



## PRESS RELEASE

CZN-TSX  
CZICF-OTCQB

FOR IMMEDIATE RELEASE  
May 16, 2014

### CANADIAN ZINC REPORTS FINANCIAL RESULTS FOR FIRST QUARTER 2014

- **Prairie Creek Mine Undergoing Optimization to Enhance Efficiencies, Lower Costs and Shorten Development Time Line**
- **Encouraging Drill Results at South Tally Pond – Additional Drilling Planned for Newfoundland Projects**

**Vancouver, British Columbia, May 16, 2014 - Canadian Zinc Corporation** (TSX: CZN; OTCQB: CZICF) (“the Company” or “Canadian Zinc”) reports its financial and operating results for the quarter ended March 31, 2014 and provides outlook on 2014 activities.

This press release should be read in conjunction with the unaudited consolidated financial statements and notes thereto for the quarter ended March 31, 2014, and management’s discussion and analysis (“MD&A”) for the quarter ended March 31, 2014, both available on SEDAR at [www.sedar.com](http://www.sedar.com).

#### **Financial Results for First Quarter 2014**

For the three month period ended March 31, 2014, the Company reported a net loss and comprehensive loss of \$2,027,000 compared to a net loss and comprehensive loss of \$4,673,000 for the three month period ended March 31, 2013. The net loss in the three month period ended March 31, 2014 included a gain of \$120,000 on the Company’s marketable securities compared to loss of \$2,319,000 for the comparative period.

At March 31, 2014, the Company had a positive working capital balance of \$9,235,000 including cash and cash equivalents of \$5,775,000, short term investments of \$2,011,000 and marketable securities of \$1,448,000 (for a total of \$9,234,000). At December 31, 2013, the Company had cash and cash equivalents of \$8,376,000, short term investments of \$2,005,000, marketable securities of \$1,328,000, and a positive working capital balance of \$10,617,000.

#### **Prairie Creek Mine**

The primary objective of the Company is to bring the Prairie Creek zinc/lead/silver mine into production at the earliest opportunity and in pursuit of that objective secure the necessary capital funding to rehabilitate, upgrade and develop the Mine, inclusive of the processing plant and related site infrastructure.

To further build on and refine the Pre-Feasibility Study (“PFS”) completed by SNC-Lavalin Inc. in 2012 CZN has engaged in an Optimization Study with a view to augmenting what has already been completed during and after the PFS. Further advancement of engineering designs, detailing and assessing what existing equipment can be utilized, determining upgrade

requirements, exploring more efficient financial ways to reduce initial capital costs. A number of bid tender documents relating to various work packages needed to develop the mine have been distributed in order to confirm the detailed plans and design and actual costs for developing the mine into production.

As a lead up to the Optimization Study, in November 2013, Canadian Zinc engaged AMC to undertake an underground optimization study of the mine plan with a view to reducing the initial development, shorten the development schedule and minimize mine operating costs.

In January 2014, the Company engaged Tetra Tech (“TT”) to provide technical services for basic engineering and procurement services for the development of major equipment packages, facility rehabilitation and repair work and capital items for the Prairie Creek Mine. Specifically these technical services will develop tender packages for mine rehabilitation and development; mill completion, power generation and distribution; heat recovery systems; a dense media separation plant; a paste fill plant; a water treatment plant; instrumentation and control systems; camp construction and winter road construction and maintenance needed to put the Prairie Creek Mine into production.

Canadian Zinc and TT have now issued a number of mine site packages for competitive tender to qualified bidders, giving full recognition to opportunities for participation by local First Nations and adjacent communities.

The tendering and procurement process, managed by TT, is an important phase of the Prairie Creek project that will refine and augment the design work completed previously and will generate definitive estimates of the capital cost and schedules, and in turn reduce contingency factors, required to place the Prairie Creek Mine into operation.

The Prairie Creek Mine site is scheduled to be re-opened at the end of May 2014 in order for ongoing care and maintenance programs to be conducted along with some pre-development and road work programs that can be completed during the summer season.

## **Newfoundland Properties**

A winter diamond drill program on the South Tally Pond property was completed in March 2014 on the South Tally Pond copper-lead-zinc-silver-gold project in central Newfoundland. The South Tally Pond project is located adjacent to and in the same volcanic belt as the Duck Pond copper and zinc mine and mill complex operated by Teck Resources.

Six drillholes, totaling 2,350 metres were completed at the Northwest mineralized zone located 250 metres northwest of the drill-defined Lemarchant Deposit. The 2014 winter drilling program successfully extended the Northwest zone mineralization which remains open for further expansion. Highlights of the 2014 winter drilling program include:

- Drillhole LM14-95 (Section 106+50N), located 30 metres up-dip of drillhole LM13-94, intersected two semi-massive sulphide intervals between 315 and 400 metres downhole. Significant assays included 4.8% zinc, 0.3% lead, 0.5% copper, 24.3 g/t silver and 0.9 g/t gold over 2.5 metres.
- Drillhole LM14-96 (Section 106+50N), located 30 metres up-dip of drillhole LM14-95, intersected semi-massive to massive sulphides with massive barite (14 metres) between 303 and 321 metres downhole. Significant assays include 7.0% zinc, 4.3% lead, 0.4% copper, 62.1 g/t silver and 0.7 g/t gold over 1.5 metres.
- Drillhole LM14-97 (Section 105+50N) located 35 metres down-dip of LM13-82, intersected a mineralized massive barite interval between 357 and 361 metres downhole. Significant assays include 90.5 g/t silver and 1.4 g/t gold over 3.5 metres.

- Drillhole LM14-99 (Section 106+50N), located 40 metres up-dip of LM14-96 intersected a thick sequence of iron-rich mudstones and felsic volcanic rocks with anomalous base and precious metals between 224 and 249 metres downhole.
- Drillhole LM14-100 (Section 107+00N), located 50 metres north of LM13-94, intersected disseminated to semi-massive stringer pyrite mineralization between 314 and 364 metres downhole with anomalous base and precious metals over two, 13 metre intervals.

The sulphide mineralization and barite intervals in the Northwest zone are commonly underlain by a moderate to intensely altered felsic volcanic footwall stratigraphy, typical of volcanogenic massive sulphide deposits. These are excellent indications of a well-developed hydrothermal system that provide vectors to potential deposits.

The Company is planning a detailed review, structural analysis and remodeling of the Lemarchant deposit to take into account the results of the Northwest zone drilling.

## **Outlook**

Canadian Zinc's focus for 2014 will be to advance the Prairie Creek Project towards production.

The Company is currently undertaking an Optimization Study as part of which Tetra Tech has been engaged to provide technical services for basic engineering and procurement services for the development of major equipment packages, facility rehabilitation and repair work and capital items for the Prairie Creek Mine. AMC has been engaged to undertake an optimization study of the underground mine plan with a view to reducing the initial development, shorten the development schedule and optimize the underground mine operating costs.

Geotechnical investigations to determine optimal mining methods will be completed the first half of 2014. Metallurgical studies, designed to enhance concentrate production and quality are also being carried out in 2014 and are part of the Company's concentrate marketing plan.

The current Optimization Study is scheduled to be completed by mid-2014 and, dependent on the progress of financing strategies concurrently being executed, the Company will begin procurement of long lead time items; construction of the access road; site preparation and other startup activities on site. The Company is evaluating strategies for raising the financing necessary to complete the development and construction of the Prairie Creek Mine.

A new diamond drill program on the Tulks South property in central Newfoundland targeting the exploration of the Boomerang deposit is scheduled to be completed later in 2014. The Boomerang has NI43-101 compliant indicated resources of 1.36 million tonnes averaging 0.51% copper, 7.07% zinc, 3.00% lead 110.2 g/t Silver and 1.66 g/t gold and inferred resources of 0.44% copper, 6.72% zinc, 2.88% lead, 96.5 g/t silver and 1.29 g/t gold. The Company is also undertaking an ongoing exploration drill program at the South Tally Pond property in Newfoundland targeting the expansion of the Lemarchant deposit and further exploring the new zone of mineralization discovered northwest of Lemarchant.

At March 31, 2014, the Company had working capital of \$9.24 million and expects it will be able to meet current commitments, continue its planned 2014 programs and subject to adequate financing, continue planned 2015 corporate activities.

## 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.

The Prairie Creek Project contains a Mineral Reserve of 5.2 million tonnes averaging 9.4% zinc, 9.5% lead and 151 g/t silver. In addition, Prairie Creek hosts an Inferred Resource of 6.2 million tonnes averaging 14.5% zinc, 11.5% lead, 0.57% copper and 229 g/t silver. (AMC Mining Consultants (Canada) Ltd. J M Shannon and D Nussipakynova, Qualified Persons, June 2012). A Preliminary Feasibility Study was completed by SNC-Lavalin in July 2012. Prairie Creek is an underground operation that will utilize multiple mining methods to access readily available ore. Canadian Zinc has the majority of infrastructure in place including a 1,000 tonne per day mill, five kilometres of underground workings and related equipment, a heavy duty and light duty surface fleet, three exploration diamond drills and a 1,000 m airstrip.

Canadian Zinc also owns an extensive land package in central Newfoundland that includes the South Tally Pond project, which hosts the Lemarchant deposit, the Tulks South project and the Long Lake project. A detailed and updated database is now being assembled from which exploration programs will be planned on key central Newfoundland properties during 2014.

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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, the parts of this MD&A that are of a scientific or technical nature.*

#### 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. 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.*