

# Haranga Resources Ltd

## Metallurgical results confirm the ability to produce a premium product with drilling recommenced at Selenge

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### Favourable metallurgy the key to unlocking the resource, and near term cash flow, potential of Selenge . . .

Haranga Resources Ltd ('Haranga' or 'the Company') has announced the results of initial detailed metallurgical testing of its flagship Selenge project (80% interest). Davis Tube Recovery ('DTR') analysis of every single metre of mineralised core drilled confirmed the expectation that the three drill tested targets to date at Selenge have the ability to each produce a premium magnetite concentrate with an average grade of +65% Fe, with favourable impurities (ex sulphur at the Bayantsogt deposit – discussed below) at a coarse grind size and with scope for further optimisation (initial analysis undertaken at 75µm in order to generate a conservative and consistent baseline study) and for higher grade mineralised zones to be treated by dry magnetic separation.

The favourable met analysis will be a key focus area due to the relatively low grade of the maiden resource (with a higher cutoff grade significantly reducing tonnage) and in our view is the key to unlocking the resource scale upside, and near term cash flow potential, of Selenge. These results will be fed into a scoping study to be announced in the next month that we expect will support a low opex, relatively low capex beneficiation process to produce a lump and/or concentrate product. Current mining operations at the neighbouring Eruu Gol mine (Mongolia's largest iron ore mine) have proven magnetite skarn deposits such as Bayantsogt and Dund Bulag at Selenge are amenable to low strip ratio mining and simple beneficiation, generating extremely attractive margins given the inherent transport cost advantage to northern China – indeed the largest individual cost component remains freight costs (not mining or processing).

### . . . with an aggressive drilling programme commenced and expected to support a 4-5Mtpa operation

The primary task for Haranga is to now quickly build its resource inventory, currently 32.8Mt @ 24.4% Fe at Bayantsogt (following 10,308 metres completed last year) with an exploration target of 120-250Mt for its Dund Bulag prospect, with the Company's planned 32,000 metre drilling programme now commenced. We expect this programme to last ~6 months and support a total resource in the order of 250-300Mt and an operation of +4-5Mtpa (on par with Eruu Gol).

### Selenge is expected to produce a premium product

While DTR results indicate that sulphur at Bayantsogt is relatively high at 1%, such levels currently only attract a ~4.75% discount to the spot price in the northern Chinese market. We expect the likely development scenario of multiple sources of ore (ie mining from the Bayantsogt, Dund Bulag and/or Huiten Gol deposit/prospects) feeding a central plant at Selenge will result in blending to achieve optimal product characteristics (premium Fe levels and favourable impurities) and mining/processing costs.

### Well funded and following a proven value creation roadmap

The Company remains comfortably funded (A\$17.4m in cash at Mar'12), with an EV of only A\$44m and the Lippo Group (a major Asian conglomerate with +A\$50b of assets under management) has recently gained board representation (the Company's largest shareholder with a 15.3% interest). The business model Haranga is employing is very similar to its big brother coal company, Hunnu Coal (the target of a successful A\$477m cash offer by Banpu Minerals) albeit ~12-18 months behind in terms of exploration/development of its flagship asset. In our view, the upside from an equity investment in Haranga is de-risked by its new big brother cornerstone financial investor (the Lippo Group) and the neighboring Eruu Gol mine, which provides proof of concept, a value creation roadmap and potential for corporate synergies. CIC invested US\$700m to take a 35% stake in Eruu Gol in Oct'09 (implied US\$2b valuation) at which time it was still a development project with a ~300Mt resource. Other near-term de-risking milestones for Haranga are expected to be a scoping study (due in a month), visibility for the Company's rail solution and submission of a mining right application (the later two expected by year end). **Refer to Exhibit's 1 & 2 on the next page of this report . . .**

OCEAN EQUITIES

## Iron Ore : MONGOLIA

2<sup>nd</sup> July 2012

Market Cap	A\$61.4m
Listing:Ticker	ASX:HAR
Share Price	A\$0.29
Shares o/s	211.8m
52 week High/Low	A\$0.54 / \$0.16
Net Cash (31/3/12)	A\$17.4m

#### Highlighted Related Research:

**11<sup>th</sup> Apr'12: Mongolia Exploration Update** "KM site visit highlights the potential of Voyager; Haranga's new big brother to assist in planned development activities; and, a focus on Mongolia at Hong Kong Mines & Money"

**19<sup>th</sup> Mar'12: Haranga Resources Ltd** "Maiden resource, significant scale exploration target and A\$6m placement with an accelerated drilling programme to shortly commence"

**29<sup>th</sup> Feb'12: Mongolia exploration update & focus series** "An emerging mining frontier and one of the last regions where a junior can add a lot of value quickly – Part i: Haranga Resources Ltd"

**17<sup>th</sup> Jan'12: Focus on Metals & Mining - Haranga Resources Ltd** "Concept starting to become reality with maiden resource, favourable met tests and scoping study expected in H1'12"

#### Analysts

**Sam Spring, CFA, CA**

+44 (0) 20 7786 4378

[sam.spring@oceanequities.co.uk](mailto:sam.spring@oceanequities.co.uk)

**Christopher Welch** +44 (0) 20 7786 4377

**Adam Lucas** +44 (0) 20 7786 4382

**Richard Nash** +44 (0) 20 7786 4386

*\*Refer to the final page of this report for the full Ocean Team's contact details*

#### Disclosures & Disclaimer

Ocean Equities has an investment in and is seeking investment business from Haranga Resources Ltd.

This report must be read with the disclaimer and disclosures on the final page that forms part of this report.

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**Exhibit 1: Coarse grind (75µm) Davis Tube Recovery ('DTR') tests were completed on 469 composite (5m) samples representing the entirety of the iron mineralisation drilled thus far at the Bayantsogt Deposit, part of the Selenge Iron Ore Project. DTR tests were also completed on all zones of mineralisation drilled at the nearby Dund Bulag and Huiten Gol Prospects. All three deposit/prospects produced a consistent, premium quality magnetite concentrate with an average grade of over 65% Fe and very low average silica content**

**Summary DTR Results – Average Concentrate Quality  
(80% passing 75µm, 10% yield cutoff)**

Deposit	Average Mass Yield	Fe (%)	SiO2 (%)	Al2O3 (%)	S (%)	P (%)
Bayantsogt	29.1%	<b>65.77</b>	3.25	0.96	1.03	0.02
<b>Prospects</b>						
Dund Bulag	18.0%	<b>65.15</b>	5.34	1.32	0.18	0.00
Huiten Gol	29.8%	<b>68.78</b>	1.90	0.41	0.01	0.01

Source: Haranga; Ocean Equities

**Exhibit 2: Bayantsogt Deposit – Summary of DTR Results (80% passing 75µm)**

Mass Yield Cut Off	Average Mass Yield (%)	Average Raw Assay Fe (%)	Concentrate Quality - Average Assay Results												
			Al <sub>2</sub> O <sub>3</sub> (%)	CaO (%)	Cr <sub>2</sub> O <sub>3</sub> (%)	Fe (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	Na <sub>2</sub> O (%)	P (%)	TiO <sub>2</sub> (%)	SiO <sub>2</sub> (%)	S (%)	Zn (%)
6%	25.13	27.84	1.02	1.60	0.02	<b>65.10</b>	0.10	0.45	0.08	0.06	0.022	0.37	3.63	1.10	0.005
8%	27.62	29.29	0.98	1.52	0.02	<b>65.50</b>	0.10	0.42	0.08	0.06	0.022	0.35	3.42	1.06	0.004
10%	29.11	30.09	0.96	1.45	0.02	<b>65.77</b>	0.10	0.41	0.08	0.06	0.022	0.34	3.25	1.03	0.004

**Dund Bulag Prospect – Summary of DTR Results (80% passing 75µm)**

Mass Yield Cut Off	Average Mass Yield (%)	Average Raw Assay Fe (%)	Concentrate Quality - Average Assay Results												
			Al <sub>2</sub> O <sub>3</sub> (%)	CaO (%)	Cr <sub>2</sub> O <sub>3</sub> (%)	Fe (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	Na <sub>2</sub> O (%)	P (%)	TiO <sub>2</sub> (%)	SiO <sub>2</sub> (%)	S (%)	Zn (%)
6%	16.94	18.00	1.35	1.78	0.05	<b>64.94</b>	0.09	0.55	0.03	0.30	0.003	0.14	5.50	0.19	0.001
8%	17.46	18.22	1.35	1.75	0.05	<b>64.97</b>	0.09	0.55	0.03	0.31	0.003	0.14	5.47	0.18	0.001
10%	18.04	18.48	1.32	1.69	0.05	<b>65.15</b>	0.09	0.54	0.03	0.31	0.003	0.13	5.34	0.18	0.001

**Huiten Gol Prospect – Summary of DTR Results (80% passing 75µm)**

Mass Yield Cut Off	Average Mass Yield (%)	Average Raw Assay Fe (%)	Concentrate Quality - Average Assay Results												
			Al <sub>2</sub> O <sub>3</sub> (%)	CaO (%)	Cr <sub>2</sub> O <sub>3</sub> (%)	Fe (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	Na <sub>2</sub> O (%)	P (%)	TiO <sub>2</sub> (%)	SiO <sub>2</sub> (%)	S (%)	Zn (%)
6%	25.64	25.15	0.82	0.60	0.02	<b>66.19</b>	0.04	0.48	0.05	0.11	0.010	0.91	3.96	0.04	0.001
8%	25.64	25.15	0.82	0.60	0.02	<b>66.19</b>	0.04	0.48	0.05	0.11	0.010	0.91	3.96	0.04	0.001
10%	29.76	27.70	0.41	0.29	0.01	<b>68.78</b>	0.01	0.30	0.02	0.04	0.006	0.31	1.90	0.01	0.001

Source: Haranga; Ocean Equities

**OCEAN EQUITIES Ltd**  
INDEPENDENT PARTNERSHIP SPECIALISING  
IN THE NATURAL RESOURCE SECTOR  
3 Copthall Avenue  
London EC2R 7BH  
Tel: +44 (0)207 786 4370  
Fax: +44 (0)207 786 4371  
E-mail: [info@oceanequities.co.uk](mailto:info@oceanequities.co.uk)  
Website: [www.oceanequities.co.uk](http://www.oceanequities.co.uk)  
Bloomberg: OELR [GO]

**PARTNERS**

**Guy Wilkes**

CEO  
+44 (0) 20 7786 4372  
[guy.wilkes@oceanequities.co.uk](mailto:guy.wilkes@oceanequities.co.uk)

**Rupert Williams**

Director, Head of Sales  
+44 (0) 20 7786 4373  
[rupert.williams@oceanequities.co.uk](mailto:rupert.williams@oceanequities.co.uk)

**Will Slack**

Director, Corporate Finance  
+44 (0) 20 7786 4375  
[will.slack@oceanequities.co.uk](mailto:will.slack@oceanequities.co.uk)

**Will Hodson**

Senior Equity Sales Executive  
+44 (0) 20 7786 4376  
[will.hodson@oceanequities.co.uk](mailto:will.hodson@oceanequities.co.uk)

**SALES**

**Justin Tooth**

Sales & Business Development  
+44 (0) 20 7786 4385  
[justin.tooth@oceanequities.co.uk](mailto:justin.tooth@oceanequities.co.uk)

**Jeremy Woodgate**

Executive, Sales & Trading  
+44 (0) 20 7786 4381  
[jeremy.woodgate@oceanequities.co.uk](mailto:jeremy.woodgate@oceanequities.co.uk)

**James McLucas**

Executive, Sales  
+44 (0)207 786 4384  
[james.mclucas@oceanequities.co.uk](mailto:james.mclucas@oceanequities.co.uk)

**Amanda van Dyke**

Executive, Sales  
+44 (0) 20 7786 4387  
[amanda.vandyke@oceanequities.co.uk](mailto:amanda.vandyke@oceanequities.co.uk)

**Freddie Blackwell**

Executive, Sales  
+44 (0)20 7786 4391  
[freddie.blackwell@oceanequities.co.uk](mailto:freddie.blackwell@oceanequities.co.uk)

**RESEARCH**

**Sam Spring, CFA, CA**

Senior Mining Analyst  
+44 (0) 20 7786 4378  
[sam.spring@oceanequities.co.uk](mailto:sam.spring@oceanequities.co.uk)

**Christopher Welch**

Mining Analyst  
+44 (0) 20 7786 4377  
[christopher.welch@oceanequities.co.uk](mailto:christopher.welch@oceanequities.co.uk)

**Adam Lucas**

Mining Analyst  
+44 (0) 20 7786 4382  
[adam.lucas@oceanequities.co.uk](mailto:adam.lucas@oceanequities.co.uk)

**Richard Nash**

Mining Analyst  
+44 (0) 20 7786 4386  
[richard.nash@oceanequities.co.uk](mailto:richard.nash@oceanequities.co.uk)

**Lisa Coate**

Research Assistant  
+44 (0)20 7786 4388  
[lisa.coate@oceanequities.co.uk](mailto:lisa.coate@oceanequities.co.uk)

**CORPORATE**

**Kelly Edwards**

Manager, Trading and settlements  
+44 (0) 20 7786 4374  
[kelly.edwards@oceanequities.co.uk](mailto:kelly.edwards@oceanequities.co.uk)

**Danielle Shoemark**

Corporate Finance  
+44 (0) 20 7786 4389  
[danielle.shoemark@oceanequities.co.uk](mailto:danielle.shoemark@oceanequities.co.uk)

**Katie Pollard**

Office Manager / Accounts  
+44 (0)207 786 4370  
[katie.pollard@oceanequities.co.uk](mailto:katie.pollard@oceanequities.co.uk)

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