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10 July 2023

### **ASX RELEASE**

### Promising initial XRF analysis from Itigi Uranium Project drilling

#### **Highlights**

- Drilling program at Itigi is now well underway and promising results have been identified from initial XRF analysis.
- A total of 925 m of air core drilling has been completed to date, across 63 holes to a maximum depth of 15 m below surface.
- Initial XRF analysis has indicated anomalous uranium mineralization across several holes currently drilled, up to maximum reading of 338ppm U<sub>3</sub>O<sub>8</sub>.
- Samples are being prepared for laboratory analysis, with assay results expected within 8-10 weeks.
- A further 1300 m of air core drilling is planned at Itigi, prior to commencement of auger drilling across certain other priority areas of the Project.

#### **Cautionary Statement**

The company uses an Olympus Vanta portable hand-held XRF analyzer to screen Air-Core samples for mineralisation before submitting samples to the lab for assay. This allows for some understanding of the distribution of mineralisation prior to sampling to better ensure that samples submitted for analysis are representative of the type and style of mineralisation. The hand-held XRF provides confirmation that mineralisation is present however it is not an accurate determination of the elemental concentration within the sample anlaysed. Limitations include; very small analysis window, possible inhomogeneous distribution of mineralisation, analytical penetration depth, possible effects from irregular rock surfaces. These results obtained from the hand-held XRF are indicative only and may not be representative of elemental concentration within the material sampled. The pXRF readings are subject to confirmation by chemical analysis from an independent laboratory.

# AuKing Mining Limited (ASX: AKN) has identified promising initial XRF U<sub>3</sub>O<sub>8</sub> results from its planned 2000m exploration drilling program at the Itigi Uranium Project in central Tanzania.

AuKing's CEO, Mr Paul Williams, said that initial results from drilling at Itigi were encouraging and provide the basis for more formal assays to be received within the next couple of months.

"We are very pleased with the activities of our in-country exploration team at Itigi and good progress is being made with our first drilling program in Tanzania. We remain hopeful that a significant uranium deposit can be established at Itigi and these early XRF readings results from near-surface drilling samples taken so far are in important first step. We now look forward to receiving the formal lab assays in due course," said Mr Williams.

#### **Itigi Project Location**

AuKing is the holder of a prospecting licence ("PL") over the Itigi project area which is 80 km west of Manyoni, and in turn approximately 100 km west of the major city of Dodoma in central Tanzania. Two other adjoining areas at Itigi are the subject of PL applications held by AuKing.



Figure 1 – Itigi and Manyoni Project Location

Historical Itigi Exploration



On 29 January 2010 UNX announced details to ASX of an intense radiometric anomaly at a project area called Itigi, approximately 50 km west of Manyoni. The anomaly extends over 40 km long and 10 km wide and in their 29 January 2010 release, UNX stated the following:

"This is the most intensive and extensive radiometric anomaly identified by Uranex during its years of exploration in the Manyoni and Bahi region. Given its very favourable location, with road and rail access to the Manyoni project area, it has the potential to substantially enhance the development opportunity in the region."

A significant amount of exploration activity was then undertaken by Uranex NL ("UNX") up until late 2010/early 2011, when priorities were then turned towards other minerals. In its report to ASX titled "Tanzania Projects Update" lodged on 16 July 2010, UNX noted the following observations about their activities at Itigi:

- 9 high priority targets identified;
- More than 400 small exploration pits (dug to 3m below surface) with visible uranium mineralisation identified in a significant number of these pits; and
- Of the 400 pits, approx. 150 were measured using a portable field XRF, with results up to 304 ppm U<sub>3</sub>O<sub>8</sub>.

#### Itigi Licences

AuKing holds one granted PL and two PL applications in the Itigi region, as shown in Figure 2 below. All of these licence areas are situated across the radiometric anomaly and provide an opportunity to substantially increase the existing uranium resources already identified at the nearby Manyoni Project.



Figure 2 – Itigi Prospecting Licence areas

Work commenced at the Itigi Project in late May and to date, with a total of nearly 925m of air core (AC) drilling having been completed across 63 holes, to depths up to 15m where bedrock is encountered.

AuKing's exploration team has conducted initial XRF field measurements of the drilling samples already obtained and identified anomalous  $U_3O_8$  readings across several drill holes, up to a maximum reading of 338ppm  $U_3O_8$ . Samples are now being prepared for shipment to local laboratories for detailed assay analysis, which is expected to be received within 8-10 weeks.

AuKing intends to complete the planned 2000m Itigi drilling program over the next 2-3 weeks.

#### Note:

References above to XRF results relate to analysis using a hand-held device. This portable device provides immediate analysis of modal mineralogy of drill samples. Unless otherwise stated, values determined by XRF analysis are based on one spot reading per one half metre of drill sample. As such, results from XRF analysis are stated as indicative only and are preliminary to subsequent confirmation (or otherwise) by geochemical laboratory analysis.



Figure 3 – Air core drilling rig at Itigi

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

#### For more information, please contact:

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#### **Competent Persons' Statement**

The information in this report that relates to exploration results at the Itigi Project is based on information compiled by Mr Chris Bittar who is a member of the Australian Institute of Mining and Metallurgy. Mr Bittar is an employee of AuKing Mining Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Bittar consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **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. AuKing recently announced the results of its Koongie Park Scoping Study on a proposal to commence mining operations around a central processing facility at Sandiego.

In January 2023, AuKing acquired several 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 historical 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.

For further information www.aukingmining.com

#### **APPENDIX A – Drillhole Intersections**

#### (Significant intersection summary at greater than 100ppm U cut-off grade.

Hole No.	From (m)	To (m)	Width (m)	U (ppm)
ITAC23_030	1.5	3	1.5	114
ITAC23_031	1.5	3.5	2	182.5
incl.	1.5	2	0.5	338

#### **APPENDIX B – Drill Collar Details**

Hole ID	Plan Easting (WGS 84/ UTM zone 36S)	Planned Northing (WGS 84/ UTM zone 36S)	Plan RL	Dip	Azi	EOH Depth	Significant intercepts (NSR = No Significant results) (AA = Awaiting XRF analysis)
ITAC23_001	634797	9381478	1265	0	360	15	NSR
ITAC23_002	634797	9381278	1265	0	360	15	NSR
ITAC23_003	634800	9381080	1265	0	360	15	NSR
ITAC23_004	634803	9380884	1265	0	360	15	NSR
ITAC23_005	634798	9380680	1265	0	360	9	NSR
ITAC23_006	634800	9380474	1265	0	360	8	NSR
ITAC23_007	634799	9380294	1265	0	360	11	NSR
ITAC23_008	634795	9380096	1265	0	360	15	NSR
ITAC23_009	634803	9379896	1265	0	360	15	NSR
ITAC23_010	634798	9379694	1265	0	360	15	AA
ITAC23_011	634002	9381016	1265	0	360	15	AA
ITAC23_012	634000	9380814	1265	0	360	15	AA
ITAC23_013	633999	9380616	1265	0	360	15	AA
ITAC23_014	634002	9380414	1265	0	360	15	AA
ITAC23_015	633999	9380212	1265	0	360	15	AA
ITAC23_016	634000	9380020	1265	0	360	15	AA
ITAC23_017	634003	9379814	1265	0	360	15	AA
ITAC23_018	634000	9379616	1265	0	360	15	AA
ITAC23_019	633999	9379398	1265	0	360	15	AA
ITAC23_020	634001	9379214	1265	0	360	15	AA
ITAC23_021	630785	9379724	1265	0	360	15	AA
ITAC23_022	630788	9379524	1265	0	360	15	AA
ITAC23_023	630789	9379322	1265	0	360	15	AA
ITAC23_024	630787	9379124	1265	0	360	15	AA
ITAC23_025	630787	9378924	1265	0	360	15	AA
ITAC23_026	630791	9378722	1265	0	360	15	AA
ITAC23_027	630792	9378524	1265	0	360	15	AA
ITAC23_028	630789	9378324	1265	0	360	15	NSR
ITAC23_029	630791	9378124	1265	0	360	15	NSR
ITAC23_030	630789	9377928	1265	0	360	15	YES
ITAC23_031	630788	9377720	1265	0	360	15	YES

ITAC23_032	630792	9377518	1265	0	360	15	NSR
ITAC23_033	630787	9377324	1265	0	360	15	NSR
ITAC23_034	630780	9377124	1265	0	360	15	NSR
ITAC23_035	630787	9376926	1265	0	360	15	NSR
ITAC23_036	630785	9376726	1265	0	360	15	NSR
ITAC23_037	630788	9376524	1265	0	360	15	NSR
ITAC23_038	630789	9376326	1265	0	360	15	NSR
ITAC23_039	630792	9376126	1265	0	360	15	NSR
ITAC23_040	630789	9375922	1265	0	360	15	NSR
ITAC23_041	630790	9375728	1265	0	360	15	NSR
ITAC23_042	630389	9378472	1265	0	360	15	NSR
ITAC23_043	630390	9378312	1265	0	360	15	NSR
ITAC23_044	630393	9378152	1265	0	360	15	NSR
ITAC23_045	630399	9377992	1265	0	360	15	NSR
ITAC23_046	630394	9377834	1265	0	360	15	NSR
ITAC23_047	630395	9377672	1265	0	360	15	NSR
ITAC23_048	630393	9377510	1265	0	360	15	NSR
ITAC23_049	630399	9377346	1265	0	360	15	NSR
ITAC23_050	630393	9377188	1265	0	360	15	NSR
ITAC23_051	630391	9377032	1265	0	360	15	NSR
ITAC23_052	630395	9376868	1265	0	360	15	NSR
ITAC23_053	630393	9376716	1265	0	360	15	NSR
ITAC23_054	630395	9376551	1265	0	360	15	NSR
ITAC23_055	630396	9376402	1265	0	360	15	NSR
ITAC23_056	630393	9376236	1265	0	360	15	NSR
ITAC23_057	630392	9376072	1265	0	360	15	NSR
ITAC23_058	630000	9379200	1265	0	360	15	NSR
ITAC23_059	630000	9379000	1265	0	360	12	NSR
ITAC23_060	630000	9378800	1265	0	360	15	NSR
ITAC23_061	630000	9378600	1265	0	360	15	NSR
ITAC23_062	630000	9378400	1265	0	360	15	NSR
ITAC23_063	630000	9378200	1265	0	360	15	NSR





## JORC Code, 2012 Edition – Itigi Drilling Section 1 Sampling Techniques and Data

Criteria	J(	ORC Code explanation	Co	mmentary
Sampling techniques	•	Nature and quality of sampling (eg 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 (eg 'reverse circulation drilling was used to obtain 0.5 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. Drill type (eg core, reverse circulation,	•	AKN utilised Air Core ("AC") drilling at Itigi to obtain individual 0.5m samples, which were reduced in size to produce a sample of approximately 1 to 2kg in weight. The samples were ticketed prior to dispatch to the analytical laboratory, pulverised to produce a pulp sample for analysis. The AC drilling results referred to in the accompanying release were obtained entirely by AC drilling with the sample return connected to a cyclone and cone splitter. Sampling has been done on a single 0.5m by 0.5m basis. The samples were analysed using a handheld Olympus Vanta XRF unit.
techniques		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).		inch hammer.
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.	•	All samples are weighed in the field and samples will also be weighed at the lab when submitted for analysis. Recovery levels are considered suitable and appropriate for this method of sampling. No relationship between sample recovery and grade has been yet observed and no sample bias is believed to have occurred.
Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	•	AC chips were logged for quantitative and qualitative attributes with chips stored in chip trays for future reference. All drill holes were logged in full.
Sub- sampling techniques	•	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled,	•	The preparation of the samples follows industry practice for XRF sampling with a small charge of the sample placed in a

Criteria	JORC Code explanation	Commentary
and sample preparation	<ul> <li>rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>CRM cup. A primary sample of 1 – 3kg was retained for lab assay purposes.</li> <li>Field QAQC was undertaken using CRM's.</li> <li>The sample sizes are considered appropriate given the nature and grain size of the material being sampled.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>All XRF readings from Itigi were conducted in the field using an Olympus Vanta XRF.</li> <li>Samples were analysed in a clean, contamination free environment.</li> <li>Suitable settings and standards were used on a daily basis to calibrate the unit.</li> </ul>
of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The grade of significant intersections has been verified by other senior geological personnel associated with the project.</li> <li>The drilling database is managed by Newexco Exploration, a Perth based exploration consultancy group. All drilling data resides on their NXDB database management system. Newexco is responsible for uploading all analytical and other drilling data and producing audited downloaded data for use in various mining software packages. The NXDB system has stringent data entry validation routines.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All location data is collected in WGS84/UTM Zone 36s.</li> <li>No downhole survey methods were completed.</li> <li>AC Drill collars were surveyed with a handheld GPS unit.</li> <li>RL data was collected using a handheld GPS. Variation is minimal across the terrain.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been</li> </ul>	<ul> <li>The drilling was a first pass drilling program for the area.</li> <li>Drilling and sampling targeted surface and subsurface Playa deposits.</li> <li>Samples were collected on 0.5m intervals.</li> </ul>

Criteria	JORC Code explanation	Commentary
	applied.	
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	No orientation bias was considered.
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>The chain of custody is managed by AKN. The samples will be freighted directly to the relevant laboratories for analysis.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No independent audit or review has been undertaken to date.

#### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The Itigi project is located on PL12352/2023 and the tenement is in good standing.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	• Historical exploration over the project area has been limited to exploration pits dug to a nominal depth of 3m by Uranex in 2010 to 2011.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The regional geology is dominated by playa-lake deposits overlying weathered uranium-rich granitoid basement.</li> <li>The two main local lithologies that are interpreted to host the mineralisation include 1) Mbuga Clay, which is a transported sediment and 2) a saprolite, which is interpreted as an in situ weathering product of the basement granitoids.</li> </ul>
Drill hole information	<ul> <li>A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length</li> </ul></li></ul>	Drilling details are not provided.

Criteria	JORC Code explanation	Commentary
Data	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. In reporting Exploration Results, weighting averaging techniques	<ul> <li>No specific intervals are being reported.</li> <li>Matel agging land values have not been</li> </ul>
methods	<ul> <li>weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	• Metal equivalent values have not been used.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The program was designed to assess the potential for surface and sub surface (&lt;15m) uranium mineralisation at Itigi.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Relevant diagrams have been included within the main body of text.</li> </ul>
Balanced Reporting	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>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.</li> </ul>	<ul> <li>Anomalous XRF readings have been identified at Itigi, these samples will be sent to the laboratory for an accredited assay, where the results will be tabulated for release.</li> <li>XRF readings should be considered a guide only.</li> <li>This reporting method has been deemed appropriate for this stage of the project.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	No other substantive data exists.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main</li> </ul>	<ul> <li>Once assay results have been received and reviewed, further drilling and geophysical work will be considered to assess the potential of the Itigi project.</li> </ul>

Criteria	JORC Code explanation	Commentary
	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	