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7 November 2025

Assay results point to sedimentary hosted uranium targets on new Overland tenure

Highlights:

- **Uranium confirmed in assays:** laboratory results from historic core hole C051 (within recently granted South Australian EL7079, part of AR3's Overland Uranium Project) confirm the presence of uranium mineralisation:
  - 0.44m @ **159ppm U_3O_8** from 56.6m within limestone
  - 0.70m @**153ppm U_3O_8** from 57.3m within limestone
  - 0.90m @ **201ppm U_3O_8** from 60.3m within lignite
- **Extensive new target zones identified:** The target zones, defined by numerous historic drillholes with anomalous gamma[1], has revealed two large uranium target zones with sedimentary layers above and adjacent to a widespread brown coal deposit.
- **Strong geological indicators:**
  - Numerous historic drillholes show gamma anomalies suggesting widespread uranium potential.
  - Untested ground remains to the west near the regional Palmer Fault and to the northeast adjacent granitic basement rocks – both highly prospective structural settings within the new EL area (See Figure 1).
  - **Contact with intrusive basement rocks provides potential uranium source:** Weathered and in some places outcropping granites within the Sedan area has produced a 'wash' of permeable sediments providing an accessible potential source of uranium for groundwaters moving through the area and into the adjacent highly reduced sediments (see Figure 4).
- **Next Steps:** Data integration and geophysical review to inform a drilling program for the new target areas that will be designed to confirm and expand mineralisation models
- Engage with this announcement at the AR3 ***investor hub***.

AR3 Managing Director and CEO, Travis Beinke, said:

"The assay results from historic drilling confirm the presence of uranium mineralisation within the newly granted Overland Project tenements. This outcome, supported by multiple gamma anomalies

[1] "Anomalous Gamma" has been defined by historical downhole gamma surveys where the gamma response was 2x background or >100cps (see appendix 2).

identified across the Sedan area, provides a strong technical basis for advancing our exploration focus in this part of the Murray Basin margin at Overland.

The data review highlights two clear target zones where geological conditions are favourable for sedimentary-hosted uranium. These findings align with our broader understanding of the region and strengthen the case for follow-up work.

Our next phase of activity will involve confirmatory drilling and further data integration to refine the geological model. These steps will ensure we build a comprehensive understanding of the mineralisation potential before progressing to more detailed evaluation work."

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Australian Rare Earths Limited (ASX: AR3) is pleased to announce identification of uranium mineralisation within recently granted exploration licenses (EL7079, 7080, 7081) forming part of the Overland Project in South Australia that now spans ~8,000km^2.

AR3 assay results from historic core drilling in the Sedan area (drilled between 1979 and 1982), together with a comprehensive review of legacy geological data, has defined two extensive sedimentary-hosted uranium target zones. These findings enhance the exploration potential of the Overland Project and provide a strong foundation for planned follow-up drilling and technical evaluation.

The review of historical drilling in the Sedan area has identified an extensive zone of interest, defined by numerous drillholes, containing anomalous gamma intercepts within sedimentary horizons sitting above and at the contact with a widespread brown coal deposit.

Two primary target areas have been defined:

1. **Western 'Flank' Zone** – located within the Ettrick Formation overlying the coal seams, remaining largely open toward the Palmer Fault (see vertically exaggerated Figure 3 below) and;

2. **Basal Sandy Unit** - a thick sandy unit developed in an area of lower topography at the base of the sedimentary sequence overlying basement rocks, where weathered granite has produced a 'wash' of potentially elevated uranium-bearing sediment, providing a potential source of uranium enrichment (see idealised section below, Figure 4).

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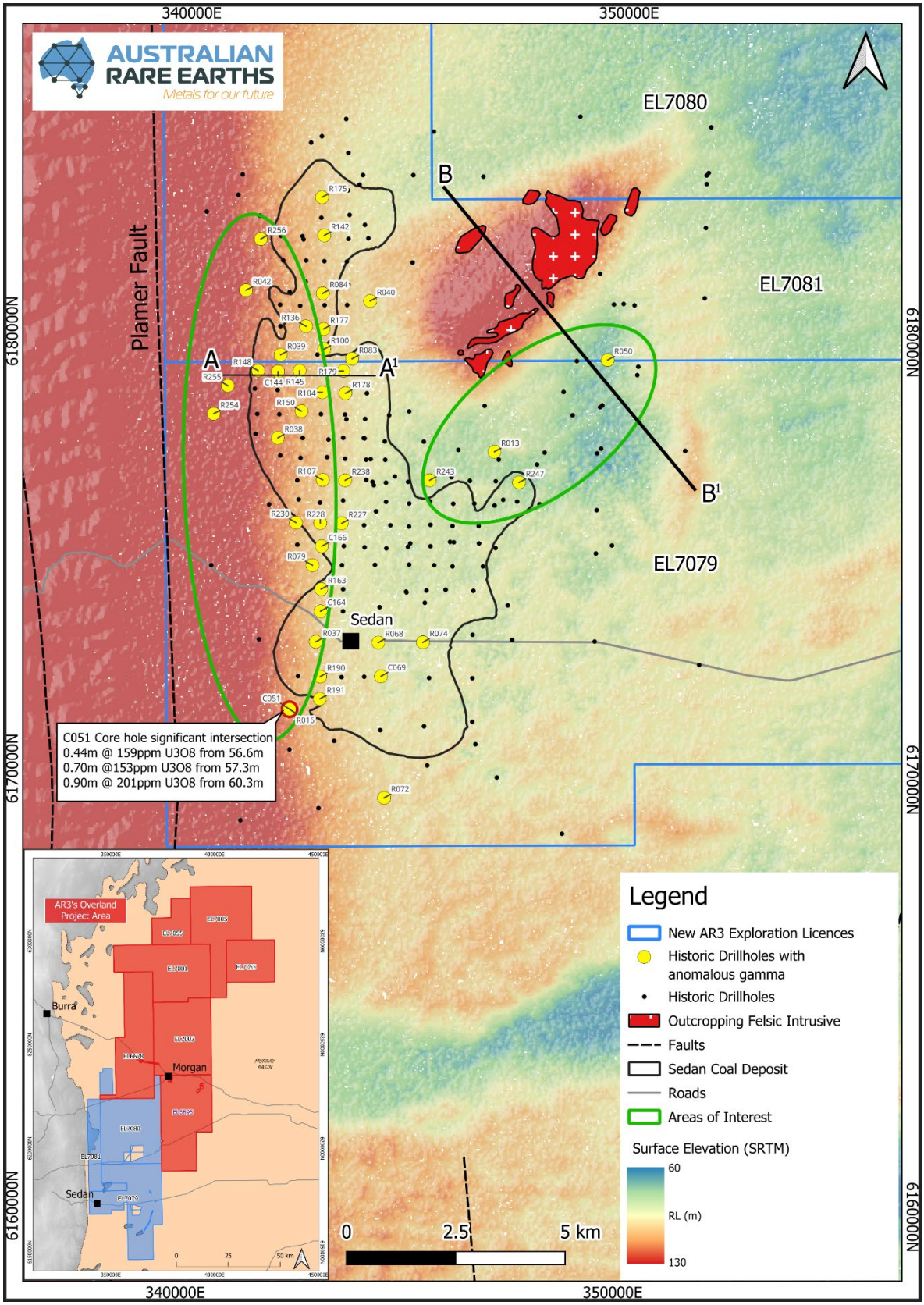

Figure 1: *Historic drilling around the Sedan Coal deposit. Historic holes which intersected anomalous gamma and resampled hole C051 shown highlighted.*

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Figure 2: *Core hole C51, with significant uranium assay intersections marked. Note redox boundary becoming evident in the sample 4586338 sample interval.*

Core material in hole C051 from historic drilling, designed to define the extent and nature of the Sedan brown coal deposit, has been reviewed at the South Australia Drill Core Reference Library and sampled for assay. Assay results include;

- 0.44 m @ 159ppm U_3O_8 from 56.6m (sample 4586338)
- 0.70 m @ 153ppm U_3O_8 from 57.3m (weighted average of samples 4586339 & 4586340)
- 0.90 m @ 201ppm U_3O_8 from 60.3m (weighed average of samples 4586344 & 4586345)

Gamma anomalism in the numerous drillholes completed between 1979 and 1982, to define the extent and nature of the Sedan brown coal deposit, leave a large area open to the west and adjacent the regional Palmer fault for uranium mineralisation to have occurred within the recently granted Els EL7079, 7080 & 7081, see Figure 1. Gamma logging in drill hole R016, adjacent to C051 points to a 5m thick anomalous zone (56 to 61m) – roughly corresponding to the interval 56.6 to 61.2m (4.6m) shown above from samples 4586338 to 4586345.

The models AR3 have proposed for this potential uranium mineralisation provides scope for the development of sedimentary hosted uranium grades and thickness of significance across a wide area.

The two target areas identified lie between the regional Palmer fault, informing the margin of the Murray Basin sediments, and intrusive units of the Delamerian Orogen. A depression had developed in that area which has accumulated the brown coal deposits and provided pathways for groundwater movement into it. The granites, some exposed today, have weathered and eroded to form a 'wash' of material which has contributed to sandy sequences adjacent the lignite deposits.

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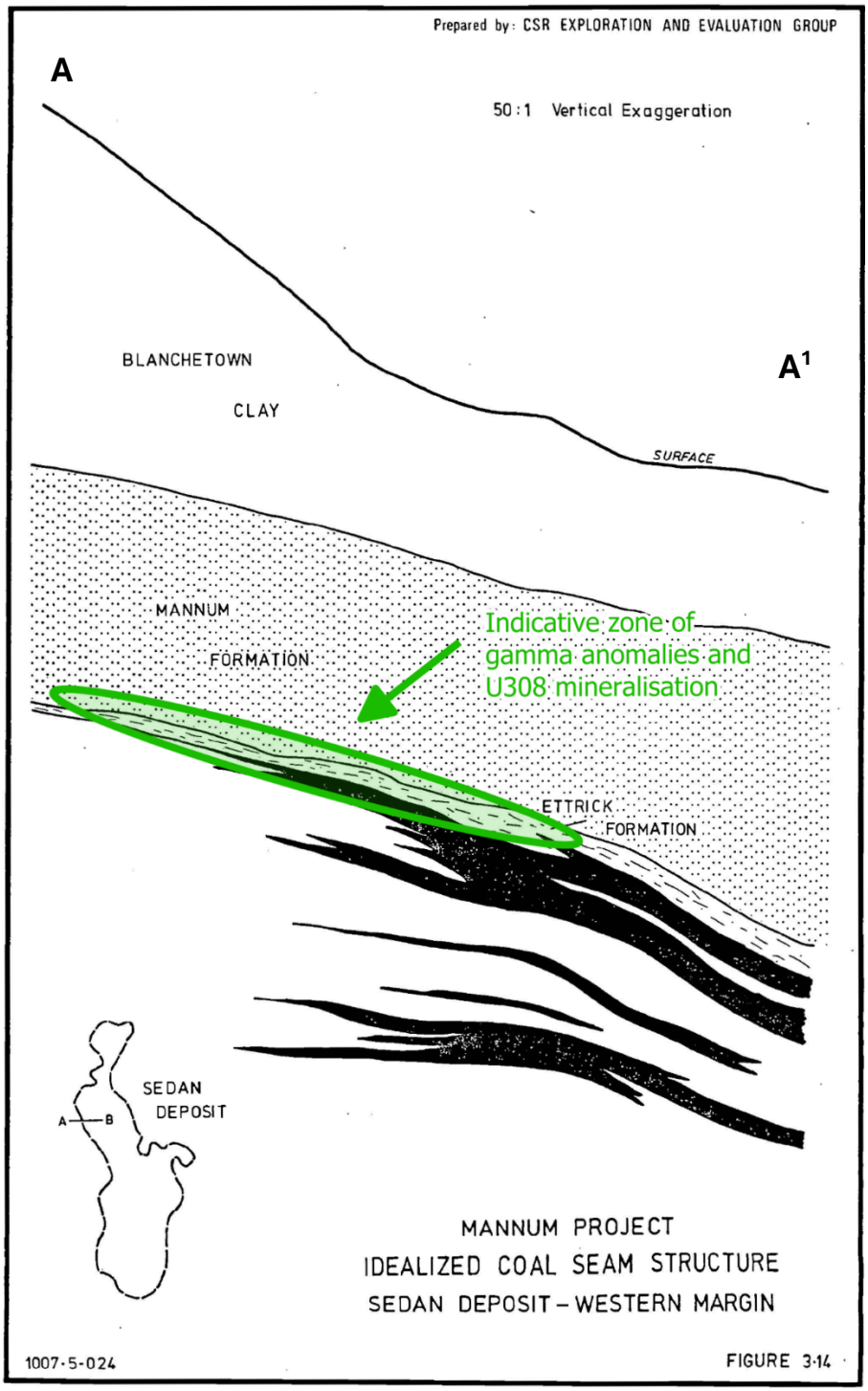

Figure 3: *Western flank zone of interest, through A-A[1], shown with 50:1 vertical Exaggeration. Modified from Open File Envelope ENV03345 pg1759.*

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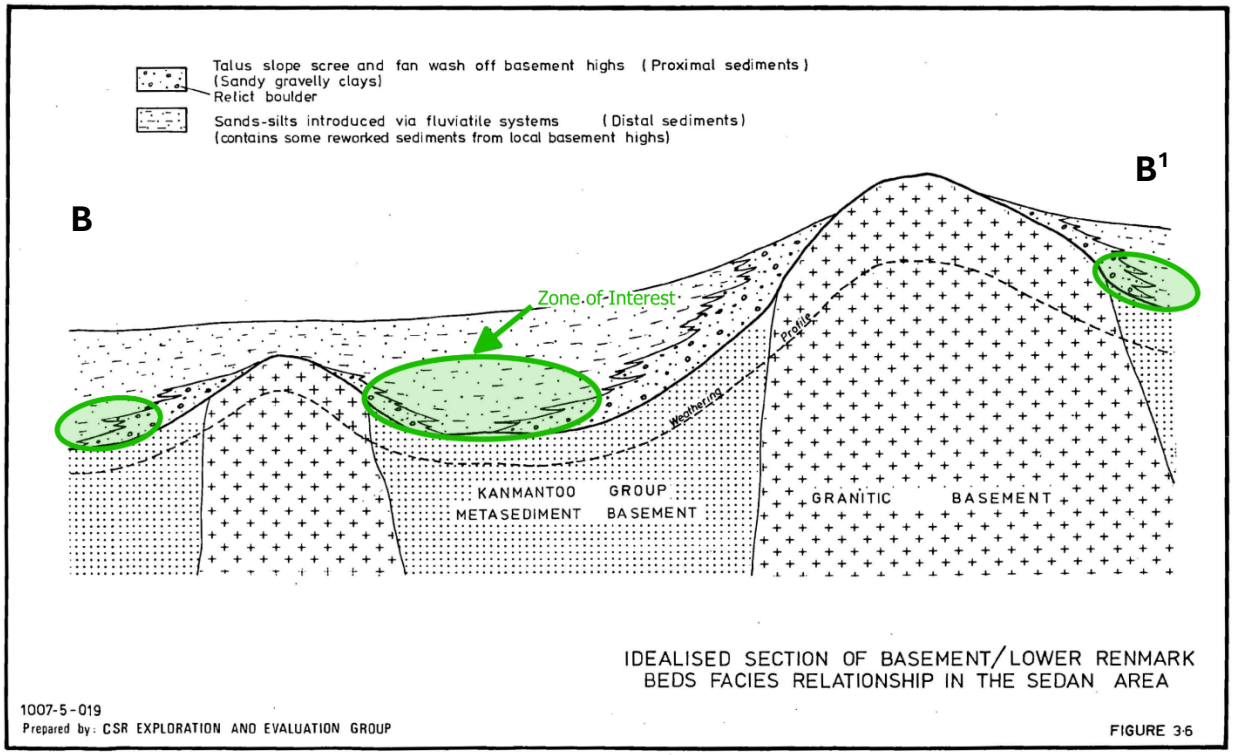

Figure 4: *Idealised Section - Granite 'wash' schematic. Modified from Open File Envelope ENV03345 pg.1745*

Next steps

- **Data Analysis:** AR3 continues to compile and interpret all existing geological and geophysical data across its extensive Overland Project tenure to inform a drilling program for the new target areas that will be designed to confirm and expand mineralisation models.

The announcement has been authorised for release by the Board of Australian Rare Earths Limited.

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Competent Person's Statement

The information in this report that relates to Exploration results is based on information compiled by Australian Rare Earths Limited and reviewed by Mr Rick Pobjoy who is the Chief Technical Officer of the Company and a member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Pobjoy has sufficient experience that is relevant to the style of mineralisation, the type of deposit under consideration and to the activities undertaken to qualify as a Competent person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Pobjoy consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

About Australian Rare Earths Limited

Australian Rare Earths (AR3) is a diversified critical minerals company, strategically positioned to meet the growing global demand for uranium and rare earth elements:

- *AR3's Koppamurra Rare Earths Project in South Australia and Victoria is a significant deposit of light and heavy rare earths, which has secured important Australian government support through a $5 million grant to accelerate development. With support from global advanced industrial materials manufacturer, Neo Performance Materials, AR3 is progressing toward a Pre-Feasibility Study and a demonstration facility, solidifying its role in diversifying global rare earth supply chains for the clean energy transition.*
- *AR3's large ~8,000 km^2 Overland Uranium Project in South Australia shows strong uranium discovery potential, with initial drilling identifying opportunities for substantial near-surface and deeper deposits.*

With strategic projects and strong government support, AR3 is poised for significant growth in the critical minerals market.

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JORC Table 1

Section 1 Sampling Techniques and Data		
Criteria	**Explanation**	**Comment**
Sampling techniques	*Nature and quality of sampling (e.g., 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 (e.g., '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 (e.g., submarine nodules) may warrant disclosure of detailed information.*	***Theiss Bros. Pty. Ltd Exploration*** • *Theiss Bros Pty Ltd completed an extensive drilling campaign exploring for lignite during the late 1970's and mid-late 80's in the area detailed within this release.* • *The data presented from this early exploration work is detailed in open file envelope ENV03345 which is publicly available for download on the South Australian Resource Information Gateway (SARIG) website https://map.sarig.sa.gov.au/.* • *Due to the extensive exploration by Theiss Bros over multiple years with varying drilling and geophysical logging methods, all data material and available has been presented within **Appendix 2** of this release.* • *The drilling was a combination of "rotary chip" noted as "R" series and lesser amount of coring, often through select sections of the drillhole within the target lithology, lignite and coal. The holes which were cored were noted with a prefix of "C".* ***Theiss Bros. Pty. Ltd. Geophysical logging*** • *Downhole geophysical logging was completed on most holes including Gamma, Neutron, Density, SP, Resistivity, and Caliper.* • *Details regarding calibration, instrument details, surveying methods were often not provided in historic reports, where details have been provided they have been included in **Appendix 2** of this release.* • *Gamma anomalies referred to within this report have been detailed in **Appendix 2**.* • *Drill holes with a gamma response of approximately 100cps and/or 2x the interpreted background gamma response have been considered anomalous and referred to as such throughout this release.* • *All Gamma logs are from the 70's and 80's and scanned paper copies were reviewed to determine the anomalous intersections and background gamma values.* ***Australian Rare Earths Re-Sampling historic hole C051***

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		• *Historic hole C051, drilled by Thiess Bros Pty. Ltd. was re-sampled at the South Australian Drill Core Reference Library located at 5 Tonsley Blvd. SA, 5042.* • *Hole location C051 is collar details are listed within **Appendix 2** of this release.* • *A total of 15 samples including one duplicate sample was sampled from the available core.* • *Sample intervals and corresponding U3O8 values from drillhole C051 are listed within **Appendix 3** of this release.* • *Samples consisted of ~60g of material from the available drill core which was submitted to Bureau Veritas for analysis.* • *Sampling was conducted by using a chisel/hammer and in sections a rock saw to cut the core along the sample interval to obtain a representative sample for the interval.* • *Due to the historic nature of the drill core there some evidence of missing material from the core tray was observed.* • *It is estimated that ~1.45 meters of core was missing between the cored interval (55.00-63.30m) which was sampled.* • *Comments on the sample quality/possible core loss have been noted within **Appendix 3** of this release.* • *The sampling was undertaken by an experienced geologist with 20+ years' industry experience and the method was reviewed by AR3's Exploration Manager and Chief Technical Officer.* • *The sampling method was considered representative.*

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Drilling techniques	*Drill type (e.g., core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., 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).*	***Thiess Bros Pty Ltd Exploration*** • *Theiss Bros Pty Ltd completed an extensive drilling campaign exploring for lignite during the late 1970's and mid-late 80's in the area detailed within this release.* • *Due to the extensive exploration by Theiss Bros over multiple years with varying drilling methodologies the data has been summarized within **Appendix 2** of this release.* • *The "R0" series holes were rotary chip boreholes and the "C" series drillholes were cored holes* • *Drill type: "Rotary Chip- RO" and "Core-C" drillholes.* • *The cored holes and intervals were not orientated.*
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.*	***Thiess Bros Pty Ltd Exploration*** • *Sample recovery quality not quantified in historical reports.* • *While no direct measurements were made of sample recovery for each interval, general comments in historic reports indicate recovery was sufficient for geochemical analysis, with no material bias evident.*
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*	***Thiess Bros Pty Ltd Exploration*** • *Geological logging was completed for the entire drill hole.* • *Geological logs were not available for a portion of the holes (see **Appendix 2**).* • *Geotechnical logging was undertaken for development of the Sedan lignite/coal resource.* • *From-to intervals and unit descriptions, including colour, grain size, sorting, and lithology, were systematically recorded.* • *No further logging details were provided in the historical reports.*

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	intersections logged.	• *The logging undertaken was not designed to support a mineral resource estimation.* ***Australian Rare Earths Re-Sampling historic hole C051*** • *No Geotechnical logging was completed for the re-sampling of hole C051.* • *Hole C051 was geologically re-logged over the interval sampled (55.00-63.30m).* • *The logging was qualitative logging rock type, color, and other noteworthy observations including the presence of shells or sulphides.*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all cores 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.*	***Thiess Bros Pty Ltd Exploration*** • *No detail provided within historical reports on the sample splitting technique, moisture content, duplicates, or sample sizes of the material being sampled.* ***Australian Rare Earths Re-Sampling historic hole C051*** • *A total of 15 samples including one duplicate sample was sampled from the available core.* • *Sample intervals and corresponding U3O8 values from drillhole C051 are listed within* ***Appendix 3*** *of this release.* • *Samples consisted of ~60g of material from the available drill core which was submitted to Bureau Veritas for analysis.* • *Sampling was conducted by using a chisel/hammer and in sections a rock saw to cut the core along the sample interval to obtain a representative sample for the interval.* • *Due to the historic nature of the drill core there some evidence of missing material from the core tray was observed.* • *It is estimated that ~1.45 meters of core was missing between the cored interval (55.00-63.30m) which was sampled.* • *Comments on the sample quality/possible core loss have been noted within* ***Appendix 2*** *of this release.* • *The sampling was undertaken by an*

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		experienced geologist with 20+ years' industry experience and the method was reviewed by AR3's Exploration Manager and Chief Technical Officer. • *The sampling method was considered representative.*
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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	***Thiess Bros Pty Ltd Exploration:*** • *The historical reports do not provide any details regarding laboratory procedures, including the use of blanks, duplicates, or external laboratory checks.* • *No information was reported on the make and model of the instruments used for downhole geophysical logging, nor on their calibration procedures or reading times.* • *Details on the quality of assay data and laboratory tests (where available) were sourced from historic reports and is provided in* ***Appendix 2*** *of this release.* ***Australian Rare Earths Re-Sampling historic hole C051*** • *Resampling of historic hole C051 was completed from sample material available as detailed in the* ***Sampling Techniques*** *section of this table.* • *After sampling was completed the samples were submitted to Bureau Veritas Laboratories located in Wingfield, SA.* ***Bureau Veritas Assaying procedures*** • *The samples will be initially oven dried at 105 degrees Celsius for 24 hours. Samples will be secondary crushed to 3 mm fraction and the weight recorded. The sample will then be pulverised to 90% passing 75 µm. Excess residue will be maintained for storage while the rest of the sample is placed in 8x4 packets and sent to the central weighing laboratory.* • *All weighed samples will then be analysed using the Multiple Elements Fusion/Mixed Acid Digest analytical method;* • *The samples were submitted for analysis using Mixed Acid Digest – Lithium Borate Fusion ICP-MS method (BV Code SC302) with detection limits for each element shown in ppm Ag (0.2*

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		ppm), Al (50.0 ppm), As (1.0 ppm), Au (0.01 ppm), Ba (2.0 ppm), Be (0.5 ppm), Bi (0.1 ppm), Ca (100.0 ppm), Cd (0.5 ppm), Ce (0.1 ppm), Co (1.0 ppm), Cr (20.0 ppm), Cs (0.1 ppm), Cu (1.0 ppm), Dy (0.05 ppm), Er (0.05 ppm), Eu (0.05 ppm), Fe (100.0 ppm), Ga (0.2 ppm), Gd (0.2 ppm), Hf (1.0 ppm), Ho (0.02 ppm), In (0.05 ppm), K (100.0 ppm), La (0.1 ppm), Li (10.0 ppm), Lu (0.02 ppm), Mg (50.0 ppm), Mn (50.0 ppm), Mo (0.5 ppm), Na (100.0 ppm), Nb (0.5 ppm), Nd (0.05 ppm), Ni (2.0 ppm), P (50.0 ppm), Pb (1.0 ppm), Pr (0.05 ppm), Rb (0.2 ppm), Re (0.1 ppm), S (50.0 ppm), Sb (0.1 ppm), Sc (1.0 ppm), Se (5.0 ppm), Si (50.0 ppm), Sm (0.05 ppm), Sn (0.1 ppm), Sr (0.5 ppm), Ta (0.1 ppm), Tb (0.02 ppm), Te (0.2 ppm), Th (0.1 ppm), Ti (50.0 ppm), Tl (0.1 ppm), Tm (0.05 ppm), U (0.1 ppm), V (20.0 ppm), W (0.5 ppm), Y (1.0 ppm), Yb (0.05 ppm), Zn (2.0 ppm), Zr (10.0 ppm) • *Bureau Veritas will complete its own internal QA/QC checks that include a Laboratory repeat every 21st sample and a standard reference sample every 9th sample prior to the results being released.* • *The adopted QA/QC protocols are acceptable for this stage of test work. The sample preparation and assay techniques used are industry standard and provide a total analysis*
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.*	• *AR3's Exploration Manager and Chief Technical Officer have carried out internal reviews of the compiled historical data disclosed in this release to ensure its accuracy and alignment with reporting standards.* ***Thiess Bros Pty Ltd Exploration:*** • *No independent verification was noted in the historical reports by Theiss Bros.* • *No twinned holes, data entry procedures, or data verification was noted in historic reports.*

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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.*	• *All maps prepared by AR3 are in GDA94/MGA zone 54.* ***Thiess Bros Pty Ltd Exploration*** • ***Drill Hole Locations:*** *Due to the historical nature of the drilling presented in this release, exact drill hole locations cannot be fully verified, as discrepancies exist between the "approximate" coordinates recorded in the original paper logs and the locations provided by SARIG.* • ***Source of Location Data:*** *The location data reported here has been sourced from SARIG records or historical reports.* • *A portion of drillholes presented within this release are not visible in the SARIG GIS map viewer and have been sourced from historical reports which listed the coordinates and provided maps which have been compiled into this release.* • *All drillhole coordinates were recorded in AMG 66, holes coordinates extracted from the ENV where required were reprojected into GDA 2020 Zone 54 using the reprojection feature in Quantum GIS software* • *A list of collars is included within* ***Appendix 2*** *of this release including* source of the data points used.
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.*	***Thiess Bros Pty Ltd Exploration*** • ***Geological and Grade Continuity:*** *No geological or grade continuity estimations relating to Uranium have been determined from historic exploration results.* • *Historic exploration by Theiss Bros was primarily focused on exploring for coal/lignite deposits.* • ***Purpose and Nature of Drilling:*** *The drilling formed part of a basin-wide regional exploration program targeting economic coal deposits followed by a targeted resource drilling program over the Sedan coal prospect.* • *The exploration by Thiess Bros eventuated in identifying the Sedan coal resource.*

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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.*	***Thiess Bros Pty Ltd Exploration*** • *Vertical orientation considered appropriate for targeting flat sediments of the Murray Basin Stratigraphy.* • *No orientation bias identified.*
Sample security	*The measures taken to ensure sample security.*	***Thiess Bros Pty Ltd Exploration*** • ***Sample Security:*** *The historical reports did not provide any information regarding the security or chain-of-custody measures for the samples or geophysical data.* ***Australian Rare Earths Re-Sampling historic hole C051*** • *Samples collected during the resampling of hole CO51 were under the custody of a consulting geologist with 20+ years experience.* • *The samples were collected from the South Australian drill core reference library and delivered directly to Bureau Veritas in Wingfield, SA by the consulting geologist who sampled the material.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	***Internal QAQC Oversight of Historical Data:*** • *AR3's Exploration Manager and Chief Technical Officer have carried out internal reviews of the compiled historical data disclosed in this release to ensure its accuracy and alignment with reporting standards.* ***Thiess Bros Pty Ltd Exploration*** • *The original historic report did not record any audits or independent reviews of the sampling data for these drill holes.*

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Section 2 Reporting Exploration Results		
Criteria	**Explanation**	**Comment**
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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	***Thiess Bros Pty Ltd Exploration*** • *The Thiess Bros Exploration and drilling was within historic EL429 and EL609.* • *EL429 was granted to Thiess Bros. Pty on Nov 13th, 1978. The Licence area was ~2257km2 and located ~107km from Adelaide.* ***Australian Rare Earths Tenure*** *•Australian Rare Earths Overland project is comprised of EL7001, EL7003, EL7005, 7055, EL7079, EL7080, and EL7081 held by Valrico Resources Ltd Pty and WRDBD PTY LTD, wholly owned subsidiaries of Australian Rare Earths.* *•Valrico Resources Ltd Pty completed an earn-in agreement with the license holders of EL6678 (Sheer Gold Pty Ltd) on April 24th, 2025 (see ASX announcement) covering an area of 990km2.* *•Recently AR3 acquired EL6895 from private minerals explorer David Clarke. Under the agreement AR3 will acquire EL6895 for a payment of $10,000 (see ASX announcement July 10, 2025).* *•The total Overland project area covers 8005km2 which includes EL7001, 7003, 7005, 7055, 6678, 6895, EL7079, EL7080, EL7081.* *•There are no Conservation Parks or Regional Reserves in the EL areas.* *•The White Dam CP has been excised from the SW corner of EL7003 and southern portion of EL6678.* *•The Morgan CP are located outside the SW corner of EL7003 and excised from EL6895.* *•Registered Native Title Determination Application SC2019/001 overlaps with the central portion of EL7003, southern portion of EL6678 and all of ELA2025/00022 & ELA2025/00023.* *•Registered Native Title Determination Application SC2011/002 overlaps with the NW corner of EL7005.* *•A registered and Notified Indigenous Land Use Agreement (ILUA)- The River Murray and Crown Lands SI2011/025 overlaps with the southern*

		portion of EL7003 and northern portion of 6895.

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Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• *Exploration activities by other exploration companies extend back to the 1930's initially exploring for lignite and water by the South Australian government.* • *Historically the area has been explored for Base Metals, Coal, Gold, Copper, Heavy Mineral Sands, and Water.* • *The most notable exploration activity was completed by Theiss Bros Pty Ltd who were exploring for economic coal deposits in the late 1970's and 1980's*
Geology	*Deposit type, geological setting and style of mineralisation.*	• *The Overland project is targeting Paleochannel Uranium within the Murray and Renmark Group sediments of the Murray Basin.* • *Sedimentary hosted uranium deposits occur in medium to coarse-grained sedimentary sequences deposited in a continental fluvial or marginal marine sedimentary environment. Impermeable shale/mudstone units are interbedded in the sedimentary sequence and often occur immediately above and below the mineralised sediments. Uranium is precipitated under reducing conditions caused by a variety of reducing agents within the permeable sediments including carbonaceous material (detrital plant debris, amorphous humate, marine algae), sulphides (pyrite, H2S), and hydrocarbons.* • *Anomalous uranium within the Murray Basin occurs in carbonaceous clay and lignite of the Winnambool Formation and Geera Clay (Murray Group) of the Murray Basin, however the Renmark Group sediments have never been effectively targeted for uranium in the South Australian portion of the Murray Basin and therefore represent a highly promising new frontier for uranium exploration.* • *Shallow sedimentary uranium mineralisation in secondary carbonate cementation is another style of U mineralization being targeted, similar to Namibia's surficial uranium deposits. Similar calcrete-hosted deposits are also found in Western Australia* • *In addition to paleochannel uranium, AR3 is*

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		also exploring basement geology for a diverse range of mineralization styles including; Porphyry Cu–Au–Mo, Skarn, Orogenic gold, Volcanic-hosted massive sulphides (VHMS) and Sediment-hosted systems. • *AR3's exploration approach integrates historical drilling data with new basement assay results collected during ongoing paleochannel uranium drilling programs. Targeting basement-hosted Cu-Au mineralisation has been a strategic consideration from the outset.* • *In 2024, GA completed a comprehensive metallogenic review of the Delamerian margin, identifying four major metallogenic events between 590 Ma and 399 Ma, associated with multiple tectonic settings (passive margin, convergent margin, intraplate, back-arc).* • *AR3's project area is underlain by convergent margin rocks and is associated with two key metallogenic phases:* • *505–494 Ma: Porphyry, epithermal, skarn, and VHMS mineralisation.* • *495–460 Ma: Granite-related magmatism linked to porphyry Cu–Mo systems (e.g. Anabama Hill, Netley Hill, Bendigo Prospects*
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.*	***Thiess Bros Pty Ltd Exploration*** • ***Drill Hole Locations**: Due to the historical nature of the drilling presented in this release, exact drill hole locations cannot be fully verified, as discrepancies may exist between the approximate coordinates recorded in the original paper logs.* • ***Source of Location Data:** The location data reported here has been downloaded from SARIG or georeferenced from historic reports.* • *All drillhole coordinates were recorded in AMG 66, holes coordinates extracted from the ENV where required were reprojected into GDA 2020 Zone 54 using the reprojection feature in Quantum GIS.* • *A list of collars and detail on the source location data is included within **Appendix 2** of this release.*

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	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.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.*	***Thiess Bros Pty Ltd Exploration*** • *No Assays results/weighted averages were reported or used in in this release* • *The historic gamma anomalism has been tabulated in **Appendix 2** of this release.* • *Anomalous gamma readings from the Theiss Bros Pty Ltd drilling was read from scanned paper gamma logs and anomalism ~ equal to 2x background and/or >100cps was determined to be anomalous.* ***Australian Rare Earths Re-Sampling historic hole C051*** • *A list of all intervals sampled and corresponding U3O8 values are provided in **Appendix 3** of this release.* • *A weighted average was used for the reporting of intersections where two or more samples were reported within that interval which is provided in **Appendix 3**.* • *No high-grade cut-off or top-capping was applied to results.*
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *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*	• *Down hole lengths of geological intervals are interpreted to be true widths as the geology in the region is relatively flat lying and the holes are vertical.*

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	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.*	• *Appropriate maps are included in the body of this release.* • *Tabulations of all significant historical gamma anomalies have been included in **Appendix 2** of this release.* • *Tabulations of all U3O8 re-sampled by AR3 are provided in **Appendix 3** of this release.* • *No drillhole sections have been included within this release as historic drilling was exclusively paper logged and would require extraordinary effort to convert to usable digital data and has not been deemed necessary at this early stage of exploration.* • *Sections from historic reporting by Theiss Bros Pty Ltd have been included within this release which show the interpreted geology and annotated by AR3 to show target areas for U3O8 mineralization.*
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.*	• *This release contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.* • *All drilling and historic work referred to in this report is available on SARIG for download and within historic report ENV03345.*

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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.*	• *No additional meaningful and material data has been excluded from this release*
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.*	• *Additional work will consist of (but not limited to) continued desktop review of historical geophysical and geological data to assist with target generation.* • *Air Core drilling, downhole gamma logging, and sampling.*

Appendix 2 - Theiss Bros Pty. Ltd. Collars and Drillhole Details

Hole ID	Easting	Northing	SRTM Corrected RL	Total Depth (m)	Hole Diameter RC/Core (mm)	Gamma Anomally Max (Cps)	Gamma Anomally Depth (m)	Geophysical Survey Company	Downhole Geophysics Completed	Reported within	EL	ENV03345 Page #	Comments
C051	342442	6171430	113	88.5	120/63	700	56-62	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Feb 1979.	EL429	25	Hole abandoned (lost circulation).
C069	344523	6172210	95	97.3	120/63	43	44	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Feb 1979.	EL429	25	
C144	342080	6179151	116	93.0	120/63	100	56	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Feb 1979.	EL429	25	Very Poor Circulation.
C164	343123	6173680	101	93.0	120/63	80	49-52	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Nov 1979.	EL429	320	
R013	347053	6177380	84	49.2	120	500+	32-33	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Nov 1979.	EL429	320	
R016	342442	6171430	113	83.9	120	500+	56-50	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Nov 1979.	EL429	320	
R037	343023	6172980	107	87.0	120	200	47	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Nov 1979.	EL429	320	
R038	342102	6177680	118	89.0	120	1000	56	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Nov 1979.	EL429	320	
R039	342163	6179540	113	65.0	120	800+	45-50	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros Pty. Limited Exploration Progress Report for 3 month period ending 12th Sept 1980.	EL609	492	
R040	344163	6180790	101	46.2	120	800+	26	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros Pty. Limited Exploration Progress Report for 3 month period ending 12th Sept 1980.	EL609	492	
R042	341323	6181000	126	68.2	120	150+	53	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros Pty. Limited Exploration Progress Report for 3 month period ending 12th Sept 1980.	EL609	492	
R050	349613	6179510	72	63.0	120	800+	33	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros Pty. Limited Exploration Progress Report for 3 month period ending 12th Sept 1980.	EL609	492	
R068	344453	6172980	96	107.0	120	30	47	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros Pty. Limited Exploration Progress Report for 3 month period ending 12th Sept 1980.	EL609	492	
R072	344634	6169432	103	79.1	120	24	50	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros Pty. Limited Exploration Progress Report for 3 month period ending 12th Sept 1980.	EL609	492	
R074	345473	6173000	93	108.7	120	23	36	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th Dec 1980.	EL609	773	
R079	342923	6174730	105	73.2	120	50	47	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	
R083	343823	6179470	99	61.0	120	50+	41	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	
R084	342947	6180789	105	77.0	120	50+	42/ 46/ 55	Geoex	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	
R100	343126	6179675	106	68.5	120	100+	44	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R104	342965	6178513	105	79.3	120	100+	47	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R107	343131	6176684	108	85.4	120	100+	47	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
C136	342575	6180022	108	64	120/63	550/1000	41/ 48	CGC	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R142	342981	6182098	101	87.5	120	50?	40	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R145	342448	6178991	107	81.5	120	50	70	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R148	341624	6179164	120	96.0	120	100+	59	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R150	342949	6178010	108	98.0	120	100+	49	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R163	343131	6174185	103	102.0	120	90	47	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R175	342909	6182958	103	98.0	120	100+	48-51	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R177	342991	6179947	106	65.0	120	100+	44	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R178	343497	6178490	100	No Data	120	600	44	CGC	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R179	343454	6179010	98	77.0	120	100+	44	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R190	343134	6172186	105	101.7	120	100	52	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R191	343132	6171675	106	91.8	120	100+	56-60	Geoscience	Gamma, Neutron, Density, Double Density, SP, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R227	343581	6175697	101	No Data	120	80+	40-42	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R228	343091	6175697	105	71.4	120	80+	46-47	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R230	342415	6175521	109	66.8	120	100+	44	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R238	343496	6176525	100	No Data	120	150+	46-47	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R243	345578	6176708	86	67.0	120	100+	29	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R247	347468	6176436	82	No Data	120	150+	32	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R254	340620	6178166	139	97	120	128+ / 400+	66/ 88-93	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R255	340823	6178647	132	91	120	100	59	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing
R256	341646	6182174	119	79	120	120	63	Geoex	Gamma, Neutron, Double Density, Resistivity, Caliper	Thiess Bros. Pty. Limited Exploration progress report for the 3 month period ending 12th March 1982.	EL609	1309	Geology Logs Missing

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Appendix 3- Significant Intersections Hole C051

Hole ID	Sample ID	From (m)	To (m)	Width (m)	U3O8 (ppm)	Significant Intersection (Weighted Average)	Sampling Comment
C051	4586335	55	55.5	0.5	23		
C051	4586336	55.5	56.1	0.6	7		Minor core loss noted for sample 4586336
C051	4586337	56.3	56.6	0.3	47		
C051	4586338	56.6	57.04	0.44	159	**0.44m @ 159ppm U308 from 56.6m**	
C051	4586339	57.3	57.58	0.28	140	**0.7m @ 153ppm U308 from 57.3m**	
C051	4586340	57.58	58	0.42	162		
C051	4586341	58	58.56	0.56	61		
C051	4586342	58.56	59	0.44	11		
C051	4586343	59	59.4	0.4	58		
C051	4586344	60.3	60.8	0.5	243	**0.9m @ 201ppm U308 from 60.3m**	
C051	4586345	60.8	61.2	0.4	149		Minor core loss noted for sample 4586345
C051	4586346	61.29	62.3	1.01	37		Loose/mixed in core tray/core block mislable and depths adjusted to measured core
C051	4586347	62.3	62.8	0.5	4		
C051	4586348	62.8	63.3	0.5	4		

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