

OSISKO ANNOUNCES UPDATED MINERAL RESOURCE ESTIMATE AT OSISKO MINING'S WINDFALL PROJECT

Indicated Resource: 1.21 Moz Au averaging 9.1 g/t Au Inferred Resource: 3.94 Moz Au averaging 8.4 g/t Au

Montreal, February 20, 2020 – Osisko Gold Royalties Ltd ("Osisko" or the "Company") (TSX & NYSE: OR) is pleased to announce that Osisko Mining Inc. ("Osisko Mining") has provided an updated mineral resource estimate for its 100% owned Windfall gold deposit ('Windfall"), located in Québec. Osisko holds a 2.0-3.0% net smelter return royalty on Windfall.

Drilling carried out in 2019 at Windfall increased the indicated mineral resource estimate by 60% (added 452,000 ounces) and increased the inferred mineral resource estimate by 66% (added 1,572,000 ounces). The Windfall project now hosts indicated mineral resources of 1.21 Moz (4.1 Mt @ 9.1 g/t) and inferred mineral resources of 3.94 Moz (14.5 Mt @ 8.4 g/t), entirely above 1,200 metres vertical depth. Located in Québec, one of the best mining jurisdictions in the world, this mineral resource estimate moves Windfall to world-class status in terms of scale and grade.

Sean Roosen, Chair and CEO of Osisko, stated: "We would like to extend our congratulations to the Osisko Mining team, led by John Burzynski, for recently completing 1 million metres of drilling and delivering this world-class resource. Osisko and Osisko Mining's teams have collectively worked on three world class gold deposits discovered in Québec over the past fifteen years – Canadian Malartic, Éléonore, and now Windfall. This couldn't have been possible without the strong support of all stakeholders. The Windfall project will deliver substantial benefits to the province of Québec, the area's First Nations communities and other stakeholders."

Area	INDICATED			INFERRED		
	Tonnes	Grade	Ounces Au ⁽¹⁾	Tonnes (1)	Grade	Ounces Au ⁽¹⁾
	(000 t) ⁽¹⁾	(g/t)	(000 oz)	(000 t)	(g/t)	(000 oz)
Lynx ²	1,817	11.3	661	6,349	10.9	2,233
Underdog	561	8.0	145	4,776	6.9	1,067
Main ³	1,749	7.1	401	3,407	5.8	638
Total	4,127	9.1	1,206	14,532	8.4	3,938

Windfall Gold Deposit Mineral Resource Estimate by Area (3.5 g/t Au cut-off)

1. Values are rounded to nearest thousand which may cause apparent discrepancies.

2. Lynx area includes: Lynx Main, Lynx HW, Lynx SW and Lynx 4, Triple Lynx.

3. Main area includes: Zone 27, Caribou, Mallard, Windfall Nord and F-Zones.

For more details, please refer to Osisko Mining's press release dated February 19, 2020 and titled "Osisko Windfall Updated Mineral Resource Estimate".

Qualified Person

The scientific and technical content of this news release has been reviewed and approved by Mr. Guy Desharnais, Ph.D., P.Geo., Director of Mineral Resources Evaluation at Osisko Gold Royalties Ltd, who is a "qualified person" as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). For more technical details, please refer to Osisko Mining's press release dated February 19, 2020 and titled "Osisko Windfall Updated Mineral Resource Estimate".

About Osisko Gold Royalties Ltd

Osisko Gold Royalties Ltd is an intermediate precious metal royalty company focused on the Americas that commenced activities in June 2014. Osisko holds a North American focused portfolio of over 135 royalties, streams and precious metal offtakes. Osisko's portfolio is anchored by its cornerstone asset, a 5% net smelter return royalty on the Canadian Malartic mine, which is the largest gold mine in Canada. Osisko also owns the Cariboo gold project in Canada as well as a portfolio of publicly held resource companies, including a 15.9% interest in Osisko Metals Incorporated and a 19.9% interest in Falco Resources Ltd.

Osisko is a corporation incorporated under the laws of the Province of Québec, with its head office is located at 1100 avenue des Canadiens-de-Montréal, Suite 300, Montréal, Québec, H3B 2S2.

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Forward-looking Statements

Certain statements contained in this press release may be deemed "forward-looking statements" within the meaning of applicable Canadian and U.S. securities laws. These forward-looking statements, by their nature, require Osisko to make certain assumptions and necessarily involve known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied in these forward-looking statements. Forward-looking statements are not guarantees of performance. These forward-looking statements, may involve, but are not limited to, the potential of its Windfall Lake gold deposit to continue to deliver benefit for all its stakeholders, the ability of Osisko Mining to realize upon any mineralization in a manner that is economic and its ability to complete any proposed exploration activities and the results of such activities, including the continuity or extension of any mineralization. Words such as "may", "will", "would", "could", "expect", "believe", "plan", "anticipate", "intend", "estimate", "continue", or the negative or comparable terminology, as well as terms usually used in the future and the conditional, are intended to identify forward-looking statements. Information contained in forward-looking statements is based upon certain material assumptions that were applied in drawing a conclusion or making a forecast or projection, including management's perceptions of historical trends, current conditions and expected future developments, as well as other considerations that are believed to be appropriate in the circumstances. Osisko considers its assumptions to be reasonable based on information currently available, but cautions the reader that their assumptions regarding future events, many of which are beyond the control of Osisko, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect Osisko and its business; Such risks and uncertainties include, among others, risks relating to the ability of exploration activities carried out by Osisko Mining (including drill results) to accurately predict mineralization; errors in Osisko Mining's geological modelling; the ability of Osisko Mining to complete further exploration activities, including drilling.

For additional information with respect to these and other factors and assumptions underlying the forward-looking statements made in this press release, see the section entitled "Risk Factors" in the most recent Annual Information Form of Osisko which is filed with the Canadian securities commissions and available electronically under Osisko's issuer profile on SEDAR at www.sedar.com and with the U.S. Securities and Exchange Commission and available electronically under Osisko's issuer profile on EDGAR at www.sedar.com and with the U.S. Securities information set forth herein reflects Osisko's expectations as at the date of this press release and is subject to change after such date. Osisko disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.