



## MT THIRSTY COBALT SCOPING STUDY UPDATE

Barra Resources Limited in conjunction with joint venture partner Conico Limited, is pleased to advise the Scoping Study remains on track for completion during August.

Scoping Study Manager Provide Advantage are working to collate the flowsheet design with consultant engineers CPC Engineering, the metallurgical results from ALS Metallurgy Pty Ltd and the mining resource and scheduling from CSA Global.

The unique characteristics of the Mt Thirsty cobalt-nickel deposit has encouraged the joint venture to progress to focus the Scoping Study on an atmospheric leaching process at ambient pressure and relatively low temperature instead of using the traditional higher capex/opex HPAL process. The preferred reagent is sulphur dioxide and results are consistent with earlier studies showing high recovery of cobalt.

During the metallurgical testing, in the interest of completeness, other reagents were tested. These tests have also produced some extremely promising results, albeit at an early stage. This work will continue during July and will be considered prior to the finalisation of flowsheet design.

### Background on Mt Thirsty Cobalt Project

Mineral Resource Category	Tonnes	Cobalt (Co) (%)	Nickel (Ni) (%)	Manganese (Mn) (%)
Indicated	16,600,000	0.14	0.60	0.98
Inferred	15,340,000	0.11	0.51	0.73
<b>Total Mineral Resource</b>	<b>31,940,000</b>	<b>0.13</b>	<b>0.55</b>	<b>0.86</b>

*The Mt Thirsty Cobalt Oxide Deposit mineral resource was prepared and first reported in accordance with the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported; refer to ASX announcement 8<sup>th</sup> March 2011: "Resource Upgrade Mt Thirsty Cobalt-Nickel Oxide Deposit": available to view at [www.barraresources.com.au](http://www.barraresources.com.au)). The Company is not aware of any new information or data that materially affects the information included in the previous announcement and that all of the previous assumptions and technical parameters underpinning the estimates in the announcement dated 8<sup>th</sup> March 2011 have not materially changed.*

Mt Thirsty is one of Australia's largest known stand-alone cobalt resources at 32 million tonnes with approximately 40,000 tonnes of contained cobalt. The great advantages of Mt Thirsty compared to other potential cobalt miners is the nature of the resource, being a flat lying, continuous and thick deposit starting from near surface to around 70 metres below surface. Due to intense oxidation, the deposit is very soft, fine grained and low in silica. As the cobalt is attached to the manganese, initial test work has indicated that an agitated leach process done at around 40°C and atmospheric pressure will be sufficient to extract the cobalt. The very nature of the deposit and leaching process being pursued has the potential to translate to a very low CAPEX/OPEX operation.

Given Mt Thirsty's ideal positioning close to infrastructure including power and port access in Western Australia, the Joint Venture remains confident Mt Thirsty has the potential to become a major supplier to the burgeoning battery supply chain.

**Gary Berrell**  
Chairman & CEO  
Barra Resources Limited



## **COMPETENT PERSONS STATEMENT AND DISCLAIMER**

- The information in this report which relates to Exploration Results at Mt Thirsty is based on information compiled by Mr Gary Harvey a Competent Person who is a Member of the Australian Institute of Geoscientists and a full-time employee of Barra Resources Limited. Mr Harvey 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 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (the JORC Code). Mr Harvey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
- The information in this report which relates to the Mineral Resources at Mt Thirsty is based on information compiled by Mr Alan Miller, a Competent Person and employee of Golder Associates Pty Ltd and who is a member of the Australasian Institute of Mining and Metallurgy. Mr 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” (the JORC Code). Mr 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.
- It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.
- Forward-looking statements are statements that are not historical facts. Words such as “expect(s)”, “feel(s)”, “believe(s)”, “will”, “may”, “anticipate(s)” and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company’s prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

**Abbreviations:** AC=Aircore, Au=gold, Co=cobalt, DEC=Department of Environment and Conservation, DD=Diamond, DMP=Department of Mines and Petroleum, g=grams, g/t=grams per tonne, kg=kilograms, km=kilometres, lb/s=pound/s, LME=London Metal Exchange, lt=litre, m=metres, min=minutes, ml=millilitre, mm=millimetre, Mn=manganese, Mt=million tonnes, Ni=nickel, oz/ozs=ounce/s, pH=measure (1-10) of acidity (1 acid, 7 neutral, 10 basic), ppb=parts per billion, ppm=parts per million, RAB=Rotary Air Blast, RC=Reverse Circulation, RL=Reduced Level, t=tonnes, tpa=tonnes per annum, µm=micro metres, @=grading, %=percent

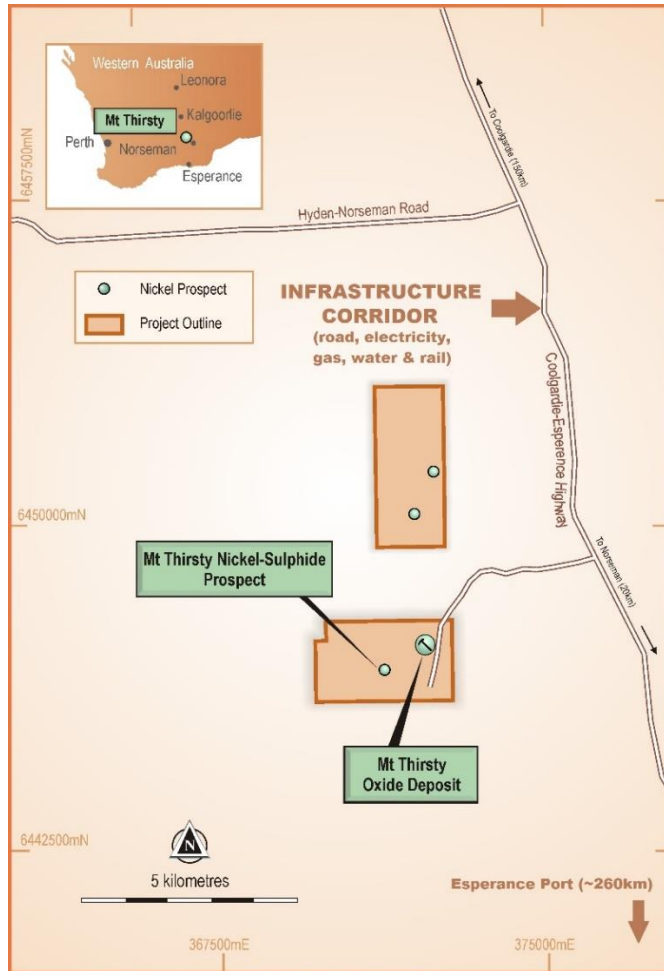


Figure 1: Mt Thirsty Cobalt Project location map

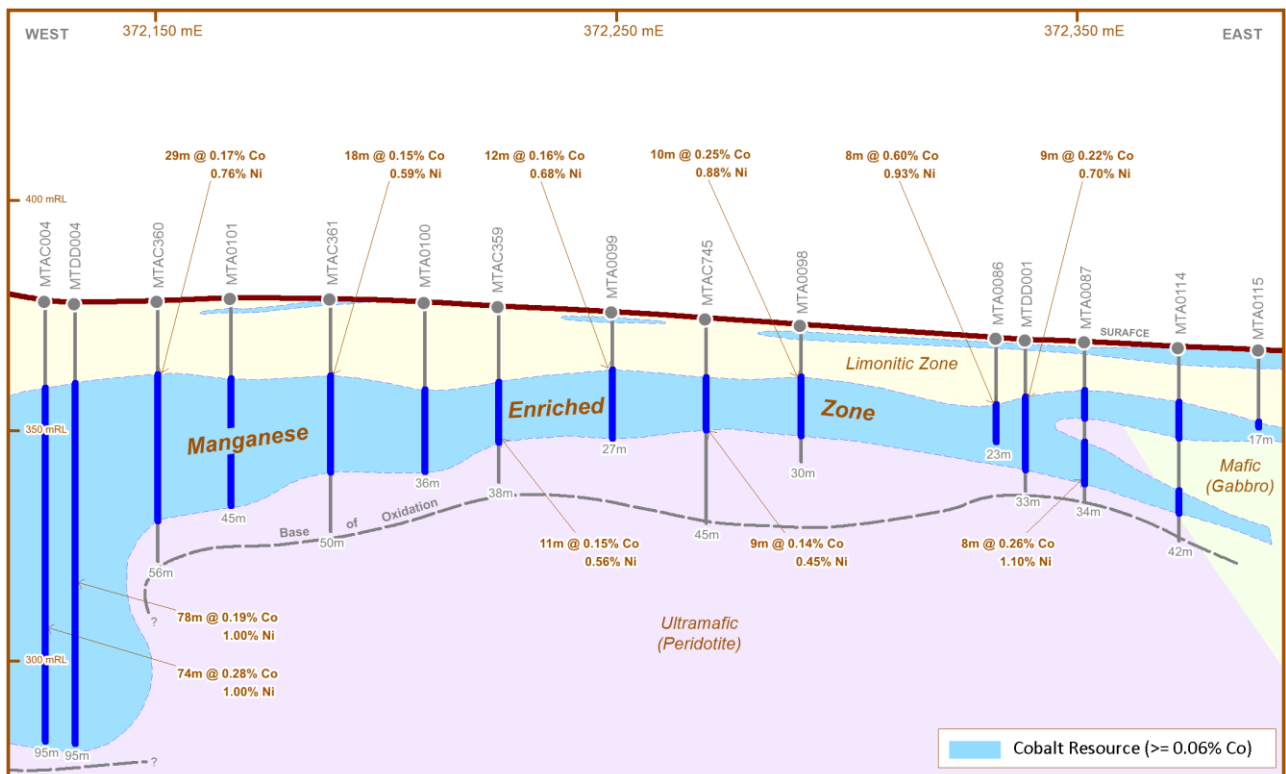


Figure 2: Representative schematic cross-section through the Mt Thirsty Cobalt – Nickel Oxide Deposit