



12 October 2016

## Tumas Project Resource Update: Increase in Size and Confidence

### KEY POINTS

- An updated Mineral Resource Estimate has been completed for the Tumas Project, resulting in a 12% increase in metal content at the same average grade and cut-off.
- The Tumas Mineral Resource Estimate is now 16.6 million tonnes at 366 ppm  $U_3O_8$  for 13.4 million pounds of  $U_3O_8$  at a cut-off of 200 ppm  $U_3O_8$ .
- For the first time the Tumas Project (Zones 1 and 2) has resources classified in the Measured Category (62%), 36% Indicated and only 2% in the Inferred Category.
- For Tumas Zone 3 an exploration target has been confirmed which holds the potential to more than double the total Tumas Project resource.
- The results from earlier drilling programs and the 2014 infill drilling program, as well as the sophisticated geophysical modelling exercise conducted in 2015 and the recent bulk sample metallurgical testwork were considered in order to deliver these excellent results.
- The results reinforce DYL's confidence in proceeding with the next phases of the Project; specifically, a geometallurgical drill program will shortly be commenced.

Advanced stage uranium explorer **Deep Yellow Limited (ASX: DYL)** is pleased to announce a JORC 2012 compliant Mineral Resource Estimate ("MRE") for its Tumas Project in Namibia. Apart from a 12% increase in metal content (at the same average grade and cut-off as the previous MRE) the confidence in the resource has been significantly enhanced with 62% now classified in the Measured Resource Category, 36% in Indicated and the remaining 2% in the Inferred Resource Category.

Multiple sources of information were used to derive the MRE, including results from the original drilling program conducted between 2008 and 2010, more recent infill drilling in 2014 and a sophisticated geophysical modelling exercise in 2015. The recent highly successful *U-pgrade<sup>TM</sup>* metallurgical testwork program conducted on a bulk sample excavated from Tumas also provided complimentary geological data.

Greg Cochran, DYL's Managing Director, said "This is another step towards the ultimate development of the Tumas Project. This MRE will give us certainty for the critical first few years of production whilst the exploration target demonstrates the longer life potential of the Project." He added "we are looking forward to completing the geometallurgical drilling program shortly which will further enhance our geological and metallurgical knowledge and commencing a fast PFS. With the recent milestones achieved it is no surprise that Tumas is rapidly becoming recognised as Namibia's next uranium mine."

ENDS



## Tumas Project Mineral Resource Estimate

The MRE is presented in Table 1 below at a range of  $U_3O_8$  cut-off grades whilst the previous (JORC 2004) MRE is shown in Table 2 for ease of comparison. Primarily, the change in resource size has been driven by an increase in the density assumption which was made possible by the recent work in that area.

The decision was made at this stage to maintain the 200 ppm  $U_3O_8$  cut-off for the preferred resource however the Company believes that the use of Marenica's *U-pgrade™* process at Tumas will likely enable a lower cut-off grade resulting in a larger project resource. Note that the figures in the table are rounded to reflect the precision of estimates and may exhibit rounding errors.

**Table 1. Tumas MRE at varying cut-off grades**

Category	Cut-off (ppm $U_3O_8$ )	Tonnes (M)	e $U_3O_8$ (ppm)	$U_3O_8$ (t)	$U_3O_8$ (Mlb)
Measured	200	9.7	386	3,700	8.2
Indicated	200	6.5	336	2,200	4.8
Inferred	200	0.4	351	150	0.3
<b>Total</b>	<b>200</b>	<b>16.6</b>	<b>366</b>	<b>6,050</b>	<b>13.4</b>
Measured	150	16	302	4,800	10.7
Indicated	150	10.8	272	2,900	6.5
Inferred	150	0.6	280	200	0.4
<b>Total</b>	<b>150</b>	<b>27.4</b>	<b>289</b>	<b>7,900</b>	<b>17.5</b>
Measured	100	29.7	219	6,500	14.3
Indicated	100	18	212	3,800	8.4
Inferred	100	1.1	208	250	0.5
<b>Total</b>	<b>100</b>	<b>48.9</b>	<b>216</b>	<b>10,550</b>	<b>23.3</b>

Notes: Figures have been rounded and totals may reflect small rounding errors.  
 e $U_3O_8$  - equivalent uranium grade as determined by downhole gamma logging.  
 Gamma probes were calibrated at Pelindaba, South Africa in 2007 and sensitivity checks were conducted by periodic re-logging of a test hole to confirm operation between 2008 and 2013. During drilling, probes were checked daily against a standard source.  
 Auslog probes were re-calibrated at the calibration pit located at Langer Heinrich Minesite in 2014 and 2015.

**Table 2. Previous JORC 2004 Tumas MRE at preferred cut-off grade**

Category	Cut-off (ppm $U_3O_8$ )	Tonnes (M)	e $U_3O_8$ (ppm)	$U_3O_8$ (t)	$U_3O_8$ (Mlb)
Indicated	200	14.4	366	5,300	11.6
Inferred	200	0.4	360	100	0.3
<b>Total</b>	<b>200</b>	<b>14.8</b>	<b>365</b>	<b>5,400</b>	<b>11.9</b>



## Background Information on the Tumas Mineral Resource Estimate

The Tumas palaeochannel straddles DYL's two wholly owned exclusive prospecting licences ("EPLs") 3496 and 3497 and is divided into three zones (See Figures 1 and 2). Zones 1 and 2 contain the new mineral resource whilst Zone 3 contains the exploration target. Prior to committing to the Marenica testwork the Company conducted a comprehensive review of the geological potential of Tumas in 2014 and 2015 and concluded that the palaeochannel had extensive upside potential.

During that period an infill drilling program (See Figure 3) was completed within Zone 1 and a sophisticated geophysical modelling exercise covering both EPLs was completed which provided confidence in the Tumas deposit and its extended palaeochannel. (See ASX release dated 16 July 2015 titled "Enhanced Palaeochannel Prospectivity" for more information.)

Also, bulk samples were excavated from the infill drilling area in December 2015 and January 2016 and sent to Perth to conduct the first phase of *U-pgrade™* metallurgical testwork. This was successfully completed at the end of June 2016.

Tumas mineralisation occurs as secondary carnotite enrichment of variably calcretised palaeochannel and sheetwash sediments and adjacent weathered bedrock.

### Summary of Recent Work Contributing to the MRE

#### *Infill Drill Program*

The 90-hole close-spaced infill program completed in December 2014 (at 12.5m x 12.5m centres for approximately 1,450m in total) confirmed a continuously mineralised north-south front over 160 metres and 50 metres wide (east-west) which was entirely consistent with previous drilling results. This was highly encouraging as the previous resource model was based on the results of earlier drill programs that typically had wider spacing. In the 2014 program the grades obtained by downhole gamma logging and validated by ICP-MS assay were a good match in tenor with the historical results and the previous mineral resource model.

Mineralisation within the infill drill area was found to be confined to the channel sediments only and not in the bedrock which will make mining simpler and improves the prospects for successful beneficiation. Only limited amounts of internal dilution were found to be present which further enhances the level of confidence one can expect in regard to beneficiation.

The topography of the base of the palaeochannel was confirmed to be gently undulating and appears to have no influence on the 'blanket' mineralisation and not to be a significant influence on the uranium grade, thickness or mineralisation. The saucer-like geometry of some of the channel margins indicates that mineralisation may be present even in areas with as little as 2 metres of channel fill. This can in future be delineated by detailed mapping of the channel margins.

At the same time as the infill drill program an internal study predicted the calcrete-hosted tonnes of uranium per lineal kilometre that might be present along the Tumas drainage channel. For this prediction certain assumptions pertaining to the consistency of the grade and thickness of the mineralisation within the channels had to be made via interpolation from historical more widely spaced drilling. The evidence from the drilling supported these assumptions, albeit over a limited area and allowed DYL to predict a range of between 1.8 and 3Mlbs U<sub>3</sub>O<sub>8</sub> per kilometre.

The study assisted with the confirmation of the exploration target for Zone 3 even when the figures are discounted by up to 50% to build in some conservatism in recognition of the relatively low level of definition across that part of the palaeochannel system.

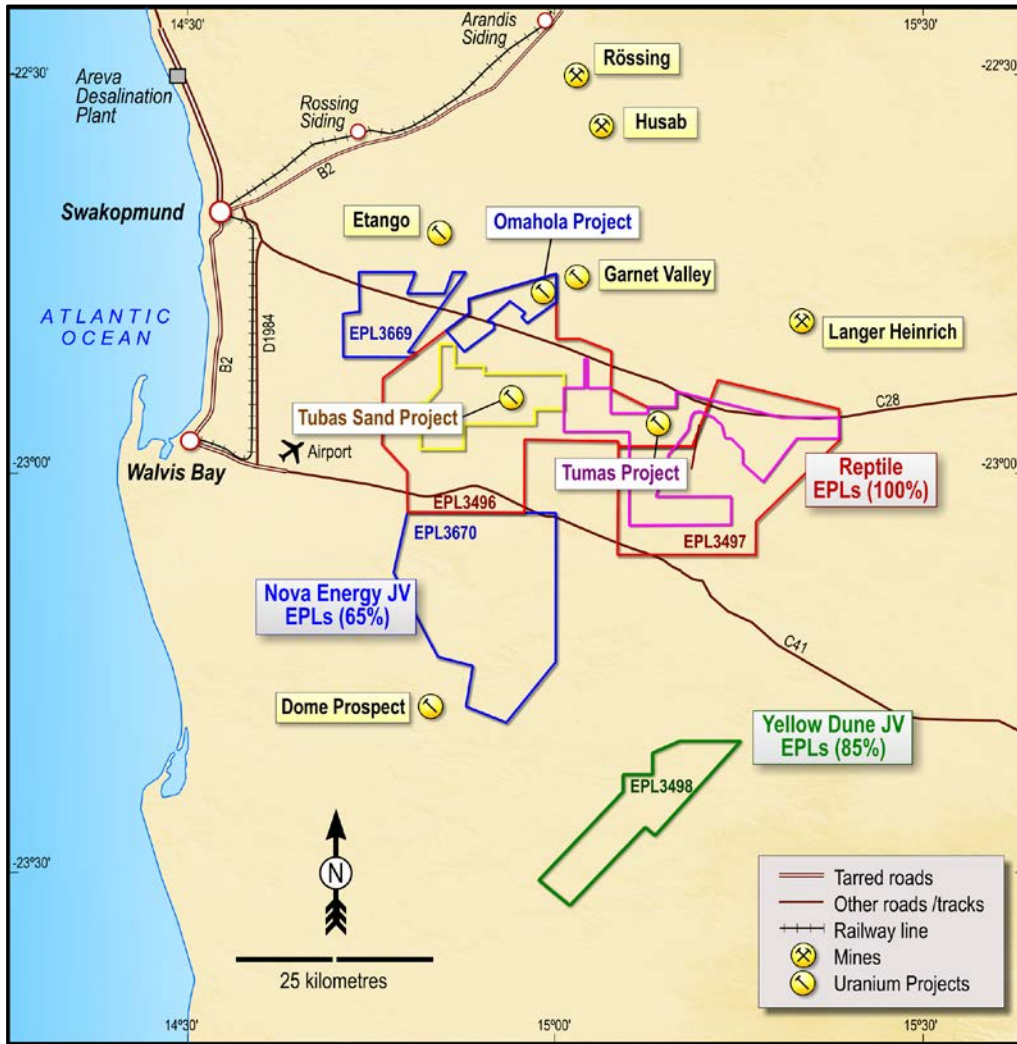


Figure 1: Namibian Locality Map Showing Position of the Tumas Project

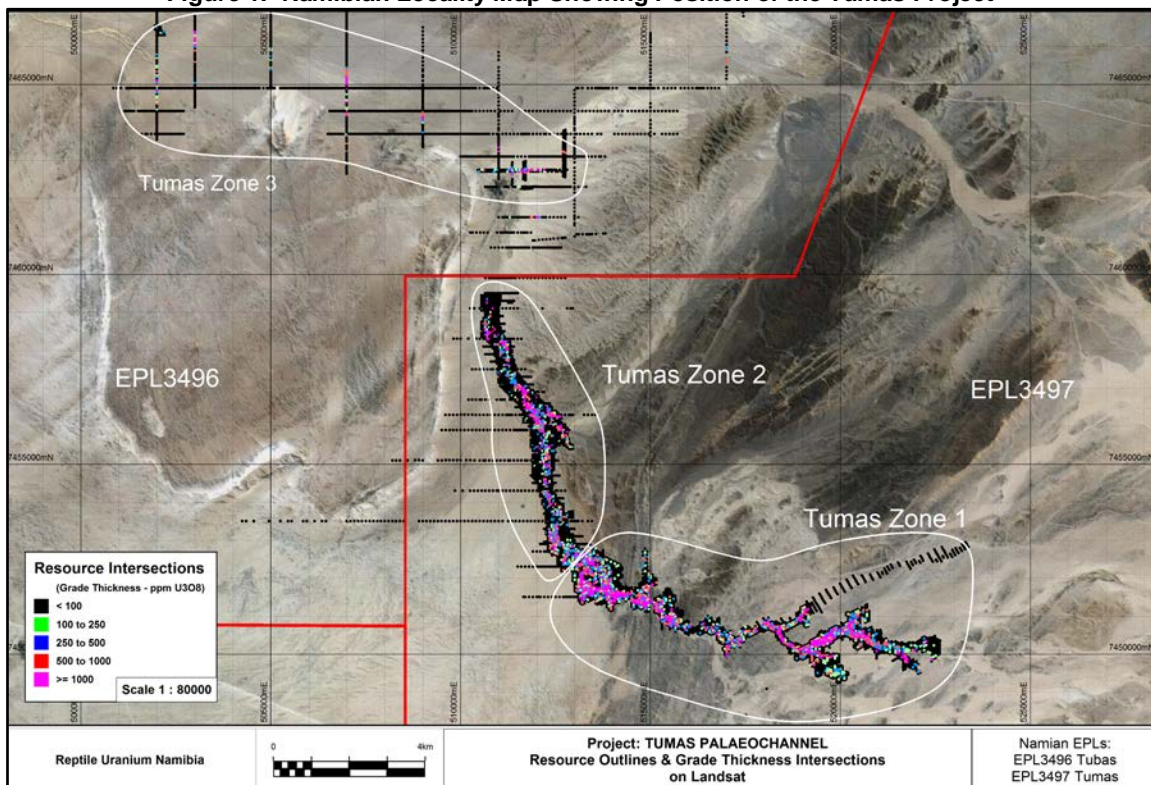


Figure 2: Tumas Project Resource Outlines for Zones 1 and 2 and Exploration Target Zone 3

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Importantly, the infill drilling program also allowed a reassessment of density in the palaeochannel which seemed to have been underreported in previous work. Probing during the infill drilling program confirmed this suspicion as density measurements encountered were in ranges varying from 1.81 for loose, sandy gypcrete to 2.64 – 2.71 for massive calcrete. With the bulk of the measurements between 2.26 – 2.41 an average density of 2.35 was adopted for this MRE compared to the previous average of 2.1.



Figure 3: Tumas Project Infill Drilling Campaign, December 2014

#### *Resource Potentials Geophysical Interpretation*

In 2008 an extensive AeroTEM helicopter electromagnetic (“HEM”) survey (Figure 4) was flown for DYL by Aeroquest Ltd of Canada covering EPLs 3496 and 3497. A total of 4,107 survey line kilometres were flown at a relatively broad 500m line spacing.

The HEM survey area was known to be prospective for uranium mineralisation located in near-surface palaeochannels which may be expected to have a positive conductivity contrast with underlying fresh basement bedrock. Palaeochannel conductivity varies based on a number of factors including clay type and content, porosity, permeability and most importantly the salinity of the ground water. A saline palaeochannel would be expected to be much more conductive and produce a stronger electromagnetic signal compared to one containing fresh water.

Resource Potentials was commissioned in 2015 to convert the AeroTEM EM time channel data to conductivity-depth values and then run an auto-picking processing routine on the conductivity-depth data to determine the thickness of conductive cover above fresh bedrock “basement”, and produce a set of georeferenced data products.

Selected AeroTEM survey flight lines were initially processed using the industry standard conductivity-depth imaging (“CDI”) software EMFlow but did not produce reliable results. An alternative software code, Layered Earth Inversion (“LEI”) recently released by Geoscience Australia was trialled and proved to be much more robust. The complete AeroTEM dataset was then processed using the LEI program to generate conductivity-depth values for all flight lines.

The auto depth-picking routine process was then run on the LEI data along each flight line to calculate the thickness of conductive cover, as represented by the conductivity variation in the LEI sections. A suite of georeferenced images was created, together with a range of data products encapsulating the LEI and auto depth-picking results; such as grid surfaces and images of the fresh rock depth, conductivity depth slices and other processed EM data. LEI conductivity sections and EM decay multiplots were produced for each AeroTEM survey flight line to display the final depth of conductive cover thickness along each survey line.

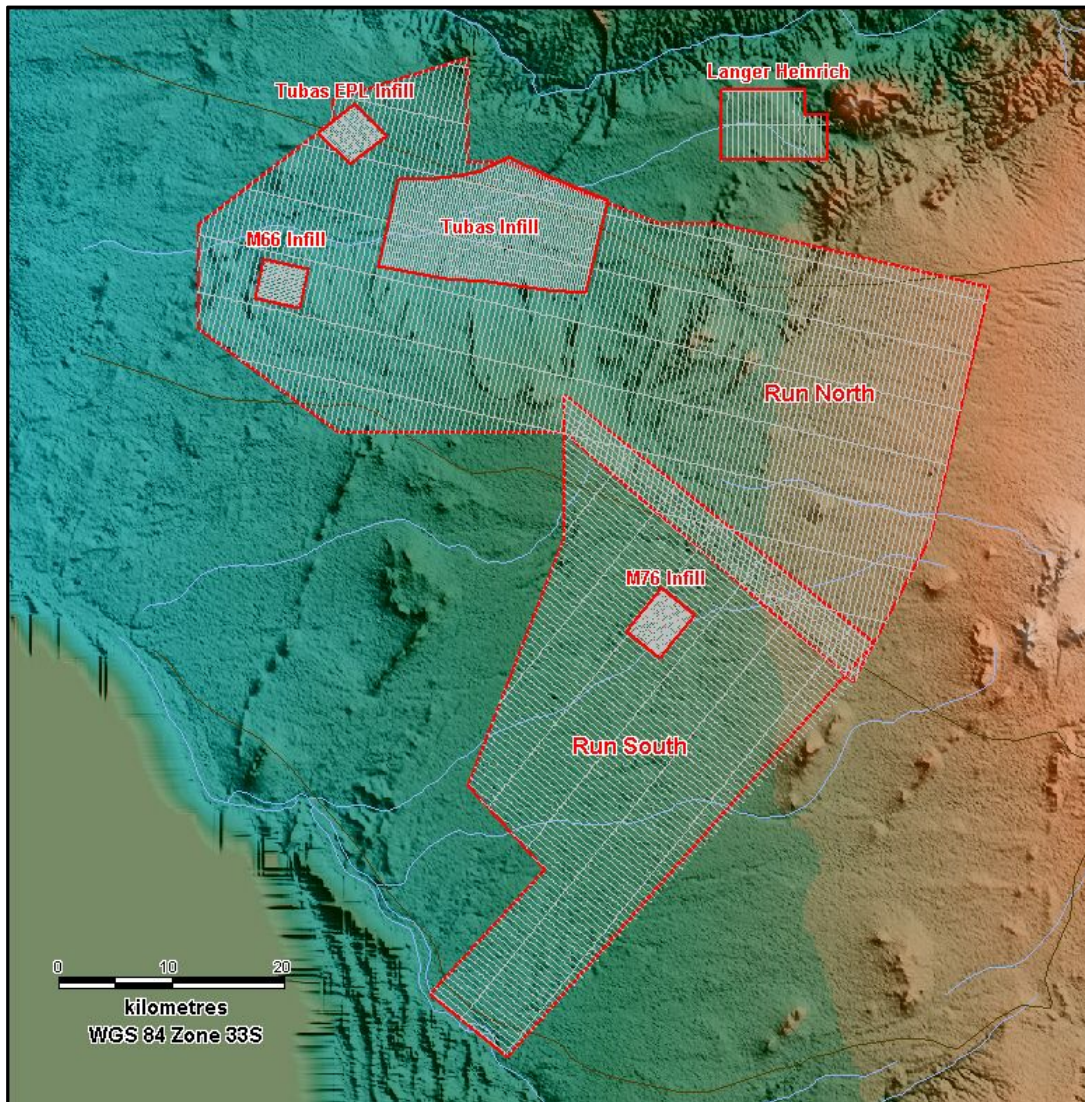


Figure 4: Flight lines of the 2008 AeroTEM HEM Survey

Depth to fresh bedrock from drilling was also gridded and imaged for selected prospect areas, and compared to the LEI results. The calculated conductive cover thickness results were compared to drilling data supplied by DYL over the known palaeochannels hosting uranium mineralisation. In general, the calculated conductive cover thickness broadly agreed with the palaeochannel thickness determined from drilling (Figure 5). It should be noted that gridded images and resulting contours of the calculated conductive cover thickness model may only broadly represent the palaeochannels, because of the very broad 500m flight line spacing for this survey; i.e. modelling of the palaeochannels is limited by the survey flight line orientational resolution.

The drillholes shown in Figure 5 appear slightly vertically offset because the “envelope” of displayed drillholes is 50 m each side of the survey line. Therefore, their collar elevations are likely to be slightly different to the survey line elevation given the slope of the ground on either side of the profile and the 3D geometry of meandering palaeochannels. Despite this, the logged bedrock lithologies generally reflect the same shape of the LEI auto-picked depth-to-basement well. Furthermore, the HEM results identified new zones of palaeochannel deposits that have not been drill tested and will form the basis for future direct drill targeting.

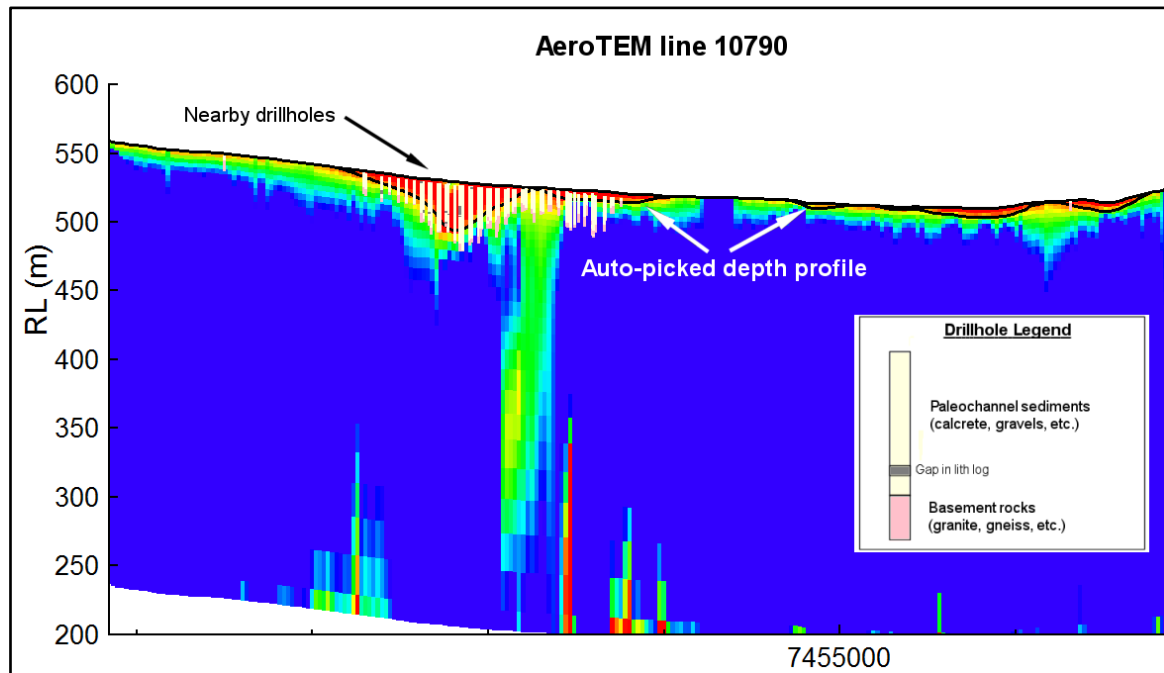


Figure 5: LEI-section showing the good correlation between bedrock depth from drilling and the depth-to-bedrock from the auto-picking routine

The palaeochannel depth map in this area can now be used to interpret uranium potential of undrilled areas and help to plan focussed drilling on new targets; despite the wide 500m survey line spacing. The most encouraging result of this interpretation is the confirmation of the lateral extent and potential depth of the palaeochannel system across the two EPLs. The palaeochannel system was independently confirmed to be well over 100 kilometres in extent and in places reaches depths of 130 metres.

#### Marenica *U-pgrade*<sup>TM</sup> Metallurgical Testwork Program

The *U-pgrade*<sup>TM</sup> metallurgical testwork program was successfully completed at the end of June 2016 (see DYL ASX releases dated 20 May, 31 May and 1 July 2016). The success of the program gave DYL the confidence to progress with the next phases of the Tumas Project and to execute a Technology Licencing Agreement with Marenica Energy Limited for the right to use its proprietary beneficiation process.

The testwork was conducted on a bulk sample that was excavated from the Tumas deposit late in 2015 and early 2016 (Figures 6 and 7). Apart from enabling the bulk sample to be excavated the trench also used for a detailed channel sampling exercise which allowed DYL to compare channel sample grades to those of the infill drilling program.

The grades compared favourably and are shown in Figure 8 below. Of particular interest was an improved understanding of the higher grades that were contained in the higher sulphate containing gypcrete layer compared to the underlying calcrete mineralisation. Particle size distribution tests were also conducted for metallurgical testwork purposes.

The *U-pgrade*<sup>TM</sup> metallurgical testwork program showed that more than 95% of the carbonate minerals in the Tumas bulk sample could be removed with a loss of less than 5% of the uranium whilst the de-sliming step rejected ~27% of the mass as fine particulate material. These results demonstrated that the critical carbonate and de-slime removal steps of the *U-pgrade*<sup>TM</sup> process work on the bulk samples provided and that it was effective in treating both a low and a medium sulphate sample. As a result DYL and Marenica concluded that the application of the *U-pgrade*<sup>TM</sup> process would enable a significant reduction in the mass being handled with only a minor loss of uranium, allowing the upgrading of uranium into a low mass concentrate at the Tumas Project.



Figure 6. Tumas Excavation December 2015



Figure 7. Tumas Trench January 2016

In summary the results indicated that a concentrate containing less than 3% of the ore feed mass grading between 10,000 and 15,000 ppm  $U_3O_8$  and containing greater than 82% of the uranium could be generated from the Tumas bulk samples by the U-pgrade<sup>TM</sup> process.



Figure 8: Image of the Tumas Trench showing channel sampling results.





## Summary of 2008-2010 Drilling Campaigns

### *Tumas Zones 1 and 2*

Zones 1 and 2 were drill-tested in the period 2008 to 2010 with a total of 4,555 reverse circulation (RC) holes being drilled by DYL's wholly owned Namibian operating subsidiary Reptile Uranium Namibia Pty Ltd ("RUN") for a total of 85,092 metres of drilling (Table 3).

The generally east-west striking Zone 1 mineralisation was drilled on a consistent, staggered 50 x 50 metre pattern giving a spacing along strike of approximately 100 metres between drill holes. The north-south trending Zone 2 mineralisation was sampled on a 50 x 50 metre square grid with some infilling to a 25 x 50 metre pattern generally along the margins of the mineralised zones.

The mineralisation domains used for the current study were interpreted to capture continuous zones of mineralisation above 50 ppm  $U_3O_8$ . The mineralisation contained in Zones 1 and 2 included in this MRE has a combined strike length of approximately 16 kilometres with an average width of around 400 metres and extends to a maximum depth of 47 metres.

Data available for the Tumas drilling includes in-rod and open-hole gamma logging, XRF assay results and scintillometer measurements from samples placed in lead shielded box as well as more recently ICP-MS. The current estimates are based primarily on one-metre down-hole composited  $U_3O_8$  grades derived from gamma logging. For the composite dataset compiled for the current estimates, grades derived from gamma logging were assigned a higher priority than XRF assay results, and scintillometer derived grades were used for intervals without logging or XRF results.

Tumas Zones 1 and 2 resources were estimated by Multiple Indicator Kriging (MIK) with block support correction, and reflect open-cut mining selectivity. As requested by RUN, the estimates assume one metre mining bench heights with 5 x 5 metre grade control sampling. Estimates for mineralisation tested by consistently 50 x 50 metre spaced drilling are classified as Indicated and all other estimates are classified as Inferred.

**Table 3. Tumas Zones 1 and 2 Drilling Campaigns (2008-2010)**

Deposit Zone	2008		2009		2010		Total	
	Holes	Metres	Holes	Metres	Holes	Metres	Holes	Metres
<b>Zone 1</b>	2,312	27,942					2,312	27,942
<b>Zone 2</b>			1,185	29,772	1,053	27,378	2,238	57,150
<b>Total</b>	<b>2,312</b>	<b>27,942</b>	<b>1,185</b>	<b>29,772</b>	<b>1,053</b>	<b>27,378</b>	<b>4,550</b>	<b>85,092</b>

### *Tumas Zone 3*

In addition to the Tumas 1 and 2 resource estimates presented in Table 1 the current study included construction of a MIK model for the Tumas 3 area. This modelling suggests that, at a cut-off grade of 200 ppm  $U_3O_8$ , the Tumas 3 area has the potential to host an exploration target of approximately 20 to 30 million tonnes at a grade of approximately 200 to 250 ppm  $U_3O_8$  which would more than double the Tumas Project Mineral Resource Estimate. This potential mineralisation is based on broadly spaced drilling (Table 4) and has had insufficient exploration to define a Mineral Resource, and the estimates of tonnage are conceptual in nature. It is uncertain that further drilling will convert any of the exploration potential to a Mineral Resource.

Drilling included 50 metre spaced holes along sets of east-west and north-south traverses separated by 600 to 2,000 metres, and some locally tight-spaced infill drilling. When combined with geophysical survey results, this wide-spaced sampling provides an indication of the extent and general orientation of mineralisation in Tumas Zone 3, however the mineralisation is too poorly defined at this stage for inclusion in resource estimates.

Interpretation of the Tumas 3 mineralisation is further hindered by the number of drill holes without gamma logging, XRF or scintillometer measurements which is notably higher than for the other Tumas areas. These un-sampled holes include holes surrounded by mineralised drilling, with around 10% of drill holes within the plan-view extents of the mineralised domain interpreted for the study having no grade data.



Table 4. Tumas Zone 3 Drilling Campaigns (2008-2010)

Deposit Zone	2008		2009		2010		Total	
	Holes	Metres	Holes	Metres	Holes	Metres	Holes	Metres
<b>Zone 3</b>	184	3,606	1,222	23,583			1,406	27,189
<b>Total</b>	<b>184</b>	<b>3,606</b>	<b>1,222</b>	<b>23,583</b>	-	-	<b>1,406</b>	<b>27,189</b>

### Next Steps

A draft project schedule (which is reliant on further funding) has been prepared by DYL in consultation with Marenica. The immediate activities that will be undertaken are:

- The first phase of a two-phased 600 metre geometallurgical drill program has been approved and will commence shortly.
- The first phase will consist of an HQ triple tube diamond drilling campaign (to maximise core recovery) which will enhance overall geotechnical knowledge and inform the location of the holes for the second phase of the program
- The second phase of the program will consist of a PQ triple tube diamond drilling campaign and will also enhance geotechnical knowledge but is primarily to generate the samples to be used in the second phase metallurgical (variability) testwork program.
- A prefeasibility study is to be conducted in parallel with the drilling campaign, based on the technical work completed to date and will be completed prior to the commencement of the metallurgical variability testwork program.

DYL is extremely pleased with its recent success and is increasingly confident that the Tumas Project is ideally positioned to become Namibia's next uranium mine.

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For further information on the Company and its projects visit the website at [www.deepyellow.com.au](http://www.deepyellow.com.au)

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### 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.

The Company recently completed metallurgical testwork and is evaluating fast track development options for its Tumas Project which consists of extensive surficial calcrete palaeochannel deposits which are amenable to physical beneficiation and upgrading techniques.

Deep Yellow also holds the Omahola Open Pit Alaskite Heap Leach Project on which value engineering studies are being conducted to supplement the recently completed preliminary economic analysis.

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## APPENDIX 1

Deep Yellow – Namibia Mineral Resources Table

Deposit	Category	Cut-off (ppm U <sub>3</sub> O <sub>8</sub> )	Tonnes (M)	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (t)	U <sub>3</sub> O <sub>8</sub> (Mlb)
<b>Omahola Project - JORC 2004</b>						
INCA Deposit ♦	Indicated	250	7.0	470	3,300	7.2
INCA Deposit ♦	Inferred	250	5.4	520	2,800	6.2
Ongolo Deposit #	Measured	250	7.7	395	3,000	6.7
Ongolo Deposit #	Indicated	250	9.5	372	3,500	7.8
Ongolo Deposit #	Inferred	250	12.4	387	4,800	10.6
MS7 Deposit #	Measured	250	4.4	441	2,000	4.3
MS7 Deposit #	Indicated	250	1.0	433	400	1.0
MS7 Deposit #	Inferred	250	1.3	449	600	1.3
<b>Omahola Project Total</b>			<b>48.7</b>	<b>420</b>	<b>20,400</b>	<b>45.1</b>
<b>Tubas Sand Project - JORC 2012</b>						
Tubas Sand Deposit #	Indicated	100	10.0	187	1,900	4.1
Tubas Sand Deposit #	Inferred	100	24.0	163	3,900	8.6
<b>Tubas Sand Project Total</b>			<b>34.0</b>	<b>170</b>	<b>5,800</b>	<b>12.7</b>
<b>Tumas Project - JORC 2012</b>						
Tumas Deposit ♦	Measured	200	9.7	386	3,700	8.2
Tumas Deposit ♦	Indicated	200	6.5	336	2,200	4.8
Tumas Deposit ♦	Inferred	200	0.4	351	150	0.3
<b>Tumas Project Total</b>			<b>16.6</b>	<b>366</b>	<b>6,050</b>	<b>13.4</b>
<b>Tubas Calcrete Resource - JORC 2004</b>						
Tubas Calcrete Deposit	Inferred	100	7.4	374	2,800	6.1
<b>Tubas Calcrete Total</b>			<b>7.4</b>	<b>374</b>	<b>2,800</b>	<b>6.1</b>
<b>Aussinanis Project - JORC 2004</b>						
Aussinanis Deposit ♦	Indicated	150	5.6	222	1,200	2.7
Aussinanis Deposit ♦	Inferred	150	29.0	240	7,000	15.3
<b>Aussinanis Project Total</b>			<b>34.6</b>	<b>237</b>	<b>8,200</b>	<b>18.0</b>
<b>TOTAL RESOURCES</b>			<b>141.3</b>	<b>306</b>	<b>43,250</b>	<b>95.3</b>

<b>Notes:</b>	Figures have been rounded and totals may reflect small rounding errors.
	XRF chemical analysis unless annotated otherwise.
	♦ eU <sub>3</sub> O <sub>8</sub> - equivalent uranium grade as determined by downhole gamma logging.
	# Combined XRF Fusion Chemical Assays and eU <sub>3</sub> O <sub>8</sub> values.
	Where eU <sub>3</sub> O <sub>8</sub> values are reported it relates to values attained from radiometrically logging boreholes.
	Gamma probes were calibrated at Pelindaba, South Africa in 2007 and sensitivity checks are conducted
	by periodic re-logging of a test hole to confirm operation between 2008 and 2013.
	During drilling, probes are checked daily against a standard source.



## Competent Persons' Statements

### Omahola Project – JORC 2004

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 Kärner, who was the Exploration Manager for 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Dr Kärner consents to the inclusion in the report of the matters based on her 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 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition).

The information in this report relating to the Omahola Project Exploration Results and Mineral Resource Estimates was prepared and first disclosed under the JORC Code 2004 and 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.

### Tubas Sand Project – JORC 2012

Where the Company refers to the Tubas Sand Project resource in this report (referencing the release made to the ASX on 24 March 2014 entitled "Tubas Sand Project – Resource Update"), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the resource estimate with that announcement continue to apply and have not materially changed.

### Tumas Project – JORC 2012

#### *Exploration Results and Mineral Resource Estimate:*

The information in this report that relates to Exploration Results for the Tumas Deposit Resource Estimate, Resource Database and Bulk Densities are based on information compiled by Mr. Martin Hirsch, M.Sc .Geology, who is a member of the Institute of Materials, Minerals and Mining (UK) and the South African Council for Natural Science Professionals. Mr. Hirsch is the Exploration Manager for 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 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 2012 Edition). Mr. Hirsch consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Tumas Mineral Resource Estimate is based on work completed by Mr. Martin Hirsch, M.Sc .Geology, who is a member of the Institute of Materials, Minerals and Mining (UK) and the South African Council for Natural Science Professionals. Mr. Hirsch is the Exploration Manager for 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 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 2012 Edition). Mr. Hirsch consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### *Geophysical Results:*

Where the Company refers to the geophysical results for the Tumas Project in this report (referencing the release made to the ASX dated 16 July 2015 titled "Enhanced Palaeochannel Prospectivity"), it confirms that it is not aware of any new



information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning those results continue to apply and have not materially changed.

**Tubas Calcrete Deposit – JORC 200**

The information in this report that relates to previous Exploration Results for the Tubas Calcrete Mineral Resources 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 was the Exploration Manager for Reptile Uranium Namibia (Pty) Ltd during 2013, 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Dr Katrin Kärner consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this report that relates to the Tubas Calcrete Mineral Resource is based on information compiled by Mr Willem H. Kotzé Pr.Sci.Nat MSAIMM. Mr Kotzé is a Member and Professional Geoscientist Consultant of Geomine Consulting Namibia CC. Mr Kotzé 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Mr Kotzé consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

The information relating to Tubas Calcrete Mineral Resource Estimates was prepared and first disclosed under the JORC Code 2004. These have 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.

**Aussinanis Deposit – JORC 2004**

The information in this report that relates to the Aussinanis Mineral Resources is based on work completed by Mr Jonathon Abbott who is a full time employee of MPR Geological Consultants Pty Ltd and a Member of the Australian Institute of Geoscientists. Mr Abbott 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 a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Mr Abbott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information relating to the Aussinanis Mineral Resource Estimate 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.



**APPENDIX 2**

**JORC Code – Table 1 Tumas Project Mineral Resource Estimate 12 October 2016**

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# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	• Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• U<sub>3</sub>O<sub>8</sub> values are derived from both down-hole total gamma counting (eU<sub>3</sub>O<sub>8</sub>) and chemical assay data.</li> </ul> <p><b>Total gamma eU<sub>3</sub>O<sub>8</sub></b></p> <ul style="list-style-type: none"> <li>• 33 mm Auslog total gamma probes were used and operated by company personnel.</li> <li>• Gamma probes were calibrated at Pelindaba, South Africa, in May 2007 (T029, T030) and in December 2007 (T161, T162, T164, T165).</li> <li>• Between 2008 and 2013 sensitivity checks were conducted by periodic re-logging of a test hole (<b>Hole-ALAD1480</b>) to confirm operation.</li> <li>• During drilling, probes were checked daily against a standard source. Majority of probing was done with probe T161 and T165</li> <li>• Auslog probes were re-calibrated at the calibration pit located at Langer Heinrich Mine site in December 2014 and probes 003, T029, T030, T161, T162, T164, T165 and T274 again in May 2015.</li> <li>• Gamma measurements were taken at 5 cm intervals at a logging speed of approximately 2 m per minute.</li> <li>• Probing was done immediately after drilling mainly through the drill rods and in some cases in the open holes. Rod factors were established to compensate for the reduced gamma counts when logging was done through the rods. No correction for water was done.</li> <li>• The gamma measurements were recorded in counts per second (c/s) and were converted to equivalent eU<sub>3</sub>O<sub>8</sub> values over 1m intervals using the probe-specific K-factor. Disequilibrium studies on 22 samples by ANSTO Minerals in 2008 confirmed that the U<sup>238</sup></li> </ul>

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Criteria	JORC Code explanation	• Commentary
		<p>decay chains of the wider Tumas deposit are within an analytical error of <math>\pm 10\%</math>, in secular equilibrium.</p> <p><b>Chemical assay data</b></p> <ul style="list-style-type: none"> <li>• Geochemical samples were derived from Reverse Circulation (RC) drilling at intervals of 1 m. Samples were spilt at the drill site using either a riffle or cone splitter to obtain a 1 to 4 kg sample from which 90 g was pulverized to produce a subset for XRF-analysis.</li> <li>• A total of 16,048 samples from Tumas 1, 2 and 3 were taken and assayed for <math>U_3O_8</math> by loose powder XRF. 15 364 assays were completed at the company owned laboratory in Swakopmund Namibia, 646 at Set Point Laboratories, RSA and 38 samples were analysed at Scientific Services, RSA.</li> <li>• In the 2014 drill program 240 samples were taken for confirmatory assay and submitted to Bureau Veritas laboratory in Swakopmund for <math>U_3O_8</math> ICP-MS following the procedure above.</li> <li>• The external laboratory and repeat assays indicate a positive bias for samples above 300ppm and analysed before April 2009.</li> <li>• A factor was applied for those of -22.6% to compensate for this effect.</li> <li>• All other assay results confirm equivalent uranium grades correctly correlated and remain within a statistically acceptable margin of error.</li> <li>• 5,800 one meter Tumas 2 sample intervals were estimated both via XRF and lead-block scintillometer measurements. The resulting correlation fitted well with XRF assay results and subsequently was used to assign <math>eU_3O_8</math> grade to drilling intervals where grade was available from scintillometer readings, only.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling was used throughout the Tumas Project.</li> <li>• All holes were drilled vertically and intersections measured present true thicknesses.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill chip recoveries were good, in excess of 90%.</li> <li>• Drill chip recoveries were assessed by weighing 1 m drill chip</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>samples at the drill site. Weights were recorded in sample tag books.</li> <li>Sample loss was minimized by placing the sample bags directly underneath cyclone/splitter</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes were geologically logged. Zone 1 and 2 logging is well in excess of 95%.</li> <li>The logging was qualitative in nature. The lithology type was determined for all samples.</li> <li>Other parameters routinely logged include color, color intensity, weathering, oxidation, grain size, hardness, carbonate (CaCO<sub>3</sub>) content, sample condition (wet, dry) and total gamma count (by Rad-eye monitor).</li> <li>In the 2014 infill drilling program 1,430m was geologically logged, which represents more than 99% of the meters drilled.</li> <li>Lithology codes were used to generate wireframes for the different host-rocks, which are from top to bottom: scree, sandy gypcrete or non-calcareous and calcareous sand, gravel, massive calcrete and metamorphosed bedrock.</li> <li>This information was used in the reporting process.</li> <li>Infill drilling in Zone 1 during 2014 confirmed mineralisation continuity at grade control scale.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Two types of sample splitters were used at Tumas: 1) Tier riffle splitter mounted on the rig giving an 87.5% (reject) and a 12.5% sample (assay sample). A portable 2-tier (75%/25%) splitter was on hand to treat any oversize assay sample. All sampling was dry.</li> <li>The above sub-sampling techniques are common industry practice and appropriate.</li> <li>Sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ul>

Number of assays			Number of standards			Number of blanks			Number of field duplicates		Number of Lab repeats	
RUN	SS	SP	RUN	SS	SP	RUN	SP	SS	RUN	SP	RUN	SS
15364	38	646	7	145	65	122	19	130	419	2	1033	193

Criteria	JORC Code explanation	Commentary																															
		<ul style="list-style-type: none"> <li>RUN (DYL's in-house laboratory in Swakopmund); SP (Setpoint Laboratories RSA), SS (Scientific Services Laboratories RSA).</li> <li>SS used three different standards, namely AMIS-91, DH-1 and SARM 78 see table below:</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Standard</th> <th rowspan="2">Number of assays</th> <th rowspan="2">Expected value (ppm)</th> <th rowspan="2">Two standard deviation</th> <th colspan="3">Assay</th> </tr> <tr> <th>average</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>AMIS-91</td> <td>13</td> <td>264 (U)</td> <td>18</td> <td>280</td> <td>272</td> <td>289</td> </tr> <tr> <td>DH-1</td> <td>267</td> <td>2,083 (U<sub>3</sub>O<sub>8</sub>)</td> <td>35</td> <td>2,063</td> <td>1,983</td> <td>2,140</td> </tr> <tr> <td>SARM 78</td> <td>2</td> <td>(U)</td> <td></td> <td>234</td> <td>233</td> <td>234</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>In 2014 field duplicates were inserted into the assay batch at an approximate rate of one for every 7 samples which is compatible with industry norm.</li> </ul>	Standard	Number of assays	Expected value (ppm)	Two standard deviation	Assay			average	Min	Max	AMIS-91	13	264 (U)	18	280	272	289	DH-1	267	2,083 (U <sub>3</sub> O <sub>8</sub> )	35	2,063	1,983	2,140	SARM 78	2	(U)		234	233	234
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SARM 78	2	(U)		234	233	234																											
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The analytical method employed was XRF. The technique is industry standard and considered appropriate.</li> <li>The analytical method employed for the 2014 drill program was ICP-MS which is also considered industry standard and appropriate</li> <li>Downhole gamma tools were used as explained under 'Sampling techniques'. This is the principal evaluating technique.</li> <li>The ratio of duplicates to primary samples is 53%, with duplicates reporting within a 10% precision.</li> <li>DYL monitored the performance of its XRF instrument through the analysis of standards and replicates. The standards (certified reference materials) were assayed and then used to monitor instrument accuracy and consistency.</li> <li>AMIS standards P0090, P0092 plus a RUN Internal Standard were submitted in a ratio of 1: 24.</li> </ul>																															
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>Paper logs were recorded in the field; sample tag books than filed at the RUN's office in Swakopmund. The field drill data of those logs and tag books (lithology, sample specifications etc.) is captured by designated personnel and after passing validation imported into a geological database.</li> </ul>																															

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Twinning RC holes was not considered due to the high variability in grade distribution.</li> <li>Data was uploaded following a strict validation protocol hardcoded into the SQL database upload routines.</li> <li>Equivalent uranium (“eU<sub>3</sub>O<sub>8</sub>”) values are calculated from raw gamma files by applying calibration factors and casing factors where applicable.</li> <li>The adjustment factors are stored in the database.</li> <li>eU<sub>3</sub>O<sub>8</sub> data is composited to 1m intervals.</li> <li>The ratio of eU<sub>3</sub>O<sub>8</sub> vs assayed U<sub>3</sub>O<sub>8</sub> for matching composites was used to quantify the statistical error. It was found that they all lie within statistically acceptable margins.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The collars were surveyed by in-house operators using a differential GPS.</li> <li>All drill holes are vertical and shallow, therefore, no down-hole surveying was required.</li> <li>The grid system is World Geodetic System (WGS) 1984, Zone 33.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>The data spacing and distribution is optimized along channel direction. The drill grid is close to 50m by 50m in EW and NS rectangular directions following the main channel.</li> <li>The drill pattern is considered sufficient to establish an optimised Mineral Resource.</li> <li>The total gamma count data, which is recorded at 5 cm intervals, is composited to 1 m composites down hole and correlates to the 1 m geochemical sampling.</li> <li>The 2014 infill drilling program in Zone 1 (90 holes) was drilled at 12.5m collar centres which is sufficient to establish degree of geological continuity.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a</li> </ul>	<ul style="list-style-type: none"> <li>Uranium mineralisation is strata bound and distributed in fairly continuous horizontal layers. Holes were drilled vertically and mineralised intercepts represent the true width.</li> <li>All holes were sampled down-hole from surface. Geochemical samples were collected at 1 m intervals. Total-gamma count data</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>sampling bias, this should be assessed and reported if material.</i>	was collected at 5 cm intervals.
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>1m RC drill chip samples were prepared at the drill site. The assay samples were stored in plastic bags. Sample tags were placed inside the bags. The samples were placed into plastic crates and transported from the drill site to RUN's site premises in Swakopmund by company personnel, prior to analyses and from there to the external laboratories when used.</li> <li>Upon completion of the assay work the remainder of the drill chip sample bags for each hole was packed back into crates and then stored in designated containers in chronological order, locked up and kept safe at RUN's dedicated sample storage yard at Rocky Point located outside Swakopmund.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Various in house audits were conducted.</li> <li>D. M. Barrett (PhD MAIG) conducted an audit of gross count gamma logging procedures and log reduction methods used by Deep Yellow Limited.</li> <li>He concludes his audit commenting: "In summary, it is my belief that the equivalent uranium grades reported by Reptile from their gamma logging program are reliable and are probably within a few percent to the true grade".</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The work to which the Exploration Results relate was undertaken on exclusive prospecting grant EPL3497 (Tumas Zone 1 &amp; 2) and EPL3496 (Tumas Zone 3).</li> <li>The EPLs were originally granted to Reptile Uranium Namibia (Pty) Ltd (RUN) in 2006. The EPLs are in good standing and are valid until 05 June 2017.</li> <li>The EPLs are located within the Namib Naukluft-National Park in</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Namibia.</p> <ul style="list-style-type: none"> <li>The EPLs are subject to an agreement with a Namibian Black Empowerment partner whereby the partner has the right to acquire 5% of the project for historical costs.</li> <li>There are no known impediments to the project beyond Namibia's standard permitting procedures.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Prior to RUN's ownership of these EPLs, extensive work was conducted by Anglo American Prospecting Services (AAPS), General Mining and Falconbridge in the 1970s.</li> <li>Assay results from the historical drilling are available to RUN on paper logs. They were not captured digitally and were not used for estimating the Tumas Mineral Resource.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tumas mineralisation occurs as secondary carnotite enrichment of variably calcretised palaeochannel and sheet wash sediments and adjacent weathered bedrock.</li> <li>Uranium mineralisation at Tumas is surficial, stratabound and hosted by Cenozoic sediments, which include from top to bottom scree sand, gypcrete, calcareous sand and calcrete.</li> <li>The majority of the mineralisation is hosted in calcrete. Locally, the underlying weathered Proterozoic bedrock is occasionally also mineralized.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>4,550 RC holes over 85,092m were used for estimating the Tumas Zones 1 &amp; 2, with all relevant drilling being done between 2008 and 2010.</li> <li>All holes were drilled vertically and intersections measured present true thicknesses.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>5 cm gamma intervals were composited to 1 m intervals.</li> <li>1 m composites of eU<sub>3</sub>O<sub>8</sub> were used for estimate.</li> <li>No grade truncations were applied.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation is sub-horizontal and all drilling vertical, therefore, mineralised intercepts are considered to represent true widths.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>No new drilling intercepts are being reported thus no tabulations are included.</li> <li>All relevant intercepts were included within the text and appendices of previous releases.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive reporting of all Exploration Results was practiced throughout the program.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>The wider area and Tumas deposit was subject to extensive drilling in the 1970's and 1980's by Anglo American Prospecting Services, Falconbridge and General Mining.</li> <li>Downhole gamma-gamma density logging for bulk density was conducted by Terratec.</li> </ul>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Further work is planned east of Tumas Zone 1. An area extending for at least another 2 km towards the East and North-East is mineralised showing carnotite in calcrete in shallow diggings less than 1/2 meter below surface; in this region Rad-eye readings are typically between 200-300cps.</li> <li>The area is planned for inclusion in a future drilling program.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Further resource extension drilling is expected as mineralisation is open along and across strike.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<p>A set of SOP's (Standard Operating Procedures) were defined that safeguard data integrity which cover the following aspects:</p> <ul style="list-style-type: none"> <li>Capturing of all exploration data; geology and probing;</li> <li>QA/QC of all drilling, geophysical and laboratory data;</li> <li>Data storage (database management), security and back-up;</li> <li>Reporting and statistical analyses on the data using the Micromine (MM) software package.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>During all drilling programs regular site visits were conducted by the Company's then Competent Person who signed off on all exploration data.</li> <li>More recently, the Company's current Competent Person has undertaken visits since April 2015, with the most recent visit being in October 2016.</li> <li>This Competent Person oversaw the excavation of a pit in December 2015 and January 2016 for the generation of a bulk sample for metallurgical test work purposes.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Confidence in the geological interpretation and modelling of the sedimentary channel fill is high.</li> <li>The factors affecting grade distribution are channel morphology and potentially bedrock profile. Additional mineralisation is evident beyond the main channel in surface scree filling shallow incised, undulating bedrock topography; these are not reflected in the Resource Estimate.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The Tumas Zones 1 and 2 orebody has a combined strike length of approximately 16 km and an average width of between 400 to 500 metres.</li> </ul>

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		<ul style="list-style-type: none"> <li>The mineralised calcrete reaches from a shallow depth below surface of 2 to 3m deep down to 40 meters in places in Tumas Zone 2 and can be deeper in Zone 3.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>The present estimates were previously composed by Hellman &amp; Schofield (Pty) Ltd in 2009 and updated in 2010.</li> <li>Resources were estimated by Multiple Indicator Kriging (MIK) with block support correction reflecting open cut mining selectivity.</li> <li>The estimates include scenarios with one, two and three metre mining bench heights. The three metre bench height option assumes selectivity of 4.0 by 4.0 by 3.0 metres (east, north, elevation) with grade control sampling on a 3.2 by 3.6 by 1.0 metre pattern.</li> <li>The one and two metre bench height scenarios assume 5 by 5 metre mining selectivity with 5 by 5 metre grade control sampling.</li> <li>The estimation methodology is comparable to those used at the nearby Langer Heinrich Uranium Mine as reported by Paladin Energy Ltd.</li> <li>Langer Heinrich has a similar style of mineralisation.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>An optical assessment of sample material was done during the sampling process and samples were classified as either “dry” or “wet”.</li> <li>Tonnages are estimated dry.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>1m composites below eU<sub>3</sub>O<sub>8</sub> of 50ppm were excluded from the 2010 estimation process.</li> <li>The range of cut-off grades were chosen based on “potentially economic” criteria and the fact that mineralization is continuous.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Possible scenarios considered are open cast mining with one, two or three-meter mining bench heights.</li> <li>A three-meter bench height option assumes selectivity of 4.0 by 4.0 by 3.0 meters (east, north and elevation) with grade control sampling on a 3.2 by 3.6 by 1.0-meter pattern. The one and two-meter bench height scenarios assume 5 by 5-meter mining selectivity with 5 by 5-meter grade control sampling.</li> <li>A surface miner will be considered as an alternative method of mining during future feasibility studies.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Initially, detailed mineralogical characterisation tests were conducted which allowed the Company to derive a sound understanding of how a calcrete ore from Tumas would respond to beneficiation and further downstream processing.</li> <li>Successful metallurgical test work has been carried out in Perth, Western Australia that has demonstrated that calcrete ore from Tumas Zone 1 can be efficiently and cost effectively beneficiated using Marenica Energy Limited's proprietary <i>U-pgrade</i><sup>TM</sup> process.</li> <li>Marenica enjoyed significant success in conducting similar tests on bulk samples from its own Namibian calcrete deposit which, apart from the much lower grade, shares the same mineralogical characteristics as Tumas.</li> <li>Also, the nearby Langer Heinrich Uranium Mine has successfully mined and processed calcrete ore for almost a decade. Although its grade is higher the mineralogical characteristics are also similar.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Independent consultant SoftChem completed a scoping level Environmental Impact Assessment for the Tumas Project in 2013.</li> <li>As the mining progresses to different sections of the mine, waste material will be backfilled into some of the mined out areas.</li> <li>The Marenica <i>U-pgrade</i><sup>TM</sup> process has a further benefit in that the non-chemical beneficiation produces a clean waste product that can be reintroduced into the mining void.</li> <li>Rehabilitation of the mined out areas and stockpile facility will be progressive throughout the life of the mine. Any remaining waste rock stockpiles will be shaped and contoured to blend into the surrounding environment.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density was derived from borehole density logging (gamma-</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</p> <ul style="list-style-type: none"> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<p>gamma) during the 2014 campaign.</p> <ul style="list-style-type: none"> <li>284 1m composites where measured in that process resulting in an average density of 2.35.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>This mineral resource estimate reflects a partial change in the classification of resource blocks from the 2010 H&amp;S resource model.</li> <li>Post 2010 geological work including a close-spaced Infill drilling program demonstrated significantly improved continuities of mineralisation across the channel.</li> <li>New semi-variography presented improved structures with ranges of up to 55m.</li> <li>Search ranges were used accordingly and blocks were re-assigned categories according to drilling data-density.</li> <li>A search radius of 55m was used to assign "measured" blocks if more than 50 data points (1m composites) were encountered.</li> <li>No changes were made to block grade or proportions.</li> <li>The Competent Person is satisfied that the applied methodology is appropriate and the resulting block re-classification being appropriate.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>No additional reviews were conducted beyond those carried out by the various Competent Persons over time.</li> </ul>
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be</li> </ul>	<ul style="list-style-type: none"> <li>The applied geostatistical approach to arrive at the 2010 resource (MIK) is considered sound and is applied by geostatisticians across the globe and industry.</li> <li>The applied geostatistical approach to re-allocate confidence levels of the pre-existing resource model is sound and unbiased and presents a true representation of drilling data.</li> <li>It is this Competent Person's opinion that the classification of resource blocks reflects data density correctly and appropriately.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"><li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	