

Thu Jan 17, 2008

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Publisher: Kaiser Bottom-Fish Online

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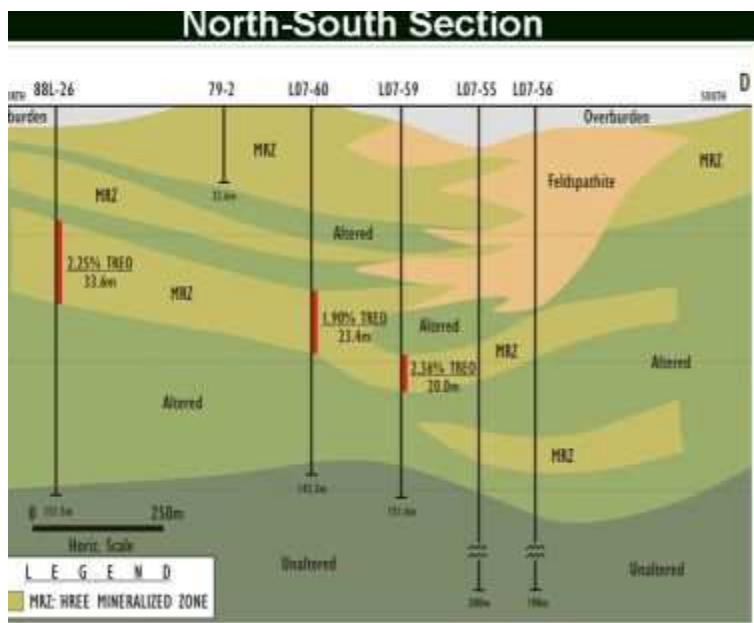
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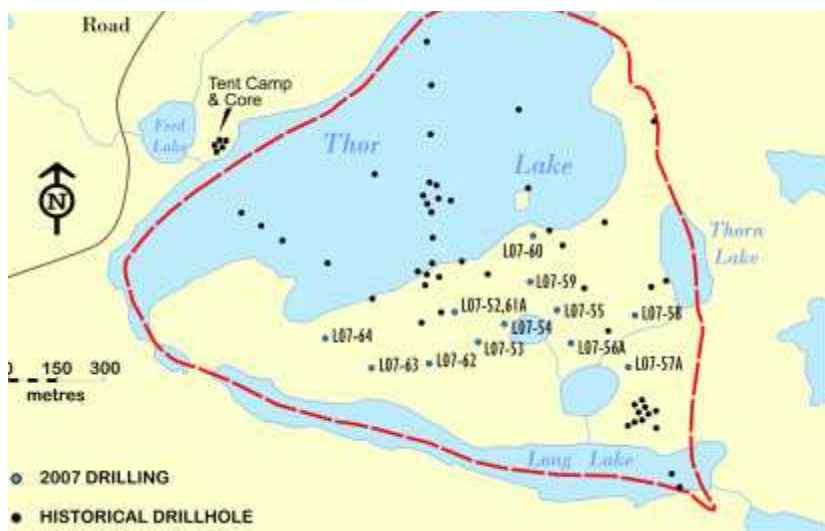
Avalon Ventures Ltd (AVL-V: \$1.54)

Avalon's rare earth enriched horizons at Thor Lake have underground mining potential

Synopsis: Avalon Ventures Ltd (AVL-V: \$1.54) released assays for its Thor Lake project on January 8 which confirm the geological concept whereby the tantalum bearing Lake Zone is viewed as an important host of rare earth oxides, in particular the heavier and more valuable rare earth elements that are a critical input for the super magnet components of hybrid vehicles. The occurrence of enriched and apparently continuous 10-35 metre thick layers open the possibility these horizons could be developed as an underground mine. Subject to further confirmation through infill drilling that these laterally extensive layers have grade continuity, these high value (\$500 plus per tonne) rare earth oxide bearing layers could represent a resource ranging 10-50 million tonnes based on their 500 m by 1,000 m footprint. One could perhaps construe the rare earth enriched Lake Zone layers as a higher value version of the diamond bearing Snap Lake dyke De Beers is putting into production. An underground mining development scenario would certainly be easier to permit. Avalon has completed the \$16.7 million financing announced in October 2007 and will resume drilling at Thor Lake in February. Its goal for 2008 is to complete a prefeasibility study and develop a metallurgical flow sheet for the rare earth oxide ore. The latter is a critical milestone because it will establish how much of the rare earth oxides can be recovered at a reasonable cost. **Both my Spec Cycle Hold 100% recommendation for the original \$0.10-\$0.19 bottom-fish cycle and the more recent Good Absolute Value Spec Value Buy issued at \$1.76 on November 7, 2007 remain valid at current prices.** I would also like to point out that ownership of Avalon fits very well with the speculative scenario of a green economy driven infrastructure renewal and transformation strategy for pulling the United States out of a recession that I outlined in my Bottom-Fish Action Report for the week ending January 5, 2008 ([Speculations on the Green Economy as the Next Big Thing](#)). I consider Avalon to be a core long term position with a \$3-\$5 target in 2008 and considerably higher in 2009 if the prefeasibility gives a green economic light to Thor Lake.

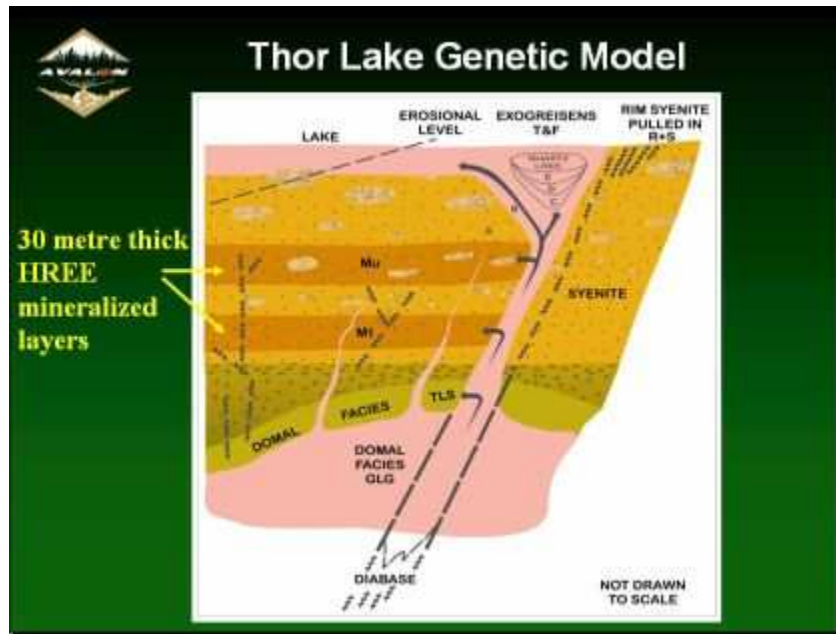


Avalon Ventures Ltd (AVL-V: \$1.54) has received assays for the first 7 holes of a 13 hole drill program (2,551 metres) at its 100% owned Thor Lake project in the Northwest Territories that wrapped up in mid-October. The significance of these results was lost on the market, probably because it is difficult to assign a rock value to the grades and because the real meaning lies in the proof of a geological concept whose existence you would recognize only by listening to Chris Pedersen, David Trueman and Bill Mercer argue about it. These are the geologists that were present during my site visit last September and who are driving the exploration program. The results confirm the existence of a 100 metre thick envelope within the Lake Zone that averages 1% "total rare earth oxides". More importantly, drilling has intersected enriched horizons 4-23 metres thick (as intervals isolated in the results) that run up to 5.06% total earth oxides. Within these enriched horizons the heavy rare earth oxides (europium through lutetium) represent up to 30.9% of the total rare earth oxides. Known rare earth deposits are typically dominated by the lighter rare earth oxides, with the heavier ones representing less than 3% of the total. These numbers indicate that Thor Lake is a very special deposit. As the cross-section demonstrates, these enriched 10-35 metre horizons are laterally extensive over an area 500 m by 1,000 m, though the richest layer occurs at the base of the deposit between 100-175 metres.



With respect to the initial concept of a giant open pit mine, this depth is bad news because an open pit mine would have to process a lot of lower grade material before accessing the higher grade ore. However, the apparent grade continuity of the gently dipping layers opens the possibility of an underground room and pillar mining operation. While this implies a smaller production scale, it also involves considerably less surface disturbance

than an open pit mine, and would be easier to permit. It also allows the initial mining plan to be scalable to accommodate demand growth for these specialty metals. Infill drilling is needed to confirm this lateral continuity. Avalon will resume drilling in February with an additional 5,000 metres on the frozen lake portion of the deposit, with closer spaced infill drilling on the land covered portion in the summer. If we jump ahead, and assume the enriched horizon exists over a 500 m by 1,000 m area with an average thickness of 10 metres, and apply a specific gravity of 2.6, we end up with a slab representing about 13 million tonnes. Boost the average thickness to 35 metres and the tonnage footprint leaps to 46 million tonnes. At this stage these numbers are highly speculative because we do not have the detailed drill spacing needed to establish grade continuity, but if it holds up, there is an obvious analogy to the 25 million tonne Snap Lake diamond dyke De Beers is putting into production at a rate of 3,000 tpd at a capital cost of \$975 million and a projected operating cost of \$156 per tonne. Snap Lake is expected to be in full production by mid-2008, and based on published recoverable grade and modeled carat values that translate into a \$173 per tonne rock value it is questionable that Snap Lake will be profitable. But the real value of Snap Lake may not reside in rough diamond prices, but in the 400-500% markup a rough diamond undergoes as it travels downstream into a retail store as a source certified, polished and luxury branded consumer product. Because of the specialized uses of rare earth elements as well as the other strategic metals present in the Lake Zone such as zirconium, hafnium, gallium and yttrium which gain considerable value when fabricated into alloys, the real value of Thor Lake may lie in the value added through downstream processing. The idea of draining Thor Lake and converting the underlying deposit into a giant open pit always struck me as something of pipedream in the permitting department, but an underground mine similar to Snap Lake is clearly something the NWT's aboriginal communities have already shown a willingness to support.



Avalon has completed the \$16.9 million private placement announced in late October 2007 and is now in excellent financial shape for achieving its goal of completing a prefeasibility study for Thor Lake in 2008. The financing of 2,750,000 flow-through shares at \$1.85 and 7,610,000 units at \$1.55 brokered by Research Capital and TD Securities was snapped up very quickly. The 180 places included ten brokers who are obviously tuned into the "green economy" concept. There has, however, been little follow-up in Avalon's market which continues to trade thinly, often with large bid-ask spreads, despite the company now having 72.3 million shares fully diluted. Avalon has also just published its annual report and buried within the "objectives for 2008" I found a note which suggests a much more aggressive profile lies in the near future for Avalon. This objective involves "exploring opportunities to access production, logistics and distribution channels for rare metals, through acquisition or partnering with existing players". I read this as a sign that Don Bubar wants to do more than the geology thing of drilling off a deposit and shopping it around to the highest bidder. Fee hungry investment bankers will no doubt keep a close eye on matchmaking opportunities. It also signals an awareness that the real value of an exotic deposit such as Thor Lake lies in the control of the value-adding downstream processes. In this regard speculators should be forewarned that the future pricing of Avalon's stock may defy the limits created by number crunchers who plug recoverable grades and nominal metal prices into their spreadsheets. If I were asked to pick a junior with biggest predictable potential to surprise people on the upside, I would pick Avalon.



As a final note, the Government of Canada announced on November 21 that it had withdrawn from industrial development a large chunk of ground surrounding the eastern part of Great Slave Lake known as the Akaitcho Territory. Avalon's Thor Lake project falls inside the Akaitcho Territory, but is not affected by the withdrawal. The media spun this announcement as the creation of the East Arm National Park that nature conservancy groups have been agitating about for a long time, but in reality it is just a freeze on new claim staking while land use studies are conducted to determine what should be excluded from land claims settlement negotiations. With regard to the proposed East Arm National Park, it is the orange area in the map above well to the east of the withdrawal lands (shaded in blue). This 5 year withdrawal has been coming since November 2005 when the Canadian government agreed with the four Dene Nation aboriginal communities resident in this region on a measure related to a 2001 decision to pursue settlement of land claims. Avalon already owns all the land it believes is relevant to the development of Thor Lake, and has land use permits in place for drilling in 2008. This does not mean it is clear sailing for the development of Thor Lake, because the affected Dene nations must still be on side with a mine in their backyard. But the withdrawal is nothing like converting the land surrounding the Windy Craggy copper deposit into a national park.

Conclusion: Avalon continues to be among my top picks for a major homerun, particularly if my thesis that the green economy movement has big legs proves to be correct. Bottom-fishers who bought in the \$0.10-\$0.19 range when I recommended Avalon on April 26, 2005 should continue to hold their positions 100%, and spec value hunters who bought when I recommended Avalon at \$1.76 on November 7, 2007, and are down nominally, should also continue to hold their positions. And for those who did not buy Avalon, it is an even better buy today in the face of general market weakness and with the benefit of the recent drill results that offer proof of geological concept.

*JK does not own shares in the securities mentioned herein