3 July 2023

ROBUST RESOURCE UPGRADE DELIVERED AT ANGULARLI

HIGHLIGHTS

- **27% uplift in Inferred Mineral Resource Estimate (MRE) at the Angularli deposit (Angularli), part of the Alligator River Project (ARP).**
- **The Angularli MRE has increased to 32.9Mlb U_3O_8, for 1.37Mt at 1.09% U_3O_8, using a cut-off grade of 0.15% U_3O_8.**
  - **MRE shows relative insensitivity to cut-off grade, still increasing to 31.5Mlb at a grade of 1.30% U_3O_8 representing a 21.5% increase even when the cut-off grade is doubled to 0.3%; and**
  - **Results confirm the high-grade nature of the Angularli deposit.**
- **MRE upgrade supported by 18 diamond holes completed in 2022, in addition to 30 historical diamond drill holes, with a best intercept of 41.5m at 2.93% U_3O_8.**
- **Successful work at Angularli continues to grow Deep Yellow's geographically diversified uranium portfolio, which includes the flagship Tumas Project and Omahola (Namibia) and the Mulga Rock Project (Western Australia).**

Deep Yellow Limited (**Deep Yellow** or **Company**) is pleased to announce an upgraded Mineral Resource Estimate for the Angularli deposit, which forms part of the Alligator River Project (see Figure 1).

This 27% uplift, compared to the previous MRE, was underpinned by a drilling program completed in late 2022 which successfully extended the footprint of the Angularli deposit and associated analytical programs.

Overview

Angularli is located approximately 380km by road, east-northeast of Darwin in the Northern Territory, Australia.

Located in a high-angle shear zone, Angularli hosts an Inferred MRE of 1.37Mt at 1.09% U_3O_8, containing 32.9Mlb U_3O_8 (see Table 1), at a cut-off grade of 0.15% U_3O_8 occurring within a combination of altered sandstone, quartzite, silica flooded breccia and schists.

The MRE upgrade is supported by 18 diamond holes completed in 2022, in addition to 30 historical diamond drill holes, with a best intercept of 41.5m at 2.93% U_3O_8, recorded in hole WRD0084 (see ASX announcements: 9 August 2022, 27 October 2022, 1 May 2023 and VMY 20 March 2018). The final MRE dataset utilised 12 of the recently completed drill holes in conjunction with 22 historical drill holes (see Appendix 2). The primary focus of the 2022 drill program was to identify up-dip extensions of mineralisation associated with the Angularli deposit.

The Angularli deposit comprises multiple stacked lenses, with the main lens accounting for approximately 95% of the total volume of the MRE, the majority of which is either sandstone or silica-flooded breccia hosted.

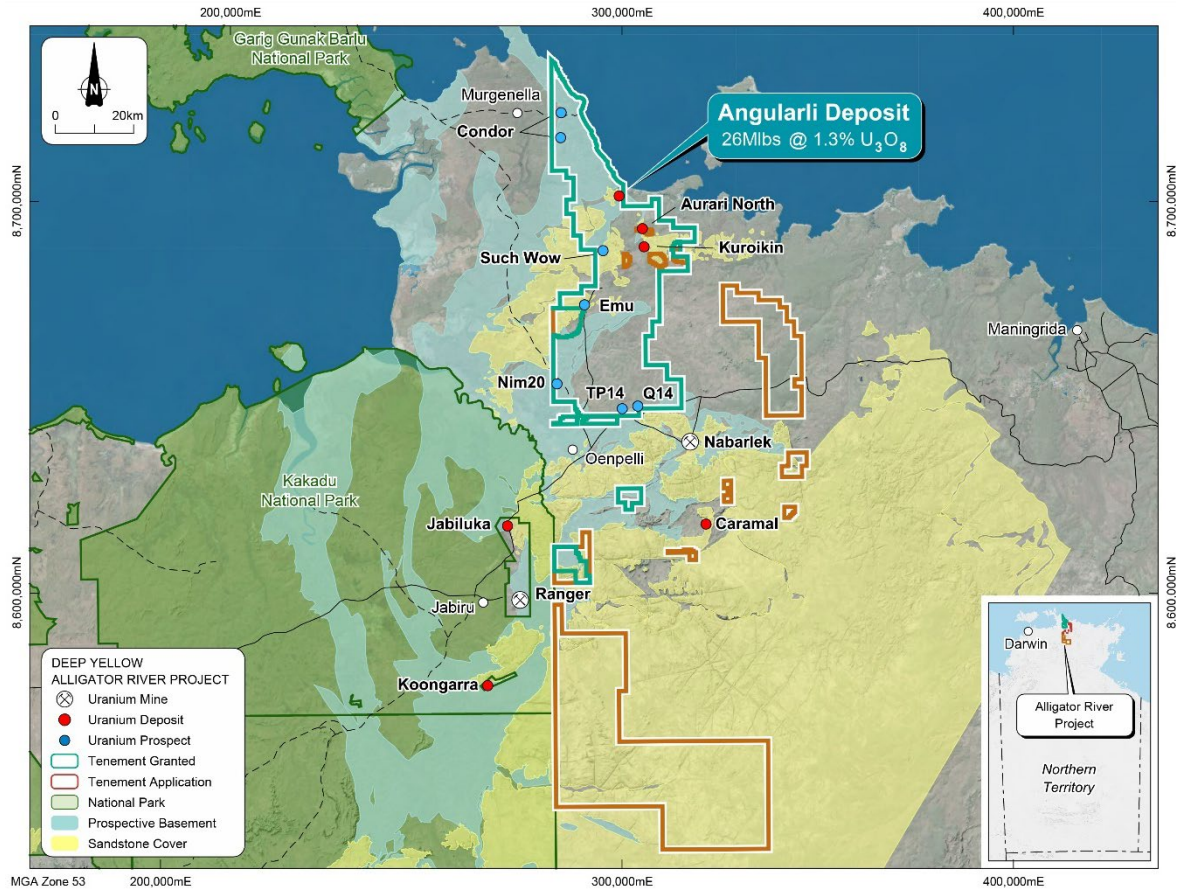

Figure 1: *Alligator River location map.*

Table 1 outlines the MRE at various cut-off grades and illustrates the relative insensitivity of Angularli deposit to cut-off grade. This shows that, due to the consistent high-grade nature of mineralisation, there is minimal reduction in contained metal with increasing cut-off grade in the range between 0.1% and 0.3% U_3O_8. The progressive reduction in tonnes with increasing cut-off grade is due to the effective removal of the peripheral, small, predominantly lower-grade pods whilst the main, high-grade zone maintains consistency.

Table 1: Angularli Mineral Resource Estimate, June 2023 [1,2]

Deposit	Category	Cut-off ($\% U_3O_8$)	Tonnes (Mt)[1]	U_3O_8 (%)[2]	U_3O_8 (t)	U_3O_8 (Mlb)	Resource Categories (Mlb U_3O_8) Measured	Indicated	Inferred
UNCONFORMITY-RELATED MINERALISATION									
Alligator River Project - JORC 2012									
Angularli Deposit	Inferred	0.10	1.47	1.02	15,048	33.2	-	-	33.2
		0.15	**1.37**	**1.09**	**11,748**	**32.9**	**-**	**-**	**32.9**
		0.20	1.27	1.16	11,700	32.5	-	-	32.5
		0.25	1.18	1.24	11,430	32.0	-	-	32.0
		0.30	1.09	1.31	11,430	31.5	-	-	31.5
Alligator River Project Total			**1.37**	**1.09**	**11,748**	**32.9**	**-**	**-**	**32.9**

1 t = metric dry tonnes; appropriate rounding has been applied and rounding errors may occur.
2 Using chemical U_3O_8 composites from drill core.

ASX ADDITIONAL INFORMATION

Geology

Mineralisation in the Angularli deposit is primarily hosted by a north-northwest trending 50 to 100m wide deformed fault zone, dipping moderately to steeply in a northeast direction, which offsets the contact between Paleoproterozoic Cahill Formation (metasediments) and the overlying red-bed Mesoproterozoic Mamadawerre Sandstone.

The Mamadawerre Sandstone is the basal member of the Kombolgie Subgroup and is the only unit present at the Angularli deposit. Locally, the Mamadawerre Sandstone varies in thickness from 10 to 250m.The unit comprises minor pebbly beds, conglomerate lenses and siltstone beds and dips shallowly to the west. The lowermost unit of the Mamadawerre Sandstone in the Angularli area is typically a highly porous pebble to cobble conglomerate.

The contact of the Mamadawerre Sandstone and the underlying Cahill Formation is marked by a sub- horizontal, angular unconformity. The Angularli fault zone crosscuts both the sandstone and Cahill basement units. The fault zone corridor has undergone multiple deformation episodes characterised by three texturally, temporally, and spatially distinct styles of deformation:

- early development of a 20 to 40m wide corridor of cohesive silica flooded breccia (SFB), with epithermal textures;
- overprinting stockwork hydraulic breccia; and
- late-stage sub-parallel, discrete, dry brittle faults.

The SFB developed prior to the deposition of the Mamadawerre Sandstone (locally present as pebbles/cobbles) within the basal conglomerate. The angular unconformity truncates the SFB which typically forms a 10-15m basement high within the Angularli area. Primary uranium mineralisation has developed within the hanging wall of the Angularli fault, within the SFB and the overlying sandstone.

Uranium mineralisation is focused along the Angularli fault, which allowed hydrothermal fluids to move from the basement and the sandstone to mix within zones of structurally induced dilation resulting in the precipitation of uraninite within the breccia and fractures in the SFB and the overlying sandstone. This structural and geochemical setting is identical to that of many structurally controlled uranium deposits in the Athabasca Basin.

The hydrothermal alteration is characterised by chemical halos surrounding the uranium mineralisation both distally and proximally. The key geochemical halo indicators are:

- bleaching of the surrounding Mamadawerre sandstone;
- broad halo of elevated boron associated with dravite;
- anomalous sulphur and potassium concentrations associated with pyrite-sericite-silica inner alteration halo; and
- elevated gold, palladium, base metal anomalism and low lead 207Pb/206Pb isotope ratio.

Figure 2 shows a surface projection and Figure 3 shows cross sections of the Angularli deposit.

Two parallel shear structures have been identified approximately 300 and 600 metres to the west of the main Angularli deposit. Diamond holes WRD0116 and WRD0117 intersected the westernmost shear structure with associated alteration. Bleaching of the Mamadawerre Sandstone and geochemical halo signature in those holes is identical to the main Angularli deposit. Drill hole WRD0117 intersected uranium mineralisation supporting the presence of uranium within this parallel shear zone which will be a key focus of further exploration drilling.

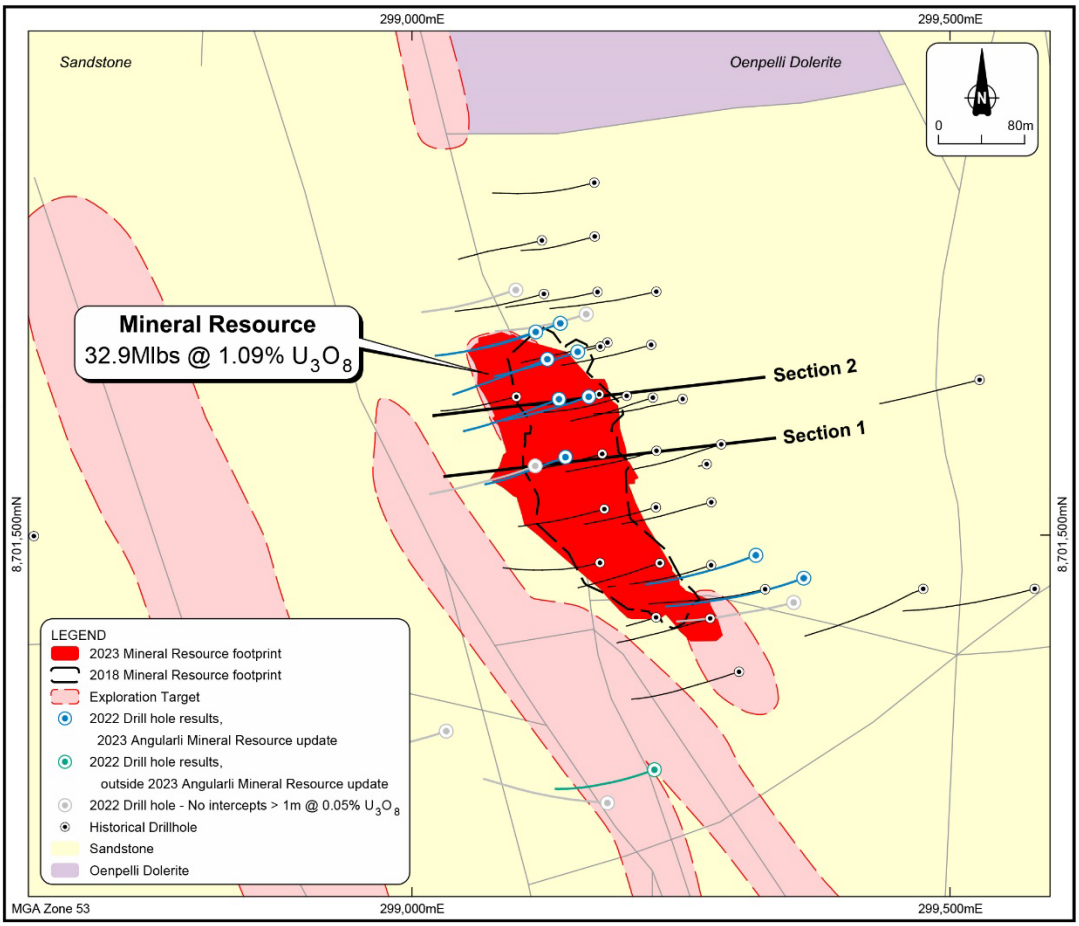

Figure 2: *Surface projection of the Angularli Mineral Resource.*

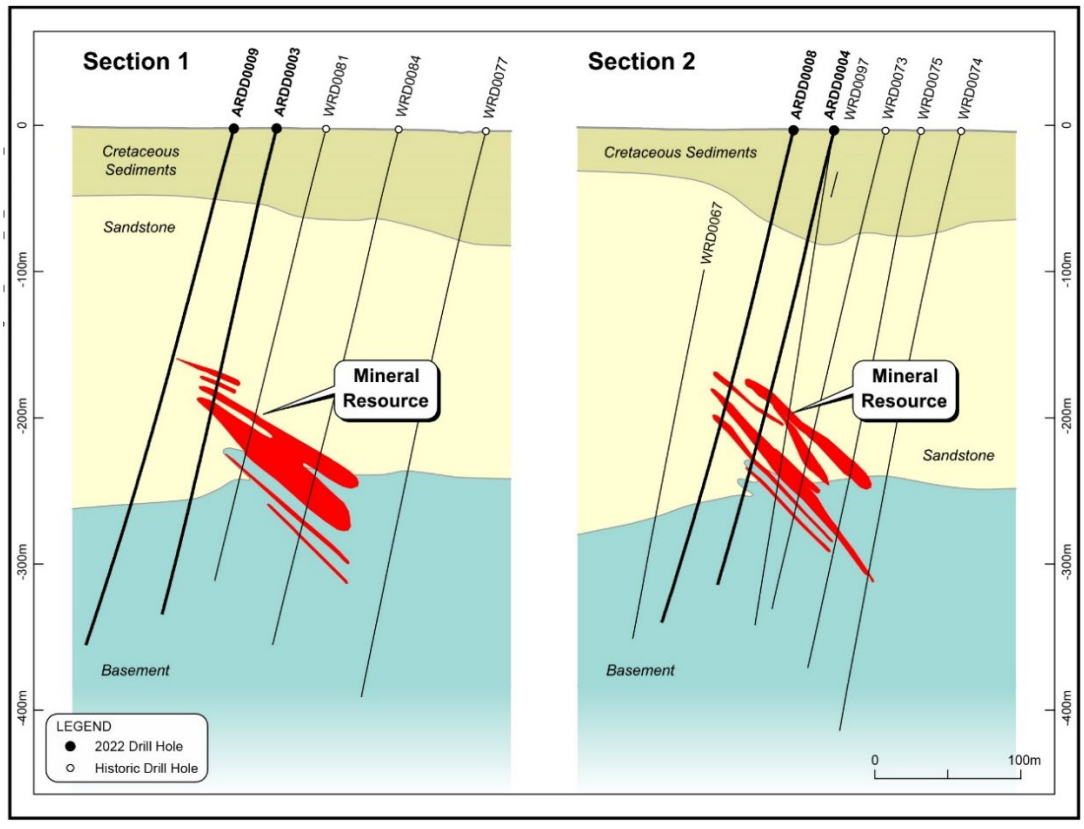

Figure 3: *Cross-sections of the Angularli Mineral Resource.*

Mineralisation and Sample Analysis

Mineralisation at Angularli is mostly monometallic, with some gold and palladium anomalism present within the high-grade component of the uranium pods. Notably, the Jabiluka uranium deposit, located 100km to the south (**302Mlb contained U_3O_8**), also contains significant amounts of gold.

Mineralisation is high-grade in nature, with an average grade of approximately 1% U_3O_8 present primarily as uraninite (UO_2) with minor coffinite. Grade determination has relied solely on chemical assays of diamond drill core. The mineralised pods extend over approximately 300m along a north-northwest to south-southeast trending mineralised envelope, which dips steeply to the northeast but with a pronounced southerly plunge. Most of the Mineral Resource is concentrated in a short central section of the main mineralised pod (8,701,500 to 8,701,600N) which coincides with the highest grades intercepted.

Given the high rate of core recovery within the mineralised zone (generally greater than 98%), chemical assays are deemed representative samples and have been used for the MRE detailed in this announcement.

Mineralised zones are moderately (basement) to strongly altered (sandstone) and occasionally disrupted by post-mineralisation brittle faulting and brecciation.

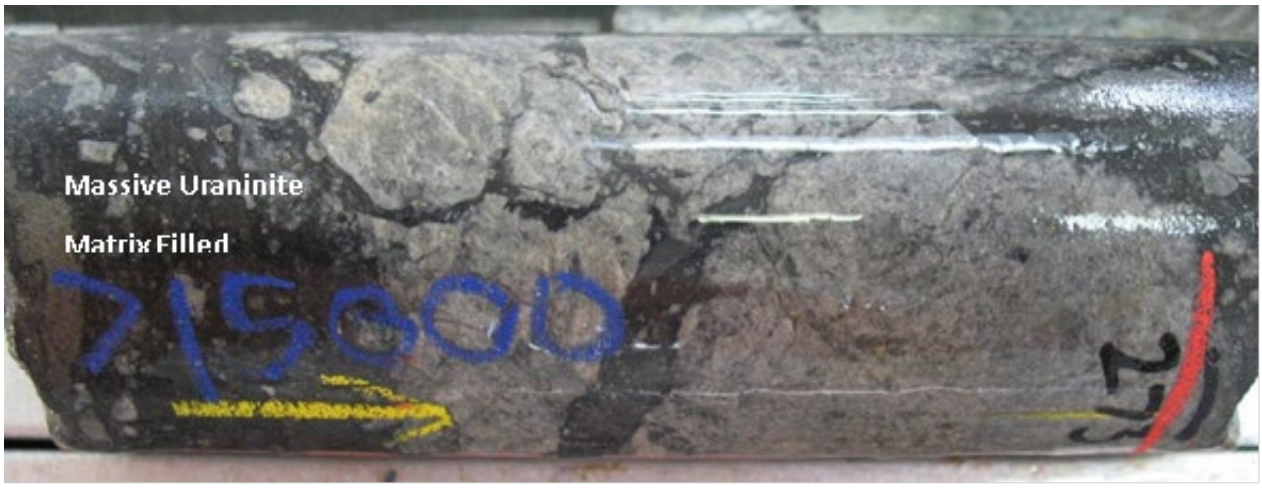

Figure 4: *Primary Mineralisation in Silica Flooded Breccia.*

Figure 4 shows typical diamond drill core of the primary mineralisation within the SFB and another example within pronounced hematitic alteration is shown in Figure 5. Disseminated uranium mineralisation also extends up into the Mamadawerre Sandstone, which is the first observed occurrence of primary uranium in the overlying sandstone in the Alligator River Uranium Province.

Additional information on drill results and ancillary studies for the project were announced to the ASX 13 August 2018 titled 'Alligator River Project Commencement of Drilling', 26 November 2018 titled 'High Priority Targets Identified and Angularli', 10 December 2018 titled 'Angularli Uranium Deposit Positive Scoping Study',17 August 2019 titled 'Exciting Drilling Results at Alligator River Project' 1 October 2019 titled 'Excellent Geochemical Results at Alligator River Project', 16 September 2020 titled 'Ore Sorting Results from Angularli, Alligator River Project', 18 July 2022 Titled 'Early Drilling Success at Alligator River', 28 July 2022 titled 'Further Drilling Success at Alligator River' by Vimy Resources and on the 27 October 2022 titled 'Successful Drilling Campaign at Alligator River' and 1 of May 2023 titled 'Strong Results Returned From Alligator River Drilling' by Deep Yellow.

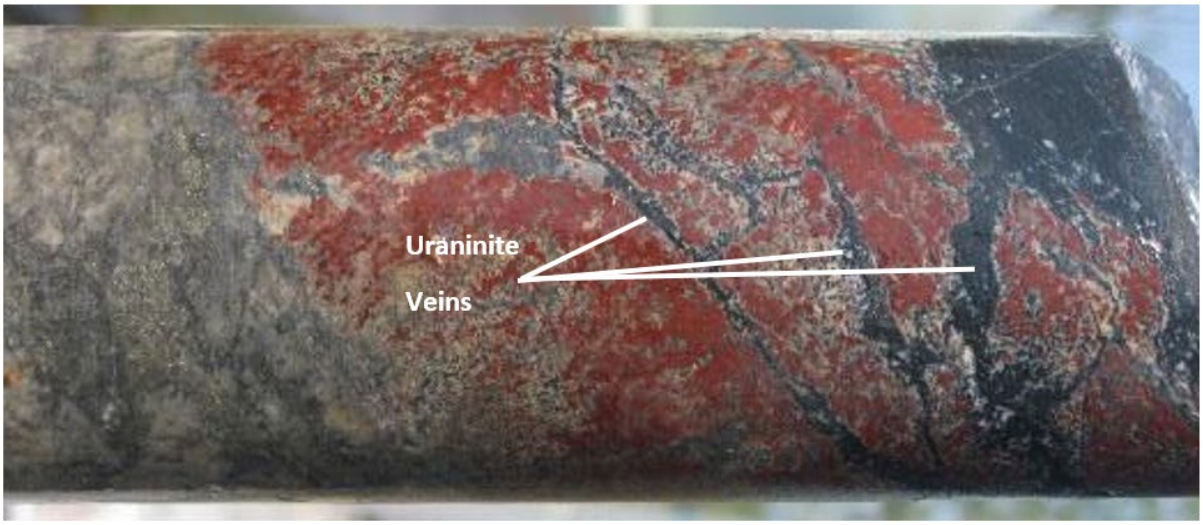

Figure 5: *Uranium Mineralisation with Pronounced Hematitic Alteration.*

Mineral Resource Estimation

Mineralisation at Angularli consists of a main mineralised pod, with four associated minor pods. The strike length of the mineralised zone identified to date is 270 metres, with a width of between 10 to 17 metres from approximately 150 to 200 metres below surface.

The mineralised wireframes at Angularli were generated using a cut-off grade of 0.05% U_3O_8, with a minimum downhole thickness of one metre and maximum internal dilution of two metres. All grades used for the estimate were based upon wet chemical assays. Dry bulk densities were allocated to samples based upon a combination of lithology (based upon 314 measurements) and a polynomial regression, which was applied to samples with grades above 1% U_3O_8 based upon a relationship derived from both measured samples and data derived from a geologically similar deposit (see Table 2).

All samples were composited to half a metre. Uranium estimation was carried out using ordinary kriging techniques with hard boundaries between mineralised domains, with an inverse distance squared estimate used for comparison. Four search passes, with increasing search distances and decreasing minimum sample numbers, were employed to fully inform the model. Approximately 12% of the blocks remained unfilled after the first two passes. This was predominantly within the four smaller domains where there were a limited number of informing composites. The density was calculated based on the estimated uranium grade for grades greater than 1% U_3O_8 and by assignment based on geology for grades less than 1% U_3O_8.

Table 2: Bulk Density Values (g/cm³)

Stratigraphy	*Lithology*	*Lith_Codes*	*<1% U_3O_8*	*>1% U_3O_8*
Mamadawerre Fm.	Sandstone/Conglomerate	SS, BXQ, BX	2.65	=2.6426+0.0184*(% U_3O_8)+0.0004*(%U_3O_8)^2
Cahill Fm.	Silica Flooded Breccia	SFB, BXQ, CRBX	2.65	
Cahill Fm.	Other lithologies (excluding amphibolite)	Pl, SPB, SPC, PSM, PLM, PEG, CS…	2.70	
Oenpelli Dolerite Cahill Fm.	Dolerite Amphibolite	DOL, DL AMP	2.92	

No mining recovery factor has been applied to the U_3O_8 in the MRE. Mining is anticipated to be carried out by shallow underground methods. No factors regarding metallurgy, recovery or processing cost have been applied in the MRE. Mineralogical studies show that most of the uranium is present as primary uraninite deposited around 1,730ma, now in a state of secular equilibrium, with a very limited fraction contained in minerals such as coffinite.

The MRE detailed in this announcement compares favorably to the previous MRE, expanding on the announcement made to the ASX on 20 March 2018 titled 'Maiden Mineral Resource Estimate at Angularli Deposit Alligator River Project' with comparison between the two shown in Table 3. The MRE increase has resulted from the follow-up drilling carried out in 2022, providing for the extension of the mineralisation wireframes along strike with an overall reduction in the average sample grades.

Table 3: Comparison with previous MRE

0.15% Cut-off	Category	M Tonnes	U_3O_8%	U_3O_8 Mlb
2018 Estimate	Inferred	0.91	1.29	25.9
2023 Estimate	Inferred	1.37	1.09	32.9

What should be noted however, and as can be seen from Table 1, is that the mineralisation is very robust and relatively insensitive to the cut-offs applied resulting in minor loss in mineral resource contained metal relative to the significant increases in the applied cut-off grade.

The Angularli MRE has been classified as an Inferred Mineral Resource in accordance with the guidelines of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2012). Mineral Resources have been classified on the basis of confidence in geological and grade continuity, geological modelling confidence, modelled grade continuity and the relative lack of density measurements.

The 27% increase in contained metal was the result of a 50% increase in tonnage driven by a combination of shallower and lower-grade sandstone-hosted mineralisation in the up-dip portion of the deposit (see announcement to the ASX dated 27 October 2022).

Additionally, a minor (7%) increase in the overall bulk density applied to mineralised domains accounted for part of that increase in tonnage.

The updated bulk density assumptions for mineralised and waste domains reflected data generated on fresh drill core in late 2022 and on historical drill core drilled in 2019.

Conclusion

Encouraging results have been achieved with the 2022 drilling program. This is both in terms of the level and quality of upgraded resource returned at Angularli and in gaining improved understanding of the deposit with identification of further targets requiring drilling.

JOHN BORSHOFF
Managing Director/CEO
Deep Yellow Limited

This ASX announcement was authorised for release by Mr John Borshoff, Managing Director/CEO, for and on behalf of the Board of Deep Yellow Limited.

Competent Person's Statement

The information contained in this announcement that relates to new exploration results is provided by Mr Xavier Moreau, who is a Member of the Australasian Institute of Geoscientists (AIG). Mr Moreau 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 JORC 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Moreau has 25 years of experience and is a shareholder and full-time employee of Deep Yellow Limited as Exploration Manager - Australia. Mr Moreau consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

The information relating to the Mineral Resource Estimate was provided by Mr David Princep, a consultant to Deep Yellow Limited. Mr. Princep is a Fellow of the Australasian Institute of Mining And Metallurgy and a Chartered Professional Geologist. Mr Princep has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, 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 Princep consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.

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About Deep Yellow Limited

Deep Yellow Limited is successfully progressing a dual-pillar growth strategy to establish a globally diversified, Tier-1 uranium company to produce 10+Mlb p.a.

The Company's portfolio contains the largest uranium resource base of any ASX-listed company and its projects provide geographic and development diversity. Deep Yellow is the only ASX company with two advanced projects – flagship Tumas, Namibia (Final Investment Decision expected in 1H/CY24) and Mulga Rock, Western Australia (advancing through revised DFS), both located in Tier-1 uranium jurisdictions.

Deep Yellow is well-positioned for further growth through development of its highly prospective exploration portfolio – Alligator River, Northern Territory and Omahola, Namibia with ongoing M&A focused on high-quality assets should opportunities arise that best fit the Company's strategy.

Led by a best-in-class team, who are proven uranium mine builders and operators, the Company is advancing its growth strategy at a time when the need for nuclear energy is becoming the only viable option in the mid-to-long term to provide baseload power supply and achieve zero emission targets. Importantly, Deep Yellow is on track to becoming a reliable and long-term uranium producer, able to provide production optionality, security of supply and geographic diversity.

APPENDIX 1

JORC Code, 2012 Edition - Table 1 Angularli Mineral Resource Estimate, June 2023

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code explanation	Commentary
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 representativity 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 3kg was pulverised to produce a 30g 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.*	• Drilling data only is considered for the purpose of mineral resource estimation. • Only chemical assays have been used, relying solely on diamond drilling data, with half-core samples collected using a hydraulic press. • Samples have been collected at a variable distance from the unconformity targeted, based on host rock, alteration and radiometric signature (down hole wireline and handheld). • In-rod wireline downhole gamma data was used to select intervals for screening using a handheld spectrometer, prior to sampling.
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.).*	• The MRE is defined by a total of 34 diamond core drill holes (standard tube). • Holes were drilled using mud rotary pre-collars within the unconsolidated Cretaceous cover, followed by HQ2 drilling in weathered sandstone and NQ2 diamond drilling to the end of hole. • The drill core is oriented continuously, where ground conditions allowed. • An ACE tool was used for orientation purposes, with drill hole collars picked up using a Trimble Differential Global Positioning System (GPS), with calibration at an existing base station on site.
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.*	• Core loss was recorded in the course of marking and logging drill core, minimal in the mineralised zone, with recovery generally in excess of 99%. • There is no relationship between recovery and grade, with minor losses associated with brittle post-mineralisation fault zones.

Criteria	JORC Code explanation	Commentary
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.*	• Lithological and alteration logging of drill samples is carried out systematically. • All drill core from the Angularli deposit was re- logged by experienced Cameco Australia geologists in 2014 to ensure consistency of data, this logging process has been continued by Company personnel. • Drill core is systematically photographed, on both wet and dry core. • 100% of the intersections used in the MRE have been logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representativity 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.*	**Site Based Work** • Radioactive intervals were sampled in 0.5m increments and sent for analysis at Intertek in Darwin. Niche sampling took place outside of the main mineralised pods, including composite sampling. **Laboratory Based Work** • Following sorting, weighing and drying at the laboratory, drill samples were crushed in two stages to ~2mm (jaw crusher followed by rolls crusher), split to produce a fraction pulverised to 100 microns. • All samples were analysed using ICP-MS (mass spectroscopy) for trace elements plus ICP-OES (optical emissions spectroscopy) for major and minor elements after a four-acid digestion. That digest offers a "near total" dissolution of most mineral species, targeting silicates not dissolved in less aggressive aqua regia digests. • Select samples were analysed for gold by fire assay (50g charge). • Pulps from samples with grades higher than 0.5% U_3O_8 (4A-ICP-MS) were re-analysed by XRF as an umpire method.
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*	• A comprehensive QA/QC program was carried out, comprising the use of in-house and external certified reference materials, blanks and laboratory duplicates, and umpire assays.
	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.*	
Discussion of relative accuracy/ confidence		• Twin drilling has not yet been carried out to validate the interpretation of the geological model, due to the early stage of the exploration across the Angularli deposit. • The data used for the resource estimate followed a thorough QA/QC process following a complete re-logging of all drill core at Angularli by experienced personnel. • All drill core has been photographed at high resolution.

Criteria	JORC Code explanation	Commentary
Portable XRF Logging		• Drill core was not analysed by portable XRF by the previous operator but has been used by Deep Yellow Limited to help delineate geochemical haloes associated with syn-mineralisation alteration and material characterisation. • Portable XRF results have not been used within the mineral resource estimate.
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.*	• Various checks were carried out on the wireline data, including via depth-matching against the drill core and handheld radiometric readings. • Verification of all intercepts was carried out visually by the Company using high resolution photographs of the corresponding drill core. • All uranium assays with results greater than 500ppm U_3O_8 were verified against the original laboratory certificates. • Various validation routines were run in Datashed™ and Imdex portable XRF and HUB-IQ cloud-based portals.
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 drill holes were surveyed using a Trimble Differential GPS. The MGA94, zone 53 grid system was used. • Azimuth and inclination data from wireline tools were used to calculate the deviation of each drill hole.
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.*	• Drill hole spacing at the Angularli deposit is 30 to 50 metres along strike and 20 to 50 metres across strike through most of the deposit. • Data spacing is adequate for the methods used and current mineral resource classification.
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.*	• Drill holes are ideally oriented to test the easterly-dipping mineralised shear and silica-flooded breccia.
Sample security	• *The measures taken to ensure sample security.*	• A full chain of custody is maintained during sampling and dispatch, with packing of drill core samples in calico within sealed drums, delivered directly to the laboratory by the previous operator's personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• An internal audit of an original geological model was carried out in 2014 by experienced personnel making full use of geochemical and structural drill hole data, resulting in a revised interpretation.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section).

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Angularli deposit is located on EL5893 in Arnhem Land, about 250km to the east of Darwin. Viva Resources Pty Ltd, a wholly owned subsidiary of Deep Yellow Limited (Deep Yellow), is the sole beneficial owner of the Angularli deposit project area, following the execution of binding purchase agreements with Cameco Australia (VMY ASX announcement dated 1 March 2018) and Rio Tinto Exploration Pty Ltd (VMY ASX announcement dated 17 August 2021). • EL5893 is located on Aboriginal Land, with existing covenants administered by the Northern Land Council (NLC) on behalf of Traditional Owners.
Exploration done by other parties	• *Acknowledgement and appraisal of exploration by other parties.*	• EL5893, which hosts the Angularli deposit, was granted to the previous operator, Cameco Australia in 2004. • Exploration during the period 2005-2007 focused on tenement-wide acquisition of aeromagnetic, radiometric, hyperspectral & tempest data. • Focus shifted to the Angularli area along NNW- trending fault zones in 2008, leading to the discovery of uranium mineralisation at Angularli South in 2009 and the main Angularli deposit in 2010, followed by a drill-out program in 2011. • Following that discovery, Cameco Australia carried out downhole and ground IP surveys over the broader Angularli area. • In 2014, Cameco Australia carried out an unpublished estimate of the mineral potential of the Angularli deposit. • From 2015 onwards, the focus of exploration shifted to regional targets.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Angularli deposit consists of small, mineralised pods associated with veins and semi- massive replacements spatially related to the basal unconformity between Proterozoic red-bed sandstone basin and metamorphic basement rocks. • Overlying the deposit and Proterozoic host rocks is a thin veneer of unconsolidated Cretaceous sediments, typically 20 to 80m thick.

Criteria	JORC Code explanation	Commentary

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; and*
	  ○ *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.*
		• All relevant drill hole information used in this MRE is listed in Appendix 2 in this announcement.

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.*	• Minimum thickness of 1m was used for modelling of mineralised lenses, with a maximum internal dilution of 2m. • The interpretation of mineralised lenses was guided by pre-existing grade-shell wireframes generated during the previous mineral resource estimate. • These were sliced to generate a set of two-dimensional cross-sectional strings, refined in MicroMine™ using the drill hole data for reference. • The polygons were snapped to the drill holes to ensure accurate boundary definition. To generate geologically meaningful volumes, additional polygons of mineralised pods were generated along “ghost” sections and wireframed using a modelling threshold of 0.05% U_3O_8.
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 (e.g., ‘down hole length, true width not known’).*	• Mineralisation is planar in nature and is primarily controlled by steep east-dipping fault zones and silica-flooded breccia. • Therefore, the angled drill hole intercepts reported below intersect the mineralisation envelope at an angle of 50 to 60º. As a result, true thicknesses are likely to approximate 80-85% of the mineralisation widths reported.
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.*	• A plan view of all drill collars relevant to the Angularli Mineral Resource and corresponding cross-sections is provided in the main text.
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.*	• Balanced reporting has been achieved through a consistent and comprehensive reporting of sampling and analytical processes followed by disclosure of all intercepts.

Criteria	JORC Code explanation	Commentary
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.*	• IP surveys carried out over the project show a strong relationship between proximal alteration associated with uranium mineralisation and chargeability anomalies.
Further work	• *The nature and scale of planned further work (e.g., 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.*	• Follow-up ore sorting testwork. • Additional moisture determination. • Geotechnical and groundwater characterization. • Test possible extensions.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section).

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The resource estimations are based on a drill hole dataset compiled by the Company. The database was reviewed, and validation checks completed prior to commencing the mineral resource estimate. • DYL has assumed responsibility for the validity of the drill hole data and geology. • No changes were made to the database before loading into the mining software. • A final check of the assays data ranking process was carried out ahead of the resource estimation.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The competent person undertook a site visit in September 2022 for due diligence purposes. • Various experienced staff undertook site visits and technical audits for the previous operators, over many years.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Geological interpretation</td><td>• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.
• Nature of the data used and of any assumptions made.
• The effect, if any, of alternative interpretations on Mineral Resource estimation.
• The use of geology in guiding and controlling Mineral Resource estimation.
• The factors affecting continuity both of grade and geology.</td><td>• Broad geological boundaries were modelled (based on main lithological domains) and used to constrain the mineralised zones.
• Interpretation of geochemical haloes was carried out, but those boundaries were not used to constrain the mineralised envelopes.
• A mid-distance rule was used to position the limit between mineralised drill hole intercepts and external waste, with external boundaries of the model along strike typically extrapolated halfway to the next section. The polylines were validated using in-plan and oblique isometric views.
• This resulted in seven separate mineralised pods, with the primary shell accounting for most of the volume. That main pod has a southerly plunge and bifurcates at various points along its strike, consistent with the current structural interpretation for the deposit.
• A previous interpretation of a significant east-dipping fault zone was used as a soft boundary for the main mineralised pod.
• Due to the limited amount of data, no attempt to define a high-grade domain was made.
• The main mineralised pod accounts for more than 90% of the mineralisation volume.
• It is noted that the two smallest pods are defined by relatively few informing samples but represent approximately 2% of the mineralisation volume.
• 3D volumes were validated for closure and self-intersecting triangles.</td></tr>
<tr><td>Dimensions</td><td>• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</td><td>• The block model is not rotated.
• The block model extents are tabulated below:
Alligator River Project – Angularli Deposit May 2023 Block Model Construction Parameters
<table><tr><th></th><th>Origin (m)</th><th>Extent (m)</th><th>Parent/Sub Block Size (m)</th></tr><tr><td>Easting</td><td>299,000</td><td>300</td><td>5/1</td></tr><tr><td>Northing</td><td>8,701,400</td><td>300</td><td>5/1</td></tr><tr><td>Elevation</td><td>-360</td><td>220</td><td>5/1</td></tr></table></td></tr>
<tr><td>Estimation and modelling techniques</td><td>• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.
• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
• The assumptions made regarding recovery of by-products.
• Estimation of deleterious elements or other non-grade variables of</td><td>• Mineralised pods were used as hard boundaries (drill hole data inside a mineralised pod could only inform the blocks within that domain).
• U_3O_8 grade estimation for the Angularli deposit was completed using an ordinary kriging (OK) process on declustered data, with a check estimate using an inverse distance square (ID^2) interpolant method.
• The OK estimate was adopted as it provides adequate reproduction of the raw grades.
• Samples were assigned bulk densities based on their dominant lithologies, using the database of measured bulk densities.
• Locally there are minor differences in grade, tonnages and hence metal content between the different estimation methods (OK and ID^2) estimates, resulting in a 0.4% difference in contained metal at a 0.15% U_3O_8 cut-off grade.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	economic significance (e.g., sulphur for acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The competent person considers that the grade difference between the two estimates is within the accepted level of uncertainty implied by an Inferred Mineral Resource. • All samples within the mineralised wireframes were composited to 0.5m, reflecting the natural sampling interval. • A high-grade cut (cap) of 14% U_3O_8 (140,000 ppm U_3O_8) was applied to the assay data based on a range of analysis methods, which compares to a 15% U_3O_8 high-grade cut used in the 2018 maiden Mineral Resource. • The OK estimate was completed using grade variogram models and a set of search parameters controlling the source and selection of composite data from the mineralised envelopes, using a four-pass search by which time all blocks within the model had been estimated. The sample search parameters were defined from the variography and data spacing. • A four-pass search strategy with hard boundaries between mineralised domains was used for grade estimation. • Shallow underground mining is envisaged for the Angularli deposit, based upon a previous scoping study-level mining assessment. • Block estimates were visually compared to the input composite samples in section views and in swath (profile) plots. Global average grades for estimates and declustered composite mean grades show a reasonable correspondence given the limited amount of data available. • As mining has not been undertaken no reconciliation data is available. • No assumptions were made concerning recovery of by-products as this is not expected to drive the economics of the project. However, low-grade palladium and gold mineralisation has been identified by the previous operator, coincident with high-grade uranium mineralisation. A proof of concept ore sorting trial showed material upgrading potential (VMY announcement to the ASX dated 16 September 2020), and this is expected to be the subject of future technical studies. • The parent block size of 5m x 5m x 5m is considered appropriate given the drill hole spacing and style of mineralisation at Angularli.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and metal are reported on a dry basis, using a dry in-situ bulk density, based upon 314 measurements.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The nominal 0.15% U_3O_8 lower cut-off used to report the Mineral Resource was chosen as a result of a scoping study level underground mining assessment completed by Mining Plus during the due diligence phase on the project.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• No mining recovery factor has been applied to the U_3O_8 in the Mineral Resource. Mining is anticipated to be carried out by shallow underground methods.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No factors regarding metallurgy, recovery or processing cost have been applied in the Mineral Resource. • Mineralogical studies show that most of the uranium is present as primary uraninite deposited around 1,730 Ma, in a state of secular equilibrium, with a very limited fraction contained in minerals such as coffinite.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Permitting of the project (in the form of a Notice of Intent or NOI) has not yet started. • The Ranger 3 Deeps underground mining project provides the most recent and closest equivalent in terms of permitting process. • At this stage, given the high-grade nature of the deposit, underground proposed mining method and isolation, no major environmental impacts have been identified. A preliminary environmental risk assessment will be completed as part of future studies.

Criteria	JORC Code explanation	Commentary
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density of bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density measurements were undertaken in various lithologies using the Archimedes approach – 314 measurements were generated across a range of lithologies and grades. • Moisture measurements were taken and all densities were converted to dry equivalents. • There is a well-documented relationship between the grade and density of high-grade samples (> 1% U_3O_8). • The regression equation (density = 0.0004*[$U_3O_8^2$]+0.0184* U_3O_8+2.6426) was applied to samples with U_3O_8 grades above 1% on the assumption that the high quantities of uraninite/pitchblende affect the density and was confirmed by examination of the densities derived from analysis of the higher grade samples. • For the low-grade samples density was allocated by logged lithology using the 314 actual measurements. • Allocated and regressed density values in the mineral resource estimate ranged between 2.65 and 2.92 t/m^3. • Bulk density was allocated in the block model based on estimated uncut grade.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified in accordance with JORC Code 2012 guidelines based on the confidence levels of the key criteria considered during the mineral resource estimation such as data quality, drilling density, apparent grade and spatial continuity of the mineralisation. • The results appropriately reflect the Competent Persons' view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• An internal review by Optiro has audited the previous 2018 Angularli Mineral Resource model and determined that the model was fit for purpose at that time. The mineral resource estimate detailed in this announcement is an update, following additional drilling, of the original mineral resource estimate.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The resource classification represents the relative confidence in the resource estimate as determined by the Competent Person. Issues contributing to or detracting from that confidence are discussed above. • Due to the nature of the uranium mineralisation, the degree of radiochemical disequilibrium is likely to be non-existent.

APPENDIX 2

List of drill holes - 2023 Angularli Mineral Resource (Grid GDA94 Zone 53)

Hole ID	Easting	Northing	RL	Depth	Type	Dip	Azimuth
ARDD0003	299142.6	8701572.4	12.1	340.7	DDH	-75.3	258.7
ARDD0004	299164.3	8701628.4	10.8	320.5	DDH	-73.5	258.9
ARDD0005	299154.0	8701670.1	10.3	315.7	DDH	-74.0	256.8
ARDD0007	299125.8	8701663.2	10.3	347.9	DDH	-72.3	251.6
ARDD0008	299136.6	8701626.1	10.9	348.6	DDH	-71.8	257.2
ARDD0009	299114.5	8701564.2	12.0	366.7	DDH	-71.4	259.2
ARDD0010	299354.7	8701437.4	13.9	428.9	DDH	-73.2	266.3
ARDD0012	299137.9	8701696.5	9.9	339.7	DDH	-75.4	260.2
ARDD0013	299115.0	8701688.6	9.8	327.7	DDH	-71.2	265.0
ARDD0014	299161.9	8701705.1	9.6	336.7	DDH	-74.1	266.3
ARDD0017	299319.5	8701481.2	12.3	410.7	DDH	-73.1	261.7
ARDD0018	299364.0	8701460.2	13.0	459.7	DDH	-70.4	265.0
WRD0067	299097.0	8701628.4	10.8	354.8	DDH	-79.5	266.1
WRD0073	299199.5	8701629.2	10.5	336.1	DDH	-77.2	268.1
WRD0074	299251.6	8701626.4	10.3	418.4	DDH	-80.2	272.2
WRD0075	299223.9	8701627.6	10.4	375.7	DDH	-77.0	254.6
WRD0076	299273.9	8701565.9	10.9	30.0	DDH	-75.0	255.0
WRD0077	299287.3	8701584.2	10.3	396.3	DDH	-78.8	257.6
WRD0078	299222.2	8701676.6	9.4	357.3	DDH	-75.6	260.0
WRD0079	299278.1	8701530.4	11.5	401.1	DDH	-79.8	261.6
WRD0080	299175.0	8701675.0	9.8	48.0	DDH	-75.0	255.0
WRD0081	299176.7	8701575.2	11.8	318.0	DDH	-76.1	258.9
WRD0082	299181.6	8701678.8	9.7	331.5	DDH	-76.6	257.6
WRD0084	299227.2	8701578.3	11.4	362.7	DDH	-76.5	259.4
WRD0085	299226.7	8701525.7	12.2	316.7	DDH	-77.3	259.6
WRD0087	299178.7	8701524.0	13.1	324.0	DDH	-75.2	262.6
WRD0089	299230.3	8701474.0	13.5	320.0	DDH	-75.2	254.7
WRD0091	299277.9	8701472.0	13.0	354.0	DDH	-72.3	264.9
WRD0093	299174.7	8701474.2	14.4	342.2	DDH	-73.5	277.5
WRD0095	299277.1	8701422.7	15.0	370.0	DDH	-76.4	257.3
WRD0096	299174.0	8701630.7	10.7	47.0	DDH	-75.0	255.0
WRD0097	299163.9	8701628.3	10.8	342.6	DDH	-80.9	269.5
WRD0098	299226.8	8701423.6	15.1	321.2	DDH	-78.4	259.0
WRD0104	299328.1	8701449.7	13.1	463.6	DDH	-78.0	267.3