New Intercept Located 200 Metres Below Known Jonpol Deposit

MONTREAL, QUEBEC--(Marketwired - Sep 28, 2016) - Osisko Mining Inc. (TSX:OSK) ("Osisko" or the "Corporation") is pleased to announce new results from the ongoing drill program at its 100% owned Garrison gold project located in Garrison Township, Ontario. The current 20,000 metre drill program at Garrison is designed to further test the limits of the known Jonpol and Garrcon gold deposits. Three drills are currently active on site. A total of 6 new drill holes are reported in this release, and are presented in greater detail in the table below.

Significant new results include: 14.9 g/t Au over 7.7 metres (uncut) in DDH OSK-G16-300 (8.70 g/t Au over 7.7 metres cut); and 1.02 g/t Au over 63.3 metres in DDH OSK-G16-296.

The drill program initiated by Osisko at the Garrison Project is designed to increase confidence in the historical resource estimates on the Jonpol and Garrcon deposits, as well as exploring for possible extensions of the known mineralized zones. The current results demonstrate there is good potential to increase the known mineral inventory at Jonpol through continued definition and exploratory drilling, specifically in the depth extensions of the main deposit. Historic drilling at Jonpol was limited to areas from surface to 600 metres depth with much of the drilling targeting above 350 metres depth. Hole OSK-G16-300 represents a mineralized extension of the deposit 200 metres below the current historical resource area.

Details of significant new results are outlined in the table below:

Hole	From (m)	To (m)	Interval (m)	Au (g/t)	Zone
OSK-G16-295	57.00	58.00	1.00	14.8	Green Zone
	256.00	257.00	1.00	4.18	Garrcon
	280.50	281.50	1.00	6.80	Garrcon
	780.00	781.00	1.00	10.7	Garrcon
OSK-G16-296	89.70	153.00	63.30	1.13	Garrcon
including	137.00	147.00	10.00	2.37	
OSK-G16-300	189.00	189.50	0.50	25.70	Garrcon
	240.00	241.00	1.00	4.13	Garrcon
	778.30	786.00	7.70	14.9	Jonpol
including	781.00	781.50	0.50	195	
cut to 100 g/t	778.30	786.00	7.70	8.70	

Notes:

(1) For complete drilling results please see www.osiskomining.com.

(2) True widths are estimated at 65-80% of the reported core length interval. See "Quality Control" below.

(3) High grade values cut to 100 g/t Au

Drill Hole Collar Coordinates and Information:

Hole Number	Azimuth (°)	Dip (°)	Length (m)	UTM E	UTM N	Section
OSK-G16-295	160	-60	906	578550	5374213	1200W
OSK-G16-296	340	-55	1218	578595	5373815	1300W
OSK-G16-297	340	-50	600	577900	5373960	1900W
OSK-G16-298	340	-60	696	577695	5373935	2100W
OSK-G16-299	160	-60	795	579415	5374618	250W
OSK-G16-300	340	-55	822	578350	5373900	1500W

DDH OSK-G16-295 intersected 14.8 g/t Au over 1.0 metres, 50 metres from surface within the Green Zone horizon within the hangingwall of the Munro Shear Zone as well as three mineralized intervals below the Garrcon Deep zone resource with up to 10.7 g/t Au over 1.0 metres. This new intercept is approximately 100 metres south of the existing deep resource.

DDH OSK-G16-296 intersected a broad zone of mineralization along the western portion of the current Garrcon resource grading 1.02 g/t Au over 63.3 metres including 2.37g/t over 10.0 metres.

DDH OSK-G16-300 intersected a series of well mineralized albite zones within the Munro Shear approximately 200 metres below the existing drilling in the Jonpol Deposit East Zone. An interval of 14.9 g/t Au over 7.7 metres including 195 g/t Au over was 0.5 metres intersected approximately 200 metres below the existing Jonpol resource. This hole demonstrates the possibility of increasing the resources within the Jonpol deposit at depth.

DDH OSK-G16-297,OSK-G16-298, and OSK-G16-299 did not return significant results.

Full analytical results from the 6 new drill holes are available at www.osiskomining.com.

Qualified Person

The scientific and technical content of this press release has been reviewed, prepared and approved by Mr. Greg Matheson, P.Geo. Senior Project Manager of the Garrison 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

True widths of the new exploration intercepts 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. Assays are uncut except where indicated. All HQ core assays reported were obtained by either whole sample rock metallic screen/fire assay or standard 30 gram fire-assaying with AA finish at SGS Mineral Services in Cochrane, Ontario. The whole sample metallic screen assay method is selected by the geologist when samples contain coarse gold or any samples displaying gold initial fire assay values greater than 4g/t. Drill program design, Quality Assurance/Quality Control 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 assays.

About the Garrison Project

The Garrison Project area is comprised of 214 mineral claims, 25 mining leases, and 87 patent claims encompassing approximately 8,000 hectares.

Both Garrcon and Jonpol have resource estimates that are described in a technical report prepared in accordance with National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101"), which was completed by a previous operator Northern Gold Mining Inc. (entitled *"Technical Report on the Golden Bear Project - Garrison Property: Larder Lake Mining Division - Garrison Township, Ontario, Canada"*) (the "Technical Report") with an effective date of December 30, 2013. The Technical Report was prepared by A.C.A. Howe International Limited for Northern Gold Mining Inc. (a wholly-owned subsidiary of Osisko) and is available on Osisko's website at www.osiskomining.com and on SEDAR under Northern Gold Mining Inc.'s issuer profile at www.sedar.com.

Resource estimates were conducted by A.C.A. Howe International Limited according to CIM standards. The Garrcon deposit estimates showed 15.1 million tonnes with an average grade of 1.07 g/t Au (521,000 oz) in measured resources; 14.1 million tonnes averaging 1.16 g/t Au (526,000 oz) in indicated resources; and 1.7 million tonnes averaging 0.72 g/t Au (39,000 oz) in inferred resources. Potential underground resources of 5.1 million tonnes averaging 3.49 g/t Au (577,000 oz) in the inferred category were also outlined. Resources were reported at a cut-off grade of 0.4 g/t Au for open pit extraction and 1.5 g/t in a bulk underground mining scenario using a gold price of US$1,250/oz.

At the Jonpol deposit, resources were estimated as 0.87 million tonnes averaging 5.34 g/t Au (150,000 oz) in the indicated category; and 1.07 million tonnes averaging 5.56 g/t Au (192,000 oz) in inferred resources. Resources were reported at a cut-off grade of 3.0 g/t Au and assume an underground extraction scenario using a gold price of US$1,250/oz.

Readers are cautioned that inferred resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or any part of the inferred resources will ever be upgraded to a higher category. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

Garrcon Deposit

The Garrcon deposit has a shallow plunge eastward along the footwall of the Destor-Porcupine Fault Zone with the bulk of the resource in the western, more densely drilled area. The zone is exposed at surface and has potential for open pit bulk mining at an estimated overall stripping ratio of 1.8:1. There is potential for additional underground resources below the pit and along the easterly plunge of the zone, which is open for further exploration down dip and along strike.

The Garrcon shaft was sunk in 1935 and 1936 by the Consolidated Mining and Smelting Co. of Canada ("Cominco") and the Shaft and South Zones were tested for high grade gold mineralization. Cominco drove approximately 1,430 metres of drifts and cross cuts, mining underground veins. Diamond drilling by Cominco and Lac Minerals Ltd. in the mid-to-late 1980s identified broad sections of low grade mineralization. In 2006-2007 ValGold Resources Ltd. conducted additional drilling confirming these

zones. From 2009-2013 Northern Gold Mining Inc. conducted 97,000 metres of diamond drilling which delineated the current resource.

In 2014 Northern Gold Mining Inc. was granted a trial mining permit allowing the extraction of up to 150,000 tonnes. Northern Gold Mining Inc. mined 73,534 dry tonnes which was processed at the nearby Holt mill facility recovering 3,516.3 oz at an average head grade of 1.55 g/t and recovery of 95.9%. The trial production permit remains active.

Jonpol Deposit

Jonpol is situated in the Munro Fault Zone, a west striking splay off the north side of the Destor-Porcupine Fault. Hosted in a shear zone tens of meters wide in altered mafic volcanic rocks, the deposit consists of four high grade gold mineralized zones (JP, JD, RP and East) over a strike length of 1.7 kilometers. Gold mineralization is hosted in quartz carbonate veins, in mafic and ultramafic host rocks, and is associated with intense albite and/or sericite alteration and pyrite mineralization.

In 1997, a 49,087 tonne bulk sample was extracted from the central part of the JP zone by Hillsborough Resources Limited with an average grade of 6.7 g/t which produced 9,476 ounces Au. From 1985-2013, over 130,000 metres of drilling was completed on the property by previous operators. Development work on the JP zone included the sinking of a 184 meter shaft as well as development of a ramp to the 150 meter level with mining on six sublevels. The Jonpol infrastructure underwent reclamation in the late 1990s and was closed out in 2001, but the existing ramp and shaft are preserved.

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 $50 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 and projections as at the date of this news release. The information in this news release about the potential for significant new mineralization near the Garrison mineral inventory; specifically increases in resource confidence within the western portion of the Garrcon zone; well mineralized "albite" zones within the Jonpol Deposit; the new intercept located below the known Jonpol deposit;the ability of the exploration team to continue intersecting new extensions and to define new parallel mineralized zones; pending transactions and any interests and options of the Corporation; any potential mineralization; the ability to realize upon any mineralization in a manner that is economic; the ability to complete any proposed drilling or 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, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "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 Osisko, 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 quality of drilling results; the ability of drill results to forecast actual mineralization; property interests; our ability to obtain required approvals, complete definitive documentation and complete transactions on the terms announced, ability of Osisko to complete further exploration activities, including drilling; 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 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