

15 September 2011

ASX ANNOUNCEMENT

ARGENTINA MINING IDENTIFIES LARGE PORPHYRY COPPER-SULPHIDE TARGET AT CERRO BLANCO

Drilling commenced 14 September to test for major mineralised system

- IP survey identifies large anomaly at Cerro Blanco Project in Argentina
- Interpretation indicates potential for a large, porphyry copper-style, sulphide-mineralised system
- IP anomaly approximately 1,500m along strike, 900m wide and extends to more than 500m depth
- Anomaly is open to the south and, potentially, at depth
- Strong correlation between IP chargeability and resistivity anomalies, magnetics and surface copper geochemistry
- Previous diamond drilling confirms porphyry-style Cu-Au-Mo at anomaly margins
- Testing of IP anomaly with three 700m+ deep drill holes commenced on 14 September 2011

Argentina Mining Limited (ASX:AVK) (“Argentina Mining” or the “Company”) is pleased to announce that it has identified a significant geophysical anomaly potentially representing a large sulphide mineralised system at its flagship Cerro Blanco Porphyry Copper Project in San Juan Province, Argentina (Figures 1 - 5). The anomaly is a high chargeability zone (HCZ) identified by an Induced Polarisation and Resistivity (IP)* survey.

3D modelling indicates that Argentina Mining’s previous diamond drilling, which intersected wide zones of porphyry copper-gold-molybdenum mineralisation, reached the margins of the HCZ, with a best result of 108m averaging 0.20 per cent copper, 0.08g/t gold and 95ppm molybdenum from 233m in DDH MC-3. This result is consistent with deposit modelling which suggests that this drilling intersected a pyrite-rich halo outside a potentially copper-rich inner zone.

Drilling of this new target commenced on Wednesday 14 September 2011.

Argentina Mining’s Managing Director Eduardo Videla says that the HCZ target is highly promising and therefore the Company moved immediately to drill test it to planned depths of up to 750m.

“This is a major development for Argentina Mining,” Mr Videla said. *“Following the success of the initial drilling which confirmed porphyry copper-gold-molybdenum style mineralisation, we continued with the integration and interpretation of data from our drilling, detailed geological and alteration mapping, surface geochemistry, ground magnetics and the recently-completed IP survey.”*

Interpretation of the combined datasets provides a robust pointer to the target zone which may represent a large copper-rich mineralised zone. This gives us confidence in the design and execution of the next round of over 2,000m of diamond drilling and dramatically enhances the potential for discovery of economic copper and gold mineralisation at the Cerro Blanco Project.”

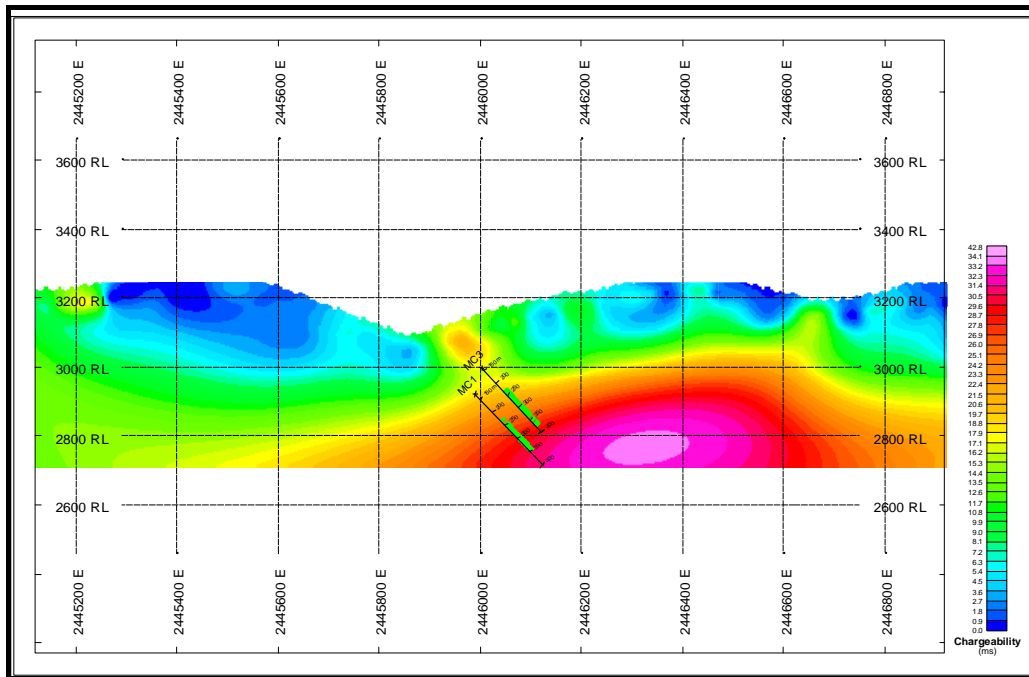


Figure 1 –Argentina Mining’s first “Proof-of-Concept” diamond drill-holes MC-1 & MC-3 with >0.2% copper histogram, projected on IP chargeability Section 6460200N

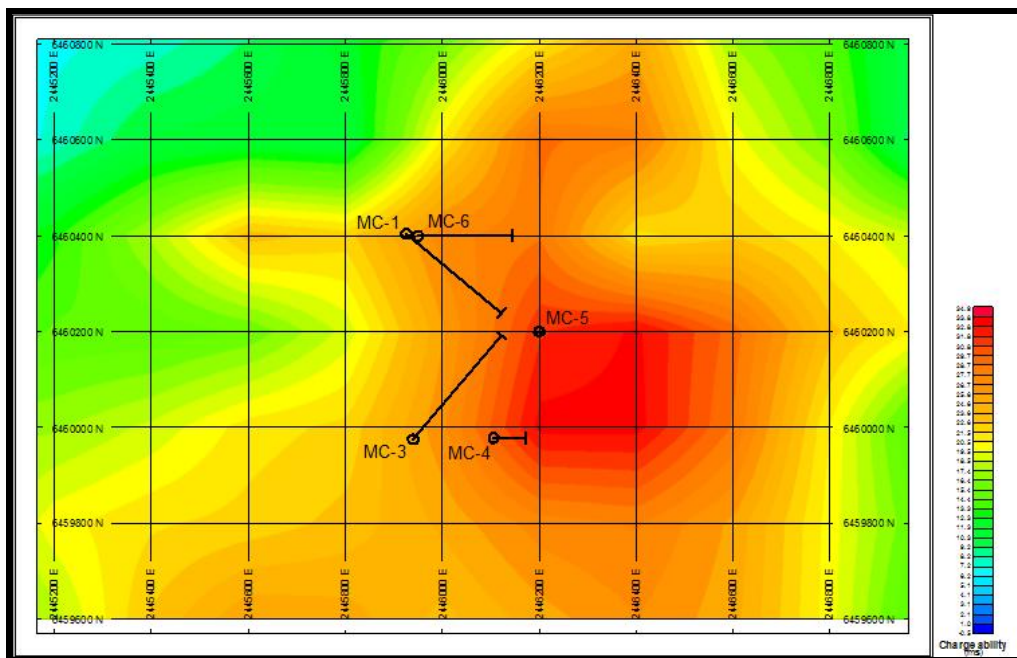


Figure 2 - Plan showing drill-holes MC-1 & MC-3 and proposed drill holes MC-4, MC-5 & MC-6, over IP chargeability contours slice at 2800m RL

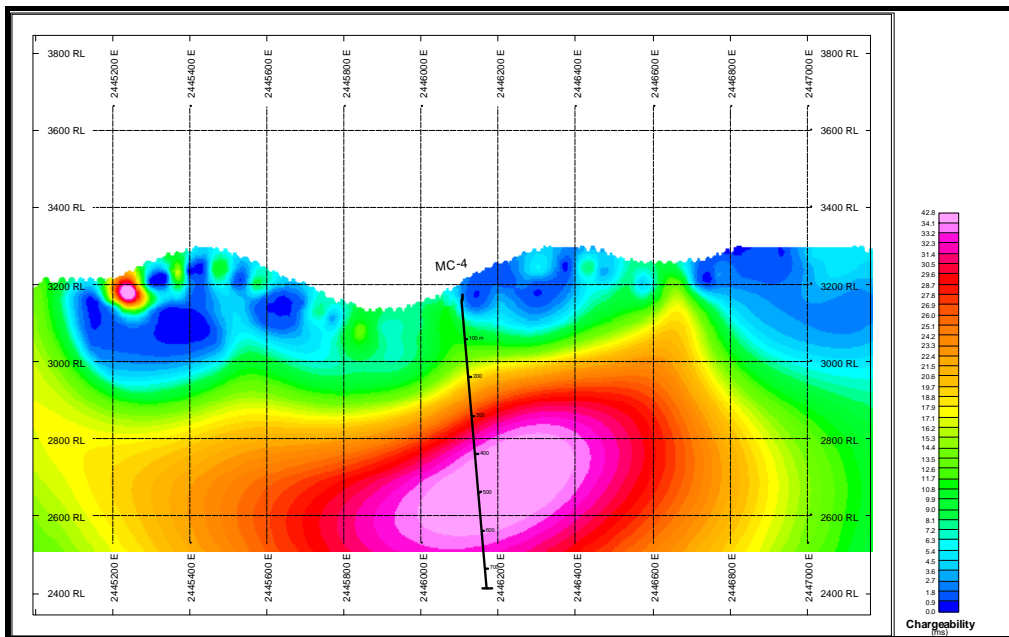


Figure 3 – Section 646000N - Proposed diamond drill-hole MC-4 on IP chargeability

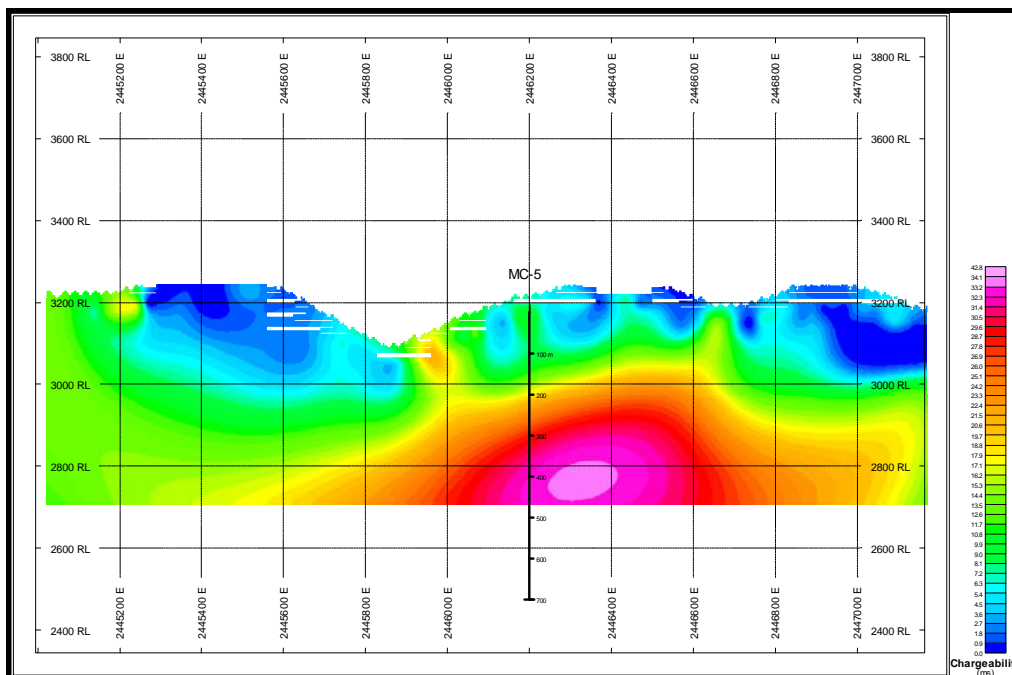


Figure 4 – Section 6460200N - Proposed diamond drill-hole MC-5 on IP chargeability

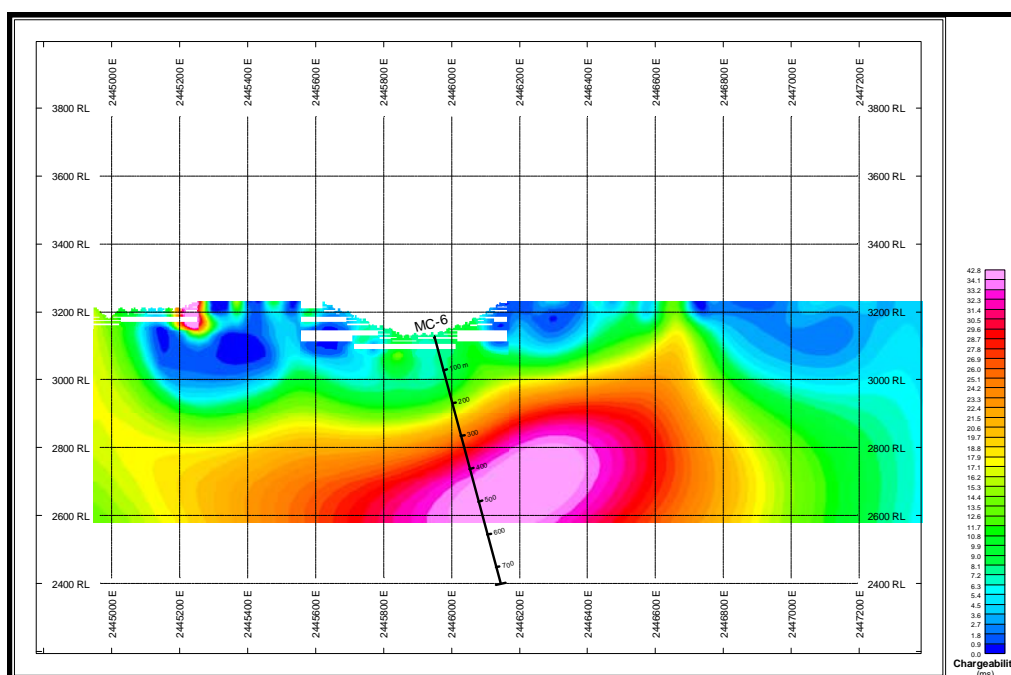


Figure 5 – Section 6460400N - Proposed diamond drill-hole MC-6 on IP chargeability

Technical Details

The Company’s recently-completed Induced Polarization and Resistivity (IP)* geophysical survey of the Copper Hill Prospect at the Cerro Blanco Project identified a large potentially sulphide-mineralized target zone, comparable with those encountered in other porphyry copper deposits.

This target is defined by the >25ms boundary of a high chargeability zone (HCZ) modelled from three-dimensional, grid-based IP data over a six square kilometre area centred on Copper Hill. This model depicts a discrete, flat-lying and ovoid HCZ whose upper surface lies at moderate depth and which currently extends over seven out of eight 200m-spaced east-west oriented grid sections.

The HCZ is approximately 900m wide east-west over most of its 1,500m north-south extent of the current grid. It lies almost horizontally north-south and dips gently to the west within a range of 5-20°.

The upper surface of the HCZ lies within approximately 250-300m of natural surface level in places, subject to topography, while a halo of lower but still significant anomalism in the 15 to 20ms range lies within 50-100m of the natural surface. The maximum depth extent of the anomaly, given topographic and instrumental limitations, appears to be between 500-700m below natural surface. This does not necessarily imply similar limits to any source of the anomaly, as it may eventually be defined.

The HCZ, which includes a higher chargeability (>35ms) core zone, is surrounded by a well developed high-resistivity anomaly that appears to define a limit to the eastern flank of the HCZ. This high resistivity may reflect major hydrothermal fluid movement resulting in silicification, or quartz veining in fractures associated with a major mineralised porphyry intrusion.

At this stage, the HCZ appears to be closed off at its northern extremity against the confining older wall rocks, but within the intrusive Copper Hill suite of rocks it remains open laterally to the south and possibly also vertically, below currently-indicated depths.

Copper Hill was the target for the Company's first two 400m deep "proof-of-concept" reconnaissance diamond holes MC-1 and MC-3 drilled earlier in 2011, the subject of ASX announcements dated 29 April, 30 May, 23 June and 29 July, 2011.

Figure 1 depicts the modelled IP chargeability anomaly on Section 6460200N with the two reconnaissance holes MC-1 and MC-2 projected onto it, showing that although 400m was the maximum depth capability of the drill rig, these holes successfully intersected the outer margins of the anomalous zone as approximately defined by the 25-30ms range of chargeability.

Both of these holes intersected over 100m of copper and gold mineralization and terminated in significant copper values and favourable host rock, as reported to ASX.

In the context of conventional porphyry copper deposit modelling, the untested core of the IP anomaly is therefore a compelling drill target.

Planned Diamond Drilling

The Company has designed three new diamond drill-holes, MC-4, MC-5 and MC-6, to test the IP anomalism on three separate 200m sections (Figures 2 – 5). They are planned to be up to 700-750m deep with inclinations in the range of 75-90 degrees. Accompanying Photographs 1 and 2 show abundant secondary copper mineralisation and other oxidation minerals exposed in the recently completed MC-4 drill pad excavation.

Drilling commenced on 14 September 2011 and is expected to be completed by mid-October 2011, with final assay results by November, 2011.

*** Induced Polarization-Resistivity (IP) geophysical survey**

An electrical geophysical technique commonly used in the location of disseminated porphyry copper-style sulphide mineralization where an electrical or magnetic field is applied to the ground surface to induce charge at mineral interfaces. The principal measured parameters include resistivity in ohm.metres (ohm.m) and chargeability in milliseconds (ms). The varying responses enable interpretations to be made about the likely mineral composition of the zone being tested.

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Company Contacts:

Eduardo Videla – Managing Director
Steve Shedden – Chairman

+61 (0) 8 6140 2571
+61 (0) 8 6140 2569

Email:

info@argentinamining.com.au

Media Contact:

Paul Armstrong

Read Corporate (+61 (0)8 9388 1474



Photograph 1 - Detail of wall in MC-4 drill pad excavation showing bands of copper oxides (green-blue) and a manganese-rich mineral (black)



Photograph 2 - Part of MC-4 drill pad excavation showing intense yellow clays (jarosite) and distinct bands of brown limonite which may represent original sulphide-rich zones

Overview of Argentina Mining Limited

Argentina Mining Limited listed on the ASX on 9 March 2011. The Company is exploring a suite of gold and base metal projects in San Juan Province, Argentina. These projects range from the established porphyry copper-gold-molybdenum project at Cerro Blanco, vein and gold and copper mineralisation at Amiches, San Francisco and Tres Amigos and regional exploration projects near Barrick Gold Corporation's major Veladero (Reserves 12Moz Au) and Pascua-Lama (Reserves 17.8Moz) gold operations.

Competent Person Statement

The information in this report relating to Exploration Results is based on information compiled by Mr Doug Bright, a Member of the Australasian Institute of Mining and Metallurgy and a Director of and consultant to Argentina Mining Limited. Mr Bright has sufficient experience relevant to the style of mineralisation and type of deposits 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 Bright consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.