock chip sampling.

The current work undertaken better defines the surface expression of the gamma anomaly seen in the regional data. The gamma anomaly appears to be hosted in the silicified sediments of a palaeochannel system that discharged from the northern Flinders Ranges. This area is known to have fertile granites that are the source of uranium for systems like Australia's 3rd the producing and closely situated Beverly mine (Figure 1).

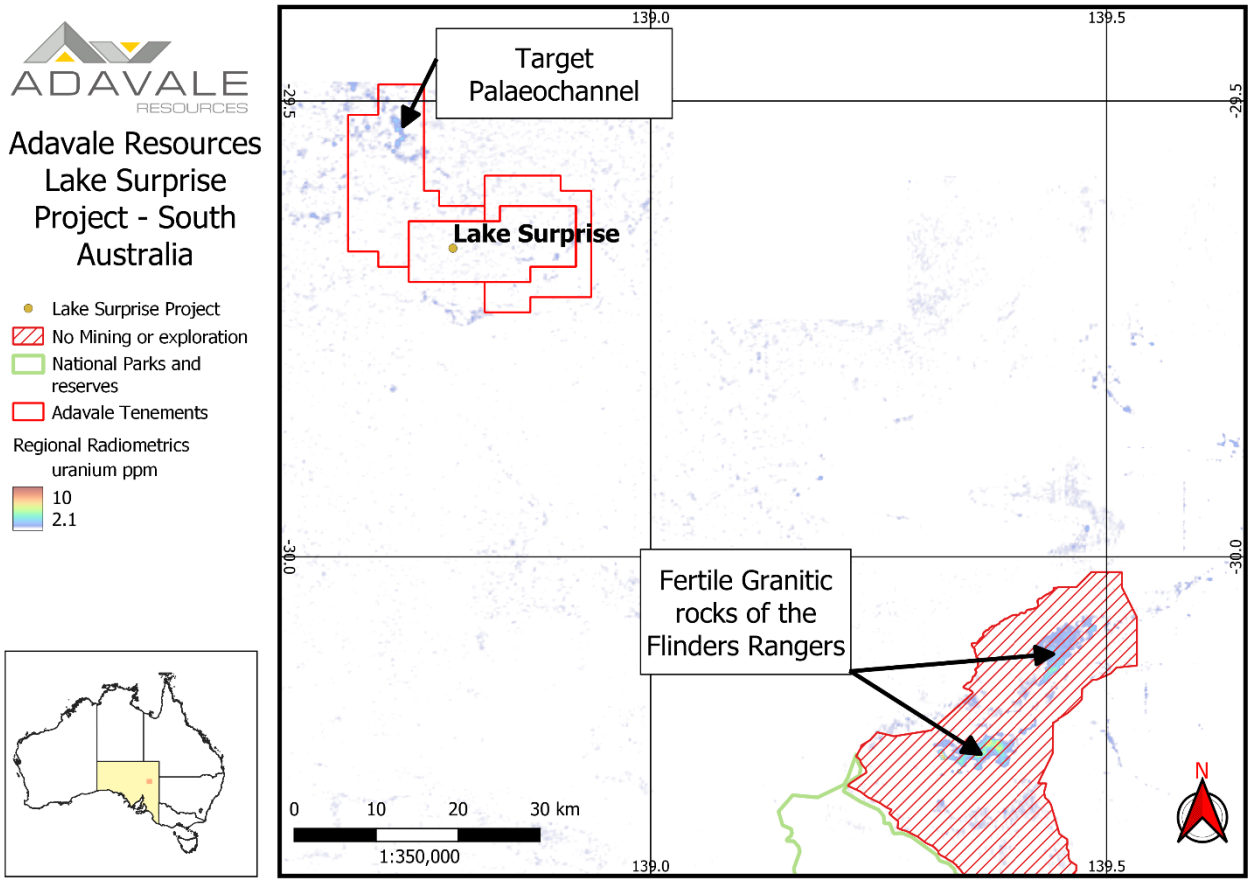

Figure 1: location of fertile granites in the northern Flinders Ranges

The results of the gamma survey, shown in Figure 2, clearly defined the eastern edge of the gamma anomaly with strong readings up to 10-times the background levels in the uranium channel on the survey spectrometer. The readings are semi-continuous along the strike of the outcropping palaeochannel.

There is a signal in the data that also defines the western edge of the palaeochannel system. This is not visible in the regional geophysical data but becomes apparent in the high-resolution data from the spectrometer. This signal defines the width of the target palaeochannel and provides a definite area to focus future exploration and target a potential host for mineralisation.

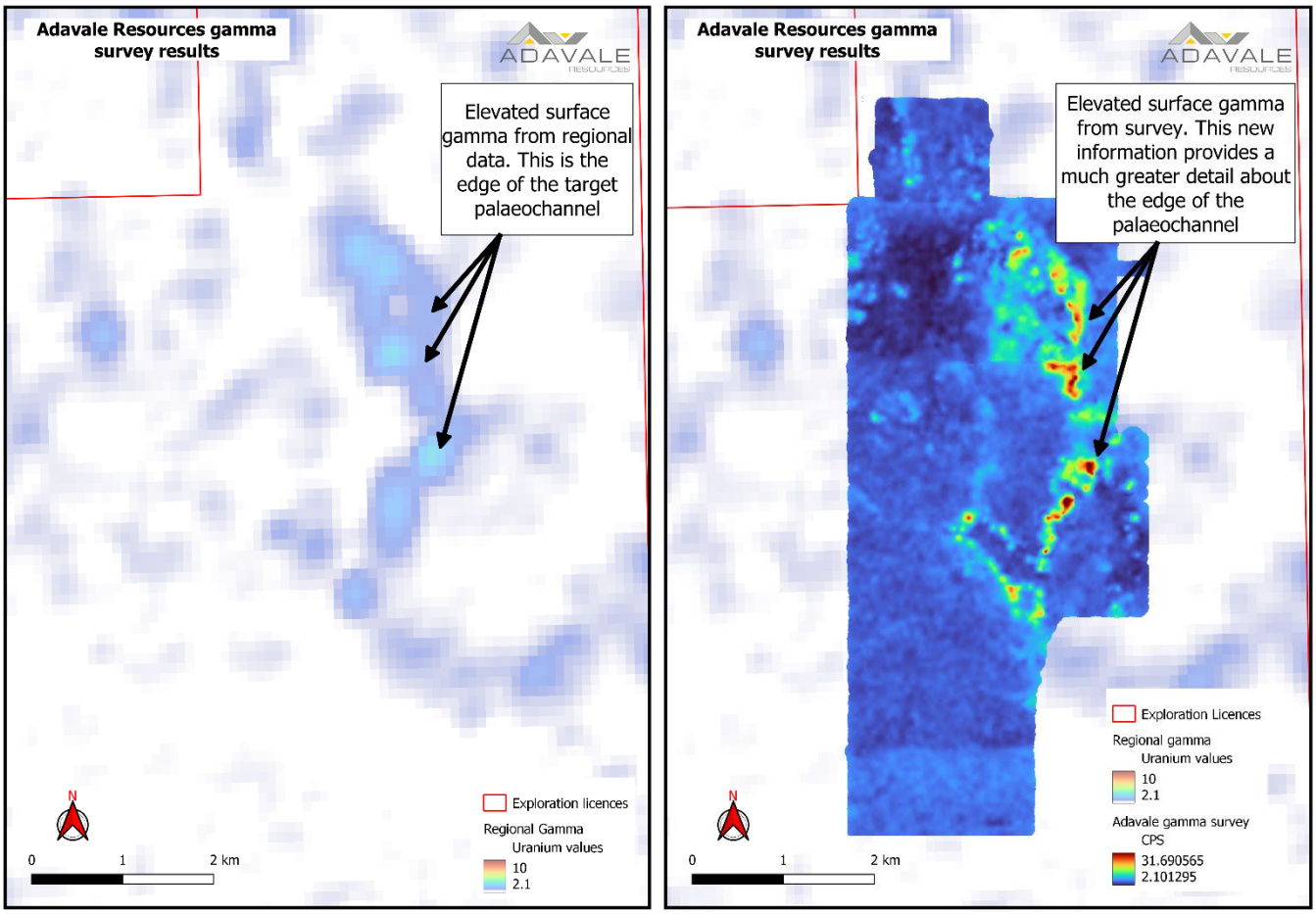

Figure 2: Image of the processed data from the gamma survey highlighting zones of anomalously high gamma radiation at the surface. Sampling took place in these zones to better understand the relationship between gamma and contained uranium.

Rock Chip Sampling

Zones of high gamma radiation defined in the survey were targeted on foot after the data was processed using SAGA GIS. Elevated gamma regions in the processed image turned up as red zones and were identified as the priority targets for the sampling process.

An RS 125 Super Spec handheld gamma spectrometer was used in survey mode to measure the gamma at each outcrop on foot. Results from the handheld spectrometer were significantly above the background radiation levels of 75 CPS and were often 5-40 times the background value.

The lowest values obtained at sample sites with the RS 125 were above 390 CPS and the highest values recorded at 3100 CPS. A total of 28 samples were collected during the field work and have been sent for assay. A full table of the samples collected is presented in Appendix 1.

Key highlights of the rock chip sampling program are:

- Minimum values more than 5 times background at 390 CPS
- Maximum value attained are more than 40 times background at 3100 CPS
- More than half the samples collected were above 1000 CPS
- 28 samples were collected and sent for analysis during this phase of work
- Expected results for samples Q1 2022

Planning of Future work

The assay results from this program will be used by Adavale to refine future works on the Lake Surprise tenement package.

Planned exploration will aim to include:

- Sampling across the palaeochannel to define zones where high uranium content is to be expected
- Continuation of the gamma survey to cover the whole area originally planned
- Sampling helium anomalies highlighted
- Development of targeted drilling programs for resource definition

The data obtained so far is highly encouraging and provides a robust dataset to begin thoroughly and systematically exploring the tenement package at Lake Surprise.

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 utmost respect to the communities in which it operates.

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

For further information please contact investor@adavaleresources.com or visit www.adavaleresources.com

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 ~ 1,145km2 along the Karagwe-Ankolean belt in Tanzania. The 4 southernmost licences are proximal to the world class Kabanga Nickel Deposit (58Mt @ 2.62% Ni). Adavale has Farmed-in to 2 more highly prospective licences contiguous to our 4 southernmost licences, adding a further 99km2 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.

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 undertaking 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 presentation will actually occur.

Appendix 1: table of samples and hand-held spectrometer readings

SampleID	SampleType	Easting	Northing	RockType	CPS
10004	In situ rock outcrop	245752	6758341	Silcrete	600
10005	In situ rock outcrop	279035	6732246	Silcrete	750
10006	In situ rock outcrop	279006	6732181	Silcrete	442
10007	In situ rock outcrop	278946	6732099	Silcrete	833
10008	In situ rock outcrop	279313	6732100	Sandstone	390
10009	In situ rock outcrop	279320	6732108	Sandstone	700
10010	In situ rock outcrop	279320	6732114	Sandstone	690
10011	In situ rock outcrop	279392	6731863	Sandstone	1045
10012	In situ rock outcrop	279393	6731861	Mudstone	549
10013	In situ rock outcrop	279489	6731864	Silcrete	600
10014	In situ rock outcrop	279603	6731389	Silcrete	1000
10016	In situ rock outcrop	279538	6731256	Sandstone	632
10017	In situ rock outcrop	279214	6730978	Silcrete	1600
10018	In situ rock outcrop	279237	6730993	Silcrete	1550
10019	In situ rock outcrop	279280	6731002	Silcrete	1360
10020	In situ rock outcrop	279280	6731002	Silcrete	1426
10021	In situ rock outcrop	279362	6730992	Sandstone	1530
10022	In situ rock outcrop	279372	6730983	Silcrete	2147
10023	In situ rock outcrop	279434	6730990	Silcrete	1100
10024	In situ rock outcrop	279543	6730825	Silcrete	1760
10025	In situ rock outcrop	279545	6730827	Silcrete	2834
10026	In situ rock outcrop	279554	6730819	Silcrete	3100
10027	In situ rock outcrop	279559	6730815	Silcrete	1423
10028	In situ rock outcrop	279573	6730778	Silcrete	1800
10029	In situ rock outcrop	279590	6730775	Silcrete	625
10030	In situ rock outcrop	279720	6729897	Silcrete	886
10031	In situ rock outcrop	279723	6729886	Sandstone	1240
10032	In situ rock outcrop	279686	6729859	Silcrete	810

Table 1: list of samples collected and the counts per second recorded in photographs taken during the Lake Surprise works program.

Gamma Survey Results between 5- and 40-times background levels at Lake Surprise Uranium Project

JORC Code Edition 2012: Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	Gamma survey equipment used is a Pico-Envirotech PGIS 2 litre gamma spectrometer (model GIS-S-128). Calibration was checked using the internal check outlined in the user manual on one of the Thorium Channels with a value between 0.7 and 0.9. The spectrometer provides two values for uranium the first in counts per second and the second is the estimated ppm from the internal equation – this is outlined in the user manual. Is the estimated uranium content from the spectrometer equation and will likely be very different to the actual content seen in the assay data. Data from this survey was processed in SAGA GIS v 8.1 using simple kriging under the geo-statistics menu. The system automatically calculates the number of pairs and range of influence in the system and uses an automated slider controlled by the geologist to fit the equation to the data. Hand held spectrometer is the RS Super Spec 125 gamma spectrometer. The unit self-stabilises. The unit was used in survey mode which outputs data as counts per second. No GPS was attached to the unit, however, sampling of rocks at sites where gamma was recorded took place. These are presented in the data table above. The use of this device is for the purpose of establishing the relationship between gamma readings and uranium content Rock chip sampling at surface was used across a number of gamma readings on a random basis so that the relationship between uranium content and gamma can be established.
Drilling techniques	• *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-*	Not applicable

Criteria	JORC Code Explanation	Commentary
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	Not applicable
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Rock chips have had their geological features logged. These are lithology, grainsize, texture and colour. Counts per second was also recorded at each site and images of the site for each sample have been retained.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Not applicable
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	The PGIS takes readings once per second and is linked to GPS. There is an internal calibration check on the device and this was checked daily after data collection in the field. The RS Super Spec was allowed to stabilise on the outcrop before sampling occurred.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Not applicable
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	The rock chips were surveyed with a handheld GPS unit with an accuracy of 3m which is considered sufficiently accurate for the purpose of the sampling. All co-ordinates are expressed in GDA2020 SUTM Z54. The PGIS Spectrometer uses WGS84 and outputs co-ordinates into ASCII files in SUTM and Lat Long.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	Not applicable
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	Not applicable
Sample security	• *The measures taken to ensure sample security.*	Not applicable
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Internal audits/reviews of procedures are ongoing, however no external reviews have been undertaken.

Section 2: Reporting of Exploration Results

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	• *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.*	The Lake Surprise Project covers an area of 396^{2}km. The tenement package is located in the North-East Pastoral District of South Australia. It is 100% owned and operated by Adavale Resources.

Criteria	Explanation	Commentary
	• *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.*	Tenement ID's are: EL5892, EL5893 and EL6589 The Native Title holder for the area is the Dieri People. The tenements cross the boundary of Clayton Station and Murnpeowie Station.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Not applicable, not referred to.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The exploration target is a sandstone hosted palaeochannel deposit of uranium within sediment outwash from the Northern Flinders Ranges.

Drill hole Information	• *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:*
	  • *easting and northing of the drill hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length.*
	• *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.*
		A complete table of rock chip data to date is presented in the body of this announcement. The assays for this are pending and will be reported when available.
		
		ASCII tables for geophysical data are hundreds of pages wide and long and the image of this data from SAGA GIS is presented as a summary of the results in this table.

Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Not applicable
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.*	Not applicable

Criteria	Explanation	Commentary
	• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	
Diagrams	• *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.*	Not applicable
Balanced reporting	• *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.*	Once laboratory results are received more comprehensive reporting will be submitted.
Other substantive exploration data	• *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.*	Images of geophysical data are being shown here. The image shown is related to the number of counts present in the uranium channel of the spectrometer.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further work following up on the Assay results from rock chips will be planned once the results are received and reported to the ASX.