2 December 2013



# FURTHER REGUIBAT PROJECT BENEFICIATION TESTS CONTINUE TO PROVIDE EXCEPTIONAL RESULTS

## SEVEN-FOLD U<sub>3</sub>O<sub>8</sub> GRADE INCREASE CONFIRMED

## AVERAGE FEED GRADE RESULT ~ 2500 PPM

Aura Energy Ltd (ASX: AEE, "Aura") is pleased to announce that mineralogical investigation has confirmed the beneficiation potential of the Reguibat Project in Mauritania. This result confirms findings reported on 26<sup>th</sup> of September and 8<sup>th</sup> of October 2013 that significant upgrade of the Reguibat material is achieved through a simple beneficiation process leading to recovery of uranium using standard leaching conditions.

"The excellent ongoing Reguibat Project testwork continues to provide exciting and significant results which will impact on the future Project." Aura's Managing Director, Dr Bob Beeson, said.

"The further increase in the grade of the uranium-bearing material to 2,500ppm  $U_3O_8$  through beneficiation provides additional encouragement that the Reguibat Project will require only modestsized leaching facilities. Reguibat will be a relatively low capital cost and low operating cost option for extracting the uranium for each tonne of material mined."

The additional size analysis conducted in these tests demonstrated that, by further reducing the screening size than previously reported, 89% of the mass could be rejected, while retaining 86% of the uranium. The average concentration of the product was 2,476ppm  $U_3O_8$ . This represents an upgrade factor of 7, achievable using simple beneficiation processes. The high product grade compares with the resource grade of 334ppm  $U_3O_8$ .

The composite sample of  $-300\mu$ m material from beneficiation tests from the upper level of a single mineralised zone, Ain Sder Zone 1, underwent mineralogy and additional size analysis. Mineralogical analysis using the QEMSCAN system showed that the deportment of uranium was exclusively with the carnotite mineral group. The carnotite occurs as extremely fine, liberated grains.

The sulphate mineral content of the fine fractions was low.

"Reguibat is almost unique among calcrete uranium projects in that the beneficiation and leaching characteristics identified to date improve the Project substantially. Many calcrete projects are metallurgically problematic because of the difficulty of beneficiation, and long leach times. This is clearly not the case with Reguibat which shows excellent beneficiation and fast leach times," Dr Beeson said.

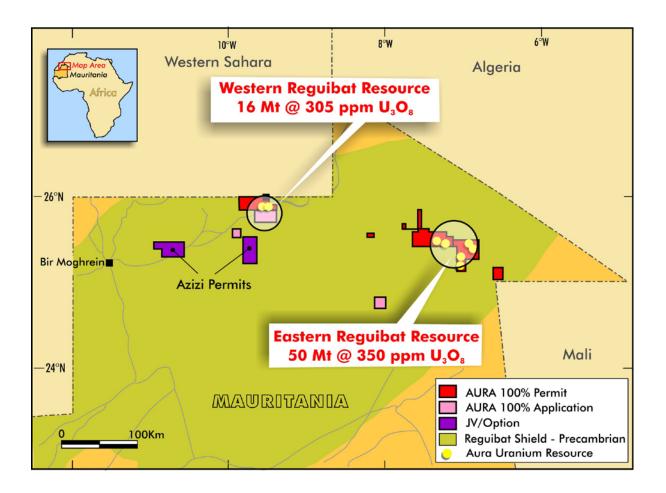
The company is evaluating the commercial implications of these results.



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## **Competent Persons Statement**

Dr Will Goodall has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking. This qualifies Dr Goodall as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Goodall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Dr Goodall is a member of the Australasian Institute of Mining and Metallurgy.









## Appendix 1 – technical summary of mineralogical analysis by QEMSCAN

### **Reguibat Preliminary mineralogy and cyclosizing results**

#### Ain Sder Zone I – Upper

Following scrubbing and screening testwork performed on a composite of trench samples from the Ain Sder Zone I Upper (0.5m to 1m), a program of cyclosizing and mineralogical analysis by QEMSCAN on the -300 $\mu$ m fraction was undertaken. The preliminary stages of this program were reported on the 26<sup>th</sup> of September and 8<sup>th</sup> of November 2013.

The uranium distribution in cyclosize fractions is shown in the table below. It can be seen that 86% of the uranium deported to the –C5 fraction (~10 $\mu$ m), comprising only 11% of the total mass. The U<sub>3</sub>O<sub>\*</sub> concentration of the –C5 fraction was 2476ppm, representing an upgrade factor of 7 on the initial head grade.

 Table 1 - Mass and uranium distribution by screen and cyclosize fraction for Ain Sder Zone I - upper composite.

screens		ICP	Uranium
		ppm	
μm	weight %	U <sub>3</sub> O <sub>8</sub>	dist %
+2000	24.1%	62.4	4.6%
+1000	23.3%	19.2	1.4%
+300	21.5%	28.9	1.9%
+75	11.7%	31.4	1.1%
+38	4.1%	279.5	3.5%
+C3	2.2%	67.0	0.4%
+C5	2.0%	108.0	0.7%
-C5	11.3%	2476	86.3%
	100.0%	323.5	100.0%

The major components of the –C5 fraction were various clay minerals and calcite. Very little sulphate was detected in this fraction.



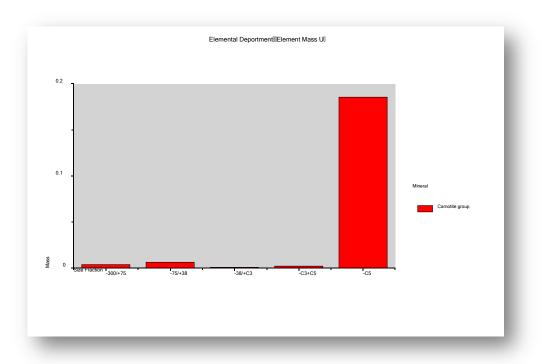


Figure 1 – Elemental deportment of uranium by size fraction in -300um screen fractions for Ain Sder Zone I - upper composite. Analysis performed by QEMSCAN automated mineralogical analysis.

The grain size of carnotite group grains showed all grains <10 $\mu$ m and 50% of the detected grains <3 $\mu$ m. This is at the spatial detection limit for QEMSCAN and finer grains may be present. This may explain the fast leaching kinetics.

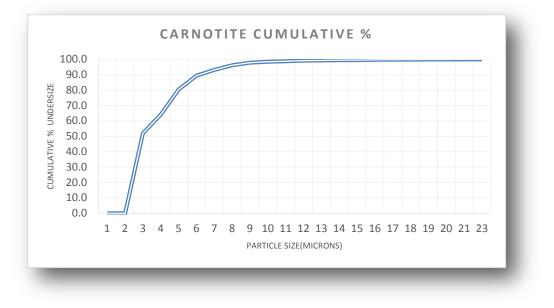


Figure 2 - Cumulative grain size distribution of carnotite group minerals in Ain Sder Zone I - upper composite, determined by QEMSCAN image analysis



### **Preliminary summary**

The results of cyclosizing and mineralogical evaluation of the  $-300\mu$ m fractions confirmed that for the Ain Sder Zone I – Upper composite the uranium occurs as very fine, liberated grains of carnotite group minerals. The deportment is heavily biased to the finest fraction, presenting significant opportunities for beneficiation.