MONTREAL, QUEBEC--(Marketwired - Jul 13, 2016) - Osisko Mining Inc. ("Osisko")(TSX:OSK) is pleased to announce that it has commenced a 20,000 metre drill program on its 100% owned Garrison property situated 100 kilometres east of Timmins, Ontario. The current work program will focus on the Garrcon and Jonpol deposits defined by previous operators on the property. The new drilling is designed to confirm the previous work and follow-up on potential higher grade underground zones at the bulk tonnage Garrcon deposit. Drilling will also be directed to further exploring the underground resource potential which remains open at depth on the Jonpol deposit.

About the Garrison Project

The Garrison Project 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 meters 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 meters 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 of high sulphide ore (10% sulphide minerals) 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 meters 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.

Qualified Person

The scientific and technical content of this press release has been reviewed by Mr. Greg Matheson, B.Sc, P.Geo. Project Manager, who is a "Qualified Person" within the meaning of NI 43-101.

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% interest in the high-grade Windfall Lake gold deposit located between near Lebel-sur-Quévillon, Québec, and holds a 100% undivided interest in a large area of claims in the surrounding Urban-Barry Townships area (82,400 hectares). Osisko also holds 100% interest in the Marban project located near Malartic, Québec and also holds 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 Company also holds interests and options in a number of additional properties in northern Ontario. Osisko is well financed with approximately $94 million in cash, cash equivalents and marketable securities (*pro-forma* financing announced June 27, 2016).

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 pending drilling, ongoing drill program, 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; the prospective significance of any historical information; 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 property interests; 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.

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