

- Continued Progress on Prairie Creek Project

CZN-TSX  
CZICF-OTCQB

VANCOUVER, March 22, 2017 /CNW/ - [Canadian Zinc Corp.](#) (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") reports its financial results for the year ended December 31, 2016.

This press release should be read in conjunction with CZN's Management's Discussion and Analysis (MD&A) and Annual Consolidated Financial Statements for the year ended December 31, 2016, which are available on the Company's website at [www.canadianzinc.com](http://www.canadianzinc.com), or under the Company's profile on SEDAR ([www.sedar.com](http://www.sedar.com)).

#### Financial Results

For the year ended December 31, 2016, Canadian Zinc 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.

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.

#### Prairie Creek Project

##### Initiation of Definitive Feasibility Study

Canadian Zinc 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.

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 also complete required engineering utilizing a cost-effective project design methodology to support the development of a high-level 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 DFS is expected to be completed by mid-2017.

##### Engagement of HCF as Debt Financing Advisors

Concurrently, the Company has also retained HCF International Advisers ("HCF") as financial advisers to arrange debt financing for the project.

HCF has prepared a three-staged approach to source and negotiate the debt financing. 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. 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, Canadian Zinc has initiated a mineral processing optimization program. To complete the 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 recently drilled in the Prairie Creek Mine. The principal objectives of the program are to examine the 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, thereby improving the projected metal recoveries and lowering milling production costs. 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.

#### Alternative Energy Options & Use of LNG

In February 2017, the Company entered into an agreement with the Northwest Territories Power Corporation ("NTPC") to 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") which is a cheaper and much more environmentally friendly source of fuel for power generation.

#### 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 two years.

In February 2017, the environmental assessment process entered into the Hearing Phase. Various registered parties submitted Technical Reports on March 10, 2017 and CZN will file its responses before April 7, 2017

A revised 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.

#### Central Newfoundland Properties

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.

#### Central Milling Facility Research Collaboration Project

In 2015, the Company entered into a collaboration agreement with [Buchans Minerals Corp.](#) ("Buchans Minerals", "BMC"), 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,

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 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.

#### 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 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

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 new drill targets in three priority areas including Lemarchant North, Spencers Pond and Lost Pond.

Between February 1 and March 7, 2017, Canadian Zinc 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.

#### 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 Pre-Feasibility 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.

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. 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. The price of silver surged over 40% in the first half of 2016 and then retreated from a two-year high of over US\$20 per ounce to approximately US\$18 per ounce.

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.

#### About Canadian Zinc

Canadian Zinc is a TSX-listed exploration and development company trading under the symbol "CZN". The Company's key project is the 100%-owned Prairie Creek Project, a fully permitted, advanced-staged zinc-lead-silver property, located in the Northwest Territories. Canadian Zinc also owns an extensive land package in central Newfoundland that it is exploring for copper-lead-zinc-silver-gold deposits.

## Cautionary Statement &#8211; Forward-Looking Information

This press release contains certain forward-looking information, including, among other things, the expected completion of acquisitions and the advancement of mineral properties. This forward looking information includes, or may be based upon, estimates, forecasts, and statements as to management's expectations with respect to, among other things, the completion of transactions, the issue of permits, the size and quality of mineral resources, future trends for the company, progress in development of mineral properties, future production and sales volumes, capital costs, mine production costs, demand and market outlook for metals, future metal prices and treatment and refining charges, the outcome of legal proceedings, the timing of exploration, development and mining activities, acquisition of shares in other companies and the financial results of the company. There can be no assurances that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. 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. There is no certainty that mineral resources will be converted into mineral reserves.

## Cautionary Note to United States Investors

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. We use certain terms in this press release, such as "measured," "indicated," and "inferred" "resources," which the SEC guidelines prohibit U.S. registered companies from including in their filings with the SEC.

SOURCE [Canadian Zinc Corp.](#)

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