



Hastings Technology Metals Limited
ABN 43 122 911 399

ASX Code: Shares - HAS

Level 25, 31 Market Street
Sydney NSW 2000
PO Box Q128 Queen Victoria
Building NSW 1220 Australia

Telephone: +61 2 8268 8689
Facsimile: +61 2 8268 8699
info@hastingstechmetals.com

Board

Charles Lew (Chairman)
Anthony Ho (Non-Exec Director)
Malcolm Mason (Non-Exec Director)

www.hastingstechmetals.com

**NPV OF \$650-\$750 MILLION INDICATED BY NOVEMBER 2015
SCOPING STUDY CONFIRMING YANGIBANA POTENTIAL**

HIGHLIGHTS

- **November 2015 Scoping Study completed by Snowden with updated inputs from all PFS consultants**
- **Study indicates compelling and excellent project viability with NPV₁₀ of A\$650 million – A\$750 million* on the base case, extracting only current Indicated Resources over 7 years**
- **Extrapolation over 15 years backed by current Inferred Resources plus Exploration Target indicates NPV₁₀ of A\$900 million – A\$1.1 billion***
- **All aspects of the PFS progressing on schedule and budget for completion in Q1 2016**

*Note that all financials are before depreciation, tax and interest

SUMMARY

Snowden Mining Industry Consultants (Snowden) has completed an updated Scoping Study on the Yangibana Project indicating compelling financial viability. Inputs to the Scoping Study were provided by each of the consultants that are working on the Pre-Feasibility Study for the Project.

Based only on the current Indicated Resources at Bald Hill South, Fraser's, Yangibana West and Yangibana North deposits, a proposed 1.0 million tonnes per annum operation is predicted to return a net present value at a 10% discount rate (NPV₁₀) of A\$650 million – A\$750 million over a life of 7 years. This scenario provides an Internal Rate of Return (IRR) of 52%.

Based on the mining and processing of 15 million tonnes of comparable material the Project would return an NPV₁₀ of A\$900 million to A\$1.1 billion. This expanded mining scenario is based on the current Inferred Resources of 4.2 million tonnes plus an Exploration Target of 4-7 million tonnes, in addition to the current Indicated Resources that are the basis of the high confidence scenario. The justification of the Exploration Target is provided in the body of this report.

All financials reported in this document are before depreciation, tax and interest.

All aspects of the Pre-Feasibility Study are progressing on schedule and within budget and are scheduled for completion by the end of Q1 2016.

SCOPING STUDY

Introduction

Hastings Technology Metals Limited (**ASX:HAS**) is pleased to announce the findings of the November 2015 Scoping Study completed by Snowden, with input from each of the Company's consultants, to provide an overview of progress achieved on the ongoing Yangibana Pre-Feasibility Study.

The updated Scoping Study focused on the production of separated oxides of the rare earths neodymium (Nd), praseodymium (Pr), dysprosium (Dy), europium (Eu), with lesser gadolinium (Gd) and samarium (Sm). Additional rare earths could be considered for processing at a later date if suitable markets and opportunities are identified.

Resources

As reported in the ASX release of 6th October 2015, the current resources at the Yangibana Project are as shown in Table 1.

Resource Classification	Tonnes	%TREO	%Nd ₂ O ₃ -Eq*
Indicated	8,126,000	1.07	0.46
Inferred	4,236,000	1.07	0.41
TOTAL	12,362,000	1.07	0.44

*see explanation at end of report

Table 1 – Yangibana Project, October 2015 JORC Resources

A detailed breakdown of the diluted resources is provided in Appendix 1.

Mining

Mining of Bald Hill South, Fraser's and Yangibana North/West (here termed Yangibana) has been proposed using standard truck and shovel methods. Dilution had already been accounted for in the resource estimate.

Snowden has completed initial pit optimisations and designs, and preliminary waste dump designs for each of these deposits. The preliminary layouts are shown in Figures 1 to 3.

The resultant pit dimensions and extracted grades are listed in Table 2. All resources included in the proposed mine plan are from within the current Indicated Resources.

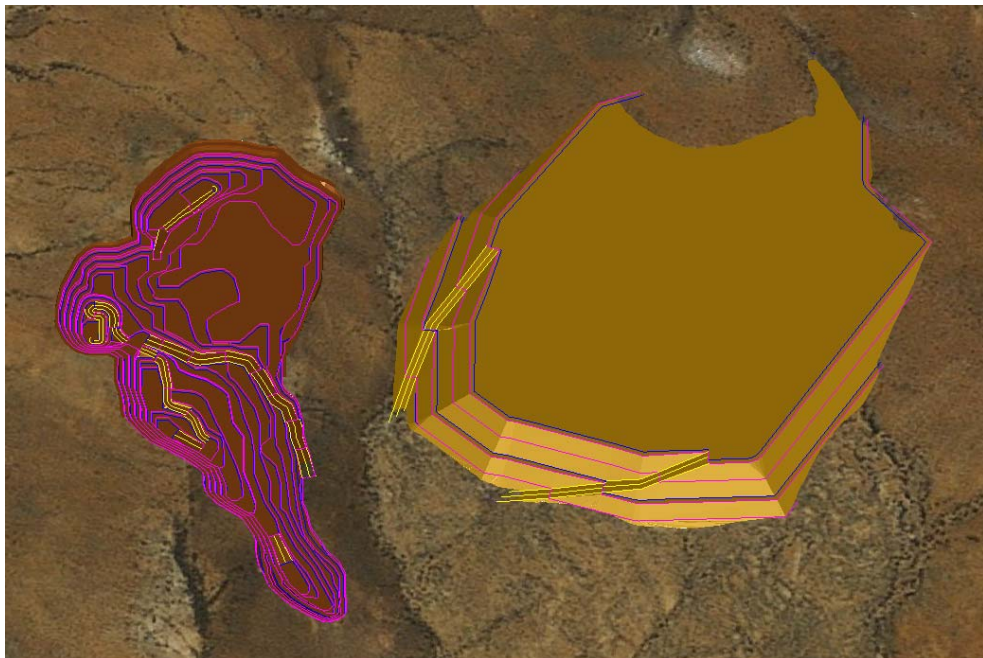


Figure 1 – Yangibana Scoping Study – Bald Hill South pit and waste dump



Figure 2 – Yangibana Scoping Study – Fraser's pit and waste dump

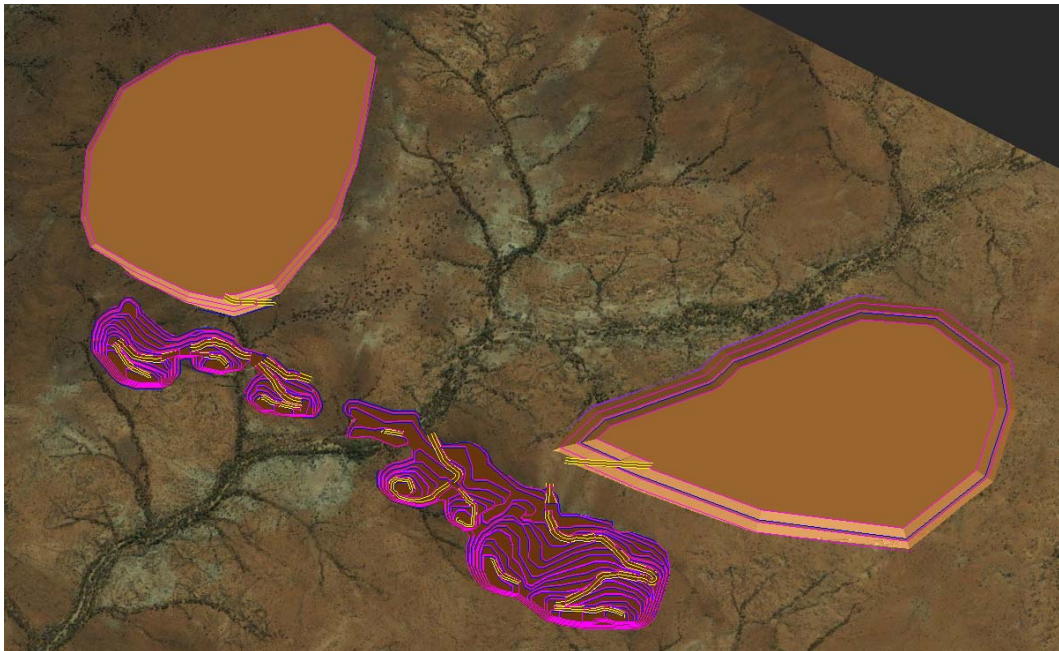


Figure 3 – Yangibana Scoping Study – Yangibana West and North pits and waste dumps

For personal use only

	Bald Hill South	Fraser's	Yangibana	Total
Pit Size (kt)	21,903	12,102	39,357	73,362
Strip ratio (w:o)	6.3	20.3	10.2	9.4
Mining inventory (kt)	2,997	569	3,507	7.074
Waste (kt)	18,906	11,533	35,849	66,289
TREO (%)	0.86	0.97	1.43	1.15
Nd ₂ O ₃ (ppm)	3,018	3,556	3,061	3,083
Pr ₂ O ₃ (ppm)	663	869	893	794
Dy ₂ O ₃ (ppm)	62	59	46	54
Eu ₂ O ₃ (ppm)	76	67	95	85

Table 2 – Yangibana Scoping Study, Mining Inventory

The three optimised and modelled pits therefore provide just over 7.0 million tonnes of mining inventory at an average grade of 1.15% TREO to the processing plant. The pits extract a total of 73.3 million tonnes of material at an average stripping ratio of 9.4:1.

For the avoidance of doubt, a Pre-Feasibility Study has not yet been completed and Hastings has not estimated a Mineral Reserve. The “mining inventory” is indicative but conceptual in nature until completion of the appropriate technical studies.

Processing

The mined ore will be fed to a crushing plant for size reduction, prior to milling to reduce the feed to the required sizing for the flotation processing.

Hastings has completed preliminary beneficiation test work that indicates that, at a plant throughput rate of 1.0 million tonnes per annum, a flotation plant can achieve a 95.5% reduction to 45,000t per annum of concentrate from Bald Hill South and Fraser's feed, and a 93% reduction to 70,000t per annum of concentrate from Yangibana feed, with recoveries of 85% of the contained rare earths (i.e. loss of only 15% of contained rare earths).

Tetra Tech Proteus has progressed the comminution and flotation sections of the design to include 3D modelling for more accurate costing. Images from the model include the expected mill and flotation plant as indicated in Figures 4 and 5.

For personal use only

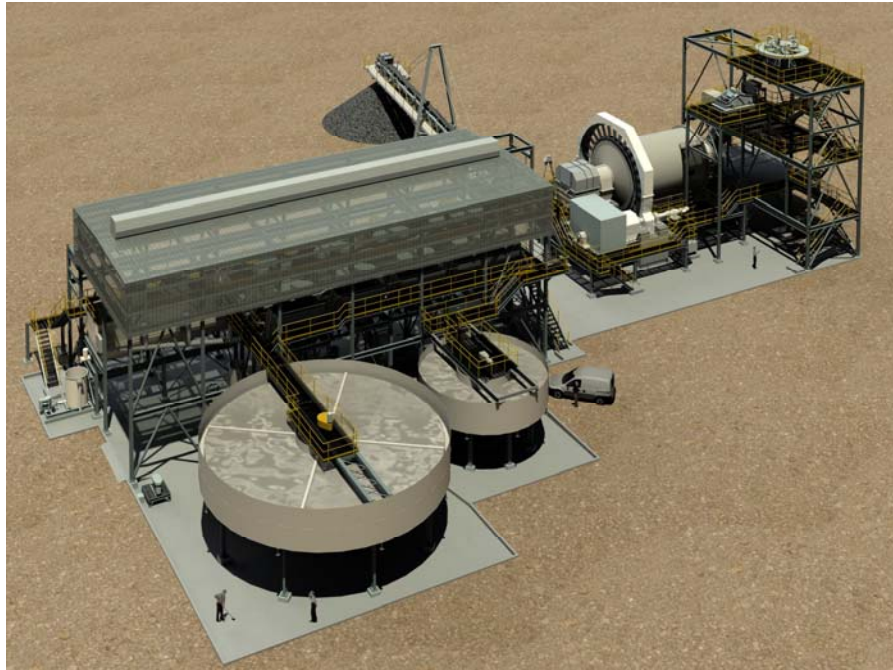


Figure 4 – Yangibana Scoping Study, Expected Mill and Flotation Plant Areas



Figure 5 – Yangibana Scoping Study, Expected Mill and Flotation Plant Areas

For personal use only

The subsequent hydrometallurgical plant leaches the 45,000t per annum or 70,000t per annum of concentrate to extract the target rare earths. The rare earths are then treated in a separation plant/refinery to produce individual or combined rare earths oxides as specified by the customers. Test work in these areas is progressing at The Core Group with work on the beneficiated concentrate from the Eastern Belt Master Composite sample (derived from Bald Hill South and Fraser's deposits) to commence in the near future.

All processes including crushing, milling, flotation, hydrometallurgy and separation are standard processes used within the rare earths industry. This further de-risks the project. Yangibana rare earths are hosted almost exclusively in the mineral monazite that has a long and well established history in commercial processing. A number of other projects are currently considering this processing route.

The predicted recovery rates incorporated in the Study are as shown in Table 3.

	Bald Hill South/Fraser's	Yangibana
Mass Pull to Concentrate	4.5	7.0
Nd ₂ O ₃ recovery	78	79
Pr ₂ O ₃ recovery	78	79
Dy ₂ O ₃ recovery	58	70
Eu ₂ O ₃ recovery	72	76
Gd ₂ O ₃ recovery	79	79
Sm ₂ O ₃ recovery	79	79

Table 3 – Yangibana Scoping Study, predicted processing recovery rates

Project infrastructure

Locations have been selected for all items of major infrastructure including

- Tailings Storage Facility (currently for 10 years)
- Roads
- Accommodation Camp
- Fresh Water Storage Dams
- Temporary Concentrate Dams
- Water supply
- Air strip

Applications have been made for a number of additional Mining Leases, General Purpose Leases and Miscellaneous Licences to cover areas with potential resources and/or infrastructure requirements.

Project Economics - High Confidence Scenario

Tetra Tech Proteus has established capital costs for the project based on industry standards for the basic equipment, milling and beneficiation sections, and by factoring costs available in the public arena from similar operations, that totals an estimated \$411 million including a 40% contingency. Table 4 provides a breakdown of these estimated capital costs.

Capital Cost Centre	A\$M
Geology	5
Mining	4
Processing	154
Project Services	10
Infrastructure	28
Accommodation	20
Management, Services, EPCM	62
Pre-Production	12
Contingency	116
TOTAL CAPEX	411

Table 4 - Yangibana Scoping Study, Estimated Capital Costs

The operating costs are based on contract mining and 90% processing plant availability. The Study assumes the sale of separate (or combined if required by the customer) rare earths oxides at site and operating costs are based on this assumption. Table 5 provides a breakdown of the estimated operating costs. Processing costs are expected to vary from \$146/t ore for Bald Hill South and Fraser’s increasing to \$183/t for ore from Yangibana. Estimated average operating costs are provided in Table 5.

Category	Operating Cost (\$/t ore mined)
Contract Mining	39
Processing and Administration	166
TOTAL OPEX	205

Table 5 - Yangibana Scoping Study, Estimated Operating Costs

The revenue is based on the commodity prices predicted by Adamas Intelligence in its 30th June 2015 report entitled “Rare Earth Market Outlook Update: Supply, Demand, and Prices from 2014 Through 2020” as the average figure for 2019, for the six target rare earths, with no projected metal price escalation.

The commodity prices used in the Study are as shown in Table 6.

Oxide	US\$/kg
Neodymium Oxide	103.69
Praseodymium Oxide	92.55
Dysprosium Oxide	480.97
Europium Oxide	420.49
Gadolinium Oxide	49.57
Samarium Oxide	3.85

Table 6 – Yangibana Scoping Study, Commodity Prices

A 2.5% state royalty was incorporated in the financial evaluation and a 0.75 US\$/A\$ exchange rate was assumed.

Key financial indicators are shown in Table 7.

Item	Units	Base Case
Plant throughput	Million tonnes per annum	1.0
Project Life	Years	7.25
Net revenue	A\$M	3,314
Operating Costs	A\$M	1,449
Capital Costs	A\$M	411
NPV at 10% discount rate	A\$M	711
IRR	%	52
Payback after construction completed	Years	1.5

Table 7 - Yangibana Scoping Study, Key Project Parameters

Project Economics - 15-year Scenario

Extrapolating the operation over an additional eight years based on the reasonable assumption that resources of the same tenor as the current resources will continue to be defined by ongoing exploration provides an NPV₁₀ of A\$900 million - A\$1.1 billion.

Hastings considers that this case is supported by:-

For personal use only

- current Inferred Resources totalling 4.24 million tonnes at 1.07% TREO at Yangibana West, Yangibana North, Gossan, Lion's Ear, Hook, Kane's Gossan, Bald Hill North, Bald Hill South and Fraser's; and
- an Exploration Target as defined by the JORC Code, Clause 17, of between 4 and 7 million tonnes of plant feed at a grade in the order of 1.0 to 1.2% TREO. This target is conceptual but is supported by:-
 - extensions of the Inferred Resources listed above, both at depth where the deepest intersections show no sign of decreasing potential and along strike supported by outcropping ironstone (the host to the bulk of the rare earths mineralisation in the Yangibana Project);
 - mineralisation at Terry's Find, Yangibana and Yangibana South prospects where limited drilling by Hastings has confirmed grades comparable to those of the existing resources but where insufficient drilling has been completed to allow the estimation of JORC resources;
 - mineralisation at Hook South and Tongue prospects where limited drilling in the 1980s has confirmed grades comparable to those of the existing resources but where insufficient drilling has been completed to allow the estimation of JORC resources; and
 - numerous outcropping ironstone units elsewhere within the Yangibana Project that in some cases have returned anomalous rare earths values from rock chip samples and in other cases are yet to be assessed.

The Exploration Target will be explored in the future to establish resources as required.

The Exploration Target discussed here is based on rare earths mineralisation associated with the outcropping ironstone units and their depth and strike extensions. The identification of carbonatite- and phosphorite-hosted higher grade mineralisation at Yangibana West, Yangibana North, Lion's Ear, Kane's Gossan, Bald Hill South and Fraser's deposits establishes potential for the Project to host higher grade mineralisation at depth. This potential is not considered in the current Exploration Target.

The potential quantity and grade of the Exploration Target is conceptual in nature. Confirmation of the Exploration Target will depend on the success of future exploration programmes to determine a mineral resource. There is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised.

For personal use only

TERMINOLOGY USED IN THIS REPORT

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 Nd_2O_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 in its report entitled “Rare Earth Market Outlook, Update: Supply, Demand and Pricing from 2014 through 20230” dated 30 June 2015, and are being used by Hastings in the evaluation of the project.

For further information please contact:

Andy Border, General Manager Exploration +61 2 8268 8689

Guy Robertson, Company Secretary +61 2 8268 8689

About Hastings Technology Metals

- Hastings Technology Metals is a leading Australian rare earths company, with two rare earths projects hosting JORC-compliant resources in Western Australia.
- The Yangibana Project hosts JORC Indicated and Inferred Resources totalling 12.36 million tonnes at 1.07% TREO, including 0.44% Nd₂O₃-Eq (comprising 8.13 million tonnes at 1.07% TREO Indicated Resources and 4.24 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% ZrO₂ and 0.35% Nb₂O₅.
- 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 November 2015 Snowden completed an updated Scoping Study of the Yangibana Project that confirmed the economic viability of the Project and Hastings is advancing work on a Pre-Feasibility Study.

Competent Persons' 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.

The Scoping Study has been compiled under the supervision of Mr Jeremy Peters. Mr Peters is a full time employee of Snowden Mining Industry Consultants and a Fellow of the Australasian Institute of Mining and Metallurgy and Chartered Professional Mining Engineer and Geologist of that organisation.

Mr Peters has sufficient experience relevant to the type of deposit and mining technique which are covered in this announcement and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code"). Mr Peters consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Cautionary statement

This document contains certain forward-looking statements with respect to the financial condition, results of operations and business of Hastings. The words “intend”, “aim”, “project”, “anticipate”, “estimate”, “plan”, “believes”, “expects”, “may”, “should”, “will”, or similar expressions, commonly identify such forward-looking statements.

Examples of forward-looking statements in this document include those regarding mineral resources, anticipated production or construction dates, costs, outputs and productive lives of assets or similar factors. Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors set forth in this document that are beyond the Hastings' control. For example, future ore reserves will be based in part on market prices that may vary significantly from current levels. These may materially affect the timing and feasibility of particular developments. Other factors include the ability to produce and transport products profitably, demand for our products, the effect of foreign currency exchange rates on market prices and operating costs, and activities by governmental authorities, such as changes in taxation or regulation, and political uncertainty.

In light of these risks, uncertainties and assumptions, actual results could be materially different from projected future results expressed or implied by these forward-looking statements which speak only as to the date of this report. Except as required by applicable regulations or by law, Hastings does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information or future events. Hastings cannot guarantee that its forward-looking statements will not differ materially from actual results.

APPENDIX 1

Deposit	Tenement	Ind/Inf	Tonnes	% TREO	Nd2O3	Pr2O3	Dy2O3	Eu2O3	Ce2O3	Er2O3	Gd2O3	Ho2O3	La2O3	Lu2O3	Sm2O3	Tb2O3	Tm2O3	Y2O3	Yb2O3
Bald Hill South	M9/157	Ind	3,247,131	0.82	2873	632	59	72	3236	10.2	172	6.3	974	0.66	339	17.6	1.00	153	5.1
Bald Hill South	P9/467	Ind	51,009	0.78	2791	602	67	82	2991	10.0	196	6.7	862	0.59	370	20.5	0.91	163	4.7
Bald Hill South	M9/157	Inf	728,619	0.64	2268	500	53	58	2475	9.3	140	5.7	698	0.56	271	15.1	0.88	140	4.3
Bald Hill South	P9/467	Inf	107,515	0.83	3011	641	81	86	3047	13.9	217	8.7	918	0.79	385	23.5	1.30	205	6.6
Bald Hill North	E9/1049	Inf	101,703	0.43	1582	327	39	43	1590	7.0	105	4.2	482	0.47	201	11.3	0.70	104	3.5
Bald Hill		Total	4,235,976	0.78	2741	602	58	69	3058	10.1	166	6.2	912	0.64	325	17.2	0.98	151	5.0
Frasers	M9/158	Ind	629,535	0.94	3437	838	58	65	3901	9.3	15	6.2	728	0.5	320	16.6	0.9	145	4.4
Frasers	M9/158	Inf	505,743	0.59	2115	500	40	42	2505	7.2	10	4.5	425	0.4	205	11.0	0.7	113	3.2
Frasers	E9/2018	Inf	35,400	0.46	1827	423	16	27	1869	2.6	56	1.6	359	0.1	154	4.6	0.3	41	1.4
Frasers		Total	1,170,678	0.77	2817	680	49	54	3237	8.2	129	5.3	586	0.4	265	13.8	0.8	128	3.8
Yangibana West	M9/160	Ind	1,479,893	0.99	2246	616	42	82	4637	5.7	187	4.0	1920	0.3	342	15.2	0.5	93	2.5
Yangibana North	M9/159	Ind	2,718,269	1.46	3061	910	43	89	7155	5.5	205	3.9	3058	0.3	394	15.5	0.5	92	2.5
Yangibana West	M9/160	Inf	294,638	1.47	3229	931	51	102	7076	6.5	239	4.7	2897	0.4	448	18.5	0.6	108	2.8
Yangibana North	M9/159	Inf	471,000	1.55	3235	962	45	94	5558	6.6	225	4.7	2300	0.4	408	18.2	0.6	109	2.8
Gossan	M9/159	Inf	220,522	1.07	2132	660	22	55	5368	2.91	113	2.03	2311	0.16	255	8.27	0.28	50	1.39
Hook	M9/159	Inf	348,819	1.09	1866	611	30	49	5513	3.71	114	2.70	2660	0.22	203	10.18	0.31	64	1.51
Kanes Gossan	M9/159	Inf	577,828	1.16	2520	773	42	57	6361	5.45	147	4.07	2454	0.30	270	14.69	0.45	93	1.97
Lions Ear	M9/159	Inf	842,034	1.42	2844	846	42	81	7014	4.45	188	3.73	3114	0.21	343	15.21	0.37	84	1.74
		Total	6,953,002	1.31	2746	810	42	82	6286	5	190	4	2671	0.3	356	15	0.5	90	2
Total Indicated			8,125,836	1.07	2865	738	50	79	4852	7.75	185	5.10	1824	0.48	357	16.40	0.73	121	3.70
Total Inferred			4,233,819	1.07	2531	703	43	67	4964	6.28	159	4.33	1960	0.35	299	14.44	0.56	103	2.69
Grand Total			12,359,656	1.07	2750	726	48	75	4891	7.25	176	4.83	1870	0.44	337	15.73	0.67	115	3.36

Appendix 1 – Yangibana Scoping Study, Detailed breakdown of October 2015 JORC Resources for the Yangibana Project

For personal use only