

MacDonald Mines Announces Further Assays from the Scadding Deposit with 24 g/t Gold over 0.65 m, 16.1 g/t over 1.81 m, 10.2 g/t over 1.1 m and 1.5 g/t over 25.15 m including 12.8 g/t over 1.47 m

TORONTO, May 11, 2020 -- MacDonald Mines Exploration Ltd. (TSX-V: BMK) ("MacDonald Mines", "MacDonald" or the "Company") announces further assay results from its Winter 2020 drilling program at the SPJ Property, 40 km east of Sudbury, Ontario. Highlights include: Hole 31 intersected 25.15 m of 1.5 g/t gold including 12.8 g/t gold over 1.47 m and 7.8 g/t gold over 1.35 m. Hole 33 intersected 24 g/t gold over 0.66 m and 8.6 g/t gold over 0.74 m. Hole 34 had an intercept of 10.2 g/t gold over 1.1 m at around 100-metres depth, 64 metres southeast of the high-grade intersection in SM-20-026 ([see February 27, 2020 News Release](#)). The Company remains well funded and is set to resume its 2020 resource definition drilling program in the coming days with strict health protocols put in place.

Results are indicating that gold mineralization in the North Pit area remains open in all directions and that the thickness of the mineralization zones remains relatively constant with increasing depth. To date, mineralization in the North Pit area has been traced over more than 200 metres down-dip and up to 150 metres laterally along strike (Figure 1).

Figure 1. Cross-section of drilling results in the Bristol/Monaco Structure is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/457f0774-3cbb-46a2-a822-130637ddbfd4>

Quentin Yarie, MacDonald's President and CEO stated, "*The drilling in the North Pit area continues to deliver near-surface gold intersections and shows the stacking of multiple zones of mineralization. We are systematically defining the geometry and extensions of the high-grade gold mineralization in the Bristol Structure and these initial results from the definition drilling program continue to indicate the continuity of the multiple zones of high-grade gold mineralization in the North Pit Area.*"

Re-Assaying of Intersections with Visible Gold

MacDonald has re-analyzed 2020 drilling intersections in which visible gold was observed. The Company's practice to eliminate sampling bias is to always send the same side of the split core for assay – regardless of where any potential visible gold is noted. In those intersections where visible gold was present, the Company followed the same protocol utilized for hole 22 (*see Feb. 20, 2020 News Release*) and sampled the other side of the core to get a better representation of gold grades in those intersections. Both sets of assays (where applicable) are shown in Table 1.

MacDonald also noticed that the procedures used in sample preparation could considerably impact the detection of gold when gold occurs as coarse nuggets in the sample. Soft gold nuggets tend to get lost in metallic screen analyses, if the samples are crushed too finely, because the gold gets smeared along the walls of the pulverizer. To improve the recovery and analysis of the coarse nuggets of gold present in the samples, the samples were crushed to a coarser size fraction prior to metallic screen analyses. Quarter core sampling is not consistent with CIM Mineral Exploration Best Practice Guidelines and will not be implemented by MacDonald on a regular basis.

Table 1. Assay highlights from reported holes

Hole	From (m)	To (m)	Length* (m)	Visible Gold Observed	Gold (g/t)	
					1 st assay	2 nd assay
SM-20-028A	37.30	38.55	1.25		4.2	
SM-20-029	37.65	40.10	2.45		0.8	
SM-20-030	93.55	94.88	1.33		0.6	
	99.31	100.25	0.94		0.6	
SM-20-031	61.35	62.35	1.00		5.9	
	94.30	119.45	25.15		0.5	1.5
	including					
	94.30	95.77	1.47	yes	2.0	12.8
	101.34	107.10	5.76	yes	0.61	1.1
SM-20-032	118.10	119.45	1.35	yes	4.2	7.8
	35.04	36.85	1.81	yes	16.1	
	including					
SM-20-033	35.04	35.54	0.50	yes	40.7	
	64.70	66.10	1.40	yes	3.7	15.9
	including					
	64.70	65.36	0.66	yes	0.65	24.0
	65.36	66.10	0.74	yes	6.4	8.6

SM-20-034	114.49	118.62	4.13	yes	3.7	3.4
	Including					
	116.25	117.35	1.10	yes	10.2	9.38
SM-20-035	132.30	137.00	4.80	yes	4.4	4.8
	including					
	135.45	136.13	0.68	yes	14.7	
SM-20-036	137.40	138.39	0.99		3.4	<i>pending</i>

* Assay results presented over core length. They are estimated to represent 75-85% true width.

Table 2. Coordinates of reported holes

Hole ID	Easting	Northing	Elevation	Azimuth	Dip	Depth (m)
SM-20-027	529210	5166742	308.6	245	-53	115
SM-20-028A	529165	5166662	314.2	260	-52	187
SM-20-029	529151	5166653	312.5	236	-46	103
SM-20-030	529241	5166686	311.9	247	-58	154
SM-20-031	529241	5166686	311.9	246	-72	100
SM-20-032	529253	5166734	307.3	243	-61	166
SM-20-033	529253	5166734	307.3	243	-79	181
SM-20-034	529271	5166710	306.5	247	-69	208
SM-20-035	529271	5166710	306.5	223	-55	217
SM-20-036	529304	5166682	309.3	245	-65	220

Hole SM-20-027 was testing the continuity of the Bristol/Monaco Structure north of SM-20-026. Hole SM-20-027 successfully intersected two zones of strong chlorite alteration characteristic of the Scadding Deposit, but these zones of chlorite alteration did not contain significant gold mineralization. Hole SM-20-027 indicates that the Bristol/Monaco Structure remains open to the north where additional drilling could expand high-grade gold mineralization.

Hole SM-20-028A was testing the shallower part of the Bristol/Monaco Structure. The hole successfully intersected the structure, but the chlorite zone was deformed and sheared by an overprinting deformation which may have resulted in a pinching of the zone.

Hole SM-20-029 was testing the southern extension of the chlorite zone intersected in SM-19-003. The hole successfully intersected the chlorite and shows that mineralization remains open to the south.

Hole SM-20-030 was testing the continuity of the chlorite in the Bristol/Monaco Structure. The hole successfully intersected zones of chlorite alteration in the projected extension of the structure, supporting the continuity of the zone of chlorite alteration hosting gold mineralization.

Hole SM-20-031 was testing the deeper continuity of high-grade mineralization in the Bristol/Monaco Structure and successfully intersected multiple intervals of mineralized chlorite alteration with visible gold in the footprints of the Bristol/Monaco Structure. Hole SM-20-31 indicates that mineralization remains open and continues to the SE and that the zone of mineralization can remain of considerable thickness going deeper in the system.

Holes SM-20-032 to SM-20-036

These holes were testing the down-dip and lateral continuity of the zones of chlorite alteration and potential gold mineralization in the Bristol/Monaco Structure. The holes successfully indicated that the chlorite alteration zones of the structures extend at depth and remain mineralized. Hole SM-19-032 also intersected a zone of high-grade gold mineralization in the Daytona Structure, which is forming a splay from the Bristol/Monaco structural corridor.

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

Drill core samples were transported in security-sealed bags for analyses to SGS in Sudbury, 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 re-analyses of the samples was conducted partially by SGS, and then by Actlabs in Ancaster, Ontario. The samples transported to Actlabs were dropped in rice bags with security seals by Manitoulin Transport. The remaining coarse reject portions of the samples remain in storage in case 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.

SPJ Property Highlights

- 100% ownership
- 18,340 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

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).

Figure 2. MacDonald Mines SPJ Property is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/ad0e27eb-9a70-46c4-8bd8-7bcf61a5af3f>

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 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

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