



ASX RELEASE

16 February 2022

Aura Defines Vanadium JORC Resource at the Tiris Uranium Project, Mauritania

KEY POINTS:

- JORC Resource of 18.4 million pounds V₂O₅ defined within Aura's low capex, low operating cost Tiris Uranium Project in Mauritania¹.
- 34% classified as Measured/Indicated Resource.
- The vanadium is contained within the mineral carnotite which also contains the uranium at Tiris.
- Metallurgical testwork indicates that the vanadium can be readily extracted at low additional cost.
- Production of a vanadium product stream is likely to significantly lower the effective cost per lb of U₃O₈.

Aura Energy Limited (ASX:AEE, AIM:AURA) ("Aura", the "Company") a company focused on the development of the low capex, low operating cost Tiris Uranium Project ("Tiris" or the "Project") in Mauritania, is pleased to announce a JORC compliant Resource estimate for 18.4 million pounds vanadium (V₂O₅), contained within its Tiris Uranium deposits.

The addition of vanadium to the Tiris Resource Estimate was undertaken after confirmation of a constant ratio of vanadium to uranium at Tiris in carnotite, a uranium vanadium potassium oxide mineral ($K_2(UO_2)_2(VO_4)_2 \cdot 3H_2O$), which is the primary host of uranium.

Global summary of the Resource Estimate is:

Cut-off U3O8 g/t	Class	Tonnes (Mt)	U3O8 (g/t)	U3O8 (Mlb)	V ₂ O ₅ (g/t)	V ₂ O ₅ (Mlb)
100	All	102.1	253	56.9	82	18.4
200	All	55.0	336	40.8	109	13.2
300	All	24.8	452	24.7	146	8.0

Table 1 - Tiris Uranium Project Global Resource Estimate

¹ At a lower cut-off grade of 100 ppm U₃O₈





Commenting on the vanadium resource estimate, Aura's Acting CEO, Will Goodall, said:

"We are very pleased to announce a JORC compliant resource estimate of 18.4 million pounds vanadium at Tiris in Mauritania.

The inclusion of vanadium in the resource estimates for Tiris gives Aura a wonderful opportunity to explore further operating cost reductions through addition of vanadium pentoxide (V_2O_5) as a by-product to uranium.

Test work on leaching of the uranium bearing mineral at Tiris through the DFS has shown that vanadium is recovered with uranium in the proposed Tiris leaching circuit. Additional test work is currently underway with ANSTO Minerals to recover leached vanadium to a V_2O_5 product. This work will aim to demonstrate that vanadium by-product could be produced with only minor additions to the existing Tiris process circuit.

The inclusion of vanadium by-product recovery has been explored in several other operations with similar mineralogy to Tiris, including Paladin Energy's Langer Heinrich operation, Namibia. It is anticipated to provide a strong driver to result in a net reduction in the already low operating costs of the Project.

This vanadium resource estimate provides the initial step to further optimise the low cost Tiris project and we are excited by the prospect of further enhancing the Project in this way."

Cut-off U₃O ₈ g/t	Class	Tonnes (Mt)	U₃O ₈ (g/t)	U ₃ O ₈ (Mlb)	V ₂ O ₅ (g/t)	V ₂ O ₅ (Mlb)
100	Measured	10.2	235.7	5.3	76.4	1.7
	Indicated	29.0	222.1	14.2	72.0	4.6
	Total M&I	39.2	226	19.5	73	6.3
	Inferred	62.9	270	37.4	87	12.1
200	Measured	4.6	355.0	3.6	115.0	1.2
	Indicated	12.8	315.4	8.9	102.2	2.9
	Total M&I	17.4	326	12.5	106	4.1
	Inferred	37.6	341	28.3	111	9.2
300	Measured	2.1	496.8	2.3	161.0	0.7
	Indicated	4.7	453.6	4.7	147.0	1.5
	Total M&I	6.8	467	7.0	151	2.3
	Inferred	18.0	446	17.7	145	5.7

Table 2 - Tiris Resource Classification - Total, Feb 2022





The uranium resource at Tiris has been reported previously.^{2,3,4}

The Resource Estimates were carried out by independent resource consultants H&S Consultants and Oliver Mapeto who have undertaken previous resource estimates at Tiris.

Summary of Resource Estimate and Reporting Criteria

In accordance with ASX Listing Rule 5.8 and JORC 2012 reporting guidelines, a summary on 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 Paleoproterozoic rocks of the Reguibat Craton, principally granitoids, meta-sediments and meta-volcanics, generally of high metamorphic grade. Near the resource zones the rocks are largely granitic.

The uranium / vanadium mineralisation forms shallow horizontal tabular bodies ranging in thickness from 1 to 12 metres within weathered granite or overlying colluvial sediments.

Sampling and subsampling techniques

For drilling programmes prior to 2017, 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. All intervals were geologically logged, recording parameters such as primary and secondary rock types, colour, oxidation, weathering, and moisture content.

The 2017 data is the major source in all of the areas classified as Measured. The uranium concentrations were measured by downhole total count gamma logging which were converted to equivalent uranium grades (eU_3O_8) by applying calibration information, an air correction and minor smoothing. A 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. 3D Exploration Pty Ltd took responsibility for the collection of the data and the calibration from total counts to uranium values.

Drilling techniques and hole spacing

The resource estimates are based on drilling conducted in separate drilling campaigns in 2011, 2012, 2014 and 2017. The uranium resource estimates for the ore zones Hippolyte, Hippolyte South, and Lazare North and South were based on downhole radiometric logging with validation by large diameter triple tube diamond drilling and these estimates were conducted by H&S Consultants and reported on in 2018 as cited in footnote 1. The uranium resource estimates for the ore zones Sadi South, Sadi North, Marie, Hippolyte West, Oum

² Refer Aura ASX/AIM announcement dated 30 April 2018 "Tiris Resource Upgrade Success".

³ Refer Aura ASX/AIM announcement dated 27 August 2021 "Resource Upgrade of 10% - Tiris Uranium Project". Small differences in quoted Resource numbers result from tenement adjustments

⁴ Refer Aura ASX/AIM announcement dated 19 July 2011" First Uranium Resource in Mauritania". Aura confirms that all material assumptions and technical parameters underpinning the earlier reported estimates continue to apply and have not materially changed.





Ferkik East, Oum Ferkik West deposits were based on chemical analyses of drillhole samples, and these estimates were reported on in 2011⁵ and 2021⁶

For Measured and Indicated Resources holes were drilled for the most part on a 50m x 50m pattern, and three $100m \times 100m$ squares of close spaced ($12.5m \times 12.5m$) holes were drilled to define short range variability. Inferred resources have been drilled on a $100m \times 100m$ or 100m by 200m grid.

Cut-off grades

The vanadium resource estimate is based on a lower cut-off grade of 100 ppm U_3O_8 . This is because vanadium will be a by-product of uranium production. For reporting compliance with JORC 2012 a U_3O_8 cut-off grade of 100 ppm was selected taking into account the economic factors investigated in Aura's Definitive Feasibility Study on the Tiris Uranium deposit completed in 2018⁷ allowing for some increase in commodity prices to define resources with reasonable prospect of economic extraction.

Vanadium Estimation Methodology

The uranium bearing mineral in Tiris deposits is carnotite, a uranium vanadium potassium oxide $(K_2(UO_2)_2(VO_4)_2 \cdot 3H_2O)$ in which the ratio by weight of vanadium to uranium is constant at 0.324.

Within the Tiris Uranium Resource outlines 734 samples from all resource zones were chemically analysed for both uranium and vanadium, as shown in **Error! Reference source not found.**

Samples were crushed, pulverised and split, with 0.25g dissolved using a four-acid digest. Uranium was determined by ICP-MS (inductively coupled plasma mass spectroscopy), while vanadium was measured by ICP-OES (inductively coupled plasma optical emission spectroscopy). These are considered to be near-total assay methods.

Deposit	Sample Count	Avg U3O8	Avg V205	Avg V205/U308
		ppm	ppm	
Ferkik East	23	231	283	1.225
Ferkik West	126	273	309	1.132
Hippolyte	206	222	211	0.950
Hippolyte South	11	106	222	2.094
Hippolyte West	7	270	250	0.926
Lazare North	74	235	313	1.332
Lazare South	208	247	284	1.150
Marie	35	236	394	1.669
Sadi	44	367	321	0.875
Total	734	247	277	1.121

⁵ Refer Aura ASX/AIM announcement dated 19 July 2011" First Uranium Resource in Mauritania". Aura confirms that all material assumptions and technical parameters underpinning the earlier reported estimates continue to apply and have not materially changed

⁶ Refer Aura ASX/AIM announcement dated 27 August 2021 "Resource Upgrade of 10% - Tiris Uranium Project". Small differences in quoted Resource numbers result from tenement adjustments

⁷ASX Announcement 29/7/2019: Tiris Uranium DFS Complete





The extensive analytical work by Aura has demonstrated that vanadium occurs throughout the Tiris deposits at concentrations greater than expected from the carnotite content alone, indicating that vanadium occurs within other minerals in addition to carnotite, very likely within clay minerals. The Vanadium Resource Estimate refers only to vanadium contained within carnotite, as no testwork has been done on extracting vanadium from minerals other than carnotite.

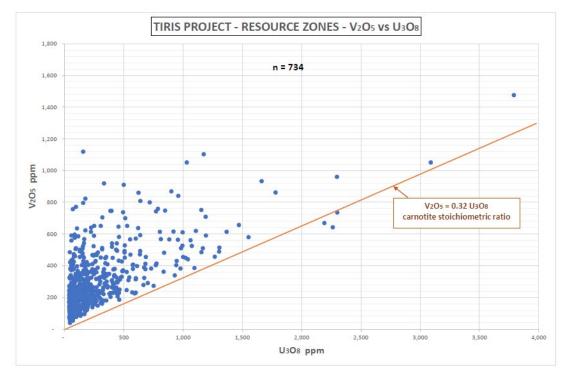


Figure 1 - Scatter plot of chemical U_3O_8 and V_2O_5 assays

The vanadium values within the Mineral Resource estimate have been derived by applying the V_2O_5 : U_3O_8 stoichiometric ratio of 0.324 to the previously reported U_3O_8 estimates within the Tiris deposits. While it is possible that the deposit may also contain the related calcium uranium vanadium mineral tyuyamunite (although this has not been identified), this has the same ratio of U:V as carnotite.

Metallurgy

Metallurgical testwork on Tiris ore carried out on uranium ore samples by Mets Engineering and by ANSTO has shown that "about 55% to 58% of vanadium was also leached during the alkaline leach." The V_2O_5/U_3O_8 ratios for the final leach liquor are close to the carnotite ratio,





indicating that effectively only vanadium from carnotite is being leached under these conditions.

Reports by other Australian companies (Paladin Energy Limited, Toro Energy Limited) suggest that vanadium recovery from carnotite ores is feasible. In the USA, Energy Fuels Inc. recovers vanadium from tailings solutions at its White Mesa uranium mill in Utah, while Western Uranium & Vanadium Corp have announced plans to re-open the Sunday mine complex in Colorado with the aim of upgrading the project's vanadium resource. These reports further suggest that vanadium recovery from uranium ores is feasible.

As such, the inclusion of vanadium within the resource is deemed reasonable and meets the criteria of 'Reasonable prospects for eventual economic extraction'. As vanadium will represent purely by-product production no additional value has been placed upon it other than marginal revenue recovery in order to determine reasonable prospects for eventual economic extraction.

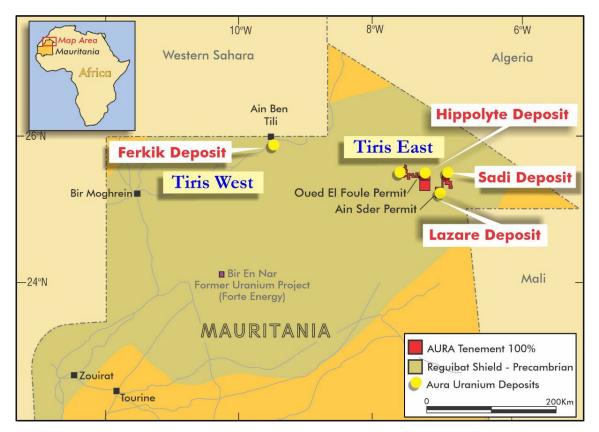


Figure 2: Location of Aura's Tiris uranium and vanadium resources





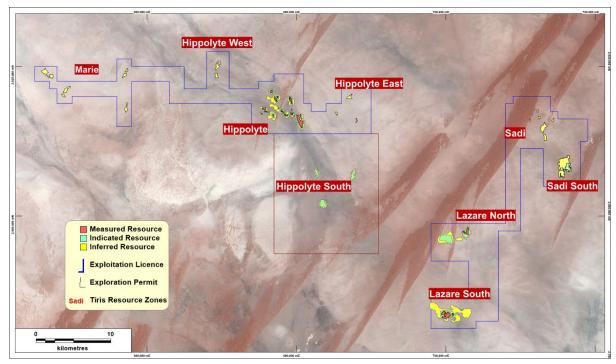


Figure 3: Tiris East Resource Zones

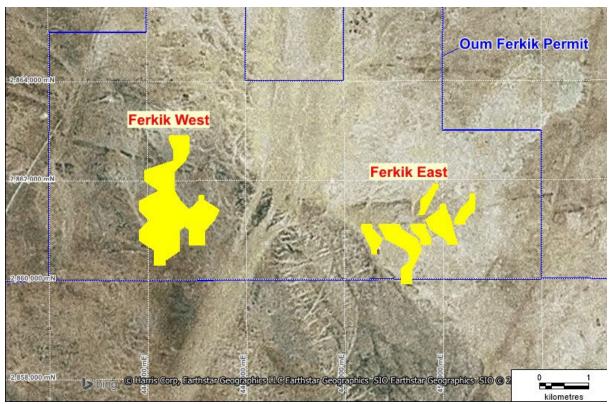


Figure 4: Tiris West Resource Zones





Table 4 - Tiris East Resource February 2022 - Detail By Zone

Cut-off U3O8 g/t	Resource Zone	Class	Tonnes (Mt)	U3O8 (g/t)	U3O8 (Mkg)	U3O8 (Mlb)	V2O5 (g/t)	V₂O₅ (Mlb)
		Measured	5.7	225	1.3	2.8	73	0.9
	Hippolyte	Indicated	6.5	217	1.4	3.1	70	1.0
		Inferred	7.4	281	2.1	4.6	91	1.5
		Indicated	4.8	192	0.9	2.0	62	0.6
	Hippolyte South Lazare North	Inferred	3.1	176	0.5	1.2	57	0.4
		Measured	1.1	284	0.3	0.7	92	0.2
		Indicated	10.6	229	2.4	5.4	74	1.7
100		Inferred	3.9	210	0.8	1.8	68	0.6
		Measured	3.4	239	0.8	1.8	77	0.6
	Lazare South	Indicated	2.6	219	0.6	1.3	71	0.4
		Inferred	9.1	214	2.0	4.3	69	1.4
	Sadi	Indicated	4.5	240	1.1	2.4	78	0.8
		Inferred	14.8	266	3.9	8.7	86	2.8
	Hippolyte West	Inferred	8.2	310	2.5	5.6	100	1.8
		Total	85.7	242	20.7	45.7	78	14.8
		Measured	2.3	345	0.8	1.8	115	0.6
	Hippolyte	Indicated	2.4	344	0.8	1.8	110	0.6
		Inferred	3.5	441	1.5	3.4	143	1.1
	Hippolyte South	Indicated	1.6	290	0.5	1.0	92	0.3
		Inferred	0.7	293	0.2	0.5	105	0.2
Lazare North	Measured	0.7	372	0.3	0.6	126	0.2	
	Lazare North	Indicated	4.5	348	1.5	3.4	111	1.1
200		Inferred	1.3	354	0.5	1.0	113	0.3
		Measured	1.6	352	0.5	1.2	110	0.4
	Lazare South Sadi	Indicated	1.0	350	0.4	0.8	118	0.3
		Inferred	3.1	364	1.1	2.5	119	0.8
		Indicated	3.3	270	0.9	1.9	85	0.6
		Inferred	9.5	326	3.1	6.8	105	2.2
	Hippolyte West	Inferred	5.5	320	1.8	3.9	104	1.3
		Total	41.0	339	13.9	30.6	110	9.9
		Measured	1.0	469	0.5	1.1	162	0.4
	Hippolyte	Indicated	1.1	471	0.5	1.1	147	0.4
		Inferred	1.9	596	1.1	2.5	193	0.8
	Hippolyte South	Indicated	0.5	402	0.2	0.4	118	0.1
		Inferred	0.2	419	0.1	0.2	147	0.1
		Measured	0.4	481	0.2	0.4	147	0.1
	Lazare North	Indicated	2.0	475	1.0	2.1	154	0.7
300		Inferred	0.6	495	0.3	0.6	147	0.2
		Measured	0.7	478	0.4	0.8	168	0.3
	Lazare South	Indicated	0.4	482	0.2	0.5	184	0.2
		Inferred	1.4	511	0.7	1.6	168	0.5
	Sadi	Indicated	0.7	420	0.3	0.6	126	0.2
		Inferred	4.1	439	1.8	3.9	140	1.3
	Hippolyte West	Inferred	2.2	430	1.0	2.1	140	0.7
		Total	17.2	483	8.3	17.9	153	5.8





Table 5 - Tiris West Resource February 2022 - Detail By Zone

Cut-off U3O8 g/t	Resource Zone	Class	Tonnes (Mt)	U3O8 (g/t)	U3O8 (Mkg)	U3O8 (Mlb)	V2O5 (g/t)	V ₂ O ₅ (Mlb)
	Ferkik West	Inferred	11.9	330	4.0	8.8	107	2.9
100	Ferkik East	Inferred	4.5	240	1.1	2.4	78	0.8
		Total	16.4	310	5.1	11.2	100	3.6
200	Ferkik West	Inferred	11.2	340	3.9	8.5	110	2.8
200	Ferkik East	Inferred	2.8	280	0.8	1.7	91	0.6
		Total	14.0	330	4.6	10.2	107	3.3
	Ferkik West	Inferred	6.7	400	2.7	6.0	132	1.9
300	Ferkik East	Inferred	0.9	370	0.4	0.8	120	0.3
		Total	7.6	406	3.1	6.8	131	2.2

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

For Further Information, please contact:

Will Goodall	Jane Morgan
Acting CEO	JMM
Aura Energy Limited	Investor & Media Relations
info@auraenergy.com.au	info@janemorganmanagement.com.au
	+61 405 555 618





Competent Persons

The Competent Person for the portion of the 2022 Tiris Vanadium Mineral Resource Estimate and classification relating to the Hippolyte, Hippolyte South, Lazare North, and Lazare South deposits 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 Mineral Resource Estimate is based on information compiled by Mr van der Heyden. Mr van der Heyden has sufficient experience that is relevant to the resource estimation to qualify 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 an employee of H&S Consultants 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 the portion of the 2022 Tiris Vanadium Resource Estimate and classification relating to all other deposits within the resource (Sadi South, Sadi North, Marie, Hippolyte West, Oum Ferkik East, Oum Ferkik West deposits) is Mr Oliver Mapeto, an independent resources consultant. The information in the report to which this statement is attached that relates to the 2018 Resource Estimate is based on information compiled by Mr Mapeto. Mr Mapeto has sufficient experience that is relevant to the resource estimation to qualify 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 the 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 a 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.

About Aura Energy (ASX:AEE, AIM:AURA)

Aura Energy is an Australian based minerals company that has major uranium and polymetallic projects with large resources in Africa and Europe.

The Company is now focused on uranium production the Tiris Project, a major greenfields uranium discovery in Mauritania, with Aura announcing a Resource Upgrade in August 2021 of 10% or 5.0 million lb U_3O_8 bringing the total JORC Resource to 56 Mlbs (at a 100 ppm U_3O_8 lower cut-off grade).

Aura also completed a capital estimate update for the Tiris Definitive Feasibility Study, to reflect current global pricing, with these 2021 figures reconfirming Tiris as one of the lowest capex, lowest operating cost uranium projects.





In October 2021, the Company entered a US\$10m Offtake Financing Agreement with Curzon, which includes an additional up to US\$10m facility, bringing the maximum available under the agreement to US\$20m.

In 2022, Aura will continue to transition from a uranium explorer to uranium producer, to capitalise on the rapidly growing demand for nuclear power as the world continues to shift towards a decarbonised energy system.

Notes to Project Description

The Company confirms that the material assumptions underpinning the Tiris Uranium Production Target and the associated financial information derived from the Tiris production target as outlined in the Aura Energy release dated 18 August 2021 for the Tiris Uranium Project Definitive Feasibility Study continue to apply and have not materially changed.

The Tiris Uranium Project Resource was released on 27 August 2021 "Resource Upgrade of 10% - Tiris Uranium Project". The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

In respect to Resource statements there is a low level of geological confidence associated with inferred mineral resource and there is no certainty that further exploration work will result in the determination of indicated measured resource or that the production target will be realised.

Disclaimer Regarding Forward Looking Statements

This ASX announcement (Announcement) contains various forward-looking statements. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements. The Company does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.





APPENDIX 1 JORC Code 2012 Table 1 Appendix 5A ASX Listing Rules 2022 Tiris Vanadium 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 The data on which this resource estimate is based is from 5 field sampling programmes: An air-core (AC) drilling programme in 2010/11 with grade estimation by chemical analysis of drill samples An AC drilling programme at Lazare in 2012 with grade estimation by chemical analysis of drill samples An AC drilling programme at Sadi in 2015 with grade estimation by chemical analysis of drill samples An AC drilling programme at Sadi in 2015 with grade estimation by chemical analysis of drill samples An AC drilling programme in 2017 with grade estimation by downhole gamma logging A diamond drilling (DD) programme with grade estimation by both chemical analysis of core and by downhole gamma logging, for validation purposes. 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. 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 2012 drilling was predominantly at a spacing of 50m x 50m to define Measured Resources. 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 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





Criteria	JORC Code explanation	Commentary
		• 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, etc). 	 AC drilling in all programmes 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 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. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 In 2011/12/15 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. 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. No relationship between estimated recovery and uranium grade was observed. 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. 2017 AC drillholes were not physically sampled. All drillcore was transported in covered core trays to Nouakchott for geological logging, density determination, and core cutting. Drillcore lengths were measured to an accuracy of c. 1 cm immediately on removal from the core barrel to determine & record core recovery. 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 lovel of detail to support appropriate.	In 2011/12/15 AC drilling each sample interval was geologically logged by an onsite geologist
	a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	and drill logs were uploaded to Aura's database managed by Reflex Hub in Perth. A sample of sieved & washed chips for each





Criteria	JORC Code explanation	Commentary
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 sample interval was retained in chip trays for reference. In 2017 AC drilling only the bottom hole sample was geologically logged, and a sample retained in chip trays. 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. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being compled 	 2011/12/15 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. Duplicates, blanks, and standards were inserted in the assay sample stream at regular intervals as detailed in the next section. Drillcore was cut in half longitudinally by diamond saw by ALS Laboratories after marking up by, and under the supervision of, an Aura geologist. For each half-metre of core half-core was bagged for assay Given the fine-grained nature of the uranium minerals these sample sizes are appropriate
Quality of assay data and laboratory tests	 sampled. The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (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. 2015 AC drill samples were were submitted to ALS Laboratories sample preparation facility in Nouakchott Mauritania. Samples were crushed by jaw crusher to -12mm and 1kg was





Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	Commentary riffle split for pulverising to +85% passing 75 microns. An c. 100g split was bagged and sent to ALS Global in Ireland for analysis by ALS method MC-ICP61 after 4-acid digestion. This method Will measure near total uranium. • 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. • Downhole gamma logging was performed by 2 down-hole Auslog gamma sondes comprising: • DLS5 Winch Controller • W600-1 12V Portable Winch • A075 Natural Gamma Tool • Logging procedures involved: • Drill holes were gamma logged as soon as possible after drilling to avoid radon build-up. Each borehole logged in both
		 Logging speed: 2 metres per minute Sampling interval: 1 cm At least one hole was re-logged after each 20 holes as a repeatability check. A reference hole was established and relogged every 2 days as a check on consistency Gamma logging procedures & interpretation were supervised by consultant David Wilson who qualifies as a Competent Person in these matters. QAQC procedures for the 2011/12 AC drilling comprised, on average: Field duplicates assays: 1 in every 12 samples Blanks: 1 in every 31 samples 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.





Criteria	JORC Code explanation	Commentary
		 Certified Reference material: 1 in every 129 samples Total QAQC samples: 1 in every 5 samples Accuracy & precision were within acceptable limits.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Approximately 2,675 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. 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. 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 2011/12 drillhole collars were surveyed by handheld GPS with reported accuracy of +/- 3 metres. All 2017 drillhole collars were surveyed by differential surveying conducted by IRC- Magma to an accuracy of +/- 20 cm in all dimensions. The grid projection used is UTM WGS84 Zone 29N 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.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and 	 Drillholes were spaced in different programmes at 50m x 50m, 50m x 100m, 100m x 100m or 100m x 200m. In most cases Measured Resources are based on 50m x 50m spaced drillholes, Indicated Resources are based on 100m x 100m spaced





Criteria	JORC Code explanation	Commentary
	 Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 holes, and Inferred Resources on 100m x 200m spaced holes. Downhole gamma data was composited into 0.5m intervals. 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. 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 Oliver Mapeto of Coffey Mining. This was independently reviewed and confirmed by Wardell Armstrong International in 2016. The 2021 Resource Estimate at Sadi was done by Oliver Mapeto acting then as an independent consultant. 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
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Resource Estimates are based on drilling conducted on 2 mineral exploration permits held 100% by Aura Energy: 562B4 Oum Ferkik, 2365B4 Oued EL Foule Sud, on 2 Exploitation permits: 2492C4 Oued El Foule, 2491C4 Ain Sder held by Tiris Ressources SA, a 100% subsidiary of Aura Energy. Aura is in the process of divesting 15% of Tiris Ressources SA to the Mauritanian Government as required by the Mining Act. 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 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Specific drillhole data is not relevant to the reporting of this resource estimation





Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Data aggregation methods are summarised in the Resource Estimate report by H&S Consultants which this table accompanies.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known'). 	• 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: 29 July 2019 "Tiris Uranium Definitive Feasibility Study Completed".
Further work	• The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	• Refer to the ASX announcement which this table accompanies.





Criteria	JORC Code explanation	Commentary	
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		





Section 3. Estimation and Reporting of Mineral Resources – PART 1

Note this Section 3 has been prepared by H&S Consultants and relates to the Hippolyte, Hippolyte South, Lazare North & Lazare South Resources

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	Aura's database was managed by the independent organisation Reflex Hub, based in Perth. 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. 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 based 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. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	The 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. 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. At the time that the estimates were completed, no topographic survey data were available. The vast majority





Criteria	JORC Code explanation	Commentary
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	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. The proportion of the block between the topographic and base surfaces were assigned to the block model and used to weight the reported estimates. 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 that mineralisation is more limited than currently interpreted. Alternative interpretations of the geology are very unlikely to significantly impact estimated resources. 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. 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. The Mineral Resources at Hippolyte North at a cut-off of 100 ppm U308 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. The Mineral Resources at Hippolyte South at a cut-off of 100 ppm U308 occur in an area 5.6 km east-west and 5.4 km north-south. This region is





Criteria	JORC Code explanation	Commentary
		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 The Mineral Resources at Lazare North at a cut-off of 100 ppm U308 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. The Mineral Resources at Lazare South at a cut-off of 100 ppm U308 occur in an irregular shape with an east-west length of 5.5 km and a north-south length of 5.7 km. The largest area has an east-west 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.
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 availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic 	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 specifically accounts for the changing spatial continuity at different grades through a set of indicator variograms at a range of grade thresholds. It also reduces the need to use the practice of top cutting. All drill hole intervals were composited to 0.5 m for estimation. The following number of half metre





Criteria	JORC Code explanation	Commentary
	significance (e.g., sulphur for acid	composites were used to estimate
	mine drainage characterisation).	the deposits:
	• In the case of block model	Hippolyte North: 9,920
	interpolation, the block size in relation to the average sample	Hippolyte South: 1,078
	spacing and the search employed.	• Lazare North: 1,585
		• Lazare South: 6,743
	 Any assumptions behind modelling of selective mining units. Any assumptions about 	Top-cut values were chosen by assessing the high end distribution of the grade population within each zone and selecting the value at which
	correlation between variables.	the distribution became erratic. Only one composite in Lazar North was
	• Description of how the geological	top-cut. This interval had a U_3O_8
	interpretation was used to control the resource estimates.	grade of 7,937 ppm and was cut to 3,200 ppm.
	 Discussion of basis for using or not using grade cutting or capping. 	The four deposits were subdivided into a total of seventeen Subzones for estimation. Conditional statistics
	• The process of validation, the	were produced for each of the Subzones. All class grades used for
	checking process used, the	estimation of the mineralised
	comparison of model data to drill hole data, and use of	domains were derived from the class mean grades.
	reconciliation data if available.	Vanadium is a potential by-product
		and vanadium oxide (V ₂ O ₅) has been estimated for the mineral resources
		using the stoichiometric V_2O_5/U_3O_8
		ratio for carnotite group minerals.
		These V ₂ O ₅ values represent potentially recoverable vanadium in
		carnotite and not total vanadium
		occurring in mineralisation, which is significantly higher in almost all cases.
		These potentially recoverable V_2O_5
		values are based on the analysis of a substantial database of available
		sample data and represent average
		values that may be conservative. This
		procedure relies on the correlation between uranium and vanadium in
		carnotite group minerals, which are the only uranium minerals identified
		to date at Tiris.
		No deleterious elements or other non-grade variables of economic
		significance have been identified or estimated.
		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.
		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





Criteria	JORC Code explanation	Commentary
		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.
		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.
		The minimum selective mining unit
		size is assumed to be 10x10x0.5 m.
		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.
		1. 1.5x60x60m search, 16-48
		samples, minimum 4 octants
		2. 1.5x150x150m search, 16-
		48 samples, minimum 4 octants
		3. 2.4x240x240m search, 16-
		48 samples, minimum 4 octants
		The maximum distance of
		extrapolation of the reported
		estimates from drill hole data points
		is limited to 220 m.
		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





Criteria	JORC Code explanation	Commentary
		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. No check estimates were produced. No mining has occurred on the Tiris East deposits so mine production data were unavailable for comparison. 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 content 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 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.	All of the resources reported here have been estimated on the assumption that the deposits will be mined by open-pit. 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 ₃ O ₈ metal variogram models assuming a minimum SMU of 10x10x0.5 metres





Criteria	JORC Code explanation	Commentary
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.	 (east, north, vertical) with high quality grade control sampling on a 10x10x0.5 metre pattern (east, north, vertical). 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. 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. No penalty elements identified in work so far. Metallurgical testwork on Tiris ore has shown that about 55% to 58% of vanadium was also extracted during the alkaline leach. The V₂O₅/U₃O₈ ratios for the final leach liquor are close to the carnotite V₂O₅/U₃O₈ ratio, indicating that effectively only vanadium from carnotite is being leached under these conditions. To date, no vanadium extraction testwork has been carried out for the recovery of vanadium from the pregnant leach solution, so further
		work is required to demonstrate that a marketable vanadium product can be produced on a commercial basis. No further 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 	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 that are likely to materially affect exploitation. H&SC therefore assumes that there are no known unusual aspects of the Tiris





Criteria	JORC Code explanation	Commentary
	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.	East deposits that may lead to adverse environmental impacts beyond what is expected from a mining operation. Waste rock and process residue are expected to be disposed of in the areas surrounding the deposits and processing facility, in a responsible manner and in compliance with local mining law.
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 measurements have been taken from drill core at the Tiris East deposits with values ranging from 1.55 to 2.66 t/m3. 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. 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). 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 effect) 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. 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.





Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	The classification appropriately reflects the Competent Person's (Arnold van der Heyden) view of the deposit. 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. No external 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. 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. 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. The estimates are global although the resources classified as Measured and 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. No production data are available as only small scale illegal artisanal mining has occurred around the Tiris East deposits.





Section 3. Estimation and Reporting of Mineral Resources – PART 2

Note: This Section 3 has been prepared by Oliver Mapeto and relates to the Sadi, Hippolyte West,
Marie, Ferkik East & Ferkik West Resources

Criteria	Explanation	Deposit Specific Information
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. Data validation procedures used. 	Aura's database was managed by the independent organisation Reflex Hub, based in Perth. The consultant conducted data validation checks including 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	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	Site visit to the project area was conducted by the Consultant in April 2012 (Coffey Mining). No site visit was conducted during the recent 2015 Sadi South extension drilling campaign. However, based on previous site visit the consultant is familiar with geological setting and mineralisation style.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	The 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 of loose sandy material. The base of ore defines the top of consolidated material, harder going into unmineralized granite basement. Ore surfaces representing the top and base of the mineralisation using a grade cut-off of 100 ppm U308 were generated across all project areas and mineralised zones. The top and base of ore surfaces were used as hard boundaries to control grade estimation. A lower cut-off grade of 75 ppm U308 was used to model the Sadi South. Due to the nature of the mineralisation, the change in lower cut-off grade had marginal changes on the mineralised volumes. 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.





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		In some zones, pods of low-grade mineralisation occur showing moderate continuity of both grade and geology. The mineralisation is recent and unaffected 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 Resource as reported in the 2011 Resource estimate lie in the following areas, Sadi South, Sadi North, Marie, Hippolyte W, Hippolyte E, Oum Ferkik West and Oum Ferkik East. Sadi South resource has since been updated following infill and extension drilling campaign in 2015. The Mineral Resources at a cut-off of 100 ppm U3O8 was applied across all project's areas. Marie occurs in an area 1.2 km east-west and 6 km north- south. This region is comprised of six separate zones that range in plan dimensions from 200m to 1.2 km wide and 500 m to 1.4km long. Hippolyte W occurs in an area 0.8 km east-west and 2.0 km north-south. This region is comprised of three separate zones that range in plan dimensions from 150m to 400m wide and 400 m to 1.0km long Hippolyte E occurs in an area 3.0 km east-west and 4.0 km north-south. This region is comprised of three separate zones that range in plan dimensions from 150m to 600m wide and 400 m to 600m long. Oum Ferkik West occurs as a single zone with dimensions of 1.6 km east-west and 2.5 km north-south. Oum Ferkik West occurs as a single zone with dimensions of 1.6 km east-west and 2.5 km north-south. Oum Ferkik East occurs in an area 2.0 km east-west and 2.0 km north-south. This region is comprised of six separate zones that range in plan dimensions from 150m to 400m wide and 400 m to 1.2km long Mineralisation forms flat lying tabular bodies ranging in thickness from 1 to 12m with some internal waste patches occuring within the mineralisation envelope. In places, there the top of mineralisation is covered by sand or waste overburden. Sadi North occurs in an area extending 3.2 km east-west and 4.0 km north-south. This region is comprised of six separate zones that range in plan dimensions from 100m to 800m wide and 300 m to 1400m long. Sadi South has been updated with extension in the north- south trending zone extending approximately 2.5 north-south and 1.4km east-west. Sadi South Mineral Resource was defines using a lower grade cut-off of 75ppm U3O8. Ore thickness va
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,	The uranium concentrations were estimated using the Ordinary Kriging estimation method. Sample database has assays samples at a nominal 1m sample interval. Some samples were sampled at 0.5m interval using overburden-ore contact depending on thickness of topsoil (sand).
	interpolation parameters, maximum distance of extrapolation from data points.	2m sample composite were created for grade estimation. Area specific high-grade assays top cuts were applied to minimise grade spearing. The top-cut values were chosen by assessing the high-end distribution of the grade population





Criteria	Explanation	Deposit Specific Information
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	within each zone and selecting the value at which the distribution became erratic Each zone was divided into subzones for grade estimation. The subzones were based on defined solid using a 100ppm lower U308 grade cut-off. Each zone was coded and only samples within the same matching zone code were used in estimation. Additional estimation parameters were applied as follows: A three-pass estimation strategy was adopted to estimate the U_3O_8 grades. The estimation search parameters are shown below for estimation run pass 1, 2 and 3. The short first axis of the search ellipse is vertical. Pass 1. 300x200x6m search, 8-24 samples Pass 2. 360x250x6m search, 6-24 samples Pass 3. 600x400x6m search, 4-24 samples Pass 3. 600x400x6m search, 4-24 samples In addition, upper cut-off grade specific to the ore zones were applied. Vanadium is a potential by-product and vanadium oxide (V_2O_3) has been estimated for the mineral resources using the stoichiometric V_2O_3/U_3O_8 ratio for carnotite group minerals. These V_2O_3 values represent potentially recoverable vanadium in carnotite and not total vanadium occurring in mineralisation, which is significantly higher in almost all cases. These potentially recoverable V_2O_3 values are based on the analysis of a substantial database of available sample data and represent average values that may be conservative. This procedure relies on the correlation between uranium and vanadium in carnotite group minerals, which are the only uranium minerals identified to date at Tiris. No deleterious elements or other non-grade variables of economic significance have been identified or estimated. In Sadi South 2021 Mineral Resource update, Inverse Distance -Power 2 (ID2) estimation method was used as no reliable variogram structure could be defined partly due to the limited drill data and variability U308 in grade. An alternate estimation would not produce material different outcome. In Sadi South Mineral Resource update sample grade values up to 2,500ppm U308 were reported. 2m comp





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		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. Pass 1. 250x250x12m search, 12-24 samples Pass 2. 350x350x12m search, 8-24 samples Pass 3. 500x500x12m search, 6-24 samples
		 Sadi South Mineral Resource update increased in resource volume due to additional lateral extension on the Sadi South mineralisation. Block model grade estimates were validated using the following methods: Statistical comparison of block model grades against drill composite grades by zone Visual check of cross sections, transverse, and long sections Plan views of grade distribution Comparison of block model and drill data grade distribution using histograms
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 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 based on information supplied to the Consultant following recent leaching test work on the Tiris Uranium Project on uranium and Vanadium.
Mining factors or assumptions	 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. However, in some cases, no reliable variogram structure could defined on a zone by zone basis. The global variogram was assumed as this could have been affected by lack of data due to limited extend of the individual mineralised zones. 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.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It	The metallurgical test work information supplied to the consultant is based on reports by H&SC which indicates that the Tiris deposits are amenable to a process of crushing,





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	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.	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. Metallurgical test work on Tiris ore has shown that about 55% to 58% of vanadium was also extracted during the alkaline leach. The V ₂ O ₅ /U ₃ O ₈ ratios for the final leach liquor are close to the carnotite V ₂ O ₅ /U ₃ O ₈ ratio, indicating that effectively only vanadium from carnotite is being leached under these conditions. To date, no vanadium extraction test work has been carried out for the recovery of vanadium from the pregnant leach solution, so further work is required to demonstrate that a marketable vanadium product can be produced on a commercial basis.
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.	No further assumptions have been made. 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 Tiris Uranium 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.
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.	The Mineral Resource estimates for Sadi North Marie, Hippolyte W, Oum Ferkik West and Oum Ferkik East used an average density of 2.0/g/cc dry bulk density based on test done by Aura Energy. This was considered realistic for material and ore similar ore deposits. In the August 2021 Sadi South resource update, an average density value of 2.1g/cc dry bulk density was applied based on previous work as reported by H & SC Consultants
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource estimates for Sadi South, Marie, Hippolyte W, Oum Ferkik West and Oum Ferkik East were based on:





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	 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). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 Drill hole drill grid spacing Mineralisation and grade continuity The grade estimation search pass used to estimate the block. All mineral Resource estimates estimated in 2011 were classified as Inferred. In Sadi South Mineral Resource estimate reported in August 2021, there was moderate confidence where the resource is coherent and grade estimated search pass one and the resource was classified as Indicated. Mineral 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 estimates for Sadi North, Marie, Hippolyte W, Oum Ferkik West and Oum Ferkik east are based on 2011 models and these were reviewed internally by Coffey Mining Consultants. No material issues were identified as a result of these reviews. However, no audit for August 2021 Sadi South Mineral Resource update has been completed by other external party.
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. 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. 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 in line with the generally accepted accuracy and confidence of the nominated JORC CODE (2012) 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 are 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 margins of the mineralised pods. 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 detailed mine planning studies to increase confidence in the mineralisation variability. There is no record available of historical production data as only small scale illegal artisanal mining has occurred around the Tiris deposits.