

Four trenches complete at SWC Target; uranium mineralisation in all trenches.

- Field crews complete four trenches at Southwest Corner (SWC) target, totaling 378 m
- All four trenches include areas with scintillometer readings of 9,999 counts per second (cps), the maximum for the device, with uranium minerals visible.
- Trench 4 includes a zone of 44 metres in length which consistently 'maxes-out' at 9,999 cps.
- The trenches are being used to investigate uranium mineralization reported in 2008 by Mantra Resources (Mantra) in auger drillholes. These shallow holes included the excellent intervals listed below, all of which ended in mineralisation.
 - MRSA04: 4m @ 838 ppm U₃O₈ from 7m, including 2m@ 1,300ppm
 - \circ MRSA06: 7m @ 440 ppm U₃O₈ from surface, including 3m@ 610ppm
 - \circ MRSA12: 8m @ 1,273 ppm U₃O₈ from surface, including 2m@ 3,825ppm
 - o **MRSA07**:
- 4m @ 1,463 ppm U₃O₈ from 3m, including 2m@ 2,705ppm
- \circ MRSA13: 5m @ 628 ppm U₃O₈ from 1m, including 3m@ 803ppm
- SWC is ~50 kms south of Mantra/Uranium One's world class "Nyota" deposit (hosting a Measured and Indicated MRE of 187 Mt at 306 ppm U₃O₈ containing 124.6 Mlbs U₃O₈) in a similar geological setting.
- Roads and drill sites are being prepared ready for drilling early 2024.
- A ~120 line km radiometric survey has been completed over the target results of which will be announced during November.

Gladiator Resources Ltd (ASX: GLA) (Gladiator or the **Company**) is pleased to announce that all four trenches completed at the SWC Target within its 724km2 Mkuju Uranium Project (Fig.1) contain uranium mineralisation, most abundant in trench 4. This is highly encouraging, supporting the historic auger hole results and furthering the Company's belief that there is the potential for a significant sandstone-hosted uranium deposit at SWC.

Trenching Program

Gladiator has completed 4 trenches at the SWC target. All have zones where the scintillometer being used is giving maximum readings of 9,999 cps The mineralisation is hosted in weathered sandstone (saprock) with yellow and green secondary uranium minerals visible (Fig. 3),and in some places is abundant. The trenches were positioned to pass close to a selection of the historic auger holes, as shown on **Figure 2** and further referenced in **Tables 1 and 2**. Trenches are mostly 3 metres in depth, an example is given in **Figure 3**. Scintillometer readings were collected on a grid on the side-wall of each trench, an example of which is provided in **Figure 4**. A final 5th trench is in progress and once completed all samples collected from the exploration program will sent for uranium analysis at a commercial laboratory.



Concurrently with the trenching, a ~120-line km ground radiometric survey has been completed during October. The data is being processed and will be reported during November. The findings from the trenching and radiometric survey will inform a drilling program which is planned to test the depth and lateral extent of the known and potentially new areas of mineralisation.



Figure 1. Gladiator's Mkuju Project area showing the SWC target





Fig 2: SWC target area and airborne radiometric data (white is highest radiometric intensity). Auger holes (white) and Gladiator's trenches (red) are marked.

The SWC Target

The target is a relatively intense 3.5×1.8 km airborne radiometric anomaly in the southwest corner of Prospecting Lease 12354 which was recently secured by Gladiator¹. The target is at the end of a 12 km long NE-SW oriented trend of radiometric anomalies referred to as the Mtonya-SWC trend (**Fig.1**). SWC has the most intense radiometric anomaly of all those on the trend, but no exploration has been carried out since 2008 except for a single diamond core hole drilled in 2012. Reportedly, Mantra (who originally drilled the auger holes) did not follow-up the highly elevated U₃O₈ results at the time due to prioritising their large "Nyota" Uranium deposit 50 km to the north which was central to an AUD\$1 Billion takeover by Uranium One in 2011.

¹ GLA announcement dated 1 June 2023





Fig 3: Photographs of one the trenches and uranium mineralised (yellow) material



	Turne	Max	From	To (m)	Interval	11208 (mmm)	U3O8 (ppm) at	Date			RL (m)
Hole_ID	туре	Depth (m)	(m)	10 (M)	(m)	0308 (ppm)	EOH*	completed	UTIVI East	UTW North	
MRSA01	auger	10	3.0	9.0	6	182	90	4/26/2008	234550	8840044	794
MRSA02	auger	13	11.0	13.0	2	305	470	4/27/2008	234645	8840026	807
MRSA03	auger	13	0.0	3.0	3	130	<10	4/28/2008	234710	8839860	806
MRSA04	auger	12	7.0	11.0	4	838	150	4/29/2008	234719	8840034	813
MRSA05	auger	10	8.0	9.0	1	90	30	4/29/2008	234864	8840155	810
MRSA06	auger	7	0.0	7.0	7	440	510	4/30/2008	234427	8839889	821
MRSA07	auger	8	3.0	7.0	4	1463	150	4/30/2008	234500	8838672	975
MRSA08	auger	5	4.0	5.0	1	150	150	5/2/2008	234523	8838750	796
MRSA09	auger	6	1.0	2.0	1	100	50	5/2/2008	234523	8838787	794
MRSA10	auger	6	4.0	6.0	2	270	120	5/2/2008	234433	8838650	791
MRSA11	auger	6	1.0	5.0	4	348	80	5/2/2008	234362	8838639	801
MRSA12	auger	8	0.0	8.0	8	1273	300	5/2/2008	233976	8838328	822
MRSA13	auger	7	1.0	6.0	5	<mark>6</mark> 28	200	5/2/2008	234059	8838422	819
MRSA14	auger	9			No data			5/4/2008	233316	8838166	838
MRSA15	auger	7			NSI		65	5/4/2008	233443	8838332	830
MRSA17	auger	11			No data			5/27/2008	233893	8837970	805
MRSA18	auger	8			NSI		40	5/31/2008	235810	8839256	784
MSED0004	diamond core	701	58.1	59.3	1.2	824		10/18/2012	233488	8838452	819

Table 1: Historic (2008) auger holes with uranium intersections (all holes vertical). NSI = No significant Intersection

				Position			
Trench_ID	Azimuth	Length	Nearby 2008 auger hole		Northing	Easting	RL
SWC-TR01	111	168	MRSA12	Start	8838290	234057	835.69
				End	8838368	233905	814.27
SWC-TR03	12	44	MRSA13	Start	8838402	234057	842.18
				End	8838450	234061	843.86
SWC-TR04	14	56	MRSA06	Start	8839946	234411	818.87
				End	8839862	234388	820.5
SWC-TR05	28	110	MRSA07	Start	8838636	234478	830.29
				End	8838741	234524	830.29

Table 2. Position of Gladiator's trenches. Coordinates are WGS84 UTM37S



Fig 4: CPS values for sidewall of trench 4 with zone of >9,999 outlined



2008 Auger Hole Results

In 2008 Mantra carried out auger drilling to test airborne radiometric anomalies at the SWC target. Available data indicates that they drilled 18 holes to a maximum depth of 13m with a total of 154m drilled. The holes were terminated on reaching the change from weathered to less-weathered harder rock, as an auger bit cannot penetrate harder ground. **Table 1** provides the results in the database obtained by Gladiator. The holes were all drilled along ridgelines for ease of access.

Geology and Target Type

The area is comprised of sediments of the Upper Triassic Mbarangandu Formation, which are coarse sandstones, grit-stones, conglomerates and lesser mudstones. The stratigraphy is gently dipping to the northeast and east, with local variations. The Uranium observed at the nearby Mtonya deposit is hosted by feldspathic sandstone and interpreted as 'stacked roll-front mineralisation' type, hosted in 3 'tiers' from tens to hundreds of meters below surface and separated by mudstones.

Based on the work at Mtonya, the primary target type is a Uranium 'roll-front' system. These are accumulations of Uranium at the interface of oxidised and reduced sandstones or siltstones, which are globally one of the most important types of Uranium deposit. There is also a possibility for tabular sandstone deposits such as the Company's Likuyu North deposit which is hosted by up to 8 stacked flat to gently dipping lenses. Both tabular and roll-front types may be very large, of excellent grade and are generally amenable to mining by In-Situ Recovery (ISR) methods, as is widely used in the USA, Kazakhstan and Australia. ISR can be beneficial in terms of economics and have less impact on the environment.

Released with the authority of the Board

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Competent Person (CP) 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 a non-executive director of Gladiator Resources Limited.



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
1.1 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 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 (eg submarine nodules) may warrant disclosure of detailed information. 	 <u>Gladiator Trenches:</u> Sampling o the trenches is underway For the cps data, a handheld Exploranium GR100 scintillometer is being used to map out mineralisation in the side-wall of the trenches. The cps readings were taken on a nominal 1 x 4 m grid on one of the sidewalls of each trench. <u>Historic drillholes:</u> No records of sampling methodology were available to Gladiator for review. All that is known is that the holes were drilled using an auger rig and that samples were 1 metre in length. It is uncertain if the full sample or a split of it was collected. The single core hole was presumably sampled by cutting into half and submitting half-core though no description has been obtained. Following on from the above, no assurances of sample representivity can be made.
1.2 Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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). 	 <u>Historic drillholes:</u> The holes were drilled using an auger rig and were vertical. Holes stopped when they reached 'refusal' – auger rigs will only penetrate soft material. The holes might have recovered the upper highly weathered bedrock (saprolite) but not beyond this. The hole MSED0004 was drilled by diamond core drilling of unknown diameter.



Criteria	JORC Code explanation		Commentary
1.3 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. 	•	<u>Historic drillholes:</u> No records of recovery are available and so no comment on sample representivity or adequacy of the method can be made.
1.4 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. 	•	<u>Historic drillholes:</u> There is no logged geological data for the auger holes. The single diamond hole has a detailed geological log recording weathering, lithology, grainsize, sorting and other characteristics. No photographs are available.
1.5 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 subsampling 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 sampled. 	•	<u>Historic drillholes:</u> No records or description of subsampling techniques are available and so no comment on appropriateness or representivity can be made.
1.6 Quality of assay data and laboratory tests	 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 	•	<u>Gladiator Trenches:</u> A scintillometer does not measure uranium directly, it measures radiation from the decay of either uranium, thorium or potassium. In this area it is well known that the radiation is likely to almost entirely be from the decay of uranium minerals. This is supported by the



Criteria	JORC Code explanation	Commentary
	 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 (lack of bias) and precision have been established 	 observation of secondary uranium minerals. The cps data cannot be converted to uranium grades but good grades are expected based on the high cps data in the trenches. <u>Historic drillholes:</u> No record of assay and laboratory methods is available. The assay sheet in the database does record that the method was 4 acid digest followed by ICPOES and that the analyses were carried out at ALS in Perth. The mineralised samples were analysed by XRF, presumably as a second analysis requiring a higher detection limit more appropriate to the mineralised samples which have up to 6130 ppm U3O8. These methods are appropriate. No quality control data is available and so the CP can make no assurances on the quality (accuracy and precision) of the analyses.
1.7 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. 	 <u>Historic drillholes:</u> There has been no independent verification of the auger hole results. Uranium measured as U in the database was converted to U308 by multiplying by 1.1792 as is correct according to molecular weights of U and O.
1.8 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. 	 <u>Gladiator Trenches:</u> The new trenches are being located using a handheld Garmin GPS, positioned at the site of a selection of the 2008 auger holes. <u>Historic drillholes:</u> There is no description of survey method for the auger holes other than that it was by GPS, presumably a hand-held unit. All holes are positioned using WGS84 UTM zone 37S. There has been no topographic survey.



Criteria	JORC Code explanation	Commentary
1.9 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 Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 <u>Historic drillholes:</u> The drillholes were drilled along topographic ridgelines and so are arranged accordingly. They are between 40 and 200 m apart and in two areas plus a single outlying hole.
1.10 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. 	 <u>Gladiator Trenches:</u> It is uncertain what the orientation of mineralisation is though it is likely to be horizontal or gently dipping. This will be better understood with the results of the trench sampling. <u>Historic drillholes:</u> No information is available on orientation of the mineralised intervals but it can be reasonably assumed that they are either horizontal or gently dipping as the rocks are consistently of this aspect in the area. The regolith also has a flat to gently undulating development, as has been observed by the CP.
1.11 Sample security	• The measures taken to ensure sample security.	 <u>Historic drillholes:</u> There is no information on this. The CP cannot make any statement regarding the assurance of sample security.
1.12 Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 No physical review or audit has been carried out of sampling techniques. The data is in a tidy format and appears to be an export from a database.
Criteria	JORC Code explanation	Commentary



Criteria	JORC Code explanation	Commentary
2.1 Mineral • tenement and land	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 SWC target is within Prospecting Licence (PL)12354/2023 granted on the 19 May 2023 and is valid for 4 years.
tenure status		 The target is within the Mbarang'andu National Community Forest Reserve. Zeus has informed the CP that there are no restrictions to operate in this Reserve as per section 95 of the Mining Act 2019. If developed as a mining project detailed Environmental and Social Impact Assessment (ESIA)
		and an Environmental Management Plan (EMP) would be required to be completed and approved.
2.2 • Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 An airborne magnetic survey was carried out by one of the companies exploring in the wider area, possibly Mantra Resources, probably sometime before/during 2008. This data may have been helpful in identifying the targets on the Mtonya-SWC trend.
		• The auger drilling at SWC was carried out by Mantra in 2008.
		 A single diamond core was drilled at SWC in 2012, reportedly by Mantra Resources.
2.3 Geology •	Deposit type, geological setting and style of mineralisation.	 The majority of the uranium deposits and occurrences in eastern and southern Africa occur within the Karoo Supergroup, a thick sequence of continental clastic sediments which are from late Carboniferous to Jurassic in age. Sandstones are the dominant lithology, with lesser amounts of conglomerate, siltstone, and mudstone. In southern Tanzania the Karoo sediments are within the NNE trending Selous Basin, a rift basin that extends over a length of about 550km and a width of up to 180km. At SWC the uranium intersected by the auger holes is assumed to be within highly weathered bedrock, as was observed by the CP at the nearby Mtonya deposit. The rocks are feldspathic sandstones of the Upper Triassic aged Mbarangandu Formation. Concentration of 'secondary' Uranium in the nearsurface saprolitic material by supergene processes may partially control the grade and thickness of the reported intervals. This needs investigation to
		understand how it relates to potential deeper 'primary' mineralisation. Preliminary observations by indicate that this mineralized saprolitic material is found along the topographic ridgelines, and that away from the ridges it has been at least partially eroded.



Criteria		JORC Code explanation		Commentary
			•	At Mtonya the exploration defined relatively narrow 'fronts' of mineralisation within the fresh bedrock. It is likely that similar 'primary' mineralisation is also present at SWC, as indicated by the intersection in the single diamond core hole MSED004 from 58.1 to 59.3m grading 824ppm U308. Efforts should be focused on locating potential thicker zones of primary roll-front mineralisation. The presence of tabular uranium deposits cannot be ruled out. The Likuyu North deposit 35km to the north appears to be a tabular deposit. At Likuyu North the mineralised layers are stacked stratiform zones interpreted as tabular bodies principally controlled by the sedimentary units with grade increasing where there are changes in grainsize, increased carbonaceous material in the sands and changes in oxidation state. The Likuyu deposit is hosted by the Mkuju River Formation whereas the rocks at SWC are of the Mbarangandu Formation. In the trenches at SWC the mineralisation is hosted in massive and highly weathered sandstone (saprolite) with yellowish secondary uranium visible within the matrix (between the sandstone grains). No bedding or other controls are evident. The aspect/orientation of the mineralisation is uncertain though it is expected to be flat to gently dipping as is the stratigraphy in this area.
2.4 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:	•	Historic drillholes: The drillhole information is provided in the table in the announcement. All holes were drilled vertically.
	0	easting and northing of the drill hole collar		
	0	elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar		
	0	dip and azimuth of the hole		
	0	down hole length and interception depth		
	0	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.		



Criteria	JORC Code explanation		Commentary
2.5 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. 	•	 <u>Historic drillholes:</u> No weighted average methods were used for the auger results as samples were all of 1m length. For the core hole MSED004 sample length weighting was used to work out the average grade of the interval. Hole MRSA012 had a sample with 6130ppm U308 from surface, without this sample the average grade of the interval is 579 ppm U308 (as opposed to 1273ppm). Similarly, the first mineralised sample in hole MRSA07 is 4480ppm U308, without it the interval grades 457 ppm U308 (as opposed to 1462 ppm)
2.6 Relationship between mineralisatio n 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'). 	•	<u>Historic drillholes:</u> The auger holes only tested the regolith, largely comprised of weathered bedrock (saprolite ad saprock) which is expected to have an aspect similar to that of the bedrock in the area which is gently dipping. It is expected that the intercept lengths are a true reflection of the thickness of the mineralisation.
2.7 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.	•	Maps and tabulations are provided in the announcement. A cross-section is not included.
2.8 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.	•	The reporting is considered balanced.
2.9 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. 	•	There is no other data available other than that which has been reported.



Criteria	JORC Code explanation	Commentary
2.10 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).	 Completion of the sampling and analysis of the trenches and the mapping of the sidewalls to attempt to understand the nature of the mineralisation.
	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	• Drill at the site of the best of the historic auger holes and/or trenches using a drilling method that can continue into the unweathered bedrock, to reach the base of the oxide mineralisation and to test for deeper primary mineralisation.
		 Use the new radiometric data to guide the interpretation and drill planning.
		 Drilling to test the lateral extent of the oxide mineralisation and potential primary uranium.
		 Work to understand the role of the regolith and supergene processes that may control the mineralisation intersected in the auger holes and understand the evolution of this supergene uranium over time.