



NANO ONE MATERIALS CORP.
(formerly Dundarave Resources Inc.)

MANAGEMENT DISCUSSION AND ANALYSIS
FOR THE PERIOD ENDED SEPTEMBER 30, 2015

MANAGEMENT DISCUSSION AND ANALYSIS

This Management Discussion and Analysis (“MD&A”) provides a detailed analysis of the business of Nano One Materials Corp. (“Nano One” or the “Company”) for the nine month period ended September 30, 2015, in comparison to corresponding periods. This MD&A should be read in conjunction with the unaudited condensed interim financial statements for the nine months ended September 30, 2015 and 2014, and the related notes contained therein which have been prepared under International Financial Reporting Standards (“IFRS”). The following should also be read in conjunction with the audited financial statements of Perfect Lithium Corp, and the related notes contained therein, and all other disclosure documents of the Company.

Additional information relevant to the Company’s activities can be found on SEDAR at www.sedar.com and the Company’s website at www.nanoone.ca. All dollar amounts included therein and in the following MD&A are in Canadian dollars, the reporting and functional currency of the Company, except where noted. The MD&A contains information up to and including November 23, 2015 (the “Report Date”).

FORWARD LOOKING STATEMENTS

Certain statements contained in this MD&A may constitute “forward-looking statements”. Such term is defined in applicable securities laws. The forward-looking information includes, without limitation, the success of research and development activities and other similar statements concerning anticipated future events, conditions or results that are not historical facts. These statements reflect management’s current estimates, beliefs, intentions and expectations; they are not guarantees of future performance. The Company cautions that all forward-looking information is inherently uncertain and that actual performance may be affected by a number of material factors, many of which are beyond the Company’s control. Such factors include, among others, risks relating to research and development; the Company’s intellectual property applications being approved, the Company’s ability to protect its proprietary rights from unauthorized use or disclosure, the ability of the Company to obtain additional financing; the Company’s limited operating history; the need to comply with environmental and governmental regulations; fluctuations in currency exchange rates; operating hazards and risks; competition; and other risks and uncertainties. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Accordingly, actual future events, conditions and results may differ materially from the estimates, beliefs, intentions and expectations expressed or implied in the forward-looking information. All statements are made as of the Report Date and, except as required by law, the Company is under no obligation to update or alter any forward-looking information.

OVERVIEW

The Company was incorporated on November 5, 1987. On March 5, 2015, Nano One completed a business combination with Perfect Lithium Corp. (“PLC”) whereby it acquired all the issued and outstanding shares of PLC in exchange for issuing Company shares to the former shareholders of PLC. As a result, the Company is now engaged in developing novel, scalable and low-cost processing technology for the production of high performance nano-structured materials. Nano One mission is to establish its know-how, intellectual property, patented and patent-pending technology as a leading platform for the global production of a new generation of nanostructured composite materials. Nano One is building a portfolio of intellectual property and technology “know-how” for applications in markets that include energy storage, specialty ceramics, pharmaceutical, semiconductors, aerospace, dental, catalysts and communications. The technology simplifies the assembly of complex formulations of organic and inorganic ceramic powders and is suited to growth markets where the commercialization of advanced materials is inhibited by costly and entrenched industrial fabrication methods. Nano One’s first market is lithium-ion cathode materials in the energy storage sector, where its advantageous technology can bring sustainable differentiation and value to early adopters.

OVERALL PERFORMANCE

Corporate Highlights:

As at the Report Date, the Company:

- (a) completed a business combination with PLC. (the "Transaction"). Pursuant to the Transaction, the Company, through its wholly-owned subsidiary, 1019491 B.C. Ltd., acquired 100% of the issued and outstanding shares of PLC in exchange for 27,425,650 Post Consolidation Shares (as defined below). All outstanding warrants of PLC were exchanged for the Company's warrants to purchase Post Consolidation Shares with appropriate adjustments to the number and price of shares that may be acquired upon exercise thereof to reflect the Exchange Ratio. All stock options of the Company and PLC issued prior to the Agreement were cancelled upon closing of the Transaction. The Company granted 2,825,000 options to the new management of the Company upon completion of the Transaction. Immediately prior to the closing of the Transaction, the Company consolidated all of its issued and outstanding common shares on the basis of two (2) existing common shares for one (1) new common share (a "Post Consolidation Share") and one (1) share purchase warrant. Each warrant is exercisable until March 5, 2016 to acquire one Post-Consolidation Share at an exercise price of \$0.40 per whole Post-Consolidation Share and thereafter until March 5, 2017 to acquire one half of one Post-Consolidation Share at an exercise price of \$0.50 per whole Post-Consolidation Share. In connection with the Transaction, the Company completed a concurrent financing (the "Financing") of 12,000,000 units at \$0.25 per unit for gross proceeds of \$3,000,000. Each unit consists of one Post Consolidation Share and one-half of a share purchase warrant. Each whole warrant is exercisable into one Post Consolidation Share for a period of two (2) years at an exercise price of \$0.40 per share during the first year from the Closing Date and at an exercise price of \$0.50 per share during the second year from the Closing Date. The Company engaged Mackie Research Capital Corporation ("Mackie") to act as the lead agent to the Private Placement. As consideration, the Company paid to Mackie and several other agents a commission of 6.5% of the proceeds of the Financing in cash and 6.5% of the number of units sold in warrants. The Company engaged Mackie to act as an advisor and paid Mackie a work fee of \$20,000 and a finder's fee in the amount of 225,000 Post Consolidation Shares on closing of the Transaction.
- (b) entered into an agreement with NRC-IRAP whereby NRC-IRAP will fund a non-repayable contribution of up to \$250,000. IRAP requires that the proceeds from the grant be applied towards the optimization and design of a demonstrated pilot facility. Under the terms of the agreement, NRC-IRAP has agreed to reimburse the Company for 80% of salaries paid to Company employees and 50% of supported contractor fees involved in this pilot facility.
- (c) and its wholly-owned subsidiary, PLC, amalgamated and continued under the name of Nano One Materials Corp.
- (d) was granted two (2) patents by the U.S. Patent and Trademark Office ("USPTO"). These consist of U.S. Patent No. 9,136,534 entitled "Complexometric Precursor Formulation Methodology For Industrial Production Of High Performance Fine And Ultrafine Powders And Nanopowders For Specialized Applications" and U.S. Patent No. 9,159,999 entitled "Complexometric Precursor Formulation Methodology For Industrial Production Of Fine And Ultrafine Powders And Nanopowders Of Lithium Metal Oxides For Battery Applications"
- (e) retained the services of Steven Feldman to assist with its investor relations activities. In consideration of the services to be provided, the Company will pay an initial fee of \$7,500 and grant stock options to purchase 125,000 common shares, exercisable at a price of \$0.25 for a period of 5 years. The agreement is subject to review whereby Mr. Feldman will be paid a combination of cash and stock options to be determined from time to time.
- (f) appointed Stephen Campbell Ph. D. to the position of Principal Scientist. Dr. Campbell will be working with Nano One's multi-disciplinary team of scientists, engineers, industrial partners, and academic

collaborators, while guiding the development of Nano One's patented technologies and nanostructured materials for commercial applications in lithium ion batteries and other market opportunities.

(g) listed its common shares on the Frankfurt Stock Exchange trading under the symbol LBMB.

(h) received a completed study on the conceptual design and cost estimate for a commercial facility that produces lithium ion battery cathode materials. The study was developed and delivered to Nano One by BC Research Inc. ("BCRI") and its parent NORAM Engineering and Constructors Ltd. ("NORAM"). As reported on April 16, 2015, this study was launched and had the financial support of Canada's National Research Council Industrial Research Assistance Program ("NRC-IRAP"). Outcomes of this study included process flow diagrams (PFD), a versatile chemical stream model and cost estimates of equipment, installation and operation of a full commercial system operating at approximately 10,000 kg/day. The study confirms Nano One's confidence in its scale-up plans and provides opportunities to grow its portfolio of intellectual property. These innovations are part of a framework to reduce costs through feedstock management, equipment selection, recycling, utilities optimization, water handling and effluent disposal. The report also provides guidelines for developing a pilot plant with critical steps and scale identified for the purposes of demonstrating the process.

The Technology

Nano One's innovative processing technology can be used to produce materials used in a wide range of markets. Nano One's first addressable market is cathode materials that are used to store and discharge energy in lithium-ion rechargeable batteries. There is growing demand in the lithium-ion battery market for more cost effective and higher performance energy storage solutions. Nano One is well positioned to address these needs with its patent-pending technology and sees growth potential for the technology in many other materials markets that include energy storage, dental, catalysts, specialty ceramics, pharmaceutical, semiconductors, agriculture, aerospace and communications.

Nano One has developed a new method of producing high performance cathode materials, which uses equipment and simple methods that are known to scale in a wide range of industrial applications. The process can produce longer lasting composite materials using lower cost feedstock and simpler processing.

With regards to performance, Nano One materials have been assessed by Nano One, by Canada's National Research Council ("NRC") and by several key undisclosed materials producers. Specifically, NRC measured electrochemical performance of LNMC out to a thousand (1,000) cycles and results were similar to those measured by Nano One and another undisclosed group. NRC also tested a comparable LNMC reference material prepared by a leader in battery material science and found that Nano One material performed with approximately 20% greater capacity than the reference material. Both the Nano One and NRC results show reasonable energy capacity fading to 85% after 500 1-hour charge-discharge cycles.

With regards to raw material costs, Nano One's liquid phase reaction is tolerant of raw material impurities and irregularities, enabling the use of lower grade feedstock (98-99% purity) instead of battery grade (99.9%) for an estimated ~30% reduction in terms of dollars (\$) per kilogram (kg).

With regards to processing costs, Nano One believes it can reduce the number of manufacturing steps by 75% and reduce throughput from several days to less than a day, when compared with state of the art methodologies described in patents and literature, such as solid state, hydrothermal, co-precipitation, sol-gel, spray pyrolysis and deposition methods. The overall savings in process costs is projected to be ~40% in terms of dollars (\$) per kilogram (kg). Furthermore, improvements to the nanostructure are showing 200-300% longer lasting material that can charge faster or store more energy. Nano One believes the product of these improvements can deliver a 50% reduction in the cost of storing energy in terms of dollars (\$) per kilowatt-hour (kWh).

The process consists of three (3) stages, and the major innovations lie in the first (1st) stage where a special mode of combining reactants controls crystal nucleation and growth of particles. Nucleation is the self-assembly of molecules into an organized structure. The desired nano-scale or superfine structure is formed

in the first (1st) stage of the production cycle and eliminates many steps common to the dominant industrial processes.

In the first (1st) stage, salts or other reactants are added to an aqueous (water-based) or other solution located within a proprietary liquid phase reactor system. Nucleation occurs upon the presentation of feedstock and takes place rapidly. The proprietary system allows for control of structural growth and reaction kinetics, with the source materials provided either from bulk or from a continuous flow preparation process. The process is suitable for operation at mild temperatures and atmospheric pressures.

This reactor stage avoids grinding, milling, classification, supercritical conditions, filtering, separation and many other steps that are used in existing industrial methods. Reactants need not be high purity, as less expensive technical grade (as opposed to battery grade) chemicals can be used to achieve a quality output. Nano One's system is less sensitive to impurities and irregularities than other known manufacturing methods and can accommodate, for example, carbonates, hydroxides, and acetates of lithium, cobalt, nickel and manganese graded at 98% and 99% purity. These materials are less costly and more widely available than battery grade feedstock (99.9% and purer) that is commonly used to prepare cathode materials. The reactor operates at mild temperatures and atmospheric pressures, and can be sealed for inert or other environments, allowing for a much safer and simpler laboratory environment. The reactor stage also avoids complexing agents, surfactants, templates, and emulsifiers that are categories of chemicals typically used to initiate nucleation and control growth of structures. Nano One avoids these chemicals and is therefore able to deliver the desired structure using simpler methods and pass them on to the second (2nd) stage of drying and the third (3rd) stage of firing in a furnace.

In the second (2nd) stage, the reactor liquids are passed to an industrial drying system such as a spraying, freezing, evaporating, microwaving or other system.

In the third (3rd) stage, dried powders are fired in a conventional furnace such as a rotary kiln, fluidized bed, plasma or other type of furnace. This final stage is known as calcination, where the dried materials are heated to 800-900°C in either an atmospheric or inert environment and are thermally decomposed into, for instance, lithium manganese oxide, steam, ammonia and/or carbon dioxide. The formation of the underlying nano-structure is completed during calcination and the resulting powder is ready for assembly into a battery cell or other application.

The underlying structure and morphology of the materials is preserved through a wide range of thermal processing steps, eliminating the need for long and repeated firings and indicative of a robust and long lasting material. The process produces materials with stable phase composition and high porosity, but which is configurable to meet a variety of density requirements.

The presence of nano-structures early in the process and prior to calcination simplifies processing and is advantageous for performance, throughput and scale-up. Characterization of the materials by electron microscope and x-ray characterizes the size, the composition and the kind of structure, providing evidence of a robust structure that withstands the rigours of drying and calcination and maintains the integrity of its advantageous structure through thousands of charge cycles.

This innovative approach can reduce the complexity and cost of materials production, through lower cost feedstock and fewer steps, while providing nanostructured materials with superior performance characteristics. The reactor, drying and calcination stages can be easily integrated to enable materials to flow from start to finish in a continuous manner and under controlled environmental conditions. In this way, Nano One's system can be configured for many different composite materials and Nano One believes the three (3) stage process can be rapidly scaled and configured for high volume production.

Typically, synthesis of nano-materials at the benchscale are performed in small quantities anywhere from milligrams to grams of material. Subsequent scale-up from these small quantities often leads to detrimental changes in thermodynamics (heat, temperature, energy, work) and reaction kinetics (reaction rates and chemical change). Nano One recognizes that synthesis of materials must begin at a larger scale where the properties of the system are much closer to production conditions. For this reason, Nano One designed a 6-

liter bench scale reactor that is capable of producing up to 150 grams per hour (150 g/hr) or 3 kilograms per day (3 kg/day), with drying and firing stages easily scaled to match. At this scale, there is sufficient enough volume to emulate the thermodynamic and reaction kinetics expected in pilot and full-scale production.

The Proprietary Protection

Five (5) patent applications were submitted to the United States Patent and Trademark Office in March 2013, covering processes, apparatus, applications and formulations. One (1) provisional patent application was filed in the United States in November 2013 and followed with one (1) non-provisional patent filed in the United States in March of 2014 for a total of seven (7) patents pending in the United States. These patents were also filed in five (5) applications under the Patent Cooperation Treaty for worldwide coverage and one (1) Taiwanese application.

As at the Report date, U.S. Patent and Trademark Office granted and issued U.S. Patent No. 9,136,534 entitled “Complexometric Precursor Formulation Methodology For Industrial Production Of High Performance Fine And Ultrafine Powders And Nanopowders For Specialized Applications” and U.S. Patent No. 9,159,999 entitled “Complexometric Precursor Formulation Methodology For Industrial Production Of Fine And Ultrafine Powders And Nanopowders Of Lithium Metal Oxides For Battery Applications”.

Patent No. 9,136,534 is directed to a revolutionary method for forming powders particularly well suited for use as a lithium ion cathode material in next generation lithium ion batteries. Patent No. 9,159,999 is specific to the formation of lithium metal oxides using the proprietary methods described in Nano One’s U.S. Patent No. 9,136,534.

The two patents were issued in about two and a half years, which was sooner than expected giving Nano One a broad set of claims that have undergone only minor revisions. This indicates a technological edge with freedom to operate and gives Nano One fertile ground to expand IP protection. Early recognition of the novelty of the Complexometric Methodology validates the unique reaction chemistry developed at Nano One and positions Nano One as an emerging leader in advanced cathode material innovation. The granted patents also move Nano One closer to strategic objectives of partnering with leading manufacturers to create commercialize its technology for battery.

Related applications are pending throughout the world with recent filings in Canada, the United States, Europe, China, Japan and Korea. Nano One has established an early IP position with patents being issued and allowed, across the globe, that describe the reactor, the process, the lithium metal oxides and a battery incorporating these lithium metal oxides for the cathode.

The intellectual property was developed and is wholly owned by Nano One. Nano One may file additional patents at a later date to further strengthen its intellectual property and technology going forward, although no assurances can be given that it will be successful in such endeavors. Nano One seeks to limit disclosure of its intellectual property by requiring employees, consultants and partners with access to the technology to execute confidentiality agreements and non-competition agreements and by restricting access to PLC’s intellectual property and technology.

Despite Nano One’s efforts to protect its intellectual property and technology, unauthorized parties may attempt to copy aspects of its technology or to obtain and use information that Nano One regards as proprietary. The laws of many countries do not protect proprietary rights to the same extent as the laws of the United States or Canada. Litigation may be necessary in the future to enforce Nano One’s intellectual property rights, to protect Nano One’s trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. Any such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on Nano One’s business, operating results and financial condition. There can be no assurance that Nano One’s means of protecting its proprietary rights will be adequate or that competitors will not independently develop similar services or products. Any failure by Nano One to adequately protect its intellectual property could have a material adverse effect on its business, operating results and financial condition.

Complexometric Precursor Formulation Methodology for Industrial Production of High Performance Fine and Ultrafine Powders and Nanopowders for Specialized Applications					
Matter No.	Country	Application No.	Filing Date	Publication Date	Publication No.
16074.0002	US	13/839,374	03/15/2013	9/15/2015	9,136,534
16074.02WO	PCT	PCT/US2014/027056	03/14/2014	09/25/14	WO2014/152193
16074.02EP	EPO	14767613.4	10/15/2015		
16074.02CA	CA	2,906,009	3/14/2014		

Reactor Vessel for Complexecelle Formation					
Matter No.	Country	Application No.	Filing Date	Publication Date	Publication No.
16074.0003	US	13/839,110	03/15/2013	09/18/2014	20140271413
16074.03WO	PCT	PCT/US2014/027094	03/14/2014	09/18/2014	WO2014140874
16074.03EP	EP				
16074.03CA	CA	2,905,525	9/11/2015		

Complexometric Precursor Formulation Methodology for Industrial Production of Fine and Ultrafine Powders and Nanopowders for Lithium Metal Oxides for Battery Application					
Matter No.	Country	Application No.	Filing Date	Publication Date	Publication No.
16074.0004	US	13/842,278	03/15/2013	09/18/2014	20140272568
16074.04WO	PCT	PCT/US2014/027125	03/15/2014	09/25/2014	WO2014/152253
16074.04CA	CA	2,905,962	3/14/2014		
16074.04JP	JP		9/14/2015		
16074.04EP	EP				
16074.04KR	KR				

Complexometric Precursor Formulation Methodology for Industrial Production of Fine and Ultrafine Powders and Nanopowders of Layered Lithium Mixed Metal Oxides for Battery Applications					
Matter No.	Country	Application No.	Filing Date	Publication Date	Publication No.
16074.0005	US	13/842,978	03/15/2014	09/18/2014	20140272580
16074.05WO	PCT	PCT/IB2014/000810	03/14/2014	01/08.2015	WO2014140806
16074.05TW	Taiwan	103109198	03/14/2014	01/16/2015	TW201503474
16074.0009	US	14/215,657	03/17/2014		
16074.05CA	CA	2,905,919	9/11/2015		
16074.05CN	CN				
16074.05EP	EP				
16074.05JP	JP				
16074.05KR	KR				
16074.05TW	TW				

Complexometric Precursor Formulation Methodology for Industrial Production of Fine and Ultrafine Powders and Nanopowders for Lithium Metal Oxides for Battery Applications					
Matter No.	Country	Application No.	Filing Date	Publication Date	Publication No.
16074.0006	US	13/842,539	03/15/2013	10/13/2015	9,159,999
16074.06WO	PCT	PCT/US2014/027248	03/15/2014	09/25/2014	WO2014152356
16074.06DIV	US	14/854,667	9/15/2015		
16074.05CA	CA	2,905,984	3/15/2014		
16074.05EP	EP				

Complexometric Precursor Formulation and Methodology for Industrial Production of Fine and Ultrafine Powders and Nanopowders of Layered Lithium Mixed Metal Oxides for Battery Applications					
Matter No.	Country	Application No.	Filing Date	Publication Date	Publication No.
16074.0008	US (provisional)	61/902,915	11/12/2013		

Current Activities

Nano One is optimizing its process and its materials with the goal of demonstrating long lasting high energy density batteries in 2015 and scalable pilot production of its materials in 2016. Recent innovations to Nano One’s process have been developed to augment manufacturing efficiencies. These achievements have led to improved structural properties of the materials with higher densities. Electrochemical analyses of the materials in batteries has been underway at Nano One’s Burnaby facility since April and are showing favourable capacity and charging in larger format cells.

Nano One is focusing its efforts on strategically important, next generation cathode materials, such as lithium manganese rich lithium nickel manganese cobalt oxide (LMR-NMC or HE-NMC, see detail below), nickel rich lithium nickel manganese cobalt oxide and high voltage nickel manganese spinel. The current round of battery tests use large format pouch cells that hold approximately 100 mg of HE-NMC, and efforts are under way to test materials in smaller format coin cell tests. HE-NMC materials have shown commercially viable reversible capacity up to 240 mAh/g (milliamp-hours per gram), which is in line with industry targets. Longevity is measured cycle to cycle and Nano One has seen about 0.03% capacity fade per cycle when charging and discharging once per hour. This is up to 10 times longer lasting than benchmarks used by key players in the battery space.

Nano One’s bench-scale apparatus is considered very productive at about 100 grams per hour and will require a modest scale-up, in the neighborhood of tenfold, to demonstrate pilot production. Commercialization partner, BC Research and NORAM, have completed a study on conceptual design of a full scale commercial facility and efforts are underway to scope and design a 10 kg/day pilot facility. Nano One is confident that its technology is scalable for piloting and full production.

Through collaboration with 4D LABS at Simon Fraser University, Nano One is using a number of analytical tools to characterize the structural properties, chemical composition, porosity, surface area and mass of Nano One’s materials. Electron microscopy is showing unique structures with beneficial shape, size and distribution. X-ray analysis of the HE-NMC material shows a high degree of crystallinity and layered structures that support efficient transport of lithium-ions in and out of the structure.

Nano One’s battery testing program began with half-cells, where it is useful to evaluate cathode materials against pure lithium anodes. Nano One has identified a number of battery materials to take to the next level of evaluation in full-cells, where the cathode is paired with a graphite anode, as it is in commercial batteries. Nano One will evaluate these materials in battery tests and anticipates that third party testing will follow, with known battery industry players.

FUTURE PLANS

Beyond the current period year, Nano One will continue to focus on the validation of four (4) key areas of uncertainty: (i) performance; (ii) novelty; (iii) scalability; and (iv) cost. Nano One’s granted patents have de-risked novelty and the completed conceptual design of a full-scale commercial facility has substantially de-risked scalability and cost. Work on electrochemical performance is on-going and it is expected that performance uncertainties will be de-risked early in 2016.

Nano One intends to continue optimizing its process in anticipation of demonstrating the synthesis of materials in pilot production and in pilot batteries. Nano One intends to ramp up its test cell assembly and

electrochemical characterization capabilities to meet internal testing demand. Nano One will also continue the evaluation of other next generation lithium-ion battery materials as dictated by strategic demand.

The commercial design study confirms Nano One's confidence in its scale-up plans and provides opportunities to grow its portfolio of intellectual property. These innovations are part of a framework to reduce costs through feedstock management, equipment selection, recycling, utilities optimization, water handling and effluent disposal. The report also provides guidelines for developing a pilot plant with critical steps and scale identified for the purposes of demonstrating the process.

Nano One will continue to work collaboratively with BCRI and NORAM in scoping, designing, constructing and demonstrating a pilot plant that can be used confidently for the design of a commercial scale plant. Nano One intends to leverage progress on these plans and approach potential strategic interests and key market pull players to collaborate as partners in the demonstration pilot.

SUMMARY OF QUARTERLY RESULTS

The following table sets out selected quarterly financial information derived from the Company's unaudited condensed interim financial statements, for each of the eight recently completed quarters, which have been prepared in accordance with IFRS. This 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 expenses during the reporting period. Significant areas requiring the use of management estimates relate to the deferral and valuation of exploration expenditures. Actual results could differ from these estimates.

Period	Interest and other items \$	General admin \$	Share-based payment \$	Loss for the period \$	Net loss per share, basic and fully diluted \$
September 30, 2015	27	(299,021)	(177,549)	(476,543)	(0.01)
June 30, 2015	1,861	(300,889)	(25,295)	(324,323)	(0.01)
March 31, 2015	(2,556,452)	(268,268)	(375,243)	(3,199,963)	(0.10)
December 31, 2014	-	(219,221)	-	(219,221)	(0.008)
September 30, 2014	316	(169,678)	-	(169,362)	(0.006)
June 30, 2014	1,751	(265,885)	-	(264,134)	(0.01)
March 31, 2014	-	(283,355)	-	(283,355)	(0.01)
December 31, 2013	1,227	(219,557)	-	(218,330)	(0.008)

RESULTS OF OPERATIONS

Nine Months Ended September 30, 2015 Compared To Nine Months Ended September 30, 2014

Loss and comprehensive loss for the period ended September 30, 2015 increased by \$3,283,978. The change was primarily due to the following:

- General and administrative costs of \$868,178 (2014 - \$718,918) increasing as follows:
 - NRC-IRAP grant of \$150,523 was claimed by the Company during the period ending September 30, 2015 and was a reduction to research and development costs; and
 - Consulting, office and general, professional fees and salary and benefits increased by \$28,125, \$19,501, \$54,937 and \$114,014, respectively, due to the work related to the reverse takeover with the Company and PLC, due to the increase in Company activity resulting in hiring additional staff and consultants upon the completion of the RTO and legal work related to the patent applications.

- The transaction costs relating to the RTO plus the aggregate of the fair value of the consideration paid and the net liabilities acquired has been recognized as listing expenses of \$2,556,808, in the statement of loss and comprehensive loss.
- The Company recorded a non-cash share-based payment of \$578,087.

Three Months Ended September 30, 2015 Compared To Three Months Ended September 30, 2014

Loss and comprehensive loss for the period ended September 30, 2015 increased by \$307,181. The change was primarily due to the following:

- General and administrative costs of \$299,021 (2014 - \$169,678) increasing as follows:
 - NRC-IRAP grant of \$44,580 was claimed by the Company during the period ending September 30, 2015 and was a reduction to research and development costs;
 - Filing and regulatory fees decreased due to the receipt of a refund received in relation to transfer agent filing fees.
 - Rent increased by \$2,500 in relations to the corporate office;
 - Professional fees increased by \$20,793 due to legal work performed in relations to the patent applications and tax filings prepared in connection with the RTO and amalgamation of Perfect Lithium and the Company;
 - Research and development increased by \$37,973 due to the commencement of a commercial facility design study;
 - Office and general, and salary and benefits increased by 4,639, and \$63,852, respectively, due to the increase in Company activity resulting in hiring additional staff and consultants; and
 - The Company recorded a non-cash share-based payment of \$177,549.

Research and development expense for the period ended September 30, 2015 Compared to September 30, 2014:

	September 30, 2015	September 30, 2014
Analytical services	\$ 20,657	\$ 10,011
Consulting	104,156	174,525
Depreciation	32,141	31,495
Government grant recovery	(150,523)	(22,298)
Lab rent	25,000	53,262
Office and lab expense	58,509	55,867
Salaries and benefits related to R&D	169,713	66,179
	\$ 259,653	\$ 369,041

LIQUIDITY

The Company started 2015 with a working capital of \$56,543, and as at September 30, 2015, the Company had working capital of \$1,749,852. The increase in the working capital of \$1,693,309 was primarily due to:

- completion of a private placement for net proceeds of \$2,768,828;
- total of \$150,523 claimed by the Company in relations to the NRC-IRAP grant;
- Finders' fee paid in connection with the private placement of \$195,000
- Net liabilities assumed in connection with the RTO of \$179,588; and
- general and administrative costs of \$868,178.

Recent developments in the capital markets have restricted access to debt and equity financing for many companies. As the Company has no significant income, cash balances will continue to decline as the Company utilizes these funds to conduct its operations, unless replenished by capital fundraising.

	September 30, 2015	December 31, 2014
Working capital	\$ 1,749,852	\$ 56,543
Deficit	(6,910,979)	(2,949,590)

CAPITAL RESOURCES

The Company has not yet realized profitable operations and it has relied on non-operational sources of financing to fund operations. The ability of the Company to achieve its objectives, meet its ongoing obligations and recover its investments in granted and pending patents, and other assets will depend on management's ability to successfully execute its business plan, achieve profitable operations and obtain additional financing, if or when required. There is no assurance that these initiatives will be successful.

RELATED PARTY DISCLOSURES

Key management personnel are the persons responsible for the planning, directing and controlling the activities of the Company and includes both executive and non-executive directors, and entities controlled by such persons. The Company considers all Directors and Officers of the Company to be key management personnel.

The following transactions were carried out with related parties:

(a) Purchases of services

	September 30, 2015 \$	September 30, 2014 \$
Ellis Street Consulting, an entity controlled by John Lando, an executive director, for consulting fees	40,000	45,000
Bedrock Capital Corp., an entity controlled by Paul Matysek, an executive director, for consulting fees	30,000	-
	70,000	45,000

(b) Key management compensation

Key management includes directors (executive and non-executive), and officers of the Company. The compensation paid or payable to key management for employee services is shown below:

	September 30, 2015 \$	September 30, 2014 \$
Salary and benefits to the CFO	63,900	-
Salary and benefits to the President and Director	23,738	-
Salary and benefits to the CEO and Director	106,692	50,000
Share-based payments to officers and directors	473,017	-
	667,347	50,000

OUTSTANDING SHARE DATA

The authorized share capital of the Company is unlimited common shares, without par value. As at the Report Date, there were 44,793,599 (December 31, 2014 – 27,425,640) common shares outstanding.

As at the Report Date, the following stock options were outstanding:

Number of Options	Exercise Price	Expiry Date
100,000	\$0.23	June 10, 2020
2,825,000	\$0.25	March 5, 2020
250,000	\$0.25	September 15, 2020
200,000	\$0.25	November 1, 2020
3,375,000		

As at the Report Date, the following warrants were outstanding:

	Exercise price \$	Expiry date
5,142,949	0.40*	March 5, 2017
6,780,000	0.40**	March 5, 2017
22,400	0.3125	November 27, 2015
1,253,334	0.35	February 26, 2016
13,198,683		

*Exercise price is \$0.40 per share until March 5, 2016 and thereafter into one-half of one common share at an exercise price of \$0.50 per share

**Exercise price is \$0.40 per share until March 5, 2016 and thereafter at an exercise price of \$0.50 per share

MANAGEMENT OF CAPITAL

The Company's objective when managing capital is to safeguard its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain optimal capital structure to reduce to the cost of capital. The Company's capital is composed of equity in the statement of financial position.

The Company is not subject to externally imposed capital requirements. In managing capital structure, the company manages its capital through regular reports to the Board of Directors, as well as management review of monthly or quarterly financial information. The Company issues new equity financing as needed and available. Additional information relating to capital management is given in the nature and continuance of operations in the condensed interim financial statements.

FINANCIAL INSTRUMENTS

The Company is exposed to various financial instrument risks and assesses the impact and likelihood of this exposure. These risks include liquidity, credit, currency, interest rate, and price risks. Where material, these risks are reviewed and monitored by the Board of Directors.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its obligations associated with its financial liabilities. The Company has historically relied upon equity financings to satisfy its capital requirements and will continue to depend heavily upon equity capital and possible loans to finance its activities. The Company manages liquidity risk through its capital management as outlined above. Accounts payable and accrued liabilities are due within one year.

Credit Risk

Credit risk is the risk of potential loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its liquid financial assets including cash and receivables. The Company limits exposure to credit risk on liquid financial assets through maintaining its cash with high-credit quality financial institutions.

The majority of the Company's cash is held with major Canadian based financial institutions.

Currency Risk

The Company operates in Canada and the United States, and is therefore exposed to foreign exchange risk arising from transactions denominated in a foreign currency.

The operating results and the financial position of the Company are reported in Canadian dollars. The fluctuations of the operating currencies in relation to the Canadian dollar will, consequently, have an impact upon the reporting results of the Company and may also affect the value of the Company's assets and liabilities.

The Company's cash, accounts payable and accrued liabilities are exposed to the financial risk related to the fluctuation of foreign exchange rates. Most significantly, the Company is exposed to potential currency fluctuations between the US and Canadian dollars as research and development expenses transacted in US dollars represented approximately Nil% (2014 – 34%) of the Company's operating results.

The Company has not entered into any agreements or purchased any instruments to hedge possible currency risks at this time.

Interest Rate Risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market interest rates. Current cash is generally not exposed to interest rate risk because of their short-term maturity.

Price Risk

The Company is exposed to price risk with respect to equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices. The Company closely monitors the individual equity movements to determine the appropriate course of action to be taken by the Company.

Based on management's knowledge and experience of the financial markets, management does not believe that the Company's current financial instruments will be affected by interest rate risk, currency risk and credit risk.

Fair Value

The Company classifies its fair value measurements in accordance with the three-level fair value hierarchy as follows:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 – Inputs that are not based on observable market data.

The fair values of cash is based on level 1 of the fair value hierarchy.

Financial Assets

The estimated fair value of financial assets is equal to their carrying values due to the short-term nature of these instruments. The Company's financial assets were held in the following currencies:

Stated in Canadian Dollars			
September 30, 2015			
Carrying Value	Canadian Dollar	US Dollar	Total
Cash	1,792,121	3,911	1,796,032
Receivables	6,854	-	6,854

Financial Liabilities

The estimated fair value of financial liabilities is equal to their carrying values due to the short-term nature of these instruments. The Company's financial liabilities were held in the following currencies:

Stated in Canadian Dollars			
September 30, 2015			
Carrying Value	Canadian Dollar	US Dollar	Total
Accounts payable and accrued liabilities	69,090	-	69,090

RISK AND UNCERTAINTIES

Risk is inherent in all business activities and cannot be entirely eliminated. Our goal is to enable the Company's business processes and opportunities by ensuring that the risks arising from our business activities, the markets and political environments in which we operate is mitigated. The risks and uncertainties described in the MD&A for the year ended December 31, 2014 are considered by management to be the most important in the context of the Company's business and are substantially unchanged as of the Report Date. Those risks and uncertainties are not inclusive of all the risks and uncertainties the Company may be subject to and other risks may apply.

CHANGES IN ACCOUNTING POLICIES AND CRITICAL ACCOUNTING ESTIMATES

Critical judgments and sources of estimation uncertainty

The preparation of the condensed interim financial statements requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statement and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. The condensed interim financial statements include estimates which, by their nature, are uncertain. The impact of such estimates are pervasive throughout the condensed interim financial statement, and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised and future periods if the revision affects both current and future periods. These estimates are based on historical experience, current and future economic conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Critical accounting estimates

Significant assumptions about the future and other sources of estimation uncertainty that management has made at the financial position reporting date, that could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions made, relate to, but are not limited to, the following:

1. whether or not an impairment has occurred in its equipment;
2. the inputs used in the accounting for share-based payments expense in the statements of comprehensive loss; and
3. the inputs used in the accounting for finders' warrants in share capital and equity reserves.

Critical accounting judgments

The following are key assumptions concerning the future and other key sources of estimation uncertainty that have significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

1. going concern of operations;
2. determining the provisions for income taxes and the recognition of deferred income taxes; and

STANDARDS AND AMENDMENTS NOT YET EFFECTIVE

The following standard has been issued but is not yet effective:

IFRS 9 Financial Instruments is part of the IASB's wider project to replace IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortized cost and fair value. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. The standard is effective for annual periods beginning on or after January 1, 2018.

There are no other standards or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Company.

INTERNAL CONTROLS OVER FINANCIAL REPORTING

Management has designed internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The design of the Company's internal control over financial reporting was assessed as of the date of this Management Discussion and Analysis.

Based on this assessment, it was determined that certain weaknesses existed in internal controls over financial reporting. As indicative of many small companies, the lack of segregation of duties and effective risk assessment were identified as areas where weaknesses existed. The existence of these weaknesses is to be compensated for by senior management monitoring, which exists. Management will continue to monitor very closely all financial activities of the Company and increase the level of supervision in key areas. It is important to note that this issue would also require the Company to hire additional staff in order to provide greater segregation of duties. Since there is insufficient work at this time to warrant the additional costs, management has chosen to disclose the potential risk in its filings and proceed with increased staffing only when the budgets and work load will enable the action. The Company has attempted to mitigate these weaknesses, through a combination of extensive and detailed review by management of the financial reports, the integrity and reputation of senior accounting personnel, and candid discussion of those risks with the audit committee.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Information provided in this report, including the financial statements, is the responsibility of management. In the preparation of these statements, estimates are sometimes necessary to make a determination of future value for certain assets or liabilities. Management believes such estimates have been based on careful judgments and have been properly reflected in the accompanying financial statements. Management maintains a system of internal controls to provide reasonable assurances that the Company's assets are safeguarded and to facilitate the preparation of relevant and timely information.

APPROVAL

The Board of Directors of the Company has approved the disclosure contained in this MD&A. A copy of this MD&A will be provided to anyone who requests it.