
# AURA COMPLETES TIRIS URANIUM PROJECT RESOURCE UPGRADE

## TOTAL TIRIS RESOURCE EXPANDS TO 52 MILLION LBS $U_3O_8$

## MEASURED AND INDICATED CATEGORY CONTAINS 17 MLBS $U_3O_8$ AT 100 PPM CUT-OFF – SIGNIFICANTLY ABOVE EXPECTATION

## NEW RESOURCES ADDED AT LAZARE NORTH AND AT NEW EXPLORATION AREA, HIPPOLYTE SOUTH

## RESOURCE CONTINUITY A HIGHLIGHT OF THE UPGRADE STUDY

**Key Tiris Uranium Resource Statistics:**

- **52 million lbs total resource (all categories) @100ppm cut-off grade, up 6.1%**
- **17 million lbs $U_3O_8$ Measured + Indicated (M&I) Resource @ 100ppm cut-off grade**
- **Includes 10.5 million lbs at 342 ppm $U_3O_8$ in M&I Resource @ 200ppm cut-off grade**
- **Includes 6.3 million lbs at 469 ppm $U_3O_8$ in M&I Resource @ 300ppm cut-off grade**

**Aura Energy Limited (AEE:ASX, AURA: AIM)** is pleased to announce the successful completion of the Tiris Uranium Project Resource upgrade. The results exceeded expectations with an increase in the overall resource to 52 million lbs $U_3O_8$, 17 million pounds in the Measured and Indicated Categories, good resource continuity and a contribution from the new Hippolyte South exploration area.

“This Resource upgrade has exceeded our expectations in many ways”, Aura’s Executive Chairman, Mr Peter Reeve said. “Our objective was to upgrade approximately 7 million lbs of contained $U_3O_8$ to the Measured and Indicated categories, so the achievement of 17 million lbs has exceeded this by a wide margin providing potential for more than 17 years mine life.”

“The resource contribution from our new exploration area Hippolyte South was very encouraging as was our resource experts highlighting the orebody continuity, an important aspect for our future development plans. Pleasingly, this upgrade study only

Level 1, 34-36 Punt Road Windsor Victoria Australia 3181
Tel: +61 3 9516 6500 /Email: info@auraenergy.com.au

covered part of the original resource so further increases in the Measured and Indicated categories are possible in the future."

"Aura has again moved this important project forward and will now be in a position to have the full Exploitation Permit granted by the government. It's a great achievement all round." He said.

The resource estimation by Aura's consultants has demonstrated that while short range variability occurs, these deposits show good continuity at a broader scale. This opens the possibility for non-selective bulk mining of the Tiris mineralisation. Aura will now address this during the production of a final mine plan.

Aura previously defined an Inferred Resource of 49 Mlbs at a grade of 334 ppm $U_3O_8$ (at a 100 ppm $U_3O_8$ lower cut-off grade)[1]. In 2017, Aura conducted an extensive drilling campaign in order to upgrade a significant portion of this resource to Measured and Indicated status to allow the establishment of mining reserves sufficient for the initial 5 to 10 years of operation of the Tiris Uranium Mining Project in Mauritania.

As announced previously one of the key technical aspects to the Tiris Uranium Project is the ability to beneficiate the ore to a higher grade before processing in the leach circuit. Given the uranium mineral is very fine grained carnotite, simple washing and screening has resulted in beneficiation upgrades of between 330 to 700%. In past test work the effect of this upgrade was found across all zones of the orebody and the impact on both the plant capital cost and operating cost is significant as between 80-90% of the mass is rejected before the main processing.

These new resource figures should be considered in the context of the unique beneficiation properties of the Tiris ore.

The Tiris uranium resources occur in 9 separate deposits in exploration permits held 100% by Aura. The recent resource upgrade work focused on 4 of these deposits, in the area where initial mining is proposed.

Following the latest resource estimation, the Tiris resource inventory[2] (Table 1) is as follows:

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[1] Refer Aura ASX announcement dated 16 July 2014 "Reguibat Uranium Project Scoping Study Complete"

[2] This Tiris Resource Inventory aggregates the 2018 Resource Estimates by H&S Consultants Pty Ltd on the Lazare North, Lazare South, Hippolyte, and Hippolyte South deposits and the 2011 Resource Estimates by Coffey Mining on the Sadi, Ferkik West, Ferkik East, Hippolyte West and Agouyame deposits. The 2011 Resource Estimate was the subject of Aura ASX announcement dated 19 July, 2011 "First Uranium Resource in Mauritania". The 2011 Resource Estimate was produced in compliance with the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Aura confirms that all material assumptions and technical parameters underpinning the 2011 estimates in the relevant market announcement continue to apply and have not materially changed.

| Cut-off Grade $U_3O8$ ppm | Class | Tonnes/Mt | $U_3O_8$ ppm | $U_3O_8$ (MLBS) |
|---|---|---|---|---|
| | | | | |
| 100 | Measured | 10.2 | 240 | 5.3 |
| | Indicated | 24.5 | 220 | 11.7 |
| | Inferred | 23.6 | 230 | 11.9 |
| | **Total** | **58.3** | **230** | **29.0** |
| 200 | Measured | 4.5 | 350 | 3.5 |
| | Indicated | 9.5 | 340 | 7.0 |
| | Inferred | 8.6 | 390 | 7.3 |
| | **Total** | **22.6** | **360** | **17.9** |
| 300 | Measured | 2.1 | 470 | 2.2 |
| | Indicated | 4.0 | 470 | 4.1 |
| | Inferred | 4.2 | 540 | 4.9 |
| | **Total** | **10.3** | **500** | **11.3** |

**Table 1. Tiris Resource Inventory**

**(Note: Totals in Tables may not sum due to rounding)**

## High Grade Zones Within the Tiris Resource

Parts of the mineralised zones have substantially higher grades than the global average. As indicated in the resource tabulation in Table 3 at a cut-off grade of 300 ppm there is 24.1 Mlbs $U_3O_8$ at 450 ppm $U_3O_8$ (in all resource categories).

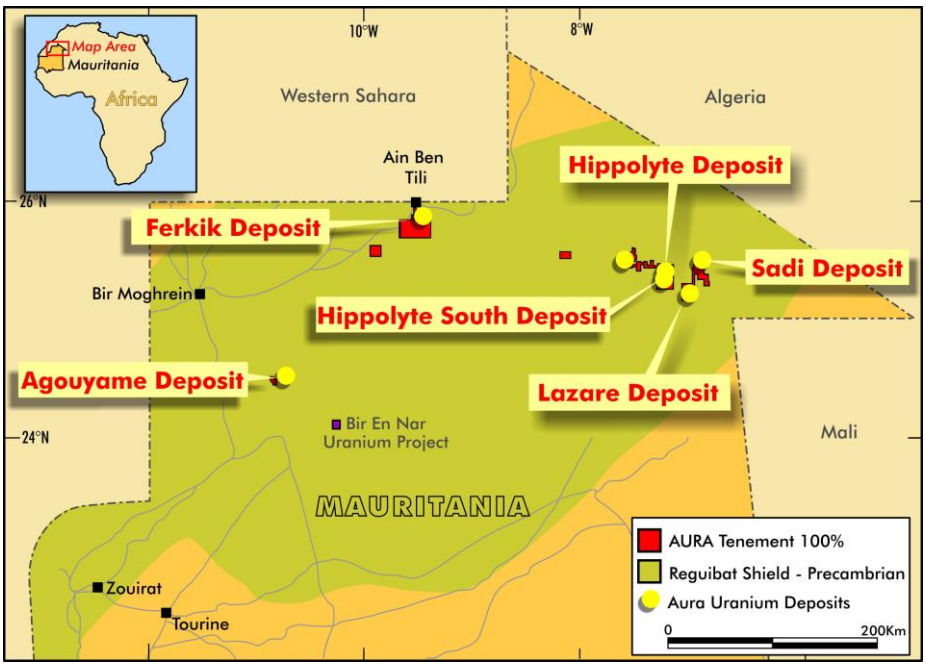


**Figure 1. Location of Aura's Tiris Uranium Resources**

## Resource Estimation

The latest Mineral Resource estimate was prepared by H&S Consultants Pty Ltd. The H&SC Mineral Resource estimate was confined to the Hippolyte, Lazare North and South, and Hippolyte South deposits. (See Figure 2).

It was based on 3 separate drilling programs conducted in 2017, 2012 and 2011.

The 2017 drilling program comprised 8,200 metres of drilling in 1428 air-core holes and 59 large diameter (PQ) diamond drill holes. Down hole logging was conducted on all holes using a calibrated total gamma logging system between June 2017 and November 2017. Aura engaged Poseidon Geophysics (Botswana) to supply experienced logging geophysicists and the required gamma logging equipment. The 2 gamma logging sondes were sent to the Department of Environment, Water & Natural Resources, Adelaide South Australia for calibration prior to the survey. Holes were drilled for the most part on a 50m x 50m pattern, and three 100m x 100m squares of close spaced (12.5m x 12.5m) holes were drilled to define short range variability.

All diamond drill core was transported to Nouakchott for density determinations, geological logging, core cutting and sampling, and chemical assaying in Ireland in order to validate the downhole radiometric logging results.

Radioactive disequilibrium determinations were carried out on 150 samples ANSTO (Australian Nuclear Science & Technology Organisation) and Actlabs Laboratories in Canada. This work indicated that the degree of disequilibrium is relatively constant and consistent throughout the deposits and that a factor of 1.25 should be applied to uranium grade determined by downhole gamma logging to obtain true uranium grade.

The classification of the estimate into Measured, Indicated and Inferred Resources is nominally based on the search pass used to estimate the block. Measured Resources have been delineated generally by a drill pattern of 50m x 50m, Indicated Resources by 100m x 50m or 100m x 100m and Inferred Resources by 100m x 200m.

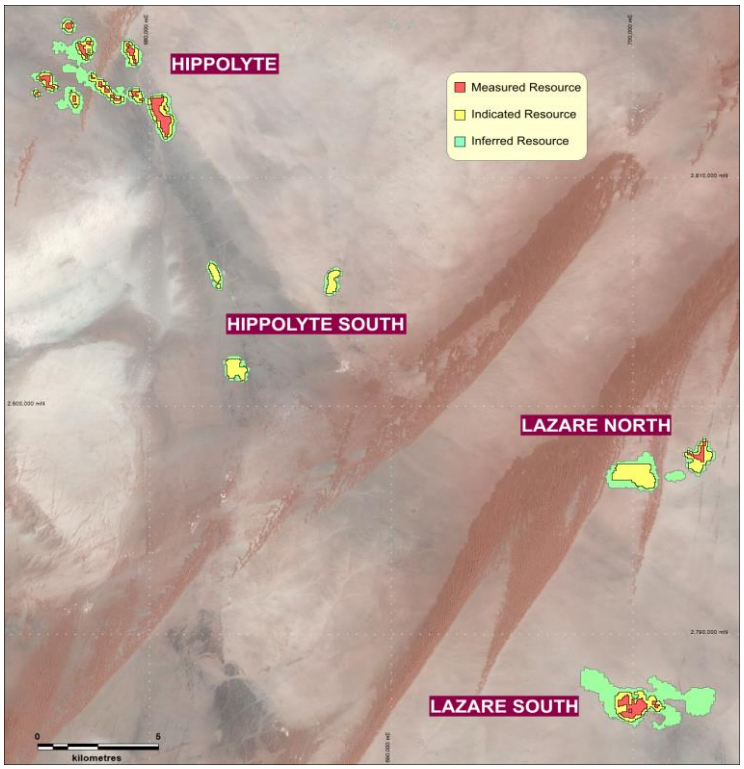


**Figure 2. Location of 2018 Tiris Resource Estimate Zones**

## Next Steps

The resource model developed from the 2018 Resource Estimate will be used to generate mining reserves and an initial mine plan which will feed into the Tiris Feasibility Study currently in preparation.

| Cut-off Grade $U_3O8$ ppm | Resource Zone | Class | Tonnes/Mt | $U_3O_8$ ppm | $U_3O_8$ (MLBS) |
|---|---|---|---|---|---|
| 75 | Hippolyte | Measured | 7.0 | 240 | 3.1 |
| | | Indicated | 8.4 | 220 | 3.5 |
| | | Inferred | 9.4 | 230 | 5.0 |
| | Hippolyte South | Measured | | | |
| | | Indicated | 6.0 | 220 | 2.3 |
| | | Inferred | 4.2 | 230 | 1.4 |
| | Lazare North | Measured | 1.2 | 240 | 0.7 |
| | | Indicated | 13.2 | 220 | 5.8 |
| | | Inferred | 5.6 | 230 | 2.1 |
| | Lazare South | Measured | 4.1 | 240 | 1.9 |
| | | Indicated | 3.5 | 220 | 1.4 |
| | | Inferred | 12.9 | 230 | 5.0 |
| | | **Total** | **75.5** | **194** | **32.2** |
| 100 | Hippolyte | Measured | 5.7 | 220 | 2.8 |
| | | Indicated | 6.5 | 220 | 3.1 |
| | | Inferred | 7.4 | 280 | 4.6 |
| | Hippolyte South | Measured | | | |
| | | Indicated | 4.8 | 190 | 2.0 |
| | | Inferred | 3.1 | 180 | 1.2 |
| | Lazare North | Measured | 1.1 | 280 | 0.7 |
| | | Indicated | 10.6 | 230 | 5.4 |
| | | Inferred | 3.9 | 210 | 1.8 |
| | Lazare South | Measured | 3.4 | 240 | 1.8 |
| | | Indicated | 2.6 | 220 | 1.3 |
| | | Inferred | 9.1 | 210 | 4.3 |
| | | **Total** | **58.3** | **230** | **29.0** |
| 200 | Hippolyte | Measured | 2.3 | 350 | 1.8 |
| | | Indicated | 2.4 | 340 | 1.8 |
| | | Inferred | 3.5 | 440 | 3.4 |
| | Hippolyte South | Measured | | | |
| | | Indicated | 1.6 | 290 | 1.0 |
| | | Inferred | 0.7 | 290 | 0.5 |
| | Lazare North | Measured | 0.7 | 370 | 0.6 |
| | | Indicated | 4.5 | 350 | 3.4 |
| | | Inferred | 1.3 | 350 | 1.0 |
| | Lazare South | Measured | 1.6 | 350 | 1.2 |
| | | Indicated | 1.0 | 350 | 0.8 |
| | | Inferred | 3.1 | 360 | 2.5 |
| | | **Total** | **22.6** | **360** | **17.9** |
| 300 | Hippolyte | Measured | 1.0 | 470 | 1.1 |
| | | Indicated | 1.1 | 470 | 1.1 |
| | | Inferred | 1.9 | 600 | 2.5 |
| | Hippolyte South | Measured | | | |
| | | Indicated | 0.5 | 400 | 0.4 |
| | | Inferred | 0.2 | 420 | 0.2 |
| | Lazare North | Measured | 0.4 | 480 | 0.4 |
| | | Indicated | 2.0 | 470 | 2.1 |
| | | Inferred | 0.6 | 500 | 0.6 |
| | Lazare South | Measured | 0.7 | 480 | 0.8 |
| | | Indicated | 0.4 | 480 | 0.5 |
| | | Inferred | 1.4 | 510 | 1.6 |
| | | **Total** | **10.3** | **500** | **11.3** |

**Table 2(a). 2018 Resource Estimate by H&S Consultants**

**(Note: Totals in Tables may not sum due to rounding)**

| Cut-off $U_3O_8$ g/t | Resource Zone | Class | Tonnes (Mt) | $U_3O_8$ (g/t) | $U_3O_8$ (Mlb) |
|---|---|---|---|---|---|
| 100 | **Sadi** | Inferred | 8.6 | 330 | 6.2 |
| | **Ferkik West** | Inferred | 11.9 | 330 | 8.8 |
| | **Ferkik East** | Inferred | 4.5 | 240 | 2.4 |
| | **Hippolyte West** | Inferred | 6.3 | 300 | 4.2 |
| | **Agouyame** | Inferred | 2.6 | 210 | 1.2 |
| | | **Total** | **33.9** | **304** | **22.8** |
| 200 | **Sadi** | Inferred | 7.3 | 350 | 5.7 |
| | **Ferkik West** | Inferred | 11.2 | 340 | 8.5 |
| | **Ferkik East** | Inferred | 2.8 | 280 | 1.7 |
| | **Hippolyte West** | Inferred | 5.5 | 320 | 3.9 |
| | **Agouyame** | Inferred | 1.4 | 240 | 0.7 |
| | | **Total** | **28.2** | **330** | **20.5** |
| 300 | **Sadi** | Inferred | 4.1 | 430 | 3.9 |
| | **Ferkik West** | Inferred | 6.7 | 400 | 6.0 |
| | **Ferkik East** | Inferred | 0.9 | 370 | 0.8 |
| | **Hippolyte West** | Inferred | 2.2 | 430 | 2.1 |
| | | **Total** | **13.9** | **417** | **12.8** |

**Table 2(b). 2011 Resource Estimate by Coffey Mining**

| Cut-off U3O8 (ppm) | Resource Zones | Class | Tonnes (Mt) | $U_3O_8$ (ppm) | $U_3O_8$ (MLBS) |
|---|---|---|---|---|---|
| 100 | All | All | 92.2 | 255 | 51.8 |
| 200 | All | All | 50.8 | 343 | 38.4 |
| 300 | All | All | 24.2 | 452 | 24.1 |

**Table 3. Combined 2018 and 2011 Resource Estimate (all classes)**

## Summary of Resource Estimate and Reporting Criteria

In accordance with Australian Securities Exchange Listing Rule 5.8 and the JORC 2012 reporting guidelines, a summary of the material information used to estimate the Mineral Resource is set out below (for further detail please refer to the Appendix to this Announcement).

## Geology and geological interpretation

The Tiris deposits lie on the Paleoproterozoic rocks of the Reguibat Craton. The rocks of the Reguibat Craton are principally granitoids, meta-sediments and volcanics, generally of high metamorphic grade. Near the resource zones, the rocks are largely granitic, visually of two main types:

- A pale grey medium grained granite with coarse phenocrysts of plagioclase, generally forming low smooth outcrops with uranium content low and typically 2 ppm.
- A finer grained pink porphyritic granite, less abundant then the grey granite. This pink granite is typically fractured and foliated and has higher uranium content in the range of 5 to 20 ppm and therefore, appears to be mildly ‘hot’ granite.

The uranium mineralisation generally forms shallow horizontal tabular bodies ranging in thickness from 1 to 12m hosted in weathered granite and granitic sediments.

## Drilling techniques and hole spacing

The resource estimate is based on data from four field drilling campaigns, comprising Air-Core (AC) drilling in 2010-2011, AC drilling in 2012, AC drilling in 2017 and diamond drilling (DD) in 2017.

The AC drilling between 2010 and 2012 was completed by Australian drilling contractor, Wallis Drilling Pty Ltd using a Mantis drill rig and NQ size bit with all AC drill holes drilled vertically to a maximum depth of 15m. The AC drilling conducted in 2017 was again carried out by Wallis Drilling Pty Ltd using the same rig as that used in previous programmes with all AC drill holes drilled vertically to a maximum depth of 11.5m.

The DD drilling was conducted by the Mauritanian subsidiary of Australian drilling contractor, Capital Drilling Ltd using wireline drilling with a PQ size bit. The DD holes were drilled vertically to a maximum depth of 12.5m.

Holes were drilled for the most part on a 50m x 50m pattern, and three 100m x 100m squares of close spaced (12.5m x 12.5m) holes were drilled to define short range variability.

## Sampling and sub-sampling techniques

Between 2010 and 2012 all drilled material provided by the AC rig was collected in its entirety on 1m intervals with the exception of the first metre which was sampled in 0.5m intervals. In 2010 and 2011, all bagged intervals were subject to a Niton half-held XRF analyser to whether a hole was mineralised. All samples from mineralised holes were then split and sent for sample preparation in Zouerate after which a sample pulp was sent to Ireland for analysis. In 2012, the Niton XRF Analyser was not used and all intervals drilled were subject to chemical analyses.

All intervals were geologically logged, recording parameters such as primary and secondary rock types, colour, oxidation, weathering and moisture content.

The 2017 AC data forms around 60% of the data that underpins the resource estimate and is the major source in all of the areas classified as Measured. 3D Exploration Pty Ltd took responsibility for the collection of the data and the calibration from total counts to uranium values. The uranium concentrations were measured by downhole total count gamma logging which were converted to equivalent uranium grades (eU3O8) by applying calibration information, an air correction and minor smoothing. An important check was undertaken on the disequilibrium between U-238 and its gamma emitting daughter products. A disequilibrium factor was established to adjust all $eU_3O_8$ grades to values close to their true $U_3O_8$ grades.

Gamma logging was undertaken by Poseidon Geophysics gamma logging systems using two calibrated Auslog gamma sondes which made by Auslog Pty Ltd, Queensland and calibrated at Australian Mineral Development Laboratory, in South Australia.

Calibration involved logging test-pits with known grade and thickness (three times) to determine the response of the logging system and then calculating a Calibration ("K") Factor, which gives the true grade (i.e. conversion of counts per second to equivalent eU3O8). The K factor for each gamma probe used the average count rate over a zone in the middle of each pit’s mineralized zone.

DD drill core was subject to geological logging, selected intervals for density measurements and supervised core sawing and sampling. All intervals were geologically logged, recording parameters such as primary and secondary rock types, colour and oxidation.

2010-2012 AC sub-samples were crushed in a jaw crusher to nominal 100% passing 12 mm with 1kg splits taken by laboratory riffle splitter pulverized to 85% passing 80 mesh. 100g splits were taken from pulverised sub-sample and placed in labeled envelope for assay. Assay pulps were then sent to Ireland for uranium analyses by pressed pellet XRF at Stewart Groups Omac Laboratory, Ireland.

Dry bulk density of diamond drill core was measured using an immersion method (Archimedes principle) on selected PQ diamond drill core intervals ranging in length from 10 to 30cm. Competent pieces of drill core were selected on a nominal interval of 50cm.

**Sampling analysis method**

During the 2010-2011 AC drilling program Aura submitted a total of 2,437 AC samples for pressed pellet XRF analysis at Alex Stewart Laboratories, Ireland. 1,906 AC samples were submitted in 2012.

3D Exploration Pty Ltd was engaged by to provide uranium gamma logging expertise, provide gamma logging quality checks and to convert the gamma logs to $eU_3O_8$. As a check on the continuing quality and accuracy of the gamma log measurements, four diamond drilled reference holes were established with each being close to a different logging area. These reference holes were selected to have a range of grades representative of the grades being logged in each different area. The reference holes were logged every few days and showed less than a ±0.5% variation in the calculated grade.

Data from the diamond drilling conducted in 2017 forms only 3% of the data used to estimate the resources at Tiris but it was used to calibrate the 2017 radiometric data, which forms around 60% of the overall data. From the total of 630 core assays from the deposits estimated 446 intervals (70%) had recovery data. Overall the recovery of diamond drill core is reasonably high but there does appear to be a slight decrease of recovery associated with higher-grade uranium mineralisation

**Cut-off grades**

All of the resources reported here have been estimated on the assumption that the deposits will be mined by open-pit. Recoverable Multiple Indicator Kriging was used for block support correction by means of a variance adjustment to account for the change from sample size support to the size of the minimum Selective Mining Unit (SMU) in order to produce estimates of recoverable resources at $U_3O_8$ cut off grades.

Indicative mining and processing costs were applied.
For reporting compliance with JORC 2012 an economic cut-off grade of 100ppm was selected taking into account the factors mentioned above and allowing for some increase in commodity prices to define resources within reasonable prospect of economic extraction.

## Estimation methodology

The uranium concentrations were estimated by recoverable Multiple Indicator Kriging (MIK) using the GS3 geostatistical software. The uranium grades at the Tiris deposits exhibit a positively skewed distribution. The uranium estimates at Tiris therefore show reasonable sensitivity to a small number of high grades.

Recoverable MIK is considered an appropriate estimation method for the uranium grade distribution at the Tiris deposits because it specifically accounts for the changing spatial continuity at different grades through a set of indicator variograms at a range of grade thresholds. MIK can often help avoid or reduce the need to use the practice of top cutting, which can be somewhat arbitrary in the resource estimation process.

Each of the deposits were split into Zones and Subzones. The Zones were selected to be broadly equivalent to the historic Zones defined for each project. All Zones were assigned a three character Subzone number (DepositCode, ZoneCode, SubzoneCode). Subzones were split into smaller areas where necessary in order to provide finer control on domain statistics and variogram orientations.

The locations of all drill hole collars that had been located with the Differential Global Positioning System to create a wireframe representing the topographic surface. The elevations of all drill holes that had been located using a handheld GPS were then derived from this topographic surface. The depth of the estimates was limited by a surface nominally representing the top of the less-weathered granite. This surface was created based on a combination of mapped outcrops and the depth of the end of drill hole uranium assays. This surface represents the base of the estimates in order to limit the extrapolation of grades into volumes that had no data. This is important at Tiris East as there is a general decrease in uranium grades with depth. This surface nominally represents the top of the less-weathered granite, where AC drilling could penetrate no further. The base surface was produced using the locations of the end of the deepest assay from each drill hole. Where drill holes were very close, within around 15m, the shallower point was removed.

The mineralisation in the Tiris deposits is generally flat lying and show reasonably long continuity in plan view and very short vertical continuity. The mineralisation is located close to surface and is planned to be mined by open pit, which the block model parameters were designed to reflect. The Hippolyte, Lazar North and Lazar South deposits have areas that have been drilled on a 50x50m grid whereas the Hippolyte South areas have been drilled on a 100x100m grid. Separate block models were created for Hippolyte, Lazar North, Lazar South and for each of the three Zones in Hippolyte South.

The block dimensions were 50 x 50m in plan view and 1m vertically. The plan dimensions were chosen as it is the nominal drill hole spacing (preferable for MIK estimation). The vertical dimension was chosen to reflect the anisotropy of the mineralisation and the downhole data spacing.

The wireframes representing topography and the base of the estimates were used to assign the fraction of the block above or below the relevant surface. These fractions were used to calculate the fraction of the block insitu, which is the fraction of the

block considered to be relevant to the mineral resource estimate. The block models were also assigned Zone codes using strings. No sub-blocking was used.

**Mining and processing methods and parameters**

Based on orientations, thickness and depths to which the Tiris deposits have been modelled, as well as the estimated grade, open pit mining is the intended mining methodology.

Various metallurgical test work has been undertaken over the years, including air-core drilling test work (wet screening and diagnostic carbonate leach) and trench channel test work (scrubbing, scrubbing and wet screening and carbonate leach).

The test work has identified that:

- Carnotite is consistently fine grained (mean grain size <5 µm) and well liberated after simple scrubbing of the material;
- Finer screen sizes resulted in higher mass rejection, with limited uranium loss; and
- Carbonate minerals are consistently more dominant than sulphate minerals, leading to preference for alkaline leaching conditions.

The process flow sheet developed has been based on crushing, screening and an alkaline carbonate leach in order to recover uranium.

For more information please visit www.auraenergy.com.au or contact the following:

**Mr Peter Reeve**
**Executive Chairman and CEO**
**Phone +61 3 9516 6500**
info@auraenergy.com.au

***Competent Persons***

*The Competent Person for the 2018 Tiris Resource Mineral Estimate is Mr Arnold van der Heyden of H&S Consulting Pty Ltd. The information in the report to which this statement is attached that relates to the 2018 Resource Estimate is based on information compiled under the supervision of Mr van der Heyden. Mr van der Hayden has sufficient experience that is relevant to the resource estimation. This qualifies Mr van der Heyden as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr van der Heyden is a director of H&S Consulting Pty Ltd, a Sydney based geological consulting firm. Mr van der Heyden is a Member and Chartered Professional of The Australasian Institute of Mining and Metallurgy (AusIMM) and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The Competent Person for information relating to uranium grade determination by down hole gamma logging is Mr David Wilson. Mr Wilson has sufficient experience that is relevant to grade estimation by gamma logging to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Wilson is an employee of 3D Exploration Pty Ltd, based in Perth, and an independent consultant to Aura Energy. Mr Wilson is a Member of The Australasian Institute of Geoscientists (AIG) and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The Competent Person for the 2011 Tiris Resource Estimate and classification was Mr Oliver Mapeto from Coffey Mining Pty Ltd. (Refer Footnotes 1&2). The information in the report to which this statement is attached that relates to the 2011 Resource Estimate is based on information compiled by Mr Mapeto. Mr Mapeto has sufficient experience which is relevant to the style of mineralisation, type of deposit under consideration and to resource estimation. This qualifies Mr Mapeto as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Mapeto was at the time of production of the 2011 Resource Estimate an employee of Coffey Mining. It should be noted that the 2011 Resource Estimate was produced in compliance with the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.*

*The Competent Person for drill hole data and for aggregating the 2018 and 2011 resource estimates is Mr Neil Clifford. The information in the report to which this statement is attached that relates to drill hole data and to aggregation of the resource estimates is based on information compiled by Mr Neil Clifford. Mr Clifford has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking. This qualifies Mr Clifford as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Clifford is an independent consultant to Aura Energy. Mr Clifford is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

# APPENDIX 1
# JORC Code 2012
# Table 1 Appendix 5A ASX Listing Rules
# 2018 Tiris Resource Estimate

## Section 1 Sampling Techniques and Data
***(Criteria in this section apply to all succeeding sections)***

| 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). 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 (eg submarine nodules) may warrant disclosure of detailed information.* | • *The data on which this resource estimate is based is from 4 field sampling programs:*<br>*1. An air-core (AC) drilling program in 2010/11 with grade estimation by chemical analysis of drill samples*<br>*2. An AC drilling program in 2012 with grade estimation by chemical analysis of drill samples*<br>*3. An AC drilling program in 2017 with grade estimation by downhole gamma logging*<br>*4. A diamond drilling (DD) program with grade estimation by both chemical analysis of core and by downhole gamma logging, for validation purposes.*<br>• *The 2011/12 drilling was the basis of 2 previous Resource Estimation exercises (ASX release: announcement 14 July 2011 "First Uranium Resource in Mauritania – 50 million pounds", & ASX release: 16 July 2014 "Reguibat Uranium Project Scoping Study Complete). The 2018 resource estimation exercise has been aimed at upgrading a substantial portion of Inferred Resource to a higher resource category.*<br>• *The 2011/12 drillhole spacing was predominantly 100m x 200m. A portion of the 2012 drilling was at a spacing of 50m x 100m drilled to define Indicated Resources. The 2017 drilling was predominantly at a spacing of 50m x 50m to define Measured Resources.*<br>• *AC drill cuttings were riffle split on site to extract approx. 2 kg samples for assay for the downhole intervals 0 to 0.5m, 0.5 to 1.0m, 1 to 2m, & thereafter in 1m intervals to end of hole.*<br>• *Down hole gamma logging in 2017 was by 2 down-hole Auslog gamma sondes operated by Poseidon Geophysics (Pty) Ltd based in Gaborone Botswana using 3 geophysicists employed by Poseidon geophysics*<br>• *The 2 sondes were sent to the Department of Environment, Water & Natural Resources, Adelaide South Australia for calibration prior to the survey* |
| *Drilling techniques* | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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,* | • AC drilling in all programs was conducted *by Wallis Drilling of Perth WA* using a Mantis drillrig and NQ size bit (outer diameter 75.7 mm). AC drilling Diamond drilling (DD) was carried out by Capital Drilling Mauritanie SARL utilising triple tube PQ coring (122.6 mm outer diameter bit, 85 mm diameter core). In 2017 1484 vertical |

| Criteria | JORC Code explanation | Commentary |
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| | *etc).* | drillholes were gamma logged of which 1428 were AC drillholes and 56 were cored diamond drillholes. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | • In 2011/12 AC drilling the total drill return for each sample interval was bagged and weighed to an accuracy of approximately 0.25 kg to estimate sample recovery.<br>• Efforts were made to minimise dust loss, eg in most holes the first metre was drilled without applying compressed air, and thereafter minimum air necessary to lift the sample was applied.<br>• No relationship between estimated recovery and uranium grade was observed.<br>• In view of the ultrafine grain size of the uranium mineral carnotite, even where high recoveries were recorded, it is possible that some carnotite was lost in dust emitted from the drillrig cyclone resulting in underestimation of uranium grade.<br>• 2017 AC drillholes were not physically sampled.<br>• All drillcore was transported in covered core trays to Nouakchott for geological logging, density determination, and core cutting.<br>• Drillcore lengths were measured to an accuracy of c. 1 cm immediately on removal from the core barrel to determine & record core recovery.<br>• Given the ultra-fine grained nature of the carnotite mineralisation, loss of uranium is likely in any core runs recording less than 100% recovery, and even where 100% recovery is recorded it is possible some loss of carnotite may have occurred. |
| *Logging* | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • *In 2011/12 AC drilling each sample interval was geologically logged by an onsite geologist and drill logs were uploaded to Aura's database managed by Reflex Hub in Perth. A sample of sieved & washed chips for each sample interval was retained in chip trays for reference.*<br>• *In 2017 AC drilling only the bottom hole sample was geologically logged, and a sample retained in chip trays.*<br>• *Drillcore was photographed, geologically logged and logs were recorded on Aura's logging template and uploaded to Aura's database managed by Reflex Hub in Perth. 385 density measurements (which included 25 duplicate determinations) were taken on drillcore by ALS Laboratories in Nouakchott under the supervision of Aura's geologist.* |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | • *2011/12 AC drill samples were riffle split on site to provide a minimum 2 kg sample for assay and a duplicate split for reference and possible umpire analysis.*<br>• *Duplicates, blanks, and standards were inserted in the assay sample stream at regular intervals as detailed in the next section.*<br>• *Drillcore was cut in half longitudinally by* |

| Criteria | JORC Code explanation | Commentary |
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| | • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | *diamond saw by ALS Laboratories after marking up by, and under the supervision of, an Aura geologist.*<br>• *For each half-metre of core half-core was bagged for assay*<br>• *Given the fine-grained nature of the uranium minerals these sample sizes are appropriate* |
| *Quality of assay data and laboratory tests* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | • *2011/12 AC drill samples were submitted to Stewart Laboratories sample preparation facility near Zouerate in Mauritania (In 2012 Stewart Laboratories became part of ALS Laboratories). Samples were crushed by jaw crusher to -12mm and 1kg was riffle split for pulverising to +85% passing 75 microns. An c. 100g split was bagged and sent to Stewart Laboratories in Ireland for analysis by pressed pellet XRF. Previous analysis comparing different analytical methods (XRF, ICP, DNC) had indicated that XRF is an accurate method on this material, if an x-ray band is selected for measurement that is not affected by the presence of strontium, and this was done. This method will measure total uranium.*<br>• *Bagged ½ core was prepared by ALS Laboratories Nouakchott by Method Prep 22 (Crush to 70% less than 6mm, pulverize entire sample to better than 85% passing 75 microns). An c. 100g sample of pulp was split off using mini-riffle splitter, placed in sample envelope and forwarded by air to ALS in Ireland for uranium analysis by ALS Method U-MS62 (U by ICP-MS after 4 acid digestion). 4 acid digestion provides near total extraction.*<br>• *Downhole gamma logging was performed by 2 down-hole Auslog gamma sondes comprising:*<br>▪ *DLS5 Winch Controller*<br>▪ *W600-1 12V Portable Winch*<br>▪ *A075 Natural Gamma Tool*<br>• *Logging procedures involved:*<br>▪ *Drill holes were gamma logged as soon as possible after drilling to avoid radon build-up.*<br>▪ *Each borehole logged in both directions to verify consistency*<br>▪ *Logging speed: 2 metres per minute*<br>▪ *Sampling interval: 1 cm*<br>▪ *At least one hole was re-logged after each 20 holes as a repeatability check.*<br>▪ *A reference hole was established and relogged every 2 days as a check on consistency*<br>▪ *Gamma logging procedures & interpretation were supervised by consultant David Wilson who qualifies as a Competent Person in these matters.* |

| Criteria | JORC Code explanation | Commentary |
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| | | • *QAQC procedures for the 2011/12 AC drilling comprised, on average:*<br>▪ *Field duplicates assays: 1 in every 12 samples*<br>▪ *Blanks: 1 in every 31 samples*<br>▪ *Umpire assays: 1 in every 11 samples Umpire analysis was carried on 427 sample intervals. For each of these the original pressed pellet XRF sample assayed by Stewart Labs was re-assayed by ICP by Stewart Labs and also by XRF by ALS Labs and by ICP by ALS.*<br>▪ *Certified Reference material: 1 in every 129 samples*<br>▪ *Total QAQC samples: 1 in every 5 samples*<br>*Accuracy & precision were within acceptable limits.* |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • *Approximately 2,275 drillholes were used in this Resource Estimate. In 1484 of these U grades was determined by downhole gamma logging, and in the remainder U grade was determined by chemical assay. This provides verification of average grades. 57 diamond drillholes were both gamma logged and chemically assayed for validation purposes.*<br>• *To test for radioactive disequilibrium 204 samples were sent to either Australian Nuclear Science and Technology Organisation (ANSTO) in Australia or the Activation Laboratories (Actlabs) in Canada for equilibrium determinations. Results were compiled and interpreted by D Wilson of 3D Exploration who concluded that a factor of 1.29 needs to be applied to all raw gamma grades to provide the correct U grade. Diamond drillcore assaying confirmed the appropriateness of this factor.*<br>• *All drillhole data recorded was uploaded to Aura's online database managed by Reflex Hub. Analyses were forwarded directly from the laboratories to Reflex Hub for incorporation in the database.* |
| *Location of data points* | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • *2011/12 drillhole collars were surveyed by handheld GPS with reported accuracy of +/- 3 metres.*<br>• *All 2017 drillhole collars were surveyed by differential surveying conducted by IRC-Magma to an accuracy of +/- 20 cm in all dimensions.*<br>• *The grid projection used is UTM WGS84 Zone 29N*<br>• *An independent check on topography was provided by satellite data provided by PhotoSat of Vancouver to an accuracy of +/- 20 cm confirming the quality and adequacy of topographic control.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • *Drillholes were spaced in different programs at 50m x 50m, 50m x 100m, 100m x 100m or 100m x 200m.*<br>• *In most cases Measured Resources are based on 50m x 50m spaced drillholes, Indicated Resources are based on 100m x 100m spaced holes, and Inferred Resources on !00m x 200m spaced holes.*<br>• *Downhole gamma data was composited into 0.5m intervals.*<br>• *Three 100m x 100m areas were drilled at 12.5m spacing in both N-S & E-W directions for geostatistical purposes and to examine variability. Variography constructed by the resource consultants confirmed that the drill spacings are appropriate for the Resource classifications. Resource classification was done by the independent resource consultants with no input from Aura.* |
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • *Three 100m x 100m squares were drilled at 12.5m hole spacing in both N-S and E-W directions to investigate grade anisotropy. This indicated a weak NW-SE trend to the mineralisation. The drilling pattern employed is considered appropriate for the mineralisation orientation.* |
| *Sample security* | • *The measures taken to ensure sample security.* | • *Sample collection was supervised by geologists. Samples were transported as soon as practicable to independent sample preparation facilities. Approx.65% of drillholes were assayed by downhole gamma logging and for these sample security is not relevant.* |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • *Resource estimation in 2012 was conducted by Coffey Mining. This was independently reviewed and confirmed by Wardell Armstrong International in 2016. The 2018 resource estimate has been carried out by independent consulting group H&S Consultants Pty Ltd. All of these consulting groups have reviewed and endorsed the sampling, grade estimation and QAQC procedures.* |

## Section 2 Reporting of Exploration Results
***(Criteria listed in the preceding section also apply to this section)***

| Criteria | JORC Code explanation | Commentary |
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| *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.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • *The Resource Estimates are based on drilling conducted on 5 mineral exploration permits held 100% by Aura Energy: 562B4 Oum Ferkik, 563B4 Oued El Foule Est, 564B4 Ain Sder, 2365B4 Oued EL Foule Sud and 2366B4 Agouyame. Exploitation Permit applications by Tiris Ressources SA, a 100% subsidiary of Aura Energy are current over portions of 3 of these exploration permits. Aura is in the process of divesting 10% of Tiris Ressources SA to the Mauritanian Government as required by the Mining Act.*<br>• *Aura has completed an Environmental and Social Impact Assessment which concluded there are no known issues arising from native title, historical sites, environmental or third-party matters which are likely to materially affect exploitation.* |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • *Aura is unaware of any prior exploration on these areas.* |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • *The mineralisation is of the calcrete uranium style. It occurs within Proterozoic rocks of the Reguibat Craton. The mineralisation is developed within near surface altered and weathered granites or and within shallow colluvium lying on granite or adjacent metasediments.* |
| *Drill hole Information* | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>1. *easting and northing of the drill hole collar*<br>2. *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>3. *dip and azimuth of the hole*<br>4. *down hole length and interception depth*<br>5. *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | • *Specific drillhole data is not relevant to the reporting of this resource estimation* |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* | • *Data aggregation methods are summarised in the Resource Estimate report by H&S Consultants which this table accompanies.* |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • *All drillholes on which the resource estimate is based were vertical and approximately perpendicular to the thickness of the mineralisation.* |
| *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 the ASX announcement which this table accompanies.* |
| *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.* | • |
| *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.* | • *Metallurgical testwork is ongoing. Information on processing has been reported in ASX announcement: 16 July 2014 "Reguibat Uranium Project Scoping Study Complete.* |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • *Refer to the ASX announcement which this table accompanies.* |

## Section 3 Estimation and Reporting of Mineral Resources
***(Criteria listed in the preceding section also apply to this section)***

| Criteria | JORC Code explanation | Commentary |
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| *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.*<br>• *Data validation procedures used.* | Aura's database was managed by the independent organisation Reflex Hub, based in Perth.<br><br>H&SC conducted data validation checks such as comparing assay certificates to database records and a variety of checks for internal inconsistencies such as overlapping intervals, records beyond end of hole depth, unassayed intervals and unrealistic drill hole data. |
| *Site visits* | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | H&SC has not visited the Tiris East deposits due to time and budget constraints. H&SC basis its view of the geological setting and mineralisation on drill hole data, discussions with Aura geologists and on information in technical reports. Representatives of Coffey Mining and Wardell Armstrong International conducted site visits in Aril 2012 and May 2016 respectively. |
| *Geological interpretation* | • *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>• *Nature of the data used and of any assumptions made.*<br>• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>• *The use of geology in guiding and controlling Mineral Resource estimation.*<br>• *The factors affecting continuity both of grade and geology.* | The uranium mineralisation generally forms shallow horizontal tabular bodies ranging in thickness from 1 to 12 m hosted in weathered granite and granitic sediments. Differentiation of the weathered granite from granitic sediments is unreliable from AC sample returns. A purely geological model of the Tiris deposits has not been produced.<br><br>H&SC created a surface representing the base of the estimates in order to limit the extrapolation of grades into volumes that had no data. This is important at Tiris East as there is a general decrease in uranium grades with depth. This surface nominally represents the top of the less-weathered granite, where AC drilling could penetrate no further. The base surface was produced using the locations of the end of the deepest assay from each drill hole. Where drill holes were very close, within around 15 m, the shallower point was removed. The base surface also honoured mapped surface outcrops.<br><br>At the time that the estimates were completed, no topographic survey data were available. The vast majority of the 2017 drill collar locations were surveyed using a Differential Global Positioning System (DGPS). H&SC used the locations of all drill hole collars that had been located with the DGPS to create a wireframe representing the topographic surface. The elevations of all drill holes that had been located using a handheld GPS were then derived from this topographic surface.<br><br>The proportion of the block between the topographic and base surfaces were assigned to the block model and used to weight the reported estimates.<br><br>The interpretation of the mineralisation as flat lying tabular bodies is undisputed. The lateral extents of the mineralisation are poorly defined and additional drilling around the edges of the deposits may indicate |

| Criteria | JORC Code explanation | Commentary |
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| | | that mineralisation is more limited than currently interpreted. Alternative interpretations of the geology are very unlikely to significantly impact estimated resources.<br><br>The continuity of both grade and geology are affected by the extent of weathering of the granitic host. The continuity does not appear to be affected by faulting. |
| *Dimensions* | • *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | The Mineral Resources reported here occur in four separate areas (Hippolyte North, Hippolyte South, Lazare North and Lazare South) within a SE trending rectangle around 40 km north-south and 12 km east-west. All mineralisation forms flat lying tabular bodies ranging in thickness from 1 to 12 m.<br><br>The Mineral Resources at Hippolyte North at a cut-off of 100 ppm $U_3O_8$ occur in an area 6 km east-west and 5.5 km north-south. This region is comprised of several separate areas that range in plan dimensions from 500 m to 1.1 km wide and 500 m to 2.2 km long. The upper limit of the mineralisation occurs at surface and the reported resources reach a maximum depth of 11 m below surface.<br><br>The Mineral Resources at Hippolyte South at a cut-off of 100 ppm $U_3O_8$ occur in an area 5.6 km east-west and 5.4 km north-south. This region is comprised of three isolated areas each with a north-south length of around 1.3 km and an east-west length that ranges 400 m to 1.1 km. The upper limit of the mineralisation occurs at surface and the reported resources reach a maximum depth of six metres below surface<br><br>The Mineral Resources at Lazare North at a cut-off of 100 ppm $U_3O_8$ occur in an area 4.5 km east-west and 2.4 km north-south. This region is comprised of three isolated areas. The smallest of these areas has an east-west length of 900 m and a north-south length of 550 m. The largest area has an east-west length of 2.2 km m and a north-south length of 1.8 km. The upper limit of the mineralisation occurs at surface and the reported resources reach a maximum depth of 12 m below surface.<br><br>The Mineral Resources at Lazare South at a cut-off of 100 ppm $U_3O_8$ occur in an irregular shape with an east-west length of 5.5 km and a north-south length of 2.7 km. The largest area has an east-west length of 2.2 km m and a north-south length of 1.8 km. The upper limit of the mineralisation occurs at surface and the reported resources reach a maximum depth of 10 m below surface. |
| *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, maximum distance of extrapolation from data points.* | The uranium concentrations were estimated by recoverable Multiple Indicator Kriging (MIK) using the GS3 geostatistical software. The uranium grades at the Tiris East deposits exhibit a positively skewed distribution and therefore show reasonable sensitivity to a small number of high grades. MIK is considered an appropriate estimation method for the uranium grade distribution at the Tiris East deposits because it |

| Criteria | JORC Code explanation | Commentary |
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| | • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>• *The assumptions made regarding recovery of by-products.*<br>• *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*<br>• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>• *Any assumptions behind modelling of selective mining units.*<br>• *Any assumptions about correlation between variables.*<br>• *Description of how the geological interpretation was used to control the resource estimates.*<br>• *Discussion of basis for using or not using grade cutting or capping.*<br>• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | specifically accounts for the changing spatial continuity at different grades through a set of indicators variograms at a range of grade thresholds. It also reduces the need to use the practice of top cutting.<br><br>All drill hole intervals were composited to 0.5 m for estimation. The following number of half metre composites were used to estimate the deposits:<br><br>• Hippolyte North: 9,920<br>• Hippolyte South: 1,078<br>• Lazare North: 1,585<br>• Lazare South: 6,743<br>Top-cut values were chosen by assessing the high-end distribution of the grade population within each zone and selecting the value at which the distribution became erratic. Only one composite in Lazar North was top-cut. This interval had a $U_3O_8$ grade of 7,937 ppm and was cut to 3,200 ppm.<br><br>The four deposits were subdivided into a total of seventeen Subzones for estimation. Conditional statistics were produced for each of the Subzones. All class grades used for estimation of the mineralised domains were derived from the class mean grades.<br><br>Only $U_3O_8$ was estimated. No assumptions were made regarding the correlation of uranium with any other variable. No deleterious elements or other non-grade variables of economic significance were estimated.<br><br>The base surface created to represent the top of the less-weathered granite was used to limit the extrapolation of grades into volumes that had no data<br><br>No assumptions were made regarding the recovery of by-products. To H&SC's knowledge uranium is the only element present in economically significant concentrations.<br><br>The Recoverable MIK technique employed by H&SC in this case requires a set of 14 variogram models, one for each of the fourteen grade bins used. A set of variogram models were created for Subzones of the Hippolyte North, Lazare North and Lazare South deposits. These variogram models were applied to Subzones that did not have sufficient data to generate reliable models.<br><br>The Hippolyte North, Lazar North and Lazar South deposits have areas that have been drilled on a 50x50 m grid whereas the Hippolyte South areas have been drilled on a 100x100 m grid. Separate block models were created for Hippolyte North, Lazar North, Lazar South and for each of the three Zones in Hippolyte South. Nominal downhole sampling interval is 0.5 m. Drill hole grade data were composited to 0.5 m intervals. The block dimensions were 50 x 50 m in plan view and 1 m vertically. The plan dimensions were chosen as it is the nominal drill hole spacing (preferable for MIK estimation). The vertical dimension was chosen to reflect the anisotropy of the mineralisation and the downhole data spacing. |

| Criteria | JORC Code explanation | Commentary |
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| | | The minimum selective mining unit size is assumed to be 10x10x0.5 m.<br><br>A three-pass search strategy was used to estimate the $U_3O_8$ grades at each of the deposits. Each pass required a minimum number of samples with data from a minimum number of octants of the search ellipse to be populated. Discretisation was set to 10x10x0.5 m. The search criteria are shown below. The short first axis of the search ellipse is vertical.<br><br>1. 1.5x60x60m search, 16-48 samples, minimum 4 octants<br>2. 1.5x150x150m search, 16-48 samples, minimum 4 octants<br>3. 2.4x240x240m search, 16-48 samples, minimum 4 octants<br>The maximum distance of extrapolation of the reported estimates from drill hole data points is limited to 220 m.<br><br>The Hippolyte North and Lazar North deposits were estimated by Mr. Mapeto of Coffey Mining in 2011. Lazar South was estimated by Mr. Mapeto in 2012. H&SC has access to these block models and considers that the current Mineral Resource Estimate takes appropriate account of these models. Significant additional drilling has occurred since these estimates were produced so the volume and confidence category have increased. Reasonably large differences exist between the current and previous estimates due to differences in estimation methodologies.<br><br>No check estimates were produced.<br><br>No mining has occurred on the Tiris East deposits so mine production data were unavailable for comparison.<br><br>The final H&SC block model was reviewed visually by H&SC and Aura and it was concluded that the block model fairly represents the grades observed in the drill holes. H&SC also validated the block model statistically using histograms, boxplots scatter plots and summary statistics. |
| *Moisture* | • *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | Tonnages are estimated on a dry weight basis. The moisture constant was not determined. |
| *Cut-off parameters* | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | A cut-off of 100 ppm $U_3O_8$ cut off is used to report the resources as it is assumed that ore can be economically mined at this grade in an open pit scenario. This cut-off is considered to be relatively low compared to operating uranium mines, but metallurgical test work indicates that a significant upgrade in uranium and decrease in sulphates can be achieved by a simple grinding and sieving process. |
| *Mining factors or assumptions* | • *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It* | All of the resources reported here have been estimated on the assumption that the deposits will be mined by open-pit. |

| Criteria | JORC Code explanation | Commentary |
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| | *may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.* | Recoverable MIK allows for block support correction to account for the change from sample size support to the size of a mining block. This process requires an assumed grade control drill spacing and the assumed size of the Selective Mining Unit (SMU). The variance adjustment factors were estimated from the $U_3O_8$ metal variogram models assuming a minimum SMU of 10x10x0.5 metres (east, north, vertical) with high quality grade control sampling on a 10x10x0.5 metre pattern (east, north, vertical).<br><br>The application of the variance adjustments to the resource estimates is expected to provide estimates of recoverable resources without the need to apply additional mining dilution or mining recovery factors. Internal dilution, that is, within the SMU unit is accounted for. If a larger SMU size or a broader grade control drill pattern is implemented the selectivity assumed in the reported resources may not be realised. |
| *Metallurgical factors or assumptions* | • *The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.* | The metallurgical test work information supplied to H&SC indicates that the Tiris East deposits are amenable to a process of crushing, screening and an alkaline carbonate leach in order to recover uranium. Bench scale test work indicates that a significant upgrade in uranium and decrease in sulphate concentrations can be achieved through screening.<br><br>No penalty elements identified in work so far<br><br>No other assumptions have been made. |
| *Environmental factors or assumptions* | • *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.* | Aura has informed H&SC that an Environmental and Social Impact Assessment has been completed which concluded there are no known issues arising from native title, historical sites, environmental or third-party matters which are likely to materially affect exploitation. H&SC therefore assume that there are no known unusual aspects of the Tiris East deposits that may lead to adverse environmental impacts beyond what is expected from a mining operation.<br><br>Waste rock and process residue is expected to be disposed of in the areas surrounding the deposits and processing facility. |
| *Bulk density* | • *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* | Dry bulk density of diamond drill core was measured at the ALS facility in Nouakchott using an immersion method (Archimedes principle) on selected PQ diamond drill core intervals ranging in size from 10 to 30 cm. Competent pieces of drill core were selected on a nominal interval of 50 cm. The samples chosen are believed to be representative of the surrounding rock type. All density samples are wrapped in cling film to avoid water absorption. A total of 304 density |

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| | | measurements have been taken from drill core at the Tiris East deposits with values ranging from 1.55 to 2.66 t/m3.<br><br>Measured density values show that there is a reasonable correlation between density and the depth of the sample. A regression was used to assign densities to each block in the block model based on the depth below surface. |
| *Classification* | • *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>• *Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*<br>• *Whether the result appropriately reflects the Competent Person's view of the deposit.* | The classification is based on the search pass used to estimate the block. In order to limit small isolated volumes of different classification (spotted dog) the search passes used to populate each block were locally averaged. Pass one nominally equates to Measured Resources, pass two translates to Indicated Resources and Pass three equates to Inferred Resources.<br><br>This scheme is considered by H&SC to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity and distribution of the data.<br><br>The classification appropriately reflects the Competent Person's (Arnold van der Heyden) view of the deposit. |
| *Audits or reviews* | • *The results of any audits or reviews of Mineral Resource estimates.* | This Mineral Resource estimate has been reviewed by Aura personnel. The estimation procedure has also been internally reviewed by H&SC. No material issues were identified as a result of these reviews.<br><br>No audits have been completed on the Mineral Resource estimates. |
| *Discussion of relative accuracy/ confidence* | • *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*<br>• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis. The main factor that affects the relative accuracy and confidence of the Mineral Resource estimate is sample data density due to the reasonably high variability in uranium grades.<br><br>The estimates are global although the resources classified as Indicated are suitable for long term mine planning studies. It should be noted that the Indicated Resources are based on broadly spaced data and may be locally inaccurate. Closer spaced drilling is necessary prior to detailed mine planning. |