

20 July 2015

Prefeasibility Study Outlines Optimisation Plan of Canadian Copper Producer with 45 per cent IRR and 21 Year Mine Life

London, England & Baie Verte, Newfoundland and Labrador, Canada - Rambler Metals and Mining plc, a Canadian copper and gold producer, explorer and developer (TSXV: RAB, AIM: RMM) ("Rambler" or the "Company") today reports that it has completed a pre-feasibility engineering study and economic assessment ('PFS') aimed to integrate the Lower Footwall Zone ('LFZ') mineral resource into the life of mine ('LOM') plan for the Ming Copper-Gold Mine.

The PFS was successful in defining a staged, low capital strategy for the optimisation of all existing infrastructure allowing the operation to run at full capacity of 1,250 metric tonnes per day ('mtpd') by 2018.

The results show positive economics, a strong internal rate of return and significant cash flow under reasonable commodity price assumptions. In addition, there remain further opportunities for improvement as the operation becomes fully optimised.

All currency is expressed in Canadian dollars (\$CDN) unless otherwise noted.

SUMMARY

- The PFS is based on an optimisation of the current high grade massive sulphide (Phase 1) operation by blending increasing amounts of LFZ ore with the massive sulphides as production ramps up to 1,250 mtpd.
- Current production at the operation is 650 metric tonnes of massive sulphide ore per day. The PFS plans increases in mill throughput to 850 mtpd in 2016; 1,180 mtpd in 2017 and finally 1,250 mtpd in 2018.
- Additional opportunities exist to improve the low risk, low capital base case scenario, including :
 - Integration of ore pre-concentration at the mine site. This could potentially allow for further optimisation of mine production with equal tonnage, but higher grade, being delivered to the mill;
 - Additional resource growth through ongoing exploration in both the higher grade massive sulphide and LFZ;
 - Further utilisation of the Nugget Pond base and precious metals milling facility with new feed sources from other regional copper and gold plays.

PRE-FEASIBILITY STUDY ('PFS') HIGHLIGHTS

- Project after-tax net present value ('NPV_{5%}') of \$62.1 million with an internal rate of return ('IRR') of 45 per cent, based on trending copper and gold prices including long-term copper price of USD \$2.79 per pound (see Note 2, page 5). Pre-tax NPV_{5%} of \$70.2 million with an IRR of 46 per cent.
- Net cash flow from operations of \$273 million, undiscounted. Net after-tax cash flow of \$110 million (before-tax \$128 million).
- Five year, \$66 million LFZ capital plan, mainly self-funded by the current mining operation. During the initial expansion the operation will require additional working capital funding to execute its plan. The first year is projecting a shortfall of \$8.43 million dollars with a net cash position of - \$650,000 over the five year period.
- The Company has initiated discussions with various debt type financing partners targeting up to USD \$25 million to strengthen the working capital shortfall, initiate the expansion's construction and provide additional capital should the Company choose to be more aggressive with construction or underground development.
- During the 21 year mine life (ending 2036), after milling and recovery, approximately 536,000 tonnes of copper concentrate (337 million pounds of copper) is estimated to be produced with 89,600 ounces of gold and 527,800 ounces of silver.
- Average annual cash operating cost of \$1.97 per equivalent pound copper (USD \$1.71).

Norman Williams, President and CEO of Rambler, commented:

"I am pleased with the results of the PFS, demonstrating a low risk and low capital solution to optimise and expand the operation into a profitable mine with an expected life of more than 20 years. Being a Canadian producer, Rambler benefits not only from working in one of the safest jurisdictions in the world, but also from selling commodities in US dollars whilst most of our costs remain in Canadian dollars."

"The Company has been advancing discussions with a selection of financing partners, focusing on debt type financing arrangements. This main project financing is intended to mainly cover working capital shortfalls as the Company progresses its optimisation plan. In the interim, the Company is in advance discussions to secure a USD5 million bridge loan facility with its current off-take partner as a means of strengthening its working capital position whilst expediting development into the LFZ."

"We will continue to advance and develop the other opportunities with a goal to further strengthening the base case economics and potentially allowing more of the 26 million tonne LFZ resource to be converted into reserve."

PRE-FEASIBILITY STUDY ('PFS')

The new twenty one year life of mine for the project will see the underground mining from both the high grade massive sulphides and the Lower Footwall Zone. The initial feasibility study, released on 26 August 2010, only considered the mining of the massive sulphides, that being the Phase 1 - high grade, low tonnage start-up. With the current infrastructure in place, this Phase 2 expansion into the Lower Footwall Zone is the natural next step allowing the mining and milling processes to be fully optimised.

The PFS has been developed through a number of independent consultants; WSP Canada Inc. out of Sudbury, Thunder Bay and Montreal were responsible for the mineral resource and reserve estimates, mining, environmental and project economics; Thibault & Associates Inc. out of New Brunswick were responsible for all processing aspects of the project; while West Coast Engineering Limited, based out of Newfoundland and Labrador, were responsible for all mill site civil and structural.

The procedures used for the resource and reserve estimation processes are consistent with the Canadian Institute of Mining and Metallurgy ('CIMM') best practices and in compliance with NI 43-101 guidelines. All operational data from the ongoing mining and milling at the Ming Copper-Gold Mine was made available for review and inclusion where necessary.

A National Instrument 43-101 ("NI 43-101") technical report will be filed on SEDAR at www.sedar.com within 45 days, before the end of August 2015.

As part of the PFS, a new geological resource and reserve has been estimated for the project. Tables 1 and 2 below outline the results of this updated estimate which will also be detailed in the technical report filed with SEDAR. No inferred mineralisation was included in the reserve estimate. Resources are inclusive of reserves.

MINERAL RESOURCE and RESERVE STATEMENT

MINERAL RESERVE

Table 1: Mineral Reserve Estimate Summary for the Ming Copper-Gold Mine*

| Classification | Quantity | Grades | | | | Contained Metal | | | |
|---|------------------|-------------|-------------|-------------|-------------|-----------------|--------------|--------------|-------------|
| | | Copper | Gold | Silver | Zinc | Copper | Gold | Silver | Zinc |
| | tonnes | % | g/t | g/t | % | M lbs | K oz | K oz | M lbs |
| Total Proven Reserve (undiluted, unrecovered) | 5,205,300 | 1.98 | 0.43 | 3.08 | 0.07 | 226.9 | 71.6 | 515.5 | 8.4 |
| Total Probable Reserve (undiluted, unrecovered) | 3,050,100 | 1.99 | 0.76 | 3.19 | 0.10 | 133.8 | 74.2 | 312.4 | 6.6 |
| Dilution (all sources) | 1,374,500 | 0.61 | 0.06 | 0.70 | 0.01 | 18.5 | 2.6 | 31.0 | 0.3 |
| Reserve (diluted and recovered) | 8,667,000 | 1.82 | 0.52 | 2.94 | 0.08 | 348.1 | 145.3 | 819.8 | 15.0 |

* All figures are rounded to reflect the accuracy of the estimate; numbers may not total due to this rounding. This reserve statement reflects changes to reserves in the massive sulphides based on depletion due to mining and additions due to new exploration drilling results. The NSR for the reserve material was calculated using an all-in costs of \$147 per tonne of ore milled for the massive sulphides and \$118 per tonne of ore milled for the lower footwall zone.

Forecast long term metal prices of USD\$2.79 per pound copper and USD\$1,100 per ounce gold, and USD\$15.50 per ounce silver with a long term USD/CDN FX rate of 1:0.88.

MINERAL RESOURCE

Table 2: Mineral Resource Estimate Summary for the Ming Copper-Gold Mine*

| Classification | Quantity | Grades | | | | Contained Metal | | | |
|------------------------|---------------|-------------|-------------|-------------|-------------|-----------------|--------------|----------------|-------------|
| | | Copper | Gold | Silver | Zinc | Copper | Gold | Silver | Zinc |
| | ('000) t | % | g/t | g/t | % | M lbs | K oz | K oz | M lbs |
| Measured Total | 19,127 | 1.50 | 0.23 | 1.90 | 0.05 | 632.0 | 141.8 | 1,167.9 | 19.9 |
| Indicated Total | 9,199 | 1.53 | 0.39 | 2.07 | 0.07 | 310.5 | 115.3 | 613.5 | 14.3 |
| M&I Total | 28,326 | 1.51 | 0.28 | 1.96 | 0.05 | 942.5 | 257.1 | 1,781.4 | 34.2 |
| Inferred Total | 5,086 | 1.51 | 0.66 | 3.75 | 0.21 | 169.7 | 107.8 | 613.4 | 23.6 |

* Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. All figures are rounded to reflect the accuracy of the estimate. Cut-off grades of 1.0 per cent copper for the massive sulphides, 1.25 grams per tonne gold for any gold zones and 1.00 per cent copper for the stringer sulphides have been used in the estimate.

Cut-offs are based on an NSR model and forecast long term metal prices of USD\$2.79 per pound copper and USD\$1,100 per ounce gold, and USD\$15.50 per ounce silver with a long term USD/CDN FX rate of 1:0.88. Zinc does not contribute to the revenues. Resources are inclusive of reserves.

HIGHLIGHTS AND ASSUMPTIONS OF THE PFS

As with all mining and exploration projects this optimisation plan carries with it some risk, but also significant upside potential. The table below summarises the sensitivities associated with head grade, commodity pricing, currency rate, project operating expenditures ('OPEX') and capital expenditures ('CAPEX').

Table 3: Summary of Sensitivities

| Variable | -10% | Base NPV | 10% | Range |
|---------------|----------|----------|----------|----------|
| Grade to mill | \$6.3M | \$70.2M | \$134.1 | \$127.8M |
| Metal Price | (\$1.5M) | \$70.2M | \$141.9M | \$140.4M |
| Currency | \$143.9M | \$70.2M | \$9.9M | \$134.0M |
| OPEX | \$114.5M | \$70.2M | \$25.9M | \$88.6M |
| CAPEX | \$82.7M | \$70.2M | \$57.7M | \$24.9M |

Note: Discounted NPV_{5%} before-tax in Canadian Dollars.

Basic assumptions used for the compilation of this PFS:

- Average copper price of USD \$2.79 per pound, gold price of USD \$1,100 per ounce and silver of USD \$15.54 per ounce. Long term pricing of USD \$2.79 per pound, \$1075 per ounce and \$15.50 per ounce for copper, gold and silver respectively. (see Note 2)
- Average USD to Canada exchange rate of 1 : 0.87. Long term exchange of 1 : 0.88.
- Project discount rate of 5%
- Mill recoveries are based on:
 - Current operations at Nugget Pond for the massive sulphide ore types at 96.1%, 67.8% and 76.1% for copper gold and silver respectively, and;
 - Recent lock cycle testing of LFZ ore with recoveries of 98.9%, 63.6% and 62.0% for copper, gold and silver respectively;
 - A weighted average ratio is used for any years with blended ore types.

The LOM envisages that production will increase from the existing 650 mtpd, to 850 mtpd in the first year, 1,180 mtpd in year two and 1,250 mtpd from year three to year twenty one. Once in "steady state" production (from year three onwards) the majority of the planned tonnage will come from longhole bulk mining of the LFZ which will help reduce the overall operating unit costs. Paste backfill augmented with waste rock from underground development will be the primary filling mechanism with access to each of the zones made possible through new development and extensions of the existing ramps and raises. Due to the increase in production, supplemental ventilation will be installed after year two.

Five year, \$66 million LFZ capital plan, mainly self-funded by the current mining operation. During the initial expansion the operation will require working capital funding to execute its plan. The first year is projecting a shortfall of \$8.43 million dollars with a net cash position of - \$650,000 over the five year period.

The Company has initiated discussions with various debt type financing partners targeting up to USD \$25 million to strengthen working capital shortfalls and initiate the expansion's construction.

OPPORTUNITIES

- The mineralisation of the LFZ consists of dense, narrow copper rich stringer sulphides hosted within lighter weight un-mineralised chlorite schist. The initial phase of bench scale and mini-pilot processing, developed with the assistance of the Research & Development Corporation of Newfoundland and Labrador ('RDC'), has revealed that physical separation of the denser mineralization from the lighter rock using Dense Media Separation ('DMS') is possible. Bench scale and pilot testing indicates that technically the DMS process could increase the grade of copper in the LFZ by removing 30 per cent to 40 per cent of the lighter waste host rock with copper recoveries averaging 95 per cent. In terms of grade improvement, the mini-pilot testing using run of mine material from the LFZ grading 1.39 per cent copper returned a pre-concentrate grade of 2.27 per cent copper (an upgrade ratio of 1.63).
All onsite test work for pre-concentration has been completed with final results pending for review.
- Rambler's gold hydromet facility, at a 500 mtpd capacity, is not being utilised in this plan. With any expansion of Rambler's gold resources or participation in another gold project, like the Maritime Resources Corp.'s Hammerdown mine, this facility could take advantage of any deposit outside the Ming Mine area and operate independently.
On 17 November 2014, Rambler and Maritime entered into a letter of intent ('LOI') to evaluate the economic potential of re-opening the past producing Hammerdown gold mine. As per the LOI Rambler will oversee engineering and evaluation work to determine the mineable ounces available at Hammerdown. The work will be initiated following the successful completion of an equity financing by Maritime.
- The Ming Mine ore bodies remain open in all directions and have been proven to return significant copper and gold intersections with ongoing diamond drill delineation and exploration programs. By expanding on these programs the Company is confident that new resources and reserves may be added.

Further updates on these opportunities will be announced as the Company moves forward with the Phase 2 Optimisation plan.

Note 1: Unless otherwise noted all figures are quoted in \$CDN

Note 2: Commodity pricing for years 1 to 5 are reflective of published 2015 forecast reports. Long term pricing beyond year 5 trending to \$2.79 per pound copper, \$1,075 per ounce gold and \$15.50 per ounce silver.

ABOUT RAMBLER METALS AND MINING

Rambler is a mining and development Company that in November 2012 brought its first mine into commercial production. The group has a 100 per cent ownership in the Ming Copper-Gold Mine, a fully operational base and precious metals processing facility and year round bulk storage and shipping facility; all located on the Baie Verte Peninsula, Newfoundland and Labrador, Canada.

The Company's Vision is to be Atlantic Canada's leading mine operator and resource developer through growth and expansion of its existing assets; discovering new deposits; strategic partnerships; mergers and acquisitions. In addition to the Ming Mine, Rambler has strategic investments in the former producing Hammerdown gold mine, the Little Deer/Whales Back copper mines and the advanced Valentine Lake Gold Project.

Rambler is dual listed in London under AIM:RMM and in Canada under TSX-V:RMM.

For further information, please contact:

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Larry Pilgrim, P.Geo., is the Qualified Person responsible for the technical content of this release and has reviewed and approved it accordingly. Mr. Pilgrim is an independent consultant contracted by Rambler Metals and Mining Canada Limited. Tonnes referenced are dry metric tonnes unless otherwise indicated.

The NI43-101 technical report has been compiled by a number of independent, third party, consultants. Including:

- Brian Saul, P.Eng., WSP Canada Inc: Project economics;
- Dean Thibault, P.Eng., Thibault & Associates Inc: Metallurgical processing;
- Jean-Sébastien Houle, Eng., WSP Canada Inc: Environmental;
- Leo Hwozdyk, P.Eng., WSP Canada Inc.: Reserve Estimation and mining methodology;
- Rimas Pakalnis P. Eng., Pakalnis & Associates: Rock Mechanics;
- Todd McCracken, P.Geo., WSP Canada Inc: Resource estimation;
- Overton Colbourne, P.Eng., West Coast Engineering Limited: Civil and Structural

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Caution Regarding Forward Looking Statements:

Certain information included in this press release, including information relating to future financial or operating performance and other statements that express the expectations of management or estimates of future performance constitute "forward-looking statements". Such forward-looking statements include, without limitation, statements regarding copper, gold and silver forecasts, the financial strength of the Company, estimates regarding timing of future development and production and statements concerning possible expansion opportunities for the Company. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief are based on assumptions made in good faith and believed to have a reasonable basis. Such assumptions include, without limitation, the price of and anticipated costs of recovery of, copper concentrate, gold and silver, the presence of and continuity of such minerals at modeled grades and values, the capacities of various machinery and equipment, the availability of personnel, machinery and equipment at estimated prices, mineral recovery rates, and others. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, interpretation and implications of drilling and geophysical results; estimates regarding timing of future capital expenditures and costs towards profitable commercial operations. Other factors that could cause actual results, developments or events to differ materially from those anticipated include, among others, increases/decreases in production; volatility in metals prices and demand; currency fluctuations; cash operating margins; cash operating cost per pound sold; costs per ton of ore; variances in ore grade or recovery rates from those assumed in mining plans; reserves and/or resources; the ability to successfully integrate acquired assets; operational risks inherent in mining or development activities and legislative factors relating to prices, taxes, royalties, land use, title and permits, importing and exporting of minerals and environmental protection. Accordingly, undue reliance should not be placed on forward-looking statements and the forward-looking statements contained in this press release are expressly qualified in their entirety by this cautionary statement. The forward-looking statements contained herein are made as at the date hereof and the Company does not undertake any obligation to update publicly or revise any such forward-looking statements or any forward-looking statements contained in any other documents whether as a result of new information, future events or otherwise, except as required under applicable security law.

APPENDIX 1 - Mineral Reserve and Mineral Resource Statements

Table 4: Mineral Reserve Estimate for the Ming Copper-Gold Mine - 20 July 2015

| Classification | Quantity | Grades | | | | Contained Metal | | | |
|----------------------------|----------|--------|------|--------|------|-----------------|------|--------|-------|
| | | Copper | Gold | Silver | Zinc | Copper | Gold | Silver | Zinc |
| | tonnes | % | g/t | g/t | % | M lbs | K oz | K oz | M lbs |
| MMS - Total Proven Reserve | 707,300 | 1.91 | 2.32 | 11.69 | 0.41 | 29.8 | 52.8 | 265.9 | 6.4 |

| | | | | | | | | | |
|---|------------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|
| LFZ - Total Proven Reserve (undiluted, unrecovered) | 4,498,000 | 1.99 | 0.13 | 1.73 | 0.02 | 197.1 | 18.8 | 249.6 | 2.0 |
| TOTAL | 5,205,300 | 1.98 | 0.43 | 3.08 | 0.07 | 226.9 | 71.6 | 515.5 | 8.4 |
| MMS - Total Probable Reserve | 848,100 | 2.06 | 2.40 | 7.48 | 0.31 | 38.6 | 65.5 | 203.9 | 5.8 |
| LFZ - Total Probable Reserve (undiluted, unrecovered) | 2,202,000 | 1.96 | 0.12 | 1.53 | 0.02 | 95.2 | 8.7 | 108.5 | 0.8 |
| TOTAL | 3,050,100 | 1.99 | 0.76 | 3.19 | 0.10 | 133.8 | 74.2 | 312.4 | 6.6 |
| MMS - Dilution (all sources) | 257,500 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 0.0 | 0 | 0.0 |
| LFZ - Dilution (all sources) | 1,117,000 | 0.75 | 0.07 | 0.86 | 0.01 | 18.5 | 2.6 | 30.7 | 0.3 |
| TOTAL | 1,374,500 | 0.61 | 0.06 | 0.70 | 0.01 | 18.5 | 2.6 | 30.7 | 0.3 |
| Total MMS Reserve (diluted and recovered) | 1,631,600 | 1.90 | 2.26 | 8.96 | 0.34 | 68.3 | 118.3 | 469.8 | 12.2 |
| Total LFZ Reserve (diluted and recovered) | 7,035,400 | 1.80 | 0.12 | 1.55 | 0.02 | 279.7 | 27.0 | 349.9 | 2.8 |
| Combined Total Reserve (diluted and recovered) | 8,667,000 | 1.82 | 0.52 | 2.94 | 0.08 | 348.1 | 145.3 | 819.8 | 15.0 |

Mineral Reserve Notes

All figures are rounded to reflect the accuracy of the estimate; numbers may not total due to this rounding. This reserve statement reflects changes to reserves in the massive sulphides based on depletion due to mining and additions due to new exploration drilling results. The NSR for the reserve material was calculated using an all-in costs of \$147 per tonne of ore milled for the massive sulphides and \$118 per tonne of ore milled for the lower footwall zone.

Forecast long term metal prices of USD\$2.79 per pound copper and USD\$1,100 per ounce gold, and USD\$15.50 per ounce silver with a long term USD/CDN FX rate of 1:0.88.

Mineral Resource Notes

Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. All figures are rounded to reflect the accuracy of the estimate. Cut-off grades of 1.0 per cent copper for the massive sulphides, 1.25 grams per tonne gold for any gold zones and 1.00 per cent copper for the stringer sulphides have been used in the estimate.

Cut-offs are based on an NSR model and forecast long term metal prices of USD\$2.79 per pound copper and USD\$1,100 per ounce gold, and USD\$15.50 per ounce silver with a long term USD/CDN FX rate of 1:0.88. Zinc does not contribute to the revenues. Resources are inclusive of reserves.

Table 5: Mineral Resource Estimate for the Ming Copper-Gold Mine - 20 July 2015

| Resource Classification | Cutoff | Quantity (000't) | Grades | | | | Contained Metal | | | |
|---------------------------------------|-------------|---------------------|-------------|-------------|--------------|-------------|-----------------|--------------|----------------|-------------|
| | | | Copper | Gold | Silver | Zinc | Copper | Gold | Silver | Zinc |
| | | | % | g/t | g/t | % | M lbs | K oz | K oz | M lbs |
| <i>Measured</i> | | | | | | | | | | |
| 1807 Zone | 1.00 % Cu | 205 | 3.45 | 2.38 | 17.64 | 0.65 | 15.6 | 15.7 | 116.2 | 2.9 |
| 1806 Zone | 1.25 g/t Au | 185 | 0.40 | 3.00 | 14.74 | 0.60 | 16.2 | 17.8 | 87.7 | 2.5 |
| Ming South | 1.00 % Cu | 560 | 1.70 | 2.28 | 9.94 | 0.40 | 21.0 | 41.0 | 178.8 | 4.9 |
| Ming North | 1.00 % Cu | 66 | 1.96 | 1.52 | 10.62 | 1.15 | 2.8 | 3.2 | 22.4 | 1.7 |
| Unmined Levels | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Remnant Pillars | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sub-Total Massive Sulphides | | 1,015 | 1.83 | 2.38 | 12.41 | 0.53 | 41.0 | 77.8 | 405.1 | 11.9 |
| Upper Footwall | 1.00 % Cu | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Lower Footwall | 1.00 % Cu | 18,112 | 1.48 | 0.11 | 1.31 | 0.02 | 591.0 | 64.1 | 762.8 | 8.0 |
| Sub-Total Stringer Sulphides | | 18,112 | 1.48 | 0.11 | 1.31 | 0.02 | 591.0 | 64.1 | 762.8 | 8.0 |
| Combined Measured Total | | 19,127 | 1.50 | 0.23 | 1.90 | 0.05 | 632.0 | 141.8 | 1,167.9 | 19.9 |
| <i>Indicated</i> | | | | | | | | | | |
| 1807 Zone | 1.00 % Cu | 44 | 2.05 | 2.11 | 17.29 | 0.74 | 2.0 | 3.0 | 24.7 | 0.7 |
| 1806 Zone | 1.25 g/t Au | 65 | 0.71 | 2.87 | 16.01 | 0.73 | 1.0 | 6.0 | 33.7 | 1.1 |
| Ming South | 1.00 % Cu | 731 | 1.60 | 2.12 | 8.83 | 0.42 | 25.7 | 11.7 | 49.9 | 6.8 |
| Ming North | 1.00 % Cu | 128 | 1.82 | 1.57 | 9.08 | 0.80 | 5.2 | 6.5 | 37.4 | 2.3 |
| Unmined Levels | -- | 125 | 2.43 | 1.99 | -- | -- | 6.7 | 8.0 | -- | -- |
| Remnant Pillars | -- | 259 | 3.96 | 2.00 | -- | -- | 22.6 | 16.7 | -- | -- |
| Sub-Total Massive Sulphides | | 1,353 | 2.12 | 2.07 | 6.97 | 0.36 | 63.2 | 90.1 | 303.2 | 10.8 |
| Upper Footwall | 1.00 % Cu | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Lower Footwall | 1.00 % Cu | 7,846 | 1.43 | 0.10 | 1.23 | 0.02 | 247.4 | 25.2 | 310.3 | 3.5 |
| Sub-Total Stringer Sulphides | | 7,846 | 1.43 | 0.10 | 1.23 | 0.02 | 247.4 | 25.2 | 310.3 | 3.5 |
| Combined Indicated Total | | 9,199 | 1.53 | 0.39 | 2.07 | 0.07 | 310.5 | 115.3 | 613.5 | 14.3 |
| <i>Measure and Indicated Combined</i> | | | | | | | | | | |
| 1807 Zone | 1.00 % Cu | 249 | 3.20 | 2.33 | 17.58 | 0.66 | 17.6 | 18.7 | 140.9 | 3.6 |
| 1806 Zone | 1.25 g/t Au | 250 | 0.48 | 2.96 | 15.07 | 0.64 | 2.6 | 23.9 | 121.3 | 3.5 |
| Ming South | 1.00 % Cu | 1,291 | 1.64 | 2.19 | 9.31 | 0.41 | 46.7 | 90.9 | 386.3 | 11.6 |
| Ming North | 1.00 % Cu | 194 | 1.87 | 1.56 | 9.60 | 0.92 | 8.0 | 9.7 | 59.8 | 3.9 |
| Unmined Levels | -- | 125 | 2.43 | 1.99 | -- | -- | 6.7 | 8.0 | -- | -- |
| Remnant Pillars | -- | 259 | 3.96 | 2.00 | -- | -- | 22.6 | 16.7 | -- | -- |
| Sub-Total Massive Sulphides | | 2,368 | 2.00 | 2.20 | 9.30 | 0.44 | 104.2 | 167.8 | 708.3 | 22.7 |
| Upper Footwall | 1.00 % Cu | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| | | | | | | | | | | |
|--|-------------|---------------|-------------|-------------|-------------|-------------|--------------|--------------|----------------|-------------|
| Lower Footwall | 1.00 % Cu | 25,958 | 1.46 | 0.11 | 1.29 | 0.02 | 838.3 | 89.3 | 1,073.1 | 11.4 |
| Sub-Total Stringer Sulphides | | 25,958 | 1.46 | 0.11 | 1.29 | 0.02 | 838.3 | 89.3 | 1,073.1 | 11.4 |
| Combined Measured & Indicated Total | | 28,326 | 1.51 | 0.28 | 1.96 | 0.05 | 942.5 | 257.1 | 1,781.4 | 34.2 |
| Inferred | | | | | | | | | | |
| 1807 Zone | 1.00 % Cu | 28 | 1.23 | 0.36 | 2.89 | 0.02 | 0.7 | 0.3 | 2.6 | 0.0 |
| 1806 Zone | 1.25 g/t Au | 149 | 0.66 | 2.63 | 10.67 | 0.50 | 2.2 | 12.6 | 51.1 | 1.7 |
| Ming South | 1.00 % Cu | 744 | 1.52 | 1.94 | 8.39 | 0.44 | 25.0 | 11.3 | 200.5 | 7.2 |
| Ming North | 1.00 % Cu | 673 | 1.72 | 1.61 | 9.43 | 0.91 | 25.6 | 34.9 | 204.2 | 13.5 |
| Unmined Levels | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Remnant Pillars | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sub-Total Massive Sulphides | | 1,593 | 1.52 | 1.84 | 8.95 | 0.64 | 53.5 | 94.2 | 458.4 | 22.5 |
| Upper Footwall | 1.00 % Cu | 402 | 2.58 | 0.21 | 2.54 | 0.05 | 22.9 | 2.7 | 32.8 | 0.4 |
| Lower Footwall | 1.00 % Cu | 3,090 | 1.37 | 0.11 | 1.23 | 0.01 | 93.3 | 10.9 | 122.2 | 0.7 |
| Sub-Total Stringer Sulphides | | 3,492 | 1.51 | 0.12 | 1.38 | 0.01 | 116.2 | 13.6 | 155.0 | 1.1 |
| Combined Inferred Total | | 5,086 | 1.51 | 0.66 | 3.75 | 0.21 | 169.7 | 107.8 | 613.4 | 23.6 |

APPENDIX 2: Summary of Pre-feasibility Economics

Table 6: Project Economics

| Item | Value \$CDN | Value \$USD |
|--|-------------|-------------|
| Copper produced (million lbs) | 336.8 | 336.8 |
| Gold produced (ozs) | 89,600 | 89,600 |
| Silver Produced (ozs) | 527,800 | 527,800 |
| Mine Life (2016 to 2036) | 21 Years | 21 Years |
| Net Revenue (million) | \$ 1,142 | \$ 992 |
| Net Cash Flow from Operations (million) | \$ 273 | \$ 239 |
| Total Capital Cost (Over LOM, million) | \$ 163 | \$ 139 |
| Net Cash Flow (before tax, million) | \$ 128 | \$ 113 |
| Net Cash Flow (after tax, million) | \$ 110 | \$ 100 |
| Net Present Value-before tax (5% discount, million) | \$ 70.2 | \$ 62.0 |
| Net Present Value-after tax (5% discount, million) | \$ 62.0 | \$ 56.3 |
| Internal Rate of Return-before tax ("IRR") | 46% | 46% |
| Internal Rate of Return-after tax ("IRR") | 45% | 45% |
| Payback (years) | 5.1 | 5.1 |

Table 7: Summary of Economic Parameters

| Item | Value \$CDN | Value \$USD |
|---|------------------|---------------------|
| Average Copper Price ¹ (\$USD per lbs) | \$ 3.21 | \$ 2.79 |
| Average Gold Price ¹ (\$USD per oz) | \$ 1264 | \$ 1,100 |
| Average Silver Price ¹ (\$USD per oz) | \$ 17.86 | \$ 15.54 |
| Average \$USD/\$CDN Exchange Rate | 0.87 | 1 |
| 5 Year Project Capital Plan | (million) | (million) |
| Mill Site | \$ 6.90 | \$ 5.53 |
| Mine Site Surface | \$ 9.92 | \$ 8.33 |
| Mine Underground and In-directs | \$ 40.67 | \$ 34.08 |
| Port Site | nil | nil |
| Contingency | \$ 8.75 | \$ 7.28 |
| Total (million) | \$ 66.24 | \$ 55.22 |
| Net Cash (Shortfall) | (million) | (million) |
| F2016 | (\$ 8.43) | (\$ 6.75) |
| F2017 nil | \$ 4.28 | (\$ 3.47) |
| F2018 nil | \$ 6.57 | \$ 5.46 |
| F2019 | (\$ 6.64) | (\$ 5.64) |
| F2020 nil | \$ 3.57 | \$ 3.14 |
| Total Cash Shortfall (million) | (\$ 0.65) | (\$ 0.33) |
| Operating Costs (\$CDN per tonne milled) | | |
| Mining | \$ 41.37 | \$ 35.99 |
| Ore Haulage to Mill | \$ 8.00 | \$ 6.96 |
| General & Administration | \$ 12.77 | \$ 11.10 |
| Sub-total | \$ 62.14 | \$ 54.05 |
| Processing | \$ 15.92 | \$ 13.83 |
| Port Operations | \$ 0.86 | \$ 0.75 |
| Royalties | \$ 1.78 | \$ 1.54 |
| Total (per tonne milled) | \$ 80.70 | \$ 70.17 |
| Price per equivalent pound of Cu | \$ 1.97 | \$ 1.71 |
| Other Parameters | | |
| Mining Dilution (Stopes, Drifts) | | 15%, 0% |
| Mining Recovery (Stopes, Drifts) | | 90%, 100% |
| Mill Recoveries MMS (Cu, Au, Ag) | | 96.1%, 67.8%, 76.1% |
| Mill Recoveries LFZ (Cu, Au, Ag) | | 98.9%, 63.6%, 62.0% |
| Concentrate Grade (Cu) | | 28.5% |

⁽¹⁾ See Page 5, Note 2

APPENDIX 3 - Glossary of Select Geological and Mining Terms

| <u>Term</u> | <u>Definition</u> |
|------------------------------|---|
| "Au" | gold |
| "Ag" | silver |
| "base metal" | generally non-ferrous, non-precious metal, including copper, lead and zinc |
| "concentrate" | in general, the saleable product resulting from crushing and grinding of mined ore in a processing plant along with concentration to remove impurities. Base metal operations can produce copper, lead and/or zinc concentrates |
| "Cu" | copper |
| "cut-off" | lowest grade of mineralised material considered economic, used in the calculation of ore reserves. Also used in reserve estimation, meaning all material higher than the given grade |
| "down plunge" | the direction within a rock mass indicated by linear features such as mineral lineation, fold axes or direction of maximum strain caused by deformation |
| "drift" | a horizontal (or nearly horizontal) passageway in a mine |
| "Footwall Zone" or "LFZ" | a mineralised zone beneath a geological feature such as a fault, another mineralised zone or bed |
| "grade" | relative quantity or the percentage of ore mineral or metal content in an ore body |
| "Indicated Mineral Resource" | that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed |
| "massive sulphide" | occurrence of a concentrated mass of sulfide mineral such as pyrite, sphalerite or chalcopyrite in one place, as opposed to their being disseminated or occurring in vein |
| "measured mineral resource" | that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity |
| "Mineral resource" | a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form that there are reasonable prospects for eventual economic extraction. Mineral resources are sub-divided, in order of increasing confidence, into Inferred, Indicated and Measured categories |
| "mineralised" | containing or impregnated with minerals |
| "National Instrument 43-101" | provides standards of disclosure for mineral projects in Canada. It is a legal requirement in Canada for all oral and written disclosure of scientific or technical information on mineral deposits |
| "net smelter return" | the value or estimated value resulting from the sale of a concentrate or other mineral or metal product, net of all costs for mining, processing, smelting, refining, sales and the like |
| "ore" | rock that can be mined and processed at a profit |
| "orebody" | mining term to define a solid mass of mineralised rock which can be mined profitably under current or immediately foreseeable economic conditions |
| "oz" | troy ounce (=31.103 grammes) |
| "Probable mineral reserves" | measured and/or indicated mineral resources which are not yet proven, but where technical economic studies show that extraction is justifiable at the time of the determination and under specific economic conditions |
| "Proved mineral reserves" | measured mineral resources, where technical economic studies show that extraction is justifiable at the time of the determination and under specific economic conditions |
| "reserve" | that part of a resource that can be mined at a profit under reasonably expected economic conditions |
| "resource" | mineralised body for which there is sufficient sampling information and geological understanding to outline a deposit of potential economic merit |

| | |
|-----------------|---|
| "strike length" | the longest horizontal dimension of an ore body or zone of mineralization |
| "stringer" | a thin, discontinuous mineral vein or rock layer |
| "sulphide" | a mineral containing sulphur in its non-oxidised form |
| "t" | a metric tonne |
| "VMS" | Volcanogenic Massive Sulphide, a recognised type of base metal ore deposit derived from submarine hydrothermal vent sediments |
| "volcanic" | igneous rock produced by eruption and solidified on or near the earth's surface; rhyolite or andesite or basalt |
| "Zn" | zinc |
