Mt Isa Metals Limited
ACN 120 212 017
Level 5, 60 Edward Street
Brisbane QLD 4000 Australia

ASX Announcement

Wednesday 23rd December 2009

BARBARA COPPER PROSPECT – FINAL PHASE 2 DRILLING RESULTS

Highlights:

- **Final assay results now received from the recently completed phase 2 drilling program at the Barbara Copper Prospect.**
- **Results for final four RC holes (BARC045 to BARC048) drilled at Barbara North Lode include 9 metres at 1.21% Cu from 121 metres in BARC045.**
- **Hole BARC048 targeting a TEM conductor at 250 metres depth intersected a sulphide rich zone with elevated cobalt but is interpreted to have drilled below the plunge of the main mineralised shoot.**
- **Maiden resource estimate for Barbara North Lode anticipated early in 2010.**
- **Surface channel sampling on the Green Zone target (soil anomaly located 400 metres to the north of North Lode) generates strong surface indications of copper mineralisation with intervals of up to 10 metres at 1.0% Cu.**
- **Aggressive program of resource expansion and exploration drilling planned for 2010.**

The Board of Mt Isa Metals Limited (MET) is pleased to advise that all remaining assay results have now been received from the phase two drilling program at the Barbara Copper Prospect (North Lode). The results include high grade intersections which continue to support the potential to define an open-pittable sulphide copper deposit.

The Barbara Copper Prospect is located approximately 50km north-east of Mt Isa and forms part of the Company's broader Leichardt Exploration Project area. The Barbara Copper Prospect – North Lode is held in joint venture between Mt Isa Metals Limited (49%) and Syndicated Metals Limited (51% and manager).

The recently completed RC drilling program at the Barbara North Lode was designed to follow up the initial results by testing the mineralised structure to a vertical depth of around 150 metres. One deeper hole was also planned to test an interpreted TEM anomaly below the North Lode at a depth of approximately 250 metres.

Previous results from the phase 2 North Lode drilling program were released to the ASX on October 22 (holes BARC024 to BARC026) and November 23 (holes BARC027 to BARC031 and BARC035 to BARC044).

The results for the final four holes (BARC045 to BARC048) are summarised in Table 1 below.

HOLE ID	East (GDA94)	North (GDA94)	RL (m)	TD (m)	Dip	Azi.	From (m)	To (m)	Width (m)	True Width (m)	Cu (%)	Au (g/t)
BARC045	379900	7741844	316	170	-89	53.4	121	130	9	7	1.21	0.07
BARC046	379922	7741820	321	107	-90	57	Abandoned before target depth					
BARC047	379922	7741818	321	184	-90	57	No significant copper intercepts					
BARC048	379848	7741718	324	340	-77	28.4	No significant copper intercepts					

Table 1. Barbara North Lode Drill Results – December 2009 (0.5% Cu cut-off).

BARC045 intersected 9 metres at 1.21% Cu from 121 metres down hole. BARC046 was abandoned before target depth due to equipment problems. BARC047, a re-drill of abandoned hole BARC046, intersected a broad zone of low-grade copper mineralisation between 131 metres and 146 metres down hole depth.

BARC048 targeted the TEM conductor at 250 metres depth. A zone of strong sulphide (mostly pyrite and pyrrhotite) was intersected between 241 metres and 310 metres containing elevated cobalt (including 3 metres of 0.12% Co from 280 metres and 5 metres of 0.10% Co from 299 metres). This intersection shows similarities to the elevated cobalt values intercepted in BARC043 located 200 metres up-plunge of BARC048 and which intersected the mineralised zone about 50m metres down dip of BARC038 (7 metres @ 3.97% Cu). It is interpreted that BARC048 may also have drilled below the plunge of the high grade copper lode.

Down-hole EM surveys were completed in holes BARC047 and BARC048. Both holes generated moderate to strong DHEM responses enabling resolution of the surface TEM survey anomaly into two separate south plunging conductive plates (See Figure 1).

As noted in the previous announcement the drilling at North Lode is progressively outlining what is believed to be a south plunging lode with higher grade copper intercepts at its centre. The Company is confident a potentially open-pittable deposit can be defined from the higher grade (+1% Cu) intersections. The high grades at the core of the lode also provide encouragement that the North Lode has potential for underground mining if continuity at depth can be demonstrated with further drilling.

All intersections reported to date from Barbara North Lode occur in the primary sulphide zone below an oxidized cap which is limited to approximately 10 to 15 metres depth.

A maiden resource estimate for Barbara North Lode is now expected to be announced early in 2010.

The Green Zone – Potential New Mineralised Structure

Surface mapping and channel sampling has also commenced over various copper anomalies identified by the previously reported Barbara soil sampling program.

The "Green Zone" anomaly, located about 400 metres northwest of the Barbara North Lode returned highly encouraging channel sampling results from a north striking mineralised shear zone up to 20 metres wide over a sampled strike length of 400 metres.

Channel samples were collected at one metre intervals at right angles to the strike of the shear zone. Results include 10 metres at 1.0% Cu and 15 metres at 0.63% Cu. Individual rock chips from this zone returned copper values up to 2.9% Cu (figure 2).

Follow-up of this target and other soil anomalies within the Barbara joint venture tenement (EPM 16112) will form part of the forward exploration program planned to commence in early 2010.

For further information please contact:

Mr Peter Spiers
Managing Director
Ph: (07) 3303 0624 or 0409 407 265

Mr Duncan Cornish
Company Secretary
Ph: (07) 3303 0624 or 0407 623 302

Email: info@mtisametals.com.au

Further information on Mt Isa Metals can be found on our website www.mtisametals.com.au

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Peter Spiers B.Sc (Hons) Geol., who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Spiers is a full time employee of the company. Mr Spiers 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'. Mr Spiers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

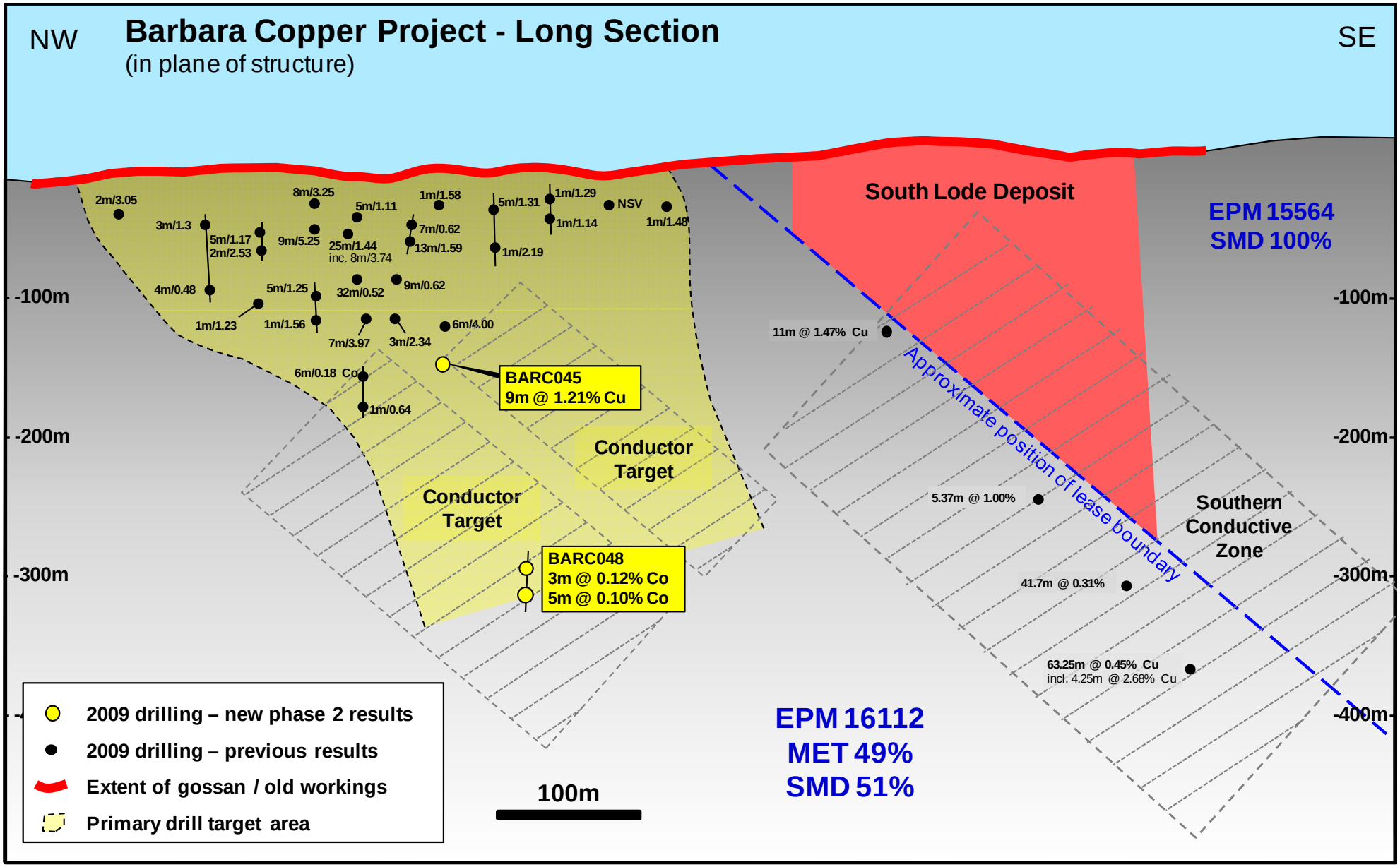

Figure 1. Barbara Long Section

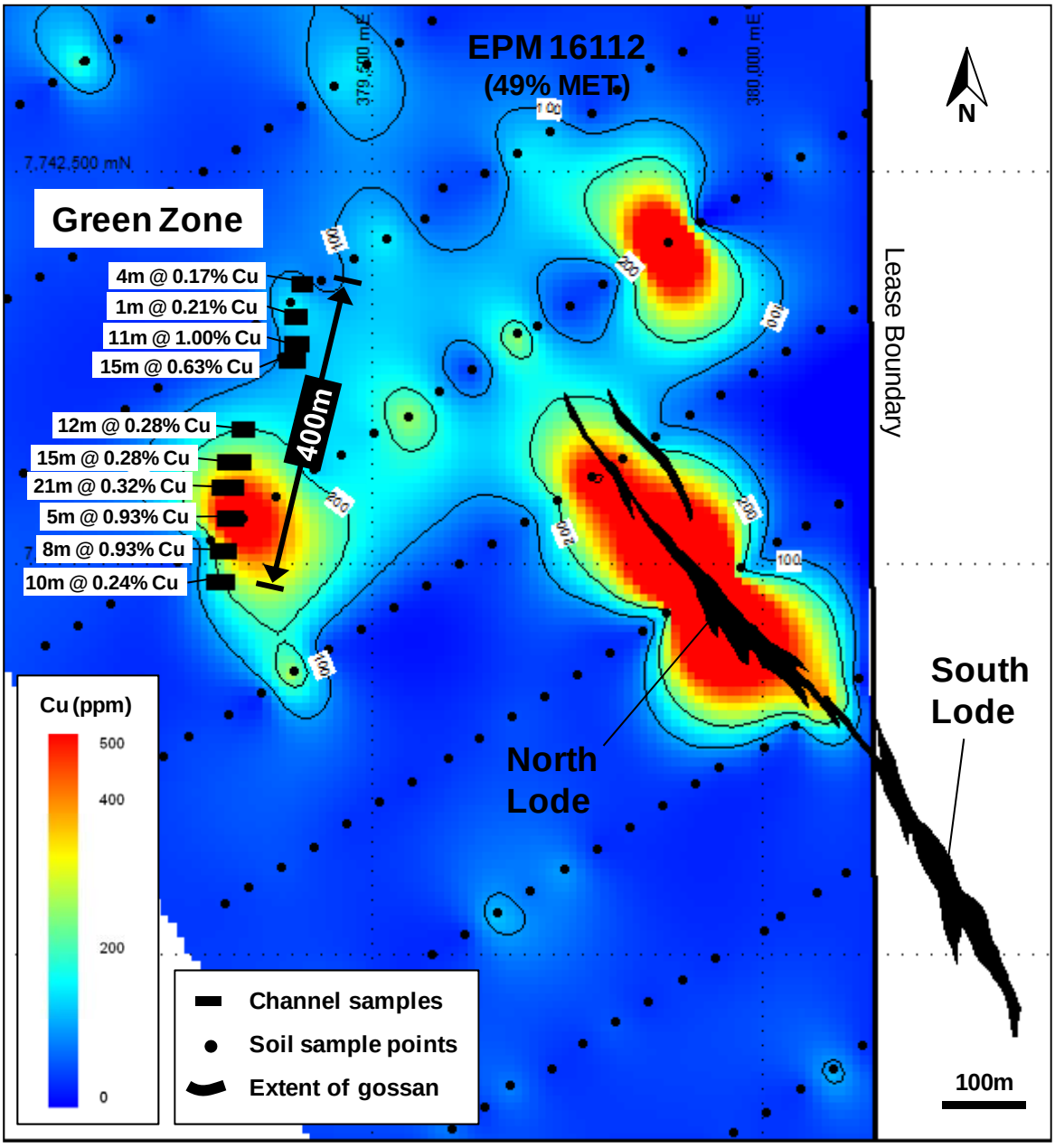

Figure 2. Barbara North – Channel Sample Results.