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## ASX ANNOUNCEMENT

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# OUTSTANDING DRILLING RESULTS FROM BIGRLYI

## HIGHLIGHTS

- **Drillholes BRD2408 and BRD2409 have both intersected multiple zones of high-grade uranium mineralisation at the A4 sub-deposit.**
- **Equivalent $U_3O_8$ concentrations have been calculated from downhole gamma surveys.**
- **BRD2408 is the standout with 10.6m at 0.86% $eU_3O_8$ from 529.1m downhole, including multiple zones in excess of 1% $eU_3O_8$.**
- **The corresponding zone in BRD2409 returned 5.3m at 0.61% $eU_3O_8$ from 488.9m downhole.**
- **The mineralised zone remains open at depth and the resource extension drilling program is ongoing.**

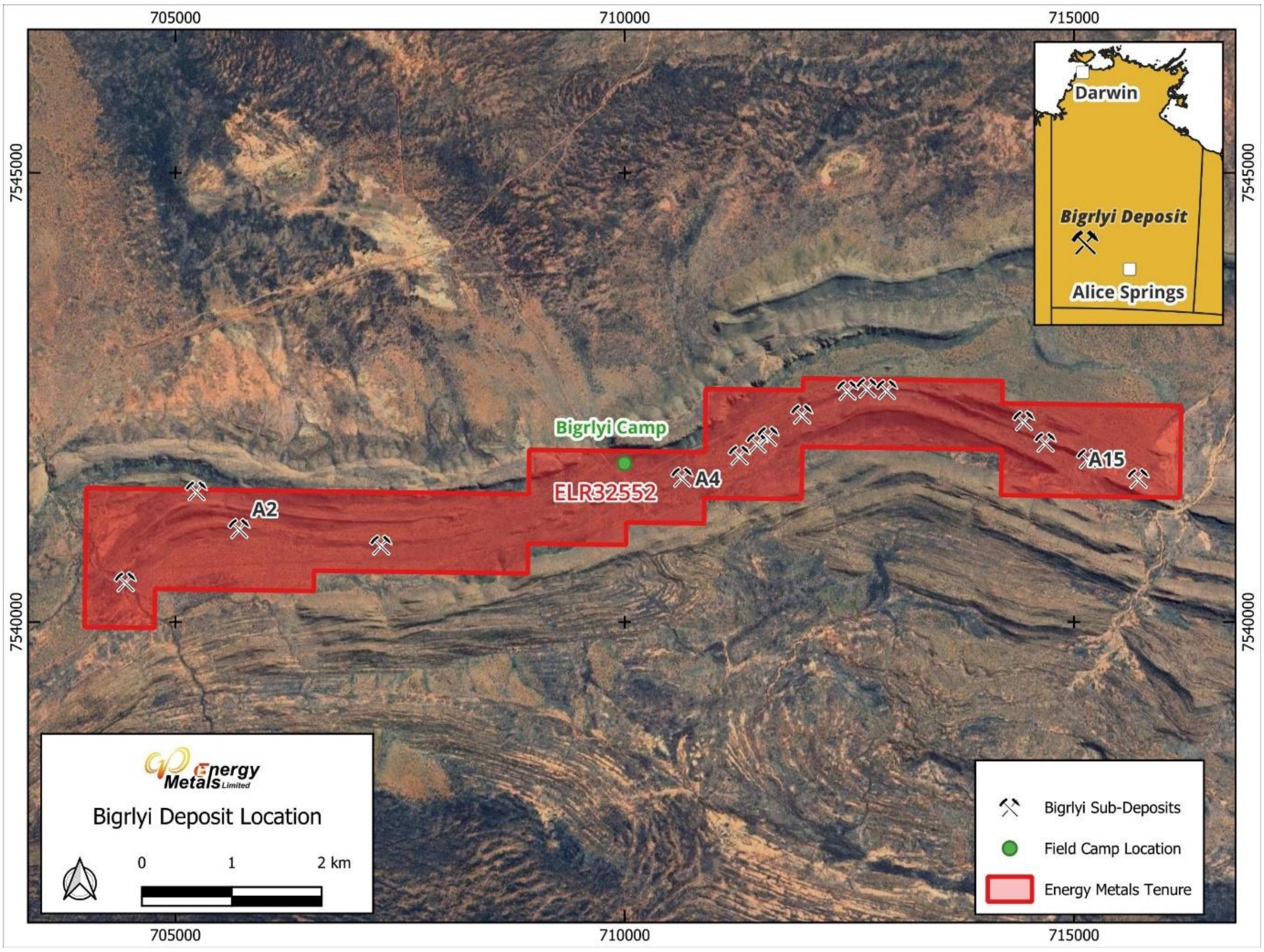
Australian uranium exploration company **Energy Metals Limited** (**ASX**: **EME; Energy Metals** or **the Company**) is pleased to announce outstanding drilling results from its ongoing resource extension drilling campaign at the Bigrlyi Project.

Located in the Ngalia Basin – approximately 350km northwest of Alice Springs, the Project is classified as a sandstone-hosted uranium and vanadium deposit, occurring within the sub-vertical Mt Eclipse sandstone, which contains a sequence of medium-to-coarse grained felspathic sandstones.

The Project is a joint venture (JV) between Energy Metals (72.4%), NT Uranium (20.8%), and Noble Investments (6.8%).

Drilling commenced on site in July[1] with the aim of growing the uranium resource at Bigrlyi, which currently sits at 6.32Mt at an average grade of 1530ppm for 9.66Kt (21.3 Mlbs) contained $U_3O_8$ using a 500ppm cut-off[2].

***Figure 1:*** *Deposit Location Map showing sub-deposits A2, A4, and A15.*




Managing Director Shubiao Tao commented: *"We're delighted with these drilling results, and I believe BRD2408 is Bigrlyi's best deep drillhole to date. We look forward to further exploring this area and determining the full extent of this high-grade mineralisation."*.

[1] ASX announcement 15/07/2024 – 'Drilling Program Begins at Bigrlyi'

[2] ASX announcement 01/08/2024 – 'Resource Update Bigrlyi Project'

To date, the company has completed approximately 10,500m of RC and diamond drilling, targeting three sub-deposits with good potential for resource growth. These sub-deposits, known as A2, A4, and A15, are shown on the location map above (see Figure 1). Selected drilling samples have been submitted to a commercial laboratory in Adelaide for chemical assays, with the analyses currently in progress.

The completed drillholes have been surveyed with calibrated downhole gamma probes which can be used to calculate an equivalent $U_3O_8$ concentration ($eU_3O_8$) based on the downhole gamma response. This is a widely used technique in uranium exploration which provides rapid results with good levels of precision and accuracy provided uranium radioactive daughter decay products are all in secular equilibrium, which is known to be the case at Bigrlyi. It should be noted that the model of gamma probe used at Bigrlyi may become over-saturated in zones of very high radioactivity (>1% $eU_3O_8$) potentially leading to under-estimation of $eU_3O_8$ grade in these zones. Chemical assays of drill core or drill chips are utilised as a validation method, however, because of the penetrative nature of gamma rays, $eU_3O_8$ values relate to a larger sample volume than chemical assays and are often considered more representative of the orebody.

Encouraging $eU_3O_8$ results have been noted across all of the sub-deposits being drill-tested, with the most notable results coming from a pair of drillholes in the centre of the A4 sub-deposit. These drillholes, known as BRD2408 & BRD2409, were designed to test for depth extensions of high-grade mineralisation below A4 as shown in the cross-section on Figure 2. Gamma probing of these drillholes returned a series of outstanding intersections, including a highlight of **10.6m at 0.86% $eU_3O_8$** from 529.1m downhole in BRD2408 (est. true width of 8m). This particular intersection includes multiple intervals over 1% $eU_3O_8$ and a maximum over 2%. The same mineralised zone was also encountered 60m up-dip in BRD2409, where it returned **5.3m at 0.61% $eU_3O_8$** from 488.9m downhole. Significant intersections greater than 0.5m in width and over 500ppm $eU_3O_8$ are summarised in Table 1 below, with all drillhole collar details listed in Table 2. The location of drillholes discussed above can be seen on the collar plan map in Figure 3.

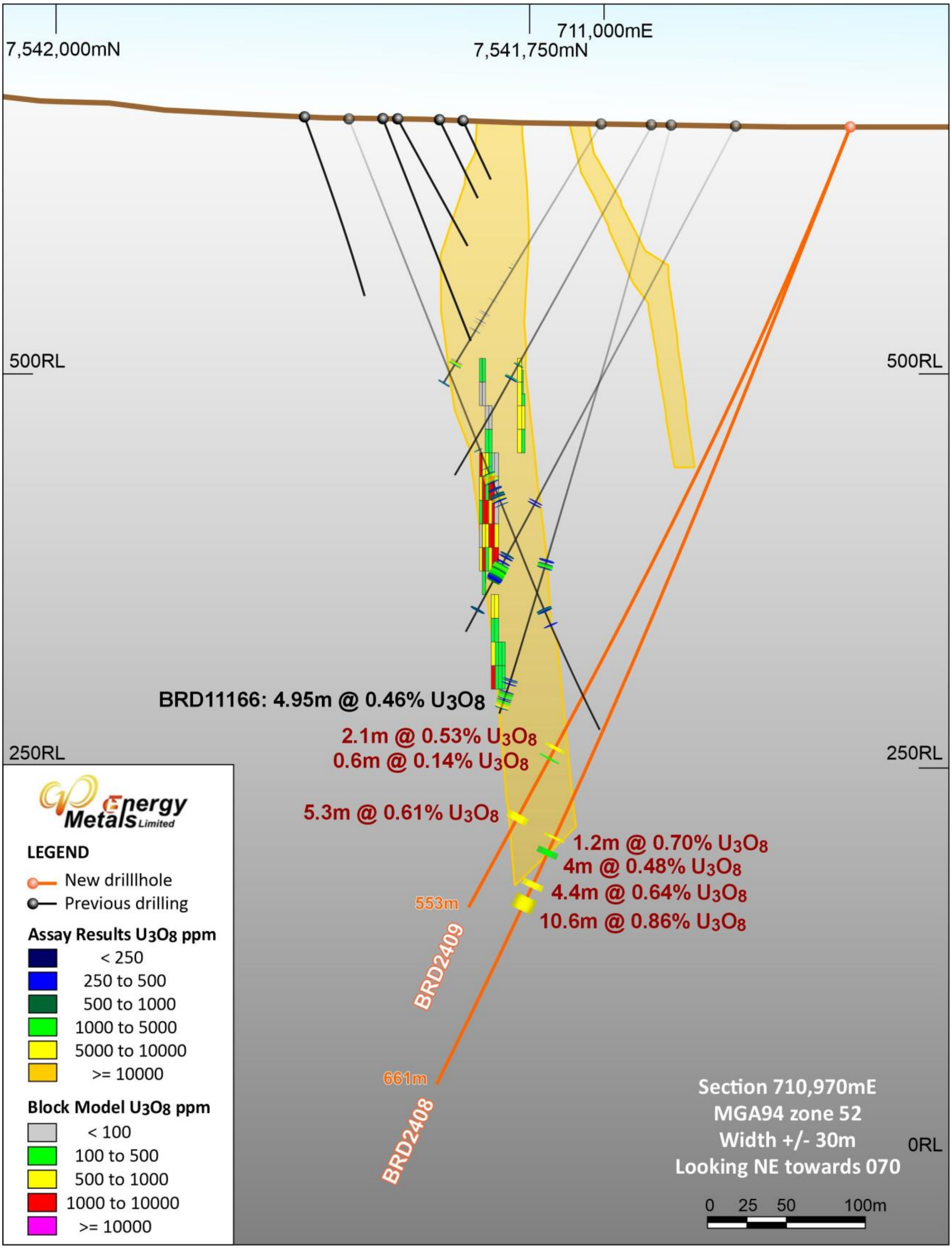
These drillholes are 70m (BRD2409) and 130m (BRD2408) below the historical drillhole BRD11166 (**4.95m at 0.46% $eU_3O_8$** from 382.3m downhole) which was the deepest hole previously drilled on this section. The mineralised intersections become progressively better in terms of grade and thickness as the depth increases, and importantly the mineralisation remains open at depth. Further drilling will be carried out in future programs to determine the full extent of this promising zone.

***Table 1:*** *Significant Intersections over 0.5m width and 500ppm $eU_3O_8$ from Drillholes BRD2408 & BRD2409.*

| HOLE ID | DEPTH | WIDTH | GRADE (% $eU_3O_8$) | HIGH GRADE INCLUSION |
|---|---|---|---|---|
| BRD2408 | 236.8 | 1.6 | 0.09 | |
| BRD2408 | 490.5 | 1.2 | 0.70 | |
| BRD2408 | 495.4 | 4 | 0.48 | |
| BRD2408 | 519.7 | 4.4 | 0.64 | |
| BRD2408 | **529.1** | **10.6** | **0.86** | Includes 1.3m at 1.72% eU3O8 from 536.3m |
| BRD2409 | 253.7 | 1.7 | 0.11 | |
| BRD2409 | 437.9 | 2.1 | 0.53 | |
| BRD2409 | 444.6 | 0.6 | 0.14 | |
| BRD2409 | **488.9** | **5.3** | **0.61** | Includes 0.4m at 1.08% eU3O8 from 491.4m |
| BRD2409 | 497.7 | 0.8 | 0.08 | |

*Note: Intersections are only reported for drillholes BRD2408 and BRD2409 at this stage. Further processing of downhole gamma data from other holes is required before it can be released to the market.*

***Figure 2:*** *Cross-Section showing the location of Drillholes BRD2408 and BRD2409.*



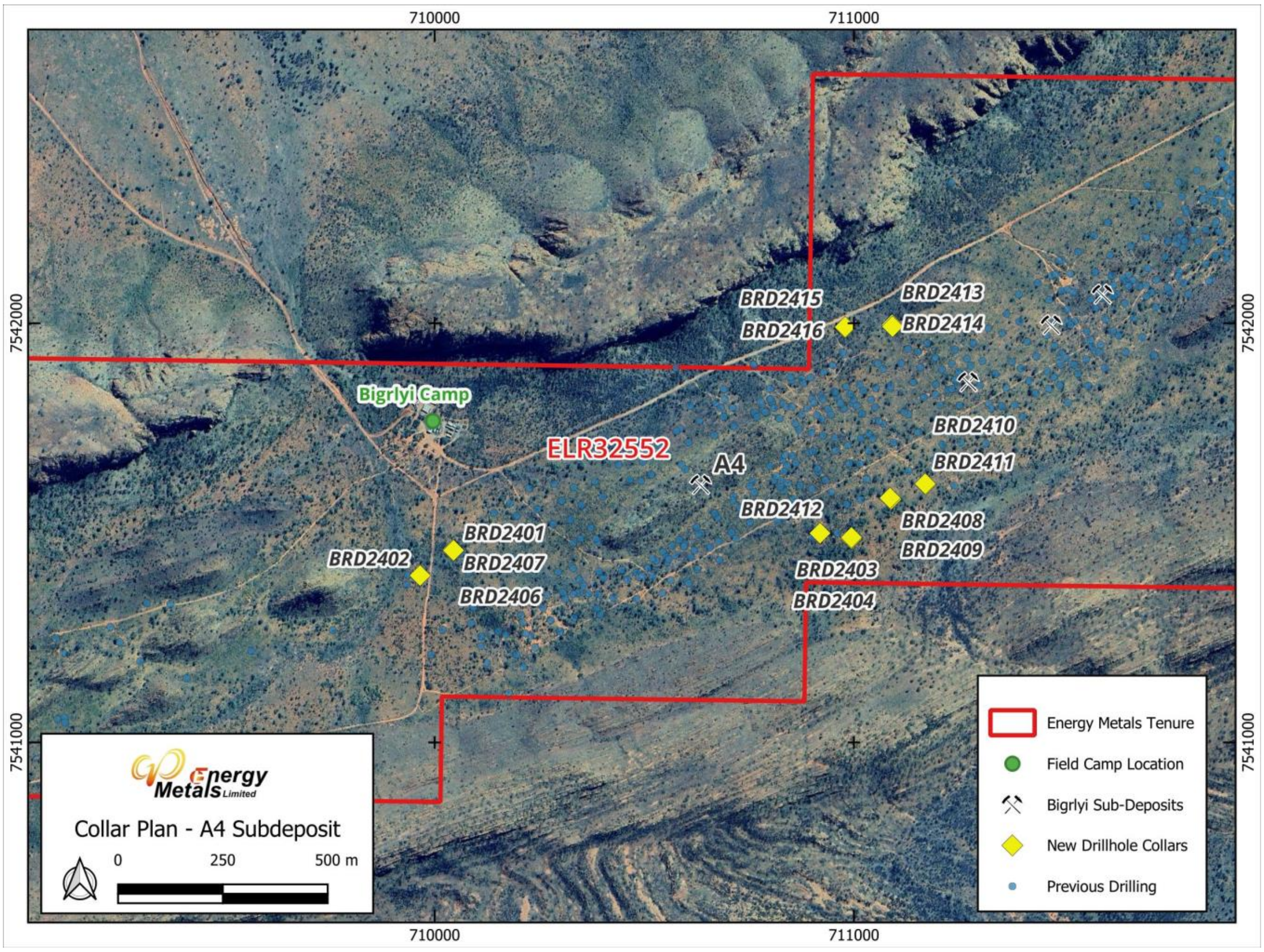

The cross-section in Figure 2 shows that drillholes BRD2408 and BRD2409 have tested directly below an existing zone of known mineralisation at A4, with that mineralisation now extending down a further 130m vertically and being open at depth below BRD2408.

***Table 2**: Drill Collar Details*

| HOLE ID | HOLE TYPE | EASTING | NORTHING | RL | DIP | AZI (GRID) | EOH DEPTH (m) |
|---|---|---|---|---|---|---|---|
| BRD2401 | RC/DD | 710044 | 7541460 | 650 | -70 | 142 | 466.2 |
| BRD2402 | RC PRE | 709965 | 7541398 | 650 | -70 | 142 | 227 |
| BRD2403 | RC/DD | 710989 | 7541485 | 658 | -63 | 333 | 613.1 |
| BRD2404 | RC/DD | 710992 | 7541487 | 658 | -57 | 330 | 508 |
| BRD2405 | RC EXP | 709966 | 7541383 | 650 | -90 | 0 | 50 |
| BRD2406 | RC/DD | 710044 | 7541457 | 650 | -65 | 140 | 376 |
| BRD2407 | RC/DD | 710045 | 7541458 | 650 | -56 | 141 | 330.9 |
| BRD2408 | RC/DD | 711089 | 7541581 | 657 | -70 | 319 | 661.1 |
| BRD2409 | RC/DD | 711088 | 7541583 | 657 | -65 | 324 | 552.8 |
| BRD2410 | RC PRE | 711170 | 7541615 | 656 | -77 | 323 | 270 |
| BRD2411 | RC/DD | 711170 | 7541616 | 656 | -72 | 325 | 649.2 |
| BRD2412 | RC PRE | 710919 | 7541501 | 658 | -70 | 334 | 270 |
| BRD2413 | RC PRE | 711093 | 7541997 | 663 | -68 | 157 | 184 |
| BRD2414 | RC PRE | 711093 | 7541997 | 663 | -62 | 155 | 269 |
| BRD2415 | RC/DD | 710977 | 7541988 | 667 | -67 | 153 | 544 |
| BRD2416 | RC PRE | 710977 | 7541988 | 667 | -61 | 154 | 269 |
| BRD2417 | RC/DD | 715027 | 7541651 | 631 | -68 | 28 | 435.7 |
| BRD2418 | RC PRE | 715660 | 7541771 | 625 | -74 | 207 | 269 |
| BRD2419 | RC/DD | 715660 | 7541771 | 531 | -70 | 205 | 322.8 |
| BRD2420 | RC/DD | 715792 | 7541763 | 623 | -60 | 200 | 380 |
| BRD2421 | RC PRE | 715857 | 7541723 | 622 | -70 | 198 | 240 |
| BRC2422 | RC EXP | 715858 | 7541722 | 622 | -62 | 193 | 123 |
| BRC2423 | RC EXP | 715831 | 7541657 | 624 | -64 | 197 | 220 |
| BRC2424 | RC EXP | 715804 | 7541674 | 624 | -64 | 203 | 262 |
| BRC2425 | RC EXP | 715655 | 7541751 | 625 | -64 | 198 | 245 |
| BRC2426 | RC EXP | 715735 | 7541746 | 624 | -68 | 210 | 125 |
| BRC2427 | RC EXP | 715733 | 7541620 | 628 | -67 | 14 | 131 |
| BRC2428 | RC EXP | 715485 | 7541745 | 628 | -57 | 203 | 317 |
| BRC2429 | RC EXP | 706155 | 7541087 | 656 | -67 | 185 | 185 |
| BRC2430 | RC EXP | 705929 | 7541121 | 658 | -66 | 178 | 190 |
| BRC2431 | RC PRE | 705861 | 7541121 | 658 | -76 | 182 | 180 |
| BRC2432 | RC EXP | 706010 | 7541110 | 657 | -71 | 184 | 196 |
| BRC2433 | RC EXP | 706049 | 7541107 | 657 | -76 | 177 | 269 |
| BRC2434 | RC EXP | 706049 | 7541106 | 657 | -66 | 180 | 170 |
| BRC2435 | RC PRE | 705759 | 7541131 | 657 | -73 | 188 | 189 |

*RC/DD = RC Precollar with completed diamond tail. RC PRE = RC Precollar with pending diamond tail. RC EXP = RC only drillhole. All coordinates in GDA94, MGA Zone 52.*

*Figure 3: Collar Plan Map for Recent Drillholes at A4*




## ENDS

*This announcement dated 4th September 2024 has been authorised for release to the ASX by the Board of Energy Metals Limited.*

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***Competent Persons Statement***

*The information in this report that relates to Mineral Exploration is based on information compiled by Mr David Nelson, a Competent Person who is a Member of The Australian Institute of Geoscientists ("AIG") (Member #4172). Mr Nelson is a full-time employee of Energy Metals Ltd where he holds the position of Exploration Manager. Mr Nelson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)'. Mr Nelson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The Competent Person for interpreting downhole gamma information and assay results is Mr David Wilson. Mr Wilson has sufficient experience that 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 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Wilson is a consultant to Energy Metals and is a full-time employee of 3D Exploration. Mr Wilson is a Member of the Australasian Institute of Geoscientists and consents to the inclusion in the report of the matters based on his information.*

**Disclaimer**

*Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.*

# JORC Code, 2012 Edition – Table 1 report

## Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| ***Sampling techniques*** | • *The nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay').*<br>• *In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.* | • The Bigrlyi deposit was sampled by reverse circulation (RC) and diamond core drilling methods. Drill holes were angled between 55 to 75 degrees to the north or south to optimally intersect the mineralisation in steeply dipping or sub-vertically oriented beds.<br>• Drill holes were probed by a calibrated downhole gamma tool to obtain a total gamma count reading and processed to yield equivalent $U_3O_8$ values ($eU_3O_8$) with depth at 10 cm intervals. Intervals of at least 3m above to 3m below significant $eU_3O_8$ intercepts (>100 ppm) were sampled for routine chemical assay.<br>• Routine chemical assays for uranium, vanadium, and calcium were carried out on approx. 3 kg size, metre-sample RC drill spoils split from the cyclone or on half-metre-length, cut half-core from mineralised intervals. Results from chemical assays are still pending at the time of this announcement.<br>• In some cases, minor adjustments have been made to the locations of downhole gamma peaks to ensure correlation with the observations of geologists logging the drill core. These adjustments are on the order of 0.5 to 2m and are believed to be a result of minor driller errors when zeroing the gamma probe depths before logging runs. |
| ***Drilling techniques*** | • *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other types, whether core is oriented and if so, by what method, etc).* | • Drilling for exploration purposes was typically reverse circulation (RC) drilling to between 100 and 280 m depth or NQ/HQ diamond core (DD) drilling for deeper holes.<br>• Core was oriented, loaded into trays, marked up, and checked for depth against core blocks; alpha/beta angle measurements on bedding planes and other features were undertaken on selected intervals using a goniometer orientation tool.<br>• Energy Metals holds reference samples of all current drill core in its core yard archive on-site at Bigrlyi. |
| ***Drill sample*** | • *Method of recording and assessing core and chip sample* | • Assessment of RC drill spoil volumes or DD core recovery was made either as a visual estimate or from core length |

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| ***recovery*** | *recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | measurements and this information was entered into the Energy Metals' database. With the exception of some deeply weathered, water-saturated zones, estimated sample recoveries were high (>90%). Appropriate drilling techniques were used to maximize sample recovery. No relationship has been identified between sample recovery and grade of mineralisation. |
| ***Logging*** | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • RC and DD holes were geologically logged with information on lithology, colour, grain-size, stratigraphic unit, oxidation state, alteration, cementation, weathering and other features recorded digitally. All coded data was verified according to Energy Metals' standard logging look-up tables.<br>• Logging was generally qualitative in nature, however the logging geologist endeavoured to quantify the relative proportions of trace and rock-forming minerals wherever possible. Chip trays & core trays were photographed before being archived at the Bigrlyi camp sample storage facility.<br>• All drill holes are logged from collar to end of hole by a suitably qualified geologist, and all significant mineralised intersections are reviewed by a senior geologist or the Exploration Manager. |

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| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn, and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Sawn half-core samples of drill-cores were submitted for chemical assay. Sample lengths were variable from 0.2m to 1.2m with the majority being 0.5m in length.<br>• RC drill spoils were sampled off the cyclone via a cone splitter to yield a 3-5 kg sub-sample in a calico bag and 40kg of bulk material which was collected in a large biodegradable plastic bag. Predominantly dry material was sampled. Field duplicates were collected by spear sampling the bulk sample.<br>• Field QC procedures involved the insertion of a set of QC samples comprising a field standard, a blank, and a duplicate at the approx. frequency of 1 QC set per 25 samples.<br>• Laboratory sample preparation of RC drill spoils involved riffle splitting the sample to a maximum sub-sample size of 3 kg; this was followed by pulverization in a low-Cr steel ring mill so that 85% passed 75 microns grain size.<br>• The unpulverised remainder was bagged and retained. Core samples (ca 2kg size) were jaw crushed to 70% nominal passing -6mm and then pulverized as for the RC drill spoils.<br>• Sample sizes of 3-5 kg are considered to be appropriate for the style of mineralisation found here (tabular sandstone-hosted uranium) taking into consideration the nature and fine-grained mineralogy of mineralised intersections. |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality, and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | • Results reported in this announcement are equivalent $U_3O_8$ ($eU_3O_8$) values which have been calculated from downhole gamma logging data. Future announcements discussing the pending chemical assays will include further detail on those techniques. 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. This technique is widely used in uranium exploration. The technique can be considered equivalent to a total digest since the uranium in fresh rock at Bigrlyi is in equilibrium |

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| | | with its daughter isotopes and no other significant radiation sources are present.<br>• Downhole gamma logging data was collected using calibrated Reflex EZ-GAMMA probes. The probes are run at speeds not exceeding 10m per minute and collect data at 5cm intervals. The probes were initially calibrated at the Adelaide Calibration Model pits in Adelaide, South Australia, and the calibration checked on an ongoing basis using API standard reference materials. In addition, Energy Metals maintains a reference borehole on site which is used to compare probes, test for instrument drift over time, and confirm $eU_3O_8$ correction factors. The company plans to engage an independent contractor to carry out gamma logging of selected drillholes on completion of the program for validation purposes, however this work has not been carried out yet. Gamma measurements are converted to equivalent $U_3O_8$ values ($eU_3O_8$) by an algorithm that takes into account the probe and crystal used, density, hole diameter, ground water where applicable and drill rod or PVC pipe thickness. Down-hole gamma probe data is also de-convolved to more accurately reflect the true thickness of mineralisation due to edge smearing of the gamma signal. It should be noted that the EZ-GAMMA probe detector may become over-saturated in zones of very high radioactivity (>1% e $U_3O_8$) potentially leading to under-estimation of $eU_3O_8$ grade in these zones.<br>• All gamma data is compared with geochemical data both via downhole comparisons and overall populations in bivariate and distribution analysis to check for potential error or disequilibrium. To adequately compare with geochemistry gamma probe data is composited into intervals represented by the corresponding geochemical samples. However, because the methods sample different volumes, the correspondence between the two methods may not be exact. Energy Metals experience is that the two methods are generally in good agreement provided the interval of comparison is sufficiently large (>2m).<br>• Instantaneous spot verification of high gamma count zones is carried out on site using a handheld portable XRF (Olympus Vanta). |
| ***Verification of sampling and*** | • *The verification of significant intersections by either* | • Significant intersections are verified by the Exploration Manager or |

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| ***assaying*** | *independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | his alternate on site.<br>• No twinned holes have been employed during this drilling program.<br>• All primary digital data is stored securely on the company's data servers. Data is validated by a senior geologist before being loaded into the company geological database by an independent contractor and stored securely in an off-site location.<br>• In the cases where uranium was reported as U ppm or %, a factor of 1.1792 was applied to convert metal to oxide value (U to $U_3O_8$).<br>Previous studies have shown the uranium at Bigrlyi to be in equilibrium and thus no adjustment factor is applied in that regard. Minor depth adjustments (<2m) have been made to selected downhole gamma logs to ensure consistency of depths between gamma logs and chemical assays / geological logs. |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Hole collar locations have been provisionally recorded using handheld GPS units accurate to +/-3m. On completion of the drilling program, all new collars will be professionally surveyed by an independent contractor using survey grade differential GPS.<br>• Coordinates are located on the MGA94 grid, Zone 52 using the GDA94 datum.<br>• Topographic control is provided by a 10m spaced digital terrain model (DTM) which was flown by a fixed wing aircraft survey and is considered adequate for our purposes.<br>• Down-hole surveys were undertaken using a multi-shot gyroscopic survey tool (Reflex EZ-Shot or Axis) on variable intervals not exceeding 30m. Initial collar orientations were also aligned using the gyroscopic survey tool. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • The Bigrlyi sub-deposits were drilled on lines with nominal line spacing (Eastings) as follows: A2-3 C-D Contact 25-100m, B-C Contact 100m; A4 C-D & B-C Contacts 25-50m; A7-9 C-D & B-C Contacts 25-50m, A12-15 C-D & B-C Contacts 12-100m.<br>• Energy Metals considers the spacing sufficient to establish continuity of geological units and grade.<br>• The sample data is stored in Energy Metals database on an |

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| | | uncomposited basis. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • Several investigations have shown that Bigrlyi style (tabular stratiform sandstone-hosted) uranium-vanadium mineralisation exhibits no significant structural control.<br>• Mineralisation is controlled by physical and chemical characteristics of the host rock such as permeability and redox state and is influenced by primary depositional and sedimentological features.<br>• Drilling has mostly been conducted perpendicular to bedding planes that host the mineralised zones and no bias of sampling related to orientation of these zones has been identified. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • The chain of custody of samples including dispatch and tracking is managed by Energy Metals staff. Samples are stored in a fenced yard at site prior to transport to the assay laboratory by Energy Metals personnel or by professional haulage contractors. Sample pulps are returned to site for storage and archive on completion of assay work. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • No audits have been carried out in relation to this work. |

## Section 2 Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location, and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national parks, and environmental settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • The Bigrlyi deposit is located on an exploration licence with retention status (ELR32552) which is 72.4% owned by Energy Metals under the Bigrlyi Joint Venture (BJV). Energy Metals is the operator of the JV.<br>• The exploration licence is located within the Mt Doreen Perpetual Pastoral Lease Native Title Claim (NTD39/2011) which was determined by consent on 3/7/2013.<br>• The exploration licence is held in good standing with no known impediments. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Previous exploration work and drilling programs at the Bigrlyi project were conducted by Central Pacific Minerals NL (CPM) in the period 1974 to 1981. Energy Metals retains all CPM's historical exploration information in its data archive and relevant historical data has been verified and incorporated into EME's exploration database. |
| ***Geology*** | • *Deposit type, geological setting, and style of mineralisation.* | • Bigrlyi and associated satellite deposits are tabular, stratiform, sandstone-hosted uranium-vanadium deposits of Carboniferous age located on the northern margin of the Ngalia Basin (NT). |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | • All drillhole information is provided in the collar table within the body of the report. |
| ***Data*** | • *In reporting Exploration Results, weighting averaging techniques,* | • Exploration results, i.e. mineralised intercepts, are reported as either |

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| ***aggregation methods*** | *maximum and/or minimum grade truncations (e.g. cutting of high grades), and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | equivalent $U_3O_8$ values ($eU_3O_8$) from processed gamma logs or as chemical assay $U_3O_8$ values in parts per million (ppm) by weight.<br>• Significant intercepts are reported at a cut-off level of 500ppm $U_3O_8$ with a minimum thickness of 1m and a maximum internal dilution of 3m and no external dilution.<br>• No metal equivalents have been used in this report. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation concerning the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | • Based on geological mapping and structural measurements of drill core, beds have been upturned and are steeply dipping or sub-vertically oriented, typically at 70 to 85 degrees.<br>• Most holes have been drilled at -60 degrees perpendicular to bedding planes and true widths of intersections are estimated to be 75% to 80% of the reported downhole widths. |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | • Refer to figures in the body of the text. |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • All diamond drillholes completed to date during this program are shown in the collar table and discussed within the report. Fully processed gamma data suitable for public release are only available for BRD2408 and BRD2409 since these have been prioritised to ensure disclosure obligations are met. A comprehensive report detailing all chemical assay results from the full drilling program will be released in due course. |
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • All relevant and material exploration data for the target areas discussed has been reported or referenced. |
| ***Further work*** | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions,* | • Resource extension drilling is ongoing at Bigrlyi. The drilling will comprise at least 10,000m of RC and diamond drilling and aims to grow the uranium resource at Bigrlyi by targeting extensions of known |

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| | *including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | mineralisation in high-grade areas of the deposit.<br>• Should the drilling be successful, it is expected that the MRE will be revised and the Company will consider initiating a mining scoping study.<br>• Relevant diagrams are included in the body of the document. |