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Company Announcements Office Australian Stock Exchange Limited Exchange Centre Level 4, 20 Bridge Street Sydney NSW 2000

Via electronic lodgement

Dear Sir/Madam,

31 May 2007

Please find the following announcement for immediate release to the market. This announcement is made on behalf of the Bigrlyi Joint Venture partners being Energy Metals Limited with 53.3%, Valhalla Uranium Limited (a subsidiary of Paladin Resources Limited) with 41.7% and Southern Cross Exploration NL with 5%.

Yours faithfully,

LINDSAY DUDFIELD

Director.

31 May 2007

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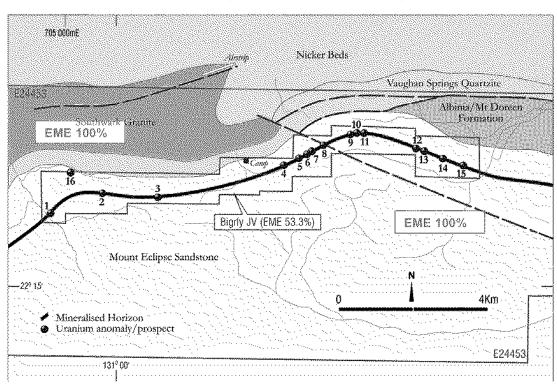


Via electronic lodgment

## **ENCOURAGING START TO 2007 DRILLING PROGRAM AT BIGRLYI**

Energy Metals is pleased to advise that drilling at its 53.3% owned Bigrlyi project has intersected significant extensions to the current uranium deposits, including intercepts of 9.25m @ 0.12% eU<sub>3</sub>O<sub>8</sub> and 4.15m @ 0.25% eU<sub>3</sub>O<sub>8</sub> at Anomaly 4.

The Bigrlyi project is located in the Northern Territory approximately 350km northwest of Alice Springs and is a joint venture with Paladin Resources' subsidiary Valhalla Uranium (41.7%) and Southern Cross Exploration (5%). The project was subject to significant exploration in the period 1974 to 1982 and is characterised by high uranium grades, accompanied by significant levels of vanadium. Metallurgical test work conducted to date has indicated recoveries of up to 98-99% of the uranium and up to 70% of the vanadium using acid leach and fine grinding.





Current resources at Bigrlyi (0.5 kg/t U<sub>3</sub>O<sub>8</sub> cutoff) total

## 14.3 M lbs U<sub>3</sub>O<sub>8</sub> and 16.3 M lbs V<sub>2</sub>O<sub>5</sub>

with most of the resources within 200m of the surface and potentially accessible via open pit mining. There is excellent potential to increase resources at depth and along strike at all of the current resource areas.

Early April 2007 the Bigrlyi Joint Venture partners approved a substantial drilling program (262 holes for 51,255m) for the 2007 field season, with drilling commencing late April 2007.

Downhole calibrated gamma probe (eU<sub>3</sub>O<sub>8</sub>)\* results have been received from the **first 18 holes** drilled as part of this program **with mineralisation intersected in all holes** (summarised below). It is emphasised that these results are preliminary and subject to confirmation by geochemical assay (uranium and vanadium). Furthermore several holes (RC) failed to reach the primary target and will be extended with diamond tails.

DEPOSIT	HOLE	FROM	INTERCEPT	TW (est)	eU <sub>3</sub> O <sub>8</sub> (%)	eU <sub>3</sub> O <sub>8</sub> (lb/t)
Anomaly 4	B07119	188.66m	0.40m @	0.40m	0.02	0.40
Anomaly 4	B07122	125.11m	0.40m @	0.40m	0.01	0.24
Anomaly 4	B07123	213.60m	0.30m @	0.30m	0.01	0.24
Anomaly 4	B07125	34.18m*	0.70m @	0.70m	0.07	1.46
Anomaly 4	B07127	238.27m	1.00m @	0.60m	0.023	0.51
		280.42m	4.65m @	2.79m	0.07	1.50
		288.42m	9.25m @	5.60m	0.12	2.58
Anomaly 4	B07128	80.97m	4.15m @	4.15m	0.25	5.45
		127.87m	0.20m @	0.20m	0.01	0.22
		130.87m	0.30m @	0.30m	0.01	0.29
		131.62m	2.75m @	2.75m	0.05	1.10
		134.92m	3.40m @	3.40m	80.0	1.70
Anomaly 4	B07131	209.43m	1.55m @	1.55m	0.04	0.84
		212.18m	0.20m @	0.20m	0.01	0.24
		251.18m	0.35m @	0.35m	0.01	0.26
		253.03m	0.65m @	0.65m	0.01	0.26
		278.88m	0.60m @	0.60m	0.01	0.29
Anomaly 4	B07132	11.59m*	0.50m @	0.30m	0.01	0.31
		16.09m*	2.20m @	1.10m	0.22	4.89



		18.99m*	1.15m @	0.60m	0.05	1.15
		24.99m*	0.85m @	0.45m	0.01	0.29
		69.59m	1.00m @	0.50m	0.04	0.97
Anomaly 4	B07133	238.03m	0.90m @	0.54m	0.01	0.26
		254.78m	6.25m @	3.75m	0.24	5.31
		264.83m	0.95m @	0.57m	0.01	0.26
		268.43m	5.00m @	3.00m	0.17	3.64
Anomaly 4	B07134	206.00m	1.40m @	1.40m	0.04	0.79
Anomaly 4	B07135	32.60m*	0.50m @	0.30m	0.01	0.29
		41.00m*	2.60m @	1.56m	0.07	1.46
		46.95m*	1.60m @	0.96m	0.02	0.53
		55.70m	0.35m @	0.21m	0.01	0.26
		56.85m	0.55m @	0.33m	0.01	0.29
Anomaly 15	B07234	254.99m	1.70m @	1.70m	0.07	1.52
Anomaly 15	B07237	320.84m	2.50m @	2.50m	0.02	0.35
		389.49m	1.25m @	1.25m	0.04	0.90
Anomaly 15	B07238	126.65m	0.70m @	0.70m	0.03	0.66
		129.85m	0.25m @	0.25m	0.01	0.29
Anomaly 15	B07239	99.93m	2.10m @	2.10m	0.22	4.81
		130.88m	0.40m @	0.40m	0.01	0.29
Anomaly 15	B07240	344.05m	1.35m @	1.35m	0.07	1.46
		346.30m	2.45m @	2.45m	0.15	3.20
Anomaly 15	B07241	361.18m	0.80m @	0.80m	0.02	0.42
		372.78m	0.30m @	0.30m	0.01	0.26
		382.13m	0.90m @	0.90m	0.02	0.49
		383.28m	1.30m @	1.30m	0.06	1.34
		391.83m	0.85m @	0.85m	0.05	1.04
Anomaly 15	B07242	336.66m	0.50m @	0.50m	0.02	0.40
		337.66m	1.05m @	1.05m	0.05	0.99
		354.51m	1.05m @	1.05m	0.02	0.49
		356.46m	0.85m @	0.85m	0.03	0.64

NB: Intervals marked with (\*) denote that it is likely significant radiometric disequilibrium exists as the intercept is in the near surface environment. All preliminary radiometric assays will be checked against chemically derived assays prior to use in resource block model compilations.



Importantly it should be noted that 13 of the 18 holes were drilled outside of current resource envelopes, reinforcing the potential for the current drilling program to lead to a significant increase in the resource base at Bigriyi.

Further downhole probe results will be released as they become available.

LINDSAY DUDFIELD **Executive Director**.

\* Uranium mineralisation grades through this report are annotated with a sub-prefix 'e' because they have been reported as uranium equivalent grades derived from down-hole gamma ray logging results and should be regarded as approximations only.

Gamma logging or "total count gamma logging" (the method used by Energy Metals) is a common method used to estimate uranium grade where the radiation contribution from thorium and potassium is very small. Sandstone and calcrete hosted deposits are usually of this type. Gamma logging does not account for energy derived from thorium and potassium (as does spectral gamma logging) and thus the result is expressed as an equivalent value or  $eU_0O_0$ .

The gamma radiation from potassium, uranium and thorium is dominated by gamma rays at specific energy levels. These energy levels are sufficiently well separated such that they can be measured independently of each other. They are typically measured as narrow energy bands that contain the specific energy levels. Bands are used because the measuring systems do not have the resolution to target a specific energy wavelength. There is some scattering of higher energy gamma radiation, e.g. thorium, into lower energy radiation, e.g. uranium and potassium. This scattered radiation can be calculated from suitable calibration procedures and removed from the lower energy level measurements. This method is commonly termed spectral gamma logging.

Energy Metals uses gamma probes which are initially calibrated at the PIRSA (Primary Industry & Resources South Australia) test pits and then subjected to annual recalibration to ensure the integrity of the probe instrument. Furthermore, Energy Metals runs regular checks to validate the accuracy of probe data using calibrated test holes located on site.

Note: The information in this report relating to Exploration Results is based on information compiled by Lorry Hughes BSc, MAusIMM. The information in this report relating to mineral resources is based on information compiled by Lorry Hughes who has more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium. Mr Hughes is a full time employee of Energy Metals Limited and takes responsibility for the quality of the data and geological interpretations.

Mr Hughes has sufficient experience relevant to the assessment of this style of mineralisation to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code". Mr Hughes consents to the inclusion of the information in the report in the form and context in which it appears.