



**ASX  
ANNOUNCEMENT**

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**LAKE MASON RESOURCE UPGRADE**

Energy Metals (ASX: EME) is pleased to announce the results of a recently completed resource estimate for its 100% owned Lake Mason project, located 25km NNE of Sandstone, Western Australia.

Consultants Hellman & Schofield (H&S) have estimated a total Mineral Resource at Lake Mason of 9.1 million tonnes averaging 185 parts per million (ppm) U<sub>3</sub>O<sub>8</sub> for a contained content of 1,689 tonnes (3.7 million pounds) U<sub>3</sub>O<sub>8</sub> at a cut-off grade of 100ppm U<sub>3</sub>O<sub>8</sub> as summarised in the table below:

**Lake Mason Mineral Resource Estimate (100ppm cut-off)**

Category	Tonnes (Million)	U <sub>3</sub> O <sub>8</sub> ppm	U <sub>3</sub> O <sub>8</sub> Tonnes	U <sub>3</sub> O <sub>8</sub> Mlbs
Indicated	5.1	204	1,049	2.3
Inferred	4.0	160	640	1.4
<b>Total</b>	<b>9.1</b>	<b>185</b>	<b>1,689</b>	<b>3.7</b>

Tonnes are metric (2204.62 pounds), figures may not total due to rounding. Significant figures do not imply precision.

Both U<sub>3</sub>O<sub>8</sub> Tonnes and U<sub>3</sub>O<sub>8</sub> Mlbs are based on contained metal in the ground and do not consider any mining, metallurgical or economic parameters at this stage.

In June 2008 Energy Metals announced an initial Inferred Mineral Resource at Lake Mason of 7.9 million tonnes at a grade of 170ppm for 1,343 tonnes (3Mlbs) U<sub>3</sub>O<sub>8</sub> (100ppm cut-off). An infill drilling program (180 holes) designed to increase the confidence of resource was completed earlier this year and the latest resource estimate incorporates the results from this program.

The latest resource estimate represents a 26% increase in contained uranium metal compared with the June 2008 resource estimate, with 62% of the resource now reporting to the Indicated Category.

## Notes

The Lake Mason mineralisation occurs as secondary carnotite enrichment of variably calcretised unconsolidated material within a northeast trending zone that has been sampled over a strike length of approximately 11 kilometres and extends to a maximum depth of 8 metres. The mineralisation averages approximately 3 metres thick, and although it locally outcrops has an average of approximately 1.4 metres of un-mineralised overburden.

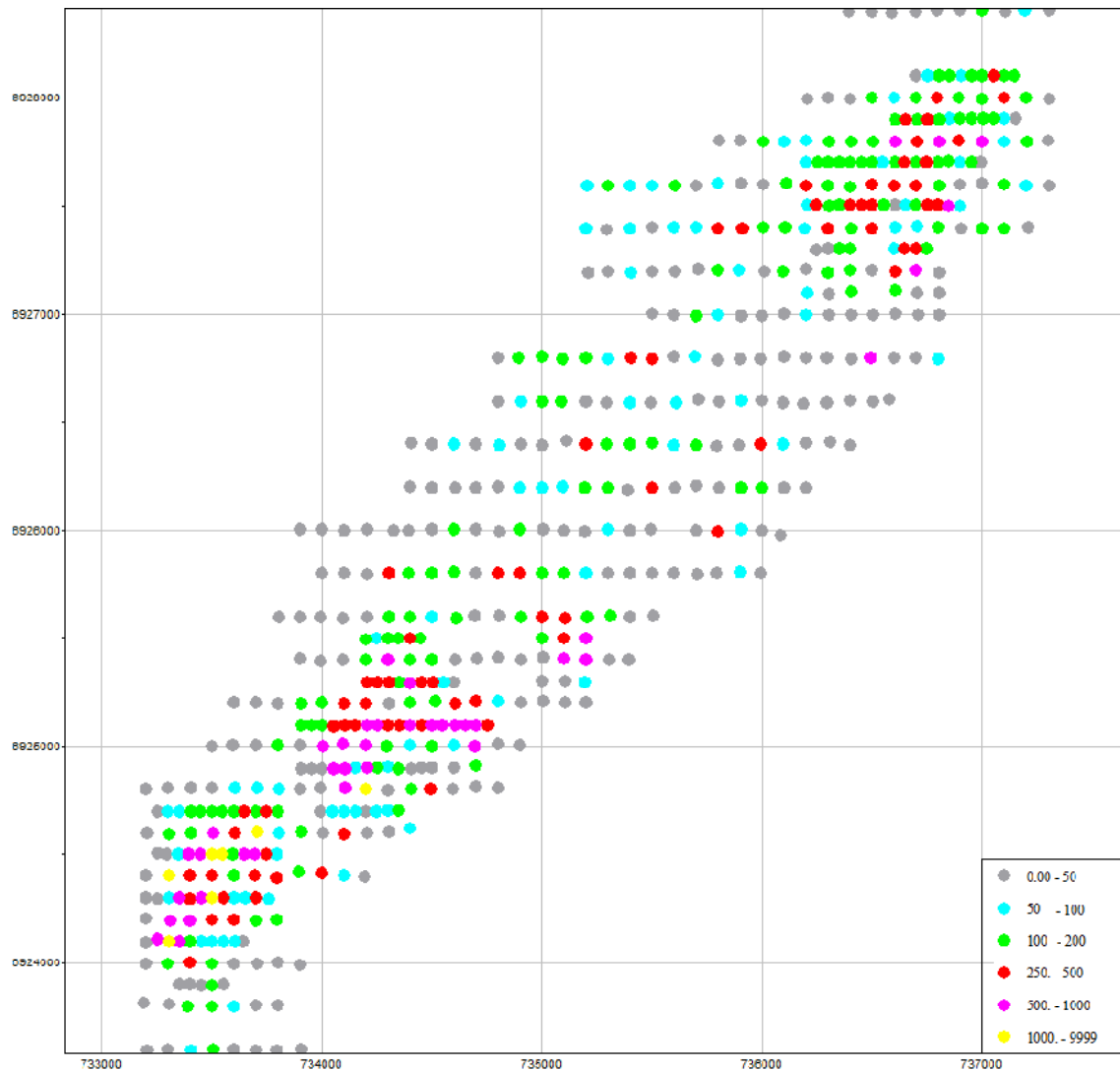
The Lake Mason mineralisation has been sampled by 582, generally 10 metre deep vertical aircore holes drilled by Energy Metals since 2006 for a total of 5,822 metres. Most of the defined mineralisation has been sampled on a 100 metre east-west by 200 metre north-south pattern. Infill drilling during 2010 targeted areas of higher grades outlined from previous sampling. Sample spacing in these higher grade areas was reduced to 100 metre spaced traverses with holes alternating between 50 metres and 100 metres apart. Samples from the drilling were collected on 0.5m intervals down hole, with representative samples from anomalous zones identified from gamma logging sent to Genalysis Laboratories, Perth, for analysis by ICPMS.

The Lake Mason resources were estimated by Multiple Indicator Kriging (MIK) with block support correction to reflect open cut mining selectivity of 5 by 5 metres with one metre mining benches and 5 by 5 by 0.5 metre grade control sampling.

The estimates are based primarily on 0.5 metre down-hole composited  $U_3O_8$  grades (Figure 1). ICPMS assay results were assigned priority over assigned deconvolved  $eU_3O_8$  grades derived from gamma logging. For the resource dataset, the supplied  $eU_3O_8$  grades were factored to reflect the general relationship between  $eU_3O_8$  and ICPMS assays. Although  $eU_3O_8$  results contribute a significant proportion of the resource dataset, the mineralised composites are dominated by ICPMS assays, which provide 97% of the resource composites of greater than 50 ppm  $U_3O_8$ .

No density measurements are available for Lake Mason. The current estimates assume a bulk density of 1.9 t/bcm, based on densities reported for deposits of comparable mineralisation style.

For the 100 ppm  $U_3O_8$  cut-off grade estimates for mineralisation in the areas tested by the 2010 infill drilling are classified as Indicated, and all other estimates are classified as Inferred.



**Figure 1: Plan view of resource composites coloured by  $U_3O_8$  grade**

The information in this report that relates mineral resource estimation for Lake Mason is based on work completed by Mr Jonathon Abbott who is a full time employee of Hellman and Schofield Pty Ltd and a member of the Australasian Institute of Mining and Metallurgy. Mr Abbott 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 Abbott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report relating to exploration results, data, densities and cut off grades is based on information compiled by Mr Paul Dunbar and Mr Lindsay Dudfield. Both Mr Dunbar and Mr Dudfield are members of the AusIMM and the AIG. Mr Dunbar is a full time employee of Energy Metals and Mr Dudfield is a consultant to Energy Metals. They both have 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 "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2004)". Mr Dunbar and Mr Dudfield both consent to the inclusion of the information in the report in the form and context in which it appears.