



## The Mercenary Geologist's REE Review:

### The Goldilocks Mining Principle: What the Engineers Are Missing

[Contact@MercenaryGeologist.com](mailto:Contact@MercenaryGeologist.com)

October 10, 2010

I read with interest the recent blog from respected engineers in rare earth element space, Jack Lifton and Gareth Hatch. These two men are experts and likely have forgotten more about the process metallurgy, separation, refining, sales, and marketing of this fascinating specialty metals group than I will ever know.

I can agree with many of the points that each makes in his analysis. I will not quibble with the idea that “small” is okay in REE space but will disagree with Jack that small is somehow *better*.

That said, as a field geologist by education and experience and an analyst and investor by profession, I think both gentlemen are missing key criteria for success by not carefully considering the share structure, people, and projects of their top stocks before picking them as favorites. There is much more to the REE game than deposit size, metal distribution, process metallurgy, and concentrate tonnages.

I would suggest that most readers of this blog are speculators in the junior resource sector attempting to learn about the best companies so they can invest and make money in the stock market. Thorough due diligence is always required to assess a company's chances of success.

Let's look briefly at some of the companies favored by Jack and/or Gareth:

I visited **Ucore Rare Metals' (UCU.V)** Bokan Mountain project in mid-August along with fellow Rare Metal blog editors Jack Lifton and Tracy Weslosky.

The Dotson Ridge deposit is small with low TREO grade but heavily skewed toward the HREOs. The individual mineralized zones are very narrow (generally less than a mineable width of 1.5 meters) and are discontinuous along strike. The deposit will require selective mining and/or physical or mechanical separation of pay zones from wall rock using very high cost mining methods.

The company apparently is reluctant to commence the next logical step: Permitting, test mining, and bulk sampling during the 2011 field season. I must conclude the sole corporate exit strategy is to sell the project but have doubts that any larger player in the REE sector is seriously interested at this juncture. With current knowledge, the Bokan Mountain project is not viable. I agree with Jack that it will require private or government subsidies if a significant deposit can be delineated and if it is ever mined.

As of June 30, Ucore Rare Metals had 105.4 million shares outstanding, 134.0 million shares fully diluted, 24.5 million warrants at an average price of 26 cents, market cap of about \$65 million, and \$4.4 million in cash and securities. The company must go to the market for financing later this year or in early 2011. Ucore Rare Metals' share structure is highly diluted given the stage of its flagship project and the potential for a significant increase in its share price is therefore limited.

The second company Jack discussed is **Great Western Minerals Group Ltd (GWG.V)**. Great Western is the only current North American junior with a partially integrated REE business via its Less Common Metals alloy facility in England and what appears to be an R&D lab in Michigan.

I do not think any of the company's exploration projects currently are candidates for development and mining. Hoidas Lake is too small, low grade, remote, and infrastructure-challenged to be of interest to outside parties. Others are very early stage, remote, and/or too low grade.

Steenkampskrall in South Africa is a small, narrow, high grade vein deposit that was mined from 1952-1963. If it eventually proves to be of sufficient size and grade, the mine likely will be operated at a loss to secure supply. Its high thorium content could be an environmental issue. GWG has signed an off-take agreement to purchase the REE mineral concentrates from owner Rare Earth Extraction Company of South Africa and currently holds a 20% equity interest in that company.

GWG recently announced a \$35,000,000 equity financing at 33 cents with a two year half warrant at 45 cents. With another 106 million shares out and 159 million fully diluted, I address the crux of my issues with Great Western Minerals Group: It has a severe case of "Aus disease", i.e., an excessive number of shares outstanding. I first evaluated GWG at a Toronto show in October 2007 and it had too many shares for my liking at that time.

Post-financing I estimate the company soon will have about 350 million shares outstanding, 451 million fully diluted, a market cap of \$125 million, and \$38 million in working capital post-financing.

Compare GWG with the share structure of **Quest Rare Minerals Ltd (QRM.V)**: After completion of its new bought deal financing, QRM will have about 53 million shares outstanding, 64 million fully diluted, a market cap of about \$250 million, and about \$55 million in the bank; or **Rare Element Resources Ltd (RES.V; REE.AMEX)** with 32 million out, 39 million fully diluted, a market cap of \$270 million, and about \$10 million in working capital.

I opine that Great Western Minerals Group has diluted beyond being a vehicle for speculative investment. A big share rollback (5 or 10:1?) appears inevitable for Great Western Minerals Group. Note I have never experienced a rollback that was beneficial to current shareholders.

I know some about Gareth's suggestion, **Alkane Resources Ltd (ALK.ASX)**. The Dubbo project may become a mineable deposit for zirconium and rare earth elements but development has been pending for two decades. As of June 30 Alkane had A\$8.5 million in the bank and requires a large capital infusion to complete its goal of a definitive feasibility study, environmental assessment, and mine financing within one year. Capital expenditures to build the mine and processing complex are estimated by the company at A\$150 million. The deposit has significant uranium content and that could be problematic since uranium production is prohibited in New South Wales. With ALK's significant gold projects, Dubbo could be acquired by a specialty metals miner, Zr or REE consumer, or perhaps spun-out as a stand-alone entity.

Alkane is not a company that is likely to attract significant North American speculative interest due to the difficulty of trading Australian-listed stocks in this hemisphere. As per usual, it has a mild case of “Aus disease” with 249 million shares outstanding but with a healthy current market cap of about A\$210 million.

I think most savvy North American investors will play on our own *terra firma* and leave this speculation for those that speak English with an oversized twang, drink beer from oil cans, and waltz with sheilas.

Gareth also mentions **Stans Energy Corp (RUU.V)**. My problem with this company is reflected in its name: Stans’ flagship project is in a country that ends in “*stan*”. It’s Kyrgyzstan, a country that had a violent coup, street riots, and ethnic fighting this spring and summer. I will steer clear of companies operating in any of the “stans” for obvious geopolitical reasons.

The Luxemburg-based company, **Frontier Rare Earths** that Jack writes about is new with little public information available. It holds the Zandkopsdrift deposit in South Africa and recently applied for a Toronto Stock Exchange listing. I have not found sufficient information to comment.

In my opinion most of the companies discussed above have projects of merit in rare earth element space. That does not imply I will consider them for speculative investment using my key criteria for investing of [Share Structure, People, and Projects](#) and employing my [Power of Two](#) philosophy.

I will let you decide which are worthy of your speculation. As Otto sez: DYODD dudes and dudettes!

P.S. I own shares of Quest Rare Minerals and Rare Element Resources. Quest is a sponsor of my website.

Ciao for now,

Mickey Fulp

[MercenaryGeologist.com](http://MercenaryGeologist.com)

[Contact@MercenaryGeologist.com](mailto:Contact@MercenaryGeologist.com)



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, newsletter writer, and speaker.

Contact: [Contact@MercenaryGeologist.com](mailto:Contact@MercenaryGeologist.com)

**Disclaimer:** I am not a certified financial analyst, broker, or professional qualified to offer investment advice. Nothing in a report, commentary, interview, and other content constitutes or can be construed as investment advice or an offer or solicitation to buy or sell stock. Information is obtained from research of public documents and content available on the company's website, regulatory filings, various stock exchange websites, and stock information services, through discussions with company representatives, agents, other professionals and investors, and field visits. While the information is believed to be accurate and reliable, it is not guaranteed or implied to be so. The information may not be complete or correct; it is provided in good faith but without any legal responsibility or obligation to provide future updates. I accept no responsibility, or assume any liability, whatsoever, for any direct, indirect or consequential loss arising from the use of the information. The information contained in a report, commentary, interview, and other content is subject to change without notice, may become outdated, and will not be updated. A report, commentary, interview, and other content reflect my personal opinions and views and nothing more. All content is subject to international copyright protection and no part or portion of this report, commentary, interview, and other content may be altered, reproduced, copied, emailed, faxed, or distributed in any form without the express written consent of Michael S. (Mickey) Fulp, Mercenary Geologist.com LLC.

[Copyright © 2010 Mercenary Geologist.com LLC. All Rights Reserved.](#)