High Grade Intercepts in Caribou, Underdog and Lynx

MONTREAL, QUEBEC--(Marketwired - Apr 11, 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 six drill holes in the Caribou, Underdog and Lynx zones are reported in this release and in the table below, with significant assay results including: 585 g/t Au over 2.8 metres (including 5.45 kilogram/t Au over 0.30 metres containing spectacular visible gold veinlets; main interval averages 11.5 g/t Au over 2.8 metres cut to 100 g/t) in hole OSK-W-17-743-W4; 19.4 g/t Au over 7.9 metres (including 29.7 g/t Au over 4.5 metres; main interval averages 16.4 g/t Au over 7.9 metres cut to 100 g/t) in hole OSK-W-17-789; and 24.9 g/t Au over 3.1 metres in hole OSK-W-17-W-802. 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)	Au (g/t) cut to 100 g/t	Zone	Corridor
OSK-W-17-743-W4	796.2	799.0	2.8	585	11.5	CS1	Caribou
including	*796.2*	*796.5*	*0.3*	*5450*			Caribou
OSK-W-17-786	652.3	660.1	7.8	5.17		CS3 HW	Caribou
including	*652.3*	*656.0*	*3.7*	*9.85*			Caribou
OSK-W-17-780-W1	1074.0	1091.0	17.0	5.97		FW0	Underdog
including	*1079.0*	*1082.8*	*3.8*	*19.7*			Underdog
OSK-W-17-789	853.0	860.9	7.9	19.4	16.4	FW1	Underdog
including	*853.0*	*857.5*	*4.5*	*29.7*	*24.5*		Underdog
	883.9	885.9	2.0	9.15		FW1 FW	Underdog
including	*884.9*	*885.6*	*0.7*	*24.1*			Underdog
OSK-W-17-802	363.0	366.1	3.1	24.9		VNCR	Lynx
including	*365.3*	*366.1*	*0.8*	*73.2*			Lynx
	378.7	381.3	2.6	3.99		VNCR	Lynx
including	*379.3*	*380.5*	*1.2*	*6.77*			Lynx
OSK-W-17-803	137.0	139.3	2.3	5.23		HW	Lynx
including	*137.0*	*138.5*	*1.5*	*7.74*			Lynx
	169.0	171.9	2.9	19.1			Lynx

Notes:

1. True Widths for Caribou and Underdog Corridors are estimated at 65 - 80% of the reported core length interval. True widths in the Lynx Zone are yet to be determined. See *"Quality Control"* below.
2. Definitions: HW = hanging wall; FW = footwall. VNCR = crustiform vein.

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-17-743-W4	334	-64	1477.5	452651	5434237	2525
OSK-W-17-786	337	-55	718.5	452673	5434412	2625
OSK-W-17-789	316	-38	1075	452546	5434390	2500
OSK-W-17-780-W1	330	-60	1264.5	452929	5434378	2850
OSK-W-17-802	330	-54	400.5	453376	5434896	3475
OSK-W-17-803	331	-64	412.5	453305	5434943	3450

Caribou Corridor

OSK-W-17-743-W4 returned 585 g/t Au over 2.8 metres (11.5 g/t Au over 2.8 metres cut) from the CS1 Zone. The hole is part of the 30 metre infill program in the Caribou Zone and mineralization includes two gold veinlets 2-5 millimetres thick within a semi-massive pyrite stringer. The host rock is a strongly sericitized andesite in contact with a felsic dike.

OSK-W-17-786 returned 5.17 g/t Au over 7.8 metres from the CS3 Zone hanging wall (CS3 Zone in same hole returned 6.64 g/t Au over 4.9 metres, see March 22, 2017 press release). The CS3 hanging wall is 3.6 metres above the CS3 Zone. Mineralization is composed of up to 4% pyrite stringers.

Underdog Corridor

OSK-W-17-780-W1 is part of the Underdog 50 metre infill program. The hole returned 5.97 g/t Au over 17.0 metres including 19.7

g/t Au over 3.8 metres in the FW0 zone. Mineralization is comprised of up to 3% pyrite stringers in a strongly silica altered hosted in a felsic fragmental dike. The intersection contains grey quartz veins, 10-15 millimetres wide, with local visible gold. This interval is located 50 metres west of previously reported 3.3 g/t Au over 4.0 metres intersected in OSK-W-17-780 (see April 6, 2017, press release).

OSK-W-17-789 previously intersected the Caribou Corridor (see April 6, 2017, press release) and also intersected two parallel zones inside the Underdog Corridor. New results from this hole in the Underdog Corridor include 19.4 g/t Au over 7.9 metres (16.4 g/t Au over 7.9 metres cut) and extend the FW1 Zone 50 metres west from previous intersections. Mineralization contains up to 4% pyrite stringers and local visible gold hosted in a strongly sericitized and silicified felsic porphyry. A second intersection associated with the FW1 footwall returned 9.15 g/t Au over 2.0 metres, including local visible gold in a semi-massive pyrite stringer.

Lynx Corridor

OSK-W-17-802 intersected two crustiform veins returning respectively 24.9 g/t Au over 3.1 metres and 3.99 g/t Au over 2.6 metres in the Lynx Corridor. Pyrite-tourmaline stringers are composed of up to 7% pyrite and local visible gold at the vein contact. This intersection is located 60 metres north-west of previously reported OSK-W-17-760 which returned 14.1 g/t Au over 3 meters (see January 11, 2017, press release).

OSK-W-17-803 intersected two mineralized zone in the Lynx Corridor. The first intersection corresponds to the hanging wall of Lynx Zone, and returned 5.23 g/t Au over 2.3 metres. Mineralization is composed of sulphide-rich silica bands including local visible gold. The second intersection corresponds to the Lynx Zone and returned 19.1 g/t Au over 2.9 metres in the similar mineralization. Both intersections are located 60 metres north-west of OSK-W-17-802 (described above).

Qualified Person

The scientific and technical content of this news release has been reviewed, prepared and approved by Mr. Louis Grenier, P.Geo. (OGQ 800), 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 Caribou and Underdog zones are estimated at 65 - 80% true core lengths. 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; new analytics from the four 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

Osisko Mining Inc.
John Burzynski
President and Chief Executive Officer
(416) 363-8653