

Caribou Corridor CS1 Zone Expanded by 120 meters

MONTREAL, QUEBEC--(Marketwired - Jan 23, 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. Nine drills are currently active directly on the Windfall deposit, with additional drills planned to be added by month end. Including areas outside the main deposit, a total of 12 drills are currently active. New analytical results from five drill holes focussed on expansion and infill drilling in the Caribou and Underdog corridors are reported in this release, with significant assay results presented in the table below.

Significant new results include: 12.7 g/t Au over 5.4 metres in OSK-W-16-749 and 10.3 g/t Au over 3.0 metres in OSK-W-16-743-W2; 11.0 g/t Au over 2.4 metres and 8.13 g/t Au over 2.6 metres in OSK-W-16-743-W1. Maps and sections 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 Zone	Corridor
OSK-W-16-743 W2	748.0	751.0	3.0	10.3	CS1	Caribou
<i>including</i>	<i>749.6</i>	<i>751.0</i>	<i>1.4</i>	<i>21.5</i>		
OSK-W-16-749	504.6	510.0	5.4	12.7	CS1	Caribou
<i>including</i>	<i>504.6</i>	<i>505.3</i>	<i>0.7</i>	<i>35.2</i>		
OSK-W-16-754	724.4	726.5	2.1	7.15	CS1	Caribou
<i>including</i>	<i>724.9</i>	<i>725.5</i>	<i>0.6</i>	<i>24.6</i>		
OSK-W-16-756	672.8	675.4	2.6	3.29	CS1	Caribou
<i>including</i>	<i>673.8</i>	<i>674.6</i>	<i>0.8</i>	<i>9.66</i>		
OSK-W-16-743 W1	1000.5	1005.7	5.2	5.77	FW0	Underdog
<i>including</i>	<i>1001.3</i>	<i>1003.7</i>	<i>2.4</i>	<i>11.0</i>		
	1243.5	1245.6	2.1	6.77	FW2 HW	Underdog
	1251.8	1254.4	2.6	8.13	FW2	Underdog
<i>including</i>	<i>1252.1</i>	<i>1252.9</i>	<i>0.8</i>	<i>24.0</i>		
	1394.0	1396.0	2.0	6.29	FW3	Underdog
<i>including</i>	<i>1394.0</i>	<i>1394.9</i>	<i>0.9</i>	<i>12.9</i>		
	1108.0	1111.0	3.0	4.94	FW0	Underdog
<i>including</i>	<i>1110.0</i>	<i>1111.0</i>	<i>1.0</i>	<i>11.9</i>		
	1128.4	1131.0	2.6	3.66	FW0 FW	Underdog

Notes:

1. True Widths are estimated at 65 - 80% of the reported core length interval. See "Quality Control" below.
2. Definitions: HW = hanging wall; FW = footwall

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-W-16-743 W1	333.3	-64.1	1489.5	452651	5434237	2525
OSK-W-16-743 W2	333.3	-64.1	1626.7	452651	5434237	2525
OSK-W-16-749	332.0	-57.0	553.0	452486	5434389	2450
OSK-W-16-754	331.0	-59.1	1564.5	452766	5434303	2675
OSK-W-16-756	331.0	-58.0	803.0	452809	5434392	2750

Caribou Corridor

Four of the drill holes intersected the CS1 Zone of the Caribou Corridor, expanding it to 360 metres by 200 metres. The CS1 Zone remains open down plunge.

OSK-W-16-749 returned 12.7 g/t Au over 5.4 metres hosted in a silicified porphyry dyke containing 2% to 35% pyrite stringers and disseminations. This intercept is located 120 metres to the southwest of previously released OSK-W-16-706 which returned 8.65 g/t Au over 3.0 metres.

OSK-W-16-743-W2 intersected 10.3 g/t Au over 3.0 metres in a bleached andesite containing 5% - 20% pyrite stringers and disseminations, expanding the CS1 Zone 120 metres down-dip.

OSK-W-16-754 assayed 7.15 g/t Au over 2.1 metres in the strongly silicified and sericitized contact between a porphyry dike and

andesite containing 5-20% pyrite stringers with minor visible gold. This hole expands the CS1 Zone 60 metres down-plunge from previously reported OBM-15-564 which returned 5.59 g/t Au over 7.4 metres. The hole also intersected 4.94 g/t Au over 3.0 metres in the FW0 Zone and 3.66 g/t Au over 2.6 metres in the FW0 Footwall Zone, both of which contain mineralization similar in style to that above the Red Dog.

OSK-W-16-756 intersected 3.29g/t Au over 2.6 meters and extended the CS1 Zone 60 metres northeast of previously reported OBM-15-564 (5.59 g/t Au over 7.4 meters) and 95 metres above previously reported OSK-W-16-754 (7.15 g/t Au over 2.1 metres). Mineralization comprises 15% pyrite stringers at the contact between a porphyry dike and strongly sericitized andesite.

Underdog Corridor

OSK-W-16-743-W1 targeted several parallel zones of the Underdog Corridor and intersected 5.77 g/t Au over 5.2 meters, extending the FW0 Zone by 100 metres southwest of previously reported OBM-15-560 (12.5 g/t Au over 2.0 meters). Mineralization consists of 10% to 30% pyrite stringers in a strongly silicified fragmental porphyry dike. The FW0 Zone has been intersected by eight drill holes to date and now defines an area 210 metres by 290 metres.

The hole also intersected the FW2 Zone assaying 8.13 g/t Au over 2.6 metres and extends the zone by 130 metres west of previously reported OSK-W-16-743 (47.0 g/t Au over 2.6 metres; 303.1 g/t Au over 2.6 metres uncut). Gold mineralization is hosted in a silicified porphyry dike containing semi-massive pyrite. The FW2 hanging wall returned 6.77 g/t Au over 2.1 metres in a silicified porphyry dike containing 2-5% pyrite and the FW3 Zone returned 6.29 g/t Au over 2.0 metres at the contact between felsic volcanics with 2-3% pyrite stringers and disseminations.

Qualified Person

The scientific and technical content of this news release has been reviewed, prepared and approved by Mr. Jean-Philippe Desrochers, Ph.D., P.Geo. Senior 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 of the new exploration intercepts below Red Dog reported in this press release have yet to be determined. Additional drilling is planned for the immediate area which will enable the true width determination. True widths of intercepts in the zones above the Red Dog are estimated at 65-80% of the reported core length intervals. Assays 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 and has approximately \$90 million in cash and cash equivalents as well as equity investments of approximately \$50 million.

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 increase in the size of the drill program by 250,000 metres; 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); additional drills being added in the coming months; the successful results from the 200 metres of step-out lines over 600 metres of strike length northeast from the main Windfall mineralization; the ability of encouraging intersections to provide the Corporation with a wide expanse of new infill drilling targets, to be the objective of the additional 250,000 metres of drilling; potential mineralization; 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; 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; 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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