

16 December 2024

## Aurora Uranium Project Recovery Improvements

### Latest Results Demonstrate >85% Recovery Achievable

- Recent testwork has demonstrated significantly higher uranium recoveries using higher acid addition.
- Recoveries were achieved for the clay (<38 micron) and middlings (38 to 600 micron) fractions up to 89% with acid consumption of 51Kg/t and 133Kg/t respectively.
- Further testwork is required to optimise the levels of acid other reagents against the recovery, however these initial results demonstrate the potential for significant increases in recovery at marginal additional cost.
- This next phase of work will lead to updated operating cost and capital cost estimates.
- Once these optimisations are completed, the updated Scoping Study economics for the Aurora Uranium Project will be provided to the market.

Aurora Energy Metals Limited (**Aurora** or the **Company**) (ASX:1AE) advises that a program of metallurgical testwork on the Aurora Uranium Project (**AUP** or the **Project**) has been completed. The new testwork was identified as part of the 2024 Scoping Study (the **Scoping Study**) as a key area to potentially increase the recovery rate used in the Scoping Study.

The results (See Table 1 below) have demonstrated that recoveries of >85% from both the clay and middlings fractions can be achieved using atmospheric leach circuits at high acid additions. The results achieved in the testwork program show a material increase over the average 69% recovery used in the Scoping Study (See ASX Release 15 May 2024).

**Aurora Chairman, Peter Lester, said:**

“These results are a material improvement over the Scoping Study recoveries and demonstrate the upside potential of the Aurora Project.

“With recoveries in the mid to high 80% now being achieved from atmospheric leaching, there is a clear pathway forward to adjust consumption of consumables and leach conditions to maintain the higher recoveries, improve potential operating costs and substantially improving the project economics.

“We are aiming to report new processing parameters and the resulting new economic outputs in the first quarter of 2025.”

Table 1: Recoveries from leach tests conducted since the release of the AUP Scoping Study

Test Number	Material	Leach Method	Grind Size 100% Passing (microns)	% Solids (w/w)	Temperature (°C)	Acid Consumption (kg/t)	Calc. Head Grade U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> Leached*
M2	Middlings	Atmospheric	600	35	80	51	471	72
M6	Middlings	Atmospheric	600	10	80	28	444	75
M7	Middlings	Atmospheric	600	35	80	133	367	89

Test Number	Material	Leach Method	Grind Size 100% Passing (microns)	% Solids (w/w)	Temperature (°C)	Acid Consumption (kg/t)	Calc. Head Grade U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> Leached*
C5	Clay	Pressure	<38	21	135	44	366	45
C7	Clay	Pressure	<38	11	135	125	397	85
C8	Clay	Atmospheric	<38	10	80	51	427	89

Note: Pressure leach results concluded after 2 hours. Atmospheric leach test results reported at 24 hours.

THIS ANNOUNCEMENT HAS BEEN AUTHORISED FOR RELEASE ON THE ASX BY THE COMPANY'S BOARD OF DIRECTORS.

#### ABOUT AURORA ENERGY METALS

Aurora Energy Metals is an ASX-listed company focused on the exploration and development of critical mineral assets. Aurora has interests in uranium-focused assets in Australia and the USA, including the Aurora Uranium Project (AUP) in southeast Oregon—the USA's largest mineable, measured and indicated uranium deposit (MRE: 107.3Mt @ 214ppm U<sub>3</sub>O<sub>8</sub> for 50.6 Mlbs U<sub>3</sub>O<sub>8</sub>). Aurora maintains a strong interest in the AUP and significant exposure to its future upside, via an option agreement that, if exercised, will result in a substantial interest in a US-based entity with incentives to advance AUP, intending to list in the near future. Additionally, Aurora is actively exploring prospective assets in Western Australia, which feature elevated uranium anomalies, as part of its commitment to supplying minerals essential to global energy needs.

The Mineral Resource for the AUP was first reported by Aurora in its announcement titled 'Uranium Resource Up 34% to 50.6Mlb, Maiden Measured Resource' on 23 November 2022. Aurora Energy Metals Limited confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed.

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**CAPITAL STRUCTURE:**  
 Share Price (13/12/24): \$0.046  
 Market Cap: \$8.2 million  
 Shares on Issue: 179 million

**COMPANY SECRETARY:**  
 Steven Jackson

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**BOARD OF DIRECTORS:**  
 Peter Lester: Non-Executive Chairman  
 Alasdair Cooke: Non-Executive Director  
 John Gardner: Non-Executive Director

**SHAREHOLDERS:**  
 Directors: 15%  
 Management: 13%  
 Institutional shareholders: 10%  
 Balance of Top 20: 14%  
 Balance of Register: 48%

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#### Competent Person Statement:

The information in this announcement relating to Metallurgical Results is based on information compiled by Mr. Martin Errington, B.Sc (Hons) Chemical Engineering, CEng, an independent consultant to Aurora Energy Metals Limited, who is a Fellow of the Institute of Chemical Engineers (FIChemE). Mr. Errington has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person under the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Errington consents to the inclusion in the announcement of the matters based on the information made available to him, in the form and context in which it appears.

#### Previously Reported Information

Information in this announcement is based on the following Aurora Energy Metals Limited Announcements, which are available from the Company's website, [www.auroraenergymetals.com.au](http://www.auroraenergymetals.com.au) or the ASX website.

All references to the Scoping Study and its outcomes in this announcement relate to the announcement of 15 May 2024 titled "Aurora Uranium Project Scoping Study". Please refer to that announcement for full details and supporting information.

- 23 November 2022 – 34% Increase in Total Uranium Resource to 50.6 Mlbs Maiden Measured Resource Declared at Aurora Uranium Deposit
- 26 April 2023 – Positive Review of Historical Uranium Testwork
- 29 August 2023 – Scoping Study Metallurgical Testwork Program Underway
- 13 December 2023 – Aurora Uranium Project Scoping Study Update
- 15 May 2024 – Aurora Uranium Project Scoping Study

## Appendix 1:

Drill hole summary for the holes used in the 2024 Metallurgical Testwork Program

Hole ID	Hole	Easting	Northing	RL	Total Depth	Dip	Azimuth
22AUD001	DDH	424300	4654512	1643	192.0	-90	000
22AUD002	DDH	424355	4654583	1645	239.3	-90	000
22AUD003	DDH	424246	4654574	1673	219.5	-90	000
22AUD004	DDH	424280	4654622	1669	261.5	-90	000
22AUD005	DDH	424823	4654311	1621	206.0	-55	222
22AURC005DT	RCDT	424823	4654311	1621	260.0	-90	000

Note: All coordinates are in UTM Zone 11N, datum WGS84.

## Appendix 2:

Summary of Uranium Oxide Assay Results.

Hole ID	Cut-off U <sub>3</sub> O <sub>8</sub> (ppm)	From (m)	Interval (m)	Grade U <sub>3</sub> O <sub>8</sub> (ppm)
22AUD001	10	98.2	187.8	200
incl	50	100.4	104.6	329
and	200	132.1	137.3	490
and	100	152.3	160.8	505
and	80	169.8	176.2	580
22AUD002	10	189.7	205.7	116
22AUD003	10	157.9	176.3	119
incl	200	160.9	164.4	259
22AUD004	10	183.2	202.8	90
22AUD005	10	183.1	206.0	150
incl	200	203.6	206.0	537
22AURC005DT	10	156.6	203.9	158
incl	300	164.6	169.5	430

## Appendix 3: Metallurgical Testwork JORC 2012 Compliance Table

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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'). 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.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling that defines the Aurora deposit and within the surrounding tenure was completed in three phases to date – the first between 1978 and 1980 by private landowner and prospector Locke Jacobs (Jacobs) in Joint Venture with Placer Amex Inc. (Placer) and the second by Energy Ventures Limited (EVE) in 2011. In addition, the Cordex Syndicate drilled over 100 holes on claims adjacent to the Aurora deposit also between 1978 and 1980. The third phase took place in November 2022, when AEM drilled 12 RC holes (one with a diamond tail) and 5 diamond core holes.</li> <li>For all phases, holes were drilled utilising Reverse Circulation (RC) and Diamond drilling (DD).</li> <li>EVE's program, which generated the core that was used in the metallurgical testwork program reviewed in this release, included 32 PQ sized core holes (4,257m) and 6 (wet) RC holes (950m) in 2011.</li> <li>AEM's November 2022 program included 12 RC holes (one with a diamond tail) and 5 diamond core holes for 2,152m of RC and 1,263m of core (a mix of HQ and PQ).</li> <li>Sampling during 2011 and 2022 was carried out under EVE's and AEM's standard protocols and QAQC procedures which are considered standard industry practice.</li> <li>EVE's and AEM's RC holes obtained representative 5ft (1.5m) metre samples.</li> <li>EVE's and AEM's diamond drill core holes were completed to provide metallurgical sample material. Whole PQ or HQ drill core was cut as either quarter or half core on mostly 3ft (0.9m) intervals with some variation to geological control.</li> <li>No trenching or other sampling has been completed at the Aurora deposit, other than the drilling.</li> <li>Metallurgical sample drill core intervals were sent to ALS Laboratories Australia.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Three bulk composite samples were prepared from the available core intervals providing a High Grade (446kg), Medium Grade (195kg) and Low Grade bulk sample composite (136kg).</li> <li>• A separate Comminution composite sample (≈160kg) was prepared from reserve uranium bearing core intercept samples, to represent the physical properties of the High, Medium and Low grade bulk composites.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>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 type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historical RC percussion drilling was completed using a 5 to 5.5 inch bit.</li> <li>• Placer core holes were drilled to 3.8", 5.3" &amp; 6" core sizes with recovery averaging over 93%. Only one of these core holes was angled (all others vertical) and it is not known whether this core was oriented.</li> <li>• EVE's 2011 diamond core drilling was completed using a PQ drill bit with triple tube used where required to maximise core recovery, which averaged over 88%.</li> <li>• 4 of the EVE core holes were angled (the remainder drilled vertical) and none of the core was oriented.</li> <li>• In addition, EVE drilled six 5.5" wet RC holes.</li> <li>• AEM's November 2022 diamond core drilling was completed using a mix of PQ and HQ drill bits with triple tube used where required to maximise core recovery, which averaged over 90%. Only one hole was angled (-55/222), all others were vertical.</li> <li>• In addition, AEM drilled twelve 5.5' dry RC holes using a mix of tricone and centre return hammer.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drill core was routinely measured and cross-checked with drill blocks to determine recovery from each core tube.</li> <li>• Diamond drill core recoveries were excellent at above 93% (historic Placer drilling), &gt;88% for EVE drilling and &gt;90% for new AEM core drilling). Where core loss did occur, it was measured and recorded during logging.</li> <li>• There is no observed sample bias, nor a relationship observed between grade and recovery.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC and core holes were logged geologically, including but not limited to, recording weathering, regolith, lithology, structure, texture, alteration, and mineralisation (type and abundance).</li> <li>• All holes and all relevant intersections were geologically logged in full.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Logging was at a qualitative and quantitative standard to support appropriate Mineral Resource studies.</li> <li>• Remaining sample pulps and core (that were not removed for metallurgical testwork purposes) from the EVE 2011 and AEM 2022 drilling are stored at the Company's Project base close to McDermitt, NV.</li> <li>• All EVE and AEM diamond drill core was photographed, and all holes were logged downhole at the time of drilling using a calibrated radiometric logging probe.</li> <li>• No core or core photographs remain from the historic core drilling.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All holes (RC or diamond) were logged using downhole radiometric logging probes to collect measurement of the uranium concentration, described in detail in the next section. As such, not all holes were sampled.</li> <li>• EVE diamond drill core holes were routinely sampled, with PQ drill core cut in half, plus into quarters for selected holes. Half or quarter core was typically composited on 3ft (0.9m) intervals, coarse crushed and then pulverised (nominal 85% passing 75 microns) to obtain a homogenous sub-sample for assay.</li> <li>• For the EVE RC percussion drilling, samples were collected in 5ft (1.5m) composites, dried, weighed, and for those selected samples that were assayed, they were pulverized to 85% passing 75 microns.</li> <li>• AEM diamond drill core holes were routinely sampled, with HQ and PQ drill core cut in half, plus into quarters for selected holes/intervals – or dry split so water is not involved in the process for some sections of core. Samples were typically composited on 3ft (0.9m) intervals, coarse crushed and then pulverised (nominal 85% passing 75 microns) to obtain a homogenous sub-sample for assay.</li> <li>• For the AEM RC percussion drilling, samples were collected in 5ft (1.5m) composites, dried, weighed, and for those selected samples that were assayed, they were pulverized to 85% passing 75 microns.</li> <li>• The sample sizes are considered appropriate for the style of mineralisation observed.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (if lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• For the 2011 EVE drilling and the recent 2022 AEM drilling, radiometric logging was completed by Century Wirelines Services using the Compu-Log system and probe type 9512C. This system is comprised of radiometric logging equipment based on a truck-mounted digital computer. Well data were digitally recorded at 1/10<sup>th</sup> foot increments for the parameter's gamma, conductivity, resistivity, and temperature. The eU<sub>3</sub>O<sub>8</sub>% conversions from the gamma log data were calculated and reported with the original, unprocessed gamma logs. These were composited to 3ft values.</li> <li>• All EVE and AEM core drilling samples (and selected RC samples) were assayed at American Assay Laboratories (AAL) for analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS) using a four-acid digestion (HNO<sub>3</sub>-HClO<sub>4</sub>-HF-HCl). Samples were then checked using XRF techniques.</li> <li>• These techniques are considered appropriate and are industry best standard. The techniques are considered to be a total digest.</li> <li>• EVE utilised industry standard QAQC procedures involving the use of matrix matched certified reference materials (CRM standards), blanks and field duplicates. A total of five different CRM standards with uranium grades ranging from 84ppm to 713ppm.</li> <li>• AEM utilised industry standard QAQC procedures involving the use of matrix matched certified reference materials (CRM standards), blanks and field duplicates. A total of three different CRM standards with uranium grades ranging from 84ppm to 858ppm U<sub>3</sub>O<sub>8</sub>.</li> <li>• EVE and AEM QAQC results have been checked with no apparent issues for all data received to date.</li> <li>• Field duplicate data suggests there is general consistency in the drilling results.</li> <li>• EVE submitted samples for umpire checks to both ALS in Reno, NV and ACME laboratory in Vancouver, Canada. Both labs analysed using both ICP-MS and XRF methods equivalent to AAL's. 98 samples were submitted to ALS and 52 to Acme with a spread of U grades ranging up to 1,100ppm. Results were generally acceptable within +/- 15% tolerance when compared back to the original AAL results.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No samples from the 2022 AEM drilling program have yet been sent for umpire lab checks.</li> <li>• Competent Person for the current JORC 2012 Mineral Resource, Lauritz Barnes, has verified all significant intersections.</li> <li>• For all historical core holes plus 26 of the 32 EVE core holes, measurement of the uranium concentration (eU<sub>3</sub>O<sub>8</sub>) was made with radiometric logging. For selected historic core and for all the EVE core, they were also assayed for U<sub>3</sub>O<sub>8</sub> by ICP-MS and XRF methods. All methods were compared with consistent results, verifying all significant intersections.</li> <li>• 22 pairs of twin holes (historic RC percussion and EVE 2011 diamond drill core) have been drilled for comparative purposes. The twinned holes show strong correlation near 1:1 correlation between the radiometric assaying and the chemical assays (correlation coefficients &gt; 0.9). With this validation, the November 2022 Mineral Resource is now reported as U<sub>3</sub>O<sub>8</sub> rather than eU<sub>3</sub>O<sub>8</sub>.</li> <li>• For EVE holes, primary geological data was collected via paper (and data entered) logging and software using in-house logging methodology and codes.</li> <li>• For AEM holes, primary geological data was collected via digital logging and software using in-house logging methodology and codes.</li> <li>• Logging data was sent to the Perth based office where the data was validated and entered into an industry standard master database maintained by the Mitchell River Group Pty Ltd database administrator.</li> <li>• The only adjustments made to the assay data is when the labs report uranium as U – and within the database management system, this is converted to U<sub>3</sub>O<sub>8</sub> using a factor of 1.179.</li> </ul>
<p>Location of data points</p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• EVE completed a due diligence site visit in March 2010 using handheld GPS to check claim monuments, historical drillhole locations plus using a handheld spectrometer to confirm mineralisation.</li> <li>• EVE collar positions for the 2011 drilling program were located using handheld GPS in UTM Zone 11N, WGS84 datum. It is noted that the GPS was left to measure the position of a minimum of 3 minutes at each site.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• AEM collar positions for the 2022 drilling program were located using handheld GPS in UTM Zone 11N, WGS84 datum. It is noted that the GPS was left to measure the position of a minimum of 3 minutes at each site.</li> <li>• Downhole surveys were completed on a few EVE drill holes using a downhole survey tool. Only 4 of the 32 EVE holes were angled.</li> <li>• Downhole surveys were completed on a few AEM drill holes using a gyro downhole survey tool. Only 1 of the 32 EVE holes were angled.</li> <li>• The local grid system used for location of all drill holes is converted to UTMN Zone 11, WGS84 datum using the two-point conversion as follows:               <ul style="list-style-type: none"> <li>○ 10000.000mE, 10000.000mN = 425315.859mE, 4653333.481mN</li> <li>○ 10248.631mE, 10723.868mN = 424944.287mE, 4654002.612mN</li> <li>○ N042°E rotation, Scale factor 1.</li> </ul> </li> <li>• The topographic surface used in Surpac format to code the block model was generated from the USGS National Elevation Dataset at 10m cell resolution with the collars added.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Drillholes are typically spaced 100 feet apart on lines spaced 200 feet apart. This spacing equates to 60m x 30m. Drill lines are orientated N042°E, a local grid was used.</li> <li>• Drill hole spacing and distribution is considered more than sufficient as to make geological and grade continuity assumptions appropriate for Mineral Resource estimation.</li> <li>• 1.5m sample compositing of the RC and diamond core drilling samples was routinely used.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The orientation of drilling and sampling is not considered to have any significant biasing effects.</li> <li>• The drill holes are mostly vertical at Aurora and are interpreted to have intersected the typically horizontal trending mineralised zone approximately perpendicular or at an acceptable angle to the dip.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample chain of custody for the 2011 drilling was managed by EVE geological personnel and samples were transported to the AAL laboratory in Reno by EVE geological personnel.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Sample chain of custody for the 2022 drilling was managed by AEM's contract geologists from Piton Exploration, LLC and samples were transported to the AAL laboratory in Reno by Piton geological personnel.</li> <li>• Cutting and sampling of the EVE diamond drill core was carried out by AAL personnel under the direction and supervision of EVE geological personnel.</li> <li>• Cutting and sampling of the AEM diamond drill core was carried out by AAL personnel under the direction and supervision of AEM and Piton geological personnel.</li> <li>• Remaining core and all lab pulp samples are securely stored at a location in McDermitt, NV close to the Aurora deposit site.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No independent audit or review has been carried out on the EVE or AEM sampling techniques and data.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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 park and environmental settings.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• AEM, through its wholly owned US subsidiary Oregon Energy LLC, holds 100% of the Aurora Energy Metals Project in southeast Oregon, USA.</li> <li>• The Project comprises 395 Mining Claims that cover an area of approximately 28.5 square kilometres.</li> <li>• The tenements are held securely and no impediments to obtaining a licence to operate have been identified.</li> <li>• The Aurora Project is on federal land managed by the Bureau of Land Management.</li> <li>• The Aurora Project is directly connected by road with the town of McDermitt, 15km to the east, and the adjacent Fort McDermitt Indian Reservation of the Fort McDermitt Paiute and Shoshone Tribes. McDermitt and Fort McDermitt have a combined population of 513 (2010 census) of which 75% are American Indian.</li> <li>• The Company has recently or historically undertaken periodic consultation with the Fort McDermitt Paiute-Shoshone Tribal Council, as well as held</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>community information meetings at the Fort McDermitt Indian Reservation, Burns Paiute Tribal Council, Malheur County Judges, Association of Oregon Counties President, and State Congress Representative.</p> <ul style="list-style-type: none"> <li>Uranium exploration in the Project area began as an offshoot of gold and other metals exploration efforts around the nearby Bretz and Cordero Mines. Placer had a limited reconnaissance program during 1974 and 1975. The program did not look promising, and interest quickly ended.</li> <li>Locke Jacobs completed an airborne geophysical survey over the area in 1977. Ground follow-up of a radiometric anomaly identified uranium mineralized outcrops and Jacobs staked claims on what became the Aurora prospect.</li> <li>Programs of aircore, RC percussion and diamond drilling were subsequently completed between 1978 and 1980, initially by Locke Jacobs and then with JV partner Placer. The Cordex Syndicate also completed RC and core drilling on claim adjacent to the current Aurora Uranium deposit.</li> <li>Feasibility studies were also completed by Placer during this period, culminating in a pre-Feasibility Study report for the Aurora Uranium Project published in 1980. The collapse of the uranium market in the 1980's resulted in a loss of interest in the project. Placer maintained the claim blocks until 1990 and let the claims lapse.</li> <li>The project lay dormant until a brief drilling program was completed by Newmont during December 2003/January 2004 with most of the holes located at the nearby Bretz workings. One hole was drilled immediately adjacent to the Aurora U ore zone (hole RZDH-6) but data for this is not completed to date. It does not materially impact the Aurora Mineral Resource as it is located on the margin of the interpreted mineralised zone.</li> <li>William Sherriff re-staked the new U claims in 1997. Energy Metals Corp (EMC) entered into an agreement to purchase the project rights from Sherriff and completed an initial 43-101 report in 2004. EMC acquired a 100% interest in the Property from Sheriff on July 19, 2004.</li> </ul>

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		<ul style="list-style-type: none"> <li>In 2005, Quincy Energy Corp (Quincy) entered into a Joint Venture agreement with Energy Metals Corp. (EMC), the property owner, to purchase up to a 75% interest in the property. Work completed included completion of a technical report by Qualified Person (as set out in Canadian National Instrument 43-101) Gregory Myers Ph.D. for the “dual purpose of               <ul style="list-style-type: none"> <li>a) a property qualifying report for the listing of Quincy Energy on the Toronto Stock Exchange and</li> <li>b) to confirm a historic uranium resource and bring this resource up to modern industry standards.</li> </ul>               As a significant body of exploration data previously existed for the deposit, and an historical pre-Feasibility study was completed by Placer Development Ltd., work performed for the subject report was limited to:               <ul style="list-style-type: none"> <li>a) compilation of all available data,</li> <li>b) a site visit to confirm historic drill hole locations and infrastructure, and</li> <li>c) an independent recalculation of mineral resources to confirm previous estimates by Placer Development.”</li> </ul> </li> <li>Quincy Energy Corp also completed a Scoping Study in January 2007 but subsequently withdrew from the deal.</li> <li>Uranium One Inc. acquired EMC in 2007</li> <li>EVE subsequently acquired the project rights from Uranium One Inc. in 2010. As part of the acquisition, EVE received a digital database plus a hardcopy database including approximately 43 archive boxes full of Jacobs/Placer reports and drill logs along with an inventory.</li> </ul>
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Aurora uranium property is within the Miocene McDermitt caldera system straddling the Oregon-Nevada border. The McDermitt caldera is approximately 30 miles long north to south and 20 miles wide east to west and consists of at least five nested ring fracture systems. The oldest rocks in the region of the caldera are intrusive rocks of Cretaceous age. A granodiorite pluton outcrops along the western margin of the caldera. Early Miocene age basalt, andesite, and dacite flows erupted 18 to 24 million years before present (m.y.b.p.) and lie unconformably upon the eroded granodiorite pluton and appear to be the earliest volcanic rocks related to the caldera complex. Collapse of the caldera occurred about 16</li> </ul>

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		<p>m.y.b.p. as the result of explosive eruptions of peralkaline ash flow tuff which began about 18 m.y.b.p.. Voluminous rhyolitic to peralkaline ash flow tuffs were erupted from 15.8 to 17.9 m.y.b.p.</p> <ul style="list-style-type: none"> <li>• Lacustrine sedimentary rocks consisting of tuffaceous sandstone, siltstone, shale, and claystone, with local chalcedony beds occur in restricted basins within the calderas. Lakebeds directly overlie dacitic lavas as well as rhyolite welded tuff and occupy about 20 percent of the interior of the caldera. Lake sediments generally fill moat-portions of the calderas and tend to be thickest near the ring fracture zones.</li> <li>• Several mineralized systems occur within the caldera systems and include mercury, uranium, and lithium occurrences. The mineralized systems are related to the well-developed hydrothermal activity associated with the volcanic complex and formed in shallow hot spring systems.</li> <li>• The Aurora uranium mineralization forms strata-bound and cross-cutting bodies in the dacitic flow units immediately below the Lake Sediments unconformity, forming an irregular mineralized zone approximately 1.5km (5,000ft) long by 300m (1000ft) wide. The mineralized horizons range from a true thickness of a few feet around the fringes to more than 50m (150ft) thick. The mineralized beds range from predominantly horizontal to moderately dipping (up to 40°) along the north-easter margin. The beds are spatially related to and partially controlled by possible growth faults or graben bounding structures, primarily on the northeast margin of the mineralization. Review of the diamond core logs indicate the uranium mineralization contained minor primary deposition related to volcanic and hydrothermal activity. The spatial distribution of uranium with sediments and broken, permeable zones of volcanic rocks suggest mechanically, and chemically transported zones of mineralization are common. Several of the secondary or tertiary basins, within the Lake Sediments and graben block, show thin repeating beds of mineralization, within zones of the more permeable rocks, which are isolated by clay rich zones. Higher grade and thicker zones of mineralization could represent high angle structures which acted as hydrothermal feeders or enrichment zones.</li> <li>• Volcanic type uranium deposits are defined as mineralized systems associated with volcanic rocks in a caldera setting. The mineralization is</li> </ul>

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		<p>associated with mafic to felsic volcanic rocks and is often intercalated with clastic sediments. Mineralization is largely controlled by structures, occurs at several stratigraphic levels of the volcanic and sedimentary units, and extends into the basement where it is found in fractured granite and in metamorphic rocks. There is generally a strong hydrothermal control to the transportation of uranium and the mineralization occurs as both primary and remobilized uranium in an oxidizing-reducing setting. Uranium mineralization is commonly associated with molybdenum, vanadium, lithium, other sulphides, violet fluorite and quartz to colloidal silica or opal. Examples of volcanic hosted uranium deposits include the Dornod deposit in Mongolia, the Michelin deposit in Canada, the Nopal deposit in Mexico, and the Strelsovsk Caldera in the Russian Federation hosts several commercial deposits.</p> <ul style="list-style-type: none"> <li>Lithium deposits occur within tuffaceous sedimentary rocks found in the restricted lake sediments within the caldera.</li> </ul>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li>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, including Easting and northing of the drill hole collar, Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole information that has been presented as Exploration Results for drilling conducted by EVE in 2011 is now within the Mineral Resource estimate. A Mineral Resource has been estimated for all prior drilling, additional information is available within Myers, 2005.</li> <li>Drill hole information that has been presented as Exploration Results for drilling conducted by AEM in 2022 is not yet included in the Mineral Resource estimate.</li> </ul>
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are based on length-weighted average grades.</li> <li>No maximum or minimum grade truncations have been applied.</li> <li>For drilling conducted by EVE in 2011 and reported in the 15 May 2022 IPO Prospectus or as Exploration Results, cut-off grades of 100ppm or 300ppm U<sub>3</sub>O<sub>8</sub> have been used to report the significant uranium mineralised intersections.</li> <li>For drilling conducted by AEM in 2022 and reported as Exploration Results, cut-off grades of 100ppm or 300ppm eU<sub>3</sub>O<sub>8</sub> have been used to report the significant uranium mineralised intersections.</li> </ul>

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		<ul style="list-style-type: none"> <li>Significant intersections do not contain intervals of more than 2m of sub-grade samples.</li> <li>No metal equivalent values have been reported.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>The orientation of drilling and sampling is not considered to have any significant biasing effects.</li> <li>Drill holes are usually vertical and are interpreted to have intersected the mineralised zone approximately perpendicular to its dip such that down hole intervals reported are considered to be or very close to true width.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>A map is included in the body of the report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>A Mineral Resource has been estimated for all prior drilling, additional information is available within Myers, 2005 or the subsequent January 2011 EVE ASX announcement (ASX: EVE on 12 January 2011). Comprehensive reporting of all results is not practicable as there are hundreds of holes and intercepts contributing to the Mineral Resource. Significant intercepts were previously reported in the 15 May 2022 IPO document for AEM.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>In mid-May 2011, Goldak Airborne Surveys completed a high sensitivity aeromagnetic radiometric survey over the Aurora deposit and surrounds. Aircraft equipment operated included a caesium vapour, digitally compensated magnetometer, a 1024 channel spectrometer consisting of 48 litres of downward looking NaI detectors and 8 litres of upward looking detectors, a GPS real-time and post-corrected differential positioning system, a flight path recovery camera, digital titling and recording system, as well as radar and barometric altimeters. All data was recorded digitally in GEDAS binary file format. Reference ground equipment included a GEM Systems GSM-19W Overhauser magnetometer and a Novatel 12 channel GPS base station which was set up at the base of operations for differential post-flight corrections. A total of 2,070-line kilometres of high resolution magnetic and radiometric data was collected, processed and</li> </ul>

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		<p>plotted. The traverse lines were flown East-West on a spacing of 100 metres with perpendicular control lines flown at a separation of 1000 metres.</p> <ul style="list-style-type: none"> <li>To date, no potentially deleterious substances have been identified associated with the Aurora mineralisation.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>As detailed in this report additional work is proposed and recommended.</li> <li>Further diamond core drilling will be undertaken within the uranium resource to generate core for further phases of metallurgical testwork.</li> <li>Further diamond core drilling will be undertaken testing the uranium potential of zones along strike and adjacent to the defined Aurora deposit, in particular zones identified in the nearby Cordex drilling. Also, in referring to the Cordex drilling, verification of this historic drilling data will be completed.</li> </ul>

