TORONTO, Oct. 03, 2017 (GLOBE NEWSWIRE) -- MacDonald Mines Exploration Ltd. (TSX-V:BMK) ("MacDonald Mines", the "Company", or “BMK”) announces that it has received gold and silver assays on 7 trenches across the Oxide Sands zone. Trenches 950, 975, 1000, 1025 and 1050 produced positive gold (Au) and silver (Ag) results.

Table 1 highlights the recently received results from the on-going sampling. The spatial relationship between these trenches and the Oxide Sands trend is shown in Figure 1.

Trench ID	Au (g/t)	Ag (g/t)	AuEq (g/t)*	Sample Length (cm)
TR1050S-3	8.65	21.6	8.93	90
TR1050S-2	7.09	41.7	7.63	65
TR1025S-4	5.2	7.78	5.3	70
TR1025S-3	4.95	22.5	5.24	75
TR1000-2	4.83	17.8	5.07	35
TR1050S-6	4.14	7.67	4.24	53
TR1000-4	4.07	7.76	4.17	30
TR1025S-5	3.68	22.1	3.97	40
TR1025S-4	3.48	29.4	3.86	50
TR1000-3	3.49	27.3	3.85	80
TR1050S-7	3.43	15.7	3.63	30
TR1000-3	3	32.4	3.43	25
TR1025S-5	3.25	8.65	3.36	70
TR1025S-2	2.88	25.9	3.22	47
TR1025S-6	3.05	7.15	3.14	65
TR1025S-7	2.75	25.4	3.08	25
TR975-4	2.63	29.2	3.02	25
TR1025S-1	1.88	15.7	2.08	75
TR950-19	1.977	5.65	2.05	63
TR950-16	1.955	6.3	2.04	75
TR1050S-6	1.87	10.9	2.01	50
TR1000-2	1.64	15.6	1.85	20
TR950-16	1.764	5.12	1.83	18
TR975-3	1.662	7.51	1.76	47
TR950-18	1.64	8.53	1.75	75
TR975-4	1.64	6.53	1.73	40
TR950-18	1.56	10.8	1.7	23
TR975-6	1.567	7.67	1.67	30
TR975-1	1.522	6.4	1.61	53
TR975-7	1.52	5.79	1.6	40
TR950-17	1.415	2.82	1.45	75
TR975-2	1.312	3.58	1.36	13
TR1050S-5	1.21	9.83	1.34	70
TR950-15	1.18	6.48	1.27	75
TR1025S-6	1.07	4.66	1.13	40
TR1050S-7	0.829	4.09	0.88	70

*AuEq calculated using spot price of 1279.4 US$/oz for gold and 16.63 US$/oz for silver taken at market closure on September 29, 2017. AuEq = (Grade Au) + [(Grade Ag)/(Gold Price/Silver Price)] (ratio rounded to 76).

A PDF accompanying this announcement is available at:
http://www.globenewswire.com/NewsRoom/AttachmentNg/a6473d68-3fd7-4228-bcc8-4536e6bd43e6

Quentin Yarie, President and Chief Executive Officer of MacDonald Mines stated, "*With assays results up to 8.93 g/t AuEq, our trenching program is demonstrating the existence of higher grade zones in the Oxide Sands. The on-going sonic drilling will quantify the thickness and vertical distribution of the precious metals in the sand formation.*”

Gold distribution in the “Oxide Sands” formation
Trenching revealed a new higher grade zone in the Oxide Sands where contiguous AuEq grades > 4 g/t were measured. The occurrence of higher grade zones in three contiguous trenches support the lateral continuity of that higher grade zone. Results for the trench TR1100S, located west of TR1050 are pending. In the adjacent trenches TR925 to TR900, a gradual eastward thickening of overburden over the precious metals-rich unit prevented its sampling. However, AuEq grades up to >3g/t were still measured in those trenches.

Oxide Sands Trenching and Sampling Procedure
MacDonald’s trenching program is exposing the uppermost layers of the soil formation containing the Oxide Sands and does not generally exceed 1m in depth.

The primary objectives of the trenching program are: 1) identify which units, in addition to the historically recognized black sands, contain precious metals, 2) constrain the lateral extent of precious metals enrichments in the soil formation, and 3) identify the key visual and chemical attributes of the precious metal-rich units of the soil formation.

The unconsolidated units are characterized by taking short representative samples. As shown by Figure 2, the sampling lengths reported are not representative of the vertical extent and size of the units containing precious metals in the soil formation, but only of the length of the representative sample taken to characterize the precious metal content of that unit.

The current trenching program is not defining the vertical extension of the units containing precious metals, especially as the units richer in precious metals are generally deeper in the formation and only their top part is exposed. Sonic drilling will be used to characterize the vertical distribution and size of the units rich in precious metals in the Oxide Sands formation.

A PDF accompanying this announcement is available at:
http://www.globenewswire.com/NewsRoom/AttachmentNg/61ba8106-e6cb-44e2-8503-cf7d37198b27

Note that the pure black sands are located at the bottom of the exposed soil column, which will result in a short sample length for that unit that is not representative of its total vertical extent that remains unknown. Sonic drilling will define the vertical thickness.

Wawa-Holdsworth Project Highlights

- Neighbouring 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.

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 in preparation for their potential extraction.

On-site Quality Assurance/Quality Control (“QA/QC”) Measures
Sand samples were transported in security-sealed bags for analyses to Activation Laboratories Ltd. in Ancaster, 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 remaining coarse reject portions of the samples remain in storage if further work or verification is needed.

MacDonald Mines has implemented a quality-control program to comply with best practices in the sampling and analysis of both the Oxide Sands and drill core. As part of its QA/QC program, MacDonald Mines inserts external gold, silver, platinum and palladium standards (low to high grade) and blanks every 20 samples in addition to random standards, blanks, and duplicates.

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 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 Gold 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

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

Cautionary Statement:

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein. The foregoing information may contain forward-looking statements relating to the future performance of the Company. Forward-looking statements, specifically those concerning future performance, are subject to certain risks and uncertainties, and actual results may differ materially from the Company’s plans and expectations. These plans, expectations, risks and uncertainties are detailed herein and from time to time in the filings made by the Company with the TSX Venture Exchange and securities regulators. MacDonald Mines does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.