



**ASX  
ANNOUNCEMENT**

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**NGALIA PROJECT  
ANOMALY 15 EAST AND CAMEL FLAT  
SIGNIFICANT DRILL RESULTS**

**HIGHLIGHTS**

**ANOMALY 15 EAST**

**2.95m @ 1,089ppm eU<sub>3</sub>O<sub>8</sub> from 98.35m in B11039**

**CAMEL FLAT**

**8.35m @ 763ppm eU<sub>3</sub>O<sub>8</sub> from 62.0m in CFRC11043**

**4.65m @ 546ppm eU<sub>3</sub>O<sub>8</sub> from 49.88m in CFRC11022**

Energy Metals Limited (ASX: EME) is pleased to announce the results from both the Camel Flat and Anomaly 15 East prospects of the extensive Ngalia Project, located in the Northern Territory.

Drilling activities have been ongoing with gamma probe results recently received from the following drill programmes:

- Step-out and infill drilling at Anomaly 15 East
- Step-out drilling at Camel Flat

**Anomaly 15 East**

The mineralised unit that hosts most of the mineralisation within the Bigrlyi Joint Venture (Energy Metals 53.3%) extends into E24453, a 100% owned EME tenement. However this trend has been poorly tested by historical drilling with most of the historical holes targeting anomalies identified from outcrop or in weathered bedrock.

Recent drilling targeted the prospective horizon over a strike length of 4,500m with a series of reconnaissance holes spaced at a nominal 200m interval with holes aimed to test the interpreted position of this horizon in fresh rock.

The latest programme comprised eight step-out holes and seven infill holes drilled to follow up previously announced intercepts (including 6m @ 1,940ppm eU<sub>3</sub>O<sub>8</sub> in B11012; refer ASX release 4<sup>th</sup> July 2011) with results showing potential along a significant extension of the prospective contact.

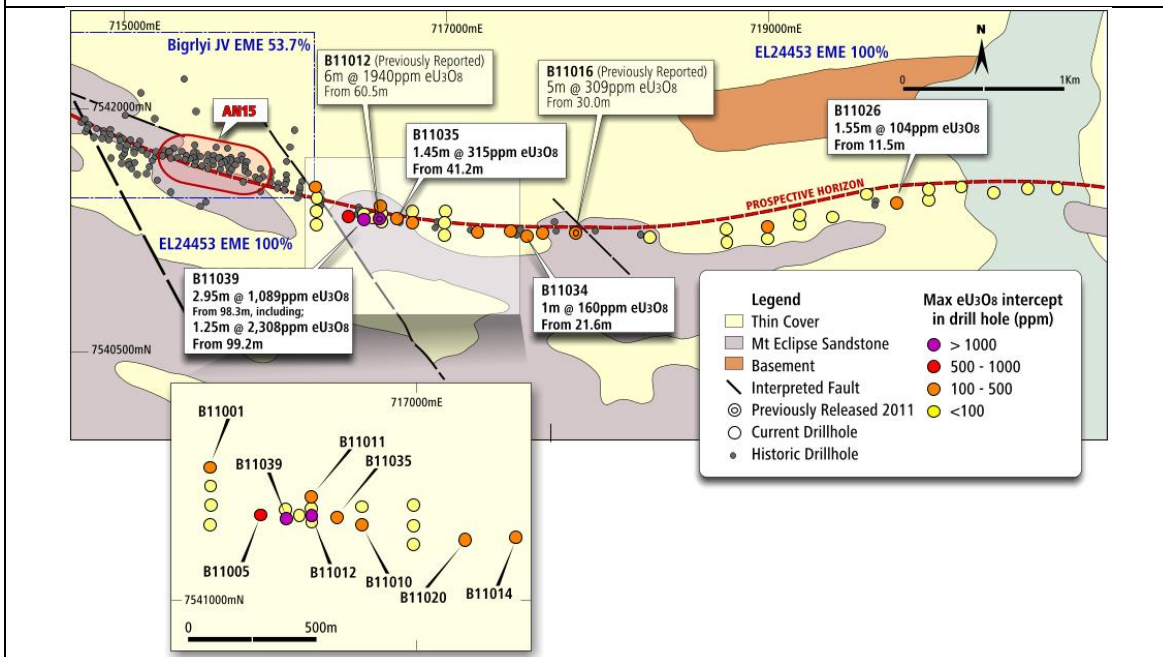
Significant (>100ppm eU<sub>3</sub>O<sub>8</sub>) gamma probe intersections have been returned from several holes in this programme, and include 2.95m at 1,089ppm eU<sub>3</sub>O<sub>8</sub> from 98.35m in B11039 (including 1.25m at 2,308ppm eU<sub>3</sub>O<sub>8</sub> from 99.2m) and 1.45m @ 315ppm eU<sub>3</sub>O<sub>8</sub> from 41.15m in B11035.

All intersections are down hole widths with the true thickness estimated to be around 80% of the down hole thickness, based on the dip of the stratigraphy in outcrop to the north and south of the drilling and from geological interpretation. The extensions of the prospective horizon are concealed by a thin (1 – 3m) layer of transported sand.

Samples from the anomalous intervals have been dispatched for chemical analysis to confirm the Uranium values returned from gamma probe estimates and to determine the Vanadium content of the holes. Vanadium is directly associated with zones of Uranium mineralisation at Bigryli.

Figure 1 is a plan showing the location of the recent drilling at Anomaly 15 East and the anomalous intercepts. Significant are detailed in Table 1 with drill hole collar information detailed in Table 2.

Figure 1 Drill hole plan of all drilling at the Anomaly 15 East prospect with the historical holes as grey circles; Anomaly 15 occurs less than 1.5km to the West of the most significant intersections.



## Camel Flat

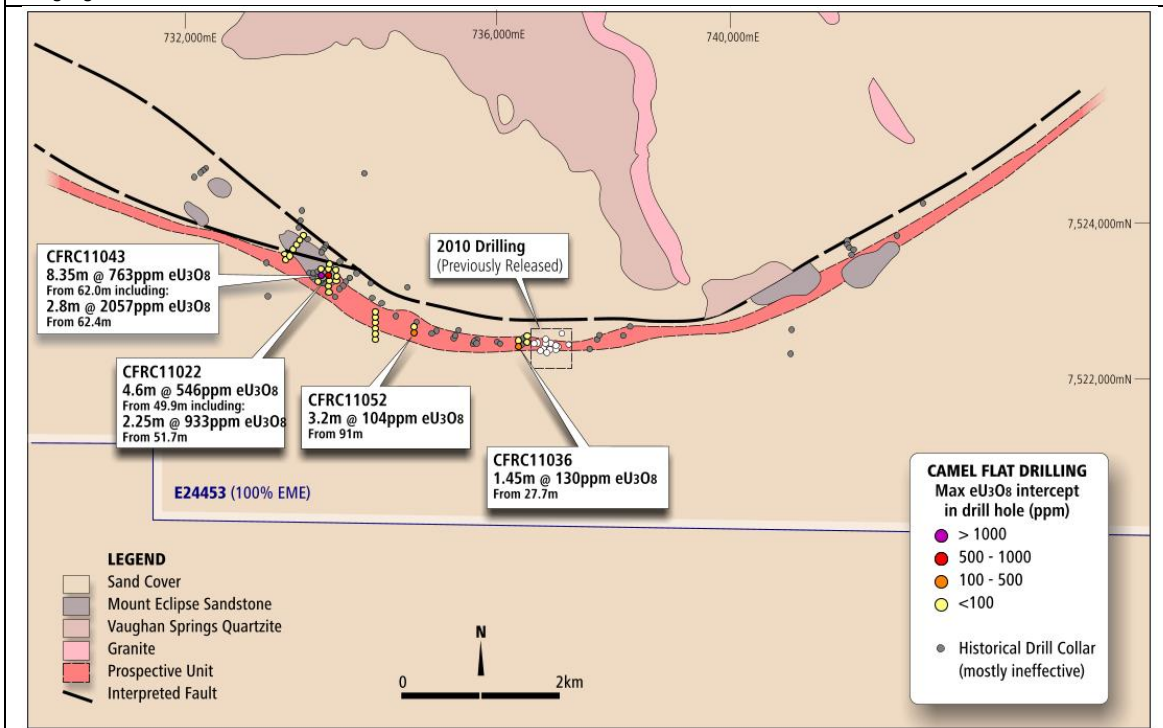
Drilling at the Camel Flat prospect (also located within E24453) during 2010 intersected significant high grade mineralisation within a specific stratigraphic horizon concealed under 3 – 5m of transported sand.

Drilling at Camel Flat over the past few months has focussed on delineating the stratigraphic position of the mineralisation intersected during 2010 to assist with focussing drilling into the most prospective sections later this year.

This recent drilling has identified a second zone of significant grades and thicknesses approximately 2.8km to the west of the 2010 drilling. Better results include 8.35m at 763ppm eU<sub>3</sub>O<sub>8</sub> from 62m in CFRC11043, including 2.8m at 2,057ppm eU<sub>3</sub>O<sub>8</sub> from 62.4m. CFRC11022 intersected 4.6m at 546ppm eU<sub>3</sub>O<sub>8</sub> from 49.88m, including 2.25m at 933ppm eU<sub>3</sub>O<sub>8</sub> from 51.68m Results from Camel Flat at a 100ppm eU<sub>3</sub>O<sub>8</sub> cut-off are detailed in Table 3 with collar coordinates detailed in Table 4.

Samples from the anomalous intervals have been dispatched for chemical analysis to confirm the Uranium values returned from gamma probe estimates.

Figure 2. Drill hole plan of all drilling at Camel Flat, the historical holes are grey circles with the 2010 holes identified as blue triangles and the 2011 holes colour coded for maximum eU<sub>3</sub>O<sub>8</sub>



Further work is required to determine the significance of these intersections and further interpretation of the step-out drilling is required to ensure that the prospective horizon has been tested between the mineralisation identified in 2010 and the new discovery zone.

Additional drilling to determine the significance of both Camel Flat and Anomaly 15 East is planned prior to the end of the field season.

Table 1: Significant Gamma probe intercepts from the step-out and infill drilling at the Anomaly 15 East Prospect.

Hole Number	From (m)	To (m)	Width (m)	eU <sub>3</sub> O <sub>8</sub> (ppm)
B11026	1.00	2.75	1.75	156
And	11.45	13.00	1.55	104
B11034	21.60	22.60	1.00	160
B11035	41.15	42.60	1.45	315
<b>B11039</b>	<b>98.35</b>	<b>101.30</b>	<b>2.95</b>	<b>1,089</b>
<b>Inc</b>	<b>99.20</b>	<b>100.45</b>	<b>1.25</b>	<b>2,308</b>

Note Intersections calculated on a 100ppm eU<sub>3</sub>O<sub>8</sub> cut off, minimum thickness of 1m and 3m maximum internal dilution based on the De-convolved eU<sub>3</sub>O<sub>8</sub> probe results. The *inc.* intersections are based on a 500ppm eU<sub>3</sub>O<sub>8</sub> cut off, minimum thickness of 1m and 3m maximum internal dilution based De-convolved eU<sub>3</sub>O<sub>8</sub> probe results. The **Bold** intersections are where the grade (in ppm eU<sub>3</sub>O<sub>8</sub>) \* thickness (m) is >1000. The true thickness of the intersections are estimated to be approximately 80% of the down hole width, based on outcrop and geological interpretation.

Table 2: Collar coordinates for the step-out and infill drilling at the Anomaly 15 East Prospect

Hole Number	Easting	Northing	Depth (m)	Dip	Azimuth
B11026	719790	7541425	217	-60	0
B11027	719990	7541440	115	-60	0
B11028	719990	7541500	151	-60	0
B11029	720190	7541525	151	-60	0
B11030	720390	7541490	151	-60	0
B11031	720600	7541510	115	-60	0
B11032	720785	7541515	103	-60	0
B11033	719190	7541350	151	-60	0
B11034	717495	7541220	151	-60	0
B11035	716690	7541330	148	-60	0
B11036	716590	7541315	151	-70	0
B11037	716590	7541355	151	-60	0
B11038	716540	7541335	151	-60	0
B11039	716490	7541325	151	-60	0
B11040	716490	7541355	151	-60	0

Note: All holes are RC holes with collar coordinates determined from a hand held GPS with a nominal accuracy of ± 5m and are all MGA zone 52, the depths are all down hole depth in meters and were all drilled toward the grid north (4<sup>o</sup> magnetic).

Table 3: Significant Gamma probe intercepts from the Camel Flat Drilling

Hole Number	From (m)	To (m)	Width (m)	eU <sub>3</sub> O <sub>8</sub> (ppm)
CFRC11036	27.70	29.15	1.45	130
CFRC11052	82.30	83.30	1.00	100
And	90.95	94.15	3.20	104
CFRC11022	42.53	44.78	2.25	362
<b>And</b>	<b>49.88</b>	<b>54.48</b>	<b>4.60</b>	<b>546</b>
<b>Inc</b>	<b>51.68</b>	<b>53.93</b>	<b>2.25</b>	<b>933</b>
CFRC11043	18.80	20.30	1.50	107
<b>And</b>	<b>39.65</b>	<b>52.70</b>	<b>13.05</b>	<b>192</b>
<b>Inc</b>	<b>49.55</b>	<b>51.30</b>	<b>1.75</b>	<b>593</b>
<b>And</b>	<b>62.00</b>	<b>70.35</b>	<b>8.35</b>	<b>763</b>
<b>Inc</b>	<b>62.40</b>	<b>65.20</b>	<b>2.80</b>	<b>2,057</b>

Note Intersections calculated on a 100ppm eU<sub>3</sub>O<sub>8</sub> cut off, minimum thickness of 1m and 3m maximum internal dilution based on the De-convolved eU<sub>3</sub>O<sub>8</sub> probe results. The *inc.* intersections are based on a 500ppm eU<sub>3</sub>O<sub>8</sub> cut off, minimum thickness of 1m and 3m maximum internal dilution based De-convolved eU<sub>3</sub>O<sub>8</sub> probe results. The **Bold** intersections are where the grade (in ppm eU<sub>3</sub>O<sub>8</sub>) \* thickness (m) is >1000. The true thickness of the intersections are estimated to be approximately 80% of the down hole width, based on outcrop and geological interpretation.

Table 4: Collar coordinates for 2011 Camel Flat Drilling

Hole Number	Easting	Northing	Depth (m)	Dip	Azimuth
CFRC11019	733850	7523120	151	-60	180
CFRC11020	733850	7523190	151	-60	180
CFRC11021	733850	7523260	151	-60	180
CFRC11022	733851	7523334	151	-60	180
CFRC11023	733851	7523410	151	-60	180
CFRC11024	733850	7523470	151	-60	180
CFRC11027	736400	7522475	151	-60	180
CFRC11028	736400	7522550	139	-60	180
CFRC11029	733300	7523540	151	-60	215
CFRC11030	733344	7523599	151	-60	215
CFRC11031	733390	7523660	151	-60	215
CFRC11033	733433	7523721	151	-60	215
CFRC11034	733476	7523781	151	-60	215
CFRC11035	733521	7523843	151	-60	215
CFRC11036	736300	7522425	151	-60	180
CFRC11037	736300	7522500	151	-60	180
CFRC11039	733950	7523255	151	-60	180
CFRC11040	733950	7523330	151	-60	180
CFRC11041	733950	7523405	151	-60	180
CFRC11042	733750	7523255	151	-60	180
CFRC11043	733750	7523330	151	-60	180
CFRC11044	733750	7523405	151	-60	180
CFRC11045	734450	7522520	151	-60	180
CFRC11046	734450	7522590	151	-60	180
CFRC11047	734450	7522660	151	-60	180
CFRC11048	734450	7522730	151	-60	180
CFRC11049	734450	7522800	151	-60	180
CFRC11050	734450	7522870	151	-60	180
CFRC11051	734950	7522670	151	-60	180
CFRC11052	734950	7522600	151	-60	180
CFRD11032	735187	7522644	196.7	-60	180
CFRD11038	735727	7522473	167.5	-60	180

Note: All holes are with a CFRC prefix are RC holes, holes with a CFRD prefix are Diamond holes with an RC pre-collar. The collar coordinates are from a hand held GPS with a nominal accuracy of  $\pm 5$ m and are all MGA zone 52, the depths are all down hole depth in meters and were all drilled toward the grid south ( $176^{\circ}$  magnetic).

Information in this report relating to exploration results, data 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 they are 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.

Information in this report relating to the determination of the gamma probe results and geophysical work is based on information compiled by Mr David Wilson. Mr Wilson is a member of the AusIMM and the AIG. Mr Wilson is a consultant to Energy Metals. He 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 “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2004)”. Mr Wilson 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.

Total count gamma logging includes the generally small number of gamma rays emitted by background levels of thorium and potassium. These background gamma rays add the equivalent of a few parts per million to the equivalent uranium values and are relatively constant in each geological unit.

Downhole gamma logging of drill holes provides a powerful tool for uranium companies to explore for and evaluate uranium deposits. Such a method measures the natural gamma rays emitted from material surrounding a drill hole. Gamma radiation is measured from a volume surrounding the drill hole that has a radius of approximately 35cm. The gamma probe is therefore capable of sampling a much larger volume than the geological samples recovered from any normal drill hole.

Gamma ray measurements are used to estimate uranium concentrations with the commonly accepted initial assumption being that the uranium is in (secular) equilibrium with its daughter products (or radio- nuclides) which are the principal gamma ray emitters. If uranium is not in equilibrium (viz. in disequilibrium), as a result of the 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 in the announcement.

Energy Metals is undertaking measurements to determine if disequilibrium is present and its distribution via undertaking chemical analysis of all  $eU_3O_8$  intersections. Previous chemical assays from Bigrlyi and surrounds have confirmed the gamma intersections and as such Energy Metals believes that the Uranium in the system is in equilibrium with its daughter products.

The logging programme was undertaken by Energy Metals utilising an Auslog Logging System. The gamma tools were calibrated in Adelaide at the Department of Water in calibration pits constructed under the supervision of CSIRO. Energy Metals carries out annual recalibration checks to validate the accuracy of gamma probe data. Furthermore, Energy Metals runs regular checks to validate the accuracy of probe data using calibrated test holes located on site.

The 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  $eU_3O_8$  data was also adjusted by an attenuation factor, determined onsite, due to drill rods. These factors also take into account differences in drill hole size and water content. The  $eU_3O_8$  data has been filtered (deconvolved) to more closely reproduce the true grades and thicknesses where thin narrow zones are encountered.

The various calibration factors and deconvolution parameters were calculated by David Wilson BSc MSc MAusIMM from 3D Exploration Ltd based in Perth, Western Australia.