Deep Yellow Limited

ASX Announcement **ASX Code: DYL**

13 December 2010

DEEP YELLOW ISSUES POSITIVE GRADE CORRECTION FOR ONGOLO ALASKITE PROJECT IN NAMIBIA

- **Change of analytical procedure results in significant, positive grade correction for alaskite-hosted uranium mineralisation at the Ongolo Alaskite project in Namibia**
- **Re-analysis of previously announced sample intervals from Ongolo have resulted in an increase of uranium grade by an average of approximately 30% from 453 ppm U_3O_8 on a weighted average basis to 587 ppm using alternative fusion-XRF analytical procedure**
- **New results further substantiate the Ongolo Alaskite project uranium mineralisation as a very significant discovery with even higher grade than originally reported**
- **Fusion-XRF analytical procedure being used for all Ongolo samples going forward**
- **Ongolo currently being drilled for initial Mineral Resource estimate anticipated in 1st Quarter 2011**
- **Alaskite-hosted uranium mineralisation at Ongolo is similar to Rio Tinto's Rossing Uranium Mine and Extract Resources' Husab uranium project to the north**

Deep Yellow Limited (ASX Code: **DYL**) is pleased to announce that a change of analytical procedure has resulted in a significant increase in the uranium assay grades for previously reported samples from the Ongolo Alaskite project in Namibia (Figure 1), operated by DYL's wholly-owned subsidiary Reptile Uranium Namibia (Pty) Ltd (RUN).

Chemical assays reported in the 29 April 2010 ASX announcement on the discovery of alaskite-hosted uranium mineralisation, and in subsequent announcements on 23 August and 9 September 2010, were obtained using X-ray florescence (XRF) analysis of powder samples (powder-XRF). These samples were re-assayed using XRF analysis of 'fused' samples (fusion-XRF), and resulted in an average increase in uranium grade of approximately 30%. As shown in Table 2, the weighted average grade increased from 453 ppm U_3O_8 with powder-XRF assays to 587 ppm U_3O_8 with fusion-XRF assays.

The change in analytical procedure for the Ongolo Alaskite project samples stemmed from observed differences between powder-XRF assays and downhole gamma logging results (eU_3O_8); confirmation from ANSTO that the eU_3O_8 was not erroneous due to disequilibrium of uranium and its daughters; and confirmation from ANSTO and Mintek that using alternative analytical procedures resulted in higher uranium grades than reported by RUN using powder-XRF.

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Assays from the fusion-XRF analytical procedure serve to further substantiate the significance of the discovery of alaskite-hosted uranium mineralisation at Ongolo by significantly increasing the uranium grade. The fusion-XRF procedure will be used for chemical analyses of all samples of alaskite-hosted uranium mineralisation going forward.

Drilling at Ongolo has been increased with four RC drilling rigs and one diamond rig working to delineate the presently interpreted two kilometre strike length mineralised zone, in anticipation of a Mineral Resource estimate in the 1st Quarter 2011.

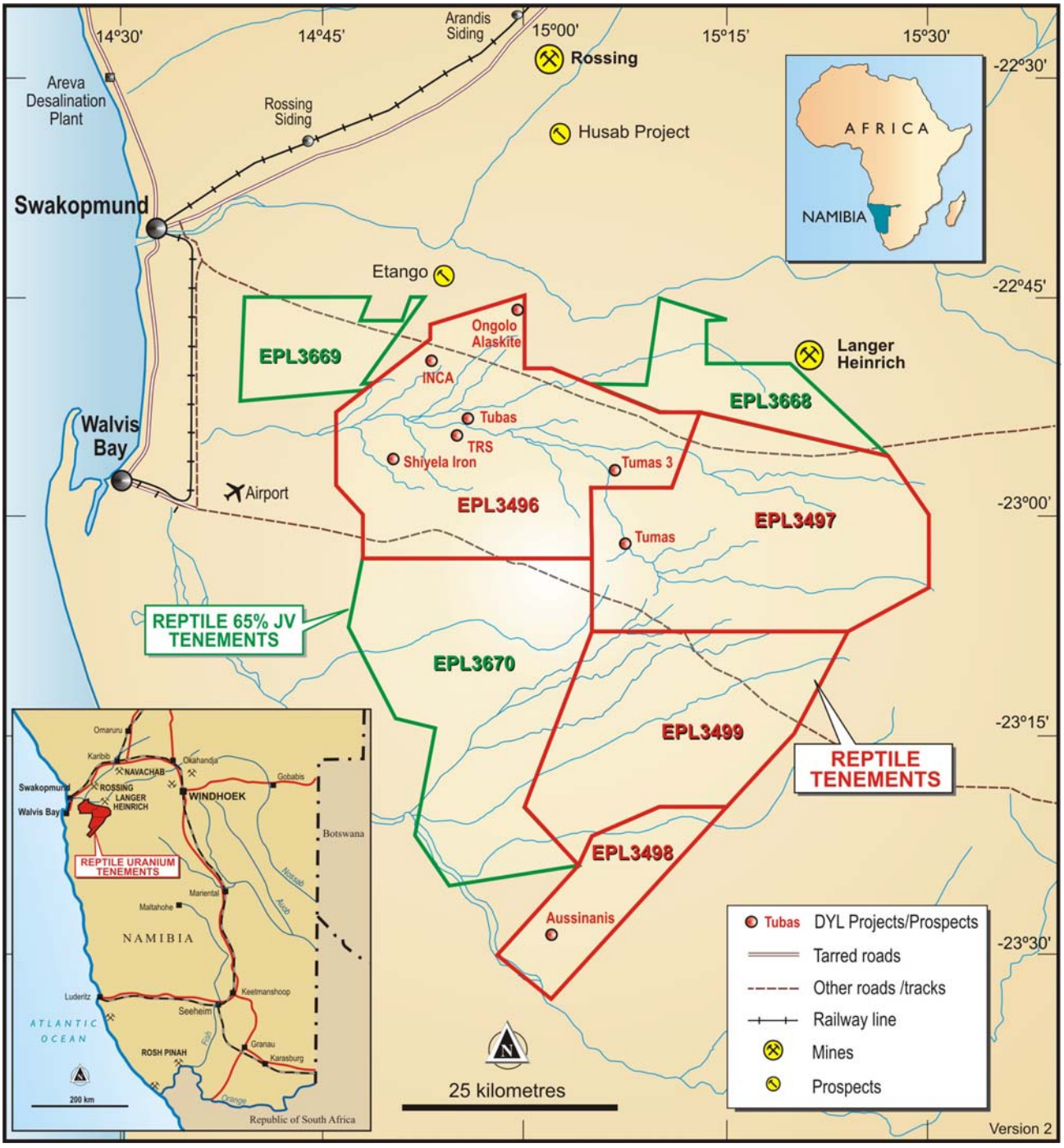

Figure 1: Reptile Uranium Namibia (Pty) Ltd EPL and Project location map

Background Details

RUN's analytical laboratory in Swakopmund routinely analyses uranium samples using the powder-XRF procedure. The accuracy of the procedure is checked and controlled using standard laboratory QA/QC methods and is corroborated by other laboratories equipped with similar procedures. As powder-XRF has been RUN's standard analytical procedure for uranium, previously announced assays for the Ongolo Alaskite project were based on this procedure, even though it was noted at the time that the XRF assays were appreciably lower than downhole gamma logging (eU_3O_8) results.

As a result of the discrepancy between powder-XRF assays and gamma logging, samples were provided to ANSTO (Sydney) to determine whether uranium at Ongolo is in equilibrium with its radioactive decay chain progeny and/or if thorium was adversely affecting the gamma logging, resulting in artificially higher eU_3O_8 values. ANSTO established that the uranium was in secular equilibrium and therefore not adversely affecting gamma readings, and that thorium concentrations were probably not a major contributing factor to gamma readings. ANSTO also determined that its uranium analysis of the samples by delayed neutron activation procedure were significantly higher than RUN's powder-XRF assays and were closer to the gamma logging results.

Duplicate samples were then submitted to Scientific Services' laboratory in Cape Town for pressed pellet-XRF analytical testing which confirmed RUN's powder-XRF results. In addition, Scientific Services carried out fusion-XRF analysis; where the sample is fused or melted at high temperature in a flux to produce a glass disk. Fusion-XRF assays were significantly higher that either powder-XRF or pressed pellet-XRF assays.

Scientific Services then carried out a range of experiments to determine if increasing the sample milling (grinding) time, ranging from 1 minute up to 9 minutes, affects the uranium assay grade for pressed pellet-XRF.

As shown in Table 1, longer sample milling time positively affected uranium grade. However, given the excessive sample milling time requirements and positive fusion-XRF results, the decision was made to use the fusion-XRF procedure going forward, until there is sufficient statistical data available to allow RUN to use gamma probe eU_3O_8 values.

Table 1: Scientific Services – Effect of Increased Sample Milling Time (finer grind) on Pressed Pellet (PP)-XRF assays and Fusion-XRF assay

Sample ID	XRF Uranium Grade (ppm U_3O_8)				
	PP – 1 minute	PP - 3 minutes	PP – 6 minutes	PP – 9 minutes	Fusion
RU 804	1,389	1,428	1,663	1,801	2,144

One possible explanation for the sample grind time and fusion effects on grade is that biotite platelets in the Ongolo alaskite-hosted mineralisation shield the X-ray induced fluorescence of uranium minerals from the XRF sensors, resulting in an under-estimation of the uranium concentration. Finer grinding destroys more and more platelets and minimises shielding effects. On the other hand, fusing the sample in the presence of a fluxing agent melts (fuses) the silicate rock and biotite platelets to form a glass which does not shield the fluorescence and therefore results in a more accurate determination of the uranium concentration.

Mineralised intervals from 11 of the 12 previously reported drillholes were re-assayed using fusion-XRF and are presented in Table 2. In general, it appears the higher the uranium grade the higher the corrected grade, though the reason and significance of this correlation are unclear.

Active Drilling Rigs at the Ongolo Alaskite Project

Table 2: Comparison of results between powder-XRF and fusion-XRF assays

									Original Powder XRF		Re-assay Fusion XRF		
Hole	**mE**	**mN**	**Azi**	**TD**	**Dip**	**Depth (m)**		**Interval (m)**	**cU_3O_8 (ppm)**	**GTM**	**cU_3O_8 (ppm)**	**GTM**	**Grade Increase**
						From	**To**						
ALAR13	499490	7482690	315	223	-60	128	217	**89**	**400**	**35,600**	**503**	**44,767**	**25.8%**
including						182	193	**11**	**710**	**7,810**	**983**	**10,813**	**38.5%**
and						199	215	**16**	**600**	**9,600**	**751**	**12,016**	**25.2%**
ALAR16	499350	7482850	315	191	-60	147	158	**11**	**399**	**4,389**	**510**	**5,610**	**27.8%**
ALAR46	499430	7482756	0	302	-90	246	254	**8**	**405**	**3,240**	**555**	**4,440**	**37.0%**
ALAR47	499354	7482854	135	300	-60	192	206	**14**	**395**	**5,530**	**522**	**7,308**	**32.2%**
and						250	260	**10**	**414**	**4,140**	**506**	**5,060**	**22.2%**
ALAR48	499453	7482753	135	213	-60	44	46	**2**	**557**	**1,114**	**801**	**1,602**	**43.8%**
and						74	84	**10**	**460**	**4,600**	**587**	**5,870**	**27.6%**
ALAR62	498951	7482649	135	261	-60	62	69	**7**	**394**	**2,758**	**443**	**3,101**	**12.4%**
and						110	125	**15**	**449**	**6,735**	**521**	**7,815**	**16.0%**
and						138	167	**29**	**422**	**12,238**	**511**	**14,819**	**21.1%**
ALAR63	498867	7482718	135	261	-60	198	208	**10**	**411**	**4,110**	**552**	**5,520**	**34.3%**
ALAR64	498800	7482800	135	251	-60	179	192	**13**	**412**	**5,356**	**515**	**6,695**	**25.0%**
and						199	206	**7**	**402**	**2,814**	**467**	**3,269**	**16.2%**
ALAR107	499693	7480696	135	245	-60	96	100	**4**	**459**	**1,836**	**799**	**3,196**	**74.1%**
ALAR125	498050	7482350	135	226	-60	68	84	**16**	**655**	**10,480**	**964**	**15,424**	**47.2%**
including						73	81	**8**	**1,029**	**8,232**	**1,536**	**12,288**	**49.3%**
ALAR126	497975	7482425	135	261	-60	137	149	**12**	**615**	**7,380**	**915**	**10,980**	**48.8%**
and	497975	7482425	135	261	-60	171	198	**27**	**513**	**13,851**	**692**	**18,684**	**34.9%**
Weighted averages								**17**	**453**	**7,543**	**587**	**9,788**	**29.8%**

Notes: TD is total depth of hole; cU_3O_8 is chemical assay U_3O_8; GTM is grade thickness metre and is calculated by multiplying the interval (m) x cU_3O_8 (ppm).
RUN considers approximately 400 ppm U_3O_8 is required to be deemed significant for hardrock hosted uranium given current market conditions.
Therefore lesser values are not reported at this time.

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

Compliance Statement

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 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.

Where eU_3O_8 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.

Deep Yellow Limited is an Australian-based uranium focused exploration company with extensive advanced operations in Namibia and in Australia.

In Namibia the Company's principal development focus is through its wholly-owned subsidiary Reptile Uranium Namibia P/L principally on the Omahola Project Pre-Feasibility Study involving the mid to high grade INCA primary uraniferous magnetite and secondary Red Sand projects and the extensive secondary calcrete deposits contained in the Tubas-Tumas palaeochannel and emerging Ongolo Alaskite project and the non-core Shiyela Magnetite Iron project.

In Australia the Company is focused on resource delineation of mid to high grade discoveries in the Mt Isa district - Queensland, including the Queens Gift, Conquest, Slance, Eldorado, Thanksgiving, Bambino and Turpentine Prospects.

A pipeline of projects in both countries are continually being examined and there is extensive exploration potential for new, additional uranium discoveries in both Namibia and Australia.