# Quarterly Activities Report
# for the Period ended 31 March 2020

**ASX RELEASE** **29 April 2020**

## Highlights

- **Drilling at Koppies (EPL 6987) in Namibia intersected high-grade uranium mineralisation including:**
  - **KOR62 3 m at 3,087 ppm $U_3O_8$ from 1 m**
    - **Including 1 m at 7,060 ppm $U_3O_8$**
  - **KOR21 11 m at 502 ppm $U_3O_8$ from 6 m**
- **A major expansion of the Koppies palaeochannel system has been indicated from analysis of horizontal loop electromagnetic surveys**
- **Koppies palaeochannel system expands to 6.4 km² in area**
- **HLEM results indicate that the paleochannel extends into Marenica's adjoining tenement**
- **Marenica holds a contiguous land package in the highly prospective Namib area**
- **Marenica increases its tenement holding for nuclear fuel minerals in Namibia with the grant of EPL 7508**
- **On 9 April 2020, the Company announced that it had completed a $1 Million Capital Raising**

## *EXPLORATION UPDATE*

### *HLEM and follow-up Drilling at Koppies Identifies Expansive Palaeochannel*

Koppies (EPL 6987) is located in the Namib Area of Namibia and covers part of the eastern extension of the highly prospective Tumas palaeochannel system, which also hosts other uranium deposits, including Tumas and Tubas (held by Deep Yellow Limited – ASX:DYL). Koppies has been the focus of Marenica's exploration activities during the quarter with exploration including ground-based geophysics using Horizontal-Loop Electromagnetic ("HLEM") surveys with follow-up drilling to identify mineralisation.

During the quarter, assay results were received from the December 2019 Reverse Circulation ("RC") drilling program, with intersections announced to the ASX on the 10 February 2020 – "Drilling Intersection – 1 m at 7,060 ppm $U_3O_8$". The best results included:

- KP062 3 m at 3,087 ppm $U_3O_8$ from 1 m
  - Including 1 m at 7,060 ppm $U_3O_8$
- KP021 11 m at 502 ppm $U_3O_8$ from 6 m

The drilling program resulted in the identification of significant and continuous uranium mineralisation in the Koppies 2 palaeochannel.

The exploration conducted on Koppies during late 2019 concluded that HLEM was effective in identifying palaeochannels and is the preferred method for locating palaeochannels, with its use expected to significantly improve future drill targeting.

A HLEM survey program was completed at Koppies just prior to Namibia going into COVID-19 lockdown towards the end of March, a lockdown that has suspended all exploration activities. The results indicate a major expansion to the Koppies palaeochannel system, doubling the palaeochannel area to approximately 6,400,000 m² or 6.4 km² and widening in the east as it crosses the tenement boundary into Marenica's adjoining tenement. The announcement for this HLEM survey was released to ASX on 26 March 2020.

The palaeochannel system extends the full width of the tenement, approximately 5.3 km, and is approximately 3.9 km from the most northern point to the most southern point. The Koppies palaeochannel system is open to the east, with the mineralised palaeochannel appearing to flow westwards from Marenica's EPL 7279, which borders Koppies to the east. The discovery of Koppies 2 increases the potential for mineralisation to be identified at EPL 7279.

The Koppies drilling and palaeochannel system within the Koppies EPL is shown in Figure 1 below, and its location relative to Marenica's other EPL's and nearby known calcrete deposits in the Namib Area, are shown in Figure 2.

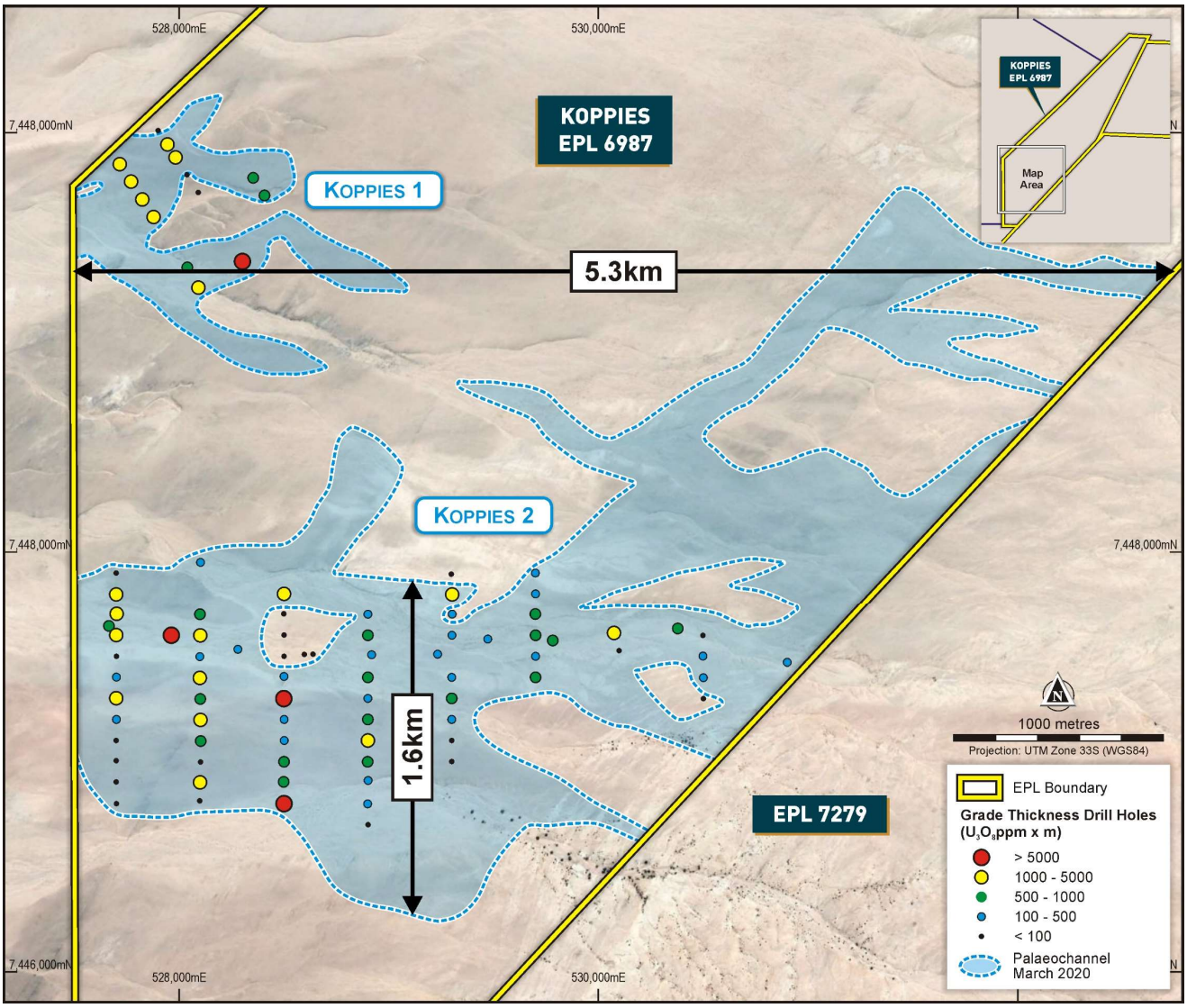


**Figure 1 – Detailed Location of Drill Holes at Koppies**

### *Koppies Potential*

Exploration to date at Koppies confirms that the uranium mineralisation is not confined to one single channel, however, is associated with a complex palaeodrainage system consisting of many palaeochannels. Identification of multiple mineralised palaeochannels emphasises the encouraging exploration potential of the extensive, uranium-fertile palaeochannel system at Koppies.

Mineralisation identified within the palaeochannels is calcrete hosted, the same style of ore used to develop Marenica's ***U-pgrade***$^{TM}$ uranium beneficiation process. The Company is therefore confident that ***U-pgrade***$^{TM}$ could be successfully applied to ore extracted at Koppies, thereby potentially resulting in a significant reduction in development and operating costs compared to conventional process routes.

The Koppies tenement is only 49 km² in area, representing less than 3% of the 1,988 km² area held by Marenica in the Namib Area. The Company is encouraged by the success achieved at Koppies to date, which highlights the significant potential of its large ground position held in the Namib Area.

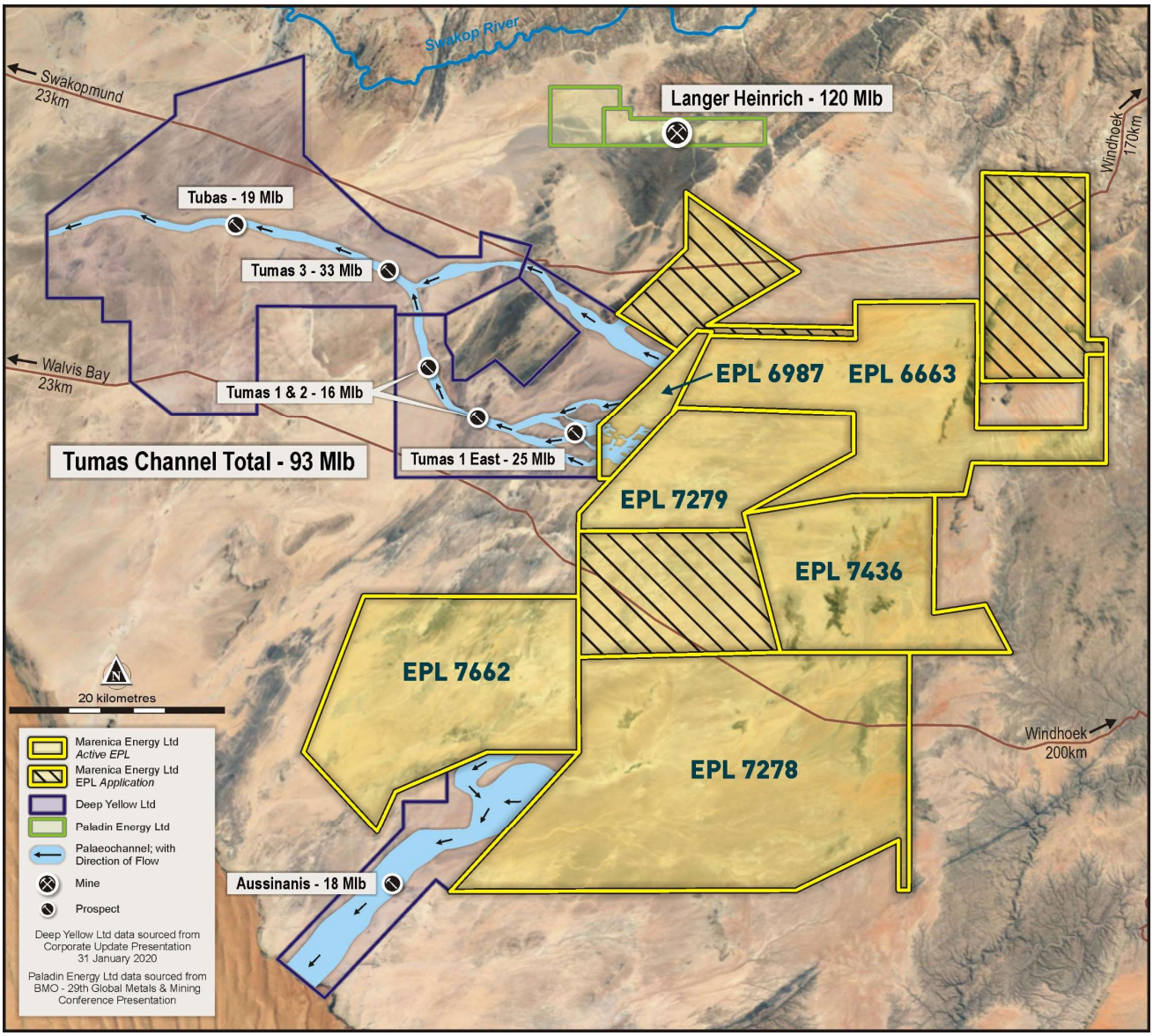


**Figure 2 – Location of Marenica's EPL's in the Namib Area, Namibia**

### *Expanded portfolio in Namibia*

During the quarter, the Company entered into a joint venture agreement with the holder of Exclusive Prospecting Licence ("EPL") 6663, which adjoins the Koppies tenement. Marenica now holds a contiguous land package in the highly prospective Namib Desert region of Namibia, which is upstream of the known deposits of Tumas and Aussinanis and also upstream of Marenica's Koppies palaeochannel system.

In addition, EPL 7508, located upstream of Mile 72, was granted during the quarter, further expanding Marenica's tenement holding for nuclear fuel minerals in Namibia (source: Namibia Mining Cadastre Portal). The Company has a total of six granted EPL's and three EPL applications in the Namib Area, two granted EPL's in the Marenica area, and two granted EPL and one EPL application in the Mile 72 area (Figure 3).

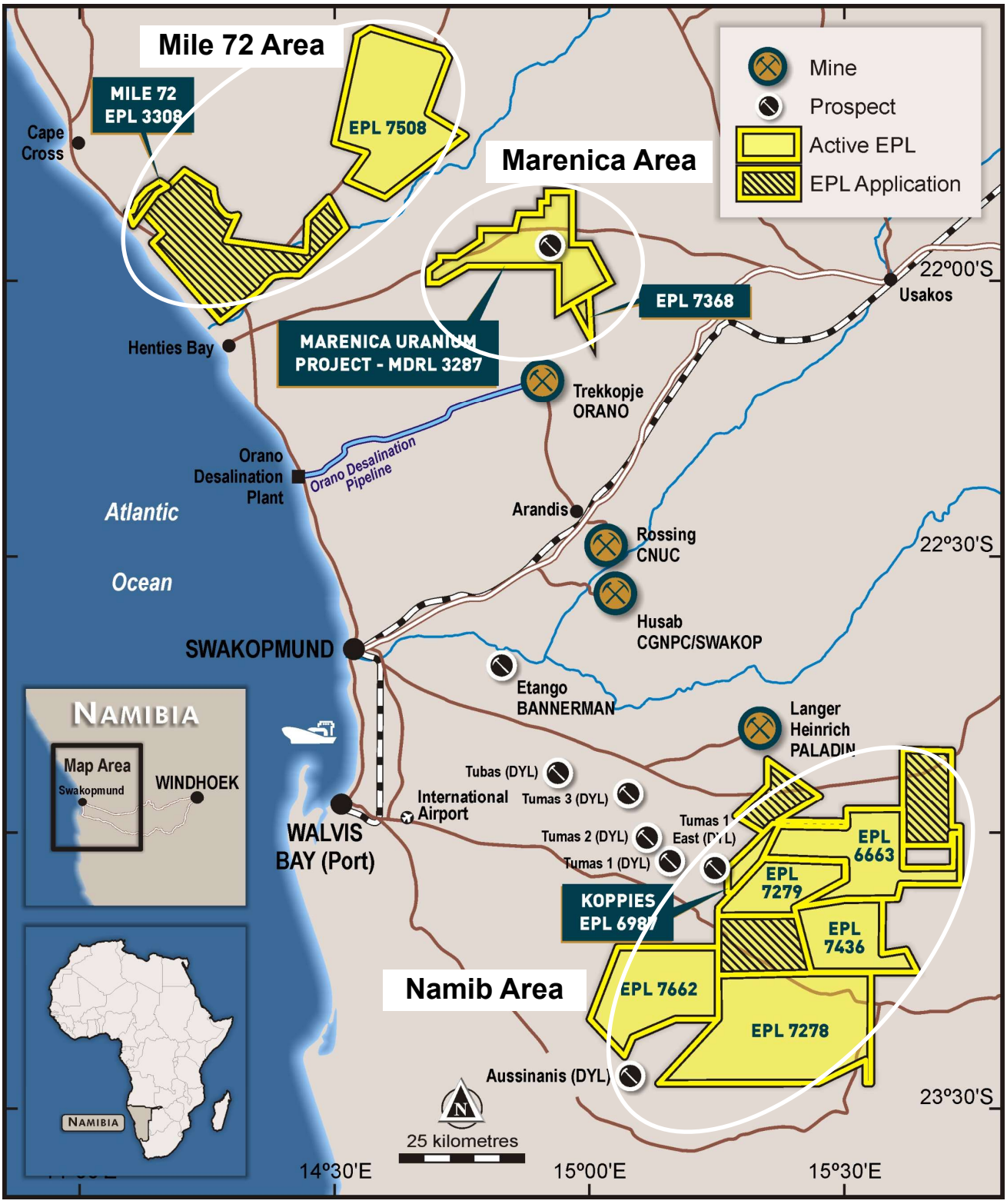


**Figure 3 – Location of EPL's in the Erongo Region, Namibia**

The COVID-19 pandemic has impacted on exploration activities in Australia and Namibia with limitations on movements, effectively suspending all ground-based exploration. However, Marenica is preparing an exploration program in Namibia and is working towards recommencing the program when exploration activities are again permitted and is working through the data on the recently acquired Australian projects.

### *Expenditure*

The Group incurred exploration expenditure of $157,126 during the quarter.

### *Capital Raising*

On 9 April 2020, the Company announced that it had received binding commitments for a placement to professional and sophisticated investors to raise a total of $1.0 million, before costs ("Placement").

The Placement will be completed in two tranches. Under the Placement, the Company will, subject to various shareholder approvals, issue a total of 26,350,000 fully paid ordinary shares at an issue price of 3.8 cents per share ("Share") plus 26,350,000 free attaching options ("Placement Options"), to raise a total of $1,001,300, before costs. The issue price per Share was at a discount of 6.82% to the 15-day VWAP at the time of the announcement.

On 17 April 2020, the Company issued 13,157,894 Shares at an issue price of 3.8 cents per Share, to raise $500,000 before costs ("Tranche 1").

Viriathus Capital and Cumulus Wealth were lead managers to the Placement.

### *Authorisation*

This report was authorised for release by the Board of Marenica Energy Limited.

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### *Competent Persons Statement – General Exploration Sign-Off*

The information in this announcement as it relates to exploration results, interpretations and conclusions was compiled by Mr Herbert Roesener, a Competent Person who is a Member of the South African Council for Natural Scientific Professions (SACNASP). Mr Roesener, who is an independent consultant to the Company, 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 Roesener consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.

## About Marenica Energy

Marenica Energy Limited (ASX:MEY) is an Australian Securities Exchange listed company with two broad areas of focus, being uranium exploration and application of its beneficiation process ***U-pgrade™***.

Marenica has developed a three-pronged strategy:

- Explore its own projects
- Acquire projects to which ***U-pgrade™*** can add value
- Apply ***U-pgrade™*** to third party projects

Marenica has a large tenement position in the globally recognised Erongo uranium province in Namibia, a country with an established and longstanding uranium mining industry. In Namibia, Marenica has three uranium exploration project areas, being the Namib Uranium Project, Mile 72 Uranium Project and Marenica Uranium Project. The Marenica Uranium Project has a large inferred uranium resource of 61 million pounds. These three areas are located in the North West, North and South East of the Erongo province, which provides diversity and opportunity to explore in a large tenement position.

In Australia, Marenica has uranium tenements and joint venture interests containing substantial uranium resources. The Angela, Thatcher Soak, Minerva and Oobagooma project areas and joint venture holdings in the Bigrlyi, Malawiri, Walbiri and Areva joint ventures contain 48 Mlbs of high-grade uranium mineral resources. The mineral resources are significant in their own right but could be dramatically enhanced when coupled with Marenica's ***U-pgrade™*** beneficiation process.

## U-pgrade™ Beneficiation Process

Marenica has assembled a portfolio of uranium mineral resources in Namibia and Australia, with uranium mineralisation suitable for processing via its breakthrough proprietary ***U-pgrade™*** beneficiation process.

***U-pgrade™*** was demonstrated in a 2017 Scoping Study conducted on the Marenica Uranium Project, to materially lower development and operating costs for calcrete hosted uranium projects.

## About U-pgrade™

***U-pgrade™*** is a potential industry leading and economically transformational beneficiation process for upgrading surficial uranium ores.

This breakthrough process was developed on ore from Marenica's namesake Marenica Project in Namibia and subsequently, testwork has been undertaken on ore samples from a number of other sources.

In summary, Marenica has demonstrated, in bench scale testwork, that the ***U-pgrade™*** beneficiation process;

- Concentrates the uranium by a factor of 50
- Increases Marenica Project ore grade from 93 ppm to ~5,000 ppm $U_3O_8$
- Rejects ~98% of the mass prior to leaching
- Produces a high-grade concentrate in a low mass of ~2% (leach feed)
- Rejects acid consumers
- Potentially reduces operating costs by ~50% and capital costs by ~50% as compared to conventional processing.

Beyond application at the Marenica Uranium Project, Marenica has determined, through bench scale testing, that Deep Yellow's Tumas deposit, Paladin's Langer Heinrich deposit, Orano's Trekkopje deposit and Toro Energy's Wiluna deposit, are amongst those that are amenable to the ***U-pgrade™*** process.

# *Annexure A – Tenement Schedule*

## Namibia

| Number | Name | Company | Interest | Area (km²) |
|---|---|---|---|---|
| **Active Licences** | | | | |
| MDRL 3287 | Marenica | Marenica Minerals (Pty) Ltd | 75% | 321 |
| EPL 3308 | Mile 72 | Metals Namibia (Pty) Ltd | 100% | 20 |
| EPL 6663 | - | Marenica Ventures (Pty) Ltd | 90% | 379 |
| EPL 6987 | Koppies | Manmar Investments One Eight Two (Pty) Ltd | 100% | 49 |
| EPL 7278 | Hirabeb | Marenica Ventures (Pty) Ltd | 100% | 730 |
| EPL 7279 | Ganab | Marenica Ventures (Pty) Ltd | 100% | 199 |
| EPL 7368 | Trekkopje East | Marenica Ventures (Pty) Ltd | 100% | 17 |
| EPL 7436 | Amichab | Marenica Ventures (Pty) Ltd | 100% | 251 |
| EPL 7508 | Capri | Marenica Ventures (Pty) Ltd | 100% | 553 |
| EPL 7662 | Namib IV | Marenica Ventures (Pty) Ltd | 100% | 379 |
| **Licence Applications** | | | | |
| EPL 6746 | - | Marenica Ventures (Pty) Ltd | 95% | 199 |
| EPL 7435 | Skilderkop | Marenica Ventures (Pty) Ltd | 100% | 190 |
| EPL 7507 | Autseib | Marenica Ventures (Pty) Ltd | 100% | 688 |
| EPL 7803 | Hotsas | Marenica Ventures (Pty) Ltd | 100% | 117 |

## Australia

| Number | Name | Status | Company | Interest | State |
|---|---|---|---|---|---|
| **100% Interest** | | | | | |
| R38/1 | Thatcher Soak | Granted | Africa Uranium Ltd | 100% | WA |
| E04/2297 | Oobagooma | Granted | Jackson Cage Pty Ltd | 100% | WA |
| EL25758 | Angela | Granted | Jackson Cage Pty Ltd | 100% | NT |
| EL25759 | Pamela | Application | Jackson Cage Pty Ltd | 100% | NT |
| ELR 22-33 | Minerva | Application | Jackson Cage Pty Ltd | 100% | NT |
| **Joint Venture** | | | | | |
| ELR 41 | Malawiri | Granted | Northern Territory Uranium Pty Ltd | 23.97% | NT |
| ELR 45 | Walbiri | Granted | Northern Territory Uranium Pty Ltd | 22.88% | NT |
| ELR 46-55 | Bigrlyi | Granted | Northern Territory Uranium Pty Ltd | 20.82% | NT |
| EL 30144 | Dingos Rest South | Granted | Northern Territory Uranium Pty Ltd | 20.82% | NT |
| ELR 31319 | Sundberg | Granted | Northern Territory Uranium Pty Ltd | 20.82% | NT |
| MCS318-328 | Karins | Application | Northern Territory Uranium Pty Ltd | 20.82% | NT |
| MLN 1952 | Karins | Application | Northern Territory Uranium Pty Ltd | 20.82% | NT |
| EL 1466 | Mount Gilruth | Application | Jackson Cage Pty Ltd | 33.33% | NT |
| EL 3114 | Beatrice South | Application | Jackson Cage Pty Ltd | 33.33% | NT |

# *Annexure B – Australian Mineral Resource Table*

| Deposit | Category | Cut-off (ppm $U_3O_8$) | Total Resource Tonnes (M) | Total Resource $U_3O_8$ (ppm) | Total Resource $U_3O_8$ (Mlb) | Marenica's Share Holding | Marenica's Share Tonnes (M) | Marenica's Share $U_3O_8$ (ppm) | Marenica's Share $U_3O_8$ (Mlb) |
|---|---|---|---|---|---|---|---|---|---|
| **100% Holding** | | | | | | | | | |
| Angela * | Inferred | 300 | 10.7 | 1,310 | 30.8 | 100% | 10.7 | 1,310 | 30.8 |
| Thatcher Soak | Inferred | 150 | | 425 | 10.9 | 100% | 11.6 | 425 | 10.9 |
| **100% Held Resource Total** | | | **22.3** | **850** | **41.7** | **100%** | **22.3** | **850** | **41.7** |
| **Bigrlyi Joint Venture** | | | | | | | | | |
| **Bigrlyi Deposit*** | Indicated | 500 | 4.7 | 1,366 | 14.0 | | | | |
| | Inferred | 500 | 2.8 | 1,144 | 7.1 | | | | |
| **Bigrlyi Deposit Total** | | **500** | **7.5** | **1,283** | **21.1** | **20.82%** | **1.55** | **1,283** | **4.39** |
| Sundberg | Inferred | 200 | 1.01 | 259 | 0.57 | 20.82% | 0.21 | 259 | 0.12 |
| Hill One JV | Inferred | 200 | 0.26 | 281 | 0.16 | 20.82% | 0.05 | 281 | 0.03 |
| Hill One EME | Inferred | 200 | 0.24 | 371 | 0.19 | | | | |
| Karins | Inferred | 200 | 1.24 | 556 | 1.52 | 20.82% | 0.26 | 556 | 0.32 |
| **Bigrlyi Joint Venture Total** | | | **10.2** | **1,049** | **23.5** | **20.82%** | **2.07** | **1,065** | **4.86** |
| **Walbiri Joint Venture** | | | | | | | | | |
| Joint Venture | Inferred | 200 | 5.1 | 636 | 7.1 | 22.88% | 1.16 | 636 | 1.63 |
| 100% EME | Inferred | 200 | 5.9 | 646 | 8.4 | | | | |
| **Walbiri Total** | **Total** | **200** | **11.0** | **641** | **15.5** | | | | |
| **Malawiri Joint Venture** | | | | | | | | | |
| Malawiri JV | Inferred | 100 | 0.42 | 1,288 | 1.20 | 23.97% | 0.10 | 1,288 | 0.29 |
| **Joint Venture Resource Total** | | | **21.6** | **847** | **40.2** | | **3.34** | **923** | **6.77** |
| **Australian Total** | | | **43.9** | **848** | **81.9** | | **25.6** | **859** | **48.4** |

* JORC 2004 Resources, all others are JORC 2012.

The Company confirms that it is not aware of any new information or data that materially affects the resource information contained in 2019 Annual Report and further confirms that all material assumptions and technical parameters underpinning the estimates in the 2019 Annual Report continue to apply and have not materiality changed.

The Mineral Resource Estimate for the resources noted as JORC 2004 in the table above were prepared and first disclosed under the 2004 Edition of the Australian Code for the Reporting of Exploration Results, Minerals Resources and Ore Reserves (JORC Code 2004). It has not been updated since to comply with the 2012 Edition of the Australian Code for the Reporting of Exploration Results, Minerals Resources and Ore Reserves (JORC Code 2012) on the basis that the information has not materially changed since it was last reported. A Competent Person has not undertaken sufficient work to classify the estimate of the Mineral Resource in accordance with the JORC Code 2012; it is possible that following evaluation and/or further exploration work the currently reported estimate may materially change and hence will need to be reported afresh under and in accordance with the JORC Code 2012.