

## Quarterly Activities Report

**24 October 2014**

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**Issued Capital:**

241.75 million shares

**ASX Symbol:** HAR

# SEPTEMBER 2014 QUARTERLY ACTIVITIES REPORT

Haranga Resources Limited (“the Company” or “Haranga”) is pleased to report on its activities for the September 2014 quarter.

## HIGHLIGHTS

- **The Company is extremely pleased with the current results of the Metallurgical test work at ALS Technical Centre in Wangara, WA. The magnetite range metallurgical programme shows excellent processing attributes of the iron ore from the Selenge Project.**
- **The preliminary results demonstrate a magnetite concentrate of marketable specification with high iron grade and low impurities suitable for Chinese steel producers.**
- **The Company expects the metallurgical test will be complete, with final results of the test work delivered in the coming weeks.**
- **An exploration programme focused on identifying high grade zones was completed during the quarter. The Company is now evaluating results of this programme.**

## Recent news in Mongolia’s iron ore industry

- **The country’s first wet magnetite separation with final grinding size of 75 micron plant was recently brought into operation. This is a small scale (300Ktpa) production capacity (China invested) export oriented operation producing 66% iron concentrate. The initial CAPEX was approximately USD15M.**
- **The average price for domestic Hebei Iron Ore 62% Fe Tangshan during the quarter was 107\$/t.**
- **This newly constructed wet magnetic iron ore processing plant serves as an excellent example for Haranga’s Selenge Project development plan with a small scale start up scenario.**

## DEVELOPMENT ACTIVITIES

The Company's flagship Selenge iron ore project ("the Project") is transitioning into its development stage after the completion of the successful exploration phase.

### Pre-Mining (Operations) Agreement

In December 2013, the Company's 80% owned Mongolian subsidiary "Haranga Huder" LLC, which currently holds a total of 6 mineral exploration licenses (MEL), signed the Pre-Mining (Operations) Agreement (PMA) with the Mineral Resources Authority (MRAM) of Mongolia. This PMA covers the entire license area of MEL#11334X where the JORC Code compliant Resource\* was estimated.

Under this PMA, the Company is allowed to build an open pit mine and processing plant complex after completion and submittal of the Feasibility Study Report together with an Open Pit Mine Design.

As part of the Feasibility Study of the Project, the Company is working on (i) to complete the metallurgical test works within this year; and is also studying (ii) potential infrastructure solutions for truck-road and railway for transportation of iron concentrate as a final product, as well as electricity power and water supply for a potential open pit mine and ore processing plant, and is working on (iii) to optimize the geotechnical and hydrogeological studies. All these are necessary components of the Project Bankable Feasibility Study.

### Infrastructure

The Project is ideally located in the heart of Mongolia's premier iron ore development region with excellent access to the main trans-Mongolian rail line and nearby rail spurs. In 2013, the Company signed the Memorandum of Understanding ("MOU") with both the Mongolian Railway Authority and the Ministry for Transportation requesting up to 5Mtpa of rail capacity from 2015 onwards.

Field studies were conducted to examine the selected infrastructure development options depending on the Project's two different production capacity scenarios:

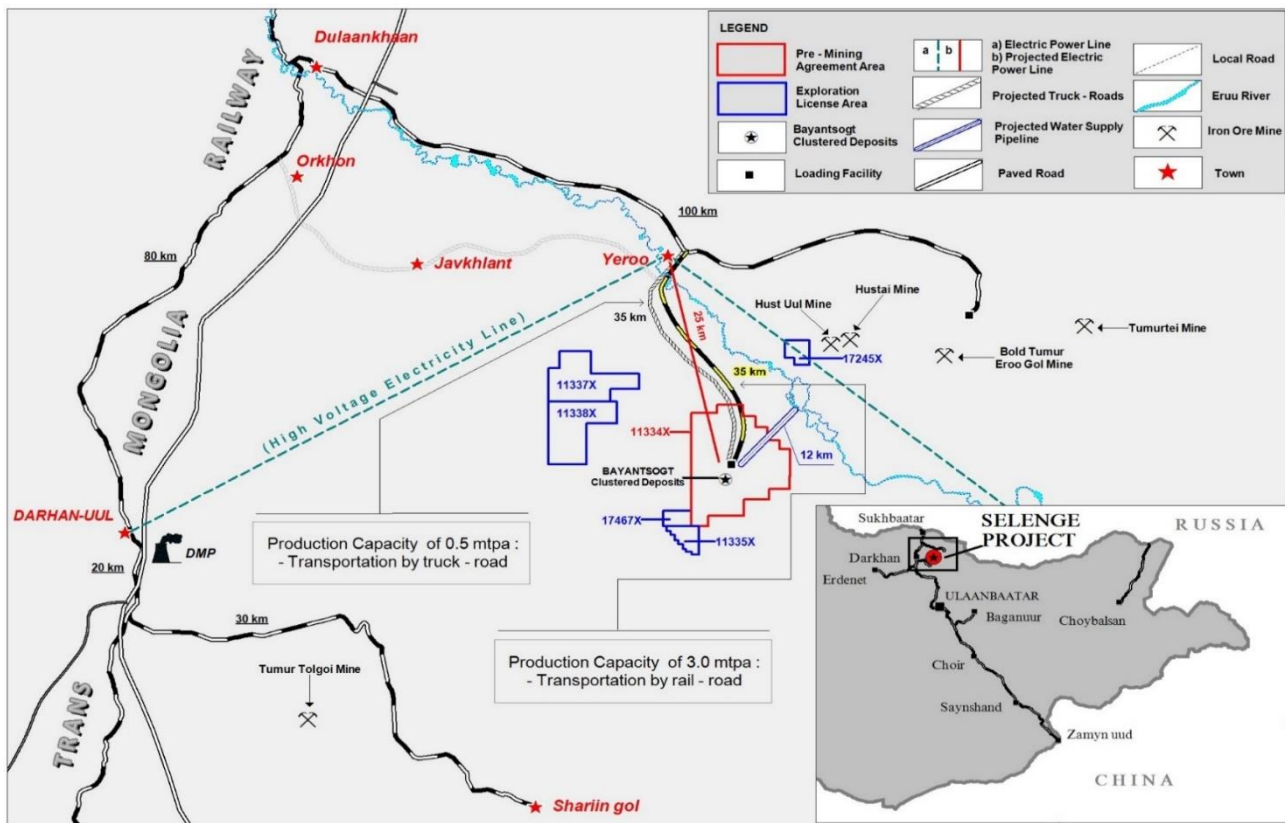
- In a smaller (0.5Mtpa) production capacity case, the Company now intends to study more carefully the iron ore concentrate transportation carried out by a paved truck-road to be built from the beneficiation plant site to the uploading facility at the existing Tavin Station nearby the sub-provincial town of Eruu. The total estimated length of the paved road is about 35 km.
- In a larger production capacity scenario, if the concentrate production capacity ramps up to 3.0Mtpa, a new railroad of 35km is planned which will be connected to the existing railway of the Bold Tumor Eruu Gol (BTEG) iron ore mine operation.

In terms of the power supply, the Company is studying to build and install a new electricity transmission line of about 25km from the main 110kV high-voltage power grid between Darkhan city and Eruu and Bugant sub-provincial town.

As for the water supply for a potential open pit mine and beneficiation plant complex, about 12 km long pipeline is considered to be built from Eruu River.

The following map shows the preliminary results of the infrastructure purpose study.

**Figure 1. The Infrastructure Development map of the Selenge project**



### Metallurgical test

The test work has commenced after the representative samples from Dund Bulag and Bayantsogt iron ore deposits were delivered at ALS Technical Centre in Wangara, WA.

The summary flow sheets with detailed descriptions of the Phase 1 and 2 metallurgical test work are attached to this report.

Within the Phase 1 the following was completed:

- i. Optical microscopy and XRD
- ii. Head analysis, multi elemental analysis
- iii. Multi target grind establishment
- iv. Bond ball and bond abrasion index determination
- v. Davis tube wash test (DTW)
- vi. Davis tube recovery test (DTR)

The following Phase 2 test work is currently underway and is estimated to be completed within October / November 2014:

- i. Grind size optimization (using ERIEZ L8)
- ii. Coarse liberation assessment
- iii. LIMS/flotation
- iv. Two-stage grinding test

The Company expects to be able to release final results in early November 2014.

## Exploration

The Company carried out a field reconnaissance programme targeting sites for the purpose of identifying potential high grade shallow zones of iron mineralisation. The below table summarises the field works completed during the quarter.

Targets	Reckon and Mapping	Trench	Bore pit	Rock chip	Trench sample	Thin section	Polished section
	hectare	m	M	Pc	pc	pc	pc
Target 1	3910		3			1	
Target 2		20.4		14	21	5	
Target 3		3					6
Target 4				2	2		2
Total		3910	23.4	3	16	23	6

The Company is now assessing the results of this programme.

Erdene Tsengelbayar  
**Managing Director**  
**Haranga Resources Limited**

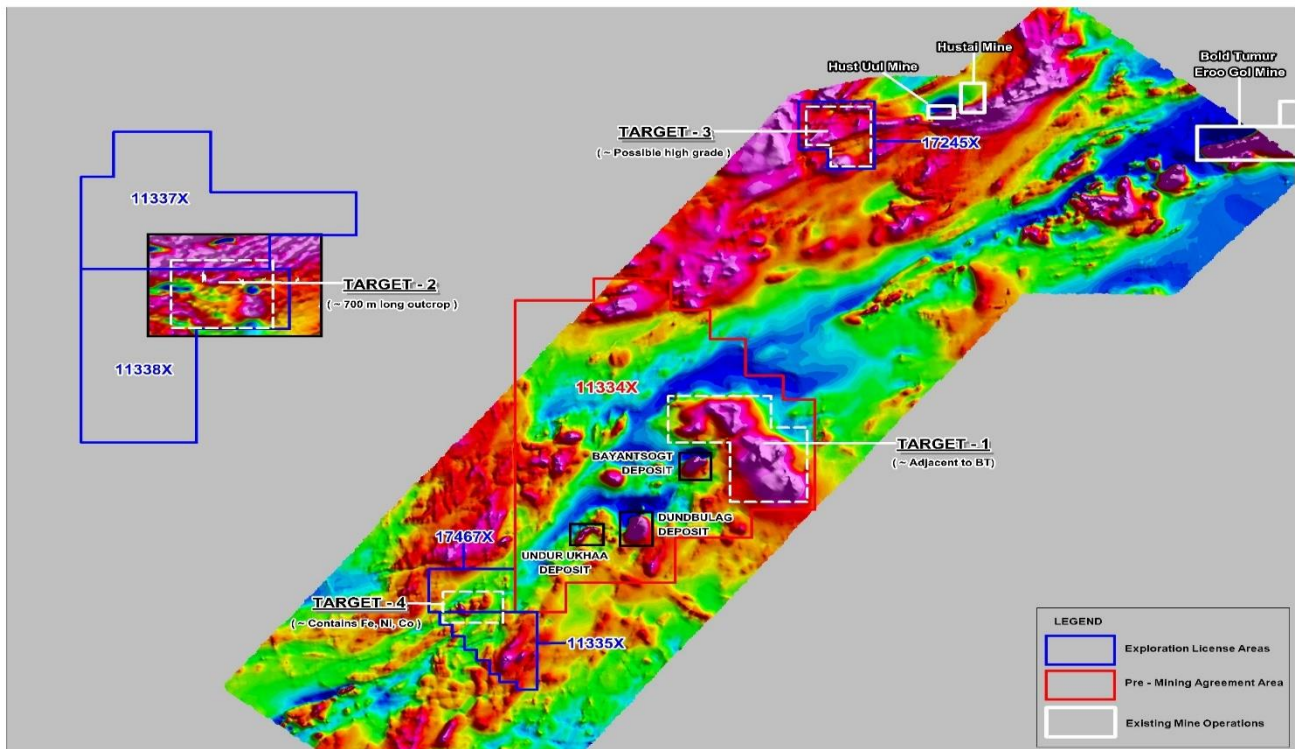
\* The technical information contained in this announcement in relation to the JORC Code (2012) Compliant Resource for the Selenge Project Deposits has been reviewed by Mr Peter Ball of DataGeo Ltd, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Ball has sufficient experience relevant to the style of mineralization and type of deposit under consideration 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 Mineral Resources and Ore Reserves'. Mr Ball consents to the inclusion in this report of the matters based on his information, and information presented to him, in the form and context in which it appears. Refer to the HAR ASX announcement dated 7 May 2013 for further details.

### JORC Resource Estimates Split by Deposit (Cutoff = 12.5% Fe)

Deposit	Measured		Indicated		Inferred		TOTAL	
	Mt	Fe Grade	Mt	Fe Grade	Mt	Fe Grade	Mt	Fe Grade
Dund Bulag	96.4	16.6	103.5	16.1			199.9	16.4
Bayantsogt	20.7	23.0	15.0	22.8	0.55	16.6	36.3	22.8
Undur Ukhaa	9.3	15.8	8.9	15.1			18.2	15.4
TOTAL	126.4	17.6	127.4	16.8	0.55	16.7	254.4	17.2

\*\* Mr. Aden Tan, who represents the ALS Technical Centre in Wangara in Western Australia, consents to the inclusion in this report of the matters based on his information, and information presented to him, in the form and context in which it appears.

\*\*\* **Identified Target Sites**



**Appendix 1 – Interests in mining tenements held**

Project	Location	Tenement	Interest (%) at beginning of quarter	Interest (%) at end of quarter	Acquired during the quarter	Disposed of during the quarter
Selenge	Mongolia	11334X	80	80	-	-
		11335X				
		11337X				
		11338X				
		17245X				
		17467X				

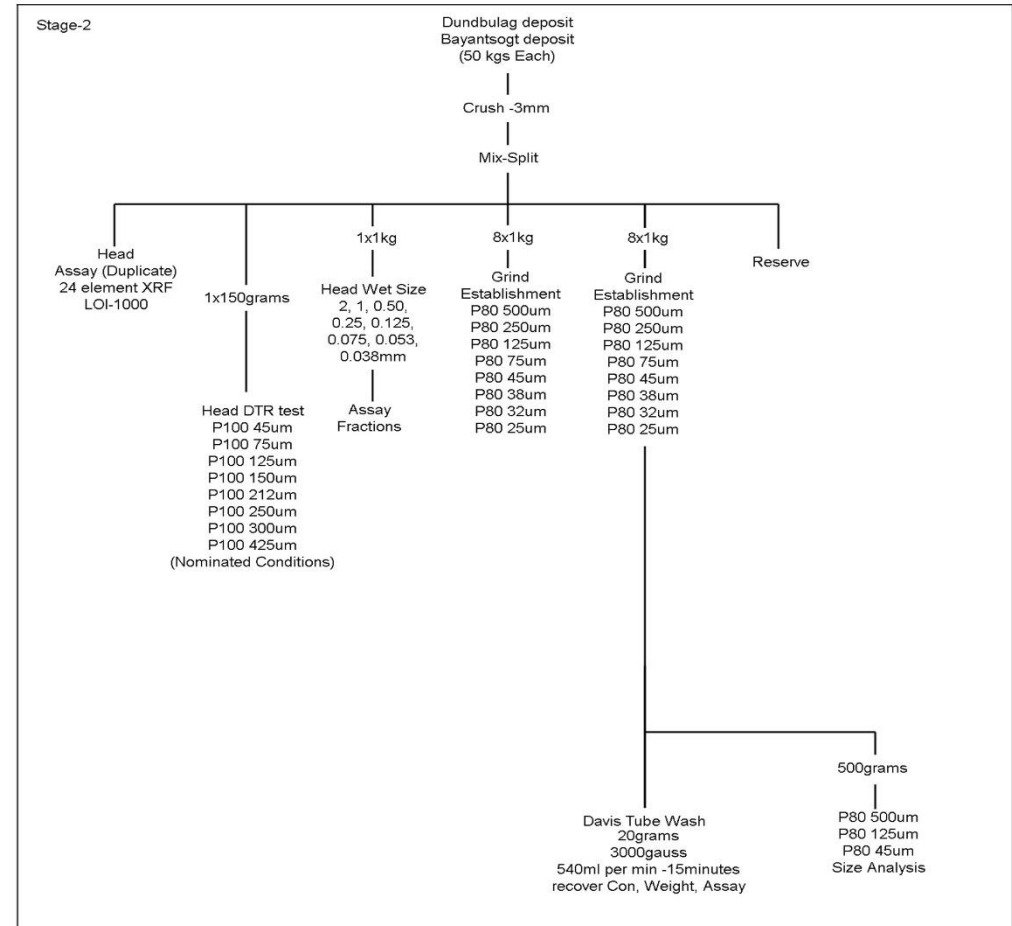
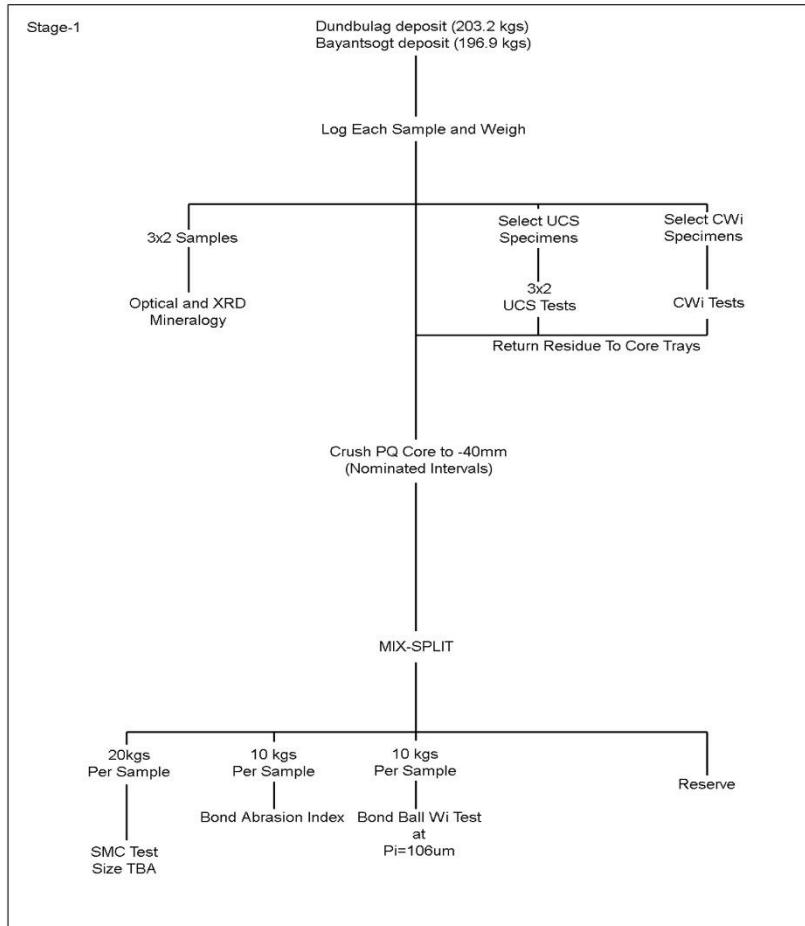
**Appendix 2 – Summary of expenditure incurred per project**

Project	Quarter Cash Spend \$A'000
Selenge	87
<b>Total</b>	<b>87</b>



**PHASE ONE:**

**Sample Preparation, Comminution Test, Magnetite Recovery Scoping Study  
Magnetic Recovery Test by Davis Tube**





**PHASE TWO:**

Grind Size Optimisation Test-Using ERIEZ L8, Coarse Liberation Assessment, LIMS/Flotation, Two-Stage Grinding Test

