



## Management's Discussion and Analysis of Financial Statements for the three months ended November 30, 2018

This Management's Discussion and Analysis ("MDA") of Avalon Advanced Materials Inc. (the "Company" or "Avalon") is an analysis of the Company's financial results for the three months ended November 30, 2018 (the "Quarter"). The following information should be read in conjunction with the accompanying unaudited condensed consolidated interim financial statements for the Quarter and the consolidated financial statements and Annual Information Form for the year ended August 31, 2018. This MDA is prepared as of January 8, 2019.

### Nature of Business and Overall Performance

Avalon is a Canadian mineral exploration and development company that is listed on the Toronto Stock Exchange in Canada, traded on the OTCQB Venture Market in the United States and also trades on the Frankfurt Stock Exchange in Germany. The Company seeks to build shareholder value by becoming a diversified sustainable producer and marketer of specialty metals and minerals and by expanding the markets for its mineral products.

Avalon operates primarily in Canada with a focus on the "Technology Metals" or "Cleantech Materials", including tin, lithium, tantalum, niobium, cesium, indium, gallium, germanium, rare earth elements ("REE"), yttrium, and zirconium.

The Company is in the process of exploring or developing four of its five mineral resource properties. The Company completed an updated preliminary economic assessment ("PEA") of its Separation Rapids Lithium Project in August, 2018. The Company completed a PEA for its East Kemptville Tin-Indium Project (the "East Kemptville Project") in July, 2018. Previously, the Company completed a feasibility study on its Nechalacho Rare Earths Elements Project (the "Nechalacho Project" or "Nechalacho") in April 2013 (the "Nechalacho FS"), and its Report of Environmental Assessment (the "Report of EA") was approved by the Minister of Aboriginal Affairs and Northern Development Canada ("AANDC") in November 2013. Work on the Nechalacho project has been recently re-activated due to growing demand for the "magnet rare earths" neodymium and praseodymium.

The Company has embraced the principles of sustainability as core to its business practice and has made a strong commitment toward implementing corporate social responsibility ("CSR") best practices. In November 2018, the Company released its seventh comprehensive Sustainability Report entitled *Refocus, Revive and Restore* (the "2018 Sustainability Report").

The Company believes that industrial demand for the advanced materials products it seeks to produce, particularly lithium compounds, is growing rapidly due to their importance in an expanding array of applications in new clean technology, notably energy storage and electric vehicles.

### Exploration and Development Activities

Resource property expenditures for the Quarter totalled \$349,764, a 1% increase from the level of expenditures for the same quarter in fiscal 2018 (\$345,728) but generally reflecting a relatively low level of activity similar to Q1 2018. Of these expenditures, 33% were incurred on the Separation Rapids Lithium Project, 43% were incurred on the East Kemptville Project, and 24% were incurred on the Nechalacho Project.

## ***Separation Rapids Lithium Project***

The Separation Rapids property consists of fifteen mineral claims and one mining lease covering a combined area of approximately 2,869 hectares (7,091 acres) in the Paterson Lake Area, Kenora Mining Division, Ontario, all of which are owned 100% by Avalon. The lease covers an area of 421.44 hectares over the area of the lithium pegmatite deposit and adjacent lands that may be used for mine development infrastructure. The deposit is a potential source of lithium minerals for use in the glass and ceramics industry and specialty composite materials as well as lithium chemicals for the battery industry.

During fiscal 2018, the Company completed an updated PEA on a simplified business model that focuses on initial production of lithium mineral concentrates for the glass industry, with potential for future expansion into production of the battery materials lithium carbonate and/or lithium hydroxide. This smaller scale development model reduces capital expenditure requirements substantially from the original model completed in September 2016, while generating attractive returns and reducing overall business and permitting risk.

During the Quarter, the Company incurred \$114,085 (2018 - \$251,517) in exploration and development expenditures on the Separation Rapids Project. Approximately 44% of these were incurred on the summer geological mapping and geochemical sampling program and resource modelling, 23% were incurred on finalizing the updated PEA, 16% was spent on on-going environmental studies and permitting, and 15% on metallurgical testwork to produce a further 15kg of "Super Petalite" sample. In addition, approximately \$50,000 was expended on lithium market development work towards securing offtake agreements for the petalite products.

As previously disclosed, during the summer mapping program the Company discovered a new petalite-bearing pegmatite, named the Snowbank Pegmatite, on the contiguous Paterson Lake claims, approximately 4 kilometres northwest of the main Separation Rapids lithium deposit. These claims host three previously known pegmatite occurrences known as the Glitter, Wolf and Rattler of which the former showing is petalite-bearing. Snowbank was discovered in a large outcrop area east of these occurrences and along trend from the main Separation Rapids deposit. Like the main deposit, the lithium occurs primarily in the ore mineral petalite, which occurs as large crystals up to 15cm in diameter. Highlights include lithium values of 1.53%  $\text{Li}_2\text{O}$  over 2.6m in channel 1A, 1.61%  $\text{Li}_2\text{O}$  over 2.3m in channel 2B and 1.07%  $\text{Li}_2\text{O}$  over 2.9 metres in channel 4A, grades that are comparable to the main deposit. The new find illustrates the potential for more petalite pegmatite discoveries in the Separation Rapids area.

### **Lithium Markets**

While lithium battery materials are getting most of the attention in the market and the media, demand for lithium in high strength glass products is also expected to grow. Many existing and new high strength glass formulations for automotive, aircraft, cell phones, and video displays where durability and light weight are key, require lithium to achieve the desired properties. Avalon's new "Super Petalite" product is well-suited for this market. Global lithium prices are stabilizing with lithium carbonate reportedly averaging US\$12,200/tonne in late 2018, while spodumene concentrate prices (6%  $\text{Li}_2\text{O}$ , FOB Australia) remain stable at approximately US\$875/tonne.

Numerous expressions of interest have been received from potential customers for the Company's lithium industrial mineral products and discussions on off-take commitments with potential partners from Europe and China were accelerated during the Quarter following completion of the PEA. These have helped to define the probable market size for the petalite product, allowing the Company to finalize an appropriate production capacity for the Phase 1 plant for the purposes of the updated PEA. With demand for lithium growing rapidly and few advanced lithium projects ready to commence production, the Company is well-positioned to bring a new supply to the market to serve priority customers, once project financing is in place.

## **Environmental Assessment and Community Engagement**

Avalon is committed to developing the Separation Rapids Project based on modern CSR principles and reporting on its performance in its annual Sustainability Reports. These CSR principles include commitments to minimize environmental impacts, ensuring the health and safety of employees, creating benefits for local communities and providing full transparency in its social and environmental performance. The Company and the project are now well known in the local community.

The Project is located in the traditional land use area of the Wabaseemoong Independent Nations (“WIN”) for which they have stewardship under an agreement with the Province. The Company first signed an MOU with WIN in 1999 which was renewed when the Project was re-activated in 2013. Avalon management has been keeping WIN leadership informed on Project activities and remains committed to fulfilling its community consultation obligations and partnering with WIN on business opportunities and providing training for community members. The Company has also initiated dialogue with the Métis Nation of Ontario which holds Aboriginal rights in the area. Engagement is ongoing with local Indigenous communities, regulators, and local government who continue to be supportive of the project.

Results of the packer testwork received during the Quarter confirmed initial expectations that the local rock has low hydraulic permeability, and thus a low risk of water inflow from the English River into the pit. Additional tests will be completed during Feasibility Study work planned for 2019-20 to confirm these initial results. Groundwater samples were also collected for analysis. A report received during the Quarter from environmental consultants Knight Piesold confirmed that historical environmental baseline data is comparable to the present site conditions and thus can be utilized for future permitting. This avoids repeating baseline data collection with consequent cost savings and reduced risk of delays. The additional data collection also confirmed that there are no species at risk at site. Fisheries data collected will allow trade off studies in the next project phase in an effort to identify a more cost effective tailing management area. Alternate routes were evaluated for a hydro-electric power line to the site, and a scope of work was prepared for a detailed study of the selected route.

## **Future Work**

The next step in the Project’s development is to proceed with a short pilot plant program on another bulk sample to finalize flowsheet parameters for engineering purposes including reagent recycling and water treatment processes, after which a bankable feasibility study can be completed. This work is expected to proceed in 2019 after off-take agreements are concluded and additional project financing is in place. Some additional drilling is also contemplated to bring more of the Inferred resources into the Measured and Indicated categories and collect more geotechnical data for pit design work. Initial exploration drilling on the new Snowbank pegmatite discovery and the Glitter pegmatite is also contemplated. Environmental studies of the proposed power transmission line route will be initiated once the final route is determined.

Unless otherwise noted, the technical information on the Separation Rapids Lithium Project has been reviewed and approved by the Company’s Senior Vice President, Metallurgy and Technology Development, Mr. David Marsh, FAusIMM (CP), or Dr. William Mercer, PhD, P.Geol. (Ontario), P. Geol. (NS), Vice President, Exploration, who are both Qualified Persons under NI 43-101.

## **Nechalacho Rare Earth Elements Project**

The Nechalacho Project is located at Thor Lake in the Mackenzie Mining District of the Northwest Territories (“NWT”), approximately 100 kilometres southeast of the city of Yellowknife. The property is comprised of eight contiguous mining leases totalling 14,229 acres (5,786 hectares). The leases are subject to one independently owned 2.5% Net Smelter Returns (“NSR”) royalty agreement. Avalon has the contractual right to buy out this royalty on the basis of a fixed formula, which is currently approximately \$1.5 million and which will increase at a rate equal to the Canadian prime rate until the royalty is bought out.

The property is situated in an area referred to as the Akaitcho Territory, an area which is subject to comprehensive land claim negotiations between the Government of Canada and the Treaty 8 Tribal Corporation, which consists of the Yellowknives Dene First Nation (“YKDFN”), the Deninu K’ue First Nation (“DKFN”) and the Lutsel K’e Dene First Nation (“LKDFN”). The Company has signed an Accommodation Agreement with the DKFN. The Company also recognizes that the Tłı̄cho First Nation (“TFN”) has a settled land claim with the Government of Canada which provides for certain harvesting rights in the area of the Nechalacho site. The general area around the Nechalacho site is subject to Aboriginal rights asserted by two Métis organizations: the Northwest Territory Métis Nation (“NWTMN”) and the North Slave Métis Alliance (“NSMA”). During 2014, Avalon concluded a Participation Agreement with the NWTMN and commenced discussions with the NSMA.

Expenditures during the Quarter totalled \$82,711 (2018 - \$17,411), which were incurred primarily on the field program that was conducted in September.

### **Rare Earth Markets**

Interest in rare earth projects outside China (including Avalon’s) has re-surfaced recently following the US National Defense Authorization Act banning the purchase of rare earths and rare earth magnets from China for the US Department of Defense. This and the ongoing US trade dispute with China has created additional supply chain risk for these critical elements.

Rare earth magnets remain vital to many clean technology applications requiring high efficiency, lightweight electric motors and generators. This includes motors for electric vehicles, which can require 5-10kg of rare earth magnets per vehicle. The growing market for electric vehicles, especially in China, has created new demand for these high strength magnets, resulting in rising prices for neodymium (US\$47/kg FOB China in early October 2018 according to Asian Metal) and praseodymium (US\$59/kg FOB China according to Asian Metal). The world still largely relies on China for rare earth supply, yet China reportedly may soon become an importer of neodymium concentrates.

### **Recent Work and Future Development Plans**

Avalon is now investigating the possibility of initiating development at Nechalacho as a small-scale producer of Neodymium- Praseodymium (“Nd-Pr”) rich concentrates from near surface resources in the T-Zone and Tardiff Zones. A low-cost mining, crushing and ore-sorting operation is contemplated that has significant advantages over the already-approved Basal Zone Project development plan both from a cost and an environmental footprint standpoint. The barren waste rock generated from the ore-sorting process (being environmentally benign) would negate the need for the originally proposed aggregate quarry for site development and the process flowsheet would not involve extensive use of water or other chemical reagents

The Company is currently participating in an independent scoping study, supported in part by the Territorial Government, on the East Arm-Yellowknife Road and hydro infrastructure corridor in order to provide clean power, year-round access to site and greatly simplified Project logistics. It would also provide significant capital and operating cost savings to Nechalacho and improved access for isolated northern communities such as Lutsel K’e. This is driven in part by Federal government initiatives to reduce greenhouse gas emissions by replacing diesel power with clean hydro power.

Avalon completed a field program in September to conduct additional sampling in the area of the T-Zone and Tardiff Zones to collect more analytical data on the Nd-Pr rich bastnaesite mineralization. Additional samples of the bastnaesite mineralization were also collected for initial ore-sorting process testwork contemplated for early 2019.

The check analyses for drill core from the North T Zone are illustrated in Table 1 below. The three intervals are from the bastnaesite-rich F subzone of the North T deposit and illustrate the average high grade of that zone with a weighted average of 4.2% total rare earth oxide (“TREO”) over 4.6 metres (the core width is believed to be close to true width).

**TABLE 1: DRILL CORE ANALYSES FROM NORTH T ZONE**

Zone	Subzone	Drill hole/ Trench	Number of samples	From (m)	To (m)	Width (m)	Li <sub>2</sub> O %	Nb <sub>2</sub> O <sub>5</sub> %	TREO %
North T Zone	F Subzone (Bastnaesite Subzone)	83-18	3	18.29	27.13	8.84	0.58	0.091	0.87
North T Zone	F Subzone (Bastnaesite Subzone)	83-16	1	26.09	28.50	2.41	0.03	0.023	11.18
North T Zone	F Subzone (Bastnaesite Subzone)	84-77	1	26.52	29.11	2.59	0.46	0.060	8.98

Footnotes

1. Samples were collected as close as possible to historic drill core samples for comparison purposes. Half core was quartered for this analysis.
2. TREO % is the total of all rare earth elements plus yttrium as oxides.
3. Analyses were completed at ALS Global Laboratory in Vancouver
4. Rare earth, lithium and niobium values are for ALS MS-89L analytical method that utilizes sodium peroxide fusion followed by ICP analysis.
5. Over limits rare earth values (for example, Ce>2,5%) were checked with ALS method ME-XRF30.

The South T-Zone is also known to contain lithium and rare earth mineralization, although the original exploration drilling in the 1980s was focused on beryllium and no formal resource estimate was established for rare earths or lithium. However, recent analytical results have highlighted significant lithium and niobium enrichment in this zone. These include drill core assays of 0.75% to 1.0% Nb<sub>2</sub>O<sub>5</sub> with 2.74% to 2.15% Li<sub>2</sub>O over 1.22 and 3.05 metres respectively. As the assays have now been received for the core samples from the North and South T-Zones, Avalon is updating the resource estimate for rare earths and developing a new resource model for lithium in these two deposits.

Following the receipt of the new Exploration Type B Land Use Permit in June, that will remain valid until June 2023, Avalon also completed an application for an extension of its existing Land Use Permit and Water License for the first year of site preparation and preliminary low impact construction activities. This was completed in December, subsequent to the end of the Quarter. Initial engagement with local Indigenous communities was also completed with no concerns identified. Site waste rock materials were collected for future testing to confirm that this material is environmentally inert, similar to other previously tested waste rock at the site.

Work plans for 2019 (subject to funding) include:

- confirming Nd-Pr resources in the F-Subzone and Tardiff Zones and preparing a scoping study on a small-scale development model focused on Nd-Pr concentrate production;
- re-sampling existing drill core from 1980s drilling to analyze for lithium and establishing an initial T-Zone lithium resource estimate;
- investigating neodymium, praseodymium, dysprosium (the other 'magnet rare earth') and lithium potential in the North T and S zone deposits;
- metallurgical testing (ore sorting) of near surface rare earth mineralization with high neodymium and praseodymium values, and
- continuing the permitting process and community engagement toward identifying local Indigenous business partners.

Unless otherwise noted, the technical information on the Nechalacho Project has been reviewed and approved either by the Company's Senior Vice President Metallurgy and Technology Development, Mr. David Marsh, FAusIMM (CP), or Dr. William Mercer, PhD, P.Geo. (Ontario), P. Geo. (NWT), Vice President, Exploration, who are both Qualified Persons under NI 43-101.

## ***East Kemptville Tin-Indium Project***

The 100% owned East Kemptville Tin-Indium Project is located 55km northeast of Yarmouth, Nova Scotia, Canada. The property consists of a Special Licence (soon to be converted to a Mineral Lease) plus one additional exploration licence covering approximately 6,000 acres in aggregate. East Kemptville was an operating tin mine from 1985-1992 and was North America's only large primary tin producer, before closing prematurely in 1992 due to a collapse in tin prices. Increasing global demand for tin and tightening supplies have resulted in strengthening tin prices, creating an opportunity for Avalon to consider re-developing East Kemptville.

Avalon is presently in the process of securing full tenure to the site under a Mineral Lease to put the Company in a position to re-start production at a small scale, utilizing the existing stockpile resources for initial feed to a gravity concentrator, supplemented by accessing near-surface higher grade tin resources. The present model will remediate the existing environmental liability and ultimately result in the full rehabilitation of the site. During fiscal 2018 the Company completed a PEA based on this new re-development model that indicated positive economics.

During the Quarter, the Company continued preparing the application for the Mineral Lease which was completed and submitted in December, subsequent to the end of the Quarter. It will be followed by submission of the accompanying Closure Plan in early 2019 after it is reviewed and certified. Once received, the Mineral Lease will allow Avalon to proceed with final feasibility study work and project financing. Environmental work was completed to allow the finalization of the Environmental Impact Assessment (referred to as a Project Designation in Nova Scotia) and the Crown Land Lease Transfer. These processes are anticipated to take approximately 4-6 months once submitted and therefore should be completed in mid-2019. Once all approvals are in place, financing is secured and feasibility work completed, the operation could be brought to initial production in 12-16 months, potentially by the fall of 2020.

The Company incurred \$149,353 (2018 - \$76,800) in expenditures during the Quarter on the East Kemptville Project, approximately 59% of the expenditures were incurred on environmental studies and permitting, 20% was spent on finalizing the EK PEA, with the balance incurred primarily on resource modelling of the stockpile.

During the Quarter, the Company decided not to renew three peripheral exploration licences and accordingly the costs incurred to-date of \$639,034 on the mineral claims under these exploration licences have been written off as an impairment loss during the Quarter.

### **Project Development Update**

As disclosed in the Company's news release dated [September 17, 2018](#) the Company received further encouraging results from an ore-sorting testwork program conducted on small samples of East Kemptville tin mineralization. These results provide further encouragement that ore-sorting technology can be successfully implemented at East Kemptville to reduce both the capital and operating costs estimated for the PEA, and to reduce the volume of tailings generated from the proposed operation.

Sensor-based ore-sorting ("SBS") is an emerging technology seeing increasing application in the mining industry. It involves the scanning of individual rock particles on a conveyor using various types of available sensor technologies. Depending on the chemical, mineralogical or physical characteristics, the particles of value are individually identified and separated from the "rejects" by applying either a mechanical, hydraulic or, in the case of East Kemptville, a pneumatic process.

The successful application of an ore-sorting process offers a number of potential benefits through the rejection of low or non-mineralized waste rock before it is fed into the processing plant. This can lead to a significant reduction in the size of the plant, along with attendant reductions in both capital and operating costs. It may also allow for the economic processing of low grade feed materials that would otherwise be un-economic to treat and the associated overall higher density waste products increases the capacity of waste management areas.

The recent work was conducted by Cronimet Mining Processing SA (Pty) Ltd (“CMPSA”), who are providing technical and metallurgical services to Avalon in relation to the East Kemptville Project. CMPSA has also expressed interest in partnering with Avalon on the development of the Project.

In addition to extensive engagement during the year with NGOs, political and business leaders, engagement with the Acadia First Nation (“AFN”) accelerated during the quarter. Regular meetings have been scheduled with AFN leadership to discuss business opportunities. Subsequent to the end of the Quarter, a meeting was held with the Benefits Committee of the KMKNO (Provincial Mi’kmaq) Assembly toward concluding an IBA type agreement. The AFN continue to be supportive of the Company’s development plans for the East Kemptville site.

Next steps for site work involve the extraction of a bulk composite sample (approximately 10 tonnes) scheduled for January, 2019 to confirm the tin recoveries obtainable with the ore-sorting technology. This program, including preparation of the technical report, is expected to take five to six months to complete. The ore-sorting testwork, combined with a confirmation drilling program on the stockpile, will be utilized to finalize the small-scale site re-development model to the feasibility level of confidence. On permitting, in addition to the Mining Lease and Crown Land Lease transfer, work will also be initiated on the required Industrial Approval.

Unless otherwise noted, the technical information on the East Kemptville Tin-Indium Project has been reviewed and approved either by the Company’s Senior Vice President Metallurgy and Technology Development, Mr. David Marsh, FAusIMM (CP), or Dr. William Mercer, PhD, P.Geo. (Ontario), P. Geo. (NS), Vice President, Exploration, who are both Qualified Persons under NI 43-101.

### ***Lilypad Cesium Project***

The Lilypad Cesium Project consists of 166 new claim units, totalling slightly over 3,200 ha, covering a field of lithium, tantalum and cesium mineralized pegmatites, and located 150 kilometres northeast of Pickle Lake, Ontario. The claims were staked by the Company between January 1999 and October 2000 and are 100% owned by the Company with no underlying royalties. Previous owners of the property drilled some 50 shallow drill holes and Avalon completed 32 drill holes totaling 4,781 metres in 2000 and 2001 in a program focused primarily on tantalum potential that produced encouraging initial results.

The project has been inactive since 2002 awaiting a recovery in tantalum prices or new demand for cesium minerals. Two recent developments have encouraged Avalon to resume exploration at the property. Firstly, because of recent increasing market interest in both lithium and cesium, a field program is justified primarily to further investigate the cesium potential of the property due to a global supply shortage. Secondly, development plans for the Ring of Fire area, north of the property, increase the probability of new road access being developed into the area in the near future.

Renewed exploration work now planned for summer 2019 will comprise geological mapping and geochemical sampling to better understand cesium distribution, identify new drill targets and to obtain samples suitable for metallurgical testwork. The 2000 and 2001 work program recognized exceptional cesium potential over a broad area on the property with drill intercepts assaying up to 6.205% Cs<sub>2</sub>O over 1.70 metres in one mineralized dyke known as the Pollucite Dyke.

The Project is located in the traditional territory of the Eabametoong First Nation. The Company has initiated discussions with community members.

### ***Other Projects***

The Company did not complete any work on any of its other projects during the Quarter.

## Corporate Social Responsibility

In November 2018, the Company released its 2018 Sustainability Report, which is available for download on the Company's website at: <http://www.avalonAM.com>

The 2018 Sustainability Report was prepared in accordance with the streamlined October 2016 Global Reporting Standards. The 2018 Sustainability Report incorporates a self-assessment of Fiscal 2018 performance and sets targets for 2019 against the applicable Mining Association of Canada "Toward Sustainable Mining" indicators.

In addition to the Company's safety performance, the report includes many other accomplishments such as energy efficiency initiatives, community outreach, and metallurgical process improvements that contribute to improved environmental performance. Avalon is committed to working closely with its Indigenous partners to create lasting economic and social benefits in the communities. In addition to its partners in the NWT, dialogue is ongoing with the Acadia First Nation in Nova Scotia as it relates to the East Kemptonville Project and with Wabaseemoong Independent Nations ("WIN") and Métis Nation of Ontario with respect to the Separation Rapids Lithium Project, and was recently initiated with the Eabametoong First Nation for the Lilypad Cesium Project.

To provide independent advice as to the efficacy of the Company's CSR work, the Company maintains an independent Sustainability Advisory Committee ("SAC") that meets intermittently to review all of the Company's sustainability-oriented work at all its projects. Recently, meetings have been infrequent due to the low level of current development activity although the members were all invited to review and comment on the 2018 report. In recognition of its sustainability efforts, Avalon has once again placed among *Corporate Knights'* 2018 Future 40 Responsible Corporate Leaders in Canada from a shortlist of eligible small and mid-size organizations.

The methodology for the 2018 Future 40 Responsible Corporate Leaders in Canada ranking is based on 16 key performance indicators covering resource, employee and financial management. The full methodology for this year's ranking is available from Corporate Knights here: <http://www.corporateknights.com/reports/future-40/2018-future-40-methodology-15085128/>. Private or publicly-listed companies headquartered in Canada with revenue of under \$1 billion and evidence of ESG reporting are eligible. Ranking is based on publicly-disclosed data, verified by the companies prior to project completion.

The full ranking can be viewed in *Corporate Knights Magazine's* Spring 2018 issue or online at [www.corporateknights.com/reports/2018-future-40/2018-future-40-results-15241106/](http://www.corporateknights.com/reports/2018-future-40/2018-future-40-results-15241106/).

The Company's focus is on materials that enable clean technology, including solar and wind power. In order to do this sustainably, Avalon designs its operations to minimize environmental impacts and greenhouse gas emissions, while planning for rehabilitation and productive use of the land post closure. The Company also now applies a staged-development approach to its cleantech materials projects, which involves starting production at a modest scale, to minimize project footprint and potential risks to environment, while also reducing investment risk and creating opportunities for its Indigenous business partners.

## Administration and Other

Corporate and Administrative expenses totalled \$680,787 during the Quarter, a 5% decrease from the amount incurred in the same quarter in Fiscal 2018 (\$718,232). The main areas of decreased operating expenses for the Quarter were salaries and benefits and marketing and sales expenses, which were partly offset by the increase on expenses on public and investor relations.

Salaries and benefits for the Quarter decreased by approximately 9% to \$347,885 compared to \$380,951 for the same quarter in fiscal 2018. The decrease in salaries and benefits was primarily related to the reduced staffing levels.

Marketing and sales expenses for the Quarter decreased by \$17,758 to \$8,597 compared to \$26,354 for the same quarter in fiscal 2018. The decrease was primarily related to the reduced travel in order to conserve cash resources.

Expenses on public and investor relations for the Quarter increased by \$42,148 (62%) to \$109,978 compared to \$67,830 for the same quarter in fiscal 2018. This increase was initiated in Q3 2018 reflecting the need to accelerate efforts to reach out to new investors which required retaining several new consultants to introduce the Company into new markets primarily in Europe and the US. During the Quarter, regular calls with European investors continued along with US investor outreach and roadshows in New York, South Florida and Arizona.

Share based compensation decreased to \$26,105 for the Quarter compared to \$38,778 for the same quarter in fiscal 2018. This decrease is primarily related to the decrease in the estimated fair values of options earned during the Quarter compared to the same quarter in fiscal 2018.

On November 30, 2018, the fair values of the Company's outstanding derivative liabilities (which included the warrants denominated in US\$ and warrants with exercise prices that are subject to adjustment from time to time in the event of certain common share rights offerings) were re-measured at fair value, which resulted in a gain of \$57,433 for the Quarter. The changes in the estimated value of these warrants are mainly caused by the fluctuation in the trading price of the Company's common shares on November 30, 2018 compared to August 31, 2018.

The fair values of the Company's outstanding convertible redeemable preferred shares (issued in March 2017, January 2018 and June 2018) were also re-measured, which resulted in losses of \$144,375 in the Quarter.

## Summary of Quarterly Results

The following selected financial data is derived from the unaudited condensed consolidated interim financial statements of the Company.

Fiscal Year	2019		2018				2017		
	Nov. 30	Aug. 31	May 31	Feb. 28	Nov. 30	Aug. 31	May 31	Feb. 29	
For the Quarters Ended	\$	\$	\$	\$	\$	\$	\$	\$	
Revenue (Interest)	13,941	14,340	20,204	12,484	14,749	16,080	7,088	2,544	
Net Loss before discontinued operations	1,569,937	786,927	682,931	1,142,848	628,038	835,616	1,312,870	568,543	
Net Loss	1,569,937	786,927	682,931	1,142,848	628,038	835,616	1,312,870	568,543	
Net Loss, per share, basic and diluted	0.006	0.004	0.003	0.005	0.003	0.004	0.007	0.003	

The fluctuation in quarterly net loss is primarily due to share-based compensation expenses recognized as stock options granted to directors, officers, employees and consultants of the Company are earned, the impairment losses recognized on resource properties, changes in the fair value of derivative liabilities and convertible redeemable preference shares, and expensed financing transaction costs. The costs of resource properties are written down at the time the properties are abandoned or considered to be impaired in value.

## Liquidity and Capital Resources

In management's view, given the nature of the Company's operations, which consists mainly of the exploration and development of mineral properties, the most relevant financial information relates primarily to current liquidity, solvency, and planned property expenditures. The Company's financial success will be dependent on the economic viability of its resource properties and the extent to which it can discover and develop new mineral deposits. Such development may take several years to complete and the amount of resulting income, if any, is difficult to determine. The sales value of

any mineralization discovered by the Company is largely dependent on factors beyond the Company's control, including the market value of the metals and minerals to be produced.

The Company manages its capital structure and makes adjustments to it based on the funds available to the Company in light of changes in general economic conditions, the Company's short term working capital requirements, and its planned exploration and development program expenditure requirements.

As the Company is in the development stage, its principal source of capital is from the issuance of equity securities. In order to achieve its objectives, the Company expects to spend its existing working capital and raise additional funds as required.

As at November 30, 2018, the Company has current assets of \$907,047 and current liabilities of \$1,272,195. The holder of the Company's convertible redeemable preferred shares is entitled to demand repayment of the applicable redemption value per share in cash (which totalled \$2,673,750 as at November 30, 2018) upon the occurrence of certain Redemption Events. Excluding the deferred flow-through share premium of \$20,575, the Company's adjusted working capital deficit was \$344,573 (calculated by adding back the deferred flow-through share premium of \$20,575 to the working capital deficit of \$365,148). As the de-recognition of the balance of the deferred flow-through share premium will not require the future outflow of resources by the Company, it is management's belief that the adjusted working capital figure provides useful information in assessing the Company's liquidity risk. As at August 31, 2018, the Company had adjusted working capital deficit of \$170,908 and cash and cash equivalents on hand of \$319,057.

The Company's monthly operating expenditures, excluding expenditures on resource property work programs, average \$290,000 during periods of moderate project activity. The Company's anticipated resource property expenditures for Fiscal 2019, assuming the requisite financing is in place, are budgeted at approximately \$1,500,000 (excluding capitalized salaries and benefits), of which approximately \$200,281 had been incurred by November 30, 2018.

Subsequent to the Quarter, the Company completed a private placement and issued 10,000,000 flow-through shares at the price of \$0.07 per share for gross proceeds of \$700,000 (the "December 2018 Private Placement").

The Company will need to raise additional capital to meet its ongoing expenditure obligations or reduce its current overhead costs. Initiatives both to reduce overhead costs and to raise additional capital are in progress although there can be no assurances that the Company will be able to raise additional funds required for all planned expenditures. As a result, certain expenditures may have to be delayed until sufficient funding has been raised. Given the continuation of weak investor sentiment and capital market conditions in the junior resource sector, there exists uncertainty as to the Company's ability to raise sufficient additional funds on favourable terms. This condition indicates the existence of a material uncertainty that raises substantial doubt about the Company's ability to continue as a going concern. The Company's expenditures on other discretionary exploration and development activities have some scope for flexibility in terms of amount and timing, which can be adjusted accordingly.

The Company does not have any externally imposed capital requirements other than those certain Redemption Events contained in the preferred share terms. The Company continues to work on attracting more substantial project financing through the participation of one or more strategic partners, a long term construction debt financing facility, and/or through the equity markets. If the Company is not able to secure financing on satisfactory terms, expenditures on the development of its projects will need to be delayed.

All of the Company's resource properties, are owned, leased or licenced with minimal holding costs. The most significant holding costs being annual lease rental fees on Nechalacho of \$24,841 and the annual expenditures related to the mining leases at Separation Rapids and Warren Township totalling \$3,327. As at November 30, 2018, the Company is required to incur additional Canadian Exploration Expenditures ("CEE") of \$93,858 by December 31, 2019. This amount represents the

remaining balance of the required expenditures resulting from the private placement completed in July, 2018. The Company is required to incur an additional \$700,000 in CEE by December 31, 2019 relating to the December 2018 Private Placement.

A joint venture with an industry partner or end-user may represent an attractive alternative for financing the further stages in the development of any of the Company's projects once the capital requirements become relatively large.

The Company has an operating lease for its premises. As at the date of this MDA, the minimum lease commitments under these leases are as follows:

Fiscal year ended August 31, 2019	\$	185,730
2020	\$	333,275
2021	\$	348,155
2022	\$	351,875
2023	\$	359,315
2024 and thereafter	\$	484,047

## Off Balance Sheet Arrangements

As at November 30, 2018, the Company had no material off balance sheet arrangements such as guaranteed contracts, contingent interests in assets transferred to an entity, derivative instrument obligations or any instruments that could trigger financing, market or credit risk to the Company.

## Transactions with Related Parties

Balances and transactions between the Company and its subsidiaries have been eliminated on consolidation and are not disclosed here. Details of the transactions between the Company and other related parties are disclosed below:

### a) Trading transactions

There had been no material trading transactions with related parties during each of the three months ended November 30, 2018 and 2017, other than the participation by certain related parties in certain equity offerings as listed below:

- (i) the participation by certain related parties in the November 2017 Private Placement, whereby Donald Bubar, Director, President and CEO, Mark Wiseman, Vice President Sustainability, Patricia Mohr, Director subscribed for 200,000, 55,000 and 50,000 flow-through shares at \$0.145 per share, respectively; and

- (ii) In November 2018, Mr. Donald Bubar subscribed for 1,000,000 Units at \$0.07 per Unit.

### b) Compensation of key management personnel

The remuneration of directors and other key members of the Company's senior management team during the three months ended November 30, 2018 and 2017 were as follows:

	November 30, 2018	November 30, 2017
Salaries, benefits and directors' fees <sup>(1)</sup>	\$ 434,088	\$ 429,567
Share based compensation <sup>(2)</sup>	21,332	33,927
	<u>\$ 455,420</u>	<u>\$ 463,494</u>

- (1) Salaries and benefits of key management personnel capitalized to exploration and evaluation assets and PPE for the three months totaled \$113,502 (2017 - \$125,533).
- (2) Fair value of stock options earned and recognized as share based compensation during the respective reporting period.

## Subsequent Events

Subsequent to the end of the Quarter, the Company:

- a) granted an aggregate of 1,065,000 stock options with a weighted average exercise price of \$0.10 per share to certain employees and consultants of the Company. The weighted average contract life of these options at issuance was 2.3 years;
- b) had 425,000 stock options with a weighted average exercise price of \$0.61 per share expire;
- c) had 150,000 broker's compensation warrants with an exercise price of \$0.15 per share expire; and
- d) completed a private placement and issued 10,000,000 flow-through common shares at the price of \$0.07 per share for gross proceeds of \$700,000.

## Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, receivables, accounts payable and accrued liabilities, convertible note payable, convertible redeemable preferred shares, warrants denominated in foreign currency, and warrants with exercise prices that are subject to adjustment from time to time.

Management does not believe these financial instruments expose the Company to any significant interest, currency or credit risks arising from these financial instruments. The fair market values of cash and cash equivalents, receivables, and accounts payable and accrued liabilities approximate their carrying values.

The Company has 6,466,513 warrants outstanding as at November 30, 2018, with an original exercise price of US\$0.56 per share ("US\$ Warrants"). These warrants are subject to certain anti-dilution provisions, which may reduce the exercise price, with a floor of US\$0.5095 per share. The adjusted exercise price as calculated by the anti-dilution provisions as at November 30, 2018 and as at the date of this MDA is US\$0.5223. These warrants are exercisable until June 13, 2021. These warrants were recorded at fair value at the time of issuance, and are re-measured at fair value using the Black-Scholes pricing model at each financial statement reporting date, with the resulting change in fair value being recorded in the statement of comprehensive loss.

As the Company has the right to redeem all of the outstanding A1, B1 and C1 Preferred Shares at any time at a 5% premium to the redemption value, the total fair value of the 125 A1 Preferred Shares, 205 B1 Preferred Shares and the 130 C1 Preferred Shares as at November 30, 2018 is \$853,125, \$1,237,687 and \$716,625, respectively. The number of common shares to be issued would be 52,426,470 if all of the outstanding A1, B1 and C1 Preferred Shares had been converted into common shares based on the closing price of the Company's common shares on the TSX of \$0.06 on November 30, 2018.

As the Company has the option to buy back the convertible note at any time for the outstanding face value, as such the fair value of the convertible note as at November 30, 2018 is its face value of \$600,000.

Interest income from cash and cash equivalents are recorded in the statement of comprehensive loss.

## Outstanding Share Data

### a) *Common and Preferred Shares*

The Company is presently authorized to issue an unlimited number of common shares without par value. The Company is also authorized to issue up to 25,000,000 preferred shares without par value, of which 950 have been issued and 460 are outstanding as at November 30, 2018.

As at November 30, 2018, the Company had 254,639,859 common shares, 125 Series A1 Preferred Shares, 205 Series B1 Preferred Shares and 130 Series C1 Preferred Shares issued and outstanding. Subsequent to the end of the Quarter, and as described earlier under "Subsequent Events", 10,000,000 flow-through common shares were issued pursuant to the December 2018 Private Placement. As at the date of this MDA, the Company has 264,639,859 common shares, 125 Series A1 Preferred Shares, 205 Series B1 Preferred Shares and 130 Series C1 Preferred Shares outstanding.

### b) *Options*

As at November 30, 2018, the Company had an aggregate of 10,045,000 incentive stock options outstanding with a weighted average exercise price of \$0.27 (of which 6,796,250 were vested and 3,248,750 were unvested). Subsequent to the end of the Quarter, 1,065,000 options were granted and 425,000 options had expired (as described earlier under "Subsequent Events"). As at the date of this MDA, the Company has 10,685,000 incentive stock options with a weighted average exercise price of \$0.24 outstanding.

### c) *Warrants*

As at November 30, 2018 the Company has the following common share purchase warrants outstanding:

- i. 6,466,513 US\$ Warrants, with an original exercise price of US\$0.56 per share and are exercisable until June 13, 2021. These warrants are also subject to certain anti-dilution provisions, which may reduce the exercise price, with a floor of US\$0.5095 per share. The adjusted exercise price as calculated by the anti-dilution provisions as at August 31, 2018 and as at the date of this MDA is US\$0.5223;
- ii. 30,000 warrants, issued pursuant to the Accommodation Agreement, with an average exercise price of \$0.31 per share and will expire as follows: 10,000 warrants on July 31, 2019, 10,000 warrants on July 31, 2020 and 10,000 warrants on August 2, 2021;
- iii. 2,400,000 warrants with an exercise price of \$0.16 per share and exercisable until November 3, 2019;
- iv. 6,900,000 A1 Warrants with an exercise price of \$0.23 per common share which are exercisable until March 10, 2022;
- v. 6,250,000 B1 Warrants with an exercise price of \$0.15 per common share which are exercisable until January 15, 2023;
- vi. 1,400,000 warrants with an exercise price of \$0.12 per share expiring on June 29, 2020, or if the closing price of the common shares on the TSX is \$0.16 or higher for a period of twenty consecutive trading days after June 29, 2018, the Company may, by notice to the holder reduce the expiry date of the warrants to not less than 30 days from the date of such notice;

- vii. 2,750,000 warrants with an exercise price of \$0.12 per share expiring on July 11, 2020, or if the closing price of the common shares on the TSX is \$0.16 or higher for a period of twenty consecutive trading days after July 11, 2018, the Company may, by notice to the holder reduce the expiry date of the warrants to not less than 30 days from the date of such notice;
- viii. 3,750,000 C1 Warrants with an exercise price of \$0.125 per common share which are exercisable until June 29, 2023;
- ix. 2,400,000 warrants with an exercise price of \$0.12 per share expiring on November 1, 2020, or if the closing price of the common shares on the TSX is \$0.16 or higher for a period of twenty consecutive trading days after November 1, 2018, the Company may, by notice to the holder reduce the expiry date of the warrants to not less than 30 days from the date of such notice;
- x. 287,500 warrants with an exercise price of \$0.12 per share expiring on November 23, 2020, or if the closing price of the common shares on the TSX is \$0.16 or higher for a period of twenty consecutive trading days after November 23, 2018, the Company may, by notice to the holder reduce the expiry date of the warrants to not less than 30 days from the date of such notice; and
- xi. 4,575,000 warrants with an exercise price of \$0.07 per share expiring on November 30, 2021.

The Company is also committed to issue 20,000 warrants to the NWTMN in two equal installments of 10,000 warrants upon the Nechalacho Project meeting certain milestones. These warrants will have a contractual term of five years and will have an exercise price based on the then current market price of the Company's common shares at the date of issue of the warrants.

**d) *Brokers' Compensation Warrants***

As at November 30, 2018, the Company had the following compensation warrants outstanding:

- i. 150,000 compensation warrants with an exercise price of \$0.15 per common share, which are exercisable until December 23, 2018;
- ii. 204,000 compensation warrants with an exercise price of \$0.15 per common share, which are exercisable until June 12, 2019;
- iii. 186,000 compensation warrants with an exercise price of \$0.145 per common share, which are exercisable until August 16, 2019;
- iv. 288,000 compensation warrants with an exercise price of \$0.15 per common share, which are exercisable until November 3, 2019; and
- v. 132,000 compensation warrants with an exercise price of \$0.15 per common share, which are exercisable until December 22, 2019.

Subsequent to the end of the Quarter, 150,000 broker's compensation warrants with an exercise price of \$0.15 per share have expired.

## Disclosure Controls and Procedures

Disclosure controls and procedures are designed to provide reasonable assurance that material information is gathered and reported to senior management, including the Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), as appropriate, to permit timely decisions regarding public disclosure.

Management, including the CEO and CFO, has designed or caused to be designed under their supervision, disclosure controls to provide reasonable assurance that the information required to be disclosed in annual filings, interim filings, or other reports filed or submitted under Canadian securities legislation, or reports filed or submitted under the U.S. Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time period specified in those rules.

## Internal Control over Financial Reporting

The CEO and CFO are also responsible for the design of the Company’s internal controls over financial reporting (“ICFR”) to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Because of its inherent limitation, internal control over financial reporting may not prevent or detect misstatements.

There have been no changes to the Company’s design of internal controls over financial reporting that occurred during the Quarter that materially affected, or are reasonably likely to affect, the Company’s ICFR.

## Critical Accounting Judgments and Estimation Uncertainties

The preparation of the consolidated financial statements in conformity with IFRS requires that the Company’s management make critical judgments, estimates and assumptions about future events that affect the amounts reported in the consolidated financial statements and the related notes thereto. Actual results may differ from those estimates. Estimates and assumptions are reviewed on an on-going basis based on historical experience and other factors that are considered to be relevant under the circumstances. Revisions to estimates are accounted for prospectively.

The Company has identified the following significant areas where critical accounting judgments, estimates and assumptions are made and where actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods.

Further details of the nature of these assumptions and conditions may be found in the relevant notes to the consolidated financial statements.

### *Key Sources of Estimation Uncertainty*

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment are included in the following notes:

*Recoverability of Exploration and Evaluation Assets, Development Assets and Property, Plant and Equipment*

The Company assesses its long-lived assets, specifically all exploration and evaluation assets, development assets and PPE at each reporting date to determine whether any indication of impairment exists. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made, which is the higher of the fair value less costs of disposal and value in use. These assessments require the use of estimates and assumptions such as long-term commodity prices, discount rates, foreign exchange rates, future capital requirements, exploration potential and operating performance.

### *Determination of Reserve and Resource Estimates*

Mineral reserves and resources are estimates of the amount of ore that can be economically and legally extracted from the Company's exploration and development properties. The estimation of recoverable reserves is based upon factors such as estimates of commodity prices, production costs, production techniques, future capital requirements and foreign exchange rates, along with geological assumptions and judgments made in estimating the size and grade of the ore body. Changes in the reserve or resource estimates may impact the carrying value of exploration and evaluation assets, development assets, PPE, site closure and reclamation provision and amortization expense.

### *Fair Value of Share Based Payments and Warrants*

The Company follows IFRS 2, Share-based Payment, in determining the fair value of share based payments. This calculated amount is not based on historical cost, but is derived based on assumptions (such as the expected volatility of the price of the underlying security, expected hold period before exercise, dividend yield and the risk-free rate of return) input into a pricing model. The model requires that management make forecasts as to future events, including estimates of: the average future hold period of issued stock options and compensation warrants before exercise, expiry or cancellation; future volatility of the Company's share price in the expected hold period; dividend yield; and the appropriate risk-free rate of interest. The resulting value calculated is not necessarily the value that the holder of the option or warrant could receive in an arm's length transaction, given that there is no market for the options or compensation warrants and they are not transferable. Similar calculations are made in estimating the fair value of the warrant component of an equity unit. The assumptions used in these calculations are inherently uncertain. Changes in these assumptions could materially affect the related fair value estimates.

### *Site Closure and Reclamation Provision*

The Company's accounting policy for the recognition of a site closure and reclamation obligation requires significant estimates and assumptions such as: requirements of the relevant legal and regulatory framework, the magnitude of possible disturbance and the timing thereof, extent and costs of required closure and rehabilitation activity, and discount rate. These uncertainties may result in future actual expenditures differing from the amounts currently provided.

Site closure and reclamation provision recognized is periodically reviewed and updated based on the facts and circumstances available at the time.

### *Property, Plant and Equipment - Estimated Useful Lives*

Management estimates the useful lives of PPE based on the period during which the assets are expected to be available for use. The amounts and timing of recorded expenses for depreciation of PPE for any period are affected by these estimated useful lives. The estimates are reviewed at least annually and are updated if expectations change as a result of physical wear and tear, technical or commercial obsolescence and legal or other limits to use. It is possible that changes in these factors may cause significant changes in the estimated useful lives of the Company's PPE in the future.

### **Critical Judgments**

Information about critical judgments in applying accounting policies that have most significant effect on the consolidated financial statements are as follows:

#### *Capitalization of Exploration and Evaluation Costs*

Exploration and evaluation costs incurred during the year are recorded at cost. Capitalized costs include costs directly attributable to exploration and evaluation activities, including salaries and benefits of employees who are directly engaged in the exploration and evaluation activities.

Administrative and other overhead costs are expensed. Exploration and evaluation costs incurred that have been determined to have future economic benefits and can be economically recoverable are capitalized. In making this judgment, management assesses various sources of information including but not limited to the geologic and metallurgic information, history of conversion of mineral deposits to proven and probable mineral reserves, scoping and feasibility studies, proximity of operating facilities, operating management expertise and existing permits.

## Changes in Accounting Policies Including Initial Adoption

The Company adopted the following new accounting standards during the Quarter:

### a) IFRS 9, Financial Instruments

On September 1, 2018, the Company adopted IFRS 9, “Financial Instruments” (“IFRS 9”) which replaces IAS 39, “Financial Instruments: Recognition and Measurement” (“IAS 39”). The retrospective adoption of IFRS 9 had no material impact to the Company’s condensed consolidated interim financial statements.

IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost; fair value through other comprehensive income (“FVTOCI”); or fair value through profit or loss (“FVTPL”). The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. IFRS 9 eliminates the previous IAS 39 categories of held to maturity, loans and receivables and available for sale. IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities.

The following table shows the original measurement categories under IAS 39 and the new measurement categories under IFRS 9 for each class of the Company’s financial assets and financial liabilities:

<b>Financial Instrument</b>	<b>Measurement Category</b>	
	<b>IAS 39</b>	<b>IFRS 9</b>
Cash and cash equivalents	Loans and receivables at amortized cost	Amortized cost
Other receivables	Loans and receivables at amortized cost	Amortized cost
Accounts payable	Other financial liabilities at amortized cost	Amortized cost
Accrued liabilities	Other financial liabilities at amortized cost	Amortized cost
Convertible note payable	FVTPL	FVTPL
Convertible redeemable preferred shares	FVTPL	FVTPL
Derivative liabilities	FVTPL	FVTPL

There were no adjustments to the carrying amounts of the Company’s financial instruments on the date of transition as a result of the transition from IAS 39 to IFRS 9.

### b) IFRS 15, Revenue from Contracts and Customers

On September 1, 2018, the Company adopted IFRS 15, Revenue from Contracts and Customers (“IFRS 15”). IFRS 15 sets out the requirements for recognizing revenue that apply to all contracts with customers, except for contracts that are within the scope of the standards on leases, insurance contracts and financial instruments. IFRS 15 uses a control based approach to recognize revenue and establishes principles to address the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity’s contracts with customers. The Company currently does not have any operating revenue and therefore, the adoption of this new standard does not have any impact on the Company’s consolidated financial statements.

## Recent Accounting Pronouncements

The following pronouncement is issued but not yet effective:

### *IFRS 16, Leases*

IFRS 16, *Leases* (“IFRS 16”) was issued by the IASB in January 2016, and will replace IAS 17 *Leases*. IFRS 16 specifies the methodology to recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases except for short-term leases and leases with low value assets. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. IFRS 16 is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted if IFRS 15 has also been adopted. A lessee will apply IFRS 16 to its leases either retrospectively to each prior reporting period presented; or retrospectively with the cumulative effect of initially applying IFRS 16 being recognized at the date of initial application. The Company is currently evaluating the impact of IFRS 16 on its consolidated financial statements.

## Forward-Looking Statements, Risk Factors and Qualified Persons

Certain of the statements that are not historical facts contained in this MDA are forward-looking statements that involve risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in the forward-looking statements. Such forward-looking statements reflect the Company’s current views with respect to future events and include, among other things, statements regarding targets, estimates and/or assumptions in respect of reserves and/or resources, and are based on estimates and/or assumptions related to future economic, market and other conditions that, while considered reasonable by management, are inherently subject to risks and uncertainties, including significant business, economic, competitive, political and social uncertainties and contingencies. These estimates and/or assumptions include, but are not limited to:

- grade of ore;
- mineral product and commodity prices;
- metallurgical recoveries;
- operating costs;
- achievement of current timetables for development;
- strength of the global economy;
- availability of additional capital; and
- availability of supplies, equipment and labour.

Factors that could cause the Company’s actual results, performance, achievements, developments or events to differ materially from those expressed or implied by forward-looking statements include, among others, the factors described or referred to under “Description of the Business - Risk Factors” in the Company’s Annual Information Form for the year ended August 31, 2018, and:

- risks related to the Company’s history of losses, lack of operating history, ability to generate material revenues and continue as a going concern;
- risks related to establishing new mining operations in the event that the Company elects to proceed with the development of one of its mineral projects;
- risks related to the Company’s need for additional financing;
- risks related to any joint venture or strategic alliances that may be entered into by the Company;
- risks related to the progression of the Separation Rapids Lithium Project to a positive feasibility stage;
- risks related to securing product off-take agreements on a timely basis;
- risks related to the unique ore type at the Nechalacho Rare Earth Elements Project (“Nechalacho” or the “Nechalacho Project”) and the Separation Rapids Lithium Project for which known metallurgical processes have not previously been applied;

- uncertainty related to title to the Company's properties as well as the risk of delays in obtaining licenses and permits as a result of local opposition, including uncertainty related to any challenges in connection with Aboriginal land title claims and Aboriginal rights
- risks related to the possible existence of rights and interests of Aboriginal groups, which may limit the Company's ability to develop its properties;
- risks related to the need to acquire properties for the hydrometallurgical plant and potentially a rare earth refinery for the Nechalacho Project;
- risks that actual capital costs, production schedules and economic returns for the Nechalacho Project may differ significantly from those anticipated by the Company;
- risks related to the demand for technology metals and minerals and fluctuations in their pricing ;
- risks related to the demand for lithium and fluctuations in its pricing;
- risks related to competition and the actions of competitors;
- risks related to costs or delays in the commercialization of rare earth products;
- uncertainties related to the fact that the Company's mineral resources and mineral reserves are only estimates;
- risks related to the Company's ability to secure the required mineral tenure licenses at the East Kemptville Tin-Indium Project ("East Kemptville Project") which could adversely affect the Company's ability to conduct further studies and exploration activities;
- risks related to obtaining, maintaining and renewing licenses and permits, and the material costs, liabilities and obligations in connection therewith;
- risks that the Company will be subject to material costs, liabilities and obligations in connection with environmental laws, regulations and approvals and that approvals will not be available;
- uncertainties involving uninsured risks;
- risks related to possible shortages of supplies, equipment and labour;
- risks related to the Company's ability to attract and retain qualified management and technical personnel;
- uncertainty whether the Company will acquire commercially mineable ore deposits or whether the current mineral deposits identified by the Company can be developed as commercially viable ore bodies;
- risks inherent to the competitive nature of the mineral industry;
- risks related to the extensive federal, state, provincial, territorial and local laws and regulations to which the Company's activities are subject;
- risks related to the availability and reliability of adequate infrastructure;
- risks and hazards inherent to the mining industry;
- risks related to any changes in critical accounting estimates that adversely affect the Company's financial results;
- risks related to potential conflicts of interest of the Company's directors and officers who may have involvement with other resource companies;
- risks due to being a "passive foreign investment company" for U.S. purposes;
- risks related to fluctuations of currency exchange rates;
- risks related to share price volatility;
- risks related to dilution of existing shareholders;
- risks related to not paying cash dividends;
- risks related to being a non-US corporation; and
- risks related to there being no market for the Company's warrants.

Most of the foregoing factors are beyond the Company's ability to control or predict. Although the Company has attempted to identify important factors that could cause actual results, performance, achievements, developments or events to differ materially from those described in forward-looking statements, there may be other factors that cause actual results, performance, achievements, developments or events not to be as anticipated, estimated or intended. There can be no assurance that the estimates and/or assumptions upon which these forward-looking statements are based will occur.

Readers can identify many of these statements by looking for words such as "believe", "expects", "will", "intends", "projects", "anticipates", "estimates", "continues" or similar words or the negative

thereof. There can be no assurance that the plans, intentions or expectations upon which these forward-looking statements are based will occur.

The forward-looking statements contained herein are made as of the date of this MDA and are expressly qualified in their entirety by this cautionary statement. Readers should not place undue reliance on the forward-looking statements, which reflect management's plans, estimates, projections and views only as of the date hereof. The Company undertakes no obligation to publicly revise these forward-looking statements to reflect subsequent events or circumstances, except as required by applicable law.

The technical information included in this MDA, unless otherwise stated, has been reviewed and approved by Donald S. Bubar, P. Geo., President and Chief Executive Officer of the Company and Dr. William Mercer, P. Geo., Vice-President, Exploration of the Company. Mr. Bubar and Dr. Mercer are both Qualified Persons under National Instrument 43-101 ("NI 43-101").

## **Notice Regarding Presentation of our Mineral Reserve and Resource Estimates**

This MDA has been prepared in accordance with the requirements of Canadian securities laws, which differ from the requirements of United States securities laws. Unless otherwise indicated, all reserve and resource estimates included in this MDA have been prepared in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects.

Canadian standards, including NI 43-101, differ significantly from the requirements of the United States Securities and Exchange Commission (the "SEC"), and reserve and resource information contained in this MDA may not be comparable to similar information disclosed by United States companies. In particular, and without limiting the generality of the foregoing, the term "resource" does not equate to the term "reserve". Under United States standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. The SEC's disclosure standards normally do not permit the inclusion of information concerning "measured mineral resources", "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by United States standards in documents filed with the SEC. United States investors should also understand that "inferred mineral resources" have a great amount of uncertainty as to their existence and as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred mineral resource" exists, is economically or legally mineable, or will ever be upgraded to a higher category. Under Canadian rules, estimated "inferred mineral resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. Disclosure of "contained ounces" in a resource estimate is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in-place tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of "reserves" are also not the same as those of the SEC, and reserves reported by Avalon in compliance with NI 43-101 may not qualify as "reserves" under SEC standards. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with United States standards.

## **Other Information**

Additional information on the Company is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.avalonadvancedmaterials.com](http://www.avalonadvancedmaterials.com).