



PRESS RELEASE

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CANADIAN ZINC INITIATES MINERAL PROCESSING OPTIMIZATION PROGRAMS ON THE PRAIRIE CREEK DEPOSIT

Vancouver, British Columbia, January 13, 2017 - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) (“the Company” or “Canadian Zinc”) is pleased to announce that, as part of its ongoing feasibility studies, the Company has engaged SGS Canada Inc. to undertake further mineral processing optimization testing on new composite bulk samples from underground drill holes in the Prairie Creek Mine in the Northwest Territories.

The principal objectives of the program are to examine new and 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.

The programs include definition of the grinding requirements and evaluation of the response of variability 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 will provide valuable additional information on:

- Geochemical/mineralogical characterization;
- Dense media separation performance on three master composites;
- Grindability-Bond ball mill index and abrasion index;
- Open cycle flotation variability testing;
- Locked cycle flotation testing;
- Bulk flotation concentrate for smelter evaluation;
- Settling and filtration testing; and
- Tailings characterization.

SGS is a globally recognized leader in the minerals industry with over 75 years of metallurgical experience in Canada. SGS has an extensive expertise with projects globally including base and precious metals, and specifically including previous Prairie Creek test programs.

Metallurgical Background

The Prairie Creek mineral deposit is partially accessed and defined in detail by three levels of underground workings that were excavated prior to 1982 and extended by Canadian Zinc in 2008. The underground access provided the ability to retrieve bulk mineral samples from the Main Quartz Vein on which all previous metallurgical studies were undertaken.

Recent underground drilling by CZN from the new decline tunnel in 2015 has enabled the collection of a high-sulphide bulk sample that is more representative of expected mining grades and oxidation state, and which can now be tested and provide the expected metal recovery data at the high-sulphide end that previously has only been projected from historical testing.

In addition, metallurgical samples from the previously untested Stockwork zone will be assessed for metallurgical response and characteristics.

It is expected that the new mineral processing testing will facilitate process optimization and lead to improvement in projected metal recoveries, and will provide accurate projections for feasibility study purposes of life-of-mine processing factors for the proposed Prairie Creek Mine operation.

About the Prairie Creek Mine

The Prairie Creek Mine hosts Proven and Probable Reserves of 7.60 million tonnes averaging 8.93% zinc, 8.33% lead, and 127.58 g/t silver within Measured and Indicated Resources of 8.70 million tonnes grading 9.5% zinc, 8.9% lead and 136 g/t silver. In addition, the Report confirms a large Inferred Resource of 7.05 million tonnes grading 11.3% zinc, 7.7% lead and 166 g/t silver and additional exploration potential.

About Canadian Zinc

Canadian Zinc is a TSX-listed exploration and development company trading under the symbol “CZN”. In addition to the Prairie Creek Project, Canadian Zinc also owns an extensive land package in central Newfoundland that it is exploring for copper-lead-zinc-silver-gold deposits.

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Cautionary Statement – Forward-Looking Information

This press release contains certain forward-looking information, including, among other things, 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.