High Grade Intersections Continue to Confirm Underdog

TORONTO, ONTARIO--(Marketwired - Aug 14, 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 16 intercepts in 14 drill holes and wedges focused on infill and expansion drilling in the Underdog, Caribou, Zone 27 and the Mallard corridors are presented below.

Highlights from the new results include: 53.5 g/t Au over 3.0 metres (35.2 g/t Au over 3.0 metres cut) and 32.9 g/t Au over 2.0 metres in DDH OSK-W-17-807-W2; 19.4 g/t Au over 2.0 meters in OSK-W-17-866 in the Underdog Corridor. 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-17-807-W1	1031.9	1034.0	2.1	8.64		FW3 FW	Underdog
including	1031.9	1032.5	0.6	27.8			
OSK-W-17-807-W2	735.0	738.0	3.0	53.5	35.2	FW1	Underdog
including	737.0	738.0	1.0	155	100		
	911.0	913.0	2.0	32.9		FW3	Underdog
including	911.0	912.0	1.0	65.4			
OSK-W-17-820	690.0	692.8	2.8	8.05		Vein	Underdog
including	690.0	691.5	1.1	14.1			
	840.5	843.6	3.1	3.85		FW0 HW	Underdog
including	842.7	843.6	0.9	11.5			
OSK-W-17-833	608.5	614.8	6.3	3.11		CN1	Caribou
including	612.9	614.8	1.9	5.93			
OSK-W-17-833-W1	1100.0	1102.0	2.0	6.16		FW3	Underdog
OSK-W-17-844	595.4	598.0	2.6	5.30		Wolf 2 FW	Caribou
including	596.4	597.0	0.6	20.3			
OSK-W-17-847	864.9	871.8	6.9	3.57		FW0	Underdog
OSK-W-17-847-W1	621.0	626.0	5.0	6.75		CS1 FW	Caribou
including	622.0	624.0	2.0	14.7			
OSK-W-17-852-W1	706.0	708.0	2.0	12.1		Wolf	Caribou
including	706.0	706.6	0.6	38.8			
OSK-W-17-858	46.8	49.0	2.2	3.95		SHR	New
including	46.8	47.7	0.9	9.58			
OSK-W-17-866	1105.0	1107.0	2.0	19.4		FW2	Underdog
including	1105.6	1106.1	0.5	73.2			
OSK-W-17-871	429.3	432.0	2.7	3.18		Z27	Zone 27
OSK-W-17-903	228.0	230.5	2.5	5.35		Caribou	Caribou
including	229.2	229.6	0.4	31.3			
OSK-W-17-919	91.5	94.4	2.9	4.32		Mallard	Mallard
including	91.5	92.3	0.8	11.0			

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-17-807-W1	330	-65	1196	452311	5434424	2325
OSK-W-17-807-W2	330	-65	1157	452306	5434421	2325
OSK-W-17-820	332	-66	1106	452669	5434484	2675
OSK-W-17-833	331	-57	1149	452597	5434395	2550
OSK-W-17-833-W1	331	-57	1173	5434395	452597	2550
OSK-W-17-844	334	-55	1092	452727	5434546	2750
OSK-W-17-847	334	-69	1347	452644	5434430	2625
OSK-W-17-847-W1	334	-69	1134	452644	5434430	2625

OSK-W-17-852-W1	330	-55 897	5434555	452879	2875
OSK-W-17-858	331	-53 840	452527	5434612	2600
OSK-W-17-866	332	-57 1299	452631	5434283	2525
OSK-W-17-871	328	-54 533	5434615	452404	2500
OSK-W-17-903	329	-56 801	452539	5434693	2650
OSK-W-17-919	329	-54 495	5434838	451943	2200

Underdog Corridor

OSK-W-17-807-W1 intersected 8.64 g/t Au over 2.1 metres including 27.8 g/t Au over 0.6 metres. Mineralization consists of 2% pyrite stringers (locally up to 30% pyrite) hosted in a silicified and sericitized felsic porphyritic dike. The intercept correlates with FW3 FW and is 50 metres up dip from OSK-W-17-807-W2 (4.29 g/t Au over 2.0 metres previously reported June 7, 2017).

OSK-W-17-807-W2 intersected two intervals: 53.5 g/t Au over 3.0 metres including 155 g/t Au over 1.0 metre (35.2 g/t Au over 3.0 metres cut) and 32.9 g/t Au over 2.0 metres including 65.4 g/t Au over 1.0 metre. The first interval is within the FW1 Zone and consists of 2% (locally up to 70%) pyrite stringers hosted in a silicified and sericitized fragmental felsic dike. This interval is 30 metres down dip of OSK-W-17-807 (19.2 g/t Au over 2.0 metres previously reported May 3, 2017). The second interval is within FW3 Zone and consists of 5% disseminated pyrite hosted in a chloritized and silicified felsic fragmental dike with trace fuschite.

OSK-W-17-820 intersected 8.05 g/t Au over 2.8 metres (including 14.1 g/t Au over 1.1 metres), and 3.85 g/t Au over 3.1 metres (including 11.5 g/t over 0.9 metres). The first interval is a quartz-vein with trace pyrite. The second interval is composed of a weakly to moderately sericitized fragmental dike with 2-3% pyrite and up to 1% pyrite-tourmaline stringers. This intercept is 70 metres west of OSK-W-17-821-W1 (7.31 g/t Au over 2.0 metres previously reported July 19, 2017).

OSK-W-17-833-W1 intersected the FW3 Zone and returned 6.16 g/t Au over 2.0 metres. Mineralization is within a fragmental felsic dike with 2-4 % pyrite stringers. This intersection is 30 metres down dip of OSK-W-17-833 (8.94 g/t Au over 2.5 metres previously reported July 19, 2017).

OSK-W-17-847 intersected the FW0 Zone and returned 3.57 g/t Au over 6.9 metres. Mineralization is within a fragmental felsic dike with 2% disseminated pyrite and stringers. The intersection is 60 metres west of OBM-15-564 (7.49 g/t Au over 7.0 metres previously reported February 29, 2016).

OSK-W-17-866 intersected the FW2 Zone and returned 19.4 g/t Au over 2.0 metres (including 73.2 g/t Au over 0.5 metres). Mineralization comprises a smoky quartz-tourmaline vein with 6% disseminated pyrite. The intersection is 30 metres south-west of OSK-W-17-706-W1 (18.6 g/t Au over 2.3 metres previously reported September 19, 2016).

Caribou Corridor

OSK-W-17-833 intersected the Caribou and returned 3.11 g/t Au over 6.3 metres (including 5.93 g/t Au over 1.9 metres). Mineralization contains traces to 5% pyrite stringers (locally up to 20%) and 2-3 % disseminated pyrite in a sericitized and silicified felsic dike.

OSK-W-17-844 intersected the Wolf 2 FW and returned 5.30 g/t Au over 2.6 metres including 20.3 g/t Au over 0.6 metre. Mineralization contains traces to 3% pyrite stringers within an intermediate volcanic unit with chlorite, sericite, carbonate and trace fuschite. The intersection is 55 metres up dip of OSK-W-16-708-W1 (4.01 g/t Au over 2.6 metres previously reported August 31, 2016).

OSK-W-17-847-W1 intersected the CS1 FW Zone and returned 6.75 g/t Au over 5.0 metres (including 14.7 g/t Au over 2.0 metres). Mineralization includes 5% pyrite stringers and 2% disseminated pyrite within an andesite with weak to moderate sericite alteration. This intersection is between two previously published results from this hole on August 1, 2017 (30.1 g/t Au over 3.0 metres and 4.08 g/t Au over 2.0 metres).

OSK-W-17-852-W1 intersected the Wolf Zone and returning 12.1 g/t Au over 2.0 metres (including 38.8 g/t Au over 0.6 metres). Mineralization includes trace to 2% disseminated pyrite and locally 50% pyrite stringers within a porphyritic felsic dike with large quartz eyes. This intersection is 60 metres north-east from Wolf Zone intersection OSK-W-16-708 (17.1 g/t Au over 2.0 metres previously reported August 31, 2016).

OSK-W-17-858 intersected 3.95 g/t Au over 2.2 metres (including 9.58 g/t Au over 0.9 metres). This near surface interval is within a shear zone and does not correlate to any currently known zone. Mineralization includes 3% pyrite stringers in a sheared andesite with moderate to strong sericite alteration.

OSK-W-17-903 intersected the Caribou Corridor and returned 5.35 g/t Au over 2.5 metres (including 31.3 g/t Au over 0.4 metres). Mineralization consists of 3-7% disseminated pyrite (up to 40% locally) in a felsic porphyritic dike with silica and sericite alteration. This intersection is 35 metres from OSK-W-16-707 (11.3 g/t au over 2.2 metres previously reported August 23, 2016).

Zone 27 Corridor

OSK-W-17-871 intersected Zone 27 returning 3.18 g/t Au over 2.7 metres. Mineralization is hosted in a felsic porphyritic dike with intense silica flooding in the matrix with smoky quartz containing 15-17 % pyrite stringers and 5-7% disseminated pyrite.

Mallard Zone

OSK-W-17-919 intersected the Mallard Zone returning 4.32 g/t Au over 2.9 metres (including 11.0 g/t Au over 0.8 metres). Mineralization includes 5% disseminated pyrite (up to 40% semi massive pyrite), 5% pyrite stringers and quartz-tourmaline veins with 5% pyrite in an andesitic unit.

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 intersections continuing to confirm Underdog; 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.

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