



Pele Mountain Hits High Grade with Visible Gold at A-Zone

Symbol: **GEM**

Listing: TSX Venture Exchange

Common Shares Outstanding: 101,843,608

FOR IMMEDIATE RELEASE

March 16, 2010 - Toronto - Pele Mountain Resources Inc. (TSX Venture: GEM) ("**Pele**" or the "**Company**") today announced assay results for the remaining 10 holes from its diamond drill program at the East Highland Gold project in Northern Ontario. The drill program included the 'A', Lone Ranger, Haystack, and Golden Eagle East zones and was aimed primarily at locating near surface, mineable, gold mineralization. East Highland is 100-percent owned by Pele Gold Corporation, a wholly owned subsidiary of the Company.

The new assays, all from the A zone, continue to confirm high grade, near surface, gold mineralization located immediately below the small open pit from which a 3,800-tonne bulk sample averaging 5 grams per tonne ("g/t") gold was mined in 1999. Previous drilling has established that the A zone has a strike length of a minimum of 65 metres and continues to a vertical depth of approximately 200 metres with the mineralized trend remaining open along strike to the east and at depth.

Drill highlights from the final 10 holes, all over estimated true widths, include:

- 34.20 g/t gold over 2.78 metres, including 122.64 g/t gold over 0.70 metres. (Hole #27) including significant visible gold
- 11.37 g/t gold over 2.80 metres. (Hole #23)
- 9.18 g/t gold over 2.20 metres. (Hole #24)

The holes were drilled from the ice in the pit, at 5 to 10 metre spacing, over a strike length of 65 metres to a vertical depth of approximately 22 metres to delineate near-surface, mineable resources (a surface plan of the A zone drilling can be viewed http://www.pelemountain.com/images/AZone_PlanMap.jpg.) Also see Pele's press release dated March 4, 2010 for previously announced East Highland drill results including the first holes from the A zone.

Pele President and CEO Al Shefsky stated, "We are encouraged by the grades and widths of near surface gold mineralization from the recent drilling at the A zone. Assay results are being compiled to determine the viability of additional near surface mining and further exploration drilling to test for deeper zones as indicated by drill hole PM-AZ-10-30. With excellent drill results, nearby operational milling facilities, and outstanding local infrastructure, we believe there is potential for near-term, revenue generating operations at East Highland."

'A' Zone Results

Drill Hole	From (m)	To (m)	Interval (m)	Est. True Width (m)	Gold (g/t)
PM-AZ-10-21	9.00	12.70	3.70	2.65	5.08
<i>and</i>	15.45	17.55	2.10	1.50	3.44
PM-AZ-10-22	11.30	15.90	4.60	3.85	3.56
PM-AZ-10-23	16.80	21.25	4.45	2.80	11.37
PM-AZ-10-24	14.75	17.80	3.05	2.20	9.18
PM-AZ-10-25	10.80	14.05	3.25	2.70	5.32
PM-AZ-10-26	16.40	19.20	2.80	1.75	6.36
PM-AZ-10-27	10.60	14.50	3.90	2.78	34.20
<i>including</i>	13.00	14.00	1.00	0.70	122.64
PM-AZ-10-28	11.70	17.70	6.00	3.75	0.81
PM-AZ-10-29	7.25	13.20	5.95	4.25	0.50

A single exploration hole (PM-AZ-10-30) was drilled extending a historic drill hole to test for continuation of the A zone veins and / or parallel gold bearing zones at depth. This hole was a technical success with significant gold values intersected in two narrow zones at a vertical depth of approximately 250 metres. The drill intersections are approximately 1.5 times true widths.

Exploration Hole Results

Drill Hole	From (m)	To (m)	Interval (m)	Est. True Width (m)	Gold (g/t)
PM-AZ-10-30	267.05	267.35	0.30	0.20	4.45
<i>and</i>	270.90	271.15	0.25	0.15	2.88

The Highland Project, covering more than 10,000 acres, is located in the Michipicoten Greenstone Belt, approximately 100 kilometres to the southeast of Hemlo in Northern Ontario. The Michipicoten Belt, where Richmond Mines Inc. is operating the Island Gold mine and milling complex, is also home to several past producing gold mines, including the one-million ounce plus Renabie Mine. Over the past 13 years, Pele has consolidated historically fragmented mining claims covering favorable geology through acquisitions, staking and licensing and has now accumulated one of the largest claim holdings in the area. Pele completed a 10,000 tonne bulk sample at the Markes Zone in 1999 which returned positive cash flow when gold was trading at US\$300 per ounce.

Core samples were halved by sawing, with one half of the core sent in security-sealed packages by ground transport to the Accurassay Laboratory in Thunder Bay, ON, an ISO certified laboratory, for analysis by fire assay (1/2 assay tonne) and an ICP technique for other elements.

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.

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.