Deep Yellow Limited

ASX Announcement **ASX: DYL**

04 June 2014

Omahola Project - Preliminary Economic Analysis Confirms Heap Leach Development Strategy

KEY POINTS

- **An in-house preliminary economic analysis has been concluded on Deep Yellow's flagship Omahola Project in Namibia, indicating heap leach recovery as the preferred development strategy for the project.**
- **In addition to optimising the preferred processing route for the Project, the analysis has also enabled estimation of likely strip ratios and appropriate cut-off and cut-over grades.**
- **As a further benefit, the analysis obviated the need for a costly metallurgical testwork program to compare an acid tank leach operation for Omahola against an acid heap leach operation.**
- **Omahola's resource is currently reported as 48.7 Mt at an average grade of 420 ppm U3O8 for 45.1 Mlbs U_3O_8 at a 250 ppm U_3O_8 cut-off but will now be re-evaluated at a lower cut-off, likely to be 100 ppm U_3O_8.**
- **It was also demonstrated via the preliminary economic analysis that drilling deeper at the MS7 deposit (which is open to depth) could be economically justified.**

Deep Yellow Limited ('DYL' or the 'Company') is pleased to announce the completion of an in-house Preliminary Economic Analysis ('PEA') that has enabled it to select a heap leach development strategy for its flagship Omahola Project, located in Namibia. The PEA had other objectives but was primarily aimed at determining the preferred process route – an acid heap leach or tank leach operation. Historically it was envisaged that the Omahola Project would be a tank leach operation due to its relatively high average uranium grade (420 ppm at a cut-off of 250 ppm U3O8). However, at this cut-off grade potential economic resources could be ignored (resulting in lower overall metal recovery) and deeper higher grade resources could also have been sterilised.

Other objectives included assessing cut-off grades and cut-over grades (the transition point between a heap leach and a tank leach operation) and the estimation of likely strip ratios for each of the three Omahola deposits (Ongolo, MS7 and INCA). The decision to conduct the PEA, which required a series of pit optimisation exercises to be completed, was made last year as a result of a successful sighter column leach test on a composite sample generated from seven boreholes across the Ongolo and MS7 alaskite deposits. The test demonstrated that a heap leach operation could potentially be feasible with uranium recovery close to 80% after only 7 days of leaching with low overall sulphuric acid consumption of 12.4kg/tonne.

DYL's Managing Director Greg Cochran said "We are pleased with the results obtained in this in-house preliminary economic analysis which have confirmed that the Omahola Project is better suited to a heap leach development strategy. Whilst further refinements could still be made, we now have a foundation on which we can build and the next step, of re-evaluating the resource base at a lower cut-off, is clear. It is also pleasing to note that on the back of this analysis we can also justify deeper drilling at MS7 which may expand that resource's potential."

ENDS

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Further Information on the Preliminary Economic Analysis

Traditionally the resources for the Omahola Project's three deposits (Figure 2) have been reported at a 250ppm cut-off grade (Appendix 1) to ensure a higher average grade mined that would permit acid tank leach processing. However based on breakeven cut-off grades calculated in this analysis it appears that imposing the high 250ppm cut-off grade will ignore potential economic resources and also cause sterilisation of deeper, higher grade resources. It was therefore decided to consider heap leach processing which would allow lower cut-off grades and likely allow greater overall resource recovery.

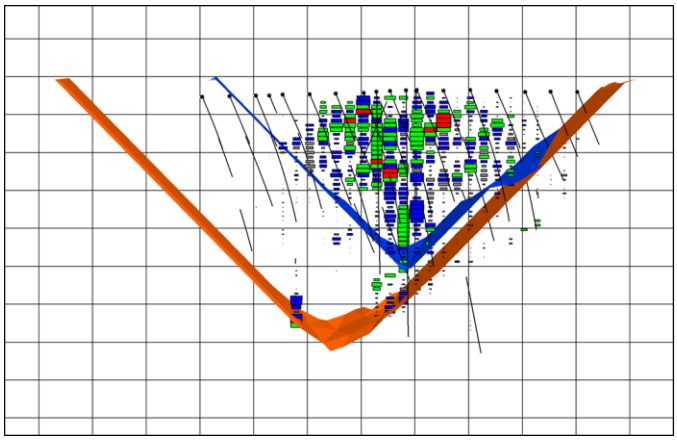
In-house pit optimisation parameters for a tank leach and a heap leach operation were estimated from previous work conducted by DYL, published information on other similar (directly comparable) projects and on quotes from suppliers. A range of uranium prices were used, from as low as US$30/lb U_3O_8 up to US$100/lb U_3O_8. In the absence of geotechnical studies a conservative overall pit slope angle of 45° was assumed, although pit slopes in excess of 50° are not unusual in the region. The results of the pit optimisation are believed to be a good indicator of future potential as almost 61 percent of Omahola's resource tonnage (and 60 percent of the contained uranium) is in the measured and indicated category.

At US$70/lb U_3O_8 the tank leach cut-off grade was calculated to be 137 ppm U_3O_8 compared to 100 ppm U_3O_8 for a heap leach, whilst the cut-over grade (the grade below which it is always more profitable to treat via the cheaper, lower recovery heap leach process for the given set of assumed parameters) was calculated at 522 ppm U_3O_8. This compares to the 400 ppm U_3O_8 figure that DYL had previously calculated as the lowest acceptable grade to economically process alaskite ores via the tank leach method.

It was interesting to note that the overall average strip ratios for the two different operating scenarios were very similar, approximately 4.2:1 (waste:ore), with the MS7 deposit having the lowest strip ratio and INCA the highest. Whilst INCA has the highest strip ratio it also has the highest average grade which means that its estimated operating costs are comparable to MS7 with Ongolo, the lowest grade deposit, naturally having the highest estimated operating cost.

Different rates of production (in terms of uranium output) were also tested, from 2.5 Mlbs/a U_3O_8 up to 3.5 Mlbs/a U_3O_8 which required between 7 ~ 10 Mtpa or ore to be mined and treated. These different production rates generated a life of mine of at least 10 years and up to approximately 14 years.

To test the down dip potential of the MS7 deposit an extended model was created by taking the existing resource and copying the mineralisation and placing it down dip in a north westerly direction (Figure 1). The additional portion of the model was only copied into areas that had no previous estimation in order to limit the addition of resource material. The two images below show the effect on the pit optimisations with the original shell in blue and the new shell in orange. The first image shows the existing resource model and the second one the extended model.



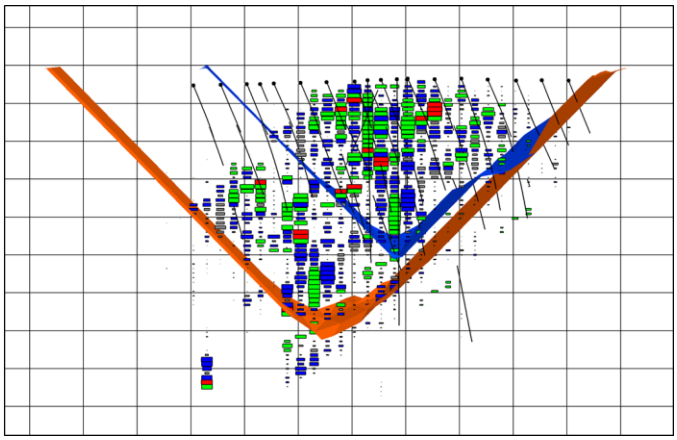


Figure 1: MS7 Original Model & Extended Model Pit Shells

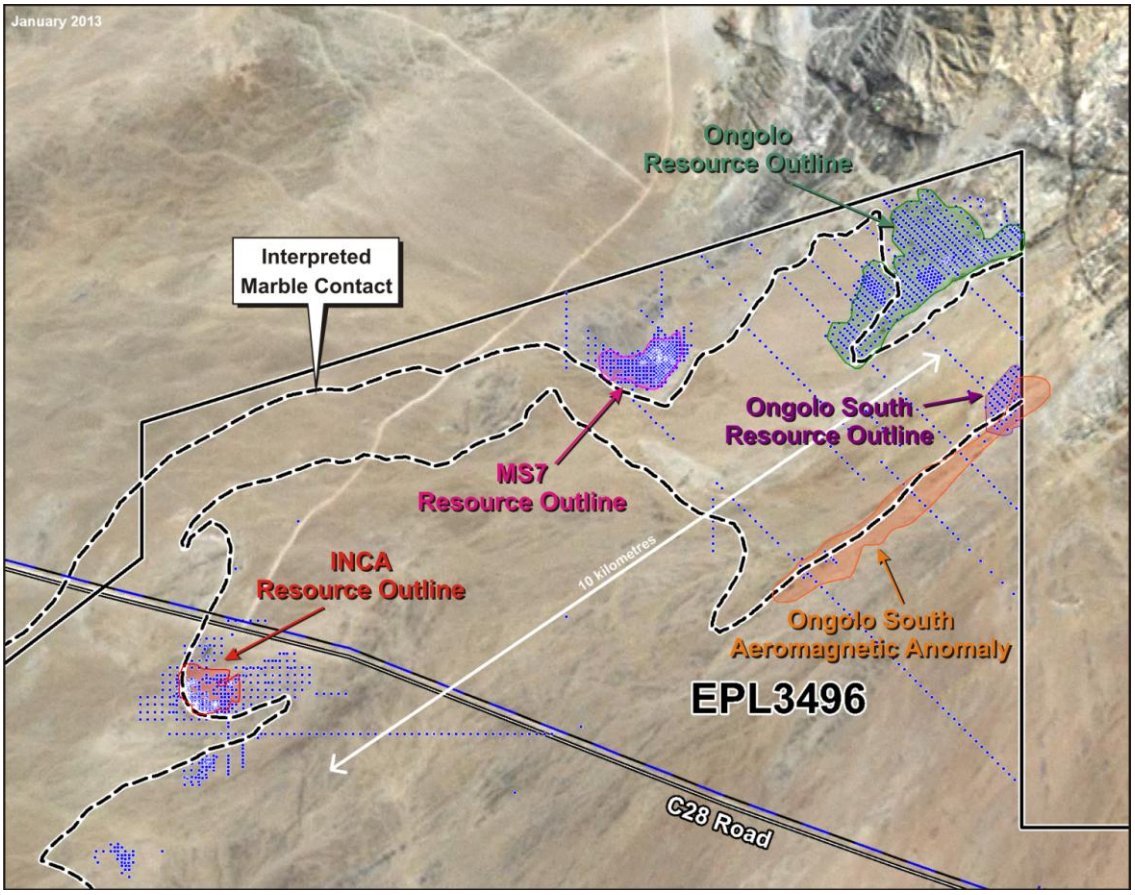


Figure 2: Locality Map Showing Omahola Project Resource Outlines

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

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. Its flagship is the high grade alaskite Omahola Project where mining studies are being conducted and the next phase of metallurgical testwork is being planned as inputs into a Pre-Feasibility Study. It is also evaluating fast track development options for its Tubas Sand Project utilising physical beneficiation techniques it successfully tested in 2011.

Appendix 1

Omahola Resource Statements – JORC 2004

Table 1: Omahola Project Resource Summary

Deposit	Category	Cut-off (ppm U_3O_8)	Tonnes (M)	U_3O_8 (ppm)	U_3O_8 (t)	U_3O_8 (Mlb)
REPTILE URANIUM NAMIBIA (NAMIBIA) - Omahola Project						
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 Categories						
	Measured Resources		12.1	441	4,955	11.0
	Indicated Resources		17.5	416	7,273	16.0
	Inferred Resources		19.1	429	8,194	18.1
Omahola Project Total			**48.7**	**420**	**20,462**	**45.1**

Notes: Figures have been rounded and totals may reflect small rounding errors.
XRF chemical analysis unless annotated otherwise.
♦ eU_3O_8 - equivalent uranium grade as determined by downhole gamma logging.
Combined XRF Fusion Chemical Assays and eU_3O_8 values.
The Ongolo Resource includes both the Ongolo deposit and the Ongolo South Resource.

Where eU_3O_8 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.

Table 2 - INCA Mineral Resource Summary

Reported at various cut-offs using bulk density coded by zone (averaging 2.89 t/m^3)
Multiple Indicator Kriged estimate based upon 3m cut eU_3O_8 composites.
Reported emulating a selective mining unit of 10m x 5m x 3m
Parent Block dimensions of 25m NS by 25m EW by 10m RL

Lower Cut-off (U_3O_8 ppm)	Tonnage above Cut-off (Mt)	U_3O_8 Grade (ppm)	Contained U_3O_8 (M kg)	Contained U_3O_8 (Mlbs)
Indicated				
100	21.4	260	5.6	12.3
150	14.7	320	4.8	10.5
200	10.0	390	3.9	8.7
250	7.0	470	3.3	7.2
300	5.2	540	2.8	6.1
350	3.9	610	2.4	5.2
400	3.0	680	2.0	4.5
Lower Cut-off (U_3O_8 ppm)	**Tonnage above Cut-off (Mt)**	**U_3O_8 Grade (ppm)**	**Contained U_3O_8 (M kg)**	**Contained U_3O_8 (Mlbs)**
Inferred				
100	15.2	290	4.4	9.7
150	10.8	360	3.9	8.5
200	7.5	440	3.3	7.2
250	5.4	520	2.8	6.2
300	4.0	600	2.4	5.4
350	3.2	680	2.2	4.8
400	2.6	750	1.9	4.3
Lower Cut-off (U_3O_8 ppm)	**Tonnage above Cut-off (Mt)**	**U_3O_8 Grade (ppm)**	**Contained U_3O_8 (M kg)**	**Contained U_3O_8 (Mlbs)**
Combined Indicated and Inferred				
100	36.6	270	10.0	22.0
150	25.6	340	8.6	19.0
200	17.5	410	7.2	15.9
250	12.3	490	6.1	13.4
300	9.2	570	5.2	11.5
350	7.1	640	4.5	10.0
400	5.6	710	4.0	8.8
Note: Figures have been rounded.				

Table 3: MS7 Mineral Resources Estimate – Grade Tonnage Relationships

Classification	Cut-off (U_3O_8 ppm)	Tonnage (Mt)	Dry Bulk Density (t/m^3)	U_3O_8 Grade (ppm)	U_3O_8 Metal (Mlbs)
Measured	75	25.88	2.65	183	10.43
	100	18.63	2.65	220	9.05
	150	10.55	2.65	296	6.87
	200	6.58	2.65	370	5.36
	250	**4.43**	**2.65**	**441**	**4.31**
	300	3.15	2.65	508	3.53
	325	2.70	2.65	541	3.22
Classification	**Cut-off (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Indicated	75	12.52	2.65	142	3.91
	100	7.15	2.65	184	2.90
	150	3.02	2.65	271	1.80
	200	1.63	2.65	355	1.27
	250	**1.02**	**2.65**	**433**	**0.97**
	300	0.70	2.65	507	0.78
	325	0.59	2.65	542	0.70
Classification	**Cut-off (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Measured + Indicated	75	38.40	2.65	170	14.34
	100	25.78	2.65	210	11.95
	150	13.57	2.65	290	8.67
	200	8.21	2.65	367	6.63
	250	**5.45**	**2.65**	**440**	**5.28**
	300	3.85	2.65	508	4.31
	325	3.29	2.65	541	3.92
Classification	**Cut-off (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Inferred	75	14.63	2.65	148	4.77
	100	8.71	2.65	190	3.65
	150	3.86	2.65	277	2.36
	200	2.11	2.65	364	1.70
	250	**1.32**	**2.65**	**449**	**1.31**
	300	0.91	2.65	529	1.06
	325	0.77	2.65	566	0.96
Classification	**Cut-off (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Measured + Indicated + Inferred Total	75	53.03	2.65	164	19.11
	100	34.49	2.65	205	15.60
	150	17.43	2.65	287	11.03
	200	10.32	2.65	366	8.33
	250	**6.77**	**2.65**	**442**	**6.59**
	300	4.76	2.65	512	5.37
	325	4.06	2.65	546	4.88

Table 4: Ongolo Mineral Resources Estimate -– Grade Tonnage Relationships

Classification	Cut-off (U_3O_8 ppm)	Tonnage (Mt)	Dry Bulk Density (t/m^3)	U_3O_8 Grade (ppm)	U_3O_8 Metal (Mlbs)
Measured	75	72.8	2.65	152	24.5
	100	47.7	2.65	187	19.7
	150	23.1	2.65	257	13.1
	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 (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Indicated	75	153.5	2.65	132	44.6
	100	85.4	2.65	168	31.7
	150	34.5	2.65	239	18.1
	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 (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Measured + Indicated	75	226.4	2.65	138	69.0
	100	133.1	2.65	175	51.3
	150	57.6	2.65	246	31.2
	200	29.8	2.65	315	20.7
	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 (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Inferred	75	174.7	2.65	134	51.6
	100	94.0	2.65	175	36.3
	150	39.2	2.65	251	21.7
	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 (U_3O_8 ppm)**	**Tonnage (Mt)**	**Dry Bulk Density (t/m^3)**	**U_3O_8 Grade (ppm)**	**U_3O_8 Metal (Mlbs)**
Measured + Indicated + Inferred **Total**	75	401.0	2.65	136	120.6
	100	227.2	2.65	175	87.6
	150	96.7	2.65	248	52.9
	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

Competent Person Statements

The Company notes that it has a portion of Inferred Resources in its total Mineral Resource Estimate for Omahola (up to 39%) and that these inferred resources have a lower level of confidence than an indicated or measured resource. The Company believes that based on the geological nature of its deposits and the work done over several years by its Competent Person that there is a high degree of probability that the inferred resources will upgrade to indicated resources with further exploration work.

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 is a consultant to 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 as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. 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.

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 (U_3O_8) 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 as defined in the 2004 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The information in this report that relates to the metallurgical testwork was managed by Mr Johannes van Heerden, Manager of the Gecko Laboratories in Swakopmund, Namibia. Mr van Heerden has extensive experience in laboratory management and specifically in uranium and alsakite processing and consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The Mineral Resource Estimate in this announcement 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.

Forward-Looking Statements

Certain statements made in this announcement, including, without limitation, those concerning the preliminary economic assessment, contain or comprise certain forward-looking statements regarding Deep Yellow Limited's (DYL) exploration operations, economic performance and financial condition. Although DYL believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management. DYL undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.