



Pele Mountain Finds More High-Grade Gold at East Highland

Symbol: **GEM**

Listing: TSX Venture Exchange

Common Shares Outstanding: 95,486,944

FOR IMMEDIATE RELEASE

September 17, 2009 - Toronto - **Pele Mountain Resources Inc. (TSX Venture: GEM)** ("**Pele**" or the "**Company**") announced today that prospecting, mapping, and sampling at its Highland gold property has led to the discovery of more high-grade gold at the Haystack and Macallan zones. Both occurrences are located on patented mining claims in the far eastern portion of the property. The Highland properties are 100-percent owned by Pele Gold Corporation, a wholly owned subsidiary of the Company.

The Haystack occurrence, originally discovered and explored in the 1930s, was recently relocated by Pele in fieldwork performed this summer. The Haystack shear zone has been traced over a 700-metre strike length and remains open along strike, with widths exceeding 8 metres in historic trenches. Reconnaissance sampling by Pele has returned gold values from non-detect up to 9.3 grams per tonne (g/t) while historic data includes two chip samples assaying 19.0 g/t and 18.1 g/t gold over 1.8 metres each, along with a grab sample of 44.5 g/t gold.

The Macallan occurrence, located approximately 200 metres to the north of Haystack, was also discovered and explored in the 1930s, and was relocated and explored by Pele in 2004, when Pele's initial grab samples returned gold values from non-detect up to 57.7 g/t. Recent work has traced the Macallan shear zone over a 500-metre strike length with widths of up to 10 metres and it remains open along strike. The 2009 field season sampling has returned gold values from non-detect up to 12.6 g/t.

The Haystack and Macallan gold occurrences are hosted by mixed mafic volcanic / sedimentary units cut by mafic intrusive, quartz porphyries and quartz veining. Both are strong shear zones in a strongly foliated and altered (sericitized / iron carbonatized) sericite schist hosting boudinaged, recrystallized (sugary) quartz veins carrying pyrite, pyrrhotite, chalcopyrite and sphalerite.

Pele President and CEO Al Shefsky stated, "Our recent work at East Highland has led to the discovery of high-grade gold at three zones, including at the Lone Ranger occurrence, a new discovery that we announced last month. Prospecting, mapping, and sampling within and along the projected extensions of these three zones will be followed by mechanical stripping and channel sampling. Results from this work will assist in our preparation for drilling later this fall."

Mr. Shefsky continued, "We've concluded that the optimal approach for advancing our Highland properties at this time is to divide them into two smaller projects, West Highland and East Highland. (The Island Gold Mine and milling complex and the formerly producing Magino Gold Mine separate the two project areas.) Recent

compilation in late-2008 and subsequent field work focusing on structural controls for gold during 2009 has continued to confirm the excellent potential of West Highland. With our recent success in pursuing high-grade, near-surface gold occurrences at East Highland, we are increasingly focusing our exploration activities there.”

Pele’s Highland gold properties cover more than 10,000 acres along the Michipicoten Greenstone Belt, approximately 100 kilometres southeast of Hemlo in Northern Ontario. In the late-1990s, Pele mined a 10,000-tonne bulk sample (to a maximum depth of just ten metres) at East Highland’s Markes Zone, returning positive cash flow when gold was trading at US\$300 per ounce. With outstanding local infrastructure including three nearby modern gold mills, Pele management believes there is excellent potential to establish revenue generating operations at East Highland.

Samples were analyzed for gold by fire assay at Accurassay Laboratories in Thunder Bay, an independent, ISO 17025 accredited laboratory. The Company is performing routine QA and QC on laboratory assay results. This news release has been reviewed and approved by Peter Dimmell, P.Geo., a Pele Director and a Qualified Person under National Instrument 43-101.

About Pele

Pele Mountain Resources is discovering and developing the mineral wealth of Northern Ontario. At its Eco Ridge Mine uranium project, Pele is advancing toward the sustainable development of a safe, secure, and reliable operation near Elliot Lake. At its East Highland Gold project, Pele has located several high-grade showings and is working to identify mineable gold resources. 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.

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.