

# **Deep Yellow**

Limited

### Australian Uranium Conference

"Enhanced Palaeochannel Prospectivity Confirmed"

15 July 2015

**Greg Cochran – Managing Director** 

**ASX: DYL** 



www.deepyellow.com.au

### Disclaimer



This document has been prepared by Deep Yellow Limited (Deep Yellow, DYL or the Company) in connection with providing an overview to interested analysts and investors.

This presentation is being provided for the sole purpose of providing information to enable recipients to review the business activities of Deep Yellow. This presentation is thus by its nature limited in scope and is not intended to provide all available information regarding Deep Yellow. This presentation is not intended as an offer, invitation, solicitation, or recommendation with respect to the purchase or sale of any securities. This presentation should not be relied upon as a representation of any matter that a potential investor should consider in evaluating Deep Yellow.

Deep Yellow and its affiliates, subsidiaries, directors, agents, officers, advisers or employees do not make any representation or warranty, express or implied, as to or endorsement of, the accuracy or completeness of any information, statements, representations or forecasts contained in this presentation, and they do not accept any liability or responsibility for any statement made in, or omitted from, this presentation. Deep Yellow accepts no obligation to correct or update anything in this presentation.

No responsibility or liability is accepted and any and all responsibility and liability is expressly disclaimed by Deep Yellow and its affiliates, subsidiaries, directors, agents, officers, advisers or employees for any errors, misstatements, misrepresentations in or omissions from this presentation.

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.

Prospective investors should make their own independent evaluation of an investment in Deep Yellow.

Nothing in this presentation should be construed as financial product advice, whether personal or general, for the purposes of section 766B of the Corporations Act 2001 (Cth). This presentation consists purely of factual information and does not involve or imply a recommendation or a statement of opinion in respect of whether to buy, sell or hold a financial product. This presentation does not take into account the objectives, financial situation or needs of any person, and independent personal advice should be obtained.

This presentation and its contents have been made available in confidence and may not be reproduced, or disclosed to third parties or made public in any way without the express written permission of Deep Yellow.

2

### Presentation Overview



- Corporate Snapshot
- Market Overview
- Project Locations
- Palaeochannel Prospectivity
- Omahola Project
- Tubas Sand Project
- **Solutions**





# **Corporate Snapshot**



#### The Board

Tim Netscher	Chairman (Independent)			
<b>Greg Cochran</b>	Managing Director			
Gillian Swaby	N.E.D			
<b>Rudolf Brunovs</b>	N.E.D (Independent)			
<b>Christophe Urtel</b>	N.E.D			
Mervyn Greene	N.E.D			

#### **Executives & Management**

<b>Greg Cochran</b>	Managing Director			
Peter Christians Country Manager: Namibia				
<b>Ursula Pretorius</b>	Financial Controller			
Martin Hirsch	Exploration Manager			

#### Capital Structure – as at 14 July 2015

-	
Shares on Issue	1,910M
Performance Rights	36.6M
Market Cap (@ 1.0)	~ AUD 19.1M
Net Cash	~AUD 3.9M
Major shareholders:	
Paladin Energy Limited	16.7%
HSBC*	13.4%
National Nominees**	9.3%

<sup>\*</sup> Including Raptor Partners Limited

<sup>\*\*</sup> Including Laurium L.P. Fund



### Market – has anything changed since last year?





#### **Global Financial Markets**

- Ongoing volatility means continued uncertainty
- Capital remains the biggest challenge
- Little appetite for investment in exploration

#### **Uranium Demand**

- Nuclear growth confirmed (underestimated?)
- \* China, India, Russia and Middle East are key drivers
- Forecast growth 180 Mlbs to 250 Mlbs by 2020

#### **Uranium Supply**

- Project development mostly stalled
- \* HEU (secondary supply source) finished
- Widespread curtailment of production
- \$ 12 to 15 (large) new mines needed by 2020

#### **Conclusions and Strategic Response**

- \* Perfect storm brewing trigger prices >US\$80/lb required
- \* Timing of recovery remains uncertain (likely 2016-2020)
- Protect assets and skill base
- Progress projects cautiously to be well positioned at recovery



### **Project Locations**





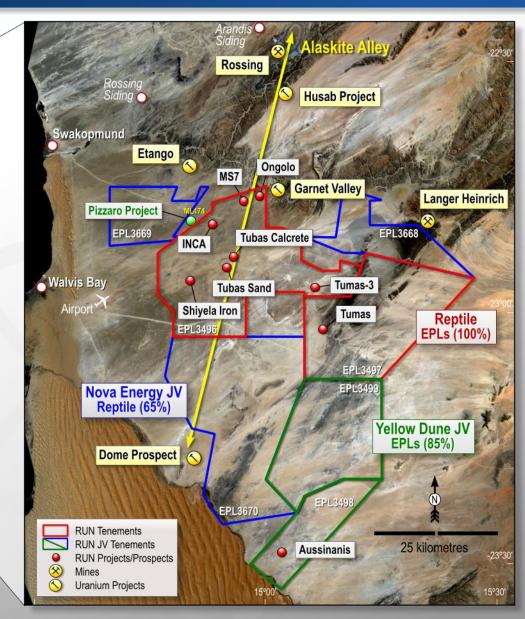
3,109 km<sup>2</sup> in exploration area\*
93.8 Mlbs at 306ppm in resources

Notes:

Exploration in Namibia is conducted by DYL's whollyowned subsidiary Reptile Uranium Namibia (RUN)

\* On a 100% basis

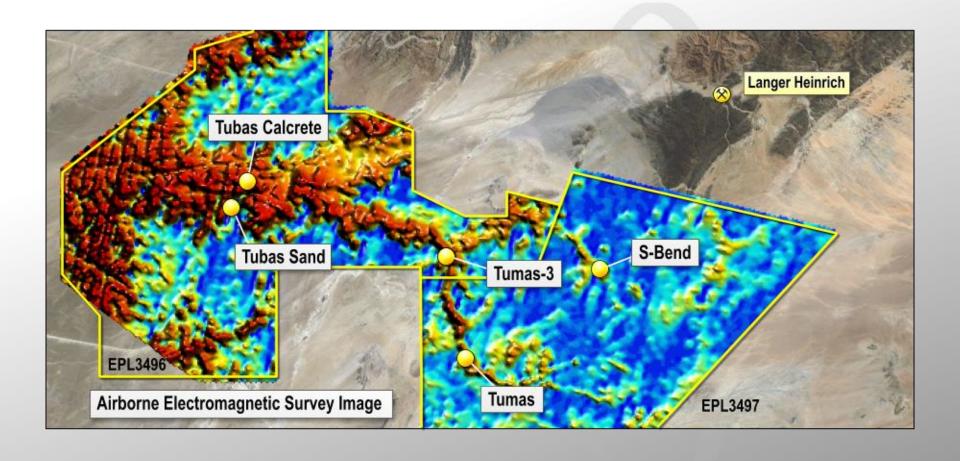
\*\* Assuming tank leach for Omahola



### Palaeochannels: Introduction



#### JORC 2004 Resource: 22.2 Mt at 368 ppm for 18 Mlbs U<sub>3</sub>O<sub>8</sub>



### Palaeochannels: Introduction



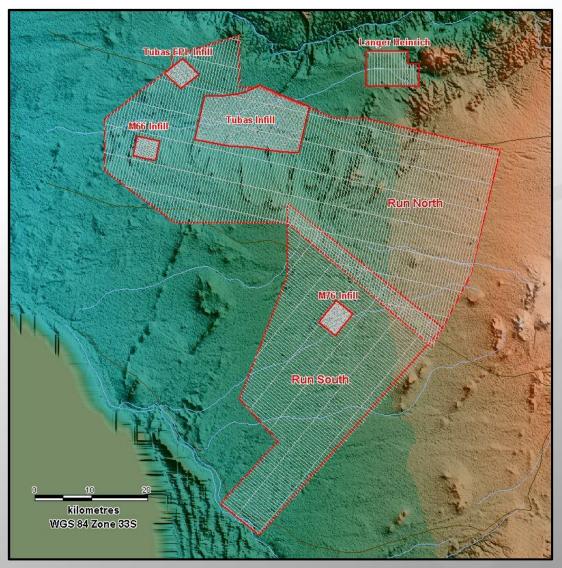
#### JORC 2004 Resource: 22.2 Mt at 368 ppm for 18 Mlbs U<sub>3</sub>O<sub>8</sub>

- Known deposits from 1970's/80's
- Reason behind original claims being lodged
- Was the total focus of DYL/RUN (with the Tubas Sand) until INCA discovery
- AeroTEM HEM Survey flown & Interpreted 2008
- **Extensive drilling campaigns 2008 2011**
- Scoping EIA completed 2013
- Intermittent Metallurgical testwork over the years
- Recent mineral characterisation to assess amenability to various forms
  - of physical beneficiation, including Marenica's U-pgrade<sup>TM</sup> process

## Palaeochannels: 2008 AeroTEM HEM Survey



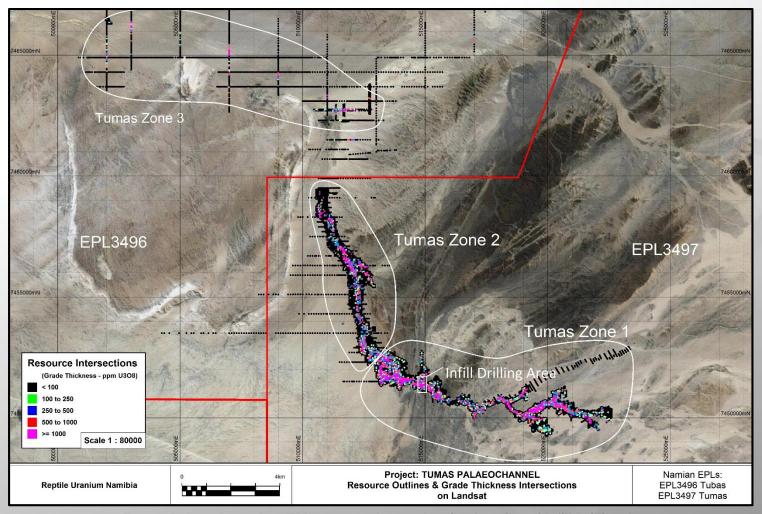
#### Flight lines at 500m gave good coverage however with limited granularity



# Palaeochannels: Existing Resource/Recent Drilling



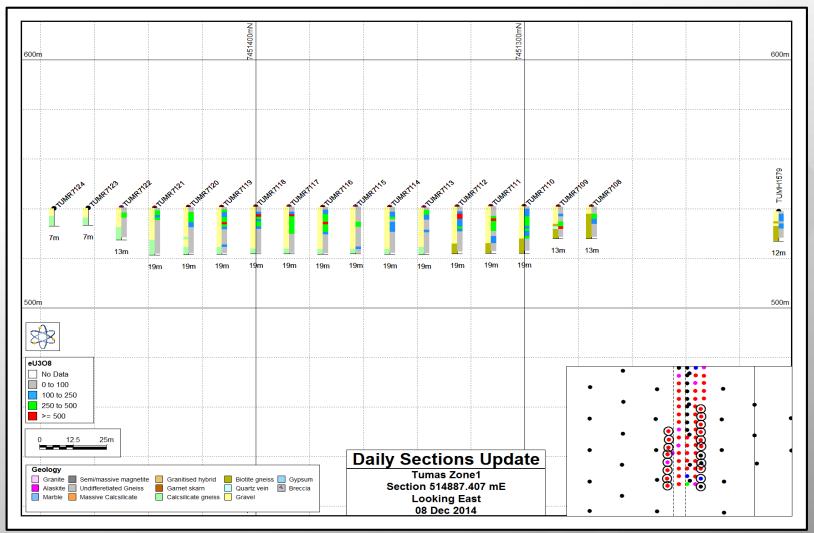
Encouraging results from mineral characterisation tests prompted a fresh look at the current resource base & geological understanding



### Palaeochannels: Recent Infill Drilling Results



# Effectively a "grade control" program with 12.5mx12.5m spacing Infilling previous 50mx100m drill spacing



### Palaeochannels: Recent Infill Drilling Results



### 21 of 90 Holes delivered GTM's over 2000m eU<sub>3</sub>O<sub>8</sub>\*

Drillhole	UTM EAST	UTM NORTH	Azi UTM	Dip	TD	From	То	Interval (m)	eU <sub>3</sub> O <sub>8</sub> (ppm)	GTM
TUMR7110	514887.60	7451300.00	0	-90	19.0	0.00	14.00	14.00	207	2898
TUMR7111	514887.50	7451313.00	0	-90	19.0	2.00	15.00	13.00	243	3159
TUMR7112	514887.50	7451325.00	0	-90	19.0	0.00	11.00	11.00	255	2805
TUMR7116	514887.60	7451375.00	0	-90	19.0	1.00	12.00	11.00	304	3344
TUMR7117	514887.50	7451388.00	0	-90	19.0	2.00	11.00	9.00	371	3339
TUMR7119	514887.50	7451413.00	0	-90	19.0	1.00	9.00	8.00	307	2456
TUMR7129	514900.10	7451325.00	0	-90	19.0	2.00	10.00	8.00	291	2328
TUMR7131	514900.00	7451350.00	0	-90	19.0	1.00	10.00	9.00	284	2556
TUMR7134	514900.00	7451388.00	0	-90	20.0	1.00	11.00	10.00	209	2090
TUMR7137	514899.90	7451425.00	0	-90	19.0	2.00	16.00	14.00	154	2156

Importantly, mineralisation was mostly from surface or with minimal cover

### Palaeochannels: Recent Infill Drilling Results



#### What have we learned from these drilling results?\*

- Confirmed a continuously mineralised north-south front of 160m(NS)x50m(EW)
- Consistent with previous drilling results done on a 50mx100m grid
- Grades matched the historical results and the existing mineral resource model
- Mineralisation confined to channel sediments and not bedrock which simplifies mining and processing
- Limited amounts of internal dilution
- Gently undulating palaeochannel base has no influence on mineralisation grade or thickness
- Mineralisation may be present even in areas with as little as 2 metres of channel fill

### Palaeochannels: Interpretation of Drilling Results



#### What else can we infer from these drilling results?\*

- \* An internal study predicted the calcrete-hosted tonnes uranium per lineal kilometre along the Tumas drainage
- \* Assumptions were made for grade/thickness consistency interpolated from wide-spaced drilling
- Assumptions referenced against other deposits in the region
- Numbers range between 1.8 and 3Mlbs/km
- Conservatively discount by 50% due to low definition
- **The Drilling results provide the evidence to support**these assumptions

Next steps – generate an estimate of the extent of palaeochannels by:

- **Geophysical interpretation done!**
- \* Prove via further drilling



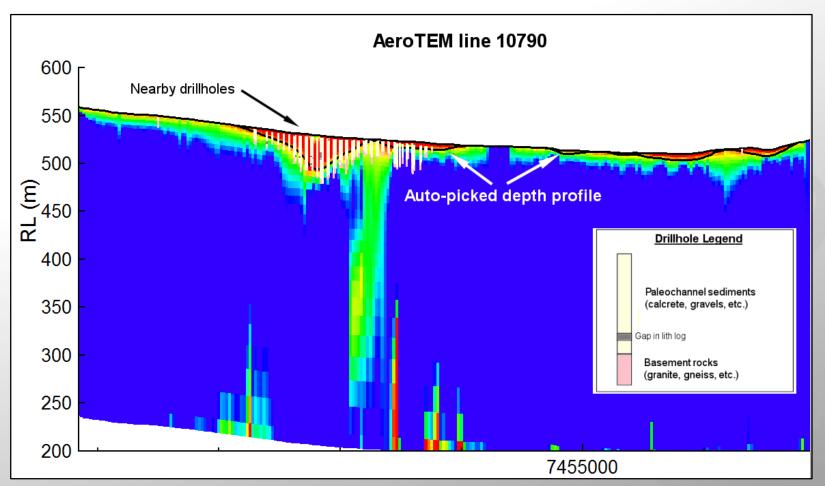
#### Resource Potentials commissioned to re-interpret AeroTEM HEM data\*

- Step 1: Convert the AeroTEM EM time domain data to conductivity-depth values shot
- Step 2: Run an auto-picking processing routine on the conductivity-depth imaging data to determine the thickness of conductive cover above fresh bedrock "basement"
- Step 3: Produce a set of georeferenced data products

This allows an estimate of the extent of palaeochannels to be made



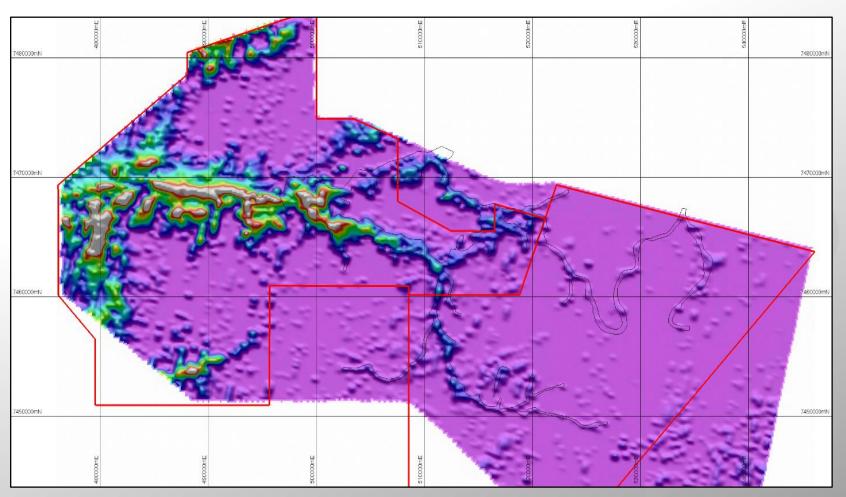
#### Layered Earth Inversion ("LEI") Techniques Produced Reliable Results\*



Layered Earth Inversion section showing good correlation between bedrock depth from drilling and the depth-to-bedrock from auto-picking routine



#### LEI Conductance Image with additional interpretation\*

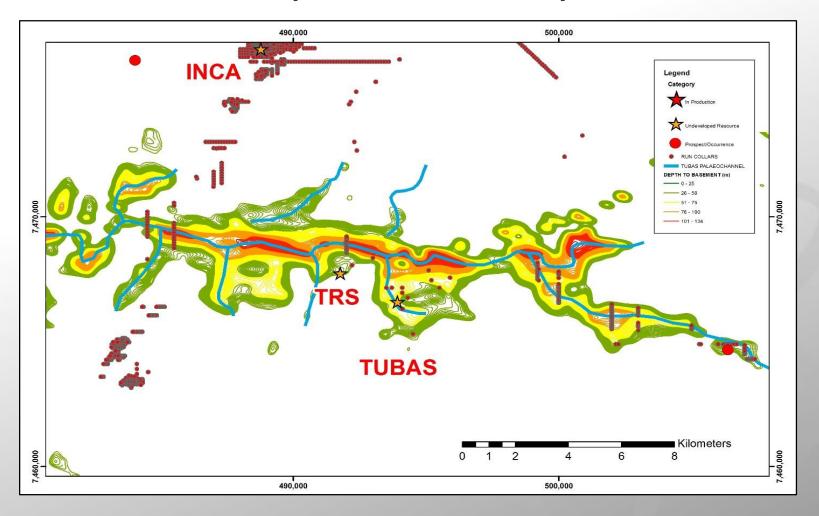


More clearly defined palaeochannel visible from this interpretation

Well over 100 kilometres in length



#### Further analysis delivers the "money shot"\*



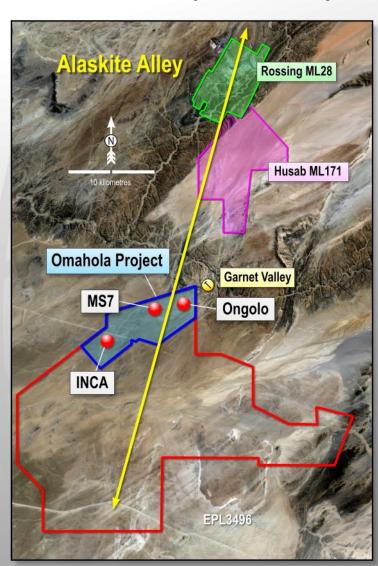
Map showing interpretation of depth to basement of the palaeochannel system across EPL 3496

# Omahola Project: PEA Completed in 2014



#### JORC 2004 Resource: 48.7 Mt at 420 ppm for 45.1 Mlbs U3O8 (tank leach)\*

- \* 'PEA' preliminary economic analysis completed (Internal study ASX release 4 June 2014)
- Heap leach operation more economically attractive
- Results included:
  - Average strip ratios similar at 4.2:1 (waste:ore)
  - MS7 had the lowest strip ratio and INCA the highest
  - Ongolo, the lowest grade deposit, had the highest estimated operating cost and low resource recovery.
  - Rates of production between 2.5 to 3.5 Mlbspa U3O8 were modelled (7 ~ 10 Mtpa or ore)
  - Life of mine of between 10 and 14 years
  - Down dip potential of MS7 confirmed
- Metallurgical testwork required to prove concept
- Next Steps (underway):
  - Review & update preliminary economic analysis using independent consultants
  - Plan scoping level metallurgical testwork



### Tubas Sand Project: Substantial Progress in 2014



#### JORC 2012 Resource: 34 Mt at 170 ppm for 12.7 Mlbs U<sub>3</sub>O<sub>8</sub>\*

- Resource update completed:
  - Covered smaller, selected area
  - Average grade up but resource smaller
  - Upside potential remains drill program designed to infill
     extend resource
- DRA techno-economic study completed
  - Intermediate product preferred strategy
  - Production ~750,000 lbs/year U3O8\*\*
  - FOB minesite costs below US\$25/lb\*\*
- Offtake contract essential
  - Existing Namibian mines & projects approached
  - Unable to commit
- Other metallurgical testwork
  - Samples tested by Marenica Energy Limited
  - ♥ U-pgrade<sup>TM</sup> process may work
- Further work planned but dependent on offtaker
  - Infill & expansion drill program
  - Supplemental metallurgical testwork



### Conclusions



#### Recent Palaeochannel Exploration has Demonstrated Exciting Upside

- Palaeochannels
  - Recent drill program confirmed grade and thickness over selected area
  - Used as an analogue for the remainder of the palaeochannel
  - Calcrete-hosted tonnes uranium per lineal kilometre has been estimated
  - Drill program underpins these assumptions
  - Reinterpretation of existing Geophysical datasets reinforced extent of channels
  - Potential ready to be tapped
- Omahola Project Ongoing progress
  - Update preliminary economic analysis with independent consultants
  - Plan MS7 deeper drilling campaign & scoping level metallurgical test work
  - Assess nearby targets to supplement resource base
- Tubas Sand Project On hold due to lack of offtaker
  - Expansion & Infill drilling program ready to go
  - Metallurgical testwork planning completed
- Improving uranium market sentiment
  - Highly leveraged to any movement in uranium spot price

Leading location, Clear focus, High prospectivity, Proven delivery record

### Thank you....



### **Greg Cochran**

**Managing Director** 

### **Deep Yellow Limited**

Level 4, 502 Hay Street

Subiaco, Western Australia 6008

**T** +61 8 9286 6999

M +61 409 938-784

F +61 8 9286 6969

Email: greg.cochran@deepyellow.com.au

Email: info@deepyellow.com.au

Website: www.deepyellow.com.au



**Appendices** 

# JORC Resources (in this presentation)



Deposit	Category	Cut-off (ppm U3O8)	Tonnes (M)	U3O8 (ppm)	U3O8 (t)	U3O8 (MIb)			
Omahola Project - JORC 2004									
INCA Deposit ◆	Indicated	250	7.0	470	3,300	7.2			
INCA Deposit ◆	Inferred	250	5.4	520	2,800	6.2			
Ongolo Deposit #	Measured	250	7.7	395	3,000	6.7			
Ongolo Deposit #	Indicated	250	9.5	372	3,500	7.8			
Ongolo Deposit #	Inferred	250	12.4	387	4,800	10.6			
MS7 Deposit #	Measured	250	4.4	441	2,000	4.3			
MS7 Deposit #	Indicated	250	1.0	433	400	1.0			
MS7 Deposit #	Inferred	250	1.3	449	600	1.3			
Omahola Project Total			48.7	420	20,400	45.1			
	Tubas Sa	nd Project - JO	RC 2012						
Tubas Sand Deposit #	Indicated	100	10.0	187	1,900	4.1			
Tubas Sand Deposit #	Inferred	100	24.0	163	3,900	8.6			
Tubas Sand Project Total			34.0	170	5,800	12.7			
	Tubas-Tumas	Palaeochanne	- JORC 20	004					
Tumas Deposit ◆	Indicated	200	14.4	366	5,300	11.6			
Deposit ◆	Inferred	200	0.4	360	100	0.3			
Tubas Calcrete Deposit ◆	Inferred	100	7.4	374	2,800	6.1			
Tubas-Tumas Palaeochan	22.2	369	8,200	18.0					
TOTAL RESOURCES			104.9	328	34,400	75.8			

Notes: Figure

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

XRF chemical analysis unless annotated otherwise.

- eU3O8 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 a test hole to confirm operation between 2008 and 2013.

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

## JORC Compliance Statements – Page 1



#### **Omahola Project**

The information in this report that relates to Exploration Results for the **Ongolo, MS7 and INCA** deposits is based on information compiled by Dr Katrin Kärner\* who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM CP(Geo)). Dr Katrin Kärner, who was the Exploration Manager for Reptile Uranium Namibia (Pty) Ltd, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Dr Katrin Kärner\* consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this Report that relates to the **Ongolo and MS7** Mineral Resources is based on information compiled by Malcolm Titley of CSA Global UK Ltd. Malcolm Titley takes overall responsibility for the Report. He is a Member of the Australasian Institute of Geoscientists ('AIG') and the Australasian Institute of Mining and Metallurgy ('AusIMM') and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity 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 2004 Edition). Malcolm Titley consents to the inclusion of such information in this Report in the form and context in which it appears.

The information in this report that relates to the **INCA** Mineral Resource Estimates is based on information compiled by Neil Inwood who is a Fellow of the AUSIMM. Mr Inwood was employed by Coffey Mining as a consultant to the Company at the time of the resource estimates and public release of results. As Mr Inwood is no longer employed by Coffey Mining, Coffey Mining has reviewed this report and consents to the inclusion, form and context of the relevant information herein as derived from the original resource reports for which Mr Inwood's consents have previously been given. Mr Inwood has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition).

The information relating to the **Omahola** Project Exploration Results and Mineral Resource Estimates was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

#### **Tubas Sand Project**

The information in this release that relates to the **Tubas Sand** Mineral Resource Estimate is based on information compiled by Dr Katrin Kärner\* of Reptile Uranium (Pty) Ltd and Malcolm Titley of CSA Global Pty Ltd. Malcolm Titley takes overall responsibility for the MRE. He is a Member of the Australasian Institute of Geoscientists ("AIG") and the Australasian Institute of Mining and Metallurgy ("AusIMM") and has sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration, and to the activity 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). Malcolm Titley consents to the inclusion of such information in this Report in the form and context in which it appears.

Dr Katrin Kärner\* of RUN was the Competent Person responsible for the exploration activities and drill hole database and assaying who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM CP(Geo)). Dr Katrin Kärner, who was the Exploration Manager for Reptile Uranium Namibia (Pty) Ltd, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). Dr Katrin Kärner\* consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

CSA is an independent geological consultancy. Fees were charged to RUN at a commercial rate for the work completed and preparation of the Tubas Sand Deposit Mineral Resource Estimate, the payment of which is not contingent upon the conclusions of the Resource Estimate. No member or employee of CSA is, or is intended to be, a director, officer or other direct employee of RUN. There is no formal agreement between CSA and RUN as to RUN providing further work for CSA.

# JORC Compliance Statements – Page 2



#### **Tubas-Tumas Project**

The information in this report that relates to the Tumas Zone 1 Infill Drilling Exploration Results is based on and fairly represents information and supporting documentation prepared or reviewed by Mr Geoffrey Gee, a Competent Person who is a Member of the Australasian Institute of Geoscientists. Mr Gee, who is employed as a contract Exploration Geologist with Deep Yellow Limited, has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gee consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to previous Exploration Results for the Tubas Calcrete and Tumas Mineral Resources is based on information compiled by Dr Katrin Kärner who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM CP(Geo)). Dr Katrin Kärner, who was the Exploration Manager for Reptile Uranium Namibia (Pty) Ltd during 2013, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Dr Katrin Kärner consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this report that relates to the Tubas Calcrete Mineral Resource is based on information compiled by Mr Willem H. Kotzé Pr.Sci.Nat MSAIMM. Mr Kotzé is a Member and Professional Geoscientist Consultant of Geomine Consulting Namibia CC. Mr Kotzé 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 2004 Edition). Mr Kotzé consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Tumas Mineral Resources is based on work completed by Mr Jonathon Abbott who is a full time employee of MPR Geological Consultants Pty Lt and a Member of the Australian Institute of Geoscientists. Mr Abbott 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 a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition') and as a Qualified Person as defined in the AIM Rules. Mr Abbott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information relating to Tubas-Tumas Mineral Resource Estimates was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

#### **Geophysical Results: Resource Potentials**

The information in this report that relates to Geophysical Results is based on information compiled by Dr Jayson Meyers who is a Fellow of the Australian Institute of Geoscientists. Dr Meyers is a full time employee of Resource Potentials Pty Ltd. Dr Meyers has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Meyers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.