



### ASX RELEASE

27 August 2021

### **Resource Upgrade of 10% - Tiris Uranium Project**

### **KEY POINTS:**

- Resource upgrade of 10% or 5.0 million lb  $U_3O_8$  to the Company's Tiris uranium deposit in Mauritania, bringing the total JORC Resource to 56 Mlbs (at a 100 ppm  $U_3O_8$  lower cut-off grade).
- 2.4 Mlbs U<sub>3</sub>O<sub>8</sub> of the total 5.0 million lb U<sub>3</sub>O<sub>8</sub> Resource Upgrade is classified as Indicated Resource with the remainder as Inferred Resource.
- The Resource Upgrade follows Aura recently commissioning a new resource estimate on the Sadi South Zone to incorporate drillholes not included in earlier resource estimates.
- Prior to the Resource Upgrade, the Tiris Uranium Project held a Resource of 50.6 Mlbs  $U_3O_8$  at a grade of 254 ppm  $U_3O_8$  (at a 100 ppm  $U_3O_8$  lower cut-off grade), including 38.4 Mlbs at 343 ppm  $U_3O_8$  (at a 200 ppm  $U_3O_8$  lower cut-off grade)<sup>1</sup>.
- The Resource upgrade supports the Company's belief that the potential exists for the resource to increase in size as further exploration work is undertaken.
- Aura is currently planning further exploration and drilling programs for Tiris.

Aura Energy Limited (AEE:ASX, AIM:AURA) ("Aura Energy", the "Company") is very pleased to announce a Resource Upgrade of 10% or 5.0 million lb  $U_3O_8$  for the Company's Tiris Uranium Project in Mauritania, bringing the total JORC Resource to 56 Mlbs at a grade of 254 ppm  $U_3O_8$  (at a 100 ppm  $U_3O_8$  lower cut-off grade). Aura Energy is the operator and has an 85% interest in the Tiris Uranium Project.

The Resource Upgrade follows Aura recently commissioning a new resource estimate on the Sadi South Zone to incorporate drillholes not included in earlier resource estimates. This has resulted in a 5.4 Mlbs  $U_3O_8$  increase in the Tiris resource of which 2.4 Mlbs is classified as Indicated Resource with the remainder classified as Inferred Resource.

Prior to the Resource Upgrade, the Tiris Uranium Project held a resource of 50.6 Mlbs at a grade if 254 ppm  $U_3O_8$  (at a 100 ppm  $U_3O_8$  lower cut-off grade), including 38.4 Mlbs at 343 ppm  $U_3O_8$  (at a 200 ppm  $U_3O_8$  lower cut-off grade)<sup>2</sup>.

Within this resource Aura has defined Proven and Probable Reserves of 8.1 Mlb  $U_3O_8$  at an average grade of 336 ppm  $U_3O_8$  and completed a Definitive Feasibility Study.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Refer Aura ASX announcement dated 30 April 2018 "Tiris Resource Upgrade Success". The resource of 50.6 Mlbs at a grade of 254 ppm U<sub>3</sub>O<sub>8</sub>, accounts for tenement adjustments since the 2019 DFS.

 <sup>&</sup>lt;sup>2</sup> Refer Aura ASX announcement dated 30 April 2018 "Tiris Resource Upgrade Success"

<sup>&</sup>lt;sup>3</sup> Refer ASX announcement dated 29 July 2019: "Tiris Uranium Definitive Feasibility Study Completed.





Aura Energy CEO and Managing Director, Peter Reeve, commented: "We are very excited by this Resource Upgrade at the Tiris Uranium Project, as it confirms our belief that the Resource will continue to increase in size as further exploration work is undertaken.

The Company continues to seek operating and capital expenditure cost reductions, whilst concurrently planning future exploration activities to further increase resource size and the potential of the opportunity. With Stage 2 exploration initiatives now underway, including an opportunity review to lower operating costs and capital expenditure, Aura is also exploring the potential positive impact on Tiris operating cost from vanadium by-product recovery.

We continue to progress the Company through the planned exploration and enhancement activities and look forward to relisting on the ASX."

As announced (ASX Release 21 May 2021), the ASX advised that upon the Company undertaking sufficient exploration on its projects in line its proposed expenditure commitments and following the completion and results of those exploration programs being released to the market, the ASX would be in a position to reinstate Aura's securities to trading on the Official List.

Following the latest resource estimation, the Tiris Resource Inventory is as follows<sup>4</sup>:

Cut-off U₃O <sub>8</sub> g/t	Resource Zone	Class	Tonnes (Mt)	U₃O <sub>8</sub> (g/t)	U₃Oଃ (Mkg)	U₃Oଃ (MIb)
100	All	All	100.3	254	23.4	56.0
200	All	All	55.0	336	17.4	41.0
300	All	All	33.0	444	10.9	32.3

### Table 1: Tiris Resource Summary, August 2021

The Tiris Resource occurs in a number of zones in two regions in northern Mauritania, which Aura groups into 2 deposit groups: Tiris East and Tiris West, which are sufficiently far apart to be regarded as separate operations. Refer Figure 1.

Aura's current focus is on the larger of these deposits, Tiris East, over which Aura has been granted 2 exploitation permits for 30 years from February 2019.

The resources at Tiris East lie in 3 zones: Hippolyte, Lazare and Sadi, all of which will be served by a central processing plant. The 5 Mlb  $U_3O_8$  resource extension is at the southern end of the Sadi zone.

The current resource estimate at Tiris East is:

### Table 2: Tiris East Resource Summary, August 2021.

Cut-off U₃O <sub>8</sub> g/t	Class	Tonnes (Mt)	U₃O <sub>8</sub> (g/t)	U <sub>3</sub> O <sub>8</sub> (Mkg)	U <sub>3</sub> O <sub>8</sub> (Mlb)
100	All	83.9	240	20.1	44.3
200	All	41.0	339	17.4	30.6
300	All	25.4	455	10.9	25.5

<sup>&</sup>lt;sup>4</sup> This Tiris Resource Inventory combines the 2021 Resource Estimate at Sadi South with 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". Aura confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.





Cut-off U₃O <sub>8</sub> g/t	Class	Tonnes (Mt)	U <sub>3</sub> O <sub>8</sub> (g/t)	U₃O <sub>8</sub> (Mkg)	U₃O <sub>8</sub> (Mlb)
100	Measured	10.2	236	2.4	5.3
	Indicated	29.0	222	6.4	14.2
	Total M&I	39.2	226	8.8	19.5
	Inferred	44.7	252	11.2	24.8
200	Measured	4.6	355	1.6	3.6
	Indicated	12.8	315	4.0	8.9
	Total M&I	17.4	326	5.7	12.5
	Inferred	23.6	348	8.2	18.1
300	Measured	2.1	497	1.0	2.3
	Indicated	4.7	454	2.1	4.7
	Total M&I	6.8	467	3.2	7.0
	Inferred	18.6	451	8.4	18.5

#### Table 3: Tiris East Resource Classification, August 2021.

Note: Totals may not add due to rounding.



Figure 1: Location of Aura's Tiris uranium resources.





#### High Grade Zones within the Resource

Parts of the mineralised zones have substantially higher grades than the global average. As indicated in the resource tabulation in Table 2 at a cut-off grade of 300 ppm, Tiris holds 25 Mlbs  $U_3O_8$  at 455 ppm  $U_3O_8$  (all resource categories).

#### **Resource Estimation**

The latest mineral resource estimate at Sadi South was prepared by Mr Oliver Mapeto, an independent resource consultant who was responsible for undertaking the original Tiris Resource estimate in 2011 on behalf of Coffey Mining.

The latest resource upgrade is based on air-core drilling with 96 mm bit conducted by Australian contractor Wallis Drilling and chemical analysis by ICP carried out by ALS Global in Ireland

In addition to the aircore drilling on which the Tiris East resource estimate is based, 59 large diameter (PQ) diamond drillholes for density determination and overall validation have been drilled in Tiris East zones at Hippolyte and Lazare, each located about 20 km from Sadi South in identical mineralisation.

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 drill patterns.

The mineralisation is of pedogenic calcrete uranium style. It occurs on and within Proterozoic rocks of the Reguibat Craton. The mineralisation is developed within near surface altered and weathered granites and within shallow colluvium lying on granite or adjacent metasediments. Mineralisation forms flat lying tabular bodies ranging in thickness from 1 to 12m with some mineralisation occurring very close to surface. Internal waste patches occur within the mineralisation envelope.

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.

Drill samples were prepared for analysis at an ALS Global facility in Nouakchott and pulps for analysis were sent to an ALS laboratory at Omac in Ireland for analysis by ICP after 4 acid digestion (ALS Method MS-ICP61)

Grade estimation at Sadi South was done using the Inverse Distance - Power 2 (ID2) estimation method.

A lower cut-off grade of 100 ppm  $U_3O_8$  within a 75 ppm  $U_3O_8$  envelope has been used for reporting. The Definitive Feasibility Study (footnote 3) indicated that this is an appropriate cut-off grade for mining in an open pit scenario. While this cut-off is relatively low compared to operating uranium mines metallurgical test work has indicated that a significant upgrade in uranium and decrease in sulphates can be achieved by a simple scrubbing and sieving process.





As detailed in the DFS the ore will be extracted by conventional mining methods using backhoe excavators and dump trucks. No drilling or blasting of the ore or overlying materials is planned due to the unconsolidated nature of the materials.

The metallurgical process detailed in the DFS is conventional beneficiation (by rotary scrubbing plus screening) followed by heated alkaline uranium leach and ion exchange. These metallurgical processes are well tested technology and appropriate for this style of mineralisation.



Figure 2: Sadi South Zone (dark green polygon) showing AC drillholes. Bright green polygon is area of previous resource estimate.

Orange dots indicate drillholes not included in previous resource estimates.







Figure 3: Map showing Resource classification in relation to drillholes.





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Figure 5: Sadi South Section 2806800 showing block model

### Table 4: Tiris East Resources August 2021 - Detail by Zone

Cut-off U <sub>3</sub> O <sub>8</sub> g/t	Resource Zone	Class	Tonnes (Mt)	U <sub>3</sub> O <sub>8</sub> (g/t)	U₃O8 (Mkg)	U <sub>3</sub> O <sub>8</sub> (Mlb)
		Measured	5.7	225	1.3	2.8
	Hippolyte	Indicated	6.5	217	1.4	3.1
	Hippolyte	Inferred	7.4	281	2.1	4.6
		Indicated	4.8	192	0.9	2.0
	South	Inferred	3.1	176	0.5	1.2
		Measured	1.1	284	0.3	0.7
	Lazare North	Indicated	10.6	229	2.4	5.4
100		Inferred	3.9	210	0.8	1.8
		Measured	3.4	239	0.8	1.8
	Lazare South	Indicated	2.6	219	0.6	1.3
		Inferred	9.1	214	2.0	4.3
	Sadi	Indicated	4.5	240	1.1	2.4
		Inferred	14.9	266	3.9	8.7
	Hippolyte West	Inferred	6.3	300	1.9	4.2
		Total	83.9	240	20.1	44.3
		Measured	2.3	345	0.8	1.8
	Hippolyte	Indicated	2.4	344	0.8	1.8
		Inferred	3.5	441	1.5	3.4
200	Hippolyte	Indicated	1.6	290	0.5	1.0
	South	Inferred	0.7	293	0.2	0.5
		Measured	0.7	372	0.3	0.6
	Lazare North	Indicated	4.5	348	1.5	3.4
		Inferred	1.3	354	0.5	1.0
	Lazare South	Measured	1.6	352	0.5	1.2



# ZERO EMISSION URANIUM

Cut-off U₃O <sub>8</sub> g/t	Resource Zone	Class	Tonnes (Mt)	U₃O <sub>8</sub> (g/t)	U₃O8 (Mkg)	U <sub>3</sub> O <sub>8</sub> (Mlb)
	Indicated	1.0	350	0.4	0.8	
	Lazare South - Sadi - Hippolyte West	Inferred	3.1	364	1.1	2.5
		Indicated	3.3	270	0.9	1.9
		Inferred	9.5	326	3.1	6.8
		Inferred	5.5	320	1.8	3.9
		Total	41.0	339	13.9	30.6
		Measured	1.0	469	0.5	1.1
	Hippolyte Hippolyte South Lazare North	Indicated	1.1	471	0.5	1.1
		Inferred	1.9	596	1.1	2.5
		Indicated	0.5	402	0.2	0.4
		Inferred	0.2	419	0.1	0.2
		Measured	0.4	481	0.2	0.4
		Indicated	2.0	475	1.0	2.1
300		Inferred	0.6	495	0.3	0.6
		Measured	0.7	478	0.4	0.8
	Lazare South	Indicated	0.4	482	0.2	0.5
		Inferred	1.4	511	0.7	1.6
	Sadi	Indicated	0.7	420	0.3	0.6
	Jaul	Inferred	4.1	439	1.8	3.9
	Hippolyte West	Inferred	2.2	430	1.0	2.1
		Total	17.2	483	8.3	17.9

Note: totals may not add due to rounding.

### Tiris Uranium Project

With Uranium demand increasing driven by a shift towards carbon free energy, Aura's 85% owned Tiris Uranium Project is well positioned as a low capex and low operating cost project.

In July 2021, Aura Energy commenced Stage 2 exploration at the Tiris Uranium Project, with results expected before the end of the 2021 Calendar Year.

The key results expected in this timeframe are:

- Detailed results of the Tiris Opportunity Review with several items being considered to lower operating costs for the project
- Completion and outcomes of the net zero emission study by Wood PLC
- Water drilling results continuing the 2019 findings
- Potential positive impact on Tiris operating cost from vanadium by-product recovery





#### **Project Attributes**

The Project has several natural attributes which result in low capital and operating costs:

- Shallow flat-lying surface mineralisation (predominantly only 1-5 metres deep within unconsolidated gravels and weathered granite)
- Low-cost mining with no blasting and negligible overburden
- Uranium ore can be simply (wash and screen) upgraded by up to 700% from 335ppm to 2500ppm
- Very small plant and footprint with minimal supporting infrastructure
- Leach feed grade 2,000 2,500 ppm U<sub>3</sub>O<sub>8</sub> with 94% leaching recovery in 4 hours

This ASX Release was authorised by the Aura Energy Board of Directors.

### For Further Information, please contact:

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### **Competent Persons**

The Competent Person for the 2021 Sadi South Resource Estimate and classification is Mr Oliver Mapeto, an independent resource consultant. The information in the report to which this statement is attached that relates to the 2021 Resource Estimate is based on information compiled by Mr Oliver Mapeto. Mr Mapeto has sufficient experience that is relevant to the 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 is a Member 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 drill hole data and for integrating different resource estimates is Mr Neil Clifford. The information in the report to which this statement is attached that relates to compiling resource estimates and to drill hole data 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 to qualify 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 Geoscientists. 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.

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### **Glossary of Technical Terms**

"cut-off grade" The lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. May be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification;

**"g/t"** grams per tonne;

**"kg"** kilogram;

"Indicated resource" a part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed;

"Inferred resource" a part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and has assumed, but not verified, geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited or of uncertain quality and reliability;

"JORC" the Joint Ore Reserves Committee, http://www.jorc.org/;

"JORC 2012" is the current edition of the JORC Code (http://www.jorc.org/docs/JORC\_code\_2012.pdf), which was published in 2012. After a transition period, the 2012 Edition came into mandatory operation in Australasia from 1 December 2013;

#### "m" metres;

"Measured resource" a part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are spaced closely enough to confirm geological and grade continuity;

"Mkg" million kilograms;

"Mlbs" million pounds;

"Mlbs" million tonnes;

"oz" ounce(s);

"ppm" parts per million;

"t" tonnes;

"Total M&I" sum of measured and indicated resource;

" $U_3O_8$ " (also "U3O8") the chemical formula for Triuranium octoxide, which is a compound of uranium.





### APPENDIX 1 - JORC Code, 2012 Edition - Table 1

### **2021 TIRIS RESOURCE ESTIMATE**

### Section 1 Sampling Techniques and Data

	2021 TIRIS RESOURC	EESTIMATE
	Section 1 Sampling Techr	niques and Data
Criteria	(Criteria in this section apply to a	II SUCCEEDING SECTIONS.)
Criteria	<ul> <li>JORC Code explanation</li> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may</li> </ul>	<ul> <li>The data on which this resource estimate is based related to 3 field sampling programs in the Sadi South zone of Aura's Tiris Uranium Deposits:         <ol> <li>An air-core (AC) drilling program in 2010/11 with grade estimation by chemical analysis of drill samples</li> <li>An AC drilling program in 2012 with grade estimation by chemical analysis of drill samples</li> <li>An AC drilling program in 2015 with grade estimation by chemical analysis of drill samples</li> <li>An AC drilling program in 2015 with grade estimation by chemical analysis of drill samples</li> </ol> </li> <li>The 2011/12 drilling was the basis of a previous Resource Estimation exercises (ASX release: announcement 14 July 2011 "First Uranium Resource in Mauritania – 50 million pounds".</li> <li>The 2011/12 drillhole spacing was predominantly 100m x 200m.</li> <li>AC drill cuttings were riffle split on site to extract</li> </ul>
	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.	• AC arill 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.
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole 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).</li> </ul>	<ul> <li>AC drilling in all programs was conducted by Wallis Drilling of Perth WA using a Mantis drill rig and NQ size bit (outer diameter 75.7 mm) in the 2011/12 program and an HQ size bit (96 mm outer diameter) in the 2015 program.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>The total arill return for each sample interval was bagged and weighed to an accuracy of approximately 0.25 kg to estimate sample recovery.</li> <li>Efforts were made to minimise dust loss, e.g. in most holes the first metre was drilled without applying compressed air, and thereafter minimum air necessary to lift the sample was applied.</li> <li>No relationship between estimated recovery and uranium grade was observed.</li> </ul>





Criteria	JORC Code explanation	Commentary
		<ul> <li>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 drill rig cyclone resulting in underestimation of uranium grade.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	• Each AC drill sample interval was geologically logged by an onsite geologist and drill logs were uploaded to Aura's database currently managed by EarthSQL in Melbourne. A sample of sieved & washed chips for each sample interval was retained in chip trays for reference.
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>The 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.</li> <li>Duplicates, blanks, and standards were inserted in the assay sample stream at regular intervals as detailed in the next section.</li> <li>Given the very fine-grained nature of the uranium minerals these sample sizes are appropriate according to Gy's sampling theory.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>AC drill samples were submitted to ALS Global sample preparation facilities in Mauritania. 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. @010/11 samples were analysed for uranium 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. The 2015 program samples were analysed by ALS method MS-ICP61 after 4 acid digestion.</li> <li>QAQC procedures for AC drilling comprised, on average:</li> </ul>





Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Field duplicates assays: at least 1 in every 25 samples</li> <li>Blanks: 1 in every 25 samples</li> <li>Umpire assays: 1 in approx. every 25 samples</li> <li>For Umpire analysis on 2011/12 samples the original pressed pellet XRF sample was re-assayed by ICP by Stewart Labs and also by XRF by ALS Labs and by ICP by ALS.</li> <li>Certified Reference material: 1 in approx. every 100 samples</li> <li>Total QAQC samples: 1 in every 6 samples</li> <li>Accuracy &amp; precision were within acceptable limits.</li> <li>No verification drilling has been performed in the Sadi South zone. However in the Lazare zone, approx. 15 km to the southwest in carnotite mineralisation of the same style, the AC drilling and assaying has been verified by Aura by trenching and sampling, by downhole radiometric logging of many holes, and by PQ diamond drilling and core assaying.</li> <li>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.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drillhole collars were surveyed by handheld GPS with reported accuracy of +/- 3 metres.</li> <li>The grid projection used is UTM WGS84 Zone 29N</li> <li>The area of the Sadi South resource is very flat and handheld GPS location accuracy is consistent with accuracy required for Indicated and Inferred resources.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drillholes for the Sadi South resource estimate were spaced at 100m x 200m.</li> <li>Close spaced drilling in nearby ore zones for variogram construction has indicated that 50m x 100m is suitable for defining Indicated Resources.</li> <li>Sample compositing was not applied.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have</li> </ul>	• Three 100m x 100m squares were drilled in nearby ore zones 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 at Sadi South is considered appropriate for the mineralisation orientation.





## ZERO EMISSION **URANIUM**

Criteria	JORC Code explanation	Commentary
	introduced a sampling bias, this should be assessed and reported if material.	
Sample security	• The measures taken to ensure sample security.	<ul> <li>Sample collection was supervised by geologists overseen by a supervising geologist. Samples were transported approx. weekly to independent sample preparation facilities.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	• Tiris Resource estimation conducted by Coffey Mining was independently reviewed and confirmed by Wardell Armstrong International in 2016. The 2021 Sadi South resource estimate has been carried out by independent consultant Oliver Mapeto (who carried the 2012 Resource Estimate for Coffey Mining) and has not been audited but has utilised the same methodology as the previous Resource Estimate in this zone.

## Section 2 Reporting of Exploration Results

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

i	ntroduced a sampling bias, this should be ussessed and reported if material	
Sample • T security s	The measures taken to ensure sample security.	• Sample collection was supervised by geologists overseen by a supervising geologist. Samples were transported approx. weekly to independent sample preparation facilities.
Audits or • 7 reviews s	The results of any audits or reviews of campling techniques and data.	• Tiris Resource estimation conducted by Coffey Mining was independently reviewed and confirmed by Wardell Armstrong International in 2016. The 2021 Sadi South resource estimate has been carried out by independent consultant Oliver Mapeto (who carried the 2012 Resource Estimate for Coffey Mining) and has not been audited but has utilised the same methodology as the previous Resource Estimate in this zone.
	Section 2 Reporting of Ex	(ploration Results
Criteria	IORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The 2021 Sadi South Resource Estimate is based on drilling conducted on Exploitation Licence 2491C4 held 100% by Tiris Resources sarl, a 100 % subsidiary of Aura Energy. Aura is in the process of divesting 15% of Tiris Resources sarl to the Mauritanian Government as required by the terms of the grant.</li> <li>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.</li> </ul>
<i>Exploration done by other parties</i>	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	• Aura is unaware of any prior exploration on these areas.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	• The mineralisation is of pedogenic calcrete uranium style. It occurs on and within Proterozoic rocks of the Reguibat Craton. The mineralisation is developed within near surface altered and weathered granites and within shallow colluvium lying on granite or adjacent metasediments.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> </ul>	• Specific drillhole data is not relevant to the reporting of this resource estimation





## ZERO EMISSION URANIUM

Criteria	JORC Code explanation	Commentary
	<ol> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ol>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Data aggregation methods for the resource estimate are summarised in Section 3 of this table.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known).</li> </ul>	• 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.	• <i>Refer to the ASX announcement which this table accompanies.</i>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low</li> </ul>	•

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## ZERO EMISSION URANIUM

	JORC Code explanation	Commentary
	and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substant exploration dat	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Metallurgical testwork is ongoing. Information on processing has been reported in ASX announcemen 16 July 2014 "Reguibat Uranium Project Scoping Stu Complete.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Aura is currently moving the project towards commencement of mining and is currently carrying out:         <ol> <li>Water drilling</li> <li>Update of feasibility studies</li> <li>Vanadium resource estimation</li> </ol> </li> </ul>
2		
Sectio (Cr	n 3 Estimation and Reporti iteria listed in section 1, and where relevant ir JORC Code explanation	ng of Mineral Resources a section 2, also apply to this section.) Commentary
Sectio (Cr Criteria	n 3 Estimation and Reporting iteria listed in section 1, and where relevant in JORC Code explanation	ng of Mineral Resources a section 2, also apply to this section.) Commentary

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	Aura's database was managed by the independent organisation Reflex Hub, based in Perth. The consultant conducted data validation checks including 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. Additional checks included collar details checks. Unrealistic RL on historical data based on new survey data were adjusted using nearest neighbour.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	No site visit was conducted during the 2015 Sadi South drilling campaign. However, the consultant previously conducted site a visit in April 2012 and is familiar with geological setting and mineralisation.





Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	The uranium mineralisation generally forms shallow horizontal tabular bodies ranging in thickness from 1 to 12m hosted in weathered granite, granitic sediments, and calcrete. 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. The material above the top of ore is waste largely made is of loose sandy material. The base of ore defines the top of consolidated material, harder going into unmineralized granite basement. The consultant created a surface representing the top and base of the mineralisation using a grade cut-off of 75ppm U308. The top and base of ore surfaces were used as hard boundaries to control grade estimation. The grade varied significantly within the drill hole intersections. At the time that the estimates were completed, the natural topographical surface was not available. The 2012 drill data had no topographic survey data available. Most of the 2015 and 2017 drill collar locations were surveyed using a Differential Global Positioning System (DGPS). The consultant used drill hole collars that had been located with the DGPS to create a wireframe representing the topographic surface. The elevations of all drill holes with no survey were then interpolated using the nearest neighbour. The interpretation of the mineralisation as flat lying tabular bodies was defined with high confidence by the top and base of ore surfaces. In Sadi pods of low-grade mineralisation occur showing moderate continuity of both grade and geology. The mineralisation is recent and unaffected by fuelting
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.	This mineral resource update is based on Sadi South trending N-S with lateral extend of 2.5 x 1.4k m Mineralisation forms flat lying tabular bodies ranging in thickness from 1 to 12m with some mineralisation occurring very close to surface. Internal waste patches occur within the mineralisation envelope The mineral resource was defines using a lower grade cut-off of 75ppm $U_3O_8$ . Ore thickness varies from 1m to a maximum of 9.5m.
<i>Estimation and modelling techniques</i>	• 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 for Sadi South were estimated using the Inverse Distance -Power 2 (ID2) estimation method as no reliable variogram structure could be defined partly due to the limited drill data and variability U308 in grade. High grade assays value up to 2,500ppm U308 were reported in the Sadi data set. 2m composite samples were used in the grade estimation. An upper cut-off grade





## ZERO EMISSION URANIUM

Criteria	JORC Code explanation	Commentary
	<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation</li> </ul>	of 850ppm U308 was applied on the composite before estimation. Very few (< 4) samples were cut. Only U <sub>3</sub> O <sub>8</sub> was estimated. No assumptions were made regarding the correlation of uranium with any other variable. No assumptions were made regarding the recovery of by-products. No deleterious elements or other non-grade variables of economic significance were estimated based on current data. Drill hole drill spacing in the Sadi South deposit is regular at 100x 200m over 2.5 x1.4km Parent block model size was 50 x 50x 2m Sub-block size 5 x 5 x 0.5m The vertical dimension was chosen to reflect the anisotropy of the mineralisation and the downhole data spacing. A three-pass search strategy was used to estimate the U <sub>3</sub> O <sub>8</sub> grades in Sadi South. Each pass required a minimum number of samples with data from a minimum number of samples in the search ellipse to be populated with discretistion 5x5x2. The search criteria are shown below. The short first axis of the search ellipse is vertical. 1. 250x250x12m search, 12-24 samples 2. 350x350x12m search, 6-24 samples Sadi South increased in resource volume due to additional lateral extension on the Sadi South mineralisation. The reported resource Sadi South is low grade and consistent with the input drill data
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	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 lower cut-off of 75ppm U <sub>3</sub> O <sub>8</sub> 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 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.

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С	riteria	JORC Code explanation	Commentary
	D		The Sadi South mineralisation occurs as a Uranium vanadate mineral and there is potential of recovery of vanadium as by product which justifies a lower U308 grade cut-off.
	Mining factors or ossumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It 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.	The resources reported here have been estimated on the assumption that the deposits will be mined by open pit mining method. Analysis was done for grade continuity and variography. No reliable variogram structure could defined. Parent block model size was 50 x 50x 2m Sub-block size 5 x 5 x 0.5m The selected sub-blocks were appropriate for minimum selective mining unit.
A fa	Metallurgical Factors or Inssumptions	• 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 the consultant is based on reports by H&SC which indicates that the Tiris deposits (including Sadi South) 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. No penalty elements identified in work done to date. No other assumptions have been made.
	Environmental Factors or Inssumptions	• 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.	Based on previous reports by H&SC, Aura 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. The consultant therefore assumes that there are no known unusual aspects of the Sadi deposits that may lead to adverse environmental impacts beyond what is expected from a mining operation. Waste rock and process residue is expected to be disposed of in the areas surrounding the deposits and processing facility.
В	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	An average density value of 2.1g/cc Dry bulk density was applied based on previous work as reported by H & SC Consultants





Criteria	JORC Code explanation	Commentary
	the measurements, the nature, size, and representativeness of the samples.	
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories.	The resource classification on Sadi South was based largely on • Drill hole drill spacing
	<ul> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>Mineralisation and grade continuity</li> <li>The grade estimation search pass used to estimate the block.</li> </ul> There was moderate confidence where the resource is coherent and grade estimated search pass one, the resource was classified as Indicated. Resource estimated in pass two and three were classified as Inferred. Regions where grade was assigned an average grade due to insufficient drill data or isolated drill holes were not classified.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	This Mineral Resource estimate has been reviewed by Aura personnel. No material issues were identified because of this review. No audits have been completed by other external party on the Mineral Resource estimates.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and</li> </ul>	The relative accuracy and confidence level in the Mineral Resource estimates are in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on both qualitative and quantitative basis. The main factor that affects the relative accuracy and confidence of the Mineral Resource estimate is sample data density and high variability in uranium grades. Confidence in mineralisation continuity is moderate. Most blocks were estimated in estimation run pass 1 and 2. In regions where the geology and mineralisation is continuous and grade was estimated in estimation run pass 1, the confidence in the grade estimates is high and the resource was classified as indicated. The rest of the resource estimated was classified as inferred. Some blocks were not estimated due to insufficient drill data particularly at the edges. Block not estimated in were assigned an average grade and these blocks were not classified. The estimates are global, and 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 datailed mine planning
	onfidence of the estimate should be	detailed mine planning.





## ZERO EMISSION URANIUM

Criteria **JORC Code explanation** compared with production data, where available.

explanation Commentary ed with production data, where e. There is no record available of historical production data as only small scale illegal artisanal mining has occurred around the Tiris deposits.

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