

MacDonald Mines Outlines its Summer 2019 Exploration Plans for the Scadding Deposit and the Larger SPJ Project

TORONTO, June 27, 2019 -- MacDonald Mines Exploration Ltd. (TSX-V: BMK) ("MacDonald Mines" or the "Company") announces the first phase of its exploration program at its SPJ IOCG property near Sudbury. The exploration program will consist of 1,500 to 2,000m of oriented diamond drilling on the Scadding Deposit and regional prospecting on the larger SPJ property. The objectives of MacDonald's 2019 drilling program are to confirm and expand zones of high-grade gold mineralization in the Scadding Deposit (Table 1 and Figure 1) and to understand the geological controls on mineralization.

Quentin Yarie, President and CEO of MacDonald Mines stated, "Our first exploration program of the Scadding Deposit will focus on zones of high-grade mineralization. We believe we are in an under-explored IOCG district that is now being recognized by the academic community. Historic drilling indicates that sizeable gold zones with high-grade mineralization, open along strike and depth, exists in the deposit but that the challenging and complex geology classically associated with IOCG deposits hindered previous exploration."

A Paradigm shift in Exploration

Multiple poly-metallic showings and deposits have been discovered within the Huronian sedimentary rocks in the Sudbury-Wanapitei area (SPJ Property). Most of these were briefly exploited at surface without properly being explored. For this reason, the formation of the Au-Cu-Co mineralization remains poorly understood. Some past and present explorers claim that the mineralization is related to the Sudbury impact because it occurs in brecciated rocks that have similar metals to the Sudbury Igneous Complex. However, the Geological Survey of Canada has recently identified the Sudbury-Wanapitei area as a promising district for iron oxide-copper-gold (IOCG) exploration. Additionally, Schandl and Gorton (2007) concluded that the Scadding Mine is a modified IOCG deposit. Key indicators of IOCG deposits the company has observed at the SPJ include:

- regional corridors of sodic alteration;
- corridors of brecciation
- the localized formation of iron oxide mineralization;
- potassic-iron alteration associated with polymetallic mineralization;
- and the presence of gold and copper in mineralized zones.

The lack of historical understanding has been directly observed at multiple areas on the SPJ property. Using an IOCG exploration model will greatly increase exploration success in the Sudbury-Wanapitei area. MacDonald Mines' technical team is led by Dr. Jean-Francois Montreuil who has an extensive background in IOCG research and exploration. Jean-Francois completed his PhD on IOCG deposits in the Great Bear Magmatic Zone, Northwest Territories and continues to research IOCG deposits around the world.

Figure 1a – Location of the SPJ Property

Figure 1a accompanying this announcement is available

at <https://www.globenewswire.com/NewsRoom/AttachmentNg/db160c33-2711-41a6-93c4-b2b45e2446f4>

Table 1. Historical drill holes assay results in the different zones of the Scadding Deposit (*Technical Report NI 43-101 on Scadding Gold Property, Scadding Township, District of Sudbury Ontario, L.D.S. Winter, P. Geo., June 2009*)

Organization	Zone	Hole #	Year	From	To	Length (m)	Grade Gold g/t	Report Reference
D.R. Watt	Central Zone	W-29	1979	91.04	123.2	32.2	12.0	41110NE0185
Northgate Exploration	Central Zone	N-10	1980	87.66	101	13.4	20.3	41110NE0185
Trueclaim	North Zone	TRM-10-07	2010	52.35	71.64	19.3	12.9	20000006269
Northgate Exploration	Central Zone	N-6	1980	87.66	101	13.4	20.3	41110NE0185
Currie Rose	New Zone	CR-25	1997	53.26	58.26	5.0	42.7	41110NE2005
Trueclaim	South Zone	TRM-11-10	2010	53	66	13.0	6.3	Moss et al, 2011.
Currie Rose	North Zone	CR-2	1997	11.28	16.01	4.7	55.1	41110NE2005
Currie Rose	North Zone	CR-3	1997	6.49	11.59	5.1	30.5	41110NE2005
Northgate Exploration	Central Zone	N-11	1980	57.79	67.18	9.4	5.9	41110NE0185

Figure 1 – Plan map of the Scadding Deposit showing some of the drilling highlights in the targeted areas of the Scadding Deposit for the validation drilling program

Figure 1 accompanying this announcement is available at

<https://www.globenewswire.com/NewsRoom/AttachmentNg/be15cecf-0ae1-49e2-ab4c-91edfa6146e4>

Following this drilling program and armed with a better understanding of the geology of the Scadding Deposit, MacDonald anticipates being able to conduct an aggressive resource definition program.

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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¹Technical Report NI 43-101 on Scadding Gold Property, Scadding Township, District of Sudbury Ontario, L.D.S. Winter, P. Geo., June 2009

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