



# Northern Vertex Provides Metallurgical Update for Phase I – Pilot Plant Heap Leach Operations

Rate of Gold Recovery Exceeding PEA Projections
Increase Secured for Pilot Plant Heap Leach Throughput

Vancouver, BC - Northern Vertex Mining Corp. (the "Company") (TSX.V: NEE, OTCQX: NHVCF) announces that, further to the Company's news release dated November 15, 2013, it is pleased to provide an update on Phase I – Pilot Plant, the first phase of a three part project development plan for the reactivation of the Moss Mine Gold-Silver project located in Mohave County, Arizona, USA with highlights as follows:

- Gold recovery rates to date are 73.45% after an average of only 96 days and exceed expectations indicated in the Preliminary Economic Assessment ("PEA")
- Permittable quantity of mineralized material for heap leaching during Phase I Pilot Plant has now been increased from approximately 90,000 tonnes to 112,500 tonnes

Dick Whittington, President & CEO, Northern Vertex., states, "We are more than excited about the metallurgical results we have received to date from our Pilot Plant operations. This first phase, where gold extraction commenced 4.5 months ahead of the PEA scheduled timeline, was our "proof of concept" phase. It has allowed us to reaffirm the technical and operational expectations of the metallurgy of the PEA and to continue de-risking the project as we move towards commercial production in Phase II."

# Phase I – Pilot Plant: Permittable Quantity Increase and Final Loading of Mineralized Material on the Heap Leach

Golden Vertex Corp., the wholly owned subsidiary of Northern Vertex Mining Corp. received approval from the Arizona Department of Environmental Quality for a requested amendment to the Aquifer Protection Permit for the Moss Mine Heap Leach Project. The approved amendment allowed an increase in the quantity of mineralized material to be leached on the company's current Phase I heap leach pad from approximately 90,000 tonnes (100,000 tons) to approximately 112,500 tonnes (125,000 tons). The increase in the allowable tonnage enables the company to leach material from a wider area of the Phase I pit and to test recoveries from varying crush sizes further enhancing the contribution and value of the pilot plant phase.

Current loading of the Phase I – Pilot Plant leach pad is comprised of:

- 25,785 tonnes of lower grade mineralized material (average 0.966 g/t) crushed to 99% -1/4 inch and agglomerated using 2 kg/tonne (4 lbs per ton) of Portland Cement
- 76,887 tonnes of higher grade material (average 1.619 g/t) crushed to 99% -1/4 inch and agglomerated using 2 kg/tonne (4 lbs per ton) of Portland Cement
- 3,239 tonnes of higher grade material (average 1.642 g/t) crushed to 99% 1 inch, not agglomerated

As of December 31, 2013, five cells on the pad consisting of a measured 81,630 tonnes of mineralized material containing 3657 ounces of gold and 36,912 ounces of silver were under leach with results as follows:

- Leaching times vary from 122 days for cell 1 to 67 days for cell 5 with average leaching at 96 days
- Gold in doré (2,139 oz) in carbon (536 oz) and in solution (11 oz) total 2,686 oz gold yielding a pre-completion recovery of 73.45% gold. (Preliminary Economic Assessment based on 75% recovery after 9 months)
- Gold is still being recovered from all 5 cells
- Silver recoveries are at 27.1 % as gold is being preferentially adsorbed onto the carbon resulting in high silver recycling values in the leach solution; however, final recovery of silver is expected to meet or exceed the PEA projections

Cell 6A (-1/4 inch agglomerated) and cell 6B (-1 inch, not agglomerated) were only treated with solution on January 1, 2014. Gold recovery, within all the cells (1 to 6B), is anticipated to continue until mid-year.

The process of loading gold onto carbon strips and shipping to processing facilities continues. Further sales are anticipated over the next few months.

## **Ongoing Activities:**

Company operations have now been scaled back as originally anticipated in the PEA, with current focus solely on the leaching of gold from the Pilot Plant operations. At the same time, the Company is continuing to exercise fiscal responsibility and is reducing costs, corporately and in the field, in order to preserve cash in the current market environment. In the meantime, work on the Feasibility Study continues albeit at reduced levels than originally anticipated. The immediate focus is on reviewing and enhancing the Company's block model based on the most recent drilling (see News Release dated October 17, 2013) and additional geological information made available as a result of the Company's Phase I – Pilot Plant operations.

#### **Qualified Persons:**

The foregoing technical information contained in this news release has also been reviewed and verified by L.J. Bardswich, P.Eng., General Manager of Golden Vertex Corp. and a Qualified Person ("QP") for the purpose of National Instrument 43-101 (Disclosure Standards for Mineral Projects).

### **About Northern Vertex:**

Northern Vertex Mining Corp. is a Canadian based exploration and mining company focused on the reactivation of the Moss Mine Gold-Silver Project located in NW Arizona, USA where the Company has the right to earn-in to a 70% property interest through a Joint Venture with Patriot Gold Corp. The Moss Mine Gold-Silver Project is an epithermal, brecciated, low sulphidation quartz-calcite vein and stockwork system which extends over a strike length of 1,400 meters and has been drill tested to depths of 220 meters vertically. It is a potential heap leach, open pit project being advanced under a three-phase business plan, specifically designed to ensure that technical, economic, permitting and funding requirements are met prior to each phase proceeding. The Company's management comprises an experienced team with a strong background in all aspects of acquisition, exploration, development, operations and financing of mining projects worldwide. The Company is focused on working effectively and respectfully with our stakeholders in the vicinity of the historical Moss Mine and enhancing the capacity of the local communities in the area.

To view photos of the Moss Mine Gold-Silver Project, please click on the following link: <a href="http://www.northernvertex.com/s/PhotoGallery.asp">http://www.northernvertex.com/s/PhotoGallery.asp</a>

#### ON BEHALF OF THE BOARD OF DIRECTORS

J.R.H. (Dick) Whittington, President & CEO

For further information, please visit www.northernvertex.com or contact Investor Relations at: 604-601-3656 or 1-855-633-8798

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#### Cautionary Note About Forward Looking Information

This news release contains statements about our future business and planned activities. These are "forward-looking" because we have used what we know and expect today to make a statement about the future. Forward-looking statements including but are not limited to comments regarding the timing and content of upcoming work and analyses. Forward-looking statements usually include words such as may, intend, plan, expect, anticipate, believe or other similar words. We believe the expectations reflected in these forward-looking statements are reasonable. However, actual events and results could be substantially different because of the risks and uncertainties associated with our business or events that happen after the date of this news release. You should not place undue reliance on forward-looking statements. As a general policy, we do not update forward-looking statements except as required by securities laws and regulations.

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