

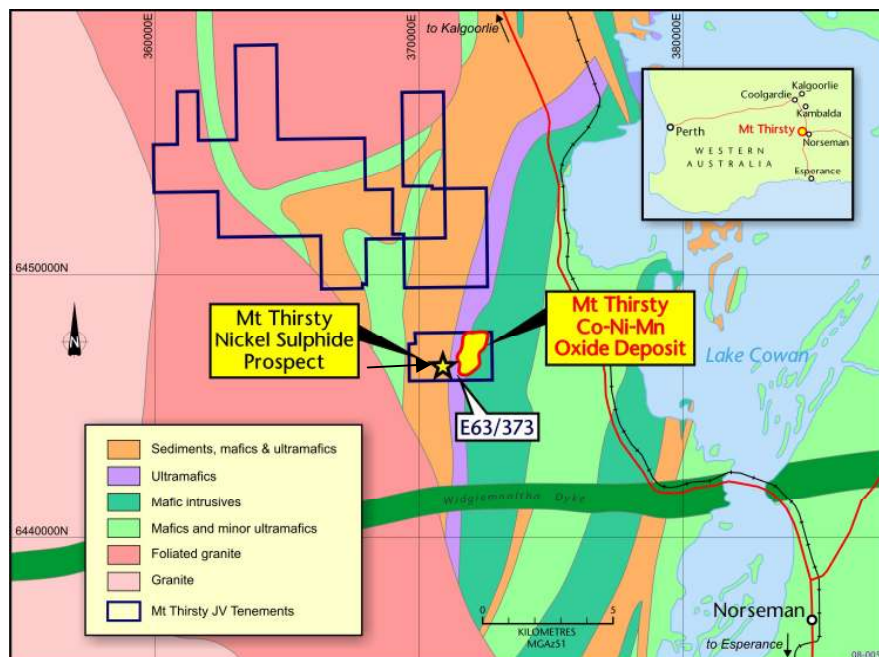
**ASX QUARTERLY REPORT  
FOR PERIOD ENDED 31<sup>ST</sup> DECEMBER 2011**

**SUMMARY**

***MT THIRSTY PROJECT (WA)***

***Mt Thirsty Co-Ni-Mn Oxide Resource***

- Preliminary tests indicate Mt Thirsty oxide ore may be amenable to the low cost INNOVAT continuous vat leaching process
- Negotiations continuing with native title claimants for grant of Mining Lease



**Figure 1: Mt Thirsty Project Location and Regional Geology.**

## MT THIRSTY COBALT -NICKEL -MANGANESE PROJECT (Fission 50%)

The Mt Thirsty Cobalt –Nickel -Manganese oxide project covering an area of 58km<sup>2</sup> is located 20km north-northwest of Norseman in the southern goldfields of Western Australia, a well endowed nickel terrain (see Figure 1). Fission through its wholly owned subsidiary Meteore Metals Limited owns 50% of the project in joint venture with Barra Resources Limited. The Mt Thirsty deposit has the potential to emerge as a significant world cobalt supplier. Metallurgical testwork indicates that high recoveries of cobalt, nickel and manganese can be achieved through low temperature atmospheric leaching.

Mt Thirsty has a JORC compliant Indicated Resource of 16.6 million tonnes at 0.14% Cobalt, 0.60% Nickel and 0.98% Manganese and a JORC compliant Inferred Resource of 15.3 million tonnes at 0.11% Cobalt, 0.51% Nickel and 0.73% Manganese over a length of 1.6 kilometres and a width of up to 850 metres.

As well as the Cobalt-Nickel–Manganese oxide resource, the Mt Thirsty joint venture tenements have potential for nickel sulphide mineralisation at greater depth within the same ultramafic sequence which hosts the near surface oxide deposit. A nickel sulphide discovery was made by the joint venture in 2010.

### Mt Thirsty Cobalt-Nickel-Manganese Oxide Deposit

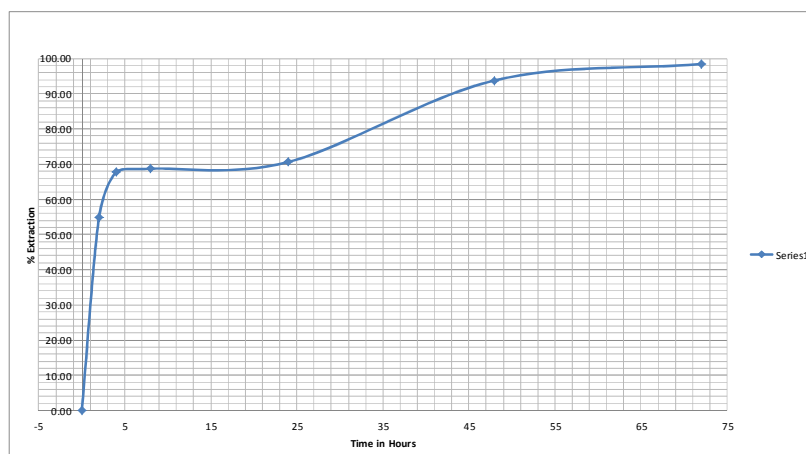
#### *Metallurgical Testwork*

Perth consultants RMDSTEM were commissioned to undertake a preliminary evaluation of the viability of leaching Mt Thirsty oxide ore using sodium metabisulphite. The testwork was carried out on available drill chip samples not totally representative of the overall resource and preliminary (bottle roll) test recoveries of 78.7% Co and 21.1% Ni were obtained. Test work also indicates that there is a good possibility of improving metal recoveries by regrinding and leaching after attritioning as the highest recoveries were obtained from the finer sized fractions (refer Figures 2a & b).

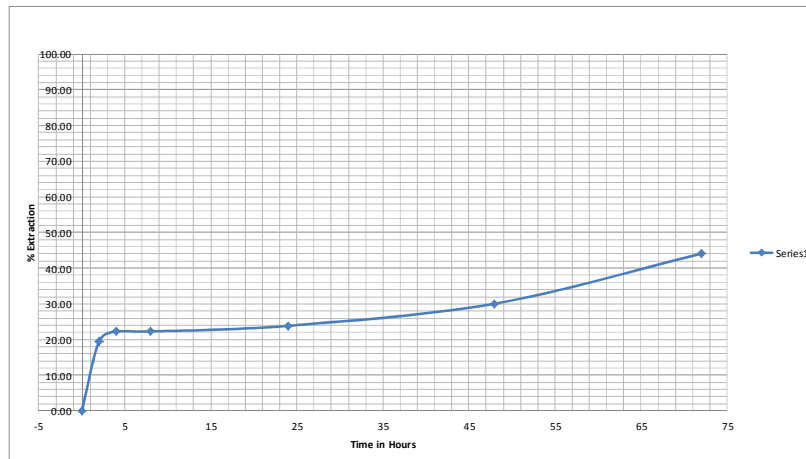
Based on these test results Mt Thirsty oxide ore may be amenable to continuous vat leaching using the proprietary INNOVAT treatment process. INNOVAT processing would require considerably lower capital expenditure and operating costs than for the previously developed flow sheet design. Cost benefits of the INNOVAT process could potentially far outweigh the considerably lower Ni recoveries achieved.

It has been proposed that Co and Ni could be precipitated from the pregnant INNOVAT leach liquor as sulphides using NaHS or as mixed hydroxides using MgO.

Further detailed testwork will be carried out next quarter along with a conceptual feasibility study to determine the efficacy and viability of this process for Mt Thirsty oxide ore.



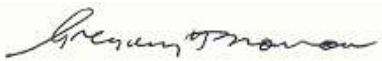
**Figure 2a: Co recovery in the Bottle Roll test for -90µm sample**



**Figure 2b: Co recovery in the Bottle Roll test for -6350 +3350 $\mu$ m sample**

### *Mining Lease*

Negotiations are continuing with the native title claimants for a compensation package that will pave the way towards grant of the Mining Lease covering the Mt Thirsty cobalt - nickel oxide deposit. This process is anticipated to take at least another several months to complete.



**Greg Solomon**  
Executive Chairman

*The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.*

*The information in this announcement, insofar as it relates to Mineral Exploration activities, is based on information compiled by Michael J. Glasson and Robert N Smith, who are members of the Australian Institute of Geoscientists, both of whom have more than five years experience in the field of activity being reported on. Mr Glasson and Mr Smith are consultants. Mr Glasson and Mr Smith have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Glasson and Mr Smith consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.*

*It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.*