

26 August 2024

## **HIGH-GRADE NIOBIUM, RARE EARTH AND HAFNIUM-RICH ZIRCON ROCK CHIP RESULTS AT HASTINGS YANGIBANA PROJECT**

### **HIGHLIGHTS**

- Multiple carbonatite-related ironstone intrusions (ranging from 100 to 650 metres in strike) have been mapped east and continuous to the Bald Hill deposit footprint at Yangibana. This focus area hosts a total of 3,000 metres combined ironstone strike.
- The following assays are rock chip samples taken from carbonatite-related ironstones (TREO mineralisation) in the footwall and along strike of the Bald Hill deposit.
  - Of 104 rock chip analyses reported in this announcement, **22% exceed 1.0% Nb<sub>2</sub>O<sub>5</sub>. An exceptional peak concentration of 23.69% Nb<sub>2</sub>O<sub>5</sub> was measured.**
  - 56% of 104 rock chip samples taken range between **0.25% to 8.91% TREO (with an average of 1.21 % TREO).**
  - 9% of the 104 rock chip samples depict ZrO<sub>2</sub> values higher than 0.1%, and an average ZrO<sub>2</sub>/HfO<sub>2</sub> ratio of 17.8. The peak measured concentration of ZrO<sub>2</sub> was 5.1% ZrO<sub>2</sub>.
  - 86% of the 104-rock chip sampled have ZrO<sub>2</sub>/HfO<sub>2</sub> ratios of 30:1 (an average of 13:1).
- Niobium and hafnium present within existing footprint of the permitted Yangibana Project.
- Niobium is a technology-critical metal with major uses in making steel lighter and stronger, high-tech alloys and faster recharging of Li-on batteries. Global production is centred on Brazil (about 90%, with new supply chains being sought).
- Hafnium is a critical metal with applications in aerospace, defence, and energy technologies.
- Zircon is the primary source of all hafnium. Zirconium and hafnium are contained in zircon at a ratio of about 50 to 1<sup>1</sup>.
- At Yangibana, a Bald Hill sample generated from process development test work reported XRF assays 1.35% Zr and 0.08% Hf. Subsequent standardless semi-quantitative analysis reported that zircon in the sample was the source of the reported zirconium and hafnium, contained at a ratio of 13 to 1 (49.0% / 3.8%). **The Hf-enriched zircons from Bald Hill thus contain 3.8 times the HfO<sub>2</sub> content compared to the benchmark of 50:1<sup>1</sup>.**
- Hastings is capable, with minor changes to current plant design and mine plans, to recover additional critical metals (i.e., zircon (ZrSiO<sub>4</sub>), ferro-columbite – (Fe)Nb<sub>2</sub>O<sub>6</sub>) and rare earths (TREO) within the current 17-year life of mine.
- With current exploration and updated Mineral Resource estimates, there is potential for life of mine and product extensions.
- An updated Mineral Resource estimate will be available by September 2024, to include ferro-columbite, zircon, hafnium in addition to rare earths.
- The additional critical minerals will provide a multi-commodity recovery process stream and by-product credit income.

<sup>1</sup> <https://www.usgs.gov/centers/national-minerals-information-center/zirconium-and-hafnium-statistics-and-information#:~:text=Zircon%20is%20the%20primary%20source,and%20rutile%2C%20or%20tin%20minerals.>

Hastings Technology Metals Ltd (ASX:HAS) ("Hastings" or "the Company") is pleased to announce the results of rock chip samples collected recently. The majority were sampled in the footwall of the planned Bald Hill pit throughout an area of approximately 80 hectares.

**Hastings Chief Geologist, Dr Louis Schürmann, said:**

"The success of the geological mapping and rock chip sampling to the east of the current Bald Hill pit underscores the multi-commodity exploration potential that remains within the Yangibana Project.

Further mapping and sampling preparations are underway as a prelude to drilling at this prospect. Hastings is committed to expanding the portfolio of minerals we aim to produce with the confirmation of anomalous niobium, zirconium and hafnium concentrations associated with rare earth mineralisation demonstrating our commitment to realise greater value from the Yangibana Project."



Louis Schurmann, Chief Geologist and Ravi Reddy, Principal Mine Planning Engineer at Yangibana

At the Bald Hill Footwall prospect there are 3,000 metres of combined strike extent of ironstone intrusions where niobium values are elevated. There are also localised occurrences elevated TREO, ZrO<sub>2</sub> and HfO<sub>2</sub>. These are presented in Figures 2-4 below. Geological mapping was also undertaken to the northwest of Bald Hill. Elsewhere at Yangibana, anomalous niobium has been recorded at Simon's Find, Bald Hill South, Hatchett and the Yangibana prospect.

A compilation of the rock chip samples is presented in Table 1.

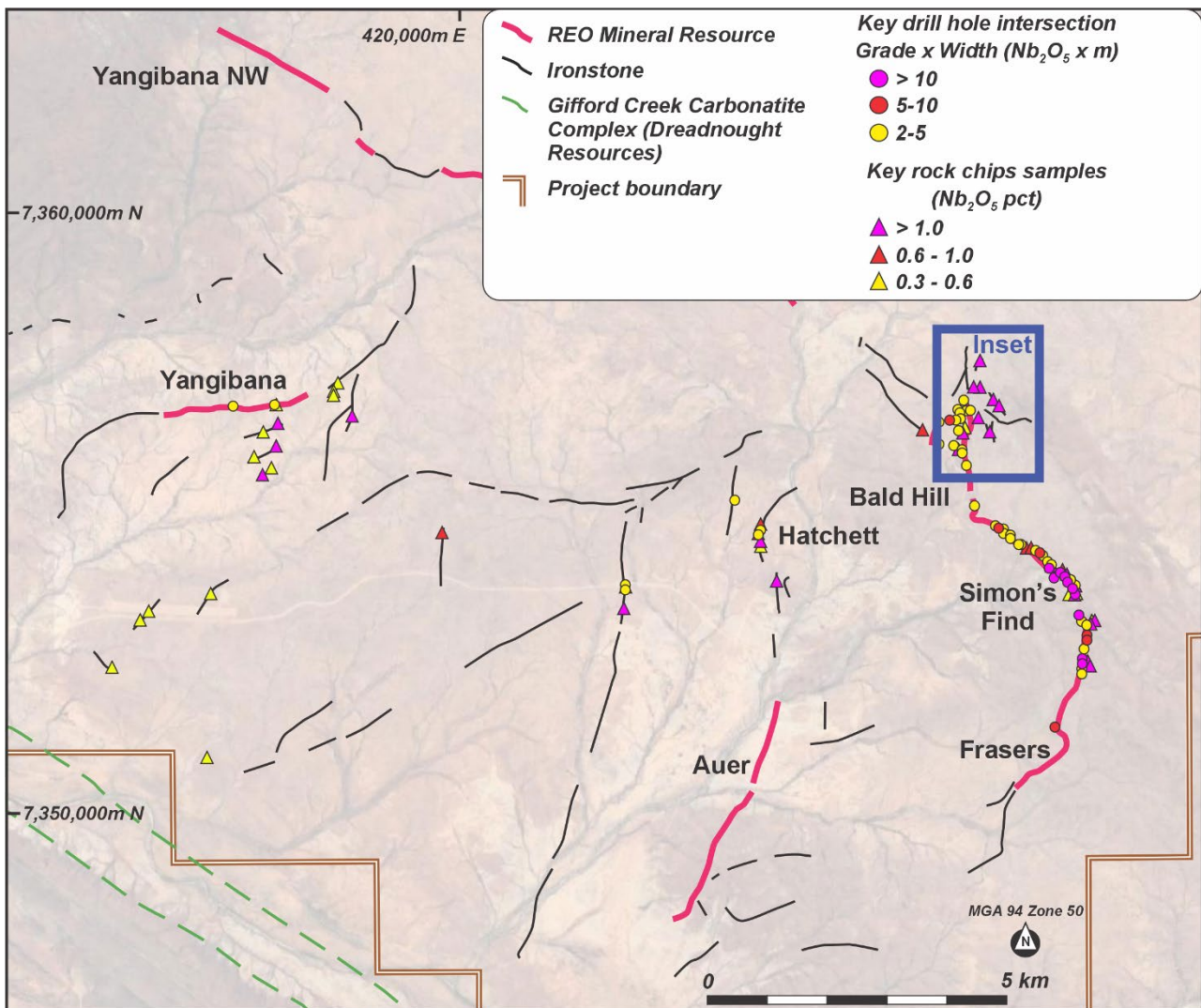


Figure 1: The distribution of niobium occurrences at the Yangibana Project. Depicted are the localities of the Yangibana mineral resources with reference to Bald Hill deposit and the Insert as reference to Figures 2, 3 and 4.





Figure 2: Photo of an ironstone outcrop along the western Bald Hill deposit footwall.

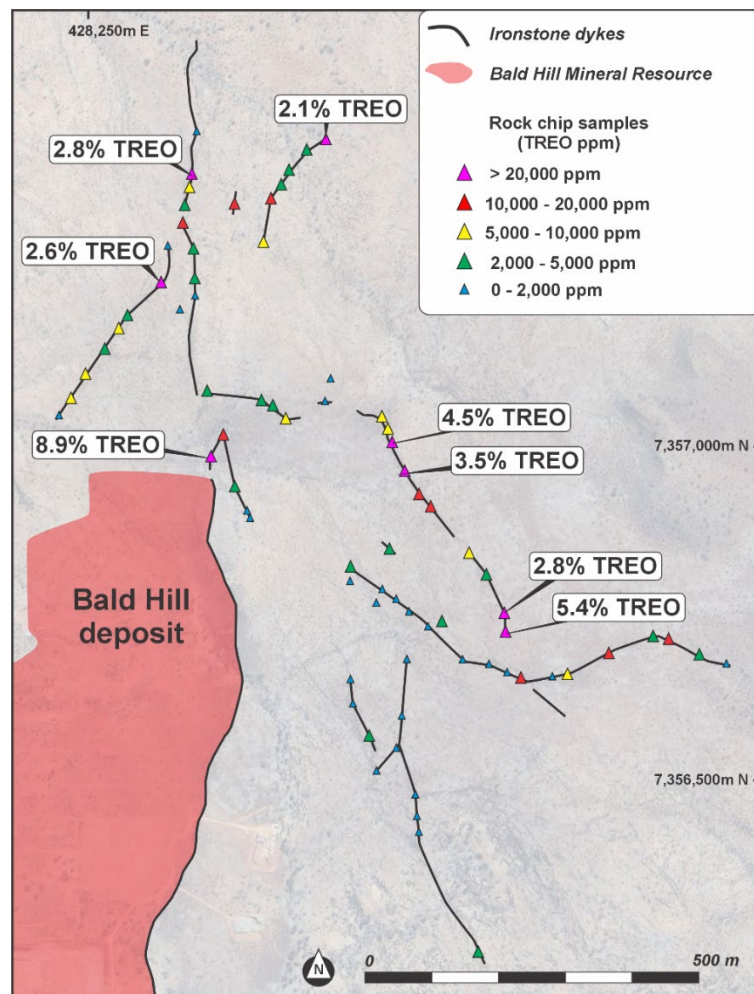


Figure 3: The distribution of TREO (ppm) for the rock chip samples taken of exposed ironstone intrusions to the east and north of the current Bald Hill deposit. Reference is made to Figure 1 for the insert locality.

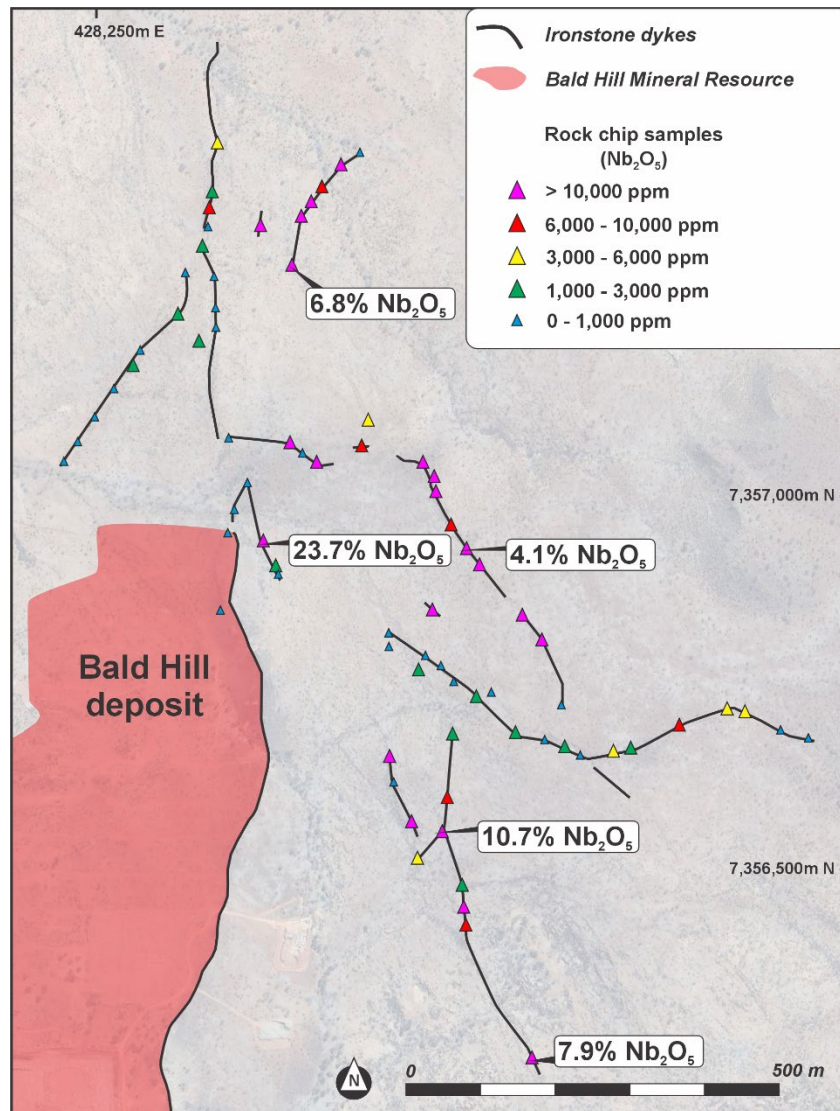


Figure 4: The distribution of  $\text{Nb}_2\text{O}_5$  (%) for rock chip samples taken of exposed ironstone intrusions to the east and north of the current Bald Hill deposit. Reference is made to Figure 1 for the insert locality.



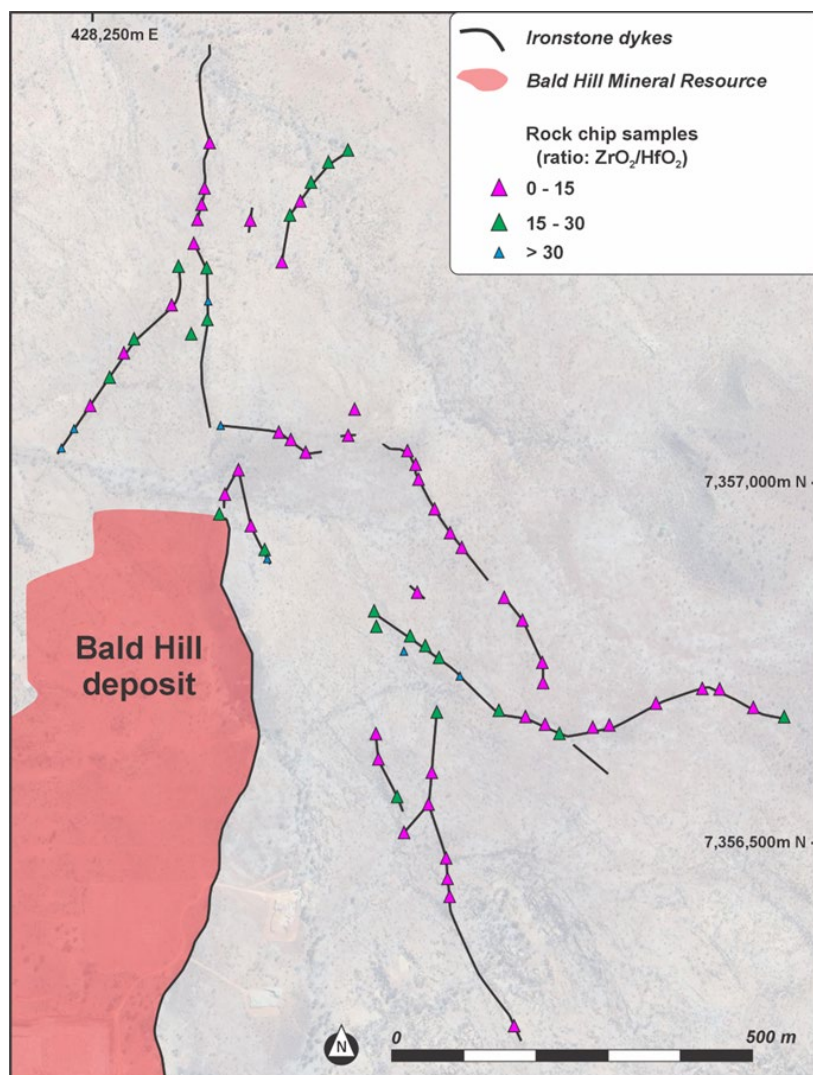


Figure 5: The distribution of ZrO<sub>2</sub>/HfO<sub>2</sub> ratio values for rock chip samples taken of exposed ironstone intrusions to the east and north of the current Bald Hill deposit. Reference is made to Figure 1 for the insert locality. The USGS National Minerals Information Centre states "Zircon is the primary source of all hafnium. Zirconium and hafnium are contained in zircon at a ratio of about 50 to 1." Standard-less semi-quantitative analysis on zircon recovered from Bald Hill samples that were used in process development test work report zirconium and hafnium are contained at a ratio of 13 to 1 (49.05% / 3.78%).

Table 1. Rock chip assays for major economic elements.

Sample No.	MGA_East	MGA_North	HfO <sub>2</sub> , ppm	Nb <sub>2</sub> O <sub>5</sub> , ppm	ZrO <sub>2</sub> , ppm	TREO, ppm	NdPr/TREO	ZrO <sub>2</sub> /HfO <sub>2</sub>
3329	428474	7356727	1	1431	14	13311	43.9	11.5
3330	428446	7356814	9	12403	89	9926	43.9	10.4
3331	428421	7356851	1	309	8	13054	44.2	8.6
3332	428422	7356901	4	1442	50	12522	45.1	13.7
3333	428432	7356956	1	64	9	2318	43.6	16.0
3334	428706	7356850	384	65122	4918	2653	45.9	12.8
3335	428825	7356844	29	22408	140	7533	47.3	4.8
3336	428852	7356811	6	11298	41	3239	46.4	6.2
3337	428878	7356752	6	837	20	27554	44.5	3.4
3338	428878	7356724	5	839	20	53686	44.7	4.0
3339	429209	7356678	4	117	100	1433	45.3	23.5
3340	429171	7356690	7	182	82	4353	45.1	11.8
3341	429124	7356716	8	3136	68	16780	47.7	8.7
3342	429100	7356718	17	3435	108	2680	52.6	6.4
3343	429035	7356695	11	8920	72	14421	48.4	6.3
3346	428971	7356665	15	2289	153	6963	45.6	10.3
3347	428768	7356913	106	15376	1483	14123	46.7	14.0
3348	428751	7356932	49	40858	258	18090	46.4	5.3
3349	428729	7356965	13	8974	88	34938	47.6	7.0
3350	428710	7357009	35	27316	228	45180	47.8	6.6
3351	428707	7357028	9	14910	61	7627	45.4	6.8
3352	428693	7357046	37	36097	169	8266	45.9	4.6
3353	428618	7357105	23	3652	281	1116	47.0	12.0
3354	428610	7357070	31	7629	211	1341	47.3	6.9
3355	428550	7357045	25	13693	211	5171	44.9	8.6
3356	428533	7357069	3	242	19	3523	48.7	5.7
3357	428515	7357073	92	102706	571	4797	45.0	6.2
3358	428457	7357021	1	140	9	11190	47.5	10.0
3361	428439	7356986	2	401	15	89169	47.1	7.9
3363	428647	7356802	14	836	313	950	43.9	22.3
3364	428646	7356821	9	219	273	2256	46.0	28.9

Sample No.	MGA_East	MGA_North	HfO <sub>2</sub> , ppm	Nb <sub>2</sub> O <sub>5</sub> , ppm	ZrO <sub>2</sub> , ppm	TREO, ppm	NdPr/TREO	ZrO <sub>2</sub> /HfO <sub>2</sub>
3365	428696	7356791	17	192	321	811	47.5	18.5
3366	428732	7356686	8	1136	158	780	50.0	19.4
3367	428729	7356598	21	8875	220	234	41.9	10.7
3368	428717	7356552	651	107191	8632	1210	36.6	13.3
3369	428747	7356450	16	11376	128	271	38.1	7.8
3370	428744	7356481	13	1595	108	41	40.1	8.2
3371	428750	7356426	24	6831	181	92	38.7	7.5
3372	428839	7356248	255	79461	3161	2626	46.5	12.4
3373	428898	7356104	8	301	150	90	29.7	19.6
3374	428948	7356662	4	5688	36	1068	45.9	8.1
3375	428902	7356656	1	903	22	13976	42.3	18.3
3376	428883	7356667	3	1520	22	190	38.4	8.0
3377	428856	7356678	5	622	51	507	47.5	9.7
3378	428817	7356687	10	1252	250	102	27.4	25.5
3379	428784	7356740	6	213	91	2897	45.7	15.0
3381	428764	7356734	21	1032	733	284	43.5	34.6
3382	428735	7356756	8	777	199	305	32.9	23.4
3383	428716	7356775	11	518	277	45	21.1	24.7
3384	428686	7356769	8	1150	307	167	36.2	36.1
3385	428433	7357083	0	40	9	2499	48.7	40.1
3386	428414	7357229	1	733	12	190	41.3	20.6
3387	428414	7357255	0	43	8	3181	45.8	34.4
3388	428412	7357299	2	379	34	2307	48.7	20.5
3390	428478	7356942	670	236932	6419	3336	53.7	9.6
3391	428498	7356899	6	1919	155	150	42.5	24.9
3392	428495	7356907	8	1750	154	188	46.1	19.2
3393	428498	7356899	3	739	82	74	26.2	31.8
3394	428396	7357334	1	81	16	13575	47.6	19.6
3395	428405	7357364	3	753	23	3149	49.3	8.1
3396	428405	7357366	1	690	12	1350	47.6	12.9
3406	426578	7357949	2	95	19	3873	29.7	12.3
3407	426574	7357908	4	40	140	522	29.4	35.0
3408	426569	7357880	1	95	16	5388	31.0	19.6



Sample No.	MGA_East	MGA_North	HfO <sub>2</sub> , ppm	Nb <sub>2</sub> O <sub>5</sub> , ppm	ZrO <sub>2</sub> , ppm	TREO, ppm	NdPr/TREO	ZrO <sub>2</sub> /HfO <sub>2</sub>
3409	426595	7357897	1	34	31	3393	33.7	23.9
3410	426578	7357820	1	32	54	1213	28.0	41.7
3411	426779	7357795	4	8	201	227	18.2	48.8
3412	426778	7357597	1	292	16	19845	40.1	13.7
3413	426780	7357607	8	115	382	6671	42.8	49.9
3414	426884	7357375	0	4	5	3870	31.8	22.9
3415	426686	7357990	0	1	16	5970	30.9	45.8
3416	426737	7358040	0	2	19	17919	34.1	80.2
3417	426898	7357345	0	13	5	2685	29.4	15.3
3419	426980	7357191	5	832	104	5510	33.1	19.2
3421	427006	7357163	3	766	95	2676	31.7	36.4
3422	427103	7357029	2	85	28	1021	40.6	14.1
3423	427124	7356996	4	2215	68	205	31.5	16.8
3424	427153	7356959	11	75430	96	1780	35.0	8.9
3425	427185	7356924	0	215	4	139	30.9	17.2
3426	427271	7356817	0	47	4	5368	36.1	34.4
3427	428392	7357209	12	1576	230	339	35.3	18.9
3428	428396	7357336	4	1313	43	1321	42.6	11.8
3429	428374	7357303	0	26	5	364	42.5	22.9
3430	428364	7357247	6	1582	43	26176	45.1	7.3
3431	428312	7357201	0	69	7	4608	42.1	19.1
3432	428304	7357177	8	1922	42	7997	41.4	5.5
3433	428277	7357149	0	256	7	4893	41.6	28.6
3434	428230	7357075	0	48	8	7905	40.9	34.4
3435	428251	7357110	1	339	16	5024	41.3	13.7
3436	428211	7357050	948	275	51058	1067	19.8	53.9
3437	428647	7356655	98	32785	1071	908	44.6	11.0
3438	428653	7356618	1	134	9	71	32.6	11.5
3439	428677	7356568	72	20156	1158	4510	46.6	16.1
3440	428685	7356518	9	4858	82	942	38.5	9.6
3441	428517	7357312	47	68714	227	7719	44.0	4.8
3442	428474	7357365	22	16291	105	17043	46.6	4.7
3443	428528	7357377	73	23407	1332	13332	45.6	18.2

Sample No.	MGA_East	MGA_North	HfO <sub>2</sub> , ppm	Nb <sub>2</sub> O <sub>5</sub> , ppm	ZrO <sub>2</sub> , ppm	TREO, ppm	NdPr/TREO	ZrO <sub>2</sub> /HfO <sub>2</sub>
3444	428542	7357396	8	13245	70	3107	47.3	9.0
3445	428557	7357416	33	9961	635	2528	45.2	19.2
3446	428582	7357446	124	25513	2055	2199	46.7	16.6
3447	428608	7357464	3	54	66	21141	47.3	20.8
3448	428419	7357476	5	4136	47	1559	45.6	9.5
3449	428409	7357410	1	1692	8	27803	46.7	6.9
3450	428406	7357390	5	6083	36	5098	45.2	7.0

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 REM and associated critical minerals like ferro-columbite, and hafnium-enriched zircon.

For more information, please visit [www.hastingstechmetals.com](http://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'.

## 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.

## TERMINOLOGY USED IN THIS REPORT

**Total Rare Earths Oxides, TREO**, is the sum of the oxides of lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), and samarium (Sm,) europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y).

**Critical Metals** is niobium oxide (Nb<sub>2</sub>O<sub>5</sub>), zirconium oxide (ZrO<sub>2</sub>), and hafnium oxide (HfO<sub>2</sub>).

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"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling of the target area west of Bald Hill pit comprises of 104 rock chip samples, collected by an experienced geologist from outcropping ironstone intrusions and fenitised country rocks.</li> <li>Due to the fine-grained nature, sample size varied from 1.5 to 3 kg in weight, and was geologically logged, photographed with calico bags and pre marked numbers. Each sample represents several rock chips over several metres of strike.</li> <li>Samples were selected for coverage over the outcrop area and similarity in appearance (i.e., lithology, and alteration).</li> <li>Samples were placed in pre-marked calico bags, tied and placed in polyweave bags (10 calico sample bags per polyweave bag. Polyweave bags were well marked (i.e., bag number, range of sample numbers within the polyweave bag, client details and laboratory address and sealed (i.e., by cable tie) and freighted to Intertek Laboratories in Perth.</li> <li>The location of samples taken was recorded with a Garmin GPS unit.</li> <li>The meta data related to the samples was sent to Rock Solid Data Pty Ltd, which hosts Hastings Technical Metals Ltd' database.</li> <li>The metal data was verified by a database geologist from APEX and Rock Solid Data Pty Ltd before uploaded it the main database.</li> <li>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.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results are reported in this announcement.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results are reported in this announcement.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Each sample was geologically logged for lithology, alteration, mineralisation, and general mineralogy.</li> <li>The rock chips samples are qualitative and may not represent the overall average grade of the outcrop. The geologist, however, endeavoured to take several rock chips along the outcrop strike.</li> <li>Photographs were taken of each sample, and a representative sub-sample was taken for thin section work.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results are reported in this announcement.</li> <li>Hasting Technical Metals Ltd has conducted sufficient verification of rock chip sampling methods and techniques to demonstrate that the results can be used for planning further target generation and exploration programmes.</li> <li>The rock chip sample was dried, crushed and pulverized to approximately 2mm in size, and then pulverised further in a pulverizing mill by Intertek in Maddington, Western Australia using method SP96.</li> <li>Samples are an indication of parts of the ironstone intrusion sampled and do not represent overall average grade of the carbonatite-related ironstone intrusions.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were sent to Intertek Laboratory in Perth for geochemical analysis. This encompasses a sodium peroxide fusion using nickel crucibles and hydrochloric acid to dissolve the melt (FP6) together with ICP/OE &amp; ICP/MS.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Intertek (Perth) conducted checks on the assay data using OREAS Standards and blank samples which passed their QA/QC standards.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>At least two Company personnel verify rock chips taken and the locality.</li> <li>Hastings Technical Metals Ltd (Hastings) has a well organised and extensive database managed by a reputable third-party, Rock Solid Data Pty Ltd.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Hastings has collected all coordinates in MGA94 Zone 50.</li> <li>Hastings used a hand-held GPS with accuracy of <math>\pm 5</math> m for surveying of rock chip sample locations.</li> <li>No information regarding topographic control was provided.</li> <li>No drilling has been undertaken in the specific area investigated and rock chip sampled.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Sample / Data spacing varies due to outcrop variability and is not representative of the overall grade of the ironstone intrusives.</li> <li>No drilling results are reported in this announcement.</li> <li>No estimation of Mineral Resources or Ore Reserves has been done. No sample compositing of samples is used in this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Hasting has not observed any material issues to date.</li> <li>Hastings is aware of the importance of understanding structural controls on mineralisation style and type and has tailored its exploration accordingly to determine possible relationships.</li> <li>The rock chip sampling was done to give an overall indication of the mineralogy of the intrusions and is not quantitative.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>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"> <li>Hastings Technology Metals Ltd</li> <li>Address of laboratory</li> <li>Sample range.</li> </ul> </li> </ul> <p>Samples were transported by R&amp;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"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Hasting has undertaken validation of the nature and quality of the sampling conducted.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The tenements of Yangibana are owned by Hastings Technology Metals Pty Ltd.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Minimal historic exploration has been noted in the area subjected to rock chip sampling. No evidence of previous testing of the newly identified ironstone intrusions has been reported.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting, and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>The Gascoyne Province marks the high-grade metamorphic core of the Capricorn Orogen.</li> <li>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.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole of down hole length and</li> <li>hole depth.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken in the areas rock chipped in this announcement.</li> <li>No drilling results are reported in this announcement.</li> <li>No information on historical drilling has been found, and there is no on-ground evidence.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No top-cuts have been applied.</li> <li>No drilling has been undertaken and no data / intersections have been aggregated.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No metal equivalents are used for the reporting of rock chip analytical results.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	<ul style="list-style-type: none"> <li>Reported rock chip analytical results have no true width associated.</li> <li>No drilling has been undertaken.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional view.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriated maps and diagrams are included within the main body of this announcement.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Assays of major economic elements for rock chip samples are included in Table 1 of the announcement (Sample Number, MGA_East, MGA_North, HfO<sub>2</sub> ppm, Nb<sub>2</sub>O<sub>5</sub> ppm, ZrO<sub>2</sub> ppm, TREO ppm, NdPr/TREO and ZrO<sub>2</sub>/HfO<sub>2</sub>).</li> <li>Table 2 summarises the complete assay results for all rock chips (104 samples) sampled during sampling program (Sample Number, Sample Type, MGA_East, MGA_North, RL, Field ID, Ba ppm, Ce ppm, Dy ppm, Er ppm, Eu ppm, Gd ppm, Hf ppm, Ho ppm, La ppm, Lu ppm, Nb ppm, Nd ppm, Pr ppm, Sm ppm, Tb ppm, Th ppm, Tm ppm, Yb ppm, Y ppm and Zr ppm).</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>The rock chip sampling program was completed to the east, north-east and north of the current planned Bald Hill pit footprint.</li> </ul>

Criteria	JORC Code explanation	Commentary
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The next phase of exploration is to expand the eastern part of the Bald Hill, Bald Hill South and Simon's Find ore bodies.</li> <li>Additional detailed mapping will be undertaken in the same area in preparation for drill testing if appropriate.</li> </ul>