



29 October 2020

ASX Announcement

***U-pgrade*TM Testwork Indicates Significant Potential Reduction in Acid Consumption at Angela**

- **Successful proof of concept *U-pgrade*TM testwork program completed on Angela Ore**
- **Acid consumption reduced by ~77% from 104 kg/t to 24 kg/t, demonstrating significant potential cost savings**
- **Uranium leach extraction increased to 96% after calcite mineral removal**
- **Further indication of the potential value that *U-pgrade*TM can add to Marenica assets**
- **Significant potential environmental benefits arising from *U-pgrade*TM also demonstrated**

Marenica Energy Limited (“**Marenica**”, the “**Company**”) (**ASX:MEY**) is pleased to announce outstanding results from a proof of concept metallurgical testwork program, achieved through application of Marenica’s proprietary ***U-pgrade*TM** beneficiation process, to an ore sample from Marenica’s Angela Uranium Project in the Northern Territory of Australia.

The results demonstrate the potential to significantly reduce the Angela Uranium Project operating costs. This outcome was achieved by removal of the bulk of the acid consuming minerals prior to acid leaching, through the application of ***U-pgrade*TM**.

Marenica Managing Director, Murray Hill, commented: *“These are great results for the Angela Project and for Marenica. The results indicate that ***U-pgrade*TM** can reduce acid consumption from 104 kg/t to 24 kg/t, demonstrating significant potential operating cost savings. These potential cost savings are likely far beyond the prevailing expectations of the time when Marenica acquired the project. These results clearly demonstrate the potential Marenica has to add value to its uranium assets through ***U-pgrade*TM**, and gives us a sustainable competitive advantage over our peers. This result also indicates the broader potential application of ***U-pgrade*TM** beyond the calcite hosted uranium ores of Namibia, on which this ground-breaking patented process was developed.*

We have not only demonstrated a potential substantial reduction of acid consumption and costs, but have isolated the calcite mineral component of the ore so that it could potentially be used to neutralise and render the leach residue inert, by neutralising any remaining acid and precipitating soluble metals, a significant environmental benefit.

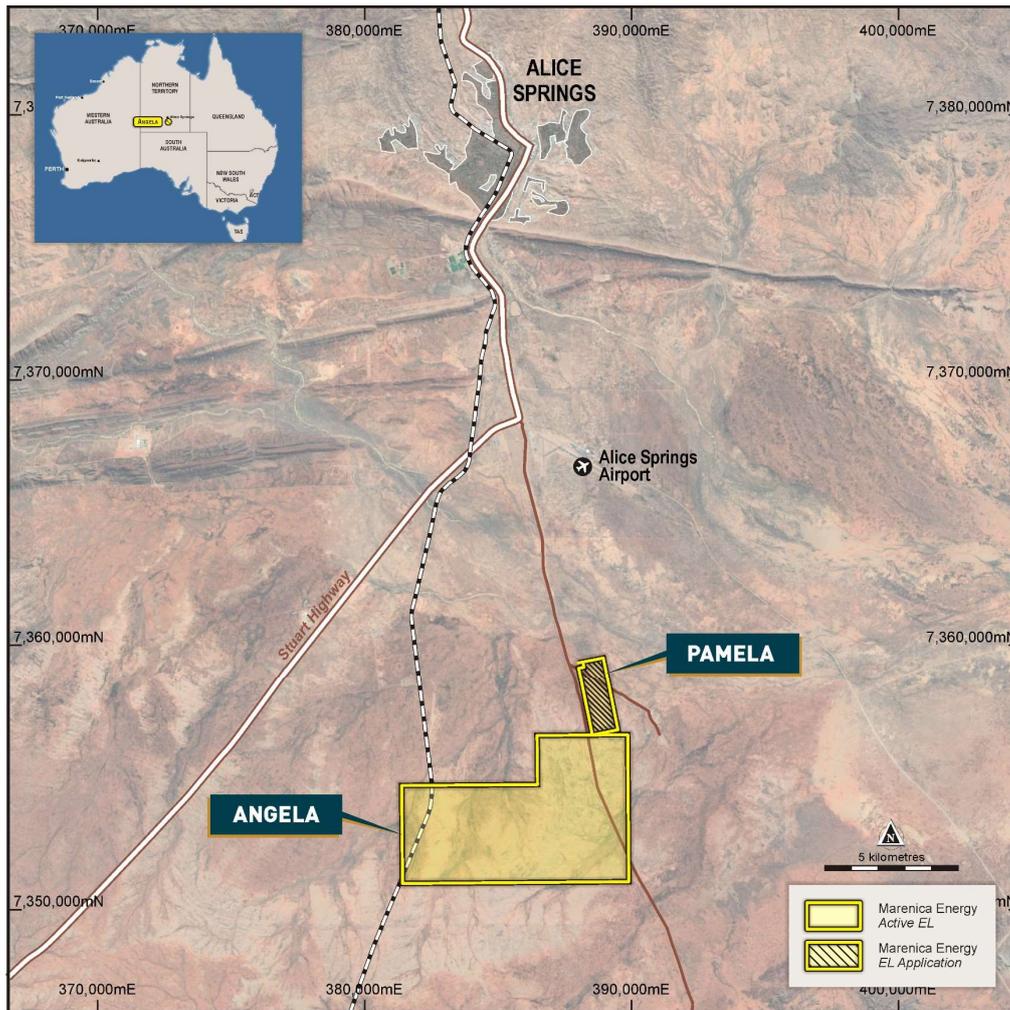
*These results indicate that, following application of ***U-pgrade*TM**, Angela potentially becomes economically viable at a significantly lower uranium price.”*

Technical Discussion

The Angela Project is a sandstone-hosted roll-front type uranium deposit with a JORC 2004 Inferred Mineral Resource reported in an ASX announcement made on 4 July 2019. The estimated calcium grade of the resource is 4% calcium, equivalent to 10% calcium carbonate (calcite).

The project is located in the Amadeus Basin of the Northern Territory, approximately 25 km from Alice Springs, in close proximity to infrastructure and services. It was formerly held by Cameco Corporation (the world's largest publicly traded uranium company) and Paladin Energy Limited, until it was sold to Optimal Mining Limited ("Optimal") in 2016. Marenica acquired the Angela project from Optimal in December 2019.

Figure 1 – Location of Angela



Acid consumption in the uranium leach stage for processing of the Angela resource was expected to be approximately 100 to 120 kg/t (as H_2SO_4), based on the metallurgical work completed prior to Marenica taking ownership and prior to testwork for the application of **U-grade™**. At the current acid price of \$400/t (\$0.40/kg) such acid cost would contribute to high operating costs for any potential project that may be developed at Angela.

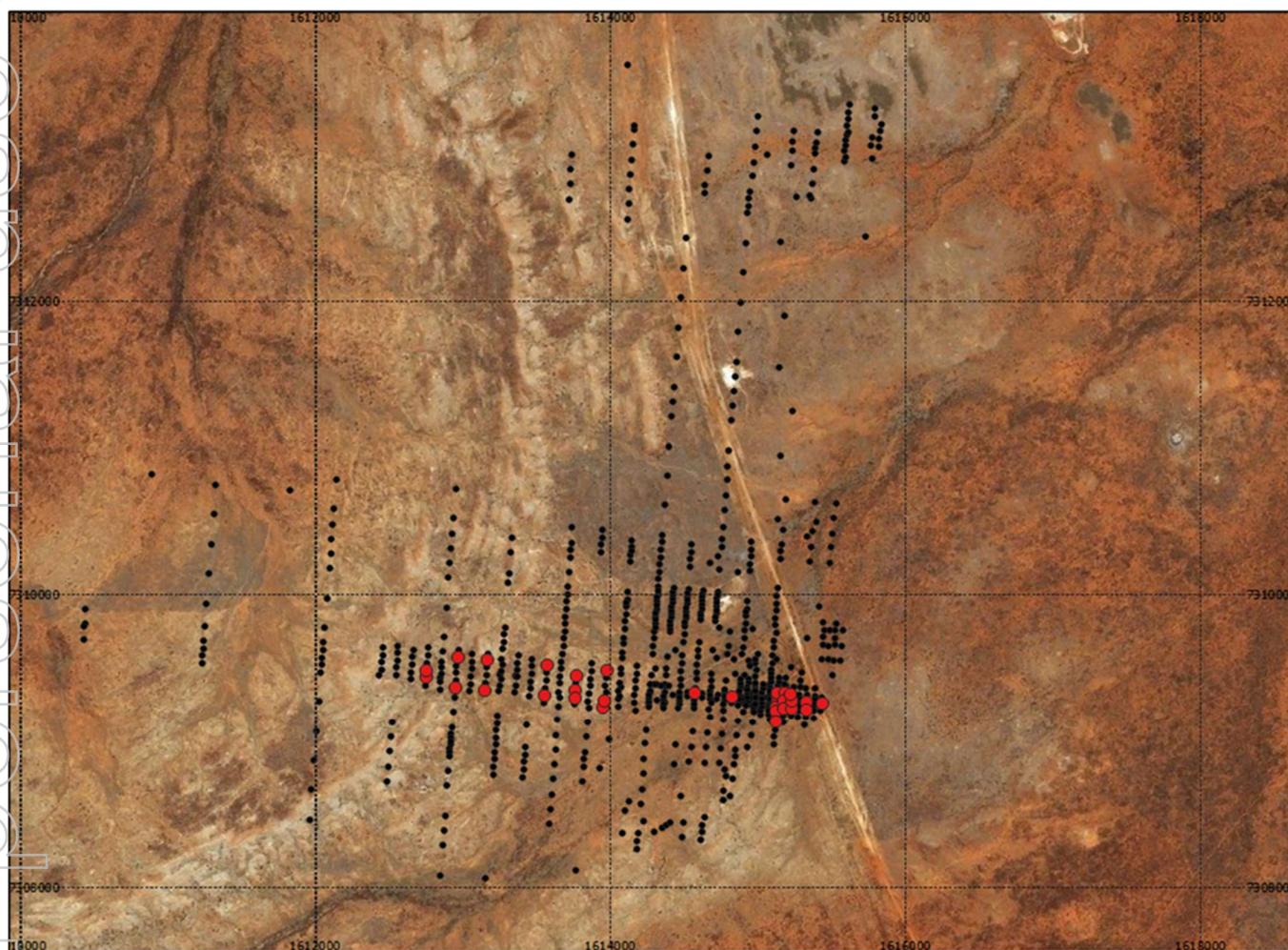
This high acid cost has historically been a serious impediment to the potential development of the Angela project. Marenica sought to analyse the potential to reduce the acid consumption through application of its **U-grade™** process.

A proof of concept metallurgical program was initiated on a drill core sample used in a prior testwork program managed by Paladin Energy Limited. Mineralogical reports suggest that the acid consuming mineral was calcite. The scope was to confirm the acid consuming mineral was indeed calcite and then establish whether the bulk of the calcite could be removed prior to leaching, thus reducing the leach acid consumption and thereby the project operating costs.

The metallurgical testwork program was completed at the Australian Nuclear Science and Technology Organisation (“ANSTO”), renowned for its uranium knowledge and experience, having run testwork programs on nearly all uranium projects around the world.

The sample used in the ANSTO program included a total of 235 half NQ diamond drill core intervals (Figure 3) obtained from 32 drill holes sourced from the locations shown in Figure 2 and the hole details provided in Table 2.

Figure 2 – Location of Drill Holes Used in Testwork Program



The total sample mass of 600 kg was stage crushed to generate a 20 kg sample for the **U-pgrade™** testwork program. The sample had an acid consumption of 104 kg/t, similar to what was expected for the total Angela resource. The sample uranium grade (459 ppm U_3O_8) was lower than the Angela resource grade, but in the context of this scope of work the uranium grade was not critical to proving the concept of calcite removal.

Mineralogical work on this sample confirmed the acid consuming mineral was calcite, which was predominantly liberated from other minerals and hence, removal by physical beneficiation was potentially possible.

Figure 3 – Photo of NQ Core Used in Testwork Program



Removal of the calcite mineral was successful from the first metallurgical test. Minor changes were made to subsequent test conditions to generate sufficient product mass to complete acid leach tests on samples pre and post calcite removal, in order to confirm the expected reduction in acid consumption. The bulk of the calcite (84% of the total minerals present) was recovered into a reject fraction grading 92% calcite and containing 9% of the feed mass, resulting in 91% of the mass and 16% of the calcite reporting to the leach stage.

A standard set of leach conditions were applied to:

- i) the pre-calcite removal sample (i.e. without application of Marenica's **U-pgrade™**), and
- ii) the post-calcite removal sample (i.e. with application of Marenica's **U-pgrade™**),

to determine the expected reduction in acid consumption.

The results summarised in Table 1 show that the removal of calcite reduced the acid consumption from 104 kg/t to 24 kg/t, i.e. a difference of 80 kg/t. The estimated delivered cost of sulphuric acid to the Angela site has been assumed, based on indicative quotes obtained for these calculations, to be A\$400/t or \$0.40/kg.

Table 1 Pre and Post Calcite Removal Leach Result Summary

| Sample | Mass (%) | Acid Consumption (kg/t of sample) | Acid Consumption (kg/t of feed) | U ₃ O ₈ Extraction from Sample (%) |
|----------------------------|----------|-----------------------------------|---------------------------------|--|
| Pre calcite removal - feed | 100 | 104 | 104 | 93.0 |
| Post calcite removal | 91 | 26 | 24 | 95.8 |
| Nett Difference | | | 80 | 2.8 |

Uranium extraction from the sample subjected to the **U-pgrade™** process increased by 2.8% after removal of the calcite compared to the untreated sample. While various mechanisms for this could be proposed, whatever the reason, removal of most of the calcite prior to acid leaching had a positive effect on the uranium extraction, in this case increasing by 2.8%.

Inevitably when a uranium sample is beneficiated, some uranium is lost in the reject fraction. This occurred during the calcite removal stage where the post calcite removal sample was 91% of the original mass with a grade of 463 ppm. However, the increased leach uranium extraction rate partially offset this loss. On the sample tested, the net loss of uranium from the **U-pgrade™** calcite removal stage and subsequent leach was 23 ppm U₃O₈ more than the whole of ore leach. At the current U₃O₈ price of US\$30/lb applied to the sample grade used in this test (459 ppm U₃O₈), the loss of uranium is relatively low compared to the potential operating cost reduction demonstrated from the significantly lower acid consumption shown in the above results.

There is also a significant environmental benefit from removal of the calcite, since the calcite stream could be used to neutralise the acid in the leach tailings prior to disposal. This would result in the leach residue being rendered inert as a result of all acid being destroyed and all soluble metals precipitated. This consequential benefit is a significant potential environmental result that will be assessed in future testwork programs and study phases.

Other benefits include a reduction in the size of the acid storage facility and reduced leach circuit volume, which could potentially contribute to a reduced capital and operating cost.

This proof of concept program concluded that:

- removal of the bulk of the acid consuming calcite mineral could be achieved with minimal uranium losses,
- uranium extraction in the leach could be increased by removal of calcite, and
- the calcite reject could be used to render the leach tailings inert, providing significant potential environmental benefit for the project.

This testwork confirms the potential benefit that **U-pgrade™** could generate for the Angela project, substantially increasing its value and reducing the uranium price at which any potential project that may be developed at Angela would be economic to develop.

These results have been achieved from a limited proof of concept testwork program. The Company is encouraged by the potential to further increase calcite removal but further reduce uranium losses, through a detailed optimisation testwork program.

Although the sample used in this program has a similar calcite content to the Angela resource, the uranium grade is lower, and although the uranium grade is not critical to the removal of calcite, it is possible that the uranium losses from a higher grade sample could vary from what has been reported from this testwork program.

Competent Person Statement:

Project and Technical Expertise

The information in this announcement that relates to Metallurgical Results is based on information compiled by Murray Hill (B.Sc Extractive Metallurgy). Mr Hill is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Hill is an employee of Marenica. Mr Hill has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken, 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 Hill consents to the inclusion in the announcement of the matters based on the information made available to him, in the form and context in which it appears.

Next steps

The Company will assess and outline the steps required to prepare Angela for more detailed studies, one of which will be an expanded optimisation testwork program on a wide range of samples.

Authorised for release by: The Board of Marenica Energy Ltd

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Forward Looking Statements

Certain information set forth in this announcement contains “forward-looking information”, including “metallurgical process performance”, “future-oriented financial information” and “financial outlook”, under applicable securities laws (collectively referred to herein as forward-looking statements). Except for statements of historical fact, the information contained herein constitutes forward-looking statements and includes, but is not limited to, the (i) the projected metallurgical performance of the process plant; (ii) projected financial performance of the Angela Uranium Project; and (iii) the expected development of the Company’s projects. Forward-looking statements are provided to allow potential investors the opportunity to understand management’s beliefs and opinions in respect of the future so that they may use such beliefs and opinions as one factor in evaluating an investment.

These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or result expressed or implied by such forward-looking statements.

Although forward-looking statements contained in this announcement are based upon what management of the Company believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.

For example, future revenues from the Angela Uranium Project described in this announcement will be based, in part, upon the market price of the reagents used and uranium produced, which may vary significantly from current levels.

Table 2 – Drill Hole Collars for samples used to generate metallurgical sample

| HOLE ID | EASTING | NORTHING | RL | AZI | DIP | DEPTH | HOLE TYPE |
|---------|------------|-------------|--------|--------|-------|--------|-----------|
| AP001 | 389448.021 | 7352319.634 | 545.67 | 0 | -90 | 75.36 | DDH |
| AP002 | 389448.481 | 7352299.362 | 545.65 | 0 | -90 | 90 | DDH |
| AP003 | 389449.27 | 7352273.823 | 545.77 | 0 | -90 | 90 | DDH |
| AP004 | 389449.563 | 7352249.9 | 545.78 | 0 | -90 | 90.28 | DDH |
| AP007 | 389450.005 | 7352224.826 | 545.91 | 0 | -90 | 90.25 | DDH |
| AP015 | 389451.565 | 7352149.078 | 546.24 | 0 | -90 | 80 | RCDD |
| AP019 | 389149.587 | 7352299.933 | 546.49 | 0 | -90 | 135 | DDH |
| AP020 | 388299.815 | 7352150.55 | 552.62 | 5.48 | -90 | 246.37 | RCDD |
| AP021 | 388300.268 | 7352199.993 | 554.09 | 5.48 | -90 | 270.3 | PCDD |
| AP025 | 388099.753 | 7352349.992 | 555.69 | 0 | -90 | 312.3 | RCDD |
| AP029 | 388900.036 | 7352300.282 | 547.47 | 0 | -90 | 185 | DDH |
| AP032 | 388100.058 | 7352250.077 | 556.7 | 0 | -90 | 312.5 | DDH |
| AP033 | 388100.349 | 7352200.107 | 556.1 | 0 | -90 | 306.5 | DDH |
| AP034 | 387900.108 | 7352400.004 | 557.16 | 0 | -90 | 350.4 | PCDD |
| AP038 | 387900.159 | 7352199.893 | 555.93 | 0 | -90 | 342.2 | PCDD |
| AP051 | 387499.785 | 7352199.649 | 560.09 | 0 | -90 | 402.4 | RCDD |
| AP055 | 387499.571 | 7352400.342 | 569.06 | 0 | -90 | 426.2 | RCDD |
| AP057 | 389450.116 | 7352349.828 | 545.51 | 0 | -90 | 90.3 | DDH |
| AP062 | 389499.834 | 7352350.156 | 545.52 | 0 | -90 | 87.3 | DDH |
| AP063 | 389499.798 | 7352299.626 | 545.78 | 0 | -90 | 90.3 | DDH |
| AP064 | 389499.845 | 7352249.991 | 546.09 | 0 | -90 | 84.35 | DDH |
| AP066 | 389550.489 | 7352250.268 | 546.26 | 0 | -90 | 81.3 | DDH |
| AP067 | 389549.921 | 7352299.656 | 545.89 | 0 | -90 | 81.4 | DDH |
| AP068 | 389539.849 | 7352350.477 | 545.37 | 0 | -90 | 81.25 | DDH |
| AP072 | 389650.403 | 7352299.847 | 545.96 | 0 | -90 | 60.1 | DDH |
| AP073 | 389650.299 | 7352250.23 | 546.28 | 0 | -90 | 54.3 | DDH |
| AP077 | 389749.98 | 7352300.515 | 546.24 | 0 | -90 | 53.9 | DDH |
| AP080 | 387300.824 | 7352200.855 | 561.8 | 351.38 | -88.5 | 432.7 | RCDD |
| AP084 | 387300.026 | 7352400.193 | 564.36 | 185.68 | -88.6 | 441.2 | RCDD |
| AP087 | 387099.879 | 7352249.677 | 563.99 | 0 | -90 | 468.3 | RCDD |
| AP088 | 387100.703 | 7352299.31 | 563.51 | 44.88 | -88 | 465.3 | RCDD |
| AP097 | 388301.738 | 7352400.11 | 552.88 | 0 | -90 | 280 | RCDD |

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"> • Samples were derived from Diamond Core (DDH) drilling sampled at various intervals ranging from 0.02 to 1.11 m. Drill core was cut in half by diamond saw to generate half NQ2 core. Samples were taken from selected intervals and holes to generate an approximate 600 kg bulk sample initially designed for radiometric sorting. • Downhole gamma probing of all drill holes has been completed in conjunction with assaying of selected intervals. |
| 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"> • Diamond drilling was used for all mineralised intercepts in the Angela drilling program. Long holes utilised RC pre-collars • All holes were drilled vertically and intersections measured represent true thicknesses of mineralisation. • Drilling was conducted by Gorey and Cole Drillers of Alice Springs using a Schramm 685 with 1800 cfm and 900 psi boosted air for RC drilling, a KL1500 universal rig for both RC pre-collars and core tails, and an Edson 6000 rig for core drilling. |
| 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 DDH sample quality are understood. • Diamond core recoveries are good at an average of greater than 90% RC pre-collars did not intersect mineralisation and as such recoveries are not relevant. • Core recoveries were assessed by confirming drill runs. |

| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| 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 costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> | <ul style="list-style-type: none"> • All drill holes were geologically logged. • The logging is qualitative in nature. The lithology type was determined for all samples. • Other parameters routinely logged include colour, colour intensity, weathering, oxidation, and total gamma count (by hand held Rad-Eye scintillometer) in conjunction with various geotechnical parameters. • All core was photographed. • All holes were logged downhole at the time of drilling using calibrated total count, spectrometer and resistivity probes. • Prior to May 2009 downhole probes were owned and operated by Cameco, the operator of the project at the time, after this time Borehole Wireline was contracted to undertake downhole logging. |
| 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"> • NQ core was cut in half. • 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, Standards and blank samples were inserted into the sample stream at a target rate 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 was four acid digest ICP-MS. The technique is industry standard and considered appropriate for sandstone hosted deposits. • Calibrated downhole gamma tools have been used. • Gamma probes used for the exploration work were routinely calibrated at the SA government calibration facility in Adelaide. • Gamma probes were assessed for calibration drift using daily sleeve calibrations when drilling was being undertaken. |
| 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</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 |

| Criteria | JORC Code explanation | Commentary |
|--|--|---|
| | <p><i>verification, data storage (physical and electronic) protocols.</i></p> <ul style="list-style-type: none"> • <i>Discuss any adjustment to assay data.</i> | <p>geological database.</p> |
| 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"> • Drill hole collar locations were surveyed by a professional contractor (Ausurv Pty Ltd.) • The grid system is World Geodetic System (WGS) 1984, Zone 53S. |
| 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 for resource purposes and infilled historical drill holes. • The drill hole spacing was a nominal 50m by 200m and aimed to result in a final coverage of 50m by 100m when the historical drilling was included. • A total of 172 drill holes were completed for a total of 32,810m and added to the historical drilling within the area of 622 drill holes for 147,658m. • For the metallurgical testwork all the samples selected were composited into a single ~600kg sample which was designed to be used in radiometric sorting studies.. |
| 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 redox front controlled and is distributed in a moderately continuous shallowly plunging zone. Holes were drilled vertically and mineralised intercepts represent the true width. • All holes were sampled down-hole from just above the mineralisation. Geochemical samples are being collected based on geological boundaries or 1 m intervals. • Downhole gamma logging was conducted at a 5 cm interval. |
| Sample security | <ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> | <ul style="list-style-type: none"> • Diamond drill core samples were placed into core trays at the drill site. The core trays were labelled with drill hole number and intervals. • The core trays were transported from the drill site to a sample storage shed in Alice Springs. • All drilling samples were kept under supervision of Cameco staff at the drill site until dispatch. Samples were transported directly to Alice Springs, and then freighted to NTEL in Darwin. Given the procedures in place it is considered that there is little opportunity for sample tampering by an outside agent. |
| 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"> 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. 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. | <ul style="list-style-type: none"> The work to which the Exploration Results relate was undertaken on exclusive prospecting licence EL25758. The EL is held by Jackson Cage Pty Ltd (wholly owned subsidiary of ASX listed Marenica Energy Limited). The EL is in good standing and is valid until 3 October 2020 with an application extension lodged. The EL is located within the Amadeus Basin in the Northern Territory of Australia. There are no known impediments to the project. |
| Exploration done by other parties | <ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. | <ul style="list-style-type: none"> Cameco Corporation and Paladin Energy Limited have previously explored the area covered by the tenement between 2008 and 2011 with the drill results used to generate a JORC resource. |
| Geology | <ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. | <ul style="list-style-type: none"> Mineralisation at Angela I occurs at a 30-40 m high and 50-300 m wide step zone in the regional redox boundary. Mineralisation at Angela I is remarkably linear, dipping at approximately 9° to the west and extending down-dip for at least 5,700 m to depths exceeding 900 m. Satellite mineralisation (Angela II-IV) are located on smaller step zones to the north of Angela I whereas Pamela occurs at a series of poorly defined steps on the upper and lower sides of the tip of the regionally reduced wedge. |
| Drill hole Information | <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. | <ul style="list-style-type: none"> A total of 172 drill holes were completed for a total of 32,810m and added to the historical drilling within the area of 622 drill holes for 147,658m. All holes were drilled vertically and intersections measured present true thicknesses. See table of drill holes supplying samples for the composite metallurgical sample in the body of this announcement. |
| Data aggregation methods | <ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade | <ul style="list-style-type: none"> The reported grades have not been cut. The grade of the metallurgical sample is the weighted average grades of the samples used to form the composite. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | <p>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.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. | |
| Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). | <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"> 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. | <ul style="list-style-type: none"> A map is included in the text. |
| Balanced reporting | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> Comprehensive reporting of all Exploration Results from this drilling program are not detailed in this announcement. |
| Other substantive exploration data | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> Previous drilling results and Mineral Resources have been reported by Paladin Energy. No other work has been completed on the tenement by the Company, the only other work known to have been undertaken was by Uranerz in the 1980's and the Cameco/Paladin joint venture in 2008-2011. |
| Further work | <ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | <ul style="list-style-type: none"> Given the current state of the uranium industry the only substantive work to be undertaken is expected to be additional metallurgical testwork aimed at reducing the expected acid consumption. |