

27 December 2023

ASX:GLA

## Uranium Grades exceeding 4245ppm U<sub>3</sub>O<sub>8</sub> in South West Corner Trench Assays

- Assay results for SWC target trenches received and confirm high-grade uranium in 4 of the 5 trenches and one of the mineralised layers is interpreted to be at least 6 m thick.
- Results include intervals above the upper detection limit of analytical method (4245ppm U<sub>3</sub>O<sub>8</sub>). These samples are being re-analysed by another method that has higher detection limits.
- Results indicate gently dipping layers of mineralised sandstone. The exposed part of the layer in Trench 4 layer has an average grade of 1727 ppm U<sub>3</sub>O<sub>8</sub> and includes one sample above the upper detection limit of analytical method (4245ppm U<sub>3</sub>O<sub>8</sub>). This is the only trench on the north side of the target.
- The recent radiometric data and the trench and auger data define a combined 'strike-length' of the north and south zones of approximately 3 km.
- The excellent work by the geology team means that SWC is now drill-ready. No drilling other than shallow auger holes (in 2008) has been carried out at Gladiator's targets.
- The trenches support the 2008 auger results which included 8m @ 1,273ppm U<sub>3</sub>O<sub>8</sub> from surface, including 2m@ 3,825ppm.

Gladiator Resources Ltd (ASX: GLA) (Gladiator or the Company) is pleased to announce assay results for trenches at the SWC Target within its 724km<sup>2</sup> Mkuju Uranium Project. The trenches have high-grade uranium mineralisation and support GLA's model of gently dipping uraniferous sandstone layers with considerable strike extent. The next step is to drill-test the potential depth extension of these layers. No drilling, other than shallow auger holes, has been previously completed at the two identified zones which have a combined 'strike-length' of ~3km. The results affirm the Company's view that there is potential for a significant sandstone-hosted uranium deposit at SWC, which is within the same geological basin as the Mantra/Uranium One's world class "Nyota" deposit which has a Measured and Indicated MRE of 187 Mt at 306ppm U<sub>3</sub>O<sub>8</sub> containing 124.6 Mlbs U<sub>3</sub>O<sub>8</sub>.

### Trenching Program and results

Gladiator completed 5 trenches at the SWC target in October 2023; four at the 'South Limb' zone and a single trench at the 'North Limb' zone (**Figure 1**). A total of 454 metres of trenching was completed and the trenches were between 3.0 and 3.9 metres deep. Sampling was taken from vertical channels at 4.0 metre intervals along one sidewall of each trench. **Table 1** provides the highest-grade vertical intervals from each trench and **Figures 2 and 3** illustrate the results more comprehensively. Where average grades are reported these were calculated by length-weight averaging of the sample grades within each layer.

**Of particular interest is trench 4 at the ‘North Limb’ zone:**

- Gently northward dipping coarse-grained arkose sandstone layer with visible high-grade uranium (**Figure 4**).
- In the trench the upper part of the layer (~2 m true thickness) has an average grade of 1935ppm U3O8. The material lower in the trench has an average grade of 676ppm U3O8.
- A 1.4 m sample from this layer has over 4245 ppm which is the upper detection limit for the pressed powder analytical method and will be re-analysed using the fusion method to obtain the actual value.
- Based on a nearby 2008 auger hole (MRSA6, 30 m to the east) the layer in the trench may be the upper part of a layer at least 6 m in thickness - the auger hole ended in mineralisation (510 ppm U3O8) at 7 metres depth.
- This trench is the only one at the ‘North Limb’ zone of SWC. It would have been ideal to have more trenching completed but the onset of the wet season prevented further work. **It is clear that drilling is needed to follow the layer ‘down-dip’.**

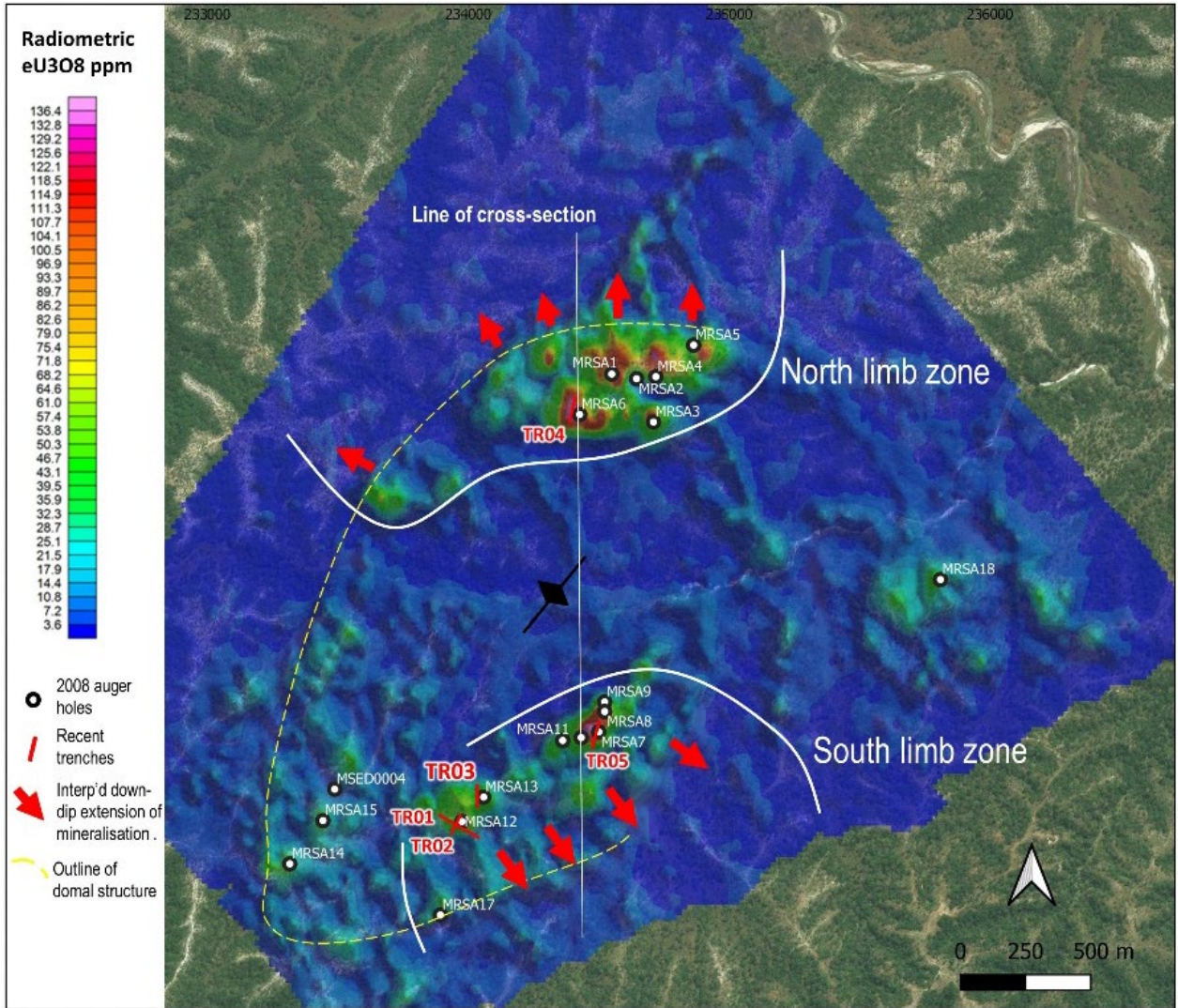
**Trench 2 and 5 at the ‘South Limb’ zone:**

- These trenches are 650 m apart and both intersect what may be two southward dipping mineralised layers approximately 4m apart, hosted in coarse-grained sandstone.
- In Trench 5 the first (southernmost) layer has an average grade of 2042ppm U3O8 and has an approximate (true) thickness of 3m. Within this are 2 samples with over 4245 ppm, the upper detection limit for the analytical method. In Trench 2 the same layer has an average grade of 708ppm U3O8 and a similar average (true) thickness.
- The second and northernmost mineralised layer in Trench 5 has average grade of 1518ppm U3O8 and has an approximate (true) thickness of 3m. The same layer in Trench 2 has an average grade of 2163ppm U3O8 and is approximately 1.0 m thick.

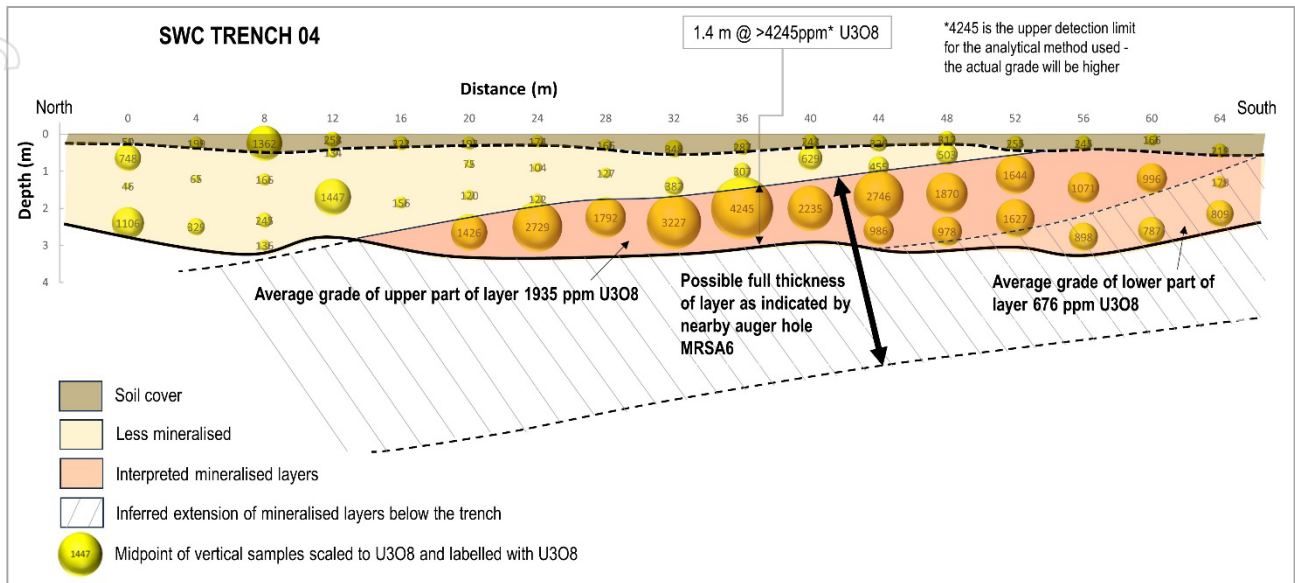
Trench ID	Area	Layer	Best vertical interval			U3O8 (ppm)	Layer average
			From depth (m)	To depth (m)	Interval (m)		Comments
SWC-TRO1	South Limb	?	0.5	2.45	1.95	1776	less certainty of layer continuity
SWC-TRO2	South Limb	1	0.40	3.40	3	1304	av. 708ppm U3O8 and 3m true thickness
		2	1.30	2.70	1.4	3170	av. 2163ppm U3O8 and 1 m thickness
SWC-TRO3	South Limb	No significant results					
SWC-TRO4	North Limb	1	1.3	2.7	1.4	>4245*	av. 1727ppm U3O8 of 3m true thick (exposed) upper part of a >6m thick layer. Top 2m has av. grade of 1935ppm U3O8.
		2					not trenched, possibly beyond north end of trench
SWC-TRO5	South Limb	1	0.50	1.90	1.4	>4245*	av. 2042ppm U3O8 and 3m true thick
			1.45	2.20	0.75	>4245*	
		2	0.80	3.35	2.55	2017	av. 1518ppm U3O8 and 3m true thick

**Table 1. Summary of trench results. Layer average grade estimated by sample length-weight averages and thickness are estimate true thickness. \*4245 ppm is the upper limit of detection for the analytical method used.**

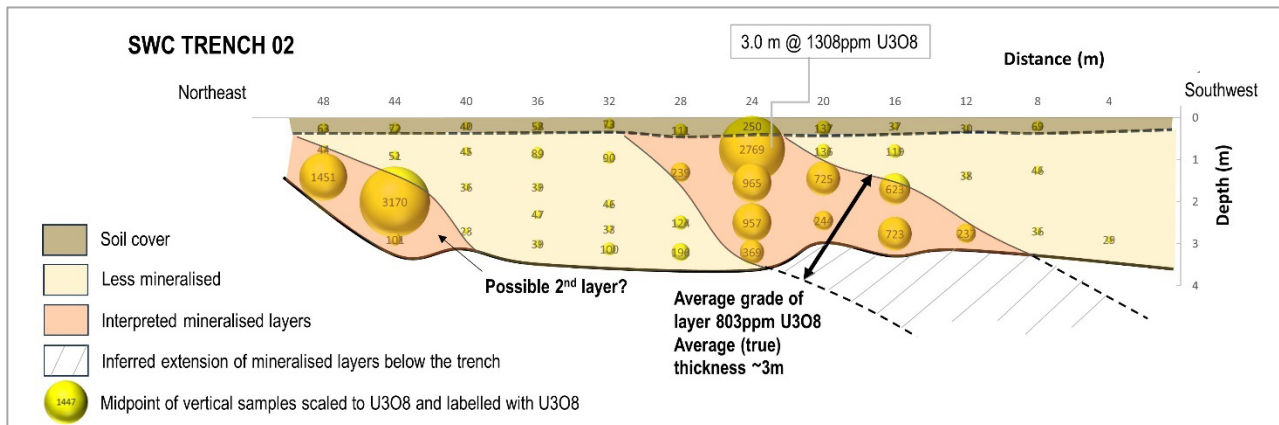
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**Figure 1. Map showing recently acquired ground radiometric survey results (linear equivalent U308) showing 2008 auger holes and the trenches. Cross section provided in Figure 5.**



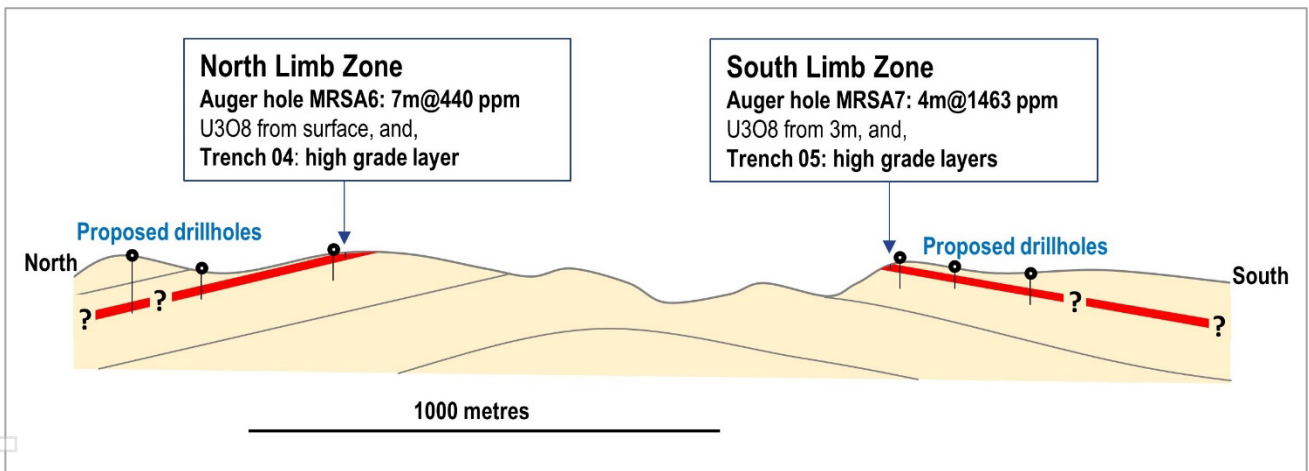
**Figure 2. Face map (cross-section) of the sampled sidewall in Trench 4 showing the assay data and interpretation. Note vertical scale is not the same as horizontal scale.**



**Figure 3. Face map (cross-section) of the sampled sidewall in Trench 2 showing the assay data and interpretation. Note vertical scale is not the same as horizontal scale.**



**Fig 4: Uranium mineralisation (yellow) in weathered sandstone from Trench 4.**



**Figure 5. Schematic cross-sectional interpretation showing domal structure and gently dipping mineralised layers. Proposed drill-hole positions are shown. This interpretation is supported by the trench data and observations.**

**The SWC Target History**

The target is an intense 3.5 km x 1.8 km oval shaped airborne radiometric anomaly in the southwest corner of Prospecting Lease 12354 which was recently secured by Gladiator<sup>1</sup>. The target is at the NE end of a 12 km long NE-SW oriented trend of radiometric anomalies referred

<sup>1</sup> GLA announcement dated 1 June 2023

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to as the Mtonya-SWC trend (**Fig.1**). Despite being the most intense radiometric anomaly of all those on this trend, no exploration appears to have been carried out on Gladiators key target areas between the 2008 auger drilling and Gladiators 2023 exploration program. Reportedly, Mantra Resources, who originally drilled the auger holes, did not follow-up the excellent auger-hole results due to prioritising exploration of their larger “Nyota” Uranium deposit 50 km to the north. Nyota which was central to an AUD\$1 Billion takeover by Uranium One in 2011. A single diamond core hole (MSED004) was drilled by Mantra in 2012 to the SW of Gladiator’s North and South limb targets, and based on GLA’s interpretation this hole is collared in the footwall (wrong) side of the mineralised layers. Gladiator began their exploration at SWC in September 2023 and has carried out the trenching, a high-resolution ground magnetic survey.

Trench_ID	Azimuth	Length	Nearby 2008 auger hole	Position			
					Northing	Easting	RL
SWC-TR01	111	168 m	MRSA12	Start	8838290	234057	836
				End	8838368	233905	814
SWC-TR02	40	48 m	MRSA12	Start	8838308	233958	794
				End	8838348	233991	803
SWC-TR03	12	44 m	MRSA13	Start	8838402	234057	842
				End	8838450	234061	844
SWC-TR04	194	84 m	MRSA06	Start	8839946	234411	819
				End	8839862	234388	821
SWC-TR05	28	110 m	MRSA07	Start	8838636	234478	830
				End	8838741	234524	830

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

### 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 3** provides the results in the database obtained by Gladiator. The holes were all drilled along ridgelines for ease of access. This work is more thoroughly described in GLA’s announcement dated 21 August 2023.

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

## Geology and Target Type

At SWC the trenches reveal highly weathered medium to coarse sandstones. The trench sidewall grain size and U3O8 sidewall maps indicate gently dipping layers some of which are mineralised and visible secondary (yellow and green) uranium minerals are abundant. The SWC target appears to be comprised of dome with a long-axis oriented NE-SW (**Figure 1**). Based on the work to date the Company recognised two zones of greatest interest, the North and South Limb zones. These have a combined strike-length of over 3km. On the South Limb there appears to be two layers and at the North Limb one layer has been observed in the trench and a second layer is probable, based on the 2008 auger drilling.

The target type is either the 'tabular' or the 'roll-front' type of sandstone hosted uranium deposit. Both 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.*

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## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
1.1 Sampling techniques	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling of the trenches was carried out by cut channels in the trenches. Trenches were excavated using a mechanical backhoe and have vertical smooth side walls as shown in the photo in the announcement.</li> <li>• Trenches were between 3 and 4 metres deep. Sample channels were all cut vertical from surface to the base of the trench, exactly every 4 metres along the trench to maximise the representivity of sampling. Samples were taken on one side of the trench only.</li> <li>• The vertical samples were 0.2 to 2.7 m in length (an average of 0.9m) collected according to lithological or regolith changes. Typically, there were 3-5 vertical samples making up each channel.</li> <li>• The material was collected using a geological hammer and a dustpan, taking care to remove an equal amount of material along the length of each channel. That the material was uniformly soft being highly weathered rock means that this could be achieved easily.</li> <li>• Samples were collected from the lowest sample upwards to avoid contamination.</li> <li>• Sections of the trenches that were 'barren' based on the scintillometer were sampled but the samples were not submitted to the laboratory. No unsampled sections exist within the mineralised intervals and so do not affect the representivity of the data in any way.</li> <li>• The samples weighed between 1 and 2.4 kg.</li> <li>• Samples were prepared at SGS Laboratory in Mwanza, Tanzania. On receipt at the laboratory they were dried and weighed. Then the full sample was crushed to &gt;75% passing 2mm.</li> <li>• The crushed sample was pulverized to &gt;85% passing 75 microns. The pulps were then sent to SGS Randfontein in South Africa for analysis.</li> </ul>

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Criteria	JORC Code explanation	Commentary
1.2 Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, 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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling is reported and so this section is not applicable</li> </ul>
1.3 Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<p>No drilling is reported and so this section is not applicable</p>
1.4 Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The trench samples were logged from the sidewall of the trench. The following information was collected: regolith type, lithology, grainsize, colour and minerals. Comments were also made recording important/relevant information.</li> <li>The counts per second (cps) of the samples was recorded using a scintillometer against each sample bag.</li> <li>All samples were logged, totaling 408 metres of vertical samples.</li> </ul>

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Criteria	JORC Code explanation	Commentary
1.5 Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, 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 style="list-style-type: none"> <li>No splitting or sub-sampling was carried out in the field.</li> <li>To maximise representivity effort was made to take the same volume of material down the channel samples.</li> <li>Channels were not positioned with any influence of a scintillometer; they were cut vertically at exactly 4 m intervals along the trench wall.</li> <li>The sample size is appropriate to the grain size which ranges from medium to coarse grained sand. No coarse mineralised 'nuggets' were observed.</li> </ul>
1.6 Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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 (lack of bias) and precision have been established</li> </ul>	<ul style="list-style-type: none"> <li>Analyses of the samples was by pressed pellet XRF which is an industry standard method for uranium analyses.</li> <li>10 % of the samples are QA-QC samples; either a blank, a duplicate or a Certified Reference Material (CRM). This is an acceptable quantity of QA-QC samples. Two CRMs were used, a low-grade CRM and a medium grade CRM.</li> <li>The Company's low-grade CRM (&lt;200 ppm U3O8) results are an average of 12% over the accepted value. The medium grade CRM reports within 3%. The laboratories internal CRMs (inserted at the main SGS lab in South Africa) which are the same CRMs as those used by GLA all report within the acceptable limits.</li> <li>The Company's CRMs were re-bagged at the prep lab but not crushed or pulverized at either lab, and so it is likely that small amounts of low-grade contamination occurred in the re-bagging of the samples. It is the CP's view that this will not have affected the (large) channel samples and less so those that are higher grade (&gt;200 ppm). The CP is of the opinion that the slight over reporting of the low-grade CRMs does not materially impact on the reported results.</li> <li>Of the 7 (40g) blanks submitted 6 have results less than detection. One had unacceptably high levels of uranium (117 ppm U3O8) and is after a high-grade sample – presumably contamination occurred, similar to that for the low-grade CRM. As it is only 1</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>of the 7 blanks and that a full-size channel sample is less likely to be affected, especially those that are of high grade (which inform the grade of the reported mineralized layers) the CP is of the opinion that this blank result does not materially impact on the reported results.</p> <ul style="list-style-type: none"> <li>One sample swap was noted. Gladiator will implement SOPs that avoid sample swaps in future.</li> </ul>
1.7 Verification of sampling and assaying	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>There has been no verification of the trench data though the trenches were at the sites of 2008 auger holes which had similar grades of uranium, and are detailed/reported in the Company's announcement dated 29/9/2023.</li> </ul>
1.8 Location of data points	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The position of the start of each trench was recorded using a hand-held Garmin GPS. The azimuth and inclination was taken at any changes in orientation.</li> <li>All holes are positioned using WGS84 UTM zone 37S.</li> <li>There has been no topographic survey.</li> </ul>
1.9 Data spacing and distribution	<ul style="list-style-type: none"> <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 applied.</li> </ul>	<ul style="list-style-type: none"> <li>The trenches are not equidistant, they were positioned to test some of the 2008 auger hole intersections, focusing on those with uranium mineralisation in the upper 3-4 m.</li> <li>Within the trenches, the channels were made at 4m intervals.</li> </ul>
1.10 Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Based on observations in the trenches, the mineralisation is sub-horizontal or gently dipping, which is consistent with a low angle of dip in the area, observed to be less than 20 degrees though outcropping bedding structures are rare.</li> <li>The gentle (10-20 degree) dip of the layers mean that the vertical samples overstate the thickness slightly and for this reason the announcement includes reference to true thickness, as measured perpendicular to the layers.</li> <li>In the case of the trenches and the 2008 auger</li> </ul>

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Criteria	JORC Code explanation	Commentary
		holes in some cases the mineralised intervals are 'open' at depth meaning that the base of the mineralised layer was not reached.
1.11 Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The samples were driven by Gladiator staff to Mwanza where they were received by the laboratory and kept on a secure premises.</li> <li>The prepared samples were securely boxed and sent with DHL to SGS in South Africa for analysis.</li> <li>It is unlikely that any security issues affect the results.</li> </ul>
1.12 Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No physical review or audit has been carried out of sampling techniques. The trench logging and sampling procedure was according to a standard operating procedure written by the CP.</li> </ul>
Criteria	JORC Code explanation	Commentary
2.1 Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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 licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The SWC target is within Prospecting License (PL)12354/2023 granted on the 19 May 2023 and is valid for 4 years.</li> <li>The target is within the Mbarang'andu National Community Forest Reserve. Gladiator has informed the CP that there are no restrictions to operate in this Reserve as per section 95 of the Mining Act 2019.</li> <li>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.</li> </ul>

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Criteria	JORC Code explanation	Commentary
2.2 Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>An airborne magnetic survey was carried out by one of the companies exploring in the wider area sometime before 2008. This data may have been helpful in identifying the targets on the Mtonya-SWC trend.</li> <li>The auger drilling at SWC was carried out by Mantra in 2008.</li> <li>A single diamond core was drilled at SWC in 2012 by Mantra Resources as part of a series of exploratory holes over a large area.</li> </ul>
2.3 Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The area is comprised of sediments of the Upper Triassic Mbarangandu Formation, which are coarse sandstones, grit-stones, conglomerates and lesser mudstones. The stratigraphy in the area is generally dipping to the southwest and west, with local variations depending on faults and gentle folds. The Uranium observed at the nearby (10km) 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. It is uncertain at this stage if the mineralisation SWC is of the same nature. The higher intensity of the radiometric anomalism and surface mineralisation, and the work to date suggests it may be a more focused zone of tabular hosted uranium possibly lower in the stratigraphy than Mtonya.</li> <li>The rock exposed in the trenches and in the 2008 auger holes is weathered, being saprolite; most of the feldspars have been largely altered to clay. The primary textures are fully preserved. The depth of weathering in the area is known to be many tens of metres in from cored holes in the wider area and it may be that mineralisation encountered in the trenches and in the auger holes is enriched by surficial processes such as a fluctuating water table, or is a residual layer best preserved on the ridge lines of the topography where drilling and trenching has focused</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>to date. If this is the case the down-dip extension of the surface mineralisation may not be of the same intensity. This is not the case at the well-drilled uranium deposits in the area, but drilling is needed at SWC to confirm that the high-grades extend 'down-dip' to depth.</p> <ul style="list-style-type: none"> <li>The work to date at SWC suggests that the layers may be tabular, as at the Likuyu North deposit 35km to the north. At Likuyu North, up to 8 mineralised layers are stacked stratiform zones interpreted as tabular bodies principally controlled by the sedimentary units with grade increasing where there are changes in grain size, 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.</li> </ul>
2.4 Drill hole Information	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in meters) 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> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling is reported and so this section is not applicable</li> </ul>
2.5 Data aggregation methods	<ul style="list-style-type: none"> <li>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.</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</li> </ul>	<ul style="list-style-type: none"> <li>For the reported vertical intervals, standard sample length weighting was used to work out the average grade of the interval.</li> <li>No short lengths or high grade were included within long intervals.</li> <li>No metal equivalents have been reported.</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<i>equivalent values should be clearly stated.</i>	
2.6 Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• As stated it is expected that the reported vertical intervals are close to the actual thickness as the mineralisation appears to be horizontal to gently dipping.</li> </ul>
2.7 Diagrams	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Maps and tabulations are provided in the announcement. A cross-section is not included.</li> </ul>
2.8 Balanced reporting	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The reporting is considered balanced.</li> </ul>
2.9 Other substantive exploration data	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• There is no other data available other than that which has been reported in the announcement and in this checklist.</li> </ul>



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2.10 Further work	<ul style="list-style-type: none"> <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 geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling at the site of the best of the historic auger holes and/or trenches is planned 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.</li> <li>And then drilling to test the down-dip extension of the uranium mineralisation.</li> </ul>

## APPENDIX 1. Trench sample results

Trench ID	Sample ID	Distance (m)	From (m)	To (m)	Interval length (m)	Lithology	Bag CPS	U308
								ppm
SWC-TRO1	0259	72	0	0.9	0.9	CLAY	202	83
SWC-TRO1	0261	72	0.9	1.94	1.04	SDST	150	64
SWC-TRO1	0262	72	1.94	3.3	1.36	SDST	108	31
SWC-TRO1	0263	76	0	0.87	0.87	CLAY	337	254
SWC-TRO1	0264	76	0.87	3	2.13	SDST	193	302
SWC-TRO1	0265	80	0	0.5	0.5	CLAY	739	384
SWC-TRO1	0266	80	0.5	1.3	0.8	SDST	1058	2684
SWC-TRO1	0267	80	1.3	2.45	1.15	SDST	316	1144
SWC-TRO1	0268	80	2.45	3.45	1	SDST	132	375
SWC-TRO1	0269	84	0	0.9	0.9	CLAY	290	121
SWC-TRO1	0271	84	0.9	2.6	1.7	SDST	653	311
SWC-TRO1	0272	84	2.6	3.7	1.1	SDST	334	68
SWC-TRO1	0273	84	3.7	4	0.3	SDST	146	40
SWC-TRO1	0274	88	0	0.6	0.6	CLAY	179	85
SWC-TRO1	0275	88	0.6	3.3	2.7	SDST	125	103
SWC-TRO1	0276	88	3.3	4	0.7	SDST	198	102
SWC-TRO2	0595	4.00	2.50	3.30	0.8	SDST	157	29
SWC-TRO2	0596	8.00	0.00	0.40	0.4	SOIL	200	69
SWC-TRO2	0597	8.00	0.40	2.10	1.7	SDST	150	46
SWC-TRO2	0598	8.00	2.10	3.30	1.2	SDST	170	36
SWC-TRO2	0599	12.00	0.00	0.50	0.5	SOIL	213	30
SWC-TRO2	0601	12.00	0.50	2.25	1.75	SDST	155	38
SWC-TRO2	0602	12.00	2.25	3.25	1	SDST	234	237

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SWC-TRO2	0603	16.00	0.00	0.40	0.4	SOIL	240	37
SWC-TRO2	0604	16.00	0.40	1.20	0.8	SDST	342	119
SWC-TRO2	0605	16.00	1.20	2.20	1	SDST	735	623
SWC-TRO2	0606	16.00	2.20	3.33	1.13	SDST	419	723
SWC-TRO2	0607	20.00	0.00	0.50	0.5	SOIL	458	137
SWC-TRO2	0608	20.00	0.50	1.10	0.6	SDST	396	136
SWC-TRO2	0609	20.00	1.10	1.80	0.7	SDST	512	725
SWC-TRO2	0611	20.00	1.80	3.10	1.3	SDST	428	244
SWC-TRO2	0612	24.00	0.00	0.40	0.4	SOIL	621	250
SWC-TRO2	0613	24.00	0.40	1.10	0.7	SDST	2486	2769
SWC-TRO2	0614	24.00	1.10	2.00	0.9	SDST	835	965
SWC-TRO2	0615	24.00	2.00	3.00	1	SDST	771	957
SWC-TRO2	0616	24.00	3.00	3.40	0.4	SDST	271	369
SWC-TRO2	0617	28.00	0.00	0.60	0.6	SOIL	270	111
SWC-TRO2	0618	28.00	0.60	2.00	1.4	SDST	424	239
SWC-TRO2	0619	28.00	2.00	3.00	1	SDST	203	124
SWC-TRO2	0621	28.00	3.00	3.40	0.4	SDST	214	196
SWC-TRO2	0637	44.00	0.00	0.50	0.5	SOIL	318	72
SWC-TRO2	0638	44.00	0.50	1.30	0.8	SDST	250	51
SWC-TRO2	0639	44.00	1.30	2.70	1.4	SDST	4487	3170
SWC-TRO2	0641	44.00	2.70	3.10	0.4	SDST	245	101
SWC-TRO2	0642	48.00	0.00	0.50	0.5	SOIL	559	63
SWC-TRO2	0643	48.00	0.50	1.00	0.5	SDST	531	44
SWC-TRO2	0644	48.00	1.00	1.82	0.82	SDST	1708	1451
SWC-TRO3	0344	0	0	0.6	0.6	SOIL	198	
SWC-TRO3	0345	0	0.6	2	1.4	SDST	180	
SWC-TRO3	0356	12	1.1	2.9	1.8	SDST	113	424
SWC-TRO3	0357	16	0	0.6	0.6	SOIL	206	639
SWC-TRO3	0358	16	0.6	2.2	1.6	SDST	475	<10
SWC-TRO3	0359	16	2.2	2.7	0.5	SDST	201	124
SWC-TRO3	0361	20	0	0.8	0.8	SOIL	190	75
SWC-TRO3	0362	20	0.8	1.5	0.7	SDST	265	94
SWC-TRO3	0387	44	1.6	3.1	1.5	SDST	105	<10
SWC-TRO4	0407	20.0	0.50	1.10	0.6	SDST	218	75
SWC-TRO4	0408	20.0	1.10	2.20	1.1	SDST	258	120
SWC-TRO4	0409	20.0	2.20	3.10	0.90	SDST	475	1426
SWC-TRO4	0411	24.0	0.00	0.40	0.4	SOIL	288	174

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SWC-TRO4	0412	24.0	0.40	1.40	1	SDST	220	104
SWC-TRO4	0413	24.0	1.40	2.10	0.7	SDST	230	122
SWC-TRO4	0414	24.0	2.10	2.90	0.8	SDST	1260	2729
SWC-TRO4	0415	28.0	0.00	0.60	0.6	SOIL	255	166
SWC-TRO4	0416	28.0	0.60	1.50	0.9	SDST	307	127
SWC-TRO4	0417	28.0	1.50	3.00	1.5	SDST	831	1792
SWC-TRO4	0418	32.0	0.00	0.80	0.8	SOIL	609	348
SWC-TRO4	0419	32.0	0.80	2.00	1.2	SDST	303	382
SWC-TRO4	0421	32.0	2.00	2.75	0.75	SDST	1430	3227
SWC-TRO4	0422	36.0	0.00	0.70	0.7	SOIL	361	287
SWC-TRO4	0423	36.0	0.70	1.30	0.6	SDST	327	307
SWC-TRO4	0424	36.0	1.30	2.70	1.4	SDST	2790	4245
SWC-TRO4	0425	40.0	0.00	0.40	0.4	SOIL	390	243
SWC-TRO4	0426	40.0	0.40	0.90	0.5	SDST	472	629
SWC-TRO4	0427	40.0	0.90	3.10	2.2	SDST	1281	2235
SWC-TRO4	0428	44.0	0.00	0.50	0.5	SDST	511	326
SWC-TRO4	0429	44.0	0.50	1.25	0.75	SDST	405	455
SWC-TRO4	0431	44.0	1.25	2.10	0.85	SDST	943	2746
SWC-TRO4	0432	44.0	2.10	3.10	1	SDST	323	986
SWC-TRO4	0433	48.0	0.00	0.30	0.3	SOIL	572	312
SWC-TRO4	0434	48.0	0.30	0.80	0.5	SDST	407	503
SWC-TRO4	0435	48.0	0.80	2.40	1.6	SDST	851	1870
SWC-TRO4	0436	48.00	2.40	2.85	0.45	SDST	380	978
SWC-TRO4	0437	52.00	0.00	0.50	0.5	SOIL	544	255
SWC-TRO4	0438	52.00	0.50	1.70	1.2	SDST	1714	1644
SWC-TRO4	0439	52.00	1.70	2.85	1.15	SDST	809	1627
SWC-TRO4	0441	56.00	0.00	0.50	0.5	SOIL	430	245
SWC-TRO4	0442	56.00	0.50	2.40	1.9	SDST	480	1071
SWC-TRO4	0443	56.00	2.40	3.15	0.75	SDST	318	898
SWC-TRO4	0444	60.00	0.00	0.30	0.3	SOIL	452	166
SWC-TRO4	0445	60.00	0.30	2.10	1.8	SDST	609	996
SWC-TRO4	0446	60.00	2.10	3.10	1	SDST	239	787
SWC-TRO4	0447	64.00	0.00	0.90	0.9	SDST	406	219
SWC-TRO4	0448	64.00	0.90	1.70	0.8	SDST	195	179
SWC-TRO4	0449	64.00	1.70	2.60	0.9	SDST	231	809
SWC-TRO5	0483	12.00	0.50	1.70	1.2	SDST	130	56
SWC-TRO5	0484	12.00	1.70	3.60	1.9	SDST	132	49
SWC-TRO5	0485	16.00	0.00	0.50	0.5	SOIL	358	105

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SWC-TRO5	0486	16.00	0.50	1.90	1.4	SDST	2632	4245
SWC-TRO5	0487	16.00	1.90	2.70	0.8	SDST	202	268
SWC-TRO5	0488	16.00	2.70	3.50	0.8	SDST	156	220
SWC-TRO5	0489	20.00	0.00	0.50	0.5	SOIL	400	104
SWC-TRO5	0491	20.00	0.50	1.45	0.95	SDST	250	84
SWC-TRO5	0492	20.00	1.45	2.20	0.75	SDST	680	4245
SWC-TRO5	0493	20.00	2.20	3.50	1.3	SDST	190	155
SWC-TRO5	0494	24.00	0.00	0.50	0.5	SOIL	312	121
SWC-TRO5	0495	24.00	0.50	1.90	1.4	SDST	318	74
SWC-TRO5	0509	36.00	1.26	2.44	1.18	SDST	183	53
SWC-TRO5	0511	36.00	2.44	3.40	0.96	SDST	169	50
SWC-TRO5	0512	40.00	0.00	0.90	0.9	SOIL	330	73
SWC-TRO5	0513	40.00	0.90	1.50	0.6	SDST	505	1119
SWC-TRO5	0514	40.00	1.50	2.20	0.7	SDST	298	2837
SWC-TRO5	0515	40.00	2.20	3.30	1.1	SDST	190	170
SWC-TRO5	0516	44.00	0.00	0.80	0.8	SOIL	260	185
SWC-TRO5	0517	44.00	0.80	1.70	0.9	SDST	236	2920
SWC-TRO5	0518	44.00	1.70	2.14	0.44	SDST	212	82
SWC-TRO5	0519	44.00	2.14	2.83	0.69	SDST	1084	1358
SWC-TRO5	0521	44.00	2.83	3.35	0.52	SDST	5620	2966
SWC-TRO5	0522	48.00	0.00	0.80	0.8	SOIL	256	105
SWC-TRO5	0523	48.00	0.80	1.90	1.1	SDST	247	2901
SWC-TRO5	0524	48.00	1.90	3.40	1.5	SDST	380	190
SWC-TRO5	0525	52.00	0.00	0.75	0.75	SOIL	242	92
SWC-TRO5	0526	52.00	0.75	2.40	1.65	SDST	205	261
SWC-TRO5	0527	52.00	2.40	3.40	1	SDST	239	167
SWC-TRO5	0528	56.00	0.00	0.60	0.6	SOIL	258	208
SWC-TRO5	0529	56.00	0.60	1.45	0.85	SDST	178	97