Deep Yellow LIMITED

NEWS RELEASE

28 December 2023

COMPLETION OF NOVA JV FOLLOW-UP PHASE 4 DRILLING

HIGHLIGHTS

- **Follow-up RC drill program involving eight holes totalling 1,558m completed at Barking Gecko North**
- **Best intersections included:**
  - **TN294RC**
    - 9m at 382ppm eU_3O_8 from 203m
  - **TN297RC**
    - 3m at 260ppm eU_3O_8 from 64m
    - 9m at 290ppm eU_3O_8 from 71m
    - 2m at 242ppm eU_3O_8 from 124m
    - 7m at 243ppm eU_3O_8 from 143m

Deep Yellow Limited (ASX: DYL) (**Deep Yellow** or **Company**) advises that the follow-up drill program at its Barking Gecko prospect on EPL3669 (refer Figure 1) started on 22 September 2023 and was completed on 10 November 2023.

The program included eight reverse circulation (**RC**) holes totalling 1,558m and aimed at further exploring for potential lateral and depth extensions of mineralisation previously discovered at the Barking Gecko North prospect.

Barking Gecko is part of the Nova Joint Venture Project (**NJV**) in Namibia, located within EPL3369.

Since the Japan Organization for Metals and Energy Security (**JOGMEC**) completed its earn-in in October 2020, the NJV parties are jointly contributing and the equity holdings are as follows.

NJV Parties	NJV Equity Holdings
Reptile Mineral Resources & Exploration (Pty) Ltd *(subsidiary of Deep Yellow Limited)*	39.5% *(Manager)*
Japan Organization for Metals and Energy Security	39.5%
Nova Energy (Africa) Pty Ltd *(subsidiary of Toro Energy Ltd)*	15%
Sixzone Investments (Pty) Ltd *(Namibia)*	6% *(carried interest)*

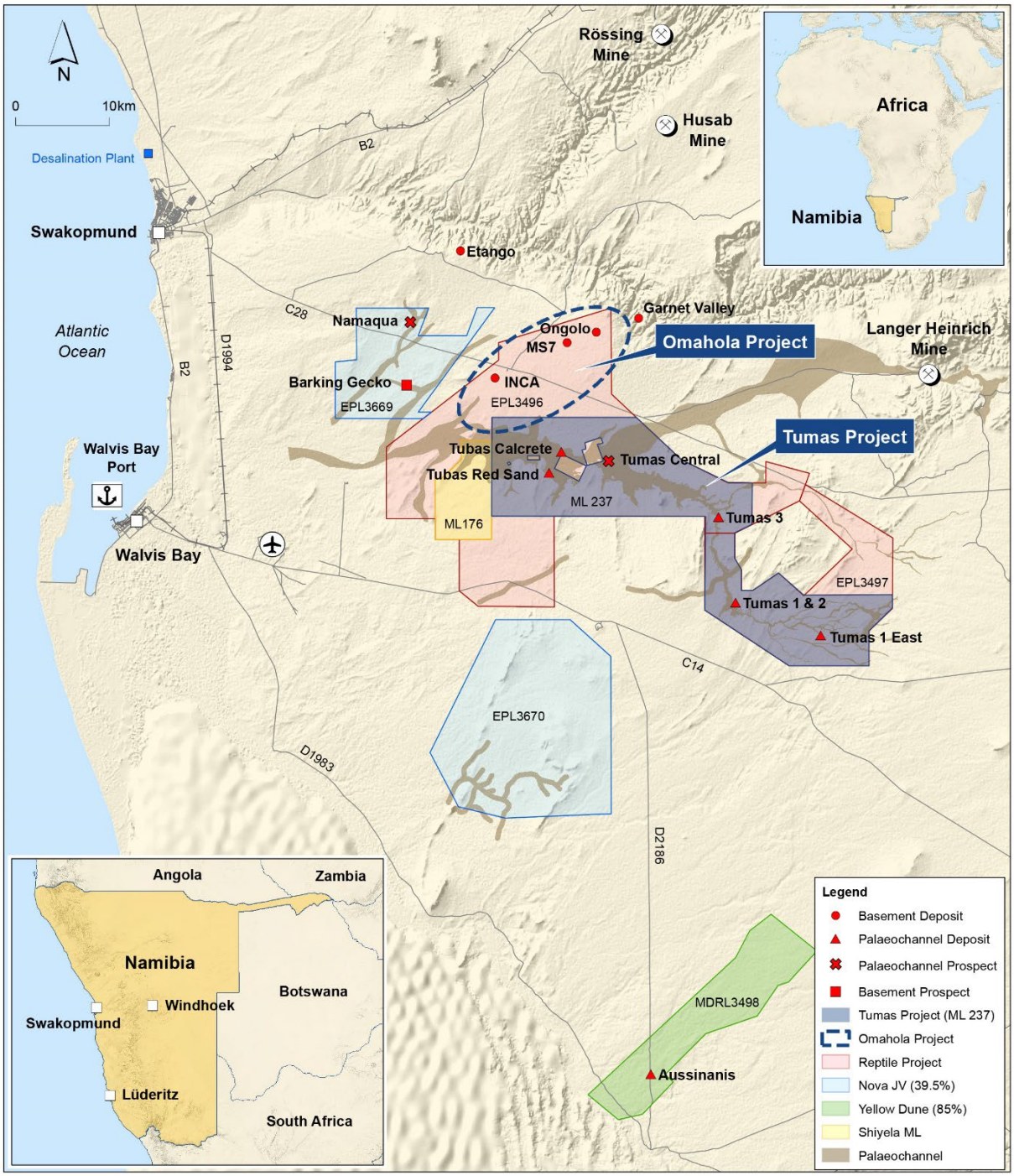

Figure 1: Location of the Nova JV EPLs 3669 and 3670.

Results from Phase 2 and Phase 3 RC drilling at Barking Gecko North were reported on 7 April 2022 and 31 March 2023, respectively.

The holes of the recently completed Phase 4 program were specifically designed to test for an extension of the mineralisation to the north and northeast towards the Iguana prospect and to explore potential western extensions of the Barking Gecko prospect. Figure 2 shows the drill hole locations.

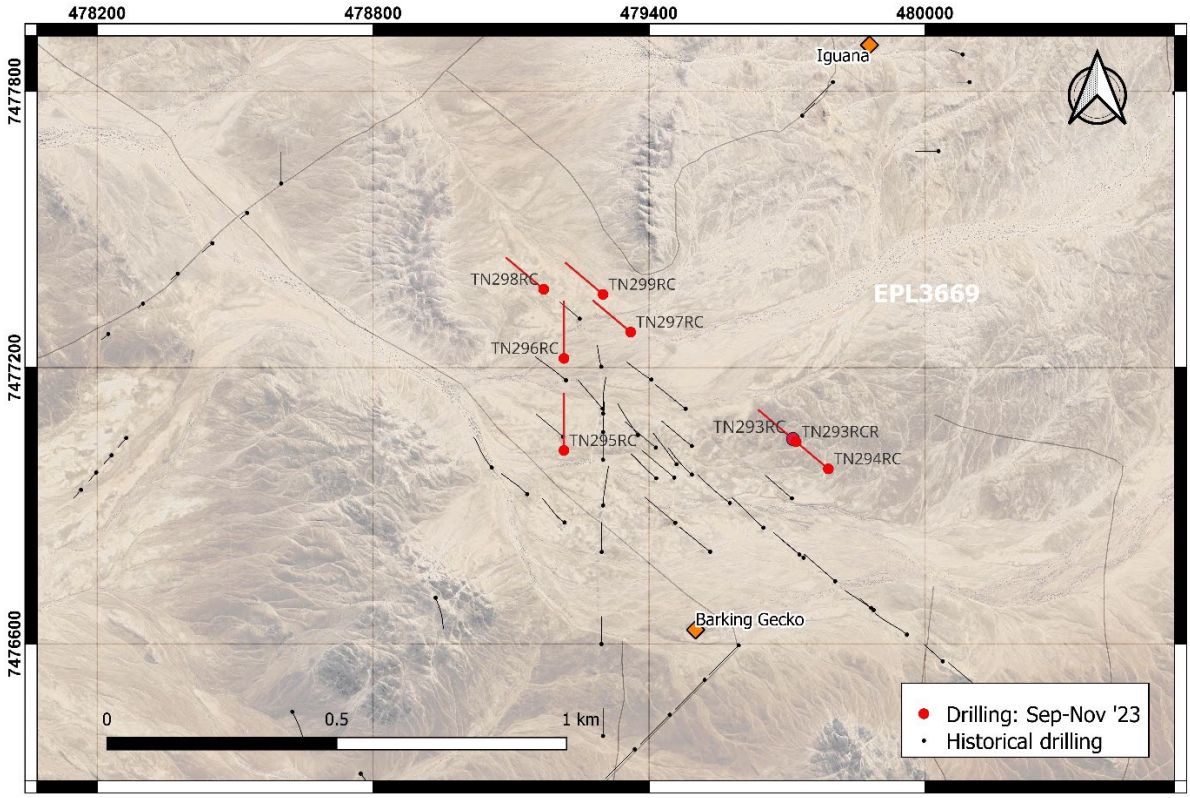

Figure 2: EPL3669, Drill hole locations at Barking Gecko.

The drilling was completed on mid-November 2023.

The holes testing the northern/northeastern extension of Barking Gecko North - TN293RC, TN294RC, TN297RC and TN299RC - intersected multiple low-grade intervals (less than 200ppm eU_3O_8), hosted by thin leucogranitic sheets (refer Figure 3). Better grades (9m at 382ppm eU_3O_8 in TN294RC from 203m depth) were hosted by altered equivalents of these sheets, commonly with hematite and epidote present.

At the western end of Barking Gecko, the mineralisation was closed off laterally by two holes – TN295RC and TN296RC (refer Figure 4), which predominately intersected country rock and only minor leucogranitic veins and veinlets hosting isolated low-grade mineralisation, with individual mineralised intervals not exceeding one metre in thickness.

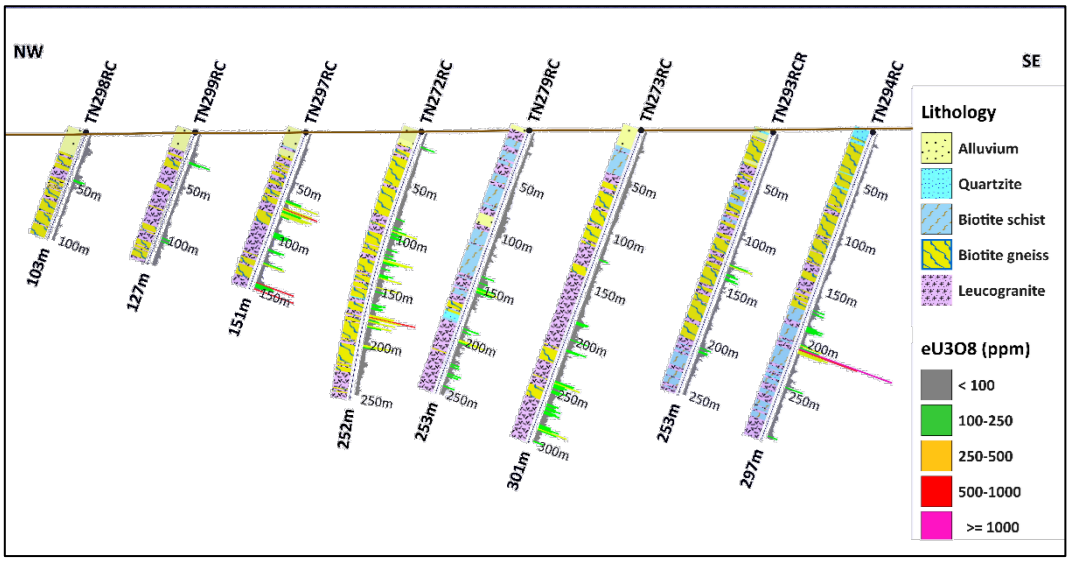

Figure 3: Barking Gecko North NW-SE Drill Section.

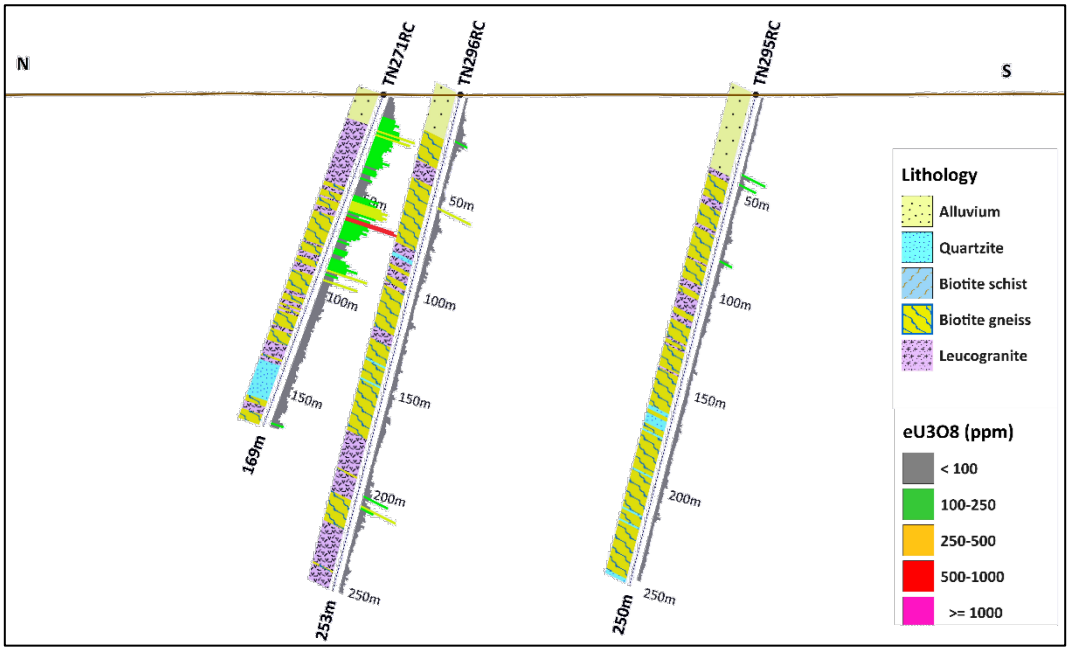

Figure 4: Barking Gecko North N-S Drill Section (479,220E).

Table 1 in Appendix 1 lists all uranium mineralisation greater than 100ppm eU_3O_8 over 1m and Table 2 gives all drill hole details. Figure 2 shows all drill hole locations. Figures 3 and 4 show cross-sections including recent drill holes.

Conclusions

The results of the most recent follow-up RC drill program confirmed the continuation of the mineralisation to the northeast for a further 100m towards the Iguana prospect. As such, the area remains prospective with a moderately strong mineralisation associated and therefore with the possibility of further discovery.

Next steps on the Baking Gecko Prospect will concentrate on evaluating the possible economic value of the mineralisation considering the recent, rapid increase in uranium prices.

At the western end of Barking Gecko North, however, favourable host rock lithologies appear to thin out. No further prospecting will be required in this area.

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.

Contact

Investors
John Borshoff, Managing Director/CEO
+61 8 9286 6999
john.borshoff@deepyellow.com.au

Media
Cameron Gilenko
+61 466 984 953
cgilenko@citadelmagnus.com

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 Q3 2024) 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 become a reliable and long-term uranium producer, able to provide production optionality, security of supply and geographic diversity.

Competent Person's Statements

Mineral Resource Estimate

*The information in this announcement as it relates to exploration results was provided by Dr Katrin Kärner, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Dr Kärner and Exploration Manager for Reptile Mineral Resources and Exploration (Pty) Ltd (**RMR**), has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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'. Dr Kärner consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears. Dr Kärner holds shares in the Company*

APPENDIX 1: Drill Hole Status and Intersections

Table 1: eU_3O_8 intersections, cut off 100ppm eU_3O_8, minimum thickness 1m (holes drilled between 22 September and 10 November 2023)

Hole ID	Depth From (m)	Depth To (m)	Interval Width (m)	eU_3O_8 (ppm)
TN293RCR	126	128	2	247
	135	141	6	106
	206	211	5	105
TN294RC	170	174	4	103
	186	191	5	149
	203	212	9	382
	242	245	3	124
	291	292	1	127
TN295RC	39	40	1	208
	44	45	1	152
	83	84	1	117
TN296RC	22	23	1	106
	56	57	1	301
	203	204	1	220
	208	210	2	209
TN297RC	64	67	3	260
	71	80	9	290
	95	100	5	164
	111	113	2	174
	124	126	2	242
	143	150	7	243
TN298RC	44	46	2	120
TN299RC	27	29	2	194
	101	104	3	102

Table 2: RC Drill Hole Locations (holes drilled between 22 September and 10 November 2023)

Hole ID	Depth (m)	Easting	Northing	RL (m)	Azimuth (°)	Dip (°)
TN293RC	124	479,713	7,477,045	220.20	310	-70
TN293RCR*	253	479,721	7,477,039	220.25	310	-70
TN294RC	297	479,790	7,476,980	220.76	310	-70
TN295RC	250	479,215	7,477,020	213.72	360	-70
TN296RC	253	479,215	7,477,220	214.04	360	-70
TN297RC	151	479,360	7,477,277	216.32	310	-70
TN298RC	103	479,171	7,477,370	214.39	310	-70
TN299RC	127	479,301	7,477,349	216.16	310	-70

** re-drill of TN293RC, which was abandoned.*

APPENDIX 2: Table 1: Report (JORC Code 2012 Addition)

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 downhole 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.*	• The current drilling relies on downhole gamma data from calibrated probes which were converted into equivalent uranium values (eU_3O_8) by experienced DYL personnel and will be confirmed by a competent person (geophysicist). • Appropriate factors were applied to all downhole gamma counting results to make allowance for drill rod thickness, gamma probe dead times and incorporating all other applicable calibration factors. **Total gamma eU_3O_8** • 33mm Auslog total gamma probes were used and operated by company personnel. • Gamma probes were calibrated at Pelindaba, South Africa, in May 2007 and in December 2007. • Between 2008 and 2013 sensitivity checks were conducted by periodic re-logging of a test hole (Hole-ALAD1480) to confirm operation. • Auslog probes were again re-calibrated at the calibration pit located at Langer Heinrich Mine site in December 2014, May 2015, August 2017, July 2018,and September 2019 and February 2022. • During the drilling, the probes were checked daily against a standard source. • Gamma measurements were taken at 5cm intervals at a logging speed of approximately 2m per minute. • Probing was done immediately after drilling mainly through the drill rods and in some cases in the open holes. Rod factors have been established once sufficient in-rod and open-hole data were available to compensate for the reduced gamma counts when logging was done through the drill rods. No correction for water was done. The majority of drill holes were dry. • All gamma measurements were corrected for dead time which is unique to the probe. • All corrected (dead time and rod factor) gamma values were converted to equivalent eU_3O_8 values over the same intervals using the probe-specific K-factor. **Chemical assay data** • Selected geochemical samples were derived from Reverse Circulation (RC) drilling at intervals of 1 m. Samples were split at the drill site using a riffle splitter to obtain a 0.5kg sample of which an approximately 25 g subsample was obtained for portable XRF-analysis at RMR's in-house laboratory. Portable XRF- analyses are still to be completed.
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).*	• RC drilling was used for the Nova JV drilling program. • All eight RC holes at Barking Gecko North were drilled at an angle of 70 degrees. • Intersections are reported as downhole and not true thicknesses.
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.*	• Drill chip recoveries are good at around 90%. • Drill chip recoveries were assessed by weighing 1m drill chip samples at the drill site. Weights were recorded in sample tag books. • Sample loss was minimised by placing the sample bags directly underneath cyclone/splitter.

APPENDIX 2: Table 1: Report (JORC Code 2012 Addition) *(continued)*

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.*	• All drill holes were geologically logged. • The logging was semi-quantitative in nature. The lithology type as well as subtypes were determined for all samples. • Other parameters routinely logged included colour, colour intensity, weathering, grain size and total gamma count (by handheld Rad-Eye scintillometer).
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• A 75:25 riffle splitter was used to treat a full 1m sample from the cyclone. The sample was further split using a 50:50 riffle splitter to obtain a 0.5kg sample. No field duplicates were taken. Most sampling was dry. • The above sub-sampling techniques are common industry practice and appropriate. • Sample sizes are considered appropriate to the grain size of the material being sampled.
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.*	• Downhole gamma tools were used as explained under 'Sampling techniques'. This is the principal evaluating technique. • Standards and blank samples are inserted during in-house portable XRF analysis at an approximate rate of one each for every 20 samples which is compatible with industry norm.
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.*	• Geology was directly recorded into a tablet in the field and sample tag books filled in at the drill site. • The drill data of those logs and tag books (lithology, sample specifications etc.) were transferred by designated personnel into a geological database. • Equivalent eU_3O_8 values have previously been and were for the current program calculated from raw gamma files by applying calibration factors and casing factors where applicable. • The adjustment factors were stored in the database. • Equivalent U_3O_8 data were composited to 1m intervals. • The ratio of eU_3O_8 vs assayed U_3O_8 for matching composites will be used to quantify the statistical error.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The collars were surveyed by in-house operators using a differential GPS. • The grid system is World Geodetic System (WGS) 1984, Zone 33.

APPENDIX 2: Table 1: Report (JORC Code 2012 Addition) *(continued)*

Criteria	JORC Code Explanation	Commentary
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.*	• The data spacing and distribution is optimized to test the selected exploration targets. • The total gamma count data, which is recorded at 5cm intervals, was used to calculate equivalent uranium values (eU_3O_8) which were composited to 1m composites downhole.
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.*	• The basement target mineralisation is moderately to steeply dipping and the drill holes are aimed at appropriate angles into the target zones. The intersections will not represent the true width and have to be evaluated for each hole depending on the structural and geological setting. • All holes were sampled downhole from surface. Geochemical samples are being collected at 1m intervals. Total-gamma count data is being collected at 5cm intervals.
Sample security	• *The measures taken to ensure sample security.*	• 1m RC drill chip samples were prepared at the drill site. The samples are stored in plastic bags. Sample tags were placed inside the bags. The samples were placed into plastic crates and transported from the drill site to RMR's site premises in Swakopmund by Company personnel for analysis by portable XRF. • Upon completion of the assay work the remainder of the drill chip sample bags for each hole will be packed back into crates and then stored in designated containers in chronological order, locked up and kept safe at RMR's dedicated sample storage yard at Rocky Point located outside Swakopmund.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• D. M. Barrett (PhD MAIG) conducted an audit of gamma logging procedures and log reduction methods used by Deep Yellow Limited. • He concluded his audit commenting: "In summary, it is my belief that the equivalent uranium grades reported by Reptile from their gamma logging program are reliable and are probably within a few percent to the true grade".

APPENDIX 3: Table 1: Report (JORC Code 2012 Addition)

Section 2 Reporting of Exploration Results

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

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 work to which the exploration results relate was undertaken on Exclusive Prospecting grant EPL3669. • The EPL was originally granted to Nova Energy (Namibia) (Pty) Ltd in 2005. • The EPL is in good standing and valid until 24 November 2024. Nova Energy (Namibia) (Pty) Ltd – (NJV is an incorporated joint venture having following partners: Reptile Mineral Resources & Exploration (Pty) Ltd (RMR) - Manager 65% Nova Energy (Namibia) (Pty) Ltd 25% Sixzone Investments (Pty) Ltd 10% In March 2017 Deep Yellow signed a landmark Joint Venture agreement with the Japan Organization for Metals and Energy Security, formerly Japan Oil Gas and Metals National Corporation (JOGMEC), a highly significant move by the minerals investment arm of Japan's government. JOGMEC can earn a 39.5% interest in two EPLs by spending A$4.5 million over four years while Deep Yellow remains manager of the Joint Venture. After fulfilment of the earn-in obligation in September 2020 equity distribution in the Nova JV is now as follows: 39.5% Reptile Mineral Resources & Exploration (Pty) Ltd (RMR) (Manager) 39.5% 39.5% JOGMEC 39.5% 15% Nova Energy (Namibia) (Pty) Ltd 15% 6% Sixzone Investments (Pty) Ltd 6% • The EPL is located within the Namib-Naukluft National Park in Namibia. • There are no known impediments to the project beyond Namibia's standard permitting procedures.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Prior to Nova Energy's ownership of this EPL, extensive work was conducted by Anglo American Prospecting Services (AAPS), General Mining and Falconbridge in the 1970s. • Assay results from the historical drilling are available to RUN on paper logs. They were not captured digitally and will not be used for resource estimation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Alaskite-type uranium mineralisation occurs on the Nova JV ground and is the main target of the current drilling program. It is associated with sheeted leucogranite intrusions into the basement rocks of the Damara orogen.
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* ○ *downhole 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.*	• Eight RC holes for a total of 1,558m, which are the subject of this announcement, have been drilled in the current program between 22 September 2023 and 10 November 2023. • The holes were drilled angled at 70 degrees. As such, intersections measured do not represent true thicknesses. • Table 2 in Appendix 1 lists all the drill hole locations and details. Table 1 lists the results of intersections greater than 100ppm eU_3O_8 over 1m.

APPENDIX 3: Table 1: Report (JORC Code 2012 Addition) *(continued)*

Criteria	JORC Code Explanation	Commentary
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.*	• 5cm intervals of downhole gamma counts per second (cps) logged inside the drill rods were composited to 1m downhole intervals showing greater than 100cps values over 1m. • No grade truncations were applied.
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 downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	• Alaskite-type mineralisation is moderately to steeply dipping in nature. The intersections of this exploration drilling program do not represent true width and each intersection must be evaluated in accordance with its structural setting.
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.*	• Appendix 1 (Table 2) shows all drill hole locations. • A location map is included in the 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.*	• Comprehensive reporting of all exploration results is practised.
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 wider area was subject to extensive drilling in the 1970s and 1980s by Anglo American Prospecting Services, Falconbridge and General Mining.
Further work	• *The nature and scale of planned further work*	• Further exploration drilling work is planned on EPL3669 for alaskite targets that reported positive results.