

**ASX Announcement** 

ASX Code: DYL

12 May 2011

# MAIDEN RESOURCE FOR HIGH GRADE ONGOLO DEPOSIT

# **KEY POINTS**

- Maiden JORC Code Indicated and Inferred Mineral Resource estimate for Ongolo Deposit completed by Coffey Mining Pty Ltd (Perth), totalling 6.9 Mt at 410 ppm for 6.2 Mlbs U<sub>3</sub>O<sub>8</sub> at a 275 ppm cut-off.
- Total Omahola Project Resource base increased to 24.5 Mlbs at higher average grade of 311 ppm.
- Mine planning to be undertaken to finalise the Omahola Project Pre-Feasibility Study with an ore blend comprising INCA and Ongolo primary material and Tubas Red Sand secondary material.
- Omahola Project Resource base now believed to be of suitable size to advance development of a 2.2 Mlbs U<sub>3</sub>O<sub>8</sub> per annum mine with a minimum 12 year life.
- A further resource upgrade for Ongolo expected in the third quarter as drilling continues with four reverse circulation rigs and two diamond rigs to the southwest where the deposit is open along strike.
- DYL's Measured, Indicated and Inferred Resource across all its Namibian projects increased to 162.4 million tonnes at 261 ppm U<sub>3</sub>O<sub>8</sub> for 93.3 million pounds of contained U<sub>3</sub>O<sub>8</sub> at varying project-specific cut-off grades.

Advanced uranium explorer, **Deep Yellow Limited** (ASX : **DYL**) is pleased to announce that Coffey Mining Pty Ltd (Perth) has completed a maiden Mineral Resource estimate for the Ongolo Alaskite deposit. The deposit is located on EPL 3496 which is held 100% by DYL's wholly-owned Namibian subsidiary, **Reptile Uranium Namibia (Pty) Ltd (RUN).** 

Deep Yellow Managing Director Greg Cochran said the addition of the high-grade Ongolo Resource has increased the Omahola Project Resource base to the extent that it is now believed to be of suitable size to allow the development of a 2.2 Mlbs U<sub>3</sub>O<sub>8</sub> per annum operation with a minimum 12 year mine life.

"This is an excellent outcome, and was the objective we set for the Company in January when we reported interim results for the Omahola Project Pre-Feasibility Study (PFS)," Mr Cochran said.

"The high grade Ongolo Resource will now allow mine planning to be undertaken to finalise the Omahola PFS based on an ore blend comprising INCA and Ongolo primary material and Tubas Red Sand secondary material."



The updated Project Resource base is given overleaf in Table 1.

The enhanced Omahola Project Resource has lifted DYL's (Measured, Indicated and Inferred) Resource base for all its Namibian projects to **162.4 million tonnes at 261 ppm U<sub>3</sub>O<sub>8</sub> for 93.3 million pounds** of contained U<sub>3</sub>O<sub>8</sub> at varying project-specific cut-off grades (Appendix 2), and also lifted the Company's total Resource base to in excess of 100 million pounds.

## Background

RUN had early success from reconnaissance drilling for alaskite hosted uranium mineralisation in the project area located within 'Alaskite Alley' which hosts a number of uranium projects including Rio Tinto's Rossing Uranium Mine and Extract Resources' Husab Project, as well as others (Figure 1).

The high grade Ongolo Alaskite deposit was discovered by RUN in April 2010, approximately 12 kilometres NE of its INCA deposit. Subsequently, a decision was taken in November 2010 to add the deposit to the Omahola Project and infill drilling to JORC Code standard commenced a month later. The detailed drill programme significantly increased the width of the mineralised zone to 600 metres in the central area, but importantly also demonstrated continuity along strike and on section as well as to depth. (The Ongolo Mineral Resource estimate at varying cut-off grades is given in Appendix 1 and an outline of the resource estimate in Figure 2.)



Figure 1: Tenement and Project Area Location Map



Deposit	Category	Cut-off (ppm U3O8)	Tonnes (M)	U3O8 (ppm)	U3O8 (t)	U3O8 (MIb)	
REPTILE URANIUM NAMIBIA (NAMIBIA)							
Omahola Project							
INCA +	Indicated	250	9.4	385	3,628	8.0	
INCA +	Inferred	250	5.5	445	2,449	5.4	
Ongolo ♦	Indicated	275	4.7	410	1,920	4.2	
Ongolo ♦	Inferred	275	2.2	400	890	2.0	
Tubas Red Sand ♦	Measured/Indicated	100	3.2	168	532	1.2	
Tubas Red Sand ♦	Inferred	100	10.7	158	1,685	3.7	
Omahola Project Total			35.7	311	11,104	24.5	

## Table 1: Omahola Project Resource Summary – May 2011

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

• eU3O8 - equivalent uranium grade as determined by downhole gamma logging.





## **Ongolo Resource**

The Resource estimate is based on a database of 164 RC drillholes totalling 18,203 metres and 5 diamond drillholes totalling 988 metres. Drill spacing comprised 85 metre spaced sections with holes spaced 53 metres along section. Multiple Indicator Kriging was used with the size of mining units being selected to simulate anticipated mining selectivity on a truck by truck basis. No high grade cutting has been applied to the composites prior to estimation. Full details of the Resource parameters are given in Appendix 3.

The full extent of mineralisation has yet to be determined for the deposit and therefore further drilling is required along strike and partially down-dip. The delineated resource occurs over a 2 kilometre strike and the JORC Code RC drilling programme is continuing by infilling initially between Reconnaissance drill lines 5 and 7 (~ 800 metres) as shown in Figure 3 in Appendix 4. A brief description of the geology is also given in Appendix 4.

RUN will also undertake an infill RC and diamond drill programme (to a notional 25 metre x 25 metre spacing) on sections selected by Coffey in order to provide drill spacing criteria for conversion of the indicated resource to measured status.

ENDS

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Further information relating to the Company and its various exploration projects can be found on the Company's website at <u>www.deepyellow.com.au</u>.

#### About Deep Yellow Limited

Deep Yellow Limited (DYL) is an ASX-listed, advanced stage uranium exploration Company with extensive operations in the southern African nation of Namibia and in Australia. It also has a listing on the NSX.

DYL's primary focus is in Namibia where its operations are conducted by its 100% owned subsidiary Reptile Uranium Namibia (Pty) Ltd (RUN). Its flagship is the Omahola Project currently under Pre-Feasibility Study with concurrent resource drill-outs on the high grade Ongolo Alaskite project and on secondary uranium mineralisation in the Tumas-Tubas palaeochannel/fluviatile sheetwash systems.

In Australia the Company is focused on resource delineation of mid to high grade discoveries in the Mount Isa district in Queensland, including the Queens Gift, Conquest, Slance, Eldorado, Thanksgiving, Bambino and Turpentine Prospects. The Company also owns the Napperby Uranium Project and numerous exploration tenements in the Northern Territory.



#### **Compliance Statements**

The information in this report that relates to the Mineral Resource estimation for the Ongolo and Inca deposits is based on work completed by Mr Neil Inwood and Mr Steve Le Brun who are both full-time employee of Coffey Mining and a Member of the Australasian Institute of Mining and Metallurgy. Messrs Inwood and Le Brun have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is 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 Le Brun consent to the inclusion in the report of the matters based on his information in the form and context in which it appear.

The information in this report that relates mineral resource estimation for Tumas and Aussinanis 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 Mineral Resource for the Tubas Red Sand deposits is based on information compiled by Mr Mike Hall, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hall is Consulting Geologist Resources with The MSA Group 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 Mineral Resources and Reserves'. Mr Hall consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Information in this report has also been verified by Mr Mike Venter, who is a member of the South African Council for Natural and Scientific Professions (SACNASP), a "Recognised Overseas Professional Organization" ('ROPO'). Mr Venter is Regional Consulting Geologist, with The MSA Group 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 Mineral Resources 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 Mineral Resources and Reserves'. Mr Venter has visited the project sites to review drilling, sampling and other aspects of the work relevant to this report and 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 Mineral Resource estimation for the Tubas deposit is based on work completed by Mr Willem H. Kotzé Pr. Sci. Nat MSAIMM. Mr Kotzé who is a full time employee of Hellman and Schofield Pty Ltd and a Member of the Australasian Institute of Mining and Metallurgy. 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' and as a Qualified Person as defined in the AIM Rules. Mr Kotzé 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 Exploration Results and to Mineral Resources or Ore Reserves for the Tubas, Tumas, Aussinanis, Tubas Red Sand, INCA and Ongolo deposits is based on information compiled by Dr Leon Pretorius a Fellow of The Australasian Institute of Mining and Metallurgy. Dr Pretorius is a full-time employee 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'. 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 Mineral Resource estimation for the Mount Isa Projects is based on work compiled by Mr Neil Inwood, 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.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves for the Mount Isa Projects is based on information compiled by Mr Martin Kavanagh a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Kavanagh is a full-time employee 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.

#### Maiden Resource for High Grade Ongolo Deposit



The information in this report that relates to Mineral Resource estimation for the Napperby Project 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.

The information in this report that relates to Exploration Results for the Napperby Project is based on information compiled by Dr David Rawlings who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Rawlings is a full-time employee of Toro Energy 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'. Dr Rawlings 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 Disequilibrium Results for the Napperby Project is based on information compiled by Mr David Wilson BSc MSc who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Wilson is a full-time employee of 3D Exploration Limited, a consultant to Toro 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 Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Where eU<sub>3</sub>O<sub>8</sub> is 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.



Category	Cut-Off U3O8 ppm	Million Tonnes	Grade (U3O8 ppm)	Tonnes (U3O8)	Million Lbs (U3O8)	
Indicated	200	11.0	305	3,360	7.42	
	225	8.0	340	2,740	6.04	
	250	6.0	380	2,260	4.98	
	275	4.7	410	1,920	4.24	
	300	3.7	445	1,650	3.63	
Inferred	200	5.5	300	1,630	3.60	
	225	3.9	335	1,290	2.85	
	250	2.8	370	1,050	2.32	
	275	2.2	400	890	1.97	
	300	1.7	430	760	1.66	
TOTALS	200	16.4	305	5,000	11.02	
	225	11.9	340	4,030	8.89	
	250	8.8	375	3,310	7.30	
	275	6.9	410	2,820	6.21	
	300	5.5	440	2,400	5.29	
Figures have been rounded						

# Appendix 1 – Ongolo Alaskite Mineral Resource Estimates at Various Cut-Off Grades

**Notes:** Reported at various cut-offs using bulk density coded by geology (averaging 2.76 t/m<sup>3</sup>); Multiple-Indicator Kriged estimate based upon 3 metre cut eU<sub>3</sub>O<sub>8</sub> composites; Block dimensions of 25 metre NS by 42.5 metre EW by 6 metre RL SMU corrections using 5 metre x 5 metre x3 metre SMU blocks



# Appendix 2 – Deep Yellow JORC Mineral Resource Estimates Summary – May 2011

Deposit	Category	Cut-off (ppm U3O8)	Tonnes (M)	U3O8 (ppm)	U3O8 (t)	U3O8 (MIb)
REPTILE URANIUM NAMIBIA (NAMIBIA)						
Omahola Project						
INCA ♦	Indicated	250	9.4	385	3,628	8.0
INCA 🔶	Inferred	250	5.5	445	2,449	5.4
Ongolo ♦	Indicated	275	4.7	410	1,920	4.2
Ongolo ♦	Inferred	275	2.2	400	890	2.0
Tubas Red Sand ♦	Measured/Indicated	100	3.2	168	532	1.2
Tubas Red Sand ♦	Inferred	100	10.7	158	1,685	3.7
Omahola Project Total			35.7	311	11,104	24.5
Tubas-Tumas Palaeochannel Project						
Tumas ♦	Indicated	200	14.4	366	5,270	11.6
Tumas ♦	Inferred	200	0.4	360	144	0.3
Tubas	Inferred	100	77.3	228	17,620	38.9
Tubas-Tumas Project Total			92.1	250	23,034	50.8
Aussinanis Project						
Aussinanis 🔶	Indicated	150	5.6	222	1,243	2.7
Aussinanis 🔶	Inferred	150	29.0	240	6,960	15.3
Aussinanis Project Total			34.6	237	8,203	18.0
RUN TOTAL - NAMIBIA		162.4	261	42,341	93.3	
NAPPERBY PROJECT (NT. AUSTRALIA)						
Napperby	Inferred	200	9.3	359	3,351	7.4
NAPPERBY TOTAL			9.3	359	3,351	7.4
MOUNT ISA PROJECT	(QLD, AUSTRALIA)					
Mount Isa	Indicated	300	1.6	400	650	1.4
Mount Isa	Inferred	300	2.0	440	890	2.0
MOUNT ISA TOTAL			3.6	428	1,540	3.4
TOTAL INDICATED RESOURCES 38.9 340 13.243 29.4					29.1	
TOTAL INFERRED RESOURCES			136.4	249	33,989	75.0
TOTAL RESOURCES			175.3	269	47,232	104.1

Notes: 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.



## Appendix 3 – Resource Parameters

Notes for the resource estimation include:

- The drillhole database in the vicinity of the estimation consists of 164 RC drill holes totalling 18,203 metres and 5 diamond drillholes totalling 988 metres. The drillholes were drilled at 60° to between 130° and 160°, with 15 drilled at 60° between 310° and 360° (UTM grid) with a drill spacing of 25 metre by 85 metre. Only RC and diamond drilling and sampling undertaken by Deep Yellow were used in the estimate.
- The Deep Yellow RC samples are collected at 1 metre intervals in mineralised zones into a three tiered splitter to obtain a 2-3 kilogram final sample. Diamond core is quartered with samples taken every metre in mineralisation. Chemical assays are undertaken at Scientific Services in Cape Town, with Setpoint and Bureau Veritas in Johannesburg used for check assays. Downhole gamma data has been used where chemical assays were not available.
- Coffey has not reviewed the QAQC in detail. RUN is the responsible entity for the assay database.
- Density data was collected from the diamond core utilising the water immersion method and pychnometry methods. A total of 1,030 density readings were available; 62 from diamond core and 969 from pychnometry measurements, to evaluate the density of the mineralised rock. The density was characterised by rock type and applied globally on a geological basis.
- Geology was modelled for marble lithologies using a wireframe boundary and using indicator shells on the presence/absence of Gneiss's lithologies, using a 77.5% or greater probability, overlaid over granite/alaskite.
- Due to the complexity of the mineralisation within the deposit, the mineralisation was defined using an indicator shell defined by material with a 50% or greater probability above 75 ppm eU3O8 and a wireframe constructed around the model and used to constrain the estimation. Nine mineralisation subdomains were identified and merged into two domains for geostatistics and estimation. No significant differences were observed between the statistical distributions of the granite/alaskite and gneiss hosted mineralisation.
- The topographic surface was defined using a combination of DGPS pickup of the drillhole collars and DTM surface supplied by Reptile. A weathering surface was defined at 10 metres below the topography surface.
- The assay data of 57,973 intervals (2,366 chemical and 55,608 factored gamma), was composited to 3 metre downhole with statistical analyses on the 3 metre composites undertaken. Variography and search neighbourhood analysis were also conducted as input into grade estimation. No high grade cutting has been applied to the composites prior to estimation.
- The method used to obtain estimated grades within the mineralised zones for U<sub>3</sub>O<sub>8</sub> was block Multiple Indicator Kriging (MIK), using 12 indicator levels. A SMU of 5 metres x 5 metres x 3 metres was selected to simulate the anticipated mining selectivity on a truck by truck basis. SMU corrections were applied to the estimate to report expected recoverable resources.
- Resource classification was developed from the confidence levels of key criteria including drilling methods, geological understanding and interpretation, sampling, data density and location, grade estimation and the quality of the estimate, including sensitivity of the estimate to SMU size (5 metres x 5 metres x 3 metres, ~200 tonnes) compared to the estimation parent block size (25 metres x 42.5 metres x 6 metres, ~17,850 tonnes).
- The full extent of mineralisation has not been determined for the deposit and further drilling is required to fully delineate the mineralisation. The deposit is not closed off along strike and only partially down-dip.



## Appendix 4 – Brief Description of Geology

Uranium mineralisation at the Ongolo Alaskite Project is hosted by alaskitic granite, which occurs as voluminous masses and sheeted intrusive dykes, within the metasedimentary Khan Formation.

The Khan Formation locally comprises infolded pelitic and calc-silicate gneisses, which are flanked by thick marble units of probable Karibib Formation. Mineralised alaskite, as steeply dipping, sheeted or anastomosing veins, occurs in a northeast trending corridor, adjacent to the Karibib Formation contact.

The Ongolo mineralisation comes to within 20 metres of surface and underlies a broad, flat gently sloping sheetwash plain thinly veneered by gravelly alluvial and aeolian sands. The host rocks are mostly pelitic gneiss with variable but significant pyrite/pyrrhotite content, which may be important if sufficient to be recovered to support locally generated sulphuric acid production. The uranium mineral is primarily uraninite, and where present at grades of greater than 500 ppm, is marked by the presence of significant visible smokey quartz and, frequently, biotite.



#### High grade alaskite mineralisation with smoky quartz in diamond hole ALAD001

A positive observation from the alaskite drilling to-date is the significant amount of sulphides (predominantly pyrite with lesser pyrrhotite) present both within and peripheral to the uranium mineralisation which reaches a visual maximum of approximately 15% (with 5% being common).

This has potential economic importance as a source of sulphur for the generation of sulphuric acid for use in any acid leach uranium plant in the area. The smokey quartz seen in the diamond core is alteration resulting from intense irradiation from high-grade uranium mineralisation, and serves as an indicator of such when diamond core or RC chip samples are geologically logged.





Figure 3: INCA Ongolo Location Plan