

31 October 2011

ASX ANNOUNCEMENT

September 2011 Quarter - Activity Report

Drilling Major Geophysical target at Cerro Blanco Porphyry Cu-Au-Mo Project

- Geophysical survey identifies large IP anomaly at Cerro Blanco Project, Argentina
- Modelling consistent with potentially rich copper-mineralised zone at Copper Hill
- Three deep diamond drill holes (>700 metres) designed
- Deep diamond drilling of IP target commenced on 14 September 2011
- Encouraging early drilling field reports received
- Access to southern Cerro Blanco (La Fortuna & Despoblados) under development
- IP Survey completed at Tres Amigos Au-Cu Project
- Summer exploration campaign planned



Figure 1 - Diamond drill-hole MC-4 site on the western flank of Copper Hill

Exploration Activities

Argentina Mining Limited (ASX:AVK) ('Argentina Mining' or 'the Company') continued its exploration focus on diamond drilling at its Cerro Blanco Porphyry Cu-Au-Mo Project in San Juan Province, Argentina. This was the Company's second full Quarter of operations since listing on ASX in March 2011.

During the June 2011 Quarter, the Company completed its maiden drilling program at Cerro Blanco, with considerable success. Two 400m deep diamond drill-holes intersected wide zones of porphyry Cu-Au-Mo mineralisation, with the following grades and widths reported to ASX on 23 June 2011:

DDH MC-1: 102.5m averaging 0.18% Cu, 0.06 g/t Au, 65 ppm Mo from 249m
(including: 37.5m @ 0.25% Cu, 0.09g/t Au and 81ppm Mo from 314m)

DDH MC-3: 108m averaging 0.20% Cu, 0.08 g/t Au, 95 ppm Mo from 233m
(including 34.0m @ 0.26% Cu, 0.12g/t Au and 106ppm Mo from 239m)

These results conclusively demonstrate the presence of porphyry copper-style mineralisation and clearly justify continued exploration at the Copper Hill Prospect.

Interpretation of the results of a high resolution ground magnetics survey undertaken at the time of drilling identified a broadly annular magnetic anomaly which corresponds closely with the drilled mineralisation. This anomaly is analogous to magnetic anomalies associated with other porphyry copper deposits and is consistent with the Company's Exploration Model.

Encouraged by these results, the Company accelerated an Induced Polarisation and Resistivity (IP) geophysical survey. Three-dimensional modelling of the IP data produced large, well-defined chargeability and resistivity anomalies whose relationships, when integrated with existing drilling, magnetic and geological data yield a compelling drilling target.

The Company commenced its second phase of diamond drilling at Cerro Blanco to test this target with three deep diamond holes, details of which are set below. The program is still underway at time of reporting.

Exploration also commenced at the Tres Amigos gold-copper project, with an IP survey conducted in September 2011.

Cerro Blanco Cu-Au-Mo Project

Geophysical Surveying

Following encouraging results from the diamond drilling and the high resolution ground magnetic survey conducted in the June 2011 Quarter at the Copper Hill Prospect, an IP survey was undertaken during the September 2011 Quarter. The results of this survey were released to ASX on 15 September 2011.

The IP survey defined a High Chargeability Zone (HCZ) modelled from three dimensional, grid-based IP data collected over a 6 square kilometre area, centred on Copper Hill.

The HCZ is a discrete, ovoid, flat-lying feature measuring approximately 900m east-west and 1500m north-south and is apparently open to south. The HCZ, the upper surface of which is approximately 250 to 300 metres below natural surface level under Copper Hill, is interpreted to represent a sulphide-rich zone comparable with those found in known porphyry copper deposits. The HCZ is surrounded by a high-resistivity zone which may result from pervasive silicification or quartz veining associated with copper sulphide mineralisation.

Three dimensional modelling also indicates that Argentina Mining’s previous drilling, which intersected wide zones of porphyry Cu-Au-Mo mineralisation, intersected the margins of the HCZ, within a pyrite-rich halo surrounding a potentially copper-rich internal zone, consistent with the Company’s Exploration Model for Copper Hill.

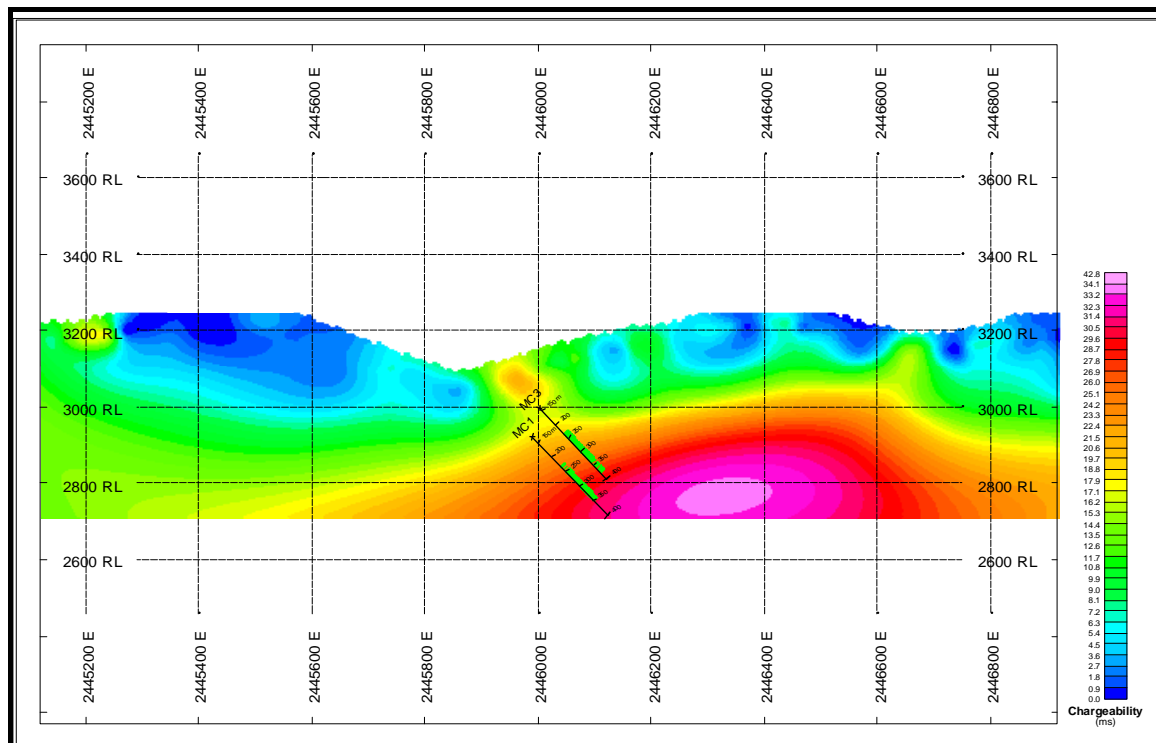


Figure 2 – Section 6460200N – Argentina Mining’s first two “Proof-of-Concept” diamond drill-holes MC-1 & MC-3 with >0.2% copper histogram, projected onto an IP chargeability section

Diamond Drilling

The Company designed its second phase of drilling with three diamond drill-holes; MC-4, MC-5 and MC-6 (now redesignated MC-2 and relocated to be drilled from the site of previous drill-hole MC-1), to test the HCZ target defined by the IP interpretation. They are planned to depths of up to 700 to 750m, with inclinations ranging from 75 to 90 degrees and all have 90 degree azimuths.

Drilling commenced on 14 September 2011. By end of the September 2011 Quarter, this program was well under way.

At the time of reporting, the Company was encouraged by visual indications in drill core and from early analytical results. At that time, the planned diamond drilling program was about 50% complete, with some technical drilling issues, now resolved, and unseasonal weather conditions slowing expected progress.

Further details will be announced when a complete, validated suite of results is available, enabling all results to be presented in a proper context after compilation with previous drilling results, geology and geophysics.

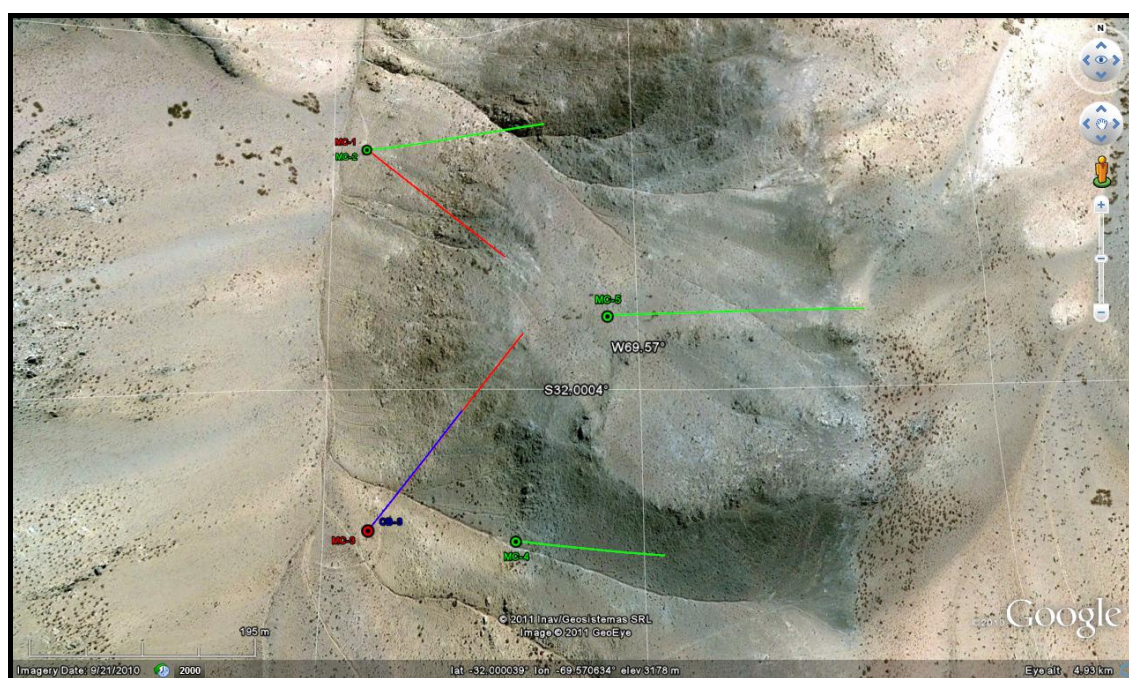


Figure 3 - Plan view Google Earth image showing Copper Hill and drill hole collars and traces of original FM hole CB-3 (blue), Phase 1 drill-holes MC-1 & MC-3 (red) and Phase 2 drill hole locations MC-2, MC-4 & MC-5. Azimuths of all Phase 2 holes (green) are 90 degrees but are distorted by projection onto topography

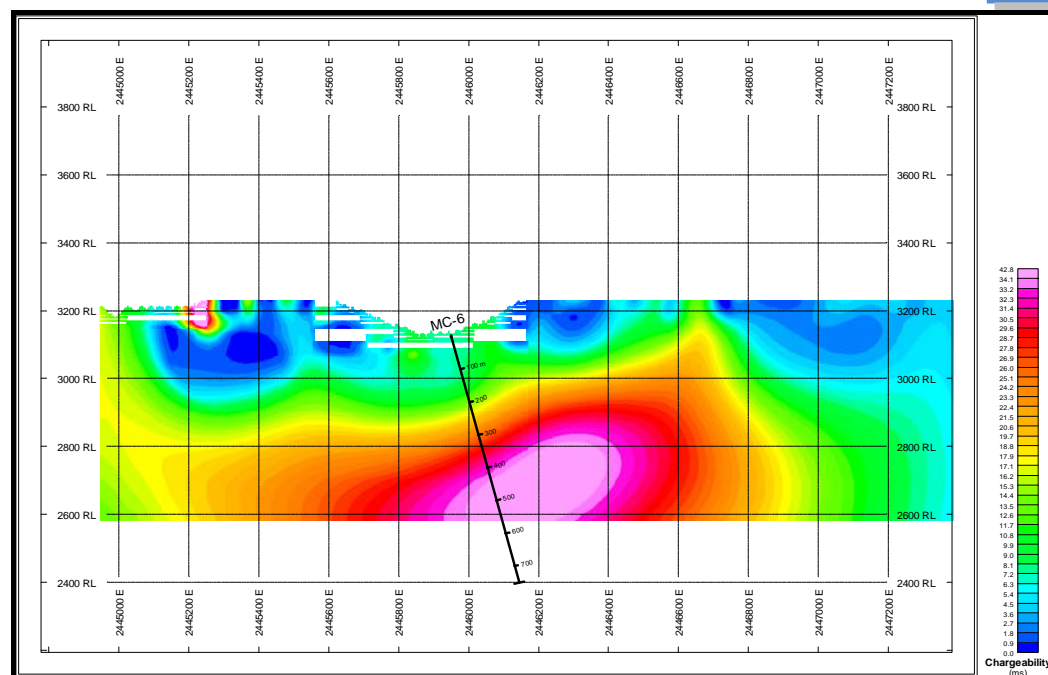


Figure 4 – Section 6460200N - Proposed diamond drill-hole MC-6 on IP chargeability

Geological Mapping

Geological mapping on the Copper Hill target area commenced during the June 2011 Quarter. This work continued during the September 2011 Quarter, with a detailed geological map now being drafted for presentation. Details include broad surface disposition of intrusive phases, contact alteration and brecciation marginal to the intrusive rocks, principal structural features including brecciation, faulting, shearing and veining and the intensity of alteration and oxidation.

Geological mapping will be continually updated as information from drill-hole data and geological exposure in road cuttings becomes available. Much of the steep slopes of Cerro Blanco and Copper Hill are covered by a thin blanket of unconsolidated detritus which obscures the generally deeply oxidised bedrock. Road and drill site cuttings provide valuable bedrock exposure with some spectacular indications of oxide copper mineralisation, as depicted in Figure 5, following.



Figure 5 - Drillhole MC-4 drill pad cutting showing jarositic clays, limonite, copper oxide and other features typical of a porphyry copper leached cap



Figure 6 – Phase 2 Program diamond drilling rig established on MC-4 drill site

Surveying

Contract licensed surveyors established a series of survey control points and completed a contour survey, from which a Digital Terrain Model (DTM) was prepared for the immediate Copper Hill Prospect area.

Geochemical Sampling

A detailed drainage map has been completed as a prelude to undertaking stream geochemical sampling in the southern part of the Cerro Blanco Project tenement group in the upcoming March 2012 Quarter. This is intended to provide fast and efficient large-area coverage and assessment of the potential within the area for large-scale targets. This work will also form a training and orientation component prior to undertaking similar work on the more remote properties.

Infrastructure and Logistics

A 15 person field camp was established at Cerro Blanco (Figure 7), supplementing the regional field office, accommodation and core farm located in the town of Barreal, 25 km north of the project site.

Bulldozed road and drill pad development continued at Cerro Blanco; this work is essential to these exploration operations in steep terrain and provides access for drilling and support equipment and other works on the project.

This work included road construction to the southern part of the Cerro Blanco Project, including the La Fortuna and Despoblados prospects, opening access to a very large part of the project area.



Figure 7 – New field camp established at Cerro Blanco

Tres Amigos Au-Ag-Cu Project

An initial IP/Resistivity survey was completed at Tres Amigos during September 2011. Data was acquired on 6 lines spaced 300 metres apart, for a total of 33 line kilometres.

Tres Amigos is located 52km north-east of Cerro Blanco. The two projects share the Company's infrastructure in the nearby town of Barreal.

Data from Tres Amigos is presently being interpreted to determine potential drill targets.

The principal targets at Tres Amigos are:

1. High grade sulphide and quartz-ironstone gold-rich veins of epithermal style in radial or circumferential shears and faults developed around the core porphyry intrusive.
2. Porphyry copper-gold mineralisation within the core porphyry intrusive and its surrounding contact metamorphic aureole.

The objective of the geophysical surveying at Tres Amigos is to identify deeper magnetic or conductive sources which may be associated with sulphide mineralisation, define the outline of shallower porphyry-related disseminated sulphide mineralisation and to better define important controlling geological structures such as faults and shear zones at varying depths.

Other Projects

No work was undertaken on the company's other Amiches, San Francisco and Regional exploration projects during the September 2011 Quarter. Field exploration is planned during the 2011-2012 summer.

Regional Developments

Cerro Blanco is located within a regional structural corridor which includes a number of significant mining and exploration projects. These include the operating Los Pelambres porphyry copper mine (Antofagasta plc (LSE: ANTO)), and the El Pachon (Xstrata (LSE:XTA)), Los Azules, Altar and San Jorge porphyry copper development projects, all of which are located within 100km of Argentina Mining's Cerro Blanco Project. Development of these projects is likely to impact positively on the Cerro Blanco Project by virtue of major regional infrastructure improvements.

During the September 2011 Quarter, the takeover of Peregrine Metals Ltd (TSX:PGM) by Stillwater Mining Company (NYSE:SWC, TSX:SWC-U) was completed, at a reported transaction value of US\$487m. Stillwater now holds 100% of Altar and 100% of the surrounding Rio Cenicero exploration property.

The conditional merger of Mineras Andes Inc (TSX:MAI) and US Gold Corporation (NYSE: USG) into a new entity called McEwen Mining, with an expected market capitalisation of greater than US\$1Bn, was also announced. McEwen Mining will hold 100% of Los Azules.

El Pachon has a published Mineral Resource of 1.79Bn tonnes at a copper grade of 0.51% Cu. Xstrata are planning to bring this project to production in 2016.

Coro Mining Corp is continuing plans to develop its San Jorge porphyry copper project, which is located about 40km south-east of Cerro Blanco, in Mendoza Province.

December 2011 Quarter Planned Activity

Exploration planned for the December 2011 Quarter includes:

- Completion of the current diamond drilling campaign at Cerro Blanco
- Completion of road access to Cerro Blanco southern area
- Regional stream geochemistry in the southern Cerro Blanco tenement area
- Reconnaissance exploration of the La Fortuna and Despoblados prospects
- Interpretation of Tres Amigos IP/Resistivity survey data
- Scout drilling at Tres Amigos
- Development of road access into the San Francisco Project area
- Reconnaissance exploration at San Francisco, La Ortiga, East Sancarron and San Crispin project areas

Corporate

Board Appointments

At the first Annual General Meeting of the Company held on 8 July 2011, Tim Kennedy and Steve Shedden were re-elected as directors. Mr Kennedy represents major shareholder, Independence Group NL, on the Board.

Company Contacts:

Eduardo Videla – Managing Director +61 (0)8 6140 2571

Steve Shedden – Chairman +61 (0)8 6140 2579

Email: info@argentinamining.com.au

Media Contact:

Paul Armstrong Read Corporate (+61 (0)8 9388-1474

Trading Codes

The Shares trade under ASX code: **AVK**

The Options trade under ASX code: **AVKO**



About Argentina Mining Limited

Argentina Mining Limited is exploring a suite of gold and base metal projects located in the Andean Cordillera and Pre-Cordillera mountain regions in San Juan Province, Argentina. These projects range from previously established copper-molybdenum projects at Cerro Blanco, gold and copper mineralisation at Amiches, San Francisco and Tres Amigos and the Regional Exploration tenement areas near Barrick Gold Corporation's major Veladero (Reserves 12Moz Au) and Pascua-Lama (Reserves 17.8Moz) gold operations.

Currently, exploration is focussed on Cerro Blanco, the Company's flagship project, where drilling and geophysical exploration is supporting the Company's interpretation of previous exploration results that indicates potential for an Andean-style large-tonnage porphyry copper-gold-molybdenum deposit centred on the Copper Hill Prospect.

The Company's other projects are Amiches, San Francisco and Tres Amigos, which include significant vein gold-copper and porphyry copper targets, and the Regional Exploration Project near Barrick Gold Corporation's major Veladero (Reserves 12Moz Au) and Pascua-Lama (Reserves 17.8Moz) gold operations.

Argentina Mining's cornerstone investor is Independence Group NL (ASX: IGO), which holds a 19.9% stake in the Company.

Competent Person's Statement

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 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 Bright consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.