ASX ANNOUNCEMENT

4th OCTOBER 2016

MT THIRSTY JOINT VENTURE PURSUES COBALT DEVELOPMENT OPTIONS - SCOPING STUDY UNDERWAY

Highlights

- **Drilling for Metallurgical test work to commence next month**
- **Scoping Study to guide development pathway**
- **High calibre independent team to lead Scoping Study**
- **Additional resource drilling to upgrade resource categorization**

Barra Resources Limited (ASX: BAR) (Barra or the Company) is pleased to announce that the Mt Thirsty Joint Venture (MTJV) (Barra Resources 50%; Conico Limited 50%) has committed to pursuing development options for its Mt Thirsty Cobalt Oxide deposit, with a reverse circulation drilling program to commence shortly to obtain new sample for further metallurgical testwork.

This next phase of metallurgical testwork will expand on and increase the level of confidence in previous testwork undertaken which has shown that agitated leaching using sulphur dioxide (SO_2) at atmospheric pressure and low temperature (<50^{o}C) recovers of up to 80% of cobalt and over 25% of the nickel within a few hours of leaching. The results of the metallurgical testwork will be fed directly into a Scoping Study over the Mt Thirsty Cobalt Oxide Deposit that contains JORC Inferred and Indicated Resources of 31.94Mt @ 0.13% Co and 0.55% Nickel (Table 1).

The Scoping Study, to be overseen by a team of highly regarded industry figures headed by former Western Mining Corporation's manager of Metallurgy, Mr. Bob Bourne, will focus on the agitated leaching process to determine the capital and operating expenditure forecasts ahead of a potential pre-feasibility study in 2017. At completion of the Scoping Study, the MTJV will be able to better determine the funding requirements and development options which may be available to bring the project to fruition.

In conjunction with the Scoping Study, the MTJV will consider undertaking infill drilling to upgrade JORC Resources (from the Inferred to Indicated category). This conversion should provide greater understanding of project economics. The results of a recently completed preliminary open pit optimization study by CSA Global Consultants will be used to assist in the planning of this infill drilling.

"The Mt Thirsty Joint Venture (MTJV) is actively working to progress the development of the Mt Thirsty Cobalt Oxide Deposit into one of the world's leading stand-alone cobalt projects. Astute investors are now aware of the importance of cobalt, as well as lithium, in the renewable energy market. The MTJV believes it can be a significant player in this market", says Gary Berrell.

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Gary Berrell
Chairman & CEO
Barra Resources Limited

Background on Mt Thirsty Cobalt Project

The Mt Thirsty Cobalt Project covers an area of 12km^2 and is located 20km north-northwest of Norseman, Western Australia, in a well-endowed nickel terrain. The Mt Thirsty Joint Venture is a 50:50 joint venture between the Company and ASX listed Conico Ltd (ASX: CNJ).

The project hosts the Mt Thirsty Cobalt Oxide Deposit (Table 1) which has the potential to emerge as one of the World's most significant cobalt suppliers.

Table 1: Mt Thirsty Cobalt Oxide Deposit Mineral Resource Summary (Un-cut)

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
Total Mineral Resource	**31,940,000**	**0.13**	**0.55**	**0.86**

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 8th March 2011: "Resource Upgrade Mt Thirsty Cobalt-Nickel Oxide Deposit": available to view at 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 8th March 2011 have not materially changed.

Extensive metallurgical testwork in recent years has indicated that high recoveries of cobalt can be achieved via agitated, low temperature, atmospheric pressure, leaching using cheaper and more efficient sulphur dioxide (SO_2) as the main leaching agent resulting in a more practical and economic leaching method by specifically targeting cobalt only.

Two flowsheets, one utilising a paste thickener and the other using an ion exchange resin-in-pulp (RIP), are still under investigation. Both have low water consumption, low reagent consumption and greater than 80% cobalt and 25% nickel recoveries. Preliminary estimations justify continued work to progress to a pre-feasibility stage.

Mt Thirsty Cobalt Oxide Deposit currently represents an excellent long term, low cost, cobalt production opportunity.

In addition to the Mt Thirsty Cobalt Oxide Deposit, the Project also hosts high-grade primary massive nickel sulphide mineralisation at the Mt Thirsty Nickel Sulphide (Ni-S) Prospect. Intersections of massive nickel sulphide up to 6.0 metres down-hole grading 3.5% nickel were reported by the joint venture in 2010. *(refer to ASX announcement 19th May 2010: "High Grade Nickel Sulphide's Intersected at Mt Thirsty JV": available to view at 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 8th March 2011 have not materially changed.*

For more details on the Mt Thirsty Cobalt Project, shareholders and investors are encouraged to visit the Project website at www.mtthirstycobalt.com.

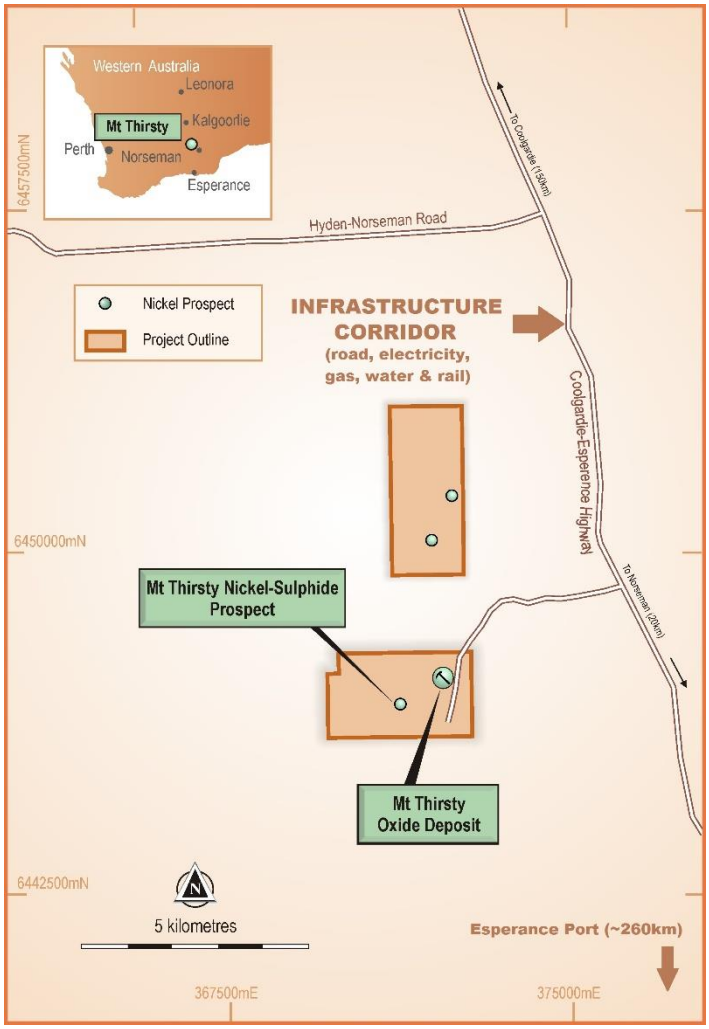

Figure 1: Mt Thirsty Cobalt Project location map

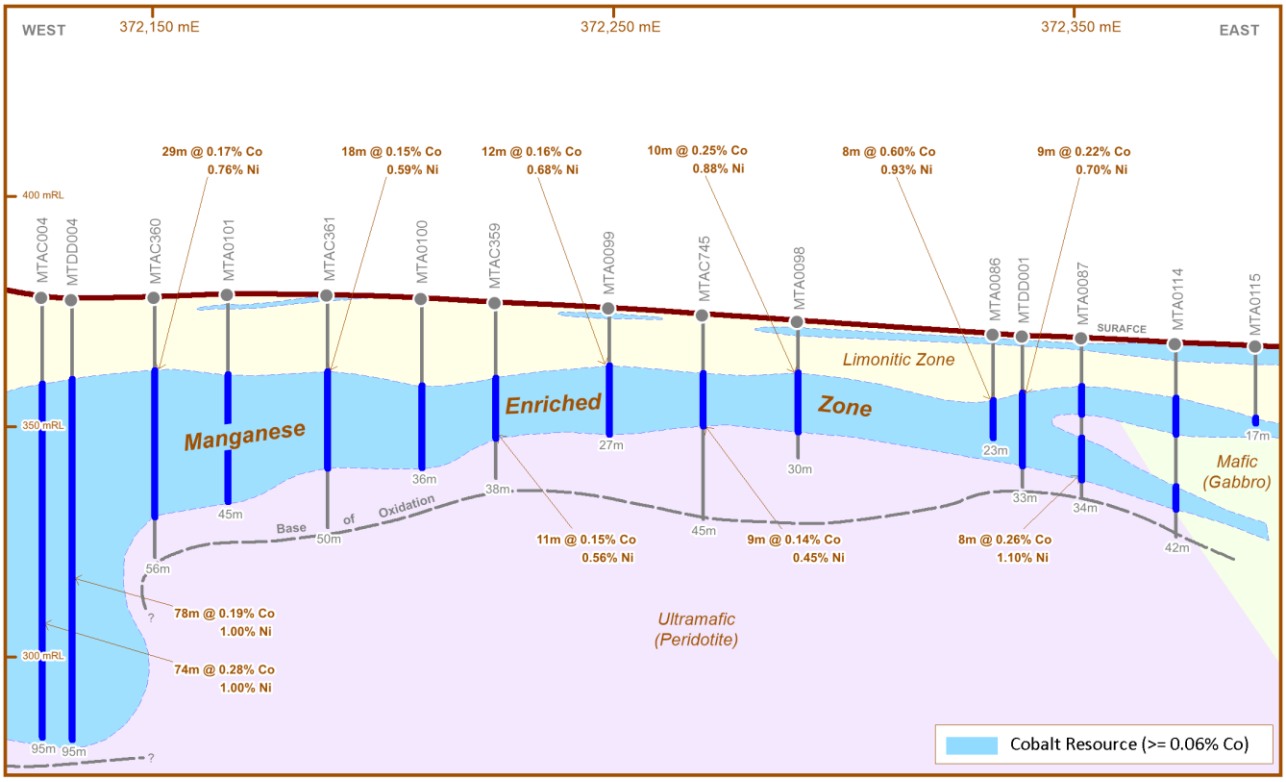

Figure 2: Representative schematic cross-section through the Mt Thirsty Cobalt – Nickel Oxide Deposit

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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