



## **Pele Mountain Confirms Significant Rare Earth Mineralization at Its Eco Ridge Mine Uranium Project**

Symbol: **GEM**  
Listing: TSX Venture Exchange  
Common Shares Outstanding: 95,486,944

### **FOR IMMEDIATE RELEASE**

October 7, 2009 - Toronto - **Pele Mountain Resources Inc. (TSX Venture: GEM)** ("**Pele**" or the "**Company**") announced today that new analysis of certain drill intersections has confirmed the presence of extensive Rare Earth Elements ("**REE**") at its Eco Ridge Mine uranium project in Northern Ontario. These results are consistent with previous analyses performed by Scott Wilson Roscoe Postle Associates ("**SWRPA**"), as documented in its October 2007 NI 43-101 compliant Technical Report on the project (the "**Technical Report**"). The Eco Ridge Mine project is owned 100% by First Canadian Uranium Inc., a wholly owned subsidiary of Pele.

Key points regarding REE mineralization at Eco Ridge include the following:

- The Elliot Lake mining camp was a global producer of Yttrium during the 1980s as a by-product of uranium production.
- REE mineralization is significant and relatively consistent, occurring as Rare Earth Oxides ("**REO**") in conjunction with uranium oxide ("**U<sub>3</sub>O<sub>8</sub>**") in the Main Conglomerate Bed ("**MCB**"). All 30 drill intersections from the MCB that have been analyzed for REE to-date have contained significant REE. (Please see Table 1 below.)
- Although Yttrium and heavy REE comprise a minority of the overall REO content of the deposit, these minerals have far greater economic value than the light REE and have demonstrated good recoverability. Preliminary leach testing at SGS Canada Inc. indicates potential recoveries of approximately 64-percent of combined Yttrium and heavy REE. (Please see Table 2 below.)
- A total of 29 of the 30 holes were drilled over an area 2 kilometres across strike and 1 kilometre down dip within the area of the defined NI 43-101 uranium resources in the Technical Report. The outlying hole was located north of the classified resources and intersected the down dip continuation of both uranium and REE mineralization beyond the area of the NI 43-101 resources. A map of drill holes analyzed to date for REE, can be viewed at [http://www.pelemountain.com/pdfs/ree\\_map.pdf](http://www.pelemountain.com/pdfs/ree_map.pdf)

Pele President and CEO Al Shefsky stated, "Although Yttrium was the primary REE produced historically at Elliot Lake, the development of many new strategically critical applications has created growing demand for the

full range of REE. Pele’s Eco Ridge deposit contains the full range of REE, including the highly valued ‘heavy’ REE, which leach recovery analysis at SGS has confirmed can be extracted from the conglomerate deposits at Elliot Lake. The extensive REE mineralization at Eco Ridge represents a potentially large future source of these strategically critical metals.”

REEs are critical components in many high-tech applications including hybrid motor vehicles, flat screen monitors, high-power magnets and a wide range of military applications. Although demand for REEs is growing rapidly, over 90-percent of global production is controlled by China, which has recently imposed restrictions on their export.

Overall REO content from each of the 30 analyzed drill holes is included in the table below.

**Table 1 - Drill Results, Main Conglomerate Bed**

Drill Hole	From	Length	Est. True Width (m)	REO	REO
	(m)	(m)		(%)	(g/t)
PM001*	203.32	3.43	3.43	0.169	1692
PM002*	279.7	2.38	2.06	0.025	249
PM003*	135	3.14	3.14	0.183	1828
PM004*	84.71	2.29	2.22	0.216	2159
PM005*	91.05	2.78	2.61	0.216	2159
PM006*	99.6	2.9	2.35	0.254	2540
PM007*	129.7	4.91	2.95	0.27	2699
PM008*	186.3	6.2	2.42	0.322	3221
PM010*	85.72	2.28	2.09	0.227	2268
PM011*	94.44	2.94	2.49	0.149	1488
PM012*	116.46	4.31	2.87	0.272	2722
PM013*	93.39	3.11	2.54	0.233	2331
PM014*	83.44	2.61	2.41	0.252	2522
PM015*	79.35	3	2.91	0.244	2440
PM016*	78	2.5	2.42	0.202	2018
PM017*	90	3.48	2.69	0.196	1960
PM018*	85.27	2.46	2.08	0.22	2200
PM019*	103.2	2.2	2.18	0.194	1941
PM020*	113.3	2.48	2.45	0.164	1642
PM021*	121.45	2.24	2.2	0.184	1842
PM022*	185.14	2.57	2.53	0.149	1488
PM063	81.97	3.03	2.7	0.176	1757
PM074	211.8	2.78	2.69	0.149	1493
PM100	299.28	2.82	2.72	0.194	1940

PM101	303.83	3.17	3.08	0.178	1784
PM108	335.33	2.59	2.5	0.197	1971
PM161	165.1	3	2.99	0.158	1579
PM173	33.53	2.79	2.62	0.194	1940
PM177	38.97	3.03	2.85	0.249	2487
PM183	33.17	3.03	2.85	0.169	1689

\* previously reported

The following paragraph and tables are excerpted from Section 16 of SWRPA's NI 43-101 compliant Technical Report:

“Rare earths are present in the deposit and represent a possible future by-product. The dissolution of REE was followed in all tests to obtain an indication of potential recovery. Light rare earths (La – Gd) are poorly leached, with average extractions ranging from 3% to 22%...”

The following tables summarize the REE extraction results. Overall leach extraction of heavy rare earths plus yttrium averages 64%.

**Table 2 - Rare Earth Extraction**

Heavy REE	Sample 6		Sample 7		Sample 8	
	Grade (g/t)	Extraction (%)	Grade (g/t)	Extraction (%)	Grade (g/t)	Extraction (%)
Yb	5.4	93.1	3.8	73.4	4.9	71.0
Dy	18	76.7	13	59.3	17	53.5
Er	7.8	82.2	5.5	63.8	6.9	61.3
Ho	3	77.5	2.1	61.9	2.6	61.6
Lu	0.7	85.7	<0.6	N/A	0.6	71.0
Tb	4	55.3	3.1	39.9	3.9	36.7
Tm	0.9	92.5	<0.8	N/A	0.8	71.6
Y	81	62.5	61	50.2	80	39.7

Light REE	Sample 6		Sample 7		Sample 8	
	Grade (g/t)	Extraction (%)	Grade (g/t)	Extraction (%)	Grade (g/t)	Extraction (%)
Ce	790	5.5	670	4.1	840	4.0
Eu	2	28.5	1.6	20.1	2.1	17.6
Gd	38	28.8	30	19.2	39	17.2
La	420	4.3	360	3.4	460	3.2
Nd	270	8.4	220	5.7	280	5.4
Pr	80	7.4	67	5.1	87	4.7

Sm	46	19.7	33	13.9	48	11.3
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Recently drilled large diameter core samples from Eco Ridge are currently being studied at MIRARCO in Sudbury and at Cardiff University in Wales to provide additional long term leach recovery data for U<sub>3</sub>O<sub>8</sub> and REE. Pele will continue REE market analysis and begin to investigate possibilities for creating strategic alliances with end users or companies that upgrade REE to very high purity in order to optimize the value received for REE from potential future production at Eco Ridge.

With its excellent regional infrastructure, well-understood geology, and politically-stable and mining-friendly jurisdiction, Elliot Lake is an ideal location for the development of a long-term secure and reliable supply of uranium and REE. Pele's 100-percent owned Eco Ridge Mine project contains a NI 43-101 compliant resource of 6.4 million pounds of "indicated" U<sub>3</sub>O<sub>8</sub> (5.68 million tonnes grading 0.051-percent U<sub>3</sub>O<sub>8</sub>) and 36.1 million pounds of "inferred" U<sub>3</sub>O<sub>8</sub> (37.26 tonnes grading 0.044-percent U<sub>3</sub>O<sub>8</sub>) with the potential for significant expansion. Based on historical wide-spaced drilling, SWRPA estimated that Pele's mining claims outside of the resource area could contain an additional 35 to 40 million tonnes grading from 0.04 to 0.05-percent as a potential mineral deposit.<sup>1</sup> More than 300 million pounds of U<sub>3</sub>O<sub>8</sub> were mined from similar deposits near Elliot Lake by Rio Algom and Denison Mines from 1956 to 1996.

The samples were analyzed at SGS Canada Inc. and Activation Laboratories Ltd., both independent and ISO 17025 accredited laboratories. The Company is performing routine QA and QC on laboratory assay results. This press release has been reviewed and approved by Fergus Kerr, P.Eng., Vice President of Uranium Operations for Pele and a qualified person under NI 43-101.

### About Pele

Pele Mountain Resources is discovering and developing the mineral wealth of Northern Ontario. At its Eco Ridge Mine uranium and REE 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](http://www.pelemountain.com).

### Notes:

1. The potential quantity and grade of the potential mineral deposit identified in the Report are conceptual in nature and there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the targets being delineated as a mineral resource.

**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.