

31 March 2023

## AUSSINANIS PROJECT RESOURCE UPGRADE TO JORC (2012)

### HIGHLIGHTS

- Exploration completed between 2007-2014 at the Aussinanis Project established an Indicated and Inferred Resource base of 18Mlb at 237ppm U<sub>3</sub>O<sub>8</sub> with a 150ppm U<sub>3</sub>O<sub>8</sub> cut off and at the time was reported as JORC (2004)
- A thorough review of the Aussinanis resource base found the underlying data and previous Mineral Resource Estimate (MRE) sound and of sufficient quality to upgrade the identified resources to JORC (2012) classification
- The upgraded MRE is reported at a 100ppm U<sub>3</sub>O<sub>8</sub> cut off and contains an Indicated and Inferred Resource base of 28.1Mlb at 171ppm U<sub>3</sub>O<sub>8</sub>
  - At a 150ppm cut-off the upgraded MRE stands at 16.5Mlb U<sub>3</sub>O<sub>8</sub> at 242ppm

### INTRODUCTION

Uranium developer Deep Yellow Limited (ASX: DYL) (**Deep Yellow**) is pleased to announce an upgrade of the Mineral Resource Estimate (**MRE**) from JORC (2004) to JORC (2012) for the Aussinanis Project located in MDRL3498 in Namibia (Figure 1) and only 40 km south of the Tumas 3 deposit. The deposit is held in the Yellow Dune Joint Venture by Deep Yellow, with 85% held through the Company's wholly owned subsidiary Reptile Uranium Namibia (Pty) Ltd (**RUN**), 5% through Epangelo Mining Company (Pty) Ltd (**EMC**) and 10% through Oponona Investments (Pty) Ltd (**OI**).

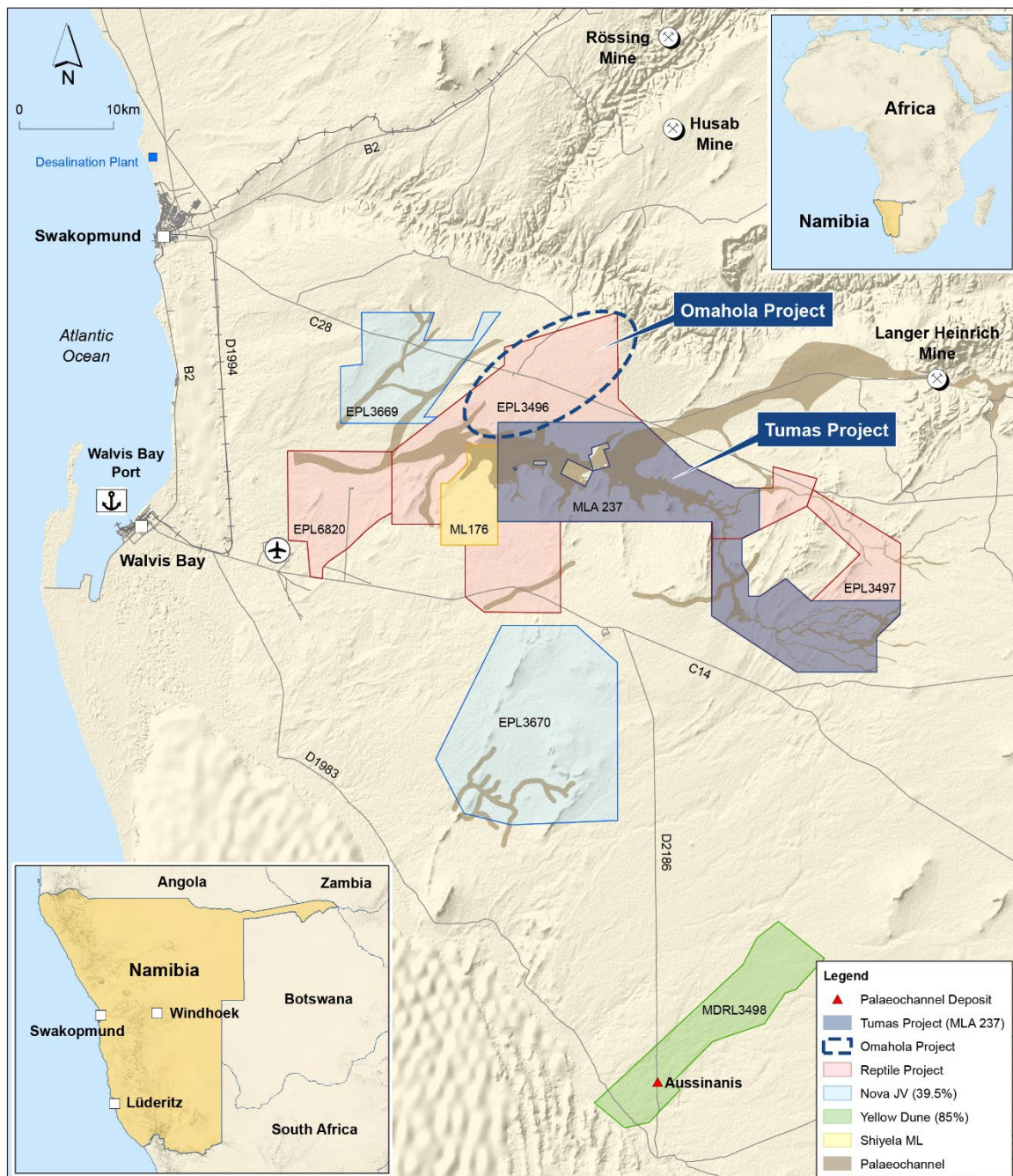
The updated JORC (2012) MRE contains an Indicated and Inferred Mineral Resource base of 28.1Mlb U<sub>3</sub>O<sub>8</sub> at 171ppm, using a 100ppm U<sub>3</sub>O<sub>8</sub> cut off. At a 150ppm cut-off the deposit contains 16.5Mlb U<sub>3</sub>O<sub>8</sub> at 242ppm.

The flagship Tumas Project continues to be the priority focus for Deep Yellow, with the Definitive Feasibility Study (DFS) finalised in January 2023 and submission of a Mining Licence Application in 2022; which was awarded a preparedness to grant by the Ministry of Mines and Energy (**MME**), pending completion of Environment Impact Assessment (**EIA**) and subsequent issuing of the Environmental Clearance Certificate (**ECC**) by the Ministry of Environment, Forestry and Tourism (**MEFT**). The EIA has been submitted and a ECC is expected to be issued in H2 2023.

### AUSSINANIS PROJECT

Aussinanis (Figure 1, Table 1) had, under its previously reported MRE, an Indicated and Inferred Mineral Resource base of 18Mlb U<sub>3</sub>O<sub>8</sub> at 237ppm (at a 150ppm cut off) conforming to the JORC (2004) Code. Mineralisation occurs from a depth of 4m to 31m, averaging 11m below surface.

The MRE has now been upgraded to the JORC (2012) Code reporting standard and at a 100ppm  $U_3O_8$  cut-off, contains an Indicated and Inferred Resource base of 28.1Mlb  $U_3O_8$  at 171ppm, to conform with the cut off adopted for the Tumas Deposit to the north (see Figure 1).



**Figure 1:** MDRL3489 in proximity to EPLs 3496, 3497, also showing the Tumas deposits and prospect locations in basement rocks.

As part of the resource revision, the current MRE of the Aussinanis Project was extensively reviewed by Mr Martin Hirsch, Deep Yellow's in-house mineral resource geologist who qualifies as a competent person under the JORC (2012) code. Mr Hirsch has verified the information available, in terms of geological understanding and drilling data validity to reclassify the MRE for the whole of the Aussinanis deposit under the JORC (2012) Code.

Aussinanis mineralisation occurs as secondary carnotite enrichment of variably calcretised palaeochannel and sheet wash sediments and adjacent weathered bedrock, within a northeast trending zone approximately 29km in length.

The mineralisation is confined to continuous zones above a nominal 50ppm U<sub>3</sub>O<sub>8</sub> cut-off grade, with the mineralisation being overlain by an average thickness of 1.7m of poorly mineralised material. Mineralised domain thicknesses range from 1 to 19m, with an average of approximately 4.4m.

### Results of Historic Data and MRE Review

A comprehensive review of existing data and the MREs indicates that the data quantity and quality of the available information, in terms of geological understanding, drilling data, grade and density determinations and quality control thereof, is sufficient to confidently estimate mineral resources for the deposit detailed in this technical report. The reliability of grades derived from RUN's drilling and downhole gamma logging can be assessed by comparing them to available assay data. In general, the assays available are backed up using incorporated certified standards and duplicates. Where assays were performed at the RUN owned and operated laboratory in Swakopmund these have been validated by comparison to external independent assay laboratories. It should be noted that equivalent uranium values (eU<sub>3</sub>O<sub>8</sub>) derived from deconvolving down hole gamma logging values are used to determine the U<sub>3</sub>O<sub>8</sub> grades for the determination of the MRE and that assays are used primarily to validate downhole gamma derived results.

The mineral resources outlined have been estimated using a variety of techniques which are regarded as being appropriate for the deposit being estimated. Table 1 lists the detailed results of the previous MRE.

**Table 1:** Previous Estimated Mineral Resources of RMR'S/DYL Namibia Aussinanis Deposit Reported to JORC (2004) Code

Deposit	Category	Cut-off ppm U <sub>3</sub> O <sub>8</sub>	Tonnes Mt	Grade		Metal Mlb
				U <sub>3</sub> O <sub>8</sub> ppm	Metal t	
Aussinanis	Indicated	150	5.6	222	1,200	2.7
	Inferred	150	29.0	240	7,000	15.3
<b>Total</b>			<b>34.6</b>	<b>237</b>	<b>8,200</b>	<b>18.0</b>

In all tables of MREs, metal content in terms of t or Mlb U<sub>3</sub>O<sub>8</sub> are based on contained metal in the ground and take no account of mining or metallurgical recoveries, mining dilution or other economic parameters.

At the time of the previous MRE, the cut-off grade for the hard rock uranium deposits was set at 150ppm U<sub>3</sub>O<sub>8</sub> on the basis of very conservative costs estimates associated with mining and processing.

The deposit conformed to the 2004 JORC code when estimated.

In recent months, a thorough process of data validation and review of the sampling and data QA/QC process was undertaken by Mr Hirsch. The MRE relevant historical data sets were compared against the recently compiled database hosted by external consultants Maxwell. Assessment and validation of the individual MREs for the relevant deposits has been completed, with the aim of bringing the MRE to JORC (2012) code reporting status. Mr Hirsch is fully satisfied with his assessment and the outcome of his work, as it confirms the suitability of the underlying data, geological modelling and estimation of Aussinanis being suitable for a MRE reporting under the JORC (2012) Code.

Considering the results of the more recent feasibility studies of similar deposits in the Tumas area of Namibia, along with internal metallurgical and mining studies conducted by Deep Yellow, it was decided that reporting the MRE at a 100ppm U<sub>3</sub>O<sub>8</sub> cut off is more appropriate than the



historically used 150ppm U<sub>3</sub>O<sub>8</sub> cut off. This has resulted in a substantial increase in contained metal accompanied by a grade reduction. At the new cut off, the Indicated and Inferred Mineral Resources total 28.1Mlb U<sub>3</sub>O<sub>8</sub> at 171ppm. Table 2 lists the detailed MRE at a 100ppm U<sub>3</sub>O<sub>8</sub> cut off. It should be noted that the 100ppm cut-off grade was also detailed when the previous JORC 2004 compliant MRE for the deposits was first announced.

**Table 2:** Updated Mineral Resource Estimate -JORC (2012) Code

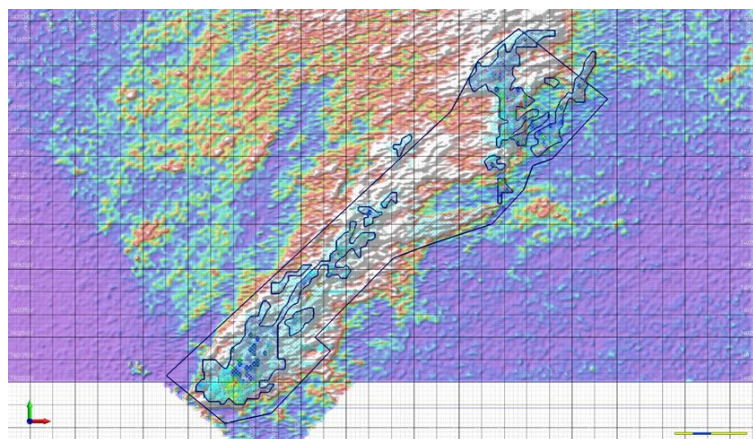
Deposit	Category	Cut-off ppm U <sub>3</sub> O <sub>8</sub>	Tonnes Mt	Grade		Metal Mlb
				U <sub>3</sub> O <sub>8</sub> ppm	Metal t <sup>(*)</sup>	
Aussinanis	Indicated	100	12.3	168	2,000	4.5
	Inferred	100	62.1	172	10,700	23.6
	<b>Total</b>	<b>100</b>	<b>74.4</b>	<b>171</b>	<b>12,700</b>	<b>28.1</b>

A comprehensive review of existing data has shown that Aussinanis is a calcrete related uranium deposit, associated with valley-fill sediments occurring within an extensive Tertiary palaeo-drainage system. The calcretes are limestone deposits formed as chemical precipitates developed under arid to semi-arid climate conditions. At Aussinanis, calcretisation has affected a complex sequence of fluviially derived conglomerates, grits, sandstone, silts and clay deposits worked in a braided stream depositional environment.

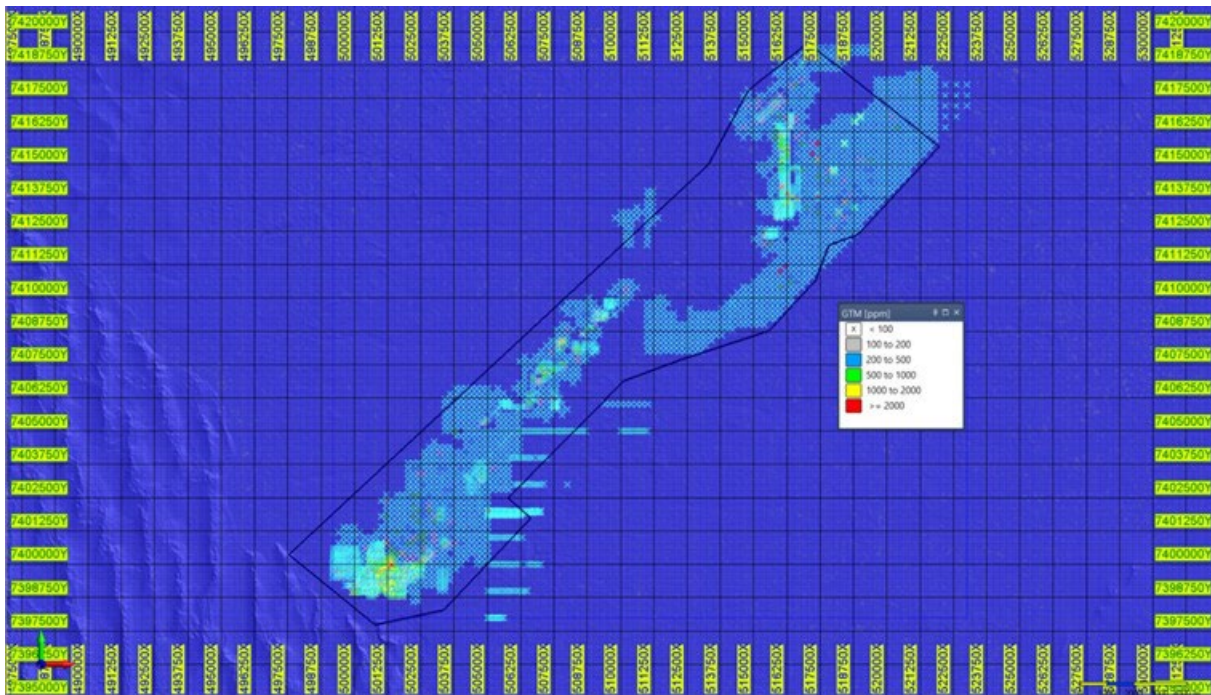
Beneath the fluvial sediments is a weathered basement topography, which occasionally rises high enough to form outliers exposed above the valley sediments. As the basement rocks alternate between softer and harder lithologies, the valley width changes from 14km down to 2km.

The fluvial sedimentary sequence at the Aussinanis deposit is up to 20m thick and comprises clasts of angular to rounded basement debris in alternating bands of conglomerate, grit, sand, clay-grit and clay. These sediments have undergone variable cementation by calcium carbonate (CaCO<sub>3</sub>) known as calcrete that precipitated from groundwater moving down the valley. This CaCO<sub>3</sub> can comprise up to 15% of the total rock mass.

Uranium mineralisation has been defined along >29km of the generally northeast - southwest trending palaeovalley and is reasonably continuous along the entirety of the valley system. The mineralisation is closed off to the southwest by the Kuiseb River and is potentially open to the northeast. Figure 2 outlines the uranium mineralisation within MDRL3498 over a background image of airborne total count radiometrics. Figure 3 shows the drill hole and deposit locations of the Aussinanis Project.



**Figure 2:** Aussinanis Project area showing the extent of U<sub>3</sub>O<sub>8</sub> mineralisation. (Background is total count, airborne radiometric data).



**Figure 3:** Aussinanis Project area showing drill hole locations with collars colored by grade thickness (GTM,ppm).

Aussinanis mineralisation has been tested by 3,999 vertical RC holes drilled by Reptile between March and November 2008. Drill hole depths range from 4 to 31m and average 11m, for a total of 44,071m of drilling. The drilling extends over a range of 23.8km east-west by 21.4km north-south and covers approximately 29km of variably mineralised strike length.

The majority of the resource area has been drilled by approximately 200 by 200m spacing, including areas of broader sampling and areas of irregularly spaced infill drilling. A relatively small area around 2km east-west by 1.5km north-south in the south-west of the deposit has been drilled at a 50 by 50m spaced grid.

96% of drill hole collars have been surveyed by differential GPS. Some 4% of total drill holes were surveyed using handheld GPS. The handheld GPS surveyed holes generally lie in peripheral areas and reliability of these surveys does not significantly affect confidence in the estimated resources.

All RC holes were drilled in 2008, with an additional 5 auger holes being drilled at an uncertain date. Details of drilled metres are shown in the table below:

**Table 3:** Drill statistics for Aussinanis

	2008		No date		Total	
	Holes	Metres	Holes	Metres	Holes	Metres
RC total	3,999	44,071			3,999	44,071
Auger total			5	6	5	6
RC for Resource estimation	3,922	42,956				42,956

All boreholes were geologically logged. At the drill site, samples were analysed for colour, moisture, weight, and HCl reaction. Additionally, all samples were scanned for total gamma count using a RadEye PRD scintillometer. The sensitivity of the RadEye was tested on a concrete calibration pad. After samples were split through a riffle-splitter, RC drill chips for lithological logging were obtained by sieving the reject sample. The lithological logging included the description of grain-size, sorting, mineralogy and the definition of a lithological code. The mineralised bulk samples were disposed of at the nearby Langer Heinrich mine, with

unmineralised samples being returned down the drill hole prior to rehabilitation. The drill chips are stored at the RUN sample storage area close to Swakopmund.

Gamma logging results are recorded for each of the drill holes. 90% of drill holes were logged within the drill string (in-rod) with approximately 10% being logged in an open hole. Logging results are available for approximately 93% of the drilling.

**Table 4: Radiometric Logging Coverage at Aussinanis**

Logging Type	Number of holes	Proportion of holes	Drill Metres	Metres probed	Proportion probed
In rod	3,519	90%	38,582	36,124	94%
Open hole	403	10%	4,374	4,003	92%
<b>Total</b>	<b>3,922</b>	<b>100%</b>	<b>42,956</b>	<b>40,128</b>	<b>93%</b>

A total of 6,955 samples were analysed using the loose powder XRF method at Reptile's Swakopmund laboratory that existed at that time. Repeat assays, undertaken by 3<sup>rd</sup> party laboratories, indicated a positive bias for earlier Reptile XRF results. For mineral resource estimation work Reptile specified an adjustment for pre-April 2009 samples as documented in Table 5; these factors have not been reviewed by the author.

**Table 5: Adjustments to XRF grades**

Date	Assay value	Factor
Pre-24th April 2009	U <sub>3</sub> O <sub>8</sub> <= 300 ppm	No factoring
	U <sub>3</sub> O <sub>8</sub> >= 300 ppm	Divide by 1.226
Post 24 <sup>th</sup> April 2009		No factoring

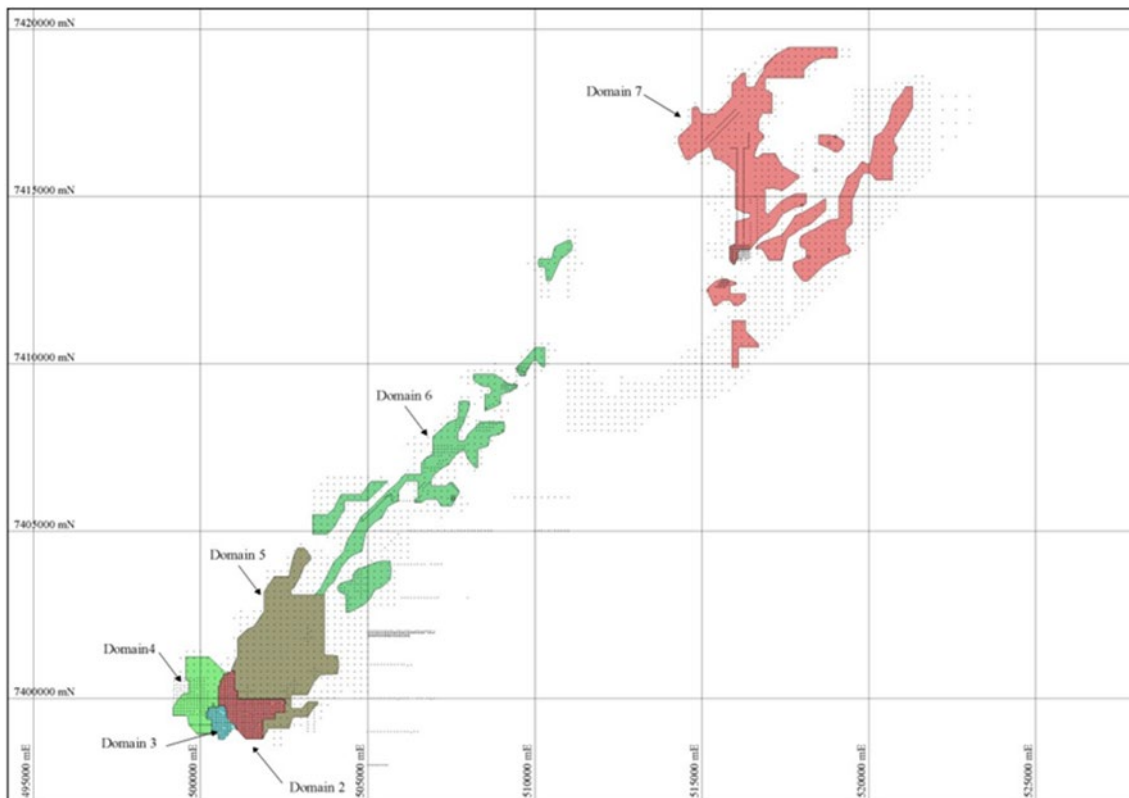
The Aussinanis mineralised zone is subdivided into six domains on the basis of data spacing and grade tenor. The mineralised zones are designated as domains 2 to 7, with domain 1 representing background. Domains 2 and 3 represent the more closely sampled mineralisation in the southeast of the Project area, with consistent 50 by 50m sampling and generally exhibit higher average grades than the other, more broadly sampled domains.

The background, generally poorly mineralised domain includes some rare isolated deeper mineralised intercepts below the main mineralised horizon. The mineralisation represented by these intercepts may be undervalued by the current estimates and will require additional drilling to be reliably estimated.

Table 6 summarises drill hole intersections with the mineralised domains. This table demonstrates that the closely sampled domains (2 and 3) tend to be thicker than the other mineralised domains. Figure 4 shows the mineralised domains relative to drill hole collars.

**Table 6:** Drill Hole Intercepts with Mineralised Domains

Domain	Number	Depth to mineralisation (m)		Depth to Base (m)	Thickness (m)		
		Min	Average		Min	Average	Max
2	756	0.0	2.2	19.0	1.0	5.6	19.0
3	194	0.0	0.6	13.0	1.0	4.2	13.0
<b>Subtotal 2&amp;3</b>	<b>950</b>	<b>0.0</b>	<b>1.9</b>	<b>17.8</b>	<b>1.0</b>	<b>5.3</b>	<b>19.0</b>
4	146	0.0	0.6	13.0	2.0	3.5	13.0
5	245	0.0	1.7	17.0	1.0	3.5	16.0
6	359	0.0	1.1	11.0	2.0	3.1	9.0
7	616	0.0	2.2	17.0	1.0	4.2	15.0
<b>Total</b>	<b>2,316</b>	<b>0.0</b>	<b>1.7</b>	<b>16.1</b>	<b>1.0</b>	<b>4.4</b>	<b>19.0</b>



**Figure 4:** Mineralised Domains relative to drill hole collars.

### Mineral Resource Estimate Summary

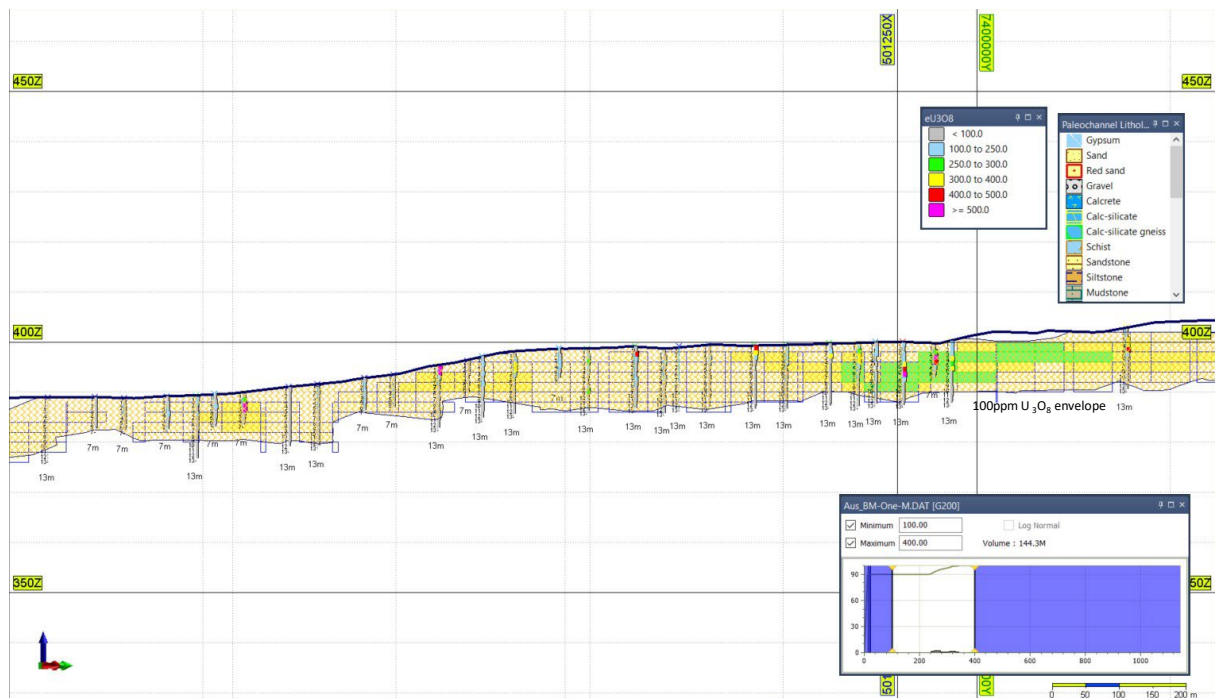
Resources were estimated by Multiple Indicator Kriging (**MIK**), with block support correction reflecting open cut mining selectivity. The estimation methodology is comparable to similar deposits like Deep Yellow's Tumas Project and the Langer Heinrich Uranium Mine resource estimates which were reported by Paladin Energy Ltd. The estimates include 2 scenarios: a one and two metre mining bench heights assuming 5 by 5m mining selectivity, with 5 by 5m grade control sampling. Estimates for mineralisation were tested by the consistency derived from the 50 by 50m spaced drilling; which are classified as Indicated; all other estimates are classified as Inferred.

The estimates assume a bulk density of 2.1 tonnes per cubic metre.

The estimates are based on radiometric logging and factored XRF results.



Figure 5 below presenting a long section through the southern part of the ore body.



**Figure 5:** Long Section showing the shallow tabular ore body and greater than 100ppm U<sub>3</sub>O<sub>8</sub> ore zone over drilling and ore blocks.

### Mineral Resource Reporting

Table 7 presents the historical MRE for one metre mining benches at both 100ppm and 150ppm cut-off grades (Abbot, J. 2010).

**Table 7:** Historical Mineral Resources Tabulation (\*metal figures are rounded)

Deposit	Category	Cut-off ppm U <sub>3</sub> O <sub>8</sub>	Tonnes Mt	Grade		Metal Mlb
				U <sub>3</sub> O <sub>8</sub> ppm	Metal t <sup>(*)</sup>	
Aussinanis	Indicated	150	5.6	222	1,200	2.7
	Inferred	150	28.6	244	7,000	15.3
	<b>Total</b>	<b>150</b>	<b>34.2</b>	<b>240</b>	<b>8,200</b>	<b>18</b>
	Indicated	100	12.3	168	2,000	4.5
	Inferred	100	70.3	171	11,700	26.5
	<b>Total</b>	<b>100</b>	<b>82.6</b>	<b>171</b>	<b>13,700</b>	<b>31.0</b>

Minor differences in reporting of inferred materials have been noticed by the author in historical reports, which seem to originate in variations of projections used for topography at the time. For example, at a 100ppm U<sub>3</sub>O<sub>8</sub> cut-off, inferred material reports range from between 70.3Mt at 171ppm U<sub>3</sub>O<sub>8</sub> to 68.8Mt at 169ppm U<sub>3</sub>O<sub>8</sub>. Or, at a 150ppm U<sub>3</sub>O<sub>8</sub> cut-off this ranges from 28.6Mt at 244ppm U<sub>3</sub>O<sub>8</sub> to 27.0Mt at 245ppm U<sub>3</sub>O<sub>8</sub>. Deep Yellow's MRE analysis indicates 29.0Mt at 240ppm U<sub>3</sub>O<sub>8</sub> at a cut-off of 150ppm U<sub>3</sub>O<sub>8</sub>.

It was not possible to explain the exact reason for the minor differences observed and they are considered not to be material.



The unchanged historical triangulated topography was used to interrogate the historically unchanged block model. The software used for interrogating the historical model is Micromine; Table 8 showing the results for reporting at 2 different cut-offs.

**Table 8:** Aussinanis JORC (2012) Mineral Resources. (\* metal figures are rounded]

Deposit	Category	Cut-off	Tonnes Mt	Grade	Metal t <sup>(*)</sup>	Metal Mlb
		ppm U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub> ppm		
Aussinanis	Indicated	100	12.3	168	2,000	4.5
	Inferred	100	62.1	172	10,700	23.6
	<b>Total</b>	<b>100</b>	<b>74.4</b>	<b>171</b>	<b>12,700</b>	<b>28.1</b>
	Indicated	150	5.6	222	1,200	2.7
	Inferred	150	25.3	247	6,200	13.8
<b>Total</b>	<b>150</b>	<b>30.9</b>	<b>242</b>	<b>7,400</b>	<b>16.5</b>	

The updated JORC (2012) mineral resource for the one metre mining benches, at a cut-off of 100ppm U<sub>3</sub>O<sub>8</sub>, contains 74Mt of ore at 171ppm U<sub>3</sub>O<sub>8</sub>, which is translating into an Indicated and Inferred in-situ mineral resource of 28.1Mlb U<sub>3</sub>O<sub>8</sub>.

#### ASX ADDITIONAL INFORMATION

The following is a summary of additional material information used to estimate the Mineral Resources as required by Listing Rule 5.8.1 and JORC (2012) Code Reporting Guidelines.

#### Deposit Parameters

Aussinanis is a carnotite hosted uranium deposit within carbonated palaeochannel sediment. The palaeochannel sediments overlie a basement of schist, granite and quartzite of the Cryogenian to Silurian Damaran or Pan-African orogenic belt and consist of between 10m to 15m of gravel and carbonate-cemented gravel (sometimes nodular), overlain with a variably occurring gypsum-cemented sand and gravel layer between 1m to 3m thick.

Aussinanis is a calcrete related uranium deposit associated with valley-fill sediments occurring within an extensive Tertiary palaeodrainage system. The calcretes are limestone deposits formed as chemical precipitates developed under arid to semi-arid climate conditions. At Aussinanis calcretisation has affected a complex sequence of fluvially derived conglomerates, grits, sandstone, silts and clay deposits worked in a braided stream depositional environment.

Beneath the sediments is a weathered basement topography, which occasionally rises high enough to form outliers exposed above the valley sediments. As the basement rocks alternate between erosional resistant and softer lithologies, the valley width changes from 14km down to 2km wide.

The fluvial sedimentary sequence comprising the Aussinanis deposit is up to 20m thick and comprises clasts of angular to rounded basement debris in alternating bands of conglomerate, grit, sand, clay-grit and clay. These sediments have undergone variable cementation by calcium carbonate (CaCO<sub>3</sub>) known as calcrete that precipitated from groundwater moving down the valley. This CaCO<sub>3</sub> can comprise up to 15% of the total rock mass.

Uranium mineralisation has been defined along >29km of the generally northeast - southwest trending palaeovalley and is reasonably continuous along the entirety of the valley system. The mineralisation is closed off to the southwest by the Kuiseb River and is potentially open to the northeast where it exits MDRL3498.

## Methodology

The historical estimate incorporates block support corrections reflecting open cut mining selectivity at 2 different scenarios.

- Scenario One: assumes mining selectivity of 5.0m by 5.0m by 2.0m, with grade control sampling on a 5.0m by 5.0m by 1.0m pattern.
- Scenario Two: assumes mining selectivity of 5.0m by 5.0m by 1.0m, with grade control sampling on a 5.0m by 5.0m by 1.0m pattern.

Variance adjustments were applied by the direct log-normal method using variance adjustment factors shown in Table 9. The factors were derived from the U<sub>3</sub>O<sub>8</sub> value variograms as shown in Table 10 and the mining selectivity assumptions described above. The reliability of these factors will improve as additional closer spaced sampling becomes available.

**Table 9: Variance Adjustment Factors**

Bench Height	Block to panel	Information effect	Total
Two metres	0.294	0.740	0.218
One metres	0.495	0.860	0.426

**Table 10: Variogram Models**

%ile	Nugget Co	C1 (Exponential)		C2 (Spherical)		C3 (Spherical)	
		Sill	Range (x,y,z)	Sill	Range (x,y,z)	Sill	Range (x,y,z)
10%	0.18	0.65	20.5,25.5,2.5	0.08	22.5,29.5,3	0.09	131,132,13
20%	0.18	0.71	18,9.5,2.5	0.04	28,24.5,3	0.07	204,286,26
30%	0.16	0.69	25.5,12,2.5	0.06	41.5,18,4.5	0.09	426,322,42
40%	0.15	0.64	5.5,3.5,2.5	0.11	11.5,4.5,3.5	0.10	469,243,46
50%	0.15	0.61	17.5,8.5,2.5	0.15	24,35.5,3.5	0.09	348,342,34
60%	0.16	0.51	7,17.5,2.5	0.21	10.5,37,3.5	0.12	460,342,89
70%	0.17	0.53	26,19.5,2.5	0.16	34,31.5,3.5	0.14	271,271,27
75%	0.18	0.52	7.5,7.5,2.5	0.09	31,18,3.0	0.20	85,81,8.0
80%	0.19	0.49	10,9,2.5	0.09	10.5,29,3.0	0.22	85,85,8.0
85%	0.20	0.56	26,25.5,2.5	0.04	28,27,3.5	0.20	103,102,10
90%	0.21	0.47	18.5,4,2.5	0.16	23.5,35.5,3.5	0.16	93,93,9.0
95%	0.22	0.49	17,13.5,2.5	0.14	23.5,20,3.0	0.15	85,80,8.0
97%	0.22	0.50	10.5,4,2.5	0.14	21.5,12.5,3	0.14	115,111,11
99%	0.43	0.47	3.5,10,2.0	0.08	13,21.5,2.7	0.02	34,29,3.0
U <sub>3</sub> O <sub>8</sub>	0.10	0.19	11,20,2.6	0.55	78,41,3.7	0.16	380,290,4.0

## Conclusions

There is sufficient quantity and quality of information available, in terms of geological understanding and drilling data, to reasonably estimate the Aussinanis mineral resources as detailed in this announcement. The reliability of grades derived from RUN's drilling and downhole gamma logging can be assessed by comparing them to available assay data. In general, the assays available are backed up by the used of incorporated certified standards and duplicates. Where assays were performed at the RUN owned and operated laboratory in Swakopmund these are validated by comparison to external independent assay laboratories. The company has sufficiently validated the MREs to allow Mr. Hirsch to take the role of competent person for the updated reporting of these mineral resources.

In addition to several site visits undertaken by the author to the Project area over the period from 2019 to 2023, the author has relied on reports completed by independent external consultants, internal documents and reports by Deep Yellow Limited and its Namibian subsidiary company Reptile Mineral Resources and Exploration (Pty) Ltd.

Information leading to the MRE has not been updated since and as such complies with JORC (2012) on the basis that the information has not materially changed since it was last reported.



**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.*

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## About Deep Yellow Limited

Deep Yellow is progressing its development through a combination of advancing its existing assets and expanding its opportunities for diversified growth through sector consolidation. With the merger and acquisition of Vimy Resources, the expanded Deep Yellow now has two advanced uranium projects located both in Namibia and Australia with the potential for production starting from the mid-2020s. In addition, with its expanded exploration portfolio, opportunity also exists for substantial increase of its uranium resource base aimed at building a significant global, geographically diversified project pipeline.

## Competent Person's Statement

The information in this announcement as it relates to exploration results and Mineral Resource estimates was compiled by Martin Hirsch, a Competent Person who is a Member of the IOM3, the UK professional science and engineering Institute of Materials, Minerals and Mining.

Mr Hirsch is currently the Manager Resources & Pre-Development for Reptile Mineral Resources and Exploration (Pty) Ltd (**RMR**) and has sufficient experience which is 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 (JORC (2012) Code). Mr Hirsch consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears. M Hirsch holds shares in the Company.

*Where MRE results previously reported by the Company are noted reference is made to several prior ASX releases including the following: 30 January 2013, 4 February 2013, 3 February 2013, 19 November 2012, 12 October 2011, 30 and 6 November 2011, 12 December 2011, 30 May 2010, 27 July 2010, 29 September 2010 and 28 October 2010.*

*It is noted that this information was first reported under JORC 2004 and has now been updated since to comply with JORC 2012 on the basis that all relevant data and mineral resource models have been validated by Mr M. Hirsch and nothing has materially changed since it was last reported.*

## APPENDIX 1: DYL Namibian Mineral Resource Summary

### Mineral Resources

Deposit	Category	Cut-off (ppm U <sub>3</sub> O <sub>8</sub> )	Tonnes (M)	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (t)	U <sub>3</sub> O <sub>8</sub> (Mib)	Resource Categories (Mib U <sub>3</sub> O <sub>8</sub> )		
							Measured	Indicated	Inferred
<b>BASEMENT MINERALISATION</b>									
<b>Omahola Project - JORC 2012<sup>1</sup></b>									
INCA Deposit ♦	Indicated	100	21.4	260	5,600	12.3	-	12.3	-
INCA Deposit ♦	Inferred	100	15.2	290	4,400	9.7	-	-	9.7
Ongolo Deposit #	Measured	100	47.7	187	8,900	19.7	19.7	-	-
Ongolo Deposit #	Indicated	100	85.4	168	14,300	31.7	-	31.7	-
Ongolo Deposit #	Inferred	100	94.0	175	16,400	36.3	-	-	36.3
MS7 Deposit #	Measured	100	18.6	220	4,100	9.1	9.1	-	-
MS7 Deposit #	Indicated	100	7.2	184	1,300	2.9	-	2.9	-
MS7 Deposit #	Inferred	100	8.7	190	1,600	3.7	-	-	3.7
<b>Omahola Project Sub-Total</b>			<b>298.2</b>	<b>190</b>	<b>56,600</b>	<b>125.4</b>	<b>28.8</b>	<b>46.9</b>	<b>49.7</b>
<b>CALCRETE MINERALISATION Tumas 3 Deposit - JORC 2012<sup>2</sup></b>									
Tumas 3 Deposits ♦	Indicated	100	78.0	320	24,900	54.9	-	54.9	-
	Inferred	100	10.4	219	2,265	5.0	-	-	5.0
<b>Tumas 3 Deposits Total</b>			<b>88.4</b>	<b>307</b>	<b>27,165</b>	<b>59.9</b>			
<b>Tumas 1, 1E &amp; 2 Project – JORC 2012<sup>3</sup></b>									
Tumas 1 & 2 Deposit ♦	Indicated	100	90.4	220	19,860	43.8	-	43.8	-
Tumas 1 & 2 Deposit ♦	Inferred	100	21.8	206	4,692	10.3	-	-	10.3
<b>Tumas 1, 1E &amp; 2 Deposits Total</b>			<b>112.2</b>	<b>219</b>	<b>24,552</b>	<b>54.1</b>			
<b>Sub-Total of Tumas 1, 2 and 3</b>			<b>200.6</b>	<b>258</b>	<b>51,717</b>	<b>114.0</b>			
<b>Tubas Red Sand Project - JORC 2012<sup>4</sup></b>									
Tubas Sand Deposit #	Indicated	100	10.0	187	1,900	4.1	-	4.1	-
Tubas Sand Deposit #	Inferred	100	24.0	163	3,900	8.6	-	-	8.6
<b>Tubas Red Sand Project Total</b>			<b>34.0</b>	<b>171</b>	<b>5,800</b>	<b>12.7</b>			
<b>Tubas Calcrete Resource - JORC 2004<sup>5</sup></b>									
Tubas Calcrete Deposit	Inferred	100	7.4	374	2,767	6.1	-	-	6.1
<b>Tubas Calcrete Total</b>			<b>7.4</b>	<b>374</b>	<b>2,767</b>	<b>6.1</b>			
<b>Aussinanis Project - JORC 2012- DYL 85%<sup>6</sup></b>									
Aussinanis Deposit ♦	Indicated	100	12.3	168	2,000	4.5	-	4.5	-
Aussinanis Deposit ♦	Inferred	100	62.1	172	10,700	23.6	-	-	23.6
<b>Aussinanis Project Total</b>			<b>74.4</b>	<b>171</b>	<b>12,700</b>	<b>28.1</b>			
<b>Calcrete Projects Sub-Total</b>			<b>316.4</b>	<b>231</b>	<b>72,984</b>	<b>160.9</b>	<b>-</b>	<b>107.3</b>	<b>53.6</b>
<b>GRAND TOTAL NAMIBIAN RESOURCES</b>			<b>614.6</b>	<b>211</b>	<b>129,584</b>	<b>286.3</b>	<b>28.8</b>	<b>154.2</b>	<b>103.3</b>

**Notes:** Figures have been rounded and totals may reflect small rounding errors.

XRF chemical analysis unless annotated otherwise.

♦ eU<sub>3</sub>O<sub>8</sub> - equivalent uranium grade as determined by downhole gamma logging.

# Combined XRF Fusion Chemical Assays and eU<sub>3</sub>O<sub>8</sub> values.

Where eU<sub>3</sub>O<sub>8</sub> values are reported it relates to values attained from radiometrically logging boreholes.

Gamma probes were calibrated at Pelindaba, South Africa in 2007. Recent calibrations were carried out at the Langer Heinrich Mine calibration facility in July 2018 and September 2019.

During drilling, probes are checked daily against standard source.

1 ASX Release 04 Nov 2021 'Omahola Basement Project Resource Upgrade to JORC 2012'

2 ASX Release 29 Jul 2021 'Drilling at Tumas 3 Delivers Significant Resource Upgrade'

3 ASX Release 02 Sep 2021 'Tumas Delivers Impressive Indicated Mineral Resource'

4 ASX Release 24 Mar 2014 'Tubas Sands Project – Resource Update'

5 ASX Release 28 Feb 2012 'TRS Project Resources Increased'

6 ASX Release 31 March 2023 'Aussinanis Project Resource Upgrade to JORC (2012)'



## APENDIX 2: JORC (2012) Table 1

### JORC Code, 2012 Edition – Table 1 Report

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>U<sub>3</sub>O<sub>8</sub> values are derived from both down-hole total gamma counting (eU<sub>3</sub>O<sub>8</sub>) and chemical assay data.</li> </ul> <p><b>Total gamma eU<sub>3</sub>O<sub>8</sub></b></p> <ul style="list-style-type: none"> <li>33mm Auslog total gamma probes were used and operated by company personnel.</li> <li>Gamma probes T030, T161, T162, T164 and T165 were calibrated at Pelindaba, South Africa, in May 2007 (T030) and in December 2007 (T161, T162, T164, T165).</li> <li>During the drilling, sensitivity checks were conducted by periodic re-logging of a test hole (<b>Hole-ALAD1480</b>) to confirm operation.</li> <li>During the drilling in 2008, probes were checked daily against a standard source. The majority of probing was done with probe T162 (81%) following by T161 (~10%), T164 &amp; T164 &amp; T030 (~9%)</li> <li>Gamma measurements were taken at 5cm intervals at a logging speed of approximately 2m per minute.</li> <li>Probing was done immediately after drilling mainly through the drill rods but in some cases in the open holes. Rod factors were established to compensate for the reduced gamma counts when logging was done through the rods. No correction for water was done.</li> <li>The gamma measurements were recorded in counts per second (c/s) and were converted to equivalent eU<sub>3</sub>O<sub>8</sub> values over 1m intervals using the probe-</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>specific K-factor. An additional rod factor was used when in-rod probing commenced. No compensation for water was done</p> <ul style="list-style-type: none"> <li>• Disequilibrium studies on 22 samples from the vicinity at Tumas by ANSTO Minerals in 2008 confirmed that the <sup>238</sup>U decay chains of the wider Aussinanis and Tumas deposit are within an analytical error of ± 10%, in secular equilibrium.</li> </ul> <p><b>Chemical assay data</b></p> <ul style="list-style-type: none"> <li>• Geochemical samples were derived from Reverse Circulation (RC) drilling at intervals of 1m. Samples were spilt at the drill site using either a riffle or cone splitter to obtain a 1 to 4kg sample from which 90g was pulverized to produce a subset for XRF-analysis.</li> <li>• A total of 6,955 samples have been analysed for uranium.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling was used throughout the Aussinanis Project.</li> <li>• All holes were drilled vertically, and intersections measured present true thicknesses.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill chip recoveries were good, in excess of 90%.</li> <li>• Drill chip recoveries were assessed by weighing 1 m drill chip samples at the drill site. Weights were recorded in sample tag books.</li> <li>• Sample loss was minimised by placing the sample bags directly underneath the cyclone/splitter</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All drill holes were geologically logged.</li> <li>• The logging was qualitative in nature. The lithology type was determined for all samples. Rock boards were utilised in the fields.</li> <li>• Other parameters routinely logged include colour, colour intensity, weathering, oxidation, grain size, hardness, carbonate (CaCO<sub>3</sub>) content, sample condition (wet, dry) and total gamma count (by Rad-eye monitor).</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Lithology codes were used for the different host-rocks, which are from top to bottom: scree, sandy gypcrete or non-calcareous and calcareous sand, gravel, massive calcrete and metamorphosed bedrock.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>Two types of sample splitters were used: 1) 3 Tier riffle splitter mounted on the rig giving an 87.5% (reject) and a 12.5% sample (assay sample) and a portable 2-tier (75%/25%) splitter to treat any oversize assay sample. All sampling was dry.</li> <li>The above sub-sampling techniques are common industry practice and appropriate.</li> <li>Sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The analytical method employed for the 2008 drill program was XRF, loose powder.</li> <li>Downhole gamma tools were used as explained under 'Sampling techniques. This is the principal evaluating technique.</li> <li>DYL monitored the performance of its XRF instrument through the analysis of standards and replicates. The standards (certified reference materials) were assayed and then used to monitor instrument accuracy and consistency.</li> <li>AMIS standards P0091, was explicitly used in a ratio of 1: 24.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Paper logs were recorded in the field; sample tag books than filed at the RUN's office in Swakopmund. The field drill data of those logs and tag books (lithology, sample specifications etc.) is captured by designated personnel and after passing validation imported into a geological database.</li> <li>Data was uploaded into a SQL database system using a hardcoded validation upload protocol.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Equivalent eU<sub>3</sub>O<sub>8</sub> values are calculated from raw gamma files by applying calibration factors and casing factors where applicable.</li> <li>• The adjustment factors are stored in the database.</li> <li>• Equivalent U<sub>3</sub>O<sub>8</sub> data is composited to 1m intervals.</li> <li>• The ratio of eU<sub>3</sub>O<sub>8</sub> vs assayed U<sub>3</sub>O<sub>8</sub> for matching composites was used to quantify the statistical error. It was found that they all lie within statistically acceptable margins.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• The collars were surveyed by in-house operators using a differential GPS.</li> <li>• All drill holes are vertical and shallow; therefore, no down-hole surveying was required.</li> <li>• The grid system is World Geodetic System (WGS) 1984, Zone 33.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• The data spacing and distribution is optimised along channel direction. The area has been drilled by approximately 200 by 200m spaced drilling, including areas of broader sampling, and areas of irregularly spaced infill drilling. A relatively small area around 2km east-west by 1.5km north-south in the south-west of the deposit has been drilled at a 50 by 50-meter spaced grid.</li> <li>• The drill pattern is considered sufficient to establish a Mineral Resource.</li> <li>• The total gamma count data, which is recorded at 5cm intervals, is composited to 1m composites down hole and correlates to the 1m geochemical sampling.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Uranium mineralisation is strata bound and distributed in a continuous horizontal layer. Holes were drilled vertically, with intercepts representing the true width.</li> <li>• All holes were sampled down-hole from surface. Geochemical samples were collected at 1m intervals. Total-gamma count data was collected at 5cm intervals.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>1m RC drill chip samples were prepared at the drill site. The samples were stored in plastic bags. Sample tags were placed inside the bags. The sample bags were placed into plastic crates and transported from the drill site to storage premises in Swakopmund by company personnel.</li> <li>Upon completion of the assay work the remainder of the sample was packed back into crates and stored in designated containers at an off-site sample storage yard outside Swakopmund.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>D. M. Barrett (PhD MAIG) conducted an audit of gross count gamma logging procedures and log reduction methods used by Deep Yellow Limited.</li> <li>He concludes his audit commenting: “...., it is my belief that the equivalent uranium grades reported are reliable, gamma values lie within a few percent to the true grade”.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The work to which the Exploration Results relate was undertaken on exclusive prospecting grant EPL3498, (Aussinanis). The license was granted to Reptile Uranium Namibia (RUN) on 15 June 2007. EPL3498 was converted into a Mineral Deposit Retention license (MDRL3498) on the 6 January 2020.</li> <li>The MDRL is in good standing and is valid until 5 January 2025.</li> <li>The MDRL is located within the Namib-Naukluft National Park in Namibia.</li> <li>There are no known impediments to the Project beyond Namibia’s standard permitting procedures.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Prior to RUN's ownership of the EPL, some work was conducted by Aquitaine and General Mining between the mid 1970's and the early 1980's.</li> <li>Very preliminary resources were estimated by these companies: Aussinanis was estimated by Aquitaine at 20 million tonnes at 275 g/t U<sub>3</sub>O<sub>8</sub> while General Mining estimated the area to contain 4 million tonnes at a grade of 240 g/t U<sub>3</sub>O<sub>8</sub>. No details supporting these estimates have been found and neither were lodged with the Ministry of Mines and Energy, and both have limited analytical determinations.</li> <li>There are no digital records available from this period.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Uranium mineralisation occurs as secondary carnotite enrichment in variably calcretised palaeochannel and sheetwash sediments and associated weathered bedrock within a northeast-southwest trending zone approximately 29km in length. The mineralisation commonly outcrops but is generally overlain by an average thickness 1.7m of poorly mineralised material. Mineralised domain thickness ranges from 1 to 19m and averages 4.4m.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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:             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar.</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.</li> <li>dip and azimuth of the hole.</li> <li>down hole length and interception depth.</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Aussinanis mineralisation has been tested by 3,999 vertical RC holes drilled between March and November 2008.</li> <li>Drill hole depths range from 4 to 31m and average 11m for a total of 44,071m of drilling.</li> <li>3,922 holes drilled over 42,956m were used for modelling and mineral resource estimation.</li> <li>The drilling extends over a range of 23.8km east-west by 21.4km north-south and covers approximately 29km of variably mineralised strike length</li> <li>The majority of the mineral resource area has been sampled by approximately 200 by 200m spaced drilling, however the data coverage is variable and includes areas of significantly broader sampling, and isolated areas of irregularly spaced infill drilling. A relatively small area of around 2km east-west by 1.5km north-south in the south west of the has been tested by consistently 50 by 50m spaced drilling.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>5cm gamma intervals were composited to 1m intervals.</li> <li>1m composites of eU<sub>3</sub>O<sub>8</sub> were used for the estimate.</li> <li>No grade truncations were applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>All mineralisation at Aussinanis is considered to be horizontally distributed and as such all sample intercepts are taken as the true width of the mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All relevant intercepts were included within the text and appendices of previous releases.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive reporting, including previous announcements of Exploration Results released to the ASX on 15 April 2008, titled "Namibian Exploration And Drilling Update" , 30 April 2008 titled 'Quarterly Report for the period ending 31 March 2008", 20 May 2008 titled "Exploration update", 22 July 2008 titled "Exploration update 1 – 15 July 2008", 21 August 2008 titled "Australian and Namibian Exploration update", and 22 October 2008 titled "Quarterly Report for the period ending 30 September 2008" covering the Aussinanis project.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Limited helicopter supported ground survey follow-up was done on targets generated by the Airborne radiometrics and magnetics that involved a total count radiometric survey on a 50m grid that covered the target area.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>In July 2008 a heli-borne AeroTEM survey was completed over the deposit and wider area which outlined the channel system and was used to define locations for some follow-up drilling completed that year.</li> <li>Gamma logging results are available for each of the Aussinanis drill holes. Although some holes were not logged to full depth, logging results are available for 93% of the drilling. Of the majority of logged holes 90% were logged within the drill rod with 10% being logged in open hole for rod factor calculations.</li> <li>Deep Yellow used Auslog probe T162 for over 80% of total probing. Probes T030, T161, T164 and T165 were used periodically and mostly at the peripherals of the deposit; these are accounting for less than 10% of total probing effort.</li> <li>The probes were subject to regular calibrations.</li> <li>Selected one metre samples from the Aussinanis drilling were analysed by Reptile at their Swakopmund office using the loose powder XRF method. As part of the operation of the RUN laboratory samples were routinely sent to Setpoint in Johannesburg for check analysis.</li> <li>Bulk density, references are made to adjacent calcrete deposits at average bulk densities of 2.1 g/cm<sup>3</sup> –the author considers this to be conservative.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>MDRL3498 has been fully explored. No additions to delineated resources are expected to materialise with further drilling, inside or outside of the currently defined envelope. The tenement is perceived to have no potential for additional resources.</li> </ul>



## 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
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>A set of SOPs (Standard Operating Procedures) were defined that safeguard data integrity which covers the following aspects:               <ul style="list-style-type: none"> <li>Capturing of all exploration data; geology and probing.</li> <li>QA/QC of all drilling, geophysical and laboratory data.</li> <li>Data storage (database management), security and back-up.</li> </ul> </li> <li>Deep Yellow utilise an SQL Server based database provided by external consultants and monitored by professional inhouse staff. QA/QC assessments and reporting including statistical repeat analyses utilised Micromine (MM) software.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>During the drilling programs regular site visits were conducted by the Company's Competent Person who signed off on all exploration data.</li> <li>The Company's current Competent Person has undertaken visits to the area in June 2022. and early October 2022.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Confidence in the geological interpretation and modelling of the deposit is very high. This type of geology is well known and readily recognised in the RC drill chips.</li> <li>The factors affecting grade distribution are morphology and bedrock profile, shallow bedrock "highs" forming areas of mineralisation traps manifesting in a partly spotty distribution of the mineralisation.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The drilled mineralisation at Aussinanis has a total strike length of approximately 29km in length.</li> <li>The mineralisation commonly outcrops and is only overlain by an average thickness 1.7m of poorly mineralised material. The mineralised domain thickness ranges from 1 to 19m and averages approximately 4m. The</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>mineralisation shows the best continuity in the southern part of Aussinanis. In other areas, the mineralisation is mostly patchy.</p> <ul style="list-style-type: none"> <li>The present estimates are based on grade thickness/grade/lithology domains controlling the interpolations into block estimates. Block sizes used are 50m East x 50m North x 3m elevation.</li> <li>Estimation of block values used Multiple Indicator Kriging (MIK); no grade capping was applied. Search ranges remained within variogram parameters at ranges of 75m for 1<sup>st</sup> pass and 112m for second and third pass, 150m for the fourth pass and 200m for the fifth search pass.</li> <li>This strategy assigned only estimates for mineralisation with consistent 50 by 50m drilling to the Indicated category.</li> <li>Block validation used qualitative drill hole displays over block estimates. The block estimates throughout correlate well with composited eU<sub>3</sub>O<sub>8</sub> GT (Grade-Thickness) data.</li> <li>No correction for water was made.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>A visual assessment of sample material was done during the sampling process and samples were classified as either “dry” or “wet”. The drilling program did not intersect any significant water.</li> <li>Tonnages are estimated dry.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The range of cut-off values chosen is based on “economic” criteria (100ppm U<sub>3</sub>O<sub>8</sub>, 150ppm U<sub>3</sub>O<sub>8</sub>, 200ppm U<sub>3</sub>O<sub>8</sub>, 250ppm U<sub>3</sub>O<sub>8</sub> and 300ppm U<sub>3</sub>O<sub>8</sub>).</li> <li>A reporting cut-off grade of 100ppm is considered appropriate, not the historical 150ppm, this reflecting latest estimates on processing cost,</li> </ul>

Criteria	JORC Code explanation	Commentary
		recovery and uranium pricing assumptions; used during the current Tumas feasibility study.
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Potential mining scenarios are open cast mining using one, two or three-metre high benches after stripping of unconsolidated sandy grits and scree cover.</li> <li>The deposit is at or very near the surface and strip ratios are expected to be low to very low.</li> <li>As the deposit is relatively wide compared to the overall depth, wall angles for pit design would not be expected to have any impact on the maximum pit depths achievable.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The uranium recovery curves indicate that uranium is reasonably evenly distributed in particle size fractions ranging from 2mm to 53 µm.</li> <li>Uranium is poorly liberated from the larger particle size fractions, with carnotite trending to concentrate in the finer particle size fractions.</li> <li>Finer grinding of the samples results in higher mass pull to the smaller size fractions but does not significantly increase uranium liberation from the coarser particle sizes.</li> <li>More metallurgical test work is needed to more clearly identify optimum liberation size fractions.</li> <li>The nearby Langer Heinrich uranium mine has successfully mined and processed calcrete ore of similar type for almost a decade. Although the mine is currently under care and maintenance and its calcrete uranium grade is much higher; the mineralogical characteristics nevertheless are very similar.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No scoping level Environmental Impact Assessment has been done for the Aussinanis project to date.</li> <li>With mining scenarios considering a shallow surface pit or group of pits, waste material is backfilled into mined-out areas behind the mining face. In so doing providing for progressing rehabilitation of the mined-out areas progressively throughout the life of the mine. Remaining waste rock</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>stockpiles will be shaped and contoured to blend into the surrounding environment.</p>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The bulk density for 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.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Limited bulk density information is available, and reference is made to adjacent deposits.</li> <li>• At the Langer Heinrich mine bulk density is defined at an SI of 2.35 (after mining geologically equivalent material for 10 years).</li> <li>• The current estimate for Aussinanis is using an SI of 2.1 which is considered conservative.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The MRE reflects an Indicated and Inferred Mineral Resource.</li> <li>• The current estimates are considered to be recoverable mineral resources incorporating a block support correction reflecting open cut mining selectivity. The estimates include 2 different mining scenarios:</li> <li>• Scenario One assumes mining selectivity of 5.0 by 5.0 by 2.0m with grade control sampling on a 5.0 by 5.0 by 1.0m pattern.</li> <li>• Scenario Two assumes mining selectivity of 5.0 by 5.0 by 1.0m with grade control sampling on a 5.0 by 5.0 by 1.0m pattern.</li> <li>• Variance adjustments were applied using direct log-normal adjustment factors derived from the variograms of eU<sub>3</sub>O<sub>8</sub> and the mining selectivity assumptions as described above. The reliability of these factors is expected to improve with additional closer spaced sampling becoming available.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No additional reviews were conducted beyond those carried out by the various Competent Persons over time.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The geostatistical approach applied to arrive at the current Indicated and Inferred Mineral Resource is considered sound reflecting current industry standards which are applied across the industry.</li> <li>• The presented block model is a true representation of the drilling data.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• It is the Competent Person's opinion that the classification of this Indicated and Inferred Mineral Resource can improve to Measured though additional infill drilling improving definition of grade and grade continuity.</li> </ul>