

MacDonald Mine Drills 14.04 g/t Gold over 4.21 Metres at its SPJ Property

TORONTO, Oct. 07, 2019 -- MacDonald Mines Exploration Ltd. (TSX-V: BMK) ("MacDonald Mines", "MacDonald" or the "Company") announces results from the second hole of its on-going exploration program at the Company's SPJ Property, 40 kilometres east of Sudbury, Ontario. The second hole was collared 35 metres from the previously reported SM-19-001 ([see Sept. 26, 2019 News Release](#)) in the North Zone of the Scadding Deposit. Two distinct zones of high-grade mineralization were intersected (Table 1): **8.56 g/t gold over 7.63 metres**, including **14.04 g/t gold over 4.21 metres**, and **3.21 g/t gold over 15.29 metres**, including **23.15 g/t gold over 0.87 metres**.

The Company has expanded its exploration program at the SPJ Property beyond the current and on-going drill program at the Scadding Deposit. Six (6) holes have been completed to date and assay results will be announced as they are received.

Table 1. Highlights from hole SM-19-002 include two (2) distinct zones of high-grade gold mineralization:

Hole	From (m)	To (m)	Length (m)*	Gold (g/t)	X	Y	Z	Az	Dip
SM-19-002	20.2	27.83	7.63	8.56	529181	5166726	306	245	49
	Including								
	23.0	27.21	4.21	14.04					
	32.34	47.63	15.29	3.21					
	Including								
37.0	37.93	0.93	13.44						
	43.15	44.02	0.87	23.15					

* Assays results presented over core length and are estimated to represent between 75 and 85% true width. Additional drilling is necessary to define the geometry of the intersected zones of gold mineralization.

Highlights from other completed drill holes include:

- Observation of **visible gold** in holes SM-19-003, SM-19-004 and SM-19-005;
- Observation in **SM-19-005** of **flecks of visible gold** at 49 metres, 50 metres, 73 metres, and 106 metres depth.

Quentin Yarie, MacDonald's President and CEO commented: *"These results support our model of multiple, thick zones of high-grade gold mineralization at Scadding. As we target these stacked zones of mineralization in our on-going drilling program, we've observed visible gold in four discrete locations down the hole in SM-19-005, located 60 metres down-dip of hole SM-19-002. This indicates that the gold-rich zones form a mineralized envelope that appears to be wider than suggested by historic drilling and that the mineralized system likely extends to depth."*

"Also, our recent sampling program within and beyond the Scadding Mine area was indicative of a gold-rich Iron-Oxide-Copper-Gold system. This can potentially expand, beyond what was previously thought, the size and footprint of mineralization on the property. We have expanded our exploration program to include further prospecting, stripping, and trenching of these new areas, along with the on-going drill program to expand the Scadding Deposit."

Figure 1. is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/f58f8e20-17de-4104-b313-5131c042d21e>

Figure 2. is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/b5e76745-d458-44f5-8532-c1390f7b918b>

Fall 2019 Exploration Program

The objective of the current 2,000-metres drill program is to confirm and expand the high-grade gold zones of the Scadding Deposit. Six (6) holes were planned and drilled in the North Zone of the deposit. Drilling in the North Zone covered a strike length of 100 metres and a down-dip extension of 150 metres. The Zone remains open in all directions.

Following the completion of drilling in the North Zone, MacDonald is testing the drilling gaps between the North and the Central zones of the Scadding Deposit. The Company will then explore the extension of the high-grade gold zones of the Central Zone.

Based on results to date, MacDonald's exploration program on the SPJ Property has been expanded to include prospecting and trenching in addition to the on-going drill program.

MacDonald will begin a mechanized stripping program in areas where the Company's recent prospecting and surface mapping uncovered zones of chlorite and magnetite alteration that were never drilled before. Nineteen (19) grab samples were collected last month and assay results are pending. These zones, located outside the known footprint of the Scadding Deposit, have the potential to expand the mineralized zone.

SM-19-002 intersected two (2) gold zones composed of iron-rich chlorite with variable disseminated sulfides and locally abundant specks of visible gold. The hole was planned near the historic holes CR-4, CR-8, and JS-02. In contrast to the historic holes, SM-19-002 was drilled closer to perpendicular to the predicted dip direction of the chlorite zones. This resulted

in the intersection of a stack of high-grade gold zones that is a better representation of the width of the mineralized system.

On-site Quality Assurance/Quality Control (“QA/QC”) Measures

Drill core samples were transported in security-sealed bags for analyses to Bureau Veritas, in Timmins, Ontario. Individual samples are labeled, placed in plastic sample bags and sealed. Groups of samples are then placed into durable rice bags and then shipped. The remaining coarse reject portions of the samples remain in storage if further work or verification is needed.

MacDonald has implemented a quality-control program to comply with best practices in the sampling and analysis of drill core. As part of its QA/QC program, MacDonald inserts external gold standards (low to high grade) and blanks every 20 samples in addition to random standards, blanks, and duplicates. All samples over 10 g/t gold or the samples with abundant visible gold are analysed by 1Kg screen metallic.

SPJ Property highlights

- 100% ownership
- 17,720 hectares in excellent mining jurisdiction and close to infrastructure
- Hosts the high-grade past producing Scadding Gold Mine
- Evidence of polymetallic mineralization at the Scadding Deposit indicative of IOCG potential
- Significant gold, cobalt-copper, silver, nickel and rare earth showings outside of the Scadding Deposit footprint
- Optimize Group contracted to redevelop the Scadding Deposit

Historically, the Scadding Mine produced 914 kilograms of gold from 127,000 tonnes of mineralized material grading 7.2 g/t (OFR 5771). MacDonald’s reinterpretation of the geological model at the Scadding Deposit and larger SPJ property indicates that it could host a gold-rich Iron-Oxide-Copper-Gold deposit and that significant gold structures may have been missed by previous operators’ drilling campaigns (2009-2011).

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 recently acquired the high-grade past-producing Scadding Gold Mine and is focused on developing its large SPJ Project in Northern Ontario.

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

For more information, please contact:

Quentin Yarie, President & CEO, (416) 364-4986, qyarie@macdonaldmines.com

Or Mia Boiridy, Investor Relations, (416) 364-4986, mboiridy@macdonaldmines.com

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This News Release contains forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “may”, “should”, “expects”, “plans”, “anticipates”, “believes”, “estimates”, “predicts”, “potential” or “continue” or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors that may cause our or our industry’s actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Although the Company believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.