

Tan Khandaker Interviews Jim McKenzie at New York Hard Assets

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It's been a while since we've talked with our friends at Ucore. When last we touched base, we did a video interview at the Hard Assets Show in San Francisco in November. At that time, they'd gone through a phenomenal price run on the heels of "Rare Earth Mania". That mania gained traction in mid 2009, and generated some major gains for juniors gifted with prospects rich in the rare earth elements (or "REE's"). Ucore was no exception. From June to September of last year, UCU averaged almost a million shares a day in volume, while spiking to a year high of \$1.00 in October, up from a low of just \$.03 in early 2009. This was a phenomenal run by any standards.

But the party stalled late in the year, as most all of the REE juniors absorbed a strong correction. Ucore was again no exception; trading at about 60% off of its previous high as the first quarter of 2010 rolled by.

As we go to press, Ucore's Bokan-Dotson Ridge project appears to be recognized as one of the better known heavy rare earth (HREE) prospects, backed by some of the best and brightest scientists in the sector. One of the foremost authorities on rare earth mineralogy, Dr. Anthony Mariano, has named Bokan as one of his top picks for near term HREE production in North America. And for good measure, newsletter gurus such as Rusty MacDougall, Keir Reynolds and Kirk Gamely have recently recommended UCU to their rapidly growing list of followers.

Yet Ucore's share price continues to lag at a substantial discount to its highs of last year, while others in the space have managed to rebound in fits and starts. Either the rare earth sector has been prone to stumbling and beating back some of the early stage winners like Ucore, or the company is now an obvious buy in the early rounds of a rare earth bull that's just starting to gain its second wind.

We caught up with Ucore President Jim McKenzie, who spoke to us from the Hard Assets Show in New York, for some insight on Ucore's prospects and some thoughts on the REE sector in general.

Khandaker: Jim, you mentioned in an earlier conversation that Byron Capital Markets recently came out with some interesting observations on the Rare Earth space, and dispelled some myths on the near term demand for rare earths. Can you comment on that for our readers?

Jim McKenzie: Well, in essence, what Byron Capital has said is that the REE hysteria of the last year or so has been overblown to a certain extent, especially with regards to many of the light rare earths, or "LREE's". They point to the idea that China may be cutting back on rare earth exports across the board. But many of the light REE's are in no real danger of under supply, and may in fact experience a near term over supply. This is because there's some fairly massive LREE projects now developing reasonably quickly outside of China, and their production horizons are in fact reasonably close.

A case in point is Molycorp's LREE deposit at Mountain Pass in California. This was the largest rare earth mine in the world some 25 years ago, and its now being prepped to return to production by 2012. By all accounts, Mountain Pass can supply most, if not all of the LREE demands of the U.S. and quite likely the entire West for decades to come. What's more, Molycorp just announced an IPO and an aggressive exploration program at Mountain Pass. So the glass appears to be more than half full as regards near term LREE production in North America at least. Add to that the massive light rare earth potential of Lynas' Mount Weld in Australia, and the global picture for non-Chinese LREE supply is actually fairly good.

Khandaker: So what does that mean for Ucore?

JM: Well, the Byron report has a strong flip side. They make it clear that the outlook for heavy rare earths, or "HREE's", is an entirely different beast. Many of the HREE's are expected to be in shortfall, both in the immediate and intermediate term. Two in particular, Terbium & Dysprosium, are likely to experience this shortfall fairly soon, and their values are anticipated to skyrocket as a result. Tb and Dy are absolutely critical to green tech and military apps in the West, so the race is on to find near term security of supply for these and other valuable heavies.

This is where Bokan Mountain is sort of the brightest beacon in the United States, which is one of the largest consumers of HREE's in the world. Bokan is known to have Terbium and Dysprosium content that's just highly anomalous in the West. Our February press release highlighted this, with intercepts up to 1.13 lbs per ton Tb and 7.69 lbs per to Dy.

While the Terbium Dysprosium aspect at Bokan comes quickest to mind, Bokan has the full spectrum of heavies, all located on U.S. soil, all accessible in the short term and as a fairly quick response to the Chinese. Bokan is pretty unique in this regard. Certainly it's fairly unique in the U.S., as what appears to be the nearest heavy REE deposit to production on American soil, something that Jack Lifton has acknowledged. So the case is strong for Bokan being the absolute quickest go-to for the U.S., especially in terms of these critical strategic HREE's that are very likely to be in shortfall in reasonably near term.

Khandaker: What do you mean when you say that Bokan can be classified in the near term, and what sort of a time frame are we talking about here? Also, you mentioned something about a horse race to heavy rare earth production in our conversation at the Global show a few weeks back. Can you elaborate on that?

JM: Actually, at least two of the rare earth pundits have called the race toward HREE production a "sprint" of sorts, with the fastest mover destined to win the initial rush to a sort of metaphoric goal line. So the deposits with very near term, if not immediate production horizons would have a distinct advantage here. By near term, I mean capable of producing within 3-5 years. And this is where Bokan has been given a phenomenal head start in what may amount to a horse race, particularly in the U.S.

Keep in mind that in absolute terms, HREE consumption in the U.S. is significant, but it's not overwhelming by any means. To be sure, short term demand for heavies is critically important, especially for military and green applications, and the U.S. is the world's single largest consumer. HREE's have also become a politically white-hot item in the States that will need some kind of resolution in the short term, if Senate and Congressional activity is any indicator. But the HREE's are a strategic niche market by comparison to the demand for industrial base metals, for example.

Increasingly, I think, the media is coming to terms with this, and the idea that an HREE deposit doesn't need to be inordinately large in order to satisfy short term supply gaps, or to win the race to near term production. Keep in mind that the entire global REE market has been estimated at only about \$2 billion per annum, with the majority of that being light REE's rather than heavies. So, even with the near term shortfalls indicated by reporters like Keith Bradsher in the Times, it's been acknowledged that it won't take a behemoth to satisfy the HREE void in the U.S., especially as regards metals like Terbium and Dysprosium. These are among the most valuable and sought after metals in the world right now. But they're not high volume product by any means. So, it's not about size. In the short run at least, it's almost entirely about speed of access.

We talked about REE mania in our last interview, and that mania has attracted a lot of capital to the sector in a fairly concentrated period. To be sure, that capital is likely to prove up some pretty substantial HREE deposits, and may well bring these to term in the long run. For example, we know there are projects in northern Canada, both in the east and west, which have enormous potential. These are exciting and need to be nurtured over the next decade or so, to build long distance road and transport infrastructure and access facilities in to some fairly remote locales. Their potential is enormous, without question, and they have talented teams at work to be sure, but no one is realistically claiming that their production horizons can be classified in the very near term, or that they'll satisfy the imminent HREE crunch that's gaining all of the media attention in the United States.

Now let's contrast those logistics to Bokan. Our project is located in the U.S. Some would say that this is an absolute political "must", as the U.S. looks to secure its short term domestic supplies, and especially when we're talking about minerals that are strategically critical to U.S. security. Bokan is also a great deal more southerly. It's in a temperate region not far from coastal BC, and in the same boreal zone as Vancouver. As a gift of nature, our mine mouth is on immediate deep water. It's a side stop on the Alaska Marine Highway, one of the most prolific shipping lanes in the West. It's located on the south Alaska Panhandle, and just a hundred kilometres from Prince Rupert; one of the largest container ports and rail heads in the Western world. Bokan is also in reasonably good proximity to Mountain

Pass in California. So, it's not that far from prospective rare earth processing facilities of Molycorp, in the event they move to strategically accommodate the heavy REE's as a complement to their already enormous supply of lights.

I could go on about Bokan's near term producing potential. We see that it's in a prior producing area. It has an existing wide-area road network, both permitted and already built. It's in a zone that's been reserved by the U.S. federal government for sustainable resource development. So, in essence it's in an area that's been specifically set aside for mining and forestry development, and not much else. So, you couldn't ask for a better situation as a prospective mining concern. There are no indigenous populations to negotiate with, since no one's allowed to live within that designated resource development area that contains Bokan. Also, it's in a state that has a record of 100% mine approval at the permitting stage and beyond. And the list goes on.

So, you can ask yourself how these factors might affect a horse race to HREE production in the U.S., and contrast these to projects situated in the Canadian north and beyond. Again, that's not to say that these projects are not highly prospective or that they don't have enormous long term potential, because they absolutely do. However, they're unquestionably not the lowest hanging fruit on the North American HREE tree, so to speak.

There's another key point to consider on the importance of Bokan's accessibility and it's near term producing capabilities. I've asked multiple geologists and geoscientists a fairly pointed question over the past few months, and that question is essentially as follows:

If tomorrow, China were to immediately cut off the supply of some of the scarcest, most valuable and most sought after HREE's known, such as Terbium and Dysprosium for instance; where is the absolute nearest term prospect to obtain this product within the U.S., or in North America, for that matter?

Now, I won't answer that question, and I leave it to you to do your own research on the building of highways and long distance transport infrastructure over permafrost and to remote latitudes, versus immediate all season seaport access and prior producing infrastructure. But I'd be happy to furnish you with some large scale maps to speed your conclusions. And if the race to HREE production is indeed a horse race, how do absolute immediate access capabilities, transportation and logistics play into the mix?

Beyond any of this, there's another question that we might want to ask for good measure:

Given the political groundswell in the U.S. to reactivate REE production for strategic and/or national security reasons, what sort of deposits are the U.S. likely to rally behind politically or expedite in the near term; those located domestically, or those located elsewhere?

So, beyond any matters related to ease of access, our U.S. location isn't just convenient, it's critically important; especially when you weigh political and logistical alternatives.

Khandaker: You mention that Bokan doesn't need to be the largest HREE deposit in order to win the HREE horse race. Does this mean that Bokan should be seen first and foremost as an emergency source, and some sort of stop-gap supply for the U.S.?

JM: No, not at all. On the contrary, Bokan houses an enormous prospective HREE deposit. And this factor surpasses our ease of access, or even our emergency response capability for the U.S. I've talked about this at length in the past. The USBM came up with a non 43-101 compliant historical estimate back in '89 which stated that Bokan contains 374M lbs of total rare earth oxides, or TREO. Half of that figure is projected to be HREE's, which is unusually high as rare earth deposits go and one of the highest estimated HREE skews in North America. That's a fairly impressive and readily accessible in situ figure, especially when you factor in that the demand for HREE's is critical and vital to the U.S., but not crushing by any means.

So, it helps to put the supply and demand figures in context here. Yes, this is critically strategic and valuable product. Supply is threatened and demand is growing. But current annual consumption of HREE's in the U.S. doesn't require that they go far afield, or even beyond U.S. soil to meet that supply gap. U.S. heavy rare earth consumption is

currently less than 5 million lbs per annum. So, if we prove up the USBM figures for Bokan, and we're well on our way to doing so, there's already enough HREE's at Bokan to supply the heavy rare earth demands of the U.S. for decades to come, even if demand effectively doubles. I realize there's a big "if" in that sentence. We need to prove up the resource to USBM estimates, and our drill program to date has met and exceeded those USBM projections, not to mention our ongoing measured skew towards HREE's, which significantly surpasses the historical USBM figures.

So, as a broad first pass, if the historical USBM figures continue to prove up for us, their estimates will qualify Bokan as one of the most substantial HREE deposits in the North America. Hands down, it appears to be the one with the nearest prospective production horizon on U.S. soil, other than collateral HREE byproduct that may be generated from Mountain Pass. And all of this without the need to develop expensive and remote, non-domestic HREE sources for the U.S.

So, how big is big enough, and how much is enough? Speculation that HREE demand is going to accelerate over time is all well and fine. And yes, new research will likely generate new applications for HREE's, since they've some unique properties that are difficult if not impossible to substitute for. But when one U.S. based deposit can prospectively meet domestic shortfalls with room to spare, and with a very short term production horizon at that, how many new deposits are realistically required to be developed by independent investment capital?

Of course, a great deal more goes into rare earth mine viability than sufficient pounds in the ground and geographic ease of access. Metallurgy and feasibility come quickly to mind, and they're some of the strongest prospective features at Bokan. But based on the first and most obvious criteria: size and situation, Bokan's historical resource and its highly accessible location can more than satisfy the domestic supply gap for some time to come. So, we have a situation that supply side economists or Occam theorists might call much more than good enough: anything beyond apparent and foreseeable demand is likely to be redundant, or classified as excess.

To draw a non rare earth comparison, the Crest iron ore deposit in the Yukon is enormous by any standards. But it's well back in the queue in terms of its production horizon, due to the need to construct accessibility infrastructure in what amounts to a remote northern locale. Contrast Crest to say, Iron Ore Country or the Mesabi Range in Minnesota more than 1000 miles to the south. We see that an impressive and massive, but remotely located deposit to the north, in the face of sufficiently large and a highly accessible alternative to the south, may well take a distant rear seat in any race to development. There are countless examples where this axiom has held true. The Izok copper deposit in Northwest Territories comes to mind. It has enormous pounds in the ground, but it's northerly and remote. So it remains undeveloped, especially given the smaller but much more accessible alternatives in Arizona, such as Kidd Creek or Bagdad.

Even when a northern deposit hits critical mass to green light its development, due to an enormous size and a highly valuable product, the race to development can still take an inordinate period of time because of onerous logistics. Take Voisey's Bay, for instance. One of the largest nickel deposits known, and even with the pedal to the metal, so to speak, still consumed over 15 years to bring to production from initial discovery, including remote logistics and first nations specifications. And this was with the benefit of near ocean access, as opposed to inland location. So, as in real estate, location is everything. Better a bungalow in Manhattan than a mansion Murmansk.

Also, keep in mind that the capex required to develop a northern deposit can easily run well north of a half billion dollars. At Bokan, we believe that our capex will be a small fraction of this. With immediate deep water access, we believe there's a good chance we'll be able to ship anywhere in the world for under \$40 per ton. So, location not only affects the race to production. It affects the eventual fixed capex, the ongoing variable costs, and all aspects of logistical feasibility in a major way.

Khandaker: Speaking of deposit potential, you just released your first estimate for Bokan. Can you tell us a bit about that?

JM: Yes. It's a Conceptual Estimate under NI 43-101 regulations, which is a first tier, 43-101 compliant calculation of projected grade and tonnage for a defined target area. In this case, we're focusing on just a 2 km section of the Dotson Trend to the southeast of the Bokan Intrusive Complex, comprised of the Dotson Shear and I&L Zones.

Our Conceptual Estimate was independently calculated by Aurora Geosciences out of Juneau. A great deal of work went into the calculation, which is set out in a detailed long section now available on our website. Under 43-101 guidelines, the CE must be expressed as a range. Because original USBM figures were calculated to a grade to 0.5% TREO, we've included that grade level for comparison. At more than 5 million tonnes for this particular 2 km area of strike, and to a reasonably shallow depth of 200 metres, the estimate surpasses the historical USBM figures for the same target area and depth.

Our goal from the start has been to prove up the USBM estimates, so this interim estimate more than delivers on that objective. The estimate also applies to a very limited segment of the overall puzzle at Bokan. Even then, it delivers estimated mineralization which renders an in situ value worth several billions in U.S. dollars. So, it's an excellent starting point, and we're just scratching the surface, both literally and figuratively.

As we've said, the Conceptual Estimate projects down to a limited depth. Our geologists believe the deposit has an excellent chance of persistence at depth, due to deep seated hydrothermal events. If this theory holds true, there's a potential to establish many successively deeper increments of mineralization at the Dotson Shear and I&L Zones alone. As well, these two zones are the first of many that were studied by the USBM. They estimated that the greater Bokan area contains 37.8 million tonnes TREO at a grade of about .5% overall. So, our initial Conceptual Estimate of 5 million tonnes at .5% for the first two of several zones is not only consistent with the USBM, but the tip of what looks to be a much larger iceberg in the Bokan area.

Khandaker: You recently announced that the State of Alaska has thrown its political support behind Bokan. What does this mean in terms of moving forward for Ucore?

JM: Well, the Alaska State House of Representatives recently passed a Resolution in favour of Bokan. What it essentially says is that the State intends to clear aside permitting hurdles at Bokan, to the full extent permitted by law, in order to expedite heavy rare earth mining at this location. The Resolution touches on the critical strategic nature of these metals to the U.S., the possible crisis represented by a dependency on China for product that the U.S. can't do without, and the strong possibility that Bokan is a prospective near term solution.

So, this announcement by Alaska is a significant milestone for us. No other state has introduced such an initiative, and we think it speaks to Alaska's commitment to removing any potential roadblocks involved in getting a strategic HREE facility active up as a producing mine. As you no doubt know, permitting is one of the biggest hurdles to near term production, so we couldn't ask for a better situation geopolitically.

For us, this is the icing on a fast-rising political layer cake of sorts in the U.S. The recent tabling of the federal RESTART Bill also targets support for near term domestic rare earth production as a response to the Chinese export withdrawals. The GOA recently reported on the impending rare earth supply shortfalls, and the issue is now on the agenda of the U.S. Department of Defense. So the rare earth lobby in the U.S. has gained tremendous momentum in a fairly short time frame. The implications for Bokan are very good to say the least, as one of very few viable domestic HREE sources, and quite possibly having one of the shortest potential production horizons.

Khandaker: Thanks Jim! We'll look forward to following your progress.