

ASX Announcement

ASX: DYL OTCQB: DYLLF

27 March 2019

#### URANIUM RESOURCES EXPANDED BY 51% AT TUMAS 1, 2 AND 3 DEPOSITS

#### HIGHLIGHTS

- Resource extension and infill drilling at Tumas 1 and 2, Tumas 1 East and Tumas 3 West has produced a combined Measured, Indicated and Inferred Mineral Resource Estimate in this area of 67.4Mlb grading 352ppm eU<sub>3</sub>O<sub>8</sub>.
  - A notable 51% resource growth achieved on these deposits while maintaining the average grade.
- Resources within the Tumas palaeochannel system now 86.2Mlb at 310 ppm eU<sub>3</sub>O<sub>8</sub> (close to three-fold increase since November 2016).
- Overall palaeochannel-related Mineral Resources have been doubled since November 2016 and are now 104.2Mlb grading 295ppm eU<sub>3</sub>O<sub>8</sub>.
- Current drilling indicates the system remains open west of Tumas 3 and drilling of Tributaries 4 and 5 at Tumas 1 East showing encouraging results delineating another zone of continuous uranium mineralisation
- 60km of uranium-fertile palaeochannels remain to be properly tested offering highly prospective targets.
  - The excellent progress to date continues to advance the project toward achieving its stated calcrete Mineral Resource target.
- Mineralisation is calcrete-associated and hosted in palaeochannels, similar to the Langer Heinrich uranium mine located 30km to the north-east.

Deep Yellow Limited (ASX: DYL) (**Deep Yellow**) is pleased to announce an updated Mineral Resource Estimate (**MRE**) for the Tumas 1, 2 and 3 deposits which, at a 200ppm  $eU_3O_8$  cut-off now contains 67.4Mlb of Measured, Indicated and Inferred Mineral Resources at 352ppm  $eU_3O_8$ . This represents an increase of 51% from the MRE announced to the ASX on 11 July 2018. These deposits occur on EPLs 3496 and 3497, held by the Deep Yellow wholly-owned subsidiary, Reptile Uranium Namibia (Pty) Ltd. The MRE was undertaken using various cut-off grades using a minimum thickness of 1m and conforms to the 2012 JORC Code of Mineral Resource Reporting.

A four-month resource extension RC drilling program was completed in December 2018, testing areas immediately east of the Tumas 1 deposit and west of Tumas 3 deposit (see Figure 1). This work also included some limited infill drilling within the Tumas 1 and 2 deposits. Drilling extended the mineralised Tumas paleochannel system in this area by 8.4km and delineated extensive uranium mineralisation therein. Of the 346 RC holes drilled for 5,599m during this campaign, 221 holes returned positive results – an overall 64% success rate.



Figure 1: Namibian locality map showing position of the Tumas Project

This addition to the Tumas palaeochannel uranium resource base has increased the Company's total surficial calcrete-related Mineral Resources over its Namibian projects by a significant 28%. Importantly, since the new exploration approach was applied from November 2016, the overall palaeochannel-hosted resources have been doubled over its Namibian projects totalling 104.2Mlb  $U_3O_8$ . This is fully vindicating the change of focus that was made which identified the extensive, regionally occurring prospective palaeochannel thus expanding the exploration target significantly.

The uranium mineralisation that has been defined to date in the Tumas palaeochannel system occurs as three distinct mineralised bodies. These are the Tumas 1 and 2 deposits, now including the Tumas 1 East tributary extensions, the Tumas 3 deposit and the Tubas Red Sands/calcrete deposits (see Figure 1). The Tumas 1, 2 and 3 deposit expansions and the associated new MRE are the subject of this announcement. The combined overall Tumas palaeochannel resource now totals 86.2Mlb eU<sub>3</sub>O<sub>8</sub> at 310ppm over EPLs 3496/97.

The high prospectivity of the palaeochannels in this region is continuing to be strongly confirmed with each drilling episode that has been undertaken. The channels occurring outside the identified deposits have only in part, been sparsely drilled by previous workers using widely spaced regional lines and large sections remain completely untested leaving much opportunity to continue increasing the uranium resource base with further drilling.

#### **Exploration Target**

As previously reported Deep Yellow has identified 125km of highly prospective palaeochannel systems of which only 65km have been adequately tested leaving much opportunity to continue increasing the uranium resource base with further drilling.

Over the last 2 years exploration and resource drilling mainly concentrated in the eastern and central parts of the Tumas palaeochannel system. This work has been highly successful producing a cumulative 86.2Mlb  $eU_3O_8$  at 310ppm associated with this Reptile Project palaeochannel. With this latest addition to its resource base the Company has notably increased its calcrete-associated uranium resources and with each drilling campaign is approaching closer to its stated total Exploration Target<sup>1</sup> of 100M to 150Mlb at a grade range of 300ppm to 500ppm for this type of uranium mineralisation. Deep Yellow's total JORC conforming uranium Mineral Resources on its Namibian projects are shown in Appendix 1.

Targeted tonnage/grades are based on results and understanding from work carried out over past 12 years in this region and the Exploration Targets that have been defined will continue to be the focus the ongoing drilling investigations.

<sup>&</sup>lt;sup>1</sup> With the additional resources as announced herein, the Company has now determined an MRE of 104Mlb of calcrete mineralisation - reaching the lower of its stated Exploration Target range of 100M to 150Mlb eU<sub>3</sub>O<sub>8</sub>. The Company however acknowledges that the potential quantity and grade of the Exploration Target is conceptual in nature. There is however significant and sufficient additional exploration information generated to give more confidence that the Exploration Target has improved the chance to achieve the stated expanded Mineral Resource objective. Additional exploration is planned; however, it is uncertain if this will result in the estimation of all the expanded Mineral Resource that has been predicted from the review and evaluation of calcrete associated mineralisation identified on the Company's tenements which commenced in the December 2017 Quarter. With the subsequent exploration and resource drilling carried out over the past two years, the Company has a greater understanding of the stratigraphy and topography of the palaeochannels which host the uranium mineralisation. This work and the resource increase that is being achieved has provided renewed confidence that further mineralisation is likely to be identified in targeted palaeochannel areas on the Company's tenements.

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#### Tumas 1, 2 and 3 Mineral Resource Estimate Summary

Exploration and infill resource drilling carried out in conjunction with geological studies in 2017 and 2018 have substantially improved the Company's understanding of the palaeochannel-associated calcrete-type targets and its uranium mineralisation. The new MRE over the Tumas 1, 2 and 3 deposits, incorporating their western and eastern extensions and including the newly discovered tributaries, is the result of the positive July to December 2018 drilling program and re-interpretation of the relevant historic drill data.

The MRE was estimated by Ordinary Kriging. Cut-off grades used for the expanded MRE included 100, 150, 200, and 250 ppm  $eU_3O_8$  and the Measured, Indicated and Inferred Mineral Resources derived from these cut-off grades indicate the mineralisation remains robust and consistent. Table 1 shows the MRE results at various cut-offs and Table 2 shows the MRE results at a 200 ppm  $eU_3O_8$  cut-off in comparison to the previous resource estimation.

The combined MRE for the extended Tumas 1, 2 and 3 deposits at a 200ppm cut-off gives a combined Measured, Indicated and Inferred Mineral Resource of 67.4Mlb at 352ppm  $eU_3O_8$  as shown in in Table 1. The 200ppm  $eU_3O_8$  cut-off has been selected as being the most appropriate for headline reporting of the resource estimations. When the Tubas Red Sands/Calcrete and the Aussinanis deposits are included, this amounts to 104.2Mlb for all the palaeochannel-associated targets.

# Table 1. Combined Tumas 1, 2 and 3 - JORC 2012 MRE - Indicated, Measured and Inferred Resources at various cut-off grades

Cut-off (ppm U <sub>3</sub> O <sub>8</sub> )	Tonnes (M)	U₃O₅ (ppm)	U <sub>3</sub> O <sub>8</sub> (MIb)
100	185.5	243	99.6
150	132.3	290	84.7
200	86.6	352	67.4
250	57.3	423	53.4

Note:Figures have been rounded and totals may reflect small rounding errors.<br/> $eU_3O_8$  - equivalent uranium grade as determined by downhole gamma logging.<br/>Gamma probes were calibrated at the Langer Heinrich uranium mine test pit.<br/>During drilling, probes were checked daily against a standard source.

Table 2.	Tumas 1, 2 and 3 - current and previous JORC 2012 MRE - Indicated, Measured and Inferred
	Resources at 200 ppm eU₃O <sub>8</sub> cut off

Tumas 1, 2 and 3 Resources			July 2018 Status			March 2019 Status		
Tumas 3 I	Deposit (2017	//18 Resource)	- JORC 201	2	Tum	as 3 Deposit		
Deposit	Category	Tonnes (M)	Grade (ppm)	U <sub>3</sub> O <sub>8</sub> MIb	Tonnes (M)	Grade (ppm)	U <sub>3</sub> O <sub>8</sub> MIb	
Tumas 3 Expanded	Inferred	37.5	377	31.2	39.7	378	33.1	
Sub Total		37.5	377	31.2	39.7	378	33.1	
	Tumas Proj	ect - JORC 2012	2		Tu	mas Project		
Tumas 1&2 Deposit	Measured	9.7	386	8.2	10.8	383	9.1	
Tumas 1&2 Deposit	Indicated	6.5	336	4.8	5.5	333	4.0	
Tumas 1&2 Deposit	Inferred	0.4	351	0.3	5.7	211	2.7	
Tumas 1 - East	Inferred	-	-	-	25	335	18.5	
Sub Total	16.6	366	13.3	47	331	34.3		
Tumas 1, 2 and 3	Total	54.1	372	44.5	86.7	352	67.4	

**Note:** Figures have been rounded and totals may reflect small rounding errors. eU<sub>3</sub>O<sub>8</sub> - equivalent uranium grade as determined by downhole gamma logging. Gamma probes were calibrated at the Langer Heinrich uranium mine test pit. During drilling, probes were checked daily against a standard source.

#### **ASX Additional Information**

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

**Deposit Parameters:** The Tumas 1, 2 and 3 uranium deposits are of the calcrete-hosted type, located within an extensive regionally-occurring mainly east-west and north/west-south/east trending palaeochannel system. The uranium mineralisation occurs in conjunction with calcium carbonate precipitations (calcrete) in sediment filled palaeovalleys. Uranium is the only economically extractable metal in this type of mineralisation although vanadium production can be considered if the price for vanadium becomes sufficiently attractive. Uranium minerals mainly include uranium vanadates. The geology of this type of mineralisation is well understood having been explored over many years. The Langer Heinrich uranium mine located 30km to the north-east exploits this type of deposit and has been mined since 2007.

The mineralisation domains used for the current extended MRE study were interpreted to capture continuous zones of mineralisation above 100ppm  $eU_3O_8$ . The mineralisation included in this study has a strike length of approximately 38km and ranges in width from 100m to 900m, extending to a depth of 40 to 50m averaging around 15m below surface along the main Tumas channel. This includes the 8km of mineralisation encountered along four tributary channels. The mineralisation occurs in a reasonably continuous, seam-like horizon and is interpreted to extend west beyond the currently drilled area. The main channel is closed off at the eastern end however some tributary channels found in this area remain to be tested.

Drilling for the project was based on RC methods only. Drill holes used in the Mineral Resource Estimation included 1,330 holes totalling 31,861m drilled in 2017 and 2018 and 7,402 historical drill holes totalling 131,531m drilled by Deep Yellow between 2006 and 2012. Drilling achieved sample

recoveries of around 90%. All drill chips were geologically logged, and their radioactivity was measured downhole. All data were added to the verified database.

The 2017 and 2018 drilling programs were carried out on a spacing of 100m by 100m. At Tumas 1 East where the continuity of the uranium mineralisation along the channel was very good, a drill density of 200m by 100m was deemed sufficient to define an Inferred Resource. Around some tributary palaeochannels drill spacing was reduced to 50m x 50m if required. Pre-2017, exploration drilling carried out by the Company was along regional 2km spaced drill lines with holes spaced 50m apart along these lines. Previous resource drilling done in the pre-2017 period had hole spacings varying from 50m by 50m to 25m by 25m enabling the definition also of Measured and Indicated Resource categories.

**Methodology:** Data used in the MRE is largely based on down-hole radiometric gamma logging taken by a fully calibrated Aus Log gamma logging system which was used in the recent and previous drilling programs. Down-hole gamma readings were taken at 5cm intervals and converted into equivalent uranium values ( $eU_3O_8$ ) before being combined to 1m intervals. Geochemical assays were collected from 1m RC-drilling intervals, which were split to 1 to 1.5kg samples by riffle splitters. 120gm were further pulverised for use in regular XRF determinations and ICP-MS check analysis work. In the 2017 and 2018 programs,1 in 10 uranium intersections were tested by XRF analysis. Selected samples from the historical holes were also check-assayed for U<sub>3</sub>O<sub>8</sub> by ICP-MS method to confirm the previous XRF results. For further description of sampling techniques and associated data see Appendix 2 Table 1

The geochemical assays were used to confirm the validity of the  $eU_3O_8$  values determined by downhole gamma probing. After validation, the  $eU_3O_8$  values derived from the down-hole gamma logging were given preference over geochemical assays for the Mineral Resource Estimation.

The relevant drill hole details and results were previously reported by Deep Yellow in announcements made to the ASX on 5 July 2018, 17 April 2018, 14 December 2017, 27 September 2017, 11 July 2017, 22 June 2017, 22 May 2017, 19 April 2017 and 25 October 2016.

Figure 2 shows the Tumas 1, 2 and 3 deposit drill hole locations with drill hole collars coloured according to their grade thickness (GT-  $eU_3O_8ppm x$  metre thickness). Figures 3, 4 and 5 show contour maps of grade thickness (GT-  $eU_3O_8ppm x$  metre thickness) of the Tumas 1, 2 and 3 mineralisation outlining the extent and nature of the mineralisation over the 38km length of channel tested and include the 8km of mineralised tributary channels that have been identified. Cross-sections through the three deposits are shown in Figures 6, 7, 8, 9 and 10.

#### Prospectivity, High Potential and Future Drilling

The ongoing drilling of the Tumas palaeochannel continues to prove highly successful, fully endorsing the new approach that has been taken to test this very prospective regional target area identified. This work continues to add substantial new uranium resources at Tumas 1, 2 and 3 with each resource drilling campaign that has been undertaken. Additionally, the investigations and exploration drilling during this current program have identified extensive untested palaeochannels that are considered very prospective.

The 67.4Mlb now attributable to Tumas 1, 2 and 3 translates to 1.8Mlb/km for the 38km over which these deposits occur. The 86.2Mlb of Measured, Indicated and Inferred Mineral Resources now attained from the Reptile Project palaeochannels represent a remarkable 167% increase in the

calcrete resource base on this project since the new-focus investigations commenced. Deep Yellow is now very close to the first major milestone of 100Mlb  $eU_3O_8$  from the Tumas palaeochannel alone.

As has been previously stated, work is clearly confirming that increasing the palaeochannel calcrete resource base toward the range of 100M-150Mlb uranium resources in the 300 to 500ppm  $U_3O_8$  grade range is considered as a realistic objective with Tumas 3 remaining open to the immediate west and a further 60km of palaeochannel identified still to be tested.

This strongly justifies the need to continue exploration and systemically drill-test the underexplored palaeochannel systems that remain contained in the Company's 100% owned tenements, EPLs 3496 and 3497.

The current drilling program commenced as announced on 4 March. Work is ongoing testing both the western extension of the Tumas 3 resource and additional tributaries north-east of Tumas 1. This drilling program is planned to be completed by late April with results reported in early May.

#### **Exploration Efficiency**

Since the new management started overseeing the Deep Yellow exploration effort, 54.1Mlb of Inferred  $U_3O_8$  Resources have been added to the uranium inventory of the Reptile Project. This was achieved by concentrating the exploration effort on calcrete-associated uranium mineralisation within the eastern occurring Tumas palaeochannel. Exploration expenditure from Nov 2016 to Dec 2018 on the Reptile Project has been close to A\$4M. This calculates into a discovery cost for delineation of the Inferred Resources that have been identified of only 7.5cents/lb  $U_3O_8$ , highlighting the high discovery efficiency and the overall low cost for delineation of additional uranium resources when targeting these near surface targets and working within a highly prospective palaeochannel.

#### **CEO Comment**

Deep Yellow Limited CEO, John Borshoff said: "In the 27 months since we adopted the new exploration approach in Namibia, we have not only identified a highly prospective palaeochannel of some 125km in length but our resource drilling programmes are continually contributing to the increase of the calcrete-related uranium resource base. In fact, we have doubled the resource base with a comparatively small expenditure not possible with deeper targets. We are confident the ongoing resource drilling will continue to add to the already substantial resource base we have delineated to date".

Yours Faithfully

JOHN BORSHOFF Managing Director/CEO Deep Yellow Limited

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#### ABOUT DEEP YELLOW LIMITED

Deep Yellow Limited is a specialist differentiated uranium company implementing a new contrarian strategy to grow shareholder wealth. This strategy is founded upon growing the existing uranium resources across the Company's uranium projects in Namibia and the pursuit of accretive, counter-cyclical acquisitions to build a global, geographically diverse asset portfolio. The Company's cornerstone suite of projects in Namibia is situated within a top-ranked African mining destination in a jurisdiction that has a long, well regarded history of safely and effectively developing and regulating its considerable uranium mining industry.

#### **Competent Person's Statement**

#### Exploration Results and Mineral Resource Estimate:

The information in this report that relates to Exploration Results for the Tumas Mineral Resource Estimate, Mineral Resource Database and Bulk Densities are based on information compiled by Mr. Martin Hirsch, M.Sc.Geology, who is a member of the Institute of Materials, Minerals and Mining (UK) and the South African Council for Natural Science Professionals. Mr. Hirsch is the Exploration Manager for Reptile Mineral Resources (Pty) Ltd, 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). Mr. Hirsch consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the Tumas Mineral Resource Estimate is based on work completed by Mr. Martin Hirsch, M.Sc. Geology, who is a member of the Institute of Materials, Minerals and Mining (UK) and the South African Council for Natural Science Professionals. Mr. Hirsch is the Exploration Manager for Reptile Mineral Resources (Pty) Ltd, 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). Mr. Hirsch consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Where the Company refers to the other JORC 2012 resources and JORC 2004 resources in this report, it confirms that it is not aware of any new information or data that materially affects the information included in the original announcements and all material assumptions and technical parameters underpinning the resource estimates in those original announcements continue to apply and have not materially changed.

#### **Geophysics Component:**

The deconvolution of the current down-hole gamma data to convert the data to equivalent uranium values ( $eU_3O_8$ ), has been reported in the ASX releases announcing results of the resource drilling that was carried out between July 2018 and December 2018. The deconvolution was performed by experienced in-house personnel of Deep Yellow with the data subsequently checked and validated by Matt Owers, a geophysicist who is knowledgeable in this process and works as a consultant for Resource Potentials with over 5 years of relevant experience in the industry. Mr Owers is a member of Australian Institute of Geoscientists and has sufficient experience with this type of processes to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). Mr. Owers consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



Figure 2: Drill hole locations of the Tumas 1, 2 and 3 uranium mineralisation



Figure 3: GT contour map of the Tumas 3 uranium mineralisation



Figure 4: GT contour map of the Tumas 1 and 2 uranium mineralisation



Figure 5: GT contour map of the Tumas 1 (including eastern extension) uranium mineralisation



Figure 6: 502300mE cross-section through the Tumas 3 palaeochannel system



Figure 7: 507100mE cross-section through the Tumas 3 palaeochannel system



Figure 8: 7464600mN cross-section through the Tumas 2 palaeochannel system



Figure 9: 513878mE cross-section through the Tumas 1 palaeochannel system



Figure 10: 52710mE cross-section through the Tumas 1 East palaeochannel system

#### **APPENDIX 1**

#### JORC RESOURCE TABLE

Denosit	Category	Cut- off	Tonnes	U <sub>3</sub> O <sub>8</sub>	U <sub>3</sub> O <sub>8</sub>	$U_3O_8$	Resourc	e Categorie U <sub>3</sub> O <sub>8</sub> )	s (Mlb
Deposit	outegory	(ppm U₃O <sub>8</sub> )	(M)	(ppm)	(t)	(Mlb)	Measured	Indicated	Inferred
<b>BASEMENT MINERALISA</b>	ΓΙΟΝ								
	Omahola Pi	roject - J	ORC 2004						
INCA Deposit	Indicated	250	7.0	470	3,300	7.2	-	7.2	-
INCA Deposit ♦	Inferred	250	5.4	520	2,800	6.2	-	-	6.2
Ongolo Deposit #	Measured	250	7.7	395	3,000	6.7	6.7	-	-
Ongolo Deposit #	Indicated	250	9.5	372	3,500	7.8	-	7.8	-
Ongolo Deposit #	Inferred	250	12.4	387	4,800	10.6	-	-	10.6
MS7 Deposit #	Measured	250	4.4	441	2,000	4.3	4.3	-	-
MS7 Deposit #	Indicated	250	1.0	433	400	1	-	1	-
MS7 Deposit #	Inferred	250	1.3	449	600	1.3	-	-	1.3
<b>Omahola Project Sub-Tota</b>	ıl		48.7	420	20,400	45.1	11.0	16.0	18.1
<b>CALCRETE MINERALISAT</b>	ION								
	Tumas 3 De	posit - J	ORC 2012						
Tumas 3 Deposits	Inferred	200	39.7	378.3	15,000	33.1			
Tumas 3 Deposits Total			39.7	378	15,000	33.1	-	-	33.1
	Tubas Sand I	Project -	<b>JORC 201</b>	2					
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
Tubas Sand Project Total         34.0         170         5,800         12.7									
Tumas Project (Tu	ımas 1 & 2, and	d Tumas	1 East Tribu	itaries) - J	ORC 2012				
Tumas Deposit 🔶	Measured	200	11	383	4,100	9.1	9.1	-	-
Tumas Deposit ♦	Indicated	200	5	333	1,700	4	-	4	-
Tumas Deposit 🔶	Inferred	200	30.8	312	9,700	21.2	-	-	21.2
Tumas Project Total			46.6	332	15,500	34.3			
Tul	bas Calcrete	Resourc	e - JORC 2	2004					
Tubas Calcrete Deposit	Inferred	100	7.4	374	2,800	6.1	-	-	6.1
Tubas Calcrete Total			7.4	374	2,800	6.1			
	Aussinanis F	Project -	<b>JORC 200</b>	4					
Aussinanis Deposit 🔶	Indicated	150	5.6	222	1,200	2.7	-	2.7	-
Aussinanis Deposit 🔶	Inferred	150	29.0	240	7,000	15.3	-	-	15.3
Aussinanis Project Total			34.6	237	8,200	18.0			
Calcrete Projects Sub-Tota	al					104.2	9.1	10.8	84.3
GRAND TOTAL RESOU	RCES		211	323	68,100	149.3			

**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  $eU_3O_8$  values are reported it relates to values attained from radiometrically logging boreholes.

Gamma probes were calibrated at Pelindaba, South Africa in 2007 and sensitivity checks are conducted by periodic re-logging of attest hole to confirm operation between 2008 and 2013.

During drilling, probes are checked daily against standard source.

# **JORC Code, 2012 Edition – Table 1 report template**

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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 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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The recent (2017-2018) drilling relies on down hole gamma data from calibrated probes which were converted into equivalent uranium values (eU<sub>3</sub>O<sub>8</sub>) by experienced DYL personnel and have been confirmed by a competent person (geophysicist). Geochemical assays were used to confirm the conversion results. Previous (2006-2012) drill data used in this report includes both geochemical assay data (U<sub>3</sub>O<sub>8</sub>) and down hole gamma equivalent uranium derived values (eU<sub>3</sub>O<sub>8</sub>).</li> <li>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.</li> <li>Total gamma eU<sub>3</sub>O<sub>8</sub></li> <li>33 mm Aus-Log total gamma probes were used and operated by company personnel.</li> <li>Gamma probes were initially calibrated at Pelindaba, South Africa, in May 2007 and in December 2007; re-calibrated at the calibration pit located at Langer Heinrich Uranium Mine site in December 2014, May 2015, August 2017 and July 2018.</li> <li>Sensitivity checks were conducted by periodic re-logging of a test hole (Hole-ALAD1480).</li> <li>During the drilling, the probes were checked daily against a standard source.</li> <li>Gamma measurements were taken at 5 cm intervals at a logging speed of approximately 2 m per minute.</li> <li>Probing was done immediately after drilling mainly through the drill rods and in some cases in open holes. Rod factors have been established to compensate for the reduced gamma counts when logging was done through the drill rods. No correction for water was done. The drill holes were dry.</li> <li>All gamma measurements were corrected for dead time which is unique to each probe.</li> </ul>

Criteria	JOBC Code explanation	Commentary
Cintenta		Commentary
		<ul> <li>All corrected (dead time and rod factor) gamma values were converted to equivalent eU<sub>3</sub>O<sub>8</sub> values over the same intervals using the probe-specific K-factor.</li> <li>Disequilibrium studies commenced on 22 samples by ANSTO Minerals in 2008. Results confirmed that the U<sup>238</sup> decay chains of the wider Tumas deposit are in secular equilibrium within an analytical error of ± 10%.</li> <li>Chemical assay data</li> </ul>
		<ul> <li>Geochemical samples were derived from Reverse Circulation (RC) drilling at intervals of 1 m. Samples were spilt at the drill site using either a riffle or cone splitter to obtain a 1 to 4 kg sample from which approx. 90 to 150 g were used to produce a subset sample for XRF-analysis.</li> <li>A representative proportion of the mineralised intersection from the Tumas 1, 2 and 3 drilling programs were assayed for U<sub>3</sub>O<sub>8</sub> using pressed powder XRF and ICP-MS.</li> </ul>
		<ul> <li>In the 2017 and 2018 resource drilling programs a total of 1,305 samples, including duplicates, blanks and standards were submitted to ALS in Perth for U<sub>3</sub>O<sub>8</sub> analysis following the procedure above for confirmatory assay.</li> <li>In the 2006 to 2013 drilling programs 16,048 samples from Tumas 1, 2 and 3 were assayed for U<sub>3</sub>O<sub>8</sub> by loose powder XRF. 15,364 of these were assayed at the company's own laboratory in Swakopmund Namibia, 646 at Set Point Laboratories, RSA and 38 samples were analysed at Scientific Services, RSA.</li> <li>In 2014 a confirmatory test program included 240 samples which were analysed by the Bureau Veritas laboratory in Swakopmund for U<sub>3</sub>O<sub>8</sub> using ICP-MS. The external laboratory including repeat assays indicated a bias for samples above 300ppm from drilling programs prior to April 2009. Consequently, a factor of minus 22.6% was applied to this subset of relevant assays.</li> <li>Taken all factors into account the recent and previous assay results confirm equivalent uranium grades correctly correlated to the assay results and remain within a statistically acceptable margin of error.</li> </ul>
Drilling technique	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul> <li>RC drilling is being used throughout the drilling program.</li> <li>All holes are being drilled vertically and intersections measured present true thicknesses.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Drill chip recoveries are good at around 90+%.</li> <li>Drill chip recoveries are measured by weighing the entire 1m drill chip sample 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>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drill holes are being geologically logged.</li> <li>The logging is qualitative in nature. A lithology type is being determined for all samples.</li> <li>Other parameters routinely logged include colour, colour intensity, weathering, oxidation, grain size, carbonate (CaCO<sub>3</sub>) content, sample condition (wet, dry) and total gamma count using a hand held Rad-Eye scintillometer.</li> <li>Lithology codes were used to generate wireframes for the palaeotopography of the palaeochannel.</li> <li>This information was used in planning drill hole locations.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>A portable 2-tier (75%/25%) splitter was used to treat a full 1m sample from the cyclone into an appropriate size 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> <li>Duplicates were inserted into the assay batches at an approximate rate of one for every 10 samples which is compatible with industry norm.</li> <li>Standards and blank samples were inserted at an approximate rate of one each for every 20 samples.</li> <li>Standards used throughout the campaigns were AMIS0076, AMIS0078, AMIS0087, AMIS0090, AMIS0114, AMIS0186, AMIS0208 and OREAS-122. The standards performed well within acceptable limits of one standard deviation.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the</li> </ul>	<ul> <li>The analytical method employed was XRF and MCP-MS. The techniques are industry standard and considered appropriate.</li> <li>Downhole gamma tools were used to calculate equivalent U<sub>3</sub>O<sub>8</sub> values as explained under 'sampling techniques'. This is the principal evaluating</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	technique.
<i>Verification of sampling and assaying</i>	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Geology was directly recorded digitally into a tablet in the field and sample tag books were filed in at the drill site.</li> <li>The drill data of those logs and tag books (lithology, sample specifications etc.) were transferred by designated personnel into a geological database.</li> <li>Equivalent eU<sub>3</sub>O<sub>8</sub> values have previously been and were for the current program calculated from raw gamma files by applying calibration factors and casing factors where applicable.</li> <li>All adjustment factors were stored in the database.</li> <li>Equivalent eU<sub>3</sub>O<sub>8</sub> data were 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 were used to quantify the statistical error.</li> </ul>
Location of data points	<ul> <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> <li>The initial collars were frequently surveyed by the project geologist using handheld GPS, this following resurveying by in-house surveyor personnel using a differential GPS after the hole was drilled.</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>
Data spacing and distribution	<ul> <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> <li>The data spacing and distribution is optimized along channel direction. Drill hole spacing varied at 25, 50 or 100m along 25, 50,100 or 200m spaced lines.</li> <li>The resource drill grid at Tumas 3 is close to 100m by 100m in EW and NS rectangular directions following the main target channel. At Tumas 1 East the resource grid varies between 100m by 100m or 200m by 100m and sometimes 50m by 50m if required. The resource drill grid at Tumas 1 and 2 is closed to 25m by 25m .</li> <li>The 100m by 100m drill hole spacing is considered sufficient to define an inferred resource for parts of the Tumas 1, 2 and 3 deposits. The uranium mineralisation at Tumas 1 East was found to be very consistent along the channel strike. Hence drill spacings of 100m by 200m were found to be</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>sufficient for an inferred resource estimate. Drill spacings at Tumas 1 and 2 were 50m by 50m or 25m by 25m in some areas resulting in categories measured and indicated resource estimates for this deposit.</li> <li>The total gamma count data, which is recorded at 5 cm intervals, was used to calculate equivalent uranium values (eU<sub>3</sub>O<sub>8</sub>) which were composited to 1 m composites.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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> <li>Uranium mineralisation is strata bound and distributed in fairly continuous horizontal zones. Holes are being drilled vertically and mineralised intercepts represent true widths.</li> <li>All holes were sampled down-hole from surface. Geochemical samples are being collected at 1 m intervals. Total gamma count data is being collected at 5 cm intervals.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>1m RC drill chip samples were prepared at the drill site. The assay samples were 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, prior to analyses and from there to the external laboratories when used.</li> <li>Upon completion of the assay work the remainder of the drill chip sample bags for each hole was 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.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <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: "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".</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <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> <li>The work to which the Exploration Results relate was undertaken on exclusive prospecting grant EPL3496 and 3497.</li> <li>The EPLs were originally granted to Reptile Uranium Namibia (Pty) Ltd (RUN) in 2006. The EPLs are in good standing and are valid until 05 June 2019. A renewal application for a two-year extension has been submitted to the Ministry of Mines and Energy and is expected to be granted.</li> <li>The EPLs are located within the Namib Naukluft-National Park in Namibia.</li> <li>The EPLs are subject to an agreement with a Namibian partner whereby the partner has the right to acquire 5% of the project for historical costs.</li> <li>There are no known impediments to the project beyond Namibia's standard permitting procedures.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Prior to RUN's ownership of this EPL, work was conducted by Anglo American Prospecting Services (AAPS), General Mining and Falconbridge in the 1970s.</li> <li>Assay results from the historical drilling are available to RUN on paper logs. They were not captured digitally and are not be used for resource estimation.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The Tumas 1, 2 and 3 uranium mineralisation occurs as secondary carnotite enrichment of variably calcretised palaeochannel and sheet wash sediments and adjacent weathered bedrock.</li> <li>Uranium mineralisation at Tumas is surficial, strata bound and hosted by Cenozoic / Tertiary sediments, which include from top to bottom scree, sand, gypcrete, calcrete, intercalated calcareous sands and/or conglomerates or more massive calcrete in places.</li> <li>The majority of the mineralisation is hosted in calcrete. Locally, the underlying weathered Proterozoic bedrock is occasionally mineralised along joints and fractures.</li> </ul>
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:	<ul> <li>1,330 holes for a total of 31,861m have been drilled in the recent 2017, 2018 program on Tumas 1, 2 and 3. Between 2006 and 2013 7,402 holes for 131,531m have been drilled across Tumas 1, 2 and 3.</li> <li>All holes were drilled vertically, and intersections measured present true</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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> <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> <li>thicknesses.</li> <li>Drill hole details including uranium intersections have been reported regularly while drilling programs were carried out.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</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> <li>5 cm intervals of down hole gamma counts per second (cps) logged inside the drill rods were converted to equivalent uranium values, composited into 1m down hole intervals showing greater than 100ppm eU<sub>3</sub>O<sub>8</sub> values over 1m.</li> <li>No grade truncations were applied.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The mineralisation is sub-horizontal and all drilling vertical, therefore, mineralised intercepts are considered to represent true widths.</li> </ul>
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.	<ul> <li>Drill hole locations and anomalous intervals have been reported regularly while the relevant drilling programs were in progress or on their completion.</li> <li>Maps and sections are included in the text.</li> </ul>
Balanced reporting	<ul> <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</li> </ul>	<ul> <li>Comprehensive reporting of all Exploration Results was practised at various times throughout the relevant drilling programs.</li> </ul>

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>Results.</li> <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</li> </ul>	<ul> <li>The wider area and Tumas deposit were subject to drilling in the 1970's and 1980's by Anglo American Prospecting Services, Falconbridge and General Mining.</li> <li>An airborne EM survey conducted in 2009 better defined the broad</li> </ul>
method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminatir substances.	<ul> <li>palaeochannel system.</li> <li>Downhole gamma-gamma density logging for bulk density was conducted by Terratec on the Tumas 1 and 2 resources.</li> </ul>	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further drilling work is planned in the Tumas 1 East area and west of the currently defined Tumas 3 Zone and its extensions.</li> <li>Further extension drilling is expected as various tributaries in the Tumas 1 East area remain untested.</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
Database integrity	<ul> <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> <li>A set of SOPs (Standard Operating Procedures) was defined that safeguard data integrity which cover the following aspects:</li> <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> <li>Reporting and statistical analyses used Micromine (MM) software and Minestis.</li> </ul>
Site visits	<ul> <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>	• During the 2017 and 2018 drilling programs regular site visits were conducted by the Company's in-house Competent Person who confirms correctness off all exploration data.

Criteria	JORC Code explanation	Commentary
		The Company's current Competent Person undertakes regular visits to the project areas.
Geological interpretation	<ul> <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> <li>Confidence in the geological interpretation and modelling of the channel is high. This type of geology is well known, understood and readily recognised in the RC drill chips.</li> <li>The factors affecting grade distribution are mainly rock type (calcrete) and position to source strata. The channel bedrock profile is a furthermore critical component.</li> </ul>
Dimensions	• 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.	<ul> <li>The drilled orebodies have a combined strike length of 38 km, are 100 to 900m wide and 3 to 50m deep.</li> <li>The main mineralised calcrete reaches from a shallow depth below surface of -2 to -3m deep down to -20m/25m</li> </ul>
Estimation and modelling techniques	<ul> <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 (eg 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 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> </ul>	<ul> <li>The present estimate is based on grade/lithology domains restricting geostatistical interpolations into blocks estimates bound to domain solids. Block sizes used are 50m east x 50m west x 3m elevation</li> <li>Resources were estimated by Ordinary Kriging (OK) using a 100ppm lower limit without any grade capping. Search ranges remained restricted to max 1½ drill hole spaces and remained restricted to geology in defined calcrete solids and grade shells.</li> <li>Omnidirectional variograms were used in the current estimates.</li> <li>Block validation was done using qualitative drill hole displays over block estimates. The current block estimates correlate with composited eU<sub>3</sub>O<sub>8</sub> GT (Grade Thickness) data.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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>	
Moisture	<ul> <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> <li>An optical assessment of sample material was done during the sampling process and samples were classified as either "dry" or "wet". The current drilling program did intersect limited water at times.</li> <li>Tonnages are estimated dry.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>1m composites below eU<sub>3</sub>O<sub>8</sub> of 100ppm were excluded from the estimation process.</li> <li>The range of cut-off grades were chosen based on "potentially economic" criteria and the fact that mineralisation is continuous.</li> </ul>
Mining factors or assumptions	<ul> <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> <li>Potential scenarios are open cast mining with one, two or three-metre mining bench heights.,</li> </ul>
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Detailed mineralogical characterisation tests were conducted from the upper Tumas areas which allowed the Company to derive a sound understanding of how a calcrete ore from Tumas would respond to beneficiation and further downstream processing.</li> <li>Also, the nearby Langer Heinrich uranium mine has successfully mined and processed calcrete ore for almost a decade. Although its grade is higher the mineralogical characteristics are very similar.</li> </ul>
Environmen- tal factors or assumptions	<ul> <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</li> </ul>	<ul> <li>Independent consultant SoftChem completed a scoping level Environmental Impact Assessment for the Tumas Project in 2013.</li> <li>As the mining progresses to different sections of the mine, waste material will be backfilled into some of the mined-out areas.</li> <li>Rehabilitation of the mined-out areas and stockpile facility will be progressive throughout the life of the mine. Any remaining waste rock</li> </ul>

Criteria	JORC Code explanation	Commentary
	reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	stockpiles will be shaped and contoured to blend into the surrounding environment.
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Bulk density was derived from borehole density logging (gamma-gamma) from drilling at Tumas 1 and 2 in 2014.</li> <li>284 1m composites where measured resulting in an average density of 2.35.</li> <li>2.35 was used for the current estimate</li> <li>At the Langer Heinrich mine bulk density is defined as 2.35 after mining geologically equivalent material for 10 years.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>This Mineral Resource Estimate reflects Measured, Indicated and Inferred Resources.</li> <li>Semi-variography presented structures with ranges of up to 155m.</li> <li>Search ranges were used accordingly to drilling data-density at max of 1 1/2 drill positions.</li> <li>A search of up to 145m over minimum 4 sectors was applied to assign eU<sub>3</sub>O<sub>8</sub> grades to blocks; sub-searches were restricted to 8x1m composites per sector.</li> <li>The average mineralised seam thickness is in the order of 2 to 10m.</li> <li>The Competent Person is satisfied that the applied methodology is appropriate, and the resulting block estimate is a true reflection of the drilling data.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul> <li>No additional reviews were conducted beyond those carried out by the various Competent Persons over time.</li> </ul>
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	<ul> <li>The applied geostatistical approach to arrive at the Mineral Resource is considered sound and reflects industry standard approaches across the globe and industry.</li> <li>The resulting block model present a true representation of drilling data.</li> <li>It is this Competent Person's opinion that the classification of the Inferred part of the Mineral Resource can improve by adding limited infill drilling to improve continuity definition.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	