Ground radiometric survey defines extensive uranium zones and drill-targets at SWC Target

- **Newly completed ground radiometric survey at the SWC target gives very positive results, adding to the news of recent trenches with long intervals of uranium mineralisation[1],**
- **The radiometric survey was carried out to further investigate the high-grade uranium mineralization in 2008 auger drillholes drilled by Mantra Resources (Mantra), recently reported by Gladiator[2], and confirmed in the new trenches.**
- **The radiometric data and geological observations suggest the mineralisation may be hosted by extensive layer/layers, dipping gently under cover 'outwards' from a dome.**
- **This interpretation presents obvious drilling targets - drilling aimed at following the surface/shallow mineralisation 'down-dip'.**

Gladiator Resources Ltd (ASX: GLA) (**Gladiator** or the **Company**) is pleased to announce that the new radiometric survey at the SWC Target (SWC) within its 724km2 Mkuju Uranium Project indicates a domal structure with an interpreted gentle dip of the uranium mineralised layer 'outwards' from the high-grade surface mineralisation.

If this interpretation is correct it presents the opportunity for extensive and shallow uranium mineralisation and obvious targets for the drilling planned for Q1 2024. The recent trenching and radiometric survey increase the Company's belief that there may be a significant sandstone-hosted uranium deposit at SWC. As reported on 26 October 2023, trenches gave a best zone of 44m with 9,999 counts per second (cps) the maximum for the device, and more recently up to 32,000 cps with a larger scintillometer. Samples have been sent to the laboratory.

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 U_3O_8 containing 124.6 Mlbs U_3O_8) in a similar geological setting.

Radiometric survey results

The ground spectrometer survey was carried out by independent geophysical contractor, Gregory Symons Geophysics over a 3-week period during October 2023. The data was

[1] GLA announcement dated 26 October 2023
[2] GLA announcement dated 1 June 2023

collected on an 80m line spacing and provides a marked improvement in the resolution of the older airborne data. The new data supports an interpretation of a domal structure with the surface/shallow mineralisation layer dipping outwards as is illustrated in **Figures 1 and 2**. The interpretation is supported by geological observations; dip measurements north of the northern edge of the anomaly indicate gentle dip to the north in that area. If the interpretation is correct, then the mineralisation found at surface/near surface (in the 2008 auger holes and recent trenches) is likely to dip under cover and be shallow and potentially be of significant extent. This presents obvious drill-targets as shown on the schematic cross-section shown in **Figure 2** – drillholes to test the down-dip extension. While on site the independent geophysical contractor checked one of the trenches (trench 5) with a large crystal (1 litre) spectrometer and recorded values up to 32,000 cps.

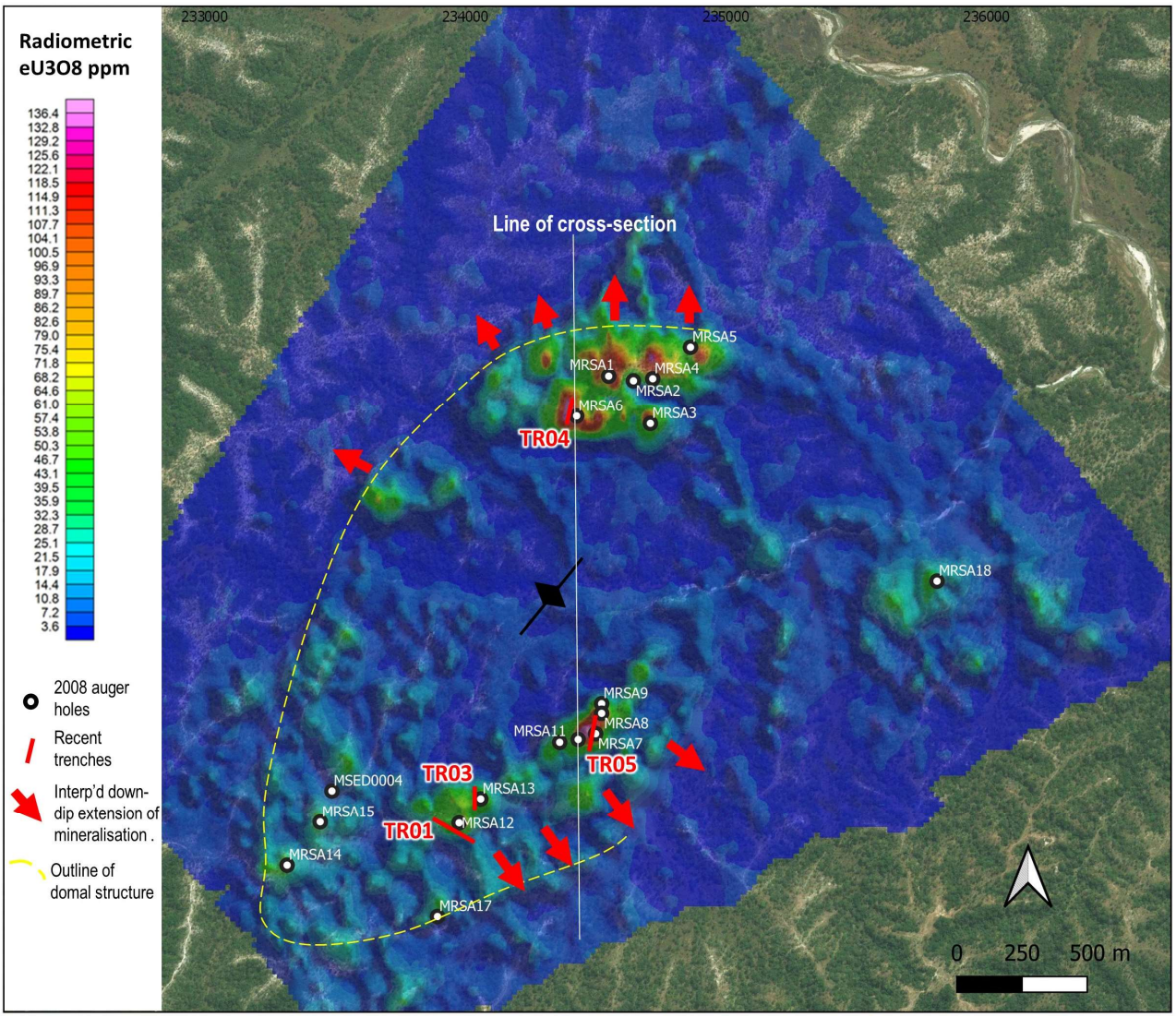

Figure 1. Newly acquired ground radiometric survey results (linear equivalent U3O8) showing 2008 auger holes and new trenches.

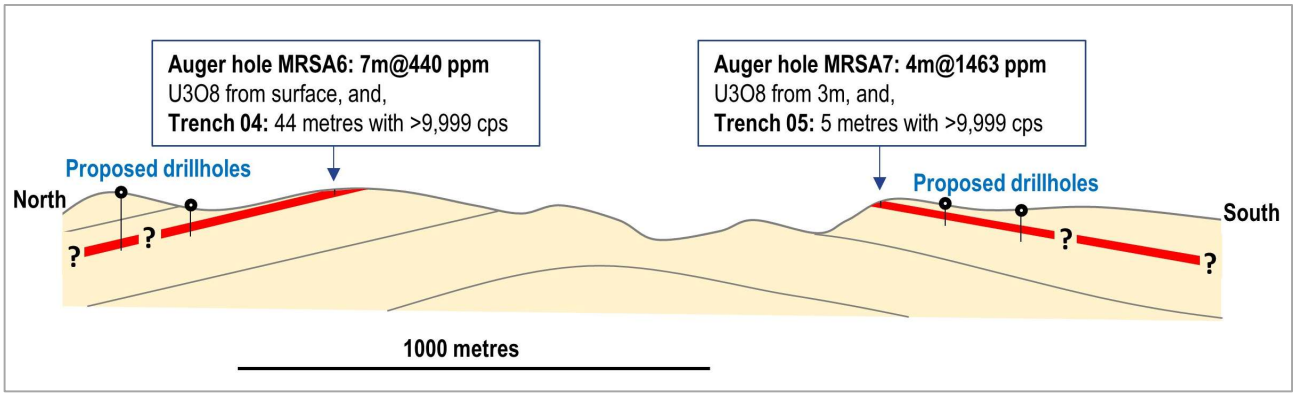

Figure 2. Schematic cross-sectional interpretation showing possible domal structure and gently dipping mineralised layers. Proposed drill-hole positions are shown.

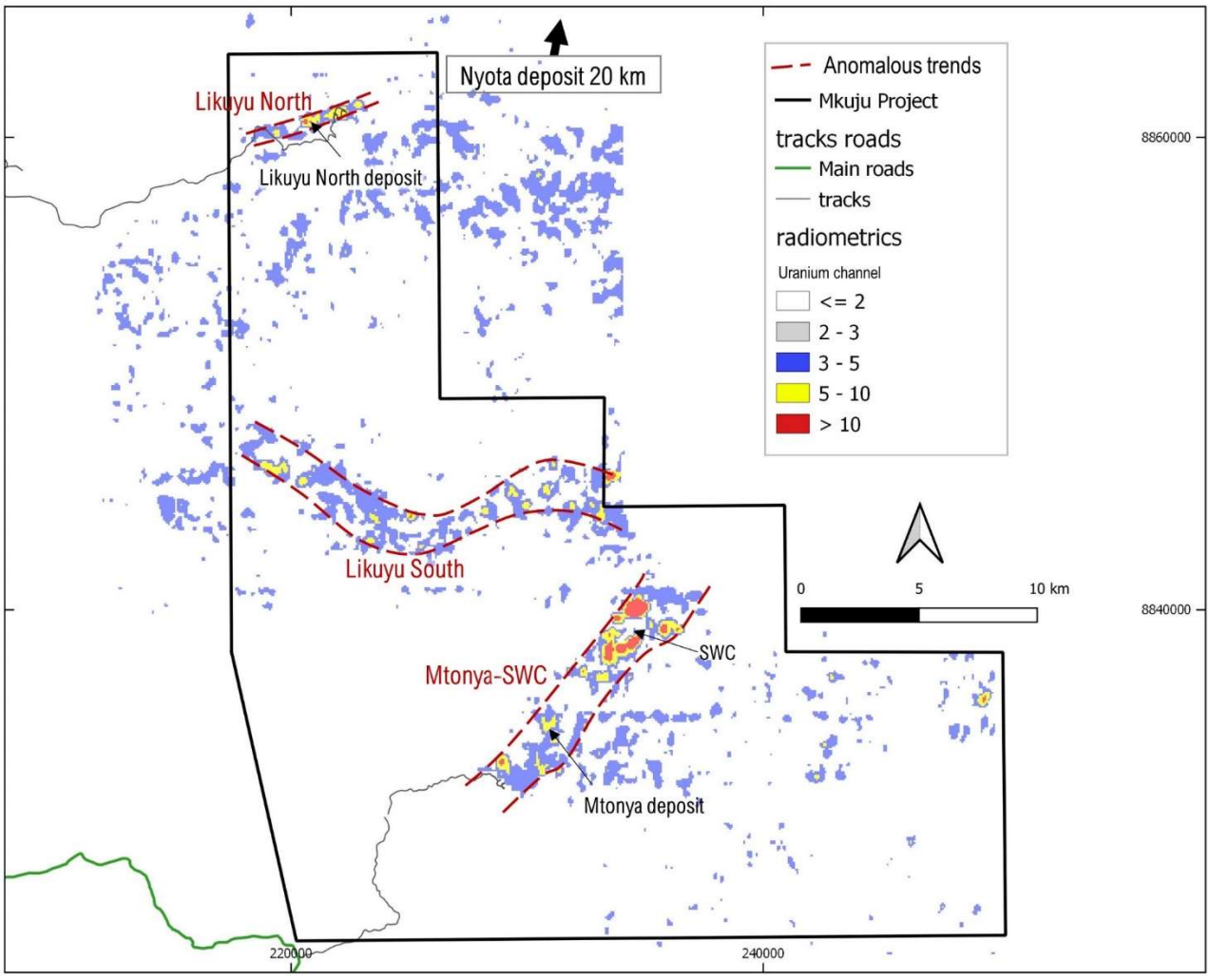

Figure 3. Gladiator's Mkuju Project area showing the SWC target

The material in the auger holes and trenches at SWC is heavily oxidised. It is uncertain if the primary mineralisation that will be targeted by drilling down-dip of the surface mineralisation will have similar grade and thickness, it is possible that 'supergene' processes have caused surficial concentration of uranium.

More on the SWC Target

The target is a relatively intense 3.5 x 1.8 km airborne radiometric anomaly in the southwest corner of Prospecting Lease 12354 which was recently secured by Gladiator[3]. 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 U_3O_8 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.

The 2008 auger hole results

These were reported by the Company in recent announcements (announcement dated 1 June 2023). The holes were drilled by Mantra in 2008 using the auger drilling method which is for shallow holes and is unable to penetrate harder ground, hence many of the holes ended in mineralisation. Available data indicates that they drilled 18 holes to a maximum depth of 13m with a total of 154m drilled. ***Table 1*** provides the results in the database obtained by Gladiator and intervals include those below.

- MRSA04: 4m @ 838 ppm U_3O_8 from 7m, including 2m@ 1,300ppm
- MRSA06: 7m @ 440 ppm U_3O_8 from surface, including 3m@ 610ppm
- MRSA12: 8m @ 1,273 ppm U_3O_8 from surface, including 2m@ 3,825ppm
- MRSA07: 4m @ 1,463 ppm U_3O_8 from 3m, including 2m@ 2,705ppm
- MRSA13: 5m @ 628 ppm U_3O_8 from 1m, including 3m@ 803ppm

[3] GLA announcement dated 1 June 2023

Hole_ID	Type	Max Depth (m)	From (m)	To (m)	Interval (m)	U3O8 (ppm)	U3O8 (ppm) at EOH*	Date completed	UTM East	UTM North	RL (m)
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**	**628**	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

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

Contact: **Greg Johnson** ,
Non-Executive Chairman **greg@gladiatorresources.net**

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

This Table provides required information for the radiometric survey only. For details of the auger and trench related data refer to GLA's announcements dated 26 October 2023 and 19 September 2023.

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.*	• The radiometric survey was completed by Gregory Symons Geophysics between 4 and 18 October 2023. • The survey was carried out on 80 m spaced East-West lines and totaled 127.4 km • The data was collected by Champion Chitima with a MS-1000 CsI (1-liter) scintillation detector which is equipped with the Medusa Detector Operating System (mDOS) on an ALGIZ RT8 Android Tablet. • The embedded software on the sensor logs the DGPS (RTK-enabled) together with spectra, and it outputs K, U, and Th values. • The Spectrometer and tablet communicate via Wi-fi and records data at 1Hz, which means the station spacing is approximately 1-2 m. • Data was positioned using a handheld Garmin GPS
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).*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes refer to announcements referred above.

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.*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes refer to announcements referred above.
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.*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes refer to announcements referred above.
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 sub-sampling 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.*	• For discussion of the 2008 auger drillholes refer to announcements referred above.
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*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.

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*	
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.*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.
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.*	• Radiometric survey data was positioned using a handheld Garmin GPS
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.*	• The radiometric survey data was collected on 80m spaced lines and a data recording spacing of approximately 1-2m. • For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.
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.*	• Outcrop is poor in the area and in the trenches dip is not visible the rocks being weathered and massive. • Generally rocks in the area have gentle dip, as observed by the CP at the nearby Mtonya deposit. • The interpretation of a domal structure at the SWC target is largely based on the radiometric data and the satellite data. Small outcrops near the northern side of the dome show a dip of 15-20 degrees to the north and northwest which supports the domal interpretation.

Criteria	JORC Code explanation	Commentary
		• For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.
1.11 Sample security	• *The measures taken to ensure sample security.*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.
1.12 Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.

Criteria	JORC Code explanation	Commentary
2.1 Mineral tenement and land tenure status	• *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. • 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.

Criteria	JORC Code explanation	Commentary
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. • The material in the auger holes and trenches at SWC is heavily oxidised. It is uncertain if the primary mineralisation that will be targeted down-dip of the surface mineralisation will be of similar grade and thickness, it is possible that 'supergene' processes have caused surficial concentration of uranium. • 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 U3O8. 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

Criteria	JORC Code explanation	Commentary
		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. ● Small outcrops just north of the northern anomaly at SWC have dip of 15-20 degrees to the north and northwest.
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *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.*	● Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes refer to announcements referred above.
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.*	● Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.

Criteria	JORC Code explanation	Commentary
2.6 Relationship between mineralisation 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').*	• Not relevant to the radiometric survey. For discussion of the 2008 auger drillholes and the recent trench data, refer to announcements referred above.
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 including a cross-section.
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.
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The analysis of the trench samples is underway. • The next steps will be the drilling to test the down-dip extension of the uranium mineralisation.