



Pele Mountain Expands Exploration for Higher Grade Remobilized Uranium at Elliot Lake

Airborne VTEM Survey Completed

Symbol: **GEM**
Listing: TSX Venture Exchange
Common Shares Outstanding: 77,985,660

FOR IMMEDIATE RELEASE

January 17, 2008 – Toronto – **Pele Mountain Resources Inc. (TSX Venture: GEM)** ("**Pele**" or the "**Company**") today announced that an airborne VTEM survey has been completed as part of Pele's expanding exploration program to target higher grade remobilized uranium at its Elliot Lake uranium mine project in Northern Ontario.

The Basal Conglomerate Bed ("**BCB**") is located about 15 metres below the Main Conglomerate Bed ("**MCB**") near the unconformity between the Archean basement rocks and the overlying Huronian sediments (the "**Unconformity**"). Earlier mineralogical and assay analyses indicate that the BCB hosts higher-grade remobilized uranium that has resulted in localized grades up to 10 times higher than the average grade of the MCB, suggesting the potential to increase resources and providing a highly prospective exploration target.

Scott Wilson Roscoe Postle Associates in its recent positive Scoping Study for the project has recommended continued exploration of the BCB for deposits of higher-grade remobilized uranium with geophysics and drilling. The airborne "VTEM" electromagnetic data will be analysed for conductors, representing possible sulphide or graphite zones that may represent reductants capable of concentrating remobilized uranium. These conductive targets will then be drill-tested.

As the exploration program targeting higher grade remobilized uranium near the Unconformity advances, Pele's ongoing 26-hole, 5,000-metre in-fill drill program is continuing on schedule in order to upgrade inferred resources in the MCB to the indicated classification for feasibility study purposes. Results from this ongoing drill program are expected shortly.

This press release has been reviewed and approved by Robert Macgregor, P.Geo., an independent Qualified Person under NI 43-101.

About Pele Mountain Resources

Pele Mountain Resources provides investors with leverage to uranium as it advances its 100-percent owned Elliot Lake Uranium Project toward objectives of development and production. The project hosts more than 42-million pounds of NI 43-101 compliant U_3O_8 resources (6.4 million pounds “indicated” at a grade of 0.051-percent and 36.1 million pounds “inferred” at a grade of 0.044-percent) and has received a positive Scoping Study, providing the basis for economically-viable, environmentally-compliant uranium mining and processing operations.¹ The Elliot Lake mining camp has produced more than 300 million pounds of U_3O_8 and was formerly known as the “Uranium Capital of the World”. Pele also holds a diverse portfolio of gold, diamond, and base metal projects in Northern Ontario. Pele stock is 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. The Scoping Study is preliminary in nature and includes both indicated and inferred mineral resources. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the Scoping Study will be realized.

The TSX-V has not reviewed and does not accept 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.