

Press Release

Loncor Reports Significant Gold Intercepts at its Flagship Adumbi Deposit

• Drill results include 33.30 metres grading 3.25 g/t Au and 10.45 metres at 3.88 g/t Au

Toronto, Canada – **December 22, 2020** – Loncor Resources Inc. ("**Loncor**" or the "**Company**") (TSX: "LN"; OTCQX: "LONCF"; FSE: "LO51") is pleased to announce that the second core hole of a 7,000 metre drilling program at its Adumbi deposit has intersected significant gold intersections of 33.30 metres grading 3.25 g/t gold (including 5.70 metres grading 7.00 g/t Au and 9.07 metres grading 5.11 g/t Au) and 10.45 metres grading 3.88 g/t Au, at its 84.68% owned Imbo Project in the eastern part of the Ngayu greenstone belt in the Democratic Republic of the Congo (see Figure 1 below).

Mineralized sections are summarised in the table below:

Borehole Number	From (m)	To (m)	Intersected Width (m)	Grade (g/t) Au
LADD003	224.55	235.00	10.45	3.88
LADD003	253.50	286.80	33.30	3.25
LADD003	Incl. 253.50	259.20	5.70	7.00
LADD003	Incl. 277.73	286.80	9.07	5.11

Borehole LADD003 had an inclination of minus 57 degrees and azimuth of 220 degrees at the start of hole and regular measurements of inclination and azimuth were taken at 30 metre intervals down the hole. All core was orientated and it is estimated that the true widths of the mineralised sections are 80% of the intersected width. All intercepted grades are uncut. Borehole LADD003 was drilled in place of LADD002 which was stopped after deviating from its intended target depth.

Commenting on these latest drilling results, Loncor President Peter Cowley said: "We are very encouraged by the results of the first two core holes of our 7,000 metre drilling program at Adumbi where we are targeting a significant increase of resources, both within and below the open pit shell. These two infill holes were drilled within the open pit shell where there is already an inferred resource of 2.19 million ounces (28.97 million tonnes grading 2.35 g/t gold). These results will further increase the inferred resource. Deeper drilling is now being focussed on the plunging/downdip mineralization below the pit shell."

In addition to core holes LADD001 and LADD003, the deeper hole LADD004, which was targeting mineralization 140 metres below previous borehole SDD53 drilled in 2017 (borehole SDD53 intersected 23.5 metres grading 6.08 g/t Au), was completed and cores have been submitted for assay. Deeper hole LADD007 and shallower hole LADD006 are currently being drilled to intercept the downdip/down plunge mineralized zone below the open pit shell and at shallower depth towards the northwest at the base of the pit shell respectively (see Figure 2 below).

The gold mineralization at Adumbi is associated with a thick package (up to 130 metres) of interbedded banded ironstone and quartz carbonate and chlorite schist with higher grade sections being found in a strongly altered siliceous unit termed "Replaced Rock" (RP) where structural deformation and alteration has completely destroyed the primary host lithological fabric. Disseminated sulphide assemblages include pyrite, pyrrhotite and arsenopyrite which can attain up to 20% of the total rock in places.

The objective of the current drilling program at Adumbi is to outline additional mineral resources to the current inferred mineral resource of 2.5 million ounces of gold on Loncor's 84.68%-owned Imbo Project which contains the Adumbi, Kitenge and Manzako deposits (inferred mineral resources of 30.65 million tonnes grading 2.54 g/t Au).

Quality Control and Quality Assurance

Drill cores for assaying were taken at a maximum of one-metre intervals and were cut with a diamond saw, with one-half of the core placed in sealed bags by Company geologists and sent to the Company's on-site sample preparation facility. The core samples were then crushed down to 80% passing minus 2 mm and split with one half of the sample up to 1.5 kg pulverized down to 90% passing 75 microns. Approximately 150 grams of the pulverized sample was then sent to the SGS Laboratory in Mwanza, Tanzania (independent of the Company). Gold analyses were carried out on 50g aliquots by fire assay. In addition, check assays were also carried out by the screen fire assay method to verify high-grade sample assays obtained initially by fire assay. As part of the Company's QA/QC procedures, internationally recognized standards, blanks and duplicates were inserted into the sample batches prior to submitting to SGS Laboratory.

Qualified Person

Peter N. Cowley, who is President of Loncor and a "qualified person" as such term is defined in National Instrument 43-101, has reviewed and approved the technical information in this press release.

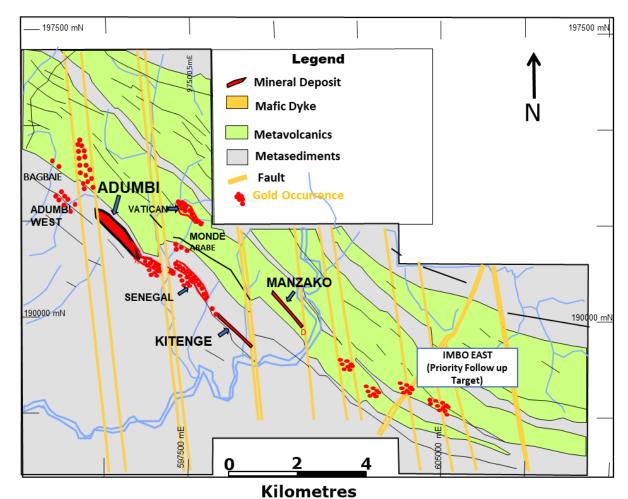


Figure 1: Imbo Project Simplified Geology

595000E 192500N 595500E Inferred resource within open pit 2.19 Moz (28.97 Mt grading 2.35g/t Au) SE NW 600 mR 69.90 \$1,500/oz Pit shell outline Prior 2017 Holes 2017 Holes **Proposed Holes** Completed New LEGEND - GM Holes (2020) Drilling in progress (2020) OPEN

Figure 2: Adumbi Longitudinal Section Looking Northeast with Drilling Pierce Points

Technical Reports

Additional information with respect to the Company's Imbo Project (which includes the Adumbi deposit) is contained in the technical report of Minecon Resources and Services Limited dated April 17, 2020 and entitled "Independent National Instrument 43-101 Technical Report on the Imbo Project, Ituri Province, Democratic Republic of the Congo". A copy of the said report can be obtained from SEDAR at www.sedar.com and EDGAR at www.sec.gov.

Additional information with respect to the Company's Makapela Project, and certain other properties of the Company in the Ngayu gold belt, is contained in the technical report of Venmyn Rand (Pty) Ltd dated May 29, 2012 and entitled "Updated National Instrument 43-101 Independent Technical Report on the Ngayu Gold Project, Orientale Province, Democratic Republic of the Congo". A copy of the said report can be obtained from SEDAR at www.sedar.com and EDGAR at www.sec.gov.

About Loncor Resources Inc.

Loncor is a Canadian gold exploration company focussed on the Ngayu Greenstone Belt in the northeast of the Democratic Republic of the Congo (the "DRC"). The Loncor team has over two decades of experience of operating in the DRC. Ngayu has numerous positive indicators based on the geology, artisanal activity, encouraging drill results and an existing gold resource base. The area is 220 kilometres southwest of the Kibali gold mine, which is operated by Barrick Gold (TSX: "ABX"; NYSE: "GOLD"). In 2019, Kibali produced record gold production of 814,000 ounces at "all-in sustaining costs" of US\$693/oz. Barrick has highlighted the Ngayu Greenstone Belt as an area of particular exploration interest and is moving towards earning 65% of any discovery in approximately 2,000 km² of Loncor ground in the Ngayu Greenstone Belt that they are exploring. As per the joint venture agreements entered between Loncor and Barrick, Barrick manages and funds exploration on the said ground until the completion of a pre-feasibility study on any gold discovery meeting the investment criteria of Barrick. In a recent announcement Barrick highlighted six prospective drill targets and have commenced confirmation drilling in 2020. Subject to the DRC's free carried interest requirements, Barrick would earn 65% of any discovery with Loncor holding the balance of 35%. Loncor will be required, from that point forward, to fund its pro-rata share in respect of the discovery in order to maintain its 35% interest or be diluted.

In addition to the Barrick joint ventures, certain parcels of land within the Ngayu Belt surrounding and including the Adumbi and Makapela deposits have been retained by Loncor and do not form part of any of the joint ventures with Barrick. Barrick has certain pre-emptive rights over the Makapela deposit. Adumbi

and two neighbouring deposits hold an inferred mineral resource of 2.5 million ounces of gold (30.65 million tonnes grading 2.54 g/t Au), with 84.68% of this resource being attributable to Loncor via its 84.68% interest in the project. Loncor's Makapela deposit (which is 100%-owned by Loncor) has an indicated mineral resource of 614,200 ounces of gold (2.20 million tonnes grading 8.66 g/t Au) and an inferred mineral resource of 549,600 ounces of gold (3.22 million tonnes grading 5.30 g/t Au).

Resolute Mining Limited (ASX/LSE: "RSG") owns 26% of the outstanding shares of Loncor and holds a pre-emptive right to maintain its pro rata equity ownership interest in Loncor following the completion by Loncor of any proposed equity offering.

Additional information with respect to Loncor and its projects can be found on Loncor's website at www.loncor.com.

Cautionary Note to U.S. Investors

The United States Securities and Exchange Commission (the "SEC") permits U.S. mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. Certain terms are used by the Company, such as "Indicated" and "Inferred" "Resources", that the SEC guidelines strictly prohibit U.S. registered companies from including in their filings with the SEC. U.S. Investors are urged to consider closely the disclosure in the Company's Form 20-F annual report, File No. 001-35124, which may be secured from the Company, or from the SEC's website at http://www.sec.gov/edgar.shtml.

Cautionary Note Concerning Forward-Looking Information

This press release contains forward-looking information. All statements, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future (including, without limitation, statements regarding drill results at the Adumbi deposit, potential mineralization, mineral resource increases, drilling and other exploration under the joint venture agreements with Barrick, potential gold discoveries, mineral resource estimates, drill targets, exploration results, and future exploration and development) are forward-looking information. This forward-looking information reflects the current expectations or beliefs of the Company based on information currently available to the Company. Forward-looking information is subject to a number of risks and uncertainties that may cause the actual results of the Company to differ materially from those discussed in the forward-looking information, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on the Company. Factors that could cause actual results or events to differ materially from current expectations include, among other things, the possibility that future exploration (including drilling) or development results will not be consistent with the Company's expectations, the possibility that drilling programs will be delayed, activities of the Company may be adversely impacted by the continued spread of the recent widespread outbreak of respiratory illness caused by a novel strain of the coronavirus ("COVID-19"), including the ability of the Company to secure additional financing, risks related to the exploration stage of the Company's properties, uncertainties relating to the availability and costs of financing needed in the future, failure to establish estimated mineral resources (the Company's mineral resource figures are estimates and no assurances can be given that the indicated levels of gold will be produced), changes in world gold markets or equity markets, political developments in the DRC, gold recoveries being less than those indicated by the metallurgical testwork carried out to date (there can be no assurance that gold recoveries in small scale laboratory tests will be duplicated in large tests under on-site conditions or during production), fluctuations in currency exchange rates, inflation, changes to regulations affecting the Company's activities, delays in obtaining or failure to obtain required project approvals, the uncertainties involved in interpreting drilling results and other geological data and the other risks disclosed under the heading "Risk Factors" and elsewhere in the Company's annual report on Form 20-F dated April 6, 2020 filed on SEDAR at www.sedar.com and EDGAR at www.sec.gov. Forward-looking information speaks only as of the date on which it is provided and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise. Although the Company believes that the assumptions inherent in the forward-looking information are reasonable, forward-looking information is not a guarantee of future performance and accordingly undue reliance should not be put on such information due to the inherent uncertainty therein.

For further information, please visit our website at www.loncor.com or contact:

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