

PRESS RELEASE

CZN-TSX CZICF-OTCQB FOR IMMEDIATE RELEASE August 14, 2015

CANADIAN ZINC REPORTS FINANCIAL RESULTS FOR SECOND QUARTER 2015

- Underground Exploration at Prairie Creek Positive Results
 - Optimization Studies Progressing
 - Corporate Update

Vancouver, British Columbia, August 14, 2015 - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") reports its financial results for the three and six month periods ended June 30, 2015, with an operational and corporate update.

Financial Results for First Half of 2015

For the three and six month periods ended June 30, 2015, the Company invested \$2,039,000 and \$5,727,000 respectively on its exploration and evaluation programs at Prairie Creek compared to \$1,455,000 and \$2,694,000 for the same periods ended June 30, 2014. The overall increase in expenditures for the Prairie Creek Project was due to increased diamond drilling costs of \$2,876,000 with no comparable costs in 2014 as the Company continued the underground exploration program which began in the final quarter of 2014.

For the three and six month periods ended June 30, 2015, the Company reported a net loss and comprehensive loss of \$2,613,000 and \$6,435,000 respectively compared to a net loss and comprehensive loss of \$3,071,000 and \$5,098,000 for the same periods ended June 30, 2014.

At June 30, 2015, the Company had a positive working capital balance of \$5,938,000 including cash and cash equivalents of \$1,225,000, short term investments of \$5,066,000 and marketable securities of \$350,000, for a total of \$6,641,000.

Prairie Creek Optimization 2014/2015

In order to address a number of recommendations in the Preliminary Feasibility Study ("PFS"), completed by SNC-Lavalin Inc. in 2012, for further work and studies to optimize the Prairie Creek Project, (detailed mine planning, construction engineering, transport efficiencies, reducing start-up time and addressing working capital requirements), and to move the Prairie Creek Project towards full feasibility for financing, Canadian Zinc embarked on a series of optimization projects which continued throughout 2014 and are anticipated to be completed later this year.

The main objectives have been to improve the project economics by increasing the mine life; defining, with feasibility level accuracy, the capital cost required to place the mine into production; refining the projected costs to operate the mine; and developing a transportation plan and marketing strategy for all of the Prairie Creek concentrate production. Notable progress has been made on all of these items over the past year.

New Mineral Resource Estimate

A new mineral resource estimate, completed by AMC Mining Consultants in March 2015, has demonstrated an increase in overall resource tonnages in the Indicated and the Inferred categories. The new mineral resource updates the previous resource estimate reported in June, 2012, which was incorporated into the PFS.

The new updated estimate, with increases in both the main quartz vein and stockwork tonnages in the Indicated category, will increase the life-of-mine potential compared to the 2012 resource estimate.

- Total Measured and Indicated Resource tonnages increased by 21% to 6.5 million tonnes at combined grade of approximately 20% Pb and Zn with 150 g/t Ag.
- Total Inferred Resource tonnages increased by 13% to 7.1 million tonnes grading 9.6% Pb, 11.7% Zn, and 177 g/t Ag.

Underground Exploration Program – Positive Results

From October 2014 to July 2015, Canadian Zinc completed an underground exploration diamond drill program at the Prairie Creek Mine. The program was carried out by CZN's contractor, Procon Mining and Tunneling who sub-contracted DMAC Drilling Ltd. to complete the diamond drilling from three, 50-metre spaced, underground drill stations on the decline from the end of the 870 metre level. The program totaled 5,484 metres of diamond drill coring in 21 drill holes.

The results have been very positive, with all holes intercepting the Main Quartz Vein fault structure and/or Stockwork mineralization, with some excellent grades and widths. It is apparent 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 will be met.

Assay results have now been received for all drill holes. The detailed interpretation of the results and findings are still being compiled and modelled. Some of the preliminary highlights of the 2015 diamond drilling program include:

- A new previously unknown quartz vein fault structure was discovered in the footwall of the Main Quartz Vein. This second vein system was intersected in five holes and appears to be defining a newly recognized structural transition zone which offsets the general strike trend of the upper part of the Main Quartz Vein.
- Hole PCU-15-65, first intersected the Main Quartz Vein (MQV) grading 4.9% Pb, 22.7% Zn, and 164 g/t Ag across 1.2m. It then intersected multiple intercepts of stockwork mineralization, one of which graded 24.7% Pb, 32.7% Zn, and 311 g/t Ag across 2.4m, and further down another graded 9.5% Pb, 38.1% Zn and 381 g/t Ag across 1.5m. That same hole intersected the new second quartz vein grading 4.6% Pb, 13.8% Zn, and 92 g/t Ag across 2.9m of true width.
- Hole PCU-15-72, the most northern hole, returned substantial mineralization including 17.8% Pb, 33.7% Zn and 247 g/t Ag over 7.5m and an additional intersection of stockwork style mineralization, which graded 6.9% Pb, 12.0% Zn, and 116 g/t Ag over 24.5m of true width, and the intersection of the second vein which graded 5.6% Pb, 3.8% Zn and 88 g/t Ag over 4.5m.

- Numerous holes intersected extensions to the previously known stockwork zone, which occurs mostly outside, but adjacent to, the calculated Indicated Resource.
- Detailed underground chip sampling of the Northwest Drift in the 870m Level workings returned composite grades of 5.6% Pb, 14.2% Zn and 119 g/t Ag across a true width of 4.4m along the strike length of 71.8m further demonstrating the potential for early, selective mining of the stockwork mineralization.
- Mineralization remains open to the north into the already defined Inferred Resource.

Assay results from the underground exploration program were reported in the Company's press releases dated May 5, 2015; June 9, 2015; June 23, 2015; and August 11, 2015.

The results of the underground exploration drilling program are being evaluated and incorporated into an updated and revised geological model.

Transportation Studies - Evaluation of Possible All Season Road

In pursuit of possible improved economics, consideration is now being given to the construction and use of an all season road which would enable the transportation of both supplies and concentrates in smaller volumes spread throughout the year.

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 for permits for an all season road is presently in 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 has completed a preliminary review of the DAR and the Company is currently working on providing supplementary information requested by the MVRB.

Prairie Creek Permitting

In June 2015, the Mackenzie Valley Land and Water Board approved the Company's application that the Type "A" Water Licence be held in abeyance until more certainty develops around the actual commencement of construction and the mine development schedule and also approved the Company's applications for amendments to the timing schedules of the various reclamation security deposits to be provided under the Water Licence and the Land Use Permit.

Security deposits totaling \$1.55 million will now be paid at the end of August 2015, with the balance of reclamation security deposits to be paid prior to commencement of production.

Outlook

Canadian Zinc's focus for the remainder of 2015 will be to continue to advance the Prairie Creek Mine towards production.

The underground exploration drilling program has been completed and all of the assay results have been received. The objective was to increase the life of the mine by the discovery of new areas of mineralization in proximity to the mine workings and by converting part of the currently Inferred Resource to an Indicated category.

The results of the recently completed drill program have been very encouraging and will be incorporated into an updated mineral resource estimate, which will in turn be converted into an updated mineral reserve and revised mine plan.

Re-examination of the capital costs for the construction and installation of new facilities and equipment, and the integration of such new facilities and equipment into the existing mine facilities, along with the refurbishment of the existing facilities, will enable updating the estimate of capital costs to bring the Prairie Creek Mine into production.

The adoption of an all season road, which would enable the transportation of both supplies and concentrates in smaller volumes spread throughout the year, has many financial implications, both in potential savings and lower finance costs but also in additional capital cost.

Discussions and negotiations will continue with a select group of smelters to obtain firm indications of off-take interest, for both lead and zinc concentrates from the Prairie Creek Mine, including indications of expected treatment charges and penalties.

The new mineral reserve estimate, revised mine plan, modified process flow-sheet, expected treatment charges and penalties, and updated estimate of capital costs will enable production of a new and updated economic model for the Prairie Creek Mine.

The new and updated economic model will form the basis of an updated preliminary feasibility study, which will also include evaluation of the integration of an all season road into the Prairie Creek Project. It is expected that this updated preliminary feasibility study will be completed later this year.

The development of the Prairie Creek Mine will require substantial additional financing. Canadian Zinc will continue to evaluate alternatives for raising the senior financing necessary to complete the development and construction of the Prairie Creek Mine. 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.

Preservation of cash is therefore a top priority. Site programs have been reduced to a minimum. Further 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 both zinc and lead remains very positive and Canadian Zinc will continue to evaluate all alternatives and possibilities for raising the financing necessary to complete the development and put the Prairie Creek Mine into production. It is not in the best interests of the Company or its shareholders to try to raise substantial financing at an inopportune time in the market and the Company does not intend to do so at this time.

At June 30, 2015, the Company had working capital of \$5.94 million and expects it will be able to meet its current commitments and continue its planned 2015 programs.

Restricted Share Unit and Deferred Share Unit Plans

As part of the Company's cost reduction and cash conservation measures, changes have been made in the compensation arrangements for senior officers and directors. The cash component of compensation payable to senior officers and directors has been reduced and going forward, effective August 1, 2015, part of their remuneration will be satisfied by the issue to officers and certain senior employees of restricted share units (RSU's) under the Company's Restricted Share Units Plan and by the grant to Non-Executive directors of deferred share units (DSU's) under the Company's Deferred Share Units Plan.

The RSU Plan and the DSU Plan were approved by shareholders at the Annual Meeting in June 2014.

On August 12, 2015, the Board of Directors approved the grant of 3,650,000 Restricted Share Units ("RSUs"), subject to regulatory approval, to certain officers and employees pursuant to the Corporation's RSU plan with a vesting period of 18 months and a payout date of 36 months.

Retirement of Director

Canadian Zinc reports that John MacPherson has retired as a director of the Company, effective August 12, 2015.

John had been a member of the Board since 1999 and had previously served as Chairman and Chief Executive of the Company. During these sixteen years he made invaluable contributions to the advancement of the Prairie Creek project and the development of the Company.

In recognition of John MacPherson's service, John Kearney, Chairman, stated

"The Board of Directors acknowledges and appreciates the leadership, commitment and guidance of John MacPherson over many years. His industry knowledge and public market experience have been of great benefit to Canadian Zinc Corporation. We extend to John our best wishes on his retirement from Canadian Zinc."

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. Key projects include the South Tally Pond project (Lemarchant deposit), the Tulks South project (Boomerang-Domino deposit) and Long Lake project (Long Lake deposit).

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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, has prepared, supervised the preparation of, or reviewed, parts of this press release that are of a scientific or technical nature.

<u>Cautionary Statement - Forward-Looking Information</u>

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.