ASX Announcement

5 October 2011

energia minerals limited
ABN: 63 078 510 988

Strong Widths of High-Grade Uranium Mineralisation Returned from Sonic Core Drilling at Carley Bore

Significant results also returned from extensive down-hole gamma logging

Key Points:

- ***Significant high-grade uranium intercepts*** *returned from core assays from recently completed sonic drilling within the Carley Bore resource area, including:*
  - ***5.4m @ 2,266ppm U_3O_8*** *from 51.4m (LYMB003), including* ***0.5m @ 5,837ppm U_3O_8 (0.58% U_3O_8)***
  - ***3m @ 2,004ppm U_3O_8*** *from 64m (LYMB006)*
  - ***6.5m @ 765ppm U_3O_8*** *from 46m (LYMB002)*

- ***Significant eU_3O_8 intercepts also returned from down-hole gamma logging completed in five sonic holes and 12 aircore drill holes****, including:*
  - ***7.2 m @ 360ppm eU_3O_8*** *from 46.2m (LYMB002)*
  - ***7.6 m @ 1,472ppm eU_3O_8*** *from 47.9m (LYMB003)*
  - ***7.8 m @ 733ppm eU_3O_8*** *from 58.7m (LYMB006)*
  - ***9.2 m @ 390ppm eU_3O_8*** *from 55.6 m (Aircore hole LYAC0299)*
  - ***6.4 m @ 469ppm eU_3O_8*** *from 55.1 m (Aircore hole LYAC0295)*

- ***Metallurgical and mineralogical testwork under way*** *on composites from sonic core under supervision from experienced international uranium consultants Tetra Tech Pty Ltd.*

- ***Statistical analysis to be undertaken to establish disequilibrium factors*** *for the deposit and compare results from sonic versus twinned aircore drilling following receipt of aircore assays, expected mid-October 2011.*

- ***Next Field Activity*** *– pump testing scheduled to be completed in November 2011 to confirm hydrogeology parameters such as porosity and permeability within the mineralised host sandstone.*

Energia Minerals Limited (ASX: **EMX**) is pleased to report **significant high-grade assay results** from geochemical analysis of core from recently completed sonic core drilling at its flagship **Carley Bore uranium deposit** in Western Australia, including some of the highest grade results seen from the Project to date.

The excellent results – together with **strong eU_3O_8 intercepts** received from down-hole gamma logging of both sonic and recently-completed aircore drill holes – have further reinforced the robustness of the Carley Bore deposit and its potential to underpin a high-quality In Situ Recovery (ISR) mining operation.

ASX Code EMX

ABN 63 078 510 988

PO Box 1785
West Perth WA 6872

Level 2, 20 Kings Park Road
West Perth WA 6005

T: +61 8 9321 5000
F: +61 8 9321 7177
E: info@energiaminerals.com
W: www.energiaminerals.com

Significant intersections from geochemical assays of sonic core are provided in ***Table 1*** and drill-hole locations and all significant eU_3O_8 intercepts from down-hole logging are provided in ***Table 2*** and. Drill-hole locations are shown on Figure 1 with sonic holes labelled.

Note that geochemical assay results are not yet available for the 22 aircore holes listed in Table 2.

Sonic Drilling

A program of sonic drilling (6 holes for 394m) was completed in July-August 2011 with the objectives of:

- twinning additional aircore holes;
- obtaining further metallurgical samples;
- acquiring additional density, mineralogical and geological data;
- establishing monitoring bores for pump testing and hydrological modelling; and
- providing sites for additional down-hole gamma logging data to complement the profiles obtained for the four diamond holes drilled in April 2010.

Five holes were completed within the Carley Bore Inferred Mineral Resource area and one remote from it (to be used as a remote monitoring bore and alternative water source). Although fewer holes were completed than initially planned (as a consequence of slow drilling rates), all of these objectives were achieved.

Sonic core drilling was undertaken throughout all zones that were indicated as mineralised by testing with a hand-held scintillometer. Core recovery was continuous and near-total in all holes, with the single exception of a 30cm loss over 1 metre at 75m down-hole in LYMB005.

An example of sonic core within a mineralised zone is shown in Figure 2. After cleaning and geological logging, each core was halved to provide a bulk sample for metallurgical sampling. The remaining core was then quartered to provide the analytical sample. Each metre of 6 inch (152mm) diameter sonic core weighed 25-35kg as recovered (wet), therefore providing abundant material for representative sampling and testing.

Significants intercepts from the sonic core assays are listed in Table 1. Analytical methods are provided in the Table caption. Two international standards and several blanks were analysed with the analytical batch to ensure quality control. Results were within acceptable ranges.

All sonic holes within the Inferred Mineral Resource area returned assays indicative of strong mineralisation with the best being hole LYMB003 (**5.4m @ 2,266 ppm U_3O_8**), located within the "Bull Run zone" in the southern part of the resource area (refer Figure 1).

One individual 0.5 metre sample within this overall intercept returned an assay of greater than **5,000ppm (0.5%) U_3O_8**. Individual 0.5m results of **more than 3,500ppm (0.35%) U_3O_8** were also returned from LYMB004 and LYMB006.

Down-hole Gamma Logging

Down-hole logging of five sonic holes and 12 aircore holes was completed in August 2011 by Borehole Geophysical Services (BHGS) of Malaga, WA using an Auslog A75 total count gamma tool. Sonic holes were logged after drilling in PVC casing and aircore holes were logged within the drill rods at the completion of drilling each hole.

Data reduction and calculation of eU_3O_8 values and intervals was undertaken by David Wilson of 3D Exploration Ltd. Further details of the methods employed are provided in the Competent Person's statement attached to this report.

Significant eU_3O_8 intercepts for all logged holes are provided in Table 2. Graphical logs for two of the holes are shown in Figures 3 and 4.

A formal statistical analysis will be undertaken on receipt of all data to compare:

- Assay data from quarter core with head-grade metallurgical data from half-core for the sonic cores;
- Assay data with down-hole logging data for the sonic cores;
- Sonic core data with assay data for each twinned aircore hole; and
- Assay data versus eU_3O_8 data for each of the aircore holes for which down-hole logging data is available.

Energia's Managing Director, Keren Paterson, said:

> *"These are important and exciting data sets in the progression of the Carley Bore Deposit. Both the down-hole logging and sonic core assays have generated strong mineralised intercepts, particularly within the newly-delineated Bull Run zone at the southern end of the current Inferred Mineral Resource.*
>
> *"This is the first comprehensive down-hole logging and eU_3O_8 data acquired from Carley Bore aside from the four diamond drill holes that were logged in July 2010. Down-hole logging is the most common method of evaluating uranium deposits, so it is encouraging to see that the new data are substantiating the grades and thicknesses indicated by our geochemical analysis of aircore holes.*
>
> *"This reinforces our belief that Carley Bore is a significant project with the potential to become an economic ISR mine. We eagerly anticipate the outcomes of metallurgical testwork and pump testing."*

ENDS

Keren Paterson .

Keren Paterson
Managing Director
info@energiaminerals.com
+61 8 9321 5000

For media enquiries contact:
Nicholas Read
Read Corporate
info@readcorporate.com.au
+61 8 9388 1474

For further information on the company please go to www.energiaminerals.com or email info@energiaminerals.com.

Competent Person Statement:

Information in this release that relates to Exploration Results and the Exploration Target are based on information prepared by **Dr Leigh Bettenay** who is a Fellow of the Australian Institute of Geoscientists and a full-time employee of Energia Minerals Limited. Dr Bettenay has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken 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 Bettenay consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

The August 2011 update for the Inferred Mineral Resource at Carley Bore is based on information compiled by **Mr Alex Aaltonen** who is employed by Energia Minerals Limited and **Mr Neil Inwood** who is employed by Coffey Mining Limited. Mr Inwood visited the site from 23-25 April 2010. Alex Aaltonen is the Competent Person responsible for the drilling assay database, QA/QC validation and density measurements. Neil Inwood is the Competent Person responsible for the resource estimation and classification. Mr Inwood is a Fellow of the AusIMM and Mr Aaltonen is a Member of AusIMM. Both Mr Aaltonen and Mr Inwood have sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Both Mr Aaltonen and Mr Inwood consent to the inclusion in this release of the matters based on their information in the form and context in which it appears.

Information in this report relating to De-convolved Downhole Gamma Results is based on information compiled by **Mr David Wilson** BSc MSc who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Wilson is a full-time employee of 3D Exploration Ltd, and a consultant to Energia and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Wilson consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

Holes at Carley Bore were logged in August 2011 by Borehole Geophysical Services (BHGS) of Malaga WA with an Auslog A75 total count gamma tool (SN014). The gamma tool was calibrated in July 2011 in Adelaide at the Department of Water, Land and Biodiversity Conservation in calibration pits constructed under the supervision of the CSIRO. Readings were averaged over 2 cm intervals at a retrieval speed of 2m/ minute and the reading and depth values were recorded directly onto a portable computer then transferred to Mr Wilson for processing.

The down-hole gamma ray data was converted from counts per second to eU_3O_8 using calibration factors obtained from measurements made at the calibration pits. The data was also adjusted to take into account differences in drill hole size, casing materials and water content. Sonic holes were logged within casing after drilling whereas Aircore holes were logged within the drilling rods. The eU_3O_8 data has been filtered (de-convolved) to more closely reproduce the true grades and thicknesses where thin narrow zones are encountered. The various calibration factors and de-convolution parameters were established and applied by David Wilson BSc MSc MAusIMM from 3D Exploration Ltd based in Perth, Western Australia.

Equivalent U_3O_8 (commonly stated as "eU_3O_8") derived from down-hole gamma logging of drill holes is a well-established method that provides a powerful tool for uranium companies to explore for and evaluate uranium deposits. The method measures the total flux of natural gamma rays emitted from materials within a radius of about 35cm surrounding a drill hole. The gamma probe is therefore capable of sampling a much larger volume than is the case by analysing geological samples recovered from the hole.

The gamma ray measurements are used to estimate uranium concentrations with the commonly accepted initial assumption being that the uranium is in (secular) equilibrium with those of its daughter products which are the principal gamma ray emitters. If uranium is not in equilibrium as a result of lack of time since formation or of the subsequent 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. Energia Minerals Limited will be conducting further studies to determine if disequilibrium is present at Carley Bore.

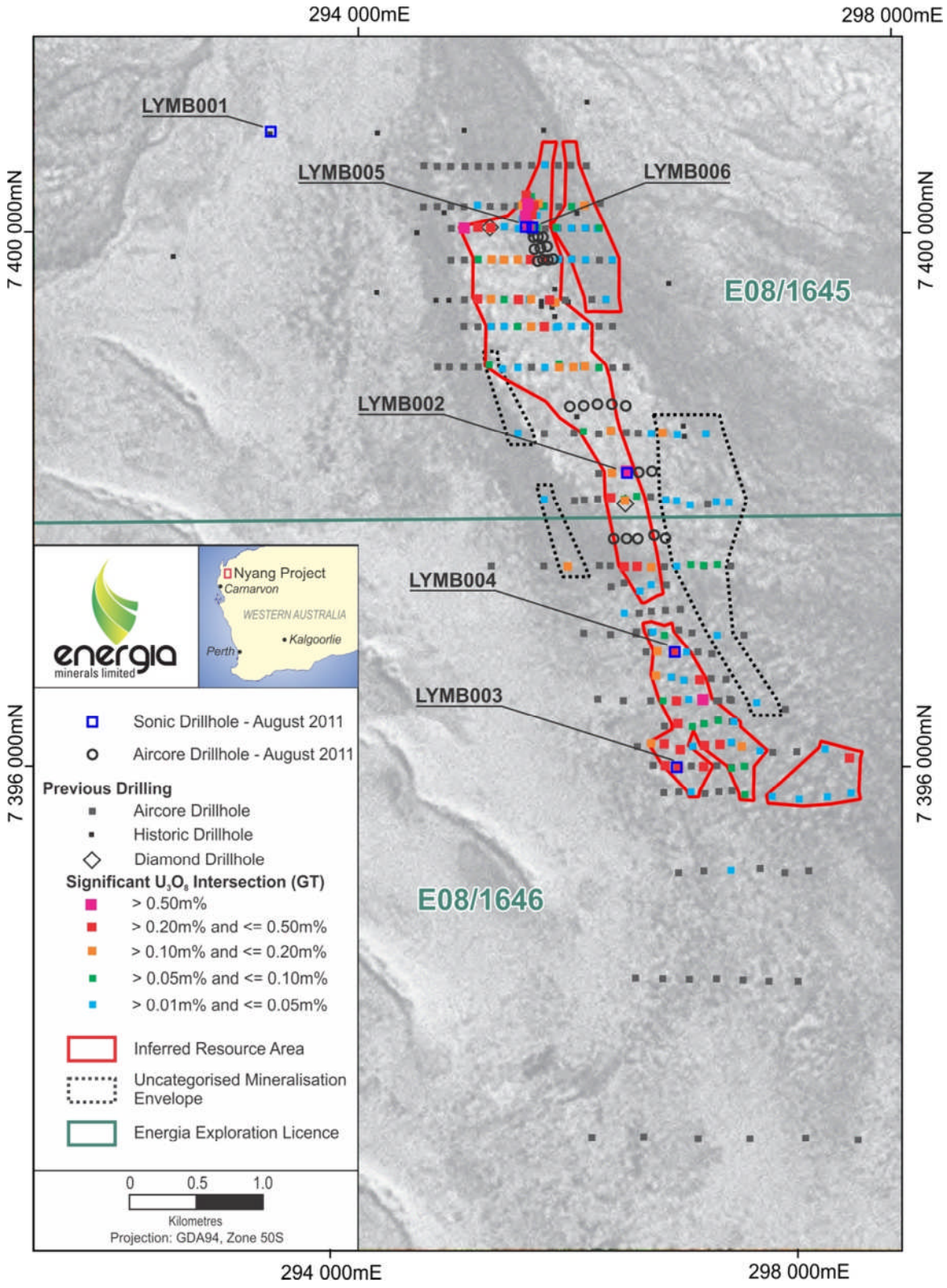

Figure 1 - Carley Bore Prospect, Nyang Project, showing Location of Sonic drilling and August 2011 Aircore drilling in relation to outline of August 2011 Inferred Mineral Resource estimate.

Figure 2 – Sonic core (LYMB002 46-49m) drilled at Carley Bore in July 2011 illustrating near-complete core recovery from semi-consolidated, uranium-mineralised reduced sediments in the ore zone

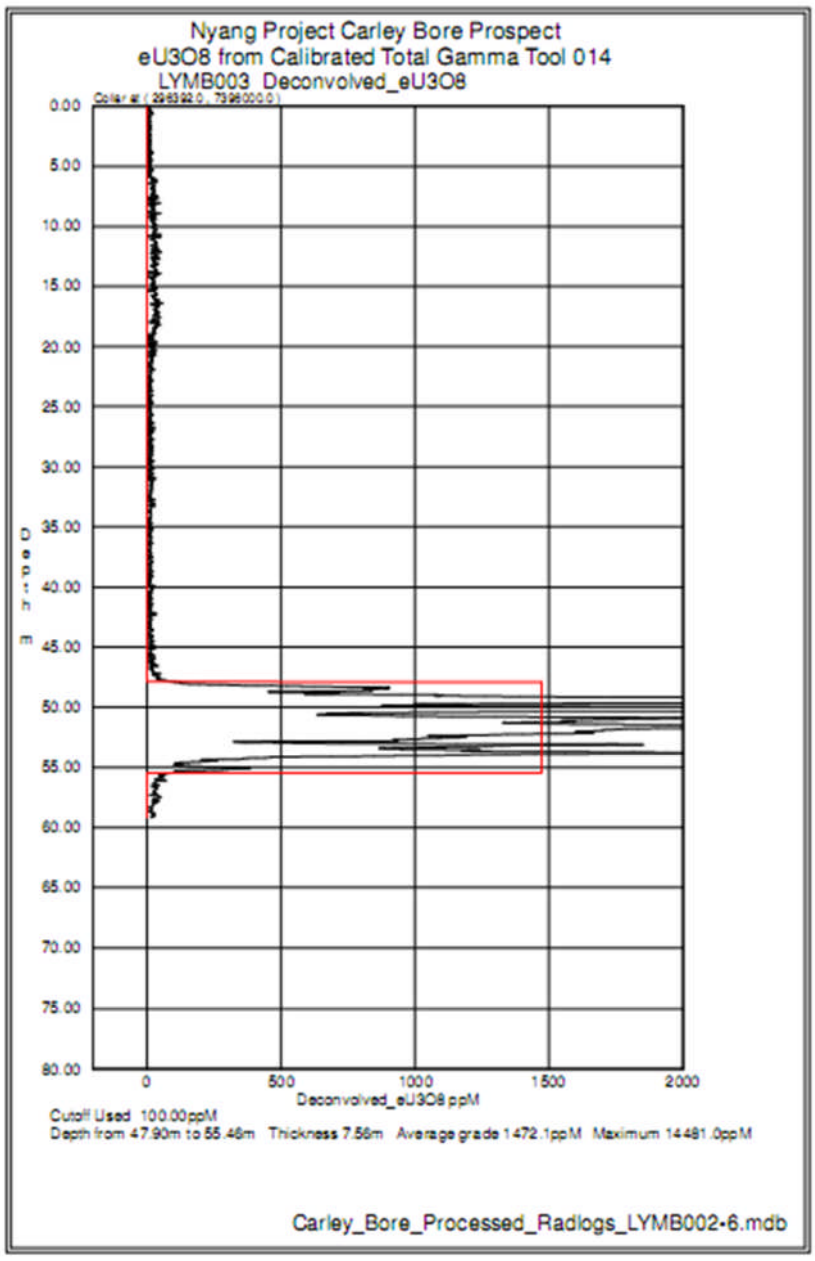

Figure 3 – Downhole plot of deconvolved eU_3O_8 in sonic drill hole LYMB003, Carley Bore Prospect, Nyang Project *(Note: Calculated intervals shown on the graph may differ slightly from those in the Table owing to different cut-off parameters. Data in the Table are the preferred intervals)*

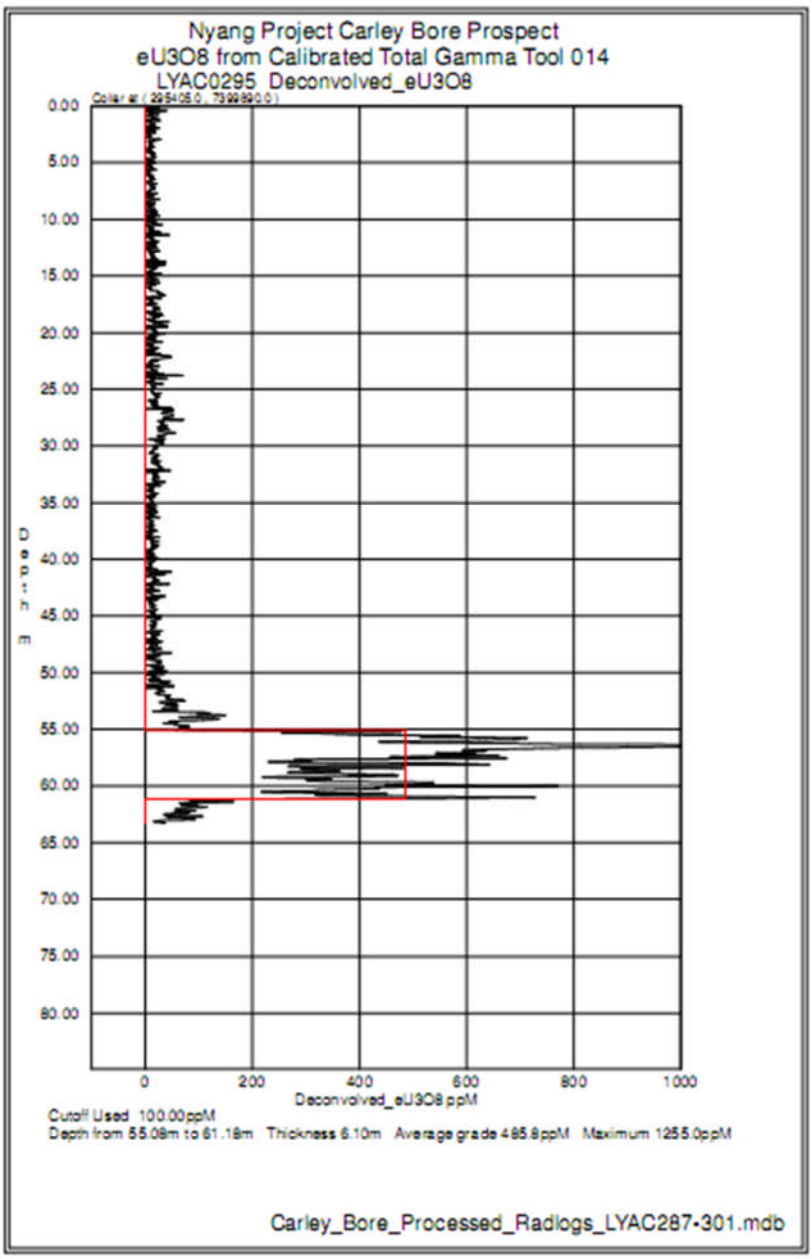

Figure 4 – Downhole plot of deconvolved eU_3O_8 in aircore drill hole LYAC0295, Carley Bore Prospect, Nyang Project *(Note: Calculated intervals shown on the graph may differ slightly from those in the Table owing to different cut-off parameters. Data in the Table are the preferred intervals)*

Table 1 – Nyang project, Carley Bore Deposit – Significant U_3O_8 intersections from geochemical assaying of Sonic core

(Notes: All holes are vertical. Intersections calculated using length-weighted accumulation and incorporating a minimum 1m down-hole thickness, 100 ppm U_3O_8 cut-off and maximum 1m internal dilution.
Geochemical analysis by Ultratrace Laboratory of Perth by ICP-MS after total sample pulverization and 4-acid digestion. Samples derived from quarter core sonic after logging, cleaning and removal of half core for metallurgical composites. Maximum sampling length of 1m but broken where necessary on shorter intervals to reflect lithological boundaries.

- *NAW = Not assayed – hole drilled as monitor well outside resource area.*

HOLE No	Easting MGA Z50	Northing MGA Z50	Total Depth	Top of Intercept	Thickness of Intercept (metres)	Average grade (ppm U_3O_8)	GT (metre % U_3O_8)
Sonic Drilling							
LYMB001	293351	7400750	70.6			NAW	
LYMB002	296009	7398200	59.5	42	1	416	
				46	**6.5**	**765**	**0.50**
				53.6	1.4	123	
LYMB003	296387	7395998	60	**50.4**	**5.4**	**2266**	**1.22**
				Incl. 51	0.71	4551	
				Incl. 53.25	0.55	5837	
				57	1	143	
LYMB004	296369	7396862	58	**51.4**	**1.6**	**1950**	**0.31**
				Incl. 51.4	0.6	3773	
LYMB005	295262	7400040	79	**72.5**	**5.5**	**412**	**0.23**
LYMB006	295302	7400038	67	**64**	**3**	**2004**	**0.60**
				Incl. 65	0.65	3738	

Table 2 – Nyang project, Carley Bore Deposit – Significant eU_3O_8 intersections from downhole gamma logging of Sonic and aircore drilling

(Notes: All holes are vertical. Intersections calculated from de-convolved down hole gamma logging, using a minimum 1m down-hole thickness, 100 ppm eU_3O_8 cut-off and maximum 1m internal dilution.

- *NAW = Not logged – hole drilled as monitor well outside resource area.*
- *NAD = Not logged – equipment delay during drilling.*
- *NAN= Not logged – no anomalous material intersected on basis of scintillometer responses.*
- *NSR= Down-hole logging completed but no significant results returned.*

Refer Competent person statement for details of measurement and calculations)

HOLE No	Easting MGA Z50	Northing MGA Z50	Total Depth	Top of Intercept	Thickness of Intercept (metres)	Average grade (ppm eU_3O_8)	GT (metre % eU_3O_8)
Sonic Drilling							
LYMB001	293351	7400750	70.6			NAW	
LYMB002	296009	7398200	59.5	46.18	7.20	360	0.26
LYMB003	296387	7395998	60	47.90	7.56	1472	1.11
LYMB004	296369	7396862	58	49.08	4.70	438	0.21
LYMB005	295262	7400040	79	71.76	4.24	340	0.14
LYMB006	295302	7400038	67	58.66	7.78	733	0.57
August Infill Aircore Drilling							
LYAC0280	295999	7398697	60			NAD	
LYAC0281	295899	7398705	60			NAD	
LYAC0282	295788	7398709	60			NAD	
LYAC0283	295691	7398699	60			NAD	
LYAC0284	295586	7398694	60			NAD	
LYAC0285	296200	7398207	63			NAD	
LYAC0286	296101	7398200	60			NAD	
LYAC0287	296303	7397704	60	46.90	4.10	320	0.13
LYAC0288	296214	7397731	60	46.26	1.98	314	0.06
LYAC0289	296095	7397701	55			NAN	
LYAC0290	296009	7397702	60			NAN	
LYAC0291	295910	7397699	60			NSR	
LYAC0292	295379	7399960	72	58.12 62.76	1.22 2.22	386 123	0.05 0.03
LYAC0293	295344	7399966	78			NAN	
LYAC0294	295314	7399960	87	73.60	6.70	223	0.15
LYAC0295	295415	7399890	69	55.08	6.40	469	0.30
LYAC0296	295366	7399878	75			NSR	
LYAC0297	295319	7399869	75	67.02	1.14	448	0.05
LYAC0298	295456	7399798	72	63.30	2.16	1122	0.24
LYAC0299	295420	7399793	74	55.58	9.22	390	0.36
LYAC0300	295378	7399799	81	64.28	6.76	234	0.16
LYAC0301	295342	7399784	81	65.66	2.60	340	0.09