



Northern Vertex Announces Positive Preliminary Economic Assessment of the Moss Gold Mine Expansion in NW Arizona

Robust Economics Indicate 10 Year Mine Life; NPV US\$133M; AISC US\$603/oz; IRR 73%

October 10, 2017, Vancouver, B.C. - Northern Vertex Mining Corp. (TSX.V:NEE) (OTC Nasdaq Intl.: NHVCF) (the “Company” or “Northern Vertex”) is pleased to announce the results of a Preliminary Economic Assessment (“PEA”) of the technical and economic viability of expanding the Moss mine to include resources that could be accessed by a future expansion of operations onto the Company’s adjacent un-patented mining claims. This scenario includes surface disturbance and an expansion of the mine facilities onto Federal public lands administered by the Bureau of Land Management (“BLM”) and would therefore require the submission to, and approval by, the BLM of the necessary Federal and environmental permits.

Kenneth Berry, President and CEO, stated: “Our team continues to execute its development plan to launch the next producing gold mine in the USA. Construction of the Company’s Phase II operations is well advanced and production is anticipated later in Q4 2017. This PEA is further encouragement of both the exceptionally strong initial years as well as the potential longevity of the Moss Gold Mine. Eliminating the patented boundary constraints and increasing production to a peak of 60,000 gold equivalent ounces in year four, the PEA indicates the Moss mine project has the potential to measurably improve the economics stated in the Company’s Phase II Feasibility Study published in June, 2015. The backbone of our PEA is our strong resource, only 10% of the gold equivalent ounces in the PEA are currently defined as Inferred resources. To further expand our existing resources, management intends to conduct an aggressive exploration and resource expansion program during the first two years of Phase II production. This district wide exploration program will be initiated within six weeks and is expected to further enhance the size and scope of the Moss Mine Project.

Click to view construction progress at Moss Mine: <https://northernvertex.com/projects/photo-gallery/>

The PEA highlights:

	Years 1-4	Years 5-10	Life of Mine
Annual Production	1.9 million tonnes	1.9 million tonnes	
Mineralized Material to Leach	7.1 million tonnes	10.0 million tonnes	17.1 million tonnes
Strip Ratio	1.77	1.92	1.85
Average Gold grade - gpt	0.95	0.52	0.70
Average Silver grade - gpt	10.5	6.78	8.33
Average “AuEq” grade* - gpt	1.12	0.62	0.83
Recoveries to Doré	Au - 82%, Ag – 65%	Au - 82%, Ag – 65%	Au - 82%, Ag – 65%
Contained Gold – troz oz	216,750	165,150	381,900
Contained AuEq – troy oz	255,209	199,916	455,125
Gold Production – troy oz	167,170	145,980	313,150
AuEq Metal – troy oz	190,740	170,010	360,750
Capital Costs (incl indirects)**			US\$61.6 million
Operating Costs	US\$76.6 million	US\$113.5 million	US\$190.021 million
AuEq Cash Cost per troy oz.	US\$401	US\$667	US\$527
Cash Cost net of Ag credits	US\$283	US\$573	US\$418
AISC per troy oz AuEq.	US\$472	US\$753	US\$603
Life of Mine			10 years
IRR (before/after tax)***			73.1% / 52.5%
NPV 5% (before/after tax)***			US\$133M / US\$93M
Payback Period (before/after tax)			20 mo. / 27 mo.

* Gold equivalent ounces of silver calculated by multiplying by 20 and dividing by 1250.

** Includes US\$37.5 million of previously funded Phase II committed costs.

*** After tax numbers are prior to the application of the Company’s significant existing tax pools.

Dr. David Stone, PE, Project Manager for the Moss Mine, stated: “The PEA’s success would not have been possible without the contributions of M3 Engineering and Technology Corp. of Tucson, AZ (process facility and site infrastructure design and costing), Golder Associates of Tucson, AZ (heap leach pad and waste dump), Mine Development Associates



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of Reno, NV (mine planning and production scheduling) and CDM Smith of Phoenix, AZ (project permitting).”

The Company cautions that the PEA is preliminary in nature in that it includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be characterized as mineral reserves, and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Project Economics and Sensitivity Analyses:

The following tables illustrate the PEA project economics and the sensitivity of the project to changes in the base case metal prices, operating costs and capital costs. As is typical with precious metal projects, the Moss project is most sensitive to metal prices, followed by operating costs, and initial capital costs.

Table 1 – Project Economics

	NPV @ 0%	NPV @ 5%	NPV @ 10%	IRR	Payback (Yr)
Before Tax	\$172,600	\$132,569	\$103,647	73.1%	1.8
After Tax	\$124,988	\$92,980	\$69,998	52.5%	2.2

Table 2 – Metal Price Sensitivity – After Tax

	Gold Price	Silver Price	NPV @ 0%	NPV @ 5%	NPV @ 10%	IRR	Payback (Yr)
20%	\$1,500	\$24	\$187,581	\$143,336	\$111,555	75.1%	1.8
10%	\$1,375	\$22	\$156,780	\$118,565	\$91,117	64.1%	2.0
Base Case	\$1,250	\$20	\$124,988	\$92,980	\$69,998	52.5%	2.2
-10%	\$1,125	\$18	\$92,677	\$66,901	\$48,425	40.3%	2.5
-20%	\$1,000	\$16	\$56,364	\$37,007	\$23,300	24.8%	3.5

Table 3 – Operating Cost Sensitivity - After Tax

	NPV @ 0%	NPV @ 5%	NPV @ 10%	IRR	Payback (Yr)
20%	\$97,596	\$71,177	\$52,204	43.0%	2.4
10%	\$111,508	\$82,309	\$61,329	48.0%	2.3
Base Case	\$124,988	\$92,980	\$69,998	52.5%	2.2
-10%	\$138,161	\$103,374	\$78,422	56.9%	2.1
-20%	\$150,788	\$113,323	\$86,476	61.0%	2.0

Table 4 – Capital Cost Sensitivity - After Tax

	NPV @ 0%	NPV @ 5%	NPV @ 10%	IRR	Payback (Yr)
20%	\$121,674	\$89,827	\$67,028	49.9%	2.2
10%	\$123,336	\$91,407	\$68,516	51.2%	2.2
Base Case	\$124,988	\$92,980	\$69,998	52.5%	2.2
-10%	\$126,637	\$94,550	\$71,477	53.9%	2.2
-20%	\$128,276	\$96,112	\$72,951	55.3%	2.2

PEA Utilizes Key Metrics of Phase II Feasibility Report

The PEA for the mine life extension utilized the same key metrics as those outlined in the Company’s “Moss Gold-Silver Project” NI 43-101 Technical Report Feasibility Study, Mohave County, Arizona, dated effective June 8, 2015 and filed on SEDAR on June 22, 2015 (the “Phase II FS”), and available at www.northernvertex.com. The Phase II mine plan in the Phase II FS was intentionally constrained to restrict all the surface disturbance and the mine facilities to the private property owned by the Company (the Moss Mine patented claims). The Phase II open pit design was constrained by property boundaries and not by economics. The result was that the Phase II pit design only recovered 50% of the Measured and Indicated mineral resources.

The Phase II Moss mine, currently under construction, encompasses crushing, agglomeration and stacking of ore onto a conventional heap leach pad. Gold and silver recovery will be achieved by a Merrill Crowe process to produce doré bars at the project site. The Phase II mine was designed to have a 5-year mine life at a projected mining rate of 5,000 tonnes per



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day. The Phase II project is expected to be in production in late Q4 2017.

The PEA mine design removes the patented claims boundary constraint by assuming the pit limits can be extended onto the adjacent Federal lands controlled by the BLM. This allows the PEA mine plan to access the mineral resources not available in the Phase II mine plan. Concurrent with expansion of the pit, the mine facilities would also need to be expanded onto the BLM lands. This would include an expanded heap leach pad to accommodate the additional mineralized material, and an expanded waste rock facility to accommodate the additional waste rock.

The PEA mine expansion plan and economic models are presented as an improved alternative to the Phase II mine plan. Specifically, the PEA does not assume that the Phase II mine is depleted first, but rather the PEA assumes that the required permits can be achieved in a reasonable time frame, after which the project development will no longer be constrained to the patented lands. This is expected to occur well before the Phase II pit is depleted, and hence would allow mining to follow a more efficient extraction plan with a more favorable production schedule.

The PEA was prepared by a team of independent consultants that included M3 Engineering and Technology Corp. of Tucson, AZ (process facility and site infrastructure design and costing), Golder Associates of Tucson, AZ (heap leach pad and waste dump), Mine Development Associates of Reno, NV (mine planning and production scheduling), and CDM Smith of Phoenix, AZ (project permitting). The PEA study team was managed by Dr. David Stone, PE, Project Manager for the Moss Mine Project.

A detailed summary report for the PEA, in the form of a Technical Report, prepared and certified in accordance with NI 43-101, will be filed on SEDAR within the next 45 days.

Project Overview

The Moss Gold-Silver Project encompasses 15 patented lode claims covering 102.8 hectares and 468 unpatented lode claims for a total of 4,030.8 hectares. The focus of the Moss Mine is gold-silver mineralization associated with the Moss Vein, the Ruth Vein, the West Extension and adjacent stockworks.

Mineral Resources

The PEA is based on the previously reported Mineral Resource Estimate (MRE) prepared by David Thomas, P.Geo. with an effective date of October 31, 2014. This estimate encompasses the Moss and Ruth Veins, the West Extension to the Moss Vein, and associated stockworks. The mineral resources, as reported in the December 30, 2014 Technical Report filed on SEDAR, include 15.48 million tonnes in the Measured and Indicated categories, grading 0.76 gpt Au and 9.3 gpt Ag above a cutoff of 0.25 gpt Au. The MRE includes another 2.18 million tonnes in the Inferred category grading 0.55 gpt Au and 5.6 gpt Ag above the same cutoff.

PEA Mine Planning

The PEA mine plan was prepared by Mine Development Associates of Reno, NV using SURPAC software. As has been noted, the principal assumption in the PEA mine plan is that the patented land boundary constraint is eliminated. Hence the pit optimizations for the PEA allow the pit shell to expand onto the adjacent BLM lands thereby capturing the majority of the 2014 MRE Measured and Indicated resources. The PEA pit shell also captures Inferred resources as allowed under Paragraph 2.3(3) of Canadian National Instrument 43-101.¹

The PEA mine plan is based on the same operating criteria as the Phase II FS, including a marginal cut-off grade of 0.20 gpt Au. The pit will be developed in 6 m mining benches with conventional drill and blast equipment. The final pit shell assumes variable 50 to 60 degree pit walls with triple benches, 6 m wide berms, and 11 m wide haul roads.

The PEA pit optimizations are based on the same operating cost assumptions as the Phase II FS except for some updated costs (noted below). Other updated assumptions compared to the Phase II FS, include:

- Flatter pit slopes compared to the 65 degree pit walls in the Phase II FS based on geotechnical review by Golder Associates.
- Triple benching versus double benching in the Phase II FS, which allows for wider catch benches.
- Un-constrained access to the resources in the West Extension. In the Phase II FS these resources were intentionally limited due to additional metallurgical testwork which was pending.
- Wider haul roads compared to the Phase II FS due to a switch to larger rigid frame trucks for haulage.



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Material Processed in the PEA are shown as follows:

Table 5 – PEA Potential Mineable Material

<i>Greater or Equal to 0.25 g Au/t</i>	K Tonnes	g Au/t	K Ozs Au	g Ag/t	K Ozs Ag
Measured *	4,840	0.98	153	10.57	1,645
Indicated *	9,271	0.65	195	8.35	2,490
Measured & Indicated	14,111	0.77	348	9.11	4,134
Inferred	1,513	0.48	23	5.83	283
<i>Less than 0.25 g Au/t & Greater than 0.20 g Au/t</i>					
Measured *	297	0.23	2	3.28	31
Indicated *	890	0.23	6	3.58	102
Measured & Indicated	1,187	0.23	9	3.50	134
Inferred	271	0.22	2	2.82	25
<i>Total PEA Potential Mineable Material</i>					
Measured *	5,138	0.94	155	10.15	1,676
Indicated *	10,161	0.62	201	7.93	2,592
Measured & Indicated	15,299	0.72	357	8.68	4,268
Inferred	1,785	0.44	5	5.37	308

Notes:

- The potentially mineable material estimate is constrained within a pit-constrained LG pit with maximum slope angles of 60°. Metal prices of US\$1,250/oz and US\$20.00/oz were used for gold and silver respectively. Metallurgical recoveries of 82% for gold and 65% for silver were applied.
- A variable gold cut-off was estimated based on a mining cost of US\$2.04/t mined, and a total process and G&A operating cost of US\$6.22/t of ore mined. Primary material is based on a cut-off of 0.25 g/t Au, and low grade material is based on a cut-off of 0.2 g/t Au. The overall cutoff grade applied in the table above is 0.20 g Au/t.
- All figures have been rounded to reflect accuracy and to comply with securities regulatory requirements. Summations within the tables may not agree due to rounding.
- Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them.
- Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- The total material considered in the PEA includes Reserves, and Resources that are external to Reserve pits at an 0.20 g Au/t cutoff grade.

The PEA mineralized material in Table 6 is inclusive of the following reserves which were reported in the Phase II FS (Table 6).

Table 6 – Mineral Reserves included in the PEA potentially mineable resource.

	ktonnes	g/t Au	kOz Au	g/t Ag	kOz Ag
Proven	4,521	0.91	132	9.59	1,393
Probable	3,514	0.72	82	8.88	1,003
Proven & Probable	8,035	0.82	213	9.28	2,397

Notes:

- The Mineral Reserve estimate was constrained within a pit-constrained LG pit with maximum slope angles of 65°. Metal prices of US\$1,250/oz and US\$18.50/oz were used for gold and silver respectively. Metallurgical recoveries of 82% for gold and 65% for silver were applied.
- A variable gold cut-off was estimated based on a mining cost of US\$2.75/t mined, and a total process and G&A operating cost of US\$6.48/t of ore mined. Primary ore is based on a cut-off of 0.25 g/t Au, and low grade ore is based on a cut-off of 0.2 g/t Au. The overall cutoff grade applied in the table above is 0.20 g Au/t.
- All figures have been rounded to reflect accuracy and to comply with securities regulatory requirements. Summations within the tables may not agree due to rounding.



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- The Mineral Reserves were defined in accordance with CIM Definition Standards dated May 10, 2014.
- The Qualified Person for the statement of reserves is Scott Alan Britton, Mining Engineer, CEng, SAB Mining Consultants Ltd.

Mining

As in the Phase II FS, the PEA assumes contract mining for the life-of-mine using a conventional truck and shovel fleet. The mining Contractor proposes to use DM45 production drills, CAT 390 excavators, and 70 ton rigid frame trucks. The Contractor will work 12 hour shifts, 5 days a week.

The PEA mine plan assumes a series of push-backs, in the hanging wall, to achieve a balanced production of waste rock and mineralized material over the life of the mine. The mine production schedule is shown in Table 7 below.

Table 7 - Life-of-Mine Production Schedule

	Units	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	Total
Pit to Plant	k Tonnes	1,398	1,602	1,581	1,814	1,491	1,598	1,591	1,687	1,345	14,107
	Au g/t	1.00	0.92	1.13	0.88	0.45	0.50	0.45	0.53	0.96	0.75
	Ag g/t	10.67	9.33	13.15	10.02	5.32	5.33	6.19	8.04	12.42	8.89
Pit to Stockpile	k Tonnes	72	254	470	245	175	310	525	352	573	2,976
	Au g/t	0.30	0.37	0.78	0.60	0.26	0.27	0.28	0.30	0.47	0.43
	Ag g/t	3.44	4.57	9.29	7.81	3.63	3.32	4.24	4.16	6.75	5.68
Total Mined Material	k Tonnes	1,470	1,856	2,051	2,059	1,666	1,907	2,116	2,039	1,919	17,083
	Au g/t	0.96	0.84	1.05	0.85	0.43	0.46	0.41	0.49	0.81	0.70
	Ag g/t	10.32	8.68	12.27	9.76	5.14	5.01	5.70	7.37	10.73	8.33
Pit to Dump	k Tonnes	2,702	5,170	4,810	821	1,109	2,473	5,204	3,430	5,883	31,601
Total Mined	k Tonnes	4,172	7,025	6,861	2,880	2,775	4,380	7,320	5,469	7,801	48,684
Strip Ratio	W:O	1.84	2.79	2.35	0.40	0.67	1.30	2.46	1.68	3.07	1.85

- Some material movement totals in Table 7 do not match the project summary due to stockpiling.

Mining will produce approximately 17.1 million tonnes of mineralized material and 31.6 million tonnes of waste during the life-of-mine for an overall strip ratio of 1.85. This compares to 8.0 million tonnes of ore above a cut-off of 0.20 gpt Au at a strip ratio of 1.3 in the Phase II FS.

Waste Rock Dump

The PEA mine will generate over 30 million tonnes of waste rock over the life of mine. This tonnage exceeds the capacity that can be stored on the patented lands, hence the revised waste rock dump has been designed to accommodate up to 35 million tonnes. This was accomplished by expanding the dump footprint to the east and south onto the BLM lands. As in Phase II FS, the waste rock dump will be developed in 10m to 15m high lifts, with benches, placed at angle of repose.

Crushing

Ore grade material from the open pit will be crushed to 6.35 mm and then agglomerated with cement prior to loading on the heap leach pad in 10m lifts. The crushing circuit will employ three stages of crushing consisting of a primary jaw crusher, a secondary cone crusher, and two tertiary cone crushers. After agglomeration, the fine ore will be conveyed to the leach pad with a series of grasshopper conveyors feeding a radial stacker.

The PEA assumes that the Phase II crushing and agglomeration plant will be suitable for the life-of-mine operation. Furthermore, the Phase II project has been redesigned to avoid the need to relocate the crushing plant in month 30, as was assumed in the Phase II FS. The PEA mine plan will not require a crusher move.

Construction of the Phase II crushing and agglomeration plant is well advanced and all the plant components have been delivered to the project site.

Heap Leaching

Golder Associates of Tucson, AZ have provided a preliminary layout for a 9 million tonne leach pad located west of, and adjacent to, the current 8.5 million tonne Phase II pad, the construction of which is well advanced. While the Phase II leach pad is located on the patented lands, the PEA leach pad expansion will almost entirely be founded on BLM lands.



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The expanded leach pad is based on the same operating parameters as the Phase II leach pad in terms of tonnes stacked daily, solution application rates, and lift heights. The expanded leach pad geotechnical design will be in accordance with Arizona BADCT protocols, and stacking will be accomplished via grasshopper conveyors and a radial stacker. During peak operations, some 45,000 m² of leach pad area will be under leach.

The expanded leach pad will share some of the Phase II facilities for solution collection and circulation since the solution application rates will be the same. The solutions collected from the PEA leach pad expansion will be pumped over to the Phase II PLS pond.

The PEA leach pad expansion is intended to operate in parallel with the Phase II leach pad so as to allow an increase in leach time for the upper lifts of the Phase II pad. As such the intention is to construct the PEA pad expansion well before the Phase II pad is fully loaded, likely as soon as the required permits are approved. This should allow material to be stacked on the PEA leach pad as soon as the end of Year 3.

Merrill Crowe

As documented in the Phase II FS, pregnant solution will be fed to the Merrill Crowe plant over the life-of-mine at a rate of about 450 m³/hr. The precious metals will be precipitated with zinc for filtration and subsequent melting in a furnace. The doré bars will be shipped by armored car service to a precious metals refiner.

Infrastructure and Services

The PEA assumes grid power at a bulk industrial rate of \$0.065 per kW-hr. The grid power replaces the diesel powered gensets that were assumed in the Phase II FS.

The primary make-up water source for the heap leaching operations will be groundwater wells and dewatering of the open pit. Since the Phase II FS was completed in July 2015, significant progress has been made in identifying and quantifying the available groundwater resources at the Moss mine site. At present the Company projects a surplus of available water based on production from the six existing groundwater wells, and estimates of inflow into the open pit.

Contracts

In preparation for Phase II operations the Company has already executed supply contracts for most of the mine and processing consumables and reagents. This includes the supply of diesel fuel, liquid sodium cyanide, zinc dust, diatomaceous earth filter media, anti-scalants, and cement for agglomeration. The Company is in receipt of several proposals for the refining of the dore metal products from the Phase II mine.

Permits

The mine life extension outlined in the PEA will require the amendment of some of the Phase II permits, as outlined below, and submission of a Mine Plan of Operations (MPO) to the BLM for approval. The required permits are as follows:

- The ADEQ State Air Quality Permit will likely only require minor revisions as the crushing plant will be operated in accordance with the existing Phase II permit. A permit revision will be required, however, to extend the length and number of conveyors needed to place agglomerated ore on the leach pad extension.
- An amended ADEQ Aquifer Protection Permit will be needed to construct and operate the leach pad extension. In the meantime, the Company will be able to operate the Phase II leach pad in accordance with the existing permit. Based on the permitting timeline for Phase II, the Company anticipates this permit could be received within 5 to 7 months of the permit submittal.
- An amended Mine Reclamation Plan will need to be submitted to allow for reclamation bonding of the increased disturbance needed for the waste dump and open pit.
- A Mining Plan of Operations (MPO), detailing the mining, leaching, waste rock stock-piling, construction activities, monitoring plans, reclamation, and closure plans etc. must be prepared and submitted to the BLM. Once it is determined to be administratively complete an Environmental Assessment (EA) document will be required to assess and document the environmental impacts of the MPO, and the proposed mitigation procedures. The EA will document the cultural surveys, biological surveys, surface water impacts, groundwater impacts, noise, dust, visual impacts, and other metrics associated with the proposed development. Based on Presidential Executive Order # 13807 (Aug 15, 2017) and subsequent Secretarial Order 3355 (Aug 31, 2017), it is anticipated that BLM approval of an MPO could be received within 12 months of the MPO being determined to be administratively complete.
- The PEA mine expansion will encroach on washes that have been judged to be jurisdictional by the U.S. Army Core of Engineers (COE) and hence will require Section 404 permits under the Clean Water Act. Approval of a



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Section 404 permit by the COE could take 12 to 18 months and would require payment of a fee to compensate for the disturbance of wetlands.

All of the other design, construction and operating permits associated with the Phase II mine will remain valid for the PEA mine expansion.

Economic Model

An economic analysis for the PEA was carried out using standard discounted cash flow modelling techniques. The production and cost estimates were estimated on a monthly basis for all pre-production costs and for the first twelve months of production. Quarterly estimates were used for the remaining months of production.

The PEA economic model timeline extends the full life of mine including what was previously reported as Phase II. This is because the PEA mine plan has been prepared as an alternative to the Phase II mine plan. As such, the PEA capital is inclusive of the capital costs reported in the Phase II FS.

The base assumptions assume a gold price of US\$1,250/oz and a silver price of US\$20/oz for the life of the project. Consumable prices for process reagents, cement, cyanide and fuel are based on recent Phase II quotes or contracts with local vendors.

Capital Costs

The PEA capital cost is estimated at \$61.6 million inclusive of \$37.5 million in sunk costs for the construction of the Phase II mine. The life-of-mine capital costs are shown in Table 8 below.

Table 8 - Life-of-Mine Capital Costs

CAPITAL COSTS	\$US (millions)
Phase II Committed Costs	
Feasibility	33.0
Capital Improvements	4.5
Phase III Expansion Costs	
Permits	2.0
Infrastructure	17.9
Contingency	4.2
TOTAL	61.6

The capital estimate includes \$33 million for construction of the Phase II facilities per the FS, and an additional \$4.5 million in committed costs for improvements in the Phase II FS designs. These costs include concrete foundations for a permanent crusher installation, installation of overhead power distribution at the mine site, and equipment upgrades. The estimate in Table 8 includes direct and indirect costs, including EPCM costs, well as a 25% contingency on Phase III expansion direct costs. The estimate does not include the cost of delivering utility power to the mine site.

Operating Costs

Operating costs were assumed to be the same as the Phase II FS costs except where more recent data was available. The mining costs were derived from the mining contract with N.A. Degerstrom which closely mirrors the costs in the Phase II FS. Process and general/administrative (G&A) operating costs were likewise matched to the Phase II FS numbers except for the cost of electric power (\$0.065 based on bulk industrial rates from Mohave Electric) and updated reagent costs.

The life of mine operating cost estimate is shown in Table 9 below.



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Table 9 - Life-of-Mine Operating Costs

Item	Operating Cost per Tonne Leached
Mining	US\$5.53
Process	US\$5.26
G&A	US\$0.81
Treatment/Refining	US\$0.11
Total Operating Cost	US\$11.70

The apparent reduction in mining costs compared to the Phase II FS is a result of the lower strip ratio in the PEA pit. The mining costs are stated in terms of "per tonne leached" based on a contractor quotation of \$2.04 per tonne mined. The reduction in the process costs compared to the Phase II FS is the result of lower cost utility power compared to diesel generators as assumed in the Phase II FS. The G&A costs are the same as in the Phase II FS.

Royalties

The cashflow model includes royalty payments for existing agreements outlined in the Phase II FS, namely: the BHL royalty, the Greenwood royalty and the MinQuest royalty. Subsequent to the Phase II FS, the Company acquired the remaining 30% of the Moss Project from Patriot Gold for an additional 3% NSR royalty.

Taxes

The cashflows include current Federal and Arizona State taxes. A "units of production" depreciation method was used to calculate net taxable income. The economic analysis was carried out on a project basis and does not take into account any potential tax savings available to Golden Vertex through the application of significant existing tax pools. Given the location and relatively uncomplicated nature of the project, the model uses a 5% discount factor in arriving at the project Net Present Value ("NPV"). Standard payback calculation methodologies were utilized.

Impact on Existing 2015 Feasibility Study

The technical and economic viability of the Moss Project was previously assessed in a 2015 Feasibility Study which focused on the Phase II mine development. The Phase II FS converted a portion of the 2014 MRE to a reserve classification based on estimated capital and operating costs.

The PEA mine plan documented herein encompasses all of the reserves previously reported in the Phase II FS, plus additional mineral resources not previously accessible due to property boundary constraints. The PEA mine plan and financial models are based on substantially the same technical, operating and economic parameters as that documented in the Phase II FS. The PEA variances from the FS are limited to updated pricing, and a 10% increase in crushing capacity, however these variances are considered insignificant.

The PEA mine plan is not intended as an update or replacement to the Phase II FS but rather is presented as an alternative plan. It is important to note that the Company is fully permitted for the construction, commissioning and operation of the Phase II project, and the mining of the Phase II reserves. The Phase II construction schedule is almost complete and mining in the Phase II pit has commenced. The PEA provides guidance as to the potential optimization of operations at the Moss Mine to achieve maximum utilization of the resources identified in the 2014 Technical Report, subject to the additional permits being acquired in a timely manner. In the meantime, the Company is proceeding to production and the mining and recovery of the precious metals in the Feasibility reserves as originally detailed in the FS. As such the Company is of the view that the PEA does not supersede the Phase II FS and the Feasibility reserves are considered current.

Qualified Person

The foregoing technical information contained in this news release has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 (Standards for Disclosure for Minerals Projects) and reviewed on behalf the Company by Joe Bardswich, PE and Director for Northern Vertex, a Qualified Person.

About Northern Vertex

Northern Vertex Mining Corp. is an exploration and mining company focused on the reactivation of its 100% owned Moss Mine Gold/Silver Project located in NW Arizona, USA. The Company's management comprises an experienced management 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.



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ON BEHALF OF THE BOARD OF NORTHERN VERTEX
"Kenneth Berry "
President & CEO

For further information, please visit www.northernvertex.com
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