

MONTREAL, QUEBEC--(Marketwired - Aug 31, 2016) - [Osisko Mining Inc.](#) (TSX:OSK) ("Osisko" or the "Corporation") is pleased to announce new results from the ongoing drill program at its 100% owned Windfall Lake gold project located in the Urban Township, Québec. The current 100,000 metre drill program combines definition drilling above the Red Dog intrusion ('Red Dog'), expansion drilling above and below Red Dog and exploration drilling on the greater property area. A total of 9 new drill holes are reported in this release.

Further drilling in the recently announced Wolf Zone discovery has led to the expansion of the new zone. DDH OSK-W-16-708-W1 intersected 12.2 g/t Au over 4.0 metres in the hanging wall (765.5m - 769.5m), 12.5 g/t Au over 3.8 metres in the Wolf Zone (816.5m - 820.3m), and significant additional intercepts in the footwall including 4.79 g/t Au over 2.4 metres (834.0m - 836.4m) and 15.4 g/t Au over 6.4 metres, (838.1m - 844.5m). These new intercepts (hanging wall, Wolf Zone and footwall) are located approximately 100 metres vertically below the previously announced Wolf Zone discovery (OSK-W-16-710 which intersected 11.8 g/t Au over 6.7 metres from 562.0m - 568.9m, Osisko press release dated August 25, 2016), and are all open to the ENE.

Additional significant results in new holes presented in this release include: 23.2 g/t Au over 3.0 metres in DDH OSK-W-16-718 that expands another new (unnamed) zone by 95 metres up-dip, and 22.6 g/t Au over 3.0 metres in DDH OSK-W-16-715 that expands the Caribou S3 Zone by 95 metres in its down-dip extension.

These new intercepts demonstrate the high potential for significant new mineralization near the known Windfall mineral inventory through continued definition and exploratory drilling, more specifically in the eastern extension of the deposit.

Details of the significant new results are outlined in the table below:

Hole	From (m)	To (m)	Interval (m)	Au (g/t)	Zone
OSK-W-16-309-W1	612.2	615.0	2.80	9.11	Quartz vein in Red Dog
OSK-W-16-309-W1	1115.00	1117.00	2.00	5.60	New - below Red Dog
including	1116.00	1117.00	1.00	11.2	
OSK-W-16-706	549.60	552.60	3.00	8.65	Caribou S1
OSK-W-16-706	950.30	952.60	2.30	12.32	FW1
including	950.30	951.30	1.00	29.40	
OSK-W-16-706-W1	886.20	888.20	2.00	4.93	FW1
including	886.20	887.20	1.00	9.72	
OSK-W-16-708	354.00	356.20	2.20	3.65	Shear and quartz vein
including	354.80	355.10	0.30	14.00	
OSK-W-16-708	796.00	798.00	2.00	17.1	Wolf
OSK-W-16-708	889.50	891.80	2.30	5.55	New
including	891.20	891.80	0.60	19.00	
OSK-W-16-708	1022.50	1023.00	0.50	16.05	FW1
OSK-W-16-708-W1	765.50	769.50	4.00	12.2	Wolf
OSK-W-16-708-W1	816.50	820.30	3.80	12.5	Wolf
OSK-W-16-708-W1	834.00	836.40	2.40	4.79	Wolf
including	835.60	836.40	0.80	13.9	
OSK-W-16-708-W1	838.10	844.50	6.40	15.4	Wolf
including	840.50	843.40	2.90	31.5	
OSK-W-16-708-W1	1069.00	1071.00	2.00	8.27	FW3
including	1069.90	1070.20	0.30	41.70	
OSK-W-16-708-W1	1163.00	1165.10	2.10	6.14	New below Red Dog
including	1163.00	1164.00	1.00	11.05	
OSK-W-16-715	646.00	649.00	3.00	22.6	Caribou S3 Zone
including	647.50	649.00	1.50	41.0	
OSK-W-16-715	668.50	671.50	3.00	6.84	New
including	668.50	670.00	1.50	13.1	
OSK-W-16-715	800.80	801.30	0.50	18.9	Quartz vein in red dog
OSK-W-16-715	803.90	804.20	0.30	5.19	Quartz vein in red dog
OSK-W-16-718	431.90	434.90	3.00	23.2	New Correlates with 4.17 g/t Au over 2.0 m in
including	432.90	434.20	1.30	44.5	OSK-W-16-715 located 95 m below
OSK-W-16-718	680.70	681.20	0.50	44.4	Quartz-carbonate vein

Notes:

1. For complete drilling results please see www.osiskominer.com.
2. True widths are estimated at 65-80% of the reported core length interval. See "Quality Control" below.

Drill Hole Collar Coordinates and Information

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-16-309-W1	325.8	-63.2	1225	452548	5434514	2575
OSK-W-16-706	329.6	-58.4	1276.5	452610	5434420	2525
OSK-W-16-706-W1	329.6	-58.4	1276.5	452610	5434420	2525
OSK-W-16-708	331.0	-54.0	1258.5	452816	5434427	2775
OSK-W-16-708-W1	331.0	-54.0	1273.5	452816	5434427	2775
OSK-W-16-712	330.0	-55.0	40.5	452678	5434680	2775
OSK-W-16-713	330.5	-55.9	524.5	452678	5434680	2775
OSK-W-16-715	333.0	-61.0	805.5	452785	5434528	2800
OSK-W-16-718	332.1	-60.5	799.5	452742	5434575	2775

DDH OSK-W-16-309-W1 intersected 9.11 g/t Au over 2.8 metres in quartz veins hosted in Red Dog and 5.60 g/t Au over 2.0 metres in a new zone located to the NW of FW3 Zone below Red Dog.

DDH OSK-W-16-706 was designed to intersect both the FW1 and FW3 zones below Red Dog. The hole intersected the Caribou S1 Zone above Red Dog returning 8.65 g/t Au over 3.0 metres in a moderately silicified and sericitized andesite. The FW1 Zone assayed 12.32 g/t Au over 2.3 metres (including 28.4 g/t Au over 0.8 metres) in a moderately silicified and sericitized porphyry dyke. There was no significant mineralization or alteration in FW3 as this drill hole intersected this zone below the high grade shoot.

DDH OSK-W-16-706-W1 was also designed to intersect both the FW1 and FW3 zones below Red Dog. The hole intersected 4.93 g/t Au over 2.0 metres in the hanging wall of FW1 in a porphyry dyke and 2.85 g/t Au over 2.0 metres in the FW1 Zone. Assays are still pending for the FW3 Zone in this hole.

DDH OSK-W-708 targeted the Wolf Zone above Red Dog and the FW1 and FW3 in the eastern sector of the deposit. The drill hole intersected 3.36 g/t Au over 2.4 metres that correlates with 7.04 g/t Au over 20.4 metres in OBM-15-559, located 30 m to the southwest. The hole also intersected 17.1 g/t Au over 2.0 metres in the hanging wall of the newly discovered Wolf Zone and anomalous gold values in the Wolf Zone. The FW1 Zone returned 3.94 g/t Au over 2.1 metres and no significant results for FW3.

DDH OSK-W-708-W1 also targeted the Wolf Zone above Red Dog and the FW1 and FW3 in the sparsely drilled eastern sector of the deposit. The hole was drilled 115 metres below DDH OSK-W-16-710 which intersected 11.8 g/t Au over 6.7 metres. In DDH OSK-W-708-W1, the Wolf hanging wall zone returned 12.2 g/t Au over 4.0 metres, the Wolf Zone assayed 12.5 g/t Au over 3.8 metres and the footwall returned 4.79 g/t Au over 2.4 metres. The Wolf zone, the hanging wall, and the footwall are open to the ENE. This hole also intersected mineralization adjacent to the footwall zone, immediately above Red Dog, which returned 15.4 g/t Au over 6.4 metres, also open to the ENE. Additional mineralization intersected includes 8.27 g/t Au over 2.0 metres in the hanging wall of FW3 and 3.74 g/t Au over 3.0 metres in the FW3 Zone.

DDH OSK-16-712 was abandoned due to difficult drilling conditions.

DDH OSK-W-16-713 targeted the down-dip extension of the Caribou Zone. No significant mineralization was intersected as a small post mineral dyke, similar to Red Dog, cross-cut mineralization at this location.

DDH OSK-W-16-715 and DDH OSK-W-16-718 were aimed at expanding gold mineralization discovered with DDH OBM-15-559 (7.04 g/t Au over 20.4 metres). DDH OSK-W-16-715 expanded the zone by 70 metres down-dip with 4.38 g/t Au over 2.8 metres and DDH OSK-W-16-718 expanded the zone by 95 metres up-dip (23.2 g/t Au over 3.0 metres). Additional drilling is planned in this sector to define to size of this zone.

Full analytical results from the 9 new drill holes are available at www.osiskominer.com.

Qualified Person

The scientific and technical content of this press release has been reviewed, prepared and approved by Mr. Jean-Philippe Desrochers, Ph.D., P.Geo. Senior Project Manager of the Windfall Lake gold project, who is a "Qualified Person" as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

Quality Control

True widths of the new exploration intercepts reported in this press release have yet to be determined. Additional drilling is planned for the immediate area which will enable the true width determination. Assays are uncut except where indicated. All NQ core assays reported were obtained by either 1 kg whole rock metallic screen/fire assay or standard 50 gram fire-assaying with AA or gravimetric finish at ALS Laboratories in Val d'Or, Québec or Sudbury, Ontario. The 1 kg metallic screen assay method is selected by the geologist when samples contain coarse gold or present a higher percentage of pyrite than surrounding intervals. All samples are also analysed for multi-elements, including silver, using an Aqua Regia-ICP-AES method at ALS laboratories. Drill program design, Quality Assurance/Quality Control and interpretation of results is performed by qualified persons employing a QA/QC program consistent with NI 43-101 and industry best practices. Standards and blanks are included with every 20 samples for QA/QC purposes by the Corporation as well as the lab. Approximately 5% of sample pulps are sent to secondary laboratories for check assays.

About the Windfall Lake Gold Deposit

The Windfall Lake gold deposit is located between Val-d'Or and Chibougamau in the Abitibi region of Québec, Canada. The current mineral resource comprises 2,762,000 tonnes at 8.42 g/t Au (748,000 ounces) in the indicated category and 3,512,000 tonnes at 7.62 g/t Au (860,000 ounces) in the inferred category (sourced from a technical report dated June 10, 2015 entitled "Preliminary Economic Assessment of the Windfall Lake Gold Property, Quebec, Canada" with an effective date of April 28, 2015, prepared in accordance with NI 43-101). The Windfall Lake gold deposit is currently one of the highest grade resource-stage gold projects in Canada. The bulk of the mineralization occurs in the Main Zone, a southwest/northeast trending zone of stacked mineralized lenses, measuring approximately 600 metres wide and at least 1,400 metres long. The deposit is well defined from surface to a depth of 500 metres, and remains open along strike and at depth. Mineralization has been identified only 30 metres from surface in some areas and as deep as 870 metres in others, with significant potential to extend mineralization up and down-plunge and at depth.

About Osisko Mining Inc.

Osisko is a mineral exploration company focused on the acquisition, exploration, and development of precious metal resource properties in Canada. Osisko holds a 100% in the high-grade Windfall Lake gold deposit located between Val-d'Or and Chibougamau in Québec and holds a 100% undivided interest in a large area of claims in the surrounding Urban Barry area (82,400 hectares), a 100% interest in the Marban project located in the heart of Québec's prolific Abitibi gold mining district, and properties in the Larder Lake Mining Division in northeast Ontario, including the Jonpol and Garçon deposits on the Garrison property, the Buffonta past producing mine and the Gold Pike mine property. The Corporation also holds interests and options in a number of additional properties in northern Ontario. Osisko continues to be well financed and has approximately \$50 million in cash and cash equivalents as well as marketable securities of approximately \$60 million.

Cautionary Note Regarding Forward-Looking Information

This news release contains "forward-looking information" within the meaning of the applicable Canadian securities legislation that is based on expectations, estimates and projections as at the date of this news release. The information in this news release about pending transactions, potential mineralization, the ability to realize upon any mineralization in a manner that is economic, the ability to complete any proposed exploration activities and the results of such activities; the continuity or extension of any mineralization; and any other information herein that is not a historical fact may be "forward-looking information". Any statement that involves discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking information and are intended to identify forward-looking information. This forward-looking information is based on reasonable assumptions and estimates of management of Osisko, at the time it was made, involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Osisko to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, risks relating to property interests; ability to obtain required approvals, complete definitive documentation and complete transactions on the terms announced, ability of Osisko to complete further exploration activities, including drilling; the results of exploration activities; risks relating to mining activities; the global economic climate; metal prices; dilution; environmental risks; and community and non-governmental actions. Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, Osisko cannot assure shareholders and prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither Osisko nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. Osisko does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

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