

**Deep Yellow**  
Limited

***Paydirt's 2012  
Uranium Conference***

***The TRS Project:  
"Making a Silk Purse out  
of a Sow's Ear"***

**28<sup>th</sup> February 2012**

**Greg Cochran – Managing Director**

**ASX: DYL**

***[www.deepyellow.com.au](http://www.deepyellow.com.au)***





## ***Forward Looking Statements***

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- ✱ Corporate Profile
- ✱ Namibian Core Projects
- ✱ 2011 Highlights
- ✱ The TRS Project
- ✱ Summary and Conclusion



***Commence uranium production in Namibia in 2015 and continue to successfully grow our uranium resource base***



## The Board

**Mervyn Greene** – Chairman

**Greg Cochran** – Managing Director

**Martin Kavanagh** – Executive Director

**Gillian Swaby** – N.E.D

**Rudolf Brunovs** – N.E.D (independent)

**Mark Pitts** – Company Secretary

## Executives & Management

**Greg Cochran** – Managing Director

**Martin Kavanagh** – Executive Director

**Leon Pretorius** – MD: Namibia

**Ursula Pretorius** – Financial Controller

**Klaus Frielingsdorf** – GM: Technical

## Capital Structure – as at 27 Feb 2012

**Shares on Issue** 1,128.51 M

**Unlisted Options/Perf. Rights** 12.68 M

**Market Cap (@ 13c)** ~ 147 M

**Net Cash** ~6 M

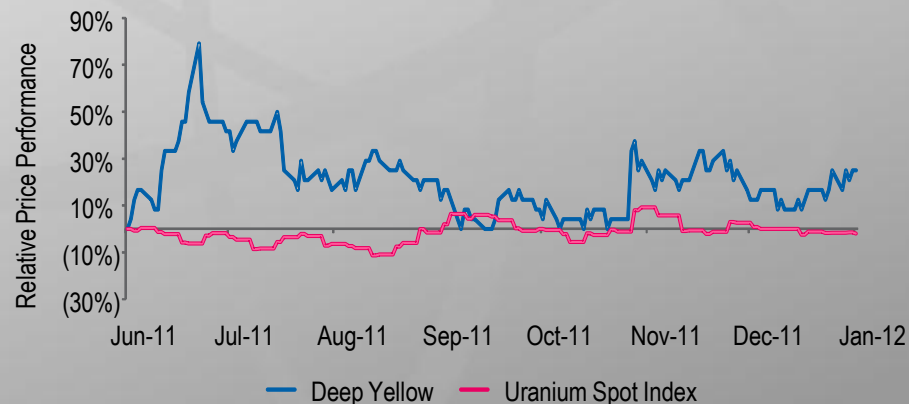
### Major shareholders:

**Paladin Energy** 19.9%

**Board & Management** 15.7%

## DYL Share Price vs. Uranium Spot

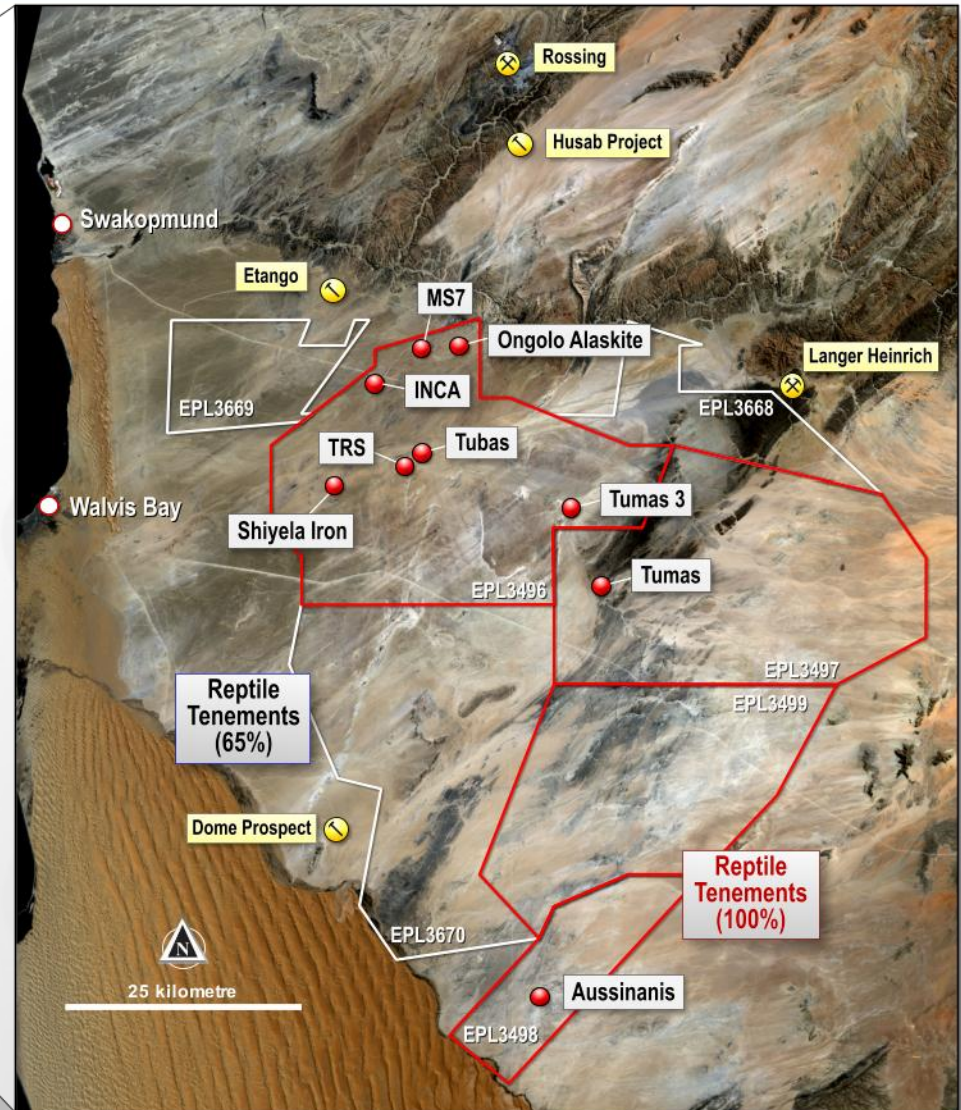
Relative Price Performance – DYL v. Uranium Price (20 Jun '11 - 20 Jan '12)



# Namibian Tenements – Reptile Uranium\*



**4,195 km<sup>2</sup>  
exploration area:  
101.4 Mlbs in  
resources**



*\*Note: Exploration in Namibia is conducted by DYL's wholly-owned subsidiary Reptile Uranium Namibia (RUN)*

# Three Namibian Core Projects



## OMAHOLA PROJECT

### ONGOLO & MS7 ALASKITE

JORC resource: 23.6 Mlbs

Primary mineralisation

Open Pit Hardrock – Drill & blast

Acid plant treatment

Grade/Cut-off: 416 ppm/250 ppm

### INCA URANIFEROUS MAGNETITE

JORC resource: 13.4 Mlbs

Primary mineralisation

Open Pit Hardrock – Drill & blast

Acid plant treatment

Grade/Cut-off : 490 ppm/250 ppm

## *Three deposits feeding a central plant*

## TRS PROJECT

### TUBAS RED SAND DEPOSIT

JORC resource: 28.4 Mlbs

Secondary mineralisation

Shallow wind blown sand deposit

Free dig/physical beneficiation

Acid or alkali plant treatment

Grade/Cut-off: 148 ppm/70 ppm

## SHIYELA IRON PROJECT

### SHIYELA IRON DEPOSIT

Mineralisation: Magnetite/Hematite

Open Pit Hardrock – Drill & blast

Drilling completed mid-2011

Scoping Study Completed 2012

Capex: U\$467 M Opex: U\$78/t

78.7 Mt @ 18.9% Fe, 16.2% DTR



- ❁ Ongolo & MS7 JORC Resource delivered ✓
- ❁ Successful TRS Beneficiation Trial ✓
- ❁ INCA & TRS EIA's completed & submitted ✓
- ❁ Shiyela EIA completed & submitted ✓
- ❁ TRS Deposit upgrade underway for standalone project ✓
- ❁ Mining Licence applications for TRS/INCA submitted ✓
- ❁ Shiyela Mining Licence application submitted ✓
- ❁ Shiyela resource and scoping study completed ✓

***An Outstanding Year of Achievement***



- ❁ Omahola Project:
  - Continue to expand Ongolo & MS7 Resource base
  - Achieve Resource Critical Mass for Project (>50 Mlbs)
  - Finalise Pre-Feasibility Study

- ❁ TRS Project
  - Resource Upgrade
  - Standalone Option Pre-Feasibility Study

- ❁ Shiyela
  - Large diameter drilling for pilot plant testwork
  - Raise funding for and complete Feasibility Study

***A multi-project company rapidly advancing its flagship projects towards development***



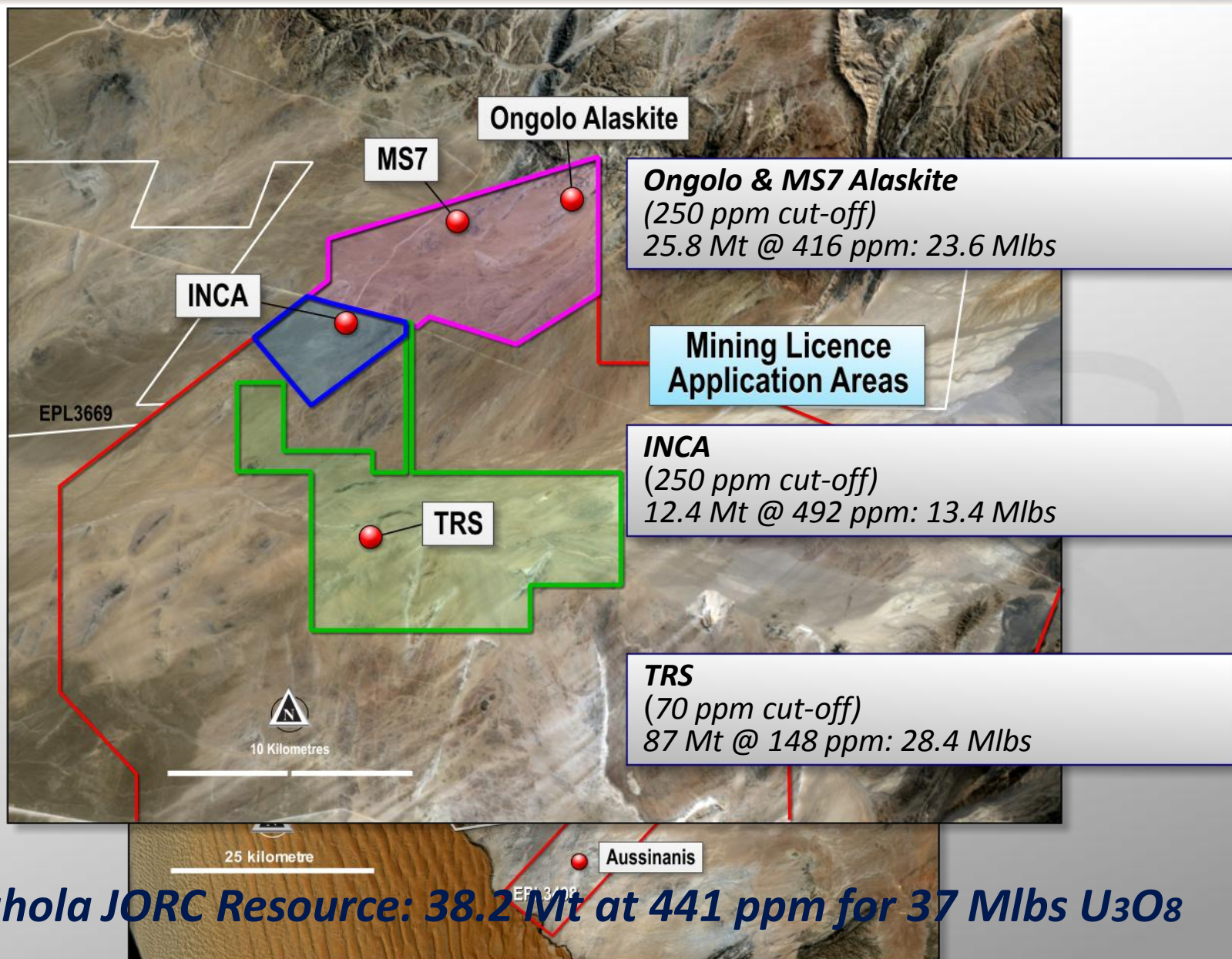
# Uranium Project Criteria



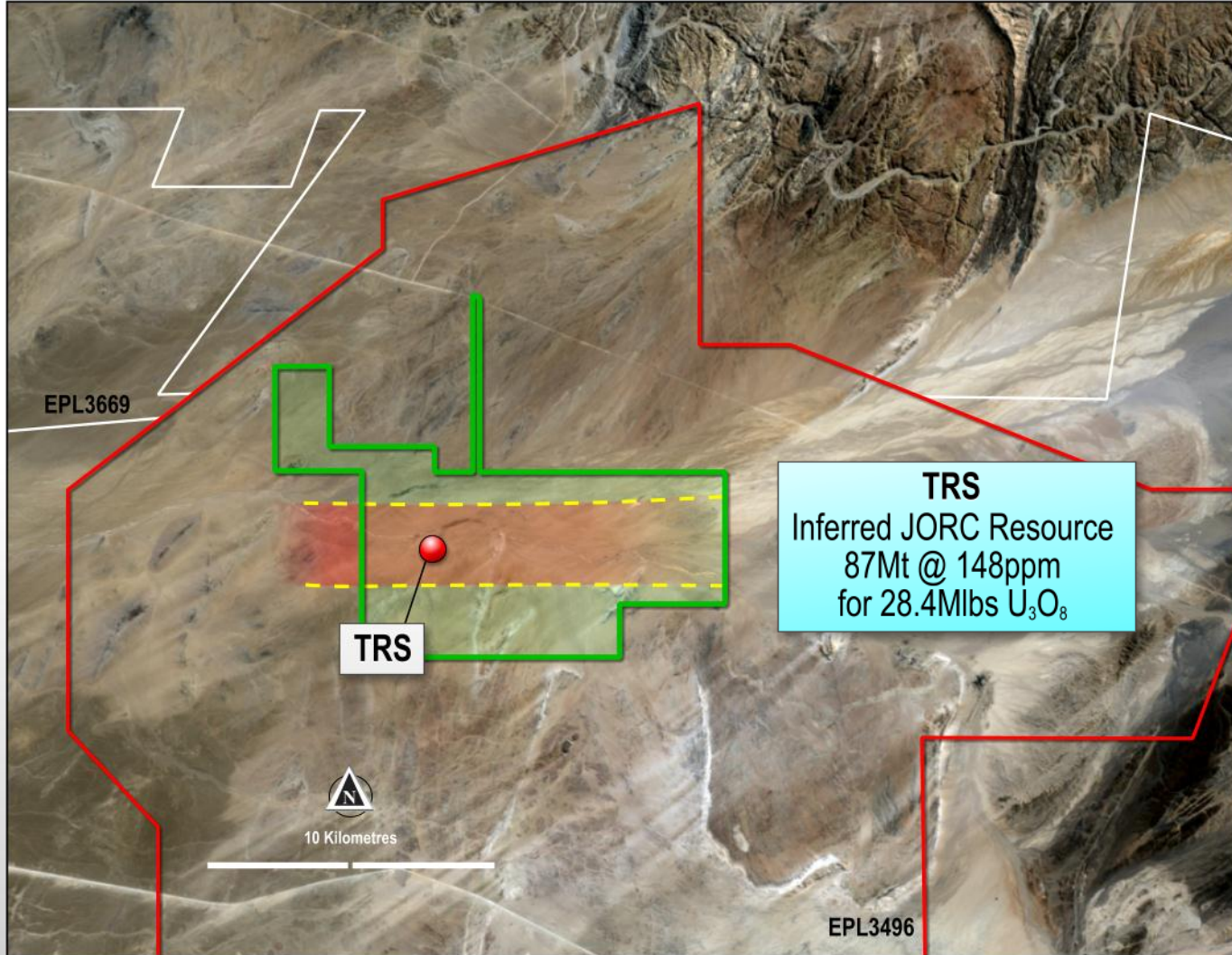
- ✿ Grade:
  - ~300ppm  $U_3O_8$  for palaeochannel and sheetwash calcretes
  - ~400ppm  $U_3O_8$  for hard rock open pit deposits (alaskites)
  - ~1,000ppm  $U_3O_8$  for potential underground deposits
- ✿ Minimum 18Mlbs  $U_3O_8$  per deposit with upside (15 yr mine life)
- ✿ Minimum production profile ~2.2Mlbs per operation
- ✿ No refractory uranium minerals
- ✿ Resource inventory ~100Mlbs  $U_3O_8$  – to enable long term offtake agreements
- ✿ Use physical beneficiation for unique low grade sand deposit

***Rational economics drives exploration and project decision making***

# Omahola & TRS Project Locations



# TRS Project – MLA & Red Sand Area



*TRS Deposit showing area with known red sand*



## Deposit Characteristics:

- ✿ Well-sorted wind-blown sand, low grade uranium
- ✿ Free flowing/loosely consolidated
- ✿ Large area along the Tubas palaeochannel
- ✿ Bulk of uranium in sub 20 $\mu$ m fraction
- ✿ Uranium mineral almost exclusively carnotite
- ✿ At ~150ppm, generally considered uneconomic

## ***Objective:***

***Concentrate maximum uranium in minimum volume through physical beneficiation to enhance economics***

# Why Physical Beneficiation?



- ⚛ Decreases the physical weight of material to be handled
- ⚛ Reduces amount of gangue and increases uranium concentration
- ⚛ Some alternatives:
  - Radiometric sorting
  - Grinding and sizing
  - Gravity separation
  - Magnetic or Electrostatic separation
  - Floatation cells

***BUT!***

- ⚛ Few ores are amenable to simple physical beneficiation
- ⚛ If they are, it offers large cost and process advantages

# The Schauenburg Solution



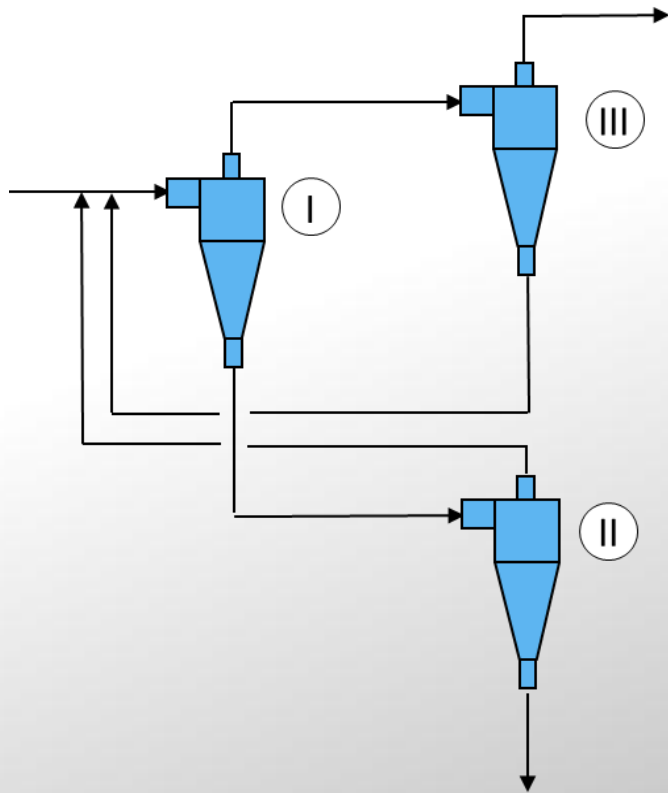
Process:

Hydrosort<sup>®</sup>- II → Scrubbing → Hydrosort<sup>®</sup>- I → 3 X Hydrocyclones

Successful Pilot Plant Test:

- ✱ Simple, physical beneficiation process
- ✱ Uranium Recovery >80% in <20% volume
- ✱ Carbonate reduction >80%
- ✱ Mass pull between 10% ~ 20%
- ✱ Uranium upgrade factor 7.9 (at 10% mass pull)
- ✱ Process guarantee offered

# The Schauenburg Solution



***Hydrocyclone Schematic***



***Pilot Plant***

# Bulk Sample for Testwork



***Spoil Pile***



***Trench for Bulk Sample***





*Scrubbing*



*Mineral Liberation*



***Flotation Tests***



***Mineral Size Separation***



***Column Leach***



***Open Flask Leach***

# Schauenburg Testwork



***Loaded IX Resin @ pH 2.5***

# Summary & Implications



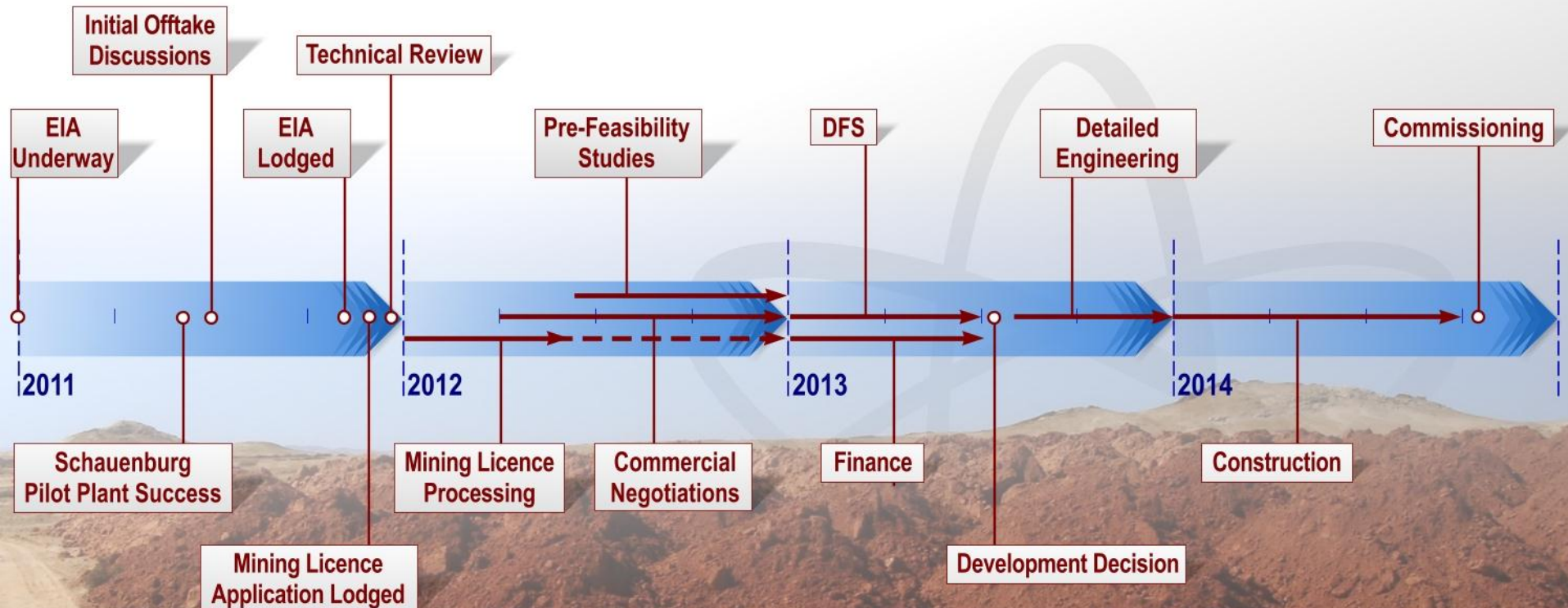
- ✿ Successful Pilot Plant Testwork was conducted on a TRS deposit bulk sample
- ✿ The deposit can be upgraded via physical beneficiation
- ✿ A uranium **recovery in excess of 80%** was achieved
- ✿ A uranium **upgrade factor 7.9** was obtained
- ✿ Testwork also showed that **the Schauenburg product is easily leached and loaded onto resin**
- ✿ Combined with the TRS deposit upgrade to **87 Mt @ 148 ppm for a 28.4 Mlb resource**, the project has **critical mass**
- ✿ The Project has **environmental clearance with a Mining Licence Application** under assessment

*The new resource, combined with the successful testwork, enables the TRS Deposit to be a standalone project*



- ❁ Develop sand mining operation with Schauenburg Plant on the TRS Deposit
- ❁ Construct Resin-In-Leach Circuit on the INCA MLA
- ❁ Produce loaded resin for sale to existing Namibian uranium producers
- ❁ Small columns transportable by truck – low volume, high value product
- ❁ Schauenburg plants are modular, allowing scalability
- ❁ One module ~ 250 tpa  $U_3O_8$
- ❁ Indicative Capital Cost from initial Scoping ~ U\$135 M for 1,000 tpa  $U_3O_8$  plant (Schauenburg Plant & RIL Circuit)

# Project Timeline



*Aggressive timetable to production*

# Conclusions



- ✿ DYL has unlocked the potential of the unique, low grade TRS deposit
- ✿ The solution is the application of a physical beneficiation process from Schauenburg MAB in Germany
- ✿ The newly increased resource base will allow a long life operation at around 500 tpa  $U_3O_8$
- ✿ Uranium loaded resin can be sent to existing producers in an offtake contract or ultimately the Omahola Plant
- ✿ An offtake contract will allow a faster development time, lower capex requirement and reduce technical risk

***A unique deposit treated with a new processing solution  
is making a silk purse out of a sow's ear!***





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# Appendices



# JORC Resource Summary – Namibia (02/12)

| Deposit                                  | Category  | Cut-off<br>(ppm U <sub>3</sub> O <sub>8</sub> ) | Tonnes<br>(M) | U <sub>3</sub> O <sub>8</sub><br>(ppm) | U <sub>3</sub> O <sub>8</sub><br>(t) | U <sub>3</sub> O <sub>8</sub><br>(Mlb) |
|--|-----------|---|---------------|--|--------------------------------------|--|
| <b>REPTILE URANIUM NAMIBIA (NAMIBIA)</b> |           |   |               |  |                                      |  |
| <b>Omahola Project</b>                   |           |   |               |  |                                      |  |
| INCA ♦                                   | Indicated | 250   | 7             | 470                                    | 3,300                                | 7.2                                    |
| INCA ♦                                   | Inferred  | 250   | 5.4           | 520                                    | 2,800                                | 6.2                                    |
| Ongolo #                                 | Indicated | 250   | 14.7          | 410                                    | 6,027                                | 13.2                                   |
| Ongolo #                                 | Inferred  | 250   | 5.8           | 380                                    | 2,204                                | 4.8                                    |
| MS7 #                                    | Indicated | 250   | 3.3           | 430                                    | 1,400                                | 3.2                                    |
| MS7 #                                    | Inferred  | 250   | 2.0           | 540                                    | 1,100.00                             | 2.4                                    |
| <b>Omahola Project Total</b>             |           |   | <b>38.2</b>   | <b>441</b>                             | <b>16,831</b>                        | <b>37.0</b>                            |
| <b>TRS Project</b>                       |           |   |               |  |                                      |  |
| TRS - Sand                               | Inferred  | 70  | 87            | 148                                    | 12,876                               | 28.4                                   |
| <b>TRS Project Total</b>                 |           |   | <b>87.0</b>   | <b>148</b>                             | <b>12,876</b>                        | <b>28.4</b>                            |
| <b>Tubas-Tumas Palaeochannel Project</b> |           |   |               |  |                                      |  |
| Tumas ♦                                  | Indicated | 200   | 14.4          | 366                                    | 5,270                                | 11.6                                   |
| Tumas ♦                                  | Inferred  | 200   | 0.4           | 360                                    | 144                                  | 0.3                                    |
| Tubas - Calcrete                         | Inferred  | 100   | 7.4           | 374                                    | 2,767                                | 6.1                                    |
| <b>Tubas-Tumas Project Total</b>         |           |   | <b>22.2</b>   | <b>369</b>                             | <b>8,181</b>                         | <b>18.0</b>                            |
| <b>Aussinanis Project</b>                |           |   |               |  |                                      |  |
| Aussinanis ♦                             | Indicated | 150   | 5.6           | 222                                    | 1,243                                | 2.7                                    |
| Aussinanis ♦                             | Inferred  | 150   | 29            | 240                                    | 6,960                                | 15.3                                   |
| <b>Aussinanis Project Total</b>          |           |   | <b>34.6</b>   | <b>237</b>                             | <b>8,203</b>                         | <b>18.0</b>                            |
| <b>RUN TOTAL - NAMIBIA</b>               |           |   | <b>182.0</b>  | <b>253</b>                             | <b>46,091</b>                        | <b>101.4</b>                           |

Notes: Figures have been rounded and totals may reflect small rounding errors.  
 XRF chemical analysis unless annotated otherwise.  
 ♦ eU<sub>3</sub>O<sub>8</sub> - equivalent uranium grade as determined by downhole gamma logging.  
 # Combined XRF Fusion Chemical Assays and eU<sub>3</sub>O<sub>8</sub> values.

# JORC Resource Summary – Aus (02/12)



| Deposit                                   | Category  | Cut-off<br>(ppm<br>U <sub>3</sub> O <sub>8</sub> ) | Tonnes<br>(M) | U <sub>3</sub> O <sub>8</sub><br>(ppm) | U <sub>3</sub> O <sub>8</sub><br>(t) | U <sub>3</sub> O <sub>8</sub><br>(Mlb) |
|---|-----------|--|---------------|--|--------------------------------------|--|
| <b>AUSTRALIA</b>                          |           |  |               |  |                                      |  |
| <b>NAPPERBY PROJECT (NT, AUSTRALIA)</b>   |           |  |               |  |                                      |  |
| Napperby                                  | Inferred  | 200  | 9.3           | 359                                    | 3,351                                | 7.4                                    |
| <b>NAPPERBY TOTAL</b>                     |           |  | <b>9.3</b>    | <b>359</b>                             | <b>3,351</b>                         | <b>7.4</b>                             |
| <b>MOUNT ISA PROJECT (QLD, AUSTRALIA)</b> |           |  |               |  |                                      |  |
| Mount Isa                                 | Indicated | 300  | 2.2           | 470                                    | 1,050                                | 2.3                                    |
| Mount Isa                                 | Inferred  | 300  | 2.5           | 450                                    | 1,120                                | 2.5                                    |
| <b>MOUNT ISA TOTAL</b>                    |           |  | <b>4.7</b>    | <b>460</b>                             | <b>2,170</b>                         | <b>4.8</b>                             |
| <b>TOTAL INDICATED RESOURCES</b>          |           |  | <b>134.2</b>  | <b>232</b>                             | <b>31,166</b>                        | <b>68.6</b>                            |
| <b>TOTAL INFERRED RESOURCES</b>           |           |  | <b>61.8</b>   | <b>331</b>                             | <b>20,446</b>                        | <b>45.0</b>                            |
| <b>TOTAL RESOURCES</b>                    |           |  | <b>196.0</b>  | <b>263</b>                             | <b>51,612</b>                        | <b>113.6</b>                           |

Notes: Figures have been rounded and totals may reflect small rounding errors.  
XRF chemical analysis unless annotated otherwise.

- ◆ eU<sub>3</sub>O<sub>8</sub> - equivalent uranium grade as determined by downhole gamma logging.
- # Combined XRF Fusion Chemical Assays and eU<sub>3</sub>O<sub>8</sub> values.

# JORC Compliance Statements



## Namibia

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Leon Pretorius, a Fellow of the Australasian Institute of Mining and Metallurgy. Dr Pretorius, Managing Director of 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 he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Pretorius 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 in this report that relates to the **Tubas** 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 as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. 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 **Aussinanis and Tumas** Mineral Resources is based on work completed by Mr Jonathon Abbott who is a full time employee of Hellman and Schofield Pty Ltd and a Member of the Australasian Institute of Mining and Metallurgy. 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 as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' 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 in this report that relates to the **MS7** Mineral Resource is based on work completed by Mr Neil Inwood; for the **INCA** Mineral Resource on work completed by Mr Neil Inwood and Mr Steve Le Brun – Mr Inwood will supply consent for the Inca Resource; and for the **Ongolo** Mineral Resource on work completed by Mr Neil Inwood and Mr Doug Corley. Mr Inwood is a Fellow of the Australasian Institute of Mining and Metallurgy and Mr Corley is a member of the Australian Institute of Geoscientists. Messrs Inwood and Corley have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Messrs Inwood and Corley consent to the inclusion in the report of the matters based on his information in the form and context in which it appears. Messrs Inwood and Corley are full-time employees of Coffey Mining.

Where eU<sub>3</sub>O<sub>8</sub> values are reported it relates to values attained from radiometrically logging boreholes with Auslog equipment using an A675 slimline gamma ray tool. All probes are calibrated either at the Pelindaba Calibration facility in South Africa or at the Adelaide Calibration facility in South Australia.

# JORC Compliance Statements



## Queensland

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Martin Kavanagh, a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Kavanagh is an Executive Director of Deep Yellow Limited 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 as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Kavanagh 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 in this report that relates to the Queensland Mineral Resource is based on information compiled by Mr Neil Inwood. Mr Inwood is a Member of The Australasian Institute of Mining and Metallurgy. Mr Inwood is employed by Coffey Mining Pty Ltd 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 as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Inwood consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Northern Territory

The information in this report that relates to the **Napperby Project** Mineral Resource is based on information compiled by Mr Daniel Guibal who is a Fellow (CP) of the Australasian Institute of Mining and Metallurgy. Mr Guibal is a full time employee of SRK Consulting 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 as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Guibal consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Where eU3O8 values are reported it relates to values attained from radiometrically logging boreholes with Auslog equipment using an A675 slimline gamma ray tool. All probes are calibrated either at the Pelindaba Calibration facility in South Africa or at the Adelaide Calibration facility in South Australia.