

# **ELAND URANIUM PROJECT - ROCK SAMPLE ASSAY RESULTS**

Gladiator Resources Ltd (ASX: GLA) (**Gladiator** or the **Company**) is pleased to announce the assays from its initial rock sampling programme at the Eland Uranium Project in southern Tanzania.

Highlights include:

- 4 targets sampled at Eland Main, Eland SW, Kudu and Lisogo Hill
- Elevated Uranium identified up to 832 ppm U<sub>3</sub>O<sub>8</sub> from Kudu target
- Elevated Uranium identified up to 291 ppm  $U_3O_8$  from Lisogo Hill target
- Further Uranium identified between 113 and 171 ppm  $U_3O_8$  across the 4 targets
- Kudu target hosts 3 of highest 4 Uranium  $U_3O_8$  assays (with elevated Tantalum and Niobium)
- Maximum of 468 ppm Tantalum and 2,880 ppm Niobium in same samples as Uranium

#### Managing Director David Chidlow comments:

"As a first pass follow-up exploration of the radiometric anomalies previously identified at the Eland Hill Prospect, we are encouraged to report samples with high Uranium assays coincident with anomalous Tantalum and Niobium numbers. Both Tantalum and Niobium are on the Critical Minerals lists of several countries, including Australia, USA, EEC, Japan and India.

The Kudu target in particular, with 3 of the 4 highest assays for these elements, is of interest and is planned to be further evaluated by determining the nature, orientation and extent of the rocks hosting this anomalous Uranium, Tantalum and Niobium."

#### Location

The Eland Project is in southern Tanzania (**Fig 1**) where the PL 11703 covers ~294 km<sup>2</sup>. The specific area of interest, the "Eland Hill Prospect", lies in the SW corner of the license ~3 km N of the Mozambique border.

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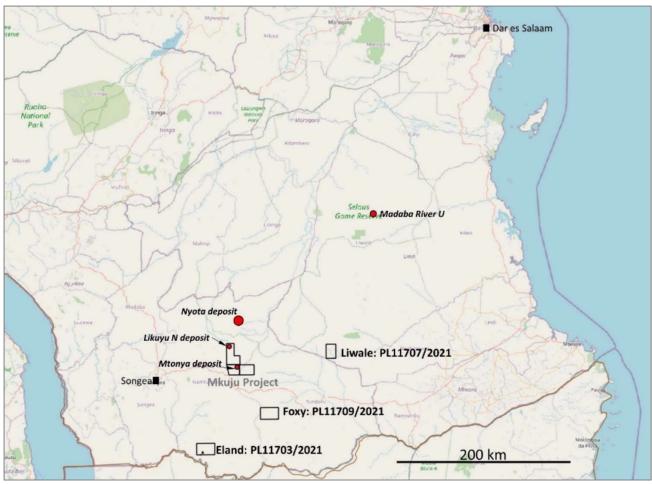


Fig 1: Location of the Eland project in southern Tanzania, along with Company's flagship Mkuju Project and the Mantra Resources world-class Nyota Uranium Deposit

# **Radiometric Anomalies and Rock Sample results**

Previous radiometric surveys by Western Metals Limited (WML) in 2008 had identified anomalous radiometric counts in 3 areas within the Eland Hill Prospect (Eland, SW and Kudu) associated with Syenitic rocks. Gladiator's recent exploration focused on these 3 areas plus an additional 4<sup>th</sup> area 500m to the west of Kudu named Lisogo Hill. Previous work was mostly at the Eland target, but the recent work by Gladiator suggests that the other targets may be more interesting and may have been overlooked until now, in particular at Kudu.

Six north-south traverses were made along which 1-2 kg rock chips were collected at 4-12m intervals, whilst recording total count gamma-ray radiation (measured in counts per second or 'cps') with a scintillometer. Samples were mostly fresh outcrop where possible. Rock samples collected were assayed to provide an indication of Uranium grades and identify areas for follow-up work, whilst also checking for Rare Earth Element (REE) presence.

Rock samples with the highest radiation and Uranium content are recorded as "Banded Gneiss" rocks, which is most likely the "Frosted Gneiss" previously described by WML in 2008. Photos of this rock type are provided in **Figs 2 and 3**.





Figs 2 and 3: Banded Syenite Gneiss (high radiometric counts)

**Fig 4** shows Gladiator's recent scintillometer data. Background radiation is recorded at 200-500 cps, with the anomalous zones recording 3 to >10 times this level (>5,000 cps), being coincident with Syenite and Gneiss rocks, and appearing to lie within a possible NE-trending corridor approximately 800m long with a possible extension of a further 600m west. This is roughly coincident with the orientation of mapped syenitic rocks. The highest cps data is from the SW and Kudu targets, with 6,253 and 6,748 cps respectively.

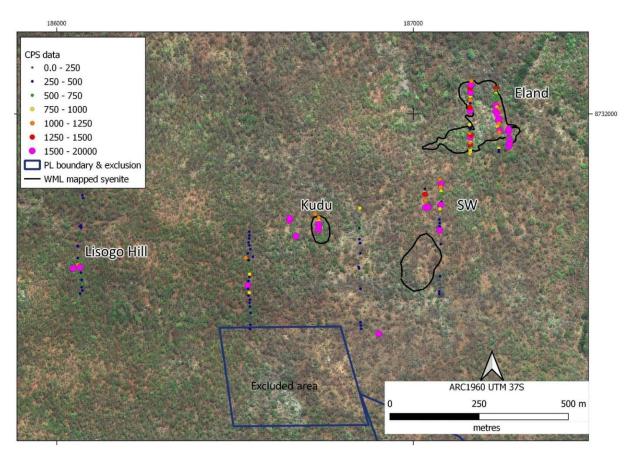


Fig 4: Map showing recent Gladiator scintillometer cps data for the Eland Hill targets



**Table 1** shows assay results of the rock samples with elevated Uranium  $U_3O_8$ , Tantalum (Ta) and Niobium (Nb), sorted by  $U_3O_8$  levels. Grades in 3 samples from the Kudu and Lisogo Hill targets show significantly elevated  $U_3O_8$  between 291 and 832 ppm, together with a further 6 samples also showing elevated  $U_3O_8$  between 113 and 171 ppm.

These results are of economic interest and require further evaluation, particularly in the Kudu target hosting 3 of the highest 4 anomalous assays for Uranium. The samples with high Uranium  $U_3O_8$  also show anomalous elevated Tantalum and Niobium, with the relatively high Nb:Ta ratio potentially indicating the presence of columbo-tantalite and columbite. The samples did not contain quantities of REE of interest.

Target	sample number	Ta ppm	Nb ppm	U3O8 ppm
Kudu	EL108	468	2880	832.4
Kudu	EL118	384	2435	<u>490</u> .5
Lisogo Hill	EL036	164	1014	<b>2</b> 91.2
Kudu	EL117	114	656	171.0
Eland	EL060	94.3	502	169.8
Eland	EL087	8.5	36	169.8
SW	EL078	96.2	503	162.7
SW	EL172	73.5	444	125.0
Eland	EL167	278	2157	113.2

Table 1: Anomalous samples, sorted by U<sub>3</sub>O<sub>8</sub> grade

**Figs 5 to 7** show the rock sample assays for Uranium (expressed as U<sub>3</sub>O<sub>8</sub>) ppm, Tantalum ppm, Niobium ppm respectively in each of the target areas of Eland, SW, Kudu and Lisogo Hill.

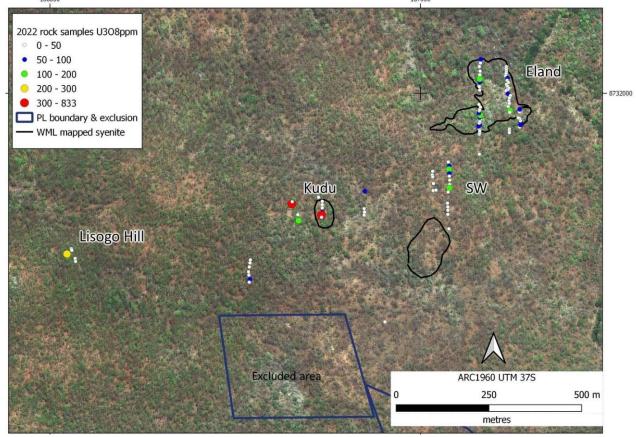


Fig 5: Map showing rock sample Uranium  $U_3O_8$  grades



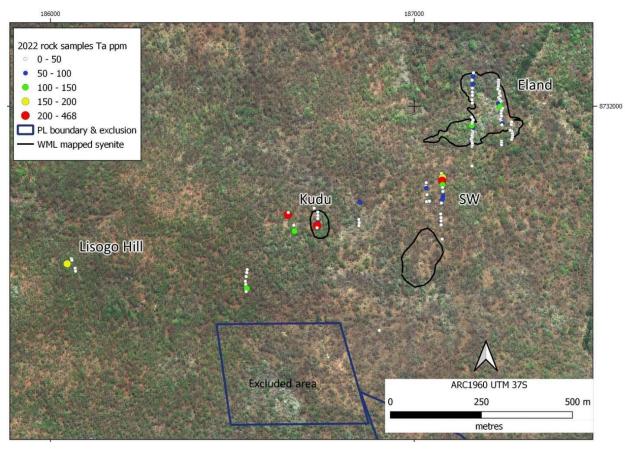


Fig 6: Map showing rock sample Ta (Tantalum) grades

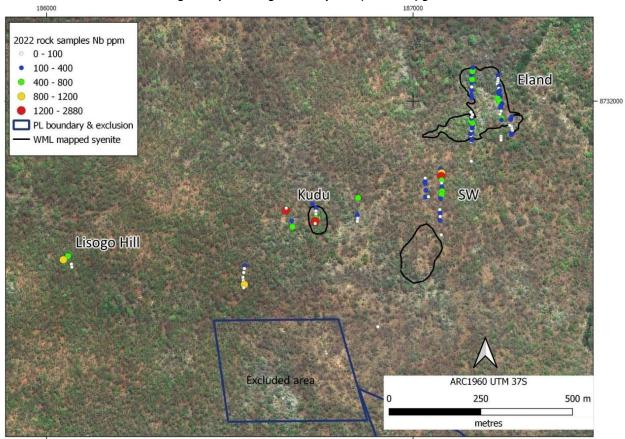


Fig 7: Map showing rock sample Nb (Niobium) grades



### **Next Steps**

The next steps are to better define the extent of the potentially Uranium-Tantalum-Niobium mineralized zone, to better understand what controls it and identify the host-rocks. Additional traverses to collect cps data will be planned to define the mineralized areas, with channel sampling either in trenches or exposures to obtain continuous fresh rock samples for analysis to give a reliable indication of grade and thickness of mineralized zones. If the results are encouraging, drilling would be considered to test the area.

## **Geology of the Eland Hill Area**

**Fig 8** shows the geology of the Eland Hill Prospect as mapped by WML in 2008. The following rock types were recorded. In addition to these, some small quartz-feldspar pegmatite veins have also been recorded.

- Syenite granular uniform white Syenite with only wispy trails of Biotite. Syenite is an intrusive igneous rock similar in composition to granite, but deficient in quartz
- Melange chaotic mixture of Syenite and blocks of altered frosted Gneiss
- **Frosted Gneiss** slabby Gneiss with distinct Biotite banding and remnant gneissic texture but with an obvious frosted appearance caused by abundant disseminated Nepheline and Albite
- White alteration believed to be albitite rock, possibly formed by metasomatism
- Pegmatoidal alteration irregular patches of very coarse (mm sized) Albite and Nepheline crystals
- Country rock banded biotitic felsic gneiss with amphibolite layers

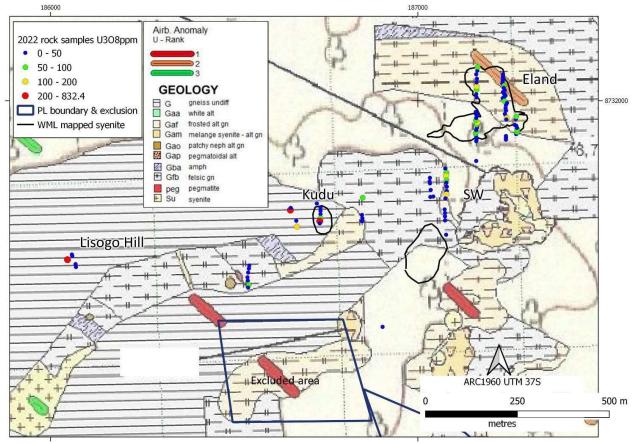


Fig 8: Geological map of the Eland Target (by WML, 2008)
black outline zones are the Syenitic rocks at Eland Hill, Kudu and a third area
red NW oriented features are airborne U anomaly axes (not pegmatites)



#### Released with the authority of the Board

FURTHER INFORMATION James Arkoudis - Executive Chairman e: james@gladiatorresources.net

#### **Competent Person Statement**

Information in this "ASX Announcement" relating to Exploration Targets, Exploration Results and Mineral Resources has been reviewed by Mr. Andrew Pedley who is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP). Mr. Pedley has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012 Edition). Mr. Pedley consents to the inclusion in this document of the matters based on the information in the form and context in which it appears. The market announcement is based on, and fairly represents, information and supporting documentation prepared by the Competent Person. Mr. Pedley is not an employee of the Company; he is a Senior Associate with the MSA Group of Johannesburg who are providing consulting services to Gladiator Resources Ltd.

### **About Gladiator Resources**

Gladiator is an ASX listed (ASX: GLA) exploration and mining Company with a focus on Uranium and Gold. The Company holds seven exploration licenses covering over 1,764km<sup>2</sup> in Tanzania, highly prospective for Uranium. Three of the licenses are contiguous, forming the Mkuju Project which has the following Uranium deposits:

### Likuyu North Deposit:

Mineral Resource Estimate (MRE) dated 27 April 2022 prepared in accordance with the JORC Code:

- Indicated MRE of 3.1 Mt at an average grade of 333 ppm U<sub>3</sub>O<sub>8</sub> containing 2.3 Mlbs of U<sub>3</sub>O<sub>8</sub>
- Inferred MRE of 4.6 Mt at an average grade of 222 ppm U<sub>3</sub>O<sub>8</sub> containing 2.3 Mlbs of U<sub>3</sub>O<sub>8</sub>
- Located ~30 kms south of Uranium One's world class Nyota deposit which has a Measured and Indicated MRE of 187 Mt at an average grade of 306 ppm U<sub>3</sub>O<sub>8</sub> containing 124.6 Mlbs U<sub>3</sub>O<sub>8</sub>
- Likuyu North is 'on trend' from Nyota, in a similar geological setting of the same age in proximity to the same major NE-SW fault

#### Mtonya Deposit:

Foreign estimate\* of 3.0 Mt at an average grade of 293 ppm U<sub>3</sub>O<sub>8</sub> containing 1.9 Mlbs of U<sub>3</sub>O<sub>8</sub>, all in the Inferred category. Prepared in 2013 by Roscoe Postle Associates (RPA) of Toronto using the Canadian institute of Mining, Metallurgy and Petroleum (CIM) definitions, and reported in accordance with Canadian National Instrument 43-101 (NI 43-101).

\*Cautionary Statement: Estimate of mineralisation at Mtonya is a "foreign estimate" as defined by the ASX Listing Rules, and accordingly: - The estimates are not reported in accordance with the JORC Code;

- The Competent Person has not done sufficient work to classify the foreign estimates as mineral resources in accordance with the JORC Code; and
- it is uncertain that following evaluation and/or further exploration work that the foreign estimates will be able to be reported as mineral resources in accordance with the JORC Code.

Gladiator also holds exploration licenses in Australia, highly prospective for Gold.



# **APPENDIX: JORC Code, 2012 Edition – Table 1.**

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
1.1 Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Samples were all surface rock samples of 1-2kg collected from outcrop or float.</li> <li>Wherever possible samples were of fresh rock rather than oxidised material. Samples were "cleaned" with a smaller hammer / (chisel if needed) to remove the exposed surface</li> <li>Efforts were made to collect samples representative of the rock in the immediate vicinity – the scintillometer was not used to guide the specific selection of each sample to avoid bias that would be caused by this.</li> </ul>
1.2 Drilling techniques	<ul> <li>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).</li> </ul>	• Not Applicable as no drilling carried out

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Criteria	JORC Code explanation	Commentary
1.3 Drill sample recovery	<ul> <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>	• Not Applicable as no drilling carried out.
1.4 Logging	<ul> <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> <li>Samples were assigned a rock-type, no other description was made.</li> </ul>
1.5 Sub- sampling techniques and sample preparation	<ul> <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 subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>1-2 kg rock chip samples were sent to African Assay Laboratories in Mwanza.</li> <li>At the lab the full sample was crushed to 75% passing 2mm.</li> <li>1.5 kg of the coarse split was then pulverised so that at least 85% passes a 75 micron screen then split and approximately 100-200g sent to SGS in Randfontein in South Africa.</li> <li>At SGS a pulverise quality check was carried our by weighing each sample and for every 15-20 carry out a pulverisation test, recording what % of each sample passes a 75 micron screen.</li> <li>'Field' duplicate samples were not collected.</li> <li>The samples may not be representative of the rocks at each site, for this additional rock-sampling channel sampling will be required.</li> </ul>
1.6 Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory</li> </ul>	<ul> <li>Analyses were carried out by SGS Randfontein in South Africa.</li> <li>Analysis was by sodium peroxide fusion followed by combined ICP-OES and ICP MS for 54 elements</li> <li>The method is expected to be total</li> <li>3 x AMIS0114 certified reference material (CRM) samples were inserted into the batch, and 2 x AMIS0092 CRMs, and 5 blank samples (dolerite). The results of these qa-qc samples are acceptable.</li> <li>The pulverize checks were all above 90% passing the</li> </ul>



Criteria	JORC Code explanation	Commentary
	checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	75 micron screen
1.7 Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Not Applicable as no drilling carried out.</li> </ul>
1.8 Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Samples positions were recorded using a handheld Garmin GPS using ARC1960 UTM zone 37S expected to be accurate to within 4-5 metres in the X and Y.</li> </ul>
1.9 Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The rock samples were collected along approximate north-south traverses 60 to 330 m in length. On the traverses samples were between 4 and 12 m apart. Traverses were 40 to 200 m apart.</li> </ul>
1.10 Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The orientation of the sample traverses are thought to be approximately perpendicular to the strike of the gneiss foliation/banding.</li> <li>individual samples were not oriented with respect to any geological features</li> </ul>
1.11 Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples were taken by Company representative to the laboratory in Mwanza.</li> </ul>
1.12 Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>MSA was not involved with the sampling but is of the opinion it was carried out in a satisfactory manner.</li> </ul>



Criteria	JORC Code explanation	Commentary
2.1 Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Eland Project is held by Zeus Resources (Tanzania) which is wholly owned by Gladiator Resources Ltd. The Prospecting License (PL) is PL11703/2021 which expires 12 September 2025. Annual rental was paid in September 202.</li> </ul>
2.2 Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Fieldwork was carried out on the Eland Project by ASX Listed Western Metals Limited (WML) in 2008. At this time, they had a 'Farm In' arrangement with Uranium Resources Plc (URA) for projects in southern Tanzania.</li> <li>WML focussed on the area of radiometric anomalism on government quarter degree sheet 312. A higher resolution radiometric survey was completed by WML for a large area, including the Eland Hill prospect.</li> <li>Geologists carried out fieldwork between 22 June and 13 July 2008 in the areas of the radiometric anomalism, including geological mapping, grab sampling and scintillometer traversing.</li> <li>The work recognised syenitic rocks to be the source of the radiometric anomalism and these were mapped. WML reported that three grab samples returned 141 ppm, 440 ppm and 1080 ppm U308 but no descriptions of these samples or other data was provided.</li> <li>No further historical work is recorded</li> </ul>
2.3 Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The PL is on the southern margin of the Karoo Supergroup sediments of the Luwegu Sub-Basin. In the southern part of the PL the underlying basement rocks are exposed and are probably gneisses of ~2Ga Usagaran age. In the Eland Hill area the gneisses are foliated biotite gneisses and amphibolite gneiss.</li> <li>The target is an area with abundant syenitic rocks which may represented the roof zone of a larger alkaline intrusion of unknown age that intruded into the gneisses. The syenitic rocks have variable textures from banded to granular or 'frosted'. Much of the syenitic was described as a 'melange' of syenite and altered gneiss.</li> <li>Based on the information available the target is most likely a uranium according to the IAEA of Type 1 (Intrusive deposits) subtype 1.2 (Plutonic deposits). Within this subtype class 1.2.2 are those associated with peralkaline complexes. Further work is required to establish this with more confidence.</li> <li>These deposit types are known to have elevated REE,</li> </ul>



Criteria	JORC Code explanation	Commentary
		Ta, Nb, Zr and Th.
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:	Not Applicable as no drilling carried out.
	$\circ$ easting and northing of the drill hole collar	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</li> </ul>	
	$\circ $ dip and azimuth of the hole	
	$\circ $ down hole length and interception depth	
	<ul> <li>hole length.</li> </ul>	
	• 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.	
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.	Not Applicable. No data aggregation was necessary
	• 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.	
2.6 Relationship between	• These relationships are particularly important in the reporting of Exploration Results.	<ul> <li>Not Applicable as no widths/lengths of mineralisation given</li> </ul>
mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	
	• 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').	
2.7 Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>A map showing sample positions is shown in the announcement.</li> </ul>



Criteria	JORC Code explanation	Commentary
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.	<ul> <li>The rock samples were not aimed to be selective so should provide an indication of the average cps and when the results are received, the average grade. However, given the sometimes nuggety nature of uranium, tantalum and niobium mineralisation this can't be ruled out.</li> </ul>
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.	<ul> <li>Thorium levels are low, between 0.3 and 12.3 ppm for the mineralised samples.</li> </ul>
2.10 Further work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Carry out detailed geological mapping and trenching/channel sampling to better delineate the potentially mineralised zones and understand the controls on mineralisation.</li> <li>After that, if justified, core drilling would be recommended to test the targets.</li> </ul>