

**ASX Announcement** 

ASX & NSX: DYL / OTCQX: DYLLF

21 January 2020

# POSITIVE TUMAS SCOPING STUDY DELIVERS PRE-FEASIBILITY STUDY GO-AHEAD

#### **HIGHLIGHTS**

- Positive Scoping Study completed on Reptile Project Tumas palaeochannel calcrete-hosted deposits focused on open pit mining utilising a purpose-built processing facility.
- Encouraging results provide confidence for Board to approve proceeding, with immediate effect, to a formal Pre-Feasibility Study to assess viability of a mining operation associated with the surficial uranium deposits considered in the Scoping Study.

#### Introduction

Deep Yellow Limited (**Deep Yellow** or the **Company**) is pleased to announce the completion of a Scoping Study focused on the Reptile Project Tumas palaeochannel calcrete deposits. Importantly, the Tumas Scoping Study has delivered encouraging results, which provided the Board with the confidence to proceed directly to a Pre-Feasibility Study.

The Board has made this decision to proceed to a Pre-Feasibility Study based on the economic benchmarks indicated in the Tumas Scoping Study. In view of the stipulations in the *ASX interim guidance: Reporting Scoping Studies (November 2016)* and the Deep Yellow use of predominantly Inferred Resources on which to base the economic outcomes, the Company is prohibited in divulging any production targets and associated financial parameters hence the qualified, cautionary nature of the release that follows.

The Tumas palaeochannel system is located within the Company's 100% owned Reptile Project (EPLs 3496 and 3497) in Namibia, (see Figure 1). At the commencement of the exploration campaign, initiated in 2016 by the new management team, the Company announced an **Exploration Target**<sup>1</sup> of between 100Mlb to 150Mlb in the grade range of 300ppm to 500ppm U<sub>3</sub>O<sub>8</sub> for the Reptile projects.

## Cautionary Statement 1

With the additional resources as announced herein, the Company has now determined an MRE of 110.5Mlb of calcrete mineralisation - reaching the lower of its stated Exploration Target range of 100Mlb to 150Mlb eU $_3$ O $_8$ . The Company however acknowledges that the potential quantity and grade of the Exploration Target is conceptual in nature. There is however significant and sufficient additional exploration information generated to give more confidence in achieving the stated Exploration Target objective. Additional exploration is planned; however, it is uncertain if this will result in the estimation of all the expanded Mineral Resource that has been predicted from the review and evaluation of calcrete associated mineralisation identified on the Company's tenements which commenced in the December 2016 quarter. With the subsequent exploration and resource drilling carried out over the past three years, the Company has a greater understanding of the stratigraphy and topography of the palaeochannels which host the uranium mineralisation. This work and the resource increase that is being achieved, having now reached the lower limit of the stated Exploration Target range and with 50% of the 125km of prospective palaeochannel that has been identified still remaining to be tested, has provided renewed confidence that further mineralisation is likely to be identified in targeted palaeochannel areas on the Company's tenements.

Targeted tonnage/grades are based on results and understanding from work carried out over the past 14 years in this region and the Exploration Targets that have been defined will continue to be the focus the ongoing drilling investigations.

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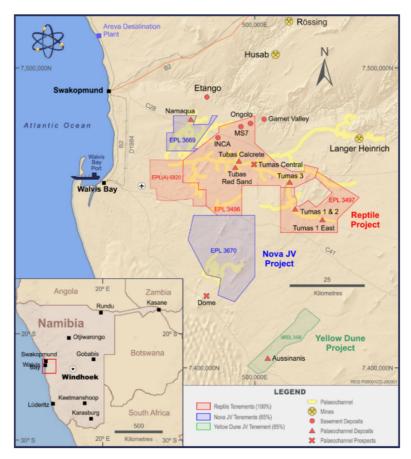


Figure 1: Namibian locality map showing position of the Tumas Project.

This Exploration Target was based on Deep Yellow management's extensive and acknowledged experience, from exploration to successful mining and production, of these surficial calcrete-associated and channel-related deposits. Deep Yellow Managing Director, Mr John Borshoff and the management and technical team involved in development of the Tumas Scoping Study were also instrumental in the successful development of Paladin Energy Ltd. This team is the only group to have established two successful, conventional uranium operations in two countries on the African continent after a 20-year global uranium industry hiatus.

One of these operations was Paladin's Langer Heinrich uranium operation in Namibia, which successfully mined deposits similar to those which occur in the Tumas palaeochannel system. Consequently, the Company is confident with the expertise this team is able to bring to these studies.

Continued success over the past three years through various exploration programs has seen the resource base from this highly prospective palaeochannel increase threefold to a total calcrete/palaeochannel related Measured, Indicated and Inferred Mineral Resource of 92.5Mlb  $eU_3O_8$ , grading 303ppm (refer to the Company's 2019 Mineral Resource and Reserve Statement dated 18 November 2019 and Appendix 1 attached).

To date, only approximately half of the 125km Tumas palaeochannel system has been properly tested and the consequent trebling of the Mineral Resources over a 3-year period reinforces the Company's confidence that the announced Exploration Target will be achieved during future exploration work.

Commenting on the encouraging outcome of the Tumas Scoping Study, John Borshoff Managing Director/CEO said: "The completion of the Tumas Scoping Study and the positive decision that has emanated from it, represents an important milestone in the corporate evolution of Deep Yellow.

"We have developed a unique and bold dual-pillar growth strategy to establish a multi-platform, low-cost global uranium company. Successful execution of our stated strategy aims to deliver a multi-mine 5-10Mlb per annum low-cost uranium production company with the expectation of each project achieving a minimum of 2-3Mlb per annum production capability. Development of our

Namibian project portfolio is a critical element of this strategy and we are extremely pleased with the ongoing success we are experiencing in advancing our highly prospective Reptile Project.

"The impressive results from the Study clearly demonstrate advancing this project to the prefeasibility study stage is justified, appreciating that uranium prices are expected to improve strongly over the next two to three years. With this approach, the Company has a significant opportunity to continue prudently advancing the Tumas palaeochannel deposits in a cost effective and timely manner and assist in achieving our aim of establishing Deep Yellow as a tier-one uranium producer."

# **Tumas Scoping Study**

The **Scoping Study**<sup>2</sup> (**Study**) was undertaken to determine the potential viability of mining and processing the Tumas deposits, contained within a 30km radius of a purpose-built processing facility, (yet to be constructed) - see Figure 2.

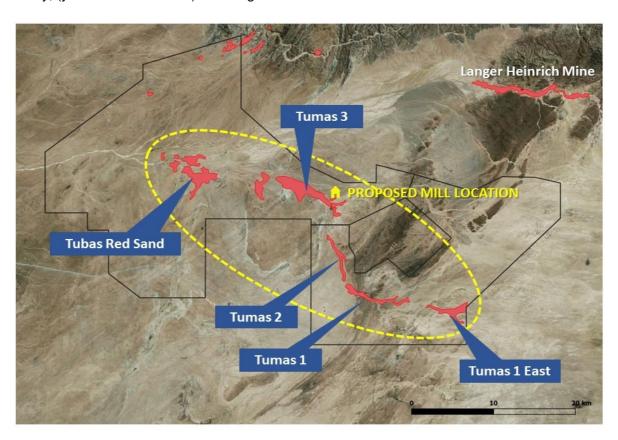


Figure 2: Study area showing potential operational footprint.

# Cautionary Statement 2

<sup>2</sup>The Study referred to in this announcement has been undertaken to ascertain whether a business case can be made to proceed with a Pre-Feasibility Study to test the potential viability of exploiting the Tumas uranium deposits that have been identified. It is a preliminary technical and economic study of the potential viability of the Tumas Project. It is based on low level technical and economic assessments and relevant assumptions (based on prior relevant experience) that are not sufficient to support the estimation of ore reserves. Further exploration and evaluation work and appropriate studies are required before Deep Yellow will be in a position to estimate any Ore Reserves or provide any informed and qualified assurance of an economic development case.

The Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While Deep Yellow considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved.

The Study provides a suitable basis for the Company to proceed to a Pre-Feasibility Study and no additional capital raising will be required by the Company to achieve this outcome. Investors should note, however, that should new capital be required due to unforeseen circumstances there is no certainty that Deep Yellow will be able to raise that amount of funding if needed. It is also possible that, should such funding be required, this may only be available on terms that may be dilutive to or otherwise affect the value of Deep Yellow's existing shares.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Study.

The Study considered the timing and cost associated with permitting, site establishment, mining, material haulage, processing, administration and closure associated with the development concept. It is based on a combination of directly gathered project data together with highly relevant assumptions derived from the adjacent Langer Heinrich uranium deposit. (The current Deep Yellow management team had direct executive management involvement in establishing the Langer Heinrich operation from resource establishment, mining, processing design, operations, optimisation, ESG management and product marketing).

#### **Uranium Resources**

The Study was based on a high proportion of Inferred Resources<sup>3</sup>.

The proportion of JORC (2012) defined "Inferred" and "Measured and Indicated" Resource is a ratio of 80:20 comprising 17.2Mlb eU<sub>3</sub>O<sub>8</sub> grading 294ppm eU<sub>3</sub>O<sub>8</sub> Measured and Indicated Resources and 73.7Mlb\* eU<sub>3</sub>O<sub>8</sub> grading 345ppm of Inferred Resources. See Table1: *Tumas 3, Tumas 1 & 2 and Tumas 1E deposits* (also *refer to the Company's 2019 Mineral Resource and Reserve Statement dated 18 November 2019 and Appendix 1 attached*).

**Table 1:** Tumas 1, 2 and 3 - current and previous JORC 2012 MRE - Indicated, Measured and Inferred Resource Estimates at 200ppm eU<sub>3</sub>O<sub>8</sub> cut off

Tumas 1, 2 and 3 Resources March 2019 Status							October 2019 Status			
Tumas Deposit - JORC 2012							Tumas 3 Deposit			
Deposit	Category	Tonnes (M)	Grade (ppm)		U <sub>3</sub> O <sub>8</sub> Mlb	Tonnes (M)	Grade (ppm)	U <sub>3</sub> O <sub>8</sub> MIb		
Tumas 3 Expanded	Inferred	39.7	378		33.1	39.7	378	33.1		
Sub Total		39.7	378		33.1	39.7	378	33.1		
Tumas Project - JORC 2012						Tumas Project				
Tumas 1&2 Deposit	Measured	10.8	383		9.1	10.8	383	9.1		
Tumas 1&2 Deposit	Indicated	5.5	333		4.0	5.5	333	4.0		
Tumas 1&2 Deposit	Inferred	5.7	211		2.3	5.7	211	2.7		
Tumas 1 – East	Inferred	25	335		18.5	35.2	319	24.8		
Sub Total		47	331		34.3	57.2	322	40.6		
Tubas Sand Project - JORC 2012						Tubas Sand Project				
Tubas Sand Deposit #	Indicated	10.0	187		4.1	10.0	187	4.1		
Tubas Sand Deposit #	Inferred	24.0	163		8.6	24.0	163	8.6		
Sub Total		34.0	170		12.7	34.0	170	12.7		
Tubas Calcrete Resource – JORC 2004						Tubas Calcrete Resource				
Tubas Calcrete Deposi	t Inferred	7.4	374		6.1	7.4	374	6.1		
Sub Total		7.4	374		6.1	7.4	374	6.1		
Tumas 1, 2, 3 & Tubas Total		128.1	305		86.2	137.8	303	92.5		

**Note:** Figures have been rounded and totals may reflect small rounding errors. eU₃O₃ - 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.

#### **Cautionary Statement 3**

<sup>3</sup>There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of sufficient indicated mineral resources. The conversion of sufficient indicated resources is based on the Company's current expectations from future results or events and should not be solely relied upon by investors when making investment decisions. Further exploration and evaluation work and appropriate studies are required before Deep Yellow will be in a position to estimate any ore reserves or to provide any informed and qualified assurance of an economic development case.

The Company is confident in converting a sufficient amount of the Inferred Resource to Indicated to establish an Ore Reserve Statement for the Pre-Feasibility Study for the following reasons:

- the depth of geological knowledge the Company holds regarding these palaeochannelrelated uranium deposits is very high; and
- the management team's working familiarity with the resource base of the adjacent Langer Heinrich uranium mine deposits (the Company believes that the Tumas Project Resources are an extension of the palaeochannel system and resources located at the Langer Heinrich Mine).

The Inferred Resource mineralisation established at Tumas is delineated in four discrete deposits occurring over a 40km long zone within the prospective palaeochannel system. 83% of the Tumas 1 & 2 deposits (occurring east-adjacent to the Tumas 3 deposit) is in an Indicated and Measured Resource status. This type of mineralisation is remarkably consistent over an extensive length. The Company is confident that the Inferred Resources at Tumas 3 will convert to a sufficiently large Indicated Resource for the purposes of Ore Reserve estimation during the Pre-Feasibility Study.

#### **Development Timing**

The timing of both the Study and the Pre-Feasibility Study, as advised previously (see ASX release dated 24 September 2019), has been developed for a possible development decision (should all subsequent studies prove positive) which is at least two to three years away and based on the uranium price reaching US\$60/lb to US\$70/lb on a predicted supply/demand dynamic where shortages are anticipated at that time in the global uranium market.

The studies are structured to provide Deep Yellow with sufficient time to align with a potential development in the period 2023-24.

# The Deep Yellow Growth Strategy

Deep Yellow has declared its strategic growth plan on previous occasions, built around establishing the Company as a low-cost, tier-one global uranium platform able to offer production optionality. This is a two-pronged strategy focused on firstly advancing the development of its Namibian projects and secondly, via sector consolidation, to acquire additional projects through merger and acquisition. This utilises the strong uranium project development, operational and corporate capabilities and proven track record of the Deep Yellow management team<sup>4</sup>.

The Company remains well-funded to continue the execution of this strategy over the next 12 months.

#### **Scoping Study Outcomes**

The analysis undertaken for the Study relies on many assumptions to be assessed in followon studies based on emerging project data as well as the relevant experience of the Deep Yellow management team. This evaluation indicates the Tumas Project meets the Company's investment criteria having the potential to achieve the stated corporate benchmarks required by the Deep Yellow growth strategy.

#### **Expertise and Experience Statement 4**

<sup>4</sup>Mr John Borshoff and the management team, both corporate and technical, involved in completing the Scoping Study were involved with the successful development of Paladin Energy Ltd in the pre-Fukushima period. This is the only group to have established two successful, conventional uranium operations in two countries after a 20-year global uranium industry hiatus. One of these operations was the Langer Heinrich uranium operation in Namibia (adjacent to the Tumas Project), which successfully mined deposits similar to those which occur in the Tumas palaeochannel system. Consequently, with this expertise at hand, the Company is justifiably confident it is able to bring appropriate expertise to the issues in the Study.

### Approval to Proceed to Pre-Feasibility

The Board of Deep Yellow has determined that due to the positive results of the Study the Company will now progress to a Pre-Feasibility Study with immediate effect to further evaluate the potential economic viability of the Tumas uranium resources.

The Pre-Feasibility Study is expected to be completed in the December 2020 quarter and will represent a further significant milestone in the Company fulfilling its stated ambition of becoming a multi-platform, low-cost, global uranium company.

Yours faithfully

JOHN BORSHOFF Managing Director/CEO Deep Yellow Limited

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For further information on the Company and its projects, please visit the website at: www.deepyellow.com.au

# ABOUT DEEP YELLOW LIMITED

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

# **Competent Person's Statement**

The information in this announcement that relates to the **Tumas Mineral Resources Estimate** and the **Mineral Resource Database** is based on work completed by Mr. Martin Hirsch, M.Sc. Geology, who is a member of the Institute of Materials, Minerals and Mining (UK) and the South African Council for Natural Science Professionals. Mr. Hirsch is now the Manager for Resources and Pre-Development for Reptile Mineral Resources (Pty) Lt 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. Hirsch consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

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

The JORC 2004 classified resources have not been updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported, however they are being progressively reviewed to bring all resources up to JORC 2012 standard.

# **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 ASX announcement has been determined to a scoping study level of accuracy and, based on the data provided by the Company and experience in development of similar deposits, considers that progress to a pre-feasibility study can be justified.

# **Forward Looking Statement**

Any statements, estimates, forecasts or projections with respect to the future performance of Deep Yellow and/or its subsidiaries contained in this presentation are based on subjective assumptions made by Deep Yellow's management and about circumstances and events that have not yet taken place. Such statements, estimates, forecasts and projections involve significant elements of subjective judgement and analysis which, whilst reasonably formulated, cannot be guaranteed to occur. Accordingly, no representations are made by Deep Yellow or its affiliates, subsidiaries, directors, officers, agents, advisers or employees as to the accuracy of such information; such statements, estimates, forecasts and projections should not be relied upon as indicative of future value or as a guaranteed of value or future results; and there can be no assurance that the projected results will be achieved.

# APPENDIX 1 JORC RESOURCE TABLE

Deposit	Category	Cut- off	Tonnes	Tonnes U <sub>3</sub> O <sub>8</sub>		U <sub>3</sub> O <sub>8</sub>	Resource Categories (MIb U <sub>3</sub> O <sub>8</sub> )		
		(ppm U₃O₃)	(M)	(ppm)	(t)	(MIb)	Measured	Indicated	Inferred
BASEMENT MINERAL									
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	Inferred	200	39.7	378.3	15,000	33.1			
Tumas 3 Deposits Tot	al		39.7	378.3	15,000	33.1	-	-	33.1
T	ubas Red Sa	nd Proje	ct - 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			
	nas 1, 1 East	& 2 Pro	ject – JOR	C 2012					
Tumas Deposit ◆	Measured	200	11.0	384	4,100	9.1	9.1	-	-
Tumas Deposit ◆	Indicated	200	4.8	333	1,700	4.0	-	4	-
Tumas Deposit ◆	Inferred	200	40.9	304	12,400	27.5	-	-	27.5
Tumas Project Total			56.7	322	18,200	40.6			
T	ubas Calcrete	Resour	ce - 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						110.5	9.1	10.8	90.6
GRAND TOTAL RESO	URCES		221.11	319	70,400	155.6			

Notes:

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

XRF chemical analysis unless annotated otherwise.

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

# Combined XRF Fusion Chemical Assays and eU3O8 values.

Where eU<sub>3</sub>O<sub>8</sub> values are reported it relates to values attained from radiometrically logging boreholes. Gamma probes were calibrated at Pelindaba, South Africa in 2007 and sensitivity checks are conducted by periodic re-logging of attest hole to confirm operation between 2008 and 2013.

During drilling, probes are checked daily against standard source.

It should be noted the Study which is the subject of this announcement excludes those Mineral Resources referred to as Basement Mineralisation in Appendix 1 JORC Resource Table above and only concerns itself with the calcrete/palaeochannel related resources that are referred to in this table. Details of these resources can be found in the ASX announcements released on the following dates - 4 February 2013, 24 March 2014, 26 October 2016, 27 September 2017, 11 July 2018, 27 March 2019 and 19 November 2019.