

# **Deep Yellow**

Limited

Proactive Investors

Spotlight CEO

Investor Presentation

12 & 13 April 2016

**Greg Cochran – Managing Director** 

ASX: DYL www.deepyellow.com.au





Namibian Uranium Association

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# **Executive Summary**



- ASX-listed advanced stage Namibian uranium exploration company
  - Focussed on near-term development of its Tumas Calcrete Project:
    - Highest grade undeveloped calcrete resource in Namibia (~350ppm)
    - Extensive palaeochannel ~ 100 kilometres for resource upside
    - Potential application of novel processing technique for mid-size comparatively low capex/opex operation
    - Close proximity to three existing world class mines (for offtake)
    - Existing infrastructure, well established, supportive uranium jurisdiction
- Namibia a leading African mining investment destination
- Blephant country exploration upside-Husab, Rössing, Langer Heinrich

# **Corporate Snapshot**



# The Board

Rudolf Brunovs	Interim Chairman		
Greg Cochran	Managing Director		
Gillian Swaby	N.E.D		
Christophe Urtel	N.E.D		
Mervyn Greene	N.E.D		
Mark Pitts	Company Secretary		

# Executives & Management

Greg Cochran	Managing Director				
<b>Ursula Pretorius</b>	Financial Controller				
Martin Hirsch	Exploration Manager				

# Capital Structure – as at 4 Apr 2016

Shares on Issue	1,931M			
Performance Rights	61.8M			
Market Cap (@ 0.7c/share)	<b>© 0.7c/share)</b> ~ AUD 13.5M			
Net Cash	~AUD 2M			
Major shareholders:				
Paladin Energy Limited	16.5%			
HSBC*	13.1%			
National Nominees**	9.2%			

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

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



# Location

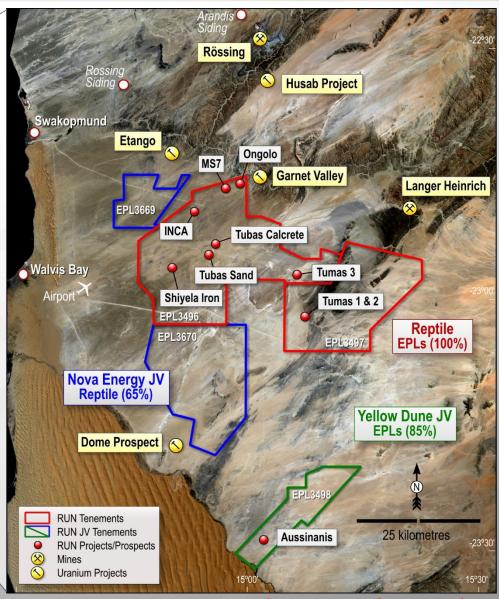




93.8 Mlbs at 306ppm in resources\*

# **Notes:**

Exploration in Namibia is conducted by DYL's whollyowned subsidiary Reptile Uranium Namibia (RUN) \* Assuming tank leach for Omahola



Note: EPLs 3496, 3497, 3669 & 3670 are under renewal

# DYL's Strategic Evolution



# Progressing projects cautiously to be well positioned at market recovery

Prior to Fukushima, Omahola Project prioritised:

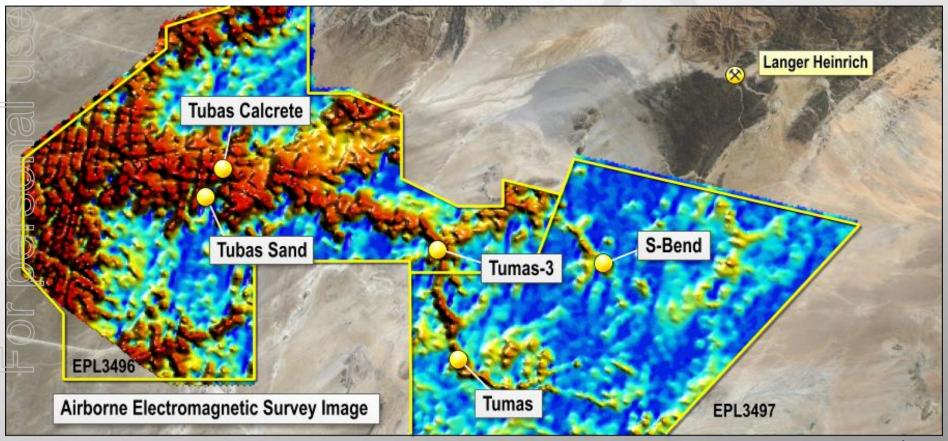
- Hard rock, open pit, acid tank leach
- Supplementary supply planned from Tubas Sand Project
   Alaskite focussed exploration to boost Omahola resource base
   Fukushima prompted cautious approach & cash conservation
   Search for low cost, low technical risk project for earlier cashflow
   Tubas Sand Project:
  - Satellite supply business model adopted
  - No offtake commitment Project suspended
- Reassessment of Omahola Project heap leach
- Successful Palaeochannel Review
  - Marenica Testwork possible amenability of U-pgrade<sup>™</sup> process
  - Successful Infill drilling program & geophysical interpretation
  - Test market appetite for satellite supply business model higher grades and potential for cleaner product, lower transport costs

# Introduction to DYL's Palaeochannels



The highest grade undeveloped calcrete resource in Namibia. An extensive mineralised palaeochannel system in excess of 100 kilometres, consisting of a number of existing defined deposits:

Tumas Calcrete 1, 2 & 3; Tubas Calcrete and Tubas Sand



JORC 2004 Palaeochannel Resource: 22.2 Mt at 368 ppm for 18 Mlbs U3O8\*

# **Tumas Calcrete Project Snapshot**



# Marenica U-pgrade<sup>TM</sup> Process

- ⇒ Development closely monitored by DYL since 2013
- Process potentially more effective than the Schauenburg Plant (used on DYL's Tubas Sand Project)
- U-pgrade<sup>™</sup> could significantly reduce capital and operating costs

# 2014 – First Steps

- Mineral characterisation tests completed by Marenica in Australia on Sand and Calcrete samples
- **Solution** Concluded process may be applicable to DYL palaeochannels
- Be Could significantly reduce capital, operating & transport costs for the Sand and Palaeochannels
- Apply Sand Project strategy Satellite supply of intermediate product to existing producer

# \* Concluded process may be applicated to a could significantly reduce capital, Apply Sand Project strategy – Sate 2015 – Building Blocks in Place Initial Resource review – complete Small Infill grade control drill progue Geophysics Assessment – complete Market Assessment for potential of Preparation for metallurgical tests.

- Initial Resource review completed
- Small Infill grade control drill program completed
- Geophysics Assessment completed
- Market Assessment for potential offtakers commenced and is ongoing
- Preparation for metallurgical testwork bulk sample excavated

# 2016 – Gathering Momentum

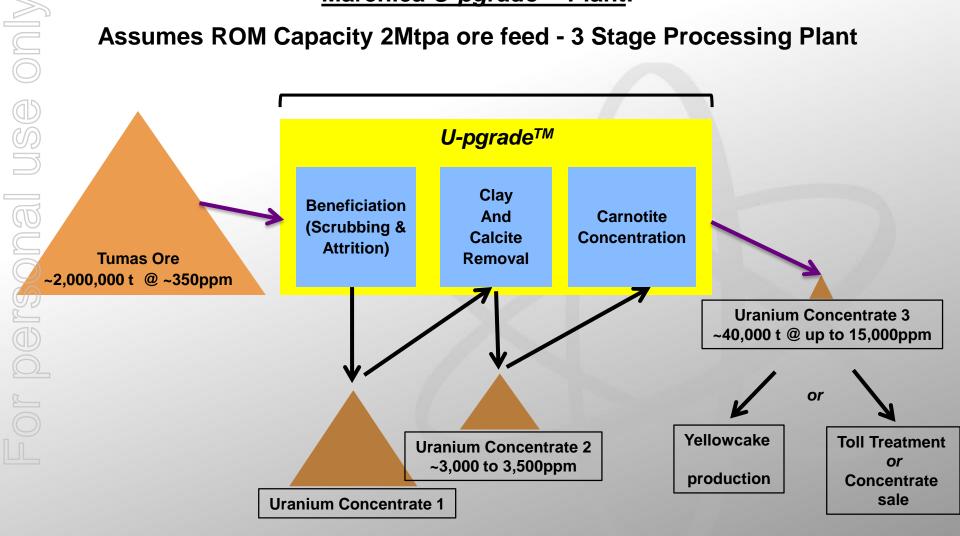
- Marenica metallurgical testwork underway in Perth
- Project planning, assuming success
- Resource update work underway
- Planning follow-up exploration program

# Tumas Theoretical Plant Operation\*



# Marenica *U-pgrade™* Plant:

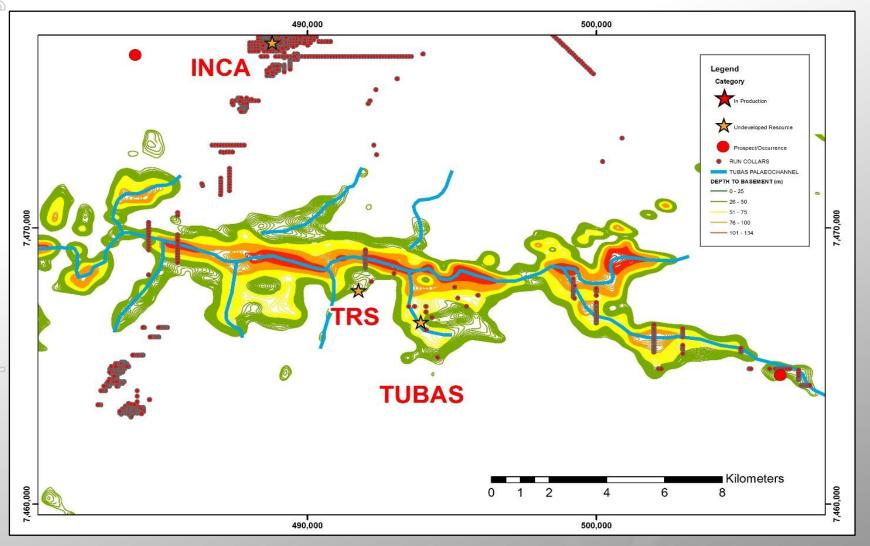
**Assumes ROM Capacity 2Mtpa ore feed - 3 Stage Processing Plant** 



<sup>\*</sup> Based on indicative mineral characterisation analysis & Marenica estimates only - subject to confirmation by additional testwork & feasibility studies

# Resource Upside – Tumas & Tubas Calcrete Projects

# New Geophysical Interpretation offered glimpse of significant upside potential



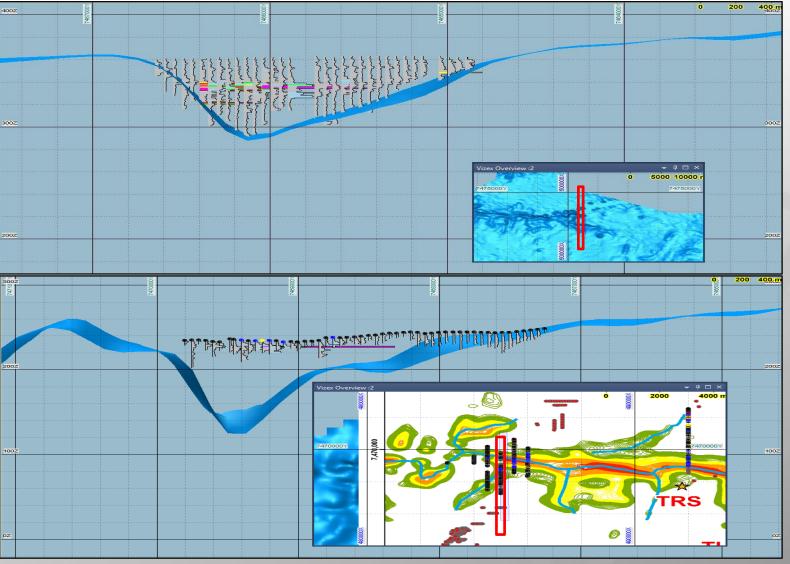
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# Resource Upside – Tumas & Tubas Calcrete Projects

# Cross sections of historical drilling show varying drill penetration

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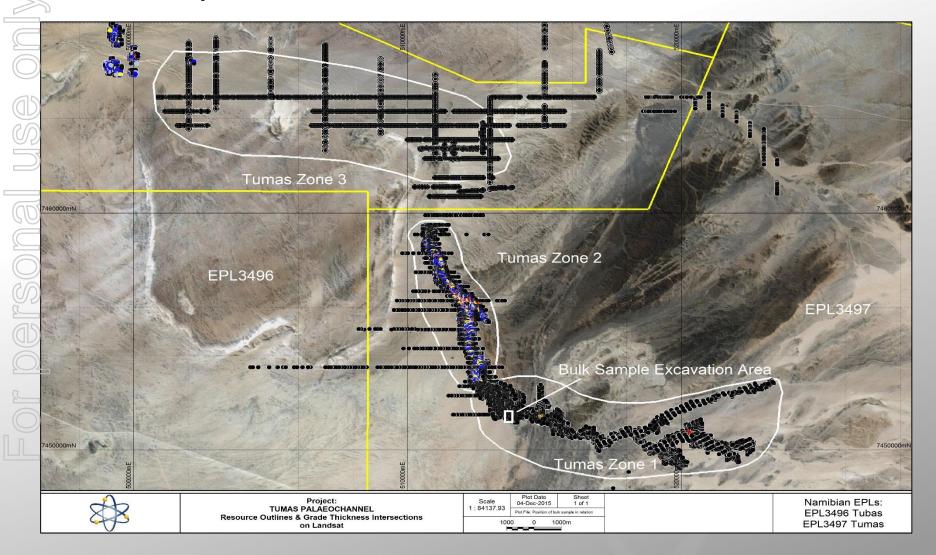
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# Tumas Project – Bulk Sample Excavation



# First bulk sample excavated November 2015 – Arrived Perth December 2015



# Tumas Project – Bulk Sample Excavation





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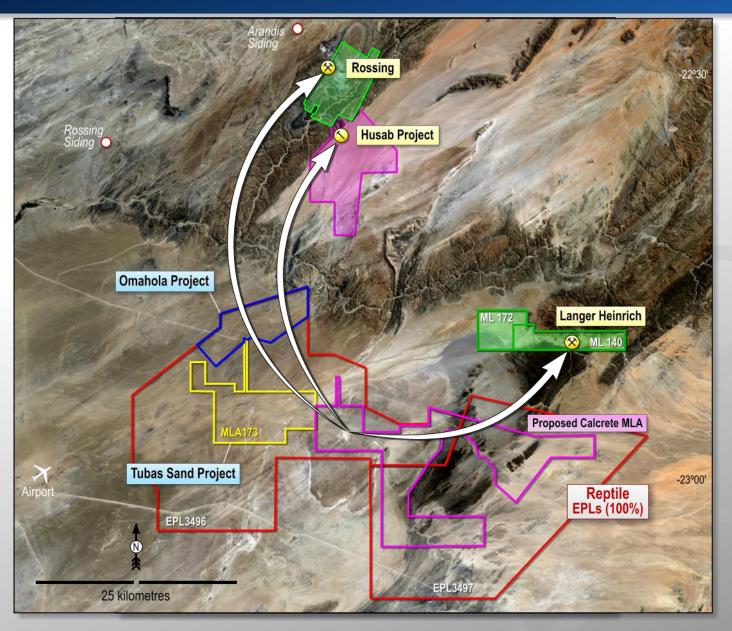


Excavation of bulk sample demonstrates simple geology – little overburden, shallow to drill out in Zones 1 & 2

# Tumas Project – Potential Offtakers







# Tumas Project – Indicative Program



# Potential for fast track, low cost project – First production mid-2019?

- Step 1: Scoping Metallurgical Testwork & Resource Work: H1 2016\*
  - First phase laboratory metallurgical testwork, ~1 tonne sample to generate high level design data
  - Resource update increase in size and confidence (JORC 2012)
  - Will allow decision on PFS
- Step 2: Tumas Project PFS: H2 2016 H1 2017\*
  - Lab scale variability testwork

  - Finalise SEIA & lodge Environmental Licence Application (Scoping SEIA already approved)
- \* Lab scale variability testwork

  \* Design, schedule & costing

  \* Resource expansion & further delineation (if required)

  \* Finalise SEIA & lodge Environmental Licence Application

  \* Step 3: Tumas Project DFS: H2 2017 H1 2018\*

  \* ~30 tonne pilot plant metallurgical test (if required)
  - \* ~30 tonne pilot plant metallurgical test (if required)
  - Detailed design, schedule & costing
  - Confirmatory metallurgical testwork (if required)
  - Lodge Mining Licence Application
  - Step 4: Project Finance, Development & Commissioning: H2 2018 H1 2019\*
    - Comparatively low capital cost project anticipated if satellite supply business model is adopted
    - If U-pgrade<sup>TM</sup> is successful, even a plant producing yellowcake will have comparatively low capex

# Conclusions



# Gathering Momentum in a Challenging Market Environment

- Tumas Calcrete Project Potential for fast track, low cost project
  - Initial testwork encouraging, next step underway
  - Untapped resource potential to depth and extensive across ~100 km channel
  - Satellite supply business model or standalone optionality
- Omahola Project Ongoing progress
  - Independent consultants confirm preliminary economic analysis of heap leach
  - Capex estimate improvements with grass hopper application
  - Nearby exploration targets could supplement resource base
- Tubas Sand Project On hold, but could be included in Calcrete Project
  - Expansion & Infill drilling program ready to go
  - Metallurgical testwork planning completed
  - Still available for supplemental feed to any DYL project at higher prices
- Exploration Unparalleled prospectivity
  - Exciting exploration potential remains Can DYL find the next Husab?
- Improving uranium market sentiment
  - Highly leveraged to looming correction in uranium spot price

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

# Thank you....





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# **Appendices**

# Omahola Project: PEA Completed in 2014



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



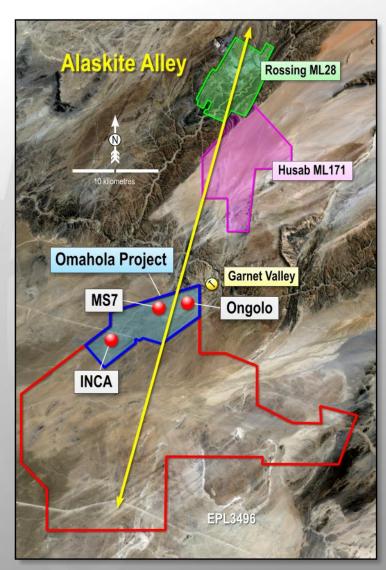
Heap leach operation more economically attractive

# **Results included:**

- Average strip ratios similar at 4.2:1 (waste:ore)
- Production rates 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
- Assess other development opportunities



# Tubas Sand Project: Substantial Progress in 2014



# JORC 2012 Resource: 34 Mt at 170 ppm for 12.7 Mlbs U3O8\*

# Resource update completed:

- Covered smaller, selected area
- Average grade up but resource smaller
- Upside potential remains drill program designed to infill & extend resource

# #SONAI #USE DRA techno-economic study completed

- Intermediate product preferred strategy
- Production ~750,000 lbs/year U3O8\*\*
- FOB minesite costs below US\$25/lb\*\*
- Transport cost makes project marginal

# Offtake contract essential

- All three mines approached
- Unwilling to commit

# Other metallurgical testwork

- Shipped samples to Australia for test by Marenica
- U-pgrade<sup>™</sup> process may work

# Planned work on hold due to no offtaker

- Infill & expansion drill program design completed
- Supplemental metallurgical testwork planned



# JORC Resources (in this presentation)



Deposit	Category	Cut-off (ppm U3O8)	Tonnes (M)	U3O8 (ppm)	U3O8 (t)	U3O8 (MIb)
	Omahol	a Project - JOR	C 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
<b>Tubas Sand Project Tota</b>	l		34.0	170	5,800	12.7
	Tubas-Tumas	Palaeochannel	- JORC 20	004		
Tumas Deposit ◆	Indicated	200	14.4	366	5,300	11.6
Tumas Deposit ◆	Inferred	200	0.4	360	100	0.3
Tubas Calcrete Deposit	Inferred	100	7.4	374	2,800	6.1
Tubas-Tumas Palaeocha	annel Total		22.2	369	8,200	18.0
TOTAL RESOURCES			104.9	328	34,400	75.8

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

XRF chemical analysis unless annotated otherwise.

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- 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.

# **Board & Management**



# Broad range of mining, technical and financial experience

# Rudolf Brunovs Interim Chairman and Non-Executive Director

- Chartered Accountant, full equity partner for over 27 years with Ernst & Young and predecessor companies
- \$ 12 years as Managing Partner in Parramatta NSW and Perth WA

## Mervyn Greene Non-Executive Director

- Over 30 years investment banking and entrepreneurial experience
- Formerly Morgan Stanley and London Partner of Namibian corporate advisory firm IJG

# **Gillian Swaby** Non-Executive Director

- Over 25 years financial and corporate administration experience
- Previously Company Secretary and Board Member for Paladin Resources

# Christophe Urtel Non-Executive Director

- Head of Corporate Development for the Noble Group, 15 years experience in investment banking and management with JP Morgan and Liberum Capital
- Investment advisor to Laurium Fund

# Mark Pitts Company Secretary

- Chartered Accountant with over 25 years experience
- Partner in the advisory firm Endeavour Corporate

# **Greg Cochran**Managing Director

- Senior mining executive with over 28 years international industry experience
- Former companies include Terramin Australia, Uranium One, Mitsubishi Development, BHP Billiton and Billiton's predecessor companies

# Ursula Pretorius Financial Controller

- Over 20 years financial management experience within mining and private security industries
- Member of the Governance Institute of Australia (ICSA)
- Formerly Finstone SA (Pty) Ltd

# Martin Hirsch Exploration Manager

- Highly experienced (over 22 years)
   exploration and production geologist
- Formerly Chief Geologist for Forsys, Trekopje (Areva) and Rössing Uranium (Rio Tinto)
- Expert knowledge in geological modelling and resource estimation