

MacDonald Mines Identifies Copper-Cobalt Potential for the Scadding Deposit

TORONTO, May 15, 2019 -- MacDonald Mines Exploration Ltd. (TSX-V: BMK) ("MacDonald Mines" or the "Company") reports that a review of historical surface exploration data suggests that copper and cobalt are anomalous in the Scadding Deposit. The Scadding Deposit produced 914 kg of gold from 127,000 tonnes of ore grading 7.2 g/t between 1984 and 1990 (OFR 5771). The potential to discover new zones of gold-copper-cobalt mineralization on the Company's 10,647-hectares SPJ (Scadding-Powerline-Jovan) Project is significant.

Quentin Yarie, President and CEO of MacDonald Mines, stated, "We have observed that the historic Scadding Gold Deposit is anomalous in copper and cobalt. This metal association continues to support our IOCG model. The mineralization reported at the Scadding Deposit is similar to what BMK reported last year at the Brady Showing, 6 kilometres away (Figure 1). This suggests that the polymetallic mineralization could have a large footprint. IOCG systems typically host large tonnage low to medium-grade polymetallic gold-copper, and possible cobalt and make for highly profitable mines."

Historic grab samples taken on the showings around and within the Scadding Mine contain copper and cobalt ranging from trace to >1% copper (copper overlimits at 1% not determined) and trace to 0.32% cobalt (Table 1). Most of the historic grab samples with cobalt over 0.05% are located east of the main zones of mineralization and suggest that the main zones of cobalt mineralization are adjacent to the zones of the deposit that were mined. The cobalt-gold assemblage observed in historic grab samples with cobalt over 0.05% however suggests that gold mineralization persists in that under-explored zone of cobalt-gold mineralization. The reader is cautioned that grab samples are selective by nature and may not represent the true mineralization of the prospect. The reader is also cautioned that a qualified person has not done sufficient work to independently verify these values. These are historical values that may not be representative of the mineralization present at the Scadding Deposit.

The gold-copper-cobalt association at the Scadding Deposit appears to be like the metal association observed by MacDonald Mines at the Brady Showing located 6 kilometres east of the Scadding Deposit (Figure 1). The alteration hosting the gold-copper-cobalt mineralization at the Brady Showing appear to be comparable to those described historically in the Scadding Deposit. Channel samples taken by the Company at the Brady Showing contained:

- 4.31% copper, 4.42 g/t gold, 0.011% cobalt, 11.15 g/t silver and 0.013% nickel (11.5 g/t AuEq) over 3.6 metres;
- 3.44% cobalt, 3.81 g/t gold, 0.14% nickel, 0.59 % copper, and 3.79 g/t silver (53.26 g/t AuEq) over 1.5 metres.

The 6 kilometres separation between the Brady Showing and the Scadding Deposit suggests a large footprint for that polymetallic mineralization and the potential to discover new zones of gold-copper-cobalt mineralization on the company's 10, 647-hectares property.

Table 1 – Highlights from historical grab samples taken near and within the Scadding Deposit¹

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| X | Y | Company | Gold (g/t) | Cobalt (wt. %) | Copper (wt. %) | Au Eq (g/t) |
|--------|---------|-----------------------|------------|----------------|----------------|-------------|
| 529819 | 5166446 | Trueclaim Exploration | 8.55 | 0.32 | 0.56 | 12.11 |
| 529258 | 5166277 | Trueclaim Exploration | 8.2 | 0.02 | > 1 | > 9.87 |
| 529814 | 5166450 | Trueclaim Exploration | 6.76 | 0.12 | 0 | 7.77 |
| 529315 | 5166314 | Trueclaim Exploration | 2.78 | 0 | > 1 | > 4.28 |
| 529366 | 5166473 | Trueclaim Exploration | 3.39 | 0 | 0.36 | 3.93 |
| 529766 | 5166437 | Trueclaim Exploration | 1.8 | 0.2 | 0 | 3.49 |
| 529102 | 5166673 | Trueclaim Exploration | 2.12 | 0.01 | 0.66 | 3.19 |
| 529322 | 5166417 | Trueclaim Exploration | 1.45 | 0.01 | 0.55 | 2.36 |
| 529814 | 5166445 | Trueclaim Exploration | 1.16 | 0.01 | 0.57 | 2.10 |
| 529760 | 5166429 | Trueclaim Exploration | 1.32 | 0.01 | 0.33 | 1.90 |
| 529813 | 5166451 | Trueclaim Exploration | 0.058 | 0.07 | 0.39 | 1.24 |
| 529814 | 5166455 | Trueclaim Exploration | 0.22 | 0.01 | 0.57 | 1.16 |

The AuEq grades are calculated using metal prices from the London Metal Exchange on May 6, 2019 assuming 100% recovery for each metal: cobalt \$34,750US/tonne, copper \$6,180 US/tonne, gold \$1279 US/oz.

About the Scadding Deposit and the Southern Province geological systems

The Scadding Deposit is one of several polymetallic gold deposits, with variable copper and cobalt showings and occurrences, that are hosted in Ontario's Southern Province. Recent studies suggest that the mineralized systems of the Southern Province share affinities with iron oxide-copper-gold ("IOCG") systems. IOCG systems can host large tonnage and low to medium-grade

polymetallic gold-copper, and possible cobalt deposits.

Within the Southern Province, the Wanapitei area has been recognized as a prospective Canadian district for IOCG and modified-IOCG mineralization. The district features key indicators of IOCG mineralization:

- regional corridors of sodic alteration;
- an important period of granitic magmatism that is contemporaneous with the formation of the sodic alteration zones;
- the localized formation of iron oxide mineralization;
- potassic-iron alteration associated with polymetallic mineralization;
- and the presence of gold and copper in mineralized zones.

MacDonald Mines SPJ Project covers a strategic land position in the Southern Province. The position, covering corridors of albitization, increases the probability of discovering new zones of polymetallic gold mineralization, and provides additional opportunities to expand the known gold-copper-cobalt showings on the property.

Qualified Person

Quentin Yarie, P. Geo. is the qualified person responsible for preparing, supervising and approving the scientific and technical content of this news release.

About MacDonald Mines Exploration Ltd.

MacDonald Mines Exploration Ltd. is a mineral exploration company headquartered in Toronto, Ontario focused on gold exploration in Canada.

The Company's common shares trade on the TSX Venture Exchange under the symbol "BMK".

To learn more about MacDonald Mines, please visit www.macdonaldmines.com

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¹ *Corriveau, L., 2007, Iron oxide-copper-gold deposits: a Canadian perspective, in: Goodfellow, W.D., (ed.), Mineral deposits of Canada: a synthesis of major deposit-types, district metallogeny, the evolution of geological provinces, and exploration methods: Geological Association of Canada, Mineral Deposits Division, Special Publication 5, p. 307-308.*

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A photo accompanying this announcement is available at <http://www.globenewswire.com/NewsRoom/AttachmentNg/71064557-5d46-4c3d-b89d-21a314b8a5fb>