

New Discovery 15 Kilometres SW of Windfall Deposit Includes 15.6 g/t Au, 93.5 g/t Ag and 3.29% Cu over 2.8 m

MONTREAL, QUEBEC--(Marketwired - Dec 6, 2016) - [Osisko Mining Inc.](#) (TSX:OSK) ("Osisko" or the "Corporation") is pleased to announce initial drill results from its 100% owned Black Dog gold project located in Barry Township, Québec. The project is situated 15 kilometres SW of its flagship Windfall Lake Gold Deposit. Drilling is targeting geophysical conductors identified with an airborne electromagnetic (EM) survey completed earlier in the year by Osisko that coincide with a 600 x 800 metre circular magnetic anomaly. The geophysical anomalies sit atop a zone of pervasive and/or brecciated quartz-tourmaline-sulfide alteration that has been the object of historical shallow drilling.

DDH OSK-BD-16-002 was collared 150 metres to the east of an outcropping alteration zone (dubbed "Tourmaline Hill"). This new hole intersected 6.14 g/t Au and 34.1 g/t Ag over 14.4 metres, including 15.6 g/t Au and 93.5 g/t Ag over 2.8 metres in a mineralized tourmaline breccia containing 2-15% coarse pyrite and 10% chalcopyrite. This intersection is part of a wider intercept that averaged 3.42 g/t Au and 23.2 g/t Ag over the entire intersected length of 32.1 metres. Significant results from the two drill holes are presented in the table below. DDH OSK-BD-16-001 was collared 600 metres to the SW of OSK-BD-16-002 and intersected 5.76 g/t Au and 34.8 g/t Ag over 0.9 metres in a tourmaline breccia.

Further drilling is currently in progress and is directed at determining the extent and continuity of the new mineralization discovered at Black Dog.

Maps and sections showing the location of DDH OSK-BD-16-001 and -002 are available at www.osiskominer.com.

Drill Hole	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Zone
OSK-BD-16-001	199.9	200.8	0.9	5.76	34.8	0.71	Black Dog
OSK-BD-16-002	93.2	125.3	32.1	3.42	23.2	0.65	Black Dog
<i>including</i>	97.2	111.6	14.4	6.14	34.1	0.95	Black Dog
<i>including</i>	97.2	100.0	2.8	15.6	93.5	3.29	Black Dog

Notes:

(1) For complete drilling results please see <http://www.osiskominer.com/>.

(2) True Widths are not known. See "Quality Control" below.

Full analytical results from the new drill holes are available at www.osiskominer.com.

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N
OSK-BD-16-001	330	-56	288	441704	5422936
OSK-BD-16-002	332	-61	196.5	442131	5423313

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 and the Black Dog 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

Additional drilling is planned for the immediate area which will enable the true width determination. Assays are uncut except where indicated. 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 Black Dog Project

The Black Dog Project is located approximately 90 kilometres east of Lebel sur Quevillon, 14 kilometres southwest of, and along the same geological trend as, Osisko's Windfall Lake project. Three zones have been defined by historical work on the property

including the Nubar Zone (with estimated resources of 564,000 tonnes at 6.2 g/t Au, based on historical estimates that have not been prepared in accordance with NI 43-101, the Tourmaline Hill Zone, and the Barry-Souart Zone. These three zones are located along a 5 kilometre length of the same geological structure. See below under the heading "Disclosure of Historical Estimates".

Disclosure of Historical Estimates

In 1950, Nubar Mines Ltd. sunk a 44 metre deep shaft and drove 135 metres of drifts and crosscuts. Several exploration surveys were then completed by other companies (Glenelg Developers Limited, Goldmaster Mines Ltd., Shell Canada Limited, Tut Explorations, Société de développement de la Baie-Jaimes (SDBG) and Oasis Resources Inc.). Between 1985 and 1990, Oasis Resources Inc. completed 152 drill holes, followed with an estimated resource calculation of 564,000 tonnes at 6.2 g/t Au. These resource estimates are of a historical nature and do not comply with NI 43-101. However, the resource estimate may be relevant because the Black Dog property encompasses the same geological trend that the Nubar Zone occupies and, to the best of the knowledge of Mr. Jean-Phillipe Desrochers, there has been no material change with respect to the metallic minerals within the original resource estimation area (and region) that would affect the estimation parameters since 1985. Further drilling would be required to upgrade or verify the historical resource estimate as current mineral resources or reserves. Osisko is unaware of the existence of any technical report prepared in connection with the scientific and technical information in this news release. A Qualified Person (within the meaning of NI 43-101) has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. Osisko is not treating the historical estimate as current mineral resources or mineral reserves. Further, there have not been any mineral resources calculated on the Black Dog property recently.

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 \$80 million in cash and cash equivalents as well as marketable securities of approximately \$60 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 initial drill results from the Black Dog gold project; drilling techniques to target geophysical conductors identified by an airborne electromagnetic (EM) survey; the circular magnetic/geophysical anomaly; the relevance of historical resources estimate on the Nubar Zone, which does not comply with NI 43-101; that any work may be done by a Qualified Person (within the meaning of NI 43-101) to classify the historical estimate as current mineral resources or reserves; 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; 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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