

Surface pitting at Minjingu Uranium Project returns up to 269ppm U₃O₈.

- 202 ppm and 269 ppm U₃O₈ in 'reconnaissance' pits at Minjingu Uranium Project in soft sand-clay layers within 4 metres of surface.
- Only two samples analysed, from pits 100m apart at the north end of the area covered by pitting - potentially the mineralized zone extends north of this.
- Gladiator plans to auger drill to understand the extent and thickness of the mineralised layer, currently unknown.
- This program compliments the Company's exploration at its flagship Mkuju uranium project in southern Tanzania where high-grade trench results were recently reported.

Gladiator Resources Ltd (ASX: GLA) (Gladiator or the Company) is pleased to announce uranium mineralisation in surface pit samples at its Minjingu Uranium Project in Tanzania. This project compliments the Company's flagship Mkuju Uranium project in southern Tanzania where high-grade trench results were recently reported¹. Follow-up work is being planned to understand the thickness of the mineralised layer and potential northward extension.

Minjingu pitting and Uranium Potential

The program was carried out in March-April 2022 to follow up on a ground radiometric survey carried out by GLA earlier in the same year. The 134 pits were positioned on a 100x100m grid, north and south of the Minjingu Phosphate Mine (**Figure 1**) which is not part of Gladiator's ground. Pits were dug to 3-4 m depth into the soft material that is considered to be young (Neogene or Quaternary-aged) lake sediments. 1-2 kg samples were taken from the pit base and/or the pit sidewall from short channels, so effectively are 'grab samples'. The objective of the work was to identify uranium mineralisation. The thickness of the mineralised sediment is unknown.

The radiation measured in counts per second (CPS) was recorded on all samples to provide a CPS value for each. Samples were kept in storage as they were not considered a priority, mostly having low CPS. A decision to analyse them was made following a recent review of all projects by the current Board of the Company - to keep cost to a minimum just two samples with the highest 'bag CPS' (samples from pits 167 and 173) were selected. These samples were sent to the SGS (laboratory in Johannesburg) for analysis and the results reported herein. Samples from other areas of the 'pit grid' to the south all have lower CPS and are not expected to be mineralised. The two samples reported here are adjacent to and located on the northern limit of the 'pit grid' and so present the possibility of a mineralised zone in this direction (**Figure 1**) – which indicates that further testing is required.

¹ Announcements dated 27 December 2023 and 10 January 2024

Observations made in the pits suggest that mineralisation is hosted by a layer of intercalated sand and clay. **Figure 2** provides photographs of this sediment.

Ground radiometric anomalies are evident in the area (labelled A, B, C on **Figure 1**) and may be related to the uranium observed in pits, which requires further investigation.

In 2007 Montero Mining and Exploration Ltd completed a program of pitting, trenching, hand-auguring, and rotary air-blast (RAB) drilling in the area. No data has been found for the auger holes or trenches. Two of the RAB holes (MW04 and MW05, **Figure 1**) were drilled (500m) northeast of the pit samples 167 and 173. Uranium mineralisation in these holes was reported as being insignificant but the RAB drillholes were only sampled at the end of each rod (4.5m lengths) so are not considered reliable.

Exploration is at an early stage and further work is required to understand the controls, the potential lateral extent of the layer and its thickness.

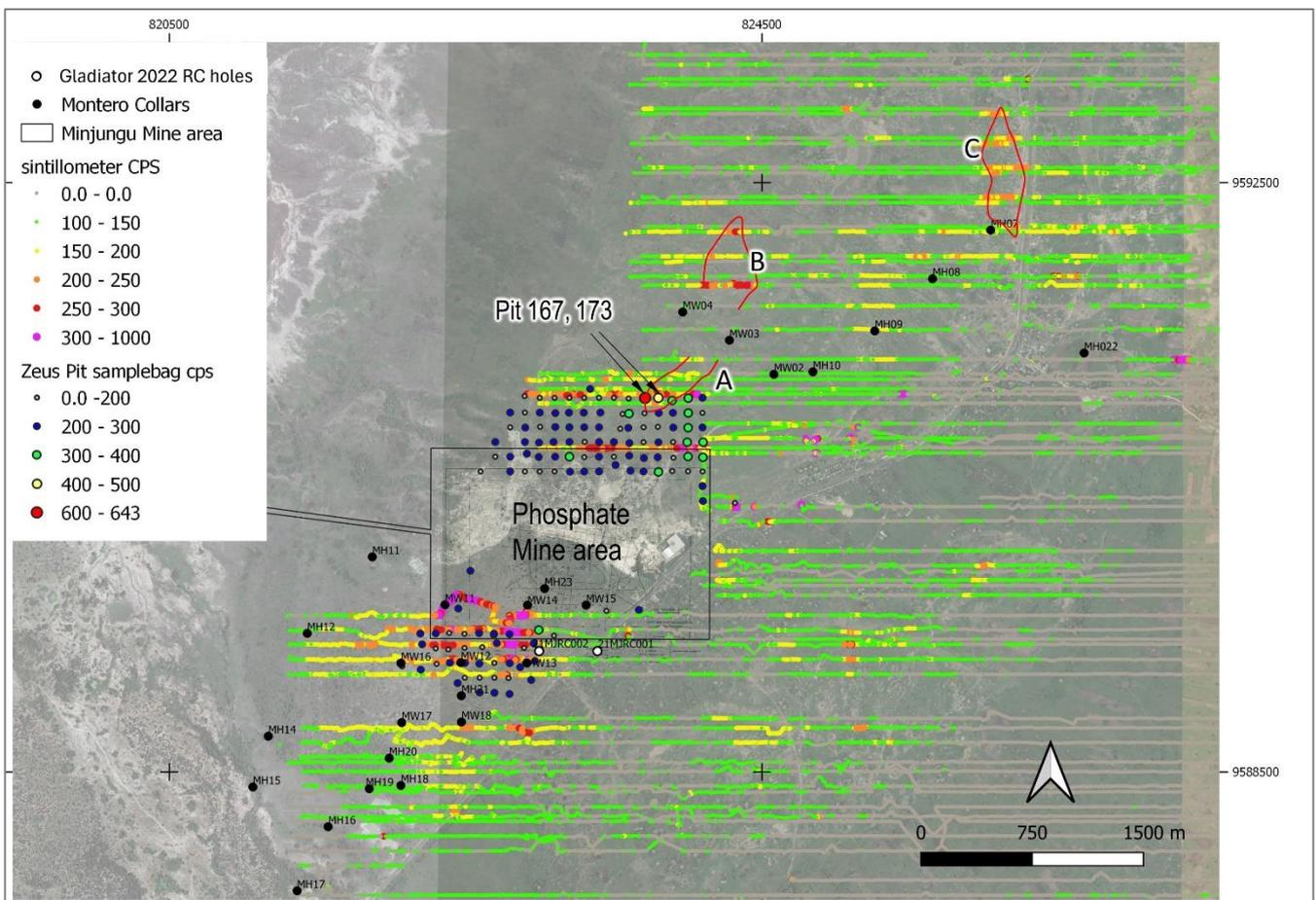


Figure 1. Map showing part of the Minjingu project around the Minjingu Phosphate Mine (not part of the project area). The pit samples are shown and ground radiometric (scintillometer) data. Pits 167 and 173 are labelled.



Figure 2. Photos of the samples collected in pits 167 and 173 and high CPS readings

The Minjingu Project

The Minjingu Project covers a total area of 296.9km² and is located in Northern Tanzania, 106km southwest of Arusha the main administrative city in the area and 520km northwest of Dar es Salaam. The Minjingu Project area possesses solid infrastructure such as quality tarmac roads, power lines, airport services via both Arusha and Kilimanjaro



Figure 3. Location of Gladiators' Projects in Tanzania

Pit	Easting	Northing	RL
MJP 167	823711	9591039	977
MJP 173	823800	9591040	999

Table 1. Positions of pits 167 and 173 (UTM Arc1960 Zone 36_S)

Released with the authority of the Board

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Competent Person (CP) Statement

Information in this “ASX Announcement” relating to Exploration Targets, Exploration Results and Mineral Resources has been compiled by Mr. Andrew Pedley who is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP). Mr. Pedley has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code 2012 Edition). Mr. Pedley consents to the inclusion in this document of the matters based on the information in the form and context in which it appears. The market announcement is based on, and fairly represents, information and supporting documentation prepared by the Competent Person. Mr. Pedley is a non-executive director of Gladiator Resources Limited.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The exploration pits were dug by hand and by backhoe, to depths of up to 3-4 metres In most cases the 1-2 kg sample was collected from a short channel on the floor of the pit. In some cases, the sample was taken from the side wall of the pit if the scintillometer indicated an interesting unit. Samples were prepared at SGS Mwanza in Tanzania. On receipt at the laboratory, they were dried and weighed. Then the full sample was crushed to >75% passing 2mm. The crushed sample was pulverized to >85% passing 75 microns. The pulps were then sent to SGS Randfontein in South Africa for analysis. The samples are not considered perfectly representative of the geological units encountered as being from the floor they were not collected perpendicular to the horizontal layers. The objective was simply to identify mineralization.

Criteria	JORC Code explanation	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • No drilling is reported and so this section is not applicable
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • No drilling is reported and so this section is not applicable
<i>Logging</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • A log of the pit sample was made recording CPS, colour, grainsize, % clay and other attributes.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • The sample collection procedure is considered appropriate. In future it is recommended that samples are collected from vertical samples from the sidewall and not the base of the pit, to obtain a more representative sample. • In summary the overall QAQC sample performance is satisfactory. • The sample size (1-2 kg) is appropriate with respect to the grain size of the material. • Samples were damp on collection. • No field duplicates of the pit samples were collected.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • Analysis of the samples was by pressed pellet XRF which is an industry standard method for uranium analyses. • The two pit samples were part of a larger batch of samples (the recently reported SWC target trench results). The announcement dated 9 January 2024 describes the QAQC in detail, including the insertion and performance of blanks and CRMs. • The CP is satisfied that the QAQC demonstrated reasonable accuracy and precision of the analyses.
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • There has been no verification of the sample results. • The data entry was into a MS Excel sheet.

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The pits were positioned with a handheld Garmin GPS64sx in UTM Arc1960 projection/datum Zone 36_S.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The pits were excavated on 100 x 100m grid. • No geological continuity can be inferred. • No sample compositing was applied
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The lake sediments are horizontal in aspect. The samples were largely taken from the base of the pit and so do not necessarily provide a representative sample of the geological units – they are effectively ‘grab samples’ • There can be no inference on the thickness of the mineralisation at this stage.
<i>Sample security</i>	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • The samples were driven by Gladiator staff to Mwanza where they were received by the laboratory and kept on secure premises. • The prepared samples were securely boxed and sent with DHL to SGS in South Africa for analysis. • The CP does not have any concerns regarding security.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • No physical review or audit has been carried out of sampling techniques.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All results were undertaken on PL 11706 (Minjingu Project) which is held by Zeus Resources (Tanzania) Limited (100%) a 100% owned subsidiary of Gladiator Resources. There are no other known impediments pertaining to operating in the current license.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Minjingu phosphate deposit was discovered by New Consolidated Goldfields Ltd (NCG) in 1956 who explored Minjingu for Phosphate. Japan Consulting Institute and Geomin, carried out further studies in 1970 and in the same year Kloeckner Industrieranlagen carried out a feasibility study on the phosphate deposit. The phosphate mine was operated by the state until 1989-1990 and intermittently since then. During the period 1978 to 1981, Uranerzbergbau GMBH carried out ground examination of about 110 radiometric anomalies identified by the airborne survey (Bianconi, 1987) in joint venture with the Tanzanian government and the United Nations as part of a uranium evaluation program. The work resulted in the identification of many uranium occurrences and prospects throughout Tanzania, including the identification of anomalous uranium values in the Minjingu phosphate deposit ranging from 11 to 849 ppm U₃O₈ (Bianconi, et al, 1978; Ingovatov, et al, 1982). Uranerzbergbau carried out reconnaissance mapping, ground radiometrics, ground magnetics, ground electromagnetics, with limited auger drilling In 2005 Tanganyika Uranium Corp and later, East African Resources (2010) have also conducted uranium exploration in the PL11706 licence area. In 2007 Montero Mining and Exploration Ltd completed a program of pitting, trenching, hand-augering, and drilling. They drilled 18 holes between 5 and 79 m in depth using a RAB rig, sampling at the end of each run. Due to the poor sample reliability of RAB samples and that they sampled at the end of each run the Montero drill results cannot be considered reliable. The maximum assay value was 1627 ppm U₃O₈ in hole MW15 from 36 to 37 metres.

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		<ul style="list-style-type: none"> Gladiator completed a ground radiometric survey in 2022 over a large part of the Project area. Then Gladiator drilled 2 holes on the south side of the Phosphate mine area, in 2022 by Reverse Circulation, to test some of the historical (Montero) results. The Gladiator drillholes intersected thick zones of low uranium content: 15 m @ 94 ppm U3O8 from 62 m depth, and 6m @ 91 ppm U3O8 from 65 metres depth. This was reported in an announcement dated 14 April 2022. It is likely that the pit samples are from younger bed than the layers RC holes tested being so shallow, possibly part of the Quaternary. This is uncertain.
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The regional geology of the area is dominated by the East African Rift Valley (EAR), which extends approximately 5000km from the from the junction of the Red Sea and Gulf of Aden to Mozambique. The Minjingu phosphate mine is within flat lying well bedded sediments of fluvial and lacustrine origin, being claystones, sandstones and phosphatic beds undifferentiated Neogene aged lake beds from the Lake Manyara Formation. These are poorly exposed at surface. The mineralisation intersected at deeper levels in the drillholes around the Minjingu phosphate mine appears to be associated with thick phosphate layers dipping gently away from the central topographic high of Minjingu Hill (where the phosphate mine is) where the basement rocks are thought to have formed an island within the lake. Phosphate beds are developed on the flanks of this island wedging out laterally grading into the laterally extensive lake beds. The sediments in the pits may be younger, possibly Quaternary. The material in the pits appears to be layers of sand, possibly phosphatic, clay and organic material. Some reaction to acid suggests possible calcite (as calcrete?). It is possible that the very near surface sediments (in the pits) are reworked from the older Neogene beds and may be in part controlled by the retreat of the lake. The relationship with the Minjingu Hill phosphate deposit is uncertain – the sediments in the pits may be laterally distributed reworked from the upper parts of the Minjungu phosphatic beds which are known to be uraniferous. The mineralisation type is likely to be surficial and of the

Criteria	JORC Code explanation	Commentary
		lacustrine type, further work is required to establish this.
Drill hole Information	<ul style="list-style-type: none"> 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"> 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. 	<ul style="list-style-type: none"> No drillholes are reported
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No data aggregation methods were applied.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> The lake sediments are horizontal in aspect. The pits were vertical so are perpendicular to the lake sediments. However, the samples were collected at the base of the pits and so do not provide a representative sample, they may be influenced by a thin horizontal layer at the base of the pit for example. There is no inference of thickness of the mineralised sediment at this stage.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Drilling of the sediments and collection of 'vertical' samples will be carried out in future.
<i>Diagrams</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> A map is provided in the announcement
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> It is stated that the results reported herein are the only pit samples that were analysed at the laboratory, selected on the basis of their high radiation (CPS) and that all other pit samples had lower CPS.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> There is no other substantive exploration data to report
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Auger drilling is recommended to test the area immediately north of the two pits 167 and 173. It is suggested that holes are drilled at 80 m spacings and to at least 5-6 metres depth. Sampling should be perpendicular and representative, and collected according to geological contacts if observed. Attempt to better understand what lithology hosts the uranium and how its distribution is controlled.