



## REE Review: Quest Rare Minerals: Big, Getting Bigger, Could It Be the Biggest?

A Monday Morning Musing from Mickey the Mercenary Geologist

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I wrote this recently: "Every good geologist knows that *grade is king*. Economic geologists get their rocks on high grade more than anything else in the exploration and mining business.

There is one other thing we like a whole lot: Size. If grade is king, then *big must be queen*.

Why is big important? Because big can make grade of lesser importance in the economic viability of a mineral deposit.

One big boy on the block in rare earth element space is [Quest Rare Minerals \(QRM.V\)](#). I first wrote about Quest after market on March 26 when it closed at \$2.85 ([Mercenary Musing, March 29, 2010](#)). It hit an all-time high of \$5.72 in mid-October, recently pulled back 30% along with the rest of the advanced REE junior companies, and then made a recent rally when reiterated as a buy by Mr. Dines:



Folks, do the math: If you follow my investing philosophy you got your double with all money off the table and half your share position remaining at zero cost basis in less than seven months. Now you can play with *other people's money* on this one. I like that and I bet you do, too!

Better yet, by employing the contrarian philosophy that I tout, you could have accumulated QRM on weakness in the sector with stink bids at less than \$2.00 in late June and early July. Timing is everything, especially in the junior resource market.

But if you weren't in earlier, never fear and don't be greedy. There have been dips and corrections over the past three months. Those will certainly come again and offer additional buying opportunities. Quest remains on my list of companies that can double in a year or less.

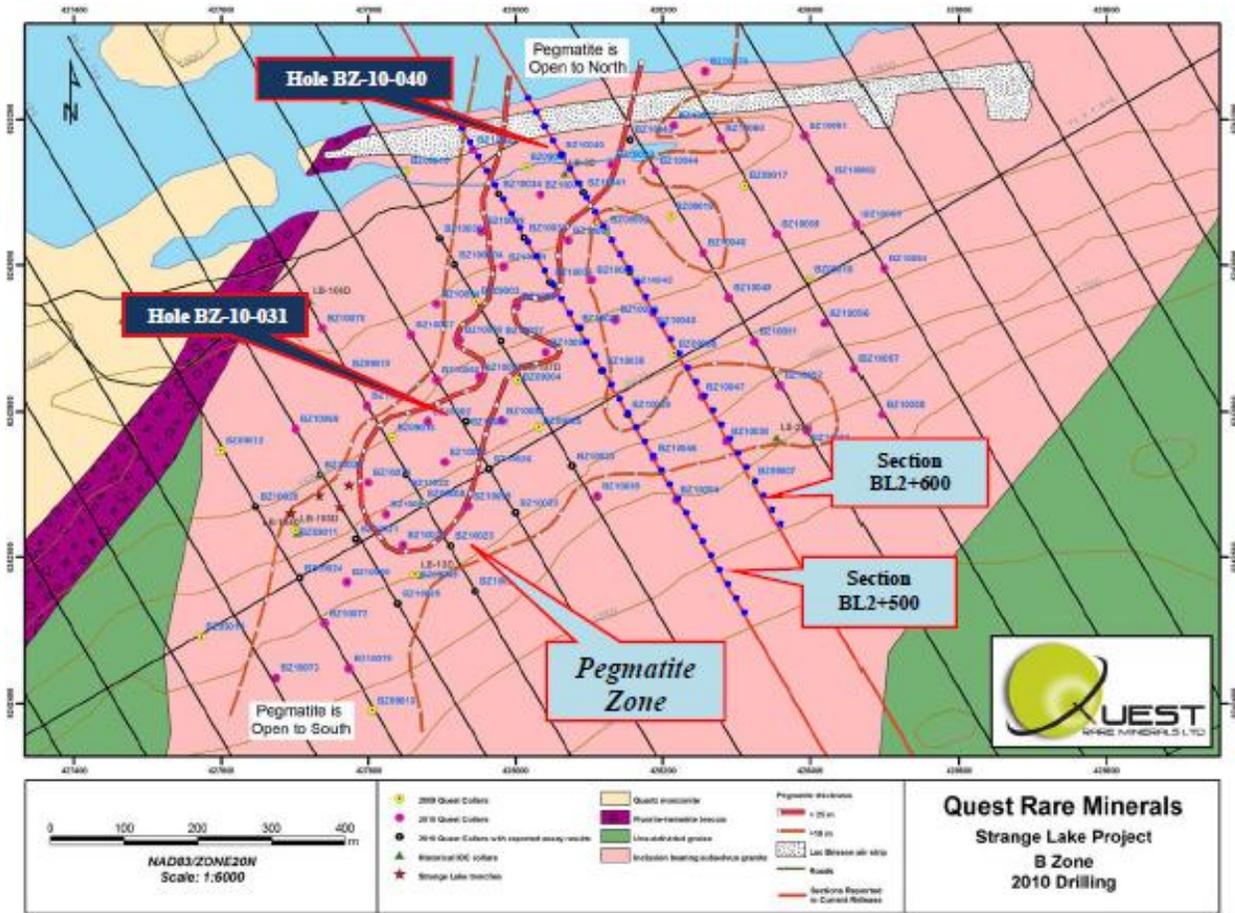
Since my last musing, Quest Rare Minerals Ltd has completed a major financing. It now has 57.8 million shares outstanding, 69.8 million fully diluted, \$54 million in working capital and a market capitalization of about \$260 million. Quest has very good liquidity, trading over one million shares per week.

It's been a very busy time for Quest over the past seven months. QRM's recent accomplishments at flagship project Strange Lake in northeastern Quebec include:

- Delivered an initial 43-101 inferred resource of 115 million tonnes grading 1.0% TREO with 43% HREO, 2.0% zirconium oxide, 0.21% niobium pentoxide, 0.05% hafnium oxide and 0.08% beryllium oxide using a base case cut-off grade of 0.85% TREO.
- Acquired thru option with Search Minerals a 65% earn-in of 30 claims adjacent to the Strange Lake deposit in western Labrador.
- Developed an initial metallurgical process on a one tonne bulk sample that involved fine grinding and a sulfuric acid bake with recoveries of 77% to 93% of the suite of various REOs.
- Tabled a Preliminary Economic Study that envisions a 4000 tonne per day truck and shovel open pit mine operation, onsite crushing and mill facility, and slurry pipeline to Voisey's Bay. The study showed robust economics for the deposit with \$563 million in capital expenditures using a 25% contingency, \$102/tonne operating costs, a 25 year life-of-mine, and REE prices at 60% of the three year trailing average. The analysis gave a Pre-Tax NPV of \$1.4 billion using a 12% discount rate, 36% IRR, and less than a four year payback.
- Completed 15,000 meters of core drilling in 83 holes with further delineation drilling of the B Zone and a five hole scout drilling program on the newly discovered B East target.
- Raised \$51.75 million in an oversubscribed bought deal financing by issuing 9.5 million units at \$4.25 with ½ warrant at \$5.00 and 2.3 million flow-through shares at \$5.00.
- Raised \$1.5 million in a strategic placement with SIDEX, a Quebec government limited partnership, for 500,000 Quest units priced at \$3.00 with a full warrant at \$3.25.
- Continued to define a thicker and higher grade shallow core of REE mineralization at the Strange Lake B Zone, deemed the Pegmatite Spine. The Spine is NNE trending and currently over 600 m in strike length, 50-180 m wide, and over 25 m thick. Although the map below shows it is cutoff

to the south, recent drilling has shown it is open in that direction. In addition the Spine is completely open to the north and covered by the shallow waters of Brisson Lake.

Here's a surface map of the B Zone showing the central Pegmatite Spine contour in dark red:



As mapping, prospecting, and drilling have progressed at Strange Lake, Quest's geologists have developed an understanding of the structural controls on alteration and mineralization. The NNE-trending hematite-fluorite breccia, shown in purple above, appears to be a footwall feeder zone and is cut by E-trending cross faults that localize thick and high grade zones of pegmatite-hosted REE mineralization. The intersection of these two structural sets controls the shallow plunge of ore shoots to the north.

A back-of-the-envelope global resource calculation indicates the Strange Lake B Zone currently hosts over 300 million tonnes of REE-bearing mineralization. It is open to the north and south and is likely to grow in both directions. Quest's predecessor at Strange Lake, Iron Ore Company of Canada (IOC), drilled one kilometer to the north and hit the hematite-fluorite breccia and mineralized pegmatite. A winter drill program from the ice will test potential under the lake in the early part of 2011.

Folks, we know that big is good, bigger is better, and biggest is best but *grade is always king*.

As an economic geologist, I think Quest's most important development in the past seven months is the delineation of a thick, high grade core within the giant Strange Lake deposit.

This core zone, the Pegmatite Spine, logically will offer development of a starter pit where mining can commence in high grade material with low strip ratio and allow payback of the capital expenditure in a shorter time period.

Twenty-five of 83 holes from the summer drill program have been released so far.

We wait anxiously for the next round of assays at Strange Lake and anticipate good results to continue over the winter as the Strange Lake B Zone continues to expand in size and the extent of the Pegmatite Spine is defined. In addition to the B Zone, Quest made a new discovery this summer called B Zone East. Prospecting uncovered high grade outcrops. Results from initial drilling of five scout holes are pending.

In my opinion, there is immense tonnage and grade potential still remaining to be found and developed at Strange Lake.

Please note that Quest Rare Minerals is not just a "one-trick pony". Its Misery Lake project is located 120 km south of Strange Lake. This summer the company's geologists continued to prospect, map, and sample rocks and till. Four holes were drilled on two high grade showings (5-10% TREOs) and assays are pending. The Misery Lake alkalic layered intrusion is analogous to the geologic setting of REE producers Lovozero in eastern Russia and Fanshan in China. It is obvious that the company is excited about its potential.

In my opinion Quest Rare Minerals management has done a phenomenal job of advancing the company in a mere 15 months since discovery of the B Zone. The company will face challenges with developing its Strange Lake and Misery Lake flagship projects and it is not without risk. Northeastern Quebec is remote, difficult to access, and current infrastructure is poor. The demand for REEs is highly sensitive to the health of the world economy.

However, Quest is well-positioned within the REE sector because Strange Lake contains a complete suite of the 16 rare earth elements. It is one of two Western world companies with potential for mid-term development of a major heavy rare earth element deposit.

I think the REE sector is still in its infancy and consolidation will happen sooner than later via off-take contracts with end-users, joint ventures, strategic alliances, or business combinations.

Quest Rare Minerals Ltd seems a likely candidate to be one of the chosen few junior rare earth companies to succeed and reward shareholders in the near- to mid-term.

I am a shareholder of Quest and it sponsors my website so I offer biased opinions about the company. As [Otto](#) sez: DYODD Dudes and Dudettes.

Ciao for now,

Mickey Fulp  
Mercenary Geologist



The [Mercenary Geologist Michael S. “Mickey” Fulp](#) is a Certified Professional Geologist with a B.Sc. Earth Sciences with honor from the University of Tulsa, and M.Sc. Geology from the University of New Mexico. Mickey has 30 years experience as an exploration geologist searching for economic deposits of base and precious metals, industrial minerals, uranium, coal, oil and gas, and water in North and South America, Europe, and Asia.

Mickey has worked for junior explorers, major mining companies, private companies, and investors as a consulting economic geologist for the past 22 years, specializing in geological mapping, property evaluation, and business development. In addition to Mickey’s professional credentials and experience, he is high-altitude proficient, and is bilingual in English and Spanish. From 2003 to 2006, he made four outcrop ore discoveries in Peru, Nevada, Chile, and British Columbia.

Mickey is well-known throughout the mining and exploration community due to his ongoing work as an analyst, writer, and speaker.

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