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## News Release

# Initial Metallurgical Test Work Very Encouraging at Mountain Lake's Leprechaun Gold Deposit

*Initial results demonstrate gold recoveries exceeding 90% overall with at least 45% recoverable by low-cost gravity circuit*

**Halifax, Nova Scotia, August 11, 2010 – Mountain Lake Resources Inc. (TSX-V: MOA)** (“Mountain Lake” or the “Company”) is pleased to report that results from initial metallurgical test work on mineralized core samples from the Leprechaun Gold Deposit demonstrate recoveries exceeding ninety percent (90%). The Leprechaun Gold Deposit is the first defined gold resource within the highly prospective 30 kilometre Valentine Lake Property located in Central Newfoundland

### Highlights:

- results suggest gold recoveries in excess of 90% could be achieved through standard processing methods – gravity plus cyanide recoveries
- gravity recovery varied between 45 % and 58% which is very high and indicative of coarse gold
- calculated head-grade from the tests and assays by G&T Metallurgical Services averaged 4.4 grams per tonne (g/t) gold
- gold grains are coarse in nature which makes suitable for gravity separation
- 8,000 m drill campaign is 60% complete and additional analytical results are forthcoming
- new resource estimate for Leprechaun Deposit on track for completion in Q4 2010

Marathon PGM Corp. (TSX: MAR) (“Marathon”) is the operator of the Valentine Lake Project under the sub-option and joint venture agreement (“OJVA”) between Mountain Lake and Marathon. For more information on the OJVA see the news release of [December 23, 2009](#).

"Metallurgical recoveries are typically one of the largest risks facing the development of a mining project. We decided to address the metallurgical risks quickly as a part of our plans to develop an economically viable deposit. The initial results are quite positive and very encouraging especially with high gravity recoveries," said Phillip Walford, President and CEO of Marathon PGM. "While we have only been working on the Leprechaun Gold Deposit for 8

months, these initial metallurgical results are an important milestone. These results will be used in the upcoming resource estimate."

#### Initial Metallurgical Study – Methods and Results:

G&T Metallurgical Services ("G&T") of Kamloops, BC, was retained to conduct an initial metallurgical test work program on a composite sample of mineralization from the Leprechaun Gold Deposit. This initial phase of work comprised preliminary mineralogical and chemical characterization and preliminary gravity separation and cyanide leach testing. This work was completed under the guidance of Richard Gowans P.Eng., President and Principal Metallurgist at Micon International Limited ("Micon").

Approximately 50 kg of split drill core was selected by Marathon for the metallurgical test work program. The samples chosen for the metallurgical composite were selected to represent typical mineralization at about average grade for the Leprechaun Gold Deposit. The average grade of the composite samples was 4.16 g/t Au.

Preliminary gravity separation results on sample ground to 80% passing 71 and 120 microns gave gold recoveries of 58% and 45%, respectively. Standard cyanide bottle roll leach tests undertaken on the tailings from the gravity separation tests gave total gravity plus leach recoveries of between 93% to 94% for the finer sample and 89% to 91% for the coarse ground material.

These preliminary metallurgical test results suggest that gold recoveries of over 90% could be achieved by using standard gravity separation and cyanide leach technologies.

The mineralogical and chemical characterization study comprised chemical analysis, modal analysis using QEMSCAN and gold particle occurrence analysis using Automated Digital Imaging System (ADIS). This program of work suggests that much of the gold occurs as liberated particles or as particles adhering to pyrite grains. The average gold grain size was estimated at approximately 51 microns, which is coarse and explains the good gravity separation.

Gary Woods, P.Geo., President and CEO of Mountain Lake, is the Company's Qualified Person on the Valentine Lake Project and has reviewed and verified the contents of this news release. Richard Gowans, P.Eng., President and Principal Metallurgist at Micon International Limited, is the Independent Qualified Person in compliance with National Instrument 43-101 with respect to this release. Mr. Gowans has reviewed the contents for accuracy and has approved this press release on behalf of Micon.

#### About the Valentine Lake Gold Property:

The Valentine Lake Property is over 30 km long and has anomalous gold values in rock and soils, reflecting widespread gold mineralization. Preliminary investigation of these areas has produced favourable drilling results that require follow up. Both Mountain Lake and Marathon

believe that the setting of the Property is geologically analogous to other gold camps such as the Abitibi Belt.

**About the Leprechaun Gold Deposit:**

To date, the Leprechaun Deposit (3 ~km from the southwest limit of the claims) is the first defined gold resource within the highly prospective Valentine Lake Property. The Deposit, which has a NI 43-101 compliant underground inferred mineral resource of 1,314,780 tonnes grading 10.50 g/t Au using a 5 g/t Au minimum cut-off and a 3 m minimum width for a total estimated mineral resource of 443,000 ounces of gold. Cutting individual assays to 58 g/t Au, the average grade is 8.51 g/t Au for a total estimated mineral resource of 359,000 ounces of gold at the cut grade. The Deposit is open at depth and along strike. The resource estimate was performed by Larry Pilgrim, P. Geo., Qualified Person, and presented in the [NI 43-101 Valentine Lake Technical Report](#) dated January 12, 2005, when the closing spot price for gold was US\$ 425.50 per ounce. For highlights from the 2010 drill programs visit the [Valentine Lake](#) page of the Mountain Lake website.

**About Mountain Lake Resources Inc.**

Mountain Lake Resources Inc. (TSX-V: MOA) is a diversified junior exploration company, whose corporate strategy is to build shareholder value through the exploration and development of economically viable mineral properties. Mountain Lake's current projects include: a 30% interest in the Valentine Lake gold Property (Newfoundland) with an option to acquire the remaining 70% interest from Richmond Mines Inc. (TSX/NYSE-Amex: RIC) and a subsequent sub-option and joint venture agreement whereby Marathon PGM Corp. can earn a 50% interest in the property; a 100% interest in the Bobby's Pond base metals property (Newfoundland); an option to earn a 100% interest in the Little River gold exploration property (Newfoundland); and a 2,350,000 share (~6.4%) stake in Etruscan Diamonds Ltd., an alluvial diamond project (South Africa). For more information visit: [www.mountain-lake.com](http://www.mountain-lake.com).

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ON BEHALF OF THE BOARD OF DIRECTORS

*s/“Gary Woods”*  
President & CEO