New High Grade Intersections in Lynx Discovery

MONTREAL, QUEBEC--(Marketwired - Apr 5, 2017) - 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 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 3 drill holes focused on the Lynx Zone discovery are reported in this release, with significant assay results presented in the table below.

New results include: 63.8 g/t Au over 4.4 metres and 50.9 g/t Au over 4.6 metres in OSK-W-799; new analytical results have also been received from holes OSK-W-17-788 and OSK-W-792. Significant intervals are presented below, as well as recalculations of two intervals that have been expanded: 42.1 g/t Au over 9.2 metres in OSK-W-16-792; and 17.0 g/t Au over 17.3 metres in OSK-W-788. 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	Au (g/t) cut to 100 g/t	Zone	Corridor
OSK-W-17-788	233.0	250.3	17.3	17.0	12.8	Main	Lynx
including	*236.4*	*236.9*	*0.5*	*153*	*100*		
including	*239.0*	*240.0*	*1.0*	*128*	*100*		
	295.0	297.0	2.0	6.21		FW	Lynx
including	*296.6*	*297.0*	*0.4*	*25.7*			
	301.0	303.0	2.0	3.76		FW	Lynx
OSK-W-17-792	309.5	318.7	9.2	42.1	25.2	Main	Lynx
including	*313.3*	*314.2*	*0.9*	*56.0*			
including	*315.6*	*317.6*	*2.0*	*162*	*100*		
OSK-W-17-799	309.3	311.2	1.9	10.6		HW	Lynx
	319.8	324.4	4.6	50.9	49.7	Main	Lynx
including	*319.8*	*320.7*	*0.9*	*106*	*100*		
including	*323.1*	*324.4*	*1.3*	*82.7*			
	339.8	344.2	4.4	63.8	41.4	FW	Lynx
including	*341.5*	*342.3*	*0.8*	*223*	*100*		
	402.0	408.5	6.5	11.0		CV	Lynx

Notes:

Definitions: HW = hanging wall; FW = footwall. PRSB = pyrite-rich silicified bands. CV = crustiform veins.

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-17-788	331.5	-66.1	376.5	453329	5434932	3450
OSK-W-17-792	334.5	-64.0	439.5	453446	5434960	3575
OSK-W-17-799	332.5	-74.5	451.5	453481	5435037	3644

The Lynx Zone is a recently discovered corridor of gold mineralization located to the East of the main Windfall deposit mineralized zones. To date it has been intersected at shallow depths (60 metres) and up to 330 metres below surface, over a strike length of over 300 metres and remains open laterally and at depth. The Lynx Zone was discovered as a result of the step-out drilling program which was designed to test an east-northeast magnetic low corridor containing altered porphyry dikes similar to those previously defined in the main deposit area. Mineralization consists of a series of crustiform veins and heavily silicified, pyrite-rich alteration bands hosted in strongly silicified and sericitized rhyolite and porphyry dikes. The veins and silicified bands are intersected at various angles, including low core angles, suggesting they may represent a vein network. Additional drilling will be conducted in a southeast direction to further evaluate the abundance and true thickness of the veins and silicified bands. True thicknesses of reported intersections are presently unknown.

OSK-W-17-788 intersected three zones of high silicified pyrite-rich alteration bands containing 5-10% pyrite with local visible gold. The first zone is an expansion of a previously released interval from this hole, based on receipt of additional assays (previously reported 57.0 g/t Au over 3.6 metres, see March 28, 2017 press release). The new calculated interval averaged 17.0 g/t Au over 17.3 metres (12.8 g/t Au over 17.3 metres cut). The second and third intersections returned 6.21 g/t Au over 2.0 metres and 3.76 g/t Au over 2.0 metres respectively, and correspond to the Lynx foot wall. All mineralization is hosted in a sericitized and silicified rhyolite.

OSK-W-17-792 is a newly calculated expanded interval based on the receipt of additional analytical results from this hole (71.4 g/t Au over 5.4 metres, see March 28, 2017 press release). The new calculated interval averages 42.2 g/t Au over 9.2 metres (25.2 g/t Au over 9.2 metres cut). Mineralization is composed of silicified pyrite-rich alteration bands containing 5-20% pyrite and local visible gold hosted in a sericitized and silicified rhyolite. This interval is located 40 metres above and 20 metres to the east

of 11.3 g/t Au over 3.6 metres in previously reported OSK-W-17-790 (see March 28, 2017 press release).

OSK-W-17-799 intersected four zones 60 metres down plunge of OSK-W-17-792. The first zone returned 10.6 g/t Au over 1.9 metres in the hanging wall. The mineralization consists of silicified pyrite-rich bands hosted in a sericitized interval at the contact between a fragmental felsic intrusive and a mafic dike. The main Lynx Zone returned 49.7 g/t Au over 4.6 metres (50.9 g/t over 4.6 metres uncut) in a felsic intrusive cross-cut by several highly silicified bands containing up to 25% pyrite and local visible gold. The third zone returned 41.4 g/t Au over 4.4 metres (63.8 g/t Au over 4.4 meters uncut) and corresponds to the Lynx foot wall. The mineralization style is the same as the second zone but localized at the lower contact of the felsic intrusive. The last zone intersected contained a crustiform vein including 5% pyrite and local visible gold. The vein cross-cuts a mafic dike. The interval returned 11.0 g/t Au over 6.5 metres.

Qualified Person

The scientific and technical content of this news release has been reviewed, prepared and approved by Mr.Louis Grenier., P.Geo. 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 width determinations in the Lynx Zone have yet to be determined. Assay 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 Windfall Lake gold deposit being one of the highest grade resource-stage gold projects in Canada; the current 400,000 metre drill program at Red Dog; the significance of new results from the ongoing drill program at the Windfall Lake gold project, including in respect of the Lynx Zone discovery; new analytics from the three drill holes focused on the Lynx Zone discovery; 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, including the recently discovered Lynx Zone; the potential to extend mineralization up and down-plunge and at depth at the Windfall Lake

gold deposit; 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, including additional drilling proposed to be conducted to the southeast of the Lynx Zone to further evaluate the abundance and true thickness of the veins and silicified bands; 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.

Contact

John Burzynski
President and Chief Executive Officer
(416) 363-8653