



Pele Mountain Completes VTEM Survey at Pigeon River, Identifies Several Priority Ni-Cu-PGE Exploration Targets

Symbol: **GEM**

Listing: TSX Venture Exchange

Common Shares Outstanding: 101,843,608

FOR IMMEDIATE RELEASE

March 5, 2010 - Toronto - Pele Mountain Resources Inc. (TSX Venture: GEM) ("**Pele**" or the "**Company**") today announced the completion of a 1,015 line-kilometre Versatile Time-Domain ElectroMagnetic ("VTEM") airborne survey over its Pigeon River property in the Thunder Bay area of Northern Ontario. Pele has staked more than 500 additional mining claim units since introducing the project in January and its total land package now exceeds 24,000 hectares (240 km²). The property covers large unexplored magnetic targets with the potential to host nickel ("Ni"), copper ("Cu"), and platinum group elements ("PGE") mineralization.

Pele President and CEO Al Shefsky stated, "Our property is ideally situated in the Mid Continent Rift, near the basal contact of the Duluth Complex. The survey shows magnetic and conductive trends with similarities to known Ni/Cu/PGE deposits in similar geological settings. We are particularly encouraged by the correlation of conductivity with a known, anomalous, Geological Survey of Canada (GSC) Ni/Cu lake sediment sample. These results have increased our confidence in the potential of the Pigeon River property and we will prioritize exploration in this area in the months ahead."

The Pigeon River property lies in the Proterozoic, Superior Mid Continent Rift, a geological setting with proven potential to host mafic/ultramafic igneous systems associated with the rifting of the Archean cratons. Recent discoveries in this setting include Kennecott's Ni/Cu/PGE deposits at Eagle (in Michigan) and Tamarac (in Minnesota) and Magma Metals' PGE deposits to the northeast of Thunder Bay. Pele's exploration targets at Pigeon River are: a massive sulphide deposit similar to the Eagle, Tamarac, and Magma deposits, magmatic sulphide deposits hosted in an ultramafic body or conduit; and disseminated sulphides similar to the vast, but lower grade, Ni/Cu deposits of the Duluth Complex, located immediately to the south of the project.

The VTEM survey was flown over the Pigeon River East Block by Geotech Ltd. of Aurora, Ontario. The survey has defined linear magnetic features with the potential for mafic/ultramafic conduit systems and feeder dykes into larger mafic/ultramafic intrusions. Preliminary analysis by the geophysical contractor indicates the presence of a number of, possible sulphide-related conductors, coincident with conduit-type magnetic features and other, larger, conductive anomalies with similarities to known mineralized layered mafic/ultramafic complexes. Conductive zones, possibly sulphide-related, are also found in the vicinity of a GSC lake sediment anomaly which gave anomalous values of 234 parts per million (ppm) Ni and 298 ppm Cu¹.

Geotech has identified several high-priority, drill-ready, targets from the survey. Other priority targets require further definition through prospecting and follow-up geophysical surveys, which are planned after spring break-up. The targets are generally till or swamp covered and no previous prospecting, mapping, or geophysical surveys, other than an airborne magnetic survey flown by the GSC in 1964, are known.

Maps showing the Pigeon River project area are available on the Pele website at http://www.pelemountain.com/pdfs/PigeonRiver_Map_PR.pdf.

This news release has been reviewed and approved by Peter Dimmell, P.Geo. (NL, Temp ON), a Pele Director and a Qualified Person under National Instrument 43-101.

About Pele

Pele Mountain Resources has generated and advanced high-quality mineral projects for more than a decade, discovering and developing the mineral wealth of Northern Ontario. At its vast Eco Ridge Mine uranium project, Pele is focused on the sustainable development of a safe, secure, and reliable operation near Elliot Lake. At its high-grade Highland gold properties, Pele's goal is to identify mineable, near-surface gold resources. At its over 100 square mile Pigeon River project, Pele has completed a VTEM survey over large unexplored magnetic targets in search of Ni/Cu/PGE deposits. The Company also holds the Ardeen Gold and Sudbury Nickel projects, which are actively explored under option agreements with Coventry Resources Ltd. and Wallbridge Mining Company, respectively. Pele's shares are listed on the TSX Venture Exchange under the symbol "GEM".

For further information please contact Al Shefsky, President, at (800) 315-7353, or visit the Pele website at www.pelemountain.com.

1 Note: Lake Sediment sample values when regressed against LOI gave 156 ppm Ni (mean 22.6 ppm) and 136 ppm Cu (mean 37.5 ppm) – GSC OFR 2179.

Neither the 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. Some of the statements contained in this release are forward-looking statements, such as estimates and statements that describe Pele's future plans, objectives or goals, including words to the effect that Pele or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. The economic viability of the 43-101 mineral resource at Pele's Elliot Lake Project has not yet been demonstrated by a preliminary feasibility study.