

13 December 2022

## ASX RELEASE

### Tanzanian uranium acquisition and project activities update.

#### Highlights

- **Subject to shareholder approval at an extraordinary general meeting (EGM) this week, the proposed acquisition of Tanzanian uranium and copper interests is due for completion before 31 December 2022.**
- **Significant exploration activities planned at both the Manyoni and Mkuju uranium projects in in early 2023.**
- **Manyoni activities will involve a two-staged program involving an initial data review and reporting of a 2012 JORC resource and followed up with a detailed drilling and exploration program across the prospective areas.**
- **Mkuju activities will comprise a systematic program of field spectrometer analysis and auger drilling over a significant area of the tenure**

**AuKing Mining Limited (ASX:AKN) is on track to complete the proposed acquisition of uranium and copper interests in Tanzania before the end of the year, subject to shareholder approval at an EGM on 16 December 2022.**

The company is nearing completion of all transaction due diligence and related activities including receipt of independent technical analyses of the key project areas – Manyoni and Mkuju.

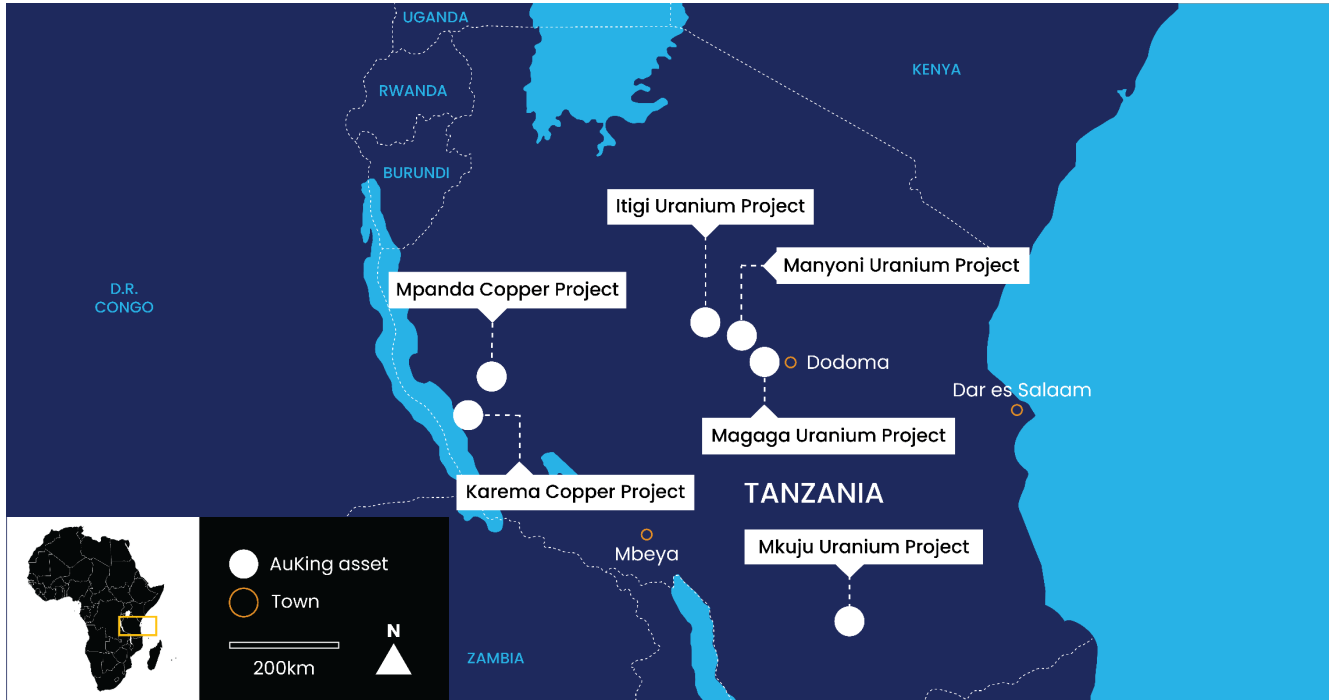
AuKing's application for Prospecting Licences (PLs) covering an area of 541km<sup>2</sup> is expected to be granted shortly. The grant of these PLs is one of the pre-conditions before completion of the sale can occur.

AuKing chief executive officer, Mr Paul Williams, said the proposed acquisition had already received strong proxy support from shareholders.

“In the event of approval being obtained from shareholders at the EGM, the company will then move to complete the Tanzanian acquisition as soon as possible and hopefully before the end of the year. We have also made excellent progress with planning for exploration activities at the primary target areas, Manyoni and Mkuju, with the intention of getting those programs underway in early 2023,” Mr Williams said.

## Tanzania Acquisition

AuKing is well advanced with arrangements associated with the Tanzanian acquisition. Due diligence activities are near completed (including receipt of independent technical analyses of the key project areas – Manyoni and Mkuju) and the focus is now on the steps required to complete the acquisition.



**Figure 1.** Location of Tanzanian Project areas

The key outstanding matter prior to completion of the Tanzanian acquisition is approval by AuKing shareholders of various aspects of the acquisition including:

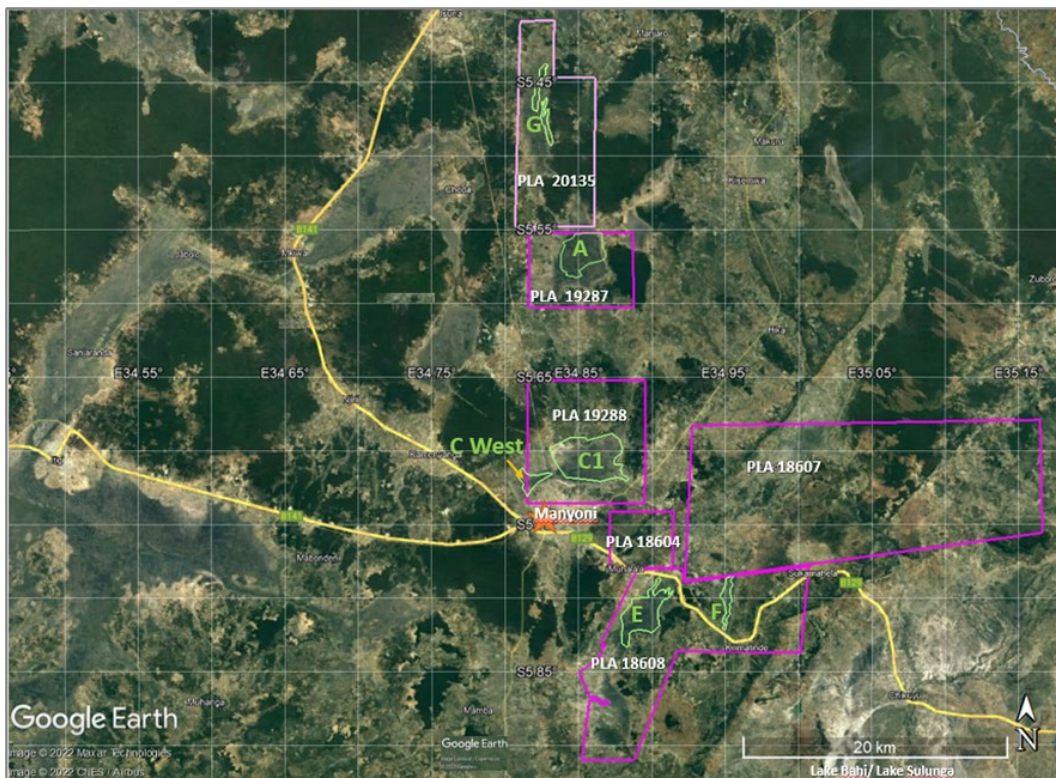
- Issue of 60,000,000 shares and 30,000,000 options (exercisable at 20c on or before 30 September 2025) (“2025 Options”) to the project vendors
- Ratification of the recent T1 share placement (13,740,000 shares) and approval to issue 6,870,000 2025 Options to the T1 participants
- Approval of the issue of 5,000,000 shares and 10,000,000 2025 options to Vert Capital; and
- Approval of the proposed T2 placement of 21,260,000 shares @ 10c per share, together with 10,630,000 2025 Options.

These items are on the agenda for approval at AuKing’s extraordinary general meeting, scheduled for Friday, 16 December at 9.30am (Brisbane time) (“EGM”) and proxy support from shareholders to date has been very encouraging. In the event of approval being obtained from shareholders at the EGM, the Company will then move to complete the Tanzanian acquisition as soon as possible and hopefully, prior to 31 December 2022.

## Manyoni work program

### Manyoni Geology

The Manyoni project is located in the Lake Bahi catchment area and comprises several uranium bearing playa lakes between 40 km and 70 km northwest of the centre of Lake Bahi. The area is characterised by outcropping granite and granitic gneisses, which are locally intruded by uranium bearing pegmatites. The sedimentary sequence of the deposit is previously described as consisting of black to grey organic rich clays (Mbuga clays) underlain by variable sandy and silty lenses, interpreted to represent a braided, variable energy depositional environment. A variably-weathered granitic saprolite underlies the sedimentary sequence and is reported to be difficult to distinguish from the sand and silty lenses above in the drill samples.



**Figure 2.** Manyoni PL areas and key known deposits

Uranium mineralisation at Manyoni is reported to occur as near surface secondary enrichment of unconsolidated Mbuga clay sediments and underlying saprolite material. The distribution of uranium is reported to be in the Mbugas and along catchment profiles indicating that uranium is anomalous in ground water for much of the length of the catchment into the Bahi depression. This presents a model for precipitation of uranium within Mbuga traps and in reduced carbonate-rich fluvial channel. Uranium from underlying granitic bodies transported and concentrated in the saprolite has been later transported by enriched ground waters and surface waters then later trapped and concentrated in the playa lakes. Uranium mineralisation in the Manyoni playa lake deposits is generally present as uranium vanadates (carnotite and tyuyamunite) and uranium silicates (coffinite). A high-grade zone noted within the identified C1 project area is dominated by a schrockingerite a water-soluble uranium carbonate.

The uranium deposits discovered at Manyoni to date are shallow, generally less than 10 m deep. To date several individual uranium bearing playa lakes/project areas also referred to as Mbuga have been identified through exploration activities.

The Manyoni deposit is classed in the IAEA (International Atomic Energy Agency) classification of uranium deposits as a surficial deposit; surficial deposits typically vary in size and generally contain low grade uranium. Surficial uranium deposits were formed in the Tertiary and Recent where uranium-rich granites were deeply weathered in a semi-arid to arid climate. The uranium mineralisation is often associated with fine-grained surficial sand and clay.

### *Previous Manyoni Resource Estimate*

Between 2005 and 2009, a significant exploration program was undertaken at Manyoni by Uranex NL (now called Magnis Energy Technologies Limited – ASX: MNS) comprising 3,746 hand dug pits, trenches, auger holes, RAB drill holes, air core holes, reverse circulation drill holes and sonic drill holes – representing more than 25,000m of exploration. In 2010 a mineral resource estimate was published although it was reported to JORC 2004 and cannot be republished by AuKing. The resource estimate include material from the deposits C1, C West, A, E, F and G (See Figure 2 above).

As noted, six individual playas/project domains were identified and explored by Uranex. The domains were based on the data from the sampling. Where possible the domains were subdivided using surfaces corresponding to the bases of the Mbuga clay and of the saprolites. This has only been done for domain C1 where there is sufficient data. This has created three sub domains representing Mbuga clay, saprolite and granite zones. A large majority of the mineralisation lies within the Mbuga clay, with only minor tonnages in the saprolite and granite.

### *Proposed early 2023 Program*

A key focus of early activity for AuKing will be a detailed review and assessment of the available Manyoni project data that formed the basis of the 2010 resource estimate and then to use that exercise for two purposes:

- Firstly, to publish an upgraded resource estimate for Manyoni to JORC 2012 classification; and
- Define the key target areas for a detailed drilling and exploration program at Manyoni.

It is intended to complete the first stage of this work by January/early February 2023 and then follow up immediately with the drilling program. Details of the drilling program and budget will be made available when finalized.

## Mkuju work program

### *Mkuju Geology*

AuKing's proposed Mkuju tenure lies just to the southeast of the world class Nyota Project which was previously owned by Mantra Resources Ltd ("MRU"), then later taken over by Uranium One/ARMZ of Russia for \$1.16Bn in 2011. MRU conducted extensive exploration and feasibility studies and reported both historical Mineral Resource estimates and Ore Reserves (JORC Code 2004) for Nyota. The historical MRE is located in close proximity to Mkuju and shares similar characteristics (e.g. geology, radiometric signature etc). For example, areas within AKN's proposed tenure were sampled by MRU including rock chip, auger, and trenching results.

A large proportion of the Mkuju Project is covered by post Karoo, late Triassic fluvial sediments of the Mbarangandu and the Mkuju Formations. The Mbarangandu Formation is late Norian in age (ca. ~210-203 Ma) and the Mkuju sediments are Rhaetian (203-199 Ma, approximately) in age. The Mkuju Formation is subdivided into three units:

- Upper Unit comprised of conglomerates and gritty sandstones (>250 m);
- Middle Unit comprised of coarse-grained and pebbly sandstones and interbedded grey-brown mudstone and siltstone (>100 m); and
- Lower Unit comprised of coarse-grained sandstones and red siltstones.

MRU subdivided the upper unit, host of the mineralisation, into five mappable sub-units:

- Upper Trig Point Sandstone: coarse- to very coarse-grained sandstones and interbedded grey-green mudstones (>35 m);
- Upper Transitional Zone: coarse-grained, gritty, cross-bedded sandstones and siltstones (15-25 m). Mineralised (U);
- Barren Sandstone: very coarse-grained, pebbly and poorly sorted sandstones (60-100 m);
- Lower Transition Zone: coarse-grained to conglomeratic sandstones with mud clasts and numerous siltstones and carbonaceous siltstones (25-45 m). Locally mineralised (U); and
- Naked Rock Sandstone: very coarse-grained, cross-bedded, arkosic sandstones (20-80 m) with minor fossil wood fragments and abundant U mineralisation.

The Mbarangandu Formation comprises medium- to coarse-grained feldspathic sandstones of grey, yellow and greenish grey colour with calcareous nodules present in places. Brick red to red brown siltstones occur rarely. The thickness of the unit is estimated to be at least 250 m.

### *Proposed early 2023 Program*

Desk work has already been completed including gathering all the previous explorers' data, creating GIS files and generating initial exploration targets. Previous works in the area included, airborne radiometrics, ground scintillometer surveys, soil and grab sampling and auger drilling. Apart from airborne radiometrics, other sampling types were not conducted systematically.

AuKing's initial exploration program has been designed to systematically cover the anomalies that were identified from airborne radiometrics and other anomalies identified from sampling. Therefore the first pass of exploration will include systematic ground spectrometer surveys and systematic auger drilling.

Systematic spectrometers survey will assist to clearly demarcate the area for anomalies and systematic auger drilling will provide samples for xrf/lab analysis. This stage of the program is expected to facilitate generation of further exploration targets that will be tested by air core drilling.



There is a total of 149 auger holes planned. The holes will go to a depth of 10m and are spaced at 200m apart across the anomalous zones. A minimum of 3 auger holes are planned to be drilled per day. The spectrometer survey is comprised of 132 proposed spectrometer survey lines, spaced at 400m for a total length of 621km. Both auger and spectrometer survey programs are expected to be completed over a 2-3 month period.

The samples collected will be analysed using a hired portable hand-held XRF analyser and some selected samples will be sent to the lab for more detailed analysis.

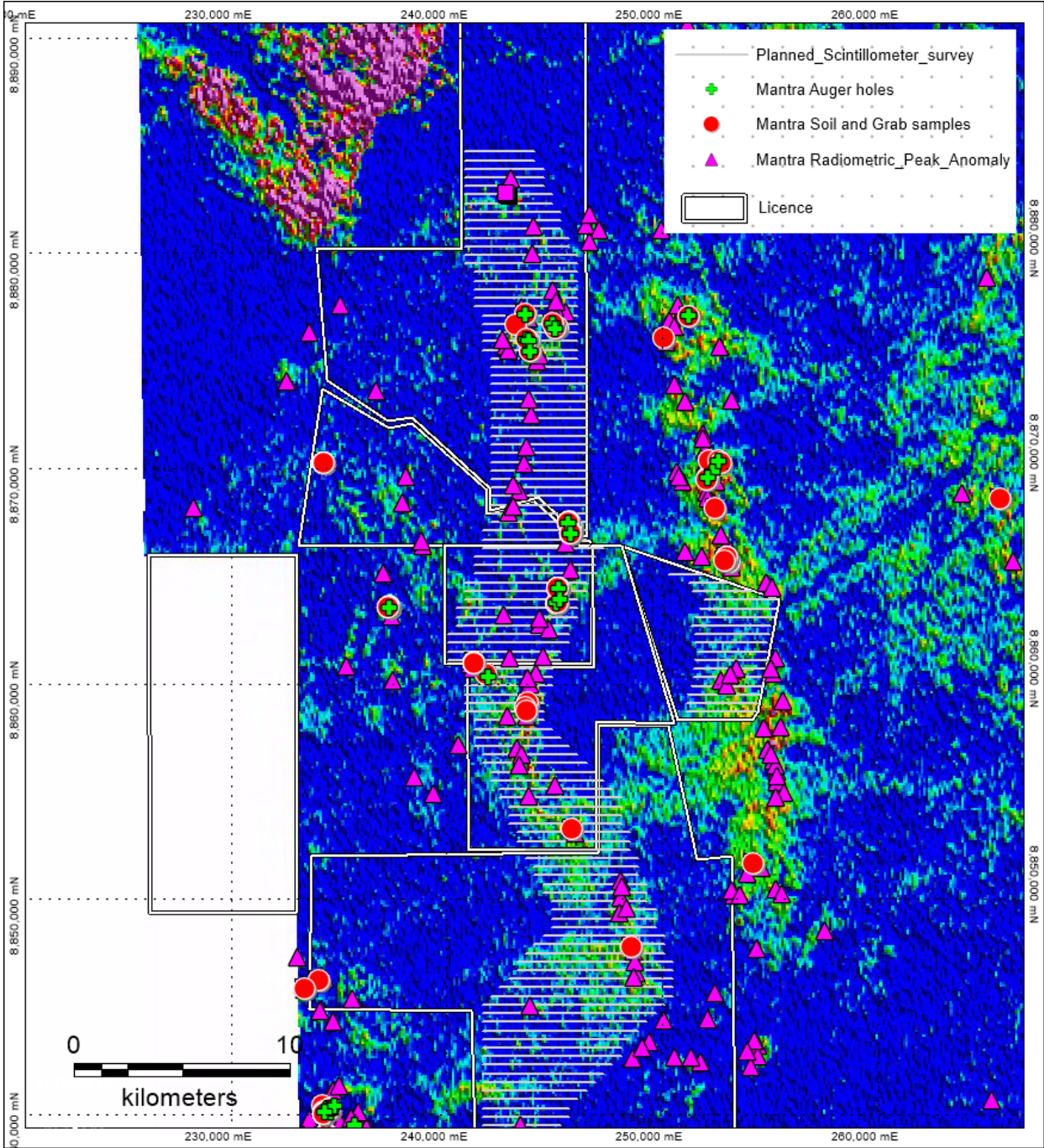


Figure 3. Proposed lines of spectrometer survey at Mkuju

This announcement has been authorised by Paul Williams, CEO, AuKing Mining Limited.



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**About AuKing Mining**

**AuKing Mining (ASX:AKN) is a mining exploration company focused on uranium, copper and zinc projects in both Tanzania and Australia.**

Our flagship Koongie Park Copper Zinc Project in Western Australia’s Halls Creek Region hosts a JORC resource and is neighboured by several significant mining and development operations including Nicholson’s Gold Mine, Panton PGM Project, and Savannah Nickel Mine. Koongie Park has already been the subject of significant exploration drilling and analysis since the 1970’s, hosting over 300 RC and diamond drill holes consisting of more than 60,000m of drilling in total. The predominant focus of drilling has been at the Sandiego, Onedin and Emull deposits, the latter of which offers the potential to establish an open pit mine.

In October 2022, AuKing acquired six uranium and copper licences in Tanzania including:

*Mkuju* – near to the world class Nyota uranium project in southern Tanzania; the subject of significant previous exploration

*Manyoni/Itigi* – the subject of significant exploration situated in central Tanzania, just west of Dodoma

*Mpanda/Karema* – prospective copper areas in western Tanzania that were the subject of historic mining operations but largely untouched by modern exploration methods.

Financial close of the Tanzanian acquisition is due by the end of December 2022.

For further information  
[www.aukingmining.com](http://www.aukingmining.com)

