

ASX/Media Release – 27th April 2010

Drilling Firms Up Western Extension to Marenica Uranium Resource

KEY POINTS

- Further excellent results from down-hole probing of wide spaced drilling at MA5 Target, located directly west of the Marenica resource, including best result of:
 - 2.9m @ 398ppm eU₃O₈ from 2.57m
 - 4.2m @ 307.1ppm eU₃O₈ from 3.14m
 - 8.8m @ 249ppm eU₃O₈ from 0.69m
- +1.6km long zone of shallow mineralisation identified in broad east-west orientated zone open to the west
- Aircore drilling completed over first six radiometric targets with 410 holes completed for over 6,000 metres

International uranium company Marenica Energy Limited (ASX: MEY) is pleased to report further excellent results from exploration drilling targeting a newly identified western extension of the main JORC resource at its 80%-owned **Marenica Uranium Project** in Namibia, Southern Africa.

Further encouraging down-hole probe results have been received for **77** holes within this **new Target Area**, **MA5**. Significant intercepts (>100ppm eU_3O_8) have been encountered in 31 holes, defining a a broad area of <u>near-surface</u>, secondary uranium mineralisation immediately west of the current resource area (*see Figure 1*). Better results from the target included:

- 3.0m @ 326.4ppm eU₃O₈ from 2.57m in MAC0042
- 4.2m @ 307.1ppm eU₃O₈ from 3.14m in MAC0055
- 8.8m @ 249.0ppm eU₃O₈ from 0.69m in MAC0127
- 4.6m @ 190.5ppm eU₃O₈ from 1.83m in MAC0129
- 5.8m @ 297.1ppm eU_3O_8 from 2.78m in MAC0133
- 2.9m @ 398.1ppm eU₃O₈ from 2.17m in MAC0134
- 3.3m @ 268.2ppm eU₃O₈ from 2.34m in MAC0137

Down-hole geophysical probing of drill-holes by Terratec Geophysical Services included those of the current Aircore program and a number of historic Goldfields holes not probed during 2009. To date, 197 holes have been probed for a total of 1,829m.

Marenica is planning to undertake a program of RC drilling in this area in the second and third quarters of 2010 to define potential resources. Significant intercepts (>100ppm eU_3O_8) received to date from Target Area MA5 are summarised in Table 1 below:

					Hole			Intercept	
Hole_ID	UTM_East	UTM_North	Dip	Azim	Depth	From(m)	To(m)	(m)	eU ₃ O ₈ (ppm)
MAC0042	487600	7578700	-90	0	12	2.57	5.57	3.0	326.4
MAC0049	487200	7578600	-90	0	15	4.28	7.58	3.3	181.2
MAC0053	487200	7578000	-90	0	10	3.39	5.89	2.5	163.1
MAC0055	487200	7578050	-90	0	12	3.14	7.34	4.2	307.1
MAC0057	487200	7578200	-90	0	9	2.24	4.44	2.2	389.0
MAC0058	487200	7578150	-90	0	9	2.93	5.63	2.7	250.7
MAC0086	487200	7577650	-90	0	6	2.24	3.84	1.6	175.2
MAC0089	487000	7577550	-90	0	12	2.44	4.04	1.6	129.1
MAC0094	487000	7577650	-90	0	12	3.49	5.59	2.1	103.0
MAC0118	487200	7578550	-90	0	18	9.51	12.01	2.5	119.5
MAC0123	487400	7577900	-90	0	12	1.95	4.45	2.5	316.4
MAC0127	487400	7578100	-90	0	10.2	0.69	9.49	8.8	249.0
MAC0128	487400	7578150	-90	0	15	1.50	3.70	2.2	132.6
MAC0128	487400	7578150	-90	0	15	7.70	10.00	2.3	152.4
MAC0129	487400	7578200	-90	0	12	1.83	6.43	4.6	190.5
MAC0131	487400	7578300	-90	0	15	3.34	4.74	1.4	306.0
MAC0131	487400	7578300	-90	0	15	9.14	10.84	1.7	123.8
MAC0132	487400	7578350	-90	0	13	3.36	5.76	2.4	252.3
MAC0133	487400	7578400	-90	0	9.5	2.78	8.58	5.8	297.1
MAC0134	487400	7578450	-90	0	13.7	2.17	5.07	2.9	398.1
MAC0134	487400	7578450	-90	0	13.7	6.87	11.27	4.4	141.5
MAC0135	487400	7578500	-90	0	8	1.16	2.96	1.8	154.5
MAC0137	487400	7578600	-90	0	10.9	2.34	5.64	3.3	268.2
MAC0157	488200	7578900	-90	0	12	3.03	5.73	2.7	148.7
MAC0158	488200	7578950	-90	0	10.4	2.78	5.38	2.6	277.0

Table 1:	Summary of sig	gnificant (>100ppm	air-core drill intercepts,	Target MA5,	Marenica Project
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Notes on the drilling results table

Intervals are calculated from data provided by Terratec Geophysical Consultants, using a down-hole spectral gamma-probe. eU_3O_8 values are based on total-count logging, with data collected at 10cm intervals. Intervals reported are a minimum of 1m, with lower cut of 100ppm eU_3O_8 . A maximum internal waste of 2m at less than 100ppm eU_3O_8 is allowed for each interval.



Figure 1: Summary of air-core drilling for target area MA5. Green circles represent holes with probe data received, clear circles represent holes probed and with data pending.

The program of regional Aircore drilling at the Marenica Project was concluded during April 2010. The program comprised 410 vertical holes for a total of 6,002m, and tested six regional target areas on the licence area (target areas MA3, MA4, MA5, MA7, MA9, and MA10; see Table 1). Drill-hole locations are shown in Figure 2.

Table 1.	: Air-core	e drillina	activities	for s	specific	reaional	taraet	areas.	Marenica	Proiect
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Target Area	No. Holes	Meters
MA03	75	1436
MA04	27	180
MA05	164	1499
MA07	86	2071
MA09	11	121
MA10	20	412
Other areas	27	283
Total	410	6002



Figure 2: Aircore drilling locations and target areas, Marenica Project, Q1 2010

Metallurgical Testwork

The Scoping metallurgical assessment for the Marenica Project, the work being carried out by ANSTO Minerals is continuing. Testwork is being carried out on two ore types from the Marenica Project (calcrete sample WAM001, and weathered bedrock sample WAM002), submitted as 500kg bulk samples during 2009.

Progress reports received from ANSTO highlighted the following results:

 The scope of metallurgical work has progressed from bottle-roll testing (heapleaching) of ore sorter accepts to further scrubbing/screening of the ore samples, followed by agitated leaching of the upgraded ore. Alkaline agitated leach testwork is in progress at ANSTO, twelve samples of scrubbed and screed "upgraded" ores have been prepared and are listed below testwork is being conducted at various reagent strengths and temperatures.

Table	3: Agit	ated Slu	urry Lea	ach Tests

Test No	Scrubbed Ore	Particle size (□m)	Temperature (°C)	Na ₂ CO ₃ (kg/t)	NaHCO ₃ (kg/t)	Comment
MC1.1	WMA001	<300	Ambient *	60	5	Effect of Temp.
MC1.2	WMA001	<300	60	60	5	Effect of Temp.
MC1.3	WMA001	<300	80	60	5	Effect of Temp.
MC1.4	WMA001	<300	80	40	5	Effect of reagent conc. at 80°C
MC1.5	WMA001	<300	80	25	10	Effect of reagent conc. at 80°C
MC1.6	WMA001	<300	60	40	5	Effect of reagent conc. at 60°C
MC2.1	WMA002	<150	Ambient *	60	5	Effect of Temp.
MC2.2	WMA002	<150	60	60	5	Effect of Temp.
MC2.3	WMA002	<150	80	60	5	Effect of Temp.
MC2.4	WMA002	<150	80	40	5	Effect of reagent conc. at 80°C
MC2.5	WMA002	<150	80	25	10	Effect of reagent conc. at 80°C
MC2.6	WMA002	<150	60	40	5	Effect of reagent conc. at 60°C

• Preliminary radiometric analysis results on the two ore types indicated that the ores are in secular equilibrium.

Mineralogy tests on uranium ore samples (WMA001 and WMA002) reveal carnotite as the only uranium-bearing mineral in both ore types. Carnotite was mainly found as crystals (1-10 microns) and relative large aggregates up to 50 microns often associated with clay minerals. Carnotite is usually intimately associated with the clay matrix. Carnotite occurs in the clay matrix mainly as platy/tabular crystals, with grainsizes ranging from one micron up to approximately 15 microns (**Figures 3**). Carnotite crystals can occasionally occur interstitial to muscovite or around the margins of quartz particles(**Figures 4**).



Figure 3 – Finley disseminated Carnotite in clay matrix



Figure 4 – Finley disseminated Carnotite surrounding quartz grain and within biotite fractures in weathered bedrock

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Notes

Information in this report that relates to exploration results is based on information compiled by Dr Erik van Noort, who is a Member of the Australian Institute of Geoscientists. Dr van Noort is a full-time employee of West Australian Metals Limited 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'. Dr van Noort consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources is based on information compiled by a team of full time employees of SRK Consulting (UK) Ltd which was directed by Dr Mike Armitage.

Dr Armitage who is a Member of the Institute of Materials, Minerals and Mining and a Fellow of the Geological Society of London, both of which are 'Recognised Overseas Professional Organisations' ('ROPOs'), is the Chairman of SRK Consulting (UK) Ltd and has taken responsibility for the Mineral Resource aspects of SRK's work. Dr Rob Bowell, a Principal Geochemist with SRK and who is also a Fellow of the Geological Society of London as well as a Fellow of the Institute of Mining, Materials and Minerals and a Member of the Royal Society of Chemistry takes responsibility for any comments related metallurgical testwork.

Other team members, Dr John Arthur and Ms Tracey Laight are both Fellows of the Geological Society of London, Dr Arthur is also a Member of the Institute of Materials, Minerals and Mining.

Both Dr Armitage and Dr Bowell have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they have undertaken to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.Both Dr Armitage and Dr Bowell consent to the inclusion in this announcement of the matters based on their information in the form and context in which these appear."

Where eU308 is reported it relates to values attained from radiometrically logged boreholes. The probe has been calibrated at the Pelindaba Calibration facility in South Africa. Down-hole spectral gamma logging/probing of drill holes provides a powerful tool for uranium companies to explore for, and evaluate, uranium deposits. Such a method measures the natural gamma rays emitted from material surrounding a drill hole out to around 0.5 metre from its centre - the gamma probe is therefore capable of sampling a much larger volume than that which would normally be recovered from a core or RC hole. These measurements are used to estimate uranium concentrations, with the assumption being that the uranium is in (secular) equilibrium with its daughter products (or radio-nuclides) which are the principal gamma emitters. If uranium is not in equilibrium (viz. in disequilibrium) – as a result of the redistribution (depletion or enhancement) of uranium and/or its daughter products - then the true uranium concentration in the holes logged using the gamma probe will be higher or lower than those reported in the announcement. Preliminary testwork completed for the company by ANSTO Minerals indicates that the Marenica deposit is in secular equilibrium (viz. disequilibrium is not apparent).