



6 October 2015

## YANGIBANA PROJECT CONFIRMED AS A SIGNIFICANT NEODYMIUM PROJECT FOLLOWING MAJOR INCREASE IN JORC RESOURCES

### HIGHLIGHTS

- Updated JORC Resources Estimates for Yangibana Project issued
- Indicated Resources now stand at 8.1 million tonnes at 1.07%TREO\* containing 0.46%Nd<sub>2</sub>O<sub>3</sub>-Eq\*\*
- Inferred Resources now stand at 4.2 million tonnes at 1.07%TREO\* containing 0.41%Nd<sub>2</sub>O<sub>3</sub>-Eq\*\*
- Total Resources have increased significantly (29%) from 103,000 contained tonnes of TREO as estimated in November 2014 to 132,500 contained tonnes
- Total project resources are now estimated to contain approximately:-
  - 33,900 tonnes of Nd<sub>2</sub>O<sub>3</sub>
  - 8,950 tonnes of Pr<sub>2</sub>O<sub>3</sub>
  - 590 tonnes of Dy<sub>2</sub>O<sub>3</sub>, and
  - 920 tonnes of Eu<sub>2</sub>O<sub>3</sub>
- Mining studies have commenced with pit optimisations utilising the Indicated Resources at Bald Hill South, Fraser's, Yangibana West and Yangibana North deposits
- Announcement of first JORC Compliant Reserve Estimates anticipated in the coming weeks

### Introduction

The Directors of Hastings Rare Metals Limited (**ASX:HAS**) are pleased to announce new JORC resource estimates that further enhance the potential of the Yangibana Rare Earths Project, which is located in the Gascoyne Region of Western Australia.

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These resource estimates are based on Hastings' drilling campaigns of 2014 and 2015 and incorporate a dilution factor as recommended by the Company's mining consultants, Snowden. The estimates were carried out by Hastings' geological consultant, CoxsRocks Pty Limited.

Total Resources are as shown in Table 1.

Resource Category	Tonnes	%TREO	%Nd <sub>2</sub> O <sub>3</sub> -Eq
Indicated	8,126,000	1.07	0.46
Inferred	4,236,000	1.07	0.41
<b>TOTAL</b>	<b>12,362,000</b>	<b>1.07</b>	<b>0.44</b>

**Table 1 – Yangibana Project, JORC Resource Summary, September 2015**

The total resources for the Yangibana Project now stand at 12.36mt at 1.07% TREO, a significant increase from the resource of 6.79mt at 1.52% TREO as estimated in November 2014. This result culminates from the success of the recently-completed Pre-Feasibility Study Drilling Programme. The total resource contains approximately 132,500 tonnes of TREO including 33,900 tonnes of Nd<sub>2</sub>O<sub>3</sub>, 8,950 tonnes of Pr<sub>2</sub>O<sub>3</sub>, 590 tonnes of Dy<sub>2</sub>O<sub>3</sub> and 920 tonnes of Eu<sub>2</sub>O<sub>3</sub>.

The resource estimates and all block models and surfaces have been forwarded to Snowden which has commenced pit optimisation that will lead to pit design, mine scheduling and the announcement of JORC-compliant Reserves in the coming weeks. Hastings' metallurgical consultants, Core Process Engineering and Tetra Tech Proteus, have updated reviews of the Project to provide higher confidence estimates of capital costs and operating costs than those used in last year's Scoping Study. Once the mining section of the Pre-Feasibility Study programme is completed an updated financial analysis of the Project will be undertaken.

## **JORC Resource Estimates**

### ***Introduction***

Hastings' geological consultant, CoxsRocks Pty Limited, has completed JORC resource estimates covering the majority of the deposits that the Company has drilled during 2014 and 2015. The density of drilling is now sufficient for a large portion of the resources at Bald Hill South, Fraser's, Yangibana West and Yangibana North deposits to be classified as Indicated Resources. For the Pre-Feasibility Study it is these Indicated Resources that will form the basis of the mining plan.

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Additional Inferred Resources have been estimated for each of these deposits plus Gossan, Lion's Ear, Hook and Kane's Gossan deposits (Figure 1). Drilling density at Terry's Find, Yangibana and Yangibana South prospects is considered insufficient to establish Resources at this stage.

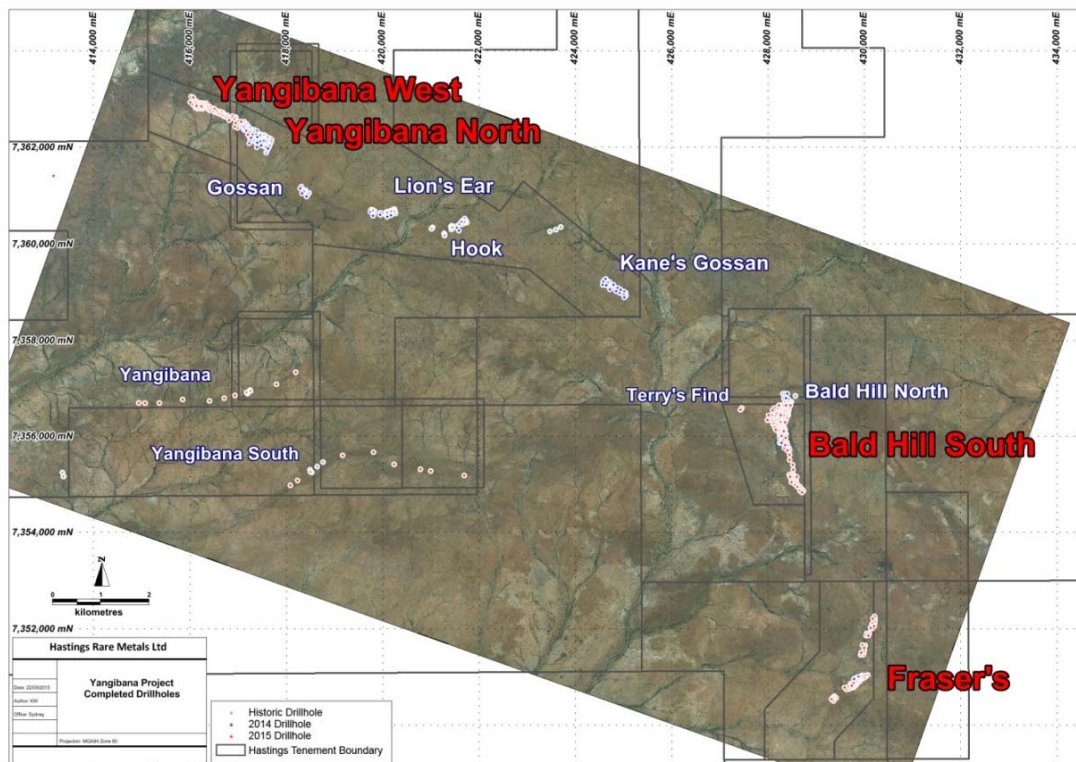
Summaries of resources with no cut-off and at a 0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq cut off are provided in Tables 2 and 3 respectively, with these figures split between tenements in which Hastings holds a 100% interest and those of the Joint Venture in which Hastings holds a 70% interest. Further details are provided later in this report.

DEPOSITS WITHIN TENEMENTS HELD 100% BY HASTINGS		Category	Tonnes	% TREO	%Nd <sub>2</sub> O <sub>3</sub> - Eq
<b>No cut-off</b>					
Total Indicated Resources no cut-off	Indicated	5,407,568	0.88	0.44	
Total Inferred Resources no cut-off	Inferred	<u>1,671,914</u>	0.78	0.39	
Total Resources no cut-off	Ind+Inf	<u>7,079,482</u>	0.85	0.43	
Bald Hill South	Ind+Inf	4,134,274	0.79	0.43	
Fraser's	Ind+Inf	1,170,678	0.77	0.43	
Yangibana West	Ind+Inf	<u>1,774,530</u>	1.07	0.41	
			<u>7,079,482</u>		
DEPOSITS WITHIN JOINT VENTURE HELD 70% BY HASTINGS		Category	Tonnes	% TREO	%Nd <sub>2</sub> O <sub>3</sub> - Eq
<b>No cut-off</b>					
Total Indicated Resources no cut-off	Indicated	2,718,269	1.46	0.50	
Total Inferred Resources no cut-off	Inferred	<u>2,561,906</u>	1.26	0.42	
Total Resources no cut-off	Ind+Inf	<u>5,280,175</u>	1.36	0.46	
Yangibana North	Ind+Inf	3,189,269	1.46	0.50	
Gossan	Inferred	220,522	1.07	0.34	
Hook	Inferred	348,819	1.09	0.31	
Kanes Gossan	Inferred	577,828	1.16	0.41	
Lions Ear	Inferred	842,034	1.42	0.47	
Bald Hill North	Inferred	<u>101,703</u>	0.43	0.25	
			<u>5,280,175</u>		

Table 2 – Yangibana Project, JORC Resources with no cut-off

DEPOSITS WITHIN TENEMENTS HELD 100% BY HASTINGS		Category	Tonnes	% TREO	%Nd <sub>2</sub> O <sub>3</sub> - Eq
At a 0.25%Nd <sub>2</sub> O <sub>3</sub> -Eq Cut-off					
Total Indicated Resources 0.25% cut-off	Indicated	4,651,508	0.96	0.48	
Total Inferred Resources 0.25% cut-off	Inferred	<u>1,301,236</u>	0.90	0.45	
Total Resources 0.25% cut-off	Ind+Inf	<u>5,952,744</u>	0.95	0.48	
Bald Hill South	Ind+Inf	3,657,304	0.85	0.47	
Fraser's	Ind+Inf	913,750	0.90	0.50	
Yangibana West	Ind+Inf	<u>1,381,690</u>	1.25	0.48	
		5,952,744			
DEPOSITS WITHIN JOINT VENTURE HELD 70% BY HASTINGS		Category	Tonnes	% TREO	%Nd <sub>2</sub> O <sub>3</sub> - Eq
At a 0.25%Nd <sub>2</sub> O <sub>3</sub> -Eq Cut-off					
Total Indicated Resources 0.25% cut-off	Indicated	2,491,325	1.55	0.53	
Total Inferred Resources 0.25% cut-off	Inferred	<u>2,088,084</u>	1.43	0.48	
Total Resources 0.25% cut-off	Ind+Inf	<u>4,579,409</u>	1.49	0.51	
Yangibana North	Total	2,916,325	1.55	0.53	
Gossan	Inferred	149,734	1.34	0.42	
Hook	Inferred	176,816	1.64	0.46	
Kanes Gossan	Inferred	493,544	1.29	0.45	
Lions Ear	Inferred	788,966	1.47	0.48	
Bald Hill North	Inferred	<u>54,025</u>	0.57	0.34	
		4,579,409			

Table 3 – Yangibana Project, JORC Resources at a 0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off



**Figure 1 – Yangibana Project, Showing Yangibana Deposits with JORC Resources and Drilled Prospects**

### Geology and geological interpretation

The rare earths mineralisation within the Yangibana Project is predominantly hosted by ironstone lenses that are part of an extensive rare earths-mineralised system associated with the Gifford Creek Ferro-Carbonatite Complex. These ironstone lenses have been explored previously to a limited extent. Twelve targets for rare earths were tested with limited drilling in the 1980s.

The ironstones comprise variable contents of iron oxides and hydroxides, silicates and quartz. Near surface manganese oxides decrease with depth and are replaced by primary carbonate minerals. The rare earths content is largely hosted by monazite with lesser bastnasite and apatite.

The ironstone lenses pinch and swell along strike and with depth, generally ranging from one to eight metres in thickness. The ironstone lenses are often surrounded by fenitised host rocks. Barren quartz veins are also locally associated with the ironstones.



The lenses dip at angles ranging from 10-30° at Yangibana North and Bald Hill South to around 60-80° at Kane's Gossan and Frasers.

Most drilling to date has intersected mineralisation within 100m of surface and there is no indication of any decrease in the tenor of mineralisation with depth.

Of the twelve targets identified in the 1980s, Hastings has undertaken significant drilling at Yangibana North (now split into Yangibana West and Yangibana North), Gossan, Lion's Ear, Hook and Kane's Gossan deposits distributed along a 12km-long zone at the northern edge of the field, and the Bald Hill (North and South) and Fraser's deposits in the eastern belt. JORC resources have been estimated for each of these drilled prospects. Lesser drilling has been undertaken at Yangibana, Yangibana South and Terry's Find, that were insufficient to allow the estimation of JORC resources.

The ironstones are considered by the Geological Survey of Western Australia to be coeval with the numerous carbonatite sills that occur within Hastings' tenements, or at least to be a part of the same magmatic/hydrothermal system and the recent identification of phoscorite-hosted rare earths mineralisation at the western end of the Yangibana West deposits adds further to this potential association.

#### ***Drilling and sampling techniques***

The latest JORC resource estimates are based on results from reverse circulation (RC) and diamond drilling programmes carried out by Hastings during 2014 and 2015. RC samples were collected over one metre intervals with samples split through the on-rig cyclone with approximately 3kg of each metre sample sent to the laboratory. Diamond core was sampled on the basis of geological controls and a minimum sample length of 0.2m.

Duplicates, blanks and standards were inserted in each sample batch in line with industry standards.

#### ***Sample analysis method***

Genalysis (Perth) was used for all initial analytical work carried out on the samples. The laboratory technique FP6/MS was used for all samples and is considered appropriate for the style of mineralisation defined at the Yangibana Project. Fusion digestion technique FP6/ digest was used to ensure the complete dissolution of the sample including the refractory mineral component.

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Initial analyses have been carried out by Genalysis with check assaying carried out at SGS. Duplicate, standard and blank samples have been inserted into the sample flow as recommended by Snowden. Analyses have been undertaken of rare earths, rare metals, thorium and uranium along with common rock-forming elements.

### ***Specific Gravity/Bulk density***

Specific gravity/bulk density values have been based on the results of independent laboratory tests on samples from Bald Hill South, Fraser's, Yangibana West and Yangibana North, plus additional tests carried out by the Company on samples from Yangibana North. Average values have been assigned for near-surface weathered rock, intermediate depth rock, and, generally deeper, fresh rock. In all cases the host rock is granite. The mineralised ironstone host varies from massive to porous and the interpretation and estimation methodology takes this factor into account.

### ***Cut-Off Grade***

Boundaries of the mineralisation in each drillhole has been based on a 0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off as this factor incorporates the value of the Company's four immediate target rare earths oxides. This cut-off conforms reasonably well with the 0.5%TREO cut-off used in the November 2014 estimation that in turn correlates with the visually distinctive ironstone unit that hosts most of the mineralisation of interest intersected to date.

Resources are then reported at a range of block grade cut-offs with all resources within the wireframes and those resources at a 0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq being those discussed in this document.

### ***Estimation methodology***

At each deposit the diluted mineralised zone was interpreted on each drilled section with cross checking by establishing perpendicular sections. Once the sectional interpretation was completed the deposits were wire-framed to produce 3-D models of the mineralised bodies. This enabled the volume of mineralisation at each deposit to be established. Water-table, oxidation and partial oxidation surfaces were incorporated such that specific gravity values could be designated to specific volumes of mineralisation and waste, and hence tonnages of each could be established.

Grade estimation for all the Indicated Resources was undertaken using Inverse Distance Cubed (ID3) methodology, applied to the relevant block model. Individual domained



wireframes were used to sub-set and constrain the data points used in the interpolation and only individual grades from individual wireframes were used. The methodology and validity of the results has been approved by a second independent expert consultant.

The block models were constructed using a 10m by 10m by 2m block size, constrained by individual wireframes corresponding to domained zones, based on grade distribution and variations in dip and azimuths of the mineralised zones. One interpolation pass was made, orientated parallel to the azimuth and dip of the mineralised zone (no plunge component assumed) to ensure all portions of the wireframe were filled.

### ***Classification of Mineral Resources***

The Mineral Resource has been classified by the Competent Person as either Indicated or Inferred based on the relevant drilling spacing. The confidence in the interpretation of mineralisation at each prospect is excellent with surface exposure providing strike control and drillhole intersections indicating good correlation of the mineralised structure at depth.

### ***Mining and metallurgical methods and parameters***

Mining and metallurgical studies are in progress to determine the optimum route for the potential development of the Yangibana Project. The outcropping nature and shallow dip of the bulk of the current Indicated Resources (Bald Hill South, Yangibana West, and Yangibana North) indicate that standard open pit mining methods will be applicable to these areas. While mineralisation at Fraser's is steeper, its higher value per tonne indicates the potential to develop an economically-viable, deeper open pit with a higher stripping ratio.

Pit optimisation studies are being carried out on the Bald Hill South, Fraser's, Yangibana West and Yangibana North deposits with the last two being contiguous mineralisation that straddles a Mining Lease boundary. Large portions of the current resources at the other prospects would be amenable to open pit extraction, but further drilling is required before optimisation can be considered.

Metallurgical test work is progressing with beneficiation test work proving extremely positive in providing a high grade clean concentrate using standard flotation technology using readily available reagents. Tests to date have been carried out on samples from Bald Hill South and Yangibana North. Hastings has recently transported 12-tonnes of sample from its 2015 RC drilling at Bald Hill South and Fraser's to Perth. This sample has

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been ground and homogenised (Nagrom) and is currently undergoing beneficiated work in Adelaide (Kyspymet). This sample is called the Eastern Belt Master Composite (EBMC) and represents material that Hastings believes will be mined during the first 4-5 years of any future operation.

Subsequent hydrometallurgical work has commenced in Brisbane (Core) and will be the main thrust of ongoing test work once the beneficiated EBMC concentrate is available.

### **Resource Estimates – Individual Deposits**

#### **Deposits Within Tenements held 100% by Hastings**

##### ***Bald Hill South Deposit***

Drilling results incorporated in the Bald Hill South resource estimate have been reported in ASX announcements dated November 5<sup>th</sup> 2014, November 10<sup>th</sup> 2014, July 14<sup>th</sup> 2015, July 28<sup>th</sup> 2015, September 9<sup>th</sup> 2015 and September 24<sup>th</sup> 2015.

Figure 2 shows the distribution of the mineralisation at Bald Hill South as m%Nd<sub>2</sub>O<sub>3</sub>-Eq accumulations.

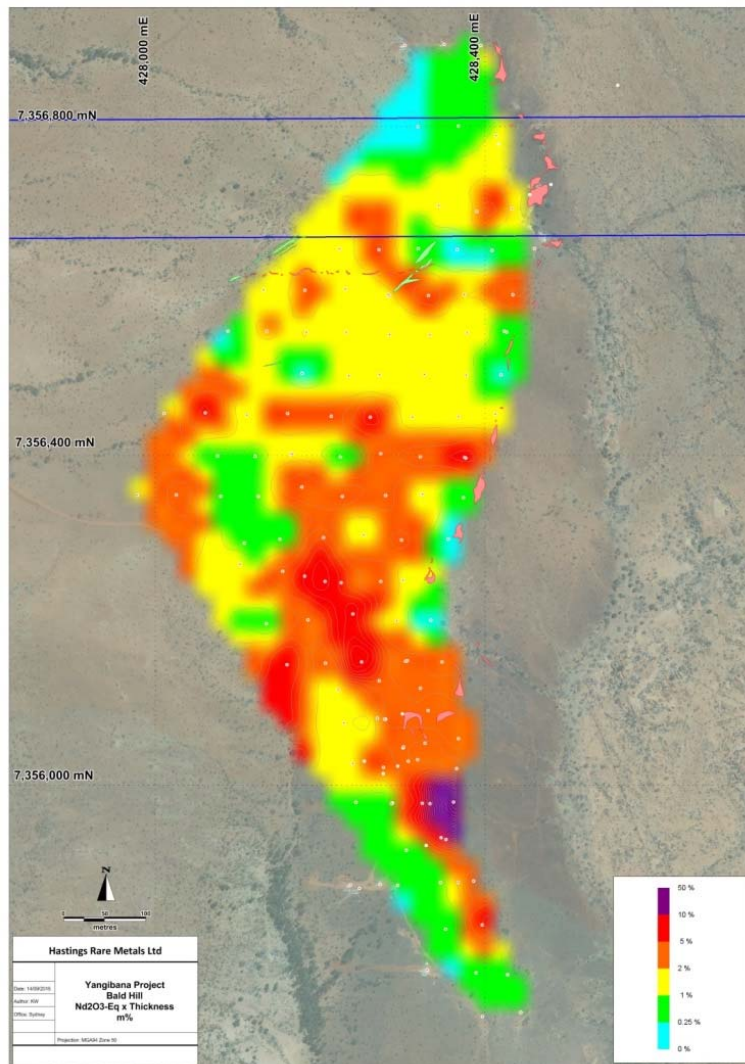


Figure 2 – Yangibana Project, Bald Hill South, contoured m%Nd<sub>2</sub>O<sub>3</sub>-Eq accumulations indicating high grade zones within the overall deposit

As can be seen in Figure 2 the deposit remains open to the west and to the north of 7,356,000N. This is also shown clearly in Figures 3 and 4 that provide cross sections of the drilling.

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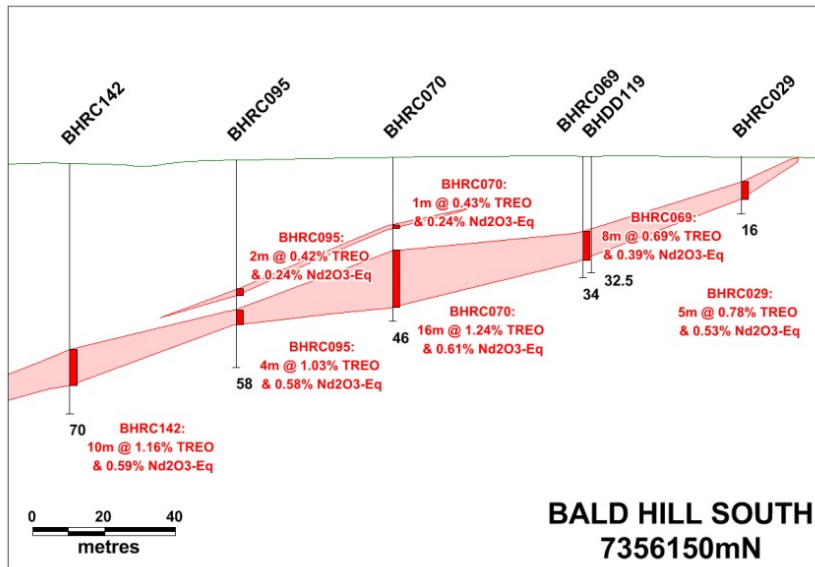


Figure 3 – Yangibana Project, Bald Hill South Section 7,356,150N showing mineralisation strongly open to the west

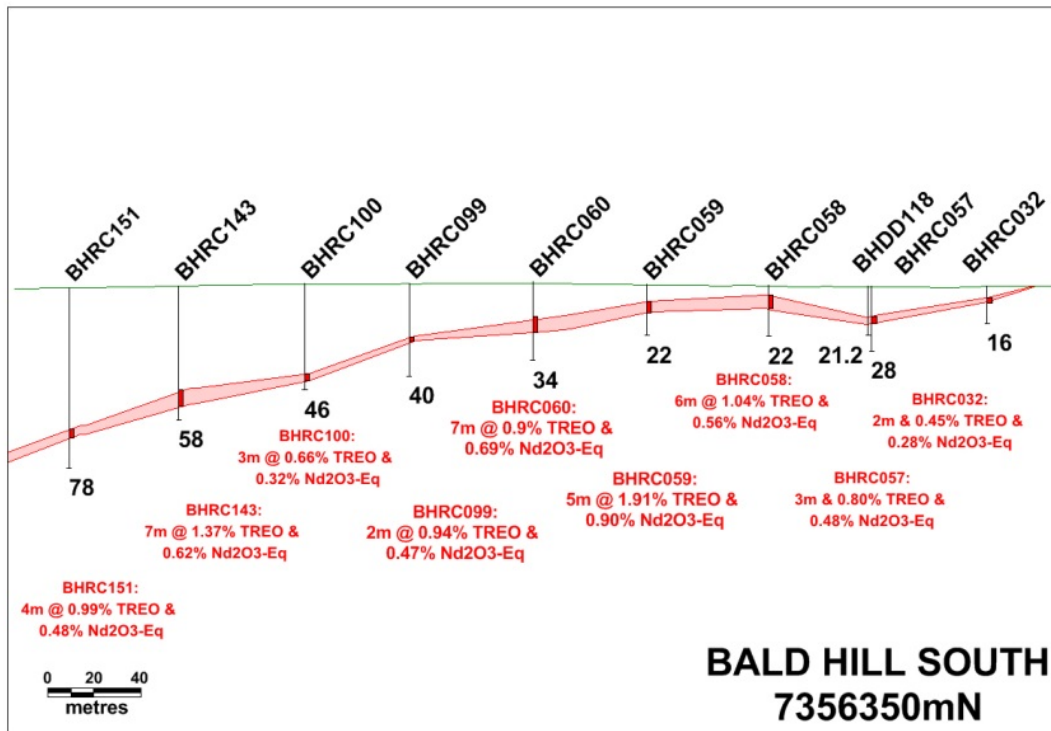


Figure 4 – Yangibana Project, Bald Hill South Section 7,356,350N showing mineralisation strongly open to the west



The bulk of the Bald Hill South deposit lies within M09/157 held 100% by Hastings.

Based on the results of Hastings' drilling, CoxsRocks has estimated global resources and those at a range of Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off grades. Global resources and those at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off For Bald Hill South within M09/157 are shown in Table 4.

Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Indicated	3.247	0.82	0.45	2873	632	59	72
Inferred	0.729	0.64	0.36	2268	500	53	58
<b>TOTAL</b>	<b>3.976</b>	<b>0.79</b>	<b>0.43</b>	<b>2762</b>	<b>608</b>	<b>58</b>	<b>69</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Indicated	2.899	0.88	0.48	3092	680	63	77
Inferred	0.604	0.70	0.40	2502	550	59	65
<b>TOTAL</b>	<b>3.503</b>	<b>0.85</b>	<b>0.47</b>	<b>2990</b>	<b>658</b>	<b>62</b>	<b>75</b>

**Table 4 - Yangibana Project, Bald Hill South JORC Resources within M09/157 at various cut-off grades**

The Global Indicated Resource at Bald Hill South deposit within M09/157 contains 26,625 tonnes of TREO with 14,612 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Global Inferred Resource at Bald Hill South deposit within M09/157 contains 4,666 tonnes of TREO with 2,624 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 31,291 tonnes of TREO with 17,236 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Indicated Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Bald Hill South within M09/157 contains 25,511 tonnes of TREO with 13,915 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Inferred Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Bald Hill South deposit within M09/157 contains 4,228 tonnes of TREO with 2,416 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 29,739 tonnes of TREO with 16,331 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

Of the Inferred Resources within M09/157 472,000 tonnes of the global resource and 412,000 tonnes at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off occur in the separate mineralised zone some 700m south of the main Bald Hill South body as reported in the ASX announcement of 14<sup>th</sup> July 2015.

A small amount of the Bald Hill South deposit lies within P09/467, held 100% by Hastings, immediately to the north of M09/157.

Based on the results of Hastings' drilling, CoxsRocks has estimated global resources and those at a range of Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off grades. Global resources and those at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off for Bald Hill South within P09/467 are shown in Table 5.

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Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Indicated	0.051	0.78	0.45	2791	602	67	82
Inferred	0.108	0.83	0.49	3011	641	81	86
<b>TOTAL</b>	<b>0.159</b>	<b>0.81</b>	<b>0.48</b>	<b>2940</b>	<b>628</b>	<b>77</b>	<b>85</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Indicated	0.046	0.82	0.48	2942	635	71	87
Inferred	0.107	0.83	0.49	3015	642	81	86
<b>TOTAL</b>	<b>0.153</b>	<b>0.83</b>	<b>0.49</b>	<b>2993</b>	<b>640</b>	<b>78</b>	<b>86</b>

**Table 5 - Yangibana Project, Bald Hill South JORC Resources within P09/467 at various cut-off grades**

The Global Indicated Resource at Bald Hill South deposit within P09/467 contains 398 tonnes of TREO with 230 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Global Inferred Resource at Bald Hill South deposit within P09/467 contains 896 tonnes of TREO with 529 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 1,294 tonnes of TREO with 759 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Indicated Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Bald Hill South within P09/467 contains 377 tonnes of TREO with 221 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Inferred Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Bald Hill South deposit within P09/467 contains 888 tonnes of TREO with 524 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 1,265 tonnes of TREO with 745 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

### *Fraser's Deposit*

Drilling results incorporated into the estimation of resources at Fraser's have been reported in the ASX announcements dated November 10<sup>th</sup> 2014 and September 1<sup>st</sup> 2015.

Significant mineralisation at Fraser's is currently confined to the main zone where the ironstone crops out up to 4m above the surrounding topography (Figure 5). This is the target that was drilled in the 1980s and at which Hastings' concentrated its drilling in 2014. In 2015 Hastings continued to drill at the main zone, successfully extending the deposit to the northeast and also tested targets to the north and southeast of the main zone. These new areas provide a portion of the Inferred Resources now quoted.

Figure 6 shows the collar locations of the drilling and the distribution of the mineralisation at the main zone at Fraser's as m%Nd<sub>2</sub>O<sub>3</sub>-Eq accumulations.





Figure 5 – Yangibana Project, Fraser’s, Main Outcropping Rare Earths-Bearing Ironstone

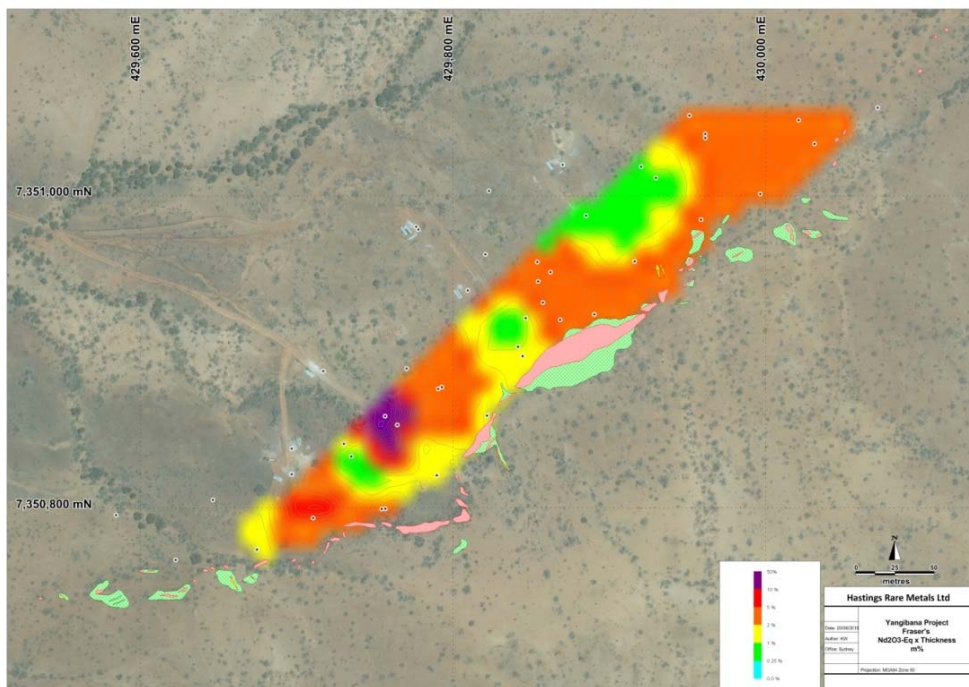


Figure 6 – Yangibana Project, Fraser’s, contoured m%Nd2O3-Eq accumulations at the Main Deposit indicating high grade zones within the overall deposit

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As can be seen in Figure 6 the Fraser's deposit remains open at depth and to the northeast. The depth potential is clearly shown in Figures 7 and 8 that provide cross sections of the drilling.

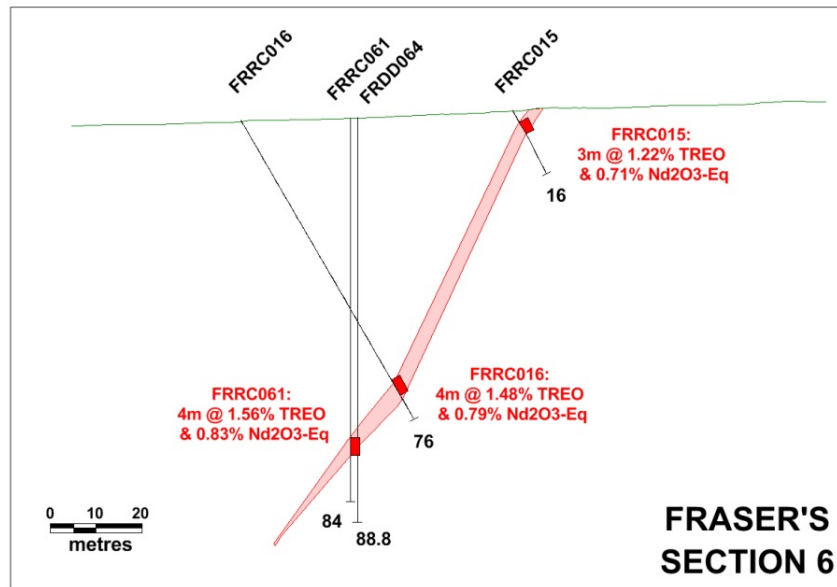


Figure 7 – Yangibana Project, Fraser's Deposit, Section near the centre of the deposit showing mineralisation strongly open at depth

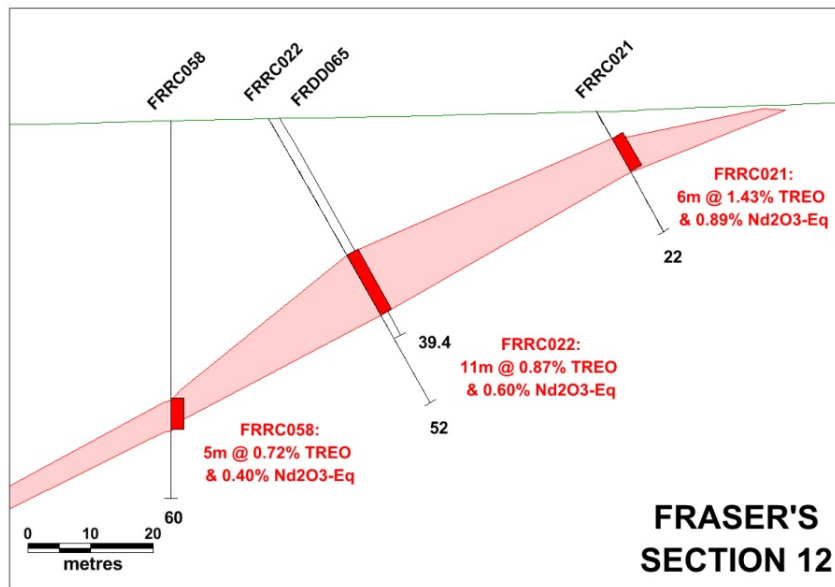


Figure 8 – Yangibana Project, Fraser's Deposit, Section towards the north-eastern part of the deposit showing mineralisation strongly open at depth

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The bulk of the mineralisation near Fraser's deposit lies within M09/158 held 100% by Hastings.

Based on the results of Hastings' drilling, CoxsRocks has estimated global resources and those at a range of Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off grades as shown in Table 3. Global resources and those at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off for Fraser's within M09/158 are shown in Table 6.

Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Indicated	0.630	0.94	0.52	3437	838	58	65
Inferred	0.506	0.59	0.32	2115	500	40	42
<b>TOTAL</b>	<b>1.136</b>	<b>0.78</b>	<b>0.43</b>	<b>2848</b>	<b>687</b>	<b>50</b>	<b>55</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Indicated	0.595	0.97	0.54	3572	871	60	67
Inferred	0.303	0.76	0.43	2764	650	54	56
<b>TOTAL</b>	<b>0.898</b>	<b>0.90</b>	<b>0.50</b>	<b>3299</b>	<b>796</b>	<b>58</b>	<b>63</b>

**Table 6 - Yangibana Project, Fraser's JORC Resources within M09/158 at various cut-off grades**

Of the Inferred Resource figures 96,000 tonnes at no cut-off and 90,000 tonnes at a 0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off occur at depth below the main deposit. Lower grade mineralisation in the recently tested targets to the north and south-west of the main deposit provide the remainder of these resources.

The Global Indicated Resource at Fraser's deposit within M09/158 contains 5,922 tonnes of TREO with 3,276 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Global Inferred Resource at Fraser's deposit within M09/158 contains 2,985 tonnes of TREO with 1,619 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 8,907 tonnes of TREO with 4,895 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Indicated Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Fraser's within M09/158 contains 5,772 tonnes of TREO with 3,213 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Inferred Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Fraser's deposit within M09/158 contains 2,303 tonnes of TREO with 1,303 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 8,074 tonnes of TREO with 4,516 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

A small portion of the Fraser's deposit lies within E09/2018, held 100% by Hastings, immediately to the east of M09/158.

Global resources and those at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off For Fraser's within E09/2018 are shown in Table 7.

Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Inferred	0.035	0.46	0.26	1827	423	16	27
<b>TOTAL</b>	<b>0.035</b>	<b>0.46</b>	<b>0.26</b>	<b>1827</b>	<b>423</b>	<b>16</b>	<b>27</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Inferred	0.015	0.66	0.36	2595	615	14	32
<b>TOTAL</b>	<b>0.015</b>	<b>0.66</b>	<b>0.36</b>	<b>2595</b>	<b>615</b>	<b>14</b>	<b>32</b>

**Table 7 - Yangibana Project, Fraser's JORC Resources within E09/2018 at various cut-off grades**

The Global Inferred and the Total Resource at Fraser's deposit within E09/2018 contains 161 tonnes of TREO with 91 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Inferred Resource and the Total Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Fraser's deposit within E09/2018 contains 99 tonnes of TREO with 54 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

### ***Yangibana West Deposit***

Yangibana West and Yangibana North are part of one continuous body separated for reporting purposes by tenement boundaries. The Yangibana West deposit lies within M09/160 held 100% by Hastings.

Information regarding drillholes that have been incorporated in the resource estimation has been reported in the ASX announcement dated August 12<sup>th</sup>.

Figure 9 shows the collar locations of the drilling and the distribution of the mineralisation at both Yangibana West and Yangibana North as m%Nd<sub>2</sub>O<sub>3</sub>-Eq accumulations.

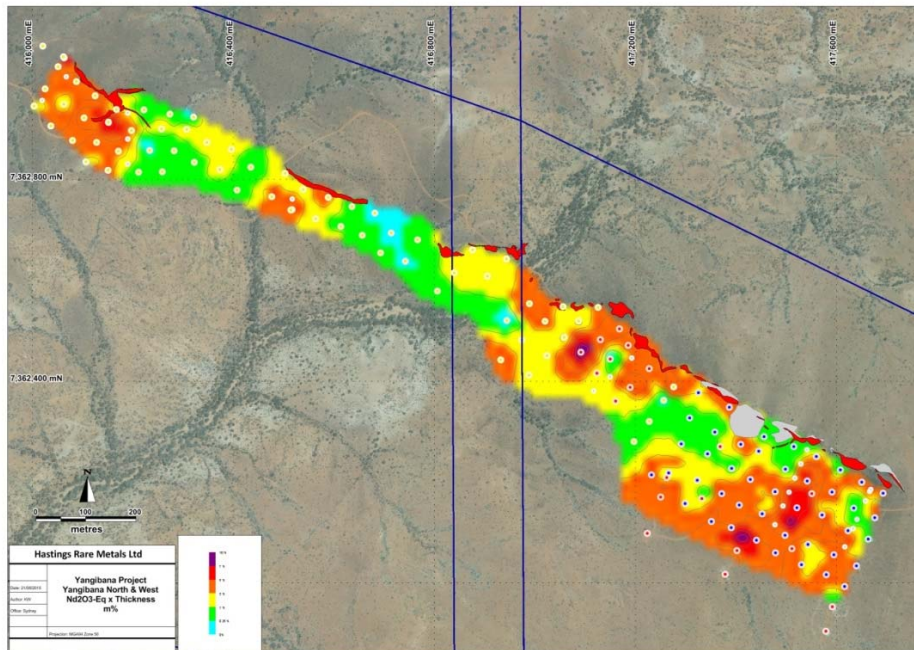


Figure 9 – Yangibana Project, Yangibana West and Yangibana North, contoured m%Nd<sub>2</sub>O<sub>3</sub>-Eq accumulations showing high grade zones within the overall deposit

The mineralisation at Yangibana West is clearly developed best in shoots that correspond with the outcropping ironstone zones (Figure 9). The higher grade shoots both remain strongly open at depth as shown in Figures 10 and 11.

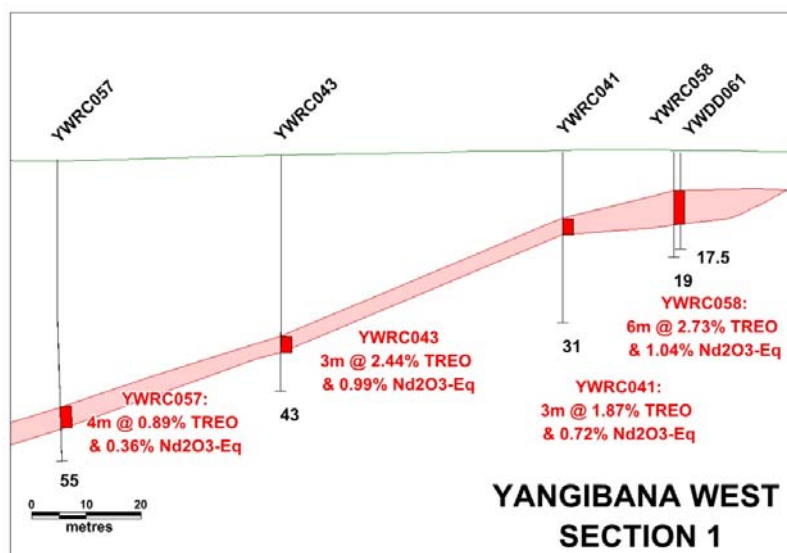


Figure 10 – Yangibana Project, Yangibana West Section at the western end of the deposit as drilled to date showing mineralisation strongly open at depth

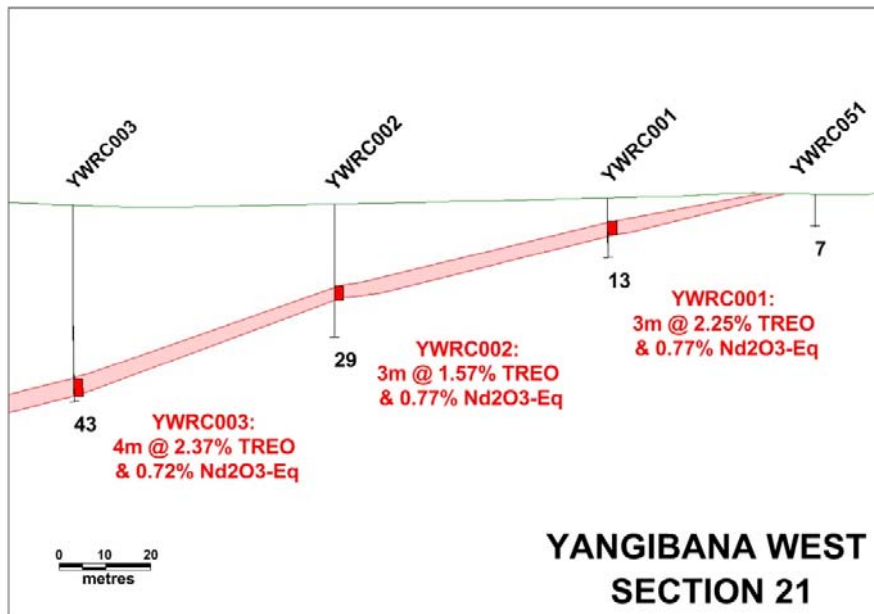


Figure 11 – Yangibana Project, Yangibana West, Section at the eastern end of the resource showing mineralisation strongly open at depth

Based on the results of Hastings’ drilling, CoxsRocks has estimated global resources and those at a range of Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off grades at Yangibana West. Global resources and those at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off for Yangibana West are shown in Table 8.

Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Indicated	1.480	0.99	0.38	2246	616	42	82
Inferred	0.295	1.47	0.54	3229	931	51	102
<b>TOTAL</b>	<b>1.775</b>	<b>1.07</b>	<b>0.41</b>	<b>2409</b>	<b>668</b>	<b>43</b>	<b>85</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Indicated	1.110	1.18	0.46	2686	739	50	99
Inferred	0.271	1.55	0.57	3408	982	54	107
<b>TOTAL</b>	<b>1.381</b>	<b>1.25</b>	<b>0.50</b>	<b>2828</b>	<b>787</b>	<b>51</b>	<b>101</b>

Table 8 - Yangibana Project, Yangibana West JORC Resources at various cut-off grades



The Global Indicated Resource at Yangibana West deposit contains 14,652 tonnes of TREO with 5,624 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Global Inferred Resource at Yangibana West deposit contains 4,337 tonnes of TREO with 1,593 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 18,989 tonnes of TREO with 7,217 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Indicated Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Yangibana West contains 13,098 tonnes of TREO with 5,106 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Inferred Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Yangibana West contains 4,201 tonnes of TREO with 1,545 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 17,299 tonnes of TREO with 6,651 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

As reported in the announcement of September, the northwestern-most diamond drillhole drilled by Hastings at Yangibana West intersected high grade rare earths mineralisation in a host rock that has been identified petrologically as a phoscorite. This style of mineralisation is rare and is usually associated with carbonatite-style mineralisation. As such this occurrence is very significant in the origin of the Yangibana mineralisation and encouraging for the discovery of further high grade mineralisation.

#### **Deposits within Tenements held under the Yangibana Joint Venture (Hastings 70%)**

##### ***Yangibana North Deposit***

The data regarding holes incorporated in the resource estimation for Yangibana North has been reported in the ASX announcements dated July 15<sup>th</sup> 2014, November 10<sup>th</sup> 2014, December 10<sup>th</sup> 2014, and August 12<sup>th</sup> 2015.

Figure 8 shows the collar locations of the drilling and the distribution of the mineralisation at both Yangibana West and Yangibana North as m%Nd<sub>2</sub>O<sub>3</sub>-Eq accumulations.

As at Yangibana West, the mineralisation at Yangibana North is clearly developed in shoots that correspond with outcropping ironstone zones. The higher grade shoots both remain strongly open at depth as shown in Figures 12 and 13.



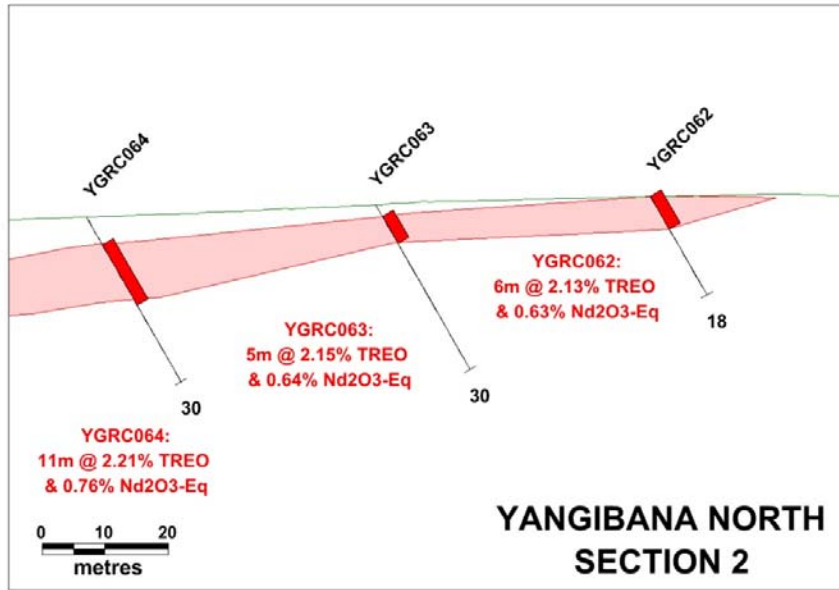


Figure 12 – Yangibana Project, Yangibana North, Section towards the west end of the resource showing mineralisation strongly open at depth

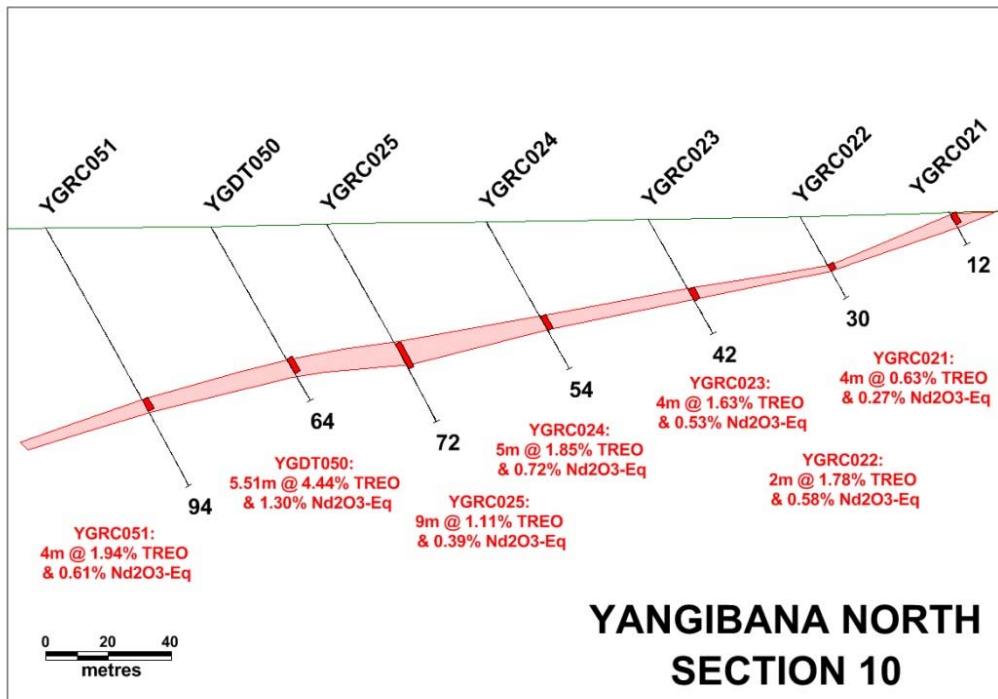


Figure 13 – Yangibana Project, Yangibana North, Section near the centre of the resource showing mineralisation strongly open at depth



Based on the results of Hastings' drilling, CoxsRocks has estimated global resources and those at a range of Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off grades for Yangibana North. Global resources and those at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off for Yangibana North are shown in Table 9.

Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Indicated	2.718	1.46	0.50	3061	910	43	89
Inferred	0.471	1.46	0.50	3061	910	43	89
<b>TOTAL</b>	<b>3.189</b>	<b>1.46</b>	<b>0.50</b>	<b>3061</b>	<b>910</b>	<b>43</b>	<b>89</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Indicated	2.491	1.55	0.53	3235	962	45	94
Inferred	0.425	1.55	0.53	3235	962	45	94
<b>TOTAL</b>	<b>2.916</b>	<b>1.55</b>	<b>0.53</b>	<b>3235</b>	<b>962</b>	<b>45</b>	<b>94</b>

**Table 9 - Yangibana Project, Yangibana North JORC Resources at various cut-off grades**

The Global Indicated Resource at Yangibana North deposit contains 39,683 tonnes of TREO with 13,590 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Global Inferred Resource at Yangibana North deposit contains 6,877 tonnes of TREO with 2,355 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 46,559 tonnes of TREO with 15,945 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Indicated Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Yangibana North contains 38,611 tonnes of TREO with 13,202 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. The Inferred Resource at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off at Yangibana North contains 6,588 tonnes of TREO with 2,253 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq. These provide totals of 45,198 tonnes of TREO with 15,455 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

#### ***Other Prospects within M09/159 and E09/1049***

Hastings has also reinterpreted the mineralisation at a number of other prospects within M09/159 (Gossan, Lion's Ear, Hook and Kane's Gossan) and E09/1049 (Bald Hill North), see Figure 1, that were drilled in 2014 and for which Inferred Resources were reported in November 2014. No additional drilling has been undertaken but knowledge gained from drilling at Yangibana West and Bald Hill South, including better definition of specific

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gravity distribution, has now been fed into the interpretation and to the estimation of resources as shown in Table 10.

Category/ Cut-Off	Mt	%TREO	% Nd <sub>2</sub> O <sub>3</sub> -Eq	ppm Nd <sub>2</sub> O <sub>3</sub>	ppm Pr <sub>2</sub> O <sub>3</sub>	ppm Dy <sub>2</sub> O <sub>3</sub>	ppm Eu <sub>2</sub> O <sub>3</sub>
<i>Global</i>							
Inferred							
Gossan	0.221	1.07	0.34	2132	660	22	55
Lion's Ear	0.842	1.42	0.47	2844	846	42	81
Hook	0.349	1.09	0.31	1866	611	30	49
Kane's Gossan	0.578	1.16	0.41	2520	773	42	57
Bald Hill North	0.102	0.43	0.25	1582	327	39	43
<b>TOTAL</b>	<b>2.092</b>	<b>1.21</b>	<b>0.40</b>	<b>2455</b>	<b>742</b>	<b>38</b>	<b>64</b>
<i>0.25%Nd<sub>2</sub>O<sub>3</sub>-Eq</i>							
Inferred							
Gossan	0.150	1.34	0.42	2636	824	24	64
Lion's Ear	0.789	1.47	0.48	2949	875	44	84
Hook	0.177	1.64	0.46	2783	919	39	69
Kane's Gossan	0.494	1.29	0.45	2795	859	46	63
Bald Hill North	0.054	0.57	0.34	2112	437	56	61
<b>TOTAL</b>	<b>1.664</b>	<b>1.39</b>	<b>0.46</b>	<b>2830</b>	<b>856</b>	<b>43</b>	<b>74</b>

Table 10 - Yangibana Project, Other Prospects within M09/159, JORC Resources at various cut-off grades

The Global Inferred Resources for these prospects contain 25,269 tonnes of TREO with 8,416 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.

The Inferred Resources at a 0.25% Nd<sub>2</sub>O<sub>3</sub>-Eq cut-off for these prospects contain 23,192 tonnes of TREO with 7,638 tonnes of Nd<sub>2</sub>O<sub>3</sub>-Eq.



## Commentary

The estimation of total global resources of 12.36 million tonnes is a very positive result to the Company's Pre-Feasibility Study (PFS) Drilling programme. Of this total, 8.1 million tonnes is in the Indicated Resources category and can be incorporated into the ongoing mining studies for the PFS. 5.4 million tonnes of Indicated Resources have been established in tenements that are held 100% by Hastings and, based on metallurgical test results to date, a large part of this mineralisation has superior metallurgical characteristics compared with the remaining resources.

All deposits remain open at depth and further drilling would be expected to define further resources. The major Bald Hill South deposit remains open to the west at its northern end. Yangibana West remains open to the west, Yangibana North to the east and each of the other deposits from Gossan through to Kane's Gossan is open in both directions. The northern and southwestern extension of Fraser's require additional drilling to determine if these sources can supply resource tonnages to the proposed operation.

Recently drill-tested prospects at Terry's Find, Yangibana and Yangibana South warrant further drilling to establish additional resources.

As mentioned, mining studies are in progress based on the geological interpretation and resource figures as part of the PFS. Metallurgical tests are progressing as the bulk sample from Bald Hill South and Fraser's becomes available for hydrometallurgical and then separation test work.

Environmental studies are continuing with the second phase of the Fauna Survey under way.

Using the global resources and the neodymium-equivalent that is explained in the section below, the Project now boasts over 8 million tonnes of Indicated Resources at an average grade of 0.46% Nd<sub>2</sub>O<sub>3</sub>-Eq containing approximately 54,500 tonnes of contained Nd<sub>2</sub>O<sub>3</sub>-Eq.

## Future Potential

To date the Company has concentrated its exploration and evaluation work on the outcropping rare earths-bearing ironstones. The potential for a larger carbonatite-hosted deposit to occur at depth has yet to be tested, but the intersections of carbonatite-hosted relatively high grade mineralisation at Yangibana North and phosphorite-hosted relatively high grade mineralisation at Yangibana West provide sound evidence that this target is realistic and warrants further work.



\*\* **TREO** is the sum of the oxides of the heavy rare earth elements (HREO) and the light rare earth elements (LREO).

**HREO** is the sum of the oxides of the heavy rare earth elements europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y).

**CREO** is the sum of the oxides of neodymium (Nd), europium (Eu), terbium (Tb), dysprosium (Dy), and yttrium (Y) that were classified by the US Department of Energy in 2011 to be in critical short supply in the foreseeable future.

**LREO** is the sum of the oxides of the light rare earth elements lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), and samarium (Sm).

### Neodymium Equivalence

Hastings is concentrating its efforts on the recovery of four important rare earths – neodymium, praseodymium, dysprosium and europium. To portray the grade of the mineralisation Hastings has established neodymium-equivalent figures where:-

\*The  $\text{Nd}_2\text{O}_3$  equivalent ( $\text{Nd}_2\text{O}_3\text{-Eq}$ ) values have been calculated based on the following rare earths prices. These prices have been established by independent consultants Adamas Intelligence and are being used by Hastings in the evaluation of the project.

- $\text{Nd}_2\text{O}_3$  - US\$85/kg
- $\text{Pr}_2\text{O}_3$  – US\$95/kg
- $\text{Dy}_2\text{O}_3$  - US\$550/kg and
- $\text{Eu}_2\text{O}_3$  - US\$635/kg

Where  $\text{Nd}_2\text{O}_3\text{-Eq}$  =

$((\text{Nd}_2\text{O}_3\text{grade} + ((\text{Pr}_2\text{O}_3\text{grade} * (\text{Pr}_2\text{O}_3\text{price} / \text{Nd}_2\text{O}_3\text{price})) + (\text{Dy}_2\text{O}_3\text{grade} * (\text{Dy}_2\text{O}_3\text{price} / \text{Nd}_2\text{O}_3\text{price}))) + (\text{Eu}_2\text{O}_3\text{grade} * (\text{Eu}_2\text{O}_3\text{price} / \text{Nd}_2\text{O}_3\text{price})))$

Such that  $\text{Nd}_2\text{O}_3 \text{ Eq} = \text{Nd}_2\text{O}_3 + (1.1176 \times \text{Pr}_2\text{O}_3) + (6.4706 \times \text{Dy}_2\text{O}_3) + (7.4706 \times \text{Eu}_2\text{O}_3)$

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### **About Hastings Rare Metals**

- Hastings Rare Metals is a leading Australian rare earths company, with two JORC compliant rare earths projects in Western Australia.
- The Yangibana Project hosts JORC Indicated and Inferred Resources totalling 12.36 million tonnes at 1.07% TREO, including 0.46% Nd<sub>2</sub>O<sub>3</sub>-Eq (comprising 8.13 million tonnes at 1.07% TREO Indicated Resources and 4.23 million tonnes at 1.07% TREO in Inferred Resources).
- The Brockman deposit contains JORC Indicated and Inferred Resources totalling 36.2 million tonnes (comprising 27.1mt Indicated Resources and 9.1mt Inferred Resources) at 0.21% TREO, including 0.18% HREO, plus 0.89% ZrO<sub>2</sub> and 0.35% Nb<sub>2</sub>O<sub>5</sub>.
- Rare earths are critical to a wide variety of current and new technologies, including smart phones, hybrid cars, wind turbines and energy efficient light bulbs.
- The Company aims to capitalise on the strong demand for critical rare earths created by expanding new technologies. In late 2014 Hastings completed a Scoping Study of the Yangibana Project that confirmed the economic viability of the Project and in early 2015 commenced work on a Pre-Feasibility Study.

### ***Competent Person's Statement***

*The information in this announcement that relates to Resources is based on information compiled by Simon Coxhell. Simon Coxhell is a consultant to the Company and a member of the Australasian Institute of Mining and Metallurgy. The information in this announcement that relates to Exploration Results is based on information compiled by Andy Border, an employee of the Company and a member of the Australasian Institute of Mining and Metallurgy.*

*Each 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, Mineral Resources and Ore Reserves' ("JORC Code"). Each consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Reverse circulation (RC) and diamond drilling has been carried out over 2014 and 2015 at each of the deposits for which JORC resources are estimated as well as Yangibana, Yangibana South and Terry's Find prospects.. RC samples were taken from one-metre intervals from which a 2-4kg sample was collected for submission to the laboratory for analysis for rare earths, rare metals, U, Th and a range of rock-forming elements. Mineralised zones were identified visually during geological logging in the field. Core samples were selected visually for submission to the laboratory for analysis for rare earths, rare metals, U, Th and a range of rock-forming elements. Mineralised zones were identified visually during geological logging of the core and samples were collected based on geological boundaries with a minimum length of 0.2m.</li> <li>Samples from each RC metre were collected in a cyclone and split using a 3 level riffle splitter. Samples from core were taken from selected areas based on geological boundaries. Duplicates, blanks and Reference Standards were inserted at a rate of approximately 1 in 20.</li> <li>Hurlston Pty Limited drilled RC holes at eleven ironstone targets within tenements in which Hastings has an interest, in the 1980s. Hurlston reported the results of most drill holes and a non-JORC resource estimation in its Annual Report for the period 1/1/87 to 31/12/88 (A25937). This report provides little data regarding processes used during the exploration, but Hastings has undertaken sufficient work on the project to indicate that Hurlston's work was carried out professionally and that certain assumptions can reasonably be based on the results reported in that report.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-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>Reverse Circulation drilling at all prospects utilised a nominal 5 1/4 inch diameter face-sampling hammer.</li> <li>No details are known regarding the RC drilling carried out by Hurlston.</li> <li>Diamond drilling using HQ equipment .</li> <li>Only one diamond hole was drilled away from vertical so no orientations were taken on most</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>holes.</p> <ul style="list-style-type: none"> <li>No diamond drilling was carried out by Hurlston.</li> <li>Four diamond holes are recorded as having been drilled historically by Newmont but limited data is available on this work.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Recoveries are recorded by the driller at the time of drilling and are verified by the geologist in the field at the time of drilling/logging.</li> <li>The drilling company took every care to maximise core recovery using triple-tube techniques.</li> <li>Sample recovery was quite variable with some mineralised but porous ironstone zones providing poor recovery. Insufficient data is available at present to determine if a relationship exists between recovery and grade. This will be assessed once a statistically valid amount of data is available to make a determination.</li> <li>No details are known regarding the RC drilling carried out by Hurlston nor regarding the DD drilling carried out by Newmont.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>The RC drilling rig was equipped with an in-built cyclone and triple tier riffle splitting system, which provided one bulk sample of approximately 20kg, and a sub-sample of 2-4kg per metre drilled.</li> <li>All samples were split using the system described above to maximise and maintain consistent representivity. The majority of samples were dry. For wet samples the cleanliness of the cyclone and splitter was constantly monitored by the geologist and maintained to avoid contamination.</li> <li>Bulk samples were placed in green plastic bags, with the sub-samples collected placed in calico sample bags.</li> <li>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.</li> <li>A sample size of 2-4kg was collected and considered appropriate and representative for the grain size and style of mineralisation.</li> <li>No details are known regarding the RC drilling carried out by Hurlston.</li> <li>All core has been logged geologically and geotechnically to a level of detail sufficient to support appropriate Mineral resource estimation, mining studies and metallurgical studies.</li> <li>All core has been logged in detail and photographed.</li> <li>All DD holes in the current programme are logged</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>in full.</p> <ul style="list-style-type: none"> <li>No details are known regarding the DD drilling carried out by Newmont.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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>Selected intervals were sawn and one quarter core sent for analysis.</li> <li>Sawn quarter core over the required interval was collected into calico bags and numbered accordingly.</li> <li>Duplicates were sent for lab checks as well as lab umpire analysis.</li> <li>The sample sizes varied with the selected interval and are considered appropriate and representative for the grain size and style of mineralisation.</li> <li>No details are known regarding the DD drilling carried out by Newmont.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Genalysis (Perth) was used for all analysis work carried out on the RC samples, diamond core 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</li> <li>Duplicates were collected and submitted to Genalysis for laboratory analysis.</li> <li>No details are known regarding the RC sampling by Hurlston nor the DD drilling carried out by Newmont.</li> </ul>
<b>Verification of sampling and assaying</b>	<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 all significant intersections.</li> <li>All geological logging and sampling information is completed firstly on to paper logs before being transferred to Microsoft Excel spreadsheets. 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.</li> <li>No adjustments of assay data are considered necessary.</li> <li>No details are known regarding the DD drilling carried out by Newmont.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<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>• A Garmin GPSMap62 hand-held GPS is used to define the location of the drill hole collars. Standard practice is for the GPS to be left at the site of the collar for a period of 5 minutes to obtain a steady reading. Collar locations are considered to be accurate to within 5m. Collars will be picked up by DGPS in the future. 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 every 30m down hole, except in holes of less than 30m. 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> <li>• Topographic control is based on the detailed 1m topographic survey undertaken by Hyvista Corporation in 2014.</li> <li>• Most of Hurlston's RC hole collars are preserved in the field. Many have been surveyed using a Garmin GPSMap62 hand-held GPS and results indicate that the Hurlston data can be regarded as professional and certainly indicative of the potential of the mineralisation.</li> </ul>
<b>Data spacing and distribution</b>	<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>• RC drill hole spacing is nominally 50m along drill-lines, with a line spacing of 50m. Collar locations were varied slightly dependent on access at a given site.</li> <li>• Further details are provided in the collar co-ordinate tables provided with previous reports.</li> <li>• No sample compositing is used in this report, all results detailed are the product of 1m down hole sample intervals.</li> <li>• Hurlston's RC drilling was not systematic other than holes were drilled to test obvious outcropping mineralised zones at each of the eleven targets tested by them.</li> <li>• Drill hole spacing for Hastings' diamond drilling programme was variable as the holes were designed to either duplicate earlier RC holes or to provide detailed geological information in more complex areas.</li> <li>• Further details are provided in the collar co-ordinate table provided in previous reports.</li> <li>• No sample compositing is used in this report, all results detailed are the product of length-weighted down hole sample intervals.</li> </ul>
<b>Orientation of data in relation to</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>• The majority of Hastings' 2014 drilling programme involved holes drilled at -60° to the outcropping ironstone target.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>geological structure</b>	<p><i>the deposit type.</i></p> <ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Most drill holes in the 2015 programme were vertical (subject to access to the preferred collar position) and as such intersected widths do not represent true thickness.</li> <li>Hurlston's drilling was generally planned to intersect mineralisation as near to perpendicular as possible. A few holes tested specific conceptual targets away from the obvious lenses.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></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 Rare Metals Ltd</li> <li>Address of laboratory</li> <li>Sample range</li> </ul> </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. 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> <li>No details are known regarding the DD drilling carried out by Newmont.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>An audit of sampling data is in progress. Data is validated when loading into the database and will be validated again prior to the proposed Resource estimation studies.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>RC drilling has been carried out within E09/1043, E09/1049, E09/1706, and E09/2007. Diamond drilling was carried out at Bald Hill South deposit within M09/157, Fraser's deposit within M09/158 and Yangibana West deposit within E09/2007.</li> <li>All Yangibana tenements are in good standing and no known impediments exist.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>RC drilling was completed at eleven ironstone targets in the 1980s by Hurlston Pty Limited, including at Bald Hill South. Rock chip sampling programmes have been carried out more recently but add little to the project.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of</i></li> </ul>	<ul style="list-style-type: none"> <li>The Yangibana ironstones within the Yangibana</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>mineralisation.</i>	<p>Project are part of an extensive REE-mineralised system associated with the Gifford Creek Carbonatite Complex. The lenses have a total strike length of at least 12km.</p> <ul style="list-style-type: none"> <li>• These ironstone lenses have been explored previously to limited degree for base metals, manganese, uranium, diamonds and rare earths.</li> <li>• The ironstones are considered by GSWA to be coeval with the numerous carbonatite sills that occur within Hastings tenements, or at least part of the same magmatic/hydrothermal system.</li> </ul>
<b>Drill hole Information</b>	<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</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to details of drilling in table in previous reports that are referenced in the body of this report.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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> <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>• All intervals reported are composed of length weighted intervals based on detailed sampling of selected geological zones. A lower cut-off grade of 2500ppm Nd<sub>2</sub>O<sub>3</sub>-Eq has been used for assessing significant intercepts, and no upper cut-off grade was applied.</li> <li>• Maximum internal dilution of 1m was incorporated in reported significant intercepts.</li> <li>• The basis for the metal equivalents used for reporting are provided in the body of the ASX announcement.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement</li> </ul>	<ul style="list-style-type: none"> <li>• True widths for mineralisation have not been calculated and as such only down hole lengths have been reported.</li> <li>• While interpretation of the results is still in the early stages, a better understanding of the geometry of the deposit will be achieved, and true widths reported, later in the programme. It</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>to this effect (eg 'down hole length, true width not known').</i>	is expected that true widths will be less than down hole widths, due to the apparent dip of the mineralisation.
<b>Diagrams</b>	<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 views.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps and sections are available in the body of this ASX announcement or in previous reports that are referenced in this report.</li> </ul>
<b>Balanced reporting</b>	<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 to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Reporting of results in this report is considered balanced.</li> </ul>
<b>Other substantive exploration data</b>	<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>Geological mapping has continued in the vicinity of the drilling as the programme proceeds and will continue as the project advances.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions, 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 Company has completed a major drilling programme within the Yangibana Project area as part of its ongoing Pre-Feasibility Study programme. Work is also progressing in the areas of metallurgical test work, plant design and costing; geotechnical studies, pit optimisation, mine design, scheduling and costing; environmental studies including baseline environmental studies; test work for waste dump and tailings disposal sites; water sourcing and costing; and overall project costing and financial evaluation.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Data was provided as a validated Access Database and was digitally imported into Micromine Mining software. Micromine validation routines were run to confirm validity of all data.</li> <li>Individual drill logs from site have been checked with the electronic database on a random basis to check for validity.</li> <li>Analytical results have all been electronically merged to avoid any</li> </ul>

Criteria	JORC Code explanation	Commentary
		transcription errors.
Site visits	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Site visits have been undertaken, drilling techniques and methods reviewed, RC holes have been logged, diamond core has been assessed and verified with adjacent RC drill intersections.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The confidence in the geological interpretation is excellent.</li> <li>• Detailed geological logging and surface mapping allows extrapolation of drill intersections between adjacent sections.</li> <li>• Alternative interpretations would result in similar tonnage and grade estimation techniques.</li> <li>• Geological boundaries are determined by the spatial locations of the various mineralised structures.</li> <li>• Continuous ironstone units comprising iron oxides and hydroxides, minor quartz rich zones, and locally carbonate and apatite host the rare earths mineralisation and are the key factors providing continuity of geology and grade. The mineralised zones may be described as visually distinctive anastomosing iron rich veins with excellent strike and down dip continuity.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bald Hill South – the lateral dimensions of the resources at Bald Hill South are shown in the diagram in the body of this release. The mineralisation dips shallowly (maximum 30°) but variably to the southwest as shown in diagrams in the body of this release, and ranges from 1m to 10m thick. Maximum depth of the resource is to a vertical depth of 80 metres below surface.</li> <li>• Fraser's - the lateral dimensions of the resources at Fraser's are shown in the diagram in the body of this release. The mineralisation dips steeply (70-80°) in the western portion becoming more shallow (to 30°) in the east and ranges from 1m to 6m thick. Maximum depth of the resource is to a vertical depth of 140 metres below surface.</li> <li>• Yangibana West - the lateral dimensions of the resources at Yangibana West are shown in the diagram in the body of this release. The mineralisation dips shallowly (maximum 30°) but variably to the south as shown in diagrams in the body of this release, and ranges from 1m to 5m thick. Maximum depth of the resource is to a vertical depth of 100 metres below surface.</li> <li>• Yangibana North - the lateral dimensions of</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>the resources at Yangibana North are shown in the diagram in the body of this release. The mineralisation dips shallowly (maximum 30°) but variably to the south as shown in diagrams in the body of this release, and ranges from 1m to 5m thick. Maximum depth of the resource is to a vertical depth of 140 metres below surface.</p> <ul style="list-style-type: none"> <li>• Gossan – the Inferred Resources at Gossan are based on limited drilling that has identified mineralisation over 300m of strike length, 100m down dip and ranging from 1-4m wide. Maximum depth of the resource is to a vertical depth of 80 metres below surface.</li> <li>• Lion’s Ear - the Inferred Resources at Lion’s Ear are based on limited drilling that has identified mineralisation over 520m of strike length, 80m down dip and ranging from 1-4m wide. Maximum depth of the resource is to a vertical depth of 140 metres below surface.</li> <li>• Hook - the Inferred Resources at Hook are based on limited drilling that has identified mineralisation over 380m of strike length, 100m down dip and ranging from 1-4m wide. Maximum depth of the resource is to a vertical depth of 130 metres below surface.</li> <li>• Kane’s Gossan - the Inferred Resources at Kane’s Gossan are based on limited drilling that has identified mineralisation over 550m of strike length, 100m down dip and ranging from 1-4m wide. Maximum depth of the resource is to a vertical depth of 130 metres below surface.</li> <li>• Bald Hill North - the Inferred Resources at Bald Hill North are based on limited drilling that has identified mineralisation over 280m of strike length, 100m down dip and ranging from 1-3m wide. Maximum depth of the resource is to a vertical depth of 80 metres below surface.</li> </ul>
<p><i>Estimation and modelling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of</i></li> </ul>	<ul style="list-style-type: none"> <li>• Grade estimation using Inverse Distance Cubed (ID3) methodology has been applied to all Indicated Resources. Nominal extrapolation distance from known data points (drilling and or ironstone outcrop) of 50 metres has been used to categorise Indicated Resources. Individual wireframes based on individual domains and variations in grade and orientation has been used to subset and constrain the data points used in the interpolation and only individual grades from individual wireframes were used in the estimation process.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>by-products.</i></p> <ul style="list-style-type: none"> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>Inferred Resources for all the deposits have been estimated the same way with a nominal 100 metre extrapolation from known data points.</p> <ul style="list-style-type: none"> <li>• No assumptions have been made regarding the recovery of by-products.</li> <li>• Estimations have been made for the thorium and uranium contents of all zones.</li> <li>• The block models were constructed using a 10m by 10m by 2m block size, constrained by individual wireframes and sub-celled to match the wireframe volume..</li> <li>• One interpolation pass was made with a 100 metre by 100 metre search oriented parallel to the azimuth and dip of the mineralised zones (no plunge component has been defined) to ensure all portions of the wireframe were filled.</li> <li>• Geological interpretation of consistent, generally shallow- to moderate-dipping anastomosing mineralised structures with a variable 1-12m true thickness.</li> <li>• Visual validation comparing block grades with drill hole assay values via cross sections, plans and long sections was completed.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages are estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A nominal downhole cut-off of 0.25% neodymium equivalent (Nd<sub>2</sub>O<sub>3</sub>-Eq) has been used to establish the target mineralised zones. The basis of the Nd<sub>2</sub>O<sub>3</sub>-Eq and its calculation methodology are described in the text of this release. The cut-off corresponds well with a 0.5% TREO cut-off and with the visually distinct ironstone host. Scintillometer readings are taken of all samples and these also effectively map the mineralised zones.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The deposits with Indicated Resources are currently being assessed by independent mining consultant Snowden. The resources defined to date would potentially be amenable to simple open pit mining.</li> <li>• The shallow dip of the mineralisation, other than at the western end of the Fraser's deposit, lends itself to open pit mining with a low stripping ratio.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Beneficiation and limited hydrometallurgical test work has been carried out on samples from Bald Hill South and Yangibana North with very encouraging results. A bulk sample (12 tonnes) combining RC samples from Hastings' 2015 drilling at Bald Hill South and Fraser's has been prepared as the Eastern Belt Master Composite (EBMC). The EBMC therefore represents mineralisation that Hastings believes will be mined over the first 4-5 years of any operation.</li> <li>Test work to date has shown that the rare earths mineralisation (largely monazite) can be upgraded readily using standard froth flotation techniques and readily available reagents. Tests are ongoing to decrease the apatite, carbonate and iron content of these concentrates as these can affect hydrometallurgical recoveries. Hydrometallurgical test work has commenced on uncleaned concentrates and results have again been encouraging but will be superior once the deleterious contents are reduced.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Environmental studies have been carried out on site with Stage 1 Flora and Fauna surveys and Stage 2 Flora survey completed. The Stage 2 Fauna Survey is currently under way. No environmental issues have been identified during the surveys completed to date.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>Bulk density/specific gravity have been measured by the Company on core from Yangibana North, and at independent laboratories on core from Bald Hill South, Fraser's and Yangibana West. Samples have been taken from each of oxidised, partially oxidised and fresh mineralisation with results feeding into the resource estimations. Bulk density/specific gravity measurements have also been carried out at an independent laboratory on samples of oxidised, partially oxidised and fresh host rock, granite and these are being used by Snowden in the pit optimisations that are ongoing.</li> <li>In situ bulk densities for the individual</li> </ul>

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Criteria	JORC Code explanation	Commentary
		deposits have ranged from 2.30→2.80 tonnes per cubic metre and have been assigned into the models based on weathering surfaces and assigned rock types.
<i>Classification</i>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resources have been classified as Indicated and Inferred based on the drill spacings and geological continuity at the various deposits.</li> <li>• The results of the Mineral resource Estimation reflect the views of the Competent Person.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This is the third JORC 2012 Resource Estimate for the Yangibana Project. An unofficial audit by a third party has assisted in defining the method of estimation and classification of resources used in this version.</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The relative accuracy of the Mineral Resource is reflected in the reporting of the Mineral Resource as being in line with the guidelines of the 2012 JORC.</li> <li>• The statement relates to global estimates of tonnes and grade, with reference made to resources above a certain cut-off that are intended to assist mining studies.</li> </ul>

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CoxsRocks Pty Ltd: ABN 69 111 457 231

*Consultants to the Exploration and Mining Industry*

24 September 2015

The Directors  
Hastings Rare Metals Limited

**Pursuant to the requirements of ASX listing rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition**

<b>Report named</b>	<b>ASX Announcement</b>
<b>By</b>	<b>Hastings Rare Metals Limited</b>
<b>Mineral Deposit</b>	<b>Yangibana Project Resource Estimation</b>
<b>Dated</b>	<b>24 September 2015</b>

I confirm that I am the Competent Person for the Report and: I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).

- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.

I am a Fellow of The Australasian Institute of Mining and Metallurgy.

- I have reviewed the Report to which this Consent Statement applies.

I am a consultant working for CoxsRocks Pty Ltd and engaged by Hastings Rare Metals Limited to prepare the documentation for the Yangibana Project Resource Estimate.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Exploration Targets, Exploration Results, Minerals Resources and/or Ore Reserves.

A handwritten signature in black ink, appearing to read "S. Coxhell", written over a light blue horizontal line.

Simon Coxhell  
Principal Geological Consultant  
CoxsRocks Pty Ltd

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