



ASX/Media Release – 16th March 2011

## **POSITIVE METALLURGICAL RESULTS FOR MARENICA URANIUM PROJECT, NAMIBIA**

*TESTWORK PROGRAM FORMS KEY PART OF PROJECT PRE-FEASIBILITY STUDY PLANNED FOR 2011*

### **KEY POINTS**

- **Positive results received from the first stage of metallurgical testwork on beneficiation of various ore types from the Marenica Uranium Project, Namibia.**
- **An average of 80-93% of total uranium reporting to concentrate, depending on material types.**
- **The high-grade bedrock materials upgrade well at -25mm, while the channel material upgrades well at both crush sizes.**
- **Intermittent 30-day bottle roll leach tests are now underway on three composites made up of screened fines. Preliminary results of typical run-of-mine material show recoveries around 50% after 24 days with low consumption of reagents.**
- **The remaining material will be composited for verification of upgrading and column leach testing of upgraded products.**

International uranium company **Marenica Energy (ASX: MEY)** is pleased to report encouraging results from the first phase of an ongoing metallurgical testwork program on various ore types from its flagship 75%-owned **Marenica Uranium Project** in Namibia, southern Africa.

The ongoing metallurgical testwork program – which is being conducted at AMMTEC Laboratories in Perth, Western Australia and is being supervised by Kappes, Cassiday & Associates Australia Pty Ltd (KCAA) – represents a key component of the Pre-Feasibility Study (“PFS”) planned to be completed on the Marenica Project during 2011.

The samples submitted in late 2010 for the metallurgical testwork program represent bedrock/basement and channel ore types from the Marenica deposit.

The results of the 2010 Scoping Study undertaken by SRK Consulting (UK) Ltd indicated that alkaline heap leaching was the most logical approach to treating the Marenica ores. ANSTO Minerals test results indicated that both dry screening and whole ore scrubbing would recover 90% of the uranium values into a lower weight, potentially 50% of the original feed.

A practical flowsheet program has been developed by KCAA where a dry screen undersize can be combined with the undersize from the wet scrubbed oversize to produce a “concentrate” that can be agglomerated and heap leached.

## Beneficiation

The preliminary results for the beneficiation stage for a range of bedrock/basement ores types has been successful in upgrading both the -25mm and -50mm material, with the average percentage of uranium to the intended agglomerate/leach feed **of 86.5% with a low of 71.5 % and a high of 94.8%.**

The total percentage of fines to the agglomerate/leach feed averaged 49.1% with a low of 37.9% and a maximum of 60.3%.

The preliminary results for the beneficiation stage for a range of calcrete ores types has been successful in upgrading both the -25mm and -50mm material, with the average percentage of uranium to the intended agglomerate/leach feed **of 91.1% with a low of 85.1 % and a high of 98.0%.** The total percentage of fines to the agglomerate/leach feed averaged 63.8% with a low of 57.3% and a maximum of 74.6%.

These numbers are close to the original objectives of the program (*see Table 1 below, highlighted in blue*) and overall it appears that **85% to 90% of the contained uranium** can be collected into a screened/scrub concentrate.

The percentage of wet fines from scrubbing ranged from 16.2% to 40.7%, indicating that the scrubbed mass is potentially close to 50% of the total agglomerate feed. This is too wet for agglomeration with the dry fines, and it is likely that some form of de-watering will be required in the flowsheet prior to agglomeration. Further optimisation of crushing and screen sizes is being carried out and should reduce the percentage of wet scrubbed product.

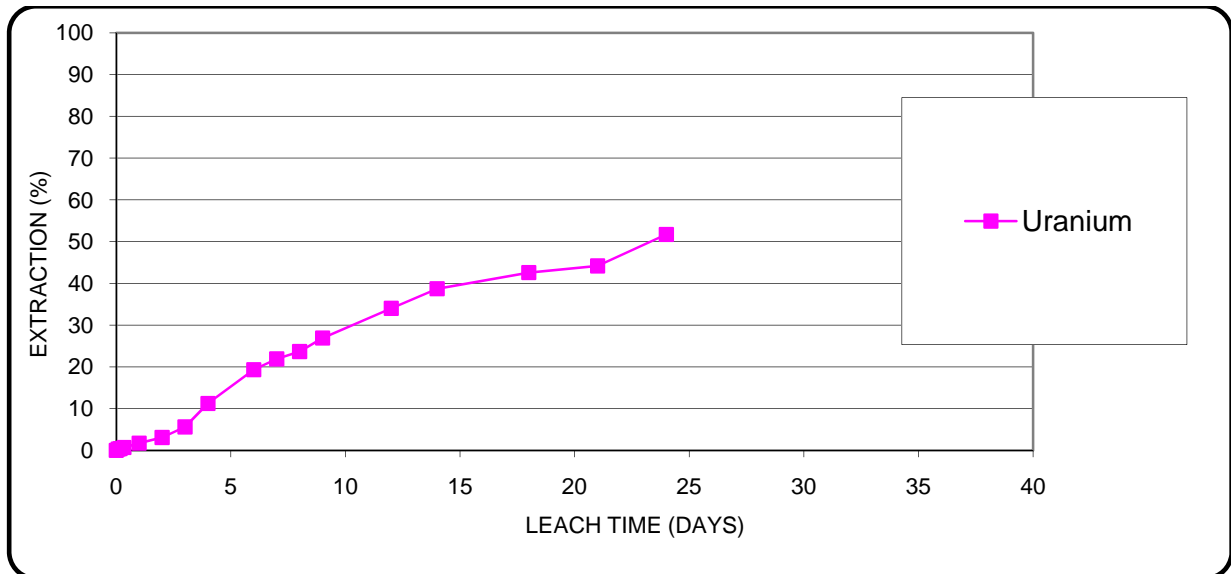
**Table 1 – Results Comparison**

		%Wt	% U	Orig Head Grade ( ppm U3O8)	Up Grade (ppm U3O8)	%UG
Scoping Assumptions	Material	50%	90%	103	191	85
AMMTEC Screen/Scrubbing	Bedrock - 25mm	49.1%	86.5%	85	147	73
	<b>Bedrock - 50mm</b>	45.3%	79.6%	107	172	61
	Calcrete - 25mm	63.8%	91.1%	111	154	39
	Calcrete - 50mm	63.0%	92.6%	101	148	47
Avg All		55.3%	87.45%	101	155	53

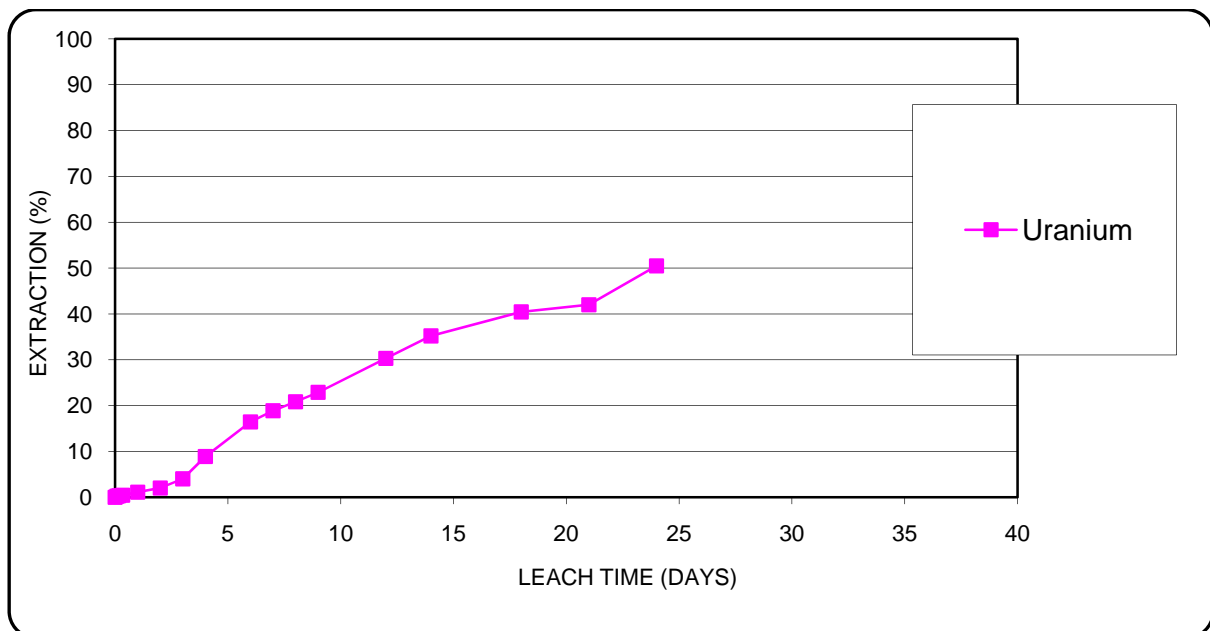
### Preliminary Leaching

The two composite samples below were made up of the dry screened fines of calcrete and bedrock materials which are undergoing intermittent 30-day bottle rolls at ambient temperatures. Preliminary results from the 24<sup>th</sup> day are shown below and results indicate leaching is progressing well with up to 50% uranium leached in the first 24 days from typical run-of-mine (ROM) ore. Although these are preliminary results, indications are that reagent consumptions have been low.

**COMPOSITE 304 (Combined B2, B3 & B4 Fines)** – which is made up of lower and average grade bedrock/basement ore from all depths:



**COMPOSITE 305 (Combined C2, C3, C4 & C5 Fines)** – which composite is made up of low and high grade calcrete ores from all depths:



## Ongoing Activities in 2011

As noted above, the metallurgical testwork program forms a key part of the PFS of the Marenica Uranium Project scheduled for 2011. Other key activities planned as part of the PFS include:

- Reverse Circulation drilling program to optimise the continuity and improve grade within the optimised pit shell;
- Trial mining/pitting for further bulk metallurgical testwork at larger scale for optimisation of the process route;
- An updated resource calculation / mining optimisation study;
- Technical Economic Model update and review; and
- Environmental and social impact studies for inclusion in the Definitive Feasibility Study.

Marenica Energy is encouraged by the results received to date and looks forward to reporting further on the progress with the PFS for the Marenica Uranium Project.

For further information contact John Young, CEO at Marenica Energy Limited; PH: +61 8 9321 7355

### Notes

*Information in this report that relates to metallurgical results is based on information compiled by Mr R. A. Pyper, who is a Fellow of the Australian Institute of Mining and Metallurgy, a Member of the SME and AIME. Mr R. A. Pyper is a full-time employee of Kappes, Cassidy and Associates Pty Ltd, a specialist consultancy in all aspects of design, construction, testing, evaluation, operations and management of heap leach and related projects and 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr R. A. Pyper consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*