

# ADDITIONAL INFORMATION TO SUPPORT ASX ANNOUNCEMENT DATED 17 JANUARY 2023

Haranga Resources Limited (ASX:HAR; FRA:65E0; 'Haranga' or 'the Company') would like to publish additional information in relation to the ASX Announcement dated 17 January 2024, titled "HARANGA DISCOVERS MULTIPLE NEW URANIUM ANOMALIES AT MANDANKOLY PROSPECT".

The additional information is in the form of a description of the analysis process undertaken on samples using a portable XRF machine (pXRF) and the measures taken to ensure the veracity of the results and the reliability of the process. The program described in the announcement is a survey to determine anomalism and is not semi-quantitative in nature and should never be considered a proxy or substitute for laboratory analysis.

The JORC Tables have also been amended to better reflect the relevance to the process described.

Pursuant to the ASX Listing Rules, the Company has attached an updated Announcement which includes the description of the calibration and validation process in operation at Haranga's Senegalese project and amended JORC Tables 1 and 2. Please note that other than the removal of irrelevant information in the JORC Tables and the addition of the analysis description, there is no substantive change to the original market release.

This announcement has been approved by the Managing Director of Haranga Resources Limited.

Investor inquiries Haranga Resources Peter Batten, Managing Director

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# HARANGA DISCOVERS MULTIPLE NEW URANIUM ANOMALIES AT MANDANKOLY PROSPECT

# HIGHLIGHTS

- **Discovery of new significant uranium anomalies** at Mandankoly prospect, located within the <u>1,650km<sup>2</sup> Saraya Uranium permit</u> in Senegal
- Two notable uranium anomalies revealed through infill survey, <u>comprising 4,065 termite</u> mound samples on a 200m x 50m grid
- The uranium concentrations in these anomalies have been recorded at up to 15ppm, seven times higher than the 2ppm background levels - each of these anomalies extends approximately 600m in length
- These anomalies are situated within erosional valleys on the Eastern Saraya laterite plateau, suggesting a potential link with the underlying granite (currently host to existing resource)
- These recent discoveries bring the <u>total number of close spaced (i.e. infilled) uranium</u> <u>anomalies to five</u> and excludes the Company's JORC compliant 16.1Mlbs U<sub>3</sub>O<sub>8</sub> inferred mineral resource @ 587ppm<sup>1</sup> on the permit
- As anomalies are defined through infill sampling, each anomaly is followed up with auger drilling to further understand the extent and nature of these anomalies **auger drilling** continues across the permit and results will be released on an ongoing basis
- Regional/infill termite mound sampling continuing (refer figure 3) and RC drill targeting at Saraya (aimed at potential resource expansion) to re-commence following Christmas shut-down – RC drilling at newly defined anomalies to re-commence following the interpretation of auger results
- Metallurgical sample enroute to Canada for analysis, following the receipt of results Haranga plans to <u>upgrade the existing uranium resource</u> from Inferred to Indicated

Haranga Resources Limited (ASX:HAR; FRA:65E0; 'Haranga' or 'the Company') is pleased to provide an update on its geochemical exploration program over the Saraya Uranium permit in Senegal.

**Managing Director Mr Peter Batten commented** "Within a short time frame we have managed to commence a significant exploration program over the very large Saraya permit, with the aim of aggressively exploring the potential in the region where the Company believes significant further uranium resources could exist. This comes at a time when we are seeing increased interest in the uranium market and explosive moves in pricing, so we are extremely excited about the next 6 months.

After starting with the Company late last year, I have managed to visit the Saraya permit twice and each time I have been pleased with the speed we are able to mobilise on our programs



and the support we are receiving from not only the ministry, but the people of Saraya and all our contractors whom we are very grateful to. There are always challenges along the way, but most importantly for me I am seeing support to develop this project to its fullest potential."

## Termite Mound Infill Sampling

An initial permit wide termite mound sampling program was completed on a 1000 m by 100 m scale. Within this survey higher grade results were used to define an infill sampling grid at 200m x 50m.

The Mandankoly sampling was preceded by infill sampling at Diobi and Sanela, where previous anomalies have been defined which are being followed up by auger drilling. The infill program was moved to Saraya South following the completion of the sampling program at Mandankoly.

# About the Mandankoly Sampling

The Mandankoly prospect is located on the Eastern Saraya laterite plateau (Figure 3). The results from the 4,065-sample infill grid have identified two uranium anomalies (Figure 1). These anomalies exceed 600 metres in length and returned uranium concentrations seven times higher than background levels. The anomalies are located in incised topography, oriented towards East on the plateaus, and display a potential connection to mineralisation in the granite beneath the lateritic cover (Figure 2). This is a similar setting to the already defined JORC Inferred resource at Saraya (Figure 3).

These anomalies will now be subjected to drill testing beneath the laterite utilising an auger rig. All field preparation has been carried out to prepare for the drilling and the auger rig will be mobilised to Mandankoly when available.

Auger drilling is planned to access the saprolitic profile of the underlying rocks and to search for the source of the termite mound anomalies.

## **XRF** Instrument

The termite mound samples and auger samples have been analysed utilising the Company's newly acquired Portable XRF (pXRF) machine.

Whilst reliable, the pXRF results are not equivalent to laboratory assays and a degree of caution is required when assessing the results. Any element of error is minimalised by the constant calibration and correct use of the machine by experienced operators.

The pXRF is an Olympus Vanta M Series XRF analyzer, an advanced handheld instrument engineered for detecting low-concentration multi-elements, including uranium, with high accuracy and precisions in the ppm range.

Samples are collected on termite mounds at surface producing between 1 and 2 kg of naturally dry samples.



Collected samples are crushed at 5mm on a jaw crusher then laid under the sun to extract any remaining moisture.

Samples are sieved to  $180\mu$  and riffle split to collect a 200gm fine fraction.

Samples are collected in small PET plastic bags.

Samples are assayed using the Olympus Vanta-M recent XRF device in a dedicated room kept at 24°C ambient temperature.

The XRF uses a graphene detector operating at -30°C with a silicon drift detector (SDD) for rapid and accurate elemental identification.

For the survey samples Haranga use the machines Geochem3 counting mode specific to Olympus that optimizes the detection for the 40 elements selected, enhancing the detection and counting of the particular elements that are of primary interest in geochemical studies, from low grade elements to ore grade elements.

The Geochem 3 method, using Fundamental Parameters, uses the adjusted rates, the tube spectrum, and the x-ray properties of the elements to calculate the sample chemistry. Fundamental Parameters considers the effect of each element on every other element. This requires very intensive calculations.

The device has been programmed for a 3 X-ray energy beam analyses with emphasis on the high energy Beam1: analyses time is programmed for 90 seconds on Beam 1, 30 seconds on Beam 2 and 30 seconds on Beam 3.

Emphasis on Beam1 allows for 2-3 ppm limit of detection for Uranium.

The assaying process include:

1. A programmed calibration test: a built-in process that calibrates itself using a Calibration Coin n°316, provided by the manufacturer. The assaying process cannot start without the preliminary calibration test. The operating team carry out two calibration tests per day.

2. A programmed Silicon Drift calibration: this calibration is programmed once a week or when the twice daily control of the blank is showing a drift. The procedure is a bult-in drift calibration to be made on a Silicon Blank provided by the constructor.

3. A twice daily quality control on CRMs: at the start of each assaying team, a quality control is done on 3 CRMs provided by the manufacturer (Calibration Coin 316, Oreas70b and Silicon Blank). This quality control aims at verifying the SDD drift and to recalibrate if out of range. It also verifies the low Uranium detection with the Calibration Coin.

4. A twice daily control on in house reference materials: 3 pulp samples have been selected from our store of core samples to verify the Uranium detection repeatability for grades around 300, 1000 and 2000 ppm Uranium.

5. A random quality control: once in a while, a set of 40 samples from our library of core samples are used to check a whole range of Uranium grades from 100ppm to 2500ppm.



6. Duplicates: for each prospect, a set of samples from the survey is duplicated to survey the repeatability of the Uranium grades from the termite mound survey

The reference material from our pulp library have been selected based on pulps prepared and assayed by the certified laboratory ALS from Vancouver Canada. These 50cm core sample from our initial DD drilling on Saraya prospect have been crushed and ground to 75% passing 80µ then assayed for uranium using two methods: fusion digestion and XRF detection as well as 4 acid digestion and combo ICP-AES and ICP-MS. The fusion + XRF method has been repeated in a second laboratory in Vancouver (MSALab) for confirmation.

Our library of 40 elements has been refereed assayed by XRF for comparison with ALS and MSA lab analyses. All 40 samples XRF survey falls within 0.5% of the Fusion + XRF assays provided by MSALab and within 3% of the Fusion+XRF assays provided by ALS Lab.

The sampling and assaying team are trained and supervised by our Operation Manager and Project Manager. The managers have completed pXRF analyses on over 150.000 termite mounds samples, an extensive experience leading the geochemistry sampling and assaying team.

Anomalism is defined as a percentage of higher values over the background recorded.

Repeatability has so far been excellent.

The termite mound sampling and pXRF assaying process is a semi-quantitative method aiming at highlighting Uranium anomalism in the range 2 to 50ppm on weathered soil profile.

Haranga relies on chemical analyses to define, quantitatively, any mineralisation intersected in RC and DD drillholes established on rooted Auger uranium anomalies detected with the pXRF.





Figure 1: Uranium results for the termite mound infill sampling over the Mandankoly Grid. The results outlined two Uranium anomalies, ten kilometres South of the Saraya Maiden Resource (Figure 3). All analysis was carried out using an in-house XRF analyser.

No previous historical work has been carried out by Cogema/Areva over the eastern plateau. Termite mound sampling has proved effective in capturing the Uranium geochemistry signal from the substratum.

The Mandankoly and Banforato anomalies bring the total termite mound anomalies identified by close spaced sampling to five (Saraya, Diobi, Sanela, Mandankoly and Banfaroto) with infill sampling being completed at Saraya South and infill sampling still to be undertaken at Diobi East and Saraya East.





Figure 2: Interpretation of termite mound infill sampling results for the Mandankoly Grid. The main uranium anomalies detected are aligned along a NE trend of +2km long.

# **RC Drilling**

Haranga announced in December their intention to commence RC drilling of the termite mound anomalies.

Haranga is using auger drilling to better define the source of these anomalies and to determine the orientation of the source for drill targeting. Auger drilling commenced in November, however, has been impeded by access issues (late rain, late harvest and seasonal grass fires).

The FTE RC rig arrived on site at Saraya on December 13 and drilling commenced on December 18. Due to the lack of access at either of Diobi and Sanela, the RC drill commenced drilling at Saraya to complete some verification holes ahead of a proposed Mineral Resource Estimate upgrade.



# **Ongoing Exploration Programs**

Haranga Resources remains committed to a comprehensive exploration strategy across the Saraya Uranium Project (Figure 3). XRF assaying is continuing with termite mound samples from Saraya South prospect (~2200 samples). The Saraya South prospect is located between the Saraya main project and Mandankoly. It is also located over the Eastern Lateritic Plateau with permit scale anomalism.

The infill termite mounds sampling has resumed at Saraya East, sampling at 200m x 50m. This grid will cover discreet anomalies resulting from the permit scale survey.

Once termite mound sampling at Saraya East is completed, the team will be sampling two more blocks of the permit scale survey to **ensure the remaining unsurveyed 28% of its surface is fully covered**.

## Metallurgical Sample

A metallurgical sample is enroute to SGS Lakefield, Canada for analysis, following which Haranga plans to upgrade the existing uranium resource from Inferred to Indicated.

The metallurgical sample is taken from crushed drill core from the 22 Haranga holes completed for the verification and confirmation of the historic drilling database Haranga Resources inherited from Cogema and Areva for the Saraya uranium deposit.

The sample will undergo ore characterisation and classification work to further improve the understanding of the data used in the Maiden MRE at Saraya.

It has taken until now to establish a workable process for the exportation of radioactive samples. Haranga has been working with the Senegalese authorities and has now gained all permissions and authorities to send the samples to Canada.

Haranga holds the only permit for nuclear fuels in Senegal and Saraya is the first uranium deposit defined in Senegal.





Figure 3 : Termite mound sampling progress to date: Green lines show the sampled and assayed lines, yellow lines show the sampled, but unassayed lines, while the red lines shows remaining program to be completed. +70% of the permit surface has been covered by the 1000m x 100m sampling survey, with two more blocks B11 and B12 in preparation for sampling. The first four Infill grids (200mx50m) defining the central area of the permit have been completed and the fourth grid (Saraya South) will be assayed by the end January. A fifth infill, Saraya East, is being sampled.

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## Disclaimer

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)", "potential(s)" and similar expressions are intended to identify forwardlooking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Investors are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and the Company does not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

### About Haranga

Haranga Resources is an African focused multi-commodity company. The Company's most advanced project is the Saraya uranium project in Senegal, previously owned by Uranium giant Orano (previously Areva) and which has in excess of 65,000 m of historical drilling. In addition, Haranga owns the gold-prospective Ibel-South permit in Senegal within the prolific Kenieba Inlier of the Birimian Formation, where more than 40 Moz of gold has been discovered. Both projects are serviced from its well-established 40-man exploration camp.

The Company's immediate focus is the Saraya uranium project, where a 16.1 Mlbs  $U_3O_8$  inferred mineral resource @ 587ppm has been defined and where further uranium anomalies are continuing to be realised across this 1,650km<sup>2</sup> permit. In conjunction, Haranga is exploring it's Ibel-South gold project, where the Company continues to define drill targets and execute a maiden drill program across this permit during 2024.

Corporately, the Company is continuing to identify and assess additional acquisition targets across the African region, primarily focused on expanding its portfolio across the clean energy and gold sectors. Haranga's collective expertise includes considerable experience running ASX-listed companies and financing and developing mining and exploration projects in Africa, Australia, and other parts of the world.

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#### **Competent Person's Statement and Previously Reported information**

The information in this announcement that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation compiled by Mr Jean Kaisin working under the supervision of Mr Peter Batten, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Batten has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Batten is the Managing Director of Haranga Resources Limited and consents to the inclusion in this announcement of the Exploration Results in the form and context in which they appear. Mr Kaisin is a full-time employee of Haranga Resources Limited. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements as noted in footnote 1. The Company confirms that the form and context is findings are presented have not been materially modified from the original market announcements.

#### ASX Announcements referenced in this release

1. Mineral Resource Estimate results taken from the report titled "Maiden Mineral Resource Estimate Saraya Uranium" released on the ASX on 25<sup>th</sup> of September 2023 and available to view on <u>https://haranga.com/investors/asx-announcements/</u>

#### Saraya – Mineral Resource

The Company confirms it is not aware of any new information or data that materially affects the information included in the Mineral Resource Estimate and all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 25 September 2023. The Company confirms that the form and context in which the Competent Person's finding is presented have not been materially modified from the original market announcements.

#### Saraya – Mineral Resource Estimate

The resource as reported at 25 September 2023 is as follows:

7000	Classification	Tonnage	Grade	Contai	ned eU <sub>3</sub> 0 <sub>8</sub>
Zone	Classification	Mt	eU₃0 <sub>8</sub> ppm	Mlbs	tonnes
+30RL	Inferred	9.40	641	13.29	6 000
-30RL	Inferred	3.05	419	2.82	1 300
Total	Inferred	12.5	587	16.1	7 300

 

 Table 1: Saraya Mineral Resource Estimate – 250ppm cutoff, Indicator Kriging (30RL is a depth measurement – approximately 160m below the topographic surface)



# JORC CODE, 2012 EDITION – TABLE 1

## SECTION 1 SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
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>Geochemical survey of termite mound sampling:         <ul> <li>Sampling grid on a 100m by 1000m permit scale.</li> <li>Sampling grid on a 50m by 200m for infill.</li> </ul> </li> <li>Sample taken on large termite "cathedral" mounds by circular sampling around the mounds. Sample consist of 1.5kg of small clods of the mounds.</li> <li>Termite mounds samples are then prepared for XRF assaying (see below)</li> </ul>
Drilling techniques	<ul> <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-</li> </ul>	



Criteria	JORC Code explanation	Commentary
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	
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>	
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>	
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</li> </ul>	<ul> <li>Termite mounds samples have been prepared for XRF assaying. The preparation consists of crushing dry termite mounds samples using a jaw breaker, sieving the passing material to 180µm, collecting the passing material, and splitting to 2x150gm pulp samples. Pulps are packed in small transparent PET plastic bags for XRF assaying. The jaw breaker crushing aims at breaking the clods of the termite mounds to dust, without pulverizing the particles. Sieving aims at removing the +180µm fraction consisting mainly</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul><li>duplicate/second-half sampling.</li><li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li></ul>	of quartz sands to concentrate fine particles carrying the uranium mineralization.
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 checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Pulp samples have been assayed using an Vanta M Olympus XRF analyzer.</li> <li>For infill grid sample: Samples have been assayed using "Geochem 3" on a 150 second assaying time(B1 90s; B2 30s; B3 30s).</li> <li>The XRF analyzer is calibrated at each start of the device using calibration tool provided by Olympus as well as with 6 in-house standards. Standards results are reviewed after each campaign and compared to previous analyses.</li> </ul>
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>XRF assaying verification.</li> <li>Sample pulps are divided and bagged by inhouse Haranga technicians.</li> <li>Sample bags are verified by XRF technicians and counted prior to assaying.</li> <li>Assay data produced by XRF device is directly downloaded to database. The Company geologist verifies the data via GIS, prior to interpretation.</li> </ul>
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> </ul>	<ul> <li>Samples have been collected on pre- established grids space by 100m by 1000m for permit scale and 50m by 200m for infill grids.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Samples are taken on the nearest appropriate termite mound sample to the pre-established station. The location of the mound is collected using handheld GPS consisting of Garmin antennas deposited on the mounds and wired to cellphones that record the information. Each termite mound is photographed with a GPS reference on the photo. Samples coordinates are edited on topographic map for visual control.
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>Infill grids are at 50m by 200m line spacing.</li> <li>Permit scale grids are at 100m by 1000m line spacing</li> </ul>
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>Regional structures are typically of Birimian orientation with a majority of known mineralized structure orientated around N20°E and N140°E.</li> <li>Regional sampling is based on East-West sampling lines to crosscut major N20E and N140E structures. Infill sampling based on the same structure, also on East-West sampling lines.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Final 150gm pulp samples are duplicated and stored in plastic containers at 2 different sites. Rejects are re-bagged and stored at the site</li> </ul>



Criteria	JORC Code explanation	Commentary
		warehouse.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No information is available on reviews of sampling techniques and data.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
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 exploration results presented fully relate to the Saraya Exploration Permit in Senegal number PR 02208 granted to Mandinga Resources via Decree N°012397/MMG/DMG of 05 June 2018 and renewed for 3 years via Decree N°012403/MMG/DMG of the 23 May 2022.</li> <li>Haranga Resources has acquired 70% interest from Mandinga Resources who own 100% of the Saraya project. The Vendor has a 30% free carry to PFS. After PFS the Vendor will have to contribute to cost or dilute to royalty.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical data from previous owners of the permit is partially available. Known historical exploration activities consisted in geochemistry of soil and termite mounds sampling.
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The Saraya project Uranium Mineralization lies within the Saraya Granite, a late Birrimian leucocratic granite with traces of deuteric alteration associated to fractional crystallization fluids and late-stage alteration within the regional Birrimian tectonic setting.</li> <li>Observations made during logging confirm a model of syn- to tardi-magmatic episyenitization followed by deuteric</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>alteration. Original quartz is initially dissolved then filled with chloritized biotites followed by geodic automorphic second-generation quartz. Uranium minerals in the form of small grains, seems to accompany or replace the initial chloritized biotite.</li> <li>Historical data indicate that episyenitization, deuteric alteration and uranium mineralization at Saraya is structurally controlled and associated with brecciated lenses that strike mainly the NNE and dip sharply to the SE. This is consistent with the dominant Birrimian structures.</li> <li>Geology at Mandankoly Prospect is not well detailed: no previous historical work has been done over the prospect by previous owners. The prospect is mostly covered by the Eastern Lateritic plateau, a 2 to 8m thick lateritic pleatu, masking the granitic substratum and possible mineralisations.</li> </ul>
Drill hole Information	<ul> <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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) 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>	Drilling did not form part of this geochemical surface sampling programme.
Data aggregatio n methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	• Termite mound Uranium assay results have been reported as ranges on a GIS map. Grade ranges are 2; 4.5; 8; 13; 18 ppm. No specific treatment of the original data has been applied.



Criteria	JORC Code explanation	Commentary
	<ul> <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 equivalent values should be clearly stated.</li> </ul>	• Countering of urnaium values for mapping purposes have been drawn at 4.5 ; 8; ;13 ; 18 ppm. Contouring has been carried out by hand by on-screen digitizing and do not include gridding of any kind.
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Drilling did not form part of this geochemical surface sampling programme.</li> </ul>
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>Drilling did not form part of this geochemical surface sampling programme.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Soil geochemistry assays have been presented as such on surface relief maps, without modification or alteration.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Regional airborne geophysical data is available (Fugro 2007-2009).</li> <li>Regional geology map of Senegal is available at 1/200000 scale (1968 and 2010).</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out</li> </ul>	Future work planned:



Criteria	JORC Code explanation	Commentary
	<ul> <li>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>Exploration Auger Drilling to confirm the underlying source of the anomalous zone, multielement assaying using pXRF, Uranium assaying using SGS Lab XRF methodology.</li> <li>Exploration Reverse Circulation Drilling to confirm mineralisation intercepts at depth, multielement assaying using XRF, Uranium chemical assaying using ALS lab fusion+XRF methodology.</li> </ul>