

12 July 2021

## Rambler Updates & Upgrades the Mineral Resource Estimate for the Little Deer Complex

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 provide this independently updated Mineral Resource on its 100% owned Little Deer Complex, located on the Baie Verte peninsula, approximately 150 kilometres from its copper and gold mining operation at the Ming Mine. Previously the Mineral Resources of the complex were identified in Technical Reports issued by Thundermin Resources Inc ("Thundermin") in 2011 (Little Deer) and 2012 (Whalesback). Rambler acquired complete ownership of the assets following a merger with Thundermin in 2015. The Technical Report associated with this Mineral Resource Estimate will be filed on the System for Electronic Document Analysis and Retrieval ("SEDAR") in Canada within 45 days of the date of this release.

### HIGHLIGHTS

- The updated Indicated Mineral Resource for the Little Deer Complex includes 2.9M tonnes at 2.13% copper ("Cu") containing 135.4M pounds or 61.4K tonnes at 1% Cu cut-off, compared to the previous Indicated Mineral Resource from 2012 of 2.7M tonnes at 2.16% Cu for 129.2M pounds or 58.6K tonnes Cu at 1% Cu cut-off;
- An Inferred Mineral Resource of 6.2M tonnes at 1.79% Cu, containing 243.8M pounds or 110.6K tonnes (at 1% Cu cut-off), highlighting the exciting exploration potential, compared to the previous Inferred Mineral Resource from 2012 of 4.2M tonnes at 2.07% Cu for 191.3M pounds or 86.8K tonnes Cu at 1% Cu cut-off;
- The updated Indicated Mineral Resource reflects a 6.5% increase in tonnes and a 4.8% increase in contained copper metal, based on a 1% Cu cut-off;
- The updated Inferred Mineral Resource represents an 47.4% increase in tonnes and a 27.5% increase in contained copper metal.
- The increases are due to:
  - Smaller block size (2.5m) in the Y direction (across dip) reducing modelling dilution;
  - Greater scrutiny on vein intercept picks which reduced sub-marginal assay intercepts;
  - Smoother and slightly less conservative wireframes;
  - Use of Inverse Distance Squared grade interpolation instead of Ordinary Kriging.
- Historical delineation and exploration of the deposit focused just on the known mineralization.
   With the deposits remaining open at depth and along strike, the periphery of the complex will be a focus of future exploration programs.

Table 1: Summary of Little Deer Complex Mineral Resource Estimate
At 1.0% Copper Cut-Off<sup>(1-10)</sup>

Deposit	Classification	Tonnes	Cu	Ag	Au	Со
		(k t)	(%)	(g/t)	(g/t)	(%)
Little Deer	Indicated	2,029	2.33	4.12	0.13	0.03
	Inferred	5,882	1.78	2.16	0.05	0.02

Copper	Copper
(M lbs)	(k t)
104.2	47.2
230.9	105.0



Deposit	Classification	Tonnes	Cu	Ag	Au	Со
		(k t)	(%)	(g/t)	(g/t)	(%)
Whalesback	Indicated	854	1.67	1.79	0.03	0.01
	Inferred	294	1.85	2.32	0.03	0.02
Total	Indicated	2,883	2.13	3.43	0.10	0.02
Complex	Inferred	6,176	1.79	2.17	0.05	0.02

Copper	Copper
(M lbs)	(k t)
31.4	14.2
12.0	5.6
135.4	61.4
243.8	110.6

See Mineral Resource Notes under Appendix 1.

# Dr Toby Bradbury, President and CEO, commented:

"The Little Deer Complex provides another exciting growth opportunity for Rambler as we continue with the progress on the turn-around of the Ming Mine.

This updated resource includes drill data from 2014 that were completed subsequent to the earlier Mineral Resource Estimates. The scale, further exploration potential and the steeply dipping nature of the orebodies makes the Little Deer Complex an exciting prospect for Rambler.

2021 is a transformational year for the Company, setting up the Ming Mine to reliably and consistently produce through 2022 and for many years ahead. Cash generated from the Ming Mine will enable us to invest in our other assets and provide for future growth and creation of shareholder value.

Exploration, development and ultimately operation of the Little Deer Complex can benefit from the expertise and synergies with our existing operations, and we plan, through the balance of this year, to advance this important project with further exploration.

The Baie Verte Peninsula is an important and supportive mining region with an excellent talent pool and is well-placed to deliver metal concentrates to world markets.

As reported in a release on 7 May, 2021, the Company has received a number of unsolicited offers of interest in its Little Deer Complex and is actively seeking arrangements that can advance these projects while retaining a significant interest."

# **Little Deer Complex Mineral Resource Update**

Rambler has engaged P&E Mining Consultants Inc. as independent advisors to re-examine the Little Deer and Whalesback deposits situated approximately 18 kilometers from the Trans-Canada highway, approximately 10 kilometers from the Town of Springdale, NL (See Figure 1 below). Due to the adjacent proximity of these deposits, together with the underground drift connection between them at 240 Level, and shared infrastructure, Rambler has combined both deposits and re-named the Project as the Little Deer Complex.



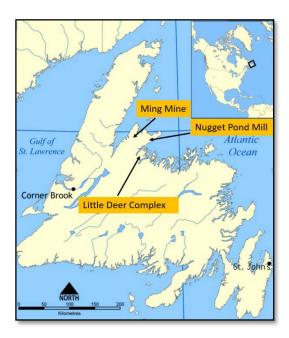


Figure 1: Location Map of the Little Deer Complex

Copper mineralization was first discovered at the Little Deer Complex in 1952 by Falconbridge Nickel Mines Limited. The Property was mined by British Newfoundland Exploration Company ("BRINEX") from 1970 to 1972, with access via a 1,144 m drift on the 244 m level from the Whalesback mine to the north, and by Green Bay Mining Company from 1973 to 1974, with access via a 329 m decline.

The Little Deer volcanogenic massive sulphide ("VMS") copper deposit occurs within the Lush's Bight Group, a Cambro-Ordovician sequence of ophiolitic mafic volcanic rocks consisting mainly of intermediate to mafic pillow lavas with minor associated tuffs and agglomerates intruded by gabbroic stocks and dykes. The main sulphide mineralization consists of disseminated, stringer and semi-massive to massive, pyrrhotite (pyrite), chalcopyrite and, locally, very minor sphalerite. The main copper-bearing zones strike east-northeast at 075° and dip approximately 75° to 80° to the south. There are eight similar VMS copper deposits in the Lush's Bight Group. These deposits belong to what is commonly referred to as the "Cyprus type" of VMS copper deposit.

In 2011 and 2012 respectively, a Preliminary Economic Assessment for the Little Deer Deposit and a Mineral Resource Estimate for the Whalesback Property were released. Both reports were completed through Thundermin Resources. The respective Mineral Resources for the two deposits as of 2012 are described in the below table:

Table 2: Previous Summary of Little Deer (July 2011) and Whalesback (July 2012) Copper Mineral Resources At 1.0% Copper Cut-Off<sup>(1-11)</sup>

Deposit	Classification	Tonnes	Cu	Ag	Au	Со
		(k t)	(%)	(g/t)	(g/t)	(%)
Little Deer	Indicated	1,911	2.37	N/A	N/A	N/A
	Inferred	3,748	2.13	N/A	N/A	N/A

Copper	Copper
(M lbs)	(k t)
99.8	45.3
175.9	79.8



Deposit	Classification	Tonnes	Cu	Ag	Au	Со
		(k t)	(%)	(g/t)	(g/t)	(%)
Whalesback	Indicated	797	1.67	N/A	N/A	N/A
wnaiesback	Inferred	443	1.57	N/A	N/A	N/A
Total	Indicated	2,708	2.16	N/A	N/A	N/A
IUlai	Inferred	4,191	2.07	N/A	N/A	N/A

Copper	Copper
(M lbs)	(k t)
29.3	13.3
15.3	6.9
129.1	58.6
191.3	86.8

See Mineral Resource Notes under Appendix 2.

Recognizing the potential value to its portfolio, Rambler acquired Thundermin in 2015. Rambler has since kept the properties accessible, established a core storage facility, and maintained the claims in good standing.

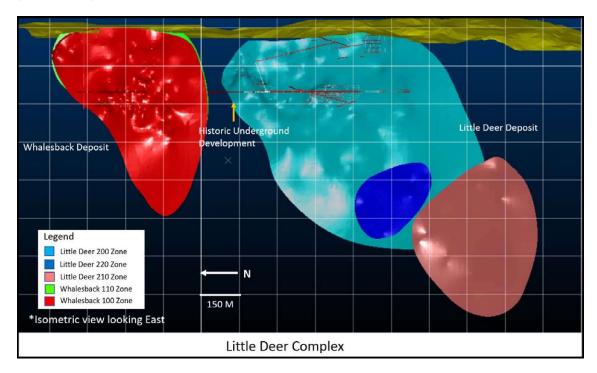


Figure 2: Isometric view of the Little Deer Complex, looking East

The Updated 2021 Mineral Resource Estimate is based on modelling of all historical and 2014 diamond drilling (see Appendix 1, Table 4 for key intercepts from 3,800 meters drilled in four holes from surface and two wedge holes in 2014), detailed review of the grade shell boundaries, reducing the horizontal (y-axis) block size from 5 m to 2.5 m to improve the capture of vein thickness, and overall smoother wireframe modelling strategy (see Tables 3, 5 and 6 under Appendix 1).

Near-term plans are to continue the conversion of Inferred to Indicated Mineral Resources, the continued step-out program to identify close-proximity targets relative to the mine footprint, and to further define the down-dip extensions of the mineralized zones.



When the Ming Mine operations are performing as planned, the Company will look to develop the value-added assets it holds in the district, including the Little Deer Complex. Future work could include:

- Improvements to site infrastructure
- Updated Preliminary Economic Assessment ("PEA") followed by a Feasibility Study
- a delineation drill program to properly define initial production sources outlined in Feasibility Study
- an exploration program to explore potential near source targets

## 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.

Rambler's focus is to regain its process plant production profile at 1,350 tonnes per day at 2% Cu during 2021 and evaluate expansion opportunities from that base.

Along with the Ming Mine, Rambler also owns 100% of the former producing Little Deer and Whalesback copper mines.

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 mineralization 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.

Eugene Puritch, P.Eng., President of P&E Mining Consultants Inc., and independent Qualified Person and Competent Person has reviewed and approved the technical content of this news release.

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') which has been incorporated into UK law by the European Union (Withdrawal) Act 2018. Upon the publication of this announcement via Regulatory Information Service ('RIS'), this inside is now considered to be in the public domain.



### 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.



# APPENDIX 1 – Updated Mineral Resource Estimate for the Little Deer Complex

Table 3: Summary of Little Deer Complex Mineral Resource Estimate
At 1.0% Copper Cut-Off<sup>(1-10)</sup>

Deposit	Classification	Tonnes	Cu	Ag	Au	Со
		(k t)	(%)	(g/t)	(g/t)	(%)
Little Deer	Indicated	2,029	2.33	4.12	0.13	0.03
Little Deel	Inferred	5,882	1.78	2.16	0.05	0.02
Whalesback	Indicated	854	1.67	1.79	0.03	0.01
	Inferred	294	1.85	2.32	0.03	0.02
Total	Indicated	2,883	2.13	3.43	0.10	0.02
Complex	Inferred	6,176	1.79	2.17	0.05	0.02

Copper
(k t)
47.2
105.0
14.2
5.6
61.4
110.6

Notes:

- 1) Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 2) The Inferred Mineral Resource in this estimate has a lower level of confidence that that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
- 3) The Mineral Resources in this news release were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- 4) Inverse Distance Squared was used for Cu and Co grade interpolation with Inverse Distance Cubed for Au and Ag.
- 5) Cu was the only metal used in the derivation of the Mineral Resource Estimation tonnage and classification. Au, Ag, and Co were not used in the Mineral Resource Estimation as the distribution of assay values was deemed to be too sparse, although sufficient for non cut-off dependent reporting.
- 6) Grade capping by domain for Cu on 1.5m composites was as follows: LD200=12%, LD210=6%, LD220=6%, WB100=12% & WB110=3%.
- 7) A variable bulk density based on numerous field measurements was used for tonnage calculations.
- 8) Domain models were generated with Leapfrog<sup>TM</sup> software, oriented along the trend of the mineralization and determined by selecting copper grades equal to or greater than 1.0% Cu with demonstrated continuity along strike and down dip. Grade interpolation was undertaken with Gemcom<sup>TM</sup> software.
- 9) A copper price of US\$3.60/lb (May 31, 2021 Consensus Economics long term price) and a USD:CDN exchange rate of 0.76 was utilized to derive the 1% Cu cut-off grade. Mining costs were C\$50/t, process costs were C\$22/t and G&A was C\$18/t. Concentrate freight and smelter treatment charges were C\$10/t mined. Concentrate mass pull was 7%, process recovery was 97%, smelter payable was 96% and Cu refining was US\$0.08/lb.
- 10) All assays were analyzed at Eastern Analytical Limited of Springdale Nfld. A QAQC program of field and lab duplicates, certified standards and blanks was in place.
- 11) The Mineral Resource Estimate is based on a database containing 622 diamond drill holes from surface and underground totalling 132,972 m.



Table 4: Little Deer Drill Results (2014)

Hala Nia	NAD 83 U1	M Zone 21	D::- (°)	A = /°\	5 ()	To (m)	Interval	C. (0()
Hole No.	East (m)	North (m)	Dip (°)	Az (°)	From (m)	To (m)	(m)*	Cu (%)
LD-14-63	571,149	5,492,702	-58.2	328	800.5	803.9	3.4	2.9
and					819	819.7	0.7	1.9
and					886.6	887.2	0.6	1.9
LD-14-63A	571,149	5,492,702	-58.2	328	763.3	766.3	3.0	1.0
and					775.2	777.7	2.5	1.0
LD-14-64	571,149	5,492,702	-52.6	328	729.6	732.6	3.0	1.0
LD-14-64A	571,149	5,492,702	-52.6	328	723.3	724.3	1.0	0.9
LD-14-65	571,174	5,492,756	-51.2	329	206.5	208.5	2.0	3.8
and					414.8	417.4	2.6	2.1
and					629.6	630	0.4	8.0
and					635.3	641.5	6.2	2.3
LD-14-66	571,189	5,492,780	-57.7	328	409.5	409.8	0.3	2.4
and					678.5	679.5	1.0	1.5

### Notes:

<sup>1) \*</sup>The reported copper intersections are core lengths. The true thicknesses of the copper intersections are highly variable due to the nature of the mineralization.

<sup>2)</sup> The "A" suffix in the drill hole number indicates a wedge hole.



Table 5: Mineral Resource Copper Grade Sensitivity for the Little Deer Deposit

MINERAL RESOURCE ESTIMATE SENSITIVITY – LITTLE DEER									
	Cut off Cu %	Tonnes k	Cu	Ag	Au	Со			
	cut on cu 70		%	ppm	ppm	%			
	2.0	988	3.29	4.47	0.14	0.03			
	1.8	1,119	3.13	4.41	0.14	0.03			
	1.6	1,273	2.95	4.34	0.14	0.03			
Indicated	1.4	1,474	2.76	4.24	0.13	0.03			
	1.2	1,714	2.55	4.17	0.13	0.03			
	1.0	2,029	2.33	4.12	0.13	0.03			
	0.8	2,323	2.15	4.00	0.12	0.03			
	0.6	2,588	2.00	3.88	0.12	0.03			
	0.4	2,878	1.85	3.76	0.12	0.03			
	2.0	1,673	2.56	2.84	0.07	0.02			
	1.8	2,400	2.36	2.64	0.06	0.02			
	1.6	3,178	2.2	2.5	0.05	0.02			
	1.4	4,098	2.04	2.4	0.05	0.02			
Inferred	1.2	4,965	1.91	2.3	0.05	0.02			
	1.0	5,882	1.78	2.16	0.05	0.02			
	0.8	6,776	1.67	2.06	0.04	0.02			
	0.6	7,556	1.57	2	0.04	0.02			
	0.4	8,314	1.47	1.98	0.04	0.02			



Table 6: Mineral Resource Copper Grade Sensitivity for the Whalesback Deposit

MINERAL RESOURCE ESTIMATE SENSITIVITES – WHALESBACK						
	Cut off Cu %	Tonnes k	Cu	Ag	Au	Со
	cut on cu /o		%	ppm	ppm	%
	2.0	171	2.61	1.66	0.04	0.01
	1.8	252	2.38	1.67	0.04	0.01
	1.6	383	2.15	1.68	0.04	0.01
Indicated	1.4	534	1.96	1.73	0.03	0.01
	1.2	679	1.82	1.75	0.03	0.01
	1.0	854	1.67	1.79	0.03	0.01
	0.8	1,016	1.55	1.84	0.03	0.01
	0.6	1,156	1.45	1.85	0.03	0.01
	0.4	1,269	1.36	1.84	0.03	0.01
	2.0	85	2.9	2.09	0.04	0.01
	1.8	110	2.67	2.2	0.04	0.01
į	1.6	148	2.42	2.25	0.03	0.01
	1.4	182	2.25	2.31	0.03	0.01
Inferred	1.2	240	2.02	2.35	0.03	0.02
	1.0	294	1.85	2.32	0.03	0.02
	0.8	337	1.73	2.31	0.03	0.02
	0.6	372	1.63	2.3	0.03	0.02
	0.4	440	1.46	2.27	0.03	0.02



## **APPENDIX 2**

Table 7: Previous Summary of Little Deer (July 2011) and Whalesback (July 2012) Copper Mineral Resources At 1.0% Copper Cut-Off<sup>(1-11)</sup>

Deposit	Classification	Tonnes	Cu	Ag	Au	Со
		(k t)	(%)	(g/t)	(g/t)	(%)
Little Deer	Indicated	1,911	2.37	N/A	N/A	N/A
Little Deel	Inferred	3,748	2.13	N/A	N/A	N/A
Whalesback	Indicated	797	1.67	N/A	N/A	N/A
vvnalesback	Inferred	443	1.57	N/A	N/A	N/A
Total	Indicated	2,708	2.16	N/A	N/A	N/A
Total	Inferred	4,191	2.07	N/A	N/A	N/A

Copper	Copper		
(M lbs)	(k t)		
99.8	45.3		
175.9	79.8		
29.3	13.3		
15.3	6.9		
129.1	58.6		
191.3	86.8		

N/A: Not all Au, Ag, and Co assays were completed and therefore none were reported or used in this Mineral Resource Estimate.

#### Notes:

- 1) Mineral resources, which are not mineral reserves, do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 2) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- 3) The mineral resources in this press release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
- 4) Ordinary Kriging was used for Cu grade interpolation.
- 5) Grade capping of 5% and 15% Cu, respectively, utilized on composites for Whalesback and Little Deer.
- 6) A variable bulk density based on numerous field measurements was used for tonnage calculations.
- 7) Domain models were generated from successive polylines spaced every five metres (Whalesback) and 10 metres (Little Deer) and oriented perpendicular to the trend of the mineralization. The outlines of the polylines were determined by selecting copper grades equal to or greater than 1.0% Cu with demonstrated continuity along strike and down dip.
- 8) Whalesback: A copper price of US\$3.82/lb (June 30, 2012 two year trailing average) and an exchange rate of US\$0.99=C\$1.00 was utilized to derive the 1% Cu cut-off grade. Mining costs were C\$45/t, process costs were C\$16/t and G&A was C\$6/t. Concentrate freight and smelter treatment charges were C\$10/t mined. Concentrate mass pull was 7%, process recovery was 97%, smelter payable was 96% and Cu refining was US\$0.07/lb.
- 9) Little Deer: A copper price of US\$3.42/lb (May 31, 2011 24 two year trailing average) and an exchange rate of US\$0.95=C\$1.00 was utilized to derive the 1% Cu cut-off grade. Mining costs were C\$40/t, process costs were C\$15/t and G&A was C\$5/t. Concentrate freight and smelter treatment charges were C\$10/t mined. Concentrate mass pull was 7%, process recovery was 97%, smelter payable was 96% and Cu refining was US\$0.07/lb.
- 10) All Thundermin and Cornerstone assays were analyzed at Eastern Analytical Limited of Springdale Nfld. A QAQC program of field and lab duplicates, certified standards and blanks was put in place.
- 11) The mineral resource estimate for Whalesback is based on diamond drill hole records from 316 surface and underground drill holes totalling 37,163 m of drilling. Fourteen of these holes were drilled recently by Thundermin and Cornerstone (see news releases dated October 20, 2011 and February 23 and May 10, 2012) and the remainder were drilled by British Newfoundland Exploration Company between 1961 and 1970.



# **APPENDIX 3 - 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
"Co"	cobalt
"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 "FZ"	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

pits, workings and appropriately spaced drill holes

exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches,



"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

"mineralized" 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