Bonanza Grade Intercept of 421 g/t Au over 3.7 Metres in Lynx 2

MONTREAL, QUEBEC--(Marketwired - May 10, 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. Significant new analytical results from five drill holes focused on infill and expansion drilling in the Lynx Corridor are reported in the table below.

Highlights from the new results include: 421 g/t Au over 3.7 metres, including 3.74 kilograms/t Au over 0.4 metres containing spectacular visible gold (27.8 g/t Au over 3.7 metres cut to 100g/t) in DDH OSK-W-17-834; 11.7 g/t Au over 7.7 metres in Lynx 4 discovery DDH OSK-17-816; and 10.4 g/t Au over 4.9 metres in DDH OSK-17-802. Maps showing drill 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-17-802	293.1	298.0	4.9	10.4		Lynx 2	Lynx
including	*297.0*	*298.0*	*1.0*	*37.5*			
OSK-W-17-806	214.6	217.5	2.9	3.13		Lynx 2	Lynx
including	*214.6*	*215.5*	*0.9*	*8.24*			
OSK-W-17-816	797.1	804.8	7.7	11.7		Lynx 4	Lynx
including	*799.3*	*800.0*	*0.8*	*68.3*			
including	*804.5*	*804.8*	*0.3*	*85.9*			
OSK-W-17-825	267.9	270.7	2.8	6.71		Lynx 1	Lynx
including	*268.9*	*269.6*	*0.7*	*21.6*			
OSK-W-17-834	292.0	295.7	3.7	421	27.8	Lynx 2	Lynx
including	*293.1*	*293.5*	*0.4*	*3740*	*100*		

Notes: True widths are estimated at 65 - 80% of the reported core length interval. See *"Quality Control"* below.

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-17-802	330	-54	400.5	453376	5434896	3475
OSK-W-17-806	331	-60	388.5	453261	5434949	3400
OSK-W-17-816	147	-69	1051.5	453470	5435215	3725
OSK-W-17-825	145	-54	579	453252	5435182	3525
OSK-W-17-834	144	-59	402	453247	5435189	3525

OSK-W-17-802 returned 10.4 g/t Au over 4.9 metres including 37.5 g/t Au over 1.0 metre from crustiform veins cross-cutting the Lynx 2 Zone. Mineralization is composed of up to 5% disseminated pyrite, 3% pyrite stringers and up to 2% sphalerite associated to strong grey silica alteration. Visible gold is hosted in a quartz tourmaline vein in the felsic volcanic package. This hole is a 25 metre step-out eastward of drill holes OSK-W-17-825 and OSK-W-17-834 described below.

OSK-W-17-806 intersected Lynx 2 in a strongly sericitized and silicified felsic volcanic. The intercept averaged 3.13 g/t Au over 3.9 metres (including 8.24 g/t Au over 0.9 metres). Mineralization is composed of 3% pyrite stringers. This intercept is located 60 metres under drill hole OSK-W-16-755, which returned 8.12 g/t Au over 2.0 metres (previously released January 11, 2017).

OSK-W-17-816 intersected a new zone averaging 11.7 g/t Au over 7.7 metres including 85.9 g/t Au over 0.3 metres (the "Lynx 4" Zone). Lynx 4 is 170 metres south of Lynx 1. Mineralization consists of up to 15% pyrite, disseminated and stringers, with visible gold grains associated with pyrite clusters.

OSK-W-17-825 intersected 6.71 g/t Au over 2.8 metres (including 21.6 g/t Au over 0.7 metres) in Lynx 1. Mineralization is composed of 8% pyrite at the contact between a fragmental porphyry dike and a strongly silicified rhyolite. This hole is an infill between OSK-W-16-760 (93.3 g/t Au over 9.0 metres uncut) and OSK-W-17-788 (17.0 g/t Au over 12.3 metres) previously released January 11 and April 5, 2017 respectively.

OSK-W-17-834 returned of 421 g/t Au over 3.7 metres (27.8 g/t Au over 3.7 metres cut), including 3.74 kilograms/t Au over 0.4 metres (uncut) in Lynx 2. The intercept contains local spectacular visible gold as patches and fracture fillings in smoky quartz-tourmaline veins hosted in a strongly sericitized and grey silicified rhyolite. This intercept is located 50 metres under OSK-16-760 which returned 95.3 g/t Au over 9.0 metres (previously released January 11, 2017).

Qualified Person

The scientific and technical content of this news release has been reviewed, prepared and approved by Mr. Louis Grenier, M.Sc.A., 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 are estimated at 65 - 80% true core lengths. 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 and Lynx 4 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 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