



## MacDonald Mines Exploration Ltd.

### **MacDonald Mines Files NI 43-101 Technical Report for its SPJ Gold Project and Provides Update on its Ongoing Drilling and Exploration Program**

#### **News Release**

**Toronto, Ontario – October 18, 2019** - MacDonald Mines Exploration Ltd. (TSX-V: BMK) (“MacDonald Mines”, “MacDonald” or the “Company”) announces that it has filed on SEDAR a National Instrument 43-101 (“NI 43-101”) technical report for the SPJ Gold Project, 40 kilometres east of Sudbury, Ontario. The report highlights recent high-grade gold results from the ongoing drill program and outlines recommended exploration work going forward. New programs and further results will be announced as they are finalized or received.

Quentin Yarie, MacDonald’s President and CEO commented: *“The technical report for the SPJ Project includes the recent high-grade gold discoveries made in our on-going drill program there and details the potential for further gold mineralization on the whole SPJ property. The report also illustrates how we have been able to capitalize on past drilling and data to discover new gold mineralization with a goal to transition back into an operating mine”.*

#### **Summary of the NI 43-101 Technical Report:**

To date, MacDonald Mines’ fall 2019 drill program has confirmed the presence of high-grade gold in the North Zone of the Scadding Deposit (Table 1). Past explorers did not understand the structures that control mineralization there. The Company’s re-interpretation of the Scadding Deposit as an Iron-Oxide-Copper-Gold Deposit can expand the mineralized zones of the deposit.

Gold was first discovered in the Wahnapiatae Gold Region in the late 1800s. The Scadding Mine, located on the SPJ property, was discovered in 1973. Three small pits were mined in 1984 and a spiral ramp was constructed for mining from 1987 to 1988. Production at Scadding totalled 140,000 t gold at 7.22 g/t (Gates, 1991). Historical drill results also indicate that high-grade gold mineralization occurs in areas that have not been mined.

The primary objective of MacDonald Mines’ current exploration program is to demonstrate that a sizeable deposit exists on the SPJ Project. The program will be realized in 2 phases:

**Phase 1 - Understand the attributes of the Scadding Deposit's high-grade gold mineralization**

- Evaluate drilling completed in the North and Central Zones of the Scadding Deposit.
- Continue the 2019 drilling program to explore the extension of the high-grade gold zones of the South, E-W and newly discovered zones of the Scadding Deposit.
- Expand the prospecting program to cover areas surrounding the Scadding Deposit.
- Continue a trenching program to mechanically strip areas where the Company's recent compilation of historic data, uncovered potential zones of chlorite and magnetite alteration that were never drilled before. These zones, located outside the known footprint of the Scadding Deposit, have the potential to expand the mineralized zone.

**Phase 2 - Find/expand the high-grade gold mineralization in the Scadding Deposit**

- Conduct a geophysical survey that is optimized to detect mineral assemblages associated with polymetallic gold mineralization in the Scadding Deposit and in other prospective areas of the Project.
- Initiate an exploration drilling program to extend the 5 zones of the Deposit and the potential discoveries identified with the geophysical survey and geological modelling.

**Table 1. Assay Highlights from holes reported to date**

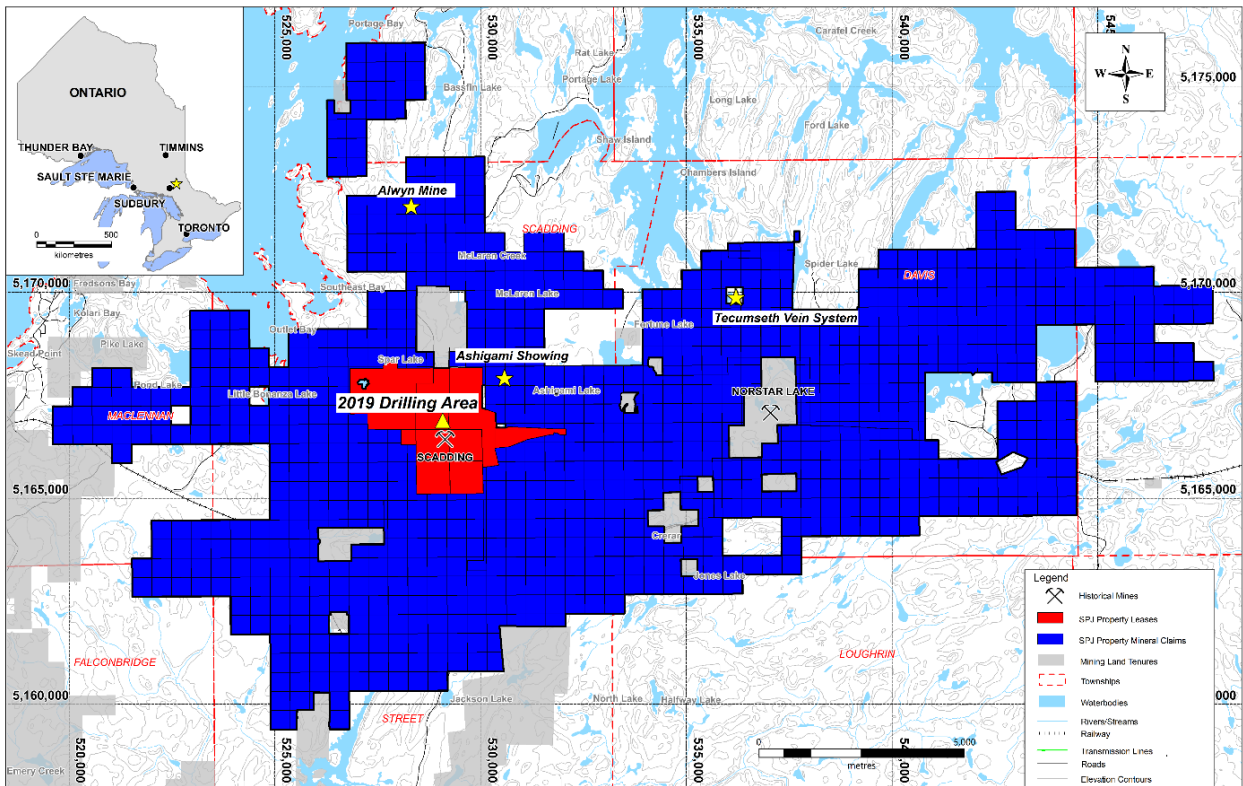
Drill Hole ID	From (m)	To (m)	From (m)	To (m)	Length (m)*	Gold (g/t)
SM-19-001	8.6	15.9			7.3	11.12
	Including		14.9	15.9	1	77.16
	25.2	30.7			5.5	5.73
	Including		27.3	28.8	1.5	17.17
	37.8	50.1			12.3	52.02
	Including		45.9	49.9	3	210.23
SM-19-002	20.2	27.83			7.63	8.56
	Including		23	27.21	4.21	14.04
	32.34	47.63			15.29	3.21
	Including		37	37.93	0.93	13.44
	Including		43.15	44.02	0.87	23.15
SM-19-003	27.88	34.02			6.14	11.1
	Including		27.88	30.55	2.67	11.39
	Including		31.42	33	1.58	23.32
	127.07	128.87			1.8	3.29
SM-19-004	11.2	14.2			3	5.15
	Including		11.2	13.2	2	7.4
	73.75	75.12			1.37	3.03
	82.77	84.75			1.98	9.02
	Including		83.91	84.75	0.84	20.38

\* Assays results presented over core length and are estimated to represent between 65 and 85% true width. Additional drilling is necessary to define the geometry of the intersected zones of gold mineralization.

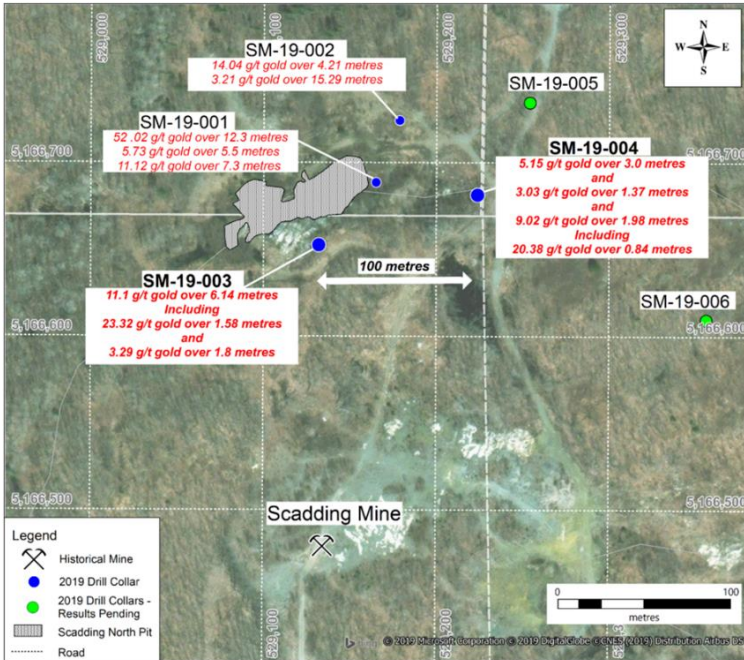
**Table 2. SPJ Project drill hole information**

Drill Hole ID	Collar location			Hole Attributes		
	X	Y	Z	Length	Az	Dip
SM-19-001	529164	5166689	304.0	96	280	-84
SM-19-002	529181	5166726	305.5	105	245	-49
SM-19-003	529131	5166654	312.4	149	245	-48
SM-19-004	529224	5166681	309.6	134	250	-52

**Figure 1. MacDonald Mines SPJ Property**



**Figure 2. Location and assay highlights of reported drill holes to date**



### **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 1 kilogram metallic screen.

### **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](http://www.macdonaldmines.com)

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