TORONTO, ONTARIO--(Marketwired - Aug. 1, 2017) - <u>MacDonald Mines Exploration Ltd.</u> (TSX VENTURE:BMK) ("MacDonald Mines", the "Company", or "BMK") is pleased to provide an update on the on-going exploration program on the Oxide Sands at its Wawa-Holdsworth Project (*Figure 1*).

Highlights from the trenching Program:

- Oxide Sands observed in trenches over a strike of 1.1 km between TR-600 and TR-1700, expanding the known trend of Oxide Sands by more than 500 metres (Figure 1);
- 30 trenches completed along the main Oxide Sands trend and 10 trenches sampled;
- 325 trench samples sent for assay;
- > 2km geophysical target (Max-Min anomaly) and the Oxide Sands correlate well; and
- Similar geophysical anomalies parallel to the main Oxide Sands trend suggest additional zones of Oxide Sands.

Quentin Yarie, MacDonald's President and CEO commented: "as the trenching program progresses, we are encouraged by the visual indicators showing the trend of the Oxide Sands has almost doubled. The geophysics has mapped the sands as anticipated and has provided us with a robust exploration tool to both expand and define additional zone of Oxide Sands on the property."

Oxide Sands Trenching Program

The trenching program of the Oxide Sands is centered on a favorable geophysical anomaly (Max-Min). The trenches are spaced 25 or 50 metres along the trend of the Oxide Sands; each trench is dug, labelled, and sampled at a set interval, with each sample location being photographed and differential GPS reading taken. The company expects to receive the initial precious metal results for the trenching program in the next 2 weeks. The trenching program has solidified spatial association between the geophysical anomaly and the Oxide Sands units.

MacDonald Mines Awards the Drilling Contract for the Oxide Sands

Major Drilling International Inc. has been contracted to complete a sonic drill program on the Wawa-Holdsworth property. The drilling is expected to start in the coming weeks and the information gained from this drilling will be used by Golder Associates to build a resource mode of the Oxide Sands.

To view Figure 1. Trenching program of the Oxide Sands, please visit the following link: http://media3.marketwire.com/docs/1100068_Fig1.jpg

About the Holdsworth and Soocana Claims

The project is located near Hawk Junction, ~20 km north east of Wawa, Ontario, and in total, is comprised of 30 claims covering approximately 1142 acres. The Holdsworth claims consist of a contiguous block of 18 fee simple absolute patented claims, including surface and mining rights covering approximately 705 acres. The Soocana claims consist of a contiguous block of 12 claims that cover 437.3 acres. These claims are under a 99-year lease agreement with Josephine Forest Resources Ltd. that expires on July 31, 2039.

Project Highlights

- Neighboring Richmont's Island Gold Mine, Argonaut's Magino Gold Project and Goldcorp's Borden project
- 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 and Reed-Booth Showing);
- 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 is focusing its near-term exploration program on the Oxide Sands. These appear to extend for more than 2 kilometres on the property as corroborated by MacDonald's recent airborne magnetics results (see June 1, 2017 News Release) and reach a depth of at least 8 metres.

Recent preliminary sampling of the Oxide Sands by MacDonald Mines returned an average grade of 5.45 g/t gold from a >75 kg

representative sample of the exposed Oxide Sand material at the historic excavation sites (see May 16, 2017 News Release). Positive preliminary metallurgical results (see July 11, 2017);

- The concentration ratio of gold in rougher flotation averaged 6.0:1
- The concentration ratio of silver in rougher flotation averaged 5.2:1
- Reduction of feed volume in rougher flotation by approximately 85-90%
- The Oxide Sands can be processed by a simple crushing/flotation process
- No caustic treatments are necessary
- The processing will require low power requirements
- The waste material is inert (>70 percent silica/quartz)

The soft and relatively unconsolidated Oxide Sands material can be extracted like an aggregate. The Company is working to better define the Oxide Sands as continues to prepare for their potential extraction.

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.

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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