

Loncor Resources Inc.

PRESS RELEASE

LONCOR REPORTS FIRST DRILLING RESULTS FROM ITS MAKAPELA PROSPECT, NGAYU GOLD PROJECT

Drilling Results: 4.08 metres grading 15.20 g/t Au and 6.76 metres @ 7.01 g/t Au

Toronto, Canada – December 21., 2010 - Loncor Resources Inc. (the "**Company**" or "**Loncor**") (TSX-V: "**LN**") is pleased to announce results for the first two drill holes at the Makapela prospect, Ngayu Gold Project, northeastern Democratic Republic of the Congo (the "DRC").

Exploration at Makapela is focusing on a quartz vein system being exploited by artisanal miners in three pits (Main, North and Sele Sele) which are each between 170 metres and 290 metres in length, located along a strike of 2.2 kilometres. Soil geochemical results indicate that the mineralization continues between these three artisanal workings under a thick soil cover. The Bamako pit is located on a separate soil anomaly to the south with a strike of 1.5 kilometres; the Company believes that the Bamako pit is probably exploiting the same vein, which has been displaced by faulting.

The principal quartz vein is 3 metres to 6 metres in width, and is located at the contact between basic lavas and a sequence of tuffs and lavas which appear to be more intermediate in composition. Thin units of banded iron formation locally occur immediately above or below the quartz vein. It is possible that the vein represents a remobilized, metamorphosed siliceous exhalite.

Channel sampling results for the artisanal pits have already been reported (reference is made to the Company's June 3, 2010 and November 29, 2010 press releases) and include:

Main Pit

4.20 metres grading 11.6 g/t Au in channel MC001
3.05 metres grading 33.4 g/t Au in channel MC006

North Pit (500 metres north of Main pit)

5.70 metres grading 5.23 g/t Au in channel MC009

Sele Sele Pit (2,000 metres north of Main pit)

4.50 metres grading 8.49 g/t Au in channel MC021
7.00 metres grading 5.30 g/t Au in channel MC022

Bamako Pit (900 metres southeast of Main pit)

4.60 metres grading 11.42 g/t Au in channel MC017

Five drill holes have been completed at Makapela, all of which have intersected the quartz vein, at vertical depths of between 26 metres and 77 metres below surface. One hole was drilled under the Main pit, two holes were drilled 480 metres to the north under the North pit, and two holes were drilled a further 1,600 metres to the north under the Sele Sele pit. The holes were inclined at between minus 50 degrees and minus 77 degrees, and averaged 123 metres in depth with a maximum downhole depth of 173 metres. Core recovery averaged 92% within the mineralized vein.

Assay results have been received for the first two drill holes as shown in the table below.

Hole	Location	Northing UTM	Easting UTM	Azimuth	Inclination	Mineralization				
						From (m)	To (m)	Width (m)	True Width (m)	(g/t) Au*
NMDD001	Main Pit	217739	551895	110 °	-50	105.70	109.78	4.08	3.10	15.20
NMDD002	North Pit	218190	552067	110 °	-50	60.14	66.90	6.76	4.30	7.01
NMDD003	Sele Sele Pit	219730	552451	110 °	-60	30.37	41.23	10.86	5.90	Results awaited
NMDD004	Sele Sele Pit	219730	552451	110 °	-77	58.67	81.10	22.43	5.00	Results awaited
NMDD005	North pit	218190	552067	110 °	-67	84.25	91.44	7.19	4.30	Results awaited

*Assay results reported are uncut

Commenting on the drilling at Makapela, Peter Cowley, President and C.E.O. of the Company, said: "We are very encouraged by these two initial core holes at Makapela which demonstrate good correlation with the surface channel sample results. Our soil geochemical sampling shows a prominent anomaly over a strike length of 3.0 kilometers covering the Sele Sele workings in the north to the Bamako workings in the south. Our drilling goal after the Christmas break will be to demonstrate continuity along strike and at depth along this significant strike."

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 SGS Laboratory (which is independent of the Company) in Mwanza, Tanzania. The core samples were then crushed 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 50 g aliquots by fire assay. The gold values are uncut. Internationally recognized standards and blanks were inserted as part of the Company's internal QA/QC analytical procedures.

Qualified Person

The exploration results disclosed in this press release have been reviewed, verified (including sampling, analytical and test data) 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 two projects in the DRC: the Ngayu and North Kivu 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 drilling and other 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.