**NEWS RELEASE**

5 October 2021

# MAJOR ORE RESERVE MILESTONE ACHIEVED FOR TUMAS DFS

## HIGHLIGHTS

- **DFS resource upgrade drilling completed at Tumas 3 and 1 East delivered >100% direct conversion of existing Inferred Mineral Resources (where drilled) to Indicated Mineral Resource category**

- **Tumas Probable Ore Reserves increased by an impressive 121% to 68.4Mlb $U_3O_8$ at 345ppm using a 150ppm $U_3O_8$ cut off**

- **Key focus of drill program was to achieve the major milestone upgrading the Tumas LOM operation to 20+ years**

- **Significant potential exists to further increase LOM through remaining Inferred Resources available for upgrade with approximately 40% of the highly prospective Tumas Palaeochannel system remaining to be adequately tested**

## INTRODUCTION

Uranium developer Deep Yellow Limited (ASX: DYL) (**Deep Yellow**) is pleased to announce a significant milestone successfully delivering an impressive 121% increase to the updated Ore Reserve Estimate (**ORE**) (see Table 1) for the Tumas Project on EPL3496 and 3497. Deep Yellow completed a successful Pre-Feasibility Study (**PFS**) on the Tumas Project and commenced the Definitive Feasibility Study (**DFS**) as announced to ASX on 10 February 2021.

The deposits, held 100% by Deep Yellow through its wholly owned subsidiary Reptile Uranium Namibia (Pty) Ltd (**RUN**), are covered by Mining Lease Application (**MLA**) 237. See Figure 1.

***Table 1:*** *Tumas Project Expanded Ore Reserves*

| Classification | $U_3O_8$ Cut-off ppm | Tonnes Mt | $U_3O_8$ ppm | $U_3O_8$ Metal Mlb |
|---|---|---|---|---|
| Proved | 150 | 0.0 | 0 | 0.0 |
| Probable | 150 | 89.8 | 345 | 68.4 |
| **Total** | **150** | **89.8** | **345** | **68.4** |

The PFS utilised only part of the known resources at Tumas and defined a Probable Ore Reserve base of 31Mlb $U_3O_8$ at 344ppm, using a cut-off grade of 150ppm. The size of the Ore Reserve was sufficient for an 11.8-year Life of Mine (**LOM**) operation and identified a project with positive viability parameters and clear potential to meet the Company's publicly stated investment criteria.

A key focus area of the DFS was to increase and upgrade the Tumas Mineral Resources and update the Tumas ORE, upon which the DFS would be based, to ensure a LOM greater than 20 years. Following the successful resource upgrade drilling program as previously announced, this major ORE milestone has been achieved.

## SIGNIFICANT INCREASE IN INDICATED MINERAL RESOURCES

In August 2021, Deep Yellow successfully completed a five-month, resource-upgrade drilling program, focused on the Tumas 3 and 1 East deposits (see Figure 2).

This program completed 1,473 holes, for 24,942m and results (reported to the ASX on 13 July and 19 August 2021) led to an updated Mineral Resource Estimate (**MRE**), with Indicated Mineral Resources of 98.7Mlb $U_3O_8$ at 266ppm for the combined Tumas 1, 1-East, 2 and 3 deposits, at a 100ppm $U_3O_8$ cut off (announced to ASX 29 July and 2 September 2021).

In addition, a further 15.3Mlb $U_3O_8$ at 215ppm of Inferred Mineral Resources remains within these deposits and may be upgraded at a future date. Overall, at a 100 ppm $U_3O_8$ cut off, these deposits now contain total Mineral Resources of 114Mlb $U_3O_8$ at 258ppm.

## UPDATED ORE RESERVES DELIVER A 20+YEAR DFS LOM

The significant increase in Indicated Mineral Resources announced for both Tumas 3 and 1 East have proved sufficient to achieve the first key milestone of the DFS, which is to establish sufficient Ore Reserves to support a 20+ year LOM.

Using the economic parameters and other modifying factors reported in the PFS, the Ore Reserves available at Tumas have now been updated and, as a consequence, have been substantially increased. The updated ORE for the Tumas Project totals Probable Ore Reserves of 68.4Mlb $U_3O_8$ at 345ppm, using a 150ppm $U_3O_8$ cut-off for Tumas 1,2, 3 and 1 East (see Table 2), with a waste to ore ratio of 2.6:1.

This updated ORE represents a 121% increase from the maiden Tumas ORE announced in the PFS.

This substantial increase in Ore Reserves confirms that Tumas will support a +20-year LOM at production rates assumed for the PFS (a maximum of either 3.75Mtpa or 3.0Mlb $U_3O_8$ pa).

***Table 2:*** *Tumas Project Updated Ore Reserves by Deposit*

| Tumas Probable Ore Reserve Estimates | | | | | | | |
|---|---|---|---|---|---|---|---|
| Area | $U_3O_8$ Cut-off | Maiden Reserve | | | Updated Reserve | | |
| | | Tonnes | $U_3O_8$ | $U_3O_8$ Metal | Tonnes | $U_3O_8$ | $U_3O_8$ Metal |
| | ppm | Mt | ppm | Mlb | **Mt** | **ppm** | **Mlb** |
| Tumas 1&2 | 150 | 13.9 | 292 | 9.0 | **14.5** | **272** | **8.94** |
| Tumas 1 East | 150 | | | | **29.5** | **267** | **17.35** |
| Tumas 3 | 150 | 26.9 | 371 | 22.0 | **46.3** | **412** | **42.11** |
| Total | 150 | 40.9 | 344 | 31.0 | **89.9** | **345** | **68.40** |

*The rounding in the above table is an attempt to represent levels of precision implied in the estimation process which may result in apparent errors of summation in some columns.*

Cube Consulting (Cube) was engaged by the Company to undertake the Ore Reserve Update.

Cube completed a number of key workstreams which included collation of input parameters, open pit optimisation studies on the Indicated Mineral Resources of the deposit, open pit designs and pit production scheduling, culminating in the reporting of an Updated Ore Reserve for Tumas.

The pit production and process feed schedule developed for the ORE ramps up mining to the designed production rates in the first year and continues over 20 years at an average head grade of 398ppm $U_3O_8$, allowing average production of approximately 2.8Mlbpa $U_3O_8$ for 20 years (compared to an average of 2.56Mlbpa $U_3O_8$ in the PFS for 11.5 years). Mining will commence at Tumas 3 and transition into Tumas 1 and 1 East after 7 years, continuing to produce from all three orebodies until cessation of mining after 20 years. Recovery from stockpiles will continue for an additional 5.75 years at lower production rates.

In total 64.1Mlb $U_3O_8$ will be produced from 89.8Mt of ore, at an average grade of 345 ppm $U_3O_8$, containing 68.4Mlb $U_3O_8$ over a total LOM of 27.5 years (25.75 production years).

Significant upside remains for optimisation of annual Run-of Mine (ROM) throughputs, which will be a key ongoing focus for DFS work.

**Commenting on the major DFS milestone Deep Yellow Managing Director Mr John Borshoff commented:** *"We continue to deliver on what we set out to achieve for the Tumas DFS. We have achieved a very important milestone with the substantial Ore Reserve upgrade that has been announced confirming a long Life of Mine operation that is now possible for the Tumas Project.*

*"We are delivering continued value and growth through targeted exploration and development and growth of the Tumas Ore Reserves provide the team with great confidence to proceed with evaluation of a 20+ year LOM operation in the Tumas DFS.*

*"A major risk milestone for Tumas has been overcome and we are very pleased with the results, which have confirmed Tumas as a long life of mine operation and demonstrated great potential to develop the Project into a tier-one uranium deposit.*

*"Importantly, significant potential remains to grow Tumas through upgrading remaining Inferred Resources and further exploration of Tumas Palaeochannel, with approximately 40% yet to be fully tested, providing Deep Yellow with exceptional, additional optionality for optimisation of the DFS, which is expected to be completed in the latter part of CY2022".*

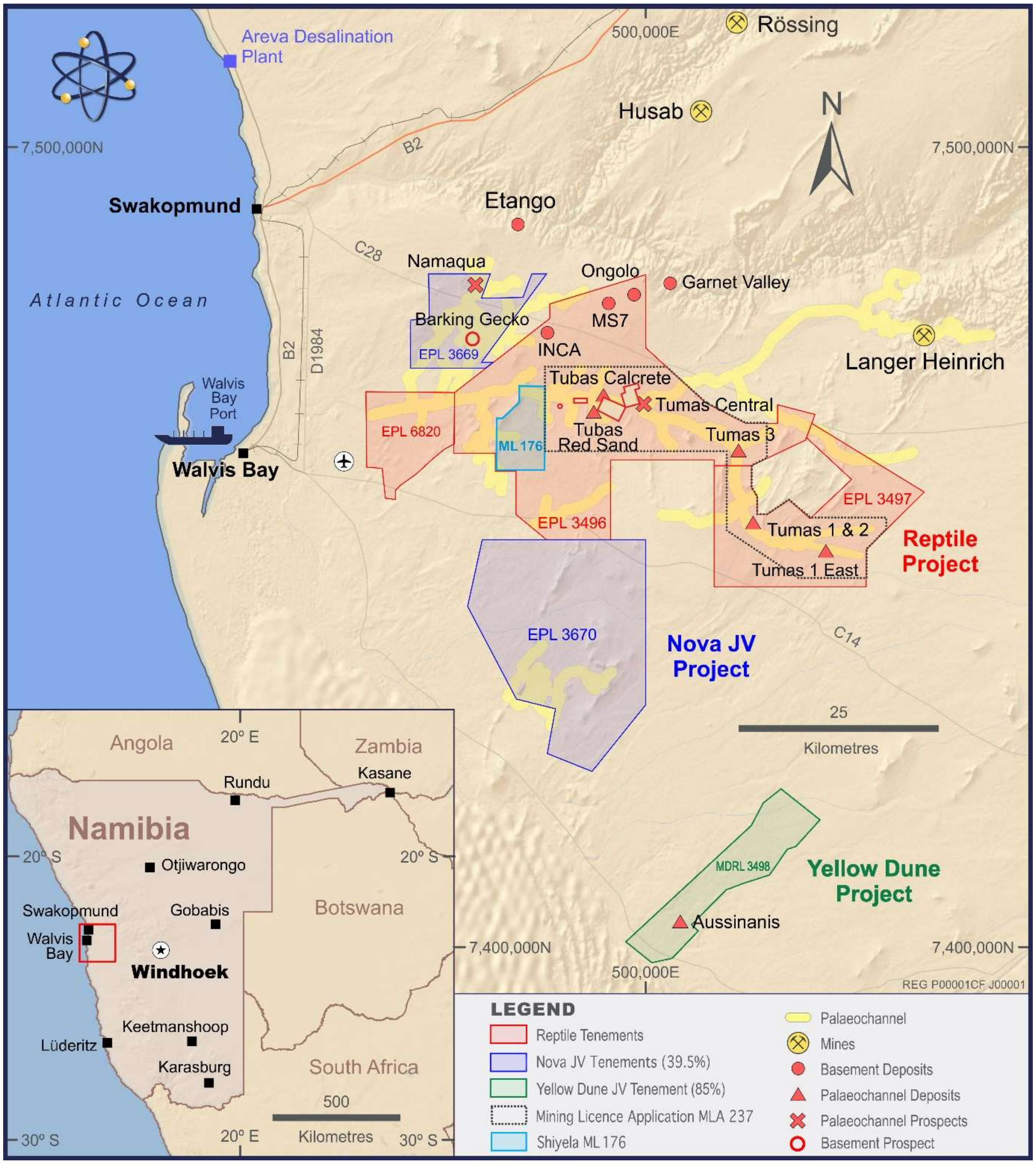


***Figure 1:** EPLs 3496, 3497 showing Tumas Deposits with MLA 176 and main prospect locations over palaeochannels.*

## IMPLICATIONS FOR THE DFS

The significant increase in Ore Reserves for the Tumas Project has very clear and positive implications for the ongoing DFS, which include:

- Development criteria for a 20+ year LOM has been established at throughput and production rates assumed for the PFS (a maximum of either 3.75Mt pa throughput or 3.0Mlb pa of $U_3O_8$);
- Extended LOM is likely to materially increase the NPV for the Project and may also increase the IRR;

- Mine schedules developed in this update indicate that for the first 20 years of production, 68.7Mt of ore may be processed at a grade of 398 ppm $U_3O_8$, resulting in production of 56.5Mlb $U_3O_8$ (2.82Mlb $U_3O_8$ pa average);
- In the subsequent 5.75 years of operation (in the unlikely event that no further higher grade reserves are identified) 21.1Mt of ore may be processed at a grade of 175ppm $U_3O_8$, resulting in production of a further 7.6Mlb $U_3O_8$ (1.33Mlb $U_3O_8$ pa average);
- In addition to this, at the end of the 25.75 years of production, a further 17.0Mt of low grade ore at an average grade of 131ppm $U_3O_8$ will remain stockpiled and may be treated profitably, should economic conditions allow; and
- Exploration of the remaining 40% of prospective Tumas palaeochannel is expected to reveal additional resources and an eventual LOM operation of over 30 years cannot be discounted.

In other DFS work undertaken to date, there have been no material adverse outcomes or issues identified compared to the PFS parameters for Tumas and consequently, it is reasonable to conclude that neither C1 nor All-In-Sustaining (AIS) Costs will increase compared to PFS determinations.

While this very important step of upgrading Ore Reserves has been completed, and consistent with the other "next steps" identified when the DFS commenced, the following activities have been undertaken or commenced:

- Detailed trade-off and optimisation studies recommended in the PFS.
- Metallurgical optimisation test work and analysis.
- Engagement of a suitable engineering service provider, Ausenco Services Pty Limited, to assist in the development aspects of the Tumas Project.
- Expansion of the Deep Yellow technical team to facilitate and support the DFS.
- EIA completion and submission of a Mining Licence application covering the Tumas Project area (announced to ASX 27 July 2021).

## TUMAS PROJECT UPDATED ORE RESERVE ESTIMATE

### Overall Mineral Resource Status

The MRE for the Tumas Deposits (Tumas 1, 1 East, 2 and 3) is reported in Table1 and 2 in Appendix 1 at 100, 150 and 200ppm $U_3O_8$ cut-off grades. The most recent JORC Mineral Resources for Tumas were announced on 29 July 2021 and 2 September 2021. The location of the mineralisation area and Mining Lease application are shown in Figure 2. Drill hole and palaeochannel locations are shown in Figure 3. A cross-section through Tumas 3 is shown in Figure 4.

A cut-off grade of 100ppm $U_3O_8$ has been selected as the MRE quoted cut-off grade, based on economic grade parameters, in order to reasonably reflect the expected total mining inventory. The cut-off used for the PFS and current Mining Study Ore Reserves estimate was 150ppm $U_3O_8$ with material in the 100 – 150ppm $U_3O_8$ grade range expected to be stockpiled as mineralised waste for possible future processing. This 100 – 150ppm $U_3O_8$ material is classed as waste for the purposes of stripping ratio determination and cost allocation.

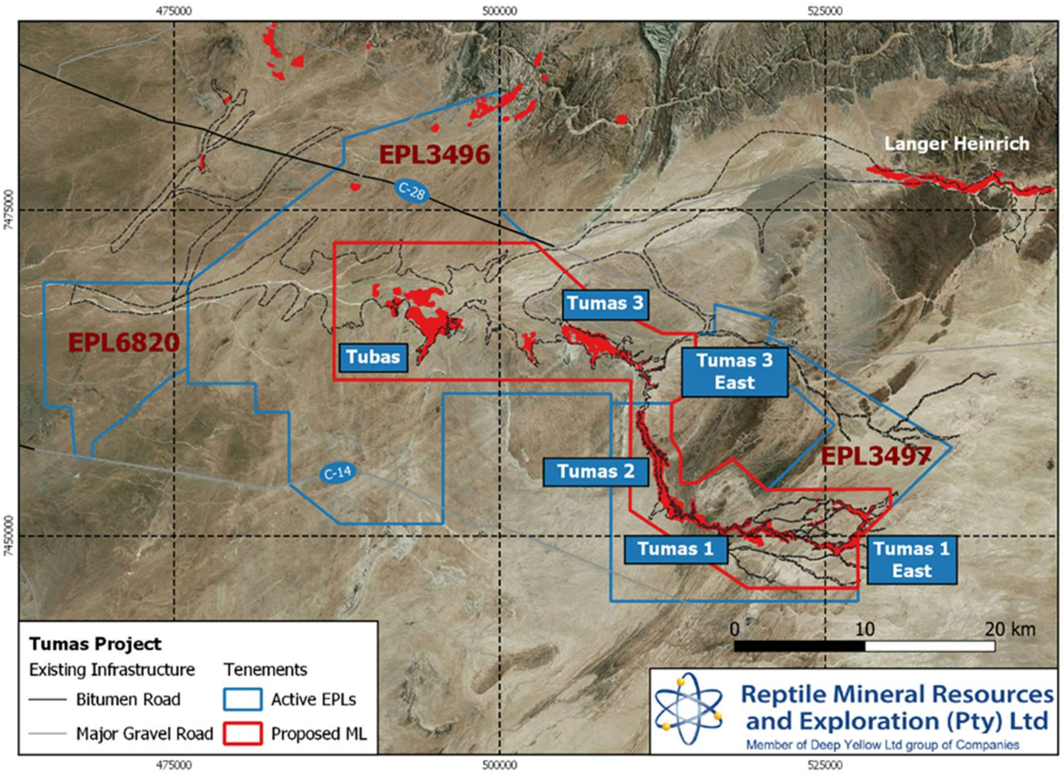


***Figure 2**: Tumas Project, showing MLA 176 (in red outline), Deposits and Palaeochannel Locations.*

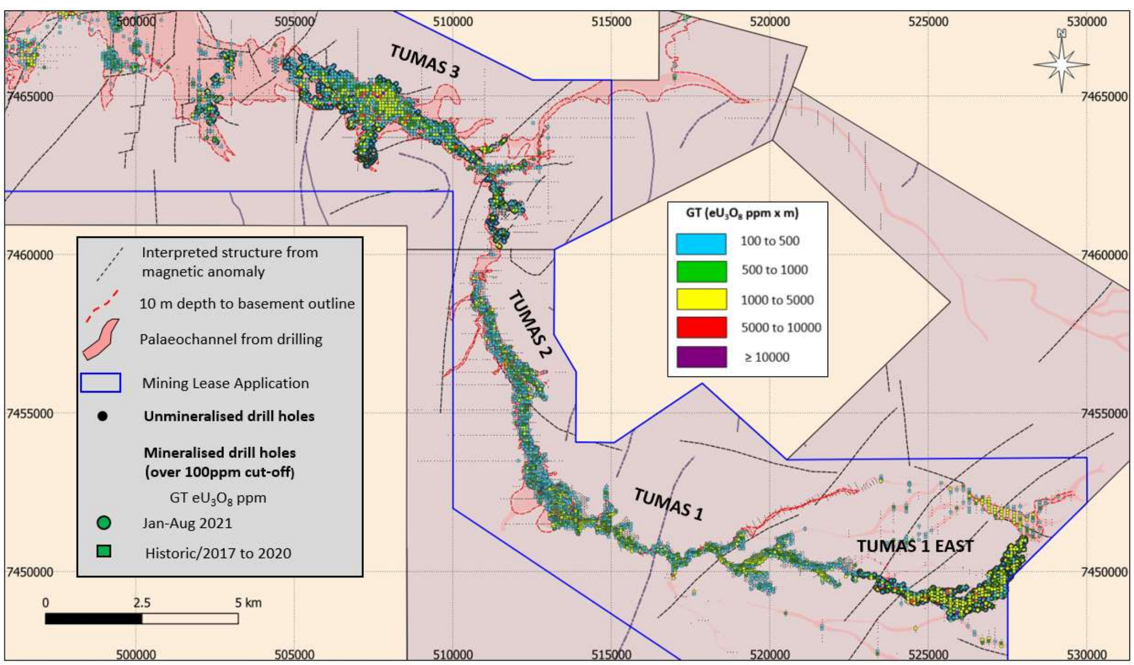


***Figure 3**: Tumas Project, Drill Hole and Palaeochannel Locations.*

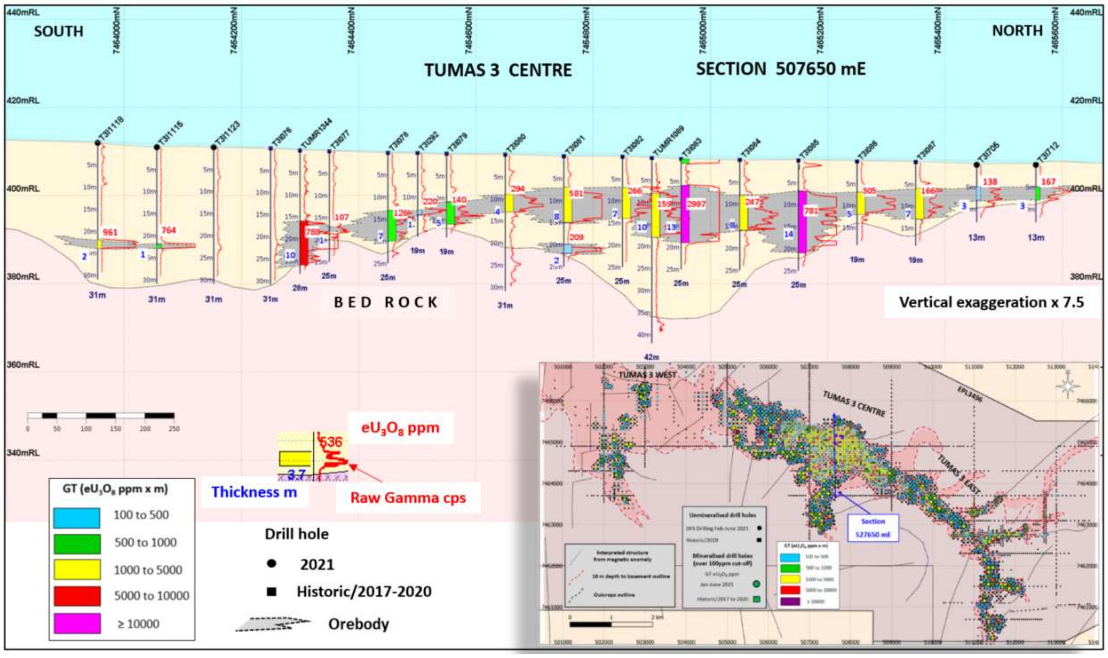


***Figure 4:*** *Tumas 3 Deposit, North-South drill hole cross-section, 507650E*

## Updated Ore Reserve Estimation

Summary information in relation to the updated Ore Reserve is set out immediately below and detailed in Appendix 2 in accordance with Section 4 of Table 1 of the JORC Code.

Cube was engaged by Deep Yellow to complete mining engineering work for the Tumas PFS.

Cube completed its work, which forms part of the PFS, based on a processing plant designed to produce 3.0Mlb $U_3O_8$ product per annum and a processing capacity of 3.75Mtpa of uranium bearing ore. The Cube report serves as a record of the technical mine engineering work completed towards the Tumas Project as part of the PFS.

Cube was again engaged by the Company to undertake the Ore Reserve Update based on the parameters developed as part of the PFS and the updated Mineral Resources consequently identified and reported.

The scope of work for Cube included collation of input parameters, open pit optimisation studies on the Indicated Mineral Resources of the deposit, open pit designs and pit production scheduling, culminating in the reporting of an Updated Ore Reserve for Tumas.

Following the pit optimisations and shell selection, a final pit design was completed together with internal staged pit designs. The shape and geometry of the final pit designs are shown in Figures 5, 6 and 7.

A pit production and process feed schedule was completed in quarterly increments resulting in an 25.75 year mine life, exclusive of pre-production development and three quarters of pre-production mining in which:

- Waste stripping is conducted;
- A Run of Mine (ROM) ore stockpile is built to have process feed material available from the start of production; and
- A completed pit void is established to serve as the initial Tailings Storage Facility for the Project.

The schedule demonstrates that the mine can provide sufficient material to maintain a consistent process feed rate and grade to achieve the targeted $U_3O_8$ production throughout the first 20 years of planned mine life, tapering after that time due to reduced grade.

Graphical results of the planned tonnes mined, area mined, ore tonnes and grade mined and ore processed in the production schedule are shown in Figures 8, 9, 10 and 11 respectively.

The work completed at PFS level in support of the modifying factors, facilitates the reporting of an Updated Ore Reserve for this Project in accordance with the guidelines in the JORC Code (2012). Probable Ore Reserves have been derived from the Indicated Mineral Resources contained within the final pit design and scheduled to be processed through the planned processing facility.

The Updated Ore Reserve is contained within an open pit containing 216.0Mt of waste material, plus 17.0Mt of low grade (<150ppm $U_3O_8$) and inferred material (considered as mineralised waste and separately stockpiled), resulting in a waste to ore (tonnes) strip ratio of 2.59:1 and a total aggregate open pit size of 322.8Mt.

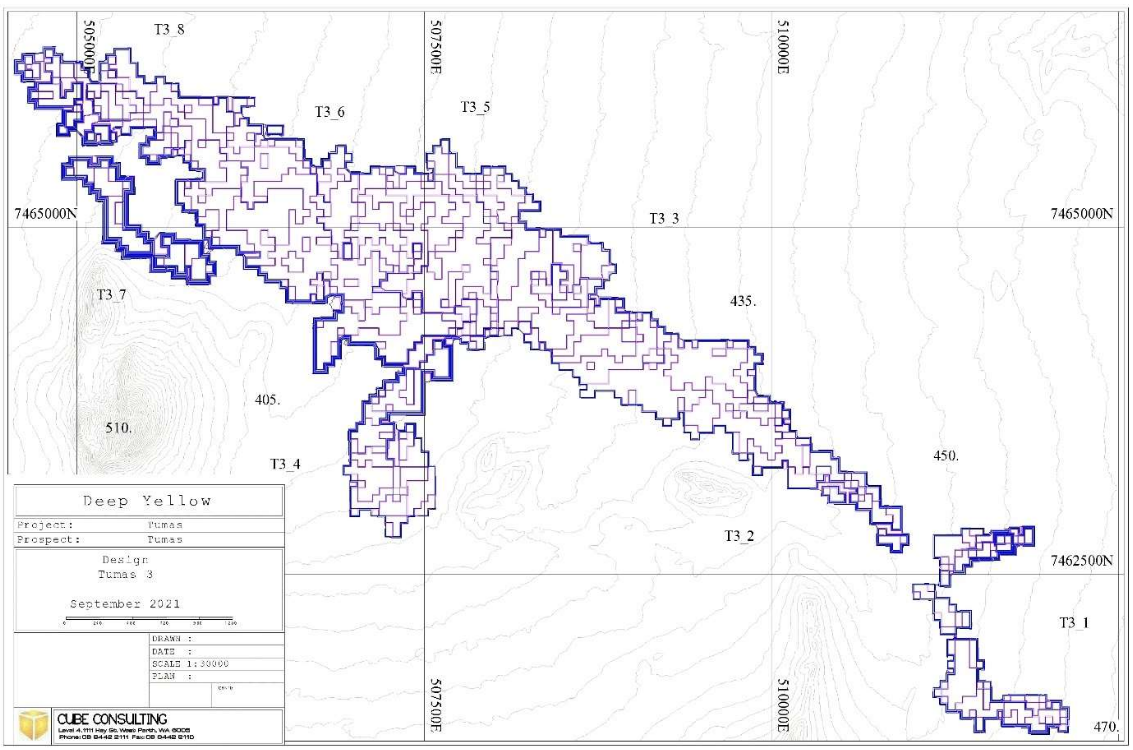


***Figure 5:*** *Tumas 3 Pit Shells.*

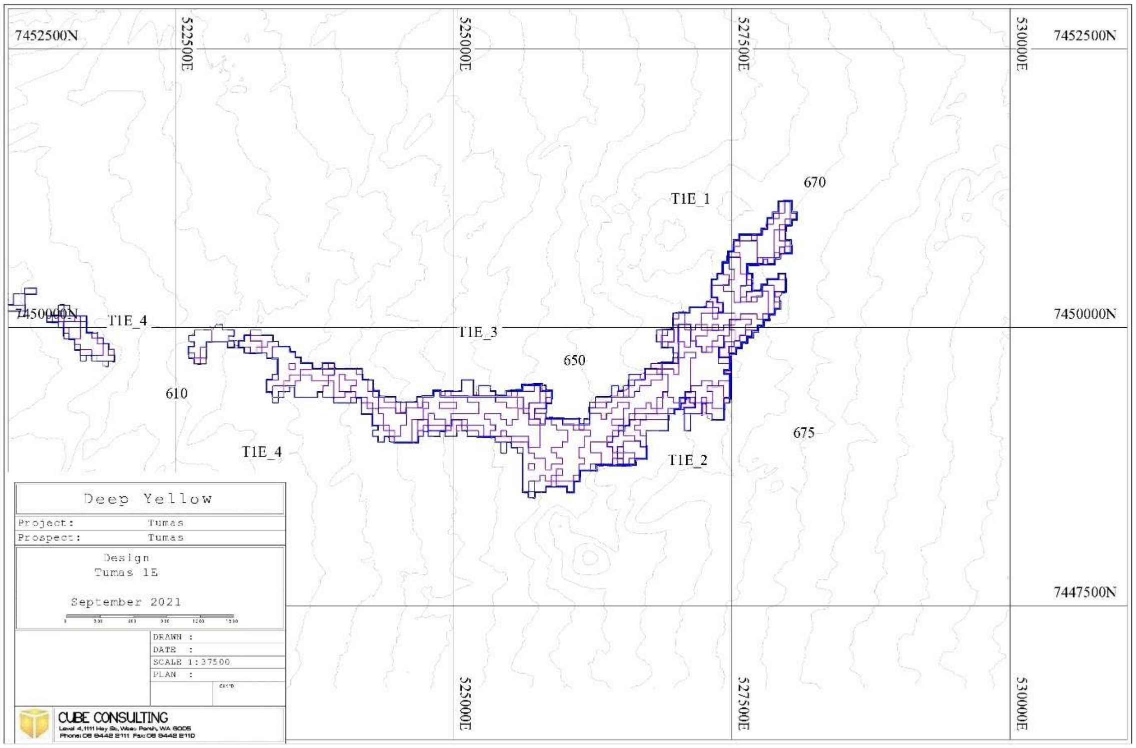


***Figure 6:*** *Tumas 1East Pit Shells.*

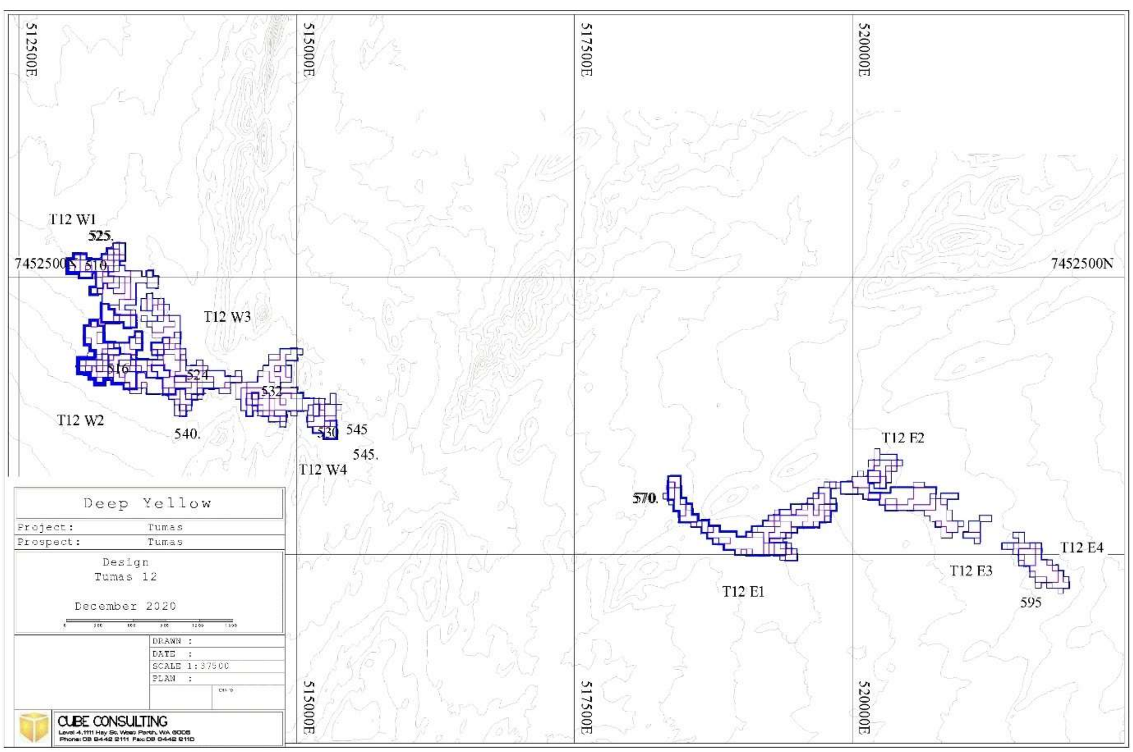


***Figure 7:*** *Tumas 1 Pit Shells.*

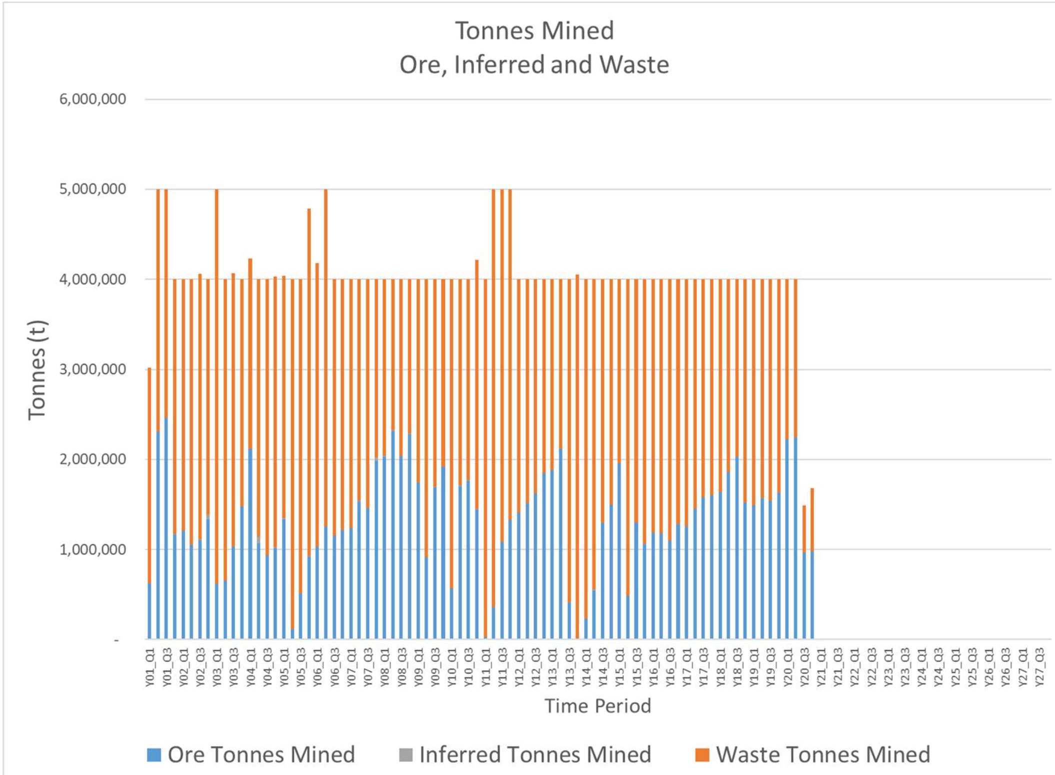


***Figure 8:*** *Tumas Project Production Schedules.*

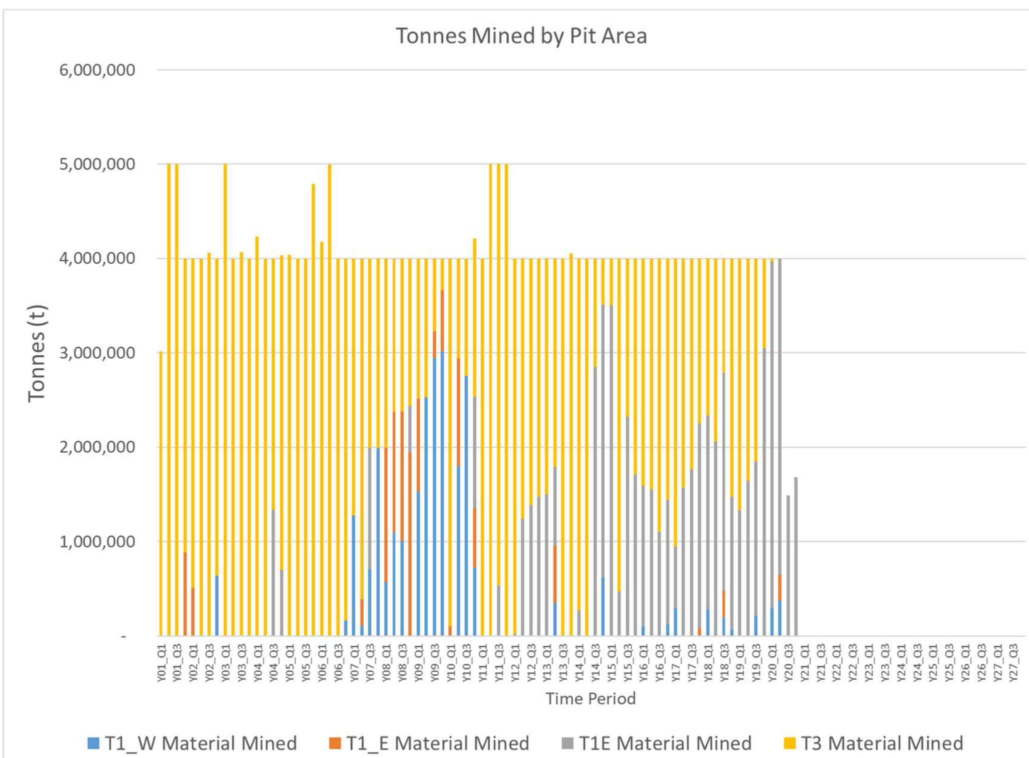


***Figure 9:*** *Tumas Project Production Schedules.*

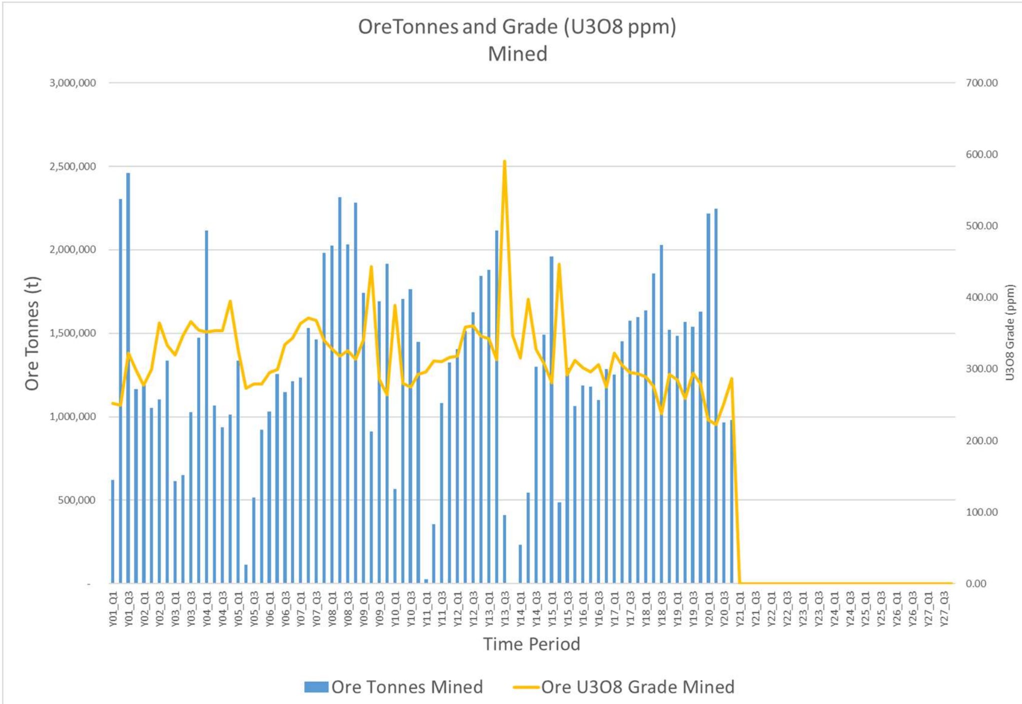


***Figure 10:** Tumas Project Production Schedules.*

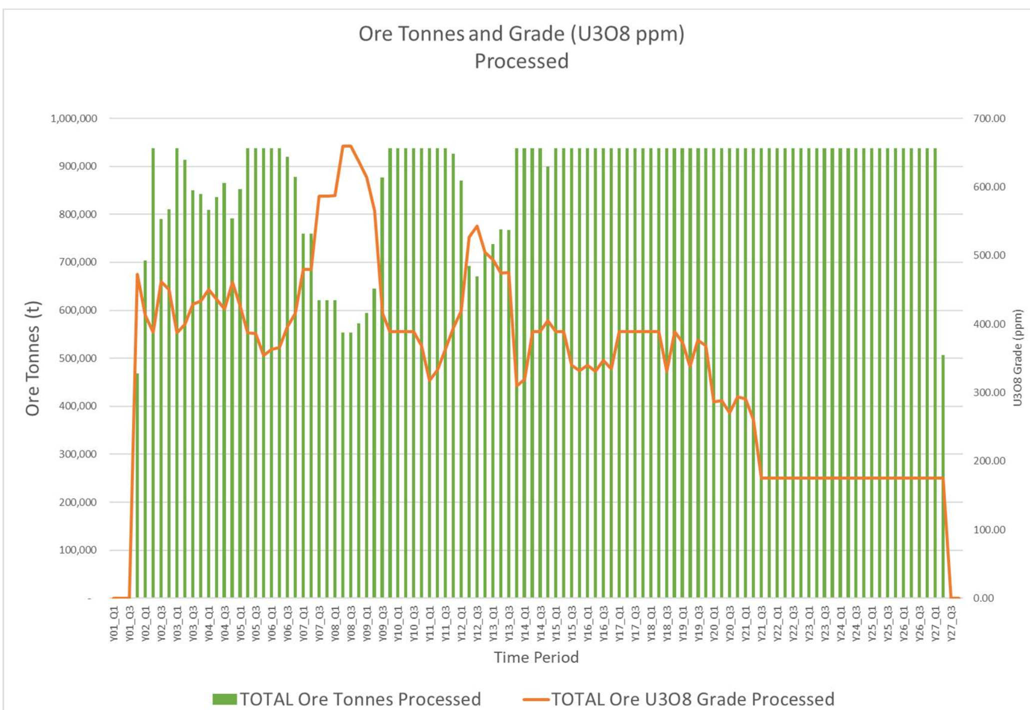


***Figure 11:** Tumas Project Production Schedules.*

Final input parameters containing processing, operating, fixed and mining costs and recovery were provided to Cube by Deep Yellow.

This information consisted of base economic, geotechnical, mining and processing parameters required for the Cube study. These inputs are listed in Table 4.

Economic parameters provided by Deep Yellow were used in completing open pit optimisations using WHITTLE® software, which uses the Lerchs-Grossman algorithm to determine a range of optimal shells at varying metal prices. The program generates economic shells based on input parameters consisting operating costs (mining & processing costs, royalties, selling costs), metallurgical recoveries, geologic and geotechnical (slope) considerations. The optimal pit shells derived from the open pit optimisation are then used to develop open pit mine plans for the deposit. The sections below discuss the parameters used in the pit optimisation process.

All dollars ($) quoted are in 2020 United States (US) dollars unless otherwise specified.

***Table 3:*** *Tumas Project, Ore Reserve, Physical and Base Inputs.*

| **Physicals and Base Inputs** | | |
|---|---|---|
| **Item** | **Unit** | **Value** |
| Ore treated | ktpa | 3,748 |
| Met Recovery $U_3O_8$ | % | 93.3 |
| Fuel Price | $/l | 0.56 |
| Exchange rate | (N$:US$) | 19.1372 |
| $U_3O_8$ produced | Mlb pa | 2.98 |
| Base Price $U_3O_8$ | US$/lb | 65 |
| Selling Costs | $/lb $U_3O_8$ | 1.59 |
| **Ore Based Costs** | | |
| Mining | $/t Ore | 2.56 |
| Processing | $/t Ore | 9.33 |
| Maintenance | $/t Ore | 1.55 |
| G&A | $/t Ore | 1.75 |
| SHR | $/t Ore | 0.33 |
| Environment | $/t Ore | 0.10 |
| HR | $/t Ore | 0.08 |
| Marketing | $/t Ore | 0.08 |
| **Total Ore Based Costs** | **$/t Ore** | **15.79** |

### Mining Dilution and Ore Loss

The models supplied were estimated using MIK with information effect adjustments and have been treated as recoverable resource models thereby not requiring additional mining dilution and ore loss factors.

### Metallurgical Recoveries

A metallurgical recovery assumption of 93.3% was used in the pit optimisation process. This was supplied by Deep Yellow.

### Discount Rate

A discount factor of 10% per annum was applied at a maximum throughput rate of 3.748Mtpa. The discounted cash flows which are exclusive of capital expenditure, are indicative only and used for comparison purposes in the optimisation evaluation and shell selections.

**Cut-off Grade Calculation**

Treatment plant breakeven cut-off grade was calculated to demonstrate a theoretical break-even point within the resources. A theoretical, calculated cut-off was determined by:

$$Cut - Off\ Grade\ (\%) = \frac{Treatment\ Plant\ Costs}{Metal\ Price * (1 - Royalty) * Recovery}$$

Where:

| | | |
|---|---|---|
| Treatment Plant Costs | = | processing and all ore related costs ($/t) |
| Metal Price | = | $U_3O_8$ price |
| Royalty | = | All royalties payable |
| Recovery | = | Metallurgical Recovery (%) |

The calculated breakeven cut-off grade using the above input parameters is 121ppm $U_3O_8$. Analyses of numerous scenario iterations of pit optimisation and production scheduling resulted in a strategic decision to base this study and hence the reported Ore Reserves on an elevated cut-off grade of 150pmm $U_3O_8$.

**Geotechnical Parameters**

Overall slope angles used in the optimisation are 35°. No allowance was made for ramps as it was decided ramps could be positioned where required for little extra cost or effect on the overall shell due to the very flat and shallow nature of the resultant open pits.

**Project Funding**

Deep Yellow has formed the view that there are reasonable grounds to believe that the Tumas Project is capable of being financed in the future, as and when required. The grounds for this view are:

- There is significant market interest in the sector given the need to drive down greenhouse gas emissions and meet the various targets set by the Paris Accord, in an environment which sees forecast growth in electricity production;
- Over the past decade there has been a significant reduction in the number of companies which have either a viable resource to be developed and/or the expertise to develop it. Deep Yellow is debt free and holds 100% of the Tumas Project;
- The technical and financial assumptions detailed in the PFS demonstrate the potential of the Tumas Project to be economically robust and highly attractive. A combination of debt and equity will likely be utilised to fund the development of the Project; and
- The executive team have significant relevant and recent experience in the development of uranium mines in Namibia. In this regard the key executives have a demonstrated track record in project developments of this nature.

**ASX ADDITIONAL INFORMATION**

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

**Deposit Parameters:** The Tumas Project uranium mineralisation is of the calcrete-type located within an extensive, mainly east-west trending, palaeochannel system. The uranium mineralisation occurs in association 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 high enough. 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, mines this type of deposit and has been in operation since 2007.

The mineralisation included in this study has a strike length of approximately 40km and ranges in width between 300m to 1200m extending to a maximum depth of 30m along the main Tumas channel. Thicknesses vary from 1m to 15m. The mineralisation occurs in a reasonably continuous, seam-like horizon, occurring between depths of 1m to 30m and extends west beyond the infill drilled area (see Figure 3).

**Methodology**

All relevant drill hole details and results were previously reported by Deep Yellow in announcements made to the ASX on 2 September, 19 August 2021, 21 August 2019, 27 November 2018, 05 November 2018, 17 October 2018 and 2 October 2018.

Figure 3 shows the Tumas Deposits drill hole locations with the collars coloured according to grade thickness (GT- $eU_3O_8$ ppm x metre thickness) outlining the extent and nature of the mineralisation over the 40km length of channel tested which was the focus of this current ORE work.

**CONCLUSION**

Ongoing exploration and drilling of the Tumas palaeochannel continues to prove highly successful, fully endorsing the new approach that has been taken in both identifying and testing of what has proven to be a highly prospective regional target.

The infill drilling, undertaken to improve the classification of uranium Mineral Resources at Tumas 3 and 1 East, shows an extremely high >100% conversion rate from Inferred to Indicated Mineral Resources and subsequent uplift in Ore Reserve outcomes, which has positive implications for upgrading the remainder of Tumas Inferred Mineral Resources.

The 114.1Mlb total Mineral Resource grading 249ppm $U_3O_8$ at Tumas 1, 1 East, 2 and 3 as shown on Table 1 and Table 2 in Appendix 1, now includes 98.7Mlb of Indicated Mineral Resources and 15.3Mlb Inferred Mineral Resources. Ore Reserves within these deposits now include 68.4Mlb at 345ppm $U_3O_8$, sufficient for the 20+ year LOM targeted by the current DFS.

As has been previously stated, work is clearly confirming that increasing the palaeochannel calcrete Mineral Resource base toward the upper of the stated range of 100M-150Mlb uranium Mineral Resources in the 300ppm to 500ppm $U_3O_8$ grade range remains a realistic objective, with a number of deposits to the west remaining open in both depth and extension.

The 50km of highly prospective palaeochannel identified, still to be tested in detail, provides significant exploration upside to further increase the uranium resource base. An eventual 30-year LOM at 3Mlb pa for the Tumas Project is becoming a real possibility.

The current infill drilling and resultant positive ORE shows that a large proportion of the current Inferred Mineral Resources identified to date has a high probability to be upgraded to the

Indicated JORC reporting status, of which a substantial proportion may convert to Ore Reserves. This has further important positive implications for the future of the Tumas Project.

Yours faithfully

**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.*

### For further information contact:


John Borshoff
Managing Director/CEO
T: +61 8 9286 6999
E: john.borshoff@deepyellow.com.au


**About Deep Yellow Limited**

Deep Yellow Limited is a differentiated, advanced uranium exploration company, in pre-development phase, implementing a 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. A PFS was completed in early 2021 on its Tumas Project in Namibia and a Definitive Feasibility Study commenced February 2021. 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.

ABN 97 006 391 948

Unit 17, Spectrum Building
100–104 Railway Road
Subiaco, Western Australia 6008

PO Box 1770
Subiaco, Western Australia 6904

DYL: ASX & NSX (Namibia)
DYLLF: OTCQX

www.deepyellow.com.au
@deepyellowltd
deep-yellow-limited

BEST 50 OTCQX 2021

AAMEG AFRICA AWARDS 2021 WINNER

***Competent Persons' Statements***

*Mineral Resource Estimate:*

*The information in this announcement that relates to the Tumas Mineral Resource Estimate is based on work completed by Mr. D Princep, B.Sc. Geology, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). Mr. Princep consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*

*Geophysics Component:*

*The deconvolution of the relevant Tumas 3 down-hole gamma data to convert the data to equivalent uranium values ($eU_3O_8$) was performed by experienced in-house personnel and checked by Dr Patrick Brunel, a geophysicist who works as a consultant with 25 years of relevant experience in the industry. Dr. Brunel obtained his doctorate in Earth Sciences (Geophysics) in 1995 and has over 10 years' experience with this type of process 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). Dr Brunel in a member of the European Association of Geoscientists and Engineers and consents to the inclusion in this announcement of those 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 announcement, 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.*

*Ore Reserve Statement*

*The information in this announcement that relates to Ore Reserves is based on information compiled by Mr Quinton de Klerk, who is employed by Cube Consulting. Mr de Klerk is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the activity 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 (the JORC Code)". Mr de Klerk consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*

*Project and Technical Expertise*

*Mr Darryl Butcher is a process engineer/metallurgist working for Deep Yellow and has sufficient relevant experience to advise the Company on matters relating to mine development and uranium processing, project scheduling, processing methodology and project capital and operating costs. Mr Butcher is satisfied that the information provided in this announcement has been determined to a Pre-Feasibility Study level of accuracy and that the relevant modifying factors determined by the PFS are suitable to use as modifying factors for this updated ORE.*

# APPENDIX 1

# JORC RESOURCES

*Table 1: Total Resources*

| Deposit | Category | Cut-off (ppm $U_3O_8$) | Tonnes (M) | $U_3O_8$ (ppm) | $U_3O_8$ (t) | $U_3O_8$ (Mlb) | Resource Categories (Mlb $U_3O_8$) Measured | Indicated | Inferred |
|---|---|---|---|---|---|---|---|---|---|
| **BASEMENT MINERALISATION** | | | | | | | | | |
| | | **Omahola Project - JORC 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 |
| **Omahola Project Sub-Total** | | | **48.7** | **420** | **20,400** | **45.1** | **11.0** | **16.0** | **18.1** |
| **CALCRETE MINERALISATION Tumas 3 Deposit - JORC 2012** | | | | | | | | | |
| 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 |
| **Tumas 3 Deposits Total** | | | **88.3** | **308** | **27,170** | **59.9** | | | |
| | | **Tumas 1 & 2 Project – JORC 2012** | | | | | | | |
| Tumas 1 & 2 Deposit ◆ | Indicated | 100 | 54.1 | 203 | 10,987 | 24.2 | - | 24.2 | - |
| Tumas 1 & 2 Deposit ◆ | Inferred | 100 | 2.4 | 206 | 503 | 1.1 | - | - | 1.1 |
| **Tumas 1 & 2 Project Total** | | | **56.5** | **203** | **11,499** | **25.3** | | | |
| | | **Tumas 1E Project – JORC 2012** | | | | | | | |
| Tumas 1E Deposit ◆ | Indicated | 100 | 36.3 | 245 | 8,873 | 19.6 | | 19.6 | |
| Tumas 1E Deposit ◆ | Inferred | 100 | 19.4 | 216 | 4,189 | 9.2 | | | 9.2 |
| **Tumas 1E Deposit Total** | | | **55.7** | **235** | **13,061** | **28.8** | | | |
| **Sub-Total of Tumas 1, 2 and 3** | | | **200.6** | **258** | **51,736** | **114.1** | | | |
| | | **Tubas Red Sand Project - JORC 2012** | | | | | | | |
| 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 Red Sand Project Total** | | | **34.0** | **170** | **5,800** | **12.7** | | | |
| | | **Tubas Calcrete Resource - JORC 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 Project - JORC 2004** | | | | | | | |
| 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-Total** | | | **276.6** | **248** | **68,536** | **150.9** | **-** | **105.5** | **45.3** |
| **GRAND TOTAL RESOURCES** | | | **325.3** | **273** | **88,936** | **196.0** | **11.0** | **121.5** | **63.4** |

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

*XRF chemical analysis unless annotated otherwise.*

*♦ $eU_3O_8$ - equivalent uranium grade as determined by downhole gamma logging.*

*# Combined XRF Fusion Chemical Assays and $eU_3O_8$ values.*

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

*Gamma probes were originally 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.*

*Sensitivity checks are conducted by periodic re-logging of a test hole to confirm operations.*

*During drilling, probes are checked daily against standard source.*

***Table 2:*** *Tumas 1, 1 East, 2 and 3 - JORC 2012 MRE - Indicated and Inferred Mineral Resources at various cut off grades*

| **Detail** | | **Indicated** | | | **Inferred** | | | **Total** | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Cut-off** | **Deposit** | **Tonnes M** | **Grade ppm** | **Metal Mlb** | **Tonnes M** | **Grade ppm** | **Metal Mlb** | **Tonnes M** | **Grade ppm** | **Metal Mlb** |
| 200 | Tumas 1E | 22.35 | 298 | 14.69 | 10.13 | 265 | 5.92 | 32.48 | 288 | 20.61 |
| 150 | | 31.25 | 263 | 18.14 | 16.53 | 231 | 8.4 | 47.78 | 252 | 26.54 |
| **100** | | **36.27** | **245** | **19.56** | **19.42** | **216** | **9.23** | **55.69** | **234** | **28.79** |
| 200 | Tumas 1 | 11.84 | 343 | 8.96 | 0.71 | 357 | 0.56 | 12.55 | 344 | 9.52 |
| 150 | | 19.7 | 275 | 11.95 | 1.15 | 286 | 0.73 | 20.85 | 276 | 12.68 |
| **100** | | **33.76** | **212** | **15.76** | **2.09** | **212** | **0.98** | **35.85** | **212** | **16.74** |
| 200 | Tumas 2 | 4.85 | 367 | 3.92 | 0.06 | 350 | 0.05 | 4.91 | 367 | 3.97 |
| 150 | | 8.69 | 281 | 5.38 | 0.13 | 262 | 0.07 | 8.82 | 280 | 5.45 |
| **100** | | **20.33** | **189** | **8.47** | **0.39** | **166** | **0.14** | **20.72** | **188** | **8.61** |
| 200 | Tumas 3 | 45.32 | 440 | 43.91 | 3.51 | 364 | 2.81 | 48.83 | 434 | 46.72 |
| 150 | | 63.17 | 364 | 50.76 | 6.25 | 280 | 3.85 | 69.42 | 357 | 54.61 |
| **100** | | **77.99** | **320** | **54.94** | **10.36** | **219** | **4.99** | **88.35** | **308** | **59.93** |
| 200 | **TOTAL** | 84.36 | 385 | 71.48 | 14.41 | 294 | 9.34 | 98.77 | 371 | 80.82 |
| 150 | | 122.81 | 318 | 86.23 | 24.06 | 247 | 13.05 | 146.87 | 307 | 99.28 |
| **100** | | **168.35** | **266** | **98.73** | **32.26** | **216** | **15.34** | **200.61** | **258** | **114.07** |

***Note:*** *Figures have been rounded and totals may reflect small rounding errors.*
*$eU_3O_8$ - 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.*

## APPENDIX 2

## 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 |
|---|---|---|
| *Sampling techniques* | • *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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg '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.* | • The recent (2018-2021) drilling relies on down hole gamma data from calibrated probes which were converted into equivalent uranium values ($eU_3O_8$) by experienced DYL personnel and have been confirmed by a competent person (geophysicist). Geochemical assays were used to confirm the conversion results.<br>• 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.<br>**Total gamma $eU_3O_8$**<br>• 33 mm Auslog total gamma probes were used and operated by Company personnel.<br>• RMR's gamma probes were calibrated by a qualified technician at Langer Heinrich Mine in July 2018 (T003, T029, T030, T164 and T165) and in September 2019 (T029, T030, T161, T162, T164 and T165).<br>• During drilling, the probe was checked daily using sensitivity checks against a standard source.<br>• Gamma measurements were taken at 5cm intervals at a logging speed of approximately 2m per minute.<br>• Probing was done immediately after drilling mainly through the drill rods and in some cases in the open holes. Rod factors were established to compensate for reduced gamma counts when logging through the rods.<br>• The gamma measurements were recorded in counts per second (c/s) and were converted to equivalent $eU_3O_8$ values |

## APPENDIX 2

## **JORC Code, 2012 Edition – Table 1 Report** (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | over 5cm intervals using probe-specific K-factors. These intervals were subsequently composited to 1m intervals.<br>• Disequilibrium studies done in 2008 on 22 samples derived from the nearby Tumas 1 and 2 zones by ANSTO Minerals indicated that the $U^{238}$ decay chains of the wider Tumas deposit, of which Tumas 1E is part, are within an analytical error of ± 12% and considered to be in secular equilibrium.<br>**Chemical assay data**<br>• Geochemical samples were derived from Reverse Circulation (RC) drilling at intervals of 1m. Samples were split at the drill site using a riffle splitter to obtain a 1kg sample from which 120g was pulverized to produce a subset for XRF-analysis.<br>• Prior to 2020, drill samples were dispatched to ALS in Johannesburg, South Africa for uranium and sulphur analysis using pressed powder pellet XRF and Leco Furnace and Infrared Spectroscopy, respectively. 15% of all uranium mineralised intersections were analysed.<br>• For the 2021 drilling program close to 80% of uranium mineralised intersections were analysed by handheld XRF in-house in the RMR laboratory. The instrument was regularly checked by analysing standards.<br>• The samples were taken for confirmatory assay to be compared to the equivalent uranium values derived from down-hole gamma logging.<br>• Previous assay results from the area have confirmed the equivalent uranium grades and are within an acceptable statistical error margin of 10%. |
| *Drilling techniques* | • *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).* | • RC infill drilling was used for the Tumas 1E campaign.<br>• All holes were drilled vertically, and intersections measured present true thicknesses. |

## APPENDIX 2

### JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | • Drill chip recoveries were good, generally greater than 90%.<br>• Drill chip recoveries were assessed by weighing 1m drill chip samples at the drill site. Weights were recorded in sample tag books.<br>• Sample loss was minimised by placing the sample bags directly underneath the cyclone.<br>• Drilling air pressures were monitored during the drilling program |
| *Logging* | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All drill holes were geologically logged.<br>• The logging was qualitative in nature. A dominant (Lith1) and a subordinate lithology type (Lith2) was determined for every sample representing a 1m interval with assessment of ratio/percentage.<br>• Other parameters routinely logged include colour, colour intensity, weathering, oxidation, alteration, alteration intensity, grain size, hardness, carbonate ($CaCO_3$) content, sample condition (wet, dry) and a total gamma count was derived from a Rad-Eye scintillometer.<br>• In the most recent drilling program, 6,982m were geologically logged, which represents 100% of metres drilled. The full Tumas 1E dataset contains 8,280 logged intervals amounting to 13,312m.<br>• Lithology Codes for palaeochannel lithologies used are: AL=Alluvion, AG=Gravel, AGS=Gravel silty sandy, SAT=Silty sand, SR=Red sand, CA=Calcrete un-differentiated, CAW=Calcrete whitish, CAB=Calcrete brownish, CAF=Calcrete pale red _Fine grained, SS=Sandstone, SC=Conglomerate, SA=Sand, SSF=Sandstone fine_CaCO3 cement, GY=Gypsum, CH=Chert, SSD=Dolomitic sandstone, QCO=Quartzitic conglomerate, CY=Clay, SH=Shale, REW=Reworked bedrock & calcrete. |

## APPENDIX 2

### **JORC Code, 2012 Edition – Table 1 Report** (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • Lithology Codes for the channel floor or basement lithologies used are: SD=Dolomite, ST=Siltstone, SM=Mudstone, GG=Granite, ALAS=Alaskite, PQM=Micaceous quartzite, MS=Micaschis, MB=Marble, PSAM=Psammite, MPEL=Metapelite, HQ=Vein quartz, GZ=Pegmatite, PZ=Biotite gneiss, PQ=Quartzite, PG=Gneiss undifferentiated, PR=Magnetite gneiss, PT=Granitised gneiss, OD=Dolerite, HS=Skarn, PA=Amphibolite, BU=Mafic extrusive, MM=Massive magnetite, GD=Granodiorite, BI=Massive biotite, SB=Breccia, BR=Bedrock, PX=Calc-silicate, PK=Calc-silicate gneiss |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Sample splitters used were a 2-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 for any oversize assay samples. All sampling was dry.<br>• The sampling techniques are common industry practice.<br>• Sample sizes are considered appropriate to the grain size of the material being sampled.<br>• Standards were inserted after each 23rd primary sample, followed by a duplicate of the 22nd primary sample.<br>• Blanks were inserted randomly, but commonly following a high-grade primary sample determined by gamma scintillometer.<br>• RMR uses two different standards, (AMIS0087 = alaskite, Goanikontes) and (AMIS0092 = calcrete, Langer Heinrich Uranium Mine). Previously AMIS0087 standards reported within two standards deviation at an average of 207ppm $U_3O_8$ while the expected value is 205ppm $U_3O_8$; Previously AMIS0092 standards also performed within the acceptable limits of the two standard deviations at an expected value of 338ppm $U_3O_8$, against an average derived assay of 339ppm $U_3O_8$. |

## APPENDIX 2

### JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Quality of assay data and laboratory tests* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *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.*<br>• *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.* | • The analytical method employed was ICP-MS (Lithium Borate Fusion). The technique is industry standard and considered appropriate.<br>• In-house XRF measurements were taken by a Hitachi X-MET8000 Expert Geo instrument.<br>• AUSLog downhole gamma tools were used as explained under 'Sampling techniques. This is the principal evaluating technique.<br>• 15% of mineralised holes will be sent for analysis to ALS during the most recent infill drilling programme.<br>• In general the quality control standards analysed with the mineralised samples from the previous drill programmes performed well and did not show any bias.<br>• Comparison between the assayed samples from previous drilling programs in th area and equivalent composited gamma data showed an acceptable correlation on a metre-by-metre basis and a good correlation based on population distribution. The comparison confirms that the gamma derived values are appropriate for use in the MRE. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • The geology logs were recorded in the field using tablets and secured Microsoft Excel logging spreadsheets. Logging codes are derived from pre-defined pulldown menus minimizing mis-logging and misspelling. All digital information was downloaded to a server and validated by the geologist at the end of every drill day.<br>• Sample tag books were utilized for sample identification.<br>• The field drill data of those logs and tag books (lithology, sample specifications etc.) is validated by the relevant project geologist before dispatching for import into a geological database. |

**APPENDIX 2**

**JORC Code, 2012 Edition – Table 1 Report** (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • Twinning of RC holes was not considered due to the nuggetty nature of the mineralisation.<br>• Data was uploaded onto a file server following a strict validation protocol.<br>• Equivalent $eU_3O_8$ values are calculated from raw gamma files by applying calibration, casing factors where applicable and deconvolution.<br>• The factors applied to individual logs are stored in a database on a file server.<br>• Equivalent $U_3O_8$ data is composited from 5cm to 1m intervals.<br>• The ratio of $eU_3O_8$ versus assayed $U_3O_8$ for matching composites is used to quantify the statistical error. It was found that they all lie within statistically acceptable margins. |
| *Location of data points* | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • The collars were surveyed by an in-house surveyor using a differential GPS.<br>• All drill holes are vertical and shallow; therefore no down-hole surveying was deemed necessary.<br>• The grid system is World Geodetic System (WGS) 1984, Zone 33. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • The data spacing and distribution is optimised along the Tumas palaeochannel direction. North-South drill line spacing is 50m with 100m hole spacings offset by 50m on alternate drill lines achieving an overall 70m by 70m hole spacing.<br>• The drill pattern is considered sufficient to establish an Indicated Mineral Resources.<br>• The total gamma count data, which is recorded at 5cm intervals, is converted to equivalent uranium value ($eU_3O_8$) and composited to 1m intervals. |

**APPENDIX 2**

**JORC Code, 2012 Edition – Table 1 Report** (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *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.* | • Uranium mineralisation is strata bound and distributed in a fairly continuous horizontal layer. Holes were drilled vertically and mineralised intercepts therefore represent the true width.<br>• All holes were sampled down-hole from surface. Geochemical samples were collected at 1 m intervals. Total-gamma count data was collected at 5 cm intervals. |
| *Sample security* | • *The measures taken to ensure sample security.* | • 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. Sample preparation for dispatch to ALS laboratories in South Africa was done at RMR's own prep-lab facility.<br>• Upon completion of the preparation 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 sample storage yard at Rocky Point located outside Swakopmund. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • Dr J Corbin from GeoViz Consulting Australia undertook a drilling data review. He concluded his audit commenting: "Overall, the data available is of reasonably good quality and easily accessible." |

## Section 2 Reporting of Exploration Results

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Mineral tenement and* | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint* | • The work to which the Exploration Results relate was undertaken on exclusive prospecting grant EPL3496 and EPL3497 |

**APPENDIX 2**

**JORC Code, 2012 Edition – Table 1 Report** (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *land tenure status* | *ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • The EPLs were originally granted to Reptile Uranium Namibia (Pty) Ltd (RUN) in June 2006. RUN is a wholly owned subsidiary of Reptile Mineral Resources and Exploration (Pty) Ltd (RMR), the latter being the operator. The EPLs are in good standing. A renewal application was submitted to the Ministry of Mines and Energy within the legislated timeframe.<br>• A Mining Lease application including the Tumas Resources was submitted to the Ministry of Mines and Energy on 21 July 2021.<br>• The EPL is located within the Namib-Naukluft National Park in Namibia.<br>• There are no known impediments to the Project beyond Namibia's standard permitting procedures. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • Prior to RMR's ownership of these EPLs, some work was conducted by Anglo American Prospecting Services (AAPS), General Mining Corporation and Falconbridge in the 1970s.<br>• Assay results from the historical drilling are incomplete and available on paper logs only. There are no digital records available from this period. Data from this historical information does not form part of the Mineral Resource dataset. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Tumas mineralisation occurs as secondary carnotite enrichment of variably calcretised palaeochannel and sheet wash sediments and adjacent weathered bedrock.<br>• Uranium mineralisation at Tumas is surficial and strata-bound in Cenozoic sediments, which include from top to bottom scree, sand, gravel, gypcrete, various intercalated calcareous sand and calcrete horizons overlying discordant Damaran age folded sequences of meta-volcanics and meta-sediments. Predominant basement stratigraphy is Nosib-Swakop Group with Chuos Fm being the highest lithostratigraphic level in the project area exposed. East of Tumas 3 is Kuiseb Fm exposed forming the highest lithostratigraphic |

## APPENDIX 2

### JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | levels. All sequences are highly metamorphosed and characterized by isoclinal folding in partly over thrusted sheets lying staggered on top of each other. Strike is generally NE-SW to NNE-SSW, mostly steep dipping. Three different folding events are observed.<br>• The majority of the mineralisation in the project area is hosted in calcrete. Locally, the underlying Proterozoic bedrock shows traces of mineralisation in weathered contact zones of more schistose basement types; this however seldomly occurs. |
| *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:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | • 1,473 RC holes were drilled over 24,942m in the 2021 infill drilling program.<br>• All relevant drilling on Tumas 3 and 1E was carried out between February 2021 and August 2021.<br>• All holes were drilled vertically, and intersections measured present true thicknesses. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • 5cm gamma intervals were composited to 1m intervals.<br>• 1m composites of $eU_3O_8$ were used for the estimate.<br>• No grade truncations were applied. |
| *Relationship between mineralisation widths and* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* | • The mineralisation is sub-horizontal and all drilling vertical, therefore, mineralised intercepts are considered to represent true widths. |

# APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *intercept lengths* | • *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').* | |
| *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.* | • All relevant intercepts were included within the text and appendices of previous releases. |
| *Balanced reporting* | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • Comprehensive reporting, including two previous announcements of Exploration Results of the 2021 program covering the Tumas 1E project area, were practised throughout the drilling program. |
| *Other substantive exploration data* | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • The wider area of the Tumas palaeochannel was subject to some drilling from the 1970s on by Anglo American Prospecting Services, Falconbridge and General Mining Corporation.<br>• Downhole gamma-gamma density logging for bulk density was derived from recent work at Tumas 1, 2 and 3 and in analogy to Langer Heinrich Uranium Mine mining in the same lithologies and geological settings East and North-East of Tumas Zone 3.<br>• 500 in house bulk density determinations were carried out on core samples from Tumas 1, 2 and 3. Additionally 50 samples were sent to ALS in Johannesburg for verification of the results. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • The palaeochannel mineralisation continues westwards into Tumas 1 and 2. |

## APPENDIX 2

**JORC Code, 2012 Edition – Table 1 Report** (continued)

## Section 3 Estimation and Reporting of Mineral Resources

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Database integrity* | • *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>• *Data validation procedures used.* | A set of SOPs (Standard Operating Procedures) was defined that safeguard data integrity which covers the following aspects:<br>• Capturing of all exploration data; geology and downhole probing;<br>• QA/QC of all drilling, geophysical and laboratory data;<br>• Data storage (database management), security and back-up;<br>• Reporting and statistical analyses used industry standard software packages including Micromine and GS[3]. |
| *Site visits* | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | • During all drilling programs regular site visits were conducted by the Company's Competent Person who signed off on all exploration data.<br>• More recently, the Company's current Competent Person has undertaken regular visits with the most recent visit being in June 2021.<br>• The Competent Person for Mineral Resources has visited the site numerous times with the most recent being in 2017. |
| *Geological interpretation* | • *Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.*<br>• *Nature of the data used and of any assumptions made.*<br>• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>• *The use of geology in guiding and controlling Mineral Resource estimation.*<br>• *The factors affecting continuity both of grade and geology.* | • Confidence in the geological interpretation and modelling of the sedimentary channel-fill is very high. This type of geology is well known and readily recognised in the RC drill chips.<br><br>The factors affecting grade distribution are channel morphology and bedrock profile, with bedrock "highs" indicative forming areas of mineralisation traps. |
| *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.* | • The infill drilled mineralisation in Tumas 3 and 1E has a total strike length of approximately 20km, 100 to 1,200m wide, 0 to 30m deep. The main mineralised calcrete reaches from a shallow depth below surface of -1 to -2m deep down to -25m |

# APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Estimation and modelling techniques* | • *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.*<br>• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>• *The assumptions made regarding recovery of by-products.*<br>• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*<br>• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>• *Any assumptions behind modelling of selective mining units.*<br>• *Any assumptions about correlation between variables.*<br>• *Description of how the geological interpretation was used to control the resource estimates.*<br>• *Discussion of basis for using or not using grade cutting or capping.*<br>• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | • The present estimates are based on grade domains controlling the interpolations into block estimates. Block sizes used are 50m East x 50m West x 3m elevation.<br>• Estimation of block values used Multi Indicator Kriging (MIK). Mineralisation surfaces were derived around an 80ppm eU3O8 minimum value.<br>• As the estimate was based on MIK no grade capping was applied.<br>• The MIK estimate was based on a total of 14 indicator bin values representing 10% probability increments up to 70% then 5% increments to 95% then 97% and 99% in order to more reasonably model the high-grade component of the dataset.<br>• Directional variograms based on 14 indicator bins are used in the current estimates.<br>• A maximum search distance of 200m x 200m x 10.4m was used within the estimate. Panel proportions were limited by the modelled basement profile as any basement hosted mineralisation is not considered for processing.<br>• Block validation was done using qualitative drill hole displays over block estimates. The current block estimate throughout correlates well with composited eU3O8 GT (Grade-Thickness) data.<br>• No correction for water was made other than any that may have been applied during the calculation of downhole equivalent uranium values.<br>• A block support correction was applied to the MIK estimate to derive final block proportions and grades. This correction value adjusts the tonnes and grade for each panel based on the likely mining and grade control parameters. The general progression of this process is to increase overall tonnes and reduce overall grades. Final smu sizes were set at 4m x 4m x 3m with a target grade control spacing of 4m x 4m x 1m. |

## APPENDIX 2

### JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| | | • The MIK estimate is considered to be a recoverable Mineral Resource.<br>• There is potential to recover the vanadium that is a component of the mineralisation (from carnotite) however this has not been considered as part of this MRE.<br>• Average drill spacing is a staggered 100m x 50m and the Mineral Resource panels are centred on alternating drill holes. |
| *Moisture* | • *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | • An visual 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 water at times. As the majority of grade values applied within the MRE are based on downhole logging whether the sample is wet or dry is not considered material.<br>• Tonnages are estimated dry. |
| *Cut-off parameters* | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • Composites less than 0.75m were excluded from the estimation process. This only relates to samples at the start or end of drill holes.<br>• The final MRE was reported at a range of cut-off grades starting at 100ppm $U_3O_8$and going up to 900ppm $U_3O_8$.<br>• Based on previous mining studies a cut-off grade of 100ppm was selected for the reporting of the MRE. |
| *Mining factors or assumptions* | • *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | • Potential mining scenarios will be open cast mining using three-metre high flitches; after stripping of unconsolidated sandy grits and screes (expected to be free-digging).<br>• The MRE has been limited by the application of a basement profile derived from drill hole logging as it is expected that any basement hosted mineralisation would not be recoverable using the expected processing flowsheet.<br>• Block support corrections applied to the MRE follow the expected mining process. |

## APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • The MRE was assessed for reasonable prospects for eventual economic extraction and the reported estimate reflects the outcome. |
| *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.* | • More detailed mineralogical characterisation tests were conducted from the lower Tumas areas which presents the Company with a sound understanding of how a calcrete ore from Tumas would respond to beneficiation and further downstream processing.<br>• Currently metallurgical test work is underway in Perth, Australia using drill core drilled in 2019 and 2020.<br>• Also, the nearby Langer Heinrich uranium mine has successfully mined and processed calcrete ore for almost a decade. Although it is under care and maintenance and its calcrete grade is higher; the mineralogical characteristics remain very similar. |
| *Environmen-tal factors or assumptions* | • *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | • SoftChem, as independent consultant, completed a scoping level Environmental Impact Assessment for the Tumas Project in 2013.<br>• With mining progressing along the channel parameter, waste material will be backfilled into mined-out areas so to provide for ongoing rehabilitation of the mined-out areas progressively throughout the life of the mine. Any remaining waste rock stockpiles will be shaped and contoured to blend into the surrounding environment. |
| *Bulk density* | • *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br>• *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.*<br>• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | • Bulk density was derived from borehole density logging (gamma-gamma) from drilling at Tumas 1 and 2 in 2014.<br>• Further borehole density logging (gamma-gamma) from recent drilling at Tumas 1, 2 and 3 was carried out in 2020.<br>• In 2020 bulk density determinations were carried out in-house and by ALS in Johannesburg.<br>• At the Langer Heinrich mine bulk density is defined at an SI of 2.40 (after mining geologically equivalent material for 10 years).<br>• Evaluation of all data resulted in an average density of 2.35.<br>• The current estimate is using an SI of 2.35. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • Due to differences between the bulk density values derived from the in-house measurement process and that from both the ALS checks and downhole density logging the MRE has been classified as Indicated. It is expected that the Company will carry out additional bulk density determinations in order to provide for a more definitive density value to be applied to the MRE. |
| *Classification* | • *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>• *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).*<br>• *Whether the result appropriately reflects the Competent Person's view of the deposit.* | • This MRE reflects an Indicated Mineral Resource.<br>• Semi-variography modelling indicates long range grade continuity of greater than 100m.<br>• Maximum search ranges used were set to maximum of 200m.<br>• A primary horizontal search of 55m (4 sectors and 16 samples) was used to assign a first $eU_3O_8$ block estimate; 75m (4 sectors and 16 samples) was used for the second search pass and these broadly equate to Indicated Mineral Resources. A third pass search of 100m (4 sectors and 16 samples) was used to allocate Inferred Mineral Resources with a final search pass of 200m (2 sectors and 8 samples). Vertical search components were 3m, 4.1m, 5.2m and 10.4m respectively.<br>• The average mineralised thickness is in the order of 2m to 10m.<br>• The Competent Person is satisfied that the applied methodology is appropriate for reporting an Indicated Mineral Resource and that the resulting block estimates are true reflections of the underlying drilling data. |
| *Audits or reviews* | • *The results of any audits or reviews of Mineral Resource estimates.* | • No additional reviews were conducted beyond those carried out by the various Competent Persons over time. |
| *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* | • The applied geostatistical approach applied to arrive at the current Indicated Mineral Resource is considered sound and is appropriate to the style of mineralisation contained within the deposit. The same estimation methodology has been successfully applied at the nearby Langer Heinrich mine for a period of over 15 years. |

# APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>• *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.*<br>• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | • The presented block model is considered to be a reasonable representation of the underlying sample data.<br>• It is this Competent Person's opinion that the classification of portions of this Indicated Mineral Resource could be improved to measured status by confirming the validity of the currently available bulk density information. |
| | | |

## Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Mineral Resource estimate for conversion to Ore Reserves* | *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*<br>*Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.* | The Mineral Resource estimates for the Tumas 3, Tumas 1&2 and Tumas 1E deposits used as a basis for conversion to the Ore Reserve estimate reported here was compiled by David Princep of Gill Lane Consulting using data supplied by Deep Yellow.<br>The data included drilling and assay data, geological interpretation, density checks and comparisons to independent check estimates. The September 2021 Tumas Mineral Resource is inclusive of the September 2021 Ore Reserves. |
| *Site visits* | *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*If no site visits have been undertaken indicate why this is the case.* | The Competent Person (CP) has not attended a site visit to this location due to prevailing travel restrictions relating to the enduring pandemic. The CP has relied on DYL personnel to relate site specific information. Furthermore, the CP has knowledge of the country having worked there for 5 years and had also previously attended a site visit to the Langer Heinrich site situated very close to the Tumas project and is also analogous in relation to the orebody presentation and style of proposed mining. |
| *Study status* | *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*<br>*The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such* | The Tumas Uranium Project was the subject of a pre-feasibility study (PFS) including the estimation of a Mineral Resource and Ore Reserve for the Tumas open pits and treatment facility. The January 2021 Ore Reserve has included all aspects of the PFS study. |

# APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.* | Operational costs and modifying factors have been applied in optimisation and design of the Reserve pit.<br><br>These updated Ore Reserves are based on the same assumptions as those derived within the PFS study with the exception of the resource models for Tumas 3 and Tumas 1E which have been updated as discussed in the preceding sections of this table. DYL has provided written assurance to the CP that there are no material factors differing from those derived within the PFS Study which may influence the updated Ore Reserves estimation. |
| *Cut-off parameters* | *The basis of the cut-off grade(s) or quality parameters applied.* | A lower MIK block cut-off grade of 150ppm $U_3O_8$ has been applied in estimating the Ore Reserve. Due to strategic objectives of target feed grades, this lower cut-off is slightly elevated from the calculated cut-off grade of 121ppm $U_3O_8$. . |
| *Mining factors or assumptions* | *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*<br><br>*The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*<br><br>*The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.*<br><br>*The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*<br><br>*The mining dilution factors used.*<br><br>*The mining recovery factors used.*<br><br>*Any minimum mining widths used.*<br><br>*The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*<br><br>*The infrastructure requirements of the selected mining methods.* | The Resource model which formed the basis for estimation of the Ore Reserve was used in an open pit optimisation process to produce a range of pit shells using operating costs and other inputs derived from as part of the PFS. The resultant optimal shell was then used as a basis for detailed design.<br><br>The mining method assumed in the Ore Reserve study is open cut with conventional excavator and truck fleets. The open pits will be developed using single staged designs.<br><br>Geotechnical recommendations made by independent consultants have been applied in optimisation and incorporated in design, although these have minimal impact on the pit designs due to their very flat and shallow nature.<br><br>No additional mining dilution and recovery factors have been applied to the MIK estimated resources since they are considered to be a recoverable resource and include the estimation of an information effect.<br><br>No Inferred Mineral Resources are included in the Ore Reserve estimation and reporting process and are therefore not included in any revenue estimates and are treated as waste in the estimation of Ore Reserves. |
| *Metallurgical factors or assumptions* | *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* | The metallurgical process proposed for the treatment of the Tumas Ore is similar to that used at the nearby Langer Heinrich Mine which operated from 2007 to 2018 |

# APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *Whether the metallurgical process is well-tested technology or novel in nature.*<br><br>*The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*<br><br>*Any assumptions or allowances made for deleterious elements.*<br><br>*The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.*<br><br>*For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?* | when it was placed into care and maintenance due to depressed uranium prices. The process consists of:<br>1. beneficiation through scrubbing and classification by size, with barren coarse material rejected to tailing;<br>2. alkali (carbonate/bicarbonate) leaching at elevated temperature;<br>3. CCD washing of the leach discharge;<br>4. membrane concentration of the pregnant liquor from the CCD circuit;<br>5. recovery of vanadium as $V_2O_5$ (red cake) from the membrane retentate liquor;<br>6. recovery of uranium as $UO_3$ (yellow cake) from the vanadium recovery section barren liquor; and<br>7. disposal and permanent storage of process tailings into in-pit tailings storage facilities.<br><br>The metallurgical process includes some aspects that are novel.<br><br>In particular:<br>1. the use of membranes to concentrate the pregnant liquor is a novel application for the uranium extraction industry, but is commercially established in the broader contemporary minerals extraction industry;<br>2. the method used to recovery vanadium is also novel, but relies on chemistry that is well described in literature; and<br>3. some aspects of reagent recycling in the metallurgical process are novel to the uranium extraction industry, but commercially established elsewhere.<br><br>The remaining elements of the metallurgical process are based on well-tested technology.<br><br>Metallurgical testing has been undertaken on representative samples of the Tumas Ore. Two bulk composite samples were generated using 5 separate primary Reverse Circulation (RC) drilling samples (~30kg) and 13 diamond core samples (whole PQ core, ~540kg). This metallurgical testwork was limited to the beneficiation and leaching aspects of the samples tested only, as the hydrometallurgy is well understood.<br><br>The only economic mineral present in the Tumas Ore is carnotite, which is a carbonate mineral of uranium and vanadium. Two separate ore types have been identified in the Tumas Ore and no material variation in processing performance has been identified. The same overall metallurgical recovery of 93.8% is appropriate for both ore types. |

## APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | The only potentially deleterious element in the Tumas Ore is vanadium and the metallurgical process has been developed to remove (as a by-product) the vanadium that is co-leached with the uranium. |
| *Environmental* | *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.* | An Environmental Impact Assessment (EIA) is being undertaken for Tumas. Tumas is located in Namibia, which has a long and continuous (since the 1970s) history of uranium mining and export. Waste rock has been determined as non-acid generating and will be stored both in-pit and in surface waste rock dumps. A mining licence application has been lodged (MLA 176), the approvals process for which will consider the appropriateness of the storage methods proposed. |
| *Infrastructure* | *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.* | The region in which the Tumas Project is located has:<br>1. established road (tarmac-covered road within 10km of the proposed treatment plant site) access;<br>2. established residential towns suitable for the projected needs of the Project within 70km of the Project location;<br>3. established power (10km from the proposed treatment plant site) and water (~30km from the proposed treatment plant site) infrastructure;<br>4. an established class 7 port (suitable for the export of uranium concentrates) ~70km from the proposed treatment plant site;<br>5. an international airport ~60km from the proposed treatment plant site; and<br>6. an established telephone communication network. |
| *Costs* | *The derivation of, or assumptions made, regarding projected capital costs in the study.*<br>*The methodology used to estimate operating costs.*<br>*Allowances made for the content of deleterious elements.*<br>*The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.*<br>*The source of exchange rates used in the study.*<br>*Derivation of transportation charges.*<br>*The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* | The estimated capital costs for the development of the Tumas Project have been developed by a Ausenco Services Pty Ltd and have a stated accuracy of ±25%. Plant capital costs were developed using a mixture of supplier quotations (major mechanical equipment) and relevant factoring.<br>The total capital cost, including capital expenditure estimates for mining, process plant, infrastructure, spares, first fills, construction indirects, EPCM, commissioning, owner's costs, capitalised pre-production costs and contingency, is US$320M.<br>Operating costs for the Project have been developed based on a detailed metallurgical balance, supplier published or quoted utility, reagent and consumable costs, local labour market rates and limited factoring. The operating cost estimate has a stated accuracy of ±10% and an effective date of December 2020.<br>The uranium price used (US$65/lb $U_3O_8$ flat) for the financial analysis is based on a report obtained from an independent third-party uranium marketing expert and |

# APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *The allowances made for royalties payable, both Government and private.* | has been set at 3%. The vanadium price used (US$7/lb $V_2O_5$) is based on published market rates as used in the PFS.<br>The currency exchange rate assumed (N$:US$ = 16.75) is based on the average published exchange rate for the first 10 months of 2020.<br>Transport charges have been based on local contractor rates in the case of road transport and established shipping and handling charges for uranium concentrate.<br>Converter charges are based on established converter rates and no allowance has been made for product specification penalties.<br>All royalties and export levies payable in Namibia have been included in the cost estimates. |
| *Revenue factors* | *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*<br>*The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.* | The uranium price used (US$65/lb $U_3O_8$ flat) for the financial analysis is based on a report obtained from an independent third-party uranium marketing expert. The vanadium price used (US$7/lb $V_2O_5$) is based on published market rates as used in the PFS<br>The currency exchange rate assumed (N$:US$ = 16.75) is based on the average published exchange rate for the first 10 months of 2020.<br>Transport charges have been based on local contractor rates in the case of road transport and established shipping and handling charges for uranium concentrate.<br>Converter charges are based on established converter rates and no allowance has been made for product specification penalties.<br>All royalties and export levies payable in Namibia have been included in the cost estimates. |
| *Market assessment* | *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*<br>*A customer and competitor analysis along with the identification of likely market windows for the product.*<br>*Price and volume forecasts and the basis for these forecasts.*<br>*For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.* | A marketing report obtained from an independent third-party uranium marketing expert that considered current and forecast nuclear electricity production, installed commercial nuclear generating capacity, secondary uranium supplies, primary uranium production, the global uranium market balance and price outlook and marketing and logistics was commissioned to provide the basis for uranium price and volume forecasts.<br>The vanadium price used was based on current published prices for red cake as used in the PFS. Vanadium is a bi-product of uranium extraction in the process and has little impact on Project economic outcomes, so a more detailed analysis was not considered to be warranted at this stage. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Economic* | *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.*<br><br>*NPV ranges and sensitivity to variations in the significant assumptions and inputs.* | The financial model as developed for the PFS for the assessment of the Tumas Project was created by an independent third-party expert. Revenues and costs are captured in the model in real US dollars (in some cases converted from real Namibian dollars at the base case starting exchange rate). Sensitivity analysis is applied to the real US dollar cashflows. The subsequent cashflows are inflated in summary form to perform both tax and working capital calculations. Valuation cashflows are shown as both nominal and real US dollars and the user can decide whether to apply a real or nominal US dollar discount rate to determine value. The model carries inflation indices for both US dollars and Namibian dollars. The assumed rate of annual inflation is 1.5% for US dollars and 5% for Namibian dollars. A cumulative index is created for inflation in each currency as a time series. The index representing the cumulative inflation difference between US dollar and Namibian dollar inflation is that predicted by 'Purchasing Power Parity' theory.<br>Capital and operating costs as well as revenue streams were developed as described above and suitable allowances were made for the required product inventory build in the marketing process.<br>Sensitivity analysis is conducted in the model on a deterministic basis by changing each variable in isolation through a range of – 40% to +40% in increments of +10%. Inputs are grouped into the following categories for the purposes of sensitivity analysis:<br>• $U_3O_8$ Price;<br>• $V_2O_5$ Price;<br>• Mining Costs;<br>• Processing Costs & G&A Costs;<br>• Downstream Costs (excluding Royalties);<br>• Capex and Sustaining Capex;<br>• Discount Rate; and<br>• USD/NAD Exchange Rate.<br>The project was shown to be sensitive to uranium price, with a 10% increase in price lifting the $NPV_{8.6}$ from US$204M to US$278M (36%). It was moderately sensitive to N$:US$ exchange rate with a 10% increase lifting the $NPV_{8.6}$ from US$204M to US$226M (11%) and total operating cost (including freight and TC's with a 10% increase dropping the $NPV_{8.6}$ from US$204M to US$167M (18%), but relatively insensitive to other factors that were analysed including individual operating cost elements. |
| *Social* | *The status of agreements with key stakeholders and matters leading to social licence to operate.* | As part of the EIA that is underway, initial meetings with all stakeholder groups have been undertaken and further meetings will be undertaken as this process continues. |

## APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Other* | *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*<br>*Any identified material naturally occurring risks.*<br>*The status of material legal agreements and marketing arrangements.*<br>*The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.* | The production of uranium concentrate involves risk specific to that commodity. These risks are being and will be actively managed.<br>To date, no marketing arrangements have been established for the proposed production.<br>All mineral permits associated with the Ore Reserves Estimate are in good standing and the company is currently in the process of completing an EIA in order to obtain an Environmental Clearance Certificate (ECC) for the proposed development.<br>An application for a Namibian Mining Licence (ML) was lodged in July 2021. There is a reasonable expectation that the ECC and ML will be issued well within the timeframe required for the proposed mining development.<br>Other than the satisfactory completing of a future feasibility study, securing suitable financial backing for capital, the ECC and ML, there are no other known unresolved matters that are dependent on a third party that may materially impact the future exploitation of the reserve. |
| *Classification* | *The basis for the classification of the Ore Reserves into varying confidence categories.*<br>*Whether the result appropriately reflects the Competent Person's view of the deposit.*<br>*The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).* | The classification of the Tumas Ore Reserve has been carried out in accordance with the recommendations of the JORC code 2012. It is based on the density of the drilling, estimation methodology, the orebody experience and the mining method to be employed.<br>Results of optimisation and design reasonably reflect the views held by the Competent Person of the deposit.<br>All Probable Ore Reserves have been derived from Indicated Resources. |
| *Audits or reviews* | *The results of any audits or reviews of Ore Reserve estimates.* | No external audits or reviews of the Ore Reserve estimate have been undertaken. |
| *Discussion of relative accuracy/ confidence* | *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* | Whilst appreciating that reported Ore Reserves are an estimation only and subject to numerous variables common in mining operations, it is the opinion of the Competent Person that there is a reasonable expectation of achieving the reported Ore Reserves commensurate with the classification. |

## APPENDIX 2

## JORC Code, 2012 Edition – Table 1 Report (continued)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *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.*<br>*Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.*<br>*It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | |