

Energy Metals Limited  
ABN 63 111 306 533  
Level 2  
18 Kings Park Road  
West Perth WA 6005  
PO Box 1033  
West Perth WA 6872  
Western Australia  
Telephone: (08) 9322 6904  
Facsimile: (08) 9321 7950  
Email: [enquiry@energymetals.net](mailto:enquiry@energymetals.net)  
Web: [www.energymetals.net](http://www.energymetals.net)



18 February 2009

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

**Via electronic lodgement**

Dear Sir/Madam,

Please find the following announcement for immediate release to the market. This announcement is made on behalf of the Bigryli Joint Venture partners being Energy Metals Limited with 53.7%, Valhalla Uranium Limited (a subsidiary of Paladin Resources Limited) with 42.1% and Southern Cross Exploration NL with 4.2%.

Yours faithfully,

A handwritten signature in black ink that reads 'Lindsay Dudgefield' with a stylized flourish at the end.

LINDSAY DUDFIELD  
**Executive Director**

18 February 2009

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Via electronic lodgment

## **MORE SIGNIFICANT URANIUM INTERCEPTS FROM BIGRLYI (NT)**

Energy Metals, as manager of the Bigrlyi Joint Venture, is pleased to advise that all geochemical assays from the 2008 extensional drilling program have now been received. The latest assays include further significant uranium (and vanadium) intercepts including:

B08087	7m @ 0.13% U <sub>3</sub> O <sub>8</sub> & 1.13% V <sub>2</sub> O <sub>5</sub>	from 88m
B08088	2m @ 0.25% U <sub>3</sub> O <sub>8</sub> & 0.29% V <sub>2</sub> O <sub>5</sub>	from 72m
B08095	5m @ 0.38% U <sub>3</sub> O <sub>8</sub> & 0.09% V <sub>2</sub> O <sub>5</sub>	from 154m
	9m @ 0.27% U <sub>3</sub> O <sub>8</sub> & 0.56% V <sub>2</sub> O <sub>5</sub>	from 234m

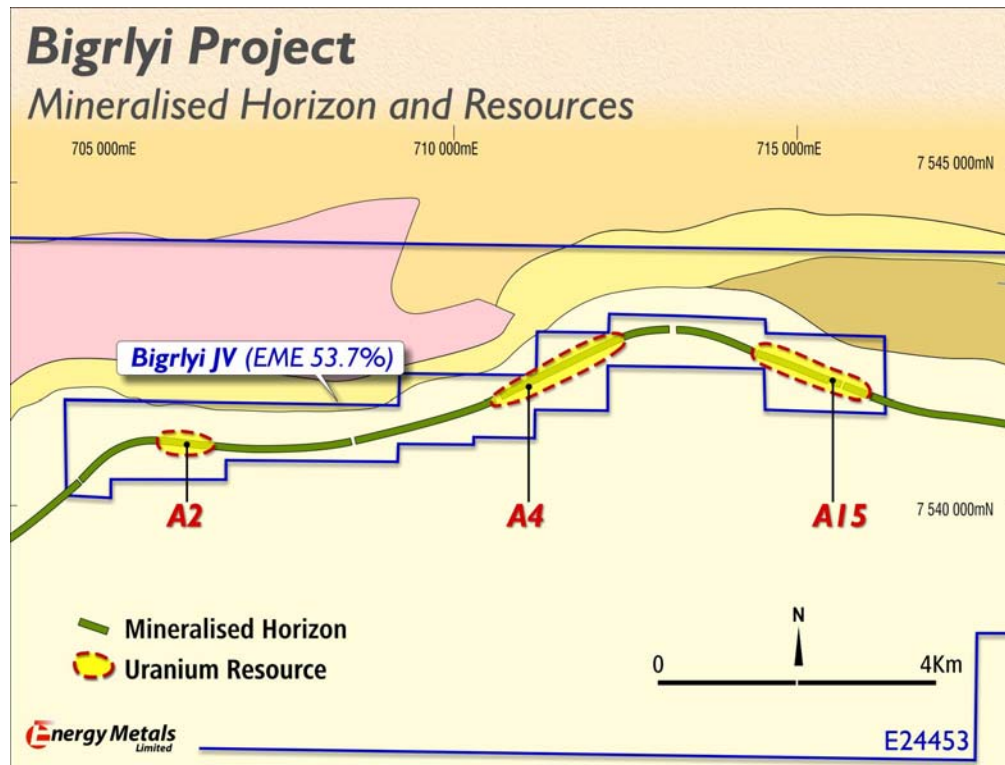
### **Discussion**

An Updated Scoping Study based on current resources at Bigrlyi (23.4 M lbs U<sub>3</sub>O<sub>8</sub> & 43.7M lbs of V<sub>2</sub>O<sub>5</sub>) was announced in July 2008 and indicated that the Bigrlyi project has the potential to produce 16.2M lbs U<sub>3</sub>O<sub>8</sub> and 14.5M lbs of V<sub>2</sub>O<sub>5</sub> over a mine life of 12 years. This study also identified excellent potential to delineate additional resources which would further enhance project economics.

An RC and diamond drill program (total 83 holes) designed to extend shallow resource positions at the A4 and A15 deposits commenced in early September 2008 and was completed in December 2008. Six large diameter diamond core holes were also drilled at Bigrlyi to obtain bulk samples for detailed metallurgical testwork.

All geochemical assays have now been received from the extensional drilling program, with 72 holes (87%) intersecting anomalous uranium values (>100ppm U<sub>3</sub>O<sub>8</sub>). The following table (Table 1) summarises significant intercepts not previously announced to ASX.

Last month the Bigrlyi Joint Venture approved further Pre-Feasibility Study activities at the project including resource modelling and estimation, engineering and mine design work, ongoing environmental baseline studies and more detailed metallurgical testwork.



This work has commenced with compilation of data from the 2008 drilling program well advanced and an upgraded resource estimate for Bigrlyi expected to be available by the end of March 2009.



LINDSAY DUDFIELD  
Executive Director.

Note: The information in this report relating to Exploration Results is based on information compiled by Nick Burn BSc (Hons), MAIG. The information in this report relating to mineral resources is based on information compiled by Nick Burn who has more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium. Mr Burn is a full time employee of Energy Metals Limited and takes responsibility for the quality of the data and geological interpretations. Mr Burn 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 Burn consents to the inclusion of the information in the report in the form and context in which it appears.

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  $eU_3O_8$ .

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.

**TABLE 1 – SIGNIFICANT INTERCEPTS (>0.1% U<sub>3</sub>O<sub>8</sub>) FROM BIGRLYI**

DEPOSIT	HOLE	FROM (m)	INTERCEPT (m)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/t)	V <sub>2</sub> O <sub>5</sub> (%)	eU <sub>3</sub> O <sub>8</sub> intercept (%)
A4	B08008	210	2	0.14	3.04	0.59	Not available
	B08087 <i>incl.</i>	79	4	0.12	2.63	0.22	1.50m @ 0.12 from 79.21m  6.80m @ 0.14 from 86.96m
		79	2	0.18	4.09	0.35	
		88	7	0.13	2.98	1.13	
		88	4	0.19	4.37	1.48	
		151	1	0.11	2.35	1.06	
	B08088 <i>incl.</i>	165	2	0.17	3.80	0.74	2.20m @ 0.30 from 71.38m
		72	4	0.15	3.38	0.19	
		72	2	0.25	5.50	0.29	
	B08095 <i>incl.</i>	91	1	0.11	2.45	0.23	1.40m @ 0.89 from 154.50m  2.20m @ 0.22 from 234.10m  3.45m @ 0.26 from 237.05m
		154	5	0.38	8.53	0.09	
		155	1	1.77	4.09	0.25	
		163	1	0.13	3.00	0.21	
		234	9	0.27	6.06	0.56	
		234	2	0.62	13.90	0.66	
238	2	0.51	11.45	1.53			

Note: All preliminary radiometric assays are checked against chemically derived assays prior to their use in resource compilation. All intercepts are estimated to approximate true width.

Assays based on RC chips sampled at 1m intervals and analysed by ALS Chemex (Brisbane). U analysed by XRF (ME-XRF05); V by XRF (ME-XRF05, for values <1000 ppm) and ICP (ME-ICP61, for values >1000 ppm).