Deep Yellow Limited

**ASX Announcement** **ASX Code: DYL**

22 April 2010

# OMAHOLA PROJECT INITIAL JORC RESOURCE ESTABLISHED AT 18.9 MILLION LBS $U_3O_8$ WITH MORE ON THE NAMIBIAN HORIZON

- **Initial Mineral Resource estimate for the Omahola Project in Namibia established at 8,583 tonnes (18.9 Mlbs) uranium oxide ($U_3O_8$) in accordance with JORC Code**
- **Omahola Project consists of INCA and Tubas Red Sand deposits**
  - **The INCA deposit is higher grade at 400 ppm $eU_3O_8$ and contains substantial quantities of magnetite which may be viable as a by-product**
  - **The Tubas Red Sand deposit is lower grade at 160 ppm $eU_3O_8$, but is located below only 1-2 metres of cover and is amenable to upgrading by attrition scrubbing and screening**
- **On-going drilling following initial resource drilling continues to expand footprint of mineralisation at INCA**
- **Potential area for additional resources at Tubas Red Sand deposit extends for tens of kilometres proximal to and flanking RUN's mineralised Tubas-Oryx palaeochannel system**
- **Initial Omahola Mineral Resource estimate in line with Reptile Uranium Namibia's objectives of the ongoing Pre-Feasibility Study being conducted by SNC Lavalin**

**Deep Yellow Limited** (ASX Code: **DYL**) is pleased to announce an initial Mineral Resource estimate of **18.9 million lbs $U_3O_8$** for the **Omahola Project** in Namibia, controlled by DYL's wholly-owned subsidiary **Reptile Uranium Namibia Pty Ltd (RUN)**.

An initial Mineral Resource estimate, in accordance with the JORC Code, has been provided to RUN by The MSA Group of South Africa for the **INCA** and **Tubas Red Sand (TRS)** uranium deposits which together form the **Omahola Project**. See Figure 1 for deposit locations and Table 1 for details of the Mineral Resource estimate.

The INCA deposit consists of Indicated and Inferred Minerals Resources totalling 16,000,000 tonnes at 400 ppm $eU_3O_8$ for 6,366 tonnes (14 Mlbs) $eU_3O_8$, and the TRS deposit consists of Measured, Indicated and Inferred Resources totalling 13,846,700 tonnes at 160 ppm $eU_3O_8$ for 2,217 tonnes (4.9 Mlbs) $eU_3O_8$. Therefore the combined Mineral Resource estimate for the Omahola Project is 29,846,700 tonnes at 287 ppm $eU_3O_8$ for 8,583 tonnes (18.9 Mlbs) $eU_3O_8$.

The combined initial Mineral Resource estimate is in line with RUN's expectations and serves to underpin its objectives of conducting a Pre-Feasibility Study (PFS) on the Omahola Project. In February 2010, SNC Lavalin was awarded a contract to conduct the PFS, which is currently scheduled to be completed in October Quarter 2010.

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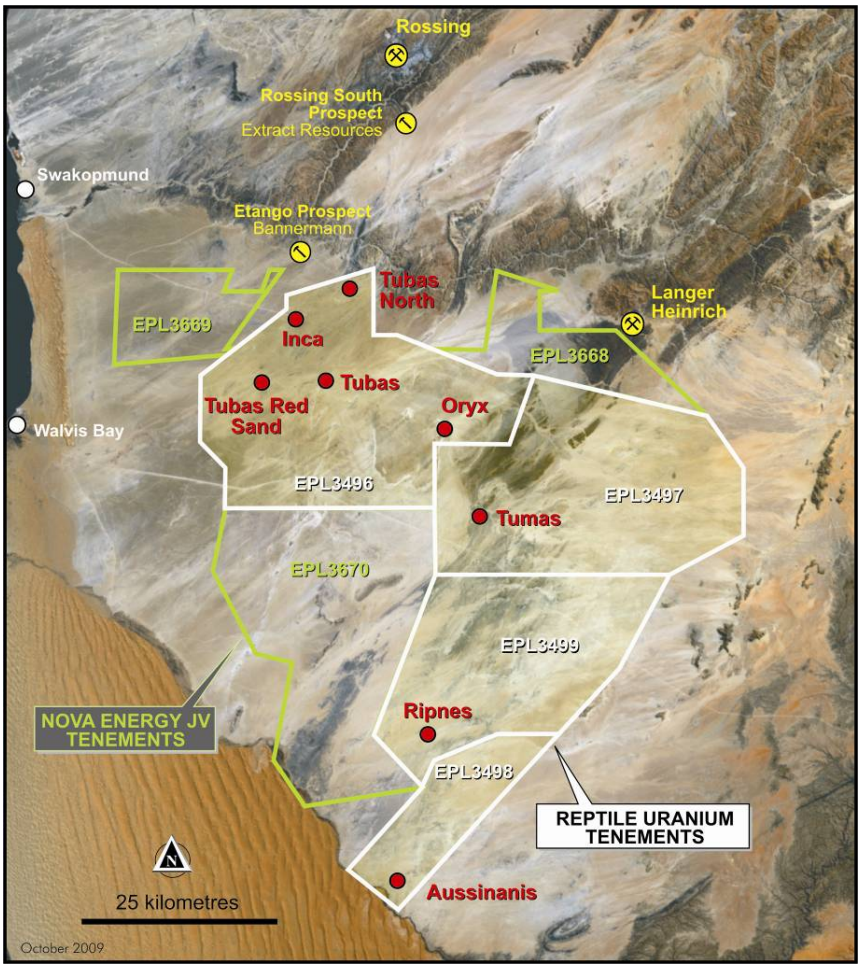


**Figure 1: Location Map**

**Table 1: Omahola Project – JORC Code Resource Estimates**

| Category | Cut-Off Grade | Tonnes | Grade ($eU_3O_8$ ppm) | Mlbs ($eU_3O_8$) | Tonnes ($eU_3O_8$) |
|---|---|---|---|---|---|
| **INCA ESTIMATE** | | | | | |
| Indicated | 200 | 6,000,000 | 392 | 5,000,000 | 2,300 |
| Inferred | 200 | 10,000,000 | 402 | 9,000,000 | 4,066 |
| **TOTAL *** | | **16,000,000** | **400** | **14,000,000** | **6,366** |
| **TUBAS RED SAND ESTIMATE **** | | | | | |
| Measured/Indicated | 100 | 3,172,500 | 168 | 1,172,668 | 532 |
| Inferred | 100 | 10,674,200 | 158 | 3,710,600 | 1,685 |
| **TOTAL** | | **13,846,700** | **160** | **4,883,268** | **2,217** |

*** Figures have been rounded**
**** Cut-off grade lower due to 'free digging' nature of sand from surface and positive beneficiation results**

## INCA

The mineralisation at INCA is best described as metasomatic introduction of uranium and iron in a northeast plunging syncline. Although the footwall to the syncline is competent crystalline marble, skarn formation is limited and mostly occurs within other calc-silicate strata within the syncline.

As can be seen in Figure 2 an area of roughly 500 by 500 metre was subjected to detailed drilling and is the area represented by the initial Mineral Resource estimate for INCA. Results of MSA's Mineral Resource estimate are summarised in Table 2 at various cut-off grades.

**Table 2: INCA – JORC Code Mineral Resource Estimates at Various Cut-Off Grades**

| Category | Cut-Off Grade | Tonnes | Grade ($eU_3O_8$ ppm) | Mlbs ($eU_3O_8$) | Tonnes ($eU_3O_8$) |
|---|---|---|---|---|---|
| **Indicated Resource Estimates** | 150 | 9,000,000 | 318 | 6,000,000 | 2,809 |
| | 175 | 7,000,000 | 358 | 6,000,000 | 2,519 |
| | 200 | 6,000,000 | 392 | 5,000,000 | 2,300 |
| | 225 | 5,000,000 | 424 | 5,000,000 | 2,112 |
| | 250 | 4,000,000 | 464 | 4,000,000 | 1,905 |
| **Inferred Resource Estimates** | 150 | 13,000,000 | 357 | 10,000,000 | 4,479 |
| | 175 | 11,000,000 | 386 | 9,000,000 | 4,222 |
| | 200 | 10,000,000 | 402 | 9,000,000 | 4,066 |
| | 225 | 9,000,000 | 418 | 9,000,000 | 3,897 |
| | 250 | 8,000,000 | 458 | 8,000,000 | 3,498 |

**Note figures have been rounded**

Drilling has continued at INCA beyond the drilling used to complete the initial Mineral Resource estimate and is currently ongoing. Additional drilling has been conducted within the initial Mineral Resource area and will serve to improve the confidence and likely the re-classification (under JORC Code) of resources within this area. Other drilling from wider 100 by 100 metre grid spaced and reconnaissance drilling to a mostly nominal 100 metre depth, occurred outside the initial Mineral Resource area and will clearly increase the overall footprint of mineralisation, which will likely increase the overall INCA resource in the next round of Mineral Resource estimates. The latest drilling results at INCA will be reported in a separate announcement. Mineralisation appears to remain open in at least three directions and at depth.

As previously announced, the INCA deposit contains substantial quantities of magnetite which can potentially be separated from the material during processing for possible sale as a by-product. In addition, drilling at INCA has identified areas of magnetite without uranium mineralisation that could be suitable for a saleable magnetite product. Additional testing and evaluation will be conducted as part of the PFS.

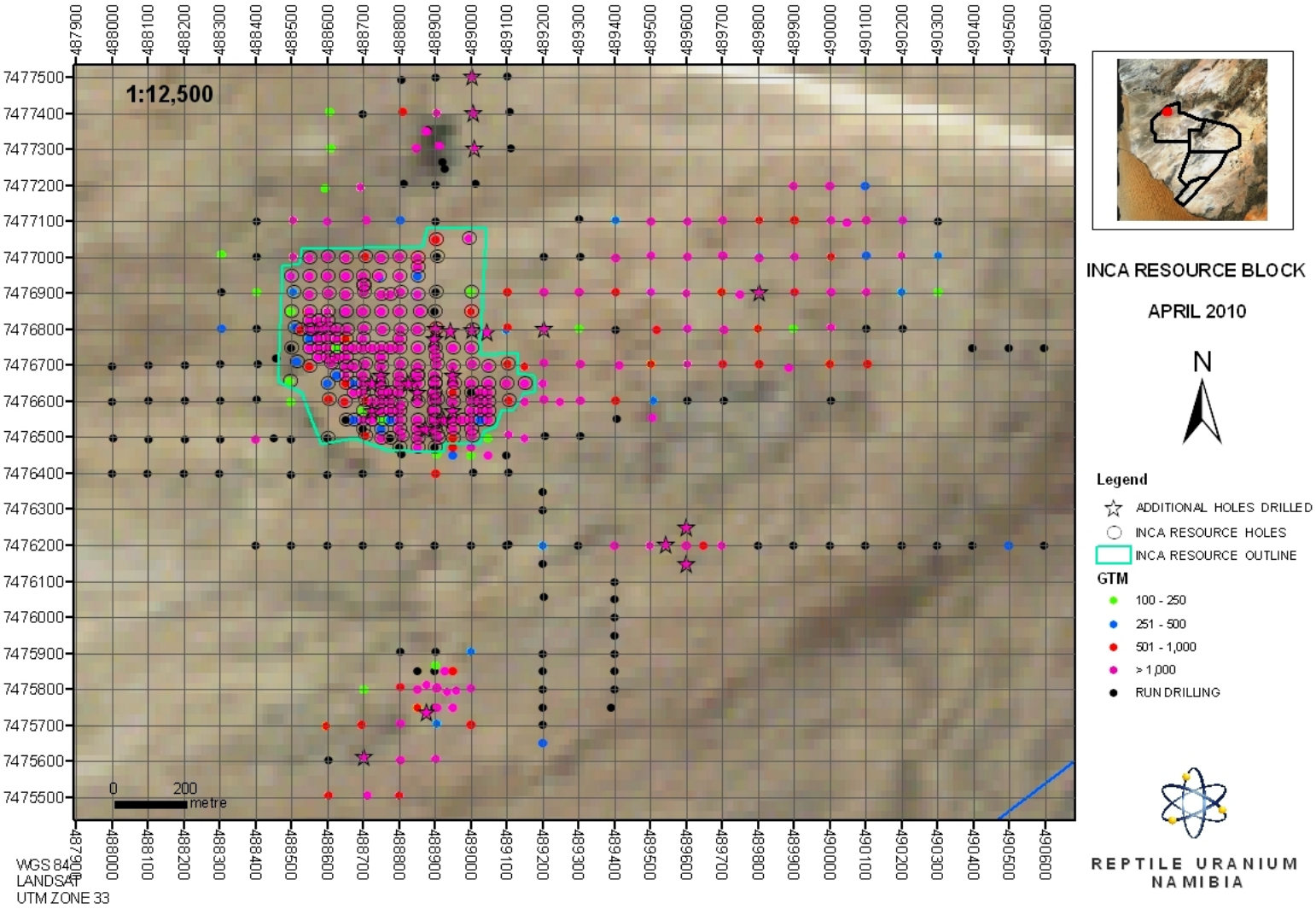


**Figure 2: INCA Resource Block**

## TUBAS RED SAND (TRS)

Results of MSA's Mineral Resource estimate for the TRS deposit are summarised in Table 3 at various cut-off grades and in Table 4.

TRS consists of secondary uranium mineralisation (carnotite) in well-sorted aeolian (windblown) sand which occurs immediately south of the Tubas palaeochannel. A relatively small area was intensely grid drilled around a trial mining trench to acquire bulk samples for physical beneficiation testwork and it is that data that constitutes this resource estimation.

**Table 3: Tubas Red Sand – JORC Code Resource Estimates at Various Cut-Off Grades**

| Category | Cut-Off Grade | Tonnes | Grade ($eU_3O_8$ ppm) | Mlbs ($eU_3O_8$) | Tonnes ($eU_3O_8$) |
|---|---|---|---|---|---|
| **TUBAS RED SAND WEST** | | | | | |
| **Measured/Indicated** | >50 | 6,530,300 | 119 | 1,712,446 | 777 |
| | >100 | 3,172,500 | 168 | 1,172,668 | 532 |
| | >150 | 1,468,600 | 221 | 714,665 | 324 |
| **TUBAS RED SAND EAST** | | | | | |
| **Inferred** | >50 | 35,627,600 | 96 | 7,518,578 | 3,413 |
| | >100 | 10,674,200 | 158 | 3,710,600 | 1,685 |
| | >150 | 4,009,300 | 220 | 1,946,943 | 884 |

**Table 4: Tubas Red Sand - JORC Code Resource Estimates**

| Category | Cut-Off Grade | Tonnes | Grade ($eU_3O_8$ ppm) | Mlbs ($eU_3O_8$) | Tonnes ($eU_3O_8$) |
|---|---|---|---|---|---|
| **TUBAS RED SAND WEST** | | | | | |
| **Measured/Indicated** | >100 | 3,172,500 | 168 | 1,172,668 | 532 |
| **TUBAS RED SAND EAST** | | | | | |
| **Inferred** | >100 | 10,674,200 | 158 | 3,710,600 | 1,685 |
| **TOTAL** | | **13,846,700** | **160** | **4,883,268** | **2,217** |

The mineral resource estimate for the TRS deposit is considered initial as this style of mineralisation has been encountered in numerous boreholes outside the current TRS Mineral Resource area. These results suggest that mineralised red sands occur adjacent to and may potentially flank the mineralised Tubas-Oryx palaeochannel system which stretches some 30 kilometres across RUN's EPL3496. The true extent can only be determined with future drilling.

The justification for the lower cut-off grade of the TRS deposit is based on unique aspects of the deposit. Firstly, the deposit is very near surface, with only minimal cover of wind-blown materials and gravel-gypcrete-calcrete of 1-2 metres. Secondly, TRS is predominately free-flowing to loosely consolidated sandy material. The combination makes the deposit amenable to simple and low cost mining techniques. Thirdly, TRS material tests positively to relatively simple beneficiation; that being attrition scrubbing with balls followed by screening. See beneficiation test details below.

**Results of Physical Beneficiation Testwork on TRS**

- Mintek (South Africa) conducted testwork on representative samples extracted from a 12 metre deep trial trench within the resource area.
- During wet screening no uranium was leached from the ore indicating that the uranium present was not water soluble at 25°C.
- The results from the attrition/scrubbing testwork indicated that milling the sample with a 10% ball charge gives the best results for the three methods trailed. Scrubbing with balls effectively breaks up the agglomerated or slightly cemented material and ensured that the majority of the $U_3O_8$ was available to be recovered in the finer size fractions (Figure 3).
- 90% of the uranium minerals ($U_3O_8$) present in the original sample was captured in only 22% of the total mass of material passing through a 75 micron screen.
- Other methods of separation of this fraction are being investigated and a programme of further testwork is underway.

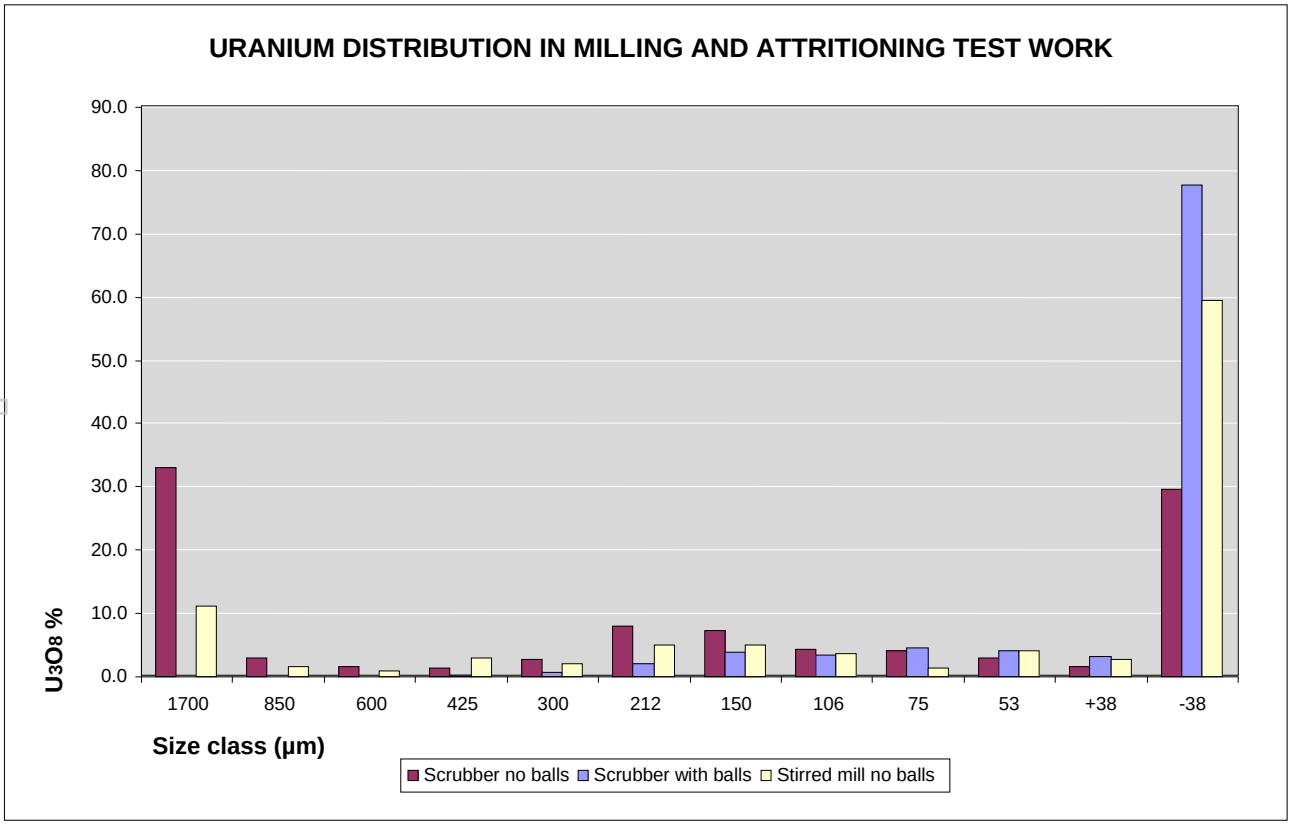


**Figure 3: Attrition/Scrubbing Comparison**
(Note: Scrubbing with balls resulted in least amount of uranium remaining with coarse size fractions**.**

As a consequence of the very positive beneficiation results and free-digging nature of the red sands from surface, it is highly likely much lower grades of uranium can be economically mined. For example – 150 ppm $U_3O_8$ run-of-mine material can be potentially upgraded to +500 ppm $U_3O_8$ for processing with INCA material.

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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 the Mineral Resource 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'. 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 and Reserves'. Mr Venter has visited the project sites to review drilling, sampling and other aspects of the work relevant to this announcement.*

*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 $eU_3O_8$ and/or $cU_3O_8$ 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.*

**Deep Yellow Limited is an Australian-based pure uranium 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 at the mid to high grade INCA primary uraniferous magnetite and secondary Red Sand projects and the extensive secondary calcrete deposits contained in the Tumas-Oryx-Tubas palaeochannel and fluviatile sheetwash systems.**

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

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