



## Pele Mountain Reports Progress at Pigeon River Project

Symbol: **GEM**

Listing: TSX Venture Exchange

Common Shares Outstanding: 101,843,608

### FOR IMMEDIATE RELEASE

June 24, 2010 - Toronto - Pele Mountain Resources Inc. (TSX Venture: GEM) ("**Pele**" or the "**Company**") today announced the results of its recent drill program at its Pigeon River project in Northern Ontario. Pele's 270 square-kilometre Pigeon River property includes large unexplored magnetic targets, near the basal contact of the Duluth Complex, which have the potential to host nickel ("Ni"), copper ("Cu"), and platinum group element ("PGE") mineralization.

Pele completed three diamond drill holes totalling 605 metres, intersecting sediments of the Proterozoic Rove Formation, some containing sulphide, and intruded by several diabase sills. Alan Aubut P. Geo., an independent geological consultant with expertise in Ni/Cu/PGE exploration in the Mid Continent Rift stated, "The Pigeon River property shows many similarities with the Noril'sk-Talnakh region of northern Russia, host to the world's largest nickel-copper deposits. The drilling done to date confirms that some of the key features required (source of secondary sulphur, multiple magma pulses and proximity to deep-seated structures that could host high-level magma chambers) are present. The lack of visible sulphide in some of the sills tested further implies gravity separation of sulphide prior to differentiation and emplacement of the magma that resulted in the diabase sills."

Pele President and CEO Al Shefsky stated, "We are encouraged by the progress achieved at Pigeon River in the short time since we began staking the property 6 months ago. We have recently entered into discussions with several highly-qualified companies for purposes of advancing the project. It is our intention to bring on an exploration partner at Pigeon River as we focus on generating near-term revenue by bulk-sampling the 'A'-zone of our East Highland Gold Project and on continued progress at our flagship Eco Ridge Mine uranium project. Performing early-stage work and then optioning non-core properties to qualified partners creates value for our shareholders and is aligned with our corporate strategy as a diversified, project-generating company."

The Pigeon River project 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 craton. Recent discoveries in this setting include Kennecott's Ni/Cu/PGE deposits at Eagle (Michigan) and Tamarac (Minnesota) and Magma Metals' PGE deposit northeast of Thunder Bay. Pele's exploration target at Pigeon River is a massive sulphide deposit similar to the Eagle, Tamarac, and Magma deposits which are hosted in an ultramafic body or conduit and disseminated sulfides similar to the high tonnage, low grade Ni/Cu deposits of the nearby Duluth complex.

**Hole PR-10-01** was designed to test a lake sediment nickel anomaly and coincident VTEM anomaly. It was collared at UTM 277000E, 5331454N, Zone 16. It was drilled at an inclination of -45, with an azimuth of 85 degrees, and was drilled to final depth of 353 metres. This hole was collared in overburden and entered Animikie Group Rove Formation sediments at 12.5 metres. Three intrusive sills were encountered: the first at

126.8 metres to 136.9 metres (core length of 10.1 metres), the second at 195.2 to 197.5 metres (core length of 2.3 metres) and the third at 216.7 metres to 223.6 metres (core length of 6.9 metres). The hole finished in Rove sediments. The upper sill is note worthy in that significant thermal metamorphism of the enclosing sediments above the sill had taken place indicating high internal temperatures when intruded.

**Hole PR-10-02**, located at UTM 279335E, 5335817N, Zone 16, was drilled vertically to a total depth 102 metres. It was designed to test a VTEM anomaly located within a regional magnetic low. The hole intersected 24 metres of overburden and was drilled to a final depth of 102 metres. Bedrock consists of a diabase sill quickly followed by 4 metres of fault breccia. The upper contact of the fault zone has a dip of approximately 30°. Below the fault are greywacke and interbedded black shale beds, commonly with fine disseminated sulphide. A second diabase sill was intersected from 54.2 metres to the end of the hole (true width of at least 47.8 metres). The chilled upper contact zone 1.6 metres thick. The diabase is fine to medium grained and is locally coarse grained. The diabase is magnetic indicating high iron content. It has about 1% disseminated sulphide consisting primarily of pyrrhotite with minor chalcopyrite.

**Hole PR-10-03** is located at UTM 283946E, 5338910N, Zone 16 and was drilled at an inclination of -55, with an azimuth of 107 degrees. This hole was designed to test a VTEM anomaly and was drilled to a final depth of 150 metres. The hole collared in dark, magnetic diabase and continued in diabase to 53.0 metres. This was then followed by Rove Formation sediments to 112.5 metres at which point a second dark, medium to coarse grained diabase sill was intersected. The hole ended at 150.0 metres still in this second sill (core length of 37.5 metres).

Only the upper, more greywacke-rich portion of the Rove Formation was intersected. It is noteworthy that numerous shale interbeds, typical of the lower Rove Formation, contain disseminated sulphide. This sulphide, if digested by high-temperature ultramafics, can contribute to partitioning of available nickel resulting in significant Ni/Cu/PGE grades.

This press release has been reviewed and approved by Alan Aubut, P.Geo. (ON), an independent geological consultant and a Qualified Person under National Instrument 43-101.

#### **About Pele**

Pele Mountain Resources has generated and advanced high-quality mineral projects since 1996, discovering and developing the mineral wealth of Northern Ontario. At its 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 270 square kilometre Pigeon River project, Pele is conducting exploration in search of Ni/Cu/PGE deposits. The Company also holds the Ardeen Gold and Sudbury Nickel projects, which are advancing under option/JV 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](http://www.pelemountain.com).

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