

ASX Announcement

ASX: DYL

16 January 2018

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 DECEMBER 2017

HIGHLIGHTS

- Two drilling campaigns completed during quarter on adjacent Namibian projects with successful results.
- Reptile Project Tumas 3 deposit extended from 4.4km to 7.2km with 1,878m of broad drilling on 400m x 100m spacing.
 - drill assays indicate extension area will add to current Tumas 3 inferred resource base.
 - work to date confirming high prospectivity of the 100km of palaeochannel remaining to be tested.
- Nova JV Project first pass drilling targeting mineralisation associated with surficial palaeochannels and alaskite/skarn type basement rocks completed involving 7,490m of RC and diamond drilling.
 - promising results on the newly defined Namaqua palaeochannel target (formerly Speke's East) where uranium mineralisation was intersected in three adjacent holes.
 - majority of drillholes testing basement targets intersected narrow uranium mineralisation requiring follow-up investigations.
- Increased confidence that the existing uranium resource base of the Company for Langer Heinrich-style deposits can continue to be expanded.

In the December quarter work continued on the Namibian projects with a dual effort focussed on both uranium resource upgrade activities on the Reptile Project at Tumas 3 and completion of the first pass target drilling on selected exploration targets that have been identified on the Nova JV Project (see Figure 1).



Figure 1: Project Locations - Reptile Project (EPLs 3496, 3497) and Nova JV Project (EPLs 3669, 3670).

REPTILE PROJECT, NAMIBIA (EPLs 3496, 3497) - 100% Deep Yellow

Deep Yellow announced on 14 December 2017 continued encouraging drilling results from the extension drilling program it carried out in November/December at Tumas 3, located within EPL 3496 which is held by Deep Yellow's wholly-owned subsidiary Reptile Uranium Namibia (Pty) Ltd.

This program, which involved 62 RC holes drilled for 1,878m, focused on testing for extensions of Tumas 3 to the immediate east and west of the maiden inferred resource announced 27 September 2017. The drilling delineated additional uranium mineralisation, extending the Tumas 3 discovery further to the east by 2.2km and to the west by 0.6km to a total strike length of 7.2km. Equivalent uranium oxide (eU_3O_8) values have been determined and the mineralised zone is defined by intersections showing greater than 100ppm eU_3O_8 over 1m or more as defined from gamma logging using a fully calibrated Auslog down hole logger. Of the holes drilled in this program, 44% returned positive results.

Drillhole spacing was 100m along 300m to 600m spaced lines aiming to define the limits of uranium mineralisation of the Tumas 3 resource. This work was also geared to give a guideline for optimal spacing to use for future first-pass target drilling when testing the remaining 100km of prospective palaeochannels that have been identified. Figure 2 shows the new areas that were tested in relation to the Tumas 3 deposit.

The drilling results further confirmed the highly prospective nature of the palaeochannel within which Tumas 3 occurs. The width of the additional 2.8km long zone of mineralisation that has been delineated varies between 200m to 400m with thicknesses ranging from 1m to 8m.

Drilling east of the Tumas 3 resource intersected mineralisation on all six of the north-south lines that were drilled covering 2.2km of palaeochannel length. Some test drilling was also targeted further to the east to better define the location of a narrow but prospective tributary channel entering the main Tumas 3 palaeochannel. This channel shows promising calcrete-type uranium mineralisation from previous drillholes and needs to be further investigated. The drilling west of the Tumas 3 resource also extended uranium mineralisation a further 600m.

The drillhole cross section shown in Figure 3 indicates the continuous nature of the uranium mineralisation and the variability and complexity of the palaeochannel topography.

The follow-on extension drilling clearly demonstrates that the Tumas 3 mineralisation extends over a strike length of more than 7km. As indicated by the previous drilling at Tumas 3, the uranium mineralisation is not confined to one simple, single channel but rather is associated with a complex palaeodrainage system containing numerous channels that head westward toward the ocean.

Conclusion: This second drilling program on the Reptile Project (following on from the very successful drilling that discovered Tumas 3) to test for extensions of the deposit has again produced successful results. It indicates that the uranium resources already defined at Tumas 3 have potential to be expanded. This is not only expected to add to the current uranium resource base at Tumas 3 but, more importantly, emphasises the strong exploration potential of the uranium-fertile, extensive palaeochannel system that is identified for future investigation. Drilling of available targets on this project is expected to commence during February 2018.

There are now four JORC defined uranium resources identified within the 125km of palaeochannel (see Figure 1) occurring within the Reptile Project tenements (Tumas 1 & 2, Tumas 3 and Tubas sand/calcrete deposits). Some 80%, or approximately 100km, of these palaeochannels remain inadequately tested.

The encouraging results emanating from the reinterpretation of historic exploration data have a far reaching positive implication. It provides management with increasing confidence that the existing uranium resource base for Langer Heinrich style deposit/s can continue to be expanded within the Reptile Project area.

NOVA JV, NAMIBIA (EPLs 3669, 3670) – 65% Deep Yellow

Deep Yellow announced on 22 December 2017 the completion of a 7,490m scout drilling program carried out on its Nova Joint Venture Project, Namibia (**Nova JV**) where Japan Oil, Gas and Metals National Corporation (**JOGMEC**) is earning a 39.5% interest and currently fully funding the exploration effort. The three-month drilling program was commenced mid-September 2017.

The overall drilling campaign was primarily designed to characterise the various targets that were defined from geophysics (using IP, EM, magnetics and radiometrics) and ground mapping to determine applicability of methods to be used in future to isolate prospective zones. Ten basement targets and three newly identified palaeochannels were targeted for this initial investigation on EPLs 3669 and 3670. This first-pass drilling totalled 7,490m and involved two diamond core and 82 RC drillholes of which four had a diamond core tail added. Figure 4 shows the Nova JV tenements – EPLs 3669 and 3670 and the prospect locations.

Palaeochannel Targets: The reinterpretation of a previously flown VTEM survey identified palaeochannels not known to occur earlier on either of the tenements. Their geophysical similarities to other mineralised palaeochannels in the region indicated that these needed testing for calcrete associated uranium mineralisation.

A new discovery was made on the Namaqua Prospect (formerly Speke's East). Three drill sections (14 holes for 639m) were completed to test this, the most northerly of the newly identified palaeochannels. Drilling in this area encountered uranium mineralisation in three adjacent holes (TN035 to TN037 – see Table 1). These averaged 220ppm eU_3O_8 over 3.5m between depths of 18m to 23m as determined by a fully calibrated Auslog down-hole gamma logging unit. An historic hole (NTNR4) drilled in 2010 located 100m to the west, targeting basement mineralisation, also showed uranium mineralisation in surficial cover sediments. The Namaqua channel was further tested by two drill lines, 1.5km and 2.5km to the SSW of the Namaqua discovery, where no uranium mineralisation was encountered.

Hole ID	From (m)	To (m)	Interval (m)	Average eU ₃ O ₈	Peak eU₃Oଃ	Background (cps)
TN035RC	18.8	24.4	5.6	281	725	8
TN036RC	20.67	23.87	3.2	128	431	6
TN037RC	22.88	24.68	1.8	192	336	8

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Figure 5 shows the drillhole locations, interpreted palaeochannel and the Namaqua Prospect in the north of EPL 3669. Figure 6 shows a cross-section of the mineralised holes drilled through the prospective palaeochannel at Namaqua.

Basement Targets: Ten targets in four areas were identified from ground geophysics which indicated potential for uranium mineralisation in the basement rocks. A total of 37 drillholes for 6,134m was drilled on these targets. This involved 602m of core from two diamond drill holes and four diamond core tails and 5,532m of RC drilling results of which are reported in ASX release dated 22 December 2017. Equivalent uranium values were determined from the fully calibrated Auslog down-hole gamma logging unit.

In EPL 3669 at Speke's and Bowsprit, drilling intersected generally fine-grained quartzofeldspathic biotite rich rocks associated with pyrite (iron sulphite) rich, quartz carbonate veined lithologies. Minor visible copper mineralisation was also observed. Narrow uranium mineralisation was also intersected in eight of the16 holes drilled on this target. There appears to be a correlation between elevated down-hole gamma counts, high pyrite content and high vein density indicating a hydrothermal nature of the uranium mineralisation and this will be further investigated. Further south, at Barking Gecko, uranium mineralisation is associated with alaskitic granite intrusions and uranium intersections, although still narrow, become more widespread as all three RC holes drilled on this target are mineralised.

On EPL 3670 geophysical ground work identified a 400m to 500m wide, 3.5km long northnorth-east trending zone of radiometric anomalism flanked on the east and west sides by chargeability anomalies identified by Gradient Array and Pole Dipole IP surveys. This feature is parallel to the regional "Alaskite Alley" trend which contains all the major basement related uranium deposits in the region. RC and diamond drilling at Cape Flat included 18 holes of which 12 showed uranium anomalism of greater than 100ppm eU_3O_8 . The drilling identified various sheet like, partly sheared granite intrusions which, on occasion, showed alaskite characteristics. Uranium mineralisation of greater than 100ppm eU_3O_8 was intersected both in narrow peaks and in thicker intersections ranging 2m to 14m in width. Figure 7 shows the drillhole locations superimposed over the uranium contours of a ground spectrometer survey and Figure 8 shows a cross-section drilled through the central anomalous zone at 7445700N. To the south, the Cape Flat anomalous zone is covered by extensive colluvium which blankets all radiometric response. Some surface radiometric anomalism occurs 8km to the SSW in an area of minor sub-crop within the colluvium cover. Airborne magnetics suggests that this prospective zone extends another 2km SSW this anomalous zone needs follow up work.

Conclusions: Further assessment of the data collected during this drilling campaign is required and geochemical assay results are still being awaited. For the next field season detailed ground radiometric work and geological mapping will be undertaken to better characterise the anomalous areas that have been identified to date. Other geophysical methods may also be applied to better define targets for drilling.

The indication that previously unexplored (and unknown) palaeochannels are fertile in carrying uranium mineralisation, as identified in three adjoining holes at Namaqua, is regarded as a very positive development. The identification of calcrete associated mineralisation within the palaeochannels in the Nova JV area is considered significant as this has expanded the prospectively of the extensive system of palaeochannels that has been identified.

Further drilling is planned in 2018 to explore the extent of the mineralisation at Namaqua and to evaluate the potential of the newly identified prospective palaeochannels on EPLs 3669 and 3670 which remain untested.

The exploration of the basement targets identified a promising zone of uranium anomalism at Cape Flat. Although grade and thickness of the mineralisation encountered is of a low level it indicates a mineralising event has occurred. Further testing is required toward the south where the prospective zone is blanketed by alluvium cover. This southern extension of Cape Flat will be explored by geochemical methods and/or shallow bedrock drilling to isolate specific targets for follow up RC drilling.

CORPORATE

The Company issued 235,525 Performance Rights to Namibian employees during the quarter as part of an incentive program and pursuant to the Deep Yellow Awards Plan. The Performance Rights vest on 1 March 2018 subject to continuing employment. The total number of Performance Rights on issue at 31 December 2017 was 568,277. In addition, following shareholder approval, 2,250,000 shares were issued pursuant to the Deep Yellow Loan Share Plan.

AGM

At the AGM, which was held on 24 November 2017, all of the resolutions as presented at the meeting were approved by the shareholders.

Yours faithfully

JOHN BORSHOFF Managing Director/CEO Deep Yellow Limited

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

Exploration Competent Person's Statement

The information in this report as it relates to exploration results was compiled by Mr Martin Hirsch, a Competent Person who is a Member of the Institute of Materials, Mining and Metallurgy (IMMM) in the UK. Mr Hirsch, who is currently the Exploration Manager for Reptile Mineral Resources and Exploration (Pty) Ltd, 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hirsch consents to the inclusion in this presentation of the matters based on the information in the form and context in which it appears. Mr Hirsch holds shares in Deep Yellow.



Figure 2: EPL 3496 - Drillhole locations showing the recent drilling program in Tumas 3 East and West with the Tumas 3 resource shown as contours of eU_3O_8 grade thickness values (GT: eU_3O_8 pmm x m).



Figure 3: Tumas 3 East – Cross Section 510000E.







Figure 4: Nova JV tenements and Prospect location maps.



Figure 5: EPL 3669 - Speke's Area and Namaqua Prospect, drillhole locations. Basement drilling (red collars), palaeochannel drilling (green collars).



Figure 6: Namaqua Prospect: Drillhole Cross-Section of Palaeochannel Drilling. NTNR4 log (historic) is U₃O₈ ppm from XRF, TN prefixed holes are current logs – gamma in counts per second. (note: section shows vertical exaggeration).



Figure 7: EPL 3670 - Cape Flat area, drillhole location over contours of the uranium channel of a ground spectrometric survey.



Figure 8: EPL 3670 - Cape Flat: Drillhole Cross-Section 7445700N.