MacDonald Mines Assays of the Oxide Sands results in Significant Increase in Gold Content – Individual Samples Contain up to 6 g/t Gold

News Release
May 16, 2017

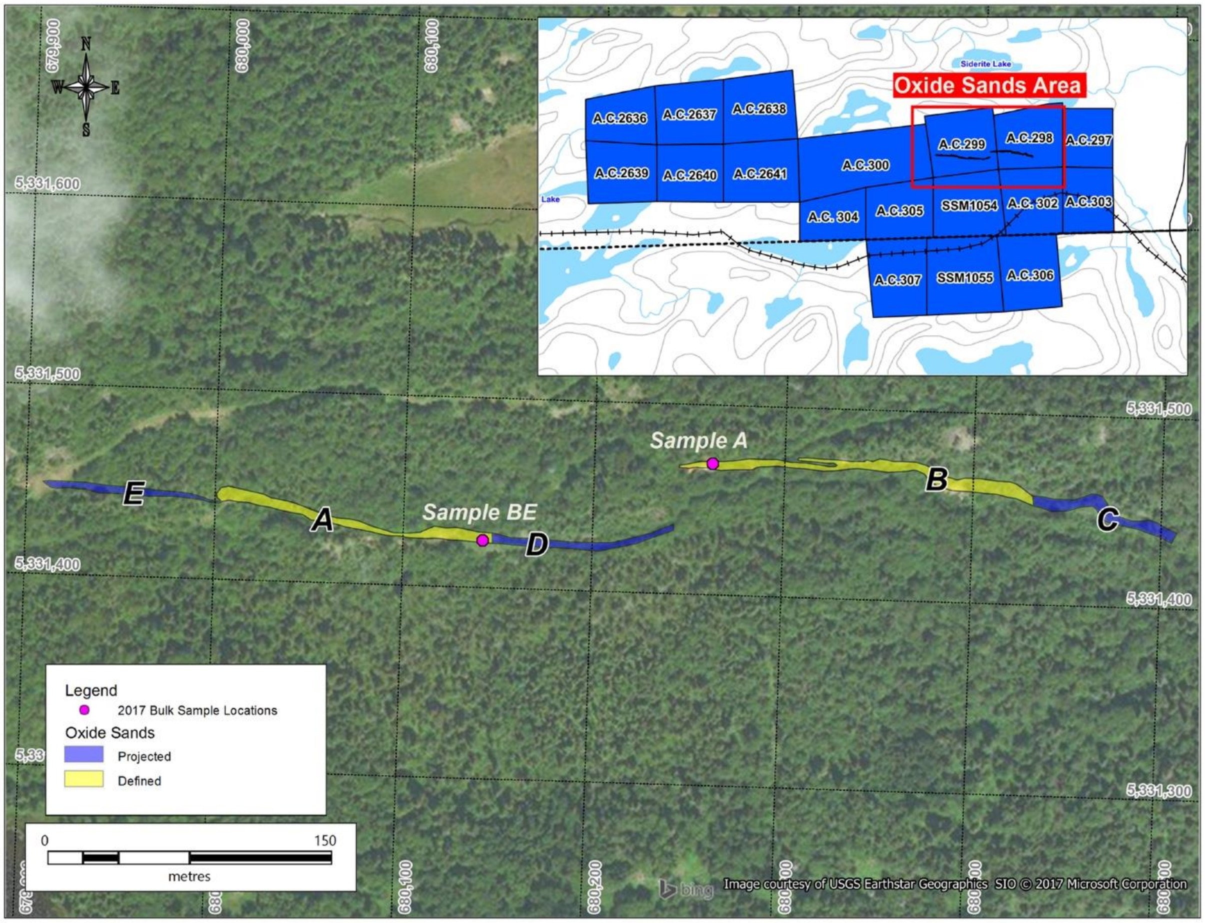
Toronto, Ontario – May 16, 2017 - MacDonald Mines Exploration Ltd. (TSX.V: BMK) ("MacDonald Mines", "MacDonald" or the "Company") has received results for its initial sampling program of the Oxide Sands at the Wawa-Holdsworth Project ("Holdsworth"), located near Hawk Junction, 25 kilometres northeast of Wawa, Ontario.

Highlights include:

- Average grade of 2.95 g/t gold for Sample A and 5.45 g/t gold for Sample BE (Figure 1);
- For Sample A, the new MacDonald result shows a respective gold grade difference of +246% and +247% compared to the results for the same location reported by Hawk Junction Capital Corp (1.20 g/t gold)in 2002[1] and Noble Minerals (1.19 g/t gold)in 2009; and
- For Sample BE, the new MacDonald result shows a gold grade difference of +641% compared to the grade estimation results reported for the same location by Hawk Junction Capital Corp (0.85 g/t gold) in 2002.

Quentin Yarie, MacDonald's President and CEO commented*: "Results obtained using robust assay methods suggest that the grade of the Oxide Sands may have been historically underestimated. This supports Sears' 1989 observation that elevated sulfur in some of the material may result in the underestimation of the gold grade by standard fire assay methods if no mitigation methods are implemented[2]. MacDonald's results are promising and we look forward to advancing the Wawa-Holdsworth project further."*

Figure 1. Oxide Sands sample location



Results from the Oxide Sands Sampling

During the spring of 2017, to validate their historically reported gold content, the Company started a targeted sampling program of the Oxide Sands. Two locations were selected for this testing program and sampling at each locations was done by taking >75 kg representative samples of the exposed Oxide Sand material at the historic excavations. Representative fractions of these sands were then sent for analyses.

Results indicate that the gold content of the Oxide Sands may have been underestimated by the previous operators as MacDonald's sampling indicates significant increases of the gold content compared to the historic results and grade estimations from the same locations reported by Noble Minerals in 2009 and Hawk Junction Capital Corp. in 2002.

Table 1 – Results from the Oxide Sands sampling compared with historic results

BMK Sample number	Sample	Gold (g/t)	Average Grade (g/t)	Grade (Hawk Junction - 2002)[1]	Grade (Noble Minerals - 2009)
17261		3.09			
17262	A	2.71	2.95	1.2	1.19
17263		3.05			
17264	BE	6	5.45	0.85	N/A
17265		4.9			

Wawa-Holdsworth Project Details

The Project is comprised of 19 contiguous patented mining claims covering approximately 304 hectares. Sixteen of these are located in the extreme southern part of Corbiere Township and the remaining three extend into the northern part of Esquega Township, in the Wawa Area of Northern Ontario.

Project Overview

Historic work by previous operators defined three gold targets on the Wawa-Holdsworth Project:

- Greenstone-hosted quartz-carbonate vein deposit (Soocana Vein System);
- BIF-hosted gold deposits (gold-bearing pyrite zones in an Algoma-type iron formation);
- Gold-bearing Oxide Sands developed from the weathering of the auriferous Pyrite Zones.

MacDonald Mines has identified the Oxide Sands as a short-term target for gold production. The Oxide Sands are interpreted to be derived from the weathering of an auriferous and pyritized Algoma-type iron formation that, so far, has been traced on the property over a 2 km-long strike length. The mineralized sands appear to reach a depth of at least 8 metres.

The soft and relatively unconsolidated oxide sands material appears to be amenable to being extracted like an aggregate. The area's shallow overburden, the proximity to labour and equipment and the easy access to the site should result in very inexpensive mining costs should the Company delineate a large enough deposit.

Preliminary metallurgical testing conducted by previous operators on composite samples recovered, without crushing, between 69% and 98.7 % gold and the Company has already initiated metallurgical testing of the Oxide Sands to achieve the highest possible gold and silver recovery. Results should be made available this summer.

The Company is currently ramping up its sampling program to better define the Oxide Sands and will continue to prepare for their potential extraction. The near-term exploitation of the Oxide Sands will provide the Company with good cash flow to further advance exploration of the other gold targets on the property.

On-site Quality Assurance/Quality Control ("QA/QC") Measures
Grab and channel samples are transported in security-sealed bags for Fire Assay/Atomic Absorption (Au 50gm) analyses at TSL Laboratories in Saskatoon, Saskatchewan. Individual samples are labeled, placed in plastic sample bags and sealed. Groups of samples are then placed into durable rice bags that are then shipped. The remaining coarse reject portions of the samples remain in storage at TSL Laboratories in Saskatoon if further work or verification is needed. One Certified Reference Material was included with the samples.

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 and silica exploration in Canada. The Company has built a portfolio of safe-jurisdiction, infrastructure-rich projects that demonstrate the greatest market potential for return. The Company is aggressively advancing its highly prospective Wawa-Holdsworth Project and recently secured 100% interest in the Holdsworth property.

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

[1]*Report on the Holdsworth Gold Prospect, Wawa Area, Ontario for Hawk Junction Capital Corp., Seymour M. Sears P.Geo., October 2002.*

[2] *Summary Report on a 1988 Work Program on the Holdsworth Property of Reed Lake Exploration Ltd., Seymour M. Sears, April 1989.*

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.