



27 August 2019

ASX Announcement

Marenica identifies significant grade uranium mineralisation at Koppies

- **Best intersections from reconnaissance drilling at Koppies include:**
 - **KP001** 6m at 342ppm U₃O₈ from 8m
 - **KP002** 3m at 342ppm U₃O₈ from 8m
 - **KP003** 6m at 219ppm U₃O₈ from 8m
 - **KP004** 6m at 432ppm U₃O₈ from 7m
 - **KP005** 5m at 351ppm U₃O₈ from 6m
- **Drilling confirms uranium mineralisation over a 1,000m long x 800m wide zone**
- **Results confirm mineralisation in shallow drill holes less than 20m in depth**
- **Marenica to commence expanded drilling program at Koppies next week**

Marenica Energy Limited (“Marenica”, “The Company”, ASX:MEY) is pleased to announce it has received assay results from the first stage of its reconnaissance RAB drilling on exclusive prospecting licence (“EPL”) 6987 in Namibia. EPL 6987, known as Koppies, is one of eight tenements that the Company has applied for in the Namib desert in recent years.

The planned exploration program at Koppies involves completing geophysical and geochemical exploration to identify palaeochannels over 2km strike lengths, before drilling to confirm the channel and mineralisation. This sequential exploration program, over each 2km, is planned to continue over the extent of the EPL.

Marenica Managing Director Murray Hill said, “Our eight drill holes have all hit mineralisation. We are really excited by these drilling results which have identified a large zone of uranium mineralisation and at a significant grade. The success of this reconnaissance program supports our exploration theory for this area and provides us with the impetus to immediately undertake expanded drilling activities on this tenement.”

The program included eight RAB holes for 136m with all holes intersecting uranium mineralisation. Mineralised intersections greater than 100ppm U₃O₈ are summarised in Table 1.

Table 1 Drill Hole Assay Results from EPL 6987

Drill Hole		From (m)	To (m)	Interval (m)	U ₃ O ₈ Grade (ppm)	Total Hole Depth (m)
KP001		8	14	6	342	14
KP002		6	13	7	240	20
	including	8	11	3	342	
KP003		2	5	3	170	19
	and	8	14	6	219	
KP004		1	3	2	253	17
	and	7	13	6	432	
KP005		7	13	6	159	19
KP006		6	14	8	263	17
	including	6	11	5	351	
KP007		3	9	6	145	12
	including	3	6	3	212	
KP008		11	16	5	104	18

Drill hole KP001 was stopped at 14m due to a heavy inflow of water. The hole was in mineralised calcrete at 14m and the base of the channel was not confirmed, uranium mineralisation may be deeper in this hole. In the other seven holes, the mineralisation is shallow, with the deepest at 16m below surface.

Deep Yellow Limited (DYL) has completed extensive drilling west of the Koppies EPL boundary, with the DYL drill lines that are within 600m of the EPL boundary are shown in Figure 2. The drilling by Marenica confirms mineralisation over a zone of 1,000m along the length of the channel from the EPL boundary to KP008. The channel is about 800m wide, from the “Extrapolated Channel Boundary” in the south to just north of KP001, but with DYL mineralised drill holes further north it is possible the channel could be 1,300 m wide.

Figure 3 shows the cross section of Marenica’s western drill line (six holes), which shows a consistent channel of 14m to 19m deep, broken up by a schist outcrop, about 130m wide, between holes KP004 and KP005. The broader channel may be split into multiple channels by the schist or this could be an outcrop within the broader channel.

Subsequent to drilling of these holes, geophysical and geochemical work has been in progress to identify channels, the outcome of which will feed into the next stage of drilling to commence next week.

This initial drilling campaign at Koppies follows from Marenica’s strategy to acquire a significant contiguous strategic package of exploration tenements in the Namib desert, following geological interpretation of regional uranium deposition, which includes significant U₃O₈ resources at Langer Heinrich, Tumas and Aussinnanis.

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Figure 1 Location of Mineralised Drill Holes at EPL 6987

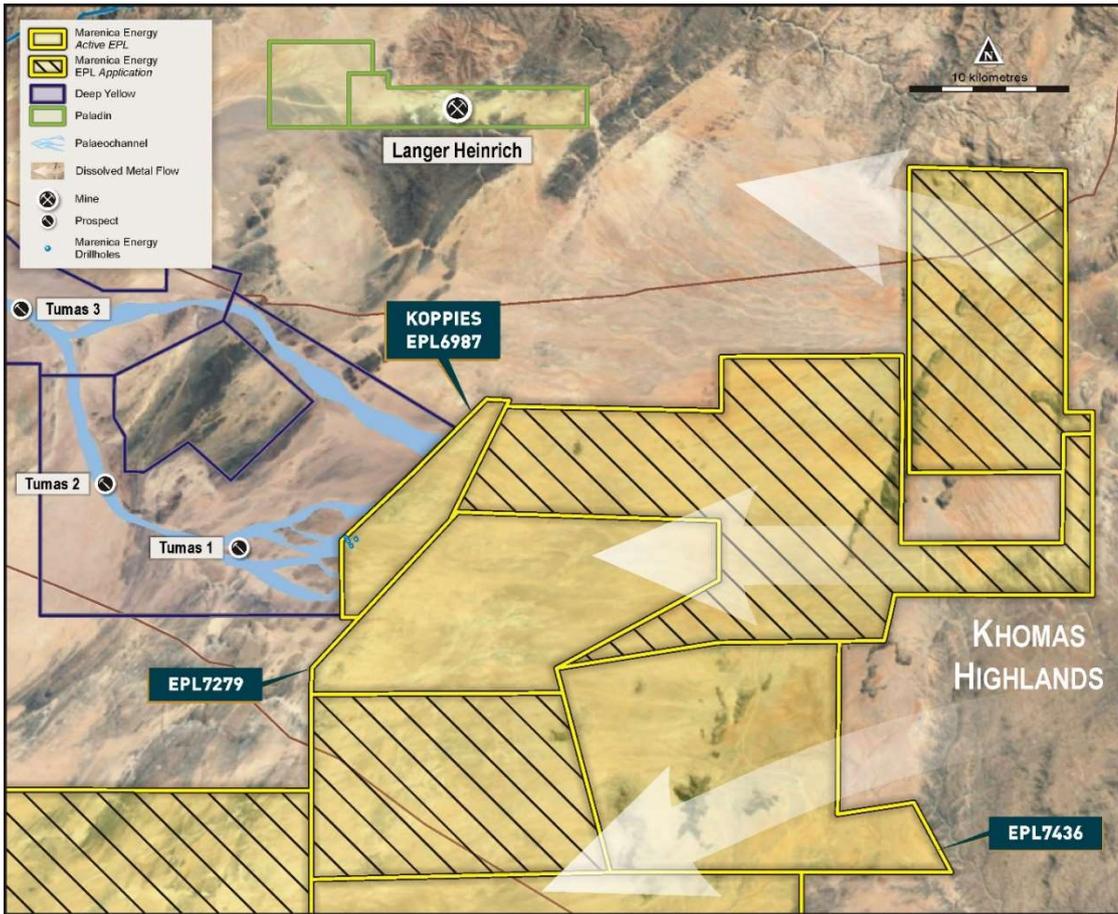


Figure 2 Detailed Location of Drill Holes

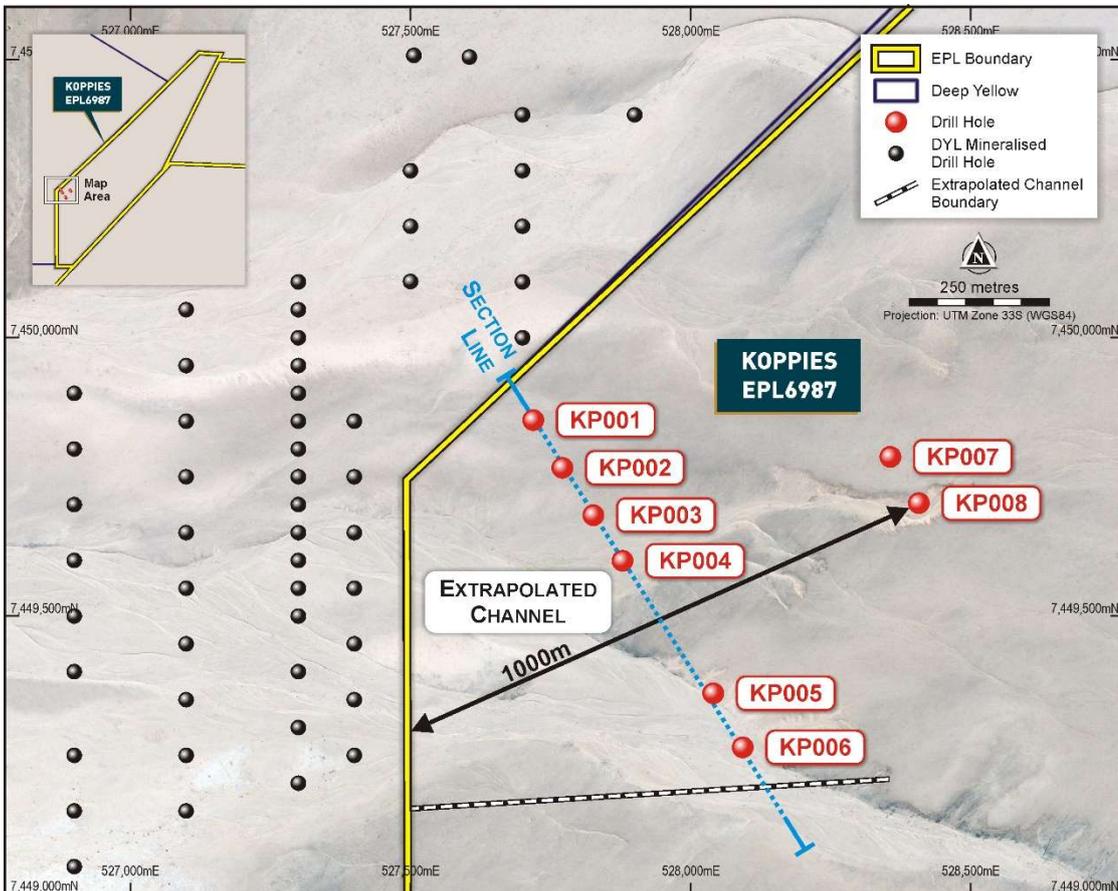


Figure 3 Cross Section of Drilling

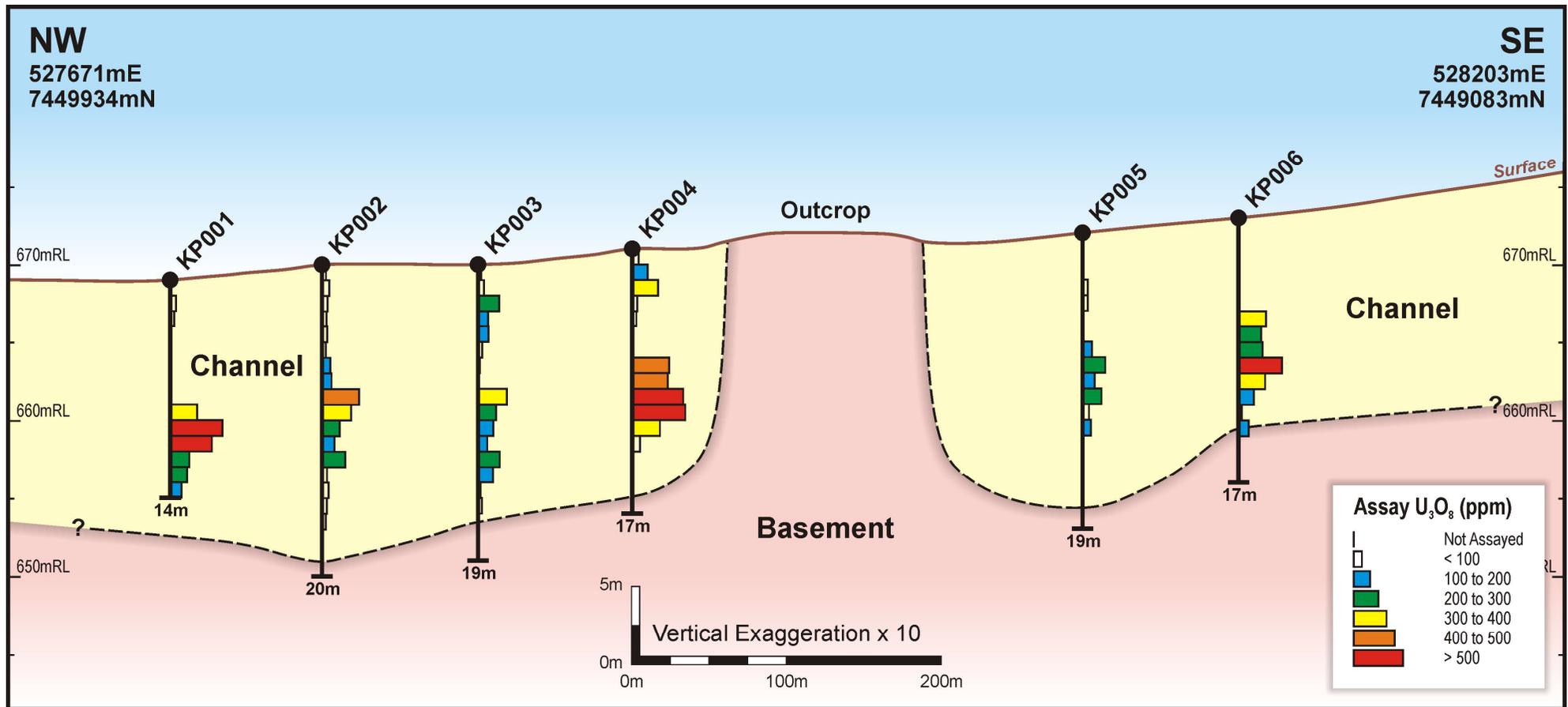


Figure 4 Location of EPL 6987 in relation to other EPLs at Namib

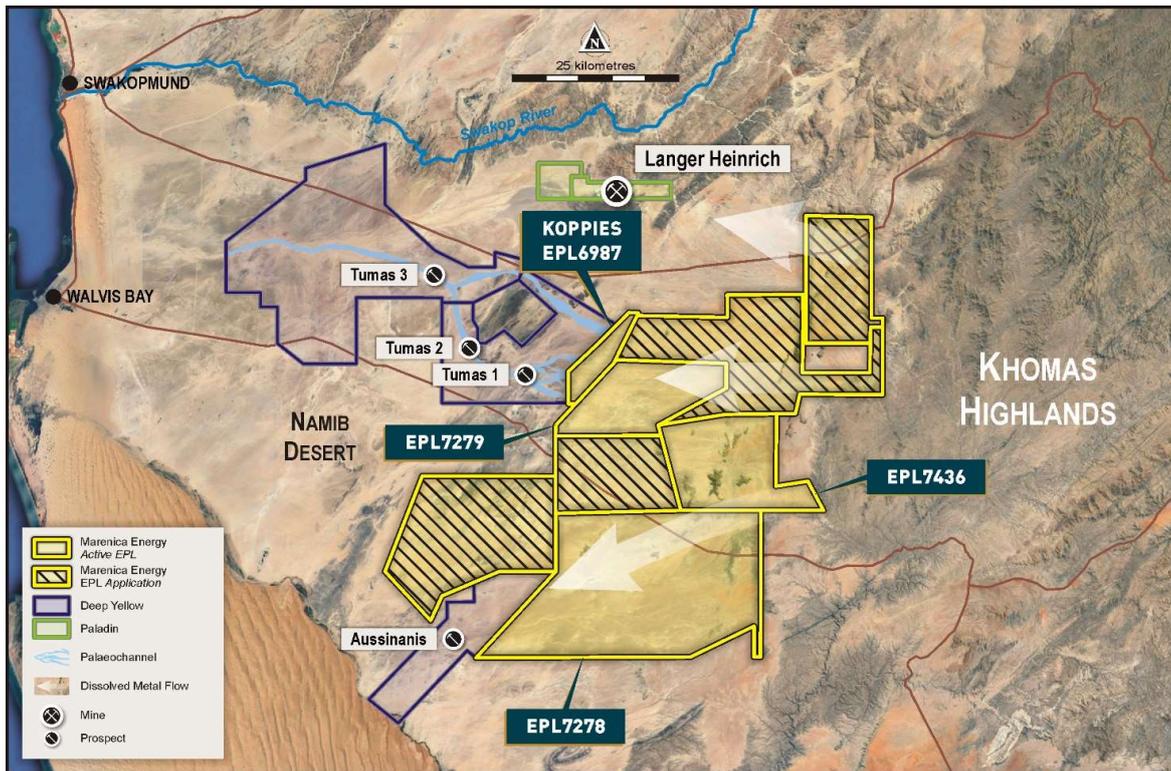


Table 2 Drill Hole Details

Drill Hole	Easting	Northing	RL (m)	Total Depth (m)
KP001	527719	7449852	669	14
KP002	527771	7449766	670	20
KP003	527826	7449681	670	19
KP004	527878	7449599	671	17
KP005	528040	7449361	672	19
KP006	528093	7449264	673	17
KP007	528356	7449786	677	12
KP008	528407	7449703	678	18

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.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <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> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <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> 	<ul style="list-style-type: none"> • Geochemical samples were derived from Rotary Air Blast (RAB) drilling at intervals of 1 m. Samples were split at the drill site using a riffle splitter to obtain a 1.2 to 1.5 kg sample from which 0.6 to 0.75 kg was pulverized to produce a sample for ICP-MS. • Samples for laboratory submission were selected by scanning the sample bag for anomalous values. After confirmation of positive assay results, the unmineralised samples will also be submitted to provide continuous assay results. • Downhole gamma probing of all drill holes will be completed at a later date.
Drilling techniques	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • RAB drilling is being used for the Koppies drilling program. • All holes are being drilled vertically and intersections measured present true thicknesses.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The parameters affecting RAB sample quality are understood. • Drill chip recoveries are good at around 98%. • Drill chip recoveries were assessed by weighing 1 m drill chip samples. • Sample loss was minimised by placing the sample bag directly underneath the cyclone.
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or</i> 	<ul style="list-style-type: none"> • All drill holes are being geologically logged. • The logging is qualitative in nature. The lithology type is being determined for all samples. • Other parameters routinely logged include colour, colour intensity, weathering, oxidation, sample condition (wet, dry) and total gamma

Criteria	JORC Code explanation	Commentary
	<p><i>costean, channel, etc) photography.</i></p> <ul style="list-style-type: none"> <i>The total length and percentage of the relevant intersections logged.</i> 	<p>count (by hand held Rad-Eye scintillometer).</p> <ul style="list-style-type: none"> Drill chips are not being photographed but a split of each metre interval is stored for future reference if required.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> A portable single tier (50%/50%) splitter was used to treat a full 1m sample from the cyclone into an appropriate size assay sample. All sampling was dry. The above sub-sampling techniques are common industry practice and appropriate. Sample sizes are considered appropriate to the grain size of the material being sampled. Duplicates will be inserted into the assay batch at an approximate rate of one for every 10 samples which is compatible with industry norm. Standards and blank samples will be inserted at an approximate rate of one each for every 20 samples.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The analytical method employed is ICP-MS. The technique is industry standard and considered appropriate. Downhole gamma tools will be used.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Geology was directly recorded into a field book and sample tag books filled in at the drill site. The drill data of those logs and tag books (lithology, sample specifications etc.) were transferred by designated personnel into a geological database.
Location of data points	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The collars are being surveyed by contractors using a differential GPS. All drill holes are vertical and shallow; therefore, no down-hole surveying was required. The grid system is World Geodetic System (WGS) 1984, Zone 33.

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Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • The drilling program was exploratory in nature and drill hole spacing varied at 100 to 300 m. • Two lines were drilled 500 m apart running in a NNW to SSE direction. • The 100 m drill hole spacing may not be sufficient to define an inferred resource at Koppies in the future. Closer spacing may be required. • Drill hole intervals were composited to 1 m composites down hole.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • Uranium mineralisation is strata bound and distributed in fairly continuous horizontal layers. Holes are being drilled vertically and mineralised intercepts represent the true width. • All holes were sampled down-hole from surface. Geochemical samples are being collected at 1 m intervals.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • 1m RAB drill chip samples were prepared at the drill site. The assay samples were stored in plastic bags. Sample tags were secured on the outside of the bags. • The samples were placed into plastic bags and transported from the drill site to a contract transport company in Swakopmund to be transferred to the Genalysis Intertek sample preparation facility in Tschudi. • A sample split was placed into plastic bags and transported from site to Marenica's storage shed in Usakos by company personnel. • Upon completion of the assay work the remainder of the drill chip sample bags for each hole will be packed back into crates and then stored in Marenica's dedicated sample storage shed in Usakos.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • No audits have been completed.

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"> • <i>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.</i> 	<ul style="list-style-type: none"> • The work to which the Exploration Results relate was undertaken on exclusive prospecting licence EPL 6987. • The EPL was granted to Manmar Investments One Eight Two (Pty) Ltd (wholly owned subsidiary of ASX listed Marenica Energy Limited) on 10 April 2019. The EPLs are in good standing and is valid until 9

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>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.</i> 	<p>April 2022.</p> <ul style="list-style-type: none"> The EPL is located within the Namib Naukluft National Park in Namibia. There are no known impediments to the project.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> General Mining located uranium mineralisation from a drill program reported in July 1978. The results of this program have provided the base information for Marenica to locate exploration targets. They were not captured digitally and were and will not be used for resource estimation.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Koppies mineralisation occurs as secondary carnotite enrichment of variably calcretised palaeochannel and sheet wash sediments and adjacent weathered bedrock. Uranium mineralisation at Koppies is surficial, stratabound and hosted by Cenozoic and possibly Tertiary sediments, which include from top to bottom scree sand, gypcrete, calcareous sand and calcrete. The majority of the mineralisation is hosted in calcrete. Locally, the underlying weathered Proterozoic bedrock is occasionally also mineralized.
Drill hole Information	<ul style="list-style-type: none"> <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"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <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> 	<ul style="list-style-type: none"> 8 holes for a total of 136 m have been drilled in the current program up to the 31 July 2019. All holes were drilled vertically and intersections measured present true thicknesses. Table 2 lists all the drill hole locations. Table 1 lists the results of intersections greater than 100 ppm U₃O₈ over 1 m.
Data aggregation methods	<ul style="list-style-type: none"> <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> <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> <i>The assumptions used for any reporting of metal equivalent values</i> 	<ul style="list-style-type: none"> The reported grades have not been cut. All grade intervals are arithmetic averages over the stated interval.

Criteria	JORC Code explanation	Commentary
	<i>should be clearly stated.</i>	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <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> 	<ul style="list-style-type: none"> • The mineralisation is sub-horizontal and all drilling vertical, therefore, mineralised intercepts are considered to represent true widths.
Diagrams	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Table 2 show all drill hole locations. Table 1 lists the anomalous intervals. • Maps and sections are included in the text.
Balanced reporting	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Comprehensive reporting of all Exploration Results was practised on receipt of the results from the first drilling stage.
Other substantive exploration data	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • The drilling completed by General Mining prior to July 1978 has been reported.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <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> 	<ul style="list-style-type: none"> • Planned work includes geophysical and geochemical exploration to confirm the extent of the palaeochannel. • Further drilling will be conducted as part of the exploration program at Koppies.