

Loncor Resources Inc.

PRESS RELEASE

LONCOR COMMENCES 10,000 METRE CORE DRILLING PROGRAM AT ITS NGAYU GOLD PROJECT

Toronto, Canada – September 14, 2010 - Loncor Resources Inc. (the "**Company**" or "**Loncor**") (TSX-V: "**LN**") is pleased to announce the commencement of drilling at the Yindi Prospect, Ngayu Project, northeastern Democratic Republic of Congo (the "DRC").

Two core rigs have now commenced an initial 10,000 metre drilling program at the Yindi Prospect in the Ngayu project. This drilling program will focus on the previously reported gold in soil geochemical anomaly with values up to 2,150 ppb Au over a strike of 1,200 metres and a width of up to 200 metres. This soil anomaly coincides with a discrete aeromagnetic anomaly. Drilling will be undertaken along strike at 80 metres and to a maximum depth of 230 metres.

The Yindi Main Zone is underlain by units of banded iron formation (BIF), individually up to 15 metres in width, separated by talc-sericite schists. These rocks strike NW-SE with steep to moderate dips to the SW, although local structural complexities are common. Gold mineralization is associated with strike-parallel quartz veins, irregular crosscutting quartz veins and stockworks, and as disseminated mineralization in the BIF. Channel sampling results from old pits, adits and trenches within the Yindi Main Zone included (reference is made to the Company's April 23, 2010 and June 30, 2010 press releases):

14.79 metres @ 5.11 g/t Au (open to the northeast and southwest) – Previously reported
19.40 metres @ 1.30 g/t Au (open to the northeast) – Previously reported
6.20 metres @ 4.57 g/t Au (open to the northeast) – Previously reported

Commenting on the commencement of drilling at Yindi, Peter Cowley, President and C.E.O. of the Company, said: "We are pleased to begin drilling at our most advanced prospect of Yindi where initial groundwork has been completed. We plan to drill other prospects later in the year in the Ngayu project pipeline, including Makapela."

Qualified Person

The exploration results disclosed in this press release have been reviewed, verified and compiled by the Company's geological staff based in Butembo, DRC, under the supervision of Dr. Howard Fall (Aus.I.M.M), the Company's Exploration Manager and a "qualified person" (as such term is defined in National Instrument 43-101).

Loncor is a gold exploration company with three projects in the DRC: the Ngayu, North Kivu and Bas Congo projects. Additional information with respect to the Company's projects can be found on the Company's web site at www.loncor.com.

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 exploration results, potential mineralization and the Company's exploration plans) 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, risks related to the exploration stage of the Company's properties, the possibility that future exploration results will not be consistent with the Company's expectations, changes in world gold markets and equity markets, political developments in the DRC, uncertainties relating to the availability and costs of financing needed in the future, the uncertainties involved in interpreting exploration results and other geological data and the other risks involved in the mineral exploration business. 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.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

For further information, please visit our website at www.loncor.com or contact: Peter N. Cowley, President and Chief Executive Officer, Telephone: + 44 (0) 790 454 0856; or Arnold T. Kondrat, Executive Vice President, or Martin Jones, Vice President, Corporate Development, Telephone: (416) 366-2221 or 1 (800) 714-7938.