TORONTO, ONTARIO--(Marketwired - May 8, 2017) - MacDonald Mines Exploration Ltd. (TSX VENTURE:BMK) ("MacDonald Mines", or the "Company") announces that it has contracted Tundra Airborne Surveys Ltd. ("Tundra") to conduct an airborne geophysical survey of its Wawa-Holdsworth Project, located 25 km northeast of Wawa, Ontario.

Quentin Yarie, MacDonald's President and CEO commented*: "The airborne geophysical survey will allow us to quickly evaluate the extent of the Oxide Sands so we can focus the upcoming field season on exposing and mapping as much of the Oxide Sands as possible and assess their economic viability. The survey will also provide structural information on the gold-bearing quartz-carbonate veins that are hosted within the greenstones."*

The survey is expected to start in mid-May with the final maps and report submitted to MacDonald Mines 3 weeks after survey completion.

Wawa-Holdsworth Project Highlights

- Approximately 285 hectares, 20 kilometres northeast of the town of Wawa
- [1]8 fee simple absolute patented claims, includes surface and mining rights
- Neighbouring Argonaut's Magino Gold Project[2] & Richmont's Island Gold Mine[3]
- Numerous gold showings with diversified mineralization styles occurring in a 500 metres-wide deformation corridor
- Year-long road access and easy access to rail, road, electrical power, labour force and suppliers

Overview of the Wawa-Holdsworth Project

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.

In 2002, a detailed and systematic sampling of the Oxide Sands was conducted over a strike length of 332.5 metres. A composite of 23 panels over the 332.5 metres returned an average gold grade of 3.45 g/t and an average silver grade of 29.99 g/t[4]. Preliminary metallurgical testing conducted by previous operators on composite samples recovered, without crushing, between 69% and 98.7 % gold.

Earlier this year, MacDonald Mines launched a trenching program to map and confirm the Oxide Sands' strike length and thickness. The Company also initiated a bulk sampling program and commenced metallurgical testing of the Oxide Sands to achieve the highest possible gold and silver recovery.

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.

Following spring breakup, the Company will ramp 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.

Administration

Following the Annual General Meeting of Shareholders on May 4, 2017, the Board of Directors approved the following executive and committee appointments:

- Quentin Yarie as President and Chief Executive Officer
- Joseph Heng as Chief Financial Officer
- Tara Gilfillan as Chairperson
- Tara Gilfillan, Kevin Tanas and Gordon McKinnon as members of the Audit, Compensation and Governance Committee

The Company also announces that it has granted an aggregate of 3,366,500 stock options to directors, officers, employees and consultants. These stock options were issued in accordance with the provisions of the Company's stock option plan and are subject to approval of the TSX Venture Exchange. Each stock option entitles the holder to purchase one common share of the

Company at an exercise price of $0.175 for a five-year period.

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 acquired a 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.

[1] Technical Report on the Holdsworth Project, Holdsworth Property, Wawa, Ontario, Canada, Q. Yarie, Dec. 20, 2016.

[2] Magino Gold Project - Indicated Gold Resources (inclusive of Reserves): 4.07M oz; Inferred Gold Resources: 1.06 Moz (http://www.argonautgold.com/gold_operations/magino/)

[3] Island Gold Mine - Proven and Probable Gold Reserves: 752,200 oz; Measured and Indicated Gold Resources (exclusive of Reserves): 91,450 oz; Inferred Gold Resources : 995,700 oz (https://www.richmont-mines.com/English/operations/production/island-gold-mine/default.aspx)

[4] Report on the Holdsworth Gold Prospect, Wawa Area, Ontario, Seymour M. Sears, P.Geo., October 2002.

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.

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