

INDUSTRY COMPARABLE URANIUM EXTRACTION ACHIEVED WITH ACID REDUCTION

Highlights

- Confirmation of industry comparable uranium extraction: Further testwork was undertaken and confirmed that the leach rates at industry standard concentrations and conditions were consistent with existing uranium development projects and operations
- >90% Uranium extraction: Low acid uranium extraction still rising at the end of the test with >90% uranium extraction calculated after 59 hours retention time, at a significantly reduced acid addition rate
- **Both acid and alkaline conditions provide process optimisation paths:** uranium extractions generated by both acid and alkaline conditions were industry comparable, providing process optimisation options for both routes.

Haranga Resources Limited (ASX:HAR; FRA:65E0; "Haranga" or "the Company") is pleased to announce the results of an initial sighter leach test program conducted on drill core from the Saraya Uranium Deposit, undertaken by SGS Lakefield (Canada) and supervised by Independent Metallurgical Operations (IMO) in a program of ore characterisation, which commenced in March 2024.

Managing Director, Mr. Peter Batten, commented: "These further results from the ore characterisation testwork are very positive. The initial, aggressive, testwork had already proven that the uranium mineralisation within the Company's Saraya deposit¹ (12.45Mt @ 587ppm eU₃O₈ for 16.1 Mlbs U₃O₈, Inferred) was leachable. This next round of tests was undertaken to determine if the leach rates at industry standard concentrations and conditions were consistent with existing uranium operations. Uranium recoveries are in line with industry standards from both acid and alkaline routes and provide further scope to optimise extractions using both routes and determine which method is likely to provide optimum project economics.

Both low acid and alkaline leach recoveries were 84%, similar to other uranium late stage development projects and operations and gives Haranga two options to consider when we approach any feasibility studies for the Saraya Uranium Deposit".

Background Metallurgical Testwork

As part of the preparation for a Maiden Resource Estimate¹, Haranga completed 22 diamond core drill holes at Saraya² to confirm the validity of the 65,000m drill hole database that existed at Saraya from previous explorers (Cogema and Areva). The results from this drilling confirmed the presence and tenor of the uranium mineralisation at Saraya. This resource estimate was classified as 100% Inferred due, in part, to the lack of leach tests proving the uranium in the Saraya deposit could be successfully extracted.

Given there had been no previous metallurgical testwork for Saraya, Perth based specialist metallurgical services group - Independent Metallurgical Operations Pty Ltd (IMO) were engaged by Haranga to conduct first pass sighter leach test work with the aim of determining first pass uranium recoveries from a composite sample which represented the uranium grade and mineralogy from the resource estimate. Metallurgical testwork was conducted at SGS Lakefield (SGS) in Canada under IMO's guidance.



Prior to conducting the testwork, IMO conducted a literature review to determine suitable testwork conditions to confirm first pass extractions and what industry established methods would be suitable for leaching of the Saraya material.

Commercial plant acid extractions ranged from 85-90% with current commercial alkaline extractions at approximately 90%.

Testwork Sample

The metallurgical sample has been composited from a number of holes at varying depths to closely represent the results of the Mineral Resource Estimate¹ ("MRE") for Saraya.

To compile the sample Haranga relied on existing core from 22 diamond core holes completed by Haranga in 2022 and previously reported in ASX release "Drilling Results Confirm Wide Shallow High Grade Uranium" released on February 28 2023.

The samples were selected from varying locations and depths to realistically represent the mineralised episyenite at Saraya. In all, 243 samples contributed to the bulk sample and these are listed in Appendix 1. Approximately 150 gms was subsampled from each drill core sample and samples were selected to obtain a weighted average grade close to the MRE¹ grade of 587 ppm eU₃O₈.

The metallurgical testwork was conducted on a subset of this composite. The subset had a calculated head grade of 672 ppm U_3O_8 , the SGS Laboratory assayed head grade of the composite was 570 ppm U_3O_8 and the calculated head grades from the acid leach and alkaline leach tests averaged 544 ppm U_3O_8 , both results similar to the estimated Mineral Resource Grade¹ of 587 ppm eU_3O_8 .

Acid Leach Test

The initial acid leach test³ was conducted at an excess sulphuric addition rate (681 kg/t) and elevated temperature (95°C). This test achieved >96% uranium oxide extraction, exceeding other uranium operations.

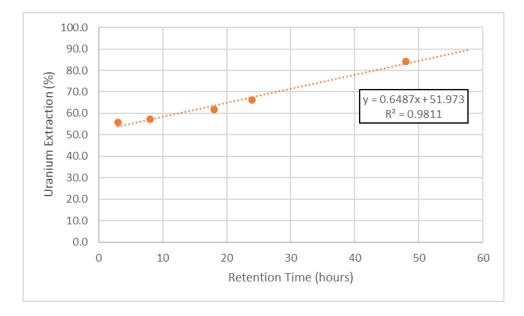
The final leached solids grade was below the ICP U₃O₈ detection limit of 24 ppm indicating almost complete extraction with acid.

Two further acid leach tests were conducted at reduced acid consumptions and then reduced acid consumption and reduced temperature.

The test with reduced acid consumption achieved a uranium extraction of 84% though showed that 90% could have been potentially achieved with additional retention time given the leach rate hadn't plateaued as shown below. The acid addition rate significantly dropped to 224 kg/t in this test as well.







The low acid and ambient temperature test uranium extraction was lower than commercial acid uranium extractions showing that some temperature is required to achieve a commercially acceptable extraction. Heated acid leaching is common in commercial operations.

IMO further recommend conducting beneficiation testwork to determine if acid consuming carbonate minerals can be removed to further reduce acid addition rates whilst still maintaining uranium extraction rates. Further testwork at increased reaction times and progressively reducing temperature is also recommended to determine minimum temperature required to achieved industry standard uranium extractions.

Alkaline Leach Test

The alkaline leach test conducted at elevated temperature achieved a similar uranium extraction (84%) to the low acid test. Leach kinetics were lower with extracted uranium oxide values still increasing in the 24 hour sub-sample. Further optimisation testwork is likely to increase alkaline leach uranium extractions by either decreasing the grind size or varying reagent and leach conditions.

Haranga considers this an excellent outcome from a single test conducted at unoptimised conditions.

Recommendations

Given the similar uranium recoveries from both the alkaline and reduced acid addition routes, IMO recommends conducting further optimisation testwork on both these routes to confirm which leach route will provide optimum uranium recoveries and reduced operating cost to deliver an optimum economic outcome for the project.

Further work may include a detailed mineralogical investigation to determine uranium mineral and liberation properties, particularly association with carbonate minerals and liberation size. The aim being to determine if high acid consuming carbonate minerals can be separated from the uranium minerals by most likely flotation, though based on the outcome of the mineralogical assessment, other techniques may also be deemed suitable to trial via testwork.



Fieldwork

Fieldwork is continuing in Senegal following the completion of the RC drilling programme in March 2024.

Termite Mound Sampling (TMS) is continuing, both regional and infill.

Auger drilling is further testing anomalous TMS results reported for Diobi, Mandankoly and Sanela and will proceed to Saraya South, Saraya East and Diobi East.

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

Investor inquiries Haranga Resources

Peter Batten, Managing Director

E: info@haranga.com.au

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 16.1Mlbs U₃O₈ inferred mineral resource @ 587ppm has been defined and where further uranium anomalies are continuing to be realised across this 1,650km² permit. In conjunction, Haranga is exploring it's lbel-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.

Haranga Resources Limited	Directors	Trading Symbols
ABN 83 141 128 841	Michael Davy (Chairman)	Australia: ASX:HAR
Suite 7/ 63 Shepperton Road Victoria Park, 6100	Peter Batton (Managing Director) Frankfurt: FS	
T: +61 6158 9990	John Davis (Non-executive Director)	
E: info@haranga.com.au	Hendrik Schloemann (Non-executive director)	
W: haranga.com	Chief Operating Officer	

Jean Kaisin

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. 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 the footnotes 1 to 3. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

The information in this document that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation reviewed by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who has been engaged by Haranga Resources Ltd to provide metallurgical consulting services. Mr Adamini has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

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 25th of September 2023 and available to view on https://haranga.com/investors/asx-announcements/
- 2. Drill samples and drilling referred to as the source of the Metallurgical composited sample were previously reported in a release titled "Drilling Results Confirm Wide Shallow High Grade Uranium" released on the ASX on 28th of February 2023 and available to view on https://haranga.com/investors/asx-announcements/
- 3. The composite metallurgical sample and previous leach work referred to were previously reported in a release titled "Initial Leach Results Confirm >96% Uranium Extraction" released on the ASX on 15th of April 2024 and available to view on https://haranga.com/investors/asx-announcements/



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 eU₃0 ₈
Zone	Classification	Mt	eU₃0 ₈ 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)

Appendix 1: Drill samples selected for composite, representative Metallurgical sample (All details regarding these drillholes is contained in a previous announcement²)

SampleID	Hole_ID	From	То	Density	Weight	U_ppm	U ₃ O ₈ _ppm	METHOD
		m	m	t/m3	gm			ALS Laboratories
22-DD-002-0413	22-SAR-DD-002	35.00	35.50	2.57	162	275	324.28	ME-MS61U
22-DD-002-0414	22-SAR-DD-002	35.50	36.00	2.65	161	586	691.01	ME-MS61U
22-DD-002-0415	22-SAR-DD-002	36.00	36.50	2.59	162	317	373.81	ME-MS61U
22-DD-002-0416	22-SAR-DD-002	36.50	37.00	2.63	163	469	553.04	ME-MS61U
22-DD-002-0417	22-SAR-DD-002	37.00	37.50	2.65	162	902	1063.64	ME-MS61U
22-DD-002-0418	22-SAR-DD-002	37.50	38.00	2.76	162	313	369.09	ME-MS61U
22-DD-002-0426	22-SAR-DD-002	41.00	41.50	2.61	161	230	271.22	ME-MS61U
22-DD-002-0427	22-SAR-DD-002	41.50	42.00	2.62	162	617	727.57	ME-MS61U
22-DD-002-0428	22-SAR-DD-002	42.00	42.50	2.54	161	336	396.21	ME-MS61U
22-DD-002-0429	22-SAR-DD-002	42.50	43.00	2.65	163	220	259.42	ME-MS61U
22-DD-002-0431	22-SAR-DD-002	43.50	44.00	2.64	163	255	300.7	ME-MS61U
22-DD-003-0444	22-SAR-DD-003	25.00	25.50	2.66	161	498	587.24	ME-MS61U
22-DD-003-0445	22-SAR-DD-003	25.50	26.00	2.73	161	507	597.85	ME-MS61U
22-DD-003-0446	22-SAR-DD-003	26.00	26.50	2.65	161	902	1063.64	ME-MS61U
22-DD-003-0447	22-SAR-DD-003	26.50	27.00	2.64	163	363	428.05	ME-MS61U
22-DD-003-0448	22-SAR-DD-003	27.00	27.50	2.56	160	813	958.69	ME-MS61U
22-DD-003-0449	22-SAR-DD-003	27.50	28.00	2.62	163	341	402.11	ME-MS61U
22-DD-003-0450	22-SAR-DD-003	28.00	28.50	2.65	162	340	400.93	ME-MS61U
22-DD-003-0453	22-SAR-DD-003	29.00	29.50	2.48	162	332	391.49	ME-MS61U
22-DD-003-0454	22-SAR-DD-003	29.50	30.00	2.53	162	442	521.21	ME-MS61U
22-DD-003-0455	22-SAR-DD-003	30.00	30.50	2.63	166	385	453.99	ME-MS61U
22-DD-003-0456	22-SAR-DD-003	30.50	31.00	2.68	161	457	538.89	ME-MS61U
22-DD-003-0458	22-SAR-DD-003	31.50	32.00	2.68	162	548	646.2	ME-MS61U
22-DD-003-0459	22-SAR-DD-003	32.00	32.50	2.68	163	315	371.45	ME-MS61U



SampleID	Hole_ID	From	То	Density	Weight	U_ppm	U₃O ₈ _ppm	METHOD
		m	m	t/m3	gm			ALS Laboratories
22-DD-003-0460	22-SAR-DD-003	32.50	33.00	2.62	162	247	291.26	ME-MS61U
22-DD-003-0463	22-SAR-DD-003	33.50	34.00	2.69	161	233	274.75	ME-MS61U
22-DD-003-0464	22-SAR-DD-003	34.00	34.50	2.48	161	222	261.78	ME-MS61U
22-DD-003-0468	22-SAR-DD-003	36.00	36.50	2.69	160	406	478.76	ME-MS61U
22-DD-003-0469	22-SAR-DD-003	36.50	37.00	2.62	163	243	286.55	ME-MS61U
22-DD-003-0471	22-SAR-DD-003	37.50	38.00	2.64	161	215	253.53	ME-MS61U
22-DD-004-0480	22-SAR-DD-004	54.50	55.00	2.65	160	415	489.37	ME-MS61U
22-DD-004-0483	22-SAR-DD-004	55.50	56.00	2.64	162	529	623.8	ME-MS61U
22-DD-004-0484	22-SAR-DD-004	56.00	56.50	2.62	162	380	448.1	ME-MS61U
22-DD-004-0485	22-SAR-DD-004	56.50	57.00	2.59	163	552	650.92	ME-MS61U
22-DD-004-0486	22-SAR-DD-004	57.00	57.50	2.58	161	239	281.83	ME-MS61U
22-DD-004-0489	22-SAR-DD-004	58.50	59.00	2.57	161	723	852.56	ME-MS61U
22-DD-004-0490	22-SAR-DD-004	59.00	59.50	2.55	162	806	950.44	ME-MS61U
22-DD-004-0491	22-SAR-DD-004	59.50	60.00	2.73	162	1420	1674.46	ME-MS61U
22-DD-004-0493	22-SAR-DD-004	60.00	60.50	2.54	160	275	324.28	ME-MS61U
22-DD-004-0494	22-SAR-DD-004	60.50	61.00	2.65	161	504	594.32	ME-MS61U
22-DD-004-0495	22-SAR-DD-004	61.00	61.50	2.63	163	307	362.01	ME-MS61U
22-DD-004-0496	22-SAR-DD-004	61.50	62.00	2.67	162	201	237.02	ME-MS61U
22-DD-004-0506	22-SAR-DD-004	66.00	66.50	2.74	163	236	278.29	ME-MS61U
22-DD-004-0515	22-SAR-DD-004	70.00	70.50	2.60	161	378	445.74	ME-MS61U
22-DD-004-0517	22-SAR-DD-004	71.00	71.50	2.71	160	544	641.48	ME-MS61U
22-DD-005-0005	22-SAR-DD-005	19.00	19.50	2.74	160	229	270.04	ME-MS61U
22-DD-005-0010	22-SAR-DD-005	21.00	21.50	2.64	162	358	422.15	ME-MS61U
22-DD-005-0019	22-SAR-DD-005	25.00	25.50	2.63	161	267	314.85	ME-MS61U
22-DD-005-0020	22-SAR-DD-005	25.50	26.00	2.50	165	230	271.22	ME-MS61U
22-DD-005-0022	22-SAR-DD-005	26.50	27.00	2.63	163	253	298.34	ME-MS61U
22-DD-005-0026	22-SAR-DD-005	28.50	29.00	2.62	162	228	268.86	ME-MS61U
22-DD-005-0027	22-SAR-DD-005	29.00	29.50	2.60	160	234	275.93	ME-MS61U
22-DD-005-0037	22-SAR-DD-005	54.50	55.00	2.71	161	371	437.48	ME-MS61U
22-DD-005-0038	22-SAR-DD-005	55.00	55.50	2.62	160	686	808.93	ME-MS61U
22-DD-005-0040	22-SAR-DD-005	55.50	56.00	2.76	162	269	317.2	ME-MS61U
22-DD-005-0041	22-SAR-DD-005	56.00	56.50	2.54	162	361	425.69	ME-MS61U
22-DD-005-0042	22-SAR-DD-005	56.50	57.00	2.65	160	385	453.99	ME-MS61U
22-DD-005-0043	22-SAR-DD-005	57.00	57.50	2.63	161	507	597.85	ME-MS61U
22-DD-005-0044	22-SAR-DD-005	57.50	58.00	2.66	162	414	488.19	ME-MS61U
22-DD-005-0045	22-SAR-DD-005	58.00	58.50	2.67	165	546	643.84	ME-MS61U
22-DD-005-0046	22-SAR-DD-005	58.50	59.00	2.56	163	690	813.65	ME-MS61U
22-DD-005-0047	22-SAR-DD-005	59.00	59.50	2.25	163	1925	2269.96	ME-MS61U
22-DD-005-0048	22-SAR-DD-005	59.50	60.00	2.48	162	749	883.22	ME-MS61U
22-DD-005-0049	22-SAR-DD-005	60.00	60.50	2.63	162	1270	1497.58	ME-MS61U
22-DD-005-0051	22-SAR-DD-005	60.50	61.00	2.53	161	1840	2169.73	ME-MS61U
22-DD-005-0052	22-SAR-DD-005	61.00	61.50	2.60	163	1285	1515.27	ME-MS61U
22-DD-005-0053	22-SAR-DD-005	61.50	62.00	2.76	160	1410	1662.67	ME-MS61U
22-DD-005-0054	22-SAR-DD-005	62.00	62.50	2.74	163	1360	1603.71	ME-MS61U



SampleID	Hole_ID	From	То	Density	Weight	U_ppm	U₃O ₈ _ppm	METHOD
		m	m	t/m3	gm			ALS Laboratories
22-DD-005-0055	22-SAR-DD-005	62.50	63.00	2.68	162	1345	1586.02	ME-MS61U
22-DD-005-0056	22-SAR-DD-005	63.00	63.50	2.60	163	290	341.97	ME-MS61U
22-DD-005-0057	22-SAR-DD-005	63.50	64.00	2.55	160	240	283.01	ME-MS61U
22-DD-005-0058	22-SAR-DD-005	64.00	64.50	2.63	160	269	317.2	ME-MS61U
22-DD-005-0059	22-SAR-DD-005	64.50	65.00	2.65	160	320	377.34	ME-MS61U
22-DD-005-0060	22-SAR-DD-005	65.00	65.50	2.65	160	687	810.11	ME-MS61U
22-DD-005-0062	22-SAR-DD-005	65.50	66.00	2.61	164	226	266.5	ME-MS61U
22-DD-005-0063	22-SAR-DD-005	66.00	66.50	2.55	162	666	785.35	ME-MS61U
22-DD-005-0064	22-SAR-DD-005	66.50	67.00	2.65	161	674	794.78	ME-MS61U
22-DD-005-0065	22-SAR-DD-005	67.00	67.50	2.58	163	373	439.84	ME-MS61U
22-DD-005-0066	22-SAR-DD-005	67.50	68.00	2.61	160	647	762.94	ME-MS61U
22-DD-005-0067	22-SAR-DD-005	68.00	68.50	2.59	166	1075	1267.64	ME-MS61U
22-DD-005-0068	22-SAR-DD-005	68.50	69.00	2.70	163	1230	1450.42	ME-MS61U
22-DD-005-0069	22-SAR-DD-005	69.00	69.50	2.58	162	911	1074.25	ME-MS61U
22-DD-005-0070	22-SAR-DD-005	69.50	70.00	2.57	161	1125	1326.6	ME-MS61U
22-DD-005-0071	22-SAR-DD-005	70.00	70.50	2.60	164	1815	2140.25	ME-MS61U
22-DD-005-0073	22-SAR-DD-005	70.50	71.00	2.57	161	817	963.41	ME-MS61U
22-DD-005-0074	22-SAR-DD-005	71.00	71.50	2.67	164	725	854.92	ME-MS61U
22-DD-005-0075	22-SAR-DD-005	71.50	72.00	2.61	160	522	615.54	ME-MS61U
22-DD-005-0076	22-SAR-DD-005	72.00	72.50	2.72	162	367	432.77	ME-MS61U
22-DD-005-0077	22-SAR-DD-005	72.50	73.00	2.58	164	300	353.76	ME-MS61U
22-DD-005-0079	22-SAR-DD-005	73.50	74.00	2.52	164	232	273.57	ME-MS61U
22-DD-005-0081	22-SAR-DD-005	74.50	75.00	2.58	160	484	570.73	ME-MS61U
22-DD-006-0526	22-SAR-DD-006	53.00	53.50	2.58	161	400	471.68	ME-MS61U
22-DD-006-0527	22-SAR-DD-006	53.50	54.00	2.61	160	328	386.78	ME-MS61U
22-DD-006-0528	22-SAR-DD-006	54.00	54.50	2.56	162	358	422.15	ME-MS61U
22-DD-006-0529	22-SAR-DD-006	54.50	55.00	2.61	162	432	509.41	ME-MS61U
22-DD-006-0530	22-SAR-DD-006	55.00	55.50	2.56	163	388	457.53	ME-MS61U
22-DD-006-0531	22-SAR-DD-006	55.50	56.00	2.66	163	526	620.26	ME-MS61U
22-DD-006-0533	22-SAR-DD-006	56.00	56.50	2.57	161	667	786.53	ME-MS61U
22-DD-006-0534	22-SAR-DD-006	56.50	57.00	2.58	162	689	812.47	ME-MS61U
22-DD-008-0544	22-SAR-DD-008	27.00	27.50	2.85	163	525	619.08	ME-MS61U
22-DD-008-0545	22-SAR-DD-008	27.50	28.00	2.66	161	1020	1202.78	ME-MS61U
22-DD-008-0547	22-SAR-DD-008	28.50	29.00	2.55	161	1905	2246.38	ME-MS61U
22-DD-008-0549	22-SAR-DD-008	29.50	30.00	2.62	162	870	1025.9	ME-MS61U
22-DD-008-0553	22-SAR-DD-008	31.00	31.50	2.60	162	444	523.56	ME-MS61U
22-DD-009-0567	22-SAR-DD-009	13.50	14.00	2.62	162	2460	2900.83	ME-MS61U
22-DD-009-0806	22-SAR-DD-009	55.00	55.50	2.50	161	251	295.98	ME-MS61U
22-DD-009-0811	22-SAR-DD-009	57.50	58.00	2.57	163	311	366.73	ME-MS61U
22-DD-009-0813	22-SAR-DD-009	58.00	58.50	2.83	160	258	304.23	ME-MS61U
22-DD-009-0814	22-SAR-DD-009	58.50	59.00	2.60	162	477	562.48	ME-MS61U
22-DD-009-0816	22-SAR-DD-009	59.50	60.00	2.64	160	496	584.88	ME-MS61U
22-DD-009-0819	22-SAR-DD-009	61.00	61.50	2.62	161	257	303.05	ME-MS61U
22-DD-009-0820	22-SAR-DD-009	61.50	62.00	2.65	162	522	615.54	ME-MS61U



SampleID	Hole_ID	From	То	Density	Weight	U_ppm	U₃O ₈ _ppm	METHOD
		m	m	t/m3	gm			ALS Laboratories
22-DD-009-0821	22-SAR-DD-009	62.00	62.50	2.62	162	253	298.34	ME-MS61U
22-DD-009-0823	22-SAR-DD-009	62.50	63.00	2.57	160	265	312.49	ME-MS61U
22-DD-009-0826	22-SAR-DD-009	64.00	64.50	2.67	162	474	558.94	ME-MS61U
22-DD-009-0829	22-SAR-DD-009	65.50	66.00	2.67	160	280	330.18	ME-MS61U
22-DD-009-0837	22-SAR-DD-009	69.00	69.50	2.63	161	330	389.14	ME-MS61U
22-DD-009-0839	22-SAR-DD-009	70.00	70.50	2.62	163	553	652.1	ME-MS61U
22-DD-009-0840	22-SAR-DD-009	70.50	71.00	2.66	162	734	865.53	ME-MS61U
22-DD-009-0841	22-SAR-DD-009	71.00	71.50	2.53	162	474	558.94	ME-MS61U
22-DD-009-0844	22-SAR-DD-009	72.00	72.50	2.73	163	305	359.66	ME-MS61U
22-DD-009-0848	22-SAR-DD-009	74.00	74.50	2.63	162	452	533	ME-MS61U
22-DD-010-0580	22-SAR-DD-010	70.50	71.00	2.75	160	314	370.27	ME-MS61U
22-DD-010-0581	22-SAR-DD-010	71.00	71.50	2.64	161	429	505.88	ME-MS61U
22-DD-010-0583	22-SAR-DD-010	71.50	72.00	2.70	160	1410	1662.67	ME-MS61U
22-DD-010-0584	22-SAR-DD-010	72.00	72.50	2.74	161	776	915.06	ME-MS61U
22-DD-010-0585	22-SAR-DD-010	72.50	73.00	2.66	160	408	481.11	ME-MS61U
22-DD-010-0587	22-SAR-DD-010	73.50	74.00	2.69	161	219	258.24	ME-MS61U
22-DD-010-0588	22-SAR-DD-010	74.00	74.50	2.60	162	276	325.46	ME-MS61U
22-DD-010-0589	22-SAR-DD-010	74.50	75.00	2.63	161	246	290.08	ME-MS61U
22-DD-010-0590	22-SAR-DD-010	75.00	75.50	2.62	162	578	681.58	ME-MS61U
22-DD-012-0601	22-SAR-DD-012	70.00	70.50	2.62	162	247	291.26	ME-MS61U
22-DD-012-0603	22-SAR-DD-012	70.50	71.00	2.77	161	677	798.32	ME-MS61U
22-DD-012-0623	22-SAR-DD-012	79.50	80.00	2.56	162	217	255.89	ME-MS61U
22-DD-012-0626	22-SAR-DD-012	81.00	81.50	2.59	160	380	448.1	ME-MS61U
22-DD-012-0627	22-SAR-DD-012	81.50	82.00	2.55	162	371	437.48	ME-MS61U
22-DD-014-0641	22-SAR-DD-014	96.00	96.50	2.38	163	318	374.99	ME-MS61U
22-DD-014-0643	22-SAR-DD-014	96.50	97.00	2.58	163	314	370.27	ME-MS61U
22-DD-014-0646	22-SAR-DD-014	98.00	98.50	2.48	164	542	639.13	ME-MS61U
22-DD-014-0651	22-SAR-DD-014	100.50	101.00	2.60	161	272	320.74	ME-MS61U
22-DD-014-0658	22-SAR-DD-014	103.50	104.00	2.66	161	360	424.51	ME-MS61U
22-DD-014-0659	22-SAR-DD-014	104.00	104.50	2.48	160	318	374.99	ME-MS61U
22-DD-014-0660	22-SAR-DD-014	104.50	105.00	2.65	163	268	316.03	ME-MS61U
22-DD-014-0661	22-SAR-DD-014	105.00	105.50	2.49	163	272	320.74	ME-MS61U
22-DD-014-0664	22-SAR-DD-014	106.00	106.50	2.65	161	758	893.83	ME-MS61U
22-DD-014-0674	22-SAR-DD-014	110.50	111.00	2.64	163	532	627.33	ME-MS61U
22-DD-014-0678	22-SAR-DD-014	112.50	113.00	2.54	164	443	522.39	ME-MS61U
22-DD-014-0681	22-SAR-DD-014	114.00	114.50	2.60	162	502	591.96	ME-MS61U
22-DD-014-0687	22-SAR-DD-014	116.50	117.00	2.51	162	457	538.89	ME-MS61U
22-DD-014-0688	22-SAR-DD-014	117.00	117.50	2.59	161	2000	2358.4	ME-MS61U
22-DD-014-0691	22-SAR-DD-014	118.50	119.00	2.54	161	219	258.24	ME-MS61U
22-DD-014-0696	22-SAR-DD-014	120.50	121.00	2.60	162	356	419.8	ME-MS61U
22-DD-014-0697	22-SAR-DD-014	121.00	121.50	2.64	163	340	400.93	ME-MS61U
22-DD-014-0698	22-SAR-DD-014	121.50	122.00	2.56	164	441	520.03	ME-MS61U
22-DD-014-0716	22-SAR-DD-014	129.50	130.00	2.61	161	264	311.31	ME-MS61U
22-DD-014-0718	22-SAR-DD-014	130.50	131.00	2.58	162	312	367.91	ME-MS61U



SampleID	Hole_ID	From	То	Density	Weight	U_ppm	U₃O ₈ _ppm	METHOD
		m	m	t/m3	gm			ALS Laboratories
22-DD-015-0736	22-SAR-DD-015	85.50	86.00	2.58	163	565	666.25	ME-MS61U
22-DD-015-0737	22-SAR-DD-015	86.00	86.50	2.49	163	261	307.77	ME-MS61U
22-DD-015-0738	22-SAR-DD-015	86.50	87.00	2.64	161	320	377.34	ME-MS61U
22-DD-015-0739	22-SAR-DD-015	87.00	87.50	2.52	162	488	575.45	ME-MS61U
22-DD-015-0740	22-SAR-DD-015	87.50	88.00	2.60	162	434	511.77	ME-MS61U
22-DD-015-0741	22-SAR-DD-015	88.00	88.50	2.55	160	220	259.42	ME-MS61U
22-DD-015-0744	22-SAR-DD-015	89.00	89.50	2.61	160	255	300.7	ME-MS61U
22-DD-015-0748	22-SAR-DD-015	91.00	91.50	2.64	163	309	364.37	ME-MS61U
22-DD-015-0754	22-SAR-DD-015	93.50	94.00	2.51	161	610	719.31	ME-MS61U
22-DD-015-0755	22-SAR-DD-015	94.00	94.50	2.53	160	217	255.89	ME-MS61U
22-DD-016-0791	22-SAR-DD-016	11.50	12.00	2.58	163	920	1084.86	ME-MS61U
22-DD-017-0104	22-SAR-DD-017	147.00	147.50	2.67	162	317	373.81	ME-MS61U
22-DD-017-0107	22-SAR-DD-017	148.00	148.50	2.66	163	261	307.77	ME-MS61U
22-DD-017-0111	22-SAR-DD-017	150.00	150.50	2.77	161	750	884.4	ME-MS61U
22-DD-017-0112	22-SAR-DD-017	150.50	151.00	2.72	162	495	583.7	ME-MS61U
22-DD-017-0113	22-SAR-DD-017	151.00	151.50	2.67	163	264	311.31	ME-MS61U
22-DD-017-0115	22-SAR-DD-017	152.00	152.50	2.66	162	267	314.85	ME-MS61U
22-DD-017-0118	22-SAR-DD-017	153.00	153.50	2.62	161	513	604.93	ME-MS61U
22-DD-017-0119	22-SAR-DD-017	153.50	154.00	2.65	162	494	582.52	ME-MS61U
22-DD-017-0122	22-SAR-DD-017	155.00	155.50	2.64	162	250	294.8	ME-MS61U
22-DD-017-0124	22-SAR-DD-017	156.00	156.50	2.65	163	230	271.22	ME-MS61U
22-DD-017-0125	22-SAR-DD-017	156.50	157.00	2.62	162	251	295.98	ME-MS61U
22-DD-017-0128	22-SAR-DD-017	157.50	158.00	2.62	162	229	270.04	ME-MS61U
22-DD-017-0129	22-SAR-DD-017	158.00	158.50	2.67	161	455	536.54	ME-MS61U
22-DD-017-0130	22-SAR-DD-017	158.50	159.00	2.67	163	334	393.85	ME-MS61U
22-DD-017-0131	22-SAR-DD-017	159.00	159.50	2.66	161	361	425.69	ME-MS61U
22-DD-017-0132	22-SAR-DD-017	159.50	160.00	2.61	160	304	358.48	ME-MS61U
22-DD-017-0134	22-SAR-DD-017	160.50	161.00	2.65	161	287	338.43	ME-MS61U
22-DD-017-0137	22-SAR-DD-017	162.00	162.50	2.55	162	553	652.1	ME-MS61U
22-DD-017-0142	22-SAR-DD-017	164.00	164.50	2.60	162	290	341.97	ME-MS61U
22-DD-017-0146	22-SAR-DD-017	166.00	166.50	2.62	161	1170	1379.66	ME-MS61U
22-DD-018-0157	22-SAR-DD-018	88.00	88.50	2.55	162	2570	3030.54	ME-MS61U
22-DD-018-0158	22-SAR-DD-018	88.50	89.00	2.66	162	615	725.21	ME-MS61U
22-DD-018-0159	22-SAR-DD-018	89.00	89.50	2.54	163	219	258.24	ME-MS61U
22-DD-018-0162	22-SAR-DD-018	90.00	90.50	2.63	161	436	514.13	ME-MS61U
22-DD-018-0169	22-SAR-DD-018	93.50	94.00	2.55	160	378	445.74	ME-MS61U
22-DD-018-0170	22-SAR-DD-018	94.00	94.50	2.57	162	285	336.07	ME-MS61U
22-DD-018-0177	22-SAR-DD-018	97.00	97.50	2.66	161	1580	1863.14	ME-MS61U
22-DD-018-0180	22-SAR-DD-018	98.50	99.00	2.64	162	419	494.08	ME-MS61U
22-DD-018-0181	22-SAR-DD-018	99.00	99.50	2.68	161	530	624.98	ME-MS61U
22-DD-018-0183	22-SAR-DD-018	99.50	100.00	2.58	162	405	477.58	ME-MS61U
22-DD-018-0184	22-SAR-DD-018	100.00	100.50	2.71	161	286	337.25	ME-MS61U
22-DD-018-0185	22-SAR-DD-018	100.50	101.00	2.64	160	212	249.99	ME-MS61U
22-DD-020-0191	22-SAR-DD-020	54.50	55.00	2.61	162	529	623.8	ME-MS61U



SampleID	Hole_ID	From	То	Density	Weight	U_ppm	U ₃ O ₈ _ppm	METHOD
		m	m	t/m3	gm			ALS Laboratories
22-DD-020-0198	22-SAR-DD-020	57.50	58.00	2.59	163	250	294.8	ME-MS61U
22-DD-020-0208	22-SAR-DD-020	62.00	62.50	2.62	162	770	907.98	ME-MS61U
22-DD-020-0217	22-SAR-DD-020	66.00	66.50	2.62	163	266	313.67	ME-MS61U
22-DD-020-0218	22-SAR-DD-020	66.50	67.00	2.54	160	231	272.4	ME-MS61U
22-DD-020-0219	22-SAR-DD-020	67.00	67.50	2.50	161	338	398.57	ME-MS61U
22-DD-020-0225	22-SAR-DD-020	70.00	70.50	2.60	161	366	431.59	ME-MS61U
22-DD-020-0242	22-SAR-DD-020	77.50	78.00	2.64	160	217	255.89	ME-MS61U
22-DD-020-0243	22-SAR-DD-020	78.00	78.50	2.61	161	244	287.72	ME-MS61U
22-DD-020-0246	22-SAR-DD-020	79.50	80.00	2.54	162	542	639.13	ME-MS61U
22-DD-020-0249	22-SAR-DD-020	80.50	81.00	2.67	161	295	347.86	ME-MS61U
22-DD-020-0251	22-SAR-DD-020	81.50	82.00	2.58	163	349	411.54	ME-MS61U
22-DD-020-0280	22-SAR-DD-020	95.00	95.50	2.70	162	497	586.06	ME-MS61U
22-DD-020-0282	22-SAR-DD-020	95.50	96.00	2.62	161	549	647.38	ME-MS61U
22-DD-020-0283	22-SAR-DD-020	96.00	96.50	2.68	160	236	278.29	ME-MS61U
22-DD-020-0294	22-SAR-DD-020	101.00	101.50	2.60	162	218	257.07	ME-MS61U
22-DD-020-0295	22-SAR-DD-020	101.50	102.00	2.55	163	278	327.82	ME-MS61U
22-DD-020-0296	22-SAR-DD-020	102.00	102.50	2.63	161	269	317.2	ME-MS61U
22-DD-020-0297	22-SAR-DD-020	102.50	103.00	2.71	160	260	306.59	ME-MS61U
22-DD-020-0300	22-SAR-DD-020	104.00	104.50	2.62	161	283	333.71	ME-MS61U
22-DD-020-0301	22-SAR-DD-020	104.50	105.00	2.66	162	332	391.49	ME-MS61U
22-DD-020-0302	22-SAR-DD-020	105.00	105.50	2.62	161	299	352.58	ME-MS61U
22-DD-020-0304	22-SAR-DD-020	105.50	106.00	2.63	160	223	262.96	ME-MS61U
22-DD-020-0311	22-SAR-DD-020	109.00	109.50	2.64	161	326	384.42	ME-MS61U
22-DD-020-0319	22-SAR-DD-020	112.50	113.00	2.77	160	333	392.67	ME-MS61U
22-DD-020-0320	22-SAR-DD-020	113.00	113.50	2.59	163	258	304.23	ME-MS61U
22-DD-022-0333	22-SAR-DD-022	44.00	44.50	2.75	162	238	280.65	ME-MS61U
22-DD-022-0337	22-SAR-DD-022	45.50	46.00	2.64	162	285	336.07	ME-MS61U
22-DD-022-0338	22-SAR-DD-022	46.00	46.50	2.65	161	278	327.82	ME-MS61U
22-DD-022-0341	22-SAR-DD-022	47.50	48.00	2.60	163	449	529.46	ME-MS61U
22-DD-022-0349	22-SAR-DD-022	51.00	51.50	2.71	163	243	286.55	ME-MS61U
22-DD-022-0356	22-SAR-DD-022	54.50	55.00	2.70	160	310	365.55	ME-MS61U
22-DD-022-0357	22-SAR-DD-022	55.00	55.50	2.61	160	370	436.3	ME-MS61U
22-DD-022-0359	22-SAR-DD-022	55.50	56.00	2.70	161	463	545.97	ME-MS61U
22-DD-022-0360	22-SAR-DD-022	56.00	56.50	2.58	162	378	445.74	ME-MS61U
22-DD-022-0366	22-SAR-DD-022	59.00	59.50	2.59	163	465	548.33	ME-MS61U
22-DD-022-0376	22-SAR-DD-022	63.50	64.00	2.63	161	766	903.27	ME-MS61U
22-DD-022-0386	22-SAR-DD-022	68.00	68.50	2.66	162	317	373.81	ME-MS61U
22-DD-022-0398	22-SAR-DD-022	73.50	74.00	2.61	160	533	628.51	ME-MS61U
22-DD-022-0400	22-SAR-DD-022	74.50	75.00	2.61	163	240	283.01	ME-MS61U
22-DD-022-0401	22-SAR-DD-022	75.00	75.50	2.66	164	316	372.63	ME-MS61U
22-DD-022-0403	22-SAR-DD-022	75.50	76.00	2.67	160	214	252.35	ME-MS61U
22-DD-022-0404	22-SAR-DD-022	76.00	76.50	2.68	161	353	416.26	ME-MS61U
22-DD-022-0405	22-SAR-DD-022	76.50	77.00	2.66	164	233	274.75	ME-MS61U



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	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	The 243 core samples (as detailed in Appendix 1) selected were subject to the underlying sampling techniques and data within this table): **Haranga Sampling** • Uranium grades were estimated using downhole gamma probes operated by Terratec Geophysics Gmbh with the following probe: • UEP42 from Electromind in 2022 Gamma data (as counts per second) from calibrated probes were converted into equivalent uranium oxide values (eU308) using appropriate calibration factors (K factor) and all other applicable correction factors, by Terratec Geoservices and reviewed by Haranga geologists and RSC consultant. • Geochemical analyses were performed on Haranga DD core to verify gamma ray downhole probe calculated grades. • A total of 758 samples have been selected on significant intervals. Each sample consist of 50cm half core. • Hand spectrometer measurements have been taken on the core (10cm spacing) to ensure proper match with downhole probe measurements. • Samples have been prepared (see below), 108 QAQC samples have been added (blanks, duplicates, CRMs), samples have been properly packed and sent to ALS Vancouver laboratory for ICP MS and AES multi-element analyses. • Some 45 samples (+5 QAQC), taken from the 758 samples have been re-assayed using a Fusion + XRF technique for Quality Control and resistive mineral assessment on two different laboratories (ALS Vancouver, MSALab Vancouver).
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Drilling – Haranga Haranga (2022) drilling technique was DD drilling: 22 Holes totalling 3021m Drilling at collar is HQ drilling and casing diameter until bedrock (from 6 to 15m) followed by NQ drilling. Average depth of hole is 140m with holes depth from 80 to 220m. Holes are drilled a 60° angle from surface at different azimuth.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential 	Prilling – Haranga Haranga properly recorded DD recovery data from all drillholes (2022). Recoveries are excellent (+99%) due to the hard rock nature of the core. Samples taken from the core are representative of the mineralized sections.





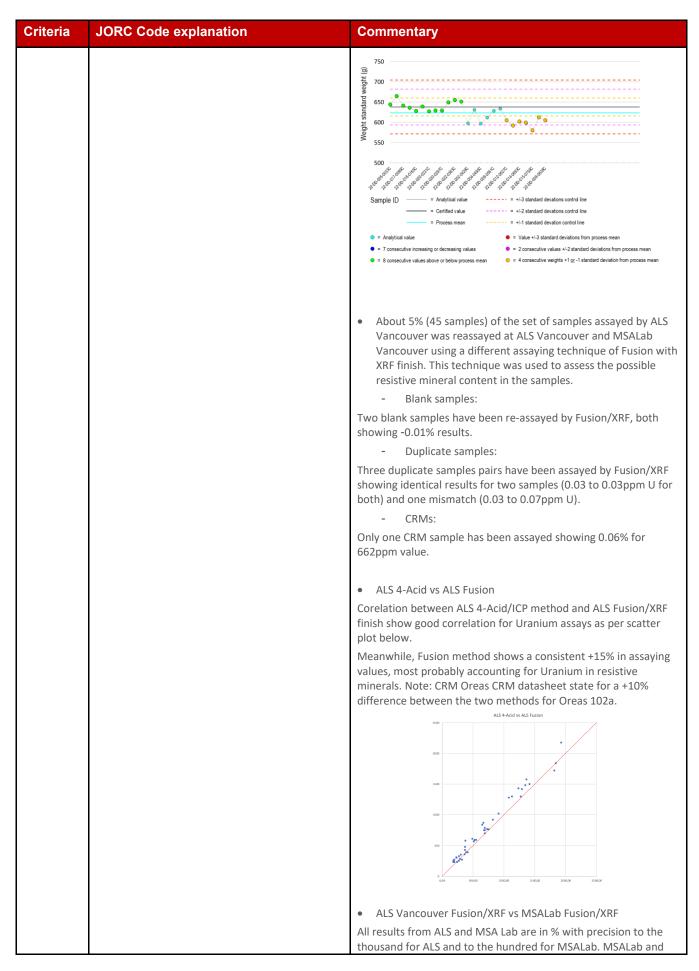
Criteria	JORC Code explanation	Commentary
	loss/gain of fine/coarse material.	
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	Drilling – Haranga All core from Haranga was logged (100%) geologically and geotechnically to provide full support of the MRE. The geological logging completed was both qualitative (rock type, mineralogy, colour, degree of oxidation, etc.) and quantitative (recording of specific depths and various geophysical data): 100% of the core has been orientated and surveyed (azim, dip) all boxes have been properly photographed and photos are of proper quality. all core are stored in Haranga field facilities all DD holes from Haranga have been logged with downhole geophysical probes
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 A total of 758 samples have been collected by Haranga on mineralized intervals: 50 cm core have been sampled using core saw, samples cut along the orientation line, same half sampled for all samples. All samples have been weighted in air and water to provide elementary density measurements. Samples have been crushed by jaw crusher at 2mm aperture. Samples have been divided into 250gr sub-samples using riffle splitters; some samples have been duplicated for QAQC purposes and to assess splitting. 250gr samples have been grinded to 75μ pulps in ALS sample prep facilities in Kedougou. Sub sample of 50gr have been split at ALS Kedougou for shipment to ALS Vancouver Analyses have been executed on 50gr pulp samples by ALS Vancouver A 40kg bulk composite sample was produced by splitting (approximately) 150gms from 243 core sections from the Haranga 2022 diamond core drilling program. The core was selected from numerous sites to represent the drilled deposit. The core sections were selected by laboratory assayed grades to produce a weighted average grade for the bulk sample that matches the Inferred Resource grade and were spatially varied to better represent the lithology of the drilled deposit. Only the core sections of laboratory assayed grades were selected to produce a weighted average grade for the bulk sample that closely matches the Inferred Resource grade. The 40kg bulk sample on being received by SGS Lakefield was remixed to overcome any settling that occurred during transport and then split the sample into a number of equal portions. This is achieved by splitting, either rotary or riffle, to ensure that each portion is relative to every other portion.
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or	Drilling – Haranga All holes from Haranga (2022) have been probed using the services of Terratec Geoservices Gmbh of Germany. Analytical





Criteria	JORC Code explanation	Commentary
laboratory tests	total. 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. 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.	 (equivalent uranium oxide eU3O8) results were obtained from downhole geophysical gamma logging using an UEP42 probe from Electromind with two counting devices, crystal (PM scintillometer) and Geiger-Muller (GM) tubes. Gamma probes have been certified by Orano at their Bessines site in France, using Uranium mixed concrete drums of different grades resulting in a Coefficient used to calculate the equivalent U3O8. Calibration certificates have been received. One hole drilled during the campaign (22-SAR-DD-005) has been used as a control drillhole with 3 quality control downhole survey carried out during the campaign to ensure the status of the probes throughout the campaign.
		 The 758 samples sent to ALS Canada were sent with duplicates, blanks and standards. The QAQC samples is totalling 108 samples.
		- Duplicate data: A total of 40 pairs of duplicate samples was introduced in the samples. The scatter and QQ plots below show good comparison for duplicate sample pairs but for one sample that most probably resulted in an inversion of sample number. HT precision of the duplicate data set is good with 1.21%.
		Scatter Plot - First QQ Plot - First QQ Plot - First QQ Plot - First 111
		- Blank data: A total of 43 samples uncertified blank material sourced localy was used as blank material. Overall, the U concentration in the blank samples is very low with 2 to 6ppm. Three samples show three peak values of 7, 11 and 14 ppm U, some of which follow higher-grade samples. It is unclear if this is due to contamination due to the very small number of samples affected and, even if it was contamination, the effect of it is so small that it doesn't materially affect the overall results.
		- CRM data: A total of 25 CRM samples have been introduced in the samples assayed. The CRM samples are Oreas 102a with a reference value of 638ppm U (95% 615-662ppm U) for 4 Acid Digestion methods and 662ppm for Fusion methods (95% 638-685ppm U). The CRM data show a step change starting with sample 22-DD-002-0429C, where the process mean drops from 641 ppm U to 607 ppm U (~5% less). The data set is too small to carry out a statistically significant assessment it is hard to tell if this has something to do with the analytical process or the CRM samples themselves. Irrespective of the cause, this change does not affect the validity of the dataset from ALS.







Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	ALS lab assay do corelate as per scatter plot below. MSALab data show a slightly higher assay grade of +8% to the ALS data but number of points and precision of the figures do limit conclusions. ALS Fusion vs MSALab Fusion The 40kg bulk sample was transported to SGS Lakefield Canada for ore characterisation work. Drilling – Haranga Gamma probe data and derived eU3O8 grades have been reviewed by Haranga's consultants for complete check. It is established that: Geochemical analysis by a certified laboratory have been compared with downhole gamma probe data. No twin holes have been drilled by Haranga, on Haranga holes to date. Out of 22 holes, Haranga twinned 9 holes of historical Areva/Cogema for grade comparison. Downhole gamma data are provided as LAS files directly after survey at drill site by Terratec. A copy of the data is sent to the head office of the contractor in Germany for processing and eU3O8 grade calculation. Data is then recovered by Haranga for storage on Haranga's hard drive and sharing with consulting company for control. No adjustments are made to any assay data.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	Prilling – Haranga All (100%) of Haranga collars have been surveyed in the field by an independent surveyor using a DGPS, including elevation. The grid system is Universal Transverse Mercator, zone 28N (WGS84). A gyroscopic tool was used to measure downhole surveys during the drilling program (Reflex tool) as well as during the downhole probing (included in the UEP42 probe).
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Drillholes are irregularly spaced across the Project. Holes are on a relatively close spacing around the main mineralised zones, around 25 m X 25 m in the main mineralisation zones. The Competent Person considers that following the planned validation drilling and database updates, the data spacing and distribution of the historical drillholes is sufficient to imply continuity as required for future Mineral Resource Estimation and classification. No sample compositing has been reported to have been applied to historical probe data. No sample compositing has



Criteria	JORC Code explanation	Commentary
		been applied to Haranga probe data nor chemical assay data.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	• Mineralisation is interpreted to be structurally controlled, dominantly striking ~040 and dipping ~80° to 130. A second perpendicular mineralised structure is speculated and may be evidenced by results from several drillholes oriented to intersect this ESE-WNW striking structure. From this interpretation, it is clear that some of the drillholes dip within, or partly within, the mineralisation. This is unavoidable in areas where the two perpendicular orientations are both present.
		 Any possible bias in the probe data from the drilling orientations is unknown at this stage.
Sample	The measures taken to ensure sample security.	Drilling – Haranga
security		 Haranga DD core are properly stored in core boxes in the workshop at Saraya camp facility, under responsibility of the camp managers and camps security. Core boxes are store outside to avoid possible Radon concentration in confined spaces.
		 Sample rejects from Jaw Crusher 2mm crushing as well as 200gr pulp rejects have been recovered and are stored for sample security purposes.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Haranga is not aware of any external audits or reviews of the historical sampling techniques or data other than the high-level review of Haranga auditors:
		 RSC audited the drilling database and deemed it appropriate for exploration targeting. Odessa audited the drilling database and deemed it appropriate for Mineral Resource Estimation after Haranga field validation. Further validation and verification drilling are required to be able to adopt better classification categories (indicated, measured).



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	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Saraya Project is a joint venture between Haranga and Mandinga Resources SARL and relates to a single active licence, PR 02208 which covers 1,650 km² in Senegal. Haranga has earned a 70% interest from Mandinga Resources. Mandinga has a 30% free carry-through to PFS. After PFS, Mandinga will have to contribute to costs or dilute to royalty. The granted licence is in good standing with no known impediments, having been recently renewed for a second term (further 3 years).
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 A compilation of historical exploration work has been completed. Historical work included reports, rock sampling, geochemistry (hydrogeochemistry, emanometry) geological mapping, geophysical surveys, drilling, and estimates of exploration potential by COGEMA and Areva. Haranga's ASX Release from 8th August 2022 summarises the material exploration drilling undertaken at the Saraya prospect. Historical drillholes reported here were undertaken by COGEMA and Areva at the Saraya Prospect. Additional historical drilling has been undertaken at minor prospects but is not considered material to this release.
		 A regional airborne survey was carried out in 2007 by an international cooperation programme (Agence Française pour le Développement, AFD, and EU Programme de Renforcement du Secteur Miniere, PDRSM, and operated by FUGRO), the SYSMINE Project, started in 2004.
Geology	Deposit type, geological setting and style of mineralisation.	The Saraya Project is situated within the Paleoproterozoic Kedougou-Kenieba Inlier (KKI) of the West African Craton. In Senegal, the KKI contains two major units separated by a major shear zone, the Main Transcurrent Zone (MTZ); the Mako NE-trending volcanic belt in the west and the Dialé-Daléma metasedimentary basin in the east. The MTZ strikes northeast in the south and rotates to a northwesterly trend as it crosses the Falémé River into Mali.
		Both the Mako volcanic belt and the Diale-Dalema sedimentary series are intruded by granitoids of variable ages and geochemical signatures. The most voluminous are the plutons of the Saraya batholith, probably emplaced around 2.1 Ga. The Saraya batholith occurs as an N30 axis. The northern half of the batholith is characterized by deuteric alteration marked by a coarse-grained muscovite-rich leucogranite. The complex is poorly faulted, mainly affected by quite late N120 and N30–40 structures, typically pegmatite veins and dolerite dikes respectively.
		Uranium mineralisation at Saraya is understood to be structurally controlled with uranium being mobilised during a sodic hydrothermal event (Na-metasomatism) and precipitated in episyenitic structural conduits. Mineralisation is found preferentially in brecciated lenses (up to 100-m long) within the episyenite but further





Criteria	JORC Code explanation	Commentary
		 investigation into the geological controls on mineralisation is required. A geological model has been constructed by Odissey based on geological logging. Two major lithologic entities have been recorded and 3D mapped: Saraya leucocratic Granite and Saraya Episyenite. A mineralisation model appears to support a dominant orientation of ~040 and dipping SE at ~80°. A second perpendicular (WNW striking) mineralised structure is speculated. However, alternative orientations have not been completely ruled out.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) 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. 	Drilling Results used in the selection for the metallurgical sample are extracted from the report entitled "Drilling Results Confirm Wide Shallow High Grade Uranium" released on 28th February 2023 and available to view on https://haranga.com/investors/asx-announcements/ .
Data aggregation methods	 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. 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. 	 Drilling Results used in the selection for the metallurgical sample are extracted from the report entitled "Drilling Results Confirm Wide Shallow High Grade Uranium" released on 28th February 2023 and available to view on https://haranga.com/investors/asx-announcements/. No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Mineralisation is interpreted to be structurally controlled striking approximately 040 and dipping ~80° to 130. From this interpretation, it is clear that some of the historical drillholes dip within, or partly within, the mineralised syenite. Only downhole intercept lengths are reported as true width is not known.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Metallurgical results only reported.



Criteria	JORC Code explanation	Commentary
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.	 ASX release "Drilling Results Confirm Wide Shallow High Grade Uranium" released on 28th February 2023 includes all drillhole information used as the basis of the Metallurgical sample reported here. No relevant information has been omitted from this report.
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.	The regional geophysical radiometric data was collected in 2007 within the Sysmine framework. Additional historical exploration data exists including drilling by COGEMA and Areva at several other prospects (Diobi, Dalafin, Fanta Diama, Badioula, Samecouta and Kanta Fanta), petrography, mineralogy and metallogeny, however, these data are still being reviewed. If considered material, they will be reported in future. Metallurgical testing (subject of this release) A further two acid leach tests were conducted utilising the below conditions: • Lower acid addition (10 g/L free acid target) at elevated temperature (95C) • Lower acid addition (10 g/L free acid target) at ambient temperature Temperature, free acid and ORP were monitored during the tests and adjusted as required Intermediate and final solution assays were conducted using a combination of ICP-OES/MS Final solids assays were conducted using a combination of XRF and ICP-OES/MS
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Haranga has undertaken termite mound geochemistry sampling surveys across the entire permit at intervals of 1,000m x 100m, and to 200m x 50m for infill areas. The samples are analyzed with a handheld XRF device. To date: about 70% of the permit area has been surveyed (11,200 samples collected out of 16,000). 9,930 infill samples have been collected, out of a planned 12,100samples on infill grids over anomalies. Early results reveal strong uranium anomalism. Haranga is planning several drilling campaigns on the newly discovered surface anomalies (auger followed by RC drilling). Further metallurgical testing is being undertaken to explore the ore character of the mineralised episyenite at Saraya and the results will be reported when they are available