



## **Andina Timing Update for Volcan Gold Project Studies**

**TORONTO, February 24, 2010 - ANDINA Minerals Inc.** (TSX-V:ADM) (the “Company”) is providing today an update on the timing of the Conceptual Design Study (“CDS”) and Preliminary Economic Assessment (“PEA”) currently being conducted on the Volcan Gold Project (“Volcan”). The CDS and PEA, based on a heap leach scenario (the “Heap Leach Base Case”), were targeted for completion in early 2010.

- Recent infill drilling suggests that there is potential to define zones of higher grade within the resource
- Further metallurgical testing completed by the Company has indicated that at the crush size the company would likely employ in the Heap Leach Base Case scenario, recoveries for Volcan would range between approximately 57% - 60% rather than the 57% - 77% range indicated by previous metallurgical tests. Prior tests incorporated finer crushing than Andina now believes would likely be employed (refer to November 21, 2007 press release)
- Alternative development scenarios have the potential to generate higher project returns through increased recoveries and optimization of the mining and processing of higher grade material
- Milling and combination heap leaching/milling scenarios are being reviewed, which will evaluate the benefits of higher production revenues against higher capital cost relative to the Heap Leach Base Case scenario
- While copper grades for Volcan are lower than other Maricunga district projects, for the milling type scenarios now being evaluated there may be sufficient copper and gold in pyrite to add a circuit to enhance project economics through the recovery of copper and gold in concentrate

As a result of these developments, Andina has targeted the second half of 2010 as the anticipated release date for the CDS and PEA, including alternative development scenarios.

“Given the current and expected strength of gold prices, we believe that it is likely that a milling or combination heap leaching/milling scenario will generate the optimum development alternative for the Volcan Project. As such we are taking the decision to broaden our technical studies rather than fast-track the Heap Leach Base Case Scenario study. While Andina has been primarily focused on a Heap Leach Base Case scenario, it is in the best interest of our shareholders to extend our technical review period to ensure we define the value maximizing scenario for the large Volcan resource”, said George Bee, President & CEO. “Volcan continues to be one of the world's largest undeveloped gold projects in a politically stable and mining friendly jurisdiction and we have sufficient cash resources and a strong team in place to optimize the development planning process.”

### **Conceptual Design Study Initial Metallurgical Results**

Since the release of the last metallurgical test results in May 22, 2008 and November 21, 2007, Andina, utilizing new development planning parameters, has spent considerable time and effort collecting new representative mineral samples, subjecting these new samples to a series of tests, and verifying the results. Although metallurgical results are still under review, the Company considers metallurgical results sufficiently advanced to provide initial conclusions and guidance on gold extraction using heap leach techniques.



The results of this metallurgical work are consistent with previously released recoveries of approximately 70%. However, these recoveries have only been achievable with crush sizes that were incompatible with other operational parameters of the project, such as leach pad stability, and reasonable capital and sustainable operating costs. For this reason the Heap Leach Base Case recovery rate at the coarser crush size now contemplated, while not optimized, falls short of the recoveries indicated by the 2008 metallurgical test program and the target recovery for the project issued as guidance in the September 2009 resource update.

#### *Initial Testing*

In 2008, based on test work and an assumed resource cut-off grade, the gold recovery from heap leaching was indicated as ranging from 57% - 77% with increasing recoveries directly correlated with increased grades. Following on from this initial phase of testing, the Andina development team collected samples in early 2009 representing various portions of the mineral resource. An independent consultant was contracted to collect the sample and design the 2009 test program. Approximately 1,250-kg of samples were collected from 10 distinct areas of the resource and arrived at McClelland Laboratories Ltd. ("McClelland") in Reno, Nevada in mid May 2009. A portion of the samples collected were sent to KHD Humboldt Wedag ("KHD") in Cologne, Germany for High Pressure Grind Roll ("HPGR") crushing as a precursor to testing. A comprehensive series of 96-hr bottle roll leach tests were performed on conventionally crushed and HPGR crushed material with crush sizes ranging from 19-mm down to 106 $\mu$ . Similar sized material was bottle-roll tested on pre-rinsed material and material that had a lead nitrate additive, beyond the standard reagent doses aimed at pH control and gold extraction. This first series of 128 bottle-roll tests were concluded during August 2009 and was the basis upon, which subsequent column tests were set up and executed, also at McClelland. The Heap Leach Base Case was refined once the initial bottle-roll results had been received. Twenty-one leach column tests were set up testing conventionally crushed material at 9-mm and 6-mm, and HPGR crushed material at 6-mm and 3-mm. Final calculated head grades and full completion of the testing is pending residue assay analysis subsequent to a 120-day column leach cycle. Preliminary results under the conditions tested (6-kg/t cement, 1.5-kg/t lime and 500 ppm NaCN) have been received by the Company.

#### *Further Testing of Representative Material*

Based on the recent preliminary bottle-roll results and review by metallurgical and process design consultants, it was concluded that the 2007 and 2008 test work program which focused on a crush size of P<sub>80</sub> of around 2-mm to 3-mm was not considered feasible for a commercial heap leach operation. The minimum practical crush size for commercial production at Volcan was established at a crush size of P<sub>80</sub> of 6-mm. Tests were then aimed at confirming that HPGR crushing improved gold recovery over conventional crushing and establishing an overall recovery parameter for a P<sub>80</sub> of 6-mm. Due to the fact that the original 10 samples collected had relatively high gold grades ranging from 0.98-g/t to 1.61-g/t, it was felt these samples did not fully characterize the gold tenor of Volcan, where this grade range represented only fourteen percent (14%) of the contained ounces in the current resource inventory. While the external consultant initially selected higher grade samples to reduce the inherent error in assaying of low grade samples, the Company and its consultants later agreed that these results would not properly reflect the general characteristics of the Volcan mineralization. During July through August 2009 another set of five (5) samples, totalling 1,559-kg was collected, again representing the resource spatially but this time focusing on



0.4-g/t, 0.8-g/t and 0.65-g/t gold grades, and were shipped to McLelland and KhD. A further set of 20 bottle-roll tests were conducted on conventional and HPGR crushed material with size ranges between 2-mm and 12-mm with the emphasis on the 6-mm (P<sub>80</sub>) crush size for both HPGR and conventional crushed products. Results from bottle-roll tests from the newer samples are now available although no further column test work has been initiated at this time on the lower and mid-range grade resource material.

As previously stated, results for the Heap Leach Base Case, which incorporates conventional primary, secondary, and then HPGR tertiary crushing, show that for a nominal P<sub>80</sub> 6-mm leach feed, recoveries of approximately 57% to 60% might be expected. This is based on agglomerating the crushed feed to the leach pad with cement, lime and applying barren leach solution at the agglomerating stage. Due to the need to maintain percolation and solution transmission through the heap and considering the need to stabilize fines in an agglomerated nodule, the feed to the pad is stacked mechanically onto an on-off reusable pad with spent material being deposited in a lined storage facility after rinsing and water recovery. Considerable work remains to be completed on the heap leach scenario to optimize the trade-off of recoveries and other factors such as capital costs for various heap leach configurations.

#### **Expansion of Processing Alternatives in the Conceptual Design Study**

Alternative process flow sheets are now under consideration in the CDS. Initial desktop evaluations indicate that several alternatives could serve to optimize Volcan's economics by improving recoveries, but also includes conventional heap leach at a coarser crush size to reduce capital investment. Given the strong gold price environment, optimizing recoveries and therefore gold production together with optimizing the mining and processing of potential higher grade material warrants the study of scenarios which probably require additional capital as compared to heap leach alternatives to incorporate milling for all or part of material mined at the Volcan Project.

Alternatives under consideration are:

- *Coarser Conventional Crush for Low-Grade and Milling for Higher-Grades* - This alternative considers conventional heap leaching for the majority of the ore tonnage but allows a higher-grade portion of the feed to be milled before carbon-in-leach gold extraction in order to enhance gold recoveries. A similar flow sheet is employed at Barrick Gold Corporation's Ruby Hill property in Nevada, USA;
- *Coarse Milling With, and Without, Flotation* - This alternative seeks to capture as much of the free and encapsulated gold at reasonable grind sizes for whole ore leaching, or recovery of gold and sulphide concentrates for more intensive treatment in a flotation concentrate; and
- *Coarser Conventional Crush and Heap Leach* – This alternative is a more conventional heap leaching technology, which will deliver lower development capital, but which may not improve gold recoveries. This method has been employed at the nearby Kinross Gold Corporation Maricunga mine and could be evaluated for Volcan on a large scale.



To evaluate the alternatives above a number of activities need to take place, including:

- Completion of the current in-fill drilling program on the Dorado resource which will help identify the different gold grade zones within the resource;
- Resource modelling which would focus on a better interpretation of higher grade zones within the overall resource. This would support selective mining which could serve to reduce dilution seen in the resource model for the Heap Leach Base Case;
- Update mine planning based on each of the alternatives being reviewed;
- Sizing plant and finalizing process flow streams; and
- Estimating capital, operating costs and project economics.

The finalized CDS will evaluate all of the alternatives above, including optimizing the Heap Leach Base Case, and evaluate final projected gold recoveries, capital and operating costs, and other key parameters. Following release of the comprehensive review of all alternatives in the second half of 2010, the Company would target completion of a prefeasibility study for the leading alternative in the first half of 2011.

#### **Qualified Person**

Mr. Richard Gowans of Micon International Ltd. is the Qualified Person under National Instrument 43-101 responsible for reviewing technical and scientific information in this press release regarding the CDS and PEA. Mr. Gowans has reviewed the contents of this press release. Certain technical information regarding the Project required to be disclosed under Part 3 of National Instrument 43-101 is contained in the Technical Report on the Volcan Gold Project, Region III, Chile and Updated Mineral Resource Estimate for the Dorado Gold Deposits, dated October 23, 2009, prepared by Reno Pressacco, M.Sc. (A), P.Geo., Richard Gowans, P.Eng. and Sam Shoemaker, B.Sc., MAusIMM, each of Micon, and is available on SEDAR at [www.sedar.com](http://www.sedar.com). This includes information regarding project area geology, mineralization, rock types and geological controls.

#### **Andina Minerals Inc.**

Andina's primary focus is mining exploration and development in Chile. The Company's flagship property is the 100%-owned Volcan Gold Project, strategically located in the prolific Maricunga Gold Belt. In September 2009, Andina provided an updated resource estimate for Volcan including measured and indicated mineral resources of 492.5 million tonnes at an average grade of 0.62 g/t Au for 9.8 million ounces of contained gold and inferred mineral resources of 36.8 million tonnes at an average grade of 0.65 g/t Au for 768,000 ounces of gold.

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For further information please contact:

**George M. Bee**  
*President & CEO*  
416 203 3488

**Keith McKay**  
*Chief Financial Officer*  
416 203 3488

Or visit the Company's website at [www.andinaminerals.com](http://www.andinaminerals.com).

#### **Forward-Looking Statements**

This release contains forward-looking statements, including predictions, projections and forecasts. Forward-looking statements include, but are not limited to, statements with respect



to exploration activities and results (including the timing of results), the timing and success of exploration activities generally, permitting timelines, government regulation of exploration and mining operations, environmental risks, title disputes or claims, limitations on insurance coverage, timing and possible outcomes of any pending litigation and timing and results of future resource estimates or future economic studies, and in particular include statements with respect to the timing of the CDS and PEA, rates of gold recovery, and analysis and assessment of processing scenarios. Often, but not always, forward-looking statements can be identified by the use of words such as “plans”, “planning”, “planned”, “expects” or “looking forward”, “does not expect”, “continues”, “scheduled”, “estimates”, “forecasts”, “intends”, “potential”, “anticipate”, “does not anticipate”, or “belief”, or describes a “goal”, or variation of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved.

Forward-looking statements are based on a number of material factors and assumptions, including, among others, the result of drilling and exploration activities, results of studies, that unexpected geological conditions or formations are not located, that contracted parties provide goods and/or services on the agreed timeframes, that equipment necessary for exploration is available as scheduled and does not incur unforeseen break downs, that no labour shortages or delays are incurred, that plant and equipment function as specified, that no unusual geological or technical problems occur, and that laboratory and other related services are available and perform as contracted.

Forward-looking statements involve known and unknown risks, future events, conditions, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, prediction, projection, forecast, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, the interpretation and actual results of current exploration activities; changes in project parameters as plans continue to be refined; future prices of gold; possible variations in grade or recovery rates; failure of equipment or processes to operate as anticipated; the failure of contracted parties to perform; labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of exploration, as well as those factors disclosed in the company's publicly filed documents. Although Andina has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

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