

INITIAL JORC CODE RESOURCE FOR MULGA ROCK DEPOSITS

Energy and Minerals Australia Limited (ASX: EMA), a Western Australian focused uranium development company, is pleased to announce its initial JORC Code Uranium Resource estimate for the Mulga Rock Deposits ('MRD'). MRD contains the Ambassador, Emperor and Shogun deposits.

The initial JORC Code Inferred Resource estimate is 24,520 tonnes of U₃O₈ at a cut-off grade of 200ppm U₃O₈.

The Inferred Resource estimate, at various cut off grades, includes:

U ₃ O ₈ Cut off (ppm)	Tonnes (Mt)	U ₃ O ₈ Grade (ppm)	Contained U ₃ O ₈ (t)	Contained U ₃ O ₈ (Mlb) *
200	44.36	550	24,520	54.06
300	35.22	630	22,220	48.99
500	18.63	850	15,810	34.86
700	10.31	1,060	10,930	24.10

* - Tonnes are metric (2,204.62 pounds)

Note: Appropriate rounding has been applied

The Resource estimate was prepared by Coffey Mining using a database of available historic uranium chemical assays and equivalent grades from radiometric data compiled by EMA.

The Resource estimate incorporates the results from 766 of 2,012 holes drilled prior to EMA acquiring the project. Future resource estimates will use data from drilling programmes completed in 2008 and those planned for 2009.

Coffey Mining noted that there is evidence for another mineralised zone below the main zones modeled at Ambassador and Emperor. However the quality and quantity of the drill hole data was not sufficient to allow inclusion of this zone in the Resource estimate.

Historical drilling data outside of the initial resource areas indicates the potential for further mineralisation to be defined once more drilling has been undertaken.

The highlight of the Resource work is the delineation of high grade uranium mineralisation at the Ambassador deposit of 7.63 Mt at 960 ppm U₃O₈ for 7,290 tonnes of contained U₃O₈ above a 500ppm U₃O₈ lower cut-off. The uranium mineralisation is generally 40 metres free dig below surface and averages 2.5 metres thick. High grade mineralisation was also identified at both the Emperor and Shogun deposits.

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This initial estimate highlights Ambassador as the ideal high grade first mine target. EMA now plans to:

- initiate an open pit Scoping Study that will initially focus on Ambassador, with a target production rate of 1,000 tonnes of U₃O₈ per year.
- undertake metallurgical studies on the Ambassador deposit to complement the Company's appreciation of historical work.
- infill drill the high grade mineralisation of the Ambassador deposit to improve resource classification and increase base metal information.
- extension drill within the known mineralisation at Ambassador that is presently outside the resource estimate boundary (includes deeper zones). This activity has been approved by the Department of Industry and Resources.
- continue drill programmes at Emperor and Shogun to achieve expansion of the Resource. The first drill programme for this activity has been approved by the Department of Industry and Resources.

The above programmes are subject to appropriate funding arrangements.

The establishment of this initial JORC Code compliant Resource, and the recent lifting of the ban on uranium mining in Western Australia are significant milestones towards the Company's target for production to commence in 2013.

Performance Shares

This Resource estimate has satisfied the first and second performance milestones of Class A and B performance shares. Subject to the Corporations Act, 55,501,695 Class A and 42,771,949 Class B performance shares will convert into ordinary shares in the Company. These ordinary shares will be subject to the same escrow provisions of the original performance shares and will be escrowed until 23 May 2010. Details of the performance shares and conversion rights are included in the replacement Prospectus dated April 2008 and the 2008 Annual Report.

The Class C performance shares remain unchanged and conversion is dependent on the third performance milestone being the Company receiving a pre-feasibility study in respect of the tenement (or any part of one or more of the tenements) on or before 23 May 2013.



Chris Davis
Managing Director

13 January 2009

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Geology and Mineralisation

The MRD are contained within a tenement package owned by the Company covering about 1,120 km². The MRD comprise three separate deposits named Ambassador, Emperor and Shogun. All are located within exploration licenses 39/876, 39/877, 39/1149, and prospecting licenses 39/4883 and 39/4884.

The MRD and associated base metal and gold mineralisation are hosted by a package of Middle Eocene carbonaceous sediments deposited in a small sedimentary basin named the Narnoo Basin.

The MRD uranium mineralisation typically comprises a tabular body developed in a lignitic succession that includes interbedded claystone and sandstone. It is thought that the mineralisation is controlled by a combination of structural and stratigraphic features. Thicker bodies of sandstone-hosted uranium mineralisation locally underlie the lignite.

Base metal (typically nickel, cobalt and zinc) and gold mineralisation are associated with (both within and below) the MRD uranium mineralisation.

Resource Estimation and Methodology

Coffey Mining was commissioned by the Company to undertake resource modeling for the uranium endowment of the MRD. Only historical uranium data was presented to Coffey Mining and no other commodities were considered for this initial Resource estimation.

EMA prepared the drill hole database used in this initial Resource estimate utilising historical reports and data it has gathered from work undertaken by previous explorers of the tenement package. EMA has assumed responsibility for the validity of the historical assay data. Coffey Mining completed an assessment of the supplied database, checked selected drill holes against available hard copy reports, and checked the database for gross errors. The following issues with historical data are noted:

- Due to the nature of the uranium mineralisation, the degree of radiochemical disequilibrium is likely to vary considerably between drill holes and with depth down each drill hole.
- Information for many of the historical drill holes which have chemical assays available indicates incomplete sampling (some of which may be due to core loss; some may be due to historical data-entry issues). It was noted that available assay information sometimes commenced or finished in high grade mineralisation (up to several thousands of ppm U₃O₈).
- Hard copy reports were not available for all the assay data in the current database. Further investigation of historical data is required to improve the accuracy and completeness of the database if suitable historical supporting information can be sourced.
- The accuracy of some historic drill hole collar surveys is suspect due to the inherent inaccuracy of survey practices at the time. The Company is continuing to uncover and re-survey old drill holes to improve the accuracy of the database to contribute to future Resource estimates.
- Historical density data indicates the dry density of the mineralised intervals can vary between 0.5 t/m³ and 1.6 t/m³. Based upon an analysis of all historical density data within mineralised intervals above 100ppm U (251 samples in total), an insitu dry bulk density of 0.9 t/m³ has been used to report the Resource estimate. Further density test work is required to adequately define the density characteristics of the three deposits. It is possible that future density test work will change the density values for the individual deposits.
- The combination of the lack of any QAQC data for the historical assaying and the incomplete sampling of many drill holes may limit the usefulness of portions of the historical data for the use in higher-level resource classifications.

The database presented to Coffey Mining contained 2,012 historical drill holes, of which 766 drill holes with chemical and radiometric assays, for 43,605 metres, were directly included in the initial Resource estimates. Of the 766 drill holes, 375 were HQ diamond drill holes, 382 were RC drill holes and 5 were aircore drill holes.

The historical diamond drill holes were typically sampled at 20 cm intervals using quarter core. Uranium assaying was by either XRF or ICPMS. Of the 375 diamond holes in the estimation region, 335 had chemical U assays. Equivalent U_3O_8 (eU_3O_8) grades based on factoring of the radiometric data was used for the remaining holes.

The drill hole spacing within the resource regions ranges from a nominal 500m X 220m, 200m X 200m and 200m X 100m with some infill drilling on sub 10m spaced lines.

The following comments relate to the estimation process:

- Disequilibrium factors were applied to the radiometric data based upon statistical studies from each of the deposits. The disequilibrium factoring applied for the 2009 resource estimate has resulted in satisfactory global results but the local results are likely to be variable.
- The assays used for estimation were ranked according to 1) historical U chemical assays from diamond drill holes and 2) factored historical radiometric assays (or U_3O_8). The ranked combined assay data set is referred to as $combU_3O_8$.
- The mineralised zones were defined based upon a combination of stratigraphy and a 100ppm $combU_3O_8$ lower cutoff. The mineralised zones were modeled to a minimum thickness of 1m. A single mineralised layer was modeled for each of the deposits. The average thickness of the mineralised zones is 2.5m for Ambassador, 1.6m for Emperor and 2.1m for Shogun.
- There is evidence for another mineralised zone below the main zones modeled at Ambassador and Emperor. However the quality and quantity of the drill hole data was not sufficient to allow inclusion of this zone in the Resource estimate.
- All assays within the mineralised zones were composited to 1m for statistical analyses and estimation. Any missing intervals within the diamond drill holes which had chemical assays were given a grade of 0ppm U_3O_8 prior to compositing.
- A top cut of 4,500 ppm $combU_3O_8$ was applied to the 1m composites for Ambassador, 2,500 ppm $combU_3O_8$ to Emperor, and 2,000 ppm $combU_3O_8$ to Shogun. The application of top cuts resulted in a 3% decrease in the declustered mean for all three deposits. The cut composites were used in the estimation process.
- Variography and search neighborhood analyses were undertaken as inputs into the grade estimation process.
- Three dimensional Ordinary Kriging was selected by Coffey Mining as an appropriate estimation method based on the quality, quantity and spacing of the available historical data and the interpreted controls on the mineralisation.
- A three-dimensional block model was constructed in Surpac software for each of the deposits covering all the interpreted mineralisation zones and including suitable additional waste material to allow later optimisation studies.
- Resource classification was developed from confidence levels of key criteria including drilling and sampling methods, assay methods, geological understanding, data density, data and grade continuity, and the quality of the grade estimate.

At alternative cut off grades the Resource estimates are as follows:

Mulga Rock Deposits Uranium Inferred Resources as of 9 January 2009

Ordinary Kriging Grade Estimates within parent cells of 100m by 100m by 10m

Using cut combU₃O₈ composites (combined chemical and factored radiometric grades) reported at a variety of lower grade cut-offs. A global dry bulk density of 0.9 t/m³ was used.

Deposit	U ₃ O ₈ Cut off (ppm)	Tonnes (Mt)	U ₃ O ₈ Grade (ppm)	Contained U ₃ O ₈ (t)	Contained U ₃ O ₈ (Mlb) *
Ambassador	200	16.53	630	10,380	23.26
	300	14.09	690	9,740	21.47
	500	7.63	960	7,290	16.07
	700	4.85	1,170	5,650	12.46
Emperor	200	24.14	500	11,970	26.39
	300	18.27	580	10,510	23.17
	500	8.94	770	6,880	15.17
	700	4.18	980	4,090	9.02
Shogun	200	3.96	590	2,160	4.76
	300	2.87	680	1,960	4.32
	500	2.06	800	1,640	3.62
	700	1.27	930	1,190	2.62
Total	200	44.36	550	24,520	54.06
	300	35.22	630	22,220	48.99
	500	18.63	850	15,810	34.86
	700	10.31	1,060	10,930	24.10

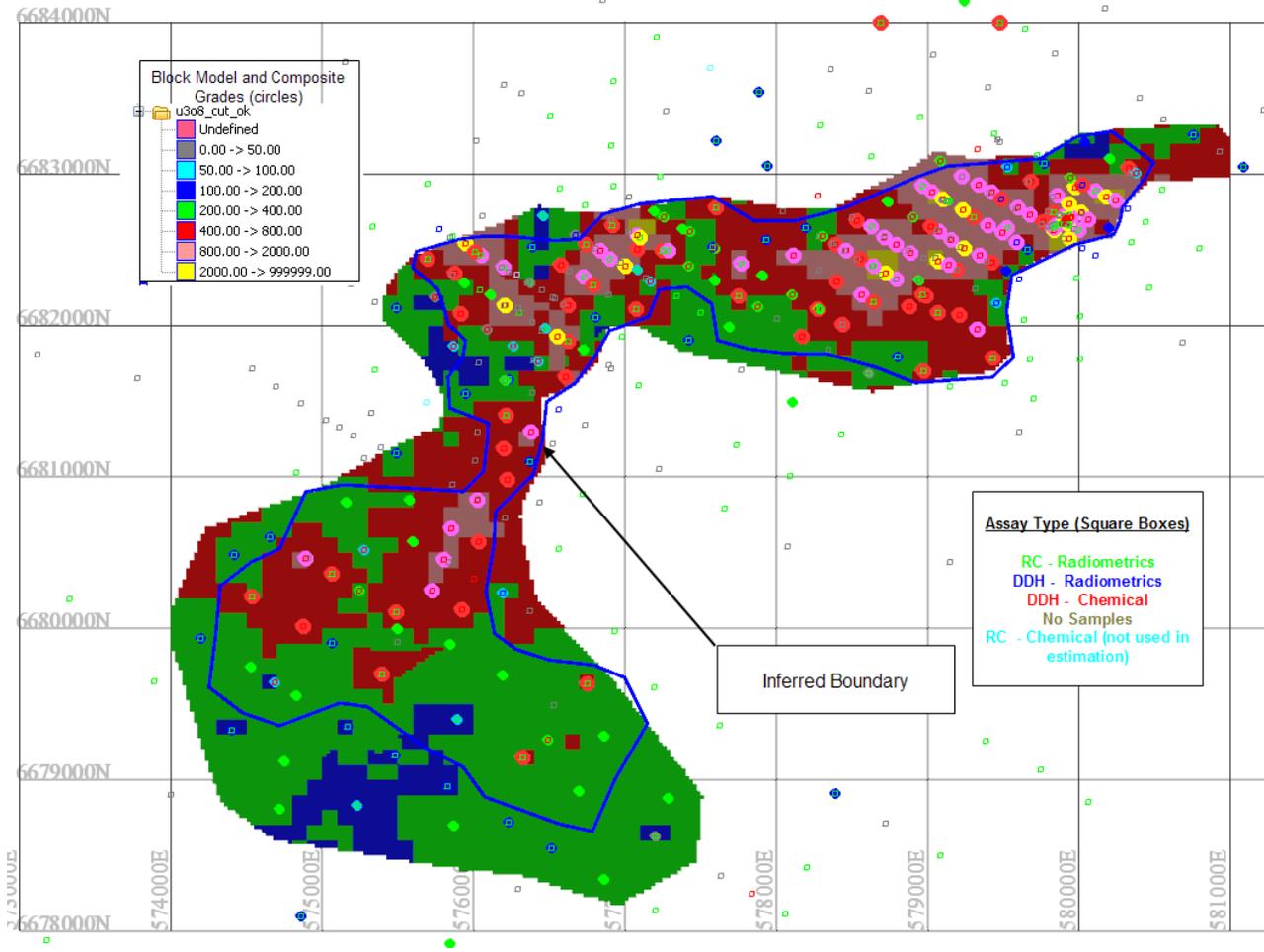
* - Tonnes are metric (2,204.62 pounds)

Note: Appropriate rounding has been applied

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The areas modeled in this initial resource are presented in the diagrams below:

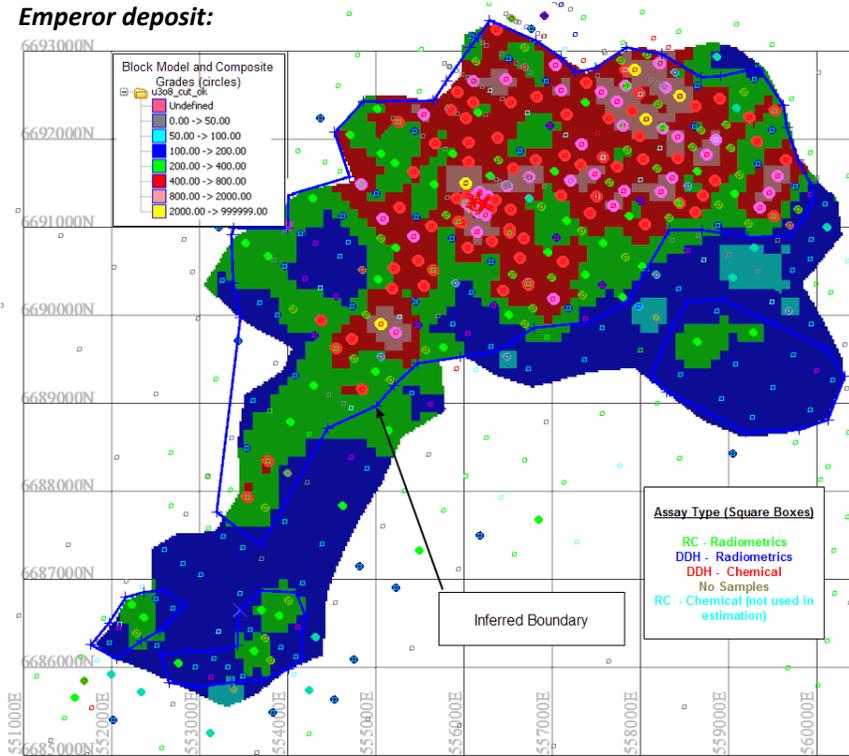
Ambassador deposit:



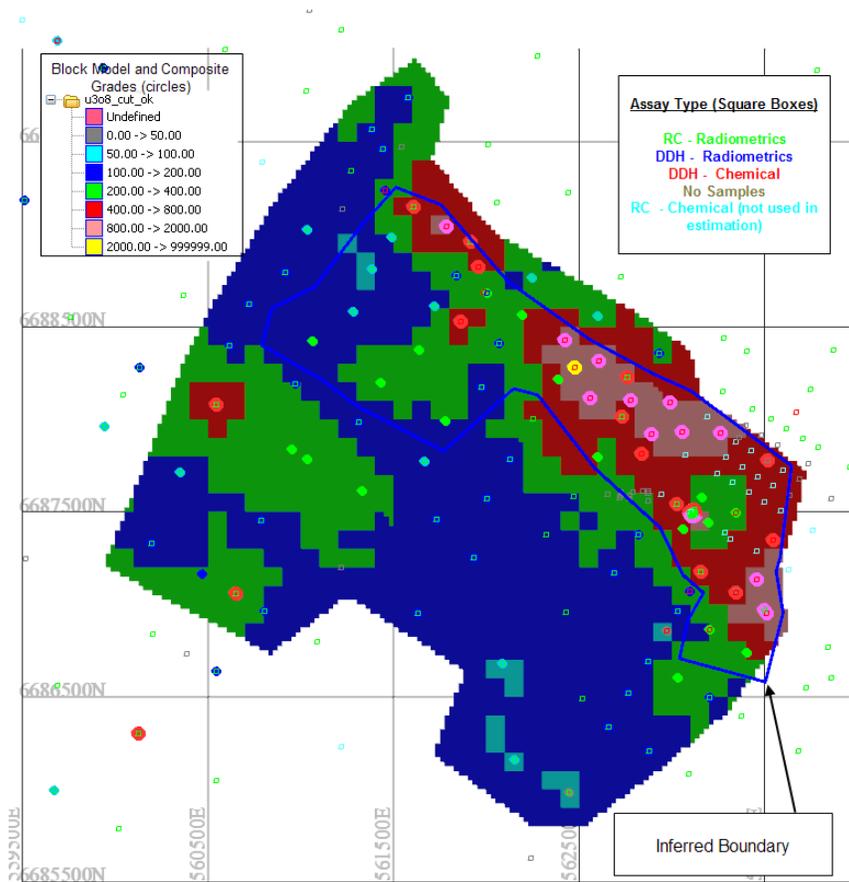
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Emperor deposit:



Shogun deposit:



The information in this announcement that relates to exploration results and the resource database is based on information compiled by Simon Fleming, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Fleming is a full time employee of EMA. Mr Fleming has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Fleming consents to the inclusion in the announcement 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 Neil Inwood, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Inwood is a full time employee of Coffey Mining. Mr Inwood has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Inwood consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

About Energy and Minerals Australia

Energy and Minerals Australia (ASX: EMA) is a Perth-based resource development company. EMA's primary focus is the development of the Mulga Rock Deposits, located about 770 kilometres east-northeast of Perth in Western Australia.

The Mulga Rock Deposits were discovered by the Japanese government company PNC Exploration in the early 1980s. The project offers the advantage of established access to infrastructure such as rail and airstrip, 1,000km of roads and cleared grid lines along with a large water resource.

The EMA package also includes the nearby project areas – Gunbarrel and Minigwal – which combined cover more than 2,000km² of prospective area to provide a large and consolidated landholding in a highly prospective region. The Company has an experienced board and management team, which includes strong geological experience in the eastern Goldfields region.



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