

Media Release

Claude Resources Inc.
Discovering. Developing. Delivering.

Claude Resources Inc.
200, 224 – 4th Avenue South
Saskatoon, Saskatchewan S7K 5M5

Toronto Stock Exchange
Trading symbol – CRJ
AMEX – CGR

Release: Immediate
Date: April 16 2008

Claude Resources Reports Drill Results of 17.32 g/t Au over 10.33 Meters (0.61 oz./t over 33.89 ft.) in Duplicate Assay at Madsen Fork Zone

Claude Resources Inc. (CRJ.TSX : CGR.AMEX) today announced screen metallic assay results from the Fork Zone at the Company's 100% controlled Madsen Project at Red Lake, Ontario.

The final screen metallic assays returned results that are significantly higher than preliminary assays completed by traditional gravimetric analysis and as reported on February 28, 2008.

<u>Hole ID</u>	<u>Gravimetric Analysis Assay</u> (Reported as at February 28, 2008)	<u>Screen Fire Metallic Assay</u> (Reported as at April 16, 2008)
RUM-08-46	14.74 g/t over 1.60 m. (0.52 oz./t over 5.25 ft.)	18.48 g/t over 1.60 m. (0.65 oz./t over 5.25 ft.)
RUM-08-48	12.11 g/t over 10.33 m. (0.43 oz./t over 33.89 ft.)	17.32 g/t over 10.33 m. (0.61 oz./t over 33.89 ft.)
Including:	17.14 g/t over 3.63 m. (0.60 oz./t over 11.91 ft.)	30.80 g/t over 3.63 m. (1.09 oz./t over 11.91 ft.)

“This intercept was duplicate assayed because significant coarse visible gold in the core is not fully represented using traditional gravimetric analysis. The screen fire metallic assay results from the Fork Zone program support our belief in the potential for development of shallow, high grade resources associated with the Mafic/Ultramafic trend,” said Brian Skanderbeg, Vice President Exploration. “The improved grades over significant widths returned from the latest Fork Zone drilling are very encouraging and the potential of this discovery remains high.”

The Fork Zone area lies approximately 600 meters southwest (2,000 feet) of the Russet South mineralization zone along the Mafic/Ultramafic trend. The Company plans to initiate further drilling on the Fork Zone target in early May.

A map of the Fork Zone and the Madsen exploration property is available on the Claude Resources website at www.clauderresources.com.

Brian Skanderbeg, P.Geo. and M.Sc., Claude's Vice President Exploration, is the Qualified Person who has reviewed and approved this news release. Drill core was halved and samples averaging 1.0 to 1.5 meters were submitted to TSL Laboratory in Saskatoon, Saskatchewan and/or SGS Laboratories at Red Lake, Ontario. Both laboratories are ISO approved. Rigorous quality assurance and quality control procedures have been implemented including the use of blanks, standards and duplicates (1 in 20 samples). Core samples were analyzed screen metallic assay and/or 30 gram gold fire assay with an atomic absorption and gravimetric finish. Intercepts are reported as drilled widths and range from 65% to 90% of true widths. Composite intervals were calculated using a 3.00 g/t cut-off and may include internal dilution.

Claude Resources Inc. is a public company based in Saskatoon, Saskatchewan, whose shares trade on the Toronto Stock Exchange (TSX-CRJ) and the American Stock Exchange (AMEX-CGR). Claude is a gold exploration and mining company. The Company also owns producing oil and natural gas assets. The Company's entire asset base is located in Canada. Since 1991, Claude has produced approximately 800,000 ounces of gold from its Seabee mine in northeastern Saskatchewan. The Company also owns 100% of the 10,000 acre Madsen property in the prolific Red Lake gold camp of northwestern Ontario.

CAUTION REGARDING FORWARD-LOOKING INFORMATION

This news release contains certain forward-looking statements relating but not limited to the Company's expectations, intentions, plans and beliefs. Forward-looking information can often be identified by forward-looking words such as "anticipate", "believe", "expect", "goal", "plan", "intent", "estimate", "may" and "will" or similar words suggesting future outcomes or other expectations, beliefs, plans, objectives, assumptions, intentions or statements about future events or performance. Forward-looking information may include reserve and resource estimates, estimates of future production, unit costs, costs of capital projects and timing of commencement of operations, and is based on current expectations that involve a number of business risks and uncertainties. Factors that could cause actual results to differ materially from any forward-looking statement include, but are not limited to, failure to establish estimated resources and reserves, the grade and recovery of mined ore varying from estimates, capital and operating costs varying significantly from estimates, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, inflation, changes in exchange rates, fluctuations in commodity prices, delays in the development of projects and other factors. Forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results to differ materially from expected results.

Potential shareholders and prospective investors should be aware that these statements are subject to known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those suggested by the forward-looking statements. Shareholders are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and various future events will not occur. Claude Resources undertakes no obligation to update publicly or otherwise revise any forward-looking information whether as a result of new information, future events or other such factors which affect this information, except as required by law.

For further information please contact:

Neil McMillan, President & CEO, Claude Resources Inc.

Phone: (306) 668-7505

or

Brian Skanderbeg, Vice President Exploration, Claude Resources Inc.

Phone: (306) 668-7505

or

Dwight Percy, Vice President Corporate Development, Claude Resources Inc.

Phone: (306) 668-7501

Email: clauderesources@clauderesources.com

Website: www.clauderesources.com