New Mineralized Zone Discovered in Main Caribou Corridor and Caribou Corridor Extension Confirmed on 500 Metre Step Out Line

MONTREAL, QUEBEC--(Marketwired - Mar 22, 2017) - Osisko Mining Inc. (OSK:TSX) ("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 Urban Township, Québec. The current 400,000 metre drill program combines definition drilling above the Red Dog intrusion ("Red Dog"), expansion drilling above and below Red Dog, expansion drilling to the NE of the main deposit, and exploration drilling on the greater deposit and Urban-Barry Project area. New analytical results from 8 drill holes focused on infill and expansion drilling in the Caribou Corridor are reported in this release, with significant assay results presented in the table below.

Significant new results include: 15.6 g/t Au over 5.8 metres in OSK-W-16-766-W1 in a new mineralized zone discovered in the main Caribou Corridor; 15.0 g/t Au over 3.5 metres in OSK-W-17-778; and 7.21 g/t Au over 6.5 metres in OSK-W-17-787 in the newly confirmed Caribou Extension. Maps showing hole locations and full analytical results are available at www.osiskomining.com.

Hole No.	From (m)	To (m)	Interval (m)	Au (g/t) uncut	Zone	Corridor
OSK-W-17-776	797.0	803.0	6.0	6.42	Caribou	Caribou
including	*797.7*	*800.3*	*2.6*	*10.1*		
OSK-W-17-766-W1	674.8	680.6	5.8	15.6	New Zone CS1 FW	Caribou
including	*676.5*	*679.5*	*3.0*	*27.6*		
OSK-W-17-777	617.0	621.0	4.0	9.01	CS3	Caribou
including	*618.0*	*619.0*	*1.0*	*18.5*		
OSK-W-17-778	545.0	547.7	2.7	13.5	Crustiform veins	Caribou
including	*546.6*	*547.0*	*0.4*	*90.2*		
	642.7	646.2	3.5	15.0	CS1	Caribou
including	*643.5*	*644.5*	*1.0*	*48.7*		
OSK-W-17-781	518.5	520.5	2.0	15.3	Crustiform veins	Caribou
including	*519.5*	*520.5*	*1.0*	*30.4*		
OSK-W-17-786	664.0	668.9	4.9	6.64	CS3	Caribou
OSK-W-17-787	507.9	514.4	6.5	7.21	Caribou Extension	Caribou
including	*512.6*	*513.6*	*1.0*	*24.1*		
OSK-W-17-789	526.1	533.5	7.4	5.12	CS1	Caribou
including	*527.9*	*530.0*	*2.1*	*16.4*		

Notes:

1. True Widths are estimated at 65 - 80% of the reported core length interval. See *"Quality Control"* below.
2. Definitions: HW = hanging wall; FW = footwall.

Hole Number	Azimuth (°)	Dip (°)	Length(m)	UTM E	UTM N	Section
OSK-W-17-776	330	-57	858.5	452851	5434434	2800
OSK-W-17-766-W1	328	-55	742.5	452690	5434340	2600
OSK-W-17-777	339	-58	714.3	452678	5434499	2675
OSK-W-17-778	331	-58	700.1	452689	5434338	2600
OSK-W-17-781	332	-61	1520.0	452844	5434221	2700
OSK-W-17-786	337	-55	718.5	452673	5434412	2625
OSK-W-17-787	333	-63	1207.3	453324	5435040	3500
OSK-W-17-789	331	-58	1279.5	452546	5434390	2500

Caribou Corridor

OSK-W-17-776 tested the down-plunge extension of the Caribou Zone and intersected 6.42g/t Au over 6.0 metres. This intercept is located 115 metres down-plunge from previously reported hole OSK-W-16-753 (7.92 g/t Au over 7.5 metres). The zone consists of 1 to 5% pyrite stringers and disseminations at the contact between a porphyry and mafic volcanics.

OSK-W-17-766-W1 intersected a new zone in the Caribou Corridor with 15.6 g/t Au over 5.8 metres. This new zone, located 40 metres in the footwall of the CS1 Zone, consists of 2 to 15% pyrite stringers with several specks of visible gold. This zone was cross-cut at depth by Red Dog.

OSK-W-17-777 extended the CS3 zone by 16 metres in its down-dip extension with 9.01 g/t Au over 4.0 metres. The zone contains 15% pyrite stringers hosted in a strongly silicified and sericitized porphyry dyke.

OSK-W-17-778 is an infill hole on the CS1 zone assaying 15.0 g/t Au over 3.5 metres. The hole is located 57 metres up and to the east of previously reported hole OBM-15-560 (11.0 g/t Au over 6.1 metres). The zone contains of 10-30% pyrite stringers hosted in strongly silicified and sericitized andesite. This hole also intersected 13.5 g/t Au over 2.7 metres in a crustiform vein containing several specks of visible gold located in the hanging wall of Caribou Zone.

OSK-W-17-781 intersected 15.3 g/t Au over 2.0 metres in a zone containing 5-10% pyrite stringers and crustiform veinlets located in the footwall of a shear zone. The hole also extended the CS1 zone down-plunge by 120 metres with 3.05 g/t Au over 2.5 metres in a bleached andesite containing 5-10% pyrite stringers.

OSK-W-17-786 tested the continuity of the CS3 zone and extended the zone by another 35 metres in its down-plunge extension with 6.64 g/t au over 4.9 metres. This intercept is located 30 metres down-plunge of OSK-W-17-777 described above. Mineralization consists of 5-10% pyrite stringers and disseminations hosted in silicified and sericitized andesite.

OSK-W-17-789 is an infill hole testing the CS1 Zone. It returned 5.12 g/t Au over 7.4 metres in silicified and sericitized porphyry dyke containing 7% pyrite stringers. This new intercept is located 60 metres down plunge of previously reported hole OSK-W-16-749 (12.7 g/t Au over 5.4 metres) and 60 metres up-plunge from previously reported hole OSK-W-16-706 (8.65 g/t Au over 3.0 metres).

Caribou Corridor Extension Drilling

OSK-W-17-787 confirms high grade gold mineralization on the 500 metre step-out section testing the ENE extension of the Caribou Corridor. The new hole intersected 7.21 g/t Au over 6.5 metres (including 24.1 g/t Au over 1 metre) in a silicified rhyolite containing 4-7% pyrite stringers and disseminations and crustiform veining. This intersection is located 60 metres above and 100 metres east of hole previously reported OSK-W-16-755 (2.1 g/t Au over 4.9 metres) which indicated the possible extension of the Caribou Corridor. Further results are pending for this hole.

Qualified Person

The scientific and technical content of this news 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 and Reporting Protocols

True widths of the new exploration intercepts below Red Dog 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. True widths of intercepts in the zones above the Red Dog are estimated at 65-80% of the reported core length intervals. Assays are uncut except where indicated, and calculated intervals are reported over a minimum length of 2 metres using a lower cutoff of 3 g/t Au. All NQ core assays reported were obtained by either 1 kilogram 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 kilogram 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 analyzed 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 Quality Assurance/Quality Control program consistent with NI 43-101 and industry best practices. Standards and blanks are included with every 20 samples for Quality Assurance/Quality Control 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, Québec, 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 Garrcon 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 with approximately $190 million in cash and investments.*

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, projections and interpretations as at the date of this news release. The information in this news release about the significance of new results from the ongoing drill program at the Windfall Lake gold project; five new drills being added by the end of this month; the significance of assay results presented in this press release; the type of drilling included in the drill program (definition drilling above Red Dog, expansion drilling above and below Red Dog, expansion drilling to the NE of the main deposit, and exploration drilling on the greater deposit and Urban-Barry project area); 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, interpretations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "interpreted", "management's view", "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 the Corporation, 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 the ability of exploration activities (including drill results) to accurately predict mineralization; errors in management's geological modelling; the ability of Osisko to complete further exploration activities, including drilling; property interests in the Windfall Lake gold project; the ability of the Corporation to obtain required approvals and complete transactions on terms announced; 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 of securities of the Corporation 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.

The securities offered under the financings of the Corporation announced on February 6, 2017 have not been registered under the U.S. Securities Act of 1933, as amended, and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements. This press release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of such securities in any State in which such offer, solicitation or sale would be unlawful.

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