



# Quarterly Activities Report for the Period ended 30 September 2020

26 October 2020

## Highlights

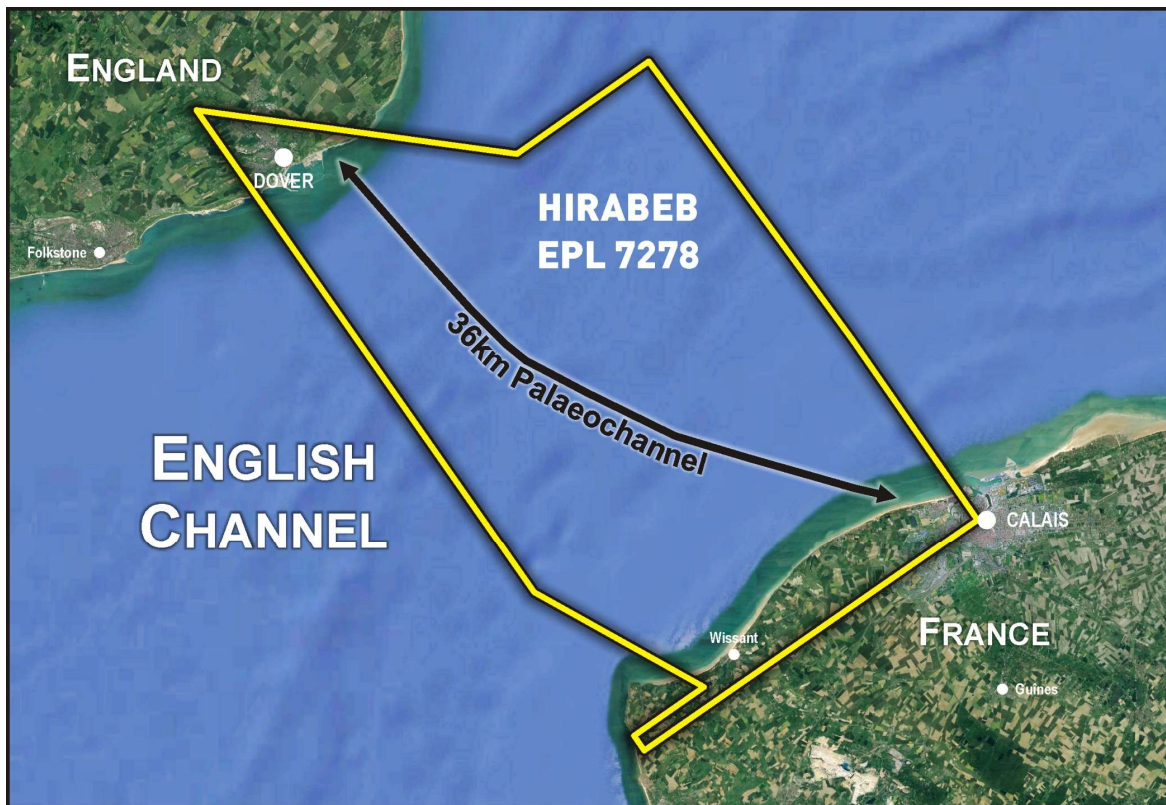
- **New uranium discovery at Hirabeb in Namibia:**
  - Marenica has identified an extensive palaeochannel system at Hirabeb
  - The palaeochannel system extends at least 36 kilometres, with uranium mineralisation identified over 30 kilometres
  - Further exploration programs planned at Hirabeb to define palaeochannel outline and identify drill targets.
- Exploration programs also being planned at four other tenements in the Namib Area.
- Activities are planned to unlock value on the Angela, Minerva and Oobagooma projects.

### ***Discovery of Extensive Uranium Mineralisation at Hirabeb, Namib Area of Namibia***

On 21 July 2020, Marenica advised ASX that it had identified an extensive new uranium discovery as a result of its maiden exploration program on exclusive prospecting license (“EPL”) 7278 (“Hirabeb”), located within the Namib Area. The maiden scout exploration program included horizontal loop electromagnetics (“HLEM”) surveys and an RC drilling program of 120 holes.

This maiden exploration program identified a network of palaeochannels, with the largest palaeochannel extending a distance of over 36 kilometres, with uranium mineralisation intersected over 30 kilometres. The palaeochannel system remains open in all directions.

With an area of 730 km<sup>2</sup>, Hirabeb is Marenica’s largest tenement in the Namib Area. The scale of the palaeochannel is shown in the comparison with the width of the English Channel in Figure 1.



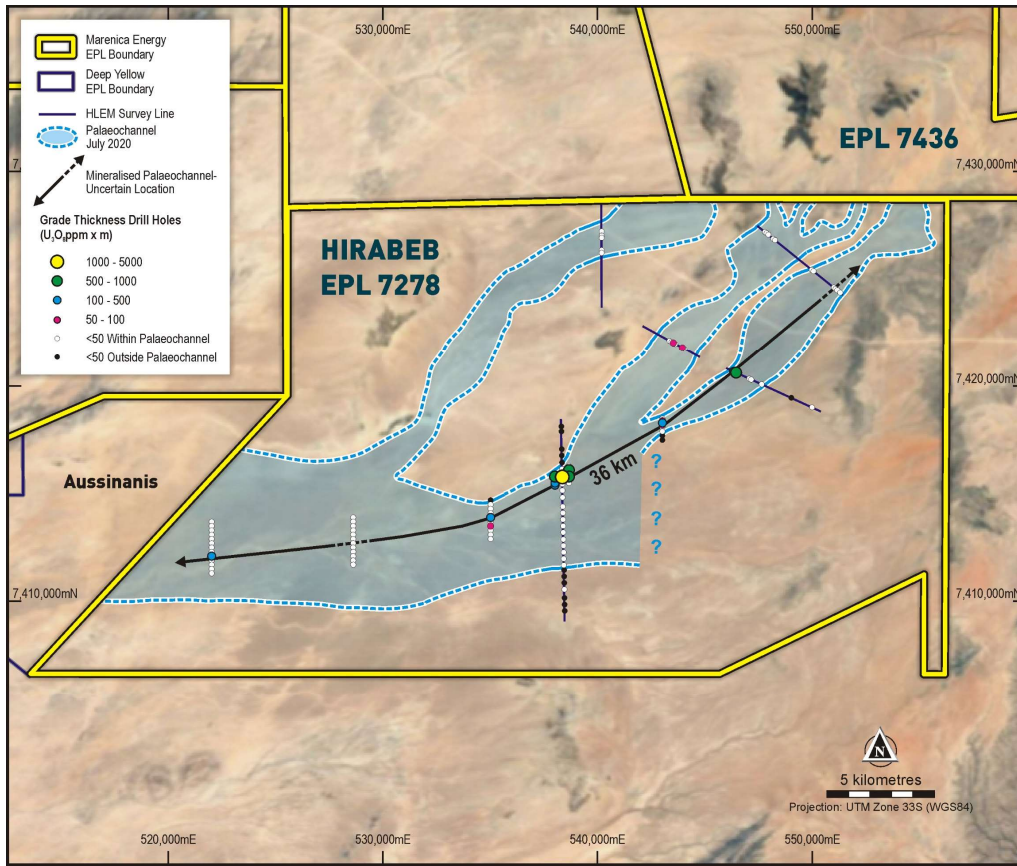
**Figure 1 – Comparison of the Hirabeb Palaeochannel with the English Channel**

The distribution of mineralisation identified in this initial, wide spaced, exploration program is extremely encouraging and indicates the potential of this tenement. On average the drill lines are 5.5 kilometres apart.

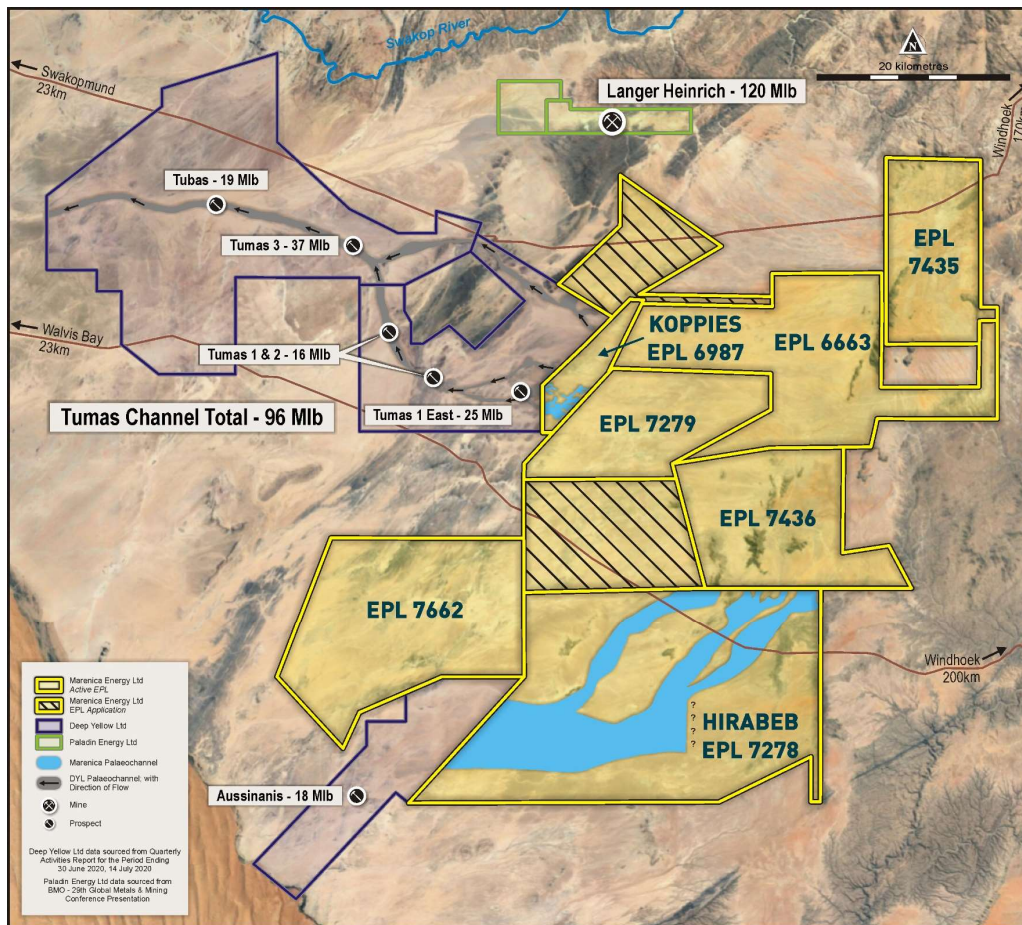
Figure 2 shows the location of the drill holes at Hirabeb relative to the previously announced HLEM survey lines, the extent of mineralisation and the potential size of the palaeochannels.

The location of Hirabeb, relative to Marenica’s other EPL’s and nearby known calcrete deposits in the Namib Area, is shown in Figure 3.

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**Figure 2 – Location of Hirabeb HLEM, Drill Holes and Potential Size of Palaeochannels**



**Figure 3 – Location of Marenica's EPL's in the Namib Area, Namibia**



The focus of the geological team during the quarter was to assess results to date and plan follow up exploration programs on the Hirabeb tenement. These plans will be implemented following completion of the capital raising referred to below. In summary, the exploration programs will be undertaken to determine the extent of the palaeochannel system and to identify geological characteristics of the palaeochannels which are suited to concentrations of calcrete hosted uranium deposits, which will provide the targets for drilling programs.

### **Namib Area of Namibia**

To date Marenica's exploration programs in Namibia have sought to identify palaeochannels (historical river systems) hosting calcrete uranium mineralisation. This style of mineralisation is suitable for processing by Marenica's **U-pgrade™** beneficiation process.

### **Tenement Granted in Namib Area**

EPL 7435 (known as Skilderkop) located in the northeast of the contiguous land package in the Namib Area (Figure 3) was granted on 21 October 2020. This tenement covers an area explored by General Mining in the late 1970's and early 1980's and considered to be highly prospective for palaeochannels with calcrete hosted uranium mineralisation.

### **Australia**

During the quarter, the Company has been continuing with physical and desktop studies on the Angela, Minerva and Oobagooma projects, the outcomes of which are expected to be established over the coming year.

### **COVID-19**

Restrictions imposed as a result of COVID-19 has limited exploration activities in Australia and Namibia. Namibia lifted its "state of emergency" on 17 September 2020, with all movement restrictions removed.

Ground based exploration in Australia is suspended and the Company is currently undertaking desktop exploration analysing historical data.

### **Capital Raising**

On 21 October 2020, Marenica announced a capital raising. The capital raising includes a share purchase plan ("SPP") seeking to raise up to \$3,750,000, at an issue price of \$0.088 per share. The SPP is joint lead managed by Viriathus Capital Pty Ltd and Cumulus Wealth Pty Ltd ("Joint Lead Managers") and partially underwritten (to the value of \$2,000,000) by Viriathus Capital Pty Ltd. Additionally, the Company has agreed with the Joint Lead Managers that it may seek to undertake a separate placement of shares to raise up to a further \$2,600,000.

The funds raised are intended to be fund exploration and development activities on the Company's assets, administration and working capital.

### **Expenditure**

The Group incurred exploration expenditure of \$239,568 during the quarter.

## **Authorisation**

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

## **For more information, contact:**

### **Managing Director – Murray Hill**

T: +61 8 6555 1816

murray.hill@marenicaenergy.com.au

### **Investor Relations – Warrick Lace**

T: +61 404 656 408

warrick.lace@reachmarkets.com.au

## **Competent Persons Statement**

*The historical exploration information detailed in this announcement was compiled by David Princep of Gill Lane Consulting. Mr. Princep is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist. Mr. Princep has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration 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 (JORC 2012). Mr. Princep approves of, and consents to, the inclusion of the information in this announcement in the form and context in which it appears.*

## Annexure A – Tenement Schedule

### Namibia

Number	Name	Company	Interest	Area (km <sup>2</sup> )
<b>Active Licences</b>				
MDRL 3287	Marenica	Marenica Minerals (Pty) Ltd	75%	321
EPL 3308	Mile 72	Metals Namibia (Pty) Ltd	100%	20
EPL 6663	Arechadamab	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 West	Marenica Ventures (Pty) Ltd	100%	199
EPL 7368	Trekkojpe East	Marenica Ventures (Pty) Ltd	100%	17
EPL 7435	Skilderkop	Marenica Ventures (Pty) Ltd	100%	190
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
<b>Licence Applications</b>				
EPL 6746	Tumasvlaktes	Marenica Ventures (Pty) Ltd	95%	199
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
<b>100% Interest</b>					
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
<b>Joint Venture</b>					
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	Bigryli	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

## About Marenica Energy

Marenica Energy Limited (ASX:MEY) is an Australian Securities Exchange listed company focused on 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 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 Bigriyi, 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 owns a portfolio of uranium mineral resources in Namibia and Australia. These resources contain uranium mineralisation suitable for processing via its proprietary **U-pgrade™** beneficiation process.

A study on the Marenica Uranium Project, indicated that **U-pgrade™** can materially lower development and operating costs on 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<sub>3</sub>O<sub>8</sub>
- 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.