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11 June 2025

AR3 expands Overland Project to unlock newly identified Cu-Au targets and additional uranium prospects

Highlights:

- **Specialist third-party review reveals copper-gold (Cu-Au) potential** in basement rocks at Overland project area, complementing ongoing sedimentary hosted uranium exploration.
- **Overland Project expanded by ~2,000km^2 to now total ~7,000 km^2** of ground prospective for sedimentary hosted uranium mineralisation, and now also considered to be a prospective and underexplored terrane for copper and gold mineralisation, all within the Tier-1 mining jurisdiction of South Australia.
- **Highly prospective Delamerian region:** Overland Project area is within the Delamerian region, which is emerging as highly prospective for multiple mineralised styles including porphyry, skarn, orogenic gold, volcanic massive sulphide (VHMS), and sediment-hosted mineralisation.
- **Strong geological credentials:** Region contains Cu-Au, Cu-Mo, and polyymetalic (Pb-Zn-Au) systems, with analogues to Tier 1 discoveries such as Winu and Cadia Hill.
- **Over 20 untested basement targets identified**, to be tested alongside ongoing uranium exploration program.
- Engage with this announcement at the AR3 ***investor hub.***

Cautionary Statement

This announcement contains references to exploration results derived by other parties exploring in other fertile terrains in Australia and includes references to geophysical similarities to those of the Company's project. It is important to note that such similarities do not guarantee that the Company will have any success or similar success in delineating a JORC-compliant Mineral Resource on the Company's tenements.

AR3 Managing Director and CEO, Travis Beinke, said:

"The expansion of our Overland Project to consider its basement prospectivity is a logical complement to AR3's strategy, broadening our exploration efforts beyond uranium to consider copper and gold targets in the basement rocks. An external review has highlighted the potential of the Overland project area basement rocks. We will now consider cost-effective ways to reveal the potential of the basement in this highly prospective and underexplored region.

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The Delamerian is fast emerging as a premier exploration frontier, and we are excited to be early movers in a region with compelling geological analogues to Tier 1 systems like Winu and Cadia Hill. With over 20 untested basement targets, and strong geological indicators, we're confident our next phase of exploration will generate meaningful results for our shareholders, in a cost-effective way. These new opportunities not only strengthen our exploration pipeline but reinforce AR3's potential for discovery success of critical and strategic minerals."

Australian Rare Earths Limited (ASX: AR3) announces its new Cu-Au basement exploration strategy after the completion of a strategic technical review of its 100%-owned Overland tenure in South Australia, revealing multiple high-value base and precious metal exploration opportunities within the existing tenure area, in addition to the sedimentary hosted uranium prospectivity. The review highlighted two additional prospective areas adjacent to the Overland Project area that the Company has applied for exploration licences over. The new areas also show evidence for sedimentary hosted uranium mineralisation providing multiple targets and highlighting the ongoing prospectivity along the Murray Basin margin.

With the additional exploration license applications, the Overland Project will expand by ~2,000km^2 to a total of ~7,000 km^2, with basement exploration rights across ~6,000 km^2.

Prospectivity of the Delamerian for Copper and Gold

The Delamerian region in southeast South Australia is emerging as a highly prospective but under-explored terrane for copper (Cu) and gold (Au), hosting a diverse range of mineralisation styles including porphyry, skarn, orogenic gold, volcanic hosted massive sulphide (VHMS), and sediment-hosted systems. The basement prospectivity review integrates historical exploration data with new assay results from AR3's ongoing basement sampling, conducted alongside drilling activities targeting paleochannel uranium. From the outset, the potential for underlying copper-gold mineralisation has been a strategic consideration, and this analysis confirms that potential.

Mineral systems and metallogeny

Over the past five years Geoscience Australia and Department of Minerals and Energy in South Australia have collected a significant amount of new precompetitive data including airborne electromagnetic, magnetotelluric survey, passive seismic and deep drilling. This dataset has significantly enhanced our understanding of the Delamerian's metallogenic potential.

In 2024 Geoscience Australia[1] (GA) completed a comprehensive overview of the mineral systems and metallogeny along the Delamerian Orogen margin, highlighting its potential for hosting a diverse range of mineral systems formed across overlapping tectonic settings—passive margin, convergent margin, intraplate, and back-arc—spanning the Neoproterozoic to Devonian.

Four major separate metallogenic events spanning from 590Ma to 399Ma, are each associated with distinct mineralisation styles from Orthomagmatic Ni-Cu-PGE through to porphyry-epithermal, skarns, volcanic hosted massive sulphides (VHMS) to intrusion related gold systems (IRGS).

[1] Cheng Y., et al., 2024a. Metallogenic characteristics of key mineral prospects in the Delamerian Orogen, Australia. Record 2024/01. Geoscience Australia, Canberra. https://doi.org/10.26186/149025

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AR3's tenure lies on the western Delamerian Orogen margin, underlain by convergent margin rocks and is associated with two key metallogenic events including;

1. The **505–494 Ma** event, associated with porphyry, epithermal, skarn, and VHMS mineralisation within convergent margin settings, and
2. the **495–460 Ma** phase of widespread granite magmatism, linked to porphyry Cu–Mo systems, including known mineralisation at Anabama Hill, Netley Hill, and Bendigo Prospects in SA.

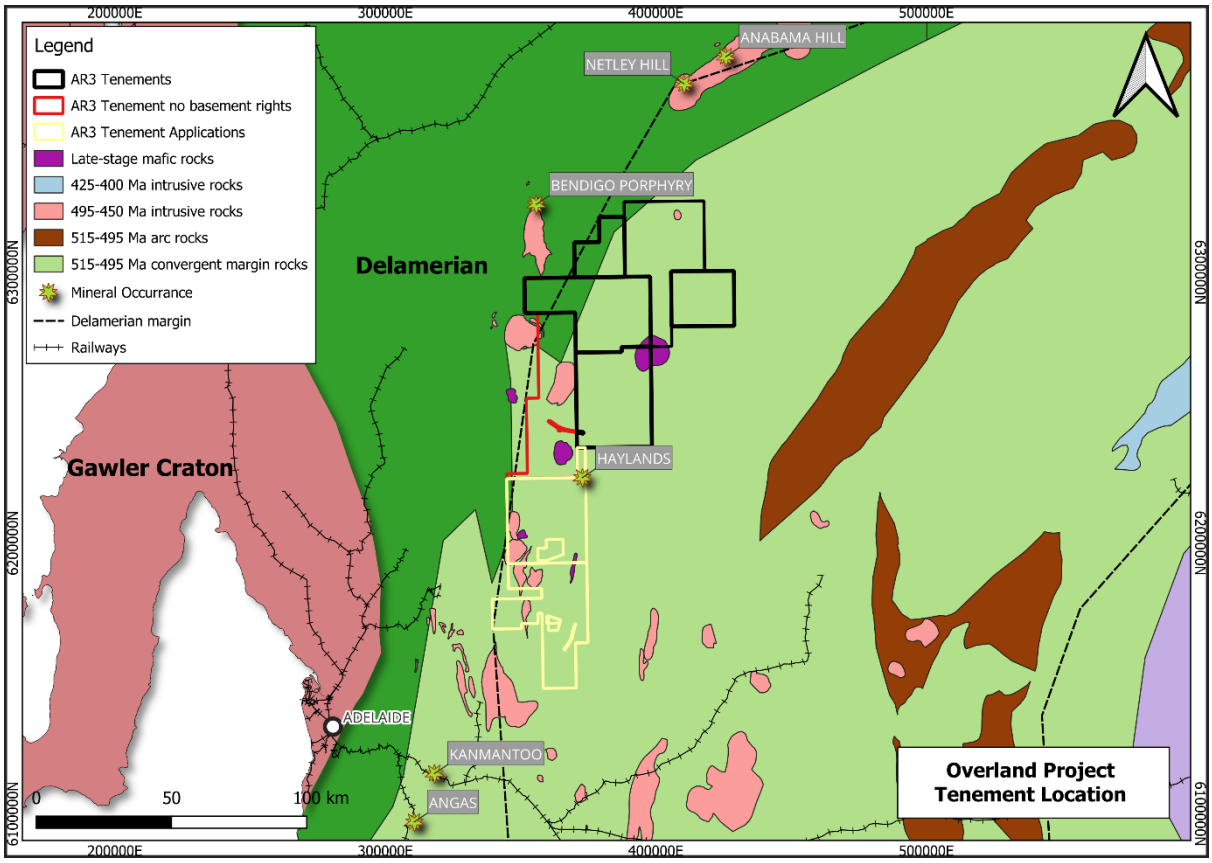

Figure 1: ***Indicative map of mineral potential of the Delamerian Orogen (after Figure 4, Cheng et al., 2024[1])***

The Winu Cu-Au-Ag intrusion related deposit in the Patterson Province (608Mt @ 0.49% CuEq[2]) of WA has many characteristic relevant to exploration in Delamerian Orogen. Winu is hosted in a sequence of gently folded Neoproterozoic metamorphosed sandstone and siltstone, with lesser mafic rocks, which possible intruded by deep seated granitic rocks during the Patteson Orogeny (~550Ma). Winu was discovered by Rio Tinto drill testing airborne electromagnetic (AEM) anomaly, from an AEM survey flown over a target area selected due to evidence of deep-seated granitic intrusions and favourable shallow structures in overlying Neoproterozoic rocks.

Porphyry systems in the Macquarie Arc (Cadia Hill) and the Delamerian Orogen also share many similarities including the geological setting, magmatic activity, hydrothermal alteration and timing of mineralisation. Macquarie Arc hosts several significant porphyry deposits, including Cadia Hill and Cadia Ridgeway Au-Cu deposits.

[2] *Porter Consultancy Website April 2025* https://portergeo.com.au/database/mineinfo.asp?mineid=mn1750

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Underexplored Terrane

Despite the high prospectivity of the Delamerian Orogen basement rocks for base and precious metals, the bulk of the historical exploration has focussed on the younger cover sediments, primarily for heavy mineral sands, uranium and coal. Only around 25% of the drilling in the area to date has been focused on the basement rocks.

The last significant basement exploration effort in the area was conducted by Gold Fields Australia (GFA) between 2007 and 2012, who were attracted to the Delamerian Orogen for its orogenic gold potential, similar to Telfer gold deposits in WA.

At the Haylands Prospect located in AR3's new tenement application, GFA intersected **2m @ 0.93 g/t Au** from 200 m in drill hole DEL09AC144 and 64 m @ 0.6 g/t Ag in quartz veining within a biotite-magnetite-garnet altered rock. Copper and Zinc assay values were also anomalous, along with the pathfinder elements bismith Bi), molybdenum (Mo), lead (Pb) and antimony (Sb). The intercept occurs on the contact between magnetic mafic igneous rock and metasediments. A NNE structural trend extends from Haylands to the SSW and NNE with little drill testing to date.

Several other of GFA's original geophysical targets have been left untested and an initial review of available geophysical, geochemical and historical drillhole information has already identified several interesting new structural targets to incorporate into AR3's ongoing exploration program.

AR3 Basement Strategy and next steps

Twenty–four initial structural targets have been interpreted from geophysics and historical exploration data. These targets were selected based on presence of interpreted faults, fold noses or sheared contacts with intrusive rocks that could provide favourable plumbing for mineralised Cu and Au fluids. The stronger looking features within the magnetics with evidence of intrusive units nearby have been given a higher priority for drill testing **(Figure 2)**.

AR3 is leveraging its active uranium drilling program to concurrently sample and assess the basement for Cu-Au prospectivity. Using portable XRF and laboratory assays, the company is mapping key pathfinder elements (Cu, Mo, Bi) indicative of porphyry and skarn systems.

One recent example from AR3 aircore drilling includes the anomalous Cu, Mo and Bi intersected in weathered granite in drill holes OV002 and OV011 **(Figure 2)**. These holes are approximately 28km south of the Bendigo Cu-Mo porphyry prospect discovered in the 1970's by DEM. This geochemical signature suggests potential for a concealed porphyry system and warrants further investigation. Follow-up work will include infill sampling, geophysical interpretation, and deeper drilling to test the underlying source.

Together, the ongoing uranium exploration and the new basement Cu-Au targets provide a strategic focus for the next phase of exploration drilling to commence in July 2025.

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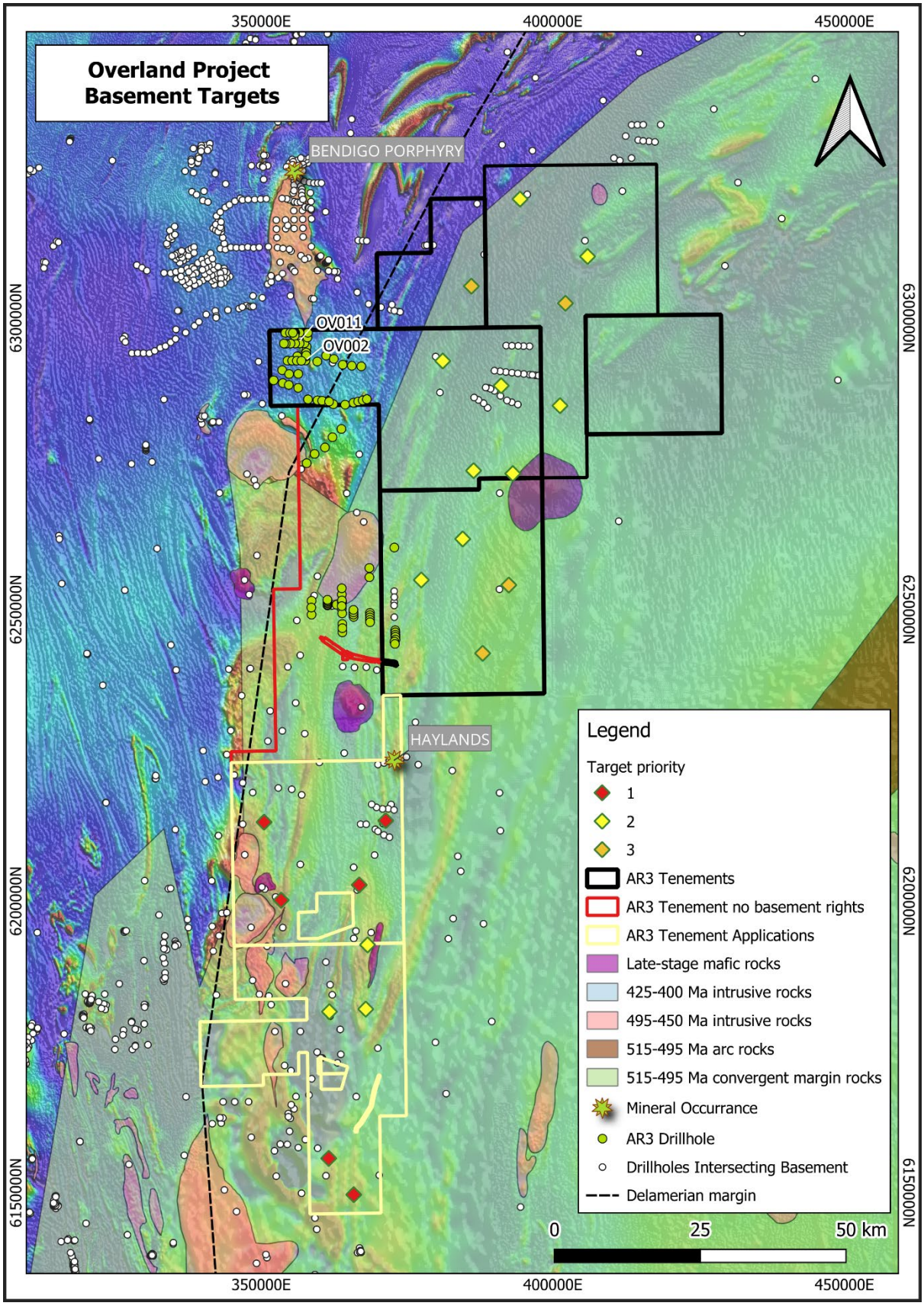

Figure 2: *AR3 initial basement Targets (TMI magnetics background and geology)*

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Next steps

- Reprocess AEM data for depth and conductor targeting of Cu-Au basement targets
- Expand basement sampling during the upcoming uranium drilling program commencing in July 2025

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

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Engage and Contribute at the AR3 investor hub: https://investorhub.ar3.com.au/

Competent Person's Statement

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Ian Warland, who is a Competent Person, and a Member of the Australian Institute of Geoscientists. Mr Warland is not aware of any new information or data that materially affects the historical exploration results included in this report. Mr Warland is an employee of Nile Exploration Pty Ltd and is currently consulting to Australian Rare Earths Limited. Mr Warland has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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 Warland consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Australian Rare Earths Limited

Australian Rare Earths (AR3) is an emerging diversified critical minerals company, strategically positioned to meet the growing global demand for uranium and rare earth elements. The Company's vast 7,000 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.

Simultaneously, AR3's Koppamurra Rare Earths Project in South Australia and Victoria has secured important 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. 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.*	***Australian Rare Earths (ARE) Drilling and Sampling Methods:*** • *Air Core drilling methods were used to obtain samples from the Overland drilling program between October-December 2024 and January-May 2025* • *The following information details the Air Core drill sampling process:* • *All Air Core drill samples were collected from the rotary splitter mounted at the bottom of the cyclone into a pre-numbered calico bag. The samples were geologically logged at 1 m intervals.* • *Based on hole-diameter, generic material density and a 20% split on the cyclone samples averaged ~1.5-2.5 kg in mass.* • *Chip trays were used to collect a representative sample for each 1m sample interval for each hole.* • *After the samples were collected within the calico bags, they were screened for anomalous gamma radiation using a handheld Ranger EXP survey meter (S/N R318772) calibrated 23/09/2024 prior to being geologically logged and tested with a pXRF at the drill site.* • *The gamma screening was conducted by placing the handheld Ranger survey meter* • *~10cm from the calico sample for 5-10sec and noting the dose rate in µSv. If elevated dose rates were detected the field crew was then notified before any additional sample logging was conducted and the anomalous reading recorded in the geological log.* • *A handheld Olympus Vanta pXRF Analyser (Model Vanta M Series S/N 842924) was used to assess the geochemistry of the Air Core samples in the field. The pXRF analysis provided screening analysis to characterize the sample lithology and full suite of elements.* • *The pXRF sampling was analysed through the calico bag with a beam count time of 20-30 sec beam 1 and 10 sec beam 2. One pXRF*

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		analysis per sample was performed. • *Samples are laid on a workbench and flattened to create a stable surface for the pXRF. The pXRF is placed on the sample with the beam down for the analysis.* • *All readings were taken at ambient temperatures between 10 and 45 degrees Celsius. The Olympus Vanta is rated for continuous operation within these temperatures.* • *Samples range from dry to wet, this is dependent on which formation is being intercepted and whether drilling water has been injected.* • *A Uranium standard Oreas 121 (215 ppm U, sourced from Mantra Resources Nyota Prospect, Tanzania, which is a Tabular Sandstone hosted deposit) was used to verify the accuracy of the pXRF before and after each analysis session.* • *The OREAS 121 standard was prepared using an industry standard pXRF sample cup and analysed for 20-30 sec on beam 1 and 10 Sec on beam 2.* • *A silica blank is used to monitor the accumulation of contamination on the lens of the pXRF. Analysis of the blank is undertaken before and after each analysis session.* • *Review of pXRF standard and blank data is checked to ensure the pXRF is operating correctly before and after each session.* • *Samples were selected for assay at the end of the hole based on geology, pXRF, and natural downhole gamma response.* • *Field duplicates were taken at a rate of ~1:40 and inserted blindly into the sample batches.* • *Field Standards were taken at a rate of ~1:40 and inserted blindly into the samples batches.* • *Samples were submitted to Bureau Veritas in Adelaide for analysis. The sample weights were recorded (wet and dry) and samples were dried at 105 degrees for a minimum of 24 hours. The samples were secondary crushed to 3 mm fraction and then pulverised to 90% passing 75 µm. Excess residue was maintained for storage*

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		while the rest of the sample was placed in 8x4 packets and sent to the central weighing laboratory. • *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 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)* • *Select samples, often at the bottom of the holes thought to be weathered basement/saprolite material were also analyzed for gold using Lead collection Fire Assay AAS (BV Code FA001) where a detection limit for Au (0.01 ppm)* • *A laboratory repeat was taken at ~ 1 in 21 samples.* • *Commercially obtained standards were inserted by the laboratory at a rate of ~ 1 in 9 into the sample sequence.* • *After the hole was drilled to completion a Reflex EZ Gamma logging tool (serial number GAM-043) rented from Imdex, and operated by the drilling crew was run down the hole, inside*

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		the rods/innertube to log the natural gamma response of the sediments. The gamma tool was last calibrated by Imdex on October 9th, 2024, as noted in the provided Certificate of Conformance. • *The survey was run in and out of the hole at a speed of no more than 10m/min and the downhole speed was reviewed after the survey.* • *The up (out) survey was then used to plot sections, after reviewing both in and out.* • *Before each downhole gamma survey the Reflex EZ Gamma logging tool was checked with an EZ-Gamma confidence checker by AR3 staff (S/N 025). The confidence checker was last calibrated 29/08/24.* • *Using the EZ-Gamma confidence checker at the start of each run allows the gamma tool to be checked ensuring it is within specifications and the tool has not been damaged or faulty providing confidence an accurate gamma reading is collected for each hole.* • *The check is completed by first running the gamma tool for ~3-5min to measure Background Gamma (BKG) in cps. A second survey is then conducted after sliding the EZ-Gamma Confidence checker (Jig serial number 025) over the gamma probe and measuring a Sleeve Response (SR) in cps. The BKG value is subtracted from the SR value which provides a Calculated Sleeve Response (CSR) value in cps. The CSR is then compared to the Expected Value (EV) of the gamma checker which is certified to be 636 cps. A resulting pass value= 636 cps +/- 10 % and required before the survey tool is confirmed as operating within expected limits.* • *The formula used for checking the gamma tool is as follows;* • *CSR= SR-BKG* • *CSR is compared to the EV of the confidence checker which is certified to 636cps (for jig serial number 025) +/- 10% (for pass value of*

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		573-700cps). • *After the gamma survey is completed, the data is uploaded to the Imdex hub IQ portal (https://iq.imdexhub.com) from the rig via satellite internet and available for review.* ***Gold Fields hole DEL09AC144*** • *Drill samples were collected every 2 metres using a cyclone into plastic/polyweave bags.* • *Wet samples were grabbed directly from the bag; dry samples were riffle split on site.* • *Field duplicates and certified standards were inserted every 30th sample.* • *Sampling through Cambrian basement only; all basement samples were taken as 2 m intervals.* • *Basement intersected at ~140 m; mineralisation sampled from 144 m to 208 m depth.* • *Sampling was conducted over 2 m intervals. Dry samples were riffle split, and wet samples were spear sampled to maintain representativity. QAQC included insertion of certified reference materials and duplicates every 25 to 30 samples.*
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).*	***ARE Drilling Techniques*** • *Drilling was completed using a Wallis "Mantis 200" Air Core drill rig with an onboard Sullair compressor (560cfm @ 200psi).* • *Air Core drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube. The drill cuttings are removed by injection of compressed air into the hole via the annular area between the inner tube and the drill rod.* • *Air Core drill rods used were 3 m long.* • *NQ diameter (76 mm) drill bits and rods were used.* • *All Air Core drill holes were vertical with depths varying between ~36m and 200 m* ***Gold Fields hole DEL09AC144*** • *Drill type: Aircore.* • *Rig: Schramm T660 Rotadrill.*

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		• *Vertical hole (dip -90°); Azimuth 0°.* • *Hole depth: 208 metres.* • *Drilled using truck-mounted rig with onboard high-pressure air system.*
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.*	***ARE Sample Recovery*** • *Drill sample recovery for Air Core drilling is monitored by recording sample condition descriptions where 'Poor' to 'Very Poor' were used to identify any samples recovered which were potentially not representative of the interval drilled.* • *A comment was included where water injection was required to recover the sample from a particular interval. The use of water injection can potentially bias a sample. Minimal water injection was required during this drilling program and used sparingly.* • *Overall, no consistent/significant loses of sample material was observed.* • *The rotary splitter was set to an approximate 20% split, which produced approximately 1.5-2.5 kg sample for each meter interval.* • *The 1.5-2.5 kg sample was collected in a pre-numbered calico bag and the remaining 80% (5 kg to 8 kg) was disposed directly into the sump as drilling progressed.* • *At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample pipes and cyclone.* • *The relationship (if any) between sample recovery and grade is unknown* ***Gold Fields hole DEL09AC144*** • *Sample recovery quality not quantified per*

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		hole but inferred as good across the campaign. • *No issues specifically reported for hole DEL09AC144.* • *Wet and dry samples handled differently to mitigate bias or contamination.* • *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 intersections logged.*	***ARE Logging*** • *All Air Core samples collected in calico bags were logged for lithology, colour, cement type, hardness, percentage rock estimate, and any relevant comments such as moisture, sample condition, evidence of reducing or oxidizing conditions, and vegetation/organic material.* • *Geological logging data for all drill holes was qualitatively logged onto Microsoft Excel spreadsheet using a field laptop with validation rules built into the spreadsheet including specific drop- down menus for each variable. The data was uploaded to the Australian Rare Earths Azure Data Studio database.* • *Every drill hole was logged in full and logging was undertaken with reference to a drilling template with codes prescribed and guidance to ensure consistent and systematic data collection.* • *The density drilling is not sufficient to support consideration of resource estimation, or mining and no geotechnical logging was completed.* ***Gold Fields hole DEL09AC144*** • *Geological logging completed for the full hole.* • *Lithology is described as quartz veining within altered schistose units.* • *Additional details not provided in historical reporting.*

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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.*	***ARE sampling techniques*** • *1m Air Core sample interval was homogenised within the cyclone and the rotary splitter was set to an approximate 20% split producing around 1.5-2.5 kg sample for each metre interval.* • *The 1.5-2.5kg sample was collected in a pre-numbered calico bag and the 80% (5 kg to 8 kg) portion was disposed directly into the sump as drilling progressed.* • *Duplicates were generally taken within intervals which indicated potential for anomalous U mineralization based on geology, pXRF, and gamma signature. These duplicate samples were collected by splitting the 1m interval by emptying the sample on to a table, mixing and splitting into 1/8th subsamples and randomly assigning 4 of the splits into the duplicate and 4 remaining as the primary.* • *The 1.5-2.5 kg sample collected in the calico bag was logged by the geologist onsite.* • *Approximately 10-20g of sample material from each for each 1m calico sample placed in a chip tray.* • *The logged calico samples were scanned with a pXRF onsite through the calico bag.* *At the end of the drillhole samples were selected for analysis.* • *Samples selected for analysis were placed in polyweave bags labelled with the sample number, From-To interval, and Hole ID, then*

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		segregated into bulka bags for transport to the lab for analysis. • *No correction factors were applied to pXRF results.* • *Field duplicates of all the samples were completed at a frequency of ~1 in 40 samples. Field standards were inserted into the sample sequence at a frequency of ~1:40. Standard reference Material (SRM) samples were inserted into the sample batches at a frequency rate of 1 per 10 samples by the laboratory and a repeat sample was taken at a rate of 1 per 21 samples.* • *An on-site geologist oversaw the sampling and logging process and selected samples for analysis based on the logging descriptions pXRF analysis, and downhole gamma response.* ***Gold Fields hole DEL09AC144*** • *Riffle splitting used for dry samples.* • *All samples sent to ALS Chemex in Adelaide (prep) and Perth (analysis).* • *Fire Assay (Au TL43) used for gold analysis.* • *Multi-element analysis conducted via aqua regia digestion and ICP-MS (ME-MS41).* • *All samples prepared at ALS Chemex using standard drying, pulverising and splitting protocols. Sample preparation and analytical procedures are considered appropriate for the style of mineralisation*

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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.*	• *The detailed geological logging of samples provides lithology (sand/clay component)* • *The 1.5 kg Air Core samples were assayed by Bureau Veritas laboratory in Wingfield, Adelaide, South Australia, which is considered the Primary laboratory.* • *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 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)* • *Select samples, often at the bottom of the holes thought to be weathered basement/saprolite material were also analyzed for gold using Lead collection Fire*

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		Assay AAS (BV Code FA001) where a detection limit for Au (0.01 ppm) • *Field duplicates were collected and submitted at a frequency of ~1 per 40 samples.* • *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.* • *Australian Rare Earths submitted field standards at a frequency of ~1:40 samples.* • *Australian Rare Earths inserted field blanks at a frequency of ~1:40 samples.* • *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.* ***Gold Fields hole DEL09AC144*** • *Gold detection limit: 0.001 ppm.* • *Multi-element data includes Ag, Bi, Cu, Mo, Pb, Sb, Zn, W, As, among others.* • *QAQC included certified standards and field duplicates.* • *Umpire assays were conducted for select samples (not specifically for DEL09AC144).*
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.*	• *All results are checked by the company's Chief Technical Officer.* • *Field based geological logging for drill holes was entered directly into an Excel spreadsheet format with validation rules built into the spreadsheet including specific drop-down menus for each variable. This digital data was then uploaded to the Australian Rare Earths Azure Data Studio database.* • *Assay data will be received in digital format from the laboratory and uploaded to Australian Rare Earths Azure Data Studio database.* • *Field and laboratory duplicate data pairs of each batch will be plotted to identify potential*

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		quality control issues. • *Standard Reference Material sample results will be checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias.* • *U3O8 is the industry accepted form for reporting Uranium. An oxide factor for U3O8 of 1.1793 was used for reporting throughout this report.* ***Gold Fields hole DEL09AC144*** • *No independent verification noted but reviewed internally by Gold Fields geologists.* • *Data stored in Gold Fields' central database with internal QA validation.*
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 are in GDA94/MGA zone 54.* • *All overland coordinate information was collected using handheld GPS utilizing GDA 1994, Zone 54. While spatial location is expected to be recovered within 3 – 5 m, it is possible that the elevation can be as much as 10 m out with respect to the currently established geoid.* • *Drillhole RL has been corrected using An Australian wide SRTM. The 1 second SRTM Level 2 Derived Smoothed Digital Elevation Model (DEM-S) is derived from the 2000 SRTM. The DEM-S has a ~30m grid which has been adaptively smoothed to improve the representation of the surface shape and is the preferred method for shape and vertical accuracy from STRM products. The smoothing process estimated typical improvements in the order of 2-3 m. This would make the DEM-S accuracy to be of approximately 5 m.* ***Gold Fields hole DEL09AC144*** • *Easting: 502175* • *Northing: 6227925* • *RL: ~70 m* • *Datum: GDA94 / Zone 54* • *Vertical hole (dip -90°)*

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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.*	***ARE Exploration*** • *Locations of Overland drill holes have been previously reported in the companies ASX releases.* • *No geological or grade continuity estimations are being determined from the Overland drilling data.* ***Gold Fields hole DEL09AC144*** • *Drilled as part of a 1 km-spaced reconnaissance program.* • *No geological or grade continuity estimations are being determined from the Gold Fields drilling.*
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.*	***ARE Exploration*** • *All drillholes completed by AR3 at the Overland Project were drilled vertically, as previously disclosed in the company's ASX announcements.* • *No evidence of sampling bias has been identified.* • *Vertical drilling is considered appropriate given the geology is interpreted to be relatively flat-lying.* ***Gold Fields hole DEL09AC144*** • *Vertical orientation considered appropriate for targeting flat to steeply dipping stratigraphy.* • *No orientation bias identified.*
Sample security	*The measures taken to ensure sample security.*	***ARE Exploration*** • *After logging, the samples in calico bags were tied and placed into polyweave bags, labelled with the drill hole and sample numbers contained within the polyweave and transported to the site laydown area, at the end of each day.* • *Sample selections were determined at the drill site and at the end of the day the polyweave bags were placed into bulk bags for either sending to the lab or storage facility.* • *Samples were shipped at a frequency of once every ~10 days during drilling.*

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		• *Samples were transported to the lab by AR3 personnel or by courier.* • *The laboratory inspected the packages and did not report tampering of the samples and provided a sample reconciliation report for each sample dispatch.* ***Gold Fields hole DEL09AC144*** • *Samples were supervised on site and transported by Gold Fields staff to ALS and courier depots.* • *Chain-of-custody procedures followed industry standards.* • *Samples were transported directly from the field to the laboratory by company personnel or via secure courier, with no known security issues.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	***Internal QAQC Oversight**:* • *AR3's Exploration Manager and Chief Technical Officer conducted internal reviews throughout the drilling, sampling, geological logging, and sample dispatch processes to ensure adherence to AR3's established protocols.* ***Gold Fields hole DEL09AC144*** • *QAQC and sampling methodologies were reviewed internally.* • *No external audit or review reported for this specific hole.*

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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.*	• *Australian Rare Earths Overland project is comprised of EL7001, EL7003, EL7005 and 7055 held by Valrico Resources Ltd Pty and WRDBD PTY LTD, wholly owned subsidiaries of Australian Rare Earths.* • *The four EL's cover an area of approximately 3,779 km2.* • *An additional two ELA's (2025/00022 & 00023) have recently been lodged covering an area of ~2000km^2* • *In addition, Valrico Resources Ltd Pty have entered into an earn in agreement with the license holders of EL6678 (Sheer Gold Pty Ltd) on November 19th, 2024 (see ASX announcement).* • *When the earn in period is completed, the tenure will be transferred to Valrico adding another 990km^2 to the Overland project and bringing the total Overland project area to 4769km^2.* • *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.* • *Registered Native Title Determination Application SC2019/001 overlaps with the central portion of EL7003 and southern portion of EL6678.* • *Registered Native Title Determination Application SC20/002 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* • *A registered and Notified Indigenous Land Use Agreement (ILUA)- Ngadjuri Faraway Hill Pastoral SI2005/005 overlaps with the Northwest corner of EL7005.*

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		Gold Fields hole DEL09AC144 • *The hole was drilled within Exploration Licence EL3737 (Morgan Area) in South Australia.* • *The tenement was held by Gold Fields Australasia Pty Ltd at the time of drilling.* • *No material access or environmental constraints were noted in the report for this hole.*

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Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• *Exploration activities by other exploration companies extends back to the 1970's.* • *Historically the area has been explored for Base Metals, Coal, Gold, Copper, Heavy Mineral Sands, and Water.* ***Gold Fields hole DEL09AC144*** • *Drilling, sampling, and assay work completed by Gold Fields Australasia in 2009.* • *Prior to Gold Fields, the area had limited basement drilling, mainly for uranium and coal.*
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*

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		uranium deposits. Similar calcrete-hosted deposits are also found in Western Australia • *In addition to paleochannel uranium, AR3 is also exploring basement geology for a diverse range of mineralization styles including;* • *Porphyry Cu–Au–Mo* • *Skarn* • *Orogenic gold* • *Volcanic-hosted massive sulphides (VHMS)* • *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* ***Gold Fields hole DEL09AC144*** • *DEL09AC144 intersected chlorite–biotite altered metasediments and basaltic rocks.* • *The mineralised zone occurs within quartz veining hosted in altered schists.* • *The mineralisation style is interpreted as orogenic-style Au-Ag with associated pathfinders (e.g. Zn, As, Sb, Mo, W).*

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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.*	***AR3 Drilling**:* • *All material information related to AR3's drilling at the Overland Project has been previously disclosed in the company's ASX announcements.* • *No new or previously unreported drilling by AR3 has been conducted.* ***Gold Fields hole DEL09AC144*** • *Hole ID: DEL09AC144* • *Easting: 502175* • *Northing: 6227925* • *RL: ~70 m* • *Dip: -90° (vertical)* • *Azimuth: 0°* • *Total depth: 208 m* • *Tenement: EL3737 (Morgan Area)* *DEL10RC001 (PACE) and DEL09AC160 were follow-up drillholes to DLE09AC144* *Hole ID: DEL10ACD001* • *Easting: 372838* • *Northing: 6224191* • *RL: ~70 m (assumed from surrounding topography)* • *Dip: -90°* • *Azimuth: 0°* • *Total Depth: 523.7 m* • *Hole Type: RC/DD* • *Cored Length: 311.3m* *Hole ID: DEL09AC160* • *Easting: 372510* • *Northing: 6224112* • *RL: ~70 m (assumed from surrounding topography)* • *Dip: -90°* • *Azimuth: 0°* • *Total Depth: 240 m* • *Hole Type: Aircore*

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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.*	***Gold Fields hole DEL09AC144*** • *Historical results are reported as simple intervals, e.g., 2 m @ 0.93 g/t Au, and 64 m @ 0.6 g/t Ag from 144 m.* • *No high-grade cut-off or top-capping was applied to results.* • *Intervals were based on 2 m sampling over the mineralised zone.*
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 lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	***AR3 Drilling*** • *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.* • *Due to limited structural data from historical records, the relationship between drilling orientation and the orientation of mineralised structures remains uncertain.* ***Gold Fields hole DEL09AC144*** • *Drill hole is vertical; host stratigraphy is not well constrained.* • *Intercepts are reported as downhole lengths; true widths are unknown.*

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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.*	• *Diagrams are included in the body of this release.* • *Cross sections have not been included within this release as the AR3 drilling referred to has been previously reported to the ASX (including appropriate cross sections).*
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* ***Gold Fields hole DEL09AC144 (and follow up holes DEL09AC144 and DEL09AC144)*** • *All relevant intercepts for DEL09AC144 are included in the report.* • *Follow-up holes near DEL09AC144 included DEL09AC158 to DEL09AC163.* • *DEL10RC001 (PACE) and DEL09AC160 were direct follow-up drillholes to DLE09AC144* *Hole ID: DEL10ACD001* • *Easting: 372838* • *Northing: 6224191* • *RL: ~70 m (assumed from surrounding topography)* • *Dip: -90°* • *Azimuth: 0°* • *Total Depth: 523.7 m* • *Hole Type: RC/DD* • *Cored Length: 311.3m* • *DEL10ACD001 generally returned below detection level assays for gold (<0.002 g/t Au) with minor zinc, copper, bismuth, arsenic and silver. Best intersection in DEL10ACD001 returned 1m @ 0.35g/t Au, 0.21% Cu and 0.14% Zn, 264ppm Pb and 76ppm Bi from*

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		329m associated with finely disseminated and thinly banded (<1mm) pyrite and chalcopyrite to 2% within the main bedding parallel foliation between 320-340m. Mineralisation is generally confined within strong cl-mg-hm-cb altered, intensely foliated, strongly magnetic, fine-grained aphanitic schist. Copper and gold mineralization is strongly correlated with Bi, Fe, K +/- Zn-Pb-Ag-As and is broadly enveloped within a halo of Zn-Pb-Ag-Sb-Mo anomalism.
		• *Most Significant Assays returned from DEL10ACD001*
		  ○ *1m @ 0.03 g/t Au, 0.29% Cu and 737ppm Zn from 324m;*
		  ○ *1m @ 0.35 g/t Au, 0.21% Cu, 1400ppm Zn, 264ppm Pb and 76ppm Bi from 329m;*
		  ○ *1m @ 0.03 g/t Au and 0.11% Cu from 338m;*
		  ○ *1m @ 0.19 g/t Au, 0.24% Cu, 518ppm Zn, 201ppm Pb, 39ppm Bi and 51ppm As from 375m; and 1m @ 0.06 g/t Au, 0.11% Cu, 46ppm Bi and 111ppm As from 377m.*
		• *The mineralisation evident within the zone between 320-340m occurs approximately 40m metres directly beneath the location of DEL09AC144. The observed style of base-metal mineralisation intersected (qtz-cb-cl-hm-cpy-py+/-sph-gal veins and disseminated/thinly banded chalcopyrite and pyritic sulphides) is sufficient enough to explain the gold-base metal anomalism intersected in DEL09AC144.*
		Hole ID: DEL09AC160
		• *Easting: 372510*
		• *Northing: 6224112*
		• *RL: ~70 m (assumed from surrounding topography)*
		• *Dip: -90°*
		•*Azimuth: 0°*

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		•*Total Depth: 240 m* • *No Significant Au was intersected in hole DEL09AC160, Max Au intersection was 2m @ 0.006 ppm Au from154m.*
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.*	• *The Total Magnetic Intensity and Regional Geology, data displayed within this release is public data available for download via the South Australian Resources Information Gateway (SARIG) https://map.sarig.sa.gov.au/.* • *Total Magnetic Intensity - (TMI) is the magnitude of all magnetic influences measured at a point. The SA_TMI grid was produced by merging open file aeromagnetic surveys within South Australia at 80m cell size using Intrepid Software by Intrepid Geophysics. Data are provided as real valued ERMapper rasters and relative georeferenced TIFF images. This suite of grids was produced in November 2021.* • *SARIG Regional Geophysics Image "Total Magnetic Intensity – TMI" layer was used to create the TMI image within this report.* ***Gold Fields hole DEL09AC144*** • *Multi-element pathfinder data support the Au-Ag anomalism:* • *Up to 938 ppm Zn, 3.3 ppm Mo, 23.6 ppm Bi, 2.4 ppm Sb, and 104 ppm As over mineralised intervals.*
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 and reprocessing of historical geophysical and geological data to assist with target generation.* • *Air Core drilling, downhole gamma logging, and sampling.* • *Additional EPEPR applications to expand exploration across the broader tenure.* • *Further work will include reprocessing of AEM data, infill sampling during uranium drilling, and potential RC or diamond drilling of priority basement targets identified in this review.*

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