High Grade Confirmed in Caribou Corridor Extension

New "Drake" Zone Discovered in the Mallard Corridor

TORONTO, ONTARIO--(Marketwired - Aug 24, 2017) - Osisko Mining Inc. (TSX:OSK)("Osisko" or the "Corporation") is pleased to provide new results from the ongoing drill program at its 100% owned Windfall Lake gold project located in Urban Township, Abitibi, Québec. The current 400,000 metre drill program combines definition, expansion and exploration drilling in and around the main Windfall gold deposit and in the adjacent Lynx deposit (located immediately NE of Windfall). Significant new analytical results from 24 intercepts in 17 drill holes and wedges focused on infill and expansion drilling in Lynx and the Underdog, Caribou, Zone 27 and Mallard corridors are presented below.

Highlights from the new results include: 36.7 g/t Au over 4.0 metres (35.4 g/t Au over 4.0 metres cut) in OSK-W-17-821-W1 in Underdog; 41.4 g/t Au over 2.4 metres (13.3 g/t Au over 2.4 metres) in OSK-W-17-918 in Lynx; 35.6 g/t Au over 2.4 metres in DDH OSK-W-17-907 in Lynx; 32.8 g/t Au over 2.1 metres (24.2 g/t Au over 2.1 metres cut) in OSK-W-16-769; and 16.6 g/t Au over 3.0 metres in OSK-W-17-936 in Caribou. Maps showing hole locations and full analytical results are available at www.osiskomining.com.

Hole Number	From (m)	To (m)	Interval (m)	Au (g/t) uncut	Au (g/t) cut to 100 g/t	Zone	Corridor
OSK-W-16-769	298.0	300.1	2.1	32.8	24.1	CN2	Caribou Extn
including	*299.6*	*300.1*	*0.5*	*137*	*100*		
OSK-W-17-821-W1	937.0	941.0	4.0	36.7	35.4	FW0	Underdog
including	*938.0*	*939.0*	*1.0*	*105*	*100*		
	952.0	954.0	2.0	16.5		FW0 FW	Underdog
including	*953.0*	*954.0*	*1.0*	*32.6*			
	1079.0	1084.0	5.0	4.63		FW1 HW	Underdog
including	*1082.0*	*1083.0*	*1.0*	*11.3*			
OSK-W-17-838	488.7	490.7	2.0	7.31		Caribou	Caribou
including	*489.7*	*490.7*	*1.0*	*12.4*			
	497.0	500.0	3.0	4.55		Caribou	Caribou
including	*498.0*	*499.0*	*1.0*	*10.8*			
OSK-W-17-867	595.0	598.9	3.9	5.94		Caribou	Caribou
	735.0	737.6	2.6	5.66		Caribou	Caribou
including	*735.9*	*736.9*	*1.0*	*12.6*			
OSK-W-17-869	388.1	397.2	9.1	4.67		VNCR	Lynx
OSK-W-17-870	353.0	356.0	3.0	3.45		Lynx 3	Lynx
OSK-W-17-884	77.0	80.0	3.0	6.88		Lynx 2	Lynx
including	*77.0*	*77.5*	*0.5*	*26.0*			
OSK-W-17-885	812.3	817.4	5.1	4.75		CS3	Caribou
including	*812.3*	*813.0*	*0.7*	*11.1*			
OSK-W-17-889	684.0	686.0	2.0	11.4		Wolf	Caribou
including	*684.0*	*685.5*	*1.5*	*15.2*			
OSK-W-17-906	182.0	184.0	2.0	23.9		Lynx 1	Lynx
including	*182.4*	*183.0*	*0.6*	*79.6*			
OSK-W-17-907	853.3	855.7	2.4	35.6		Lynx 4	Lynx
including	*853.7*	*854.7*	*1.0*	*83.1*			
	861.0	863.0	2.0	6.19		Lynx 4	Lynx
including	*861.0*	*862.1*	*1.1*	*10.3*			
OSK-W-17-912	373.1	375.3	2.2	14.6		Lynx 2	Lynx
	408.0	410.0	2.0	19.8		Lynx 1	Lynx
including	*408.4*	*409.1*	*0.7*	*55.2*			
	415.0	417.8	2.8	6.65		Lynx 1	Lynx
including	*416.5*	*416.8*	*0.3*	*59.2*			
OSK-W-17-918	185.5	187.9	2.4	41.4	13.3	Lynx 1	Lynx
including	*186.4*	*186.7*	*0.3*	*325*	*100*		
OSK-W-17-936	616.6	619.6	3.0	16.6		Caribou	Caribou
including	*616.6*	*617.6*	*1.0*	*38.3*			

OSK-W-17-947	239.8	242.1	2.3	5.45	VNCR	Lynx
including	*241.2*	*242.1*	*0.9*	*8.87*		
OSK-W-17-969	58.2	61.5	3.3	7.39	Drake	Mallard
including	*58.2*	*58.6*	*0.4*	*28.4*		
	71.2	74.0	2.8	4.83	Drake	Mallard
including	*71.6*	*72.2*	*0.6*	*15.0*		
OSK-W-17-1048	209.1	212.0	2.9	10.4	Lynx 2	Lynx
including	*210.3*	*210.7*	*0.4*	*49.2*		

Notes:

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

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-16-769	331	-64	923	452932	5435051	3175
OSK-W-17-821-W1	323	-59	1416	452738	5434475	2725
OSK-W-17-838	329	-65	528	453145	5434903	3275
OSK-W-17-867	315	-50	1029	452799	5434551	2825
OSK-W-17-869	132	-48	864	453229	5435374	3600
OSK-W-17-870	332	-50	411	453419	5434939	3550
OSK-W-17-884	333	-53	371	453211	5434984	3375
OSK-W-17-885	335	-67	1458	452864	5434496	2850
OSK-W-17-889	333	-57	786	452693	5434565	2725
OSK-W-17-906	331	-56	442	453349	5434938	3475
OSK-W-17-907	134	-51	1317	453216	5435343	3575
OSK-W-17-912	147	-48	570	453329	5435403	3675
OSK-W-17-918	335	-57	372	453386	5434956	3525
OSK-W-17-936	332	-56	822	452772	5434547	2775
OSK-W-17-947	330	-58	444	453373	5434898	3475
OSK-W-17-969	328	-48	324	452200	5434875	2425
OSK-W-17-1048	333	-52	303	453214	5434914	3350

Lynx Deposit

OSK-W-17-869 intersected 4.67 g/t Au over 9.1 metres in a sericitized rhyolite. Mineralization is composed of up to 5% disseminated pyrite associated with low core angle crustiform veins. The veins are in the Lynx 3 Zone 40 metres south-west of OSK-W-17-922 (3.89 g/t Au over 2.2 metres previously reported August 9, 2017).

OSK-W-17-870 intersected 3.45 g/t Au over 3.0 metres in a strongly sericitized and chloritized rhyolite. Mineralization is composed of local pyrite stringers and traces of disseminated pyrite. The intersection corresponds to the Lynx 3 Zone and is 80 metres north-east of OSK-W-17-802 (3.99 g/t Au over 2.6 metres previously reported April 11, 2017).

OSK-W-17-884 intersected 6.88 g/t Au over 3.0 metres (including 26.0 g/t Au over 0.5 metres). Mineralization is composed of local pyrite stringers hosted in a weakly silicified fragmental felsic intrusion. The intersection is 25 metres south-west of OSK-W-17-879 (52.8 g/t Au over 2.3 metres previously reported July 25, 2017) in the Lynx 2 Zone.

OSK-W-17-906 intersected 23.9 g/t Au over 2.0 metres (including 79.6 g/t Au over 0.6 metres) in the Lynx 1 Zone. Mineralization includes 30% pyrite and a 0.5 centimetre gold cluster associated with a dark quartz vein cross-cutting a strongly silicified felsic intrusion. The intersection is 25 metres south-west of OSK-W-17-800 (16.4 g/t Au over 2.4 metres previously reported April 25, 2017).

OSK-W-17-907 returned two intersections: 35.6 g/t Au over 2.4 metres (including 83.1 g/t Au over 1.0 metre) and 6.19 g/t Au over 2.0 metres (including 10.3 g/t Au over 1.1 metres). The first intersection is hosted in the andesite and the second intersection lies at the contact between the andesite and the rhyolite. The alteration is characterized by silica flooding and fuchsite. Mineralization is composed of up to 5% disseminated pyrite and 2% quartz-tourmaline veins. Both intersections are related to the Lynx 4 Zone, between OSK-W-17-827, 255 metres to the south-west, and OSK-W-17-816, 130 metres to the north-east (57.0 g/t Au over 2.7 metres and 11.7 g/t Au over 7.7 metres respectively reported July 25 and May 10, 2017).

OSK-W-17-912 returned one intersection in the Lynx 2 Zone 14.6 g/t Au over 2.2 metres and two intersections in the Lynx 1 Zone: 19.8 g/t Au over 2.0 metres (including 55.2 g/t Au over 0.7 metres) and 6.65 g/t Au over 2.8 metres (including 59.2 g/t Au

over 0.3 metres). The mineralization in Lynx 2 lies at the contact between a gabbro and a felsic intrusion with pervasive silica flooding and 25% pyrite. It is 65 metres north-east of OSK-W-17-837 (97.4 g/t Au over 8.4 metres, previously reported May 30, 2017). The first intersection from Lynx 1 consist of 10% pyrite in a fragmental felsic intrusion with silica flooding; the second intersection consists of 20% pyrite within a pervasive silica flooding zone at the contact of a fragmental felsic intrusion with a gabbro. They are 50 metres north-east of OSK-W-17-837 (16.8 g/t Au over 5.4 metres previously reported May 24, 2017).

OSK-W-17-918 was previously reported on August 9, 2017, with a cut value of 13.3 g/t Au over 2.4 metres. Additional analysis was done on the samples greater than 100 g/t; the interval is now returning 41.4 g/t Au over 2.4 metres, uncut (including 325 g/t Au over 0.3 metres). The cut value remains unchanged. The mineralization consists of 5% pyrite tourmaline stringers and 2% disseminated pyrite associated with a quartz-carbonate crustiform vein and pervasive silica flooding within a rhyolite. This interval correlates to the Lynx 1 Zone and is 30 metres up dip of OSK-W-17-924 (9.12 g/t Au over 2.0 metres previously reported August 9, 2017).

OSK-W-17-947 intersected 5.45 g/t Au over 2.3 metres (including 8.87 g/t Au over 0.9 metres). Mineralization is a crustiform vein with 3% disseminated pyrite at the contact between a massive felsic volcanic and a fragmental felsic volcanic with chlorite alteration. This vein is 20 metres south of the Lynx 1 Zone, within the hanging wall (Lynx HW Zone).

OSK-W-17-1048 intersected 10.4 g/t Au over 2.9 metres (including 49.2 g/t Au over 0.4 metres) in the Lynx 2 Zone. Mineralization is composed of 1-5% pyrite-tourmaline stringers, with local 25% pyrite clusters associated with silica flooding within a rhyolite. It is 30 metres east of OSK-W-17-805 (12.4 g /t Au over 5.0 metres previously reported June 7, 2017).

Main Deposit

OSK-W-16-769 intersected 32.8 g/t Au over 2.1 metres, uncut, (including 137 g/t Au over 0.5 metres) or 24.1 g/t Au over 2.1 metres, cut. This intersection is related to the CN2 Zone within the Caribou Corridor Extension. Mineralization is composed of 25% pyrite stringers with quartz veins in a silicified and a sericitized rhyolite. It is 370 metres north-east of OBM-16-698 (4.49 g/t Au over 3.4 metres, previously reported August 25, 2016).

OSK-W-17-821-W1 returned three intersections in the Underdog Corridor: 36.7 g/t Au over 4.0 metres, uncut, (including 105 g/t Au over 1.0 metre, uncut) or 35.4 g/t Au over 4.0 metres, cut in FW0 Zone, 16.5 g/t Au over 2.0 metres (including 32.6 g/t Au over 1.0 metre) in FW0 FW Zone and 4.63 g/t Au over 5.0 metres (including 11.3 g/t Au over 1.0 metre) in FW1 HW Zone. Mineralization is composed of 2% disseminated pyrite, locally as stringers, within a sericitized and silicified fragmental felsic intrusion. The first intersection (FW0) is 60 metres south-west of OSW-K-17-780-W1 (5.97 g/t Au over 17.0 metres, previously reported April 11, 2017).

OSK-W-17-838 returned two intersections in the Caribou Corridor Extension: 7.31 g/t Au over 2.0 metres (including 12.4 g/t Au over 1.0 metre) and 4.55 g/t Au over 3.0 metres (including 10.8 g/t Au over 1.0 metre). Mineralization is composed of 3-6% disseminated pyrite, up to 2% pyrite stringers and up to 2% sphalerite stringers within a moderately silicified rhyolite. These intersections are 90 metres north-east of OSK-W-16-728 (14.7 g/t Au over 3.1 metres, cut, previously reported September 19, 2016). This intersection continues to infill the Caribou Corridor Extension which extends from the 2014 resource area, section 2825E, to section 3500E (OSK-W-17-787: 7.21 g/t Au over 6.5 metres previously reported March 22, 2017).

OSK-W-17-867 returned two intersections: 5.94 g/t Au over 3.9 metres and 5.66 g/t Au over 2.6 metres (including 12.6 g/t Au over 1.0 metre). Mineralization consists of trace to 10% disseminated pyrite and up to 5% pyrite-toumaline stringers at the contact between a porphyritic felsic dike and the andesite. The contact contains chlorite, sericite and carbonate alteration. The second interval is composed of 5-10% disseminated pyrite and traces of tourmaline stringer in a bleached andesite. These intersections are between the Wolf Zone and Zone 27 and the geometry is still to be determined.

OSK-W-17-885 intersected 4.75 g/t Au over 5.1 metres (including 11.1 g/t Au over 0.7 metres). Mineralization contains up to 15% disseminated pyrite clusters and 2-3% pyrite stringers within a weakly bleached andesite. The intersection extends the CS3 Zone 165 metres vertically below OSK-W-16-715 (22.6 g/t Au over 3.0 metres previously reported August 31, 2016).

OSK-W-17-889 intersected 11.4 g/t Au over 2.0 metres (including 15.2 g/t Au over 1.5 metres). Mineralization is composed of 5% pyrite-tourmaline stringers in a bleached andesite. This intersection in the Wolf Zone is 40 metres south-west of OSK-W-16-708-W1 (12.5 g/t Au over 3.8 metres previously reported August 31, 2016).

OSK-W-17-936 intersected 16.6 g/t Au over 3.0 metres (including 38.3 g/t Au over 1.0 metre). Mineralization consists of 7% pyrite stringers, 1% tourmaline-pyrite stringers, and 6% disseminated pyrite within the andesite. This intersection is related to the Wolf 2 FW and is 15 metres up dip from OSK-W-17-844 (5.30 g/t Au over 2.6 metres previously reported August 14, 2017).

OSK-W-17-969 returned two intersections in the Mallard Corridor: 7.39 g/t au over 3.3 metres (including 28.4 g/t au over 0.4 metres) and 4.83 g/t Au over 2.8 metres (including 15.0 g/t Au over 0.6 metres). These intersections represent a new sub-surface zone named Drake. The Drake Zone is located between Zone 27 and Mallard and appears to hold on to the same mineralization and alteration characteristic as Zone 27. The first intersection from Drake consists of strong silicate alteration in

the andesite with up to 20% pyrite stringers, 5% disseminated pyrite and 1% pyrite-tourmaline stringers. The second intersection is composed of 15% semi-massive pyrite in pervasive silicate flooding, 5% disseminated pyrite and 8% pyrite-tourmaline stringers in a fragmental felsic intrusion.

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 widths determinations are estimated at 65-80% of the reported core length intervals for most of the zones. Assays are uncut except where indicated. Intercepts occur within geological confines of major zones but have not been correlated to individual vein domains at this time. Reported intervals include minimum weighted averages of 3.0 g/t Au diluted over core lengths of at least 2.0 metres. All NQ core assays reported were obtained by either 1-kilogram screen fire assay or standard 50-gram fire-assaying-AA finish or gravimetric finish at ALS Laboratories in Val d'Or, Québec, Thunder Bay and Sudbury, Ontario or Vancouver, British Colombia or Bureau Veritas in Timmins, Ontario. The 1-kilogram screen assay method is selected by the geologist when samples contain coarse gold or present a higher percentage of pyrite than surrounding intervals. Selected 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 ("QA/QC") 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 assay.

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 mineral resource defined by the previous operator 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 and nearby Quevillon area (over 3,300 square kilometres), 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 Quebec and 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; the significance of new results from the ongoing drill program at the Windfall Lake gold project; the significance of assay results presented in this press release; the type of drilling included in the drill program (definition drilling, expansion drilling to the NE of the main deposit and adjacent Lynx deposit, and exploration drilling on the greater deposit and Urban-Barry project area); high grade confirmed in Caribou Corridor Extension; potential mineralization; 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

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