

1 August 2024

NIOBIUM TEST RESULTS ENHANCE YANGIBANA PROJECT POTENTIAL AS A MULTI-COMMODITY RARE EARTHS PROJECT

HIGHLIGHTS

- Hastings is expediting the investigation of including a niobium (Nb) circuit to its Yangibana Rare Earths Project to provide a **multi-commodity recovery process stream**
- The potential for **by-product credits from niobium in addition to Hastings' primary focus on the rare earths elements' (Nd, Pr, Dy, Tb) income stream**
- Niobium (Nb_2O_5) concentrations occur in the form of mineral ferro-columbite at the Yangibana Project over a 4-kilometre strike at the **existing Simon's Find and Bald Hill deposits**.
- The presence of niobium minerals is not limited to the Bald Hill – Simon's Find trend. There are occurrences noted in all prospects of the Yangibana Rare Earths Project.
- Importantly ferro-columbite has been shown to be mineralised extensively in the fenitised foot- and hanging wall of all intrusive ironstones.
- Historical mineralised drill intersections at the Simon's Find prospect, previously announced on 9 October and 22 November 2017, include:
 - 5.45m at 5.3% Nb_2O_5 from 27.55 metres (SFDD002¹)**
 - 10m at 2.66% Nb_2O_5 from 7 metres (SFRC065²)**
- Additional mineralised drill intersections at the Simon's Find prospect include:
 - 21m at 1.64% Nb_2O_5 from 34 metres (SFRC188)**
 - 15m at 1.82% Nb_2O_5 from 61 metres (SFRC174).**
- Niobium mineralisation is not limited to the Simon's Find deposit with significant occurrences identified in drill chips at both the Bald Hill and Hatchett prospects, and in outcrops at the Yangibana and Yangibana South prospects. Mineralised drill intersections include:
 - 11m at 0.54% Nb_2O_5 from 24 metres (BHRC548)**
 - 12m at 0.47% Nb_2O_5 from 55 metres (BHRC550)**
 - 6m at 0.70% Nb_2O_5 from 17 metres (HARC005)**
- Initial metallurgical test work has now been completed on selected samples from Bald Hill South at the Yangibana Project. RC drill chips from four separate holes and intervals, BHRC543 62-63m, BHRC546 13-14m, BHRC550 64-65m, and BHRC551 47-48m were combined and blended in equal proportions into a composite feed. Using gravity separation followed by low intensity magnet separation, the initial test work recovered and concentrated the ferro-columbite to 16.88% Nb_2O_5 from a 0.87% Nb_2O_5 feed, a 19 times uplift of niobium grade.
- Further metallurgical test work results and maiden Resource Estimate for niobium are expected by the end of Q3 2024.**

¹ Refer to ASX Announcement 'High Neodymium Praseodymium Ore Grade at New Targets,' dated 9 October 2017 – previously reported intersection was limited to SFDD002

² Refer to ASX Announcement 'Final 2017 JORC Resource Update Including Auer & Auer North Results,' dated 22 November 2017 – previously reported intersections were drill holes SFRC007 – SFRC074

Niobium is listed as a critical and strategic mineral, with significant market interest given its use in strengthening steel and in new generation Niobium-Lithium-Ion batteries reducing charging times whilst extending battery life (refer Appendix 1 for additional market information).

Hastings Technology Metals Ltd (ASX:HAS) ("Hastings" or "the Company") is pleased to announce the results of its successful initial metallurgical test work on niobium samples from the Company's 100%-owned Yangibana Rare Earths Project ("Yangibana Project"). The test work of material sourced from Bald Hill South demonstrated that finely crushed material (38 – 300 µm) was able to be upgraded to 30% ferro-columbite (from 0.87% Nb₂O₅ to 16.88% Nb₂O₅ at 46.6% Nb recovery) using a Wilfley shaking table followed by a Low Intensity Magnetic Separation (LIMS) stage.

Metallurgical test work and Resource Estimates of niobium at Simon's Find and Bald Hill is planned to determine how niobium by-product will be extracted from the Company's Yangibana Rare Earths Project.



Figure 1: Dr Louis Schurmann (left) and Ravi Reddy (right)

Hastings Chief Geologist Dr Louis Schurmann said:

"In parallel with our focus on developing the Yangibana Rare Earths Project, Hastings is committed to expanding the portfolio of minerals that can be produced at Yangibana. The confirmation of the presence of ferro-columbite mineralisation, together with initial test work demonstrating recoveries of ferro-columbite, provides us with strong initial data to determine and develop the viability of producing niobium from Yangibana."

Niobium concentration

The mineral ferro-columbite containing niobium occurs both within the ironstone hosting the monazite and fenite alteration proximal to the ironstone. Along strikes to the north, the niobium occurrences extend into the southern domain of the Bald Hill prospect. There is 4,000 metres of strike extent where niobium values are elevated. They have been drill tested up to 180 metres down dip.

The presence of niobium minerals is not limited to the Bald Hill – Simon's Find trend. There are occurrences noted in the ironstones of the Hatchett and Yangibana prospects. Importantly ferro-columbite has been shown to be mineralised extensively in the fenitised foot- and hanging wall of all intrusive ironstones, creating significant opportunities for future exploration campaigns.

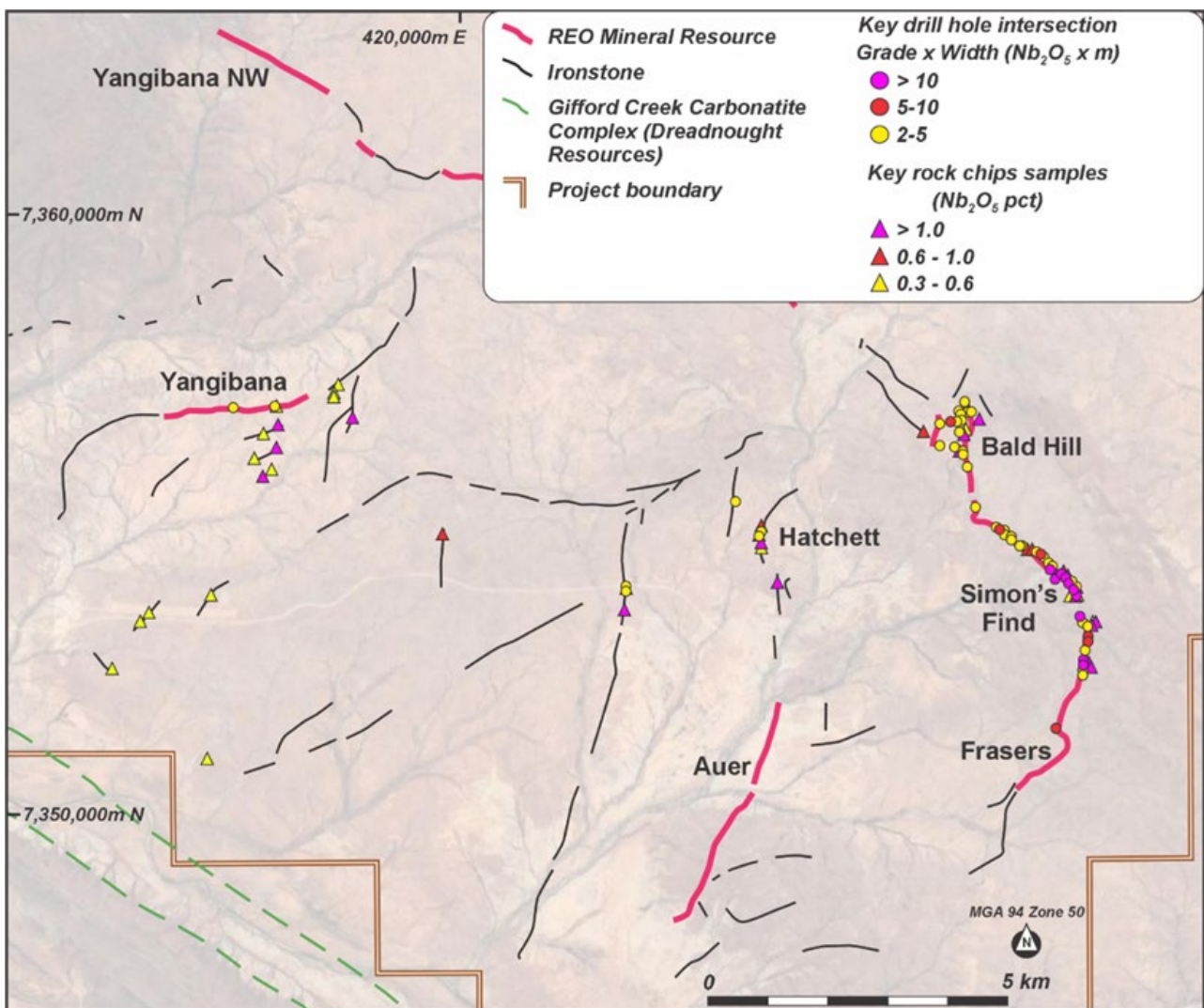


Figure 2: The distribution of niobium occurrences at the Yangibana Project.

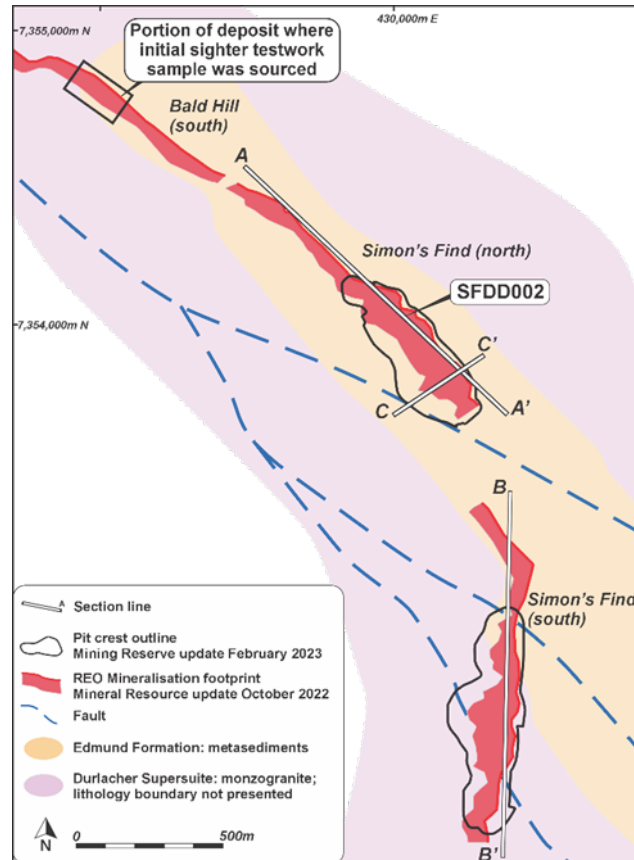


Figure 3: Plan of the Simon's Find prospect providing geological context to the x-sections of this announcement. Also shown are the locations for the initial sighter test work sourced from 4 Bald Hill (south) drill holes.

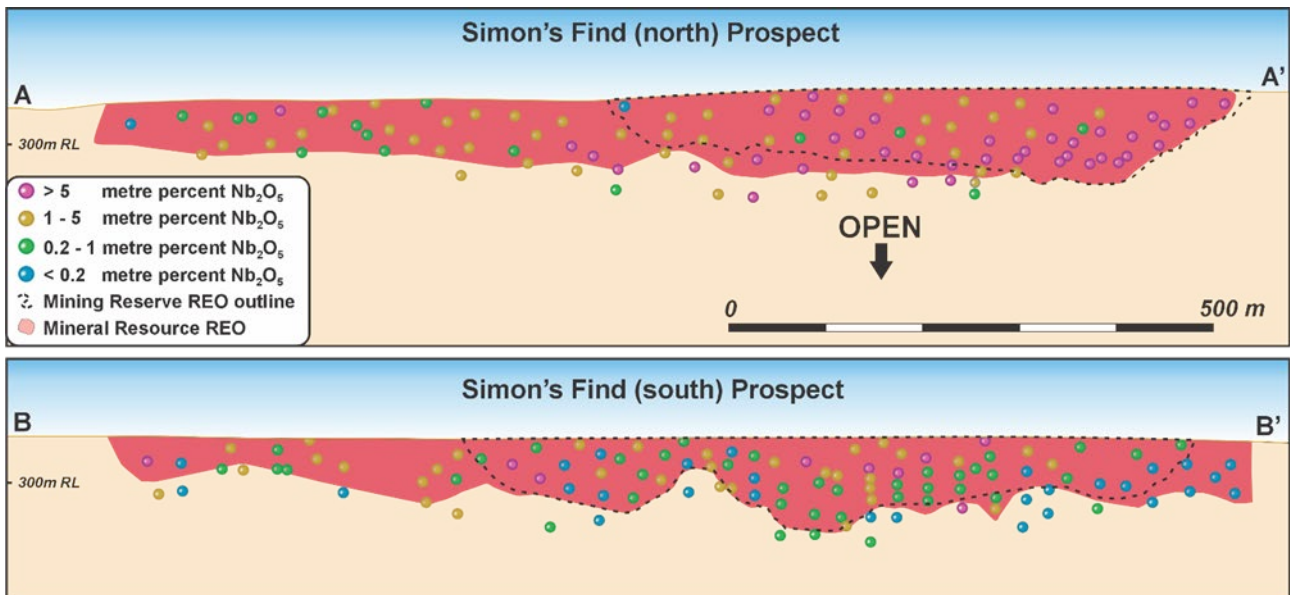


Figure 4: Long sections (A-A' and B-B') at Simon's Find. Refer to Figure 3 for the spatial context.

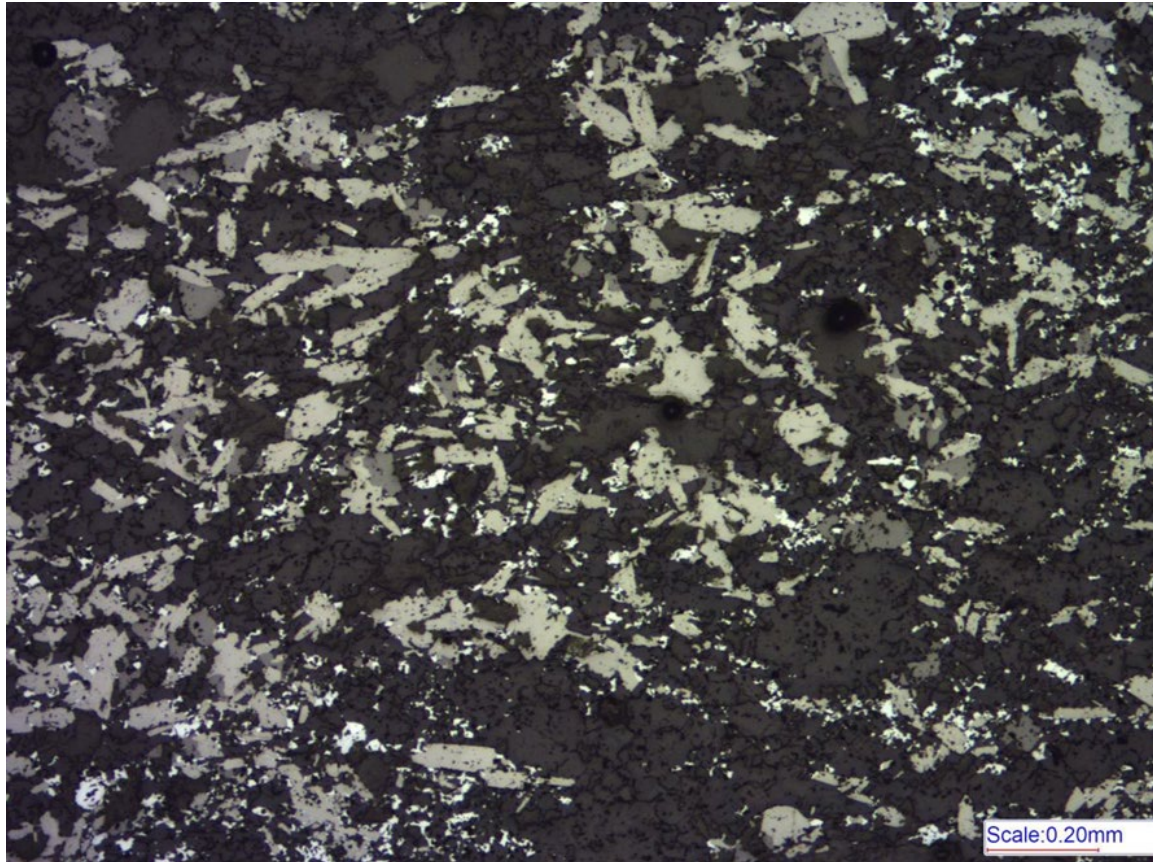


Figure 5: Tabular prismatic grey-greenish crystals of ferro-columbite with tiny white hematite grains in a weakly banded, fine-grained quartzose matrix (Sample SFD002 (30.0 to 30.2m).

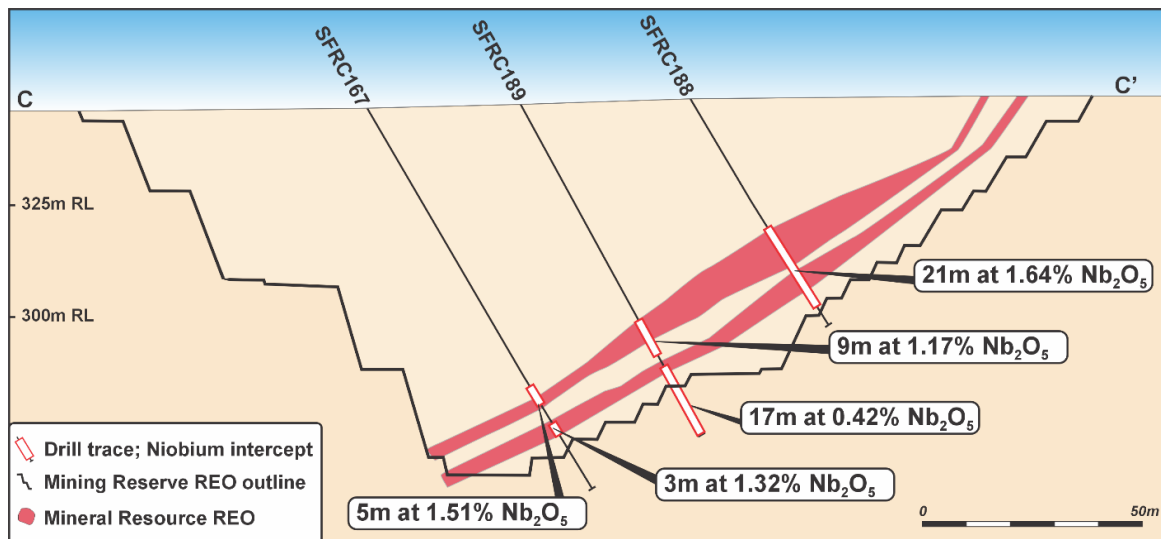


Figure 6: Cross-section through the Simon's Find deposit. Intercepts of the niobium mineralisation is shown in context to the rare-earth oxide mineral resources.

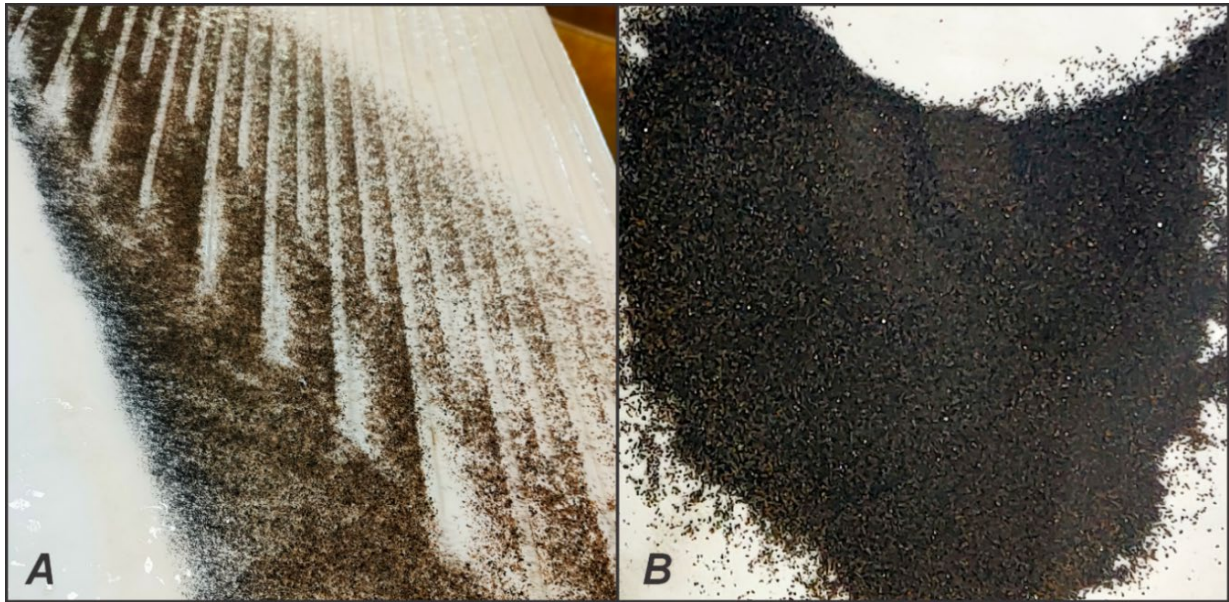


Figure 7: Photos of the sighter test work processing ferro-columbite ore over a Wilfley shaking table to generate a rough ferro-columbite concentrate.



Figure 8: QEMscan image of coarse-grained ferro-columbite (green) within the concentrate streams generated in the initial sighter test work.

Table 1: Significant Drill Hole Intersections (where interval (m) x Nb₂O₅ (%) exceeds 10).

Hole Id	Easting	Northing	RL	EOH (m)	Dip	Azimuth	Depth from (m)	Interval (m)	Nb ₂ O ₅ (%)
SFRC188	430207	7353788	311	60	-60	56	34	21	1.64
SFDD002	430078	7353972	322	60	-60	60	27.55	5.45	5.30
SFRC174	430066	7353906	287	65	-60	55	61	15	1.82
SFRC188	430207	7353788	311	60	-60	56	34	21	1.64
SFDD002	430078	7353972	322	60	-60	60	27.55	5.45	5.30
SFRC174	430066	7353906	287	65	-60	55	61	15	1.82
SFRC065	430264	7353714	339	90	-60	60	7	10	2.66
SFRC083	430181	7353829	305	72	-60	56	43	17	1.14
SFRC084	430219	7353753	308	66	-61	59	37	19	0.99
SFRC168	430154	7353784	287	65	-61	55	62	15	1.23
SFRC189	430187	7353768	286	90	-61	61	56	29	0.62
SFRC086	430246	7353702	318	85	-60	57	27	14	1.27
SFRC085	430195	7353743	288	60	-59	58	64	11	1.50
SFRC080	430048	7353963	307	87	-60	58	41	11	1.44
SFRC175	430243	7353734	319	60	-60	55	27	16	0.86
SFRC079	429936	7353998	284	55	-60	55	68	7	1.77
SFRC173	430083	7353873	278	75	-60	53	75	10	1.23
SFRC165	430315	7353326	328	90	-60	59	20	10	1.22
SFRC187	430179	7353797	300	40	-61	59	47	17	0.70
SFRC074	429989	7354031	332	65	-60	60	0	31	0.38
SFRC180	430282	7353690	338	36	-60	56	5	14	0.82
SFRC247	429826	7354118	290	50	-61	58	53	9	1.21
SFRC134	430384	7352595	320	70	-60	91	23	19	0.56
SFRC205	430392	7352538	330	65	-61	89	14	16	0.65

Authorised by the Board for the release to the ASX.

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ABOUT HASTINGS TECHNOLOGY METALS LIMITED

Hastings Technology Metals Limited is a Perth-based rare earths company focused on the development of its 100% owned Yangibana Rare Earths Project. Located in the Gascoyne region of Western Australia, the Yangibana Project contains one of the most highly valued deposits of NdPr in the world with an NdPr to Total Rare Earth Oxide ratio of up to 52% in some areas of the orebody.

With an initial mine life of 17 years, the Yangibana Project will become a globally significant source of NdPr, a critical component in the manufacture of permanent magnets used in advanced technology products including electric vehicles, renewable energy, humanoid robotics, and digital devices.

The Yangibana Project is fully permitted for immediate development and is well-timed to meet the forecast supply gap for rare earth elements accelerated by the growth in electric vehicles and wind turbines, both vital for the global energy transition. It will be developed in two stages with an initial focus on the construction of the mine and beneficiation plant to produce 37,000 tonnes per annum of mixed rare earth concentrate.

Hastings continues to assess downstream processing opportunities including the development of a hydrometallurgical plant to capture more of the rare earth value chain. The Company holds a strategic 21.5% shareholding in TSX-listed Neo Performance Materials, a leading global rare earth processing and advanced permanent magnets producer, providing future optionality to explore the creation of a mine to magnet supply chain.

Hastings recognises in its geological model and mine plan the potential of a multi-commodity recovery process stream which underpins the economic recovery of rare earth metals and associated minerals like ferro-columbite (niobium).

For more information, please visit www.hastingstechmetals.com

COMPETENT PERSONS' STATEMENT

The information in this release relating to exploration results is based on information compiled by Competent Person, Dr Louis Schürmann. Dr Schürmann is a full-time employee of Hastings and a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM; 308067). Dr Schürmann has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this announcement and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results'.

The scientific and technical information in this announcement and that relates to process metallurgy is based on information reviewed by Mr Scott Atkinson. Mr Atkinson is a full-time employee of Hastings Technology Metals Limited and member of the Australasian Institute of Mining and Metallurgy (AusIMM; 3056865) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined by the JORC Code 2012. Mr Atkinson consents to the inclusion in this announcement of the matters based on their information in the form and context in which it appears.

CAUTIONARY STATEMENT

The exploration results have been prepared and reported in accordance with the 2012 edition of the JORC Code. There has been insufficient exploration to estimate a Mineral Resource for all target areas reported. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

FORWARD LOOKING STATEMENT

This release contains reference to certain intentions, expectations, future plans, strategies and prospects of the Company. Those intentions, expectations, future plans, strategies and prospects may or may not be achieved. They are based on certain assumptions, which may not be met or on which views may differ and may be affected by known and unknown risks. The performance and operations of the Company may be influenced by a number of factors, many of which are outside the control of the Company. No representation or warranty, express or implied, is made by the Company, or any of its directors, officers, employees, advisers, or agents that any intentions, expectations, or plans will be achieved either totally or partially or that any particular rate of return will be achieved.

Given the risks and uncertainties that may cause the Company's actual future results, performance, or achievements to be materially different from those expected, planned, or intended, recipients should not place undue reliance on these intentions, expectations, future plans, strategies and prospects. The Company does not warrant or represent that the actual results, performance, or achievements will be as expected, planned, or intended.

The Company is under no obligation to, nor makes any undertaking to, update or revise such forward looking statements, but believes they are fair and reasonable at the date of this release.

SCHEDULE 1: METALLURGICAL AND TEST WORK SUMMARY:

Sample origin and assay

RC drill chips from 4 separate holes and intervals, BHRC543 62-63m, BHRC546 13-14m, BHRC550 64-65m, and BHRC551 47-48m were combined and blended in equal proportions into a composite feed.

	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	Nb ₂ O ₅ (%)	Nd ₂ O ₃ (%)	SiO ₂ (%)
Composite feed	13.08	12.74	1.02	0.03	59.04

Composite feed size by assay

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	(%)	(%)	%dist.	(%)	%dist.	(%)	%dist.	(%)	%dist.	(%)	%dist.
+2800µm	68.9	6.9	12.62	6.8	10.34	5.5	2.29	13.6	0.03	9.4	62.25	7.3
+1700µm	143.6	14.4	12.15	13.6	9.82	11.0	1.82	22.6	0.02	13.0	62.68	15.4
+850µm	144.1	14.5	12.91	14.5	9.52	10.7	1.40	17.5	0.02	13.1	62.68	15.4
+425µm	123.5	12.4	12.47	12.0	11.28	10.9	1.30	13.9	0.02	11.2	61.61	13.0
+212µm	121.3	12.2	11.98	11.3	14.44	13.6	0.92	9.6	0.01	5.5	59.90	12.4
+106µm	95.1	9.5	11.66	8.6	17.44	12.9	0.92	7.5	0.02	8.6	57.54	9.3
+75µm	40.9	4.1	11.70	3.7	17.44	5.6	0.90	3.2	0.02	3.7	56.47	3.9
+38µm	63.0	6.3	12.04	5.9	16.58	8.1	0.87	4.8	0.03	8.6	55.83	6.0
-38µm	196.6	19.7	15.38	23.6	14.13	21.6	0.43	7.3	0.03	26.8	51.55	17.3
Calc'd Head	997.0	100.0	12.88	100.0	12.87	100.0	1.16	100.0	0.03	100.0	58.81	100.0
Assay Head			13.08		12.74		1.02		0.03		59.04	

Coarse fraction, particle size -3.35mm to +1.3mm

Wilfley shaking table stage 1 run response:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
stream 1	339.6	3.65	10.1	3.38	19.9	8.13	8.91	20.8	0.10	17.0	48.3	2.78
stream 2	891.3	9.57	12.0	10.5	15.0	16.1	3.89	23.9	0.05	19.8	56.3	8.50
stream 3	2071.7	22.3	11.5	23.4	12.6	31.5	2.50	35.7	0.02	23.0	60.3	21.2
stream 4	1258.2	13.5	12.8	15.8	9.22	14.0	1.32	11.4	0.02	14.0	63.5	13.6
stream 5	870.2	9.35	13.4	11.4	6.73	7.06	0.47	2.83	0.01	4.83	66.1	9.75
stream 6	1235.3	13.3	13.3	16.2	5.90	8.78	0.36	3.04	0.01	6.85	67.0	14.0
Mids. & Tails	2644.3	28.4	7.41	19.3	4.55	14.5	0.13	2.34	0.01	14.7	67.4	30.2
Calc'd Head	9310.6	100.0	10.9	100.0	8.92	100.0	1.56	100.0	0.02	100.0	63.4	100.0

Streams 1, 2, 3, and 4 from Wilfley shaking table stage 1 run were combined for feed to Wilfley shaking table stage 2 run:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
stream 1	97.3	2.33	8.35	1.63	24.0	4.43	13.5	11.2	0.21	12.1	41.9	1.65
stream 2	414.1	9.91	10.3	8.55	20.0	15.7	6.65	23.4	0.09	23.0	50.3	8.40
stream 3	974.3	23.3	10.7	21.0	16.9	31.1	4.69	38.8	0.06	33.8	54.3	21.4
stream 4	537.9	12.9	11.8	12.8	13.3	13.6	2.63	12.0	0.03	11.2	59.3	12.9
stream 5	282.8	6.77	12.2	6.92	11.5	6.17	1.54	3.71	0.02	3.92	61.6	7.03
stream 6	444.6	10.6	12.6	11.3	10.2	8.60	1.26	4.75	0.02	6.16	62.7	11.2
Mids.	1342.9	32.2	13.2	35.7	7.68	19.5	0.51	5.88	0.01	9.31	65.0	35.2
Tails	83.0	1.99	13.3	2.21	5.48	0.86	0.27	0.19	0.01	0.58	66.7	2.23
Calc'd Head	4176.9	100.0	11.9	100.0	12.6	100.0	2.82	100.0	0.04	100.0	59.3	100.0

Stream 2 from the Wilfley shaking table stage 2 run was separated with two magnetic intensities. Stream 1 from the Wilfley shaking table stage 2 run was lost in a sample prep error:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
Low Mag	52.2	16.8	2.12	3.50	40.6	33.7	46.6	15.5	0.05	9.93	4.98	12.2
High Mag	44.6	14.3	5.82	8.23	26.7	19.0	49.6	14.1	0.05	8.48	7.50	15.7
Non-Mag	214.5	68.9	13.0	88.3	13.9	47.3	51.3	70.3	0.09	81.6	7.17	72.1
Calc'd Head	311.3	100.0	10.1	100.0	20.2	100.0	50.3	100.0	0.08	100.0	6.85	100.0

Medium fraction, particle size -1.3mm to + 0.3mm

Wilfley Shaking table stage 1 run:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
stream 1	906.3	10.5	12.0	10.7	38.5	38.3	4.22	41.9	0.05	23.1	40.2	6.73
stream 2	1697.4	19.6	13.5	22.3	11.9	22.2	1.82	33.8	0.03	32.5	61.8	19.4
stream 3	2088.1	24.1	13.2	27.1	7.19	16.5	0.69	15.7	0.01	13.3	65.0	25.1
stream 4	769.9	8.90	13.7	10.3	7.09	6.00	0.43	3.62	0.01	4.91	64.6	9.18
stream 5	905.4	10.5	13.7	12.2	6.10	6.08	0.27	2.70	0.02	11.6	66.3	11.1
stream 6	638.1	7.38	1.27	0.79	5.16	3.62	0.14	1.00	0.01	4.07	67.2	7.91
Mids. & Tail	1645.1	19.0	10.4	16.7	4.05	7.32	0.07	1.29	0.01	10.5	68.0	20.7
Calc'd Head	8650.3	100.0	11.8	100.0	10.5	100.0	1.06	100.0	0.02	100.0	62.6	100.0

Streams 1, 2, and 3 from Wilfley shaking table stage 1 run were combined for feed to Wilfley shaking table stage 2 run:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
stream 1	38.8	0.89	1.72	0.13	77.5	4.78	6.41	3.41	0.07	2.40	10.6	0.16
stream 2	724.2	16.6	6.99	9.80	39.9	45.9	4.71	46.7	0.06	37.3	38.9	10.9
stream 3	1722.7	39.5	12.3	40.9	10.6	29.0	1.60	37.8	0.02	35.5	62.5	41.5
stream 4	524.6	12.0	13.2	13.4	7.99	6.66	0.73	5.25	0.02	10.8	64.8	13.1
stream 5	699.6	16.0	13.8	18.7	6.13	6.82	0.36	3.43	0.01	7.21	65.9	17.8
stream 6	331.0	7.58	13.7	8.78	6.46	3.40	0.37	1.69	0.01	3.41	65.5	8.35
Mids. & Tails	325.5	7.45	13.1	8.26	6.72	3.48	0.37	1.66	0.01	3.35	66.1	8.29
Calc'd Head	4366.4	100.0	11.8	100.0	14.4	100.0	1.67	100.0	0.03	100.0	59.4	100.0

Streams 1 and 2 from the Wilfley shaking table stage 2 run were combined and separated with two magnetic intensities:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
Low Mag	176.0	27.4	0.77	3.20	85.2	55.2	2.06	11.3	0.02	11.1	11.5	8.52
High Mag	107.8	16.8	1.97	4.98	66.5	26.4	5.21	17.5	0.03	10.2	21.1	9.57
Non-Mag	357.8	55.8	10.9	91.8	14.1	18.5	6.39	71.2	0.08	78.8	54.3	81.9
Calc'd Head	641.6	100.0	6.63	100.0	42.4	100.0	5.01	100.0	0.06	100.0	37.0	100.0

Fine fraction, particle size -0.3mm to + 0.038mm

Wilfley Shaking table stage 1 run:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
stream 1	927.0	9.77	1.23	1.00	80.6	49.0	5.39	60.5	0.07	23.2	7.74	1.31
stream 2	2107.7	22.2	10.3	19.1	18.3	25.3	1.26	32.1	0.05	35.2	58.0	22.4
stream 3	2393.9	25.2	13.5	28.3	4.85	7.61	0.10	2.90	0.02	20.0	67.4	29.5
stream 4	549.2	5.79	14.5	6.96	4.43	1.60	0.06	0.38	0.01	2.29	65.7	6.60
stream 5	787.4	8.30	14.9	10.3	5.02	2.59	0.06	0.55	0.01	3.28	65.2	9.40
stream 6	514.8	5.43	14.7	6.63	6.28	2.12	0.07	0.45	0.01	2.15	63.5	5.99
Mids.	1139.4	12.0	14.1	14.1	8.19	6.12	0.19	2.56	0.02	9.50	62.3	13.0
Tail	1067.7	11.3	14.6	13.7	8.02	5.62	0.04	0.55	0.01	4.45	60.5	11.8
Calc'd Head	9487.1	100.0	12.0	100.0	16.1	100.0	0.87	100.0	0.03	100.0	57.6	100.0

Streams 1, 2, and 3 from Wilfley shaking table stage 1 run were combined for feed to Wilfley Shaking table stage 2 run:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
stream 1	38.1	0.72	0.38	0.03	91.4	2.89	5.79	3.02	0.07	1.73	1.99	0.03
stream 2	792.5	15.1	0.79	1.16	86.6	57.0	5.48	59.4	0.06	30.1	4.98	1.39
stream 3	1520.4	28.9	9.41	26.5	22.4	28.3	1.65	34.2	0.05	46.2	54.3	29.1
stream 4	659.6	12.6	12.6	15.4	5.68	3.11	0.13	1.16	0.01	5.01	68.9	16.0
stream 5	404.2	7.69	13.2	9.86	4.96	1.67	0.07	0.40	0.01	3.07	68.7	9.79
stream 6	457.4	8.70	13.3	11.3	4.70	1.79	0.07	0.45	0.01	3.47	68.0	11.0

Mids. & Tails	1383.0	26.3	14.0	35.8	4.52	5.19	0.07	1.35	0.01	10.5	67.0	32.7
Calc'd Head	5255.3	100.0	10.3	100.0	22.9	100.0	1.39	100.0	0.03	100.0	54.0	100.0

Streams 1 and 2 from the Wilfley shaking table stage 2 run were combined and separated with two magnetic intensities:

PRODUCT	Mass		Al ₂ O ₃		Fe ₂ O ₃		Nb ₂ O ₅		Nd ₂ O ₃		SiO ₂	
	(g)	%	%	%dist.	%	%dist.	%	%dist.	%	%dist.	%	%dist.
Low Mag	296.6	41.8	0.47	25.7	96.8	46.7	1.02	7.76	0.01	7.12	3.19	28.0
High Mag	234.4	33.0	0.72	30.9	91.5	34.9	2.39	14.4	0.02	11.3	3.62	25.1
Non-Mag	179.0	25.2	1.32	43.4	63.2	18.4	16.9	77.8	0.22	81.6	8.88	47.0
Calc'd Head	710.0	100.0	0.77	100.0	86.6	100.0	5.47	100.0	0.07	100.0	4.76	100.0

SCHEDULE 2: SIGNIFICANT DRILL HOLE INTERSECTIONS WHERE Nb₂O₅ METAL (INTERCEPT X GRADE OF NIOBIUM PENTOXIDE) EXCEEDS 1. COORDINATES ARE IN MGA94, ZONE 50.

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Simons Find	SFRC188	430207	7353788	31	60	-60	56	34	21	1.64
Simons Find	SFDD002	430078	7353972	32	65	-60	60	27.55	5.45	5.30
Simons Find	SFRC174	430066	7353906	28	90	-60	55	61	15	1.82
Simons Find	SFRC065	430264	7353714	33	72	-60	60	6	12	2.24
Simons Find	SFRC083	430181	7353829	30	66	-60	56	43	17	1.14
Simons Find	SFRC084	430219	7353753	30	65	-61	59	37	19	0.99
Simons Find	SFRC168	430154	7353784	28	90	-61	55	62	15	1.23
Simons Find	SFRC189	430187	7353768	28	85	-61	61	56	29	0.62
Simons Find	SFRC086	430246	7353702	31	60	-60	57	27	14	1.27
Simons Find	SFRC085	430195	7353743	28	87	-59	58	64	11	1.50
Simons Find	SFRC080	430048	7353963	30	60	-60	58	41	11	1.44
Simons Find	SFRC175	430243	7353734	31	55	-60	55	27	16	0.86
Simons Find	SFRC079	429936	7353998	28	75	-60	55	68	7	1.77
Simons Find	SFRC173	430083	7353873	27	90	-60	53	75	10	1.23
Simons Find	SFRC165	430315	7353326	32	40	-60	59	20	10	1.22
Simons Find	SFRC187	430179	7353797	30	65	-61	59	47	17	0.70
Simons Find	SFRC074	429989	7354031	33	36	-60	60	0	31	0.38
Simons Find	SFRC180	430282	7353690	33	50	-60	56	5	14	0.82
Simons Find	SFRC247	429826	7354118	29	70	-61	58	53	9	1.21
Simons Find	SFRC134	430384	7352595	32	65	-60	91	23	19	0.56
Simons Find	SFRC205	430392	7352538	33	60	-61	89	14	16	0.65
Simons Find	SFRC245	429899	7354048	27	84	-87	79	53	22	0.45
Simons Find	SFRC233	430166	7353724	28	110	-61	56	67	12	0.80
Simons Find	SFRC131	430363	7352567	31	54	-60	90	27	22	0.43

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Simons Find	SFRC051	430199	7353843	332	36	-60	60	18	5	1.88
Simons Find	SFDD200	429838	7354095	277	72.	-90	0	55	17.2	0.50
Simons Find	SFRC057	430040	7354019	343	30	-60	60	0	14	0.60
Simons Find	SFRC050	430232	7353841	346	24	-60	60	0	8	1.04
Simons Find	SFRC181	430237	7353683	331	30	-60	137	13	12	0.69
Simons Find	SFRC185	430054	7353936	291	70	-61	60	59	11	0.73
Simons Find	SFRC087	430206	7353675	334	60	-60	55	9	9	0.86
Simons Find	SFRC243	429910	7353980	243	120	-88	66	94	15	0.50
Simons Find	SFRC167	430158	7353756	282	100	-61	55	73	5	1.51
Simons Find	SFRC182	430023	7353975	305	60	-60	55	42	12	0.60
Simons Find	SFRC048	430256	7353760	326	42	-60	60	25	6	1.18
Simons Find	SFRC030	430408	7352660	328	60	-60	90	18	10	0.70
Fraser's	FRRC272	429890	7351473	322	60	-61	99	34	5	1.39
Simons Find	SFRC070	429632	7354360	334	18	-60	60	3	10	0.69
Simons Find	SFRC242	429981	7353979	275	80	-90	84	65	11	0.61
Simons Find	SFRC169	430125	7353765	289	110	-89	61	54	9	0.75
Simons Find	SFRC082	430139	7353873	302	60	-60	55	51	5	1.30
Simons Find	SFRC171	430125	7353825	284	110	-60	46	67	13	0.50
Simons Find	SFRC123	430293	7352503	279	90	-60	90	74	9	0.70
Simons Find	SFRC237	430050	7353845	266	100	-89	108	77	6	1.05
Simons Find	SFRC153	430414	7352955	323	40	-60	91	29	4	1.56
Simons Find	SFRC238	430034	7353879	264	105	-89	97	79	6	1.04
Simons Find	SFRC076	430015	7354007	326	30	-60	60	19	11	0.56
Simons Find	SFRC176	430219	7353720	300	75	-60	56	50	10	0.60
Bald Hill	BHRC548	428934	7354810	317	40	-61	52	24	11	0.54
Bald Hill	BHRC550	428926	7354782	291	90	-61	50	55	12	0.47
Simons Find	SFRC090	430113	7353855	284	85	-61	61	68	9	0.61
Simons Find	SFRC152	430399	7352928	309	57	-60	87	47	4	1.37
Simons Find	SFRC014	430392	7352478	347	18	-60	90	0	8	0.68
Simons Find	SFRC068	430043	7353987	331	48	-60	60	14	9	0.60
Simons Find	SFRC170	430152	7353839	291	90	-60	55	60	14	0.39
Simons Find	SFRC064	430174	7353850	311	72	-60	60	37	13	0.41
Simons Find	SFRC040	430378	7352641	317	54	-60	90	29	11	0.48
Bald Hill	BHRC148	428131	7356602	316	54	-90	0	46	3	1.73
Simons Find	SFRC101	429819	7354140	299	50	-61	48	42	8	0.64
Simons Find	SFRC075	429973	7354016	304	60	-60	64	42	10	0.51
Simons Find	SFRC007	430434	7352829	343	18	-60	90	4	7	0.68
Simons Find	SFRC059	430010	7354043	337	30	-60	60	5	13	0.35
Simons Find	SFRC049	430233	7353812	328	40	-60	60	22	5	0.91
Simons Find	SFRC246	429880	7354072	293	80	-59	62	48	16	0.28
Simons Find	SFRC243	429908	7353980	256	120	-88	66	86	5	0.90
Bald Hill	BHRC542	429066	7354696	299	56	-61	50	52	4	1.12
Simons Find	SFRC139	430367	7352629	313	70	-60	86	37	5	0.89
Simons Find	SFRC191	430370	7352595	322	105	-89	257	18	15	0.29
Simons Find	SFRC035	430384	7352506	327	42	-60	90	19	13	0.33

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Hatchett	HARC005	424957	7354792	318	30	-60	134	17	6	0.70
Hatchett	HARC008	424956	7354721	327	33	-60	90	3	9	0.47
Simons Find	SFRC167	430162	7353759	275	100	-61	55	82	4	1.02
Bald Hill	BHRC512	428954	7354793	309	60	-60	51	37	7	0.55
Simons Find	SFRC240	429966	7353940	252	110	-88	37	90	7	0.54
Simons Find	SFRC052	430154	7353882	325	42	-60	60	25	4	0.93
Simons Find	SFRC055	430072	7354009	342	30	-60	60	6	8	0.47
Bald Hill	BHRC599	428265	7356740	290	84	-89	95	75	3	1.24
Simons Find	SFRC066	430123	7353910	315	67	-61	59	35	7	0.53
Simons Find	SFRC166	430466	7353126	322	40	-60	90	28	6	0.61
Simons Find	SFRC262	429728	7354205	270	100	-60	51	79	6	0.61
Bald Hill	BHRC230	428281	7356624	330	42	-90	0	33	8	0.45
Simons Find	SFRC109	429561	7354371	305	60	-60	47	38	11	0.33
Bald Hill	BHRC546	429031	7354784	337	25	-61	49	6	8	0.44
	TRB199	422760	7353831	326	15	-90	0	2	4	0.89
Simons Find	SFRC092	429977	7354058	341	30	-59	56	0	12	0.29
Simons Find	SFRC031	430396	7352610	338	66	-60	90	8	7	0.50
Simons Find	SFRC069	429676	7354331	333	18	-60	60	6	6	0.59
Simons Find	SFRC098	429893	7354080	311	70	-60	55	30	11	0.32
Simons Find	SFRC054	430103	7353973	336	36	-60	60	12	6	0.58
Simons Find	SFRC172	430079	7353831	295	100	-60	57	59	4	0.84
Simons Find	SFRC249	429750	7354244	322	40	-59	52	21	9	0.37
Bald Hill	BHRC532	429297	7354504	299	68	-61	50	52	3	1.07
Simons Find	SFRC100	429828	7354161	323	30	-60	55	16	7	0.46
Simons Find	SFRC244	429893	7354013	252	95	-90	207	88	5	0.63
Simons Find	SFRC177	430195	7353704	312	85	-89	26	33	4	0.78
Bald Hill	BHRC518	429150	7354652	321	60	-61	46	27	3	1.03
Bald Hill	BHRC044	428231	7356551	345	34	-90	0	17	2	1.51
Simons Find	SFRC104	429775	7354229	329	24	-60	49	12	8	0.38
Simons Find	SFRC259	429561	7354391	320	45	-60	57	23	7	0.43
Hatchett	TRB043	424544	7355241	331	15	-90	0	5	2	1.49
Simons Find	SFRC183	430012	7353952	291	80	-60	55	61	12	0.25
Simons Find	SFRC036	430389	7352563	336	48	-60	90	13	4	0.74
Simons Find	SFRC209	430363	7352736	301	90	-60	84	50	8	0.36
Simons Find	SFRC251	429780	7354163	280	90	-61	66	66	9	0.32
Simons Find	SFRC186	430109	7353893	291	70	-60	55	64	3	0.95
Simons Find	SFRC097	429917	7354097	325	50	-61	58	17	7	0.40
Bald Hill	BHRC483	427950	7356551	287	85	-88	79	64	5	0.56
Bald Hill	BHRC426	428320	7356091	328	27	-90	0	16	9	0.31
Simons Find	SFRC015	430377	7352434	347	24	-60	90	0	6	0.46
Simons Find	SFRC178	429856	7354107	312	80	-60	64	27	12	0.23
Simons Find	SFRC024	430147	7353914	339	30	-60	60	8	6	0.44
Yangibana	YARC048	416887	7356842	320	30	-60	180	12	7	0.38
Simons Find	SFRC013	430337	7352364	340	18	-60	90	7	3	0.89
Simons Find	SFRC253	429706	7354280	316	40	-61	64	29	5	0.52

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Simons Find	SFRC229	430280	7353316	295	80	-61	56	59	6	0.43
Bald Hill	BHRC084	428550	7355166	316	34	-90	0	17	9	0.29
Bald Hill	BHRC234	428324	7356676	334	42	-90	0	29	7	0.37
Simons Find	SFRC095	429927	7354064	305	70	-61	55	39	9	0.28
Simons Find	SFRC125	430307	7352469	286	90	-60	90	65	11	0.23
Simons Find	SFRC239	429997	7353899	254	105	-90	108	90	4	0.63
Simons Find	SFRC006	430428	7352888	344	18	-60	90	4	6	0.42
Simons Find	SFRC218	430402	7353012	277	108	-61	89	79	7	0.36
Bald Hill	BHRC237	428408	7356749	339	30	-90	0	20	5	0.49
Bald Hill	BHRC430	428358	7356058	337	16	-90	0	8	4	0.62
Bald Hill	BHRC023	428371	7356901	324	52	-60	90	38	5	0.49
	TRB196	422750	7353754	325	15	-90	0	2	9	0.27
Simons Find	SFDD003	430356	7352413	325	65	-60	90	23.2	8.45	0.29
Simons Find	SFRC177	430196	7353704	306	85	-89	26	40	2	1.20
Simons Find	SFRC058	430003	7354073	340	24	-60	60	2	13	0.18
Simons Find	SFRC102	429798	7354196	329	30	-60	47	11	7	0.34
Bald Hill	BHRC436	428316	7356029	319	36	-90	0	25	6	0.39
Simons Find	SFRC094	429944	7354076	340	50	-61	59	0	9	0.26
Bald Hill	BHRC079	428396	7355831	313	40	-90	0	24	10	0.23
Bald Hill	BHRC545	429132	7354689	340	30	-61	49	5	3	0.76
Simons Find	SFRC227	430362	7353227	320	80	-61	64	31	2	1.14
Bald Hill	BHRC224	428200	7356572	337	32	-90	0	27	3	0.76
Bald Hill	BHRC223	428250	7356572	345	24	-90	0	19	2	1.14
Bald Hill	BHRC146	428181	7356602	330	42	-90	0	31	8	0.28
Bald Hill	BHRC418	428185	7356177	324	63	-90	0	20	4	0.56
Bald Hill	BHRC236	428464	7356749	358	12	-90	0	0	10	0.22
Simons Find	SFRC238	430033	7353879	286	105	-89	97	58	4	0.55
Bald Hill	BHRC075	428362	7355981	340	22	-90	0	0	11	0.20
Bald Hill	BHRC344	428310	7356572	346	30	-90	0	17	2	1.09
Bald Hill	GC0343	428279	7356411	345	22	-90	0	9	5	0.44
Yangibana	YARC200	416172	7356823	267	85	-60	176	78	7	0.31
Simons Find	SFRC241	429997	7353955	278	95	-89	63	66	4	0.54
Bald Hill	BHRC543	429021	7354714	289	95	-61	53	62	8	0.27
Bald Hill	BHRC551	428890	7354823	302	50	-60	48	46	2	1.08
Simons Find	SFRC107	429639	7354337	311	60	-60	46	31	8	0.27
Simons Find	SFRC157	430384	7353241	342	50	-60	92	6	5	0.42
Simons Find	SFRC108	429604	7354347	304	60	-61	48	43	3	0.71
Bald Hill	BHRC054	427950	7356550	339	28	-90	0	13	4	0.53
Bald Hill	BHRC519	429294	7354559	336	24	-60	46	6	8	0.26
Simons Find	SFRC135	430353	7352596	301	80	-60	89	50	9	0.23
Bald Hill	BHRC508	428867	7354871	335	16	-61	47	7	4	0.52
Bald Hill	GC0294	428348	7356391	344	15	-90	0	8	6	0.34
Bald Hill	BHRC533	429318	7354530	326	32	-61	44	17	7	0.29
Bald Hill	GC0417	428334	7356432	352	18	-90	0	2	5	0.41
Bald Hill	BHRC551	428887	7354820	308	50	-60	48	37	5	0.40

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Bald Hill	GC0442	428249	7356446	338	24	-90	0	19	3	0.66
Bald Hill	BHRC485	427954	7356576	300	90	-88	111	51	6	0.33
Bald Hill	BHRC106	428183	7356551	340	40	-90	0	22	3	0.65
Bald Hill	GC0437	428329	7356439	352	18	-90	0	2	7	0.28
Simons Find	SFRC022	430180	7353871	339	24	-60	60	10	4	0.47
Bald Hill	BHRC147	428223	7356652	315	60	-90	0	51	3	0.63
Bald Hill	BHRC444	428351	7355951	325	24	-90	0	19	4	0.47
Bald Hill	BHRC133	428319	7356653	331	46	-90	0	32	8	0.23
Bald Hill	BHRC541	429099	7354666	299	60	-61	48	52	4	0.46
Bald Hill	BHRC549	428920	7354805	295	70	-61	48	55	2	0.92
Simons Find	SFRC105	429755	7354219	298	60	-60	46	49	6	0.31
Bald Hill	GC0450	428289	7356446	350	18	-90	0	5	7	0.26
Bald Hill	BHRC487	428049	7356565	310	65	-88	59	47	4	0.45
Simons Find	SFDD001	429506	7354393	339	66	-60	60	1	4.15	0.43
Bald Hill	BHRC337	428292	7356595	338	40	-90	0	27	3	0.60
Simons Find	SFRC106	429719	7354259	306	60	-60	47	41	4	0.44
Hatchett	HARC004	424972	7354839	296	60	-60	131	42	6	0.29
Bald Hill	BHRC552	428865	7354809	284	80	-60	45	65	5	0.35
Simons Find	SFRC241	429997	7353955	271	95	-89	63	74	3	0.59
Auer	AURC228	423953	7348815	312	36	-90	0	8	3	0.58
Bald Hill	BHRC434	428290	7356048	324	42	-90	0	22	3	0.57
Bald Hill	BHRC420	428276	7356204	319	36	-90	0	28	2	0.85
Bald Hill	BHRC248	428150	7356522	328	36	-90	0	31	3	0.57
Bald Hill	BHRC083	428532	7355218	321	22	-90	0	12	6	0.28
Simons Find	SFRC252	429729	7354235	295	75	-61	55	54	4	0.42
Bald Hill	BHRC106	428183	7356551	332	40	-90	0	30	3	0.56
Simons Find	SFRC222	430440	7353154	330	45	-61	95	21	2	0.83
Bald Hill	BHRC513	429067	7354755	340	24	-60	45	5	4	0.41
Bald Hill	BHRC200	428150	7356378	348	30	-90	0	4	7	0.23
Bald Hill	BHRC445	428522	7355214	312	40	-60	90	26	4	0.40
Bald Hill	BHRC042	428333	7356547	347	52	-90	0	12	6	0.27
Bald Hill	BHRC044	428231	7356551	351	34	-90	0	10	3	0.53
Bald Hill	BHRC347	428191	7356520	340	30	-90	0	21	3	0.53
Simons Find	SFRC085	430190	7353740	298	87	-59	58	56	4	0.39
Simons Find	SFRC053	430115	7353935	319	50	-60	60	32	4	0.39
Bald Hill	BHRC106	428183	7356551	346	40	-90	0	16	3	0.52
Bald Hill	BHRC376	428176	7356402	344	30	-90	0	13	3	0.52
Simons Find	SFRC060	429707	7354300	341	36	-60	60	0	4	0.39
Bald Hill	GC0451	428293	7356446	352	18	-90	0	3	7	0.22
Hatchett	HARC006	424950	7354797	297	54	-57	133	44	3	0.51
Bald Hill	BHRC520	429279	7354546	320	48	-60	45	29	2	0.76
Yangibana	YWRC057	415996	7362955	291	61	-90	0	44	1	1.52
Bald Hill	BHRC340	428240	7356603	338	36	-90	0	27	2	0.75
Bald Hill	GC0443	428254	7356446	340	24	-90	0	17	3	0.50
Simons Find	SFRC135	430347	7352596	310	80	-60	89	42	3	0.50

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Bald Hill	BHRC019	428421	7356789	349	30	-60	90	11	7	0.21
Bald Hill	BHRC204	428337	7356426	349	18	-90	0	5	4	0.37
Yangibana	YARC165	414721	7356720	295	50	-90	0	32	6	0.25
Bald Hill	BHRC366	428171	7356452	346	27	-90	0	10	7	0.21
Simons Find	SFRC012	430418	7352582	346	18	-60	90	2	3	0.49
Bald Hill	BHRC020	428383	7356801	335	42	-60	90	28	6	0.24
Simons Find	SFRC094	429951	7354080	327	50	-61	59	19	3	0.48
Simons Find	SFRC015	430382	7352434	338	24	-60	90	13	1	1.43
Bald Hill	BHDD293	428551	7355165	314	60.	-60	90	22.55	7.2	0.20
Simons Find	SFRC210	430385	7352756	319	95	-58	97	33	4	0.36
Bald Hill	GC0461	428343	7356445	351	18	-90	0	5	2	0.71
Auer North	ANRC146	425268	7351745	246	90	-60	90	84	2	0.71
Bald Hill	BHRC132	428271	7356651	324	52	-90	0	42	2	0.71
Yangibana	YARC051	416971	7356873	326	60	-60	180	6	3	0.47
Bald Hill	BHRC510	428972	7354813	329	40	-61	47	16	4	0.35
Simons Find	SFRC091	429942	7354038	342	60	-60	58	0	6	0.23
Bald Hill	GC0314	428343	7356397	346	16	-90	0	9	1	1.39
Simons Find	SFRC248	429816	7354079	260	110	-61	57	89	9	0.15
Simons Find	SFRC206	430281	7352622	266	105	-89	123	79	3	0.46
Bald Hill	GC0424	428264	7356439	342	24	-90	0	14	4	0.34
Simons Find	SFRC146	430357	7352747	301	55	-60	92	52	3	0.45
Simons Find	SFRC209	430359	7352736	308	90	-60	84	45	2	0.68
Simons Find	SFRC240	429965	7353938	281	110	-88	37	63	4	0.34
Bald Hill	BHRC077	428386	7355885	330	22	-90	0	9	8	0.17
Simons Find	SFRC154	430445	7353011	335	30	-61	93	12	6	0.22
Bald Hill	GC0454	428309	7356446	353	18	-90	0	2	5	0.26
Simons Find	SFRC260	429533	7354375	296	76	-60	62	51	7	0.19
Bald Hill	GC0405	428274	7356432	345	24	-90	0	10	6	0.22
Simons Find	SFRC191	430370	7352596	305	105	-89	257	39	8	0.16
Bald Hill	BHRC517	429156	7354658	334	40	-60	45	10	6	0.22
Bald Hill	BHRC574	428204	7356049	277	110	-89	73	68	1	1.28
Bald Hill	GC0449	428283	7356446	349	18	-90	0	6	7	0.18
Bald Hill	BHRC157	428320	7355853	289	57	-90	0	51	5	0.26
Bald Hill	BHRC089	428533	7355065	282	64	-90	0	57	3	0.43
Simons Find	SFRC130	430307	7352544	292	80	-59	87	64	8	0.16
Simons Find	SFRC160	430428	7353047	306	60	-60	89	47	3	0.42
Bald Hill	BHRC168	428301	7356061	316	40	-90	0	30	2	0.63
Bald Hill	BHRC538	429173	7354619	306	50	-61	48	43	4	0.31
Simons Find	SFRC179	429806	7354122	275	78	-61	56	76	2	0.63
Simons Find	SFRC236	430052	7353814	265	105	-89	129	81	1	1.24
Simons Find	SFRC028	430415	7352760	334	72	-60	90	17	1	1.22
Simons Find	SFRC220	430412	7353043	287	80	-60	92	68	3	0.40
Bald Hill	BHRC509	428856	7354855	316	60	-60	36	28	6	0.20
Bald Hill	GC0336	428348	7356405	342	16	-90	0	13	1	1.19
Bald Hill	GC0382	428264	7356425	350	23	-90	0	3	9	0.13

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Bald Hill	BHRC220	428249	7356521	347	24	-90	0	13	4	0.30
Simons Find	SFRC054	430099	7353971	345	36	-60	60	5	1	1.17
Yangibana	YADD128	416907	7356853	315	30	-60	180	19	4.3	0.27
Simons Find	SFRC250	429801	7354170	310	50	-61	70	34	2	0.58
Simons Find	SFRC219	430436	7353032	320	78	-60	96	30	4	0.29
Simons Find	SFRC037	430338	7352397	310	48	-60	90	42	5	0.23
Simons Find	SFRC048	430248	7353756	340	42	-60	60	10	3	0.38
Bald Hill	BHRC593	428345	7356851	338	68	-90	216	19	9	0.13
Simons Find	SFRC031	430402	7352610	327	66	-60	90	21	6	0.19
Simons Find	SFRC053	430112	7353933	325	50	-60	60	25	4	0.28
Bald Hill	BHRC353	428282	7356500	351	18	-90	0	9	2	0.56
Bald Hill	GC0366	428289	7356418	353	22	-90	0	3	1	1.13
Simons Find	SFRC136	430318	7352594	289	100	-60	90	66	2	0.56
Bald Hill	BHRC549	428916	7354801	304	70	-61	48	44	4	0.28
Bald Hill	BHRC478	427800	7356448	281	90	-90	0	67	3	0.37
Simons Find	SFRC137	430383	7352807	309	50	-61	90	46	2	0.56
Bald Hill	BHRC589	427950	7356600	289	74	-90	98	63	3	0.37
Bald Hill	GC0445	428263	7356446	338	24	-90	0	20	1	1.11
Bald Hill	BHRC440	428312	7355979	322	36	-90	0	23	2	0.55
Simons Find	SFRC184	429924	7354028	285	65	-90	127	58	2	0.55
Simons Find	SFRC223	430463	7353160	348	30	-60	88	2	2	0.55
Bald Hill	GC0239	428283	7356375	346	15	-90	0	6	6	0.18
Simons Find	SFRC155	430426	7353013	308	60	-61	93	47	3	0.36
Simons Find	SFRC139	430360	7352628	326	70	-60	86	24	1	1.09
Simons Find	SFRC158	430439	7352988	315	40	-60	88	38	1	1.08
Simons Find	SFRC034	430368	7352474	331	36	-60	90	18	6	0.18
Bald Hill	BHRC005	428278	7355821	293	90	-60	90	55	3	0.36
Bald Hill	BHRC466	428605	7355191	330	30	-60	89	7	3	0.36
Bald Hill	GC0360	428259	7356418	342	23	-90	0	12	6	0.18
Bald Hill	BHRC076	428304	7355922	301	52	-90	0	40	6	0.18
Simons Find	SFRC046	430397	7352867	314	54	-60	90	41	2	0.54
	TRB197	422751	7353784	323	15	-90	0	7	1	1.07
Simons Find	SFRC067	430084	7353942	308	62	-60	60	45	2	0.53
Hatchett	HARC001	425011	7354874	302	48	-90	0	33	4	0.27
Bald Hill	BHRC356	428387	7356550	338	28	-90	0	22	3	0.35
Bald Hill	GC0440	428344	7356438	351	18	-90	0	4	5	0.21
Bald Hill	BHRC596	428291	7356804	294	75	-90	21	68	2	0.53
Simons Find	SFRC172	430091	7353840	275	100	-60	57	85	2	0.53
Bald Hill	BHRC227	428381	7356622	332	36	-90	0	30	3	0.35
Simons Find	SFRC081	430093	7353925	302	60	-60	55	51	3	0.35
Bald Hill	GC0375	428333	7356418	351	17	-90	0	3	4	0.26
Bald Hill	BHRC071	428301	7356047	334	40	-90	0	10	6	0.17
Bald Hill	BHRC310	427876	7356401	268	90	-90	0	80	3	0.34
Simons Find	SFRC047	430353	7352538	333	56	-60	90	16	1	1.03
Simons Find	SFRC041	430382	7352691	326	48	-60	90	22	5	0.21

Prospect	Hole_id	Easting	Northing	RL	EOH	Dip	Azimuth	Depth_ From	Intercept_m	Nb ₂ O ₅ _pct
Bald Hill	BHRC125	428321	7356119	325	28	-90	0	21	2	0.51
Simons Find	SFRC235	430098	7353798	277	100	-90	144	68	4	0.25
Bald Hill	BHRC009	428186	7355900	324	72	-60	90	19	4	0.25
Bald Hill	GC0379	428249	7356426	340	23	-90	0	16	3	0.34
Yangibana	YARC004	416927	7356854	330	18	-60	175	2	3	0.34

**SCHEDULE 3: SIGNIFICANT ROCK CHIP SAMPLES WHERE NIOBIUM PENTOXIDE VALUES EXCEEDS 0.6%.
COORDINATES ARE IN MGA94, ZONE 50.**

Prospect	SiteID	Easting	Northing	RL	Nb ₂ O ₅ _pct
Hatchett	141011	424975	7354676	320	6.8
Bald Hill	YBH20	428646	7356619	377	6.6
Simons Find	18RX012	430481	7352539	320	6.05
Bald Hill	YBH17	428387	7356364	367	3.49
Simons Find	17RX009	430553	7353202	320	3.31
Simons Find	17RX017	430112	7354002	320	3.23
Bald Hill	YBH5	428309	7356082	360	2.58
Spider Hill	141008	425273	7353888	320	2.45
Auer Far West	47141_PT	422731	7353442	350	2.3
Yangibana	18RX049	416700.9	7355664	320	1.9
Yangibana	18RX057	416961.1	7356519	320	1.86
Hatchett	141010	425002	7354562	320	1.74
Simons Find	1039469	429865	7354146	320	1.48
Yangibana	18RX040	418196.5	7356655	320	1.41
Simons Find	17RX010	430528	7353194	320	1.29
Yangibana	18RX054	416929.1	7356141	320	1.2
Simons Find	18RX013	430505	7352464	320	1.12
Bald Hill	YBH28	428442	7356812	373	1.12
Spider Hill	445	425274	7353893	320	1.1
Simons Find	1039475	430247	7353673	320	1.06
Simons Find	17RX019	430257	7353808	320	1.04
Spider Hill	1039490	430054	7354063	358	0.97
Terrys Find	141014	427725	7356417	320	0.89
Southern Ironstones	YFEN2	419657	7354708	352	0.84
Fraser's Bald Hill	YFR014	429483	7354437	320	0.81
Simons Find	17RX013	429527	7354438	320	0.78
Spider Hill	1039489	430051	7354062	358	0.77
Hatchett	141013	425011	7354849	320	0.7

The following section is provided for compliance with requirements for the reporting of exploration results under the JORC code (2012 edition).

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. 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. 	<ul style="list-style-type: none"> Samples used to determine the significant niobium intersections and mineralised context of the Yangibana Project (reported in this announcement) have been derived from reverse circulation (RC) drilling and diamond drilling. <p>Samples used in the maiden sighter test work comprised a composite sample of RC chips sourced from BHRC543; BHRC546; BHRC550 and BHRC551. Whilst these are 'Bald Hill South' samples, they represent along strike continuation of the same mineralisation trend from the Simon's Find trends, albeit at a lower intercept niobium concentration. Follow up test work utilised diamond core sourced from SFDD002.</p> <p>Rock chips were sampled from ironstone outcrops. These outcrops were targets for their prospective monazite content and niobium-bearing minerals were not expected.</p> <ul style="list-style-type: none"> Samples from reverse circulation drilling were collected from each metre from a rig mounted cyclone and split using a 3-level riffle splitter from which 2-4kg samples were sent for analysis Field duplicates, blanks and Reference Standards were inserted at a rate of approximately 1 in 20. <p>Diamond drill core is logged and marked for sampling. Prospective zones are sawn into half along the length and the drill core. One half is then further sawn in half. One quarter of the drill core is sent for analysis. Assayed intervals are based on geology with a minimum length of 0.2m.</p> <ul style="list-style-type: none"> Samples for assaying are prepared by drying, crushing, weighing splitting, and pulverising the split samples to produce a representative sample for sodium peroxide fusion and ICP-MS, ICP-OES analysis.

Criteria	JORC Code explanation	Commentary
		The initial sample for the sighter test work is not representative of the Simon's Find deposit in its entirety as and expected feed to the processing plan, merely providing an initial test of concept.
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc.). 	<ul style="list-style-type: none"> Reverse Circulation drilling at the various targets utilised a nominal 5 ¼-inch diameter face-sampling hammer. <p>Diamond drilling has been NQ and HQ diameter.</p>
Drill sample recovery	<ul style="list-style-type: none"> 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 loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Recoveries are recorded by the geologist in the field at the time of drilling/logging. If poor sample recovery is encountered during drilling, the geologist and driller have endeavoured to rectify the problem to ensure maximum sample recovery. Visual assessment is made for moisture and contamination. An integrated cyclone and splitter system were used to ensure representative samples and were routinely cleaned. Sample recoveries to date have generally been reasonable, and moisture in samples minimal. Insufficient data is available at present to determine if a relationship exists between recovery and grade.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All drill chip samples are geologically logged at 1m intervals from surface to the bottom of each individual hole to a level that supports appropriate future Mineral Resource studies. Logging (geological) is semi-quantitative given the nature of reverse circulation drill chips. All RC and diamond holes are logged in full. Photographs were taken of each sample.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill core was split along the length of the drill core. One half is then further split in half. One quarter of the sampled core is sent for analysis. The RC drilling rig is equipped with an in-built cyclone and triple tier riffle splitting system, which provided on bulk sample of approximately 25kg and a sub sample of 2-4 kg per metre drilled. All samples were split using the system described above to maximise and maintain consistent representivity. Most samples were dry. For wet samples the cleanliness of the cyclone and splitter was constantly monitored by the geologist and maintained to avoid contamination.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling 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. 	<ul style="list-style-type: none"> Bulk samples were placed in green plastic bags, with the sub-samples collected placed in calico sample bags. Field duplicates were collected directly from the splitter as drilling proceeded through a secondary sample chute. These duplicates were designed for lab checks as well as lab umpire analysis. A sample size of 2-4 kg was collected and considered appropriate and representative for the grain size and style of mineralisation.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Intertek (Perth) was used for all analysis work to determine significant intersections. This encompasses a sodium peroxide fusion using nickel crucibles and hydrochloric acid to dissolve the melt (FP6) together with ICP/OE & ICP/MS. <p>ALS (Perth) was the laboratory used for the sighter test work. Where assays were required, samples were digested using a 35.3% Lithium tetraborate ($\text{Li}_2\text{B}_4\text{O}_7$): 64.7% Lithium metaborate (LiBO_2), pre-fused ultra-pure X-ray flux. This was followed by XRF analysis. Mineral deportment was determined by QEMscan using industry standard techniques.</p> <p>Intertek (Perth) conducted checks on the assay data using OREAS Standards and blank samples which passed their QA/QC standards.</p> <ul style="list-style-type: none"> N/A Blind field duplicates were collected at a rate of approximately 1 duplicate for every 20 samples that are to be submitted to Genalysis for laboratory analysis. Field duplicates were split directly from the splitter as drilling proceeded at the request of the supervising geologist.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> At least two Company personnel verify all significant intersections. Some diamond holes have twinned RC drill holes corroborating the RC drill observations.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Initially geological observations and sampling information was completed on paper logs before being transferred to Microsoft Excel and subsequently an Access database. As the project progressed, the data was captured automatically at the drill site and then synced with the reputable third-party database host. The assay data were converted from reported elemental assays for a range of elements to the equivalent oxide compound as applicable to rare earth oxides and metals.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Final drillhole collars completed were collected by trained surveyors in each of the different campaigns using DGPS utilising a locally established control point. Accuracies of the drillhole collar locations collected is better than 0.1m. Grid system used is MGA 94 (Zone 50). Topographic control is based on the detailed 1m topographic survey undertaken by Hyvista Corporation in 2016 in combination with the ground surveying.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Substantial areas of the Simon's Find deposit have been infill drilled at a staggered 25m x 50m pattern, giving an effective 40m x 40 spacing. In general, and where allowed by the kriging parameters and data quality, this would allow portions of the deposit to be classified in the Measured category. Areas of 50m x 50m spacing are generally classified as Indicated, while zones with wider spacing or where blocks are extrapolated are generally classified as Inferred category. No sample compositing of samples is used in this report.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Most drill holes in the recent programme are angled and collared at -60° with only some at -90° to appropriately intersect the mineralization. Sampling bias related to drill orientation has not been introduced.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The chain of custody is managed by the project geologist who places calico sample bags in polyweave sacks. Up to 10 calico sample bags are placed in each sack. Each sack is clearly labelled with: <ul style="list-style-type: none"> Hastings Technology Metals Ltd

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Address of laboratory Sample range. <p>Samples were transported by R&L Transport from site to Perth and delivered Intertek/Genalysis / ALS, as required.</p> <p>The freight provider delivers the samples directly to the laboratory. Detailed records are kept of all samples that are dispatched, including details of chain of custody.</p>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> An audit of sampling has been completed following major drilling campaigns in 2020 and reviewed as part of the May 2021 Resource Update.

Section 2 Reporting of Exploration Results

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

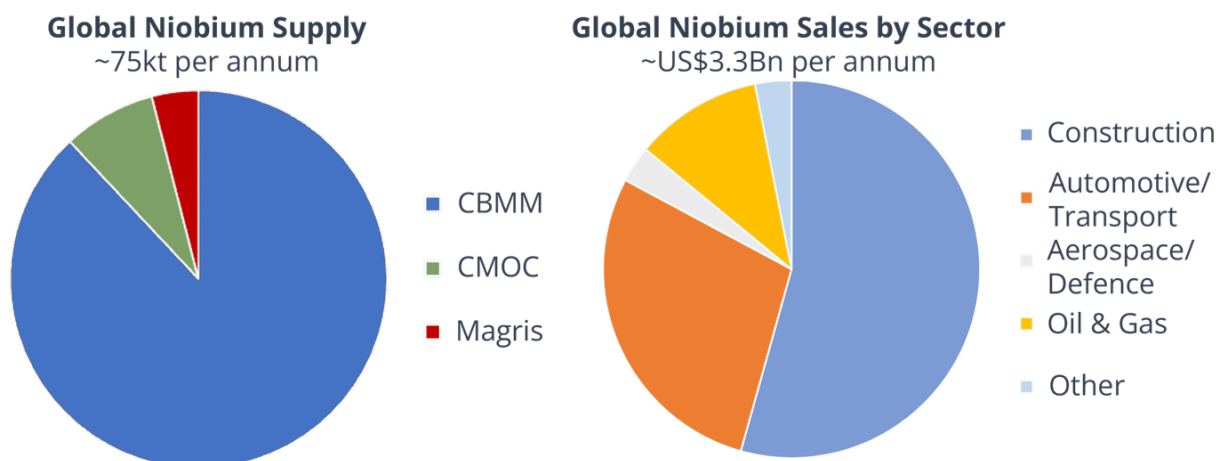
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The tenements of Yangibana are owned by Hastings Technology Metals Pty Ltd. The tenements are in good standing and no known impediments exist.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> All RC and Diamond Drilling on the tenement has been undertaken by Hastings Technology Metals Ltd. The discovery and delineation of Mineral Resources at Frasers, Simon's Find and Bald Hill is entirely the result of work performed by Hastings Technology Metals.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting, and style of mineralisation. 	<ul style="list-style-type: none"> The target Area is in the Gascoyne Province, between the Archaean aged Yilgarn Craton (to the south) and the Pilbara Craton (to the north). The geology comprises granitoids and medium- to high-grade metamorphic rocks which are overlain by variably deformed, low-grade metamorphosed sedimentary sequences and lies within the Glenburgh Terrane of the Gascoyne Province. The main orogenic and mineralisation event was the Capricorn Orogeny (1,820–1,770 Ma). The Gascoyne Province marks the high-grade metamorphic core of the Capricorn Orogen.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> REE mineralisation at the Yangibana REE Project is hosted within carbonatite-related ironstone dykes and associated fenite emplaced along structures within a variety of rock types but predominantly in granites.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole of down hole length and hole depth. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> All information that is relevant is supplied in Schedule 1. Information is not excluded.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> No top-cuts have been applied. Aggregate intercepts used have been based on a minimum grade of 0.1% Nb₂O₅ with a maximum internal dilution of 2 metres. No metal equivalents re used for the reporting of exploration results.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	<ul style="list-style-type: none"> True widths are generally estimated to be about 70%-100% of the down-hole width.

Criteria	JORC Code explanation	Commentary
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
Diagrams	<ul style="list-style-type: none"> 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 view. 	<ul style="list-style-type: none"> See diagrams included.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> All significant intersections are reported. Of the sighter test work, the composites and sizing domains that generated more optimal results have been reported.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Historical exploration only is available in ASX announcements: <ul style="list-style-type: none"> HAS: ASX. 22 November 2017: Final 2017 JORC Resource update including Auer, Auer North Results. HAS: ASX. 09 October 2017: High neodymium (Nd) and praseodymium (Pr) ore grade discovered at new targets. HAS: ASX. 29 January 2021. December 2020 Quarterly Report.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g., 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. 	<ul style="list-style-type: none"> The next phase of exploration is to undertake additional drilling to collected representative metallurgical sample material to enable further test work. This test work will refine some of the liberation, gravity separating and magnetic separation concepts as well as introduce flotation as a means of further niobium in concentrate upgrade.

Appendix 1: Niobium: A Critical and Strategic Mineral

Niobium is considered a critical and strategic mineral. With almost 90% of the estimated ~75kt per annum supply coming from two producers in Brazil and the remainder from Canada, almost all countries are forced to import niobium.



Source: NioCorp Presentation Q2 2024³

Majority of niobium demand used to strengthen steel

Approximately 90% of all niobium is consumed in steelmaking with the strength of steel increasing +30% by adding 0.03-0.05% niobium. Niobium improves steel toughness, corrosion/temperature oxidation resistance, and reduces brittleness. The increased steel strength results in less steel being required in construction, significantly reducing costs for industries including construction, automotive, aerospace and oil and gas.

Examples of structures containing steel (using niobium):

- Mega-buildings such as the One World Trade Centre, Zun Tower, Marina Bay Sands in Singapore. Niobium steel used to save construction costs and using a lower carbon footprint
- The Viaduct de Millau bridge in Southern France contains 0.025% Niobium and it reduced the overall weight by 60%.
- Further 300g of Niobium reduces the weight of a mid-sized car by 200kg and improves fuel efficiency by 5%.

High growth from next generation uses (Niobium-Lithium Batteries)

Niobium, outside of steel making, is used in a wide variety of small volume, high-valued added components including in superconductors, high-performance alloys, electronics and ceramics. There is significant recent market interest in Niobium given its use in new generation Niobium-Lithium-Ion Batteries reducing charging times whilst extending battery life.

³ NioCorp Presentation Q2/2024 Available at: https://gx0d43.a2cdn1.secureserver.net/wp-content/uploads/Detailed_NioCorp_Presentation_Q2-2024.pdf