ASX ANNOUNCEMENT



ASX:1AE auroraenergymetals.com

23 November 2022

34% Increase in Total Uranium Resource to 50.6 Mlbs Maiden Measured Resource Declared at Aurora **Uranium Deposit**

- Aurora Uranium Deposit Mineral Resource increases by 12.7 Mlb to 50.6 Mlb U₃O₈
- Grade of the High Grade Zone increased by 10%, to 485 ppm U₃O₈
- 90% of existing Indicated Mineral Resource converted to the Measured Category
- High Grade Zone of 17.5 Mlb U₃O₈ classified as Measured (91% of the 19.2 Mlb total zone)
- Over 82% of the Mineral Resource now in the Measured and Indicated Category
- One of the largest uranium deposits in the USA, open along strike and to the Northwest, drilling underway

US focused uranium and lithium advanced explorer, Aurora Energy Metals Limited (Aurora or the Company) (ASX:1AE) has released a new uranium Mineral Resource Estimate (MRE) for its Aurora Energy Metals Project (the "Project"), incorporating results from the diamond drilling (DD) program conducted by the Company in 2011.

The updated MRE totals 107.3 Mt @ 214 ppm U₃O₈ for 50.6 Mlbs U₃O₈, including a Measured Mineral Resource of 59.5 Mt @ 251 ppm U_3O_8 for 32.9 Mlb U_3O_8 , Indicated of 21.4 Mt @ 184 ppm U_3O_8 for 8.7 Mlb U_3O_8 and Inferred of 26.4 Mt @ 157 ppm U_3O_8 for 9.1 Mlb U_3O_8 (see Table 1).

Table 1: November 2022 Aurora Energy Metals Resource

	ı	Measure	ed		Indicate	d		Inferred	i		Total	
Resource Zone	Mt	U₃O ₈ ppm	Mlb U₃O ₈	Mt	U₃O ₈ ppm	Mlb U₃O ₈	Mt	U₃O ₈ ppm	Mlb U₃O ₈	Mt	U₃O ₈ ppm	Mlb U₃O ₈
High Grade Zone ¹	16.3	487	17.5	1.6	467	1.6	0.1	425	0.1	18.0	485	19.2
Low Grade Zone ²	43.2	162	15.4	19.8	161	7.0	26.3	155	9.0	89.3	160	31.5
Total	59.5	251	32.9	21.4	184	8.7	26.4	157	9.1	107.3	214	50.6

¹ High grade zone estimated using a 300 ppm U₃O₈ cut-off

Note: Appropriate rounding applied

Aurora's Managing Director, Greg Cochran, commented: "At the time of the IPO we committed to a mineral resource upgrade and conversion of Aurora's existing uranium mineral resource and this fantastic result further validates what we have been saying all along - that Aurora holds one of the largest, well-defined uranium deposits in the USA. By any measure, this outcome is significant, but I am particularly pleased with the high percentage of measured resource in this update, as well as the 34% increase in total mineral resource. These aspects of the mineral resource give us even greater confidence to advance the Project through its next stages, being further metallurgical testwork and techno-economic studies."

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 $^{^2}$ Low grade zone estimated using a 100 ppm U_3O_8 cut-off



Background to the Mineral Resource Estimate

The Aurora uranium deposit was discovered in 1977 through follow up of anomalies detected on an airborne radiometric survey. The deposit was intensively explored by Placer Amex Corp up to 1980.

Energy Ventures Limited (EVE), acquired the Aurora Uranium Project from Uranium One Inc. in 2010. In January 2011, EVE compiled and announced an updated Mineral Resource Estimate (MRE) reported under the 2004 edition of the JORC Code. The 2011 EVE estimate was based on 426 historical diamond and rotary holes, drilled into the interpreted resource on a 60m by 30m grid spacing oriented perpendicular to the strike of the deposit.

Subsequent to the January 2011 resource, EVE drilled an additional 32 PQ diameter diamond drill holes (Figure 1) and six reverse circulation (RC) drill holes, designed as a confirmation program and to provide metallurgical samples.

In the lead up to the Company's IPO in May this year, the uranium resource was updated to be reported in accordance with the JORC Code (2012) (see Table 2). However, the 32 PQ holes were only included for quality assurance – quality control and twin hole comparison purposes; the assays were not incorporated into the updated MRE.

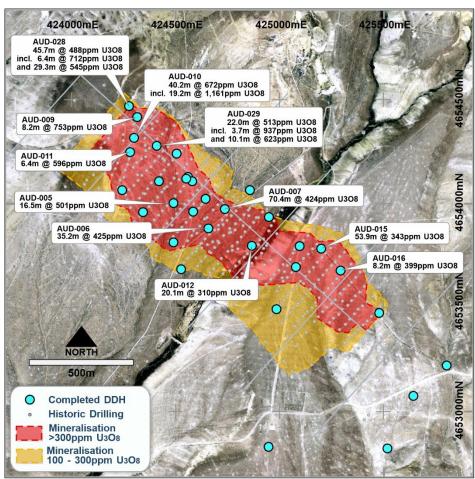


Figure 1: Selected results from the 2011 PQ drilling campaign overlying the 2011 Mineral Resource



Thus, one of the priorities identified at the IPO was to update and convert the MRE, incorporating the 32 PQ diamond holes, which consisted of 4,257m of drilling, and further validating the historic drillhole database. Figure 1 shows a selection of some of the results from the 2011 program, as well as the position of the historical holes drilled.

Table 2: Aurora Energy Metals Resource at IPO in May 2022

	Indicated			Inferred			Total		
Resource Zone	Mt	<i>e</i> U₃O ₈ ppm	Mlb <i>e</i> U₃O ₈	Mt	<i>e</i> U₃O ₈ ppm	Mlb <i>e</i> U₃O ₈	Mt	<i>e</i> U₃O ₈ ppm	Mlb <i>e</i> U₃O ₈
High Grade Zone ¹	18.4	444	18.0	-	-	-	18.4	444	18.0
Low Grade Zone ²	47.3	179	18.7	3.6	151	1.2	50.9	177	19.9
Total	65.7	253	36.7	3.6	151	1.2	69.3	248	37.9

¹ High grade zone estimated using a 300 ppm eU₃O₈ cut-off

Note: Appropriate rounding applied

2022 Mineral Resource Estimate Overview

The updated Mineral Resource, completed by resource consultancy Trepanier Pty Ltd, contains a high grade portion of 18 Mt @ 485 ppm U_3O_8 for 19.2 Mlbs of U_3O_8 (Measured, Indicated and Inferred), based on an interpreted grade envelope defined by a 300 ppm U_3O_8 cut-off grade. This compares favourably with the previously quoted Indicated Mineral Resource for the deposit, however the major difference being that the bulk of this resource (91% or 17.5 Mlbs U_3O_8) has been classified in the Measured category.

A broad zone of lower grade resource surrounds and lies immediately below the high grade zone. This zone contains a further 89.3 Mt @ 160 ppm U_3O_8 for 31.5 Mlbs U_3O_8 using an interpreted envelope defined by a cut-off grade of 100 ppm U_3O_8 . Previously, this zone was estimated to contain a total of 19.9 Mlb U_3O_8 , hence an increase of over 58% in metal content.

Much of the substantial increase in the resource size is largely attributable to the increase in the lower grade zone, although almost half (49%) of the metal contained in this zone has also been classified in the Measured category.

Uranium mineralisation at the Aurora deposit is hosted in clay altered volcanic flows and tuffs within the McDermitt Caldera complex. The mineralisation occurs as multiple stratabound and cross-cutting bodies in the volcanic units, forming a flat-lying to gently dipping, northwest-trending mineralised zone approximately 1.5km long by 300m wide. The mineralised horizons range from a true thickness of a few metres to more than 30m thick and are interpreted to represent both primary and secondarily enriched uranium bodies which are controlled by porous and permeable stratigraphic units and structural zones.

The resource model comprises a higher grade core of stacked, sub-horizontal to gently dipping, tabular zones of mineralisation that locally coalesce into thicker bodies of mineralisation. This core, which shows continuity at a 300 ppm U_3O_8 cut-off grade, is surrounded by a large, lower grade halo of mineralisation that extends the overall zone of mineralisation to a depth of 180m below surface which is open along strike and to the northwest.

For the historic RC drillholes, the Uranium oxide grade is based on down-hole geophysical radiometrics (gamma log), both continuous and so-called point measurements. The historic calculated eU_3O_8 grades were validated against the EVE 2011 assays plus historical geochemical assays of diamond core samples collected from within the deposit, with overall strong near 1:1 correlation between the

² Low grade zone estimated using a 100 ppm eU₃O₈ cut-off



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 .

Statistical analyses on the accumulated composites were completed and outliers reduced where appropriate. Variography and search neighbourhood analysis were also conducted as input into the grade estimation. The grade estimation method used was Ordinary Kriging.

Measurements of dry in situ bulk density are based on the recent (2011 drilling - 3,508 measurements) and historical records (199 measurements) produced from core samples distributed through the deposit. The average dry in situ bulk densities used for the resource estimate are 1.9t/m³ for the higher grade zone and 2.1 for the lower grade zone.

Resource classification was developed from the confidence levels of key criteria including drilling method, geological understanding and interpretation, grade analysis, data density and location, grade estimation and quality. The 2011 PQ drilling program also enabled the delineation of Resources to the new, higher levels of classification.

Figure 2 presents the Grade vs. Tonnage curve for the total Aurora Energy Metals Project Mineral Resource.

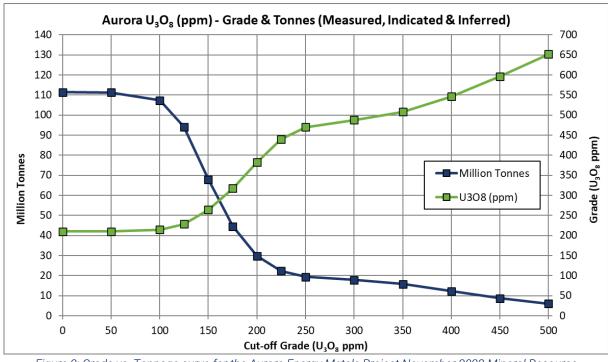


Figure 2: Grade vs. Tonnage curve for the Aurora Energy Metals Project November 2022 Mineral Resource



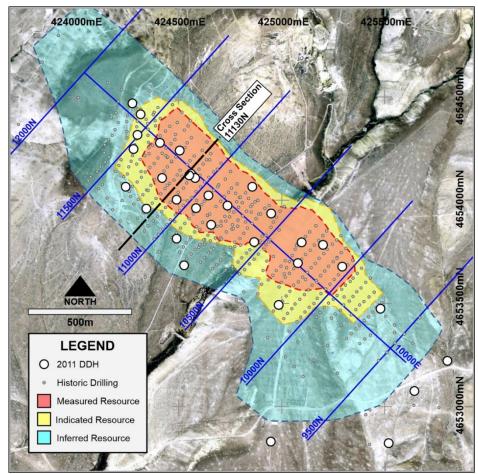


Figure 3: Plan view of November 2022 Mineral Resource with local grid and example section location

Figure 4 and Figure 5 present a typical cross section through the Aurora Deposit, both for the domain interpretation and the estimated blocks, with locations shown on Figure 3.

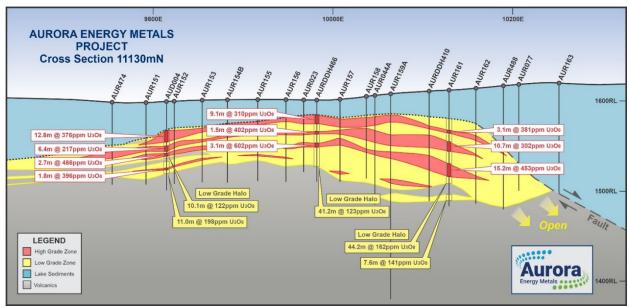


Figure 4: Cross section (11130mN Local grid) showing the interpreted mineralised domains and example drillhole intercepts



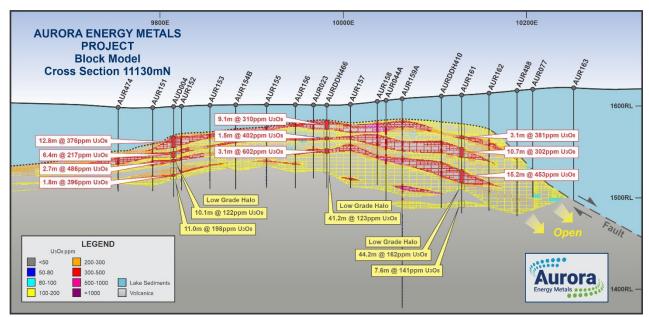


Figure 5: Cross section (11130mN Local grid) showing estimated block grades within the interpreted domains

Figure 6 and Figure 7 present oblique views of the estimated blocks showing U_3O_8 grades for both internal high grade zones (>300ppm U_3O_8) plus the overall lower grade halo (100-300ppm U_3O_8).

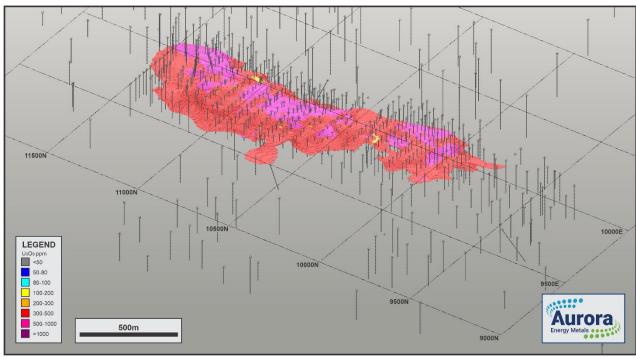


Figure 6: Oblique view of estimated block grades for the internal higher grade domains



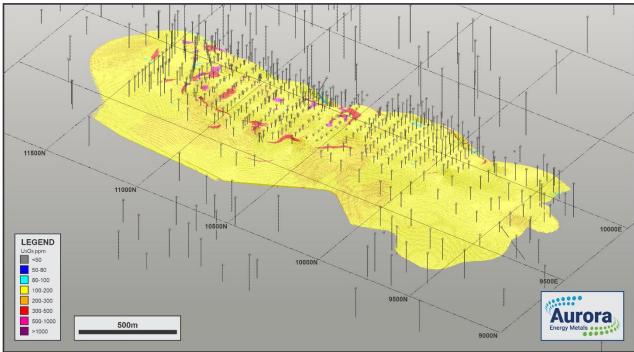


Figure 7: Oblique view of estimated block grades for the overall lower grade halo domains

Figure 8 illustrates an oblique view of the drilling density and the new resource classification.

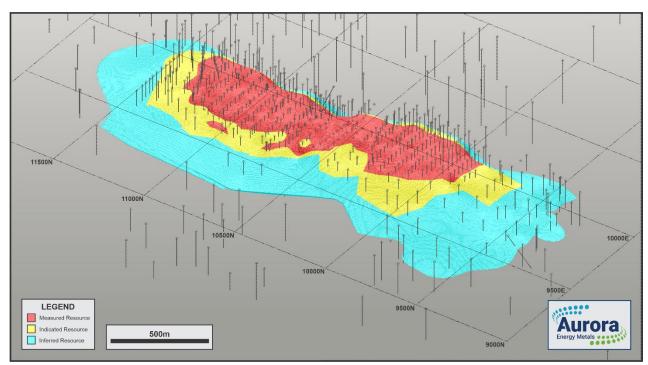


Figure 8: Oblique view of the drilling density and the new resource classification



Next steps

There is potential to extend the Aurora Uranium Deposit for the Aurora Energy Metals Project to the northwest and also to the north-east down into the horst-graben structure which is interpreted to be an important conduit for the uranium bearing mineralising fluids. Aurora currently has two drill rigs on site (a diamond rig and a RC rig – Figure 9) testing the north-western potential uranium extension target. In addition, the rigs are drilling through the overlying lake sediments testing for lithium mineralisation. Results for this drilling will be received and announced in the coming few months.



Figure 9: Drill rigs currently on site at Aurora testing lake sediments for lithium and the potential north-western extension to the uranium zone

In addition, Aurora has compiled historic uranium drilling data from Cordex for the graben block immediately to the north-east of the defined Aurora Uranium Deposit, shown on Figure 10. These 112 holes not only show uranium zones in the underlying volcanics, but along with the extensive Placer and EVE drilling data, add significant understanding to the architecture and thickness of the overlying lake sediments that potentially may host significant lithium mineralisation. Uranium mineralisation in this zone is not included in the current resource. This data has been utilised to plan further drilling which is currently in the permitting phase and expected to start in 2023.



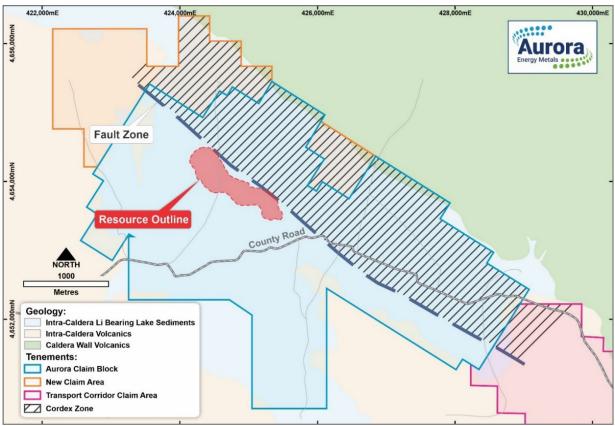


Figure 10: Map showing the current resource plus the Cordex Zone which is not included in the resource

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 one of the USA's largest, well-defined uranium deposits (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 deposit, the Company's vision is to supply minerals that are critical to the USA's energy transition.

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CAPITAL STRUCTURE:

Share Price (22/11/22): \$0.225 Market Cap: \$32 million Shares on Issue: 142.6 million

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Balance of Register: 48%

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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: SUMMARY OF RESOURCE ESTIMATE AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to JORC Table 1, Sections 1 to 3 included below).

Geology and geological interpretation

The Aurora uranium property is within the Miocene McDermitt caldera system straddling the Oregon-Nevada border. The McDermitt caldera is approximately 48 km (30 miles) north to south and 32 km (20 miles) 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 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 uranium, lithium and mercury 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 3 km (9,800 ft) long by 1 km (3,300 ft) 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 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.



Drilling techniques and hole spacing

Drilling that supports the Mineral Resource estimate was primarily Reverse Circulation (543 holes including 537 historic holes) with supporting Diamond Core drilling with 55 diamond spread across the deposit, including 32 drilled by Energy Ventures Limited (EVE) in 2011 as confirmation drilling and to collect metallurgical sample. Most of the drilling was completed between 1978 and 1980 by Placer Amex Inc. (Placer) in Joint Venture with prospector Locke Jacobs (Jacobs). EVE's 2011 program included 32 PQ sized core holes and 6 (wet) RC holes

The interpretated geological and mineralized domains are supported by a tight drilling pattern (60m x 30m or 200 ft x 100 ft), detailed drill hole logging and assays together with structural and mineralogical studies completed by Jacobs/Placer, and more recently EVE and its geologists and consultants. 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 that were used to validate the digital database.

Sampling and sub-sampling techniques

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. 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

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.

Sample analysis method

EVE diamond drill core and RC samples were coarse crushed and then pulverised (nominal 85% passing 75 microns) to obtain a homogenous sub-sample for assay.

For all historic (Jacobs and Placer) holes, measurement of the uranium concentration in drillholes was made with radiometric logging throughout the entire resource area and surrounds. Radiometric logging of the drill holes was completed by Century Geophysical using the Compu-Log system. This system is comprised of 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. Neutronneutron 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 eU₃O₈% 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.

Confirmation analyses included direct chemical assays and closed can radiometric assays for selected Placer core holes. 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, 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 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-HCIO4-HF-HCI). Samples were then checked using XRF techniques. 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.

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 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 .

Cut-off grades

The tenor of U_3O_8 grades between drill holes demonstrates generally low variability and the identified lower (100-300ppm U_3O_8) and higher grade (>300ppm U_3O_8) sub-domains within the broader uranium-mineralised domain can clearly be modelled with continuity supported by lithology, downhole radiometric logging, and multi-element geochemistry.

Estimation Methodology

Grade wireframes correlate extremely well with the logged volcanic host units located immediately below the and capped by the overlying lake sediments. These grade domains include a broader low grade mineralized envelope (approximately 100ppm U_3O_8 cut-off) with internal modelled higher grade sub-domains (approximately 300ppm U_3O_8 cut-off). To the north-east, the mineralized zone is constrained by an interpreted horst-graben bounding structure. These domain models were constructed using Leapfrog^{IM} software modelling tools and coded into the final Geovia Surpac^{IM} software block model.

Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac[™] software for U_3O_8 (ppm). Drill hole samples were flagged with modelled domain codes and sample data was composited for U_3O_8 ppm to 1m using a best fit method. Influences of extreme sample distribution outliers were investigated to potentially be top-cut on a domain basis. Top-cuts were checked by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, the domaining proved to be robust and no data required top-cutting. Directional variograms were modelled by domain using traditional variograms. Nugget values are very low (around 5% or less) and structure ranges up to 120m.

The Aurora block model was constructed with parent blocks of 8m (E) by 16m (N) by 4m (RL) and sub-blocked to 2m (E) by 4m (N) by 0.5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains. Three estimation passes were used with the first pass utilising limits of 90m, the second pass 180m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4. Search orientations were by dynamic anisotropy along the trend of the mineralised zones. Search ellipse sizes were based primarily on a combination of the variography, and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.

Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing, and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.



Subsequent to the announced January 2011 Aurora Mineral Resource, EVE contracted AAL as part of the laboratory work to conduct Specific Gravity (SG) measurements using Archimedes method with wax coating. A total of 3,508 valid measurements were reported. Analysis of these measurements by domain for the new November 2022 model indicates the 1.9 t/m3 used for the January 2011 Mineral Resource matches exactly for the higher grade >300ppm U_3O_8 domains (522 measurements) and with 2.1 for the lower grade 100ppm to 300ppm U_3O_8 domains (1,064 measurements). The overlying lake sediments (potential lithium host zone with 875 measurements) has a consistent bulk density of 1.55 and the underlying volcanics (waste) of 2.1 also (1,047 measurements).

Classification criteria

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information.

The tenor of U₃O₈ grades between drill holes demonstrates generally low variability and the identified lower and higher grade sub-domains within the broader uranium-mineralised domain can clearly be modelled with continuity supported by lithology, downhole radiometric logging, and multi-element geochemistry.

Further to the above, the Mineral Resources are considered to have reasonable prospects for eventual economic extraction (RPEE) based on:

- Location just within Oregon, USA within a couple of km's of the Nevada (favourable mining jurisdictions) close to Reno;
- No known impediments to land access or tenure;
- Amenability of the ore body to low-cost traditional open-pit mining methods;
- Metallurgical test work completed to date on representative material showing potentially economic recoveries via conventional leaching processes;

All factors considered, the resource estimate has for most been assigned to Measured and Indicated resources with the remainder to the Inferred category.

Typical drill spacing supporting Measured is 30m across strike x 60m along strike with scattered infill including the 2011 core holes by EVE.

Typical drill spacing supporting Indicated is 30-60m across strike x 60-120m along strike around the margins of the Measured.

It is noted that the majority of the of Inferred material lies on the south-eastern and south-western fringes of modelled zone and is typically lower grade. These areas do not have consistent recent infill drilling and rely mostly for grade on downhole eU_3O_8 grades.

Mining and metallurgical methods and parameters

Based on the orientations, thicknesses, and shallow depths to which the U-mineralised volcanic-hosted domains have been modelled, plus their estimated grades for U_3O_8 , the expected mining method is open pit mining.

Placer 1979/1980 metallurgical results produced indicative recoveries as follows:

Processing method	Indicative recovery (%)
Strong Acid Leach	55 %
Acid Leach at 80°C no oxidant	60 %
Acid Leach at 80°C and 20% Sodium Chlorate	70 %
Acid Pressure Leach	85 %



No metallurgical testing had been undertaken at Aurora by EVE at the date the Aurora JORC 2004 Mineral Resource was originally published in January 2011.

In late January 2012, EVE announced preliminary metallurgical results (ASX: EVE announcement dated 31 January 2012 titled Initial Metallurgical Results from the Aurora Deposit) received from a metallurgical testwork programme that was conducted on representative mineralisation samples from the Aurora uranium deposit. Scrubbing and wet screening tests demonstrated that Aurora's uranium mineralisation can be separated into size fractions with distinctly different physical and mineralisation characteristics.

The test results showed:

- Approximately 30% of the sample consisting of hard, coarse material could be separated, with the loss of only around 10% of total uranium.
- After scrubbing attrition, around 55% of the total uranium mineralisation reported to sizes less than 2 mm and around 35% reported to sizes less than 149 µm.
- The fine mineralisation could be separated into clay and non-clay fractions.

These results were significant and promising as:

- It showed the potential for efficient removal of internal waste with minimal uranium losses, which would allow the feed grade to be increased prior to leaching.
- The removal of hard, coarse waste and low-grade material would reduce crushing and grinding costs, as well as reagent consumption.
- Capital costs should also be lower due to a smaller volume requiring grinding.
- The separation of clay and non-clay mineralisation may allow different leach processes for each ore type, with potential for improved reagent consumption and recoveries compared to the bulk leach results from previous work.

Further metallurgical testwork is required to confirm these conclusions and assess the leaching characteristics of the different size fractions.

Appendix 2: 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. 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: Jacobs and Placer – 537 RC holes (60,558.5m as 3.8", 5.3" & 6")and 23 core holes (2,083m) 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. 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 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 was carried out under EVE's standard protocols and QAQC procedures which are considered standard industry practice. EVE's RC holes obtained representative 5ft (1.5m) metre samples. EVE's diamond drill core holes were completed to provide

Criteria	JORC Code explanation	Commentary
		 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.
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) and >88% recent EVE 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 drilling are stored on site in two

Criteria	JORC Code explanation	Commentary
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. 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 insitu 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. 	 weatherproof shipping containers at a property in McDermitt (as at Q4 2022). All EVE diamond drill core was photographed, and holes were also logged geotechnically. No core or core photographs remain for the historic core drilling. 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. 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. The sample sizes are considered appropriate for the style of
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. 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. 	 mineralisation observed. 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 drill holes was completed by Century Geophysical using the Compu-Log system. This system is comprised of 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

Criteria	JORC Code explanation	Commentary
		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 ₃ O 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, 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 1/10 th foot increments for the parameter's gamma, conductivity, resistivity, and temperature. The eU ₃ O 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 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-HCIO4-HF-HCI). Samples were then checked using XRF techniques. • These techniques are considered appropriate and are industry best standard. The techniques are considered to be a total digest. • EVE utilised indus

Criteria	JORC Code explanation	Commentary
		 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 eU₃O₃% 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 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.
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 (eU₃O₈) was made with radiometric logging. For selected historic core and for all the EVE core, they were also assayed for U₃O₈ by ICP-MS and XRF methods. All methods were compared with consistent results, verifying all significant intersections.

Criteria	JORC Code explanation	Commentary
		 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 U₃O₈ rather than eU₃O₈. For EVE holes, primary geological data was collected via paper (and data entered) 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 U₃O₈ using a factor of 1.179.
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.

Criteria	JORC Code explanation	Commentary
		Downhole surveys were completed on a few EVE drill holes using a downhole survey tool. Only 4 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: 10000.000mE, 10000.000mN = 425315.859mE, 4653333.481mN 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. Samples were transported to the AAL laboratory in Reno by EVE 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. 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 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 a 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.
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.

Criteria	JORC Code explanation	Commentary
		 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 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 Toroto Stock Exchange and b) to con

Criteria	JORC Code explanation	Commentary
		 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 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 zone approximately 1.5km (6,000ft) long by 300m (1000ft) wide. The mineralized horizons range from a true thickness of a few feet around

Criteria	JORC Code explanation	Commentary
		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 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 Dornot 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.
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. 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.

Criteria	JORC Code explanation	Commentary
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 U₃O₈ 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. 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

Criteria	JORC Code explanation	Commentary
		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 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. New drilling and sampling across the entire claim block is planned to test the lithium potential of the overlaying lithium-bearing lakebed sediments.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	 The database was compiled by drillhole database specialists Mitchell River Group, from a digital database received by EVE on acquisition of the project from Uranium One Inc. in 2010. Data captured during 2010 to 2012 in the field by EVE geologists utilized paper logging templates and spreadsheets with structured logging and sampling coding libraries to minimize data capture errors and validate the data before it is imported to the SQL database. Data were imported into a relational SQL Server database using DataShed™ (industry standard drill hole database management software). The data was constantly audited, and any discrepancies checked by EVE and now AEM personnel before being updated in the database.
	Data validation procedures used.	 Normal data validation checks were completed on import to the SQL database. Random data have been cross checked back to hardcopy logs, reports, original laboratory report files or survey certificates. All 2011 logs were supplied as spreadsheets and any discrepancies checked and corrected by field personnel.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Lauritz Barnes (Resource Geologist and Competent Person) has been actively involved in the EVE exploration program with multiple site visits undertaken to the deposit area and the nearby EVE core storage in 2011 and 2012 – and also in now in May and November 2022.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 The confidence in the geological interpretation is considered robust. Models were created with significant input from EVE and AEM's geological team and knowledge from previous modelling. The interpretated geological and mineralized domains are supported by a tight drilling pattern (100 ft apart on lines spaced 200 ft apart which equates to 60m x 30m), detailed drill hole logging and assays together with structural and mineralogical studies completed by Jacobs/Placer, and more recently EVE and its geologists and consultants. Grade wireframes correlate extremely well with the logged volcanic host units located immediately below the and capped by the overlying lake sediments. These grade domains include a broader low grade mineralized envelope (approximately 100ppm U₃O₈ cut-off) with internal modelled higher grade subdomains (approximately 300ppm U₃O₈ cut-off). To the north-east, the mineralized zone is constrained by an interpreted horst-graben bounding

Criteria	JORC Code explanation	Commentary
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth	 structure. These domain models were constructed using Leapfrog™ software modelling tools and coded into the final Geovia Surpac™ software block model. The key factor of continuity confidence is the use of detailed downhole radiometric logs to support geological logging observations which can, with a majority of holes being drilled RC, sometimes miss subtle lithological changes. The main drilled mineralized domain has approximate dimensions of 1,500m along strike (NW-SE), up to 500m wide and ranging between 1-2m on the fringes
	below surface to the upper and lower limits of the Mineral Resource.	and up to 60m thick vertically - and present from surface or with a thin lake sediment cap.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for U₃O₃ (ppm). Drill spacing is tight with holes 100 ft apart on lines spaced 200 ft (which equates to 60m x 30m) with some additional targeted infill. Drill hole samples were flagged with wire framed domain codes. Sample data was composited for U₃O₃ ppm to 1m using a best fit method. Influences of extreme sample distribution outliers were investigated to potentially be top-cut on a domain basis. Top-cuts were checked by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, the domaining proved to be robust and no data required top-cutting. Directional variograms were modelled by domain using traditional variograms. Nugget values are very low (around 5% or less) and structure ranges up to 120m. The Aurora block model was constructed with parent blocks of 8m (E) by 16m (N) by 4m (RL) and sub-blocked to 2m (E) by 4m (N) by 0.5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains. Three estimation passes were used. The first pass had limits of 90m, the second pass 180m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4. Search orientations utilized dynamic anisotropy along the trend of the mineralised zones. Search ellipse sizes were based primarily on a combination of the variography, and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains. Validation of the block model included a volumetric comparison of the resource

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		wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing, and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnes have been estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The mineralised domain interpretations were based upon a combination of geology, supporting multi-element geochemistry and downhole radiometric logging.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Based on the orientations, thicknesses, and shallow depths to which the U-mineralised volcanic-hosted domains have been modelled, plus their estimated grades for U ₃ O ₈ , the expected mining method is open pit mining.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Placer 1979/1980 metallurgical results produced indicative recoveries as follows: Processing method Indicative recovery (%) Strong Acid Leach Acid Leach at 80°C no oxidant Acid Leach at 80°C and 20% Sodium Chlorate Acid Pressure Leach No metallurgical testing had been undertaken at Aurora by EVE at the date the Aurora JORC 2004 Mineral Resource was originally published in January 2011. In late January 2012, EVE announcement initial metallurgical results (ASX: EVE announcement dated 31 January 2012 titled Initial Metallurgical Results from the Aurora Deposit). Key outcomes from this included: Preliminary results received from a metallurgical testwork programme being conducted on representative mineralisation samples from the Aurora uranium deposit. Scrubbing and wet screening tests have demonstrated that the Aurora

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		mineralisation can be separated into size fractions with distinctly different physical and mineralisation characteristics. • The test results showed: • Separation of approximately 30% of the sample as a hard, coarse material containing around 10% of total uranium. • Scrubbing attrition resulting in around 55% of total uranium mineralisation reporting to sizes less than 2 mm and around 35% reporting to sizes less than 149 µm. • Separation of fine mineralisation into clay and non-clay fractions. • The significance of the results: • Potential for efficient removal of internal waste through scrubbing and screening with minimal uranium losses. This would allow bulk mining of the resource and upgrading of mineralisation prior to leaching. • Removal of hard, coarse waste and low-grade material should significantly reduce crushing and grinding costs, as well as reducing capital costs due to lower volumes requiring grinding. • Separation of clay and non-clay mineralisation will allow different leach processes for each ore type, with potential for improved reagent consumption and recoveries compared to bulk leach results from previous work. • Further metallurgical testwork is required to assess leaching characteristics of the different size fractions.
+	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 No baseline studies have been initiated – an environmental baseline study program will be designed in concert with State and Federal agencies once a notice of intent is finalized. It is anticipated that the project will be designed as a zero-discharge operation with no mine waste or process residues leaving the site.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether	In Myers' 2005 NI43-101 report, as sourced from Placer Amex Inc, 1980, Placer and Hazen Labs completed specific gravity determinations for 199 hundred samples from the Aurora project and from the nearby McDermitt mercury mine,

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	 wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	which occurs in equivalent lithologic units. The detailed data has been sourced from the historic paper database and captured in the current digital database. The results were summarized in the 1980 Placer Pre-Feasibility report (Placer Amex Inc, 1980). Results for the unmineralized volcanic rocks within the Aurora deposit indicate the density values are somewhat low compared to volcanic rocks of similar composition in general. The low density is attributed to the strong clay and opalite alteration and high porosity and open space nature of the brecciated volcanic rocks. • Density values were assigned to the historic block model is based on those from the above-mentioned reports as follows: • Rock Type Density (t/m³) • Gravels 2.23 • Lake Sediments 1.90 • Volcanic Rocks 1.93 • As such, the mineralised zones within the January 2011 Aurora Mineral Resource were assigned a blanket bulk density of 1.9 t/m³. • In addition, and subsequent to the announced January 2011 Aurora Mineral Resource, EVE contracted AAL as part of the laboratory work to conduct Specific Gravity (SG) measurements using Archimedes method with wax coating. A total of 3,508 valid measurements were reported. • Analysis of these measurements by domain and correlation against U ₃ O ₈ ppm for the new November 2022 model indicates the 1.9 t/m³ used for the January 2011 Mineral Resource matches for the higher grade >300ppm U ₃ O ₈ domains (522 measurements) and now with 2.1 for the lower grade 100ppm to 300ppm U ₃ O ₈ domains (1,064 measurements). The overlying lake sediments (potential lithium host zone with 875 measurements) has a consistent bulk density of 1.55 and the underlying volcanics (waste) of 2.1 also (1,047 measurements).
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. The tenor of U₃O₈ grades between drill holes demonstrates generally low variability and the identified lower and higher grade sub-domains within the broader uranium-mineralised domain can clearly be modelled with continuity supported by lithology, downhole radiometric logging, and multi-element geochemistry. Further to the above, the Mineral Resources are considered to have reasonable prospects for eventual economic extraction (RPEEE) based on:

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		 Location just within Oregon, USA within a couple of km's of the Nevada (favourable mining jurisdictions) close to Reno; No known impediments to land access or tenure; Amenability of the ore body to low-cost traditional open-pit mining methods; Metallurgical test work completed to date on representative material showing potentially economic recoveries via conventional leaching processes; All factors considered, the resource estimate has for most been assigned to Measured and Indicated resources with the remainder to the Inferred category. Typical drill spacing supporting Measured is 30m across strike x 60m along strike with scattered infill including the 2011 core holes by EVE. Typical drill spacing supporting Indicated is 30-60m across strike x 60-120m along strike around the margins of the Measured. It is noted that the majority of the of Inferred material lies on the south-eastern and south-western fringes of modelled zone and is typically lower grade. These areas do not have consistent recent infill drilling and rely mostly for grade on downhole eU₃O₈ grades.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No independent audits/reviews have yet been completed on the Aurora Mineral Resource apart from internal EVE peer review.