



## **Management's Discussion and Analysis**

For the year ended December 31, 2016

**As of March 15, 2017**

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## PRELIMINARY NOTES AND INTRODUCTION

This Management's Discussion and Analysis ("MD&A"), dated March 15, 2017, focuses upon the activities, results of operations, liquidity, financial condition and capital resources of Canadian Zinc Corporation (the "Company" or "Canadian Zinc" or "CZN") for the year ended December 31, 2016 compared to those of the previous year. In order to better understand the MD&A, it should be read in conjunction with the Company's audited consolidated financial statements and notes thereto for the years ended December 31, 2016 and 2015.

The Company's audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The Company reports its financial information in Canadian dollars and all monetary amounts set forth herein are expressed in Canadian dollars unless specifically stated otherwise.

The Company is considered to be in the exploration and development stage given that its exploration properties are not yet in production and, to date, have not earned any significant revenues. The recoverability of amounts shown for exploration and evaluation assets on the Company's balance sheet is dependent on the existence of economically recoverable mineral reserves, obtaining and/or maintaining the necessary permits to operate a mine, obtaining the financing to complete development and construction and future profitable mine production.

### Cautionary Note Regarding Forward-Looking Statements

*This MD&A contains "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" with the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, "forward-looking statements"), such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Forward-looking statements in this MD&A include, but are not limited to, statements with respect to the Company's planned or proposed Prairie Creek Mine operations; the completion of a definitive feasibility study; the future mine grades and recoveries expected from the Prairie Creek Mine; the estimation of mineral reserves and mineral resources; the realization of mineral reserve and mineral resource estimates; future cost estimates pertaining to further construction and development of the Prairie Creek Mine and items such as capital costs, operating costs and long-term environmental reclamation obligations; the Company's plans for further mineral exploration at the Prairie Creek Mine and other exploration properties; the expectations around the process for obtaining operating permits; the future Prairie Creek Mine operation and production; projected earnings before interest, taxes, depreciation and amortization ("EBITDA") on the Prairie Creek Mine; the timing of activities and the amount of estimated revenues and expenses; the success of exploration activities; permitting time lines; requirements for additional capital and sources and uses of funds; financings and the expected use of proceeds thereof; the completion of financings and other transactions; the outlook for future prices of zinc, lead and silver; the impact to the Company of future accounting standards; and the risks and uncertainties around the Company's business.*

*Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as "expects", "anticipates", "plans", "estimates", "intends", "strategy", "goals", "objectives" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be "forward-looking statements". Such forward-looking statements are made pursuant to the safe harbour provisions of the United States Private Securities Litigation Reform Act of 1995.*

*Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties which could cause actual results or events to differ materially from those reflected in the forward-looking statements, including risks relating to, among other things: mineral reserves, mineral resources (including with respect to the size, grade and recoverability of mineral resources), results of exploration, reclamation and other post-closure costs, capital and construction costs, mine production costs, the timing of exploration, development and mining activities, and the Company's financial condition and prospects not being consistent with the Company's expectations, changes in general economic conditions and conditions in the financial markets; changes in demand and prices for the minerals the Company is exploring for or expects to produce; inability to obtain and/or maintain permits or approvals; litigation; legislative,*

environmental and other judicial, regulatory, political and competitive developments in areas in which the Company operates; technological and operational difficulties (including failure of plant, equipment or processes to operate in accordance with specifications or expectations) encountered in connection with the Company's activities; unavailability of materials and equipment, and the sources of such items; labour relations matters, industrial disturbances or other job action; inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses; changing interest and foreign exchange rates; unanticipated events related to health, safety and environmental matters, political risk, social unrest, and changes in general economic conditions or conditions in the financial markets and other matters discussed under "Risk Factors"; "Liquidity, Financial Condition and Capital Resources"; and "Review of Financial Results" herein. The material assumptions used to develop EBITDA projections for the Prairie Creek Mine are contained in the technical report on the Prairie Creek Property, titled "Prairie Creek Property, Northwest Territories, Canada, Technical Report for Canadian Zinc Corporation" dated effective March 31, 2016 (amended and restated on September 30, 2016) and filed on SEDAR on September 30, 2016, summarized herein.

These forward-looking statements are based on certain assumptions which the Company believes are reasonable, including that market fundamentals will result in sustained zinc, lead, silver and other commodity demand and prices, and such prices will be materially consistent with those anticipated; the proposed development of the Company's mineral projects will be viable operationally and economically and proceed as planned; the actual nature, size and grade of the Company's mineral resources are materially consistent with resource estimates; any additional financing required by the Company will be available on reasonable terms; that general business and economic conditions will not change in a materially adverse manner; that all necessary governmental approvals for the planned exploration on the Prairie Creek Project will be maintained on acceptable terms; and the Company will not experience any material accident, labour dispute or failure of plant or equipment.

The above list is not exhaustive of the factors that may affect any of the Company's forward-looking statements. These and other factors should be considered carefully and readers should not place undue reliance on the Company's forward-looking statements. Further information regarding these and other factors which may cause results to differ materially from those projected in forward-looking statements are included in the filings by the Company with securities regulatory authorities. The Company does not undertake to update any forward-looking statements that may be made from time to time by the Company or on its behalf, except in accordance with applicable securities laws. Readers should be aware that historical results are not necessarily indicative of future performance; actual results will vary from estimates and variances may be significant. For the reasons set forth above, the reader should not place undue reliance on forward-looking statements.

#### **Cautionary Note Regarding Non-GAAP Financial Measures**

The EBITDA projections for the Prairie Creek Property summarized herein and contained in the preliminary feasibility study described in the 2016 Technical Report (the "**Company's Non-GAAP Financial Measures**") are not measures recognized under Canadian generally accepted accounting principles ("**GAAP**") and do not have any standardized meanings prescribed by GAAP. The Company's Non-GAAP Financial Measures are presented herein because management of the Corporation believes that such measures represent a reasonable approximation of projected operating income and are relevant for evaluating projected returns on the Prairie Creek Property. The Company's Non-GAAP Financial Measures may differ from similar computations as reported by other similar organizations and, accordingly, may not be comparable to similar non-GAAP financial measures as reported by such organizations. There is no measure contained in the Company's financial statements that provides a direct comparison to the Company's Non-GAAP Financial Measures, as cash flows from operating activities would be the most directly comparable measure, but the Company does not currently have any operations and does not present operating income in its financial statements. The Company's Non-GAAP Financial Measures should not be construed as alternatives to net income, cash flows related to operating activities, or other financial measures determined in accordance with GAAP, as an indicator of the Company's projected performance.

#### **Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated or Inferred Resources**

The United States Securities and Exchange Commission ("**SEC**") permits U.S. mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. The Company uses certain terms in this MD&A, such as "measured," "indicated," and "inferred" "resources," which the SEC guidelines prohibit U.S. registered companies from including in their filings with the SEC, but which are permitted by Canadian securities regulators. U.S. Investors are urged to consider closely the

disclosure in the Company's Form 20-F which may be obtained from Canadian Zinc, or from the SEC's website at [www.sec.gov](http://www.sec.gov). "Inferred mineral resources" have significant uncertainty as to their existence, and as to their economic feasibility. United States investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically mineable. It cannot be assumed that all or any part of an inferred mineral resource would ever be upgraded to a higher category. United States investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves.

### **Cautionary Note Regarding Mineral Resources**

*Mineral Resources that are not mineral reserves do not have demonstrated economic viability. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves and there is no certainty that all or any part of an inferred mineral resource will ever be upgraded to a measured or indicated mineral resource or to a mineral reserve.*

Additional information about the Company, including the Company's Annual Information Form, is available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.canadianzinc.com](http://www.canadianzinc.com). Information is also available through the EDGAR system accessible through the United States Securities and Exchange Commission's website [www.sec.gov](http://www.sec.gov).

### **Qualified Person**

Alan Taylor, P.Geo., Vice President of Exploration, Chief Operating Officer and Director of the Company, who is a Non-Independent Qualified Person as defined in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101"), has prepared, supervised the preparation of or reviewed, the parts of this MD&A that are of a scientific or technical nature.

### **Measurement Conversion Information**

In this MD&A, metric measures are used with respect to mineral properties described herein. For ease of reference, the following conversion factors are provided:

- 1 mile = 1.6093 kilometres
- 1 metric ton (tonne) = 2,205 pounds
- 1 foot = 0.305 metres
- 1 troy ounce = 31.103 grams
- 1 acre = 0.4047 hectare
- 1 imperial gallon = 4.546 litres
- 1 long ton = 2,240 pounds
- 1 imperial gallon = 1.2010 U.S. gallons

### **Glossary of Names and Terms**

- "Deposit" -- A mineralized body which has been physically delineated by sufficient drilling, trenching, and/or underground work, and found to contain a sufficient average grade of a commodity, metal or metals to warrant further exploration and/or development expenditures. Such a deposit does not qualify as a commercially mineable ore body or as containing reserves of ore, unless final legal, technical, and economic factors are resolved.
- "Ore" -- A natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit or from which some part may be profitably separated.
- "Reclamation" -- The restoration of land and the surrounding environment of a mining site after the metal is extracted.
- "Ton" -- Short ton (2,000 lbs.). 1 Ton equals 0.907185 Metric Tons.
- "Tonne (t)" -- Metric ton (1,000 kilograms). 1 Tonne equals 1.10231 Tons.

## OVERVIEW

Canadian Zinc Corporation currently exists under the *Business Corporations Act* (British Columbia). The Company was incorporated in British Columbia, Canada, on December 16, 1965, under the *Companies Act* of British Columbia. On June 16, 2004, the Company's shareholders adopted new Articles to bring the Company's Charter documents up to date and into conformity with the *Business Corporations Act* (British Columbia).

The address of the Company's registered office is Suite 1710, 650 West Georgia Street, Vancouver, British Columbia, Canada, V6B 4N9. The Company's common shares are listed on the Toronto Stock Exchange under the symbol "CZN" and on the OTCQB tier of the OTC Link under the symbol "CZICF".

### Prairie Creek Mine

The Company's key project is the 100%-owned Prairie Creek Mine, an advanced-staged, permitted, partially developed zinc-lead-silver property, located in the Northwest Territories, Canada (the "**Prairie Creek Property**", "**Prairie Creek Project**" or "**Prairie Creek Mine**"). The Prairie Creek Property is subject to a 1.2% net smelter return royalty.

The Prairie Creek Mine contains a NI 43-101 Proven and Probable Reserve of 7.6 million tonnes grading 8.9% Zn; 8.3% Pb and 128 g/t Ag, which ranks Prairie Creek amongst the highest grade base metal deposits in the world. These reserves are based upon a Measured and Indicated resource of 8.7 million tonnes grading 9.5% Zn; 8.9% Pb and 136 g/t Ag, together with an Inferred resource of 7.0 million tonnes grading 11.3% Zn, 7.7% Pb, and 166 g/t Ag.

Canadian Zinc's primary objective is to bring the Prairie Creek Mine into production at the earliest opportunity and in pursuit of that objective to secure the necessary senior financing to complete the development and construction of the Project.

The Company has initiated a Definitive Feasibility Study ("**DFS**") to follow up on the recommendations contained in previous prefeasibility studies and to facilitate the raising of project debt financing for the Prairie Creek Project. AMC Mining Consultants (Canada) Ltd. ("**AMC**") and Ausenco Engineering Canada Inc. ("**Ausenco**") have been engaged to complete the DFS which is expected to be completed by mid-2017.

Concurrently, the Company has also retained HCF International Advisers ("**HCF**") as financial advisers to arrange debt financing for the Project. HCF is currently developing a funding strategy with the goal of arranging debt financing of up to 70% of the capital expenditures required once the DFS is completed.

In 2016, the Company completed a Preliminary Feasibility Study ("**2016 PFS**") (Technical Report filed on SEDAR September 30, 2016) which indicates a Base Case pre-tax Net Present Value ("**NPV**") of \$284 million using an 8% discount rate, with an Internal Rate of Return ("**IRR**") of 23% and a post-tax NPV of \$155 million, with a post-tax IRR of 18%.

The 2016 PFS indicates average annual production of 60,000 tonnes of zinc concentrate and 55,000 tonnes of lead concentrate containing a total of 86 million pounds of zinc, 82 million pounds of lead and 1.7 million ounces of silver in both zinc and lead concentrates. The 2016 PFS indicates average annual EBITDA of \$64 million per year and cumulative EBITDA of \$1.0 billion over an initial mine life of 17 years, using metal price forecasts of US\$1.00 per pound for both zinc and lead and US\$19.00 per ounce for silver. Pre-production capital costs, including provision for a new all season road, are estimated at \$244 million, including contingency, with payback of five years.

The Prairie Creek Mine already has extensive infrastructure in place including five kilometres of underground workings on three levels, a 1,000 ton per day mill, a fleet of heavy duty and light duty surface vehicles, three surface exploration diamond drill rigs, camp accommodation, maintenance and water treatment facilities and a 1,000 metre long gravel airstrip.

Over the past eight years Canadian Zinc has successfully completed six environmental assessments and obtained all the significant regulatory permits and social licences required to complete construction and development at the mine site and a winter access road to allow commencement of mining and milling at Prairie Creek. An environmental assessment for the Company's permit application for use of the access road on an all season basis is currently underway and completion is expected in the second quarter of 2017.

## **Lead / Zinc Exploration in Central Newfoundland**

Canadian Zinc owns an extensive mineral land package in central Newfoundland covering three large Volcanogenic Massive Sulphide (“VMS”) projects with known mineral deposits and excellent exploration potential, including the South Tally Pond Project, which hosts the Lemarchant deposit; the Tulks South Project, which hosts the Boomerang and Domino deposits and the Hurricane and Tulks East prospects; and the Long Lake Project.

The Company’s exploration strategy in Newfoundland is to continue to build on its existing polymetallic resource base with the aim of developing either a stand-alone mine, similar to the past-producing mines at Buchans or Duck Pond, or a number of smaller deposits that could be developed simultaneously and processed in a central milling facility.

## **PRAIRIE CREEK PROJECT**

### **Feasibility Study Initiated**

Discussions to date with financial institutions have confirmed that the opportunity of raising project debt financing to complete the development and construction of the Prairie Creek Project would be enhanced by a definitive feasibility study. This comprehensive study would address all geological, engineering, operating, economic, environmental and other relevant factors in the required detail to serve as the basis and support for a financial institution to finance the development of the Project to production.

In January 2017, the Company engaged AMC and Ausenco to complete a DFS to support the debt financing of the Project.

AMC, an industry leader in mine engineering services and support for large-scale development projects and operating mines, was previously involved in the 2016 PFS for the Prairie Creek Mine. AMC will further detail the underground aspects of the proposed operation including further optimizing the mineplan, and defining associated operating and capital costs to a DFS level.

Ausenco is a diversified engineering and project management company providing services to the global resource and energy sectors. The Company has built its business and reputation for delivering new and better ways to add value to client’s projects, and in some of the world’s most challenging environments. Ausenco will be responsible for all the physical areas of the surface facilities and for contributions to the overall FS and NI 43-101 report including the process plant and buildings and all surface infrastructure and ancillaries.

Ausenco will assess all surface infrastructure needs to bring the Project into operation and undertake project development/execution planning services for the Prairie Creek Mine and deliver a robust optimized project development plan that can be used to advance the Project to production. At the same time this will provide a critical link to the project financing plan by providing potential providers of debt or equity with a clear path to profitable production.

Ausenco will complete required engineering utilizing a cost-effective project design methodology to support the development of a high-level execution plan which will be focused on making the best possible use of existing infrastructure and construction materials on site so as to provide a lower cost or faster time-frame to production for the Project.

Ausenco has engineering services based in the Vancouver area, has the relevant experience and expertise, including northern design and project execution at brownfield sites, to prepare a Project Execution Plan that will define the approach to constructing the Prairie Creek Project. This will include the development of a contracting and procurement strategy for further stages of work, which will align with the project execution schedule and will serve to support the capital cost estimate and make provision for the identified execution risks and opportunities. The plan will be developed with the objective of converting it to an Engineering Procurement and Construction Management (“EPCM”) contract at the appropriate time.

The fully independent 43-101 technical report will be co-authored by AMC and Ausenco. The Company expects that the DFS will be completed by mid-2017.

## **HCF Retained as Financial Adviser**

HCF, a leading independent corporate finance advisory firm based in London, UK and focused on the global natural resources and infrastructure sectors, was appointed to advise the Company with regard to securing debt financing for the Prairie Creek Project.

HCF has prepared a three-staged approach to source and negotiate debt financing for the Prairie Creek Mine. The preliminary stage, which is now under way, includes development of a funding strategy, appointment of an independent technical engineer, preparation of a new financial model to be incorporated into the DFS; and conducting preliminary market soundings of potential lenders. This will be followed by formal engagement with potentially interested parties and thereafter negotiation and finalization of financing documentation.

HCF is fully involved in the DFS process and will use the completed study in support of securing debt financing with major financial institutions. It is anticipated that up to 70% of the currently estimated \$250 million of capital required to complete the Project could be supported by debt financing.

## **Mineral Processing Optimization**

In tandem with the development of the DFS, the Company initiated a mineral processing optimization program in January 2017. To complete the metallurgical testing, the Company engaged SGS Canada Inc. (“**SGS**”) to undertake further mineral processing optimization testing on new composite bulk samples collected from underground drill holes drilled in the Prairie Creek Mine in 2015. The principal objectives of the program are to examine metallurgical characteristics and responses from the fresh and relatively unoxidized zones of the deposit, to optimize the proposed mineral processing flow sheet and to simplify the flotation circuit design, all with the objective of thereby improving the projected metal recoveries and lowering milling production costs.

The metallurgical testing programs include definition of the grinding requirements and evaluation of the response to the variability of samples to the optimized processing method. In addition, the waste products generated in the test programs will be utilized in designing treatment plans for the process water and in testing paste tailings for underground disposal.

It is estimated the metallurgical program will take four months to complete and the results of this metallurgical program will be incorporated into the DFS.

In tandem with the 2015 underground drill program the Company also undertook detailed hydrology monitoring and testing of groundwater from underground under the supervision of Robertson Geoconsulting. This has resulted in a detailed hydrological model being developed which more accurately predicts rates of underground water flow as the future mine would be developed. The results of the modelling are being incorporated into the DFS to better predict underground dewatering needs, including pumping/piping, which also directly relate to the facilities required for water management and treatment.

## **Alternative Energy Options**

In February 2017, the Company entered into an agreement with the Northwest Territories Power Corporation (“**NTPC**”) to examine and develop an electrical power strategy for the Prairie Creek Project. The process will examine the method best suited to delivering power and the potential integration of energy alternatives such as Liquefied Natural Gas (“**LNG**”).

The Prairie Creek Mine stands to gain environmental and economic benefits from the recent discovery of natural gas in the Liard/Horn River Basins. These natural gas resources, which are located adjacent to the existing highway haulage route, can now be considered for use at the Mine which would result in reducing the dependency on diesel fuel and replacing it with LNG, which is a cheaper and much more environmentally friendly source of fuel for power generation.

LNG has been a dependable fuel for decades and continues to demonstrate a long track record of safe storage, safe transportation and safe usage, which is an important consideration given the location of the Prairie Creek Mine. It is better for the environment with typical emissions being much lower than other fuel sources with greenhouse gas reduction of between 11% and 20%, NOx emissions reduced by 80% and particulate emissions reduced by 75%. Any LNG spills would not require any remediation of soil, groundwater or surface waters because LNG evaporates immediately and dissipates quickly into the atmosphere.



NTPC is a wholly owned subsidiary of NT Hydro, which is 100% owned by the Government of the Northwest Territories. Their mission is to generate, transmit and distribute electricity in a safe, reliable, efficient and environmentally sound manner; striving to reduce reliance on fossil fuels. NTPC exists to provide value to its shareholder and customers through the efforts of a highly dedicated, skilled, and productive workforce.

### **Updated Prefeasibility Study**

The 2016 PFS update was undertaken to incorporate the increased Mineral Resources and longer mine life derived from the 2015 underground exploration program which increased total Measured and Indicated Mineral Resource tonnages by 32% from the previous March 2015 Mineral Resource estimate and increased total Proven and Probable Mineral Reserves by 46% from the previous 2012 Mineral Reserve estimate, incorporation of an all season road to access the mine, advanced engineering details and updated capital and operating costs and to follow up on a number of other recommendations from previous studies.

The 2016 PFS, based on optimization work undertaken over the previous three years, was completed in March 2016 by AMC Mining Consultants (Canada) Ltd., in conjunction with Tetra Tech Inc., on behalf of Canadian Zinc Corporation. A Technical Report entitled *Prairie Creek Property Prefeasibility Update NI 43-101 Technical Report (Amended and Restated)*, reporting on the results of the 2016 PFS, was filed on SEDAR on September 30, 2016.

### **Highlights of the 2016 Prairie Creek Prefeasibility Study**

*(All costs are in Canadian dollars unless indicated otherwise, g=gram, tpd=tonnes per day, dmt=dry metric tonnes, LOM=life of mine, CDN=Canadian, US=United States).*

- Post-tax Net Present Value, using an 8% discount, of \$155 million, with a post-tax internal rate of return of 18%, based on base case metal price forecasts of US\$1.00 per pound for both zinc and lead and US\$19.00 per ounce of silver, for the LOM production at an exchange rate of \$1.25CDN:\$1.00US.
- Average EBITDA of \$64 million per year and cumulative EBITDA of \$1.0 billion over the LOM.
- 17 year mine life based exclusively on a defined mineral reserve of 7.6 million tonnes, grading 8.9% zinc and 8.3% lead, with 128 g/t silver, including a defined Mineral Reserve in the Main Quartz Vein of 5.2 million tonnes, grading 9.4% zinc, 10.4% lead and 160 g/t silver.
- Average annual production of 60,000 dmt of zinc concentrate and 55,000 dmt of lead concentrate containing 86 million pounds of zinc, 82 million pounds of lead and 1.7 million ounces of silver.
- Pre-production capital cost is estimated to be \$216 million of which \$59 million will be incurred in year 1 and \$157 million in year 2, with an additional contingency of \$28 million.
- Average LOM cash operating costs per tonne of ore mined (before transportation costs) are estimated at \$165 per tonne.

The 2016 PFS does not take into consideration the Inferred Resources of 7.0 million tonnes of 11.3% zinc, 7.7% lead and 166 g/t silver, which is currently too speculative geologically to have economic considerations applied to them, but could have the potential to more than double the presently considered mine life. The Prairie Creek orebody continues open-ended at increasing depths to the north.

### **Conclusions from Prefeasibility Study**

In its conclusions, AMC considers the Prairie Creek Project to be viable based on the Mineral Reserves, mine plan, production and economic parameters set out in the 2016 PFS and recommends that Canadian Zinc proceed with the development of the Prairie Creek Project.

AMC also concluded that the development of the Prairie Creek Mine offers significant economic advantages to local communities and to the Northwest Territories. Its envisaged operation presents a unique opportunity to enhance the social and economic well-being of the surrounding communities. There will be approximately 220 direct full time jobs. In addition, there will be many indirect business and employment opportunities, related to transport, supply of the mine site and environmental monitoring and management.

## **Recommendations for Optimization**

The 2016 PFS included a number of recommendations for further optimization and potentially enhanced economics identified in the 2016 PFS including:

- Complete environmental assessment and permitting of the all season access road.
- A front-end engineering and design phase to complete detailed engineering and issued for construction drawings to definitive feasibility study levels to obtain fixed pricing from construction contractors.
- Additional mill studies to further optimize the mill circuit capacity to increase both ore throughput and metal recoveries.
- Further metallurgical tests to optimize the process flowsheet, particularly reagent regimes, including variability tests on the samples from various mineralization zones and ore types.
- Further study of on-site or off-site processes to reduce deleterious components of concentrates, thereby reducing smelter penalties.
- Studies to optimize the mine operation by automation and adoption of advanced technology.
- Additional underground paste backfill strength studies.
- Additional hydrology studies to better design, size and cost water management facilities.
- Early completion of site clearance construction, engineering and mine development programs to accelerate start-up times. This would include preliminary earthworks on the water storage pond, waste rock pile, building foundations, portal construction and upgrades of existing infrastructure in tandem with detailed engineering of new structures.

A number of these recommended programs are currently underway.

## **MOUs signed for Concentrate Production**

As announced on March 3, 2016, Canadian Zinc has signed agreements with Korea Zinc and Boliden for the sale of zinc and lead concentrates to be produced at Canadian Zinc's 100% owned Prairie Creek Mine. These offtake arrangements with two of the pre-eminent smelting companies in the world, confirming the marketability of Prairie Creek's zinc and lead concentrates, represent a major step forward in the development of the Prairie Creek Mine and move Canadian Zinc closer to production.

Canadian Zinc has entered into a Memorandum of Understanding ("**MOU**") with Korea Zinc Co., Ltd. ("**Korea Zinc**") for the sale to Korea Zinc of approximately 20,000 to 30,000 wet metric tonnes of zinc sulphide concentrates, approximately 15,000 to 20,000 wet metric tonnes of lead sulphide concentrates and approximately 5,000 tonnes of lead oxide concentrates, per year, for a minimum period of five years from the date of startup of the Prairie Creek Mine, with exact annual quantiles to be mutually agreed.

Canadian Zinc has also entered into a Memorandum of Understanding with Boliden Commercial AB, ("**Boliden**") for the sale to Boliden of a minimum of 20,000 dry metric tonnes and up to 40,000 dry metric tonnes of zinc sulphide concentrates, per year, for a minimum of five years from the start of regular deliveries, with exact annual quantities to be mutually agreed.

The MOUs with each of Korea Zinc and Boliden set out the good faith intentions of Canadian Zinc and each of Korea Zinc and Boliden to enter into concentrate sales agreements for the concentrates to be produced from the Prairie Creek Mine on the general terms set out in the MOUs, including commercial terms which are to be kept confidential. The MOUs reflect the understanding of the parties and constitute the basis for continued negotiation of definitive binding sales agreements which the Company expects to negotiate and conclude in parallel with concluding senior financing for the development of the Prairie Creek Mine.

These sale agreements will represent all of the planned production of zinc concentrate and about half of the planned production of lead concentrate for the first five years of operation at the Prairie Creek Mine. It is expected that shipments will be made from the Port of Vancouver with the exact shipping schedule and lot sizes in each delivery to be mutually agreed within the Project's shipping season.

The sales agreements will provide that treatment charges will be set annually at the annual benchmark treatment charges and scales, as agreed between major smelters and major miners. Payables, penalties and quotational periods will be negotiated in good faith annually during the fourth quarter of the preceding year, including industry

standard penalties for mercury contained in the zinc concentrate based on indicative terms and agreed limits specified in each MOU.

### **Prairie Creek Permitting Update**

In April 2014, the Company submitted an application to the Mackenzie Valley Land and Water Board and to Parks Canada for Land Use Permits to permit the possible future upgrade of the current winter access road to all season use. The application has been undergoing environmental assessment before the Mackenzie Valley Review Board (“**MVRB**”) over the past three years.

Technical Sessions took place in Yellowknife from June 13, 2016 to June 16, 2016. The purpose of the Technical Session was for all parties and regulators to discuss issues face-to-face in order to gain a better understanding of the all season road project and its potential environmental impacts.

Additional Technical Sessions on cultural impacts were also held in the local communities of Nahanni Butte and Fort Simpson on July 4 and 5, 2016. The purpose of these sessions was to gather information from land and resource users in the two Dehcho communities about the potential impacts and to discuss possible mitigations for the proposed all season road.

The June Technical Sessions generated a list of commitments and undertakings. In July 2016, CZN completed a field work program along the road corridor to gather additional base line data on vegetation, wildlife and stream crossings that were deemed necessary to respond to some of the undertakings. On August 18, 2016, Canadian Zinc completed submitting its responses to the undertakings from the June Technical Session. Canadian Zinc was subsequently asked to submit some additional information and did so on September 6, 2016.

In September 2016, the Company received the second round of Information Requests from parties registered in the regulatory process. CZN submitted its responses to the second round of Information Requests in October 2016. This was followed by a Risk Assessment stage. After a number of submissions, the Risk Assessment Phase was deemed complete by the MVRB in early February 2017 and the Environmental Assessment process subsequently entered into the Hearing Phase.

As part of the preparatory process within the Hearing Phase various registered parties submitted Technical Reports on March 10, 2017 and CZN has until April 7, 2017 to file its responses to the Technical Reports. A revised draft work schedule was issued by the MVRB which indicates that community and public hearings will be held in Nahanni Butte and Fort Simpson during the week of April 24, 2017.

### **NEWFOUNDLAND PROPERTIES**

Canadian Zinc owns an extensive mineral land package in central Newfoundland that includes three large VMS projects, each with defined mineral deposits, which are being explored by Canadian Zinc.

The Company's exploration strategy in Newfoundland is to continue to build on its existing polymetallic resource base with the aim of developing either a stand-alone mine, similar to the past-producing mines at Buchans and Duck Pond, or a number of smaller deposits that could be developed simultaneously and processed in a central milling facility.

#### **Central Milling Facility Research Collaboration Project**

In 2015, the Company entered into a collaboration agreement with Buchans Minerals Corporation (“**Buchans Minerals**”), a wholly owned subsidiary of Minco Plc (AIM: MIO), whereby the two Companies share research data on their respective central Newfoundland Zn-Pb-Cu-Ag-Au deposits. The intent and objective of the research is to determine the technical and economic viability of developing the companies' deposits into producing operations by utilizing a central milling facility. The concept is based on the potential that collectively, the satellite deposits can be economically mined, pre-concentrated, trucked and then milled simultaneously or sequentially through a central mill.

The collaborative research program, partially funded by the Research & Development Corporation of Newfoundland and Labrador (“**RDC**”) through the GeoEXPLORE Industry-led program, initially examined seven VMS deposits located in central Newfoundland. Four of the deposits are held the Company (Lemarchant,

Boomerang-Domino, Tulks East, and Long Lake) and three of the deposits are held by Buchans Minerals (Bobbys Pond, Daniels Pond and Tulks Hill). The seven deposits have demonstrated resources of various sizes and quality, are all located near the communities of Millertown and Buchans, NL and within trucking distance (30-90 km) of the recently closed Duck Pond Cu-Zn Mine. Individually at this time, the various deposits are not large enough to support stand-alone operations, but could potentially be developed with improving economic factors and by utilizing a central mill facility.

The research project was subsequently focused on four key NI43-101 compliant Zn-Pb-Cu-Ag-Au VMS deposits located on the south side of Red Indian Lake in the Victoria Lake district of central Newfoundland. Two of the deposits are held by Canadian Zinc (Lemarchant, Boomerang-Domino) and two of the deposits are held by BMC (Bobbys Pond, Daniels Pond). In June 2016, the research program was extended to include the Lundberg Cu-Pb-Zn-Ag deposit (100% held by Buchans).

The Lundberg deposit is a large, near-surface and potentially open-pitabile resource located on the north side of Red Indian Lake near the town of Buchans, NL. The key rationale to include the Lundberg deposit was to fully assess all the known deposits in the district and to determine if it could enhance the economics of a central milling facility and the future development of this region's mineral resources. The additional tonnage contribution from the Lundberg deposit to a central milling facility could add considerably to its useful life.

### **Research Study Methodology**

To evaluate the potential for centralized milling of some or all of these deposits, the study included bench scale testing for process development, preliminary mine plan development and using a conceptual economic model to assess the economics of various processing scenarios.

The bench scale test work was undertaken by Thibault & Associates Inc. of Fredericton, New Brunswick, to characterize each deposit with respect to dense media separation (“**DMS**”) and flotation for production of copper, lead and zinc concentrates. The use of DMS was considered as an opportunity to reduce transportation costs by rejecting waste at the mine site before trucking to the central milling facility. The bench scale flotation testing was completed in order to develop a common flotation flowsheet with flexibility for processing of the five different deposits involved, and improve grades, recoveries and operating costs defined by previous test programs.

The DMS and metallurgical test programs were followed-up by Thibault & Associates with a Process Simulation and Cost Assessment model (order of magnitude conceptual assessment) to evaluate and identify the key factors impacting the operating economics of a centralized processing concept for the production of the base metal concentrates from the five base metal deposits.

Canadian Zinc and Buchans provided preliminary mine plans, mining costs and operating costs for each of their respective deposits. Thibault & Associates Inc. combined the mining inputs with the process simulation and costing model to develop a conceptual economic model for the project, which was used to evaluate various process options. Multiple conceptual economic scenarios at three potential sites were developed to simulate the proposed centralized milling concept. The variables assessed included three potential mill sites, with or without DMS, new or used process equipment, mining rate, and processing feedstock composition for each deposit. Lundberg, being the largest but lowest grade deposit, was considered the main plant feed and Lemarchant, Boomerang, Daniels Pond and Bobbys Pond were treated as satellite deposits.

### **Highlights of Results of Research Program:**

- Pre-concentration of the samples by bench scale DMS testing (prior to flotation) was determined to be technically viable for the Lundberg deposit, Bobbys Pond samples and the semi-massive and stringer sulphide sample from the Lemarchant Footwall.
- Metallurgical test results strongly support the development of a sequential flotation flowsheet for the processing of all five deposits using a centralized processing facility.
- Bench scale flotation test programs indicated improved grade and recovery relationship for the production of copper, lead and zinc concentrates using a common sequential flotation flowsheet rather than a bulk flotation flowsheet.
- Test results and METSIM™ metallurgical simulations confirm that selective zinc, lead and copper concentrates at marketable grades can be produced using a sequential flotation flowsheet.

- The process simulation and cost assessment results (conceptual economic modeling) provided key information on which to base future studies and development plans, including the ongoing exploration programs that are critical to expanding the deposits and advancing the viability of developing the central Newfoundland deposits through a centralized milling facility.

The metallurgical research study demonstrated that the ore from the Company's Lemarchant and Boomerang-Domino deposits can be successfully processed in a central mill using a sequential flotation flowsheet, and that selective zinc, lead and copper concentrates at marketable grades can be produced from these deposits.

The positive results of the research project provide valuable direction to guide future exploration on the Company's central Newfoundland deposits and the conceptual economic modeling provided key information on which to focus future economic studies and development plans for advancing the development of these deposits through a centralized milling facility. It was recommended that further review of the satellite deposits should be undertaken to examine the potential to increase minable resource size, run of mine ore grades and mine production rates, and to evaluate alternative cost effective mining methods.

### **Central Newfoundland Exploration Work**

Canadian Zinc undertook ground geophysical surveys including magnetics, gravity, electromagnetics ("EM") and borehole EM on a number of high priority Cu-Pb-Zn-Ag-Au target areas on its South Tally Pond and Tulks South properties in the autumn of 2016.

This geophysical program at the South Tally Pond Project focused on the Lemarchant North, Spencers Pond and Lost Pond target areas with the aim of defining new drill targets. Magnetometer surveys were carried out in all three areas and merged with historical magnetic survey data where available. Plate modeling of the surface EM data outlined conductive trends in all three areas and identified new drill targets.

At Lemarchant North, the target area is immediately north of the Lemarchant deposit where the surface EM survey outlined a north trending, moderately east dipping conductor over a 600 metre strike length. The conductive trend is interpreted to be related to a near surface mudstone horizon based on several drillholes previously completed along the first 200 metre of the conductor, but which has not been drill tested over the entire conductor length.

At Spencers Pond, two near surface, parallel conductive trends that dip moderately to the northwest have been identified over a 600 metre strike length. Two shallow, historic drillholes were previously drilled in this area, one of which intersected pyritic, graphitic mudstone with a similar hydrothermal geochemical signature to that which overlies the Lemarchant deposit.

At Lost Pond, the surface EM survey outlined two conductive trends over an approximately 800 m strike length that dip moderately to the northwest. Three historic drillholes in the more northern of the two conductive trends intersected graphitic mudstones with similar hydrothermal geochemical signatures to that which overlie the Lemarchant deposit.

In February 2017, the Company initiated a winter drill program on the South Tally Pond property based on the magnetic and electromagnetic geophysical surveys completed in late 2016 which outlined the new drill targets in three priority areas. The 2017 winter drill program consists of up to 5,000 metres in 16 diamond drillholes and is designed to test for mineralized extensions to the Lemarchant massive sulphide deposit immediately along the strike and up-dip of the currently defined Lemarchant resource. Included in the planned drill program is initial drill testing of a newly defined EM target at the Spencers Pond prospect, located along strike, approximately 2 kilometres southwest of the Lemarchant deposit.

Between February 1 and March 7, 2017, the Company completed 2,247 metres of drilling in 9 drillholes (2,115 metres) and 2 drillhole extensions (312 metres) at the South Tally Pond property - Lemarchant deposit. The drilling to date has focused on extending the known mineralization on the Lemarchant deposit Main Zone. Assay results are pending. Drilling at Spencers Pond and several other south Lemarchant priority targets has been postponed due to the lack of freezing of the bogs/swamps which is required for direct, easy access to these targets. Access trails through wooded areas to these priority targets are being planned for the late spring/early summer.

## EQUITY FINANCINGS IN 2016

On July 7, 2016, the Company closed an underwritten public offering of common shares and flow-through shares through a syndicate of underwriters co-led by Paradigm Capital Inc. and Canaccord Genuity Corp. and including Dundee Securities Ltd. (collectively, the "**Underwriters**").

The Company issued 34,135,000 common shares at a price of \$0.25 per share for gross proceeds of \$8,533,750 and 6,665,000 flow-through shares at a price of \$0.25 per share for gross proceeds of \$1,666,250. In total, the gross proceeds of the offering amounted to \$10,200,000.

On December 14, 2016, the Company closed a non-brokered private placement of flow-through shares. The Company issued 6,666,664 common shares, which qualify as flow-through shares of the Company for purposes of the Income Tax Act (Canada), at a price of \$0.30 per share, raising aggregate gross proceeds of \$2,000,000.

The net proceeds from the sale of non-flow-through shares are being used to fund feasibility and development programs for the Prairie Creek Project, exploration programs at both the Prairie Creek Project and the Company's Newfoundland properties, as well as for general working capital purposes.

The gross proceeds from the sale of flow-through shares issued in the public offering and the private placement are being used to incur eligible Canadian Exploration Expenses and flow-through mining expenditures, as defined under the Income Tax Act (Canada), that were renounced in favour of the purchasers with an effective date of December 31, 2016. The funds are being used to explore the Company's Long Lake, Tulks South and South Tally Pond projects in central Newfoundland.

## METAL PRICES

After four years of general decline, base metal prices bounced off multi-year lows to post strong gains in 2016, driven by resilience in the global economy, investment speculation, supply disruptions and inventory depletion. Precious metals showed volatility rising in the first half of 2016 but declining in the second half to post only modest gains over the year. Nevertheless, the broad trend of improving commodity prices is prevailing and so far in 2017 both base metals and precious metals are continuing on an upward trend.

### Zinc

Zinc has continued to be one of the strongest performing metals throughout 2016 and into 2017, rising from the US\$0.70 per pound level at the end of 2015 to a high of US\$1.30 per pound in the first part of 2017.

The price increase has been bolstered by output cuts by major producers. In addition to the closures of Lisheen and Century mines in 2016, Glencore announced additional production cuts of 500,000 tonnes of zinc concentrate in the third quarter of 2016. There is some concern that the increasing zinc price may lead to Glencore bringing some suspended production back on stream in the second half of 2017 but most industry analysts think this will be done gradually, without having a negative impact on the increasing zinc price trend.

Initial data compiled by the International Lead and Zinc Study Group ("**ILZSG**") for the year 2016 show that global market for refined zinc metal recorded a deficit of 286kt. Inventories held in LME, Shanghai Futures Exchange and Chinese State Reserve Bureau (SRB) warehouses, together with those reported by producers, consumers and merchants decreased by 82kt to total 1384kt.

- A substantial 43% decline in Australian zinc mine output was primarily a consequence of the closure of MMG's Century mine at the end of 2015 and a reduction in output at a number of Glencore's mines. Production was also significantly lower in Ireland, India and Peru. These reductions were offset by increases in Bolivia, Canada, China and the commissioning of new production in Eritrea. As a consequence, overall world mine production was at a similar level to that in 2015.
- World output of refined zinc metal was also close to the total recorded in 2015 with increases in China and Korea being balanced by a significant fall in India and reductions in Argentina, Australia, Belgium, Finland, France, Japan, Mexico, Poland and the United States.

- A rise in global usage of refined zinc metal of 3.6% was primarily driven by sharp increases in apparent demand in China and India. A fall in apparent usage in the United States of 12.4% was possibly affected by drawdowns in unreported stock levels. European demand was 0.3% lower.
- Chinese imports of zinc contained in zinc concentrates in 2016 amounted to 817kt, a decrease of 40.5% compared to 2015. Net imports of refined zinc metal decreased by 9.8% to total 403kt.
- Cash Settlement and Forward Three Month Prices on the LME averaged US\$2095 and US\$2102 per tonne, respectively during 2016, 8.6% and 8.4% higher than the average for 2015. The highest Cash Settlement Price of US\$2907 was recorded on November 28, 2016 and the lowest of US\$1453 on January 12, 2016.

Lower levels of zinc concentrates will have an impact on refined zinc metal production. Industry analysts have suggested that for the first time in many years there will be a deficit in zinc metal by the third quarter of 2017 putting additional upward pressure on zinc prices. Korea Zinc recently announced production cuts for this year because of concentrate shortage. Further evidence of lower concentrate supply has been the fall of spot and long-term treatment charges. According to Wood Mackenzie, zinc spot treatment charges fell from US\$200 per tonne in 2015 to US\$40 per tonne by the end of 2016, while industry analysts have suggested that benchmark treatment charges for 2017 could drop by 20% or US\$50 per tonne.

## Lead

Lead has also performed well in 2016, rising from US\$0.75 per pound at the end of 2015 to US\$0.95 per pound during the third quarter and continuing to stay in the US\$0.90 to US\$1.12 per pound range into early 2017, despite gradually increasing inventories for most of the year. The lead price has risen by over 14% since the end of 2016.

Preliminary data compiled by the ILZSG indicates that in 2016, supply exceeded demand by 11kt in the global market for refined lead metal. Over the same period inventories reported by the London Metal Exchange (LME), Shanghai Future Exchange (SHFE) and producers and consumers increased by 24kt totaling 478kt at the year end.

- There was a sharp decrease in Australian lead mine output mainly as a consequence of the closure of the Century mine in 2015 and cutbacks in output at some Glencore operations. Production was also lower in India and Mexico. These reductions were partially balanced by a rise in China resulting in an overall global decline of 1.3%.
- World refined lead metal production rose by 2.4%. This was mainly the result of an increase in output in Korea largely influenced by Korea Zinc's commissioning of a new primary lead plant in Onsan in November 2015. Output was also higher in Australia, Kazakhstan and the United States.
- Production of refined lead metal from secondary (recycled) raw material accounted for 58.1% of global output compared to 57.8% in 2015.
- European demand for refined lead metal increased by a robust 8.7% driven mainly by rises in the Czech Republic, Italy, Poland, the Russian Federation and the United Kingdom. In the United States, usage rose by 3.6%. However, in China there was a decline in apparent demand of 1.5%. Overall global usage increased by 2.0%.
- Chinese imports of lead contained in lead concentrates in 2016 fell by 26.3% compared to 2015 and amounted to 758kt. Of these imports 144kt were sourced from the United States, 123kt from the Russian Federation and 77kt from Peru.
- Cash Settlement and Forward Three Month Prices on the LME averaged US\$1872 and US\$1878 per tonne, respectively during 2016, 5.0% and 4.7% higher than the average for 2015. The highest Cash Settlement Price of US\$2466 was recorded on November 28, 2016 and the lowest of US\$1597 on January 12, 2016.

Demand for lead continues to be driven by lead-acid batteries. According to Wood Mackenzie 85% of global lead demand is used to make batteries, mostly for automobiles, demand for which is growing in countries such as China, Brazil, Argentina and Russia. Higher quantities of lead are required for batteries used in increasingly popular stop-start cars (40% of the auto sales) produced by automakers to comply with stringent new emissions legislation. Multiple stops and starts mean more wear and tear, so the batteries used in these cars need to be heavier and stronger and require about 25% more lead.

Renewable technologies such as wind and solar power have created a need for suitable storage capacity and, large-scale industrial batteries, which use lead, are in increasing demand.

## **Silver**

Uncertainty about the globally economy and investor anxiety continue to support gold and silver. The price of silver surged over 40% in the first half of the year and then retreated from a two-year high of over US\$20 per ounce to approximately US\$18 per ounce. The average price over 2016 was just over US\$17 per ounce.

The silver market is expected to have been in an annual physical deficit of 52.2 million ounces in 2016, marking the fourth consecutive year in which the market has realized an annual physical shortfall, according to the Silver Institute Interim Silver Market Review.

## **OUTLOOK**

Canadian Zinc's focus for 2017 will be to complete a Definitive Feasibility Study and seek the financing required to begin initial development of the Prairie Creek Project and advance the Mine towards production.

Building on the robust economics indicated by the 2016 Prefeasibility Study, opportunities for optimization that could yield further economic, operational and environmental benefits are being pursued as part of the DFS process. Some of the recommended mill capacity and metallurgical testing studies have been initiated, along with the ongoing environmental assessment and permitting of the proposed all season road.

The Company is well advanced in completing the DFS with a target completion date of June 30, 2017. This independent report co-authored by AMC and Ausenco will be used by the Company, with the assistance of HCF International Advisers, to seek senior debt financing. Several commercial banks have expressed indicative interest in providing project financing for the development and construction of the Prairie Creek Mine.

The all season road environmental assessment is nearing completion, and will be followed by the permitting process.

The metallurgical testing program on the central Newfoundland properties was successfully completed and will help to plan the 2017 exploration program. A winter drill program on the South Tally Pond property based on the magnetic and electromagnetic geophysical surveys completed in late 2016 is ongoing and a two-stage exploration program on selected targets will begin in the second quarter of 2017.

The long-term price environment for lead and zinc remains very positive and, supported by the completion of the DFS, Canadian Zinc will continue to evaluate all alternatives and possibilities for raising the senior financing necessary to complete the development and construction and put the Prairie Creek Mine into production.



## SELECTED ANNUAL FINANCIAL INFORMATION

The following summary financial information has been derived from the consolidated financial statements of the Company.

	Year ended December 31,		
	2016	2015	2014
<b>Statement of Comprehensive Loss</b>			
Comprehensive loss	\$ (5,077)	\$ (8,262)	\$ (12,434)
Basic and diluted loss per share	(0.02)	(0.04)	(0.06)
<b>Statement of Financial Position</b>			
Cash, cash equivalents and short-term investments	9,817	1,702	13,815
Marketable securities	-	936	450
Total assets	18,497	11,183	21,899
Total liabilities	2,598	2,276	4,854
Shareholders' equity	15,899	8,907	17,045

(prepared in accordance with IFRS; thousands of Canadian dollars except per share amounts)

The Company is at the exploration and evaluation stage and does not generate revenue or cash flows from operations. There have been no distributions or cash dividends declared or paid. The losses in all years represent exploration and evaluation expenditures incurred on the Company's mineral properties as well as losses on marketable securities.

## FOURTH QUARTER

During the fourth quarter of 2016 the Company incurred a loss of \$1,726,000 (Q4 2015 - \$49,000) mainly due to increased exploration and evaluation costs; increased share-based compensation expenses; and decreased gains recorded on marketable securities. Exploration and evaluation expenses incurred in the fourth quarter of 2016 amounted to \$786,000 (Q4 2015 - \$486,000) as the Company continued permitting of the all season road for the Prairie Creek Project. Share-based compensation recorded in the fourth quarter of 2016 amounted to \$458,000 compared to \$77,000 in the comparable quarter. The Company also recorded a gain on marketable securities of \$486,000 during the fourth quarter of 2015 with no comparable charge in 2016. A gain on changes in the decommissioning provision was \$64,000 during the fourth quarter of 2016 compared to \$246,000 in the fourth quarter of 2015.

## SUMMARY OF QUARTERLY RESULTS

<i>(Unaudited)</i> Quarter ended	Investment Income	Net Loss	Net Loss per Common Share – basic and diluted
December 31, 2016	\$ 36	\$ (1,726)	\$ (0.01)
September 30, 2016	10	(1,708)	(0.01)
June 30, 2016	7	(866)	-
March 31, 2016	7	(777)	-
December 31, 2015	7	(49)	-
September 30, 2015	20	(1,778)	(0.01)
June 30, 2015	32	(2,613)	(0.01)
March 31, 2015	48	(3,822)	(0.02)

(prepared in accordance with IFRS; thousands of Canadian dollars except per share amounts)

The Company completed equity financings in the third and fourth quarters of 2016 which increased cash, cash equivalents and short-term investments and provided the Company with increased investment income. Investment

income decreased in all other periods as the Company funded its operating activities. In addition, the rate of return for such investments has remained low for all eight quarters.

The net losses reported in all quarters were significantly affected by the Company's exploration and evaluation costs which, in accordance with the Company's accounting policy, are expensed as incurred. The last two quarters of 2016 were affected by an increase to share-based compensation. The first three quarters of 2015 were affected by a loss in the fair market value of the Company's marketable securities. The fourth quarter of 2015 was impacted by a gain on marketable securities and a gain on changes in the decommissioning provision.

## **REVIEW OF FINANCIAL RESULTS**

This review of the results of operations should be read in conjunction with the audited consolidated financial statements of the Company for the years ended December 31, 2016 and 2015 and other public disclosure documents of the Company.

For the year ended December 31, 2016, the Company reported a net loss and comprehensive loss of \$5,077,000 compared to a net loss and comprehensive loss of \$8,262,000 for the year ended December 31, 2015.

Included in the loss for the year ended December 31, 2016, were exploration and evaluation expenditures of \$2,428,000 compared to \$7,650,000 for the previous year and share-based compensation charges of \$1,104,000 in the current year versus \$124,000 in the comparable year. The net loss in the year ended December 31, 2015 included a gain of \$486,000 on the Company's marketable securities with no comparable gain or loss in the current year, as well as a gain on changes to the decommissioning provision of \$246,000 compared to \$64,000 in the current year.

### **Exploration and Evaluation Costs**

For the year ended December 31, 2016, the Company expensed \$1,857,000 on its exploration and evaluation programs at Prairie Creek compared to \$7,317,000 for the year ended December 31, 2015. The Company was involved in the application of permits for an all season road in both years and was completing an underground diamond drilling program at Prairie Creek in the comparable year of 2015 with no comparable costs in the current year.

For the year ended December 31, 2016, the Company also expensed \$571,000 on its exploration and evaluation properties in central Newfoundland compared to \$333,000 for the comparative year. The Company began an exploration program in the last quarter of 2016 which will continue throughout 2017. In the final quarter of 2015 and continuing throughout 2016, the Company conducted a research program to complete physical and metallurgical studies on the Company's mineral deposits in Newfoundland. This program was partially funded by the Research & Development Corporation of Newfoundland and Labrador.

### **Revenue and Investment Income**

The Company does not generate any cash flows from operations. To date the Company has not earned any significant revenues other than interest and related investment income. Investment income for the year ended December 31, 2016 was \$60,000 versus \$107,000 for the comparative year. The decrease is attributable to the overall decrease in amounts available for investment during the current year versus the comparative year.

### **Administrative Expenses**

The Company recorded administrative expenses (excluding share-based compensation and depreciation) of \$1,621,000 for the year ended December 31, 2016 compared to a similar amount of \$1,740,000 for the comparative year.

### **Share-Based Compensation**

Share-based compensation was \$1,104,000 for the year ended December 31, 2016 versus \$124,000 for the comparative year. The increase is due to the issuance of RSUs (in the amount of 1,900,000 in 2016 and 3,650,000 in 2015) to senior officers; the issuance of DSUs (in the amount of 376,034 in 2016 and 276,340 in 2015) to independent directors; and the issuance of stock options (in the amount of 5,200,000 in 2016 and nil in 2015) to

directors, officers and employees. The RSUs granted are subject to a ten to 18 month vesting period and were assigned a fair value based on the share price at time of issuance with the fair value amortized over the vesting period. The DSUs, which are issued quarterly, are fully vested upon issuance and were assigned a fair value based on the five-day volume weighted average share price at time of issuance. The options granted in 2016 vest over two years and are assigned a fair value determined using the Black-Scholes option pricing model with assumptions specified in Note 11 of the Company's financial statements.

### Other Income (Expenses)

The Company reported a tax deduction recovery of \$471,000 and a gain on marketable securities of \$486,000 for the year ended December 31, 2015 with no comparable recoveries or gains in the current year.

## LIQUIDITY, FINANCIAL CONDITION AND CAPITAL RESOURCES

At December 31, 2016, the Company had a positive working capital balance of \$9,513,000 including cash and cash equivalents of \$9,817,000 and short term investments of \$28,000.

At December 31, 2015, the Company had cash and cash equivalents of \$1,674,000, short term investments of \$28,000, marketable securities of \$936,000, and a positive working capital balance of \$2,482,000.

Cash inflows from financing activities totaled \$11,232,000 for the year ended December 31, 2016 versus \$nil for the comparative year, due to the Company's financing activities in the third and fourth quarters of 2016. Included in the total cash inflow, the Company received \$142,000 for the issue of 406,200 common shares upon the exercise of warrants at an exercise price of \$0.35 per common share during the year ended December 31, 2016 with no comparable activity in the previous year.

During the current year, the Company's marketable securities were liquidated for cash of \$936,000 with no purchase or sale occurring in the comparative year.

Accounts payable and accrued and other liabilities at December 31, 2016 were \$801,000 compared to \$451,000 as at December 31, 2015. The Company has no long term debt.

The Company has a history of losses with no operating revenue other than interest income, and has working capital of \$9,513,000 as at December 31, 2016. The ability of the Company to carry out its planned business objectives is dependent on its ability to raise adequate financing from lenders, shareholders and other investors. Additional financing will be required in the short term to continue the development of the Prairie Creek Project and in the longer term to put the Prairie Creek Mine into production. There is no assurance that such financing will be available on a timely basis or on acceptable terms. If the Company is unable to obtain adequate additional financing, the Company will be required to curtail operations, exploration and development activities. The Company is currently evaluating various opportunities and seeking additional sources of financing. This is discussed in more detail in the "Risk Factors" section in this MD&A.

The following table reflects the Company's aggregate contractual commitments as of December 31, 2016:

Contractual Obligations	Total	Payment due by period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating lease obligation <sup>(1)</sup>	\$ 762	\$ 155	\$ 458	\$ 149	\$ -
Decommissioning provision <sup>(2)</sup>	2,728	-	-	-	2,728
Annual fees and taxes <sup>(3)</sup>	750	75	150	225	300
<b>Total Contractual Obligations</b>	<b>\$ 4,240</b>	<b>\$ 230</b>	<b>\$ 608</b>	<b>\$ 374</b>	<b>\$ 3,028</b>

(1) Represents obligations under operating leases for office space and equipment.

(2) The decommissioning liability obligation represents undiscounted costs which are anticipated to be predominantly incurred at the end of the life of the Prairie Creek Mine. The liability is supported by a letter of credit deposited with the GNWT secured by a pledge of restricted cash.

(3) Includes the annual fees related to the Company's mining leases, surface leases and mineral claims which total approximately \$45,000 per annum and property taxes of approximately \$30,000 per annum.

## FINANCING - USE OF PROCEEDS

During 2016, the Company completed an equity financing, which closed July 7, 2016, by way of a short form Prospectus for an underwritten public offering, raising gross proceeds of \$10.2 million. The following table details how the net proceeds of the financing have been used up to December 31, 2016 compared to the anticipated use of the net proceeds set out in the Prospectus, including additional net proceeds derived from the sale of additional flow-through shares upon the exercise, in part, by the Underwriters of their over-allotment option.

	Net Use of Proceeds	
	Prospectus	Actual
Prairie Creek Mine Feasibility and Development Programs	\$ 5,642	\$ 790
Definitive Feasibility Study Report	1,110	-
Exploration Programs	1,110	806
General and Administrative	1,387	949
Total	\$ 9,249	\$ 2,545

(Unaudited, thousands of Canadian dollars)

## OUTSTANDING SHARE DATA

As at the date of this MD&A, the Company has 266,111,543 common shares issued and outstanding. In addition, there are outstanding stock options, share units and warrants for a further 5,850,000, 6,011,404 and 16,734,000 common shares respectively.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements as at the date of this MD&A.

## TRANSACTIONS BETWEEN RELATED PARTIES

During the year ended December 31, 2016, the Company incurred rent expense in the amount of \$24,000 (2015 - \$24,000 and 2014 - \$24,000) with Buchans Minerals Corporation ("**Buchans**") a corporation in which the Chairman of the Company John F. Kearney serves as a director and chairman and with which the Company has an office sharing arrangement. These transactions were within the normal course of business and have been recorded at amounts agreed to by the transacting parties. There was not an amount owing to related parties and included in accounts payable and accrued and other liabilities at December 31, 2016 nor was there an amount recorded at the end of the previous year.

The Company recorded a net receivable of \$10,000 at December 31, 2016 due from Buchans representing payments made on behalf of Buchans for work undertaken associated with a grant receivable from the Research and Development Corporation of Newfoundland and Labrador.

These transactions were within the normal course of business, are measured at fair value and have been recorded at amounts agreed to by the transacting parties. Management believes these transactions were undertaken at market rates under the same or similar terms and conditions as comparable transactions with non-related parties.

During the year ended December 31, 2016, the Company incurred short-term employee remuneration and benefits to officers and directors in the amount of \$650,000 (2015 - \$690,000 and 2014 - \$850,000) and share-based compensation with officers and directors in the amount of \$986,000 (2015 - \$124,000 and 2014 - \$2,000).

## CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. Management uses its best estimates for these purposes, based on assumptions

that it believes reflect the most probable set of economic conditions and planned courses of action. Actual results may differ from these estimates. The critical accounting estimates used in determining the Company's financial results and position are listed below.

### **Decommissioning provision (environmental estimates)**

The Company recognizes provisions for statutory, contractual, constructive or legal obligations, including those associated with the reclamation of exploration and evaluation assets and PPE, when those obligations result from the acquisition, construction, development or normal operation of the assets. Initially, a decommissioning provision is recognized at its present value in the period in which it is incurred, which is generally when an environmental disturbance occurs or a constructive obligation is determined. Upon initial recognition of the provision, a corresponding amount is added to the carrying amount of the related asset and the cost is amortized as an expense over the economic life of the asset using the unit-of-production method. Subsequent to initial recognition the carrying value of the provision is increased for the passage of time and adjusted for changes to the current market-based discount rate and the amount or timing of the underlying cash flows needed to settle the obligation. This accretion expense is recognized in profit or loss as finance costs. Changes to estimated future decommissioning costs are recognized in the consolidated statement of financial position by either increasing or decreasing the decommissioning provision and the related asset.

Various assumptions are used in determining the liability including current mine plans, future retirement costs and estimates of resources. The estimates used require extensive judgment as to the nature, cost and timing of the work to be completed and may change with future changes to cost structures, environmental laws and requirements and remediation practices employed. Management evaluates the decommissioning provision estimates at the end of each reporting period to determine whether the estimates continue to be appropriate.

The Company's undiscounted decommissioning provision for the Prairie Creek site, as it currently exists, is \$2,728,000 (December 31, 2015 - \$2,728,000), being the estimated future net cash outflows of the reclamation and closure costs, including a 25% contingency and inflation rate of 2% per annum, required to satisfy the obligations, settlement of which will occur subsequent to closure of the mine through to 2036. The discounted decommissioning provision is discounted using a risk free rate of 2.21% (December 31, 2015 – 2.03%).

Reclamation and closure costs for the Prairie Creek Property have been estimated based on an Abandonment and Restoration Plan agreed to by the Mackenzie Valley Land and Water Board and the Company based upon current obligations under existing surface leases, land use permits and class "B" Water Licence for reclamation and closure of the Prairie Creek Mine site as it now exists with the current infrastructure and assuming a mine life of 17 years. The Company will recognize an increased decommissioning liability for additional reclamation and closure costs upon undertaking future development, construction and mining activities. The water licences and land use permits issued in 2013 together provide for the posting, in stages, of a total of approximately \$20.4 million in respect of security deposits or financial assurance required to secure expected decommissioning liabilities.

### **Exploration and evaluation asset policy**

Significant judgement must be exercised in determining when a project of the Company moves from the exploration and evaluation phase and into the development phase. The existence and extent of proven or probable mineral reserves; retention of regulatory permits and licences; the availability of development financing; current and future metal prices; and market sentiment are all indications leading to the Company's project moving to the development phase. Exploration and evaluation costs are capitalized as deferred development expenditures and included within exploration and evaluation assets upon a project moving to the development phase. There are currently no projects that have moved to the development phase. The Company evaluates the status of each project at the end of each reporting period to determine the current phase of each project and whether to subsequently capitalize applicable costs.

### **Impairment of long-lived assets**

The carrying value of property, plant and equipment at December 31, 2016 was \$710,000 (December 31, 2015 - \$777,000) and for exploration and evaluation assets was \$5,398,000 (December 31, 2015 - \$5,398,000).

The Company assesses at each date of the consolidated statement of financial position the carrying amounts of non-financial assets to determine whether there is an indication that those assets have suffered an impairment loss. If such an indication exists, the recoverable amount of the asset is estimated in order to determine the extent

of the impairment loss. Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the assets belong.

Recoverable amount is the greater of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments for the time value of money and risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in the consolidated statement of comprehensive income or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or cash-generating unit) in prior years. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized.

As at December 31, 2016, management carried out an impairment assessment and determined that, notwithstanding the Company's history of losses, and based upon best estimates available, no impairment of the carrying value of exploration and evaluation assets was indicated.

In assessing the future estimated cash flows management uses various estimates including, but not limited to estimated future operating and capital costs as well as future commodity prices and estimates based upon indicated and inferred resources. By their very nature, there can be no assurance that these estimates will actually be reflected in the future construction or operation of a mine. The ultimate recoverability of amounts deferred for exploration and evaluation assets is dependent upon, amongst other things, obtaining the necessary financing to complete the development of, and obtaining the necessary permits to operate, a mine.

## **FINANCIAL INSTRUMENTS**

Financial assets are initially recorded at fair value and designated upon inception into one of the following four categories: held-to-maturity, available-for-sale, loans and receivables or at fair value through profit or loss ("FVTPL").

Financial assets classified as loans and receivables are measured at amortized cost less impairment. The Company has classified its other receivables as loans and receivables.

Financial assets classified as FVTPL are measured at fair value with unrealized gains and losses recognized through earnings. The Company has classified its cash and cash equivalents, short-term investments, marketable securities and restricted cash as FVTPL. The Company designated its marketable securities as FVTPL upon initial recognition in accordance with an investment strategy that management uses to evaluate performance on a fair value basis.

Financial assets classified as held-to-maturity are measured at amortized cost. The Company has no financial assets classified as held-to-maturity.

Financial assets classified as available-for-sale are measured at fair value with unrealized gains and losses recognized in other comprehensive income (loss) except for losses in value that are considered other than temporary. The Company has no financial assets classified as available-for-sale.

Transaction costs associated with FVTPL financial assets are expensed as incurred, while transaction costs associated with all other financial assets are included in the initial carrying amount of the asset.

Financial liabilities are initially recorded at fair value and designated upon inception as FVTPL or classified as other financial liabilities.

Financial liabilities classified as other financial liabilities are initially recognized at fair value less directly attributable transaction costs. Subsequently, they are measured at amortized cost using the effective interest method. The Company has classified its accounts payable and accrued liabilities as other financial liabilities.

Financial liabilities classified as FVTPL include financial liabilities held-for-trading and financial liabilities designated upon initial recognition as FVTPL. Fair value changes on financial liabilities classified as FVTPL are recognized through the consolidated statement of comprehensive income or loss. The Company has no financial liabilities classified as FVTPL.

The following table reflects the Company's categories of financial instruments as at the specified date:

		December 31, 2016	December 31, 2015
Cash and cash equivalents	FVTPL	\$ 9,817	\$ 1,674
Short-term investments	FVTPL	28	28
Marketable securities <sup>(1)</sup>	FVTPL	-	936
Other receivables	Loans and receivables	199	54
Restricted cash	FVTPL	2,075	2,075
Accounts payable	Other financial liabilities	(328)	(298)
Accrued and other liabilities	Other financial liabilities	(473)	(153)

(1) Classified under Level 3 fair value hierarchy

In respect of financial assets, the Company's policy is to invest cash at floating rates of interest and cash reserves are to be maintained in cash equivalents in order to maintain liquidity. Fluctuations in interest rates impact the value of cash equivalents. Included in the net loss for the year ended December 31, 2016, is investment income on the Company's cash and cash equivalents and short-term investments. As at December 31, 2016, with other variables unchanged, a 1% increase or decrease in the Prime rate would have resulted in a decrease or increase, respectively, to net loss of approximately \$40,000. The Company does not have any debt obligations which expose it to interest rate risk.

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The Company does not currently generate any revenues from sales to customers nor does it hold derivative type instruments that would require a counterparty to fulfil a contractual obligation resulting in a credit risk. The Company seeks to place its cash and cash equivalents, short-term investments and restricted cash with reputable financial institutions.

The Company considers the following financial assets to be exposed to credit risk: cash and cash equivalents, short-term investments, marketable securities and restricted cash. The carrying value of these financial assets at December 31, 2016 is \$11,920,000 (December 31, 2015 - \$4,713,000). At December 31, 2016, the Company's cash and cash equivalents, short-term investments and restricted cash were invested with two financial institutions.

Liquidity risk encompasses the risk that the Company cannot meet its financial obligations as they fall due. The Company ensures that there is sufficient capital in order to meet short-term business requirements. The Company's policy is to invest cash at floating rates of interest, while cash reserves are maintained in cash equivalents in order to maintain liquidity after taking into account the Company's holdings of cash equivalents, money market investments, marketable securities and receivables. As at December 31, 2016, the Company had positive working capital of \$9,513,000 (December 31, 2015 - \$2,482,000).

The ability of the Company to carry out its planned business objectives is dependent on its ability to raise adequate financing from lenders, shareholders and other investors. Additional financing will be required in the short term to continue the development of the Prairie Creek Project and in the longer term to put the Prairie Creek Mine into production. There is no assurance that such financing will be available on a timely basis or on acceptable terms. If the Company is unable to obtain adequate additional financing, the Company will be required to curtail operations, exploration and development activities. The Company is currently evaluating various opportunities and seeking additional sources of financing. This is discussed in more detail in the "Risk Factors" section in this MD&A.

## **DISCLOSURE CONTROLS AND PROCEDURES**

The Company's disclosure controls and procedures are designed to provide reasonable assurance that material items requiring disclosure by the Company in its annual filings, interim filings or other reports filed or submitted by it under securities legislations is recorded, processed, summarized and reported within the time periods specified in the securities legislation and include controls and procedures designed to ensure that information required to be disclosed by the Company in its annual filing, interim filings or other reports filed or submitted under securities legislation is accumulated and communicated to the Company's management, including its Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate to allow timely decisions regarding required disclosure.

As required under National Instrument 52-109 and based on current securities legislation in Canada and the United States, the CEO and the CFO of the Company have evaluated the design and effectiveness of the Company's disclosure controls and procedures as of December 31, 2016, and have concluded that such disclosure controls and procedures were operating effectively at that date.

It should be noted that, while the Company's CEO and CFO believe that the Company's disclosure controls and procedures provide a reasonable level of assurance and that they are effective, they do not expect that the disclosure controls and procedures can prevent all errors or mistakes. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

### **Management's Report on Internal Control over Financial Reporting**

Management is responsible for designing, establishing and maintaining a system of internal controls over financial reporting to provide reasonable assurance that the financial information prepared by the Company for external purposes is reliable and has been recorded, processed and reported in an accurate and timely manner in accordance with IFRS.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities. The Audit Committee fulfills its role of ensuring the integrity of the reported information through its review of the interim and annual consolidated financial statements.

There are inherent limitations in the effectiveness of internal controls over financial reporting, including the possibility that misstatements may not be prevented or detected. Accordingly, even effective internal controls over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation. Furthermore, the effectiveness of internal controls can change with circumstances. The Company has paid particular attention to segregation of duties matters surrounding its internal controls over financial reporting as the Company has only limited staff resources at the present time such that "ideal" segregation of duties is not feasible. This risk is dealt with by management identified compensating controls such as Board oversight or senior management review where appropriate. At the present time, the Company does not anticipate hiring additional accounting or administrative staff as this is not considered necessary or practical and accordingly, will continue to rely on review procedures to detect potential misstatements in reporting of material to the public.

The CEO and the CFO have evaluated the design and effectiveness of internal controls over financial reporting based on the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on this evaluation, as at December 31, 2016, the Company believes that its internal controls over financial reporting were designed and operating effectively to provide reasonable, but not absolute, assurance that the objectives of the control system are met. There have been no material changes to internal controls since the year ended December 31, 2016.

The Company's management, including the CEO and CFO, believe that any internal controls over financial reporting, including those systems determined to be effective and no matter how well conceived and operated, have inherent limitations and can provide only reasonable, not absolute, assurance that the objectives of the control system are met with respect to consolidated financial statement preparation and presentation. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any system of controls is also



based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.

KPMG LLP, an independent registered public accounting firm, has audited the Company's consolidated financial statements for the year ended December 31, 2016, and expressed an unqualified opinion thereon. KPMG LLP has also expressed an unqualified opinion on the Company's internal control over financial reporting as of December 31, 2016.

## **RISK FACTORS**

In conducting its business, Canadian Zinc faces a number of risks and uncertainties, many of which are beyond its ability to control or predict. Because of these risks and uncertainties, actual results may differ materially from those expressed or implied by forward-looking statements, and investors are cautioned not to place undue reliance on such statements, which speak only as of the date hereof. Investors are urged to review the discussion of risk factors associated with the Company's business as set out in the Company's most recent Annual Information Form (on Form 20-F) as well as in the Company's audited consolidated financial statements (under the headings "Nature of Operations and Going Concern" and "Significant Accounting Policies" and elsewhere within that document) for its most recently completed financial year, being the year ended December 31, 2016, and its other disclosure documents, all as filed on the SEDAR website at [www.sedar.com](http://www.sedar.com).

Additional risks and uncertainties not currently known to the Company or that the Company currently deems to be immaterial may also impair the Company, and the Company's failure to successfully address any such risks and uncertainties could have a material adverse effect on its business, financial condition and/or results of operations, and the future trading price of its common shares may decline and investors may lose all or part of their investment. The risk factors outlined in this section and elsewhere in this MD&A should be carefully considered by investors when evaluating an investment in the Company.

The management of Canadian Zinc has sought to manage risks within its control using several key components:

**Corporate Values:** Canadian Zinc promotes its corporate values throughout the Company and has a written Code of Business Conduct and Ethics (the "**Code**") that is distributed to all employees and signed by them to acknowledge receipt and compliance with the Code. A copy of the Code is available on the Company's website and is also available at no charge upon written request.

**Policies:** Canadian Zinc maintains a set of corporate policies designed to provide guidelines and determine authority levels for certain transactions.

**Internal Reporting:** Canadian Zinc holds regularly scheduled board meetings and also provides reports, on a monthly basis, to the board of directors. The Company believes that the frequency of regular reporting and meetings, supplemented by additional meetings as needed, provides for effective and timely risk management and oversight.

**Whistleblower System:** Canadian Zinc has a system in place, using a third-party independent service provider, where employees or other interested stakeholders may report any potential ethical concerns. The reports can be made on a confidential basis and any concerns reported are received by the Chairman of the Audit Committee. Should a matter be reported, the audit committee has been empowered to seek assistance from any personnel it deems relevant and also external legal counsel. All employees receive a copy of the whistleblower policy upon commencing employment with Canadian Zinc and are required to acknowledge receipt thereof.

Though the following are major risk factors identified by management, they do not comprise a definitive list of all risk factors related to the Company's business, financial condition and/or operating results.

### **Permitting, Environmental and Other Regulatory Requirements**

The operations of Canadian Zinc require licences and permits from various governmental and regulatory authorities. Canadian Zinc holds all necessary licences and permits under applicable laws and regulations for the operation of the Prairie Creek Mine. Canadian Zinc believes that it is presently complying in all material respects

with the terms of its current licences and permits. However, such licences and permits are subject to change in various circumstances. There can be no guarantee Canadian Zinc will be able to maintain all necessary licences and permits as are required to explore and develop its properties, including the Prairie Creek Property, commence construction or operation of mining facilities or properties under exploration or development.

The Prairie Creek Project is located in an environmentally sensitive and remote area in the Mackenzie Mountains of the Northwest Territories, within the watershed of the South Nahanni River. The South Nahanni River is considered to be of global significance, is highly valued as a wilderness recreation river and is a designated World Heritage Site. The South Nahanni River flows through the Nahanni National Park Reserve.

The Prairie Creek Property is encircled by the Nahanni National Park Reserve; however, an area of approximately 300 square kilometres immediately surrounding the Prairie Creek Mine is specifically excluded from the Park. In 2009 new legislation entitled "*An Act to Amend the Canada National Parks Act to enlarge Nahanni National Park Reserve of Canada*" was enacted, which also authorized the Minister of Environment to enter into leases, licences of occupation or easements over Nahanni Park lands for the purposes of a mining access road leading to the Prairie Creek Mine area, including the sites of storage and other facilities connected with that road. The Company has obtained permits from the Parks Canada Agency for the purposes of accessing the Prairie Creek Mine area. There can be no guarantee Canadian Zinc will be able to maintain all necessary permits on acceptable terms.

Canadian Zinc's activities are subject to extensive federal, provincial, territorial and local laws and regulations governing environmental protection and employee health and safety. Canadian Zinc is required to obtain governmental permits and provide bonding requirements under federal and territorial water and mine regulations. All phases of Canadian Zinc's operations are subject to environmental regulation. These regulations mandate, among other things, the maintenance of water and air quality standards and land reclamation. They also set forth limitations on the generation, transportation, storage and disposal of solid and hazardous waste. Environmental legislation is evolving in a manner, which will require stricter standards and enforcement, increased fines and penalties for non-compliance, and more stringent environmental assessments of proposed projects. United Nations proposals for a global treaty on mercury, intended to result in reduced global emissions of mercury, may place restrictions on the production, use and international movement of mercury and mercury-containing wastes which may, if adopted, result in restrictions on shipment of concentrates or other mineral products containing by-product or trace mercury. There is no assurance that future changes in environmental laws or regulations, if any, will not adversely affect Canadian Zinc's operations.

Environmental laws and regulations are complex and have tended to become more stringent over time. These laws are continuously evolving. Any changes in such laws, or in the environmental conditions at the Prairie Creek Property, could have a material adverse effect on Canadian Zinc's financial condition, liquidity or results of operations. Canadian Zinc is not able to determine the impact of any future changes in environmental laws and regulations on its future financial position due to the uncertainty surrounding the ultimate form such changes may take. The Company does not currently consider that its expenditures required to maintain ongoing environmental monitoring obligations at the Prairie Creek Property are material to the results and financial condition of the Company. However, these costs could become material in the future and would be reported in the Company's public filings at that time.

Although Canadian Zinc makes provision for reclamation costs, it cannot be assured that such provision is adequate to discharge its obligations for these costs. As environmental protection laws and administrative policies change, Canadian Zinc will revise the estimate of its total obligations and may be obliged to make further provisions or provide further security for mine reclamation costs. The ultimate amount of reclamation to be incurred for existing and past mining interests is uncertain. Additional discussion on the impact of reclamation costs is included in this MD&A in the section "Critical Accounting Estimates".

Existing and possible future environmental legislation, regulations and actions could cause additional expense, capital expenditures, restrictions and delays in the activities of the Company, the extent of which cannot be predicted. The Company must obtain various regulatory approvals, permits and licences relating to the Prairie Creek Property and there is no assurance that such approvals will be obtained. No assurance can be given that new rules and regulations will not be enacted or made, or that existing rules and regulations will not be applied, in a manner which could limit or curtail production or development.

Regulatory approvals and permits are currently, and will in the future be, required in connection with Canadian Zinc's operations. To the extent such approvals are required and not obtained; Canadian Zinc may be curtailed or

prohibited from proceeding with planned exploration or development of its mineral properties or from continuing its mining operations.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. The Company may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Failure to comply with applicable environmental and health and safety laws can result in injunctions, damages, suspension or revocation of permits and imposition of penalties. There can be no assurance that Canadian Zinc has been or will be at all times in complete compliance with all such laws, regulations and permits, or that the costs of complying with current and future environmental and health and safety laws and permits will not materially adversely affect Canadian Zinc's business, results of operations or financial condition. Environmental hazards may exist on the properties, including the Prairie Creek Property, on which Canadian Zinc holds interests which are unknown to Canadian Zinc at present and which have been caused by previous owners or operators of the properties.

Amendments to current laws, regulations and permits governing operations and activities of mining and exploration companies, or more stringent implementation thereof, could have a material adverse impact on Canadian Zinc and cause increases in exploration expenses, capital expenditures or production costs or require abandonment or delays in the development of mining properties.

The Prairie Creek Project has, on numerous occasions, experienced significant delays in obtaining permits and licences necessary for the conduct of its operations. The environmental assessment of the Company's application for a permit for an all-season road has been ongoing for almost three years and is not yet complete. If at any time permits essential to operations are not obtained, or not obtained in a timely manner, or are cancelled or revoked, there is a risk that the Company may not be able to operate a mine at the Prairie Creek Property.

### **Political and Legislative**

Canadian Zinc conducts its operations in Canada and specifically in the Northwest Territories and the province of Newfoundland and Labrador. The Mackenzie Valley in the Northwest Territories of Canada is in an area which is claimed by the Dehcho First Nations as their traditional territory. The Dehcho have not settled their land claim with the Federal Government of Canada. The Dehcho and the Federal Government both claim legal title to this territory and legal title to the land remains in dispute. The Company's operations are potentially subject to a number of political, legislative and other risks. Canadian Zinc is not able to determine the impact of political, legislative or other risks on its business or its future financial position.

Canadian Zinc's operations are exposed to various levels of political, legislative and other risks and uncertainties. These risks and uncertainties include, but are not limited to, cancellation, renegotiation or nullification of existing leases, claims, permits and contracts; expropriation or nationalization of property; changes in laws or regulations; changes in taxation laws or policies; royalty and tax increases or claims by governmental, Aboriginal or other entities; retroactive tax or royalty claims and changing political conditions; government mandated social expenditures; governmental regulations or policies that favour or require the awarding of contracts to local or Aboriginal contractors or require contractors to employ residents of, or purchase supplies from, a particular jurisdiction or area; or that require that an operating project have a local joint venture partner, which may require to be subsidized; and other risks arising out of sovereignty or land claims over the area in which Canadian Zinc's operations are conducted.

The mineral exploration, mine development, and proposed mining, processing activities of Canadian Zinc, and the anticipated production, transportation and sale of mineral concentrates are subject to extensive federal, territorial, international and local laws, regulations and treaties, including various laws governing prospecting, development, production, transportation taxes, labour standards and occupational health, mine safety, toxic substances including mercury, land use, water use and other matters. Such laws and regulations are subject to change and can become more stringent and costly over time. No assurance can be given that new laws, rules and regulations will not be enacted or that existing laws, rules and regulations will not be applied in a manner which could limit or curtail exploration, development, mining, processing, production and sale of concentrates. Amendments to current

laws and regulations governing operations and activities of exploration and mining, or more stringent implementation thereof, could have a substantial adverse impact on Canadian Zinc.

There was a major change to the legislative and regulatory framework and regulations in the Mackenzie Valley between 1998 and 2000 with the enactment of the *Mackenzie Valley Resource Management Act* (“MVRMA”). In 2007, the Federal Government announced the Northern Regulatory Improvement Initiative to improve the current regulatory regime in the north of Canada and formally embarked on a review of environmental regulatory systems throughout the North.

In May 2010, the Federal Government announced an Action Plan to improve northern regulatory regimes, which anticipated changes to the current legislative framework and regulatory processes. This process, which included negotiations with the Government of the Northwest Territories and various Aboriginal Governments in the context of NWT devolution, led to several changes to the MVRMA, including creation of the Superboard, the effect of which would be to collapse the functions of the Wek’eezhii Land and Water Board (WLWB), the Sahtu Land and Water Board, and the Gwich’in Land and Water Board into one single land and water board, or “Superboard” - the Mackenzie Valley Land and Water Board.

Creation of the Mackenzie Valley “Superboard” was contemplated in the amendments to the MVRMA contained in the Northwest Territories Devolution Act 2014. The Superboard legislation was to take effect on April 1, 2015. The Tlicho Government objected on the grounds that the Tlicho Agreement expressly requires the establishment of the WLWB. The Tlicho further said that they were not consulted on the amendments. Canada maintained that the legislation is necessary to increase efficiency in the regulatory process. As a result of this disagreement, the Tlicho Government commenced an action against the Federal Government in May 2014, seeking among other things a declaration that Superboard legislation is unconstitutional, as well as an injunction preventing the Superboard legislation from taking effect until the constitutionality of the Superboard can be determined. The Supreme Court of the Northwest Territories granted an injunction to the Tlicho Government suspending the implementation of the “Superboard” legislation and the Federal Government appealed the decision. In December 2015, the new Liberal Government announced the suspension of the appeal. It is expected that the new Liberal Government will introduce legislation further amending the MVRMA to remove the “Superboard” and re-establish the original regional water boards.

On April 1, 2014, The Northwest Territories Devolution Act which provides for the devolution of lands and resource management from the Government of Canada to the Government of the Northwest Territories (GNWT) came into force. Devolution in the Northwest Territories means the transfer of decision-making and administration for land and resource management in the NWT from the Government of Canada to the Government of the Northwest Territories. The Territorial government is now responsible for the management of onshore lands and the issuance of rights and interests with respect to onshore minerals and oil and gas. The GNWT now has the power to collect and share in resource revenues generated in the territory. *The Northwest Territories Devolution Act* includes certain amendments to the *Mackenzie Valley Resource Management Act*, which impose additional regulations and obligations on mining operations in the Mackenzie Valley.

There can be no assurance that these laws and regulations will not change in the future in a manner that could have an adverse effect on the Company’s activities and/or its financial condition.

In relation to Northwest Territories specifically, a number of policy and social issues exist which increase Canadian Zinc’s political and legislative risk. The Government of Canada and Government of the Northwest Territories are facing legal and political issues, such as land claims and social issues, all of which may impact future operations. This political climate increases the risk of the Government making changes in the future to its position on issues such as mining rights and land tenure, which in turn may adversely affect Canadian Zinc’s operations. Future government actions cannot be predicted, but may impact the operation and regulation of the Prairie Creek Mine. Changes, if any, in Government policies, or shifts in local political attitude in the Northwest Territories may adversely affect Canadian Zinc’s operations or business.

In 2016, the Government of Canada announced the introduction of a national pan-Canadian framework that includes a national floor price on carbon which, if implemented, will increase the cost of power supply to the Company’s projects. Canadian provinces and territories will be given until 2018 to implement a carbon pricing policy, starting with a minimum price of \$10 per tonne in 2018, increasing \$10 per year to \$50 per tonne by 2022.

Canadian Zinc's exploration, development and production activities may be substantially affected by factors beyond Canadian Zinc's control, any of which could materially adversely affect Canadian Zinc's financial position or results of operations. The occurrence of these various factors and uncertainties cannot be accurately predicted. The Company is not able to determine the impact of these risks on its business.

## **Financing and Going Concern**

The successful development of the Company's properties will depend upon the Company's ability to obtain financing through private placement financing, public financing, the joint venturing of projects, bank financing or other means. Additional financing will be required in the short term to fund its corporate administration costs and working capital and to continue the development of the Prairie Creek Project and in the longer term to put the Prairie Creek Mine into production. There is no assurance that the Company will be successful in obtaining the required financing.

Securities of junior and small-cap companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and global and market perceptions of the attractiveness of particular industries. The share price of Canadian Zinc is likely to be significantly affected by short-term changes in metal prices. Other factors unrelated to Canadian Zinc's performance that may have an effect on the price of its shares include the following: the extent of analytical coverage available to investors concerning Canadian Zinc's business may be limited if investment banks with research capabilities do not follow the Company's securities; lessening in trading volume and general market interest in the Company's securities may affect an investor's ability to trade significant numbers of common shares; the size of Company's public float may limit the ability of some institutions to invest in the Company's securities; and a substantial decline in the price of the common shares that persists for a significant period of time could cause the Company's securities to be delisted from an exchange, further reducing market liquidity.

As a result of any of these factors, the market price of the Company's shares at any given point in time may not accurately reflect Canadian Zinc's long-term value. Securities class action litigation often has been brought against companies following periods of volatility in the market price of their securities. Canadian Zinc may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

Canadian Zinc does not currently generate any cash flow from its operations and will need to generate additional financial resources in the short term to fund its corporate administration costs and working capital and to continue the development of the Prairie Creek Project and in the longer term to put the Prairie Creek Mine into production. The ability of the Company to carry out its planned business objectives is dependent on its ability to raise adequate financing from lenders, shareholders and other investors. There is a risk that additional financing will not be available to the Company on a timely basis or on acceptable terms. The Company is currently evaluating various opportunities and seeking additional sources of financing. There is no assurance that such financing will be available on a timely basis or on acceptable terms.

There are no assurances that the Company will continue to be able to obtain additional financial resources and/or achieve positive cash flows or profitability. Canadian Zinc has a history of losses with no operating revenue other than minor interest income. The Company has not achieved profitable operations, has an accumulated deficit since inception and expects to incur further losses in the development of its business.

The development of the Prairie Creek Mine will require substantial additional financing. The 2016 Preliminary Feasibility Study estimated that the additional capital required to install the planned new facilities and to bring the Prairie Creek Mine into production will aggregate \$216 million, plus a contingency of \$28 million for a total of \$244 million. Working capital required upon commencement of production is estimated to be \$30 million plus a contingency of \$6 million for a total of \$36 million.

Supported by the results of the 2016 Preliminary Feasibility Study, Canadian Zinc will continue to evaluate all alternatives and possibilities for raising the senior financing necessary to complete the development and construction and put the Prairie Creek Mine into production. However, the ability to raise financing is impacted by conditions beyond the control of the Company, including depressed commodity prices, continued uncertainty in the capital markets and the current lack of investor interest in the resource sector. There are no assurances that the Company will continue to be able to obtain such financing on a timely basis or on acceptable terms.

## **Metal Prices and Marketability of Minerals**

The market price of metals and minerals is volatile and cannot be controlled. Metal prices have fluctuated widely, particularly in recent years. If the price of metals and minerals should drop significantly, the economic prospects for the Prairie Creek Project could be significantly reduced or rendered uneconomic. There is no assurance that a profitable market may exist for the sale of products, including concentrates from the Prairie Creek Project. Factors beyond the control of the Company may affect the marketability of minerals or concentrates produced. It is expected that the zinc concentrates to be produced from the Prairie Creek Mine will contain relatively high levels of mercury. United Nations proposals for a global treaty on mercury, intended to result in reduced global emissions of mercury, may place restrictions on the production, use and international movement of mercury and mercury-containing wastes which may, if adopted, result in restrictions on shipment of concentrates or other mineral products containing by-product or trace mercury.

The marketability of minerals is affected by numerous other factors beyond the control of the Company, including quality issues, impurities, deleterious elements, government regulations, royalties, allowable production and regulations regarding the importing and exporting of minerals, the effect of which cannot be accurately predicted.

Factors tending to affect the price of metals include:

- The relative strength of the U.S. dollar against other currencies;
- Government monetary and fiscal policies;
- Expectations of the future rate of global monetary inflation and interest rates;
- General economic conditions and the perception of risk in capital markets;
- Political conditions including the threat of terrorism or war;
- Speculative trading;
- Investment and industrial demand; and
- Global production and inventory stocks.

The effects of these factors, individually or in aggregate, on the prices of zinc, lead and/or silver is impossible to predict with accuracy. Fluctuations in metal prices may adversely affect Canadian Zinc's financial performance and results of operations. Further, if the market price of zinc, lead and/or silver falls or remains depressed, Canadian Zinc may experience losses or asset write-downs and may curtail or suspend some or all of its exploration, development and mining activities.

Furthermore, sustained low metal prices can halt or delay the development of new and existing projects; reduce funds available for mineral exploration and may result in the recording of a write-down of mining interests due to the determination that future cash flows would not be expected to recover the carrying value.

Metal prices fluctuate widely and are affected by numerous factors beyond Canadian Zinc's control such as the sale or purchase of such commodities by various central banks and financial institutions, interest rates, exchange rates, inflation or deflation, fluctuation in the value of the United States dollar and foreign currencies, global and regional supply and demand, and the political and economic conditions of major mineral and metal producing countries throughout the world.

Future production, if any, from Canadian Zinc's mining properties is dependent on mineral prices that are adequate to make these properties economic. The prices of metals have fluctuated widely in recent years, and future or continued serious price declines could cause continued development of and commercial production from Canadian Zinc's properties to be impracticable. Depending on the price of metal, cash flow from mining operations may not be sufficient and Canadian Zinc may never commence commercial production and may lose its interest in, or may be forced to sell, its properties.

The zinc concentrates to be produced from the Prairie Creek Mine will contain, to varying degrees, relatively high levels of mercury. Canadian Zinc has signed MOUs with Korea Zinc and Boliden for the sale of zinc concentrates. The MOUs set out the intentions of Canadian Zinc and each of Korea Zinc and Boliden to enter into concentrate sales agreements for the concentrates to be produced from the Prairie Creek Mine on the general terms set out in the MOUs, including commercial terms which are to be kept confidential. The sales agreements will provide that treatment charges will be set annually at the annual benchmark treatment charges and scales, as agreed between major smelters and major miners. Payables and penalties will be negotiated in good faith annually during the fourth

quarter of the preceding year, including industry standard penalties based on indicative terms and agreed limits specified in each MOU.

Treatment and refining charges, including deductibles and penalties, vary with smelter location, and individual smelter terms and conditions. The economic model used in the 2016 Preliminary Feasibility Study has been prepared assuming average blended indicative treatment charges and penalties, however, no smelter or concentrate buyer has contractually committed to the assumed treatment charges or penalties. There can be no assurance that the assumed terms will be available to the Company.

In addition to adversely affecting Canadian Zinc's reserve or resource estimates and its financial condition, declining commodity prices can impact operations by requiring a reassessment of the feasibility of a particular project. The need to conduct such a reassessment may cause substantial delays or may interrupt operations until the reassessment can be completed.

Currency fluctuations may affect the costs that Canadian Zinc incurs at its operations. Zinc, lead and silver are sold throughout the world based principally on the U.S. dollar price, but operating expenses are incurred in currencies other than the U.S. dollar. Appreciation of the Canadian dollar against the U.S. dollar increases the cost of production in U.S. dollar terms at mines located in Canada.

## **Exploration and Evaluation**

The business of exploring for minerals and mining involves a high degree of risk. There is no assurance the Company's mineral exploration activities will be successful. Few properties that are explored are ultimately developed into producing mines. In exploring and developing its mineral deposits the Company is subjected to an array of complex economic factors and technical considerations. Unusual or unexpected formations, formation pressures, power outages, labour disruptions, flooding, explosions, cave-ins, landslides, environmental hazards, and the inability to obtain suitable or adequate machinery, equipment or labour are other risks involved in the conduct of exploration and development programs. Such risks could materially adversely affect the business or the financial performance of the Company.

There is no certainty that the expenditures made by Canadian Zinc towards the search and evaluation of mineral deposits will result in discoveries of commercial quantities of ore. The exploration for and development of mineral deposits involves significant risks which even a combination of careful evaluation, experience and knowledge may not eliminate. Major expenses may be required to locate and establish mineral reserves, to develop metallurgical processes and to construct mining and processing facilities at a particular site. It is impossible to ensure that the exploration or development programs planned by Canadian Zinc will result in a profitable commercial mining operation. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: the particular attributes of the deposit, such as size, grade and proximity to infrastructure; metal prices which are highly cyclical; and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in Canadian Zinc not receiving an adequate return on invested capital.

A specific risk associated with the Prairie Creek Property is its remote location. Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important factors, which affect capital and operating costs. Unusual or infrequent weather phenomena, government or other interference in the maintenance or provision of such infrastructure could adversely affect Canadian Zinc's operations, financial condition and results of operations.

Mining operations generally involve a high degree of risk. Canadian Zinc's mining operations will be subject to all the hazards and risks normally encountered in the development and production of minerals, including unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability. Mining and milling operations are subject to hazards such as equipment failure or failure of retaining dams around tailings disposal areas, which may result in environmental pollution and consequent liability.

## **Uncertainty in the Estimation of Mineral Reserves and Mineral Resources**

The figures for Mineral Reserves and Mineral Resources contained in this document are estimates only and no assurance can be given that the anticipated tonnages and grades will be achieved, that the indicated level of recovery will be realized or that Mineral Reserves and Mineral Resources can be mined or processed profitably. There are numerous uncertainties inherent in estimating Mineral Reserves and Mineral Resources, including many factors beyond Canadian Zinc's control. Such estimation is a subjective process, and the accuracy of any reserve and resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. In addition, there can be no assurance that mineral or metal recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production.

Inferred mineral resources do not have demonstrated economic viability. Due to the uncertainty, which may attach to inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to measured and indicated mineral resources as a result of continued exploration.

Fluctuation in metal prices, results of drilling, metallurgical testing and production and the evaluation of mine plans subsequent to the date of any estimate may require revision of any such resource or reserve estimate. The volume and grade of resources mined and processed and recovery rates may not be the same as currently anticipated. Any material reductions in estimates of Mineral Reserves or Mineral Resources, or of Canadian Zinc's ability to extract these Mineral Reserves or Mineral Resources, could have a material adverse effect on Canadian Zinc's results of operations and financial condition.

Mineral reserve and mineral resource estimates are imprecise and depend partly on statistical inferences drawn from drilling and other data which may prove to be unreliable. Future production could differ dramatically from reserve or resource estimates for many reasons including the following:

- Mineralization or formations could be different from those predicted by drilling, sampling and similar examinations;
- Declines in the market price of metals may render the mining of some or all of Canadian Zinc's Mineral Reserves or Mineral Resources uneconomic;
- Increases in operating mining costs and processing costs could adversely affect reserves or resources; and
- The grade of reserves or resources may vary significantly from time to time and there can be no assurance that any particular level of metal may be recovered from the reserves or resources.

Any of these factors may require Canadian Zinc to reduce its Mineral Reserve or Mineral Resources estimates.

## **Insurance and Uninsured Risks**

Canadian Zinc's business is subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground or slope failures, cave-ins, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods and earthquakes. Such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to Canadian Zinc's properties or the properties of others, delays in mining, monetary losses and possible legal liability.

Although Canadian Zinc maintains insurance to protect against certain risks in such amounts as it considers reasonable, its insurance will not cover all the potential risks associated with the Company's mining operations. Canadian Zinc may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to Canadian Zinc or to other companies in the mining industry on acceptable terms. In particular, the Company is not insured for environmental liability or earthquake damage.

Canadian Zinc might also become subject to liability for pollution or other hazards which may not be insured against, or which Canadian Zinc may elect not to insure against, because of premium costs or other reasons. Losses from these events may cause Canadian Zinc to incur significant costs that could have a material adverse effect upon its financial performance and results of operations.



## **Title Matters**

Mining leases and surface leases issued to the Company by the Government have been surveyed but other parties may dispute the Company's title to its mining properties. The mining claims in which the Company has an interest have not been surveyed and, accordingly, the precise location of the boundaries of the claims and ownership of mineral rights on specific tracts of land comprising the claims may be in doubt. These claims have not been converted to lease, and are, accordingly, subject to regular compliance with assessment work requirements. Failure to comply strictly with applicable laws, regulations and local practices relating to mineral right applications and tenure, could result in loss, reduction or expropriation of entitlements.

While the Company has investigated its title to all its mining leases, surface leases and mining claims and, to the best of its knowledge, title to all properties is in good standing, this should not be construed as a guarantee of title and title may be affected by undetected defects. The validity and ownership of mining property holdings can be uncertain and may be contested. There are currently a number of pending Aboriginal or Native title or Treaty or traditional land ownership claims relating to Northwest Territories. The Company's properties at Prairie Creek are subject to Aboriginal or Native land claims. Title insurance generally is not available, and Canadian Zinc's ability to ensure that it has obtained secure title to individual mineral properties or mining concessions may be severely constrained. Canadian Zinc's mineral properties may be subject to prior unregistered liens, agreements, transfers or claims, including Native land claims, and title may be affected by, among other things, undetected defects. No assurances can be given that there are no title defects affecting such properties.

## **Executives and Conflicts of Interest**

Canadian Zinc is dependent on the services of key executives, including its President and Chief Executive Officer, its Vice President of Exploration and Chief Operating Officer and its Chief Financial Officer. Due to the relatively small size of the Company, the loss of these persons or Canadian Zinc's inability to attract and retain additional highly skilled or experienced employees may adversely affect its business and future operations.

Certain of the directors and officers of the Company also serve as directors and/or officers of, or have significant shareholdings in, other companies involved in natural resource exploration and development and consequently there exists the possibility for such directors and officers to be in a position of conflict. Any decision made by any of such directors and officers involving Canadian Zinc will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of the Company and its shareholders. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest in accordance with the procedures set forth in the *Business Corporations Act* (British Columbia) and other applicable laws.

To the extent that such other companies may participate in ventures in which Canadian Zinc may participate, the directors of Canadian Zinc may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that such a conflict of interest arises at a meeting of the Company's directors, a director who has such a conflict will abstain from voting for the approval of such participation or such terms.

From time to time several companies may collectively participate in the acquisition, exploration and development of natural resource properties thereby allowing for their participation in larger programs, permitting involvement in a greater number of programs and reducing financial exposure in respect of any one program. It may also occur that a particular company will assign all or a portion of its interest in a particular program to another of these companies due to the financial position of the company making the assignment. Under the laws of the Province of British Columbia, the directors of the Company are required to act honestly, in good faith and in the best interests of the Company. In determining whether or not Canadian Zinc will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at that time.

## **Acquisitions**

From time to time Canadian Zinc undertakes evaluations of opportunities to acquire additional mining assets and businesses. Any resultant acquisitions may be significant in size, may change the scale of Canadian Zinc's business, and may expose Canadian Zinc to new geographic, political, operating financial and geological risks. Canadian Zinc's success in its acquisition activities depends on its ability to identify suitable acquisition candidates, to acquire them on acceptable terms, and integrate their operations successfully with those of Canadian Zinc. Any

acquisition would be accompanied by risks, such as a significant decline in metal prices; the ore body proving to be below expectations; the difficulty of assimilating the operation and personnel; the potential disruption of Canadian Zinc's ongoing business; the inability of management to maximize the financial and strategic position of Canadian Zinc through the successful integration of acquired assets and businesses; the maintenance of uniform standards, control, procedures and policies; the impairment of relationships with employees, customers and contractors as a result of any integration of new management personnel; and the potential unknown liabilities associated with acquired assets and business. In addition, Canadian Zinc may need additional capital to finance an acquisition. Debt financing related to any acquisition will expose Canadian Zinc to the risk of leverage, while equity financing may cause existing shareholders to suffer dilution. There can be no assurance that Canadian Zinc would be successful in overcoming these risks or any other problems encountered in connection with such acquisitions.

## **Competition**

The mining industry is competitive in all of its phases. There is aggressive competition within the mining industry for the discovery and acquisition of properties considered to have commercial potential. Canadian Zinc faces strong competition from other mining companies in connection with the acquisition of properties, mineral claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees and other personnel. Many of these companies have greater financial resources, operational experience and technical capabilities than Canadian Zinc. As a result of this competition, Canadian Zinc may be unable to maintain or acquire attractive mining properties on terms it considers acceptable or at all. Consequently, Canadian Zinc's operations and financial condition could be materially adversely affected.

## **Requirements of the Sarbanes-Oxley Act and Similar Canadian Regulations**

Since 2007, the Company has documented and tested its internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 ("**SOX**"), which requires an annual assessment by management of the effectiveness of the Company's internal control over financial reporting and an attestation by the Company's independent auditors addressing internal controls over financial reporting.

Due to its size, its limited staff resources and financial constraints, the Company is exposed to certain potential deficiencies in its internal controls over financial reporting. If the Company is unable to maintain the adequacy of its internal control over financial reporting, as such standards are modified, supplemented, or amended from time to time; the Company may not be able to ensure that it can conclude on an ongoing basis that it has effective internal controls over financial reporting in accordance with Section 404 of SOX. The Company's inability to satisfy the requirements of Section 404 of SOX on an ongoing, timely basis could result in the loss of investor confidence in the reliability of its consolidated financial statements, which in turn could harm the Company's business and negatively impact the trading price of its common shares. In addition, any inability to implement required new or improved controls, or difficulties encountered in their implementation, could impact the Company's operating results or cause it to be unable to meet its reporting obligations. Future acquisitions (if any) may provide the Company with challenges in implementing the required processes, procedures and controls in the acquired operations. Acquired companies may not have disclosure controls and procedures or internal control over financial reporting that are as thorough or effective as those required by securities laws currently applicable to the Company.

No evaluation can provide complete assurance that the Company's internal control over financial reporting will detect or uncover all failures of persons within the Company to disclose material information otherwise required to be reported. The effectiveness of the Company's controls and procedures could also be limited by simple errors or faulty judgments. In addition, as the Company continues to develop, the challenges involved in implementing appropriate internal controls over financial reporting will increase and will require that the Company continue to enhance its internal controls over financial reporting. Although the Company will be required to devote substantial time and will incur substantial costs, as necessary, in an effort to ensure ongoing compliance, the Company cannot be certain that it will be successful in continuing to comply with Section 404 of SOX.

## **Information Technology Systems Disruption**

The Company relies on information technology systems and networks in the operation of its business. The Company could be materially and adversely affected in the event that its information technology systems or networks are compromised. This information technology infrastructure may be subject to security breaches or other cybersecurity incidents, or may be compromised by natural disasters or defects in software or hardware

systems. The consequences of the Company's information technology systems being compromised include material and adverse impacts on the Company's financial condition, operations, production, and reputation.

### **Global Climate Change**

Extreme weather events (such as increased frequency or intensity of storms, increased snow pack, or unusually warm or shorter winter seasons) have the potential to disrupt operations at the Company's projects. Extended disruption to road access due to extreme weather could delay or increase the cost of construction of the Company's projects, or otherwise adversely affect the Company's business.

### **History of Losses and No Assurance of Profitable Operations**

The Company has incurred cumulative losses since inception of \$114,592,000 through December 31, 2016, which includes \$78,508,000 of exploration and development expenditures on the Prairie Creek Property and \$4,167,000 on the central Newfoundland properties all of which has been expensed in accordance with the Company's accounting policies. There can be no assurance that the Company will be able to operate profitably during future periods. If the Company is unable to operate profitably during future periods, and is not successful in obtaining additional financing, the Company could be forced to cease its exploration and evaluation programs and mine development activities as a result of insufficient cash resources.

### **Shareholder Dilution**

As of December 31, 2016, there were 266,111,543 common shares outstanding. As of December 31, 2016, the Company had 5,850,000 share purchase options and 16,734,000 warrants outstanding allowing the holders to purchase 22,584,000 common shares. Directors and officers of the Company hold 3,850,000 of these share purchase options; contractors and employees of the Company hold 2,000,000 share purchase options; and third-party entities hold 16,734,000 share purchase warrants. In addition, 6,011,404 share units are outstanding allowing the holders to receive an equal amount of common shares upon payout. Directors and officers of the company hold 5,111,404 of these share units with the balance being held by contractors and employees of the Company.

As of the date of the MD&A, there were 266,111,543 common shares outstanding and the Company had 5,850,000 share purchase options, 16,734,000 warrants and 6,011,404 share units outstanding. The exercise or payout of all of the existing share purchase options, warrants and share units would result in a percentage ownership dilution to the existing shareholders.

### **Potential Future Equity Financings**

The Company has used equity financing in order to meet its needs for capital and may engage in equity financings during future periods. Subsequent issuances of equity securities or securities convertible into or exchangeable or exercisable for equity securities would result in further percentage ownership dilution to existing shareholders and could depress the price of the Company's shares.

### **DIVIDENDS AND DISTRIBUTIONS POLICY**

No dividends have been paid by the Company to date. The Company anticipates that it will retain all future earnings and other cash resources for the future operation and development of its business and the Company does not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of the Company's board of directors after taking into account many factors, including the Company's operating results, financial condition and current and anticipated cash needs.

### **ADDITIONAL INFORMATION**

Additional information relating to the Company, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, and securities authorized for issuance under equity compensation plans, is contained in the Company's Information Circular for its most recent Annual Meeting of Shareholders that involved the election of directors, which may be found on SEDAR at [www.sedar.com](http://www.sedar.com). Information is also available

through the EDGAR system accessible through the United States Securities and Exchange Commission's website [www.sec.gov](http://www.sec.gov).