



PRESS RELEASE

Loncor Outlines New Mineralised Trends, In Close Proximity to Key Adumbi Deposit in the DRC

Toronto, Canada – September 21, 2020 – Loncor Resources Inc. ("Loncor" or the "Company") (TSX: "LN"; OTCQX: "LONCF"; FSE: "LO51") is pleased to announce that the recent exploration results have outlined a number of significant, undrilled mineralised trends at its 84.68%-owned Imbo Project. The focus of exploration by Loncor during 2020 has been along trend in the southeast of the Imbo Project from the 2.5 million ounce Adumbi, Kitenge and Manzako deposits (inferred mineral resources of 30.65 million tonnes grading 2.54 g/t Au) previously delineated in the northwest of the 122 square kilometre project area.

Commenting on these results, Loncor’s President Peter Cowley said: “Situated approximately 9 kilometres from our key deposit of Adumbi, we are very encouraged by the exploration results received to date on the eastern part of our Imbo Project. Additional infill soil sampling, augering and channel sampling will be undertaken at Esio Wapi, Paradis and Museveni to better define these mineralised trends prior to outlining drill targets later in the year.”

Table 1 - Channel Sample Results on Esio Wapi, Paradis and Museveni Mineralised Trends

Prospect	Workings	Channel_ID	Channel Width (metres) and Grade (g/t Au)	Lithology	Open/Closed
ESIO WAPI	Colonial	IECH033	19.80 m @ 1.58 g/t	Brecciated BIF	Open to northeast
ESIO WAPI	Colonial	IECH021	4.00 m @ 2.31 g/t	Metasediment	Open to southwest
ESIO WAPI	Colonial	IECH022	5.00 m @ 1.65 g/t	Brecciated BIF& Metasediment	Closed at both ends
ESIO WAPI	Colonial	IECH021	8.00 m @ 1.11 g/t	Brecciated BIF	Closed at both ends
PARADIS	Artisanal	IECH025	6.80 m @ 5.44 g/t	Metasediment with quartz vein	Open to Southwest
MUSEVENI	Artisanal	IECH008	1.40 m @ 62.10 g/t	Metasediment with quartz vein	Open to southwest & northeast
MUSEVENI	Artisanal	IECH006	6.00 m @ 4.37 g/t	Metasediment with quartz vein	Open to southwest & northeast

Gridding, geological mapping, soil geochemical sampling and channel sampling of old colonial trenches and artisanal workings have outlined three significant mineralised trends, Esio Wapi, Paradis and Museveni, to the east of the Imbo river and approximately 8 to 10 kilometres southeast of the Adumbi deposit (see Figure 1 below). Analytical results have been received for 21% of soil samples from the completed 5,440 metre by 2,320 metre grid and where soil samples were collected every 40 metres on lines 160 metres apart.

At Esio Wapi, soil geochemical results have outlined a number of plus 200 ppb (parts per million) gold in soil anomalies with a maximum value of 2,230 ppb Au over a 3.2 kilometre long mineralised trend (see Figure 2 below). Best channel samples from old colonial workings are tabulated in Table 1 above and include 19.80 metres grading 1.58 g/t Au (open to the northeast), 8 metres grading 1.11 g/t Au and 5.0 metres grading 1.65 g/t Au in brecciated banded ironstone (BIF) and metasediment. Individual rock sample values included 15.10 g/t and 7.88 g/t Au in quartz veins; 12.30 g/t and 6.39 g/t Au in BIF and 7.91 g/t, 4.81 g/t and 4.52g/t Au in metasediments.

On the Paradis trend, soil sample results are still awaited from the eastern part of the trend but soil anomalies (plus 200 ppb Au) in the western part of the trend occur over 800 metres of strike. Significant channel samples along the Paradis trend include 6.8 metres grading 5.44 g/t Au (open to the southwest) in metasediments with quartz veins. Individual rock sample values included 22.40 g/t, 5.84 g/t and 2.31 g/t Au in quartz veins.

At Museveni, soil samples are still to be received but artisanal workings occur over a strike of 2.7 kilometres. Channel samples from the artisanal workings include 6.0 metres grading 4.37 g/t Au and 1.40 metres grading 62.10 g/t Au and represent high grade quartz veins in metasediment. Individual rock sample values included 53.90 g/t, 32.80 g/t and 32.60 g/t Au in quartz veins and 18.10 g/t Au in metasediment.

Quality Control and Quality Assurance

Soil, channel and rock samples were put in sealed bags by Company geologists and sent to the independent SGS Laboratory in Mwanza, Tanzania. The samples were then crushed at the laboratory down to minus 2 mm and split with one-half of the sample pulverized down to 90% passing 75 microns. Gold analyses were carried out on 50g aliquots by fire assay. In addition, checks assays were also carried out by the screen fire assay method to verify high grade sample assays obtained by fire assay. Internationally recognized standards and blanks were inserted as part of the internal QA/QC analytical procedures at a frequency of four standards and two blanks per every 50 samples. Every eighth sample collected in the field was split and submitted as an unmarked duplicate for assay.

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.

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 1,894 km² of Loncor ground that they are exploring. As per the joint venture agreement signed in January 2016, 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 JV, 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 the joint venture 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 drilling on the Company's properties, potential gold discoveries, mineral resource estimates, potential mineral resource increases, 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 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, the possibility that future exploration (including drilling) or development results will not be consistent with the Company's expectations, 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: Arnold Kondrat, CEO, Toronto, Ontario, Tel: + 1 (416) 366 7300.

Figure 1: Imbo Project Simplified Geology

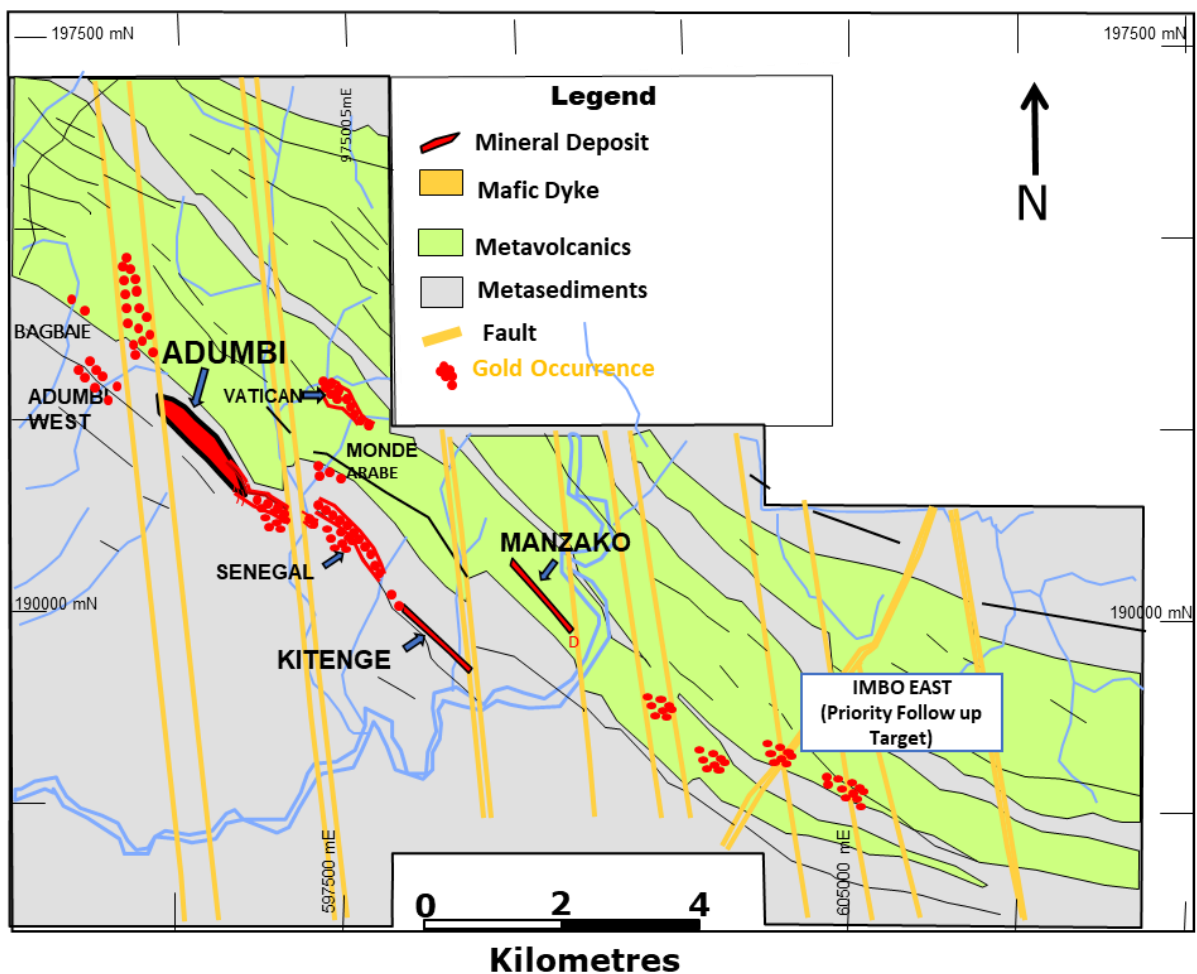


Figure 2: Imbo East Soil and Channel Sampling (on Aeromagnetic grey scale Background)

