



NEWS RELEASE – 02/2020

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## MONETA REPORTS IMPROVED METALLURGICAL GOLD RECOVERIES

Toronto, Ontario – January 14, 2020 - Moneta Porcupine Mines Inc. (TSX:ME) (OTC:MPUCF) (XETRA:MOP) (“Moneta” or the “Company”) is pleased to announce the results of gold recovery test work conducted on drill core samples from the South West deposit, Golden Highway Project, located 110 km east of Timmins, Ontario, (see Figure 1).

### Highlights:

Metallurgical gold recovery test work showed increased gold recoveries from drill core from the South West deposit included in the November 2019 Mineral Resource Estimate:

- Gold recoveries (gravity and leach) increased to 93.9% at a standard grind size
- Gold recoveries (gravity and leach) increased to 95.5% at a finer grind size
- Gravity recovery of gold averaged 50.6%
- Whole ore leach gold recoveries increased to 93.4% recovery
- Combination of higher head grade and gravity recovery increased recoveries by 1.4% for standard grind and 2.0% for finer grind size
- Optimal recoveries at low CN concentrations (0.5 g/L) with low reagent consumptions

Gary O’Connor, CEO & Chief Geologist commented, “We are pleased that the latest metallurgical gold recovery test-work has resulted in higher gold recoveries with no deleterious elements present. The test work indicated gold recoveries of up to 93.9% with 50.6% being recovery by gravity, with standard grind sizes at an estimated head grade of 4.65 g/t Au, and up to 95.5% at finer grind sizes.”

The metallurgical gold recovery test-work was conducted to assess the potential gold recoveries and optimum process flow sheet required to develop the project at a head grade reflective of the latest mineral resource estimate on the South West Deposit (Press release issued November 26, 2019). The test work was conducted on a composite sample collected from 36.20 m of quarter core sampled from 2018 and 2019 drill holes completed on the South West deposit (including the Gap Zone). The sample weighed 33.47 kg with an estimated grade of 4.65 g/t Au based on core assays, selected to be spatially and geologically representative of the deposit. Metallurgical test work was undertaken by SGS Canada Minerals Lakefield at the SGS Lakefield Laboratory, Ontario.

**Table 1: Total (Gravity and Leach) Gold Recoveries**

Sample	Grind Size	Gravity Rec-y	CN Conc.	Leach Tail	Leach Rec-y	Head Grade	Recovery*
(#)	(P80, µm)	(%)	(g/L)	(g/t Au)	(%)	(g/t Au)	(%)
CN-1	79	50.6%	0.50	0.26	88.8	4.58	94.3
CN-2	79	50.6%	0.50	0.26	88.0	4.27	93.9
CN-2R	79	50.6%	0.50	0.28	89.0	4.33	93.5
Average	79	50.6%	0.50	0.27	88.6	4.39	93.9

*\* Normalized Overall Au Recovery = Normalized Overall Au Extraction/100 \* (100 - gravity recovery) + gravity recovery*

### **Discussion of South West Gold Metallurgical Test Work Recovery Results**

The metallurgical test-work showed that total gold recovery averaging 93.9% was achievable at a 79 micron grind size, with 50.6% of the gold recovered by gravity at a head grade reflective of the updated mineral resource (Table 1). Finer grinding to 59 micron resulted in an average total gold recovery of 95.5% with 50.6% recovered by gravity (Table 2). Whole ore leaching returned recoveries of 93.4%, (Table 3). Optimum recoveries were achieved after 24 hours leaching after gravity recovery, at a CN concentration of 0.5 g/L, with average laboratory test-work consumption of 1.1 kg/t CN and 1.1 kg/t lime. Lower CN concentration levels and oxygen addition indicated lower overall recoveries (Table 4). The test work also confirmed that the composite and process tails contained no elevated levels of deleterious elements. Previous test work, also conducted by SGS Canada on composite samples with an average head grade of 0.86 g/t Au without gravity recovery, showed an average total recovery of 92.5% at the standard grind size and 93.5% on the finer grind under similar laboratory conditions. The combination of a higher head grade and use of gravity recovery has resulted in higher gold recoveries. Finer grinding also increases the overall gold recovery.

**Table 2: Total (Gravity and Leach) Gold Recoveries: Fine Grind**

Sample	Grind Size	Gravity Rec-y	CN Conc.	Leach Tail	Leach Rec-y	Head Grade	Recovery*
(#)	(P80, µm)	(%)	(g/L)	(g/t Au)	(%)	(g/t Au)	(%)
CN-3	59	50.6%	0.50	0.21	91.0	4.49	95.6
CN-3R	59	50.6%	0.50	0.21	91.0	4.37	95.4
Average	59	50.6%	0.50	0.14	91.0	4.43	95.5

*\* Normalized Overall Au Recovery = Normalized Overall Au Extraction/100 \* (100 - gravity recovery) + gravity recovery*

**Table 3: Whole Ore Leach Gold Recoveries**

Sample	Grind Size	Gravity Rec-y	CN Conc.	Leach Tail	Leach Rec-y	Head Grade	Recovery*
(#)	(P80, µm)	(%)	(g/L)	(g/t Au)	(%)	(g/t Au)	(%)
CN-7	77	NA	0.50	0.30	93.4	4.40	93.4

**Table 4: Total (Gravity and Leach) Gold Recoveries; Various Grind Sizes**

Sample	Grind Size	Gravity Rec-y	CN Conc.	Leach Tail	Leach Rec-y	Head Grade	Recovery*
(#)	(P80, µm)	(%)	(g/L)	(g/t Au)	(%)	(g/t Au)	(%)
CN-5	79	50.6%	0.35	0.31	88.9	4.66	93.3
CN-6	79	50.6%	0.25	0.38	87.6	4.66	91.8
CN-7	79	50.6%	0.50**	0.36	85.1	4.70	92.2

*\* Normalized Overall Au Recovery = Normalized Overall Au Extraction/100 \* (100 - gravity recovery) + gravity recovery*

*\*\* Oxygen addition*

### **QA/QC Procedures**

All core drilling conducted by Moneta was oriented. Drill core is cut with half sent to AGAT Laboratories Inc. (AGAT) for drying and crushing to -2 mm, with a 1.00 kg split pulverized to -75 µm (200#). AGAT is an ISO 17025 accredited laboratory. A 50 g charge is Fire Assayed and analyzed using an AAS finish for Gold. Samples above 10.00 g/t Au are analyzed by Fire Assay with a gravimetric finish and selected samples with visible gold or high-grade mineralization are assayed by Metallic Screen Fire Assay on a 1.00 kg sample. Moneta inserts independent certified reference material and blanks with the samples and assays routine pulp repeats and coarse reject sample duplicates, as well as completing third-party check assays at Activation Laboratories Ltd. SGS Canada Minerals Lakefield conducted the metallurgical test work at the SGS Lakefield, Ontario Laboratory. SGS Canada Inc. conforms to the requirements of ISO/IEC 17025 and is accredited by the Standards Council of Canada for the specific tests

undertaken. Gary O'Connor, FAusIMM is a qualified person under NI 43-101 and has reviewed and approved the contents of this press release.

### **About Moneta**

The Company holds a 100% interest in 6 core gold projects strategically located along the Destor-Porcupine Fault Zone in the Timmins Gold Camp with over 85 million ounces of past gold production. The projects consist of the Golden Highway, North Tisdale, Nighthawk Lake, DeSantis East, Kayorum and Denton projects. The Golden Highway Project covers 12 kilometres of prospective ground along the DPFZ of which 4 km hosts the current 43-101 mineral resource estimate comprised of an indicated resource of 556,500 ounces gold contained within 3.82 Mt @ 4.53 g/t Au and a total of 1,174,000 ounces gold contained within 8.47 Mt @ 4.31 g/t Au in the inferred category at a 3.00 g/t Au cut-off.

### **FOR FURTHER INFORMATION, PLEASE CONTACT:**

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The Company's public documents may be accessed at [www.sedar.com](http://www.sedar.com). For further information on the Company, please visit our website at [www.monetaporcupine.com](http://www.monetaporcupine.com) or email us at [info@monetaporcupine.com](mailto:info@monetaporcupine.com).

*This news release includes certain forward-looking information and forward-looking statements, collectively "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking statements are frequently identified by such words as "may", "will", "plan", "expect", "anticipate", "estimate", "intend" and similar words referring to future events and results. Forward-looking statements include, but are not limited to information with respect to the future performance of the business, its operations and financial performance and condition such as the Company's drilling program and the timing and results thereof; and the ability of the Company to finance and carry out its anticipated goals and objectives.*

*Forward-looking statements are based on the current opinions and expectations of management. All forward-looking information is inherently uncertain and subject to a variety of assumptions, risks and uncertainties, including the speculative nature of mineral exploration and development, fluctuating commodity prices, competitive risks and the availability of financing, as described in more detail in our recent securities filings available at [www.sedar.com](http://www.sedar.com). Actual events or results may differ materially from those projected in the forward looking-statements and we caution against placing undue reliance thereon. We assume no obligation to revise or update these forward-looking statements.*