



Resource Upgrade

Mt Thirsty Cobalt - Nickel Oxide Project

Barra Resources Limited (ASX: BAR) and 50% Joint Venture partner Fission Energy Limited (ASX: FIS) are pleased to announce that recent infill aircore drilling at Mt Thirsty has increased confidence in the cobalt-nickel-manganese oxide resource and also lead to a 10% increase in contained cobalt and nickel.

Mt Thirsty is located 20 kilometres north-northwest of Norseman (Figure 1) in the southern goldfields of Western Australia.

The Mt Thirsty cobalt-nickel-manganese oxide 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. Based on the current flowsheet design, approximately 27,000 tonnes of mixed sulphide precipitate (containing 2,700t Co & 10,000t Ni) and 33,000 tonnes of manganese carbonate could be produced annually from Mt Thirsty.

Resource Upgrade

Independent mining and geological consulting firm Golder Associates Pty Ltd were engaged to estimate a new JORC⁺ compliant Indicated and Inferred Resource within E63/373 which is summarised in Table 1. The figures shown in this table were estimated within a wireframed mineralised envelope which was based mostly on a 0.06% Co cut off. In some places where Co was less than 0.06% a Ni cut off of 0.7% was used. The location of the Indicated and Inferred Resources is shown in Figure 2.

Table 1

Mt Thirsty Oxide Resources February 2011

Category	Tonnes	Co%	Ni%	Mn%
Indicated Resource	16,600,000	0.14	0.60	0.98
Inferred Resource	15,340,000	0.11	0.51	0.73
Total Resource	31,940,000	0.13	0.55	0.86

⁺Joint Ore Reserves Committee - Resource compiled in accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2004.

The total Indicated and Inferred Resource above contains approximately 177,000 tonnes of nickel, 40,000 tonnes of cobalt and 274,000 tonnes of manganese. This is a 10% increase in cobalt and nickel and a 7% increase in manganese on the 2008 resource estimate which previously had an Indicated Resource of 14.8 million tonnes at 0.14% Co,

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0.59% Ni and 0.99% Mn and an Inferred Resource of 14.2 million tonnes at 0.11% Co, 0.52% Ni and 0.77% Mn (Total Indicated and Inferred Resource 29.0 mt at 0.12% Co, 0.56% Ni and 0.88% Mn).

The upgraded resource is based on 6,507m of infill aircore drilling (151 holes) completed in November 2010, mostly on the western side of the deposit within the existing Inferred Resource and 1,870 m (45 holes) of mostly extensional drilling completed in mid-2009 at the southern end of the deposit. The most recent drilling has improved confidence in the inferred resource as the drilling density within the area of the inferred resource was increased from a 100m by 80m to a 50m by 80m spacing.

The classification of this near surface resource is shown in Table 2 at varying cobalt cut-off grades with a summary of the estimation methodology utilised included below.

Table 2
Mt Thirsty Resource 2011 at Varying Cobalt Cut-off Grades
(estimated within wireframed mineralised envelope)

Resource at Varied cut-offs	Indicated Resource Category		Inferred Resource Category		Total Resource	
	Tonnage	Co%/Ni%/Mn%	Tonnage	Co%/Ni%/Mn%	Tonnage	Co%/Ni%/Mn%
0.00%*	16,600,000	0.14/0.60/0.98	15,340,000	0.11/0.51/0.73	31,940,000	0.13/0.55/0.86
0.06%	16,280,000	0.14/0.60/1.00	15,210,000	0.11/0.51/0.74	31,490,000	0.13/0.55/0.87
0.08%	14,180,000	0.15/0.60/1.07	12,940,000	0.12/0.52/0.79	27,120,000	0.13/0.56/0.94
0.10%	10,900,000	0.16/0.61/1.21	8,510,000	0.14/0.53/0.91	19,410,000	0.15/0.57/1.08
0.20%	2,160,000	0.28/0.66/2.06	610,000	0.25/0.66/1.72	2,770,000	0.27/0.66/1.98
0.30%	570,000	0.39/0.73/2.79	70,000	0.36/0.78/0.73	650,000	0.39/0.74/2.73

Note: The table above shows rounded tonnages. This may cause some apparent computational discrepancies.

* Where Co was less than 0.06% a 0.7% Ni cut off was used.

Interpretation of the mineralisation was carried out by the Mt Thirsty Joint Venture, in conjunction with Golder Associates Pty Ltd, on 50 metre spaced sections through the deposit. The cut-off grades used to define the mineralised envelopes are similar to those used for the previous estimate. These interpretations were digitized and wireframed in 3D using Vulcan software.

Internal waste was also interpreted and wireframed. Domain codes were assigned to each wireframe. The wireframes were used to capture the 1 metre drill hole assays within each domain code.

The block model utilized a block size of 25 metres wide by 25 metres long by 5 metres high. Sub-blocks with dimensions 5 metres wide by 5 metre long by 1 metre high were also used when required.

Domain statistics were generated and variography was conducted on the main domain.

The Mt Thirsty resource grades were estimated using the ordinary kriging method. The elements estimated were Ni, Co, Mn, Fe, Mg& Al.

Bulk densities are based on data collected from PQ diamond core holes drilled prior to the 2008 resource estimate and average densities were applied on a domain basis. This

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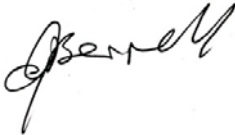
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resulted in an average bulk density of about 1.89 for the main mineralized domain as for the previous model.

The resource estimate has been classified based on data quality, data density, geological continuity and confidence in the estimation.

Future Program – Nickel Sulphide Exploration

Follow up diamond drilling to test the down plunge continuation of the mineralisation at the Mt Thirsty nickel sulphide prospect is scheduled to commence later this month.



Gary Berrell
Executive Chairman
Barra Resources Limited

The information in this report which relates to the Mt Thirsty Mineral Resource is based on information compiled by Alan Miller, a full time employee of Golder Associates Pty Ltd and who is a member of the Australasian Institute of Mining and Metallurgy. Alan Miller has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Ore Resources Committee, the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Mineral Council of Australia." Alan Miller consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

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 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.

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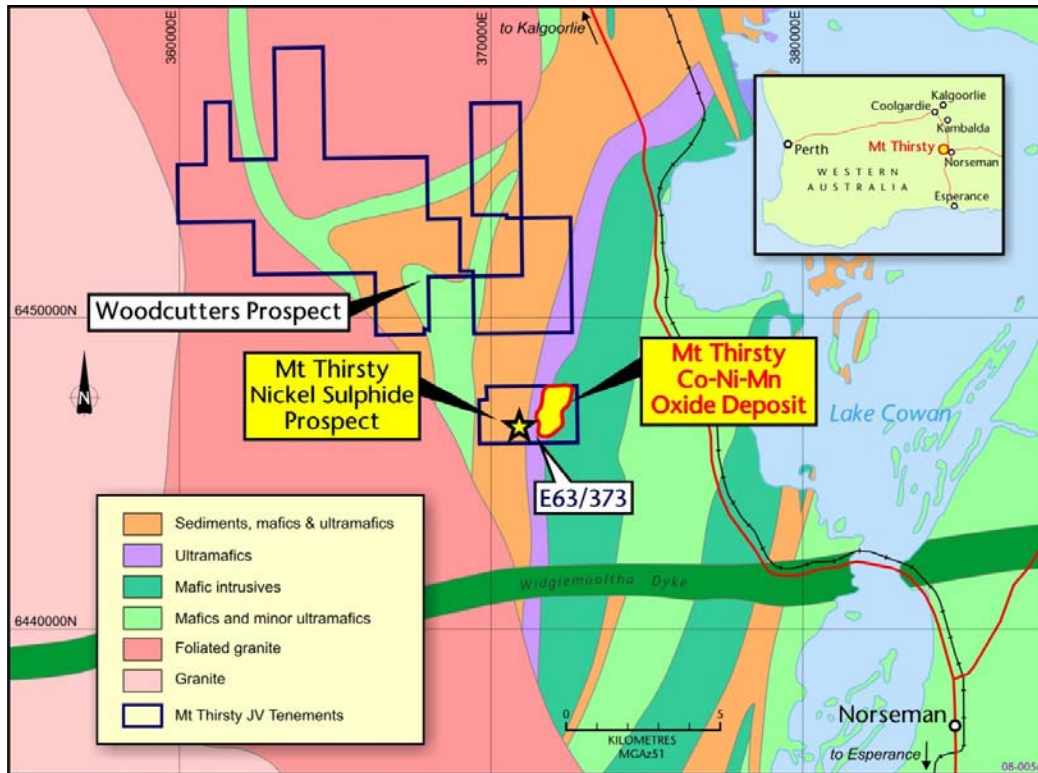


Figure 1: Location of Mt Thirsty JV Tenements, Co-Ni-Mn Oxide Deposit and 2010 Nickel Sulphide Discovery

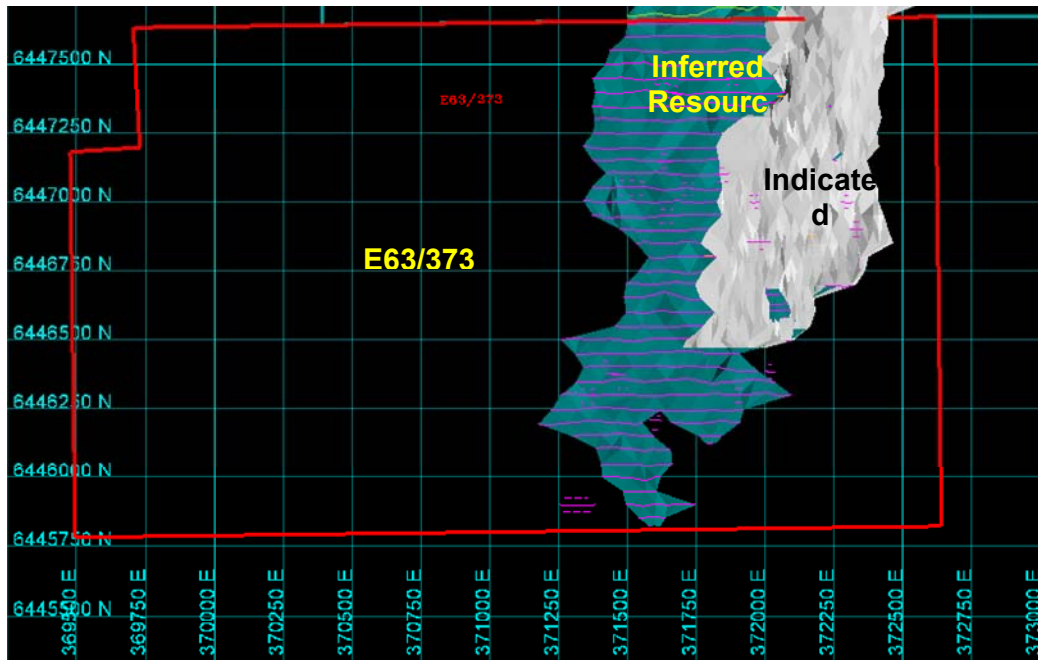


Figure 2: Distribution of Mt Thirsty Co-Ni-Mn Oxide Resources (AGD84 Zone 51)

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