

MTONYA URANIUM DEPOSIT TANZANIA

HIGHLIGHTS

- Gladiator has received drilling and estimation data for the Mtonya deposit which is in southern Tanzania on the Company's Mjuku Uranium Project and is partly exposed at surface.
- The Mtonya deposit has a foreign estimate of 2.95 Mt with an average grade of 293 ppm U₃O₈ containing 1.9 Mlbs of U₃O₈ ¹, reported March 1, 2013, by Uranium Resources Plc under NI 43-101.
- The deposit is 25km from the Company's Likuyu North deposit which has a JORC Code reported Mineral Resource Estimate (MRE) (Refer ASX Announcement 29 April 2022 Likuyu North Mineral Resource Estimate) of 7.7 Mt with an average grade of 267 ppm U₃O₂ containing 4.6 Mlbs U₃O₂, in the Inferred and Indicated classification categories.
- The Company intends to carry out a detailed review of Mtonya database with a view to reporting in accordance with the JORC Code and to establish areas where it is reportedly 'open' for potential expansion.
- Roll-front uranium deposits are one of the most important uranium deposit types globally due to their typically large size and amenability to ISR. Mtonya demonstrates that roll-front uranium deposits are present on the Project. Over 90% of the Project area is underlain by the prospective geological series.
- The Company is gearing up to start exploration efforts aimed at expanding the existing deposits and identifying new zones with roll-front or the tabular deposit type which hosts Likuyu North.

Gladiator Resources Ltd (ASX: GLA) (**Gladiator** or the **Company**) is pleased to provide the following update for activities undertaken by its wholly owned subsidiary Zeus Resources (T) Limited (**Zeus**) at its Mkuju Uranium Project (the **Project**) located in Tanzania.

Gladiator Resources Chairman Ian Hastings commented:

"The Company is very pleased to finally receive the historical drilling and estimation data for the Mtonya deposit and has asked the MSA Group to review the database and advise on the necessary work to potentially report it in accordance with the JORC Code. The Mtonya deposit adds to the Company's nearby Likuyu North deposit and with the several drill-ready prospects provides opportunity for the Company to quickly build a significant uranium asset. The Company is preparing for the exploration program for this valuable uranium opportunity."

- ¹ Cautionary Statement: The estimate of mineralisation at Mtonya is a "foreign estimate" as defined by the ASX Listing Rules, and accordingly:
 - The estimates are not reported in accordance with the JORC Code;
 - The Competent Person has not done sufficient work to classify the foreign estimates as mineral resources in accordance with the JORC Code; and
 - it is uncertain that following evaluation and/or further exploration work that the foreign estimates will be able to be reported as mineral resources in accordance with the JORC Code.
 - Full disclosures required by Listing Rule 5.12 are contained in Appendix 1 of this announcement.



MTONYA DEPOSIT OVERVIEW

The Mtonya deposit estimate was prepared by Roscoe Postle Associates Inc. (RPA) for the previous holder of the Prospecting License, Uranium Resources Plc (URA) with effective date 1 March 2013. The estimate was prepared using the Canadian institute of Mining, Metallurgy and Petroleum (CIM) definitions, and reported in accordance with Canadian National Instrument 43-101 (NI 43-101). The estimate was made on the assumption that parts of the deposit that are below the water table at 50-60 m depth are potentially amenable to In-situ Recovery (ISR) of the uranium, and that the upper parts can be mined by open-pit methods.

The deposit is in southwest Tanzania (Figure 2) and is hosted by feldspathic sandstone of the Upper Triassic ages Mbarangandu Formation. The mineralisation was interpreted by RPA and URA as 'stacked roll-front mineralisation' hosted in 3 'tiers' separated by mudstone aquitards. Below the near-surface oxidation zone, Mtonya has three oxidation tiers. The redox tiers are 100 m to 160 m thick and each may contain several roll-fronts. Tier 1 has been defined from depths of 50 m to 260 m and has been the main drill target to date. Tier 2 has been intersected at depths of 270 m to 350 m and is less drill tested. Tier 3 oxidation has been intersected at depths over 350 m and its geometry is poorly defined.

The mineralised bodies are modelled as being tabular and lenticular and 1-15 m thick, 50-200 m wide and 100 to over 1000 m in length (Figure 4). They occur along well-defined redox interfaces in the very coarse sandstone with mudstone beds.

MINERALOGY AND RECOVERY

Above depths of approximately 80 m the uranium mineralisation is oxidised and is autunite and other secondary uranium minerals. Below this mineralogical work has identified primary minerals uraninite and coffinite. These oxide and primary minerals are generally amenable to recovery by leaching, either by In Situ Recovery (ISR) or conventional tank leaching. The host rock and mineralogy is similar to that at the Company's Likuyu North deposit for which process test work has been carried out giving recoveries of 85.6 to 87.9% using acid leaching.

PREVIOUS DRILLING

The discovery of Mtonya was by Western Metals who completed 16,271 m of RC drilling between 2007 and 2008 targeting surface radiometric anomalies. URA then completed 38,591 m of diamond core drilling between 2010 and 2012 to explore and better delineate the deposit. Drillholes supporting the estimate are on 100-200m spaced lines and holes are approximately 50m spaced on these lines. Only chemical analyses were used for the estimation.

AN INDICATOR OF PROSPECTIVITY FOR ROLL-FRONT DEPOSITS

Over 90% of the Mkuju Project area is comprised of rocks of the Mbarangandu Series and may be considered prospective for roll-front type deposits like Mtonya. That roll-front type deposits occur on the Project is significant as they are globally one of the most important types of uranium deposit and may be very large, of excellent grade and are generally amenable to ISR as widely used in the US, Kazakhstan, Australia and elsewhere.

OPPORTUNUTY TO EXPAND

In their 2013 NI-43101 Technical Report for Mtonya, RPA noted that further infill drilling within the resource area and lateral extension of known mineralisation could lead to a substantial increase in resources and potential for significant deeper uranium mineralisation in Tiers 2 and 3 located below Tier 1. This is encouraging though the Competent Person has not carried out a detailed review of the Mtonya data or estimate and so is unable to verify this statement.



CONCEALED URANIUM TARGETS

To date exploration on the Project has focused solely on targets with surface radiometric anomalism (Figure 3). Radiometric surveys generally do not detect mineralisation if it is below a cover of unmineralised material. The Company recognises the potential of areas with no radiometric anomalism and has identified targets based on other exploration and geological evidence, including potential extensions to the known mineralisation and new areas. The next stage of exploration will include drilling to test these targets.

Table 1: Foreign estimate of mineralisation for the Mtonya deposit at a 100 and 200 ppm U₃O₈ cut-off grades

Cut-off grade		Tonnes (millions)	grade U3O8 ppm	contained U3O8 Mlbs
	Above water table	0.49	318	0.34
100 ppm U308	Below water table	2.50	288	1.56
	Total Inferred	2.95	293	1.91
	Above water table	0.29	438	0.28
200 ppm U308	Below water table	1.54	372	1.26
	Total Inferred	1.83	382	1.54

- The estimate was prepared by Roscoe Postle Associates Inc.
- 2. The estimate was reported effective 1 March 2013 using the CIM definitions and in accordance with Canadian NI 43-101
- 3. Note that the 200-ppm cut-off estimate is a portion of the 100-ppm cut-off estimate, it is not in addition to it.
- 4. It was assumed that the deposit could be mined viably by ISR
- 5. A minimum mining width of 80 cm was used.
- 6. Bulk density of 1.7 t/m³ was used
- 7. Numbers may not add due to rounding.

Figure 1. Secondary uranium exposed at surface at Mtonya, the scintillometer reading 40,900 counts per second (40.9 kcps).





Figure 2. Project location map in Tanzania





Figure 3. Mkuju Project- main targets over airborne radiometric data showing location of Mtonya

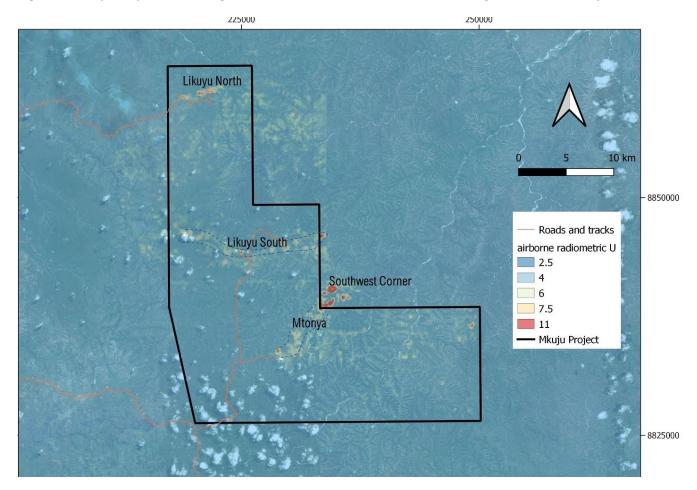


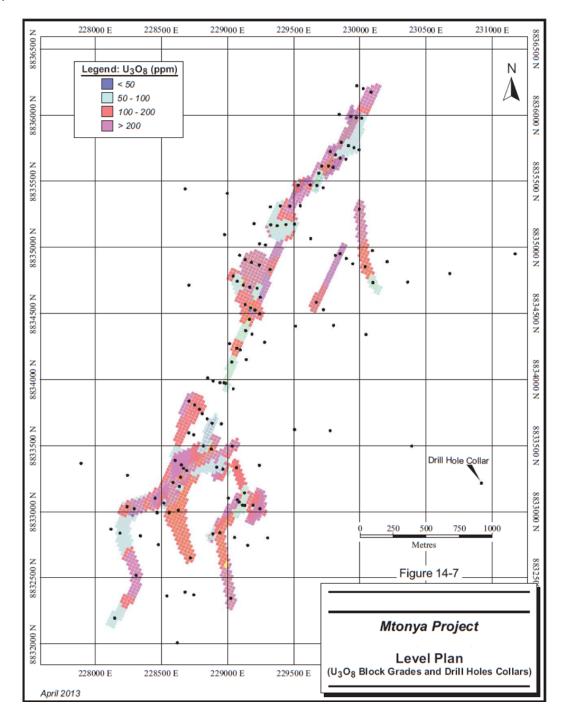
Table 2: Mineral Resource Estimate for the nearby Likuyu North Deposit, reported in accordance with the JORC Code. Likuyu North is 25 km northwest of Mtonya, using a 100 and 200 ppm U_3O_8 cut-off grade.

100 pm U3O8 cut off	Tonnes (millions)	grade U3O8 ppm	contained U3O8 Mlbs
Indicated	3.1	333	2.3
Inferred	4.6	222	2.3
Total Inferred + Indicated	7.7	267	4.6
200 pm U3O8 cut off	Tonnes (millions)	grade U3O8 ppm	contained U3O8 Mlbs
Indicated	1.9	448	1.9
Inferred	1.9	326	1.4
Total Inferred + Indicated	3.8	387	3.2

- 1. Effective date 27 April 2022
- 2. Note that these are not in addition to each other, the 200 ppm cut-off MRE is a portion of the 100 ppm cut-off MRE.
- 3. The MRE assumes open pit mining within a conceptual pit shell based on a USD70/lb U3O8 and 88% recovery.
- 4. Figures have been rounded to the appropriate level of precision for the reporting of Mineral Resources, totals may not add-up exactly
- 5. The MRE are stated as in situ dry metric tonnes.



Figure 4. Plan view of the Mtonya deposit block model created by RPA (source: RPA Technical report for Mtonya)



-ENDS-

Released with the authority of the Board.



For further information please visit: www.gladiatorresources.net

contact:

Ian Hastings Chairman ian@tomiknominees.com.au +61 408 581 022 Andrew Draffin
Company Secretary
adraffin@dwaccounting.com.au
+61 3 8611 5333

Mark Flynn
Investor Relations
mark.flynn@gladiatorresources.net
+61 416 068 733

Competent Person's Statement

Information in this "ASX Announcement" relating to Exploration Targets, Exploration Results and Mineral Resources has been compiled by Mr. Andrew Pedley who is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP). Mr. Pedley has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012 Edition).

Mr. Pedley consents to the inclusion in this document of the matters based on the information in the form and context in which it appears. The market announcement is based on, and fairly represents, information and supporting documentation prepared by the Competent Person. Mr. Pedley is not an employee of the Company; he is a Senior Associate with the MSA Group of Johannesburg who are providing consulting services to Gladiator Resources Ltd.

The information in the market announcement provided under rules 5.12.1 to 5.12.7 contained in Appendix A of this document is an accurate representation of the available data and studies for the material mining project.

About Gladiator Resources

Gladiator is an ASX listed (ASX: GLA) exploration and mining company with a focus on gold and uranium.

The Company was recently granted seven exploration licenses covering over 1,764km2 of prospective exploration tenements located in Tanzania, East Africa.

Gladiator also has three gold projects in Australia including Marymia located in Western Australia and Rutherglen and Bendoc which are each located in Victoria.

All the Company's projects are located in areas that have experienced significant exploration attention and investment whilst also recording highly encouraging results. Victoria, in particular, is currently experiencing a revival in exploration and production which is attracting significant investment attention both domestically and abroad. The Company's primary focus is to advance its current portfolio of projects whilst also evaluating other opportunities that are complimentary.



APPENDIX 1 – ASX Listing Rules Chapter 5.12 – Reporting Requirements for a Foreign and/or Historical Estimate.

Criteria	JORC Code Explanation	Commentary
5.12.1	The source and date of the historical estimates or foreign estimates.	The estimate for the Mtonya Deposit has an effective date of 1 March 2013 and was prepared by Roscoe Postle Associates Inc. (RPA) for previous holder of the Mineral Rights, Uranium Resources Plc (URA). The estimate is described in a Canadian National Instrument 43-101 (NI 43-101) Technical Report titled 'Technical Report on the Mtonya Project, Ruvuma Province, Tanzania. By Roscoe Postle Associates. April 18, 2013.'
5.12.2	Whether the historical estimates or foreign estimates use categories of mineralisation other than those defined in Appendix 5A (JORC Code) and if so an explanation of the differences.	The estimate was prepared using the Canadian institute of Mining, Metallurgy and Petroleum (CIM) definitions which uses categories that are consistent with those defined in Appendix 5A (JORC Code). The Mtonya estimate was classified as Inferred.
5.12.3	The relevance and materiality of the historical estimates or foreign estimates to the entity.	The foreign estimate is relevant as it provides a material opportunity to increase the Mineral Resource Estimate on the Company's Mkuju Project, if the efforts to report it or a portion of it, in accordance with JORC Code is successful. It is material as it contains 1.9 Mlbs of U3O8.
5.12.4	The reliability of the historical estimates or foreign estimates, including by reference to any of the criteria in Table 1 of Appendix 5A (JORC Code) which are relevant to understanding the reliability of the historical estimates or foreign estimates.	The Competent Person has reviewed the aforementioned Technical Report. In terms of data spacing, data quality and the estimation methodology, and other criteria in Table 1 of Appendix 5A (JORC Code) the estimate appears to be well prepared and sufficiently reliable for the classification of Inferred, though a detailed review is required for its potential consideration as a mineral resource under JORC Code.



5.12.5	To the extent known, a summary of the work programs on which the historical estimates or foreign estimates are based and a summary of the key assumptions, mining and processing parameters and methods used to prepare historical estimates or foreign estimates.	URA completed 159 holes for 38,591 m of diamond core drilling between 2010 and 2012. The estimate was based on 158 holes and 26,376 assays. Intervals with ≥50 ppm U3O8 and minimum 80 cm thickness were imported into Leapfrog for 3D interpretation and these then imported into Gemcom for further editing. A total of 11 zones were interpreted. Data was top-cut at 1500 ppm U3O8 and composited to the full width of each zone. Grade was then interpolated using Inverse Distance Squared with search ellipses oriented in the plane of the roll-fronts, into blocks of 25x25x1m. A density of 1.7 t/m³ was used. The estimate was classified as Inferred. RPA assumed that uranium below the water table (50-60 m depth) is recoverable by In Situ Recovery (ISR) and that above this open pitting may be required. They stated that the following assumptions were applied: U3O8 price of US\$75/lb, operating Cost of US\$30/lb and 50% recovery of the uranium. The Competent Person notes that further work on demonstrating that ISR has reasonable prospects of successful application is required, or the application of a conceptual open-pit shell, to provide necessary confidence that the denosit or parts of it have Peasonable Prospects for
		that the deposit or parts of it have Reasonable Prospects for Eventual Economic Extraction (RPEEE). Mineralogical work has identified minerals that are amenable to recovery, either by ISR or conventional acid leaching, similar to those at the Company's Likuyu North deposit for which a significant amount of process testwork has been carried out.
5.12.6	Any more recent estimates or data relevant to the reported mineralisaton available to the entity.	The Company or Competent Person are not aware of any more recent data or estimates.
5.12.7	The evaluation and/or exploration work that needs to be completed to verify the historical estimates or foreign estimates as mineral resources or ore reserves in accordance with Appendix 5A (JORC Code).	A detailed review of the drilling data and resource model and estimation files is required, and other criteria required by Table 1 of Appendix 5A (JORC Code). It will be necessary to create a conceptual pit-shell based on assumed parameters and report those portions of the deposit falling inside the shell as being Mineral Resources. It may be possible to carry out desktop or limited fieldwork to provide greater confidence that ISR can be used for uranium recovery, so that may be used as an alternative assumed mining method for the purposes of demonstrating RPEEE. A site visit has been carried out by the Competent Person to Mtonya on 17 March 2021. Drill-collars were visited and secondary uranium mineralisation at surface was observed.



5.12.8	The proposed timing of any evaluation and/or exploration work that the entity intends to undertake and a comment on how the entity intends to fund that work.	The review of the drilling data, resource model and estimation files are planned to take place during July 2022. No exploration work is deemed necessary at this stage. The review work will be carried out by the MSA Group and the Company has the funds available to complete this.
5.12.9	Contained in the Competent Persons	
	statement	
5.12.10	Contained in the Competent Persons	
	statement	