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ASX Announcement

Exploration Activities Update

Marenica Energy Limited (ASX: MEY) ("Marenica" or "the Company") is pleased to provide an update on its future exploration and development activities following completion of capital raisings undertaken during November 2020.

The $5.4 million raised will enable the Company to undertake aggressive exploration and development programs in Namibia and Australia. The Company is now fully funded to undertake its planned activities for at least 18 months.

In Namibia, Marenica holds 10 granted tenements which make up the largest land package for nuclear fuel minerals in the country. The Company will now accelerate its exploration activities on these tenements, all of which have been granted during the past eighteen months. The Company has prioritised each tenement and intends to methodically explore them during 2021.

First priority is Marenica's largest tenement, called Hirabeb. Exploration to date has identified a network of palaeochannels, with the primary palaeochannel extending from the northeast corner to the southwest corner of the tenement, a distance of over 36 kilometres. Uranium mineralisation was intersected over a distance of 30 kilometres (see Figures 1 and 2). This discovery was achieved for less than A$120,000 (see ASX Announcement of 21 July 2020 "Extensive Palaeochannel Discovered in Namibia, Mineralised over 30 Kilometres"). Marenica now has the funds to capitalise on that initial success and intends hitting the ground hard in early 2021.

In Australia, Marenica owns uranium projects which contain 48.4 Mlb U_3O_8 of high-grade mineral resources (see Table 2). Since acquiring its Australian uranium projects in December 2019, Marenica has undertaken desktop and testwork exploration and development studies on these projects. An example of the success that can be achieved from such studies, on 29 October 2020 Marenica announced a proof of concept study which concluded that ***U-pgrade™*** could reduce acid consumption at the Angela Project by approximately 80% (see "***U-pgrade™*** Testwork Indicates Significant Potential Reduction in Acid Consumption at Angela"). Angela has a JORC 2012 Mineral Resource of 30.8 Mlb of U_3O_8 at a grade of 1,310 ppm U_3O_8 (see Table 2). The Company will continue with its studies on these projects (see Figure 4).

Marenica Managing Director, Murray Hill, commented: *"We now have the longer-term funding to pursue our exploration and development activities in Namibia and Australia. We will now aggressively increase exploration activities on our extensive uranium tenement package in Namibia and on activities to add significant value to the Australian uranium projects. These activities will be methodically planned to ensure the most efficient use of shareholders money with a view to getting the biggest 'bang for our buck'. We look forward to getting boots on the ground and executing our exploration plans early next year."*

Approval

This announcement has been approved by the Board of Directors.

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Hirabeb

On 21 July 2020, Marenica announced a new uranium discovery at Hirabeb (EPL 7278). Exploration on the tenement identified a massive palaeochannel system which extends a distance of over 36 kilometres. To put this into perspective, the palaeochannel is longer than the width of the English Channel (see Figure 1).

The primary palaeochannel is mineralised over the majority of its length, providing Marenica with a multitude of follow up exploration targets with the potential to host a significant uranium deposit. Marenica now has the funds to methodically explore this tenement which covers 730 km^2 in area.

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

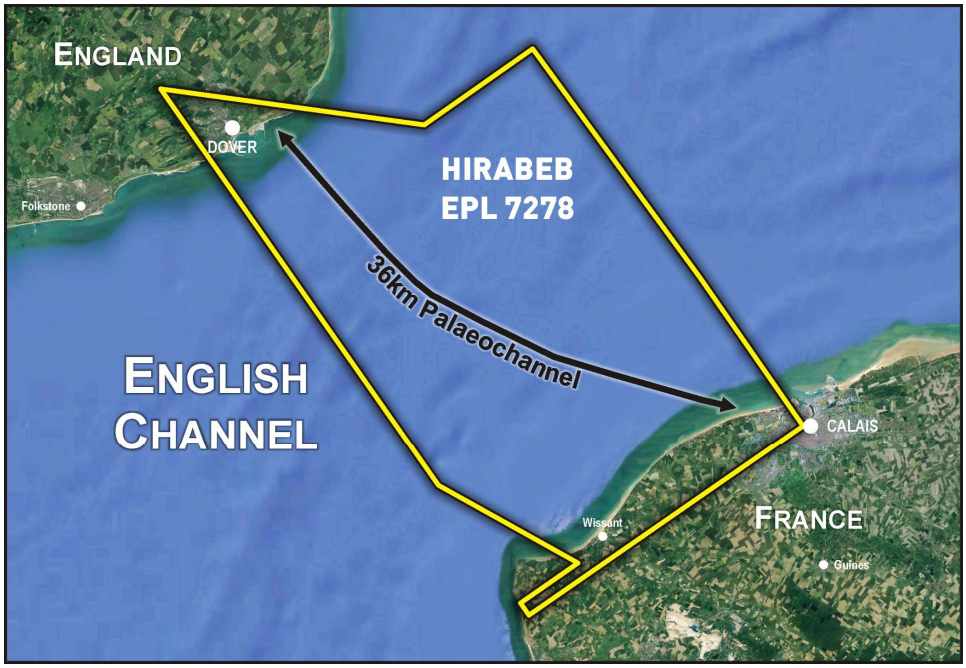
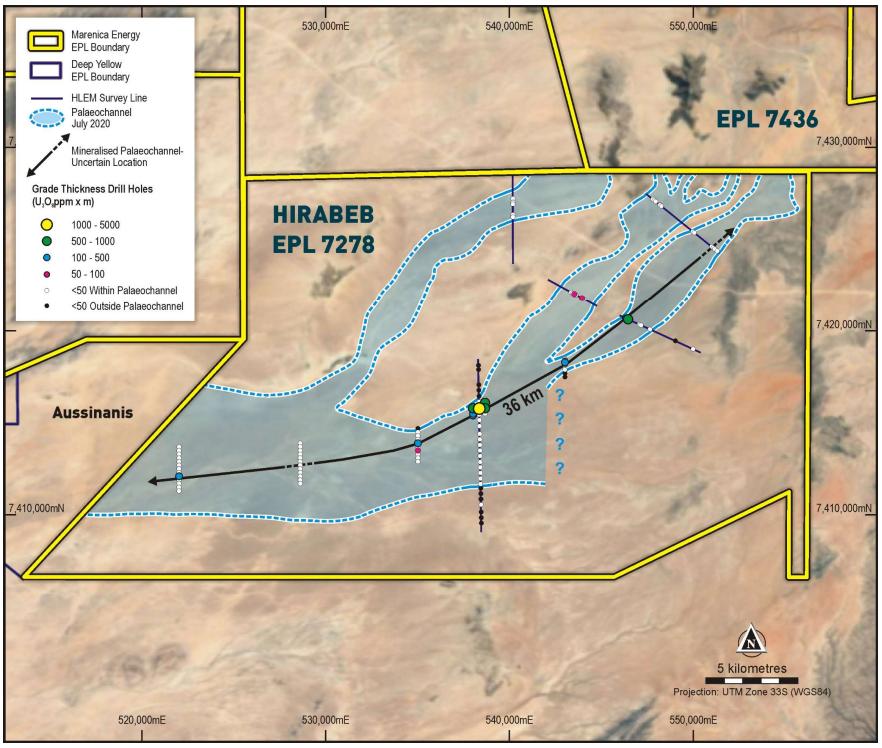


Figure 2 – Location of Hirabeb HLEM Survey Lines, Drill Holes and Potential Extent of Palaeochannels



Marenica holds ten active tenements in the Erongo Region of Namibia covering an area of 2,899 km², with a further four tenements under application (see Figure 3). Marenica's tenements in the north of the Erongo region are also highly prospective for calcrete hosted uranium mineralisation. The Company's Marenica Uranium Project has a JORC resource of 61 Mlb of U_3O_8 (see Table 1).

Figure 3 – Marenica's tenements in the Erongo Region of Namibia

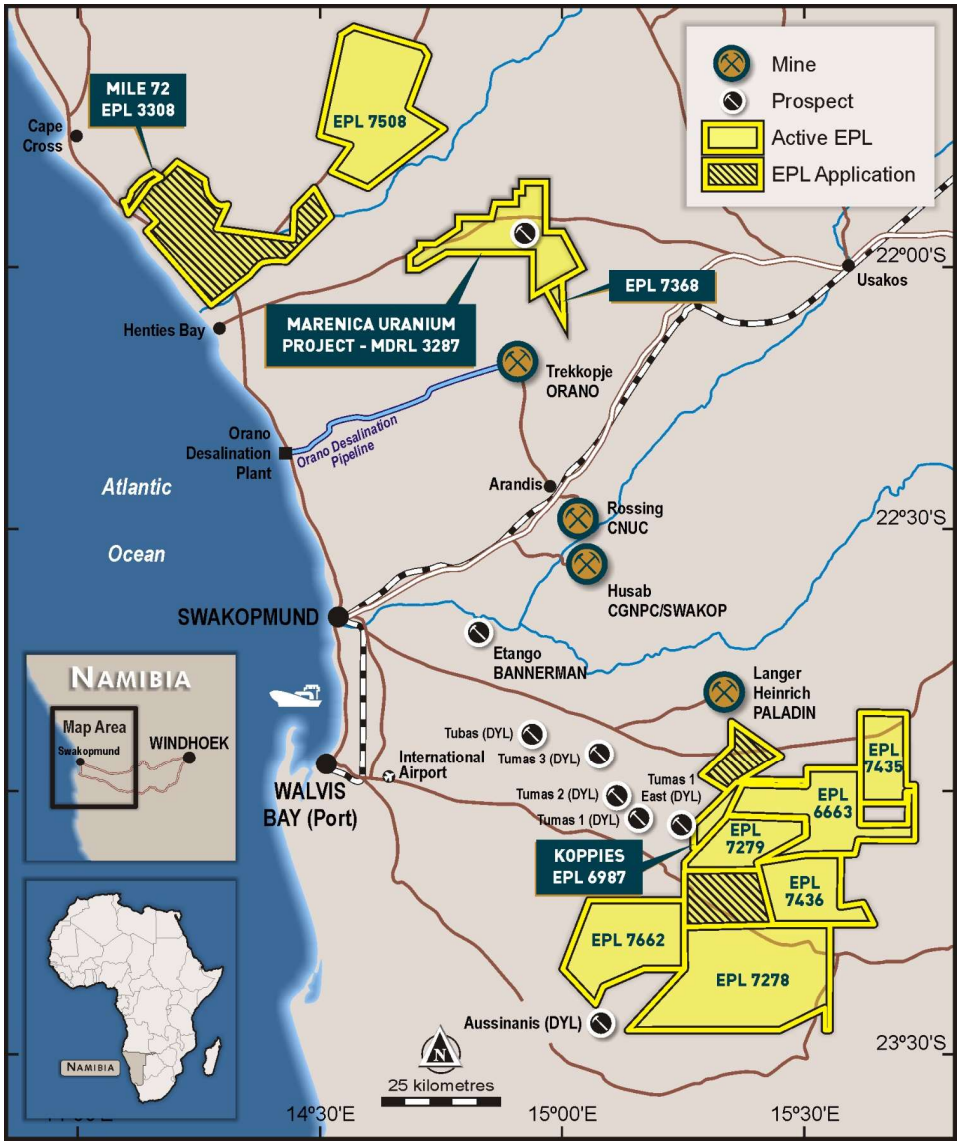


Table 1 – Marenica Project Mineral Resource

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)
Marenica									
Marenica	Indicated	50	26.5	110	6.4				
	Inferred	50	249.6	92	50.9				
Marenica	**Total**	**50**	**276.1**	**94**	**57.3**	**75%**	**207.1**	**94**	**43.0**
MA7									
MA7	Inferred	50	22.8	81	4.0				
MA7	**Total**	**50**	**22.8**	**81**	**4.0**	**75%**	**17.1**	**81**	**3.0**
Namibia Resource Total			**298.9**	**93**	**61.3**		**224.2**	**93**	**46.0**

Figure 4 – Location of Marenica's Australian Tenements

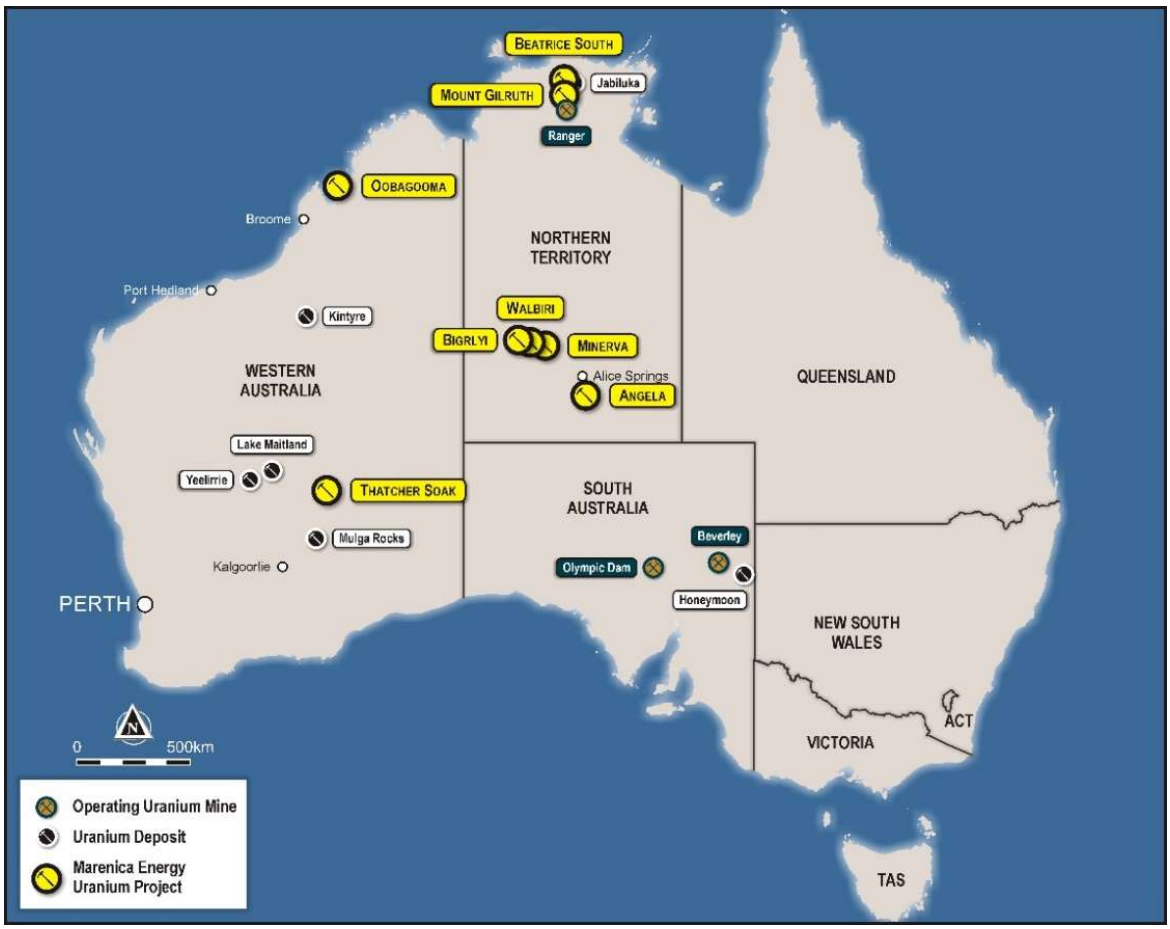


Table 2 – Uranium Mineral Resources in Australia

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	11.6	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		**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**
Australia Resource Total			**43.9**	**848**	**81.9**		**25.6**	**859**	**48.4**

Competent Persons Statement - Marenica Uranium Project:

The Company confirms that the Mineral Resource Estimate for the Marenica Uranium Project has not changed since the annual review included in the 2020 Annual Report. The Company is not aware of any new information, or data, that effects the information in the 2020 Annual Report and confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The Mineral Resource Estimate for the Marenica Uranium Project was prepared in accordance with the requirements of the JORC Code 2004. The Mineral Resource Estimates 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 they were 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.

Competent Persons Statement - Australian Uranium Projects:

The Company confirms that the Mineral Resource Estimates for Thatcher Soak, Bigrlyi, Sundberg, Hill One, Karins, Walbiri and Malawiri have not changed since the annual review included in the 2020 Annual Report. The Company is not aware of any new information, or data, that effects the information in the 2020 Annual Report and confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The Company confirms that the Mineral Resource Estimate for Angela has not changed since the ASX announcement of 10 November 2020 titled “Angela Mineral Resource Updated to JORC 2012”. The Company is not aware of any new information, or data, that effects the information in the ASX announcement and confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The Mineral Resource Estimate for the Bigrlyi deposit was prepared in accordance with the requirements of the JORC Code 2004. The Mineral Resource Estimates 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 they were 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.