

5 March 2020

Rambler Increases Mineral Resources at its Ming Copper-Gold Mine

London, England & Newfoundland and Labrador, Canada – Rambler Metals and Mining plc (AIM: RMM) ("Rambler" or "the Company"), a copper and gold producer, explorer and developer is pleased to announce increases in copper, gold and silver contained in estimated Mineral Resources at the Ming Copper-Gold Mine, located in Eastern Canada.

A depleted mineral reserve estimate is also being reported. This mineral reserve is not based on the newly updated mineral resource but rather a mining depletion from the previous estimate announced on 5 March 2018.

RESOURCE SUMMARY

- The new mineral resource estimate includes 24.506 million tonnes of Measured and Indicated Resources grading 1.70% copper and 0.34 grammes per tonne gold, containing 920 million pounds of copper and 264 thousand ounces of gold at 1% copper cut-off.
- Additionally, Inferred Mineral Resources include of 5.023 million tonnes grading 1.89% copper and 0.39 grammes per tonne gold containing 209 million pounds of copper and 64 thousand ounces of gold at 1% copper cut-off.
- Contained copper, gold, and silver in the Measured and Indicated category have increased 8
 to 12% over the previous September 2017 Mineral Resource estimate, at 4 to 7% higher
 grades. (See Table 4 below)
- Contained copper, gold, and silver in the Inferred Mineral Resource category have increased 64 to 102% over the previous Mineral Resource estimate.
- All zones remain open for extension with further drilling, especially down dip from the current
- Details of the new Mineral Resource estimate by zone appear in Appendix 1

Table 1: Mineral Resource Summary for the Ming-Copper-Gold Mine at 1% Copper Cut-off*(see note below)

	Quantity		Grades		Contained Metal			
Classification		Copper	Gold	Silver	Copper	Gold	Silver	
	(000't)	%	g/t	g/t	M lbs	K oz	K oz	
Measured Total	6,731	1.70	0.56	4.26	252	120	922	
Indicated Total	17,776	1.70	0.25	2.10	668	144	1,200	
M&I Total	24,506	1.70	0.34	2.69	920	264	2,121	
Inferred Total	5,023	1.89	0.39	3.20	209	64	517	

The procedures used for the Mineral Resource estimation is consistent with the Canadian Institute of Mining and Metallurgy ('CIMM') (2014) best practices. See Mineral Resource note below for additional disclosures.

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Andre Booyzen, President and CEO, commented,

"Replenishing the resources of the Ming Mine with higher grade material close to mine infrastructure is a top priority for the exploration program. Our underground development is now below the primary mining horizon of the historic (pre-2012) operation, allowing the 2019 diamond drilling program to reach targets further down-plunge where Indicated and Inferred Resources have dramatically increased relative to previous estimates. In addition, the Upper Footwall zone has been distinguished as a particularly high-grade zone of Measured and Indicated Resources.

"While overall Measured and Indicated Resources at Ming have increased modestly, the new drilling has delineated within the new volumes a higher grade 11.8 million tonnes of Measured and Indicated Resources at 1.5% cut-off grade averaging 2.22% copper and 0.49 grammes per tonne gold. The size, continuity, and near-mine location of these resources is a compelling focus for revised life of mine planning; we plan to develop and release a new mining reserve later in the fiscal year."

Significant Increases to New Mineralised Areas

The Ming North and Upper Footwall Zones have been the focus for exploration and represent the bulk of the additional resources for the updated statement. Both zones incorporated new high-grade drill intersections completed in Q4 2019. These additions improved the resource profile for the Ming Mine and are part of the near-term production profile for the operation.

Table 2: Resource Summary for the Ming North and Upper Footwall Zones at 1% copper cut-off

	Quantity		Grades		Co	ontained Meta	ıl
Classification		Copper	Gold	Silver	Copper	Gold	Silver
	(000't)	%	g/t	g/t	M lbs	K oz	K oz
Measured and Indicate	d		·				
	_	2.73	1.34	8.35	62	44	276
Ming North Zone	1,030	2.73	1.34	6.33	02	44	2/6
Upper Footwall Zone	678	2.63	0.22	2.75	39	5	60
Inferred							
Ming North Zone	685	4.64	1.04	8.26	70	23	182
Upper Footwall Zone	50	2.46	0.16	1.86	3	0.3	3

The Lower Footwall Zone model has been re-interpreted and re-modelled to more accurately reflect the ongoing results from mining the zone over the last 3 years. This re-modelling has resulted in improved copper grade continuity throughout the zone with a 10% improvement in contained copper over the previous estimate under the 1.5% copper cut-off.

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Table 3: Resource Cutoff Sensitivity Summary for the Lower Footwall Zone

	Quantity		Grades		Co	ontained Meta	al
Copper Cutoff		Copper	Gold	Silver	Copper	Gold	Silver
(%)	(000't)	%	g/t	g/t	M lbs	K oz	K oz
1.0	20,969	1.58	0.12	1.57	729	80	1,061
1.1	17,880	1.67	0.12	1.66	658	71	952
1.2	15,178	1.76	0.13	1.74	589	62	849
1.3	12,838	1.86	0.13	1.82	525	54	752
1.4	10,830	1.95	0.14	1.90	465	47	663
1.5	9,137	2.04	0.14	1.98	411	41	583

At a 1.5% copper cut-off, the entire measured and indicated mineral resource estimate consists of 11.779 million tonnes of material grading 2.22% copper and 0.49 grammes per tonne gold, containing 541 million pounds of copper and 182 thousand ounces of gold. This material will form the basis of a new NI43-101 life of mine (LOM) plan for the Ming Mine that will be forthcoming in the second half of 2020.

An updated comparison to the previously released Mineral Resource Estimate, effective date September 7, 2017, is shown in Table 4 below.

Table 4: Resource Summary at 1% copper cut-off (% change from September 2017 resource in brackets)

	Quantity		Grades			Contained Metal	
Classification		Copper	Gold	Silver	Copper	Gold	Silver
	(000't)	%	g/t	g/t	M lbs	K oz	K oz
Measured Total	6,731 (-65%)	1.70 (6%)	0.56 (121%)	4.26 (84%)	252 (-63%)	120 (-23%)	922 (-36%)
Indicated Total	17,776 (332%)	1.70 (-7%)	0.25 (-59%)	2.10 (-40%)	668 (301%)	144 (75%)	1,200 (159%)
M&I Total	24,506 (5%)	1.70 (4%)	0.34 (6%)	2.69 (7%)	920 (8%)	264 (11%)	2,121 (12%)
Inferred Total	5,023 (75%)	1.89 (6%)	0.39 (-6%)	3.20 (15%)	209 (85%)	64 (64%)	517 (102%)

The updated mineral resource estimate for the Ming Copper-Gold mine is based on new exploration and delineation diamond drilling. Since January 2018 the Company has completed 5,443 meters of new drilling into the various mining zones. The drilling by zone is summarized in Table 5 below.

Table 5: 2019 Diamond Drilling Summary Supporting the Update Resource Estimate

Zone	Metres of Drilling (m)	Holes
LFZ (UFW + LFW)	13,996	148
MNZ (Ming North)	11,373	81
1807 Zone	753	3
Total	26,122	232 holes



Mineral Reserve (Depleted)

The effective date of the last mineral reserve estimate for the Ming Copper-Gold Mine was January 1, 2018, see press release dated 5 March 2018. The updated mineral reserve reported below is effective as of January 1, 2020, however, is a depleted estimate and not a fully updated mineral reserve based on the new mineral resource referenced above. A fully updated mineral reserve and life of mine production plan will be released before the end of 2020.

Table 6: Depleted Mineral Reserve Estimate Summary for the Ming Copper-Gold Mine**

	Quantity		Grades		Contained Metal		
Classification	(000't)	Copper	Gold	Silver	Copper	Gold	Silver
		%	g/t	g/t	M lbs	K oz	K oz
Tatal Duarra Dasama	2 1 4 1	1.00	0.42	2.00	122	42	200
Total Proven Reserve	3,141	1.92	0.43	2.86	133	43	289
(undiluted, unrecovered)							
Total Probable Reserve	4,520	1.86	0.43	2.95	185	62	428
(undiluted, unrecovered)							
Dilution (all sources)	1,149	0.64	0.06	0.73	16	2	27
Reserve (diluted and recovered)	7,930	1.72	0.38	2.62	306	100	715

*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 % copper for the massive sulphides, 1.25 grammes per tonne gold for any gold zones and 1.0 % 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\$2.99 per pound copper, USD\$1,300 per ounce gold and USD\$17.00 per ounce silver with a long-term USD/CDN FX rate of 1:0.80. Resources are inclusive of reserves.

**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 based on depletion due to mining over the 2018 and 2019 calendar years. The NSR for the reserve material was calculated using an all-in cost of USD\$72 per tonne of ore milled.

Long term metal prices of USD\$2.99 per pound copper, USD\$1300 per ounce gold and USD\$17.00 per ounce silver with a long-term USD/CDN FX rate of 1:0.80.

The procedures used for the Mineral Resource and Reserve estimations is consistent with the Canadian Institute of Mining and Metallurgy ('CIMM') (2014) best practices.

The effective date for the Mineral Resource Estimate is December 31, 2019. The effective date for the depleted Mineral Reserve Estimate is January 1, 2020.

Mineral Resources and Reserves for the Ming Mine were estimated under the supervision of Mark Ross, P. Geo., who is a qualified person as defined by NI43-101.

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Tim Sanford, P.Eng., is the Qualified Person responsible for the technical content of this release and has reviewed and approved it accordingly. Mr. Sanford is an employee of Rambler Metals and Mining Canada Limited. Tim Sanford consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears. Tim Sanford has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as a "competent person" as defined by the AIM rules.

Tonnes referenced are dry metric tonnes unless otherwise indicated; unless otherwise noted all figures are quoted in \$USD

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 ('MAR'). Upon the publication of this announcement via Regulatory Information Service ('RIS'), this inside is now considered to be in the public domain.

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.

Following the completion of its recent productivity improvement initiative Rambler's focus is on sustaining mine and mill production at over 1,350 metric tonnes per day at 2% Copper at the Ming Mine. With a return to profitability and positive cash flow, Rambler will continue advancing engineering studies and capital asset additions with a view to further increase production.

Along with the Ming Mine, Rambler also owns 100 per cent of the former producing Little Deer/ Whales Back copper mines.



Rambler is listed in London under AIM:RMM.

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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 forwardlooking 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.

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APPENDIX 1

Table 1: Complete Mineral Resource Estimate, by zone, for the Ming Copper-Gold Mine – effective December 31, 2019 (Resources are inclusive of reserves.)

		Ouantitu		Grades	1		Contained Metal	1
Resource	Cutoff	Quantity	Copper	Grades Gold	Silver	Copper	Gold Gold	Silver
Classification	Culon	(000't)	%	g/t	g/t	000' lbs	OZ	OZ
			75	8/ -	6/ -	000 1.00	02	02
Measured								
1807 Zone	1.00 % Cu	412	2.40	2.67	20.16	21,838	35,344	267,159
1806 Zone	1.25 g/t Au	185	0.40	3.00	14.74	1,623	17,830	87,663
Ming South Zone	1.00 % Cu 1.00 % Cu	286 616	2.19 2.33	2.01 1.38	13.45 9.29	13,809	18,495	123,490
Ming North Zone Unmined Levels	1.00 % Cu	910	2.33	1.38	9.29	31,590	27,404	184,038
Remnant Pillars								
Sub-Total Massive Sulphides		1,499	2.08	2.06	13.74	68,859	99,073	662,351
		2,100			20	00,000	33,070	002,002
Upper Footwall Zone	1.00 % Cu	440	2.80	0.26	3.03	27,145	3,640	42,885
Lower Footwall Zone	1.00 % Cu	4,792	1.48	0.11	1.41	156,039	17,500	216,600
Sub-Total Stringer Sulphides		5,232	1.59	0.13	1.54	183,184	21,140	259,485
Total Measured		6,731	1.70	0.56	4.26	252,044	120,213	921,836
Indicated								
1807 Zone	1.00 % Cu	123	1.75	1.98	14.66	4,740	7,842	57,964
1806 Zone	1.25 g/t Au	65	0.71	2.87	16.01	1,026	6,029	33,650
Ming South Zone	1.00 % Cu	374	2.07	2.09	12.79	17,082	25,148	153,962
Ming North Zone	1.00 % Cu	414	3.33	1.27	6.94	30,447	16,886	92,433
Unmined Levels		125	2.43	1.99		6,693	7,989	
Remnant Pillars		259	3.96	2.00		22,603	16,656	
Sub-Total Massive Sulphides		1,361	2.75	1.84	7.73	82,591	80,550	338,008
Upper Footwall Zone	1.00 % Cu	238	2.31	0.16	2.24	12,151	1,250	17,124
Lower Footwall Zone	1.00 % Cu	16,177	1.61	0.10	1.62	573,344	62,119	844,411
Sub-Total Stringer Sulphides	2.00 /0 00	16,415	1.62	0.12	1.63	585,495	63,369	861,535
		•				•	ŕ	•
Total Indicated		17,776	1.70	0.25	2.10	668,087	143,918	1,199,544
	shinad	17,776	1.70	0.25	2.10	668,087	143,918	1,199,544
Measure and Indicated Com								
Measure and Indicated Com 1807 Zone	1.00 % Cu	535	2.25	2.51	18.90	26,579	43,186	325,123
Measure and Indicated Com 1807 Zone 1806 Zone						26,579 2,648	43,186 23,859	325,123 121,314
Measure and Indicated Com 1807 Zone	1.00 % Cu 1.25 g/t Au	535 250	2.25 0.48	2.51 2.96	18.90 15.07	26,579	43,186	325,123
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu	535 250 660	2.25 0.48 2.12	2.51 2.96 2.06	18.90 15.07 13.08	26,579 2,648 30,891	43,186 23,859 43,643	325,123 121,314 277,451
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu	535 250 660 1,030	2.25 0.48 2.12 2.73	2.51 2.96 2.06 1.34	18.90 15.07 13.08 8.35	26,579 2,648 30,891 62,037	43,186 23,859 43,643 44,289	325,123 121,314 277,451 276,471
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu	535 250 660 1,030 125	2.25 0.48 2.12 2.73 2.43	2.51 2.96 2.06 1.34 1.99	18.90 15.07 13.08 8.35	26,579 2,648 30,891 62,037 6,693	43,186 23,859 43,643 44,289 7,989	325,123 121,314 277,451 276,471
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 	535 250 660 1,030 125 259 2,859	2.25 0.48 2.12 2.73 2.43 3.96 2.40	2.51 2.96 2.06 1.34 1.99 2.00 1.95	18.90 15.07 13.08 8.35 10.88	26,579 2,648 30,891 62,037 6,693 22,603 151,451	43,186 23,859 43,643 44,289 7,989 16,656 179,623	325,123 121,314 277,451 276,471 1,000,359
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 	535 250 660 1,030 125 259 2,859	2.25 0.48 2.12 2.73 2.43 3.96 2.40	2.51 2.96 2.06 1.34 1.99 2.00 1.95	18.90 15.07 13.08 8.35 10.88	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297	43,186 23,859 43,643 44,289 7,989 16,656 179,623	325,123 121,314 277,451 276,471 1,000,359
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 	535 250 660 1,030 125 259 2,859 678 20,969	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12	18.90 15.07 13.08 8.35 10.88 2.75 1.57	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 	535 250 660 1,030 125 259 2,859	2.25 0.48 2.12 2.73 2.43 3.96 2.40	2.51 2.96 2.06 1.34 1.99 2.00 1.95	18.90 15.07 13.08 8.35 10.88	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297	43,186 23,859 43,643 44,289 7,989 16,656 179,623	325,123 121,314 277,451 276,471 1,000,359
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 	535 250 660 1,030 125 259 2,859 678 20,969	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12	18.90 15.07 13.08 8.35 10.88 2.75 1.57	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 	535 250 660 1,030 125 259 2,859 678 20,969 21,647	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12	18.90 15.07 13.08 8.35 10.88 2.75 1.57	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12	18.90 15.07 13.08 8.35 10.88 2.75 1.57 1.61 2.69	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12	18.90 15.07 13.08 8.35 10.88 2.75 1.57 1.61 2.69	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 10.88 2.75 1.57 1.61 2.69	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone Ming South Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 10.88 2.75 1.57 1.61 2.69	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Ming North Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 10.88 2.75 1.57 1.61 2.69	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone Ming South Zone	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Unmined Levels	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072 181,822
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Unmined Levels Remnant Pillars	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131 7,044 12,576 2,329 22,830	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072 181,822
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Unmined Levels Remnant Pillars	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.00 % Cu 1.25 g/t Au 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131 7,044 12,576 2,329 22,830	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072 181,822
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131 3,989 2,181 4,817 70,044 81,030	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131 7,044 12,576 2,329 22,830 44,780	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072 181,822 297,448
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131 3,989 2,181 4,817 70,044 81,030 2,694	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131 7,044 12,576 2,329 22,830 44,780	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072 181,822 297,448 2,959
Measure and Indicated Com 1807 Zone 1806 Zone Ming South Zone Ming North Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Lower Footwall Zone Sub-Total Stringer Sulphides Total Measured and Indicated Inferred 1807 Zone 1806 Zone Ming South Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides Upper Footwall Zone Unmined Levels Remnant Pillars Sub-Total Massive Sulphides	1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.25 g/t Au 1.00 % Cu 1.00 % Cu	535 250 660 1,030 125 259 2,859 678 20,969 21,647 24,506	2.25 0.48 2.12 2.73 2.43 3.96 2.40 2.63 1.58 1.61 1.70 1.75 0.66 1.86 4.64 3.49 2.46 1.45	2.51 2.96 2.06 1.34 1.99 2.00 1.95 0.22 0.12 0.12 0.34 2.12 2.63 0.62 1.04	18.90 15.07 13.08 8.35 	26,579 2,648 30,891 62,037 6,693 22,603 151,451 39,297 729,383 768,680 920,131 3,989 2,181 4,817 70,044 81,030 2,694 125,298	43,186 23,859 43,643 44,289 7,989 16,656 179,623 4,890 79,619 84,509 264,131 7,044 12,576 2,329 22,830 44,780 248 18,501	325,123 121,314 277,451 276,471 1,000,359 60,010 1,061,011 1,121,021 2,121,380 53,454 51,100 11,072 181,822 297,448 2,959 217,053



APPENDIX 2 - Glossary of Select Geological and Mining Terms

Term	Definition
"Au"	gold
"Ag"	silver
"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
"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
"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

"ore" rock that can be mined and processed at a profit

"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

"stringer" a thin, discontinuous mineral vein or rock layer

"sulphide" a mineral containing sulphur in its non-oxidised form

"t" a metric tonne