# LEADING EDGE MATERIALS CORP.

# MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED OCTOBER 31, 2019

This discussion and analysis of financial position and results of operation is prepared as at January 21, 2020 and should be read in conjunction with the audited consolidated financial statements for the years ended October 31, 2019 and 2018 of Leading Edge Materials Corp. ("Leading Edge Materials" or the "Company"). The following disclosure and associated financial statements are presented in accordance with International Financial Reporting Standards ("IFRS"). Except as otherwise disclosed, all dollar figures included therein and in the following management discussion and analysis ("MD&A") are quoted in Canadian dollars. Additional information relevant to the Company's activities can be found on SEDAR at <u>www.sedar.com</u>.

### **Forward Looking Statements**

Certain information in this MD&A may constitute forward-looking statements or forward-looking information within the meaning of applicable securities laws (collectively, "Forward-Looking Statements"). All statements, other than statements of historical fact, addressing activities, events or developments that the Company believes, expects or anticipates will or may occur in the future are Forward-Looking Statements. Forward-Looking Statements are often, but not always, identified by the use of words such as "seek," "anticipate," "believe," "plan," "estimate," "expect," and "intend" and statements that an event or result "may," "will," "can," "should," "could," or "might" occur or be achieved and other similar expressions. Forward-Looking Statements are based upon the opinions and expectations of the Company based on information currently available to the Company. Forward-Looking Statements are subject to a number of factors, risks and uncertainties that may cause the actual results of the Company to differ materially from those discussed in the Forward-Looking Statements including, among other things, the Company has yet to generate a profit from its activities; there can be no guarantee that the estimates of quantities or qualities of minerals disclosed in the Company's public record will be economically recoverable; uncertainties relating to the availability and costs of financing needed in the future; competition with other companies within the mining industry; the success of the Company is largely dependent upon the performance of its directors and officers and the Company's ability to attract and train key personnel; changes in world metal markets and equity markets beyond the Company's control; the possibility of write-downs and impairments; the risks associated with uninsurable risks arising during the course of exploration; development and production; the risks associated with changes in the mining regulatory regime governing the Company; the risks associated with the various environmental regulations the Company is subject to; rehabilitation and restitution costs; the Company's preliminary economic assessment on Woxna is no longer current or valid as a result of the filing of a new NI 43-101 Technical Report effective March 24, 2015, and the Company has no plans to complete a new preliminary economic assessment, a pre-feasibility or feasibility study on the project, as such there is an increased risk of technical and economic failure for the Woxna graphite project; dealings with non-governmental organizations. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the Forward-Looking Statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such Forward-Looking Statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such Forward-Looking Statements. Such Forward-Looking Statements has been provided for the purpose of assisting investors in understanding the Company's business, operations and exploration plans and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on Forward-Looking Statements. Forward-Looking Statements are made as of the date hereof, and the Company does not undertake to update such Forward-Looking Statements except in accordance with applicable securities laws.

# **Company Overview**

Leading Edge Materials is a Canadian and Swedish listed public company focused on the discovery and production of high value critical raw materials for the European market. Leading Edge Material's flagship asset is the fully built and permitted Woxna graphite production facility located in central Sweden. As lithium ion batteries are comprised of approximately 15% high purity graphite, ongoing investment at Woxna is directed towards production of specialty materials for this emerging high growth market.

In addition to Woxna, Leading Edge Materials holds a portfolio of raw material assets suitable for lithium ion batteries (graphite, lithium, cobalt) and high strength permanent magnets (rare earth elements including neodymium and dysprosium). The Company continues to seek out prospective battery material projects in Europe and will provide updates as information becomes available.

With a focus on Europe and assets in a fast moving sector, Leading Edge Materials is ideally placed to play a pivotal role in the sustainable supply of technology critical materials.

#### **Officers and Directors**

As at the date of this MD&A the Board of Directors and Officers of the Company are:

Mark Saxon	- Director, Interim Chief Executive Officer ("CEO") & President
Mike Hudson	- Director, Non-Executive Chairman
Filip Kozlowski	- Director
Nick DeMare	- Chief Financial Officer ("CFO") and Corporate Secretary

### **Company History**

The Company was incorporated on October 27, 2010 under the *Business Corporations Act* (British Columbia) as Tasex Capital Limited. The Company's common shares began trading on the TSX Venture Exchange (the "TSXV") as a capital pool company on June 10, 2011. On February 22, 2012 the Company completed the acquisition of the Woxna Project and changed its name to Flinders Resources Limited. On August 25, 2016 the Company completed the acquisition of Tasman Metals Ltd. ("Tasman") and changed its name to Leading Edge Materials Corp. The Company's common shares trade on the TSXV as a Tier 1 mining issuer under the symbol "LEMIF" and on the Nasdaq First North, trading under the symbol "LEMSE". The Company's principal office is located at #1305 - 1090 West Georgia Street, Vancouver, British Columbia, V6E 3V7.

### Update on Developments in the European Battery Industry

Lithium-ion battery and electric vehicle ("EV") markets are showing very rapid potential growth through the aligned interests of battery manufacturers, the automotive industry and the European Commission. Industry news during the reporting period has continued to be very positive for future battery raw material demand, with Europe cementing a leading position.

The world's largest light vehicle manufacturer Volkswagen AG have expressed in their "Strategy 2025" the ambition to offer more than 50 EV models by 2025. The planned roll out shall consume at least 150 GWh of annual battery capacity, equivalent to six of Tesla's Nevada giga-factories. Volkswagen commitments include expenditure of €60 billion over the next 5 years to both research and manufacturing of electric vehicles.

As one of numerous battery supply solutions, Volkswagen AG and Swedish battery manufacturer Northvolt AB recently announced a 50/50 joint venture to build a lithium-ion battery factory in Salzgitter, Germany. Start of production is planned for the end of 2023 with an initial annual output of 16 GWh.

Daimler's "Ambition 2039" statement outlined the aim to have plug-in hybrids or EVs comprise more than 50% of its car sales by 2030. In line with this aim, Daimler announced a partnership with Farasis Energy, a Chinese developer and supplier of lithium-ion battery technologies, to build batteries in Germany. A site for this manufacturing is yet to be announced, however the factory is planned to be carbon neutral.

Daimler has also signed battery purchase agreements with Contemporary Amperex Technology Limited ("CATL"), another Chinese industry leader. CATL is underway with construction of a battery factory in Erfurt, with production planned for 2022.

In November 2019, Tesla made a long-awaited announcement also confirming Germany as the site for their first European battery and vehicle factory. A location near Berlin was chosen, where  $\notin$ 4 billion will be invested and first production from phase 1 scheduled for late 2021.

Such developments are on top of existing commitments by Northvolt who have received  $\bigoplus 86$  million funding from the Volkswagen Group, Goldman Sachs, BMW Group, AMF, Folksam Group and IMAS Foundation. Strength of the market is confirmed by Northvolt reporting  $\bigoplus 13$  billion in battery pre-sales through to 2030. First production from Stage 1 of the "Northvolt Ett" factory in Skellefteå, Sweden is planned for 2021, with Northvolt aiming to build the world's greenest battery cell with a minimal carbon footprint and a high proportion of locally sourced materials. Based on typical industry figures, the Stage 1 facility will require between 14,000 and 18,000 tonnes of blended natural and synthetic graphite anode per year.

The European Commission forecasts 400 GWh of annual battery demand in Europe by 2025, with a market value of approximately €400 billion. The European Commission's Vice President for the Energy Union, Maroš Šefčovič continues to express the urgency for a secure, transparent and integrated European battery materials supply chain that combines domestic mined materials, recycled materials and imports.

After a recent EU Battery Alliance meeting, Mr Šefčovič stated: "We must also show that we mean business when filling the remaining gaps in the value chain, notably mining and refining. EU companies need to be better supported to invest in sustainable mining and refining of raw materials - both in EU and third countries. We plan to launch a European Raw materials investment facility with the EBRD and the EIB - hopefully at the end of the year."

And even more succinctly, Mr Šefčovič was quoted in November 2019 discussing the importance of establishing a full European battery value chain: "I really think that, when it comes to the issue of dependency, we could end up in a situation where raw materials become the new oil. We have to be very vigilant that today's dependency on fossil fuels like oil and gas is not replaced by dependency on lithium, cobalt, copper and other raw materials that we need for the green transition, where Europe is leading the way."

Leading Edge Materials remains an active core member of the EU Battery Alliance and is working hard to provide critical raw material supply opportunities for Europe.

### Achievements

Work undertaken by Leading Edge Materials during the fiscal year 2019 was in line with the Board's aims to benefit from the roll out of transport electrification in Europe. In particular, the Company has maintained its investment focus on the Woxna graphite mine in Sweden, with a view to readying the site for the supply of battery anode materials to the European market.

From January to May 2019, two members of the Leading Edge Materials Board of Directors undertook a strategic review (the "Strategic Review") to identify, examine and consider all potential opportunities towards enhancing shareholder value and enable the Company to accelerate customer engagement in the rapidly developing European battery materials industry.

The Strategic Review provided various structural recommendations and highlighted that the Company's combination of discovery-stage and development-stage assets present different requirements with regard to operational structure, capital needs and investor preferences. In response, the Board resolved to initiate the transition of its Swedish subsidiary Woxna Graphite AB into a freestanding company, with the capacity to take funding from parties in addition to Leading Edge Materials. A freestanding structure for Woxna Graphite AB is anticipated to allow more effective execution upon a high value graphite materials business plan. Furthermore, it is anticipated that Woxna Graphite AB will be in a stronger position to benefit from Swedish and European public funding opportunities that are developing in the battery materials sector.

The optimal path for direct funding opportunities has been evaluated during the 2019 fiscal year and the Company is continuing these investigations. The Board will communicate developments in this regard should they progress. In the event of direct funding being successful, the Board emphasizes that Leading Edge Materials will continue to hold significant exposure to the success of the Woxna graphite mine as a future graphite materials supplier.

The Board is continuing to execute on other assets within the Company's portfolio in the Nordic region and Romania, including supporting mine lease permitting for the Norra Kärr rare earth element project while identifying project improvements that reduce the environmental footprint; and progressing the Romanian exploration alliance towards exploration licence granting at Bihor Sud.

# Woxna Graphite Mine and Production Facility

The Woxna graphite mine and production facility is comprised of four graphite deposits, an open pit mine, a fully permitted 100,000 ton per annum processing plant and tailings dam, located some 8 kilometres ("km") WNW of the town of Edsbyn, Sweden, approximately 3.5 hour drive north of Stockholm. Access is via 10 km of all-weather forest road from Highway 301. The principal property is the Kringelgruvan concession, where permission to mine remains current until 2041.

It is noteworthy that the Woxna mine and processing facility is currently held on a production ready basis and includes full time staff to ensure all permit conditions are met.

At Woxna, the Company is focused on optimization of the processes required to convert low value graphite into high value finished products including lithium-ion battery-ready anode material, followed by qualification of products and processes with various European battery customers.

A key component of this strategy, subject to finance, is the installation of an onsite value-add demonstration plant to produce large volumes of battery-ready graphite anode from flotation product. This demonstration plant will allow strengthened engagement with potential battery customers by providing volumes of anode materials that are adequate to be used within customer test circuits. Additionally, the demonstration plant will enable evaluation of by-products including expandable and micronized graphite, allow market development for all materials produced at Woxna, and optimize technical and economic steps to progress to commercial anode production.

During fiscal year 2019, an engineering study (the "Study") was completed by a leading global engineering firm to support the installation and commissioning of a value-add demonstration plant. Data from the extensive purification and spheronisation test work completed by the Company over past years allowed equipment selection and engineering to for future on-site installation and operation. The Study provides design, installation and cost estimate criteria for a spheronisation and thermal purification process that can deliver approximately 100kg per day of high purity natural graphite anode suitable for lithium ion batteries.

The thermal purification process is designed with a high degree of flexibility. 2018 test work by Leading Edge Materials has produced ultra-high purity graphite up to 99.998% carbon and the process flexibility will allow purity to be tailored to customers' performance and price requirements. Spheronisation test work produced D50 size ranges from 15-25 micron with D10 ranges of 7-12 micron and D90 from 28-35 micron. These ranges meet specifications provided by potential customers and are consistent with anode materials used by all current lithium ion battery manufacturers.

Thermal purification removes the need to transport, handle and dispose of the toxic chemicals often used for commercial natural graphite purification. Today, 100% of natural graphite anode is manufactured in China using chemical leaching which emits waste streams for treatment or disposal. In contrast, the thermal purification process designed for the Woxna demonstration plant requires no chemicals, instead using elevated temperature to remove impurities.

A purification furnace operated by Leading Edge Materials in Sweden will use cost competitive Swedish hydroelectric power. The resulting graphite anode will have a very low carbon dioxide footprint which is anticipated to be attractive to European customers.

The demonstration plant costing incorporates equipment manufacturer quotations, and is designed to be installed on the Leading Edge Materials Woxna mine site, where space, adequate power, skilled personnel and waste management facilities are already in place. Leading Edge Materials has received written confirmation from the Gävleborg Länsstyrelsen ("County Administration Board") that based on the engineered design, the demonstration will conform with current site permits.

Very coarse and very fine flake graphite is not suitable for lithium ion battery applications and may find high value applications in other markets. During the 2019 fiscal year, research was completed using coarser flake material from the Woxna mine to manufacture expandable graphite. Research was completed in Germany with leading consultancy ProGraphite GmbH. ProGraphite used run-of-mine +80 mesh (>180 micron) graphite to test a range of standard process variables and demonstrated that a combination of sulphuric acid and potassium permanganate delivered optimal results, expanding up to 215 ml/g (480 times) when heated to 1000°C.

This degree of expansion is in line with expandable graphite products available in the market today. Additional process optimization and product improvement is anticipated through further research. The methods tested did not require the use of toxic chromium, lead, or bromine-bearing chemicals that are used in the manufacture of some Chinese expandable graphite.

Expandable natural graphite is a critical industrial material, with a significant and growing market. Current market size is estimated to be 70,000 to 80,000 tonnes per year, with approximately 45% of demand coming from manufacture of fire-resistant materials. Other market segments include flexible foils, conductivity additives, and a small volume as a graphene manufacturing pre-cursor. Pricing of expandable graphite is based on flake size, expansion ratio and purity, and lies in the range of US \$2000 - US \$4000 per tonne. Of note, the purity requirements for expandable graphite are substantially lower than battery materials. Leading Edge Materials is now preparing for follow up test work with increased sample size to optimize process conditions and material economics.

Value add applications for fine flake material, of a size below that currently used by the battery anode industry, is now being reviewed. Of most potential appears to be micronized graphite that is in demand for various metallurgical, paint and casting applications.

The Company maintains the Woxna processing plant in an operation ready status and can be run on an as needed basis. Leading Edge Materials is positioning Woxna as the supplier of choice in terms of price, supply security, sustainability and quality to the European lithium ion battery and graphite markets. The production model being implemented aims to displace Chinese produced synthetic graphite with Swedish produced natural graphite products.

# **Technical Report**

In 2014, Leading Edge Materials commissioned Reed Leyton Consulting ("Reed Leyton") to prepare a technical report (the "Technical Report") in accordance with Canadian National Instrument 43-101 ("NI 43-101") for the Kringelgruven ("Kringelgruven"), Gropabo ("Gropabo"), Mattsmyra ("Mattsmyra") and Månsberg ("Månsberg") graphite deposits that form part of the Company's 100% owned Woxna graphite assets. The Technical Report is dated with an effective date of March 24, 2015 and was prepared in accordance with NI 43-101 Standards of Disclosure for Mineral Projects. The Qualified Person responsible for the Technical Report is Mr. Geoff Reed, consulting geologist for Reed Leyton.

# Mineral Resources

Leading Edge Materials' four graphite deposits (Kringelgruvan, Gropabo, Mattsmyra and Månsberg) located along a 40km trend in central Sweden, and are each held on Mining Leases. The partially mined Kringelgruvan deposit lies adjacent to the processing plant, tailings dam and related infrastructure.

Mining Lease	Classification	Tonnes x 1,000,000 (Mt)	Graphite ("Cg") %
Gropabo	Indicated	1.5	8.8
Mattsmyra	Indicated	3.4	8.4
Kringelgruven*	Measured	1.0	10.7
Kringelgruven*	Indicated	1.8	10.7
TOTAL	Measured + Indicated	7.7	9.3

 Table 1: Total Measured and Indicated Mineral Resources at the Woxna Graphite Project, Sweden.

 Effective date March 24, 2015

\*Previously reported, refer to Company's press release September 3, 2013 and November 5, 2013 with an effective date of October 11, 2013

Mining Lease	Classification	Tonnes (Mt)	Cg %
Gropabo	Inferred	0.7	8.7
Mattsmyra	Inferred	1.2	8.4
TOTAL	Inferred	1.9	8.5

# Table 2: Total Inferred Mineral Resources at the Woxna Graphite Project, Sweden. Effective date March 24, 2015

#### Cautionary Note: Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

In addition to the Kringelgruvan, Gropabo, and Mattsmyra, the Månsberg flake graphite deposit contains historic resources. Månsberg will continue to be classified as historic resources.

Readers are encouraged to read the entire Technical Report which is available for download on the Company's website at <u>www.leadingedgematerials.com</u> or under the Company's Profile on SEDAR at <u>www.sedar.com</u>

As a result of the new estimated mineral resources for the Woxna Project, effective March 24, 2015, there is no longer a current PEA for the Woxna Project and the previous PEA released by the Company in 2013 is no longer current or valid as it does not consider these additional mineral resources. The Company cautions that it has no plans to complete a new preliminary economic assessment, a pre-feasibility or feasibility study at this time on the Woxna Project, as a result, there is an increased risk of technical and economic failure for the Woxna Project.

The decision to recommence mining at Woxna in 2014 was not based on a feasibility study of mineral reserves demonstrating economic and technical viability as the Company was of the view that the establishment of mineral reserves was not necessary. There is increased uncertainty and risk of economic and technical failure associated with such production decisions. Mineral resources that are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, socio-political, marketing or other relevant issues.

During fiscal 2014 technical feasibility of the extraction of mineral resources at the Woxna graphite mine was demonstrated, transitioning Leading Edge Materials to the development stage of mining. The Woxna processing facility was refurbished and upgraded with new equipment in the first half of 2014 after which the processing plant commenced operation by feeding stockpiled graphitic material into the plant during July 2014. The plant was operated until the end of 2014 on stockpiled graphitic rock and mining of fresh graphitic rock commenced in Q1 2015. The freshly mined graphitic rock was fed into the Woxna processing facility and operated at normal design capacity producing graphite concentrate inventory. This inventory was stockpiled due to declining global flake graphite demand during 2015. Effective August 1, 2015 the Company determined that the refurbishment and commissioning of the Woxna Graphite Mine was complete. The Woxna graphite mine is not currently operating and will not commence meaningful production until market conditions warrant. The Company is pursuing opportunities to produce higher value specialty products including high purity graphite for lithium ion batteries.

The Company's Board of Directors formed the view that the costs of undertaking a feasibility study for a brownfield project of this type and scale was cost prohibitive. Therefore, the Company determined the most responsible utilization of financial resources was to restart the mine and processing plant to establish itself in the graphite market as quickly as possible. The Company acknowledges an increased uncertainty and risk of economic and technical failure associated with production decisions not supported by pre-feasibility and feasibility studies that are structured for a large greenfield project. With the cost of this brownfield project, the Company believes its financial decision to restart the Woxna mine was justified without the contribution from an extensive series of studies.

It was concluded that the risk of restarting the plant was manageable, demonstrated in the cost effective manner the facility was refurbished and restarted for a low capital cost. Although prices for some graphite products have been on the rise since mid-2016, the Woxna plant remains on a production ready status and can be restarted if graphite products demonstrate consistent price rises to a profitable level.

# Impairment of Property, Plant and Equipment

Management is required to annually assess impairment in respect of property, plant and equipment, where triggering events are defined in IAS 36. In making the assessment, management is required to make judgments on the status of the project and the future plans which relate to the property, plant and equipment. In fiscal 2019 Leading Edge Materials management determined that impairment indicators were present, as defined in IAS 36, for property, plant and equipment and, as a result an impairment test was performed.

The valuation of the Woxna site incorporates the substantial property, plant and equipment that enables processing of 100,000 tonnes per year of graphite bearing ore and the production of approximately 10,000 tonnes per year of graphite concentrate. The process plant lies adjacent to mineral resources on the Kringelgruvan mining lease that allow for more than 10 years of mining at the current build specifications. The site is permitted to operate until 2041.

While there are no physical indications that the state of the property, plant and equipment at the Woxna site has declined, the Woxna mine has not operated since 2015 when a decision was taken by the Board to suspend mining on the basis of low flake graphite prices. Although flake graphite prices have now stabilized, the market is not sufficiently positive for the Board to propose re-opening in the short to medium term without substantial investment in research and capital items to allow value-add graphite products to be manufactured.

In light of the continued suspension of the operations of the Woxna Graphite Mine, large net loss, the additional capital investment to achieve profitable production and the low trading value of the Company's common shares, management concluded there were indications of impairment. The Company does not have sufficient verifiable information to prepare adequately detailed and meaningful calculations of fair value less costs of disposal or value in use. Therefore, the Company applied a value in use method that takes into account the Company's financial position and results of operations and operational issues among other factors in determining an estimated recoverable amount. This method indicated that an impairment provision of \$8,800,000 was appropriate in fiscal 2019 for the carrying value of the Woxna graphite mine and Kringelgruvan mining lease.

### Bihor Sud Cobalt Nickel Project

In 2018 Leading Edge Materials initiated an Exploration Alliance (the "Exploration Alliance") in Romania focused on the discovery and development of lithium ion battery raw materials. The Exploration Alliance has principally been directed towards cobalt mineralization within the Upper Cretaceous Carpathian magmatic belt of the Balkan region, with an eye to identifying other opportunities. The Carpathian is a well mineralized intrusive arc that extends from Western Turkey to Hungary, forming the western end of the Tethyan Metallogenic Belt.

Following technical and commercial due diligence, Leading Edge Materials established a local branch company ("LEM Romania") of which it is the majority shareholder with the right to earn a 90% interest. During 2018 and early 2019, LEM Romania completed various prospecting, sampling and geological activity across an area of 25.5 sq km (2,550 ha) pertaining to the Bihor Sud Prospecting Permit in central western Romania.

Results from the Bihor Sud Prospecting Permit were considered encouraging, and consequently LEM Romania submitted a request that the Romanian Mining Inspectorate ("Agenția Națională pentru Resurse Minerale") publish an Exploration License tender across the prospective areas. Publication of the request for tenders for the Bihor Sud Exploration License occurred during August 2019 and a tender was submitted by LEM Romania in October 2019.

The LEM Romania tender document was declared as compliant by the Romanian Mining Inspectorate and has progressed to further evaluation. The Company was been notified that one other application was received under the competitive tender process. The tender is adjudicated on the basis of technical and financial merit, with substantial credit given to the work completed under the prior Prospecting Permit. Leading Edge Materials, via its subsidiary is the only company to have held a Prospecting Permit over the entire Exploration License application area.

#### Norra Kärr REE Project

Norra Kärr lies in south-central Sweden, 15 km northeast of the township of Gränna and 300 km southwest of the capital Stockholm in mixed forestry and farming land. The project is 100% owned by the Company via an Exploration Licence ("EL") granted August 31, 2009. On March 19, 2018 the Company was advised by Swedish Mines

Inspectorate ("Bergsstaten") that the EL had been extended until August 31, 2019. During August 2019, an application to extend the EL for an additional 3 years was submitted to the Bergsstaten.

Process development testwork and other activity at Norra Kärr remains restricted while permitting of a Mining Lease is resolved.

Norra Kärr is highly significant within Europe and can deliver a secure long-term source of rare earth elements ("REE"), zirconium, hafnium and niobium to European renewable energy and electric vehicle industries. The Norra Kärr REE deposit was first discovered and drill tested by Leading Edge Materials (then Tasman Metals Ltd.) in 2009. Following thick intersections of mineralized rock, the project progressed quickly through drill out, metallurgical testing, resource calculation, Preliminary Economic Assessment ("PEA"), environmental and social studies, and Mining Lease application, culminating in a Pre-Feasibility Study ("PFS") completed in 2015. Relevant supporting documentation can be found on the Company's website.

Norra Kärr is a peralkaline nepheline syenite intrusion which covers 450m x 1,500m in area. The deepest extents of the REE mineralized intrusion have not been delineated but exceed 350m. Mineralogical studies show nearly all REE in the deposit is found within the mineral eudialyte, which is enriched in heavy REEs, in particular dysprosium.

Due to the unique status of Norra Kärr, being one of only two NI43-101 REE resources on mainland Europe, the project was identified as potentially significant for European REE security ("ERECON study"), and well supported by European Commission funding for process research (Horizon2020 funded EURARE study). Subsequent to the publication of the PFS, research by EURARE identified an optimized flowsheet for eudialyte processing, and produced 25kg of REE oxalate from Norra Kärr mineral concentrates. Furthermore, a by-product of high purity nepheline/feldspar was produced which is believed suitable for European ceramic and glass markets.

# Mining Lease

A mining lease for Norra Kärr, is presently under reapplication with the Bergsstaten following a decision by the Swedish Supreme Administrative Court ("SAC"). In 2016, a Swedish governmental review of a Supreme Administrative Court ("SAC") interpretation of the Swedish Mining Act lead the Bergsstaten to reassess four granted Mining Leases. This review included the Company's Norra Kärr Mining Lease. The Company continues to hold exclusive rights to the Norra Kärr project throughout the Mining Lease application process.

The Bergsstaten requested additional information from Leading Edge Materials to complete their reassessment. In mid-January 2018 the Company submitted all required information to Bergsstaten, to complement the original Norra Kärr Mining Lease application documentation submitted in 2013. As part of the review process, the Bergsstaten forwarded this supplementary information to various stakeholders for opinion, including the County Administration Board ("Länsstyrelsen"). The Länsstyrelsen published their response in Sweden June 15, 2018, requesting further information before an opinion on the Norra Kärr Mining Lease application can be delivered.

Subsequently, discussions were held with the Bergsstaten and this additional information was submitted in December 2018. On March 8, 2019, Länsstyrelsen submitted their opinion that more information is required for them to support re-granting of the Norra Kärr Mining Lease. Leading Edge Materials reviewed the comments of the Länsstyrelsen, and has initiated a Natura2000 permit application on Natura2000 areas in the Norra Kärr region which may be influenced by a future mining operation.

The environmental data to support the Natura2000 permit application has largely been collected by the Company as part of previous work conducted including during the PFS study. During the fiscal year, a summary of the Natura2000 assessment was submitted to the Länsstyrelsen for review and public comment. Additional meetings with the Länsstyrelsen are planned to ensure the work of Leading Edge Materials is in line with the agencies expectations.

To grant a Mining Lease in Sweden, conditions include that the Bergsstaten and Länsstyrelsen must be in agreement. In the circumstance that the Bergsstaten and Länsstyrelsen have contrasting opinions, the decision is referred to the Regeringen ("Swedish Government") for adjudication. For reference, when the Norra Kärr Mining Lease was granted in 2013, the Bergsstaten and Länsstyrelsen were aligned in support of the Mining Lease granting, and referral to the Regeringen was not required.

# **Previous Process Development**

Norra Kärr is a zirconium ("Zr") and heavy REE enriched peralkaline nepheline syenite intrusion which covers 450m x 1,500m in area. The deepest extents of the REE mineralized intrusion exceed 350m. The rock units comprising the Norra Kärr intrusion include mineral phases that are comprised of or associated with REEs, Zr, Nb, Y and Hf.

Mineralogical studies show nearly all of the REE in the deposit is found within the mineral eudialyte. Eudialyte at Norra Kärr is relatively rich in REE's compared to most other similar deposits globally, and also contains a very high proportion of high value heavy REE's. A total of 121 exploration holes have been completed since work began in 2009, typically on 50m sections.

Previous process development research on Norra Kärr achieved significant technical milestones. Hydrometallurgical research targeted optimized REE extraction from eudialyte, and developed a new process delivering high REE recovery with a substantial reduction in process water consumed. In addition, this new process provided the opportunity for the efficient recovery of the additional high value metals hafnium and zirconium. Research culminated with the production of approximately 25 kg of mixed REE carbonate produced from a eudialyte concentrate, using a new and optimized hydrometallurgical flowsheet.

Magnetic separation was chosen as the preferred beneficiation pathway, in line with the processing research previously completed by the Company that indicated REE recovery of 86%. A total of approximately 500 kg of eudialyte mineral concentrate was produced from beneficiation of more than 5 tonnes of representative mineralized drill core.

In addition, more than 1 tonne of non-magnetic nepheline/feldspar by-product was produced, which has been delivered to the Company in Sweden. High purity nepheline and feldspar are highly sought for use in ceramic, paint, glass, cement and building products, and the Company shall seek to further optimize material for these markets.

In 2018 the Geological Survey of Finland ("GTK") undertook test work on a bulk sample originally collected under the EURARE Horizon 2020 project. Nine tests were completed where the nepheline/feldspar sample was passed through a second phase of magnetic separation under varying conditions to remove any remaining iron impurity. This "clean-up" stage was highly effective in removing iron, which was lowered to a level consistent with peer materials that are sold within Europe today. Once sub-20 micron material was screened out, iron oxide ("Fe2O3") content of 0.1% was achieved with an iron oxide (ppm) to aluminum (%) ratio ranging from 45 to 50.

EURARE was a 5-year research project co-funded by the European Commission under the Seventh Framework Programme of the European Community for Research, Technological Development and Demonstration Activities (Grant Agreement NMP2-LA-2012-309373). The project completed research on Norra Kärr and other European REE deposits with a final technical meeting in November 2017.

In March 2015, Tasman published a comprehensive Pre-Feasibility Study ("PFS") for the Norra Kärr project. PFS conclusions are supported by very extensive drilling, sampling, process test work and REE consumer discussions. The PFS is a complete study, addressing in addition to mining and processing, all required on-site and off-site infrastructure, land access, reagent and fuel transport and storage, power access, water recycling and purification, waste rock and tailings storage, and final closure. Engineering work focused on applying the lowest risk process solutions using commercially available technology.

A technical report supporting the PFS is available in its entirety, on the SEDAR website at <u>www.sedar.com</u>, under Tasman's SEDAR profile, or the Company's website at <u>www.leadingedgematerials.com</u>. The PFS was prepared by GBM Minerals Engineering Consultants Limited ("GBM"), under the guidance of Michael Short, Principal Consultant for GBM who is a "Qualified Person" in accordance with NI 43-101.

The Mineral Resource and Mineral Reserve estimates were completed by Wardell Armstrong International Limited under the supervision of Greg Moseley and Mark Mounde, who are both "Qualified Persons" in accordance with NI 43-101. The process for the integrated processing plant for the PFS was completed by GBM under the supervision of Thomas Apelt who is a "Qualified Person" in accordance with NI 43-101. The infrastructure design and cost estimation for the PFS was completed by GBM under the supervision of Michael Short who is a "Qualified Person" in accordance with NI 43-101. The infrastructure design and cost estimation for the PFS was completed by GBM under the supervision of Michael Short who is a "Qualified Person" in accordance with NI 43-101. The environmental and social section and the permitting review for the PFS was

completed by Golder Associate Oy under the supervision of Gareth Digges La Touche who is a "Qualified Person" in accordance with NI 43-101.

# **Bergby Lithium Project**

Bergby is a lithium project located in central Sweden, 25km north of the town of Gävle. The claim area (including granted exploration licences and licences that are in the process of being renewed) totals 1,903 hectares with major roads, rail and power supply passing immediately adjacent to the claim boundaries. Mapping and sampling of the Bergby claim in late 2016 and early 2017 located a large number of angular pegmatitic and aplitic lithium-mineralized boulders within an area of 650 metres by 250 metres and demonstrated spodumene and petalite host minerals. Analytical results for the 27 boulder samples averaged 0.85% Li<sub>2</sub>O (lithium oxide) and ranged from 0.08% Li<sub>2</sub>O to 2.3% Li<sub>2</sub>O. The boulders are anomalous in other elements which characterize lithium-cesium-tantalum ("LCT") pegmatites that are regularly associated with lithium deposits.

Bergby has been tested by a total of 33 drill holes to a maximum depth of 131.1m over an approximate 1500m strike length. Mineralization drilled to date lies very close to surface, and extends from the outcrop beneath thin glacial soil cover. Intersections often include elevated levels of tantalum.

Leading Edge Materials, through its Swedish subsidiary Woxna Graphite AB, is a project member of the EIT Raw Materials' LiRef project. The project is validating two conversion processes with the target to develop one robust and flexible process transforming spodumene concentrate into battery grade lithium chemical. It aims to foster the development of a sustainable European value chain. The partners include four mining companies (Savannah Resources, Leading Edge, Keliber and Europena Lithium) as well as Aurora Lithium AB, Outotec, FLSmidth, GTK and Luleå University of Technology.

In support of the LiREF project, during the 2019 fiscal year, Leading Edge Materials has provided bulk sample of lithium mineralized drill core for mineralogical characterization and mineral processing test work. On completion of this work, spodumene concentrate will be used as feedstock for lithium chemical manufacturing applying innovative processes.

Additional lithium targets are being reviewed at Bergby and the surrounding areas.

# **Qualified Person**

The qualified person for the Company's project, Mr. Mark Saxon, B.Sc. Hons (Geology), a Fellow of the Australasian Institute of Mining and Metallurgy, the Company's Interim President and CEO, has reviewed and verified the contents of this document.

# **Financial Information**

The report for the quarter ended January 31, 2020 is expected to be published on or about March 27, 2020.

# **Selected Financial Data**

The following selected financial information is derived from the audited consolidated financial statements of the Company prepared in accordance with IFRS.

	Year Ended October 31,				
	October 31, 2019 \$	October 31, 2018 \$	October 31, 2017 \$		
Operations					
Expenses	(2,393,498)	(4,493,336)	(2,772,709)		
Other items	(8,723,909)	107,051	(147,319)		
Net loss	(11,117,407)	(4,386,285)	(2,920,028)		
Basic and diluted loss per share	(0.12)	(0.05)	(0.03)		
Dividends per share	Nil	Nil	Nil		

	Year Ended October 31,			
	October 31, 2019         October 31, 2018         October 31, 2017           \$         \$         \$			
Balance Sheet				
Working capital	132,551	960,707	3,490,760	
Total assets	24,825,107	35,075,446	37,915,728	
Total non-current liabilities	(7,701,324)	(8,306,212)	(8,330,321)	

The following selected financial information is derived from the unaudited condensed consolidated interim financial statements of the Company prepared in accordance with IFRS.

		Fiscal 2019				Fiscal 2018			
Three Months Ended	October 31, 2019 \$	July 31, 2019 \$	April 30, 2019 \$	January 31, 2019 \$	October 31, 2018 \$	July 31, 2018 \$	April 30, 2018 \$	January 31, 2018 \$	
Operations									
Expenses	(409,297)	(561,771)	(571,749)	(850,681)	(1,151,305)	(697,426)	(665,364)	(1,976,066)	
Other items	(8,799,476)	27,101	46,864	1,602	39,448	(7,721)	32,508	39,641	
Comprehensive loss	(9,208,773)	(534,670)	(524,885)	(849,079)	(1,111,857)	(705,147)	(632,856)	(1,936,425)	
Basic and diluted loss per share	(0.09)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	
Financial Position									
Working capital	132,551	518,129	929,183	1,438,895	960,707	1,369,748	2,041,550	2,698,150	
Total assets	24,825,107	34,088,219	35,359,241	35,766,406	35,075,446	36,132,517	36,139,745	36,902,593	
Total non-current liabilities	(7,701,324)	(7,876,382)	(8,637,726)	(8,515,027)	(8,306,212)	(8,902,310)	(8,157,203)	(8,204,190)	

# **Results of Operations**

Three Months Ended October 31, 2019 Compared to Three Months Ended July 31, 2019

During the three months ended October 31, 2019 ("Q4") the Company reported a net loss of \$9,208,773 compared to a net loss of \$534,670 for the prior three months ended July 31, 2019 ("Q3"), for an increase in loss of \$8,674,103 primarily attributed to recognition of an impairment provision of \$8,800,000 to property, plant and equipment in Q4 to reflect management's assessment. See also "Woxna Graphite Mine and Production Facility - Impairment of Property, Plant and Equipment".

#### Three Months Ended October 31, 2019 Compared to Three Months Ended October 31, 2018

During the three months ended October 31, 2019 ("Q4/2019") the Company reported a net loss of \$9,208,773 compared to a net loss of \$1,111,857 for the three months ended October 31, 2018 ("Q4/2018"), for an increase in loss of \$8,096,916. The increase in loss is mainly attributed to recognition of an impairment provision of \$8,800,000 to property, plant and equipment in Q4/2019.

#### Year Ended October 31, 2019 Compared to Year Ended October 31, 2018

During the year ended October 31, 2019 ("fiscal 2019"), the Company incurred a net loss of \$11,117,407 compared to a loss of \$4,386,285 during the year ended October 31, 2018 ("fiscal 2018"), an increase in loss of \$6,731,122. The increase in loss is primarily attributed to the recognition of an impairment provision of \$8,800,000 to property, plant and equipment in fiscal 2019 partially offset by a \$976,752 decrease in share-based compensation from \$1,216,525 in fiscal 2018 to \$239,773 in fiscal 2019. In addition, excluding share-based compensation, expenses decreased by \$1,123,086, from \$3,276,811 during fiscal 2018 to \$2,153,725 during fiscal 2019.

Specific expenses of note during fiscal 2019 are as follows:

- (i) incurred \$483,998 (2018 \$443,652) for directors and officers compensation. During fiscal 2019 a \$200,000 severance fee was paid to Mr. Way, the Company's former President and CEO, pursuant to the management contract. See also "Related Party Transactions and Balances";
- (ii) incurred \$136,476 (2018 \$278,341) for regulatory fees. During fiscal 2018 the Company incurred significant fees for the application and listing of its common shares on the Nasdaq First North Exchange;

- (iii) incurred a total of \$92,421 (2018 \$102,764) for accounting and administration services of which \$53,100 (2018 \$56,500) was for accounting and administration services provided by Chase Management Ltd. ("Chase"), a private corporation controlled by Mr. DeMare, and \$39,321 (2018 \$46,164) was for bookkeeping and accounting services provided by an independent accountant in Sweden;
- (iv) shareholder costs increased by \$11,264, from \$40,571 during fiscal 2018 to \$51,835 during fiscal 2019 for increased costs for news dissemination;
- (v) incurred a total of \$18,450 (2018 \$215,884) for legal expenses. During fiscal 2018 the Company incurred significant legal fees for the Company's listing of its common shares on the NASDAQ First North Exchange;
- (vi) incurred a total of \$118,406 (2018 \$48,319) for consulting fees. During fiscal 2019 the Company engaged a number of consultants for administrative and financial services;
- (vii) recorded research and development expenses of \$108,599 (2018 \$185,407) The Company has continued to conduct research and development to optimize and improve the purification process;
- (viii) incurred general exploration expenses of \$95,171 (2018 -\$490,322). During fiscal 2018, \$316,912 was for exploration work in Romania and \$173,410 was recorded as the value of the 385,356 common shares issued under the share purchase agreement on the Bihor Sud Project in Romania; and
- (ix) incurred \$57,137 (2018 \$220,358) for travel expenses. During fiscal 2018, Company personnel visited various mineral exploration properties, attended several investment conferences and reviewed research and development projects on the Woxna Graphite Mine; and
- (x) incurred \$7,703 (2018 \$43,839) for investment conference fees. During fiscal 2018 Company personnel attended several investment conferences.

Interest income is primarily generated from cash held on deposit with the Bank of Montreal. During fiscal 2019 the Company reported interest income of \$21,876 compared to \$36,062 during fiscal 2018 due to lower levels of cash held during fiscal 2018. During fiscal 2019 the Company also recorded other income of \$35,273 (2018 - \$27,646) for receipt of government grants in Sweden for research and development in production and marketing of graphite.

During fiscal 2018 the Company reviewed accounts payable balances due to former directors and officers of Tasman. It was agreed that the amounts, totalling \$63,000, were forgiven and, accordingly, the Company has recorded the amount as a recovery.

# Financings

During fiscal 2019 the Company completed a private placement financing of 6,027,855 units at \$0.28 per unit for gross proceeds of \$1,687,799. The net proceeds from this financing have been designated for general corporate requirements. In addition the Company issued 150,000 common shares on the exercise of share options for \$24,000. The net proceeds have been designated for general corporate requirements.

No financings were undertaken during the 2018 period. The Company did, however, issue 400,000 common shares on the exercise of share options for \$156,000.

#### Property, Plant and Equipment

	Vehicles \$	Equipment and Tools \$	Building \$	Manufacturing and Processing Facility \$	Mineral Property Acquisition and Development Costs \$	Total \$
Cost:						
Balance - October 31, 2017 Adjustment to site restoration	81,147	287,018	344,139	7,567,878	9,487,156 (42,742)	17,767,338 (42,742)
Balance - October 31, 2018 Addition Adjustment to site restoration	81,147	287,018	344,139 - -	7,567,878	9,444,414 4,917 (613,692)	17,724,596 4,917 (613,692)
Balance - October 31, 2019	81,147	287,018	344,139	7,567,878	8,835,639	17,115,821

	Vehicles \$	Equipment and Tools \$	Building \$	Manufacturing and Processing Facility \$	Mineral Property Acquisition and Development Costs \$	Total \$
Accumulated Depreciation:						
Balance - October 31, 2017 Depreciation	(53,451) (6,720)	(248,224) (8,079)	(49,484) (22,013)	(110,218)	-	(461,377) (36,812)
Balance - October 31, 2018 Depreciation Impairment	(60,171) (6,718)	(256,303) (3,969)	(71,497) (22,009)	(110,218) - (3,800,000)	(5,000,000)	(498,189) (32,696) (8,800,000)
Balance - October 31, 2019	(66,889)	(260,272)	(93,506)	(3,910,218)	(5,000,000)	(9,330,885)
Carrying Value:						
Balance - October 31, 2018	20,976	30,715	272,642	7,457,660	9,444,414	17,226,407
Balance - October 31, 2019	14,258	26,746	250,633	3,657,660	3,835,639	7,784,936

During fiscal 2019 the Company recorded total additions of \$4,917 (2018 - \$nil) and recognized a credit adjustment to site restoration of \$613,692 (2018 - \$42,742) primarily due to the impact of foreign exchange movements on the site restoration provision.

Exploration and Evaluation Assets

Exploration and Evaluation Assets	Graphite Exploration Concessions \$	Norra Kärr \$	Bergby \$	Other \$	Total \$
Balance at October 31, 2017	41,363	15,482,964	391,523	89,056	16,004,906
Exploration costs					
Consulting	-	52,548	-	-	52,548
Environmental	-	155,389	-	-	155,389
Exploration site	-	-	1,035	-	1,035
Geochemical	-	-	5,345	-	5,345
Geological	-	17,634	9,127	-	26,761
Geophysical	-	-	-	1,231	1,231
Permitting		19,288			19,288
		244,859	15,507	1,231	261,597
Acquisition costs					
Mining rights	6,599	8,583		2,290	17,472
Impairment	(29,159)			(92,577)	(121,736)
Balance at October 31, 2018	18,803	15,736,406	407,030		16,162,239
Exploration costs					
Geological	-	23,258	1,297	-	24,555
Permitting		29,564			29,564
		52,822	1,297		54,119
Acquisition costs					
Mining rights	1,953	9,437	4,942	-	16,351
Recovery	(5,988)				(5,988)
	(4,016)	9,437	4,942		10,363
Balance at October 31, 2019	14,787	15,798,665	413,269		16,226,721

During fiscal 2019 the Company recorded total additions of \$64,482 (2018 - \$279,069) and recognized impairments of \$nil (2018 - \$121,736.)

# **Financial Condition / Capital Resources**

During fiscal 2019 the Company recorded a net loss of \$11,117,407 and, as at October 31, 2019, the Company had an accumulated deficit of \$38,171,731 and working capital of \$132,551. The Company is maintaining its Woxna Graphite Mine on a "production-ready" basis to minimize costs. The Company currently has no significant budget allocated for the Norra Kärr Project. The Company anticipates that it will require additional capital to meet anticipated levels of corporate administration and overheads for the ensuing twelve months, to recommence operations at the Woxna Graphite Mine and/or modernize the plant to produce value added production. The Company is conducting a strategic review which may result in direct funding of Woxna Graphite AB. There are no assurances that the Company will be successful in obtaining funding. In addition the Norra Kärr Property will require significant funds for development. There is no assurance such additional capital will be available to the Company on acceptable terms or at all. In the longer term the recoverability of the carrying value of the Company's long-lived assets is dependent upon the Company's ability to preserve its interest in the underlying mineral property interests, the discovery of economically recoverable reserves, the achievement of profitable operations and the ability of the Company to obtain financing to support its ongoing exploration programs and mining operations. Whether the Company can generate positive cash flow and, ultimately, achieve profitability is uncertain. These uncertainties may cast significant doubt upon the Company's ability to continue as a going concern.

On December 30, 2019 the Company completed a non-brokered private placement of 18 million units at a price of \$0.056 cents per unit for aggregate gross proceeds of \$1,008,000. The funds will be used for the Company's projects, located in Sweden and Romania, and for general working capital and corporate purposes. This may include assessing the next appropriate actions for the Company's wholly owned Swedish subsidiary, Woxna Graphite AB, as recommended by the internal strategic review (announced May 27, 2019).

#### **Off-Balance Sheet Arrangements**

The Company has no off-balance sheet arrangements.

### **Proposed Transactions**

The Company has no proposed transactions.

# **Critical Accounting Estimates**

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenditures during the reporting period. Examples of significant estimates made by management include estimating the fair values of financial instruments, valuation allowances for deferred income tax assets and assumptions used for share-based compensation. Actual results may differ from those estimates.

A detailed summary of all the Company's critical accounting estimates is included in Note 3 to the October 31, 2019 audited annual consolidated financial statements.

#### **Changes in Accounting Policies**

#### (i) IFRS 9 - Financial instruments ("IFRS 9")

The Company adopted all of the requirements of IFRS 9 as of November 1, 2018. IFRS 9 replaces IAS 39 - *Financial Instruments: Recognition and Measurement* ("IAS 39"). IFRS 9 utilizes a revised model for recognition and measurement of financial instruments and a single, forward looking "expected loss" impairment model. Most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward in IFRS 9, so the Company's accounting policy with respect to financial liabilities is unchanged. As a result of the adoption of IFRS 9 management has changed its accounting policy for financial assets retrospectively for assets that continued to be recognized at the date of initial application.

	Original Under IA	S 39	New Under I	FRS 9
	Classification	Carrying Amount \$	Classification	Carrying Amount \$
Cash	Fair value through profit or loss	1,184,420	Fair value through profit or loss	1,184,420
Accounts receivable	Loans and receivables	658	Amortized cost	658
Reclamation deposit Accounts payable and	Loans and receivables	105,540	Amortized cost	105,540
accrued liabilities Property acquisition	Other financial liabilities	(615,756)	Amortized cost	(615,756)
obligation	Other financial liabilities	(578,012)	Amortized cost	(578,012)

As the standard permits on transition to IFRS 9, the Company has not restated prior periods with respect to the new amortized cost measurement for financial assets and impairment requirements.

The adoption of IFRS 9 resulted in no impact to the opening accumulated deficit or to the opening deficit on November 1, 2018.

(ii) IFRS 15 - Revenue from Contracts with Customers ("IFRS 15")

The Company adopted all of the requirements of IFRS 15 as of Novmeber 1, 2018. This new accounting pronouncement establishes principles for reporting the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers.

There was no impact on the Company's consolidated financial statements upon the adoption of IFRS 15, as the Company does not have any revenue from contracts with customers.

A detailed summary of all the Company's significant accounting policies and accounting standards and interpretations issued but not yet effective, is included in Note 3 to the October 31, 2019 audited annual consolidated financial statements.

#### **Related Party Transactions and Balances**

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. The Company has determined that key management personnel consists of members of the Company's current and former Board of Directors and its executive officers.

(a) During fiscal 2019 and 2018 the following compensation was incurred:

	2019 \$	2018 \$
Management fees - Mr. Way, former President, CEO and director <sup>(1)</sup>	49,998	199,992
Termination fee - Mr. Way <sup>(1)</sup>	200,000	-
Consulting fees - Mr. Hudson, Chairman and director	30,000	30,000
Consulting fees - Mr. Kozlowski, director	30,000	30,000
Consulting fees - Mr. DeMare, CFO, Corporate Secretary and former director <sup>(3)</sup>	30,000	30,000
Consulting fees - Mr. Saxon, interim CEO, interim President and director <sup>(2)</sup>	144,000	144,000
Consulting fees - Ms. Bermudez, former Corporate Secretary <sup>(4)</sup>	-	9,660
Share-based compensation - Mr. Way	-	172,000
Share-based compensation - Mr. Hudson	18,000	172,000
Share-based compensation - Mr. DeMare	12,000	118,250
Share-based compensation - Mr. Saxon	24,000	172,000
Share-based compensation - Mr. Kozlowski	30,000	172,000
Share-based compensation - Ms. Bermudez	-	86,000
	567,998	1,335,902

- (1) Mr. Way resigned as CEO, President and a director on January 31, 2019 and Mr. Saxon was appointed interim CEO and President. The \$200,000 was paid to Mr. Way pursuant to the terms of his employment agreement.
- (2) Mr. Saxon received \$30,000 (2018 \$30,000) for director fees and \$114,000 (2018 \$114,000) for being a member of the technical advisory committee. On January 31, 2019, Mr. Saxon was appointed interim CEO and President.
- (3) Mr. DeMare resigned as a director on December 15, 2017 but remains as the Company's CFO and was appointed as Corporate Secretary on April 30, 2018.
- (4) Ms. Bermudez resigned as corporate secretary on April 30, 2018.

As at October 31, 2019, \$91,500 (2018 - \$31,500) remained unpaid.

(b) During fiscal 2019 the Company incurred \$53,100 (2018 - \$56,500) to Chase, for accounting and administrative services provided by Chase personnel, exclusive of Mr. DeMare, and \$4,020 (2018 - \$4,020) for rent. As at October 31, 2019, \$335 (2018 - \$4,170) remained unpaid.

During fiscal 2018 the Company also recorded \$53,750 for share-based compensation for share options granted to Chase.

### **Outstanding Share Data**

The Company's authorized share capital is unlimited common shares without par value. As at January 21, 2020, there were 113,667,391 issued and outstanding common shares, 27,754,219 warrants outstanding with exercise prices ranging from \$0.10 to \$0.80 per share and 7,163,109 share options outstanding with exercise prices ranging from \$0.165 to \$0.64 per share.