What does the replacement of the Australian Strategic Materials CEO mean?

written by Jack Lifton | July 22, 2022

Australian Strategic Materials Ltd. (ASX: ASM) has accomplished the execution of a business model first described by Canada's former Great Western Minerals and then appropriated by the (second) American Molycorp, neither of which could ultimately pull it off — the vertical integration of a critical mineral producer from the mine to the finished mass-produced product ready for end-user product fabrication.

For ASM the first integrated production will be of rare earth metals, titanium, and zirconium, the mineral supply chain for each of them originates with the company's Australian mining operation, and the final processing to metals is done in a Korean joint venture, already proven at the pilot plant level and with a full-scale plant being contracted for with Hyundai Engineering.

I have no doubts that the entire output of ASM's Korean operations will be sold into the Korean market. The sister company of Hyundai Engineering, Hyundai Motors, is already mass producing a low-cost battery powered EV, which needs rare earth permanent magnet electric motors made independently of Chinese critical metals.

The Korean nuclear power industry needs zirconium (and its sister metal, hafnium [also to be produced by ASM in Korea]) for the cladding of fuel rods. And the Korean domestic armaments industry needs rare earth permanent magnet motors and titanium for its aircraft and shipbuilding (Korea's first full-scale

aircraft carrier is now being planned).

ASM, having now structured its total supply chain for critical metals, just last week <u>installed a new CEO</u>, its former COO, Rowena Smith, who has almost 30 years of global mining experience in strategic planning and mineral processing with senior mining corporations, including roles at South 32, Rio Tinto, and BHP. Previous CEO David Woodall abruptly stepped down from his roles and left the company.

It's important at this point to understand the significance of the replacement of now former CEO, David Woodall, by former COO, now CEO, Rowena Smith. Those who plan wars, or even battles, rarely carry them out. During David Woodall's tenure, the vertical integration of ASM was planned and the component ventures were acquired, modified and themselves integrated. During that time Rowena Smith, as COO, familiarized herself with the plan, helped to implement it, and took over the day-to-day operations of the system as it matured. She has overseen areas of the Dubbo project and the Korean Metals Plant. Last week the board of the company determined that ASM was ready for her operationally-experienced and skilled management to assume overall control, and the management change was implemented.

ASM is now the first non-Chinese company to complete a vertically integrated business model from the mine through to the production of high purity critical metals for the EV, shipbuilding, aerospace, and nuclear industries.

ASM is Australian-owned and sited, and its first customers are in Korea.

The rest of the non-Chinese mining and processing world should look closely at this success and emulate this model.

Greg Andrews of Search Minerals talks about their newly released rare earths project PEA

written by InvestorNews | July 22, 2022 In this InvestorIntel interview with host Tracy Weslosky, <u>Search Minerals Inc.</u> (TSXV: SMY | OTCQB: SHCMF) President, CEO, and Director, Greg Andrews talks about the company's new <u>preliminary economic assessment</u> report (PEA) reporting a low CAPEX and pretax NPV of \$2.23B for their Deep Fox and Foxtrot Rare Earth Element (REE) deposits located in Labrador, Canada.

In the interview, which can also be viewed in full on the InvestorIntel YouTube channel (click here), Greg explains how their technology and reduction in size of the equipment and reagents resulted in very low initial capital costs reported at just \$422 million. Greg goes on to talk about how the four magnet rare earth elements present in Search Minerals' project — neodymium, praseodymium, dysprosium, and terbium — drive over 90% of the gross revenue in the PEA due to increased and ongoing demand by the permanent magnet industry.

Greg also talks about Search Minerals' other properties in its 63km district not covered in the recent PEA, including Fox Meadow where drilling is expected to commence in the fall on identified channel sample targets. He also provides an update on technological advances in the Company's innovative patented Direct Extraction Metallurgical Process that significantly

reduces CAPEX and operational costs while offering a more environmentally conscientious solution for managing waste residue.

To access the full InvestorIntel interview, click here

Don't miss other InvestorIntel interviews. Subscribe to the InvestorIntel YouTube channel by <u>clicking here</u>.

About Search Minerals Inc.

Led by a proven management team and board of directors, Search is focused on finding and developing Critical Rare Earths Elements (CREE), Zirconium (Zr) and Hafnium (Hf) resources within the emerging Port Hope Simpson — St. Lewis CREE District of southeast Labrador. The Company controls a belt 63 km long and 2 km wide and is road accessible, on tidewater, and located within 3 local communities. Search has completed a preliminary economic assessment report for **FOXTROT**, and a resource estimate for **DEEP FOX**. Search is also working on three exploration prospects along the belt which include: **FOX MEADOW, SILVER FOX** and **AWESOME FOX**.

Search has continued to optimize our patented Direct Extraction Process technology with support from the Department of Industry, Energy and Technology, Government of Newfoundland and Labrador, and from the Atlantic Canada Opportunity Agency. We have completed two pilot plant operations and produced highly purified mixed rare earth carbonate concentrate and mixed rare earth concentrate for separation and refining. We also recognize the continued support by the Government of Newfoundland and Labrador for its Junior Exploration Program.

Search Minerals was selected to participate in the Government of Canada Accelerated Growth Service ("AGS") initiative, which supports high growth companies. AGS, as a 'one-stop shop' model,

provides Search with coordinated access to Government of Canada resources as Search continues to move quickly to production and contribute to the establishment of a stable and secure rare earth element North American and European supply chain.

To learn more about Search Minerals Inc., click here

Disclaimer: Search Minerals Inc. is an advertorial member of InvestorIntel Corp.

This interview, which was produced by InvestorIntel Corp., (IIC), does not contain, nor does it purport to contain, a summary of all the material information concerning the "Company" being interviewed. IIC offers no representations or warranties that any of the information contained in this interview is accurate or complete.

This presentation may contain "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking statements are based on the opinions and assumptions of the management of the Company as of the date made. They are inherently susceptible to uncertainty and other factors that could cause actual events/results to differ materially from these forward-looking statements. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business or any investment therein.

Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as assurances that the projected results will be obtained by the Company. The assumptions used may not prove to be accurate and a potential decline in the Company's financial condition or results of operations may negatively impact the value of its securities. Prospective investors are urged to review the

Company's profile on <u>Sedar.com</u> and to carry out independent investigations in order to determine their interest in investing in the Company.

If you have any questions surrounding the content of this interview, please contact us at +1 416 792 8228 and/or email us direct at info@investorintel.com.

The Colombian sun rises for Auxico Resources with a mining permit for its rare earths and PGM project

written by InvestorNews | July 22, 2022

A pleasant surprise is always a nice thing. These days it seems that any time you see the S&P 500 or the Nasdaq in positive territory on the day it's considered a pleasant surprise. But that's not what I'm talking about. What I'm referring to is a situation where you are a junior mining company in hot pursuit of a valuable and globally in-demand commodity, like rare earths, and you come across decent grades of gold, platinum and titanium, at surface no less. I believe that is what you call "having your cake and eating it too", if you are at all familiar with that expression. If that phrase means nothing to you, then let's stick with a pleasant surprise.

The company that looks like it's blessed with an abundance of riches is <u>Auxico Resources Canada Inc.</u> (CSE: AUAG), a Canadian

company engaged in the acquisition, exploration and development of mineral properties in Colombia, Brazil, Bolivia, Mexico, and the Democratic Republic of Congo (DRC). They are a combination project generator, miner, processor and marketer all rolled up into one, with a focus on the production of critical minerals and high-value metals, including niobium, tantalum, platinum group metals (such as platinum and iridium), and rare earth elements. Additionally, Auxico is the exclusive trade agent for rare earth concentrates from the DRC. The Company owns directly or through joint ventures, mineral rights in Colombia, Bolivia, and Brazil, with access to close to 4 million tonnes of critical minerals and rare earth elements — the largest deposits outside of China.

But today we are going to focus on their Minastyc Property in Vichada, Colombia, where Auxico recently announced the granting of a mining permit (specifically a Work Plan Authorization) from the National Mining Agency of Colombia. This is a very significant development for the Company because Auxico will now be able to move forward with the formal purchase of the Minastyc Property from its current owner. The approval of the Work Plan was the last condition in the purchase agreement. This leaves one step left, a site visit by representatives of Corporinoquia (the Colombian environmental agency), before the Company will be able to move equipment on site, including heavy machinery for bulk sampling and a processing facility, which will enable Auxico to move towards making a production decision for small-scale mining operations.

In the meantime, Auxico has been busy at the Minastyc Property having previously announced a NI 43-101 Technical Evaluation Report on March 28th of this year with highlights including a 3.2 tonne bulk sample from two locations of the Area 50 pit resulting in a 7.7 kg fine concentrate returning Total Rare

Earth Oxides (TREO) grading 68.32% and 65.67% respectively from the two locations. Back in October 2021 the Company reported the discovery of platinum group metals (PGM's) in samples including Sample 1 with 42.8% titanium, 25.4% niobium, and 8.3% tantalum while Sample 2, found in a different zone on the property, originating from a rock sample containing 30.4% tantalum, 23.3% niobium and 24.5% titanium.

But the fun doesn't end there. The latest results published by Auxico show gold, platinum, titanium, zirconium and hafnium test results on samples taken from the Area 50, TA Area and two other areas from the Minastyc property. At this point, it's almost easier to talk about what metal or mineral they don't have on this property. All joking aside, highlights from the latest fourteen samples, taken from pits in the first metre from surface in these areas, gave an average head grade of 9.5 g/t of gold, and 13.5 g/t of platinum from 8 of the 14 samples that returned grade. Additionally, the Company reported the discovery of 24.5% titanium, 7.8% zirconium, and 2.4 kilograms of hafnium. And if those grades aren't enough to get your attention, then perhaps the fact that the Company suggests that based on these field observations and from the satellite interpretation, an estimated minimum of 250,000 tonnes of material is represented by this Ferricrete layer in the first metre from surface at Area 50 and the TA area.

All this explains why Auxico is presently coordinating the site visit with Corporinoquia and expects the visit to occur near term. With these kinds of grades literally at surface they could be generating a decent revenue stream in short order to help finance further exploration, a preliminary resource estimate or whatever they determine is the best use of funds.

With a market cap of C\$55 million, this isn't one of those undiscovered companies that provides an almost free option on

their exploration. However, with almost every valuable hard rock commodity on the planet concentrated in one spot with pretty impressive grades, any expansion in size could be a boon to shareholders. And I didn't even touch on the myriad of other interesting opportunities going on at Auxico Resources that you can explore on your own at their website.

Search Minerals moving forward with growing rare earths resource, new PEA and a commercial magnetic separation plant

written by InvestorNews | July 22, 2022

It has recently been reported that the U.S. Government (subject to approval of the proposal) is likely to widen their definition of "domestic source" in the Defense Production Act to include the United Kingdom of Great Britain and Northern Ireland and Australia. This is in addition to the current inclusion of Canada and of course the USA. If passed, this is great news for critical material miners located in these countries.

One such company is focused on the high value magnet rare earths and is advancing their project in Canada. Magnet rare earths prices, such as neodymium, have increased very significantly over the past year as EV demand surged.

<u>Search Minerals Inc.</u> (TSXV: SMY | OTCQB: SHCMF) (Search) is developing their rare earths projects in Labrador, Canada. Their three projects include:

- The Port Hope Simpson (PHS) Property (flagship) Includes Foxtrot, Deep Fox, Silver Fox, Awesome Fox, and Fox Meadow deposits. Prospective for Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy), and Terbium (Tb), as well as Zirconium (Zr) and Hafnium (Hf). The updated 2022 PEA is due soon in Q2, 2022.
- The Henley Harbour Area in Southern Labrador.
- The Red Wine Complex located in Central Labrador.

Search Minerals PHS Property showing the Foxtrot & Deep Fox deposits and other targets



Source: Search Minerals website

Search's flagship PHS Property has been the Company's focus with a <u>PEA completed in 2016</u> on Foxtrot only, an updated Resource recently released (now includes both Foxtrot & Deep Fox), and an updated PEA to follow very soon. Given the larger resource (hence potentially longer mine life) and higher rare earth prices, the upcoming 2022 PEA is expected to potentially improve significantly on the 2016 PEA. Search President & CEO Greg Andrews, discusses the positive impact on their upcoming PEA in a recent InvestorIntel video here.

Details of the updated resource at Foxtrot and Deep Fox

As a result of the recent <u>updated resource</u> news the Foxtrot resource has grown by approximately 60% from the 2016 estimate and the Deep Fox resource has grown by 25% from the 2019 estimate. Search state in their April 11, 2022 resource <u>announcement</u>: "Revenue attributable to Pr, Nd, Dy, and Tb

represent approximately 92% of the total revenue."

Estimated Mineral Resources for the FOXTROT and DEEP FOX Projects as of December 31, 2021

×

Source: Search Minerals announcement on April 11, 2022

Both Foxtrot and Deep Fox Resources include open pit (OP) and underground (UG) components as shown on the models below. They will form the basis of the upcoming updated 2022 PEA. In both cases, mineralization remains open at depth.

Models showing the open pit and underground resource at Foxtrot and Deep Fox

×

Source: Search Minerals announcement on April 11, 2022

Next steps (including steps towards a full commercial magnetic separation plant)

The next steps for Search at their PHS Property will be the 2022 PEA release, further drilling to grow the resource (including at Fox Meadow), and further advancements with off-take agreements. In 2021 Search signed a non-binding MOU with USA Rare Earth LLC for the future delivery of a rare earth mineral concentrate supply containing 500 tpa of NdPr. The MOU also included a plan to expand the collaboration to include discussions regarding separation, marketing, and offtake of a portion of the future production at Search's Deep Fox and Foxtrot deposits. There will also be the upcoming results from Search's magnetic separation program using bulk samples from the PHS Property (Foxtrot & Deep Fox). The results of the testing will be used as part of a 'scale up' to a full commercial magnetic separation plant.

Search President & CEO, Greg Andrews, <u>states</u>: "We continue with our "Sprint to Production" and this is a very important step to scale up and produce more material for further separation into individual oxides of the permanent magnet material, Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy) and Terbium (Tb). These are the key elements which create the value in the rare earth element supply chain. Upon producing the oxides, Search will demonstrate the transformation of the permanent magnet oxides into metal."

Closing remarks

Last month Search released a significant Resource upgrade at Foxtrot and Deep Fox deposits on their PHS Property. The results were strong growing the resources by 60% and 25% respectively. Both remain open at depth and the PHS Property has numerous other exciting rare earth targets such as Silver Fox, Awesome Fox, and Fox Meadow. This means the PHS Property should potentially continue to further grow the total resource size in years to come. Search did recently release encouraging assay results at the Fox Meadow target where Search plans to commence a 6,000 m drill program this fall.

The big next catalyst for Search is the upcoming updated 2022 PEA which should potentially see a significant improvement on the 2016 PEA. Following that it will be interesting to see Search's progress towards becoming a rare earths miner as well as processor.

Search Minerals trades on a market cap of C\$65 million.

Avalon to Build a Lithium Processing Facility as Ontario Adopts an Unprecedented Industrial Policy to Become the Global Leader in the Critical Material Supply Chain

written by InvestorNews | July 22, 2022 First, it was China, then the USA, Australia, and now Canada; developing a critical minerals strategy to support the green revolution this decade.

Last week the Ontario Government <u>announced that the</u>: "Province's First-Ever Critical Minerals Strategy Positions Ontario as Global Leader. **Strategy will unleash Ontario's mineral potential and support a made-in-Ontario electric vehicle supply chain........The Critical Minerals Strategy is a five year roadmap to: better connect the mines in the north with the manufacturing sector in the south, in particular to Ontario-based electric vehicle (EV) and battery manufacturing; tap into new and growing markets, including electric vehicles, batteries, telecommunications and national defense; and secure Ontario's place in the global supply chain for decades to come."**

(Note: Bold emphasis by the author.)

As part of the announcement, the Province is investing \$24 million over three years toward Ontario's Junior Exploration Program. Industry insiders have told InvestorIntel they expect this is just the beginning and expect "funding to support

development of the mid-stream processing capacity will be a much bigger number".

For investors now is the time to start looking at promising critical minerals companies with projects in Ontario, Canada. Today's company fits the bill perfectly with multiple critical mineral projects in Ontario.

Avalon Advanced Materials Inc. (TSX: AVL | OTCQB: AVLNF) (Avalon) has three projects in Ontario, Canada, and five in total throughout Canada. The projects have exposure to lithium, tin, rubidium and indium; as well as rare earth elements, tantalum, cesium and zirconium. Avalon's most advanced project is the Separation Rapids Lithium Project near Kenora in Ontario. Avalon is working on a plan for a JV to build a lithium-ion battery materials refinery in Thunder Bay, Ontario.

Avalon's Projects summary

- Separation Rapids Lithium Project (Ontario) (100% owned) –
 2018 PEA completed.
- Lilypad Cesium-Tantalum- Lithium Project (Ontario) (100% owned) Exploration stage.
- Warren Township Feldspar Project (Ontario) (100% owned renewable lease) PFS completed.
- Nechalacho Rare Earth Elements Property (Northwest Territories) (100% owned lower zone) Feasibility Study stage (ownership is below a depth of 150 metres including the Basal Zone deposit).
- East Kemptville Tin-Indium Project (Nova Scotia) (100% owned) PEA stage.

Given the past 15 months <u>11x surge in the price of lithium</u> (and huge demand forecasts this decade), Avalon has decided to focus on developing its Separation Rapids Lithium Project, while continuing to advance other projects, including <u>re-activating</u>

its Lilypad Cesium-Tantalum-Lithium Project. Both Avalon's lithium projects are in Ontario, Canada.

REF: An update on Avalon's progress to develop their Ontario lithium projects

Separation Rapids Lithium Project

At Avalon's Separation Rapids Lithium Project the Company is working on acquiring a demonstration scale dense media separation (DMS) plant to begin processing the 5,000t bulk sample collected earlier in 2022. Next Avalon will begin producing the lithium bearing mineral, petalite, concentrate product samples for glass ceramic end-users that have expressed interest and for further battery materials testwork.

At the Snowbank petalite pegmatite discovery made in 2018, Avalon's latest results were successful to extend the known strike length by 50% to 127 metres and confirmed the widespread presence of coarse grained petalite mineralization. Avalon is now planning to proceed with a winter diamond drilling program to begin to delineate the size potential of the new Snowbank discovery as well as testing several other lithium pegmatites in the same area. Preparation of the necessary access trails is underway and work toward securing the necessary drilling permits is progressing.

The current 2017 M& I Resource estimate of the Project is 8.2MT at 1.37% Li₂0 and 0.36% Rb₂0 plus Inferred 1.2MT at 1.33% Li₂0 and 0.361% Rb₂0.

×

Source: Avalon Advanced Materials company presentation

Lilypad Cesium-Tantalum-Lithium Project

In September 2021 Avalon <u>reported</u> results that confirmed the exceptional cesium enrichment in several Lithium-Cesium-Tantalum (LCT) pegmatite dyke occurrences at the Lilypad Project. LCT deposits are more valuable lithium projects due to having valuable by-products of cesium and tantalum. Sub-samples assay results averaged 3.02% Cs_2O , 1.07% Li_2O and 0.03% Ta_2O_5 , similar to the average grade of the historic resource. Avalon <u>stated</u>: "The Pollucite Dyke, with a historic resource estimate of 340,000 tons grading 2.294% Cs_2O and 0.037% Ta_2O_5 based on 9 holes drilled to a maximum vertical depth of 250 metres and along a strike length of just 140 metres, remains open for expansion to depth and along strike."

Note: Historical Resources are not yet to be relied upon.

Given the surge in lithium prices, I would not be surprised to see Avalon look to discover further lithium on the property. Avalon says that their <u>next steps</u> will be to plan for a diamond drilling program to test all the new targets including the western extension of the Pollucite Dyke.

Thunder Bay battery metals refinery

In 2020, Avalon signed a LOI with Rock Teck Lithium to build a lithium refinery in Thunder Bay. However since then, the plan has evolved with Avalon stating (regarding the Rock Teck JV): "So, while we have not ruled out the possibility of partnering on a plant (in Thunder Bay), it seems less likely now given that we are now going down different paths in terms of scale, process flowsheet and types of products." In a February 2022 update, Avalon stated: "Still planning to establish a new lithium battery materials refinery in Thunder Bay. Lots of interest from international consumers of lithium battery materials and planning a partnership arrangement."

Avalon is working on a plan to build a JV lithium refinery in

Thunder Bay, Ontario; with one or possibly two of their lithium projects as potential feed



Source: Avalon Advanced Materials company presentation

Closing remarks

Avalon Advanced Minerals trades on a market cap of only C\$52
million which seems extraordinary given they have 5 projects in Canada, several of which are reasonably advanced. Also, the fact that several projects contain very high value minerals such as lithium, tin, rubidium and several rare earths.

Don't miss this opportunity.

Greg Andrews on Search Minerals "Sprint to Production" with its rare earths deposits in Labrador

written by InvestorNews | July 22, 2022

In a recent InvestorIntel interview, Tracy Weslosky spoke with Greg Andrews, President, CEO, and Director of <u>Search Minerals Inc.</u> (TSXV: SMY | OTCQB: SHCMF) about the commencement <u>magnetic separation</u> of bulk samples of Deep Fox and Foxtrot deposits at SGS Canada as Search Minerals "Sprint to Production" with its rare earths deposits in Labrador.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Greg Andrews highlighted the rising investor's interest in the rare earths sector and the dearth of operating rare earth deposits outside of China. With the prices for rare earths on the rise, he went on to explain why Search Minerals' updated 2022 PEA is expected to significantly improve the economics of its rare earths' deposits. Providing an update on Search Minerals' recent successful financing, Greg went on to explain why Search Minerals is "one of the most advanced rare earths companies in North America."

To watch the full interview, <u>click here</u>.

About Search Minerals Inc.

Led by a proven management team and board of directors, Search is focused on finding and developing Critical Rare Earths Elements (CREE), Zirconium (Zr) and Hafnium (Hf) resources within the emerging Port Hope Simpson — St. Lewis CREE District of South East Labrador. The Company controls a belt 63 km long and 2 km wide and is road accessible, on tidewater, and located within 3 local communities. Search has completed a preliminary economic assessment report for **FOXTROT**, and a resource estimate for **DEEP FOX**. Search is also working on three exploration prospects along the belt which include: **FOX MEADOW, SILVER FOX** and **AWESOME FOX**.

Search has continued to optimize our patented Direct Extraction Process technology with the support from the Department of Industry, Energy ad Technology, Government of Newfoundland and Labrador, and from the Atlantic Canada Opportunity Agency. We have completed two pilot plant operations and produced highly purified mixed rare earth carbonate concentrate and mixed REO concentrate for separation and refining. We also recognize the

continued support by the Government of Newfoundland and Labrador for its Junior Exploration Program.

To learn more about Search Minerals Inc., click here

Disclaimer: Search Minerals Inc. is an advertorial member of InvestorIntel Corp.

This interview, which was produced by InvestorIntel Corp., (IIC), does not contain, nor does it purport to contain, a summary of all the material information concerning the "Company" being interviewed. IIC offers no representations or warranties that any of the information contained in this interview is accurate or complete.

This presentation may contain "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking statements are based on the opinions and assumptions of the management of the Company as of the date made. They are inherently susceptible to uncertainty and other factors that could cause actual events/results to differ materially from these forward-looking statements. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business or any investment therein.

Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as assurances that the projected results will be obtained by the Company. The assumptions used may not prove to be accurate and a potential decline in the Company's financial condition or results of operations may negatively impact the value of its securities. Prospective investors are urged to review the Company's profile on Sedar.com and to carry out independent investigations in order to determine their interest in investing

in the Company.

If you have any questions surrounding the content of this interview, please contact us at +1 416 792 8228 and/or email us direct at info@investorintel.com.

Critical materials frontrunner ASM closes out 2021 with a pre-tax NPV of AUD\$2.36 billion

written by Tracy Weslosky | July 22, 2022

Australian Strategic Materials Ltd. (ASX: ASM) management team closed out 2021 with a measurable project and corporate successes. Most significantly, in December 2021, the company updated the 2018 Dubbo Project Optimization Study. The updated study released in early December 2021, supports a 20-year mine life based on existing ore reserves, with Measured and Inferred mineral resources, (which have the potential to extend the mine life) being excluded for this study. The economics are robust — pre-tax NPV of AUD\$2.36 billion and a pre-tax IRR of 23.5%. This is 6% higher than the previous study done in 2018 and is measurably significant.

The Dubbo Project is based on the Toongi deposit in southeastern Australia (New South Wales), which contains rare earths, zirconium, niobium and hafnium and reserves that support a project life of 20 years and resources that may support a much

longer mine life. Importantly, on July 21, 2021, the company announced a new 20% partner for Dubbo development, the receipt of US\$250 million from a consortium of South Korean investors, and a buyer for product from its Korean Metals plant in South Korea, which saw partial commissioning for the neodymium metal production furnace system last year with additional commissioning to follow this year and full scale production expected in the second half of 2022.

The Dubbo Project is ready for construction with all major state and federal approvals and licenses in place, along with a proven process flow sheet and solid project economics. Management has appointed Australian and New Zealand Banking Group Limited (ANZ) as debt financial advisor to assist in engaging with Australian and South Korean export finance agencies as part of the financing of the Dubbo Project.

The company has a "mines to metal" strategy and has executed on that in the past year. The company is nearing completion of the Korean Metals Plant (KMP) in South Korea and, as previously announced, as part of the framework agreement with the investors, a new and separate consortium will be established to develop a permanent magnet manufacturing business in South Korea (MagnetCo Fund).

Not to be outdone by the calendar, in mid-December the company announced the signing of a Joint Statement of Cooperation. ASM and KOMIR, the Korea Mine Rehabilitation and Mineral Resources Corp., have agreed to work together to expand the use of rare earths and critical metals in Korea and develop import opportunities that will secure the supply of these metals for Korean industry. While this is a lot of press-release-speak, it means that ASM has a deal to supply an alternative, secure and sustainable supply of critical metals to South Korea. ASM will commence production of critical metals at ASM's Korean Metals

Plant in 2022.

In Summary:

- Dubbo Mine fully permitted, updated optimization study, now funded and partnered. Have a feedstock purchaser in KMP for rare earths.
- Metallization plant under construction in South Korea.
 Partially commissioned in 2021 and expected to be fully operational this year.
- Magnet producer to be constructed, partnership established.

Or as keen observers of the Australian Open tennis tournament would observe "Game, Set and Match".

Greg Andrews on Search Minerals 'sprint' towards rare earth production

written by InvestorNews | July 22, 2022

In a recent InvestorIntel interview, Tracy Weslosky spoke with Greg Andrews, President, CEO, and Director of <u>Search Minerals</u> <u>Inc.</u> (TSXV: SMY | OTCQB: SHCMF) about Search Minerals' 'sprint' towards production as they work towards strengthening the North American rare earths supply chain.

In this InvestorIntel interview, which may also be viewed on YouTube (<u>click here to subscribe to the InvestorIntel Channel</u>), Greg Andrews said that Search Minerals recently signed an MoU

for an <u>offtake agreement</u> with USA Rare Earth, thus ensuring that it has sales and revenues when production begins. He went on to say that Search Minerals is progressing towards announcing an updated PEA and explained why the updated PEA is expected to be robust and economic at the current pricing of rare earths. With a loyal shareholder base and strong federal, provincial, local government and indigenous support, Greg told InvestorIntel that Search Minerals is progressing well towards its goal of going further down the rare earths supply chain to produce magnet metals and alloys.

To watch the full interview, <u>click here</u>.

About Search Minerals Inc.

Led by a proven management team and board of directors, Search Minerals is focused on finding and developing deposits of the Critical Rare Earths Elements (CREE), and of Zirconium (Zr) and Hafnium (Hf) resources, within the emerging Port Hope Simpson — St. Lewis CREE District of South East Labrador. The Company controls a belt 63 km long and 2 km wide that is road accessible, on tidewater, and has access to 3 local communities. Search has completed a preliminary economic assessment report for its FOXTROT site, and a resource estimate for its DEEP FOX site. Search is also working on three exploration prospects along its part of the St. Lewis District, which are named, and include: FOX MEADOW, SILVER FOX and AWESOME FOX.

Greg Andrews went on to emphasize that Search has continued to optimize its patented Direct Extraction Process technology with generous support from the Department of Tourism, Culture, Industry and Innovation, Government of Newfoundland and Labrador ("InnovateNL"), and from the Atlantic Canada Opportunity Agency ("ACOA"). He said that Search has completed two pilot plant operations and produced a highly purified mixed rare earth

carbonate concentrate and a mixed REO concentrate for use in testing individual rare earth separation and refining.

To know more about Search Minerals Inc., click here

Disclaimer: Search Minerals Inc. is an advertorial member of InvestorIntel Corp.

This interview, which was produced by InvestorIntel Corp. (IIC) does not contain, nor does it purport to contain, a summary of all the material information concerning the "Company" being interviewed. IIC offers no representations or warranties that any of the information contained in this interview is accurate or complete.

This presentation may contain "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking statements are based on the opinions and assumptions of management of the Company as of the date made. They are inherently susceptible to uncertainty and other factors that could cause actual events/results to differ materially from these forward-looking statements. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business or any investment therein.

Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as assurances that the projected results will be obtained by the Company. The assumptions used may not prove to be accurate and a potential decline in the Company's financial condition or results of operations may negatively impact the value of its securities. Prospective investors are urged to review the Company's profile on Sedar.com and to carry out independent investigations in order to determine their interest in investing

in the Company.

If you have any questions surrounding the content of this interview, please email info@investorintel.com.

Greg Andrews with Jack Lifton on Advancing Search Minerals Towards a Total Domestic Rare Earth Supply Chain

written by InvestorNews | July 22, 2022
In a recent InvestorIntel interview, Jack Lifton spoke with Greg Andrews, President, CEO, and Director of Search Minerals Inc. (TSXV: SMY | OTCQB: SHCMF) about how its recent MoU for an offtake agreement with USA Rare Earth puts Search Minerals in the top tier of North American rare earth ventures.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Jack started by complementing Search as "Canada's first rare earths company to be involved in a domestic North American total rare earths enabled product supply chain." Greg Andrews then said that Search already has rare earth resources with excellent infrastructure, and has a patented selective extraction process. Greg also explained that Search is progressing towards its end goal of entering the high value add section of the rare earths supply chain, the production of metals and alloys.

To watch the full interview, click here.

About Search Minerals Inc.

Led by a proven management team and board of directors, Search Minerals is focused on finding and developing deposits of the Critical Rare Earths Elements (CREE), and of Zirconium (Zr) and Hafnium (Hf) resources within the emerging Port Hope Simpson — St. Lewis CREE District of South East Labrador. The Company controls a belt 63 km long and 2 km wide and is road accessible, on tidewater, and located with access to 3 local communities. Search has completed a preliminary economic assessment report for its FOXTROT site, and a resource estimate for its DEEP FOX site. Search is also working on three exploration prospects along its part of the St. Lewis District, which are named, and include: FOX MEADOW, SILVER FOX and AWESOME FOX.

Greg Andrews went on to emphasize that Search has continued to optimize its patented Direct Extraction Process technology with generous support from the Department of Tourism, Culture, Industry and Innovation, Government of Newfoundland and Labrador ("InnovateNL"), and from the Atlantic Canada Opportunity Agency ("ACOA"). He said that Search has completed two pilot plant operations and produced a highly purified mixed rare earth carbonate concentrate and a mixed REO concentrate for use in testing individual rare earth separation and refining.

To know more about Search Minerals Inc., click here

Disclaimer: Search Minerals Inc. is an advertorial member of InvestorIntel Corp.

This interview, which was produced by InvestorIntel Corp. (IIC) does not contain, nor does it purport to contain, a summary of all the material information concerning the "Company" being interviewed. IIC offers no representations or warranties that any of the information contained in this interview is accurate or complete.

This presentation may contain "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking statements are based on the opinions and assumptions of management of the Company as of the date made. They are inherently susceptible to uncertainty and other factors that could cause actual events/results to differ materially from these forward-looking statements. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business or any investment therein.

Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as assurances that the projected results will be obtained by the Company. The assumptions used may not prove to be accurate and a potential decline in the Company's financial condition or results of operations may negatively impact the value of its securities. Prospective investors are urged to review the Company's profile on Sedar.com and to carry out independent investigations in order to determine their interest in investing in the Company.

If you have any questions surrounding the content of this interview, please email info@investorintel.com.

Can Avalon Advanced Materials

ride the lithium tidal wave?

written by InvestorNews | July 22, 2022 Lithium miners have been the best performing sector of almost every sector of the stock market over the past year. This has been due to a 'tidal wave' of new lithium demand as electric vehicle (EV) sales dramatically increased over the past year. For example global electric car market share more than doubled from 4.2% in calendar year 2020 to 8.7% in the month of June 2021. This has led to a surge in lithium demand and subsequently lithium prices in 2021.

Lithium prices (1 year chart) have risen rapidly due to a massive demand increase from booming EV sales

×

Source: <u>Trading Economics</u>

One under the radar lithium junior is <u>Avalon Advanced Materials Inc.</u> (TSX: AVL | OTCQB: AVLNF) ("Avalon"). Avalon has six projects, providing investors with exposure to lithium, tin and indium, as well as rare earth elements, tantalum, cesium and zirconium. Avalon is currently focusing on developing their Separation Rapids Lithium Project near Kenora, Ontario, while looking at several new project opportunities, one being a lithium hydroxide (and other materials) refinery in Thunder Bay, Ontario, Canada. They are also working to advance their Lilypad Cesium-Tantalum Project, in Ontario, Canada.

Separation Rapids Lithium Project (100% owned; Ontario, Canada) + possible lithium battery materials refinery (Thunder Bay, Canada)

Avalon completed a <u>PEA</u> of their 100% owned Separation Rapids Lithium Project in 2018, resulting in a pre-tax NPV8% of \$156

million, post tax IRR of 22.7%, CapEx C\$77.7 million with a 20
year mine life.

Then in March 2021, Avalon <u>announced</u> a Letter of Intent ("LOI") with Fort William First Nation ("FWFN") to collaborate on the development of a lithium battery materials refinery located on industrial lands owned by FWFN in Thunder Bay, Ontario. As stated in the announcement: "This facility would be designed to accept lithium mineral concentrates from Avalon's Separation Rapids Lithium Project (70 km north of Kenora) and Rock Tech's Georgia Lake Lithium Project (145 km northeast of Thunder Bay), as well as potentially other emerging, new lithium mining operations in northern Ontario, to produce lithium hydroxide and other lithium battery materials."

Then in May 2021, Avalon reported that their recent process testwork using dense media separation ("DMS") technology had proven to be successful at producing a high-quality petalite lithium mineral concentrate $(4.0\%-4.2\%\ \text{Li}_20)$ from their Separation Rapids Lithium Project. The concentrate is suitable for the needs of specialty glass-ceramic end-users. As a result, Avalon is now looking at acquiring their own DMS equipment so they can more quickly meet the needs of the many end-users that have expressed interest over the years in their petalite product samples. Avalon will also resume exploration work this summer on the western part of the Separation Rapids property to further work towards growing their resource.

Avalon Advanced Materials Separation Rapids Lithium Project - PFS & PEA completed

×

Source: <u>Company presentation</u>

Announced in July 2021, Avalon is now in active discussion to

potentially progress their lithium materials refinery in Thunder Bay. The release <u>stated</u>: "On the lithium battery materials market development work, Avalon continues to engage with potential customers looking for new supply sources and are in active conversation with one group in Europe. With a firm commitment on off-take, Avalon can then proceed with its plans for establishing a lithium refinery in Thunder Bay."

Lilypad Cesium-Tantalum Project (100% owned; Ontario, Canada)

Avalon's Lilypad Property, located 150 km northeast of Pickle Lake, Ontario, is an exploration stage project with cesium-tantalum-lithium mineralization. It has some potential to be a secondary lithium supply source for Avalon, however, cesium and tantalum are the key products for now.

In July 2021 news, Avalon <u>stated</u>: "Following the closing of the recent flow-through financing, an exploration work program was initiated in June on its 100% owned Lilypad Cesium-Tantalum Project involving re-establishing a field camp and new grid on the property in preparation for detailed mapping and geochemical sampling to commence later this month. Additional cesium mineralized rock was collected from the Pollucite Dyke for continued process research on techniques to efficiently concentrate the rare cesium mineral pollucite, which continues to be in high demand. Drilling is planned for later this year."

Avalon Advanced Materials project pipeline

×

Source: <u>Company presentation</u>

Closing remarks

As evidenced by a recent record lithium spodumene spot market price achieved this past week of $\frac{US$1,250/t}{}$ (around 3x the

contract prices from 12 months ago), there is now a new realization that lithium supply is critically low. This means it is a great time to be a lithium miner and it generally acts to boost the sentiment of the sector thereby helping lithium juniors raise capital and hopefully reach production.

Avalon Advanced Materials is not only a junior lithium miner, as they have a total of 6 projects across multiple critical metals and rare earths. Key critical metals Avalon has are lithium, tantalum, cesium and zirconium; all are on the list of U.S critical materials. The Company trades on a market cap of only C\$52 million. One to watch.