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# YANGIBANA DRILLING CONFIRMS SIGNIFICANT MINERALISATION EXTENSION NOW UP TO 8KM LONG

- Results from drilling at Simon's Find confirm a major 2km long zone
  of economic mineralisation, significantly expanding the existing
  resource base across the Yangibana Rare Earths Project.
- Simon's Find and the recently announced Fraser's North and South drill results form a continuous zone of economic mineralisation 4km long.
- The Fraser's Simon's Find Bald Hill trend now forms an 8km-long economic mineralised corridor.
- Simon's Find results contain world-beating quantities of neodymium (Nd<sub>2</sub>O<sub>3</sub>) and praseodymium (Pr<sub>6</sub>O<sub>11</sub>) that, when combined, total 52% of the TREO (total rare earth oxides) values. These results are significantly higher than the 40-41% values recorded from the nearby Bald Hill and Frasers deposits.
- High-grade and shallow intersections from Simon's Find include:
  - 2m @ 2.78% TREO from 46m
  - 6m @ 1.20% TREO from 43m
    - including 4m @ 1.61% TREO
  - 4m @ 1.21% TREO from 46m
  - 15m @ 0.72% TREO from 37m
    - including 6m @ 1.11% TREO
  - 2m @ 1.38% TREO from 67m
  - 7m @ 0.89% TREO from 31m
    - including 2m @ 1.76% TREO
  - 3m @ 1.40% TREO from 11m
  - 6m @ 0.75% TREO from 39m
    - including 2m @ 1.51% TREO
- 83 out of 96 holes (~86%) reported significant intercepts of grades above the lower economic TREO cut-off grade for Simon's Find.

# Introduction

Australia's next rare earths producer Hastings Technology Metals Limited (ASX: HAS) ("Hastings" or "the Company") is pleased to announce further significant results for the Simon's Find deposit as part of the 2020 exploration drilling program for the Yangibana Rare Earths Project ("Yangibana") in Western Australia.

Recent drilling in the Simon's Find area has resulted in significant rare earths results as provided in Table 1.



### Simon's Find - Major Mineralised Trend Defined

The Company can now report that it has successfully delineated, as a minimum, approximately 2km of economic mineralisation (Figure 1), forming the Simon's Find resource area through the completion of close-spaced reverse circulation (RC) drilling.

Recent drilling to target ironstone rocks hosting rare earths has returned consistent grades and widths of mineralisation over a 2km-long zone, which remains open along strike and down dip. Results have also confirmed that Simon's Find includes exceptionally high quantities of neodymium and praseodymium, widely recognised as the two most important rare earths elements required over the next decades to satisfy global demand for electric vehicles, renewable energy projects and industrial automation.

From the results underlying this announcement for Simon's Find, neodymium and praseodymium (together, "NdPr") represent approximately 52% of the total rare earths content. This is at least 25% higher than existing results from the nearby Bald Hill and Frasers deposits, which have a NdPr:TREO ratio of approximately 40-41% of total rare earths.

A 40-41% ratio is widely acknowledged as world leading when compared to other known rare earths deposits, which typically report ratios in the 15-25% range. The 52% recorded at Simon's Find confirms the special and unique geological properties of Yangibana and further underpins Hastings' accelerated march to becoming Australia's next rare earths producer.

These new results are expected to substantially add to the 20.86Mt mineral resource<sup>1</sup> (see ASX announcement dated 25 February 2020) already confirmed at Yangibana, with a new mineral resource and mining reserve estimate expected to be completed over the coming months.

Simon's Find is located in close proximity to the site of Yangibana's proposed processing plant. The nature of Simon's Find's softer geological host rocks means this deposit is expected to play an important role during the production start-up phase of Yangibana.

#### Frasers - Simon's Find Trend

Drill results released during the year have confirmed that Simon's Find forms the northern portion of a defined and continuous 4km-long zone of economic mineralisation (Figure 1) when including the recently released Fraser's South and Fraser's North drilling results.

#### Frasers - Simon's Find - Bald Hill Trend

Hastings has now defined a single, largely coherent zone of mineralisation commencing at Fraser's South and finishing at Bald Hill (the largest of Yangibana's rare earths deposits) that is approximately 8km in length (Figure 1).

Substantial potential exists for continued exploration throughout this zone, which has demonstrated significant capacity to host rare earths, while opening up enormous opportunities for mineral resource expansions and extensions to Yangibana's mine life within close proximity of the processing plant location.

<sup>&</sup>lt;sup>1</sup> Hastings is not aware of any new information or data that materially affects the information in this market announcement. In the case of estimates of 'mineral resources' or 'ore reserves', all material assumptions and technical parameters underpinning the estimates in this market announcement continue to apply and have not materially changed. Mineral resource comprises 4.15mt measured, 11.25mt Indicated and 5.46mt inferred.



This zone has been lightly drilled and, on average, only between 40-70m below the surface. Additional opportunities to the north and south of this trend have been identified by geophysics and ground mapping. Down-dip extensions remain open along the entire 8km of defined mineralisation.

Exploring and delineating the mineralisation in this zone was a key objective of the 2020 exploration drilling program, which has been successfully delivered.

In fact, the 2020 exploration drilling program has been so successful that the vast majority of holes reported to date have delivered intercepts of TREO considered to be economic by the Company.

**Hastings Technology Metals' Executive Chairman, Charles Lew, commented:** "Hastings has delivered and exceeded all of its key objectives for the 2020 exploration drilling program. The results from drilling over the past several months have shown the magnitude of the resource potential that exists at Yangibana."

"Hastings has now defined and delivered a single coherent zone of economic mineralisation trending more than 8km in length from Fraser's through to Simon's Find and Bald Hill, with further upside in all areas along this zone to the north, south and at depth."

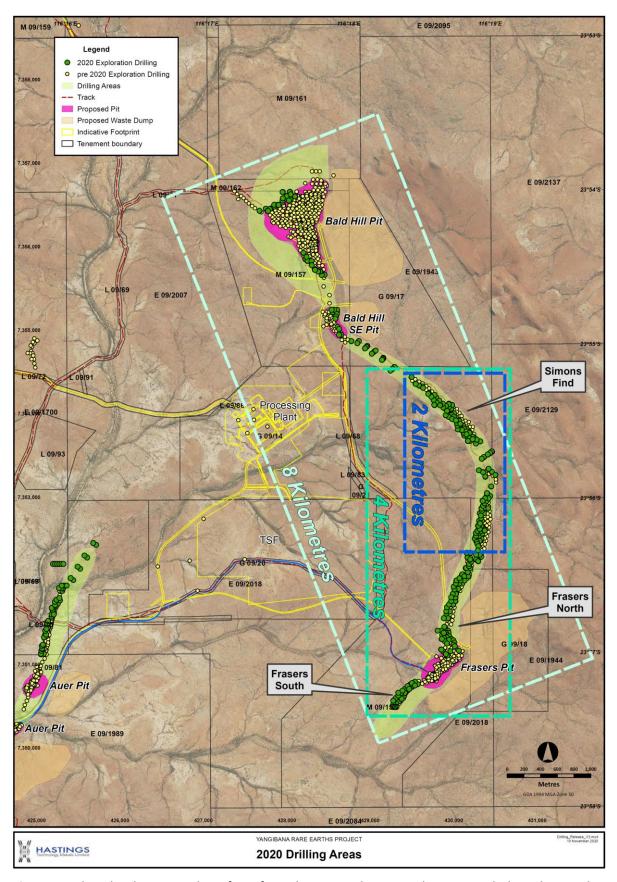
"Additionally, the ability to replicate the results from the past few months into other areas of the tenement package remains high, with similar known geological structures demanding additional work."

"While the average head grades at Simon's Find results may be lower than at Yangibana's other deposits, what is important and makes this deposit such a stand-out – in global terms – are the very high levels of neodymium and praseodymium – at 52% of total rare earths reported."

"Hastings will now start the process of collating the drilling information to define a new mineral resource for Simon's Find.

"The success at Simon's Find comes amid a busy period for Hastings as we advance Yangibana's development by concluding more offtake contracts and settling on a coastal site for our project's hydrometallurgical plant."





**Figure 1:** The 8km-long corridor of confirmed rare earths mineralisation, including the newly defined 2km-long Simon's Find zone.



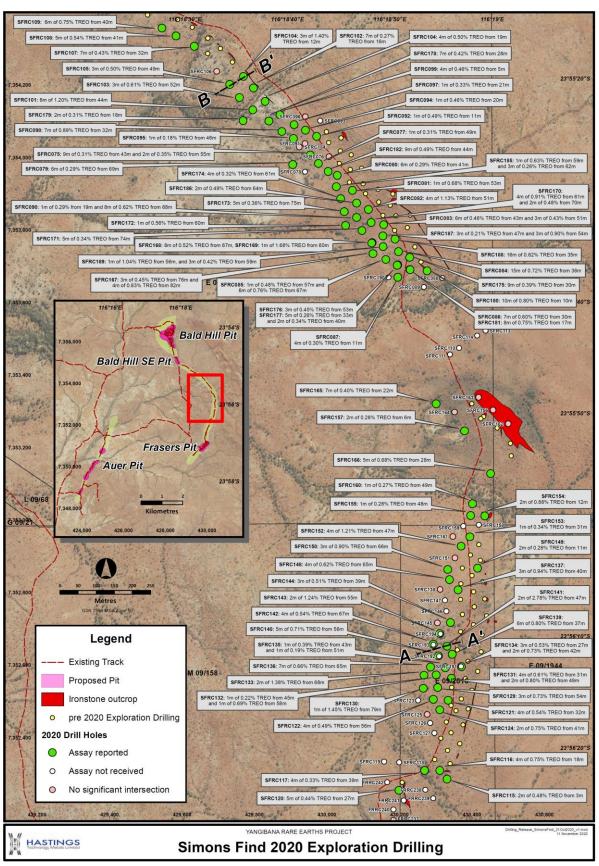


Figure 2: Results from Simon's Find confirm a 2km-long strike length of economic mineralisation.



Table 1: Significant intersections from drilling at Simon's Find:

Hole-ID	Depth	Depth	Intercept	TREO %	Nd <sub>2</sub> O <sub>3</sub> + Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub> + Pr <sub>6</sub> O <sub>11</sub>
	From	То			%	% of TREO
SFRC075	43	52	9	0.31	0.15	50%
and	<i>55</i>	<i>57</i>	2	0.35	0.19	52%
SFRC077	49	50	1	0.31	0.16	51%
SFRC079	69	75	6	0.29	0.14	49%
SFRC080	41	47	6	0.29	0.14	47%
SFRC081	53	54	1	0.68	0.39	57%
SFRC082	51	55	4	1.13	0.56	49%
SFRC083	43	49	6	0.46	0.22	49%
and	51	54	3	0.43	0.24	55%
SFRC084	38	53	15	0.72	0.35	48%
SFRC085	<i>57</i>	58	1	0.48	0.24	50%
and	67	73	6	0.76	0.39	51%
SFRC086	30	37	7	0.60	0.31	51%
SFRC087	11	15	4	0.30	0.16	53%
SFRC090	68	76	8	0.62	0.31	49%
SFRC092	11	13	2	0.49	0.26	54%
SFRC094	20	21	1	0.46	0.23	50%
SFRC095	46	47	1	0.18	0.09	51%
SFRC097	21	22	1	0.33	0.18	53%
SFRC098	32	39	7	0.89	0.47	52%
SFRC099	5	9	4	0.46	0.21	45%
SFRC100	19	23	4	0.50	0.27	53%
SFRC101	44	50	6	1.20	0.66	55%
SFRC102	11	18	7	0.27	0.14	51%
SFRC103	52	55	3	0.61	0.30	49%
SFRC104	12	15	3	1.40	0.74	53%
SFRC105	49	52	3	0.50	0.27	54%
SFRC107	32	39	7	0.43	0.20	46%
SFRC108	41	46	5	0.54	0.24	44%
SFRC109	40	46	6	0.75	0.35	46%
SFRC115	2	5	2	0.48	0.29	60%
SFRC116	18	22	4	0.75	0.40	53%
SFRC117	39	43	4	0.33	0.18	53%
SFRC120	27	32	5	0.44	0.22	50%
SFRC121	32	36	4	0.54	0.30	55%
SFRC122	32	36	4	0.49	0.26	54%
SFRC124	41	43	2	0.75	0.44	59%
SFRC125	74	75	1	0.24	0.14	56%
SFRC129	54	57	3	0.73	0.43	59%
SFRC130	79	80	1	1.45	0.73	51%
SFRC131	31	35	4	0.61	0.33	54%



Hole-ID	Depth	Depth	Intercept	TREO %	Nd <sub>2</sub> O <sub>3</sub> + Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub> + Pr <sub>6</sub> O <sub>11</sub>
	From	То			%	% of TREO
and	49	51	2	0.80	0.45	56%
SFRC132	45	46	1	0.22	0.11	52%
and	58	59	1	0.69	0.38	54%
SFRC133	68	70	2	1.38	0.73	52%
SFRC134	27	30	3	0.53	0.31	58%
and	42	44	2	0.73	0.40	55%
SFRC135	42	44	2	0.39	0.23	58%
SFRC136	65	72	7	0.66	0.36	56%
SFRC137	40	43	3	0.94	0.47	50%
SFRC139	37	43	6	0.80	0.44	55%
SFRC140	56	61	5	0.71	0.40	56%
SFRC141	47	49	2	2.78	1.54	55%
SFRC142	67	71	4	0.54	0.29	53%
SFRC143	55	57	2	1.24	0.69	56%
SFRC144	39	42	3	0.51	0.27	54%
SFRC148	65	70	5	0.50	0.27	54%
SFRC149	11	13	2	0.26	0.13	51%
SFRC150	66	69	3	0.90	0.57	63%
SFRC152	47	51	4	1.21	0.68	56%
SFRC153	29	32	3	0.34	0.17	52%
SFRC154	12	14	2	0.88	0.46	53%
SFRC155	48	49	1	0.28	0.15	55%
SFRC157	6	8	2	0.28	0.14	49%
SFRC160	49	50	1	0.27	0.14	50%
SFRC165	22	29	7	0.40	0.22	55%
SFRC166	28	33	5	0.68	0.36	54%
SFRC167	82	86	4	0.83	0.31	37%
SFRC168	67	75	8	0.52	0.25	48%
SFRC169	60	61	1	1.68	0.79	47%
SFRC170	61	65	4	0.91	0.47	51%
and	70	72	2	0.48	0.26	55%
SFRC171	74	79	5	0.34	0.17	50%
SFRC172	60	61	1	0.56	0.28	50%
SFRC173	75	80	5	0.36	0.17	49%
SFRC174	61	65	4	0.32	0.17	52%
SFRC175	30	39	9	0.39	0.20	50%
SFRC176	53	56	3	0.45	0.25	55%
SFRC177	33	38	5	0.26	0.12	46%
and	40	42	2	0.34	0.17	50%
SFRC178	28	35	7	0.42	0.22	52%
SFRC179	18	20	2	0.31	0.14	47%
SFRC180	10	20	10	0.80	0.43	54%
SFRC181	17	25	8	0.75	0.34	45%

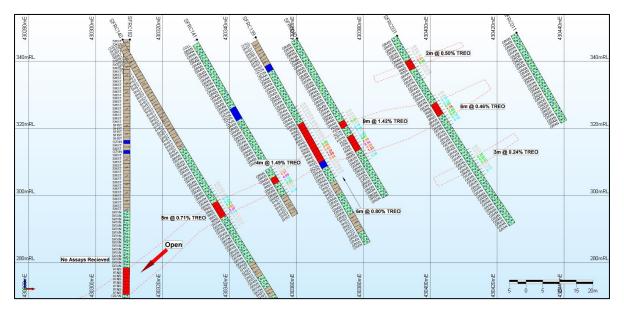


Hole-ID	Depth	Depth	Intercept	TREO %	Nd <sub>2</sub> O <sub>3</sub> + Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub> + Pr <sub>6</sub> O <sub>11</sub>
	From	То			%	% of TREO
SFRC182	44	53	9	0.49	0.26	53%
SFRC183	61	65	4	0.27	0.14	52%
and	68	73	5	0.42	0.23	54%
SFRC185	59	60	1	0.63	0.33	53%
and	62	65	3	0.26	0.14	54%
SFRC186	64	66	2	0.49	0.23	47%
SFRC187	47	50	3	0.21	0.10	45%
and	54	57	3	0.90	0.44	49%
and	61	63	2	0.37	0.18	49%
SFRC188	35	51	16	0.62	0.33	53%
SFRC189	56	57	1	1.04	0.53	50%
and	59	62	3	0.42	0.21	51%

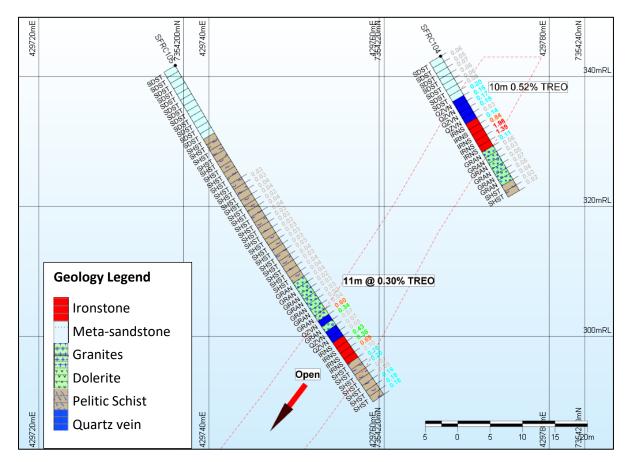
# Additional Holes:

SFRC076	No significant intersection
SFRC091	No significant intersection
SFRC096	No significant intersection
SFRC106	No significant intersection
SFRC138	No significant intersection
SFRC145	No significant intersection
SFRC151	No significant intersection
SFRC156	No significant intersection
SFRC161	No significant intersection
SFRC162	No significant intersection
SFRC163	No significant intersection
SFRC164	No significant intersection
SFRC184	No significant intersection





**Figure 3:** Section A-A' cross section (see plan) looking north-west through the Simon's Find mineralisation.



**Figure 4:** Section B-B' cross section (see plan) looking north-west through the Simon's Find mineralisation.



# Sampling

Samples were sent to Genalysis Intertek in Perth for analysis using techniques considered appropriate for the style of mineralisation. Samples were analysed for the range of rare earths, rare metals (Nb, Ta, Zr), thorium and uranium and a range of common rock-forming elements (Al, Ca, Fe, Mg, Mn, P, S, Si, Sr).

Substantial delays are currently being experienced by commercial laboratories in Perth with respect to assay turnarounds. A turnaround of more than five weeks is currently expected.

Once assay data is returned, the elemental values will be converted to oxides using standard factors.

Table 2: Simon's Find drill hole location and status:

Hole ID	Drill	Depth (m)	Easting (m)	Northing (m)	RL (m)	Survey	Dip	Assay Status
	Type	· · · · ·	. ,	. ,		Туре	•	
SFRC075	RC	60	429952	7354006	345	GPS	-60 -60	Reported
SFRC076	RC	30	430004	7354001	347	GPS	-60	Reported
SFRC077	RC	60	429976	7353982	346	GPS	-60	Reported
SFRC078	RC	60	429941	7353956	345	GPS	-60	Pending
SFRC079	RC	75 60	429904	7353977	344	GPS	-60	Reported
SFRC080	RC	60	430028	7353950	347	GPS	-60	Reported
SFRC081	RC	60	430071	7353910	348	GPS	-60	Reported
SFRC082	RC	60	430117	7353858	348	GPS	-60	Reported
SFRC083	RC	66	430159	7353814	349	GPS	-60	Reported
SFRC084	RC	65	430199	7353741	349	GPS	-60	Reported
SFRC085	RC	87	430165	7353724	347	GPS	-60	Reported
SFRC086	RC	60	430231	7353692	348	GPS	-60	Reported
SFRC087	RC	60	430200	7353671	346	GPS	-60	Reported
SFRC088	RC	60	430316	7353664	346	GPS	-60	Pending
SFRC089	RC	60	430275	7353657	346	GPS	-60	Pending
SFRC090	RC	85	430083	7353834	347	GPS	-60	Reported
SFRC091	RC	60	429940	7354038	344	GPS	-60	Reported
SFRC092	RC	30	429974	7354056	346	GPS	-60	Reported
SFRC093	RC	30	429982	7354102	347	GPS	-60	Pending
SFRC094	RC	50	429942	7354075	344	GPS	-60	Reported
SFRC095	RC	70	429909	7354052	343	GPS	-60	Reported
SFRC096	RC	30	429944	7354118	344	GPS	-60	Reported
SFRC097	RC	50	429908	7354092	343	GPS	-60	Reported
SFRC098	RC	70	429878	7354070	342	GPS	-60	Reported
SFRC099	RC	30	429872	7354118	342	GPS	-60	Reported
SFRC100	RC	30	429820	7354155	340	GPS	-60	Reported
SFRC101	RC	50	429802	7354126	340	GPS	-60	Reported
SFRC102	RC	30	429793	7354191	341	GPS	-60	Reported
SFRC103	RC	60	429759	7354163	341	GPS	-60	Reported
SFRC104	RC	24	429769	7354223	343	GPS	-60	Reported
SFRC105	RC	60	429734	7354201	342	GPS	-60	Reported



Hole	Drill	Depth	Easting	Northing	RL	Survey		Assay
ID	Type	(m)	(m)	(m)	(m)	Type	Dip	Status
SFRC106	RC	60	429703	7354245	343	GPS	-60	Reported
SFRC107	RC	60	429625	7354325	341	GPS	-60	Reported
SFRC108	RC	60	429587	7354332	342	GPS	-60	Reported
SFRC109	RC	60	429544	7354356	342	GPS	-60	Reported
SFRC110	RC	20	430363	7353477	351	GPS	-90	Pending
SFRC111	RC	20	430339	7353460	351	GPS	-90	Pending
SFRC112	RC	20	430461	7353542	352	GPS	-90	Pending
SFRC113	RC	20	430438	7353527	352	GPS	-90	Pending
SFRC114	RC	20	430412	7353509	351	GPS	-90	Pending
SFRC115	RC	30	430322	7352280	347	GPS	-60	Reported
SFRC116	RC	40	430314	7352306	347	GPS	-60	Reported
SFRC117	RC	70	430269	7352309	346	GPS	-60	Reported
SFRC118	RC	30	430198	7352331	346	GPS	-60	Pending
SFRC119	RC	50	430157	7352331	346	GPS	-60	Pending
SFRC120	RC	40	430198	7352251	348	GPS	-60	Reported
SFRC121	RC	50	430334	7352504	348	GPS	-60	Reported
SFRC122	RC	64	430293	7352502	347	GPS	-60	Reported
SFRC123	RC	90	430254	7352503	347	GPS	-60	Pending
SFRC124	RC	65	430313	7352473	348	GPS	-60	Reported
SFRC125	RC	90	430272	7352469	347	GPS	-60	Reported
SFRC126	RC	80	430286	7352438	347	GPS	-60	Pending
SFRC127	RC	70	430299	7352415	347	GPS	-60	Pending
SFRC129	RC	70	430306	7352536	348	GPS	-60	Pending
SFRC130	RC	80	430268	7352537	347	GPS	-60	Reported
SFRC131	RC	54	430344	7352567	347	GPS	-60	Reported
SFRC132	RC	65	430306	7352571	347	GPS	-60	Reported
SFRC133	RC	75	430268	7352566	347	GPS	-60	Reported
SFRC134	RC	65	430367	7352596	348	GPS	-60	Reported
SFRC135	RC	80	430324	7352595	347	GPS	-60	Reported
SFRC136	RC	100	430284	7352594	347	GPS	-60	Reported
SFRC137	RC	50	430358	7352806	349	GPS	-60	Reported
SFRC138	RC	70	430313	7352805	348	GPS	-60	Reported
SFRC139	RC	70	430348	7352627	347	GPS	-60	Reported
SFRC140	RC	95	430308	7352623	346	GPS	-60	Reported
SFRC141	RC	60	430330	7352649	346	GPS	-60	Reported
SFRC142	RC	78	430292	7352656	346	GPS	-60	Reported
SFRC143	RC	70	430312	7352685	346	GPS	-60	Reported
SFRC144	RC	55	430342	7352714	347	GPS	-60	Reported
SFRC145	RC	70	430306	7352715	347	GPS	-60	Pending
SFRC146	RC	55	430330	7352746	347	GPS	-60	Pending
SFRC147	RC	50	430327	7352777	348	GPS	-60	Pending
SFRC148	RC	72	430339	7352836	349	GPS	-60	Reported
SFRC149	RC	25	430416	7352866	350	GPS	-60	Reported



Hole	Drill	Depth	Easting	Northing	RL	Survey		Assay
ID	Type	(m)	(m)	(m)	(m)	Type	Dip	Status
SFRC150	RC	72	430333	7352866	350	GPS	-60	Reported
SFRC151	RC	70	430352	7352897	350	GPS	-60	Reported
SFRC152	RC	57	430373	7352926	350	GPS	-60	Reported
SFRC153	RC	40	430397	7352955	350	GPS	-60	Reported
SFRC154	RC	30	430438	7353012	348	GPS	-60	Reported
SFRC155	RC	60	430399	7353011	348	GPS	-60	Reported
SFRC156	RC	30	430456	7353302	355	GPS	-90	Reported
SFRC157	RC	50	430380	7353241	350	GPS	-60	Reported
SFRC158	RC	40	430420	7352986	349	GPS	-60	Reported
SFRC159	RC	60	430377	7352982	349	GPS	-60	Reported
SFRC160	RC	60	430402	7353044	347	GPS	-60	Reported
SFRC161	RC	70	430346	7352955	350	GPS	-60	Reported
SFRC162	RC	12	430501	7353264	357	GPS	-90	Reported
SFRC163	RC	12	430419	7353337	354	GPS	-90	Reported
SFRC164	RC	50	430353	7353298	350	GPS	-60	Reported
SFRC165	RC	40	430304	7353319	350	GPS	-60	Reported
SFRC166	RC	40	430450	7353126	349	GPS	-60	Reported
SFRC167	RC	100	430127	7353734	347	GPS	-60	Reported
SFRC168	RC	90	430125	7353765	347	GPS	-60	Reported
SFRC169	RC	110	430124	7353763	347	GPS	-90	Reported
SFRC170	RC	90	430122	7353820	347	GPS	-60	Reported
SFRC171	RC	110	430097	7353798	347	GPS	-60	Reported
SFRC172	RC	100	430052	7353812	346	GPS	-60	Reported
SFRC173	RC	90	430048	7353850	346	GPS	-60	Reported
SFRC176	RC	70	430196	7353704	347	GPS	-60	Reported
SFRC177	RC	85	430194	7353703	347	GPS	-90	Reported
SFRC178	RC	80	429840	7354099	341	GPS	-60	Reported
SFRC179	RC	78	429769	7354101	339	GPS	-60	Reported
SFRC180	RC	50	430277	7353687	348	GPS	-60	Reported
SFRC181	RC	30	430230	7353690	348	GPS	-60	Reported
SFRC184	RC	65	429924	7354029	344	GPS	-90	Reported
SFRC185	RC	70	430026	7353919	347	GPS	-60	Reported
SFRC187	RC	65	430155	7353783	348	GPS	-60	Reported
SFRC188	RC	60	430188	7353774	349	GPS	-60	Reported
SFRC189	RC	85	430156	7353754	348	GPS	-60	Reported
SFRC190	RC	105	429297	7350488	344	GPS	-90	Pending
SFRC191	RC	105	430370	7352595	348	GPS	-90	Pending
SFRC192	RC	85	430310	7352624	346	GPS	-90	Pending
SFRC193	RC	85	430312	7352619	348	GPS	-90	Pending
SFRC194	RC	85	430297	7352654	347	GPS	-90	Pending



### 2020 Exploration Drilling Program

Hastings commenced the 2020 exploration drilling program with an RC rig mobilised to site in mid-June. The program is continuing into the December 2020 Quarter and has been designed to achieve three goals:

- Validate the existing Bald Hill mineral resource estimates with close-spaced grade control drilling;
- Increase Yangibana's Measured and Indicated Mineral Resource; and
- Obtain core samples for additional metallurgical test work and ore characterisation studies.

The Company's geological interpretation suggests that there is substantial opportunity to add additional Mineral Resource tonnages along the Bald Hill - Simon's Find — Fraser's trend. This trend presents the highest opportunity to add Mineral Resources within close proximity to Yangibana's proposed processing plant location.

Existing results support and warrant additional drilling where near-surface extensions to known mineralisation can be traced and identified. Observations from field mapping continue to provide new insights into the local geology and its structural settings, which conceptually offer the greatest opportunity to host additional resources.

This ASX announcement has been authorised for release by the Board of Directors.

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### **About Hastings Technology Metals Limited**

#### Yangibana Project

Hastings Technology Metals Limited (ASX: HAS) is on track to become Australia's next rare earths producer by advancing its flagship Yangibana Rare Earths Project in the Upper Gascoyne Region of Western Australia towards production. The proposed beneficiation and hydrometallurgy processing plant will treat rare earths deposits, predominantly monazite, hosting high neodymium and praseodymium contents to produce a mixed rare earths carbonate that will be further refined into individual rare earth oxides at processing plants overseas.

Neodymium and praseodymium are vital components in the manufacture of permanent magnets that are used in a wide and expanding range of advanced and high-tech products including electric vehicles, wind turbines, robotics, medical applications and others. Hastings aims to become the next significant producer of neodymium and praseodymium outside of China.

Hastings holds 100% of the most significant deposits at Yangibana and 70% in additional deposits that will be developed at a later date, all held under Mining Leases. Numerous prospects have been identified, warranting detailed exploration to further extend the proposed life of the project.

#### Brockman Project

The Brockman deposit, near Halls Creek in Western Australia, contains JORC Indicated and Inferred Mineral Resources, estimated using the guidelines of JORC Code (2012 Edition).

The Company is also progressing a Mining Lease application over the Brockman Rare Earths and Rare Metals Project.

Hastings aims to capitalise on the strong demand for critical rare earths created by the expanding demand for new technology products.

For further information on the Company and its projects visit www.hastingstechmetals.com

#### **Competent Persons and Qualifying Persons Statement**

The information in this announcement that relates to Exploration Results in relation to the Yangibana Project is based on information compiled by Mr. Andrew Reid BSc (Hons) MSc FAUSIMM, a Competent Person, who is a Fellow of the Australian Institute of Mining ad Metallurgy. Mr. Reid is a full-time employee of the company and has sufficient experience that is relevant to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. The Qualified Person has verified the data disclosed in this release, including sampling, analytical and test data underlying the information contained in this release. Mr. Reid consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.



# JORC Code, 2012 Edition – Yangibana project deposits

# **Section 1 Sampling Techniques and Data**

#### (Criteria in this section apply to all succeeding sections) Criteria **JORC Code explanation** Commentary Sampling Nature and quality of sampling Samples used to assess the Fraser's Find deposit techniques (e.g. cut channels, random chips, or Yangibana Project (reported in specific specialised industry standard announcement have been derived from reverse measurement tools appropriate to the circulation (RC) drilling. minerals under investigation, such as Samples from reverse circulation drilling were down hole gamma sondes, or handheld collected from each metre from a rig mounted cyclone XRF instruments, etc.). These examples and split using a 3-level riffle splitter from which 2-4kg should not be taken as limiting the broad samples were sent for analysis Field duplicates, blanks meaning of sampling. and Reference Standards were inserted at a rate of Include reference to measures approximately 1 in 25. taken to ensure sample representivity and Diamond Drill core is logged and marked for the appropriate calibration of any sampling. Prospective zones are sawn into half along measurement tools or systems used. the length of the drill core. One half is then further sawn Aspects of the determination of in half. One guarter of the drill core is sent for analysis. mineralisation that are Material to the Assayed intervals are based on geology with a minimum Public Report. length of 0.2m. In cases where 'industry standard' Samples are prepared by drying, crushing, work has been done this would be weighing splitting and pulverising the split samples to relatively simple (e.g. 'reverse circulation produce a representative sample for sodium peroxide drilling was used to obtain 1 m samples fusion and ICP-MS, ICP-OES analysis. from which 3 kg was pulverised to Field duplicates, blanks and Reference Standards produce a 30 g charge for fire assay'). In were inserted at a rate of approximately 1 in 20. other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may disclosure warrant of detailed information. Drilling Drill type (e.g. core, reverse

# techniques

- 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.).
- Reverse Circulation drilling at the various targets utilised a nominal 5 1/4-inch diameter face-sampling hammer.



Will	Technology Metals Limited	
Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Recoveries are recorded by the field at the time of drilling/logging.</li> <li>If poor sample recovery is endrilling, the geologist and driller have rectify the problem to ensure in recovery. Visual assessment is made contamination. A cyclone and split ensure representative samples and cleaned.</li> <li>Sample recoveries to date have reasonable, and moisture in samples a relationship exists between recovered a relationship exists between recovered by the first poor to be the first poor t</li></ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drill chip samples are geol</li> <li>1m intervals from surface to the individual hole to a level that supplication of the individual hole to a level that supplication of the individual hole to a level that supplication of the individual hole surface.</li> <li>Logging (geological) is considered quantitative given the nature of reversibles.</li> <li>All RC drill holes in the previous were logged in full.</li> <li>Diamond drill core is marked up reported measurements of each coring core are measured and compared</li> </ul>

Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- control Quality 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

- the geologist in the
- encountered during ve endeavoured to maximum sample le for moisture and itter were used to nd were routinely
- ave generally been samples minimal. ent to determine if ery and grade.
- sample weights on cant intercept most
- ologically logged at e bottom of each pports appropriate
- dered to be semierse circulation drill
- evious programme
- up using the drillers ing run. Lengths of ured and compared to reported and where any loss has occurred. Recoveries are calculated as a percentage of the drilled interval.
- The RC drilling rig is equipped with an in-built cyclone and triple tier riffle splitting system, which provided one bulk sample of approximately 25kg, and a sub-sample of 2-4kg per metre drilled.
- All samples were split using the system described above to maximise and maintain consistent Most samples were dry. For wet representivity. samples the cleanliness of the cyclone and splitter was constantly monitored by the geologist and maintained to avoid contamination.
- 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



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# **JORC Code explanation**

#### Commentary

results for field duplicate/second-half sampling.

• Whether sample sizes are appropriate to the grain size of the material being sampled.

sample chute. These duplicates were designed for lab checks as well as lab umpire analysis.

• A sample size of 2-4kg was collected and considered appropriate and representative for the grain size and style of mineralisation.

# Quality of assay data and laboratory tests

- 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.
- Genalysis (Perth) was used for all analysis work carried out on the 1m drill chip samples and the rock chip samples. The laboratory techniques below are for all samples submitted to Genalysis and are considered appropriate for the style of mineralisation defined at the Yangibana REE Project: FP6/MS
   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

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

# Location of data points

- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
- Specification of the grid system used.
- Quality and adequacy of topographic control.

- At least two company personnel verify all significant intersections.
- All geological logging and sampling information is completed firstly on to paper logs before being transferred to Microsoft Excel spreadsheets and subsequently a Microsoft Access database. Physical logs and sampling data are returned to the Hastings head office for scanning and storage. Electronic copies of all information are backed up daily.
- No adjustments of assay data are considered necessary.
- Final drillhole collars completed during 2014 were collected by MHR Surveyors using DGPS utilising a locally established control point. Accuracies of the drillhole collar locations collected by MHR Surveyors is better than 0.1m. Drillhole collar positions from 2015 onwards were collected using a Trimble RTX R1 GNSS receiver, with accuracy of approximately 50cm.
- Collar positions are surveyed by RM Surveys (formerly MHR Surveys) and accuracies are better than 0.1m.



<b>""</b>		
Criteria	JORC Code explanation	Commentary
		<ul> <li>Elevation data was recorded by both MHR Surveyors and the Trimble receiver, but the topographic control for all drillholes is based on the high-resolution DTM undertaken by the Company, with Relative Level (RL) assigned to each borehole based on the DTM using Mapinfo Discover 3D.</li> </ul>
		<ul> <li>Down hole surveys are conducted by the drill contractors using a Reflex electronic single-shot camera with readings for dip and magnetic azimuth nominally taken at the top and bottom of drill holes. The instrument is positioned within a stainless-steel drill rod so as not to affect the magnetic azimuth.</li> <li>Grid system used is MGA 94 (Zone 50)</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>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.</li> <li>No sample compositing of RC samples is used in this report, all results detailed are the product of 1m downhole sample intervals. DD holes were composited to 1m intervals in order to provide for equivalent samples.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Most drill holes in the recent programme are angled and collared at -60o or -70o in order to appropriately intersect the mineralization. Orientation is towards the east for the southernmost area within the Mineral Resource and towards to northeast in the remaining two areas.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <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</li> </ul>

- Hastings Technology Metals Ltd
- Address of laboratory

sack. Each sack is clearly labelled with:



Criteria	JORC Code explanation	Commentary
		<ul> <li>Sample range</li> <li>Samples were delivered by Hastings personnel to the Nexus Logistics base in order to be loaded on the next available truck for delivery to Genalysis</li> <li>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.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>An audit of sampling has been is in the final stages of completion. Additional umpire sampling is underway. A new source of standards is being used to cross-check data from existing standards and assayed samples that were acquired in the drilling programs comprising the resource.</li> </ul>

**Section 2 Reporting of Exploration Results** (Criteria listed in the preceding section also apply to this section.)

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Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The results are from the Hastings Technology Metals Ltd Yangibana REE Project, Frasers Area which lies within Mining Licence M09/158. This tenement is wholly owned by Yangibana Pty Ltd, a wholly entity of Hastings Technology Metals.</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>All RC and Diamond Drilling on the tenement has been undertaken by Hasting's Technology Metals. The discovery and delineation of Mineral Resources at Frasers is entirely the result of work performed by Hastings Technology Metals.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>REE mineralisation at the Yangibana REE Project is hosted within carbonatites and associated phoscorite dykes emplaced within a variety of rock types but predominantly in granites.</li> <li>Economic mineralisation is hosted within in the completely weathered and oxidised portions of the carbonatite-phoscorite rocks which occur as</li> </ul>

ironstones.



mineralisation

widths and

Exploration Results.

• If the geometry of the mineralisation with respect to the drill

Criteria	JORC Code explanation	Commentary
		<ul> <li>The nature of weathering and oxidation means that all resources occur in the near surface. Transitional zones from completely weathered ironstones to primary carbonatite have rarely been intersected in drilling across the Yangibana REE Project as drilling has focused primarily on relatively shallow mineralisation.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole 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> <li>All relevant information material to the understanding of exploration results has been included within the body of the announcement or as appendices.</li> <li>No information has been excluded.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul> <li>No top-cuts have been applied.</li> <li>No metal equivalent values are used for reporting exploration results.</li> </ul>
	<ul> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between	<ul> <li>These relationships are particularly important in the reporting of Exploration Possults</li> </ul>	<ul> <li>True widths are generally estimated to be about 70% of the down-hole width.</li> </ul>

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sensitive.

Criteria	JORC Code explanation	Commentary
intercept lengths	<ul> <li>hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there</li> </ul>	
	should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional view.</li> </ul>	See diagrams included.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>All significant intersections are reported. All drill hole locations from the Frasers 2020 drill program are reported. Additional information on assays will be reported from these holes as results become available.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	See release details.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out 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</li> </ul>	<ul> <li>Further work will include infill, step out and twinhole drilling. This work will be designed to improve confidence in, and test potential extensions to the current resource estimates and to provide necessary sample material for additional and ongoing metallurgical studies</li> </ul>