

# Crunch Time on Avalon's Lithium Potential

Any day now, Avalon Advanced Materials Inc. (TSX:AVL | OTCQX:AVLNF) ("Avalon") will be completing a drill project that should considerably increase their resource. In fact, renowned lithium developers Lepidico issued a letter of intent earlier this year based on their confidence that Avalon's Separation Rapids project can deliver the goods; a combination of a great resource, proprietary processing and valuable relationships has my attention firmly fixed on the Avalon curve.

Already this month, Avalon stocks have seen a change in trend, switching from the year-to-date steady decline to a promising gain of a couple of points ahead of the news. The 2,000 meter drilling program was undertaken last month to scientifically verify the presence of large quantities of suspected lepidolite mineralization. Separation Rapids already has an NI 43-101 compliant petalite resource, but is also known to host a very large, but as yet unquantified, amount of lepidolite.

Upon the results of the current drill, we are expecting to see the expansion of the existing petalite resource, which is open along strike and at depth, as well as first data regarding an undrilled area one kilometer west of Separation Rapids, where the company sampled 1.56%  $\text{Li}_2\text{O}$  over 8.9 meters back in 1997. Leading up to the release of the information, anticipatory movement has been seen on share prices, but we expect a significant jump when the results are confirmed.

Crucial for any lithium explorer is metallurgical processing, and Avalon's agreements with Lepidico couldn't be better placed. For anyone that follows us regularly, you'll know that Lepidico have been developing the L-Max proprietary extraction process for quite some time, that promises the commercially

viable recovery of lithium from lithium-bearing micas such as lepidolite and zinnwaldite. Before the advent of processing technologies such as L-Max, these rock types had largely been passed-over as a source of lithium due to the lack of an economically viable extraction process, making the current Avalon drill project one of the more exciting in recent years.

Samples of lepidolite outcroppings from a site just east of the Separation Rapids petalite resource were sent to Lepidico for laboratory bench tests using L-Max as part of their Pre-Feasibility Study (PFS). Excellent results were achieved, including the production of battery grade lithium carbonate of 99.88% purity, meaning that data already exists to demonstrate that both the feedstock and the relationship are working well; should Avalon prove that Separation Rapids has sufficient lepidolite to sustain long-term production, we may very well be looking at the next major producer.

Avalon boasts an enviable management team, and given the geological, exploration and processing experience totalling over a century, it's no wonder that they've landed such a promising resource. The team developed a proprietary floatation process nearly twenty-years-ago for concentrating the petalite rock, which was further optimized during the 2016 pilot plant program and incorporated into the PEA model. This petalite concentrate can also be used as a direct input into high strength and thermal shock resistant specialty glass and ceramics products.

Surging demand for lithium from battery makers is disrupting traditional supply sources for innovators in the glass industry, which still accounts for 30% of global lithium demand as reported by the USGS. This creates an opportunity for new producers of high purity lithium minerals to fill the growing supply gap, and Avalon's high purity petalite concentrate is ideally suited to meet this need. The company is currently pursuing a risk-reducing, staged construction of their demonstration plant in Kenora, but if the current drill

program rubber-stamps the agreed 15,000 tpa of lepidolite concentrate to be shipped to Lepidico, we are looking at one serious leap forward very soon indeed.