22 February 2023

Lithium Zone Expanded Significantly, Open in All Directions

- Final uranium and lithium assays from last year's 3,414m drill program received.
- First hole in the graben area intersected lithium bearing clays, including:
  - **8.3m at 2,046 ppm Li (0.44%) from 120m and**
  - **8.8m at 1,411 ppm Li (0.3%) from 136.5m** in hole 22AUDD005
  - **9.1m at 1,663 ppm Li (0.44%) from 100.6m and**
  - **5.1m at 1,266 ppm Li (0.27%) from 114.3m** in hole 22AURC005DT
- Uranium chemical assays from another four holes also delivered positive results, such as:
  - **13.5m at 278 ppm U_3O_8 from 158.5m**, including **5.6m at 418 ppm U_3O_8 from 164.6m** from hole 22AURC005DT
- Planning for the next drilling program continues, with quotes from various drilling contractors being assessed.

Aurora Energy Metals Limited (**Aurora** or **the Company**) (ASX:1AE) today announces the final set of chemical assay results from the Reverse Circulation (**RC**) and Diamond Drill (**DD**) program completed in December last year at the Company's Aurora Energy Metals Project (**the "Project"**) in south-east Oregon/north-east Nevada.

The program targeted uranium to the north-west of the existing Aurora Uranium Deposit and lithium, interpreted to be hosted in thicker lakebed sediments overlying and widely beyond the Aurora Uranium Deposit, an area of approximately 18km^2.

Sixteen vertical and one angled hole were drilled during the program, made up of 12 RC and 5 DD holes. Importantly, holes were drilled into the lakebed sediments over 1km away from the Aurora Uranium deposit including the first hole to be drilled by the Company to the north-east of the fault line, in the so-called graben block (See Figures 3 and 4).

Drilling has now confirmed lithium mineralisation over an area of more than 1500m x 2000m, with mineralisation open in all directions. The presence of thicker lithium clay mineralisation and uranium mineralisation on the eastern side of the horst graben fault is a significant positive result for the project.

Aurora's Managing Director, Greg Cochran, commented:

"Now that the final chemical assays have been received, we can reflect on this first Aurora drill program since listing with a lot of satisfaction. We have not only validated the well-defined Aurora uranium deposit model, we have also enhanced our understanding of the potential for an extension of that model. Importantly, the first hole in the graben area returned some tantalising assays, showing that uranium mineralisation may extend deeper than what was previously thought.

"That same hole also intersected lithium in the graben, at grades similar to the giant lithium deposits elsewhere in the McDermitt Caldera, providing further evidence that we are on the right track as we head into the thicker sediments on that north-eastern side the fault during the next phase of drilling."

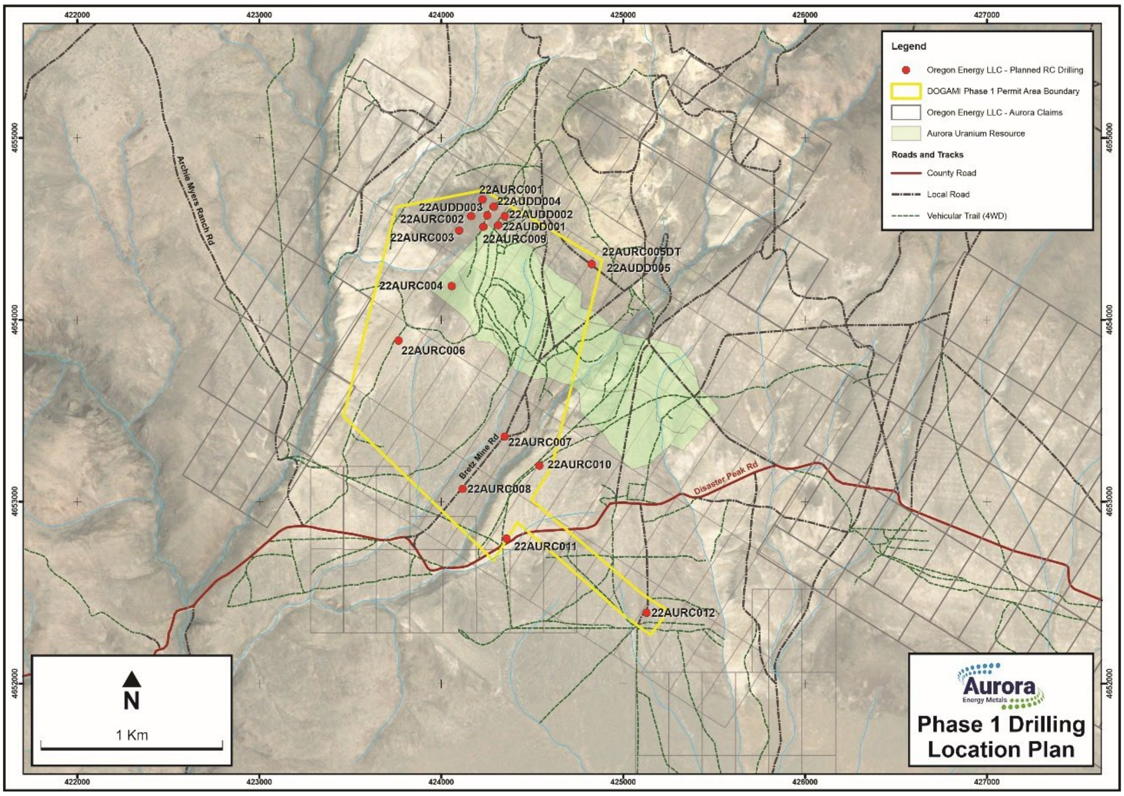

Figure 1: Map showing the completed drillholes

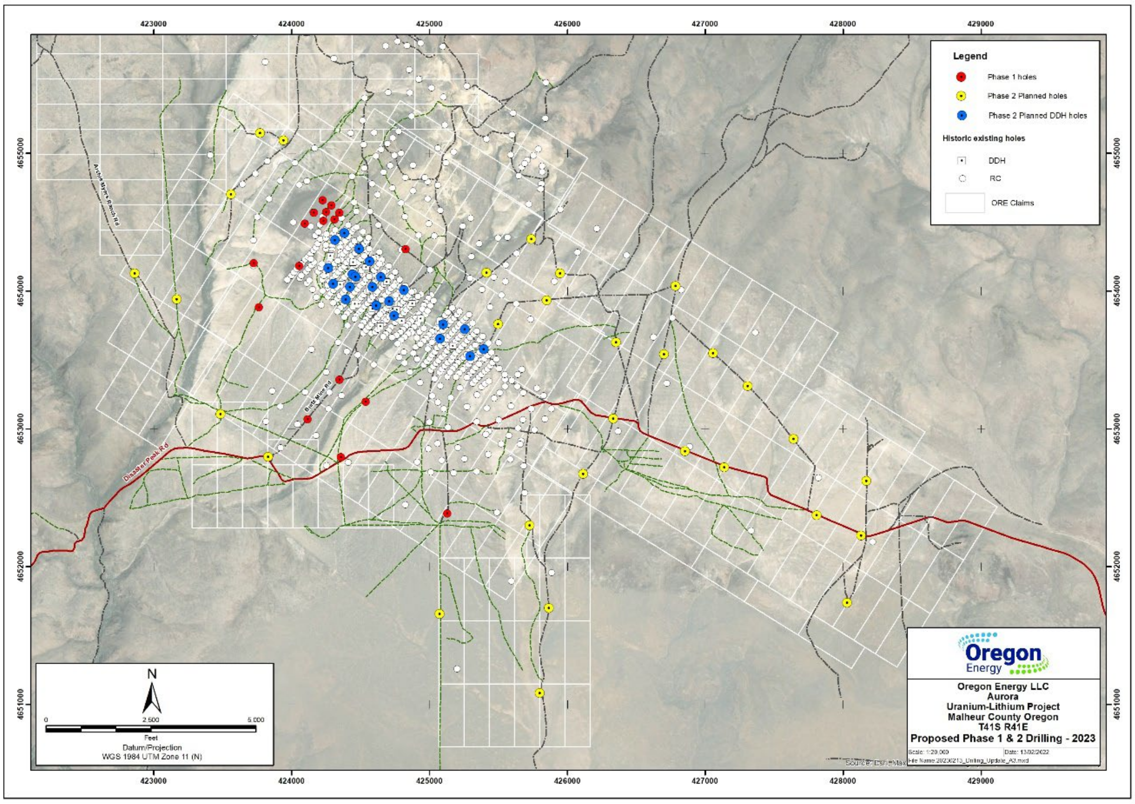

Figure 2: Map showing the planned drillholes for 2022-2023

Final Chemical Assay Results Received

The following lithium results, using a 1000ppm Li cut-off, were received including (See Figure 3):

- 22AUDD003: **8.4m at 1,333 ppm Li (0.29% Li_2O)** from 93.9m
- 22AUDD005: **8.3m at 2,046 ppm Li (0.44% Li_2O)** from 120m
  8.8m at 1,411 ppm Li (0.3% Li_2O) from 136.5m
- 22AURC005DT: **9.1m at 1,663 ppm Li (0.44% Li_2O)** from 100.6m
  5.1m at 1,266 ppm Li (0.27% Li_2O) from 114.3m
  2.7m at 1,415 ppm Li (0.3% Li_2O) from 140.1m
  2.5m at 1,369 ppm Li (0.29% Li_2O) from 147.8m

Importantly, holes 22AUDD005 and 22AURC005DT are located on the eastern side of the NW horst graben fault. On the eastern side of the fault, the sediments thicken, opening the potential for thicker lithium clay sequences on this side.

The grade of the lithium results in this drill program compare favourably with other large lithium clay sediment deposits in the McDermitt Caldera, including Jindalee Resources' McDermitt deposit[1] to the west and Lithium America's Thacker Pass deposit[2] to the south.

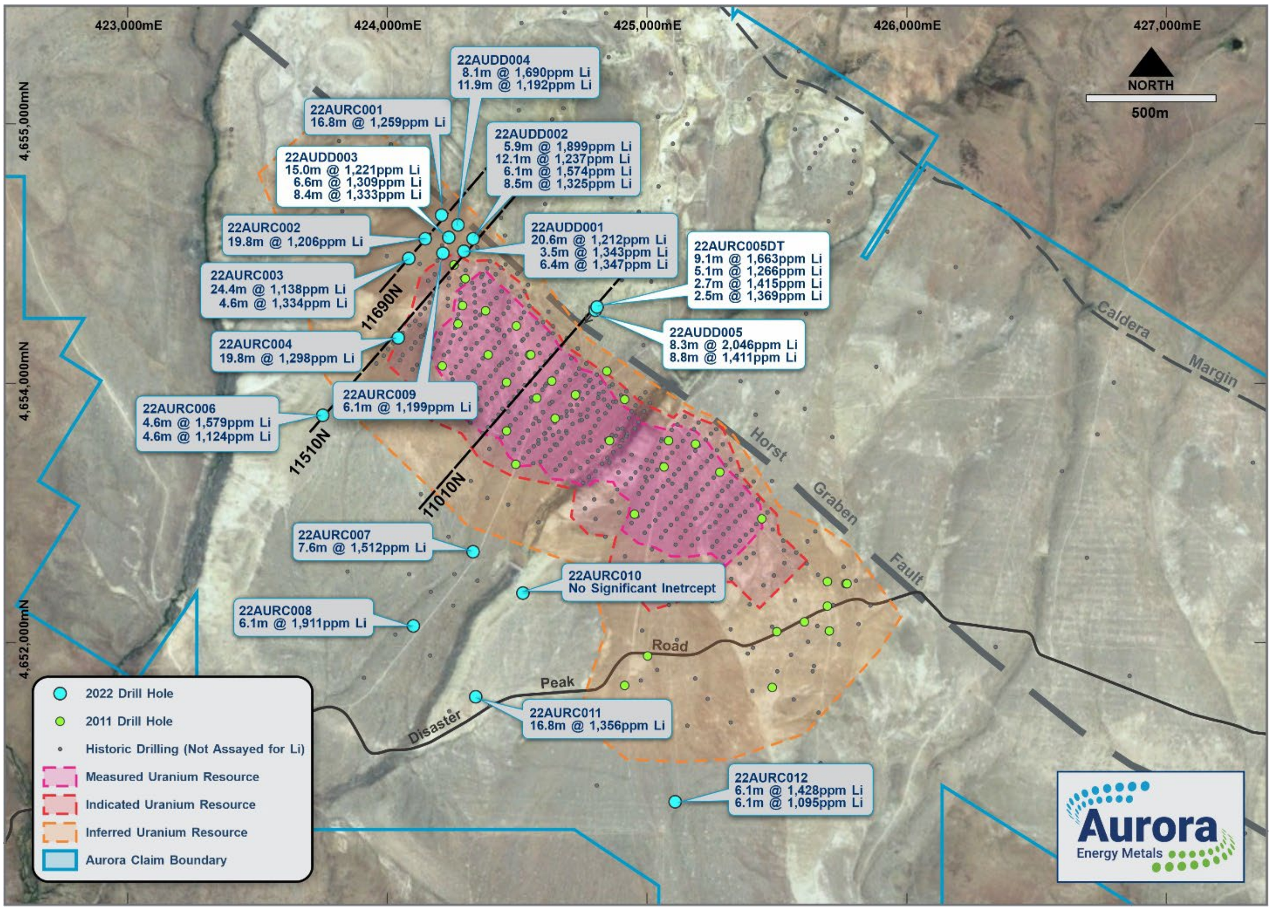

Figure 3: Map showing lithium assay results

[1] https://www.jindalee.net/site/projects/usa/us-lithium
[2] https://www.lithiumamericas.com/usa/thacker-pass/

The following uranium oxide results, using a 100ppm U_3O_8 cut-off, were received including (Figure 4):

- 22AUDD003: 12.6m at 176 ppm U_3O_8 from 160.9m
- 22AUDD004: 6.2m at 134 ppm U_3O_8 from 185m
  3.8m at 117 ppm U_3O_8 from 197m
- 22AUDD005*: 9.8m at 133 ppm U_3O_8 from 185.1m
  2.4m* at 540 ppm U_3O_8 from 203.6m
  (*hole terminated in mineralisation due to drilling issues)
- 22AURC005DT: 13.5m at 278 ppm U_3O_8 from 158.5m
  including *5.6m at 418 ppm U_3O_8 from 164.6m*
  8.0m at 128 ppm U_3O_8 from 174.5m
  4.7m at 288 ppm U_3O_8 from 196.5m

In addition, hole 22AUDD005 targeted the horst-graben structure interpreted to be the conduit for the uranium-bearing mineralised fluids. This hole finished in high-grade uranium mineralisation (2.4m at 540 ppm U_3O_8 from 203.6m – refer figure 5) but had to be terminated due to drilling issues.

This result and the uranium intersections in hole 22AUDRC005DT are significant in that they demonstrate that uranium mineralisation continues to the east of the horst graben fault, opening up the potential to significantly increase the existing mineral resources.

This zone, along the entire length of the Aurora Deposit, will be targeted in future drilling to test for immediate extensions to the currently defined uranium Mineral Resource.

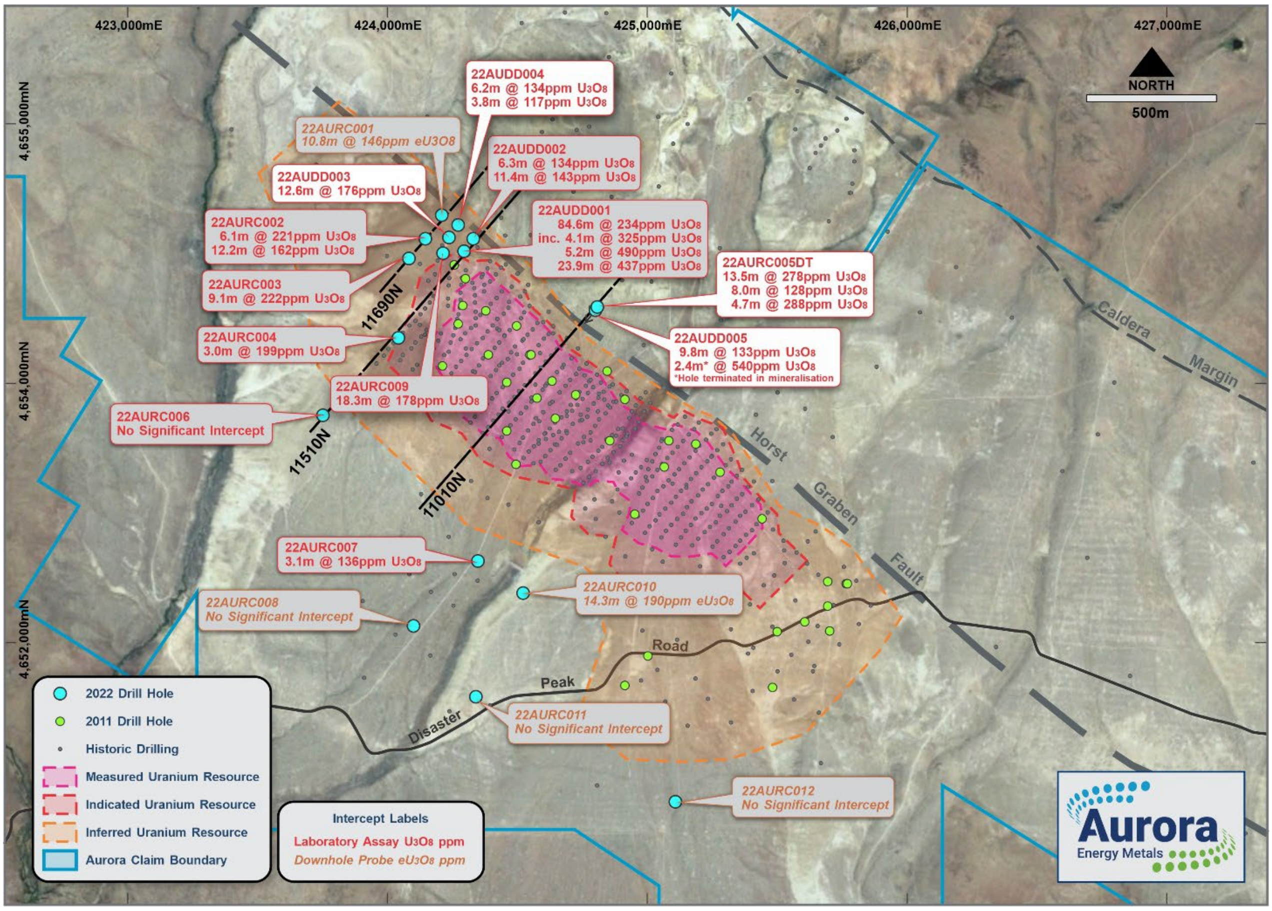

Figure 4: Map showing uranium assay results

Cross sections for 11010mN, 11510mN and 11690mN (Local Grid – See Figures 3 and 4 for locations) showing both the lithium and uranium chemical assay results are shown in Figures 5, 6 and 7.

A summary of all drillhole location information is included in Appendix 1 whilst all laboratory chemical assays results for lithium and uranium are listed in Appendix 2.

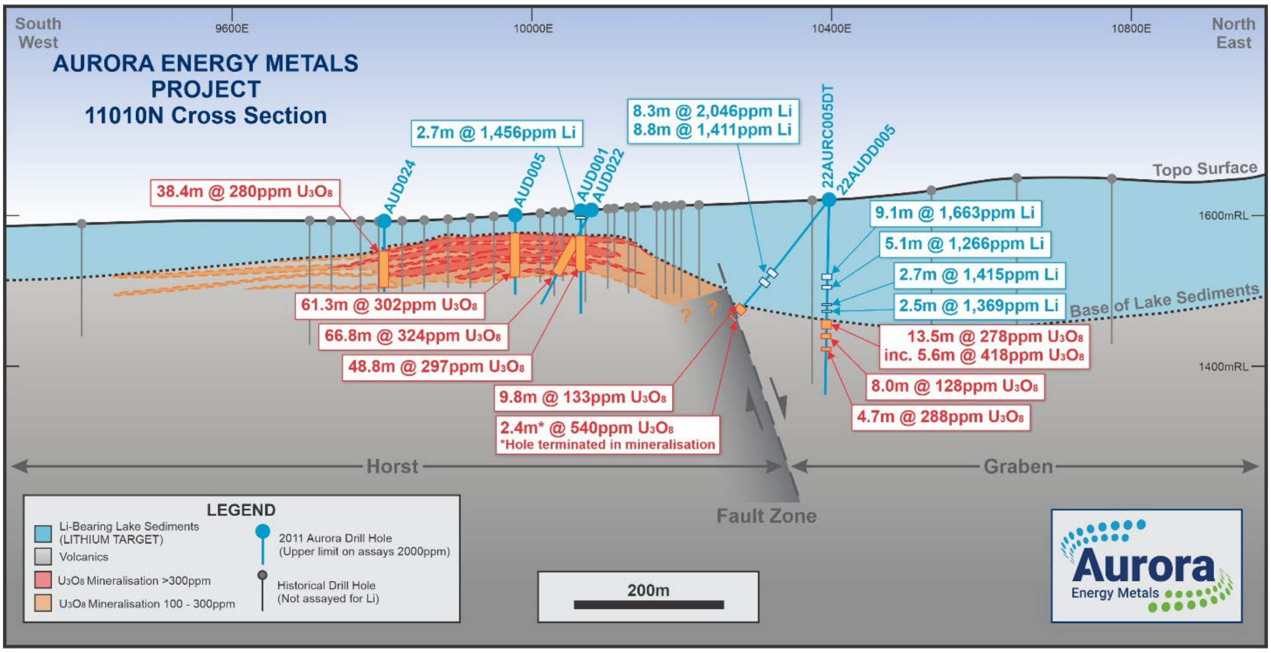

Figure 5: Cross section 11010mN (Local Grid) showing lithium and uranium chemical assay results

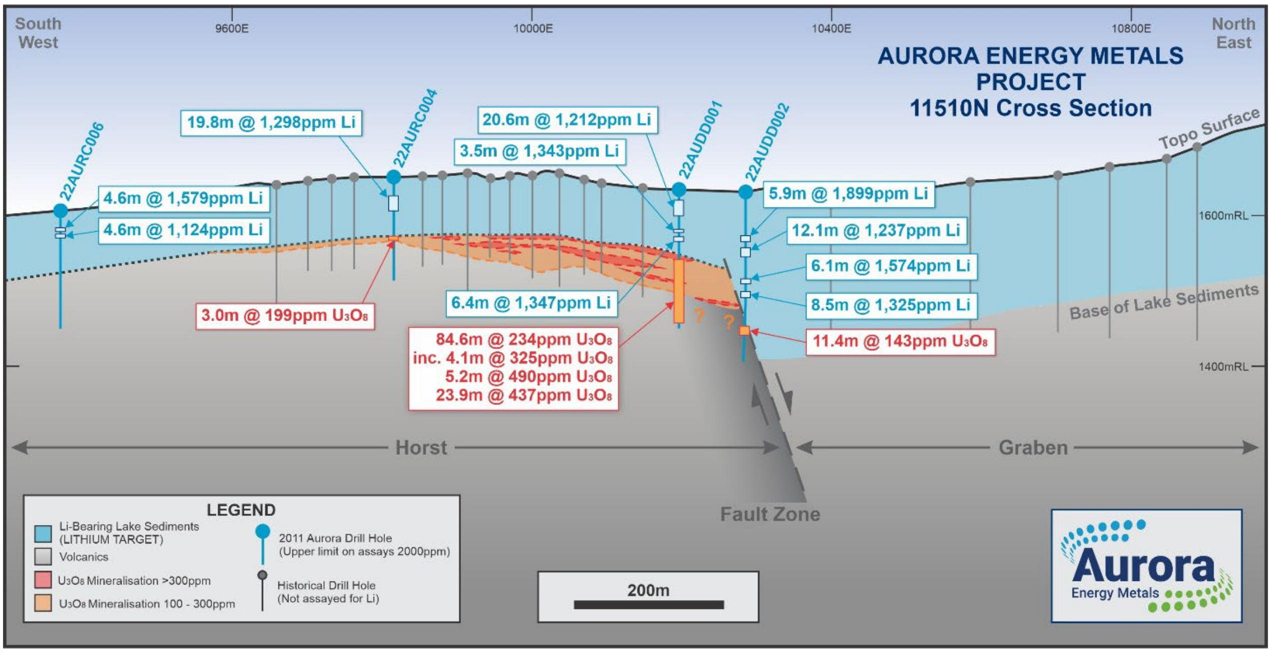

Figure 6: Cross section 11510mN (Local Grid) showing lithium and uranium chemical assay results

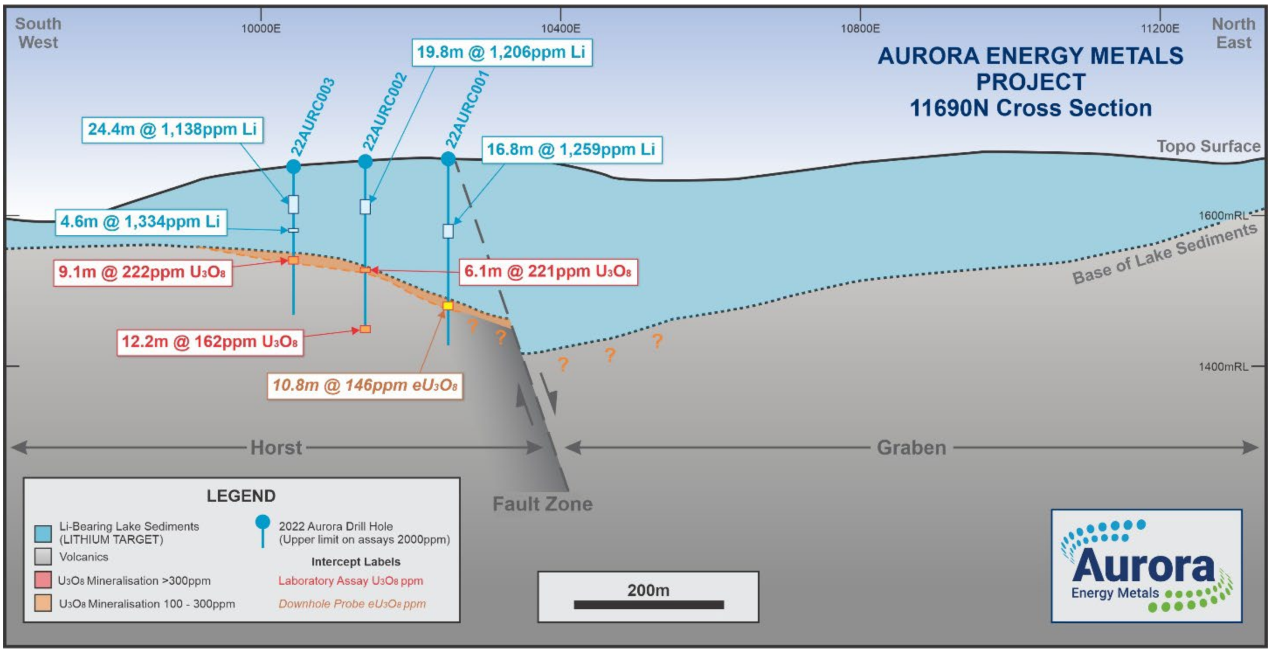

Figure 7: Cross section 11690mN (Local Grid) showing lithium and uranium chemical assay results

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 its flagship, the 100 per cent owned Aurora Energy Metals Project in south-east Oregon, USA. Boasting the USA's largest, mineable, measured and indicated uranium deposit (MRE: 107.3Mt @ 214ppm U_3O_8 for 50.6 Mlbs U_3O_8) with known lithium mineralisation in lakebed sediments above and surrounding the well-defined uranium deposit, the Company's vision is to supply minerals that are critical to the USA's energy transition.

ABN: 87 604 406 377 | ASX: 1AE

FOLLOW US ON TWITTER:
https://twitter.com/Aurora_1AE

FOLLOW US ON LINKEDIN:
https://www.linkedin.com/company/aurora-energy-metals/

CAPITAL STRUCTURE:
Share Price (21/2/23): $0.135
Market Cap: $20 million
Shares on Issue: 142.6 million

COMPANY SECRETARY:
Steven Jackson

SHAREHOLDER CONTACT:
Steven Jackson
Email: info@auroraenergymetals.com
Tel: +61 8 6465 5500

BOARD OF DIRECTORS:
Peter Lester: Non-Executive Chairman
Greg Cochran: Managing Director
Alasdair Cooke: Non-Executive Director

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

INVESTOR & MEDIA CONTACT:
Andrew Rowell
White Noise Communications
Tel: +61 (0) 400 466 226
Email: andrew@whitenoisecomms.com

JORC Disclaimer:

Information in this announcement relating to Exploration Results and Mineral Resources is based on information compiled by Mr. Lauritz Barnes (a consultant to Aurora Energy Metals Limited and a shareholder) who is a member of The Australian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists. Mr. Barnes 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 under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Barnes consents to the inclusion of the data in the form and context in which it appears.

Appendix 1:

Drill hole summary for completed November 2022 Drilling Program

Hole ID	Hole Type	Easting	Northing	RL	Total Depth (m)	Dip	Azimuth
22AUDD001	DDH	424300.4	4654511.6	1643.3	192.0	-90	000
22AUDD002	DDH	424355.0	4654582.8	1645.1	239.3	-90	000
22AUDD003	DDH	424246.3	4654574.3	1672.6	219.5	-90	000
22AUDD004	DDH	424280.4	4654622.2	1668.8	261.5	-90	000
22AUDD005	DDH	424822.9	4654310.9	1621.0	206.0	-55	222
22AURC001	RC	424221.0	4654655.5	1677.4	249.9	-90	000
22AURC002	RC	424155.0	4654566.0	1674.2	230.1	-90	000
22AURC003	RC	424085.7	4654498.9	1667.5	199.6	-90	000
22AURC004	RC	424076.0	4654199.3	1654.2	140.2	-90	000
22AURC005DT	RCDT	424822.9	4654310.9	1621.0	260.0	-90	000
22AURC006	RC	423753.8	4653890.2	1610.7	160.0	-90	000
22AURC007	RC	424350.1	4653353.9	1575.9	170.7	-90	000
22AURC008	RC	424109.3	4653077.2	1562.9	190.5	-90	000
22AURC009	RC	424226.3	4654511.0	1667.2	160.0	-90	000
22AURC010	RC	424543.9	4653212.7	1589.5	199.6	-90	000
22AURC011	RC	424346.9	4652796.7	1560.6	201.2	-90	000
22AURC012	RC	425071.7	4652313.0	1577.9	134.1	-90	000

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

Appendix 2:

Summary of Lithium Assay Results Received (1,000ppm Li cut-off)

Hole ID	From (m)	Interval (m)	ppm Li	Li_2O % [2]
22AURC001	88.4	16.8	1,259	0.27%
22AURC002	51.8	19.8	1,206	0.26%
22AURC003	39.6	24.4	1,138	0.25%
22AURC003	82.3	4.6	1,334	0.29%
22AURC004	27.4	19.8	1,298	0.28%
22AURC005DT[1]	97.5	9.1	1,663	0.36%
	114.3	5.1	1,266	0.27%
	140.1	2.7	1,415	0.30%
	147.8	2.5	1,369	0.29%
22AURC006	25.9	4.6	1,579	0.34%
22AURC006	35.1	4.6	1,124	0.24%
22AURC007	21.3	7.6	1,512	0.33%
22AURC008	36.6	6.1	1,911	0.41%
22AURC009	48.8	6.1	1,199	0.26%
22AURC010	NSI	-	-	-
22AURC011	62.5	16.8	1,356	0.29%
22AURC012	102.1	6.1	1,428	0.31%
	117.4	6.1	1,095	0.24%
22AUDD001	20.7	20.6	1,212	0.26%
	61.0	3.5	1,343	0.29%
	71.5	6.4	1,347	0.29%
22AUDD002	73.6	5.9	1,899	0.41%
	87.5	12.1	1,237	0.27%
	129.2	6.1	1,574	0.34%
22AUDD002	145.1	8.5	1,325	0.29%
	56.1	15.0	1,221	0.26%
	82.6	3.1	1,059	0.23%
	98.9	3.3	1,237	0.27%
	110.7	6.6	1,309	0.28%
22AUDD003	93.9	8.4	1,333	0.29%
22AUDD004	79.5	8.1	1,690	0.36%
	92.3	11.9	1,192	0.26%
	131.3	4.2	1,452	0.31%
	145.4	2.7	1,564	0.34%
22AUDD005	120.0	8.3	2,046	0.44%
	136.5	8.8	1,411	0.30%

[1] Hole 22AURC005DT has a RC pre-collar and a diamond core tail

[2] Lithium Oxide (Li_2O) is derived by multiplying Li grades by 2.153

Summary of Uranium Oxide Assay Results (100ppm U_3O_8 cut-off)

Hole ID	From (m)	Interval (m)	ppm U_3O_8
22AURC001	Sample compromised – refer to downhole probe results		
22AURC002	143.3	6.1	221
	217.9	12.2	162
22AURC003	121.9	9.1	222
22AURC004	82.3	3.0	199
22AURC005DT	158.5	13.5	278
including	*164.6*	*5.6*	*418*
	174.5	8.0	128
	196.5	4.7	288
22AURC006	NSI	-	-
22AURC007	86.9	3.1	136
22AURC008	NSI	-	-
22AURC009	114.3	18.3	178
22AURC010	Sample compromised – refer to downhole probe results		
22AURC011	NSI	-	-
22AURC012	*Hole terminated in Lake Sediments, U zone not intersected*		
22AUDD001	100.4	84.6	234
including	*100.4*	*4.1*	*325*
and	*132.1*	*5.2*	*490*
and	*152.3*	*23.9*	*437*
22AUDD002	138.4	6.3	134
	191.9	11.4	143
22AUDD003	160.9	12.6	176
22AUDD004	185.0	6.2	134
	197.0	3.8	117
22AUDD005[2]	185.1	9.8	133
	203.6	2.4[2]	540

[1] Hole 22AURC005DT has a RC pre-collar and a diamond core tail

[2] Hole 22AUDD005 terminated in mineralisation due to drilling issues

Appendix 3: JORC 2012 Compliance Table

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• 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. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • 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.	• Drilling that has defined the Aurora deposit and within the surrounding tenure was completed in two phases – 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. • In November 2022, AEM drilled 12 RC holes (one with a diamond tail) and 5 diamond core holes. • For all phases, holes were drilled utilising Reverse Circulation (RC) and Diamond drilling (DD). • The holes in the database for the historic phase of drilling in the late 1970's for each company includes: o Jacobs and Placer – 537 RC holes (60,558.5m as 3.8", 5.3" & 6") and 23 core holes (2,083m) o Cordex – 102 RC holes (17,157m) and 9 core holes (1,962m) • EVE's program included 32 PQ sized core holes (4,257m) and 6 (wet) RC holes (950m) in 2011. • AEM's new 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). • It is not clear if chip samples were recovered from the historical RC drillholes as no descriptions exist and the holes were logged via downhole gamma probe, and not assayed. The diameter of the rotary holes is a minimum of 5.1 inches and in some cases the holes were reamed to a larger diameter for re-entry and re-logging. • For the historical Jacobs and Placer diamond holes, core sample had excellent recovery averaging over 93%. Samples were sent to Hazen

Criteria	JORC Code explanation	Commentary
		Research Inc., of Golden, Colorado in 1978, for metallurgical and analytical testing of core samples. • At this stage, detailed checks of the Cordex drilling information is pending. All Cordex drilling is outside of the limits of the Mineral Resource. • 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. • EVE's and AEM's RC holes obtained representative 5ft (1.5m) metre samples. • EVE's and AEM's diamond drill core holes were completed to provide metallurgical sample material. Whole PQ3 or HQ3 drill core was cut as either quarter or half core on mostly 3ft (0.9m) intervals with some variation to geological control. • No trenching or other sampling has been completed at the Aurora deposit, other than the drilling.
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 type, whether core is oriented and if so, by what method, etc).*	• Historical RC percussion drilling was completed using a 5 to 5.5 inch bit. • Placer core holes were drilled to 3.8", 5.3" & 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. • 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%. • 4 of the EVE core holes were angled (the remainder drilled vertical) and none of the core was oriented. • In addition, EVE drilled six 5.5' wet RC holes. • 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 holes was angled (-55/222), all others were vertical. • In addition, AEM drilled twelve 5.5' dry RC holes using a mix of tricone and centre return hammer.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Again, it is not clear if chip samples were recovered from the historical RC drillholes as no descriptions exist and the holes were logged via downhole gamma probe, and not assayed. • EVE drilled six wet RC holes as a test program to compare core vs. wet RC samples. Sample recovery was considered inadequate, and the program was terminated early after six holes. None of these holes have been utilised in the resource estimation process. • Diamond drill core was routinely measured and cross-checked with drill blocks to determine recovery from each core tube. • Diamond drill core recoveries were excellent at above 93% (historic Placer drilling), >88% for EVE drilling and >90% for new AEM core drilling). Where core loss did occur, it was measured and recorded during logging. • There is no observed sample bias, nor a relationship observed between grade and recovery.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• RC and core holes were logged geologically, including but not limited to, recording weathering, regolith, lithology, structure, texture, alteration, and mineralisation (type and abundance). • All holes and all relevant intersections were geologically logged in full. • Logging was at a qualitative and quantitative standard to support appropriate Mineral Resource studies. • Remaining sample pulps and core (that not removed for metallurgical testwork purposes) from the EVE 2011 and AEM 2022 drilling are stored on site in weatherproof shipping containers at a property in McDermitt (as at Q4 2022). • All EVE and AEM diamond drill core was photographed, and holes were also logged geotechnically. • No core or core photographs remain for the historic core drilling.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality, and appropriateness of the sample preparation technique.*	• All holes (RC or diamond) were logged using downhole radiometric logging probes to collect measurement of the uranium concentration – this is described in detail in the next section. As such, not all holes were sampled.

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• It is not clear if chip samples were recovered from the historical RC drillholes as no descriptions exist and the holes were logged via downhole gamma probe, and not assayed. • Historically, where Placer core holes were completed to provide metallurgical sample material, drill core was composited on intervals ranging between 1.5ft up to 17ft (average of 7.7ft or 2.3m), samples were fine crushed (0.7mm), a 200g subsample was then pulverised (75 microns) to obtain a homogenous sub-sample for assay. • 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. • 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. • 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. • 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. • The sample sizes are considered appropriate for the style of mineralisation observed.
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.* • *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.*	• For all historic (Jacobs, Placer and Cordex) holes, measurement of the uranium concentration in drillholes was made with radiometric logging throughout the entire resource area and surrounds. • Confirmation analyses included direct chemical assays and closed can radiometric assays for selected Placer core holes. • Radiometric logging of the historic drill holes was completed by Century Geophysical using the Compu-Log system. This system is comprised of

Criteria	JORC Code explanation	Commentary
	• *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.*	radiometric logging equipment based on a truck-mounted digital computer. The natural gamma (counts/second, or cps), self-potential (millivolts), and resistance (ohms) were recorded at 1/10th foot increments on magnetic tape and then processed by computer to graphically reproducible form. Neutron-neutron logging was also used to collect rock characteristics for dry drill holes and SP and resistance logs were completed for drillholes with water. The neutron-neutron and SP data have not been tabulated or evaluated. The eU_3O_8 % conversions from the gamma log data were calculated and printed with the original, unprocessed gamma logs. • The database consists of more than 2 million historic 0.1 ft original gamma probe readings, and these were composited to 5ft values, which were used in the resource model. • For the Placer core drilling, selected samples were prepared and subjected to a series of analytical techniques including chemical and radiometric analysis for uranium, as well as chemical and X-ray fluorescence analysis for other constituents of the ore. Uranium analytical procedures included chemical fluorometric assay, closed can techniques including radiometric beta-gamma, radiometric sealed can gamma, %radon loss, and %beta and gamma readings. • For the 2011 EVE drilling and the recent 2022 AEM drilling, radiometric logging was also 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 1/10th foot increments for the parameter's gamma, conductivity, resistivity, and temperature. The eU_3O_8% conversions from the gamma log data were calculated and reported with the original, unprocessed gamma logs. These were composited to 3ft values. • 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 (HNO3-HClO4-HF-HCl). Samples were then checked using XRF techniques.

Criteria	JORC Code explanation	Commentary
		• These techniques are considered appropriate and are industry best standard. The techniques are considered to be a total digest. • 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. • 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_3O_8 and three different CRM standards with lithium grades ranging from 814ppm to 2,270ppm. • EVE and AEM QAQC results have been checked with no apparent issues for all data received to date. • Field duplicate data suggests there is general consistency in the drilling results. • For historical umpire laboratory checks, duplicate samples of drill core were submitted to Skyline Labs, Geoco Division of EDA Instruments Inc. (Geoco), Wheatridge, Colorado, and Bondar-Clegg Inc., Denver, Colorado for the purpose of verifying Hazen's analytical results. Geoco analysed duplicate samples using fluorometric and radiometric techniques. Bondar-Clegg (1980) determined the uranium content using neutron activation analysis. Comparison of the Beta-gamma eU_3O_8% values from Geoco and Hazen show reasonable agreement in values. • The analytical laboratories used in 1978-1980 check assay and confirmation assay programs were well established and accepted geochemical and radiometric analytical facilities. The analyses were completed prior to the designation of ISO certification for analytical labs. Hazen's Analytical Services are now certified by the State of Colorado to analyse drinking water for metals and anions, and by the U.S. Environmental Protection Agency (EPA) for radiochemistry. Skyline Bondar Clegg did receive certification when ISO standards were implemented. • EVE submitted samples for umpire checks to both ALS in Reno, NV and ACME laboratory in Vancouver, Canada. Both labs analysed using both

Criteria	JORC Code explanation	Commentary
		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. • No samples from the 2022 AEM drilling program have yet been sent for umpire lab checks.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Verification of significant intersections was completed in 2011 for the January 2011 JORC 2004 resource. Competent Person for the JORC 2012 Mineral Resource, Lauritz Barnes, has again verified all significant intersections. • For all historical core holes plus 26 of the 32 EVE core holes, measurement of the uranium concentration (eU_3O_8) was made with radiometric logging. For selected historic core and for all the EVE core, they were also assayed for U_3O_8 by ICP-MS and XRF methods. All methods were compared with consistent results, verifying all significant intersections. • 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 > 0.9). With this validation, the November 2022 Mineral Resource is now reported as U_3O_8 rather than eU_3O_8. • For EVE holes, primary geological data was collected via paper (and data entered) logging and software using in-house logging methodology and codes. • For AEM holes, primary geological data was collected via digital logging and software using in-house logging methodology and codes. • 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. • 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_3O_8 using a factor of 1.179.

Criteria	JORC Code explanation	Commentary
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Historic hole coordinates have been checked against hardcopy drill logs and plan maps. However, accuracy and quality of surveys (i.e., use of surveyors with theodolite or similar) used to locate drill holes has not been reported in these logs. • Within the hardcopy database received from Uranium One with the survey maps and data from the 1978-1980 field programs completed by Placer. This included original maps showing the local grid in feet from this period, including the positions of 24 survey grid markers. All of these 24 markers still existing in the field and in early October 2022, have been sited, identified using metal tags attached to the markers that match the survey maps and data, located using current GPS systems and photographed. From this, all Placer drilling has been accurately located to within a few metres (and generally less) of its true position in the field. Remote sensing imagery, including Google Earth, also clearly show the historic drill sites that match the located collar positions from the historic maps providing high confidence in the positions of all historic drillholes. • EVE also completed a due diligence site visit in March 2010 using handheld GPS to check claim monuments, drillhole locations plus using a handheld spectrometer to confirm mineralisation. • 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. • 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. • Downhole surveys were completed on a few EVE drill holes using a downhole survey tool. Only 4 of the 32 EVE holes were angled. • 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. • 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: o 10000.000mE, 10000.000mN = 425315.859mE, 4653333.481mN

Criteria	JORC Code explanation	Commentary
		◦ 10248.631mE, 10723.868mN = 424944.287mE, 4654002.612mN ◦ N042°E rotation, Scale factor 1. • 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.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• 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. • Drill hole spacing and distribution is considered more than sufficient as to make geological and grade continuity assumptions appropriate for Mineral Resource estimation. • 1.5m sample compositing of the RC and diamond core drilling samples was routinely used.
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.* • *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.*	• The orientation of drilling and sampling is not considered to have any significant biasing effects. • 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.
Sample security	• *The measures taken to ensure sample security.*	• The historic geophysical data acquisition was completed by Century Geophysical under contract to Placer. • Check assays from Placer diamond core drillholes were collected by Placer geologists and submitted to several commercial laboratories for analysis • 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. • 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.

Criteria	JORC Code explanation	Commentary
		• Cutting and sampling of the EVE diamond drill core was carried out by AAL personnel under the direction and supervision of EVE geological personnel. • 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. • Remaining core and all lab pulp samples are securely stored at a location in McDermitt, NV close to the Aurora deposit site.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No independent audit or review has been carried out on the EVE or AEM sampling techniques and data.

Section 2 Reporting of Exploration Results

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

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 park and environmental settings.* • *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.*	• AEM, through its wholly owned US subsidiary Oregon Energy LLC, holds 100% of the Aurora Energy Metals Project in southeast Oregon, USA. • The Project comprises 395 Mining Claims that cover an area of approximately 28.5 square kilometres. • The tenements are held securely and no impediments to obtaining a licence to operate have been identified. • The Aurora Project is on federal land managed by the Bureau of Land Management. • 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. • The Company has in the past undertaken periodic consultation with the Fort McDermitt Paiute-Shoshone Tribal Council, as well as community information meetings at the Fort McDermitt Indian Reservation, Burns

Criteria	JORC Code explanation	Commentary
		Paiute Tribal Council, Malheur County Judges, Association of Oregon Counties President, and State Congress Representative.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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. • 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. • 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. • 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. • 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. • 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. • 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

Criteria	JORC Code explanation	Commentary
		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 a) a property qualifying report for the listing of Quincy Energy on the Toronto Stock Exchange and b) to confirm a historic uranium resource and bring this resource up to modern industry standards. 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: a) compilation of all available data, b) a site visit to confirm historic drill hole locations and infrastructure, and c) an independent recalculation of mineral resources to confirm previous estimates by Placer Development." • Quincy Energy Corp also completed a Scoping Study in January 2007 but subsequently withdraw from the deal. • Uranium One Inc. acquired EMC in 2007 • 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.
Geology	• *Deposit type, geological setting, and style of mineralisation.*	• 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 m.y.b.p. as the result of explosive eruptions of peralkaline ash flow tuff

Criteria	JORC Code explanation	Commentary
		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. • 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. • 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. • 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. • Volcanic type uranium deposits are defined as mineralized systems associated with volcanic rocks in a caldera setting. The mineralization is associated with mafic to felsic volcanic rocks and is often intercalated

Criteria	JORC Code explanation	Commentary
		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. • Lithium deposits occur within tuffaceous sedimentary rocks found in the restricted lake sediments within the caldera.
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, 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.* • *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.*	• 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. • 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. Refer to included representative drill collar plans and cross-sections.
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results are based on length-weighted average grades. • No maximum or minimum grade truncations have been applied. • For drilling conducted by EVE in 2011 and reported in the 15 May 2022 IPO Prospectus or here as Exploration Results, cut-off grades of 100ppm or 300ppm U_3O_8 have been used to report the significant uranium mineralised intersections. • For drilling conducted by EVE in 2011 and reported here as Exploration Results, a cut-off grade of 1,000ppm Li has been used to report the significant lithium mineralised intersections.

Criteria	JORC Code explanation	Commentary
		• For drilling conducted by AEM in 2022 and reported here as Exploration Results, cut-off grades of 100ppm or 300ppm eU_3O_8 have been used to report the significant uranium mineralised intersections. • Significant intersections do not contain intervals of more than 2m of sub-grade samples. • No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The orientation of drilling and sampling is not considered to have any significant biasing effects. • 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.
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 included in the body of the report.
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.*	• Refer to included representative drill collar plans and cross-sections. • 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.
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.*	• 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

Criteria	JORC Code explanation	Commentary
		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 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. • To date, no potentially deleterious substances have been identified associated with the Aurora mineralisation.
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• As detailed in this report additional work is proposed and recommended. • 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. • Further drilling and sampling across the entire claim block is planned to test the lithium potential of the overlaying lithium-bearing lakebed sediments.