

# PRESS RELEASE

# CZN-TSX CZICF-OTCQB

# FOR IMMEDIATE RELEASE March 30, 2016

# CANADIAN ZINC REPORTS FINANCIAL RESULTS FOR 2015

- Underground Exploration increases Resources
  - Two MOUs signed for Concentrate Sales
- Prairie Creek Updated Preliminary Feasibility Completed
  - Newfoundland Metallurgical Testwork on track

**Vancouver, British Columbia, March 30, 2016 - Canadian Zinc Corporation** (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") reports its financial results and development activities for the year ended December 31, 2015.

# Financial Results for Fiscal 2015

For the year ended December 31, 2015, the Company reported a net loss and comprehensive loss of \$8,262,000 compared to a net loss and comprehensive loss of \$12,434,000 for the year ended December 31, 2014.

Included in the loss for the year ended December 31, 2015, were exploration and evaluation expenditures of \$7,650,000 compared to \$9,996,000 for the previous year.

The net loss in the year ended December 31, 2015 included a gain of \$486,000 on the Company's marketable securities compared to a loss of \$878,000 for the comparative year of 2014 and a gain on changes to the decommissioning provision of \$246,000 compared to no gain or loss in the comparative year of 2014.

At December 31, 2015, the Company had a positive working capital balance of \$2,482,000 including cash and cash equivalents of \$1,674,000, short term investments of \$28,000 and marketable securities of \$936,000. In January 2016, the Company's marketable securities, being its investment in Vatukoula Gold Mines Plc, were liquidated for cash of \$936,000.

# Prairie Creek Project

# 2015 Underground Exploration Program

In 2015, Canadian Zinc completed its underground exploration diamond drill program at the Prairie Creek Mine totaling 5,484 metres of diamond drill coring in 21 drill holes.

The results of the 2015 underground exploration drilling program were very positive, with all holes intercepting the Main Quartz Vein structure and/or Stockwork mineralization, with some excellent grades and widths. The objectives of testing for new areas of mineralization in proximity to the

existing underground workings and increasing the projected life of the mine by converting part of the currently Inferred Resource to an Indicated category have been met.

Following completion of the 2015 underground exploration program a new mineral resource estimate was completed by AMC Mining Consultants in September 2015, which demonstrated an increase in overall resource tonnages in the Indicated and the Inferred categories.

- Total Measured and Indicated Resource tonnages increased by 32% to 8.7 million tonnes at combined grade of approximately 19% Pb and Zn plus 136 g/t Ag.
- Total Inferred Resource tonnages remained relatively unchanged with an increase in Stockwork resource replacing upgraded Main Quartz Vein resource.

The September 2015 Prairie Creek mineral resource estimate was completed by AMC [Gregory Z. Mosher P.Geo., Qualified Persons as defined by NI 43-101] and reported in the Company's September 17, 2015 press release.

#### MOUs signed for Concentrate Production

As announced on March 3, 2016 Canadian Zinc has signed MOUs 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 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 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.

In negotiating these arrangements for the future sale of Prairie Creek concentrates, Canadian Zinc has secured the annual offtake and sale of a minimum of 40,000, and potentially up to 70,000 metric tonnes, of zinc concentrates and 20,000 to 25,000 tonnes of lead concentrates, per year, and with the flexibility for any remaining unallocated concentrate being available for third party or spot market sales.

# 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 is now undergoing environmental assessment before the Mackenzie Valley Review Board ("MVRB").

In April 2015, Canadian Zinc submitted its Developer's Assessment Report ("DAR") to the MVRB. The MVRB completed a preliminary review of the DAR in response to which the Company provided supplementary information to the MVRB partly in the form of a comprehensive DAR Addendum, which was submitted to the MVRB in September 2015 and followed by additional Terrain Analysis data which was submitted in November 2015. The Review Board concluded that the environmental assessment could proceed on existing information but requested some additional information which was subsequently submitted. In February 2016, the Company received Information requests from interested parties which the Company is in the process of responding to. Once all responses to the information requests are submitted a Technical Session will be scheduled and held in Yellowknife.

In November 2015, Canadian Zinc and Parks Canada signed a Memorandum of Understanding Phase III ("MOU") regarding the operation and development of the Prairie Creek Mine and the management of Nahanni National Park Reserve. The Phase III MOU, which is valid for five years from November 2015, renews the previous MOUs signed between the Parties in 2008 and 2012.

In the renewed MOU, Canadian Zinc and Parks Canada further agree to make every reasonable effort to address issues of common interest and build a strong working relationship, including convening a Technical Team, which will, among other things, better identify, define and consider issues of common interest including, among other things, development and use of the access to and from the Prairie Creek Mine through Nahanni National Park Reserve and operation of the Prairie Creek Mine

# 2016 Preliminary Feasibility Study

An updated 2016 Preliminary Feasibility Study ("2016 PFS"), based on optimization work undertaken over the past three years, was completed in March 2016 and supersedes the 2012 Pre-Feasibility Study completed by SNC Lavalin. The 2016 PFS was completed by AMC Mining Consultants (Canada) Ltd., Tetratech Inc. and Canadian Zinc personnel.

The 2016 PFS was undertaken to incorporate the increased resources and longer mine life derived from the 2015 underground exploration program, 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 listed in the 2012 PFS.

#### Summary Highlights of the 2016 PFS

(All costs are in Canadian dollars unless indicated otherwise, t=tonne, M=million, g=gram, lb=pound, lbs=pounds, oz=ounces, 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 \$302M, with a post-tax internal rate of return of 26%, based on base case metal price forecasts of US\$1.00/lb for both zinc and lead and US\$19.00/oz silver, for the Life of Mine ("LOM") production at an exchange rate of \$1.25CDN:\$1.00US.
- Average EBITDA of \$90M per year and cumulative EBITDA of \$1,432M over the LOM.
- 17 year mine life based exclusively on a Mineral Reserve of 7.6 million tonnes, grading 8.9% zinc and 8.3% lead, with 128 g/t silver, including a 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 86M lbs of zinc, 82M lbs of lead and 1.7M ounces of silver.
- Pre-production capital cost is estimated to be \$216M, of which \$59M will be incurred in Year 1 and \$157M in Year 2, with an additional contingency of \$28M.

• Average LOM cash operating costs per tonne of ore mined (before transportation costs) are estimated at \$165/t.

The 2016 PFS indicates average annual production of approximately 60,000 tonnes of zinc concentrate and 55,000 tonnes of lead concentrate, containing approximately 86 million pounds of zinc, 82 million pounds of lead and 1.7 million ounces of silver, and yielding average annual earnings before interest, taxes, depreciation and amortization ("EBITDA") of \$90 million per year and cumulative EBITDA of\$1.4 billion over an initial mine life of 17 years, using Base Case 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 the new all season road, are estimated at \$244 million, including contingency of \$28 million, with payback of three years.

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.

#### **Newfoundland Properties**

Canadian Zinc owns an extensive land package in central Newfoundland that includes three VMS projects, each with defined 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.

On June 30, 2015, the Company entered into a collaboration agreement with Buchans Minerals, a wholly owned subsidiary of Minco Plc (AIM: MIO), whereby the two Companies will share research data on their respective central Newfoundland Zn-Pb-Cu-Ag-Au deposits. The collaboration agreement is focused on 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).

In conjunction with the collaboration agreement, the Company was awarded research funding by the Research & Development Corporation of Newfoundland and Labrador ("RDC") in December, 2015. The funding was provided to undertake a research program to complete physical and metallurgical bench scale studies on the seven VMS deposits located in central Newfoundland. The RDC is providing funding of \$535,000 for the project through the GeoEXPLORE Industry-led R&D Technology Development and Demonstration Program. The total cost of the research project is estimated at \$735,000 with Buchans Minerals and the Company each contributing up to \$100,000

Work completed to December 31, 2015 includes:

• Diamond drilling was completed to obtain fresh metallurgical samples from four of the seven VMS deposits. These included Canadian Zinc's Boomerang-Domino and Lemarchant deposits and Buchans Minerals' Bobbys Pond and Daniels Pond deposits. The metallurgical samples and blending instructions were submitted to Thibault &

Associates Inc. for mineralogical investigation, grindability characterization, acid generation assessment and bench scale flotation testing.

• Twelve samples (5-10 kg each) were collected and submitted to Thibault & Associates Inc. for bench scale Dense Media Separation ("DMS") testing. The DMS samples include four (4) samples from the Boomerang-Domino deposit, two (2) samples from the Lemarchant deposit, two (2) samples from the Bobbys Pond deposit and one (1) sample from each of the Tulks East, Long Lake, Tulks Hill and Daniels Pond deposits.

The bench-scale Dense Media Separation test program was completed in late February, 2016. Highlights of the initial bench scale test results indicate five (5) of the semi-massive sulphide samples (Long Lake, Domino, Bobbys Pond and Daniels Pond) and one (1) footwall stockwork mineralization sample (Lemarchant) achieved a technically viable DMS separation with a pre-concentrate weighing 60-80% of the original sample weight. The remaining six (6) pyritic massive sulphide and/or barite samples (Boomerang, Lemarchant, Tulks East, Tulks Hill) were not considered technically amenable to upgrading by DMS.

# Outlook

Canadian Zinc's focus for 2016 will be to continue to advance the Prairie Creek Mine towards production. The updated 2016 Pre-Feasibility Study indicates a robust project at consensus forecasts for the long term prices of lead and zinc and there is good potential for additional project optimization, enhanced economics and further extending the mine life.

The 2016 PFS, with the Base Case economic model, indicates a Pre Tax Net Present Value, using an 8% discount of \$509 million, with an internal rate of return of 32.0% and Post-tax Net Present Value ("NPV"), using an 8% discount, of \$302 million, and a post-tax internal rate of return ("IRR") of 26%, with an initial mine life of 17 years and payback period of three years.

The development of the Prairie Creek Mine will require substantial financing. The pre-production capital cost has been estimated at a total of \$244 million, including a contingency of \$28 million. Several commercial banks have expressed indicative interest in providing senior, secured project financing for the Project. It is expected that the 2016 PFS, and the financial model, will be shared with these banks to solicit indicative terms of financing. In parallel to bank financing, alternative funding structures will also be explored with royalty and streaming finance providers, who have expressed an indicative interest to provide a structured funding package. These could include royalty financing, stream financing, commodity related financing or other financing instruments.

At December 31, 2015, Canadian Zinc had working capital of \$2.48 million and expects it will be able to meet its minimum commitments for 2016. The ability of the Company to carry out its planned business objectives is dependent on its ability to raise adequate financing. There is a risk that additional financing will not be available to the Company on a timely basis or on acceptable terms. These conditions indicate the existence of material uncertainties which cast significant doubt about the Company's ability to continue as a going concern. The Company is currently evaluating various opportunities and seeking additional sources of financing. Careful management and preservation of cash is a top priority. Site programs have been reduced to a minimum. Cost reduction measures have been implemented across the Company, including reductions in staff, corporate salaries and expenses and directors fees.

The long term outlook for lead and zinc remains very positive and, supported by the positive results of the 2016 PFS, Canadian Zinc will continue to evaluate all alternatives and possibilities for raising the 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.

#### **Qualified Person**

Alan Taylor, P.Geo., Chief Operating Officer, Vice President Exploration and a Director of Canadian Zinc Corporation, is a Non-Independent Qualified Person for the purposes of National Instrument 43-101 and has approved this press release.

#### **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.

#### For further information contact:

John F. Kearney Chairman &Alan B. TaylorChief Executive (416) 362-6686Vice President Exploration & Chief Operating Officer (604) 688-2001Suite 1200 -220 Bay Street, Toronto, ON M5J 2W4Suite 1710 - 650 West Georgia Street, Vancouver, BC V6B 4N9 Tollfree:1-866-688-2001	Steve Dawson Vice President Corporate Development (416) 203-1418 Suite 1200 –220 Bay Street, Toronto, ON M5J 2W4
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------

E-mail: invest@canadianzinc.com

Website: www.canadianzinc.com

#### Cautionary Statement – 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.

#### 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.