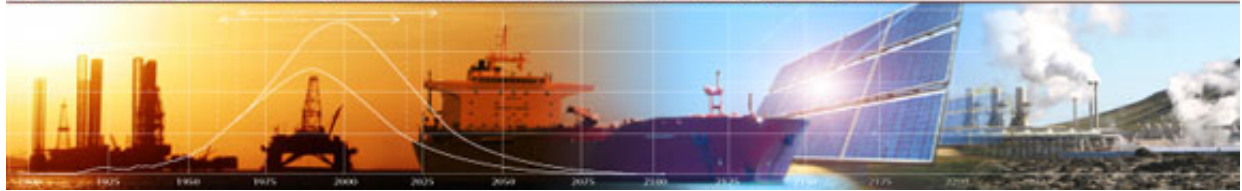




Your customer number: 54409280 | Your username: MCKENZIE08874 | Your password: B4B2A7

ENERGY & SCARCITY INVESTOR



August 12, 2011

Ucore Rare Metals and Bokan Mountain

Dear *Energy & Scarcity*Reader:

The economy stinks. The stock market has crashed. The price of oil is all over the map. We've got riots in Britain and hooliganism in Wisconsin. In Washington, D.C., the U.S. political classes are waging a war of invective over competing future visions of a badly broken economy. Indeed, it's sort of a combination of 2008 and 1968 out there.

Let's Go to Alaska

So what have I been doing? Well, last week I boarded an airplane in Seattle and flew to Ketchikan, Alaska:



Nice flight, by the way, on Alaska Airlines, which flies clean, well-maintained Boeing 737s:



Off to Ketchikan.

In my experience, the Alaska Airlines ground staff are polite and exceedingly helpful. Flight crews are excellent. Flight attendants could not be nicer. And somehow, the coach seating on Alaska Airlines gives you much more legroom than the coach seating in the other U.S. majors -- how DO they manage that?

Visiting Ucore Rare Metals

As Matt mentioned [the other day](#), the purpose of my trip was a boots-down visit with the guys at **Ucore Rare Metals (UCU: TSX-V)**, including a long day hiking and climbing up and down the rare earths (RE) site at Bokan Mountain on Prince of Wales Island. Tough duty, but someone has to do it:



Aerial view of Bokan Mountain, Alaska

I've had Ucore in the ESI portfolio since [last September](#). Its key asset is the Bokan Mountain mining district, a uranium play from about 1955 through the early 1970s. Despite the pretty picture above, this area has been and still is a mining area.

Alexander Terrane

The short version is that Prince of Wales Island is part of a geological slice of southeast Alaska called the "Alexander terrane." To get slightly more technical, it's the remnants of an old island arc (like Japan, for instance) that plate tectonics has squished up against the western edge of North America.

To get much more technical, per the 1992 description by Rubin and Saleeby in the journal *Tectonics*, Alexander terrane is where lower Paleozoic, metamorphosed volcanic and sedimentary rocks plus dioritic plutons "are unconformably overlain by Lower Devonian clastic strata. These rocks are overlain locally by Upper Triassic basalt, rhyolite and marine clastic strata." On top of it all, above another unconformity, are "upper Jurassic and Lower Cretaceous metamorphic volcanic and sedimentary strata."

Then, of course, the place has been extensively deformed by both compressional and extensional tectonics, as well as right-lateral strike-slip faulting. And finally, what we see today is the product of several million years of glacial erosion. It all makes perfect sense if you have a nodding acquaintance with basic geologic concepts.

For our purposes in ESI, the key thing is that the geological and geochemical processes of the ancient past deposited some of the highest-concentration uranium ore ever found in the U.S. (The uranium ore sends a Geiger counter scintillometer off the scale!)

And the companion point is that similar processes pumped the Bokan Mountain area full of an extensive, intrusive dike system that followed pre-existing fracture planes. The dikes are the target ore bodies for our current exploration effort, because they're rich in mineralogy that includes high concentrations of RE, particularly the "heavy" RE (HRE) such as dysprosium and yttrium.

The Ucore Play

Here's exactly what I said about Ucore last year:

"So why look at Ucore? Because of the ore body. Because of the mining history. Because of location, location and location. Because in the coming rare earths crunch, I can see Ucore teaming up with a larger, better-capitalized firm. Meanwhile, I believe that Ucore has a good rare earths story to tell and it can keep delivering good results until the right partner comes along. Don't chase this stock. But accumulate a position. Get on board."

Looking back, I'm glad I said that. Because although it took a while for me to get up to Alaska and kick the actual rocks, it's all true. Here are some details.

First, a salute to CEO Jim McKenzie and his able assistant Byron Fillmore for organizing the trip for me and numerous others. It was great in many respects -- political, geological and financial. It was all well put together, and things flowed nicely.

My first encounter, almost right after arriving in Ketchikan, was with U.S. Sen. Mark Begich (D-AK), who was there with two of his very pleasant and sharp staff

members:



*U.S. Senator Mark Begich (D-AK)
and your ESI Editor Byron King*

Think about that. Here's a senator who could be anywhere, from Washington, D.C., to Anchorage, hanging out with the you-know-who and you-know-what kind of crowd. Instead, he was sitting in a conference room in a hotel in Ketchikan, listening to a talk by Jim McKenzie about the Ucore development plan. Not just that, but Sen. Begich was asking questions about things like "roadless wilderness designations" and about the technical skills involved in HRE extraction.

Later on, I had some time alone with the senator and staff. They're knowledgeable and engaged in the RE issue, and in the particular development issues for Bokan Mountain.

The point is there's high-level political support for what Ucore wants to do. I happened to be there when Sen. Begich was on deck, but Ucore also has received strong support from the office of Sen. Lisa Murkowski (R-AK) as well as Alaska Gov. Sean Parnell.

This kind of political support is critical for any current U.S. resource development, even one in a former mining district on a faraway island. As longtime readers know, I'm not terribly sanguine about the U.S. development process. The U.S. political and legal culture has institutionalized drop-dead opposition to development, to the point that any number of people can shut you down at every step.

In the U.S., there's significant risk at many levels. Everybody can say no. Nobody can say yes. It's a national problem. Still, the criticality of the RE issue has sunk in at the highest levels of government. So on this score, at least, Ucore has a leg up.

Hanging out With the Geologists

I spent a lot of time over the next couple of days in Alaska hanging out with the Ucore staff and contract geologists. We walked and talked, picked up rocks, examined crystals with magnifying glasses and discussed mineralogy and composition assays:



Geologists examine site where Ucore employee is preparing for bulk sample extraction.

Basically, Ucore has spent the past two years going over Bokan Mountain with a fine-toothed comb. The geologists have mapped every outcrop and overseen an extensive drilling program that has built a solid model of the mineralization, which extends to great depth.

Ucore has taken extensive mineral samples and analyzed them for HRE content, which is present in handsome economic quantities. During my visit, I saw one site (see photo) where a jackhammer operator was preparing the rock for blasting to obtain clean samples for bulk testing and assaying.

Ucore also has a drilling rig running 24/7 on the mountainside, taking core. There's a full core shack on site, with two professional staff analyzing mineralogy using an X-ray device that NASA developed for the Mars Rover system. It says a lot about how much technology is expediting development these days.

Ucore has been working with the well-regarded Hazen Laboratories in Denver to develop a metallurgy program for these particular rocks and ore. The results are due out "soon," per Jim McKenzie -- next couple of weeks, he told me.

As ESI readers surely know, it's the metallurgy that matters for RE development. That is, you take the ore out of the ground and crush it and concentrate it via normal processes. But with RE – and, especially, with HRE -- you've got to dissolve the materials in acid and then start a chain of events to turn the goop into something that people can use as an end product. It's super-complex chemical engineering. That's the hard part.

More to Come

I'll refrain from regaling you with more stories about rocks and mineralogy, or

even about flying in a helicopter around the utterly gorgeous coastline and glens of Prince of Wales Island. Well, OK. If you insist...



Typical view over Prince of Wales Island.

The bottom line is that Ucore has been doing its work since I recommended the company last year. The RE markets have gone up and down, and the broad stock market is doing what it's doing. But Ucore has been just plain sticking to its work and developing its project.

Ucore has about \$8 million in the bank, which is good. Ucore is, from what I hear, getting solid interest from midstream processors and downstream users, but those details are competition sensitive.

Thus, there's more to come from Ucore. It's got a superb ore deposit -- just great in every respect. It's an extensive vein system that's very clean and very mineable. It's not an open-pit kind of thing, in which they have to plan and develop a massive hole in the ground. It's more like chasing veins, of which there are plenty to chase. And the ore has high grades, with good economics.

The next step is to break the code on the metallurgy and develop the business plan to turn these rocks and ore bodies into a high-value end product.

Ucore has an outstanding asset at Bokan Mountain. Ucore has superb geologic staff, as well as an outstanding development staff. Ucore is using all the right consultants. And the company has an enviable level of political support.

I believe I'm on solid ground -- dioritic plutons, as a matter of fact -- in re-endorsing Ucore Rare Metals. It's trading in the 65-75 cent range and destined for much higher levels over the next 24 months. Keep accumulating a position, and we'll watch as this promising play develops and blossoms. That's all for now.



Gotta go...

Action to take: Buy Ucore Rare Metals (UCU: TSX-V) up to 80-cents.

Thanks for reading,

Byron King