Hastings Rare Metals Limited

**ASX Announcement**
**23rd October 2014**

# SEPTEMBER 2014 QUARTERLY ACTIVITIES REPORT


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## HIGHLIGHTS

- **Maiden JORC resource estimate for the Yangibana Project, at the Yangibana North prospect with total JORC resources of 3.36 million tonnes comprising Indicated Resource of 1.86 million tonnes at 1.38% TREO plus Inferred Resource of 1.50 million tonnes at 1.29% TREO at a 0.5% TREO cut-off**
- **Stage 2 drilling of 6,500m in progress at Yangibana testing six additional targets**
- **Yangibana North JORC resource to be further tested along strike and at depth**
- **Drilling at the Southern Extension to the defined JORC resource at the Hastings Project encounters significant mineralisation with higher HREO grades**
- **Drilling at the Levon and Haig targets also returned wide intervals of encouraging rare earths values**

## YANGIBANA PROJECT

During the quarter the Company announced the results of the maiden JORC resource estimation for the Yangibana Project. The estimation is based on the Company's May 2014 reverse circulation (RC) drilling programme carried out at the Yangibana North prospect in which Hastings holds a 70% interest, and was carried out by consultants CoxRocks Pty Limited.

The deposit was modelled based on the higher-grade ironstone-quartz lens plus any portions of the halo that carried immediately adjacent mineralisation exceeding 5,000ppm total rare earths oxides (TREO). This model was then wire-framed to produce the 3-D model within which the block-modelling was carried out. Resource grades were calculated for each of the rare earths and the relevant figures were summed to provide TREO and critical rare earths oxides (CREO) figure. A specific gravity/bulk density of 2.8 was used in the estimation of tonnes, and this provided the resources as shown in Table 1:-

| Cut-off grade ppm (%) TREO | Resource Category | Tonnes | Average Grade ppm (%) TREO | Including ppm (%) CREO |
|---|---|---|---|---|
| 5,000 (0.5) | Indicated | 1,860,000 | 13,800 (1.38) | 3,000 (0.30) |
| | Inferred | 1,500,000 | 12,900 (1.29) | 2,800 (0.28) |
| | TOTAL | 3,360,000 | 13,400 (1.34) | 2,900 (0.29) |

**Table 1 – Yangibana North Resource Estimate (CoxRocks Pty Limited)**

The new resource covers some 825m of strike of the outcropping Yangibana North prospect that is part of a discontinuous 12km trend of ironstone-quartz bodies that are known to carry significant rare earths. The May 2014 drilling tested the target to only 200m down dip and all mineralisation intersected to date is within 75m of surface. Composite bulk samples were collected from all 44 holes for preliminary metallurgical test work which commenced during the quarter.

Following the success of the Yangibana North drilling programme the Company commenced a Stage 2 drilling programme. Stage 2 drilling aims to define initial resources at each of Bald Hill, Frasers, Lion's Ear, Hook, Gossan, and Kane's Gossan (Figure 2). Further drilling will be undertaken at Yangibana North to expand on the initial resource estimation.

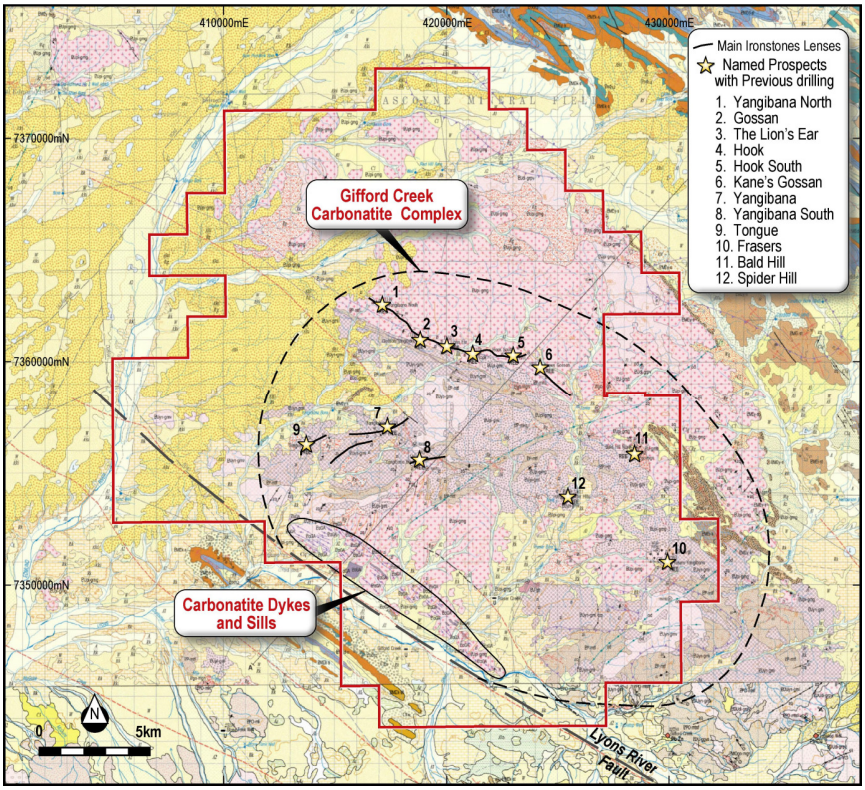



**Figure 1 – Hastings tenements, red outline, on regional geology showing main ironstone prospects**

Drilling was still in progress at the end of the quarter and the first assay results are yet to be received.

**HASTINGS PROJECT**

The Company also received the results of the reverse circulation (RC) drilling programme completed within its Hastings tenements in June 2014. The results from the three targets – Southern Extension, Levon and Haig – are encouraging and enhance the overall potential of the Hastings Project.

Six holes tested some 400m of strike at the Southern Extension with each hole intersecting significant mineralisation in the Niobium Tuff unit that hosts the mineralisation within the defined JORC resource to the north, and also in the overlying trachytic lava unit. Best intersections achieved from the drilling, from north to south, are shown in Table 2.

| | From (m) | To (m) | Interval (m) | TREO ppm | HREO ppm | $Dy_2O3$ ppm | $Nb_2O_5$ ppm | $Ta_2O_5$ ppm | $ZrO_2$ ppm |
|---|---|---|---|---|---|---|---|---|---|
| SE1 | 10 | 33 | 23 | 2,670 | 2,300 | 250 | 5,000 | 250 | 12,025 |
| and | 41 | 46 | 5 | 2,090 | 1,800 | 190 | 3,800 | 180 | 8,800 |
| SE2 | 14 | 18 | 4 | 2,750 | 2,320 | 260 | 5,025 | 280 | 12,910 |
| and | 29 | 65 | 36 | 2,325 | 1,980 | 215 | 4,470 | 225 | 10,675 |
| SE3 | 15 | 22 | 7 | 2,680 | 2,290 | 250 | 5,025 | 270 | 12,910 |
| and | 30 | 59 | 29 | 2,475 | 2,120 | 230 | 4,725 | 240 | 11,425 |
| (plus) | 59 | 77 | 18 | 1,890 | 1,615 | 180 | 3,440 | 175 | 8,565 |
| SE4 | 11 | 74 | 63 | 2,270 | 1,935 | 215 | 4,000 | 210 | 10,140 |
| SE5 | 1 | 50 | 49 | 2,405 | 2,040 | 230 | 4,400 | 235 | 10,745 |
| and | 109 | 133 | 24 | 2,185 | 1,855 | 200 | 3,890 | 200 | 9,660 |
| SE6 | 29 | 63 | 34 | 2,360 | 2,005 | 215 | 4,165 | 220 | 10,090 |

**Table 2 – Hastings RC Drilling Programme June 2014 – Southern Extension prospect Assay Intersections**

The majority of the intersections shown in Table 2 exceed the average grade of the defined resources further north that average 2,100ppm TREO including 1,800ppm HREO, including 186ppm $Dy_2O_3$ with 3,550ppm $Nb_2O_5$, 182ppm $Ta_2O_5$ and 8,900ppm $ZrO_2$ (as reported previously).

The increased grades for both the rare earths and the rare metals and the potential to increase the defined JORC resource further enhance the economics of the Hastings Project.

Samples have been sent for preliminary metallurgical test work.

At Levon prospect, the two holes drilled passed through trachytic lava and tuff and both terminated at the target depth of 95m to achieve the initial data required on this project. In both cases the holes commenced and terminated within the mineralisation, with the intersections achieved as shown in Table 3.

| | From (m) | To (m) | Interval (m) | TREO ppm | HREO ppm | $Dy_2O_3$ |
|---|---|---|---|---|---|---|
| L1 | 0 | 95 | 95 | 2,770 | 800 | 78 |
| L2 | 0 | 95 | 95 | 2,785 | 760 | 76 |

**Table 3 - Hastings RC Drilling Programme June 2014 – Levon Prospect Assay Intersections**

The average intersection TREO grade exceeds the arithmetic average of surface rock chip samples (2,050ppm TREO) that was reported previously.

At Haig prospect the one hole drilled intersected homogenous trachytic lava from 24m downhole to end of hole. As with Levon, the hole was terminated in mineralisation. The intersection from 24m to the end of hole at 125m is provided in Table 4.

| | From (m) | To (m) | Interval (m) | TREO ppm | HREO ppm | $Dy_2O_3$ |
|---|---|---|---|---|---|---|
| HI | 24 | 125 | 101 | 3,065 | 845 | 84 |

**Table 4 - Hastings RC Drilling Programme June 2014 – Haig Prospect Assay Intersections**

This intersected TREO grade exceeds the arithmetic average of surface rock chip samples (2,485ppm TREO including 766ppm HREO) that were reported previously.

Composite samples from Levon and Haig were collected pending preliminary test work. A review of results will then be made to determine what further work is warranted.

*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)

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

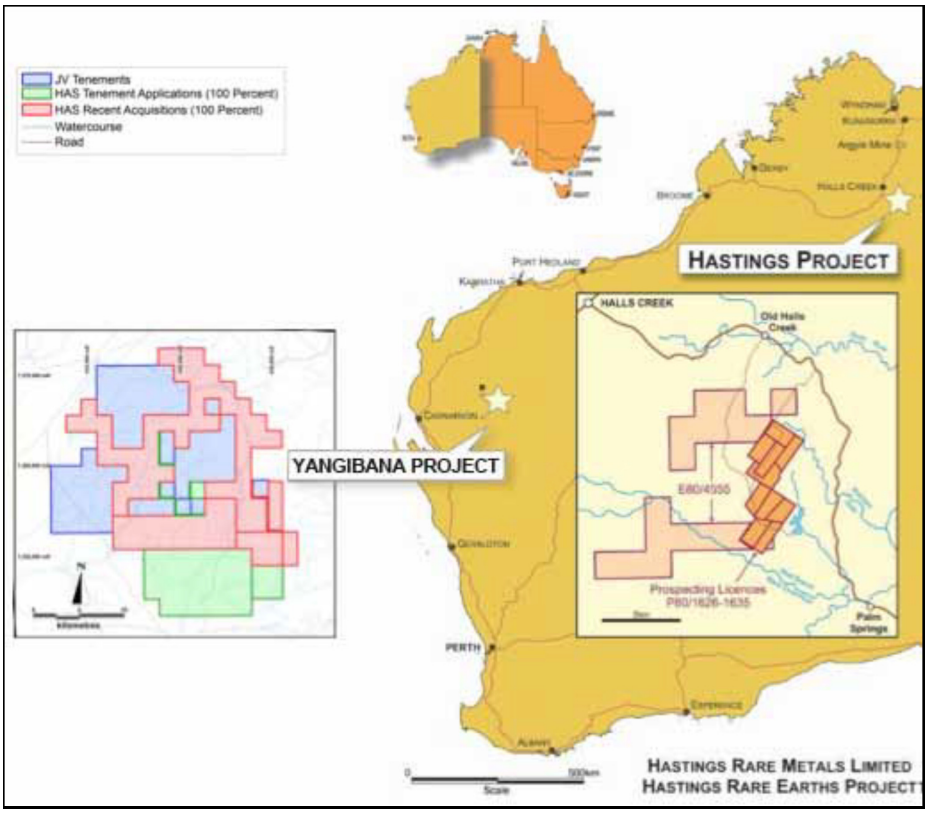
CREO is the sum of the oxides of Nd, Eu, Tb, Dy and Y that were so designated by the US Department of Energy (2010) based on the availability and future perceived requirements for these particular rare earths.

## CORPORATE

The Company's 30 June 2014 Annual Report was released on 30 September 2014. A copy is available for download on the Company's website www.hastingsraremetals.com.

**About Hastings Rare Metals**

- Hastings Rare Metals is a leading Australian rare earths company, with two rare earths projects in Western Australia.
- The Hastings project is at an advanced stage of development and contains JORC Indicated and Inferred Resources totaling 36.2 million tonnes at 0.21% TREO, including 0.18% HREO, plus 0.89% $ZrO_2$ and 0.35% $Nb_2O_5$.
- The Yangibana deposit contains JORC Indicated and Inferred Resources totalling 3.36 million tonnes at 1.34% TREO, including 0.29% of CREO (that includes 0.27% $Nd_2O_3$) (comprising 1.86 million tonnes at 1.38% TREO Indicated Resources and 1.50 million tonnes at 1.29% TREO in Inferred Resources).
- 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 Hastings deposit contains predominantly heavy rare earths (HREO) (85%), such as dysprosium and yttrium which are substantially more valuable than the more common light rare earths (LREO).
- The company aims to capitalise on the strong demand for heavy rare earths created by expanding new technologies. It is currently validating the extensive historical work and undertaking further scoping study to confirm economics.




**Hastings Project Locations**

## TENEMENT SCHEDULE

**Hastings Project Holdings Pty Ltd (100% Owned Subsidiary)**

**Owns a 100% interest in the Hastings Project**

| | |
|---|---|
| P80/1626 | Western Australia |
| P80/1627 | Western Australia |
| P80/1628 | Western Australia |
| P80/1629 | Western Australia |
| P80/1630 | Western Australia |
| P80/1631 | Western Australia |
| P80/1632 | Western Australia |
| P80/1633 | Western Australia |
| P80/1634 | Western Australia |
| P80/1635 | Western Australia |
| E80/4555 | Western Australia |

**Gascoyne Metals Pty Limited (100% Owned Subsidiary)**
**Owns a 70% interest in the following Yangibana Project tenements**

| | |
|---|---|
| E09/1043 | Western Australia |
| E09/1049 | Western Australia |
| E09/1703 | Western Australia |
| E09/1704 | Western Australia |
| E09/1705 | Western Australia |
| E09/1706 | Western Australia |

**Owns a 95% interest in the following Yangibana Project tenements**

| | |
|---|---|
| E09/1943 | Western Australia |
| E09/1944 | Western Australia |
| E09/2018 | Western Australia |
| E09/1700 | Western Australia |
| P09/467 | Western Australia |
| E09/2007 | Western Australia |

**Owns 100% of the additional Yangibana EL Application**

| | |
|---|---|
| E09/1989 | Western Australia (Application) |

**Owns a 100% interest in the following Yangibana Project tenements**

| | |
|---|---|
| P09/480 | Western Australia |
| P09/481 | Western Australia |
| P09/482 | Western Australia |

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***Competent Persons' Statement***

*The information in this report 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 report 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 report 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 presentation of the matters based on his information in the form and context in which it appears.*