



**Orion Metals Limited (ASX:ORM)**

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## **ASX RELEASE**

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### **ORION METALS INFORMATION PROVIDED AT PDAC**

Attached is a copy of the Corporate Information brochure being provided to participants at PDAC in Toronto.

For further information contact:

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Chief Operating Officer  
Orion Metals Limited 07 3249 3060

# ORION METALS LIMITED

## Focusing on Rare Earth and Gold Projects



**ASX Code** ORM

### Market Capitalisation

AUD\$6 million (at Feb 2012)

79.5M Shares on Issue

757 Shareholders

### Top 20 Shareholders

Hold 73% of Listed Shares

### Largest Shareholders

Mr Conglin Yue: 17.3%

Metallica Minerals Ltd: 15.8%

Jien Mining Pty Ltd: 14.0%

Directors: 5.7%

### Board of Directors

David K Barwick, Chairman

Andrew Gillies, Director

Adrian Day, Director

Tao Li, Director

### Management

Garry Gill, Chief Operating Officer

Bill Lyne, Company Secretary

### Registered Office

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### Project Overview

#### KILLI KILLI HILLS (200 kms south-east of Halls Creek, WA)

As this project is the major focus of the Company it is covered in detail on the back of this document.

#### FULFORD & BONNOR CREEKS (northeast of Mt Surprise and southeast of Chillagoe)

The total holding of directly owned and optioned tenements in the Fulford-Bonnor Creeks project area is 580 km<sup>2</sup>, and the formal granting of these titles is proceeding.

These tenements are contiguous cover creek systems draining radiogenic granites where past alluvial tin operations have encountered heavy mineral concentrations that contain monazite and xenotime minerals which host Rare Earth Elements (REE).

Sampling, identification and analysis is now planned in the coming dry season to determine the REE 's contained in the drainages and mineral assemblages. Initial reconnaissance samples that have already been examined by a consultant petrologist have confirmed the existence of monazite in the heavy mineral suite. Data compilation and assessment and initial reconnaissance to beformed following the wet season.

#### BROUGHTON (30km's south of Mary Kathleen, Cloncurry)

Orion has signed a Joint Agreement with private prospecting company Broughton Minerals Pty Ltd on a prospect located 30km from Mary Kathleen REE-U mine. Broughton have completed 1,700 line km's of high resolution airborne magnetics and radiometric geophysics which has defined radioactive occurrences and lithologies that are currently being investigated.

Ground work included the collection of 254 rock and mineral samples, of which 149 returned an average grade of Total Rare Earth Elements (TREE) of 1%, with a maximum values to 9% TREE. A systematic mapping, radiometric, XRF sampling and geochemical soil sampling programme is to commence in the second quarter of calendar 2012 following the current wet season.



In this regard Orion has recently acquired a 17.7% interest in a South Korean based REE exploration company. Orion Metals Limited continues to assess new gold and rare earth project opportunities within Australia and overseas.

# Killi Killi Hills Project

## Rare Earth Element Project (Western Australia)

### Highlights

- Tenements covering 564km<sup>2</sup> in Tanami
- Exploration program in 2010 and 2011 confirmed significant concentrations of REE and specifically HREE and gold
- Two subsequent drilling programs in 2011 uncovered unexpected anomalous Au results
- Best drill intercept averaging 6 meters of 5.85 g/t Au
- Airborne geophysical survey conducted in 2011 identified further potential drill targets
- New scientific study commissioned from internationally recognised geoscientist to define the mineralogy and geochemistry of the Killi Killi region.

### SUMMARY OF THE KILLI KILLI HILLS PROJECT

Located in the West Tanami Desert in northern Western Australia the Killi Killi Hills prospects were known from the 1960s as a number of small low grade uranium occurrences 8 kms apart in a basal conglomerate unit of an extensive flat-lying sandy sediment sheet straddling the WA/NT state border.

During the initial evaluation of the prospects in 1969, a limited suite of outcrop samples were submitted for analysis for REE (albeit with rudimentary techniques with limited accuracy) and petrological examination. These determinations established the presence of high values of REE (especially the HREE end members) in what was identified as small well-formed crystals of xenotime and florencite, possibly of hydrothermal origin.

Since 2010 when ORM acquired the project, systematic outcrop rock chip sampling, close spaced RC drilling, and regional assessments, including a detailed high resolution airborne geophysical survey, have been completed.

As well as confirming highly anomalous levels of REE by modern analytical techniques in outcrop and drilling samples, analysis has also discovered encouraging gold values. At Killi Killi East a shallow 6 metre hole averaged 5.85 g/t Au, while at the Killi Killi West Prospect intersections of 40m @ 0.92g/t Au and 44m @ 0.49g/t Au were recorded in the last drilling programme. The latter suggest a significant gold mineralised system in the area of the prospect and future drilling is planned to test the open ended extensions to the east and north.

What appears to be a useful geochemical association of high order strontium and barium values has also been reported in the drilling and this may assist the broader scale appraisals of the region. Levels of both thorium and uranium are quite low in the Killi Killi mineralisation.

Preliminary metallurgical testing has demonstrated that the xenotime mineralisation can be recovered by fine grind and high intensity wet magnetic separation techniques.

During 2012 ORM will concentrate on regional reconnaissance to follow up anomalous features defined by the airborne survey (which may help to determine the source of the Killi Killi mineralisation), repetitions and extensions of known radiometric anomalies and general fieldwork in newly acquired licences. Programmes of testing open-ended mineralised zones will be undertaken.

