25,000 Metres Added to Garrison Drill Program

TORONTO, ONTARIO--(Marketwired - May 25, 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 Garrison gold project located in Garrison Township, Ontario. To date, over 45,000 metres of new drilling have been conducted by Osisko on the Garrison Project. An additional 25,000 metres of drilling has been added to the Garrison Project to further test the known Garrcon, Jonpol and 903 zones. A total of nine new intercepts in thirteen holes are reported in this release, with significant assay results presented in the table below.

Significant new results include: 20.6 g/t Au over 2.0 metres and 2.93 g/t Au over 7.2 metres in OSK-G17-348; and 4.72 g/t Au over 7.0 metres in OSK-G17-349.

The new results have demonstrated the potential to expand the extent of known mineralization in the 903 Zone and beneath the Garrcon Zone. The increased drill program for 2017 will continue to follow new extensions of the mineralized zones within the Garrcon, Jonpol and 903 zones.

Maps and sections showing hole locations and complete drilling results are available at www.osiskomining.com.

Hole No.	From (m)	To (m)	Interval (m)	Au (g/t) uncut	Au (g/t) cut to 30 g/t	Zone
OSK-G17-348	85.5	92.7	7.2	2.93		903
	106.0	113.0	7.0	2.57		903
	248.0	250.0	2.0	20.6	15.2	903
including	*249.0*	*250.0*	*1.0*	*40.7*	*30.0*	903
OSK-G17-349	168.3	175.3	7.0	4.72		903
including	*169.8*	*170.8*	*1.0*	*15.7*		903
OSK-G17-351	101.2	117.0	15.8	1.35		903
	139.6	155.0	15.4	1.12		903
	181.0	188.0	7.0	2.39		903
OSK-G17-352	315.7	321.2	5.5	2.90		903
OSK-G17-350	563.0	565.2	2.2	7.93		Garrcon
including	*564.1*	*564.7*	*0.6*	*28.6*		Garrcon

Notes: True Widths are estimated at 65 - 80% of the reported core length interval. See "Quality Control" below.

Hole Number	Azimuth (o)	Dip (o)	Length (m)	UTM E	UTM N	Section
OSK-G17-337	337	-63	642	578356	5373576	1600W
OSK-G17-340	340	-46	207	577268	5373351	2700W
OSK-G17-347	160	-50	186	576881	5373276	3100W
OSK-G17-348	340	-45	271	577273	5373190	2750W
OSK-G17-349	340	-47	447	577073	5373301	2900W
OSK-G17-350	340	-46	769	577934	5373274	2100W
OSK-G17-351	340	-45	369	577319	5373209	2700W
OSK-G17-352	340	-60	465	576951	5373037	3100W
OSK-G17-353	338	-46	273	577383	5373179	2650W
OSK-G17-355	338	-46	273	577277	5373033	2800W
OSK-G17-356	338	-46	507	577653	5373172	2400W
OSK-G17-357	340	-45	270	577490	5373325	2500W
OSK-G17-359	335	-47	414	577524	5373231	2500W

OSK-G17-348 and OSK-G17-351 were drilled in the central section of the 903 Zone targeting the down dip extension of the intersection in drill hole OSK-G17-326 (16.7 g/t Au over 16.4 metres, previously reported). The holes extended the mineralized zone 50 metres down dip and 50 metres west of the prior intersections with multiple intersections of syenite showing coarse sulphide mineralization and hematite alteration. DDH OSK-G17-348 intersected three zones of mineralization: 2.93 g/t Au over 7.2 metres, 2.57 g/t Au over 7.0 metres and 20.6 g/t Au over 2.0 metres. DDH OSK-G17-351 also intersected three mineralized zones: 1.35 g/t Au over 15.8 metres, 1.12 g/t Au over 15.4 metres and 2.39 g/t Au over 7.0 metres.

OSK-G17-349 was drilled 150 metres west of DDH OSK-G17-348 along strike of the 903 Zone. This hole targeted the 903 Zone

footwall sediment mineralization 85 metres up dip from previously reported intersection in OSK-G16-318 (2.90 g/t Au over 19.6 metres). A zone of sericite altered fine grained sediment was intersected returning 4.72 g/t Au over 7.0 metres (including 15.7 g/t Au over 1.0 metre).

OSK-G17-352 targeted the main 903 Syenite Zone 350 metres west of DDH OSK-G17-348. The hole intersected a highly deformed and sericite altered syenite dike with significant quartz vein content hosted within mariposite schist. The quartz rich syenite returned 2.90 g/t Au over 5.5 metres.

OSK-G17-350 targeted the eastern extension of Garrcon style mineralization along the footwall of the Destor Porcupine Fault, hosted within strongly sericite altered metasediment containing narrow intervals of iron formation. This hole is 100 meters east along strike of previously reported intersection in OSK-G17-331 (10.9 g/t Au over 3.9 metres). The new hole intersected 7.93 g/t Au over 2.2 metres (including 28.6 g/t Au over 0.6 metres) from veins cross cutting iron formation containing 5% coarse pyrite along the vein wall and local fine grained visible gold.

OSK-G17-337, -340, -347, -353, -355, -356, -357, -359 did not intersect significant mineralization.

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, and calculated intervals are reported over a minimum length of 2 metres using a lower cutoff of 3 g/t Au. 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 Minerals 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 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 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 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") dated December 30, 2013, with an effective date of December 30, 2013 (the "Garrison Technical Report"). The Garrison 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 Zone 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 Zone, 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 Zone

The Garrcon Zone 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 oz at an average head grade of 1.55 g/t and recovery of 95.9%. The trial production permit remains active.

Jonpol Zone

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 metres 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 metre shaft as well as development of a ramp to the 150 metre 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 Garrcon and Jonpol zones 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 $190 million in cash and equity investment.

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 ongoing drill program at the Garrison gold project; results of the current 35,000 metre drill program; the significance of new drill results reported in this press release; the ability of new drill results to demonstrate potential for expansion of the previously defined Garrcon, Jonpol and 903 mineralized zones at the Garrison project; the scope of the 2017 drill program; that the 2017 drill program will follow new extensions of these mineralized zones to further define the scale of mineralization at the Garrison project; 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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