Quarterly Activities Report
for the Period ended 30 June 2020

30 July 2020

Highlights

- **Marenica identifies extensive new uranium discovery at Hirabeb from maiden scout exploration program.**
    - **the palaeochannel system extends 36 kilometres, a distance wider than the English Channel**
    - **mineralisation identified over 30 kilometres, within the palaeochannels**

- **Detailed review of extensive historical drill data at Minerva, Northern Territory, has identified high-grade uranium and gold mineralisation.**

  Significant intercepts include:

  Uranium
    - **Y158RD - 5.5m at 11,131 ppm U_3O_8 from 117.5m**
    - **Y166RD - 3.5m at 17,843 ppm U_3O_8 from 277.5 m**

  Gold
    - **Y153RD – 0.5m at 19.2 g/t Au from 143.5m**

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, announced to ASX on 30 April 2020, which was followed up by an RC drilling program of 120 holes (1,601 metres).

Marenica's exploration program has targeted identification of palaeochannels (historical river systems), initially by HLEM surveys, which is followed up by drilling to verify the HLEM and identify uranium mineralisation within those palaeochannels. The mineralisation in these palaeochannels is calcrete hosted, the style of mineralisation suitable for processing by Marenica's ***U-pgrade***^{TM} process, which studies have shown to significantly reduce operating and capital costs on this type of mineralisation.

The exploration program has identified a network of palaeochannels, with the largest palaeochannel extending from the northeast corner to the southwest corner of the tenement, a distance of over 36 kilometres. Uranium mineralisation has been intersected over a distance of 30 kilometres. The palaeochannel system remains open in all directions.

With an area of 730 km^2, 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, see in Figure 1.

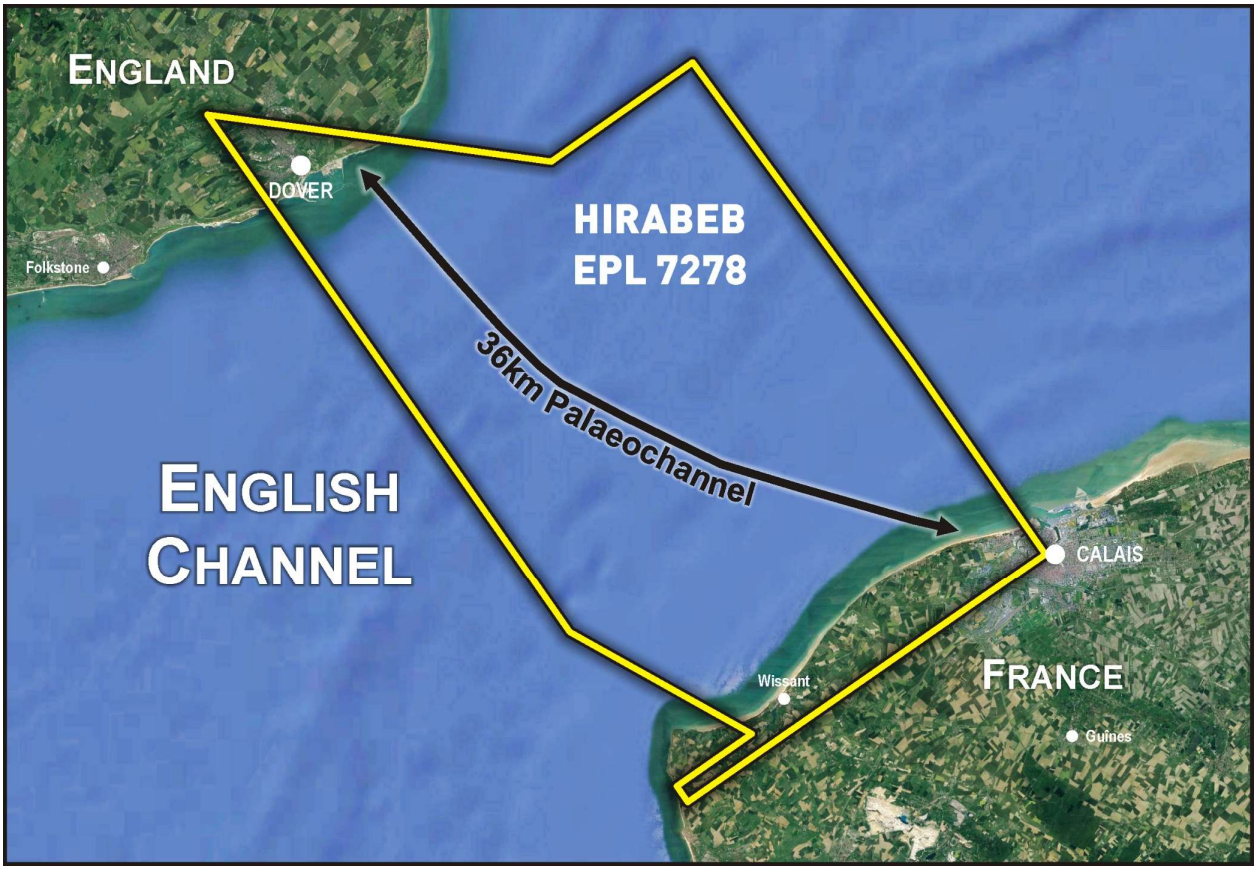

Figure 1 – Comparison of the Hirabeb Palaeochannel with the English Channel

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. Follow-up 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. Consequently, there is significant potential for multiple uranium deposits within the extensive palaeochannel system.

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

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

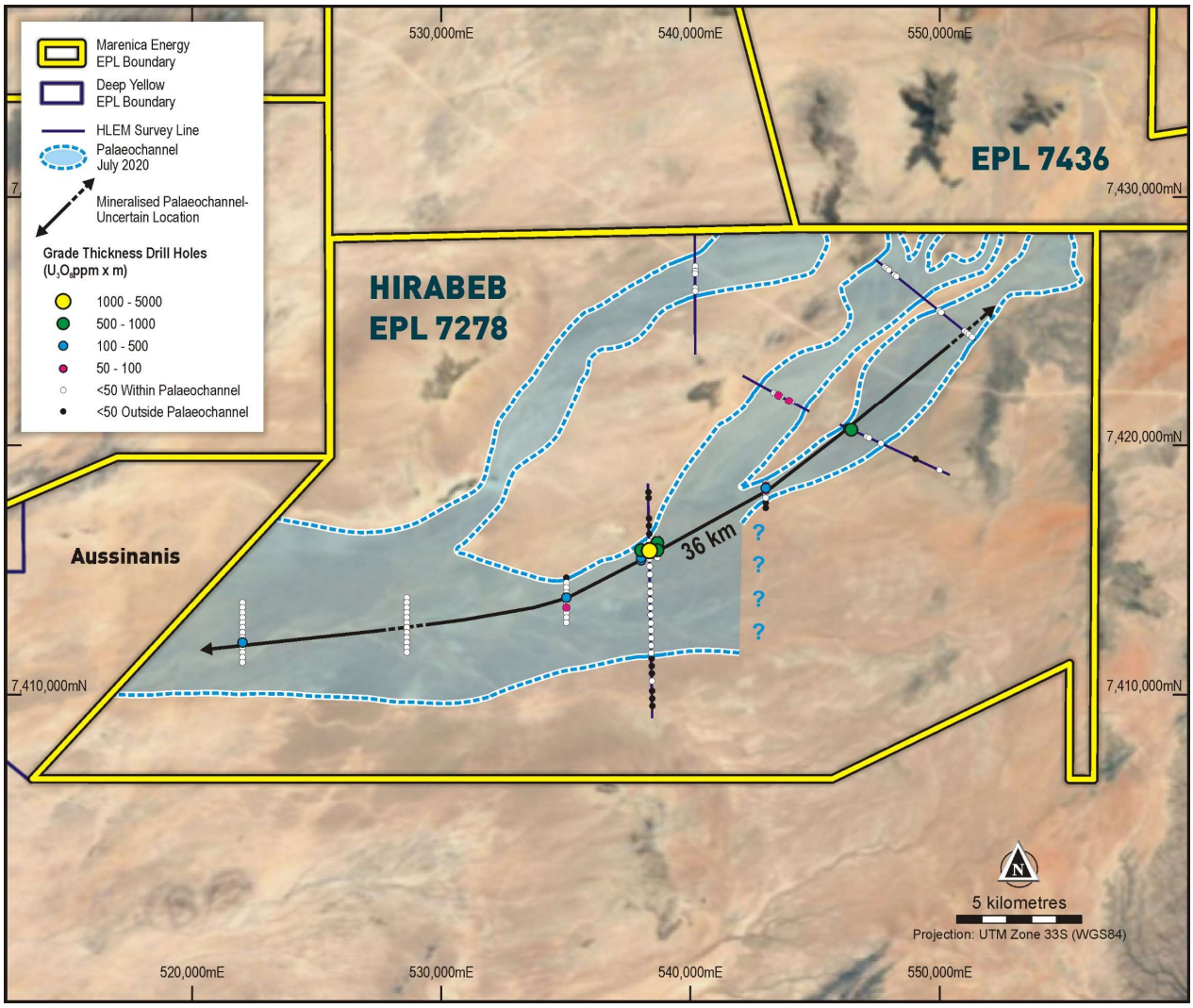

Figure 2 – Location of Hirabeb HLEM, Drill Holes and Potential Extent of Palaeochannels

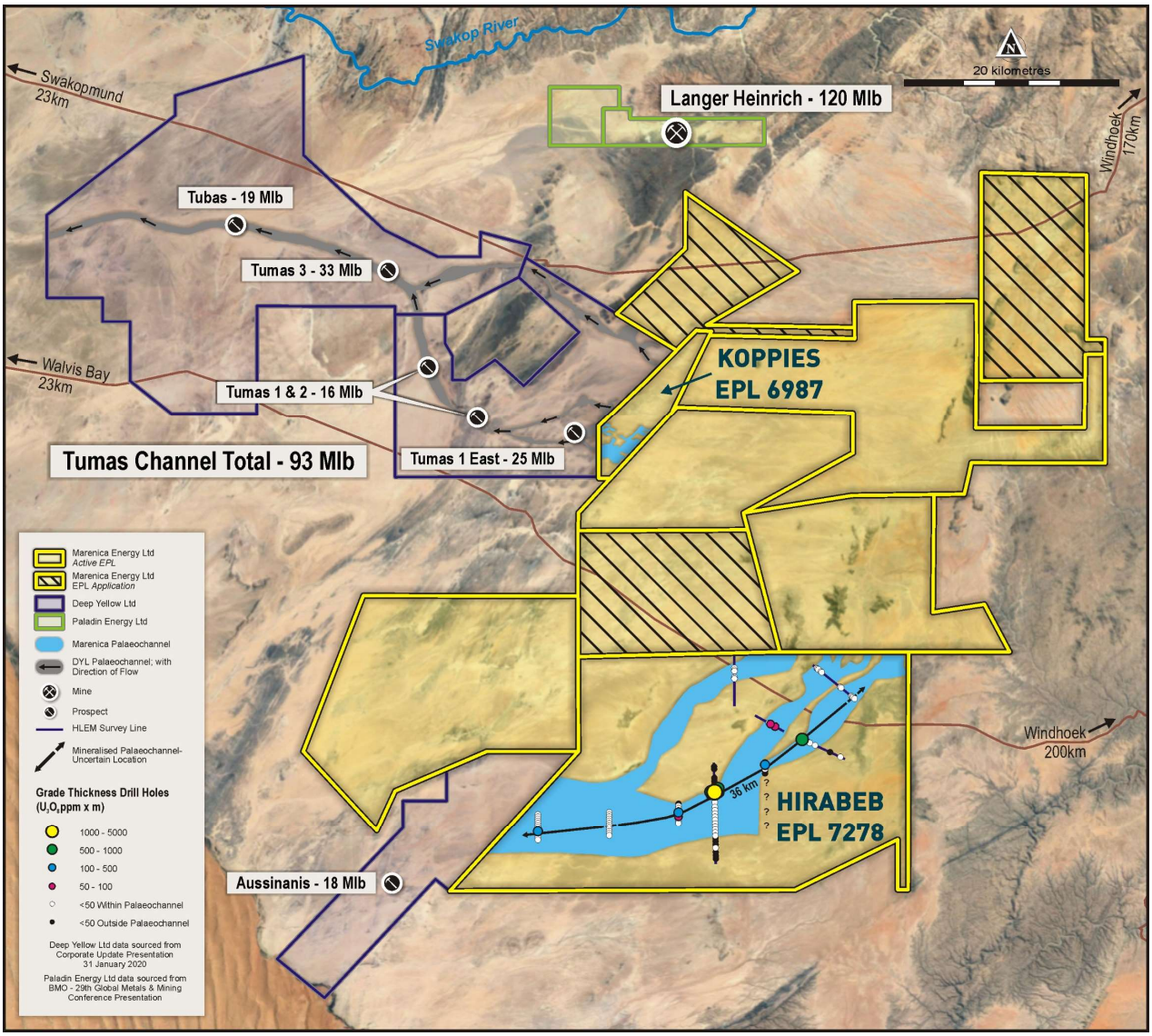

Figure 3 – Location of Marenica's EPL's in the Namib Area, Namibia

Minerva Project, Northern Territory of Australia

On 5 May 2020, in an announcement titled "High-Grade Uranium and Gold at Minerva Uranium Project, NT", the Company announced results of a detailed review of historical data from the Minerva Uranium Project in the Northern Territory of Australia. The data review identified 49 mineralised drill holes with uranium grades greater than 250 ppm U3O8, including 29 drill intervals with grades in excess of 10,000 ppm (1.0%) U3O8. These exploration results identified uranium mineralisation over a 2,400 metre strike length.

In addition to the high-grade uranium mineralisation, high-grade gold was present in one of the two drill holes on which gold assays are available. Hole Y153RD included 0.5 m at 19.2 g/t Au from 143.5 m, and 0.5 m at 2.3g/t Au from 141.5 m, with the gold intervals contained within a broader uranium mineralised zone of 8.5 m at 653 ppm U_3O_8. A second drill hole assayed for gold (Y160RD) did not contain either uranium or gold mineralisation, however there is potential for gold mineralisation to be associated with the existing uranium mineralisation within the deposit.

The tenements are located in the eastern part of the Ngalia Basin with the mineralised area less than one kilometre from the Tanami Road, a bitumen road that leads 215 km southeast to Alice Springs (Figure 4). The drill hole locations are shown in Figure 5.

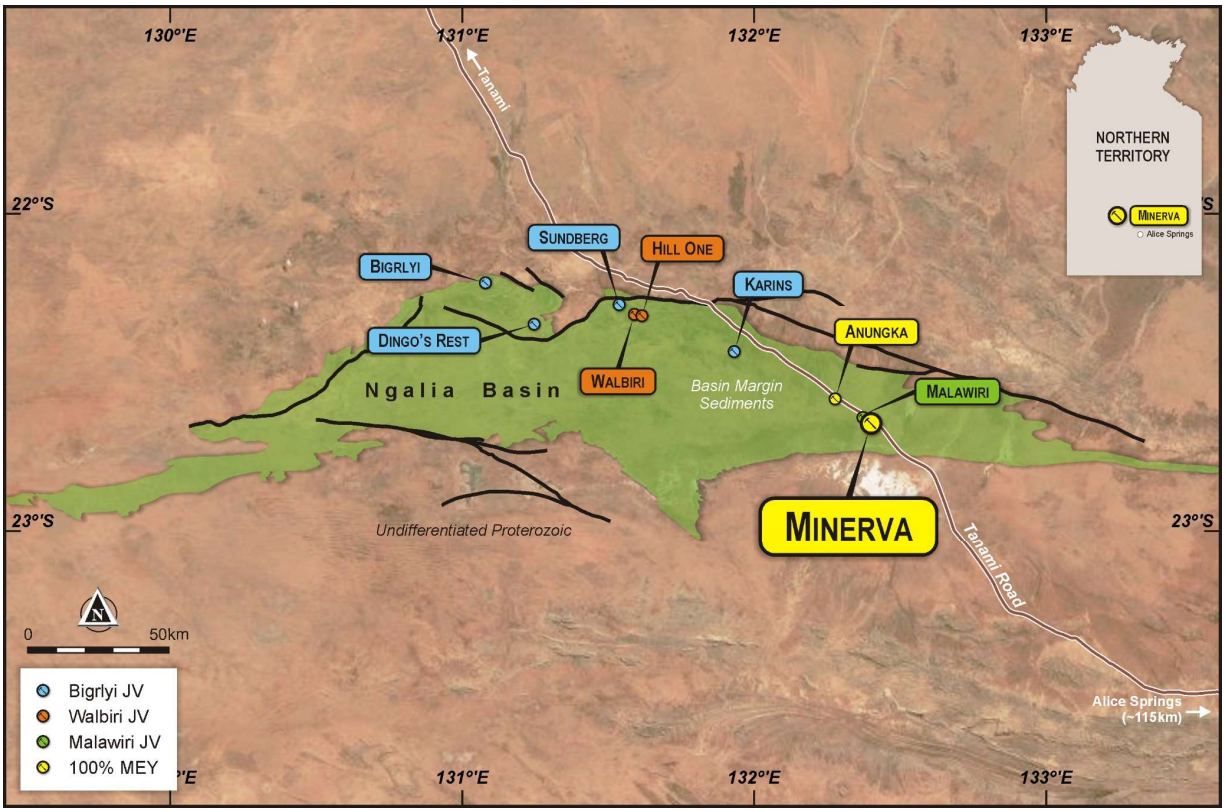

Figure 4 – Minerva deposit geological setting

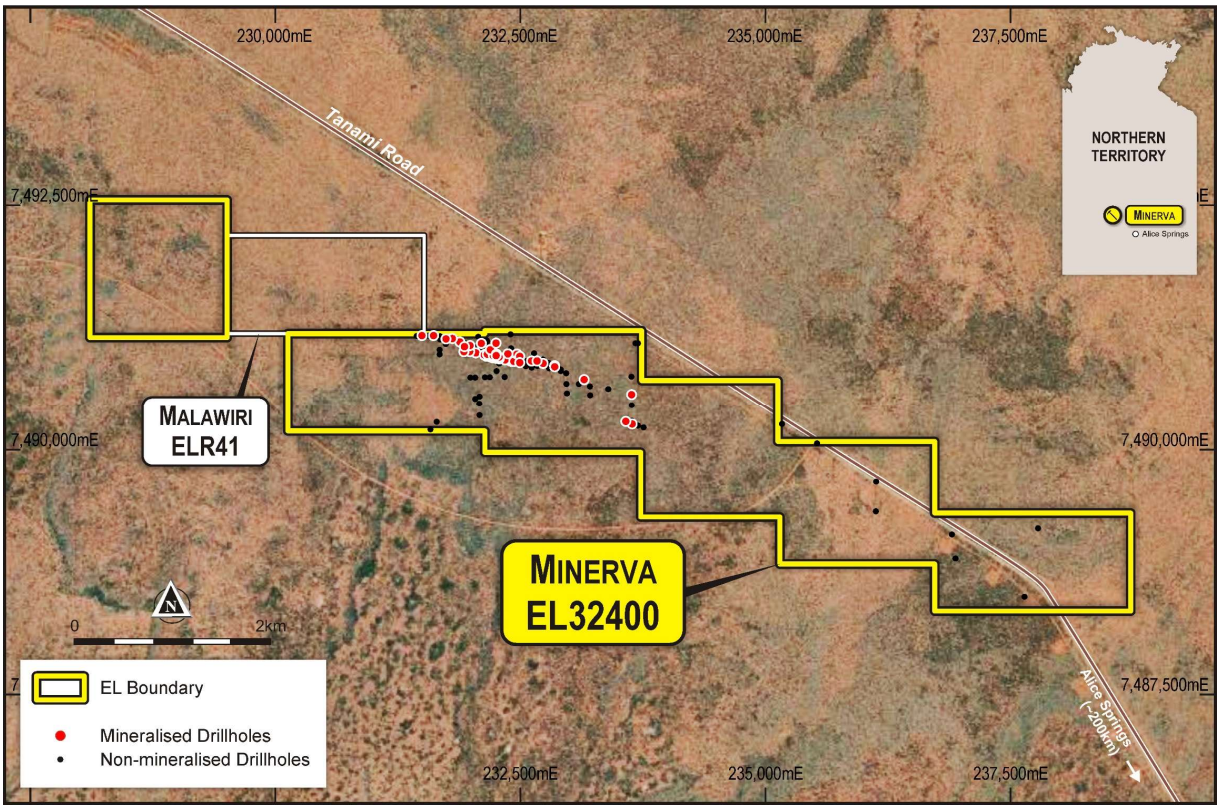

Figure 5 – Drill hole layout, note the proximity of the Tanami road

The historical drill data was compiled into a database and significant intercepts were extracted. Values calculated from AMDEL XRF assays are presented in Table 1. The compositing of the

intervals was based on a cut-off grade of 250 ppm U_3O_8, a maximum of less than 2 m internal waste and, due to the orientation of the mineralisation, a minimum thickness of 2 m. The drill hole assay data contains a number of additional high-grade intervals, greater than 10,000 ppm or 1.0% U_3O_8, which fall short of the 2 m minimum criteria but are within a broader zone of mineralisation.

Table 1 – Significant intervals

Hole		Depth From (m)	Depth To (m)	Interval (m)	Grade U_3O_8 (ppm)
Y93R		118.0	125.0	7.0	746
Y106RD		150.5	153.0	2.5	960
Y115RD		171.5	174.0	2.5	390
Y116RD		109.0	111.5	2.5	2,402
	And	129.5	140.5	11.0	4,218
	including	138.0	138.5	0.5	41,200
	And	153.0	160.5	7.5	1,964
	including	155.0	155.3	0.3	16,600
Y132RD		124.0	130.5	6.5	5,312
	including	124.0	124.5	0.5	11,800
	And	133.0	140.5	7.5	2,714
	And	142.5	146.0	3.5	2,713
	And	157.5	161.0	3.5	6,600
	including	158.5	159.5	1.0	20,000
Y134RD		139.0	141.5	2.5	8,036
	including	140.0	140.5	0.5	20,500
	And	144.0	156.0	12.0	1,494
	And	145.0	148.5	3.5	4,334
	including	146.5	147.0	0.5	25,000
	And	166.0	181.5	15.5	2,313
	including	179.0	180.0	1.0	18,300
	And	196.0	199.5	3.5	2,250
Y136RD		185.0	188.0	3.0	1,282
Y145RD		112.0	115.0	3.0	4,198
	including	114.0	115.0	1.0	10,800
	And	157.0	159.0	2.0	661
	And	175.0	178.0	3.0	512
Y152RD		150.0	153.0	3.0	630
Y153RD		138.0	146.5	8.5	653
	And	182.5	185.0	2.5	570
	And	229.0	238.0	9.0	2,667
	including	237.0	237.5	0.5	26,400
Y154RD		107.0	116.0	9.0	447
Y158RD		117.5	123.0	5.5	11,131
	including	118.0	120.0	2.0	20,725
	And	128.0	134.0	6.0	546
Y161RD		131.0	133.0	2.0	785
	And	135.0	141.0	6.0	1,883
	including	135.5	136.0	0.5	11,500
	including	135.0	137.0	2.0	4,398
Y166RD		277.5	281.0	3.5	17,843
	And	307.0	310.0	3.0	1,473

Hole		Depth From (m)	Depth To (m)	Interval (m)	Grade U_3O_8 (ppm)
Y168RD		166.0	172.0	6.0	1,297
Y183RD		209.0	214.0	5.0	1,064
	And	231.0	236.0	5.0	618
	And	313.0	315.0	2.0	2,930
Y186RD		265.0	267.0	2.0	1,750
Y188RD		168.0	174.0	6.0	320
	And	201.0	208.0	7.0	860
Y190RD		152.0	164.0	12.0	439
Y193RD		204.0	206.0	2.0	1,600
Y195RD		144.0	152.0	8.0	1,313
	And	177.5	184.0	6.5	1,616
	And	192.0	195.0	3.0	2,031
	And	204.0	207.0	3.0	1,763
	And	236.0	238.0	2.0	1,025
Y200RD		237.5	240.0	2.5	5,690
	including	238.0	239.0	1.0	12,400
	And	242.0	244.0	2.0	1,988
Y208RD		155.0	157.0	2.0	2,625
Y210RD		148.0	150.0	2.0	395
Y219RD		236.0	240.5	4.5	3,131
	including	238.0	239.0	1.0	11,900
Y222RD		205.7	207.7	2.0	465
	And	396.1	399.1	3.0	2,903
Y234RD		235.5	237.5	2.0	1,300
Y249RD		212.7	215.2	2.5	384
Y260RD		176.0	178.0	2.0	520
	And	188.0	192.0	4.0	1,078
Y264RD		152.0	154.0	2.0	850
Y266RD		134.0	136.0	2.0	270
Y271RD		188.0	190.0	2.0	810
	And	219.0	221.0	2.0	1,175
Y275RD		154.0	157.0	3.0	578
Y276RD		230.0	232.0	2.0	410
Y277RD		278.0	282.0	4.0	1,938
	And	292.5	294.5	2.0	2,075
Y283RD		199.5	202.5	3.0	2,030
	And	257.0	259.0	2.0	1,525
Y287RD		264.0	266.0	2.0	1,300
Y288RD		161.0	163.0	2.0	3,750
Y293RD		255.0	257.0	2.0	610
Y315RD		274.0	278.0	4.0	1,040

EPL7279 Ganab West

During the quarter, a drilling program was completed on the Ganab West tenement in Namibia, with no significant results returned.

COVID-19

The COVID-19 pandemic has restricted exploration activities in Australia and Namibia, for varying periods of time. The Erongo region of Namibia entered a second lockdown period in June, however, mining and exploration are exempt and Marenica's exploration program continued.

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

Expenditure

The Group incurred exploration expenditure of $156,905 during the quarter.

Capital Raising

On 15 June 2020, the Company completed a two-tranche capital raising for a total of $1.0 million, before costs. 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

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.

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 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 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_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	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	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	Tumasvlaktes	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