

**ASX Announcement** 

#### 4 February 2013

# OMAHOLA PROJECT 39% INCREASE IN ONGOLO RESOURCE

#### **KEY POINTS**

- An updated JORC Code Compliant Resource for the Ongolo Alaskite Deposit has been completed by CSA Global Pty Ltd.
- The resource now totals 29.6 Mt at 384 ppm U<sub>3</sub>O<sub>8</sub> for 25.1 Mlbs U<sub>3</sub>O<sub>8</sub> at a 250 ppm U<sub>3</sub>O<sub>8</sub> cut-off.
- Contained U<sub>3</sub>O<sub>8</sub> has increased by 39% (7.1 Mlbs) with 58% of the resource classified as Measured and Indicated, whilst the grade of the resource declined slightly from 398 to 384 ppm U<sub>3</sub>O<sub>8</sub>.
- As a result the Omahola Project resource base has increased to 48.7 Mt at an average grade of 420 ppm U<sub>3</sub>O<sub>8</sub> for 45.1 Mlbs U<sub>3</sub>O<sub>8</sub> at a 250 ppm U<sub>3</sub>O<sub>8</sub> cut-off.

Advanced uranium explorer, **Deep Yellow Limited** (ASX: **DYL**) is pleased to announce that it has received an updated Mineral Resource estimate for its Ongolo Alaskite deposits in Namibia. The deposit, which forms a key part of DYL's flagship Omahola Project, are within EPL3496 which is held 100% by DYL's whollyowned Namibian subsidiary, **Reptile Uranium Namibia (Pty) Ltd (RUN).** 

The upgrade of the Ongolo Resource includes for the first time a contribution from the satellite Ongolo South Deposit of 3.1 Mt at 364 ppm U<sub>3</sub>O<sub>8</sub> for 2.5 Mlbs U<sub>3</sub>O<sub>8</sub>.

"This is an outstanding result" Deep Yellow's Managing Director Greg Cochran said, "a 39% increase in metal content as well as the improvement in confidence is exactly what we were aiming for and brings us significantly closer to our 50 Mlb U<sub>3</sub>O<sub>8</sub> short term project resource target. Despite the minor reduction in deposit grade we are pleased to see that the Project's average grade remains significantly higher than our Namibian exploration peers. Whilst drilling continues we are also conducting a review to identify new targets to ensure that we continue to grow the Project's high grade resource base."

#### ENDS

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For further information on the Company and its projects - visit the website at <u>www.deepyellow.com.au</u>



# Background Technical Information on Ongolo and on the Resource Update

The Ongolo alaskite deposit is located in the northern sector of EPL 3496 and was discovered in April 2010 (Figure 1). Uranium mineralisation at Ongolo is hosted by alaskitic granite, which occurs as voluminous masses and sheeted intrusive dykes, within the meta-sedimentary Khan Formation. The uraniferous alaskites at Ongolo are located in a large fold structure comprised of Khan-Rössing Formation marble and calc-silicates with localised large garnet clinopyroxene / magnetite skarns.

There is also a nearby satellite deposit, Ongolo South, included for the first itme in this resource update, which was discovered by a single hole intersection during reconnaissance drilling in late 2010. Follow-up drilling in 2012 led to the confirmation of the deposit and the potential of the distinctive Ongolo South Aeromagnetic Anomaly to host uranium mineralisation (Figure 1).



Figure 1: Omahola Project Resource Outlines and Drilling – Ongolo, MS7 and INCA Deposits

The Mineral Resource Estimate (MRE) for the Ongolo Alaskite deposit at a 250 ppm  $U_3O_8$  cut-off is presented in Table 1 below, reported as at  $30^{th}$  January 2013 according to the guidelines of the JORC Code 2004 Edition.



Classification	Cut-off	Tonnage	Dry Bulk Density	U <sub>3</sub> O <sub>8</sub> Grade	U <sub>3</sub> O <sub>8</sub> Metal	
Classification	(U3O8 ppm)	(Mt)	(t/m <sup>3</sup> )	(ppm)	(Mlbs)	
Measured	250	7.7	2.65	395	6.7	
Indicated	250	9.5	2.65	372	7.8	
Sub-Total M&I	250	17.2	2.65	382	14.5	
Inferred	250	12.4	2.65	387	10.6	
TOTAL	250	29.6	2.65	384	25.1	

## Table 1: Ongolo Project JORC Compliant Mineral Resource Estimates – 30<sup>th</sup> January 2013

Grade estimation was completed using MIK. The portion of the MRE classified as Measured is based on drill holes located on an approximately 40x50 metre grid. Indicated and Inferred are based on drill holes located on an approximately 80x100 metre (and wider) grid. The MRE utilises all available drill hole sampling data collected over the history of the Project. Data used for the MRE comprised a combination of Fusion XRF assay values and down-hole gamma U<sub>3</sub>O<sub>8</sub> equivalent grades. All figures are in metric tonnes based on a Dry Bulk Density of 2.65 t/m<sup>3</sup>. M&I is Measured + Indicated. Significant figures do not imply an added level of precision after all MRE tabulations. Conversion factor kilograms to pounds of 2.2046. No Ore Reserves have been estimated.

CSA is an independent geological consultancy. Fees are being charged to DYL at a commercial rate for the work completed and preparation of this report, the payment of which is not contingent upon the conclusions of the report. No member or employee of CSA is, or is intended to be, a director, officer or other direct employee of DYL. There is no formal agreement between CSA and DYL as to DYL providing further work for CSA.

The field inspection of the Ongolo deposit was completed on 26<sup>th</sup> to 28<sup>th</sup> September, 2012 by Ms Heather King of CSA. CSA reviewed data collection, data base management procedures and QAQC results and is satisfied that the data is suitable for this MRE update.

## About Deep Yellow Limited

Deep Yellow Limited is an ASX-listed, Namibian-focussed advanced stage uranium exploration company. It also has a listing on the Namibian Stock Exchange.

Deep Yellow's operations in Namibia are conducted by its 100% owned subsidiary Reptile Uranium Namibia (Pty) Ltd (RUN). Its flagship is the Omahola Project where testwork and concurrent reconnaissance and resource drill-outs are underway on the high grade Ongolo Alaskite – MS7 trend. It is also evaluating a stand-alone project for its Tubas Sand uranium deposit utilising physical beneficiation techniques it successfully tested in 2011.

In Australia the Company owns the Napperby Uranium Project and numerous exploration tenements in the Northern Territory and in the Mount Isa District in Queensland.



## Appendix 1: Omahola Project Resource Summary – 30 January 2013

Deposit	Category	Cut-off (ppm U₃Oଃ)	Tonnes (M)	U₃Oଃ (ppm)	U3O8 (t)	U₃Oଃ (MIb)
<b>REPTILE URAI</b>	NIUM NAMIBIA (N					
INCA ♦	Indicated	250	7.0	470	3,300	7.2
INCA ♦	Inferred	250	5.4	520	2,800	6.2
Ongolo #	Measured	250	7.7	395	3,040	6.7
Ongolo #	Indicated	250	9.5	372	3,540	7.8
Ongolo #	Inferred	250	12.4	387	4,810	10.6
MS7 #	Measured	250	4.4	441	1,955	4.3
MS7 #	Indicated	250	1.0	433	433	1.0
MS7 #	Inferred	250	1.3	449	584	1.3
Omahola Project Total			48.7	420	20,462	45.1
Resource Cate	gories					
Measured Resources			12.1	441	4,955	11.0
Indicated Resources		17.5	416	7,273	16.0	
Inferred Resources		3	19.1	429	8,194	18.1
Omahola Project Total			48.7	420	20.462	45.1

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

XRF chemical analysis unless annotated otherwise.

eU<sub>3</sub>O<sub>8</sub> - equivalent uranium grade as determined by downhole gamma logging.
 Combined XPE Fusion Character Annual Combined XPE Fusio

Combined XRF Fusion Chemical Assays and eU<sub>3</sub>O<sub>8</sub> values.

The Ongolo Resource includes both the Ongolo deposit and the Ongolo South Resource.

#### Compliance Statements:

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 Resources is based on work completed by Mr Neil Inwood. Mr Inwood is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Inwood 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 Persons 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. Mr Inwood was previously a full-time employee of Coffey Mining (Perth).

The information in this report that relates to Exploration Results, is based on information compiled by Dr Leon Pretorius and Mr Martin Kavanagh, both Fellows of the Australasian Institute of Mining and Metallurgy. Dr Pretorius was previously Managing Director of Reptile Uranium Namibia (Pty) Ltd and Mr Kavanagh an Executive Director of Deep Yellow Limited, have 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 and Mr Kavanagh consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

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.



## Appendix 2: Summary of Relevant Criteria for the Mineral Resource Estimate

- The Ongolo alaskite uranium mineralisation was discovered in April 2010. The most recent historical combined indicated and inferred Mineral Resource Estimate (MRE) reported at a 250 ppm U<sub>3</sub>O<sub>8</sub> cut-off is 20.5 million tonnes at 398 ppm U<sub>3</sub>O<sub>8</sub> for 18 million pounds of U<sub>3</sub>O<sub>8</sub> metal. This was estimated by Coffey consultants and announced in October, 2011. The historical Coffey MRE was based on 7 diamond core ("DDH") holes for 1,676.5m, 12 reverse circulation pre-collar with DDH tails ("RCD") for 2,630.7m and 484 reverse circulation ("RC") holes for 101,961m, for a total of 106,268.2m of drilling. The MRE was estimated using MIK methodology.
- Uranium mineralisation at Ongolo is hosted by alaskitic granite, which occurs as voluminous masses and sheeted intrusive dykes, within the meta-sedimentary Khan Formation. The uraniferous alaskites at Ongolo are located in a large fold structure comprised of Khan-Rössing Formation marble and calc-silicates with localised large garnet clinopyroxene / magnetite skarns.
- During the period from October 2011 until December 2012 an additional 5 DDH holes for 1,162.9m and 427 RC holes for 90,140m, for a total of 91,302.9m of drilling was completed. The drill holes were typically drilled towards the south east at a dip of 60°. Figure 2 presents a plan view of the drilling data. Additional drill holes are presented in red. The new drilling was dominated by infill. The purple boundary, presents the Ongolo deposit area previously reported in the Coffey MRE. The updated MRE includes the extensions to the south and south west.



Figure 2: Plan of Ongolo Project drill hole collars used in the MRE



• The major marble waste units are presented in Figure 3. The wire frames for the marble were based on geological logged intersection of the drill holes with the marble units.



Figure 3: Ongolo drill holes in relation to the footwall Marble

- A digital terrain model ("DTM") topographic surface was compiled from the collar positions of the drill hole data. As the topography is generally flat and has limited impact on the MRE, this method is considered acceptable by CSA.
- A DTM surface representing the boundary oxidation surface was compiled from down hole logging information.
- RUN completed down hole radiometric gamma logging using in-house Auslog probes made in Australia by Auslog Pty Ltd (now Weatherford International Ltd).
- The samples from the RC and DD drilling are prepared at the RUN laboratory in Swakopmund, Namibia, and dispatched to Scientific Services, Cape Town, South Africa, for Fusion XRF analysis.
- Quality control and quality assurance ("QAQC") is conducted throughout the drilling, sampling and analysis stages. CSA reviewed the QAQC results for the chemical assay and down hole gamma processes and no significant issues were identified.
- The MRE was completed using data from both Fusion XRF assay results and gamma readings. The gamma readings were correlated with twinned chemical assay pairs and adjusted using a polynomial function to take into account local deposit factors which affect the determination of the gamma equivalent U<sub>3</sub>O<sub>8</sub>. Where a drill hole sample has a chemical XRF analysis value, this was used in preference to the gamma value. Approximately 7% (13,622 of 195,410) of the 1m samples used were XRF Fusion assay results, however; the XRF results are dominated by high grades due to selective sampling.
- Statistical analysis was completed for all samples used in the MRE. The population can be described as a log normal distribution, with a reasonable tail of high grade values.
- Orientations determined from variography follow the significant geological mineralisation trends. Semi-variograms were constructed for each grade cut-off for multiple indicator Kriging ("MIK") grade estimation.



- The MRE were compiled using MIK for 15 cut-off values, using parent block model dimensions of 25m x 25m x 6m (X, Y & Z) with the grade tonnage results reported using a Support Correction function based on SMU dimensions of 5m x 5m x 3m. One metre drill hole sample lengths were utilized. Datamine<sup>™</sup> and H&S Consultants Pty Ltd proprietary software were used for determination of the MRE.
- The primary search criteria were 45m x 45m x 15m (X, Y & Z) using a minimum and maximum number of samples of 16 and 40 respectively. Pass 2 and 3 search ellipses were increased to 90m x 90m x 30m and 180m x 180m x 30m with an appropriate reduction in sample requirements. The search parameters were orientated at 45 degrees to 315 for data 6 domains (Figure 4).



Figure 4: Ongolo MIK data domains

 Although the proportion of each block below the topography and the oxide DTM's and within the interpreted marble units was estimated. All sample data was used to estimate U<sub>3</sub>O<sub>8</sub> grade during the MIK estimation. The marble and oxide boundaries were ignored in the reporting process. This was



done because the marble is often broken by the alaskite and the geological interpretation tends to be simplistic, whilst the MIK mineralisation trends are controlled by the surrounding sample data.

- Comparison of the mean U<sub>3</sub>O<sub>8</sub> block grades and 2m composite samples compared favourably.
- The tonnage factor applied to the MS7 estimated volume was determined from review of ¼ diamond drill core water immersion results. The MRE was determined using an in-situ dry bulk density of 2.65 t/m<sup>3</sup>.
- The Mineral Resource is reported at a cut-off of 250 ppm U<sub>3</sub>O<sub>8</sub>. The cut-off selected satisfies the JORC requirement of potential economic viability based on uranium commodity price estimates, relevant operating and mining costs and potential production rates.
- The MRE has been classified as Measured, Indicated and Inferred based on guidelines specified in the JORC code. The MIK estimation pass number together with geological understanding and sample spacing was used as a guide to determining classification criteria.
- The Figure 5 presents a north-south cross section through the MIK block model showing block with at least one 5m x 5m x 3m SMU with a grade above 250 ppm U<sub>3</sub>O<sub>8</sub>, the purple bars on the drill holes indicate 1m samples >= 250 ppm U<sub>3</sub>O<sub>8</sub>.



Figure 5: Cross-Section 498,900mE through Ongolo MIK Model

• Table 2 below presents the grade tonnage tabulation at defined U<sub>3</sub>O<sub>8</sub> cut-off values.



# Table 2: Mineral Resources Estimate - Ongolo – Grade Tonnage Relationships – 30<sup>th</sup> January 2013

Classification	Cut-off	Tonnage	Dry Bulk Density	U <sub>3</sub> O <sub>8</sub> Grade	U <sub>3</sub> O <sub>8</sub> Metal
Classification	(U <sub>3</sub> O <sub>8</sub> ppm)	(Mt)	(t/m <sup>3</sup> )	(ppm)	(Mlbs)
	75	72.8	2.65	152	24.5
	100	47.7	2.65	187	19.7
	150	23.1	2.65	257	13.1
Measured	200	12.7	2.65	327	9.1
	250	7.7	2.65	395	6.7
	300	4.9	2.65	461	5.0
	325	4.0	2.65	494	4.4
Classification	Cut-off	Tonnage	Dry Bulk Density	U <sub>3</sub> O <sub>8</sub> Grade	U <sub>3</sub> O <sub>8</sub> Metal
Classification	(U <sub>3</sub> O <sub>8</sub> ppm)	(Mt)	(t/m³)	(ppm)	(Mlbs)
	75	153.5	2.65	132	44.6
	100	85.4	2.65	168	31.7
	150	34.5	2.65	239	18.1
Indicated	200	17.1	2.65	306	11.6
	250	9.5	2.65	372	7.8
	300	5.6	2.65	439	5.4
	325	4.4	2.65	472	4.6
Classification	Cut-off	Tonnage	Dry Bulk Density	U <sub>3</sub> O <sub>8</sub> Grade	U <sub>3</sub> O <sub>8</sub> Metal
	(U <sub>3</sub> O <sub>8</sub> ppm)	(Mt)	(t/m³)	(ppm)	(Mlbs)
	75	226.4	2.65	138	69.0
	100	133.1	2.65	175	51.3
Measured	150	57.6	2.65	246	31.2
+	200	29.8	2.65	315	20.7
Indicated	250	17.2	2.65	382	14.5
	300	10.6	2.65	449	10.5
	325	8.4	2.65	483	9.0
Classification	Cut-off	Tonnage	Dry Bulk Density	U <sub>3</sub> O <sub>8</sub> Grade	U <sub>3</sub> O <sub>8</sub> Metal
	(U <sub>3</sub> O <sub>8</sub> ppm)	(Mt)	(t/m³)	(ppm)	(Mlbs)
	75	174.7	2.65	134	51.6
	100	94.0	2.65	175	36.3
	150	39.2	2.65	251	21.7
Inferred	200	20.9	2.65	321	14.7
	250	12.4	2.65	387	10.6
	300	7.8	2.65	453	7.8
	325	6.3	2.65	486	6.8
Classification	Cut-off	Tonnage	Dry Bulk Density	U <sub>3</sub> O <sub>8</sub> Grade	U <sub>3</sub> O <sub>8</sub> Metal
	(U <sub>3</sub> O <sub>8</sub> ppm)	(Mt)	(t/m³)	(ppm)	(Mlbs)
	75	401.0	2.65	136	120.6
	100	227.2	2.65	175	87.6
Measured + Indicated + Inferred	150	96.7	2.65	248	52.9
Total	200	50.7	2.65	317	35.4
	250	29.6	2.65	384	25.1
	300	18.4	2.65	451	18.3
	325	14.8	2.65	484	15.7



# Conclusions

• Comparison of the January 2013 and Coffey October 2011 MRE's is presented in Table 3.

# Table 3: Ongolo deposit – Comparison of Jan 2013 and Oct 2011 MRE's

Classification	Cut-off U3O8 ppm	Tonnage variance	Dry bulk density variance	U3O8 grade variance	U₃Oଃ metal variance
Measured	250	None previously	-0.4%	-	None previously
Indicated	250	-41.2%	-0.4%	-7.7%	-45.7%
Sub-total M&I	250	6%	-0.4%	-5.2%	0.7%
Inferred	250	185.2%	-0.4%	2.1%	191.3%
TOTAL	250	44.1%	-0.4%	-3.5%	39.1%

- There is an overall 44% and 39% increase in tonnes and metal respectively, with a small (3.5%) decrease in grade. Additionally 27% of the resource is now classified as measured. The increase in overall tonnes is a direct result of the additional drilling completed by RUN.
- The combined Measured and Indicated ("M&I") has been maintained, with 45% of the M&I converted to Measured with in-fill drilling of the deposit during 2012.
- The in-situ dry bulk density has decreased from an average 2.66 t/m<sup>3</sup> to 2.65 t/m<sup>3</sup> (-0.4%) based on analysis of additional core samples.
- The repeatability of the previous results with the in-fill drilling adds to the increased confidence in the resource.
- Excellent correlation of gamma equivalent U<sub>3</sub>O<sub>8</sub> and chemical assay U<sub>3</sub>O<sub>8</sub> exists. CSA suggest that future in-fill drilling programs can utilise the more cost effective gamma methods as the primary assay method (with appropriate QAQC procedures in place). CSA recommend that chemical assay methods are used for regional exploration drilling programs.

The information in this Report that relates to in-situ Mineral Resources and Ore Reserves 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 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 2004 Edition). Malcolm Titley consents to the inclusion of such information in this Report in the form and context in which it appears.