

PRESS RELEASE

CZN-TSX CZICF-OTCQB FOR IMMEDIATE RELEASE September 16, 2013

DRILL PROGRAM UNDERWAY FOR SOUTH TALLY POND, NEWFOUNDLAND

- Drill testing of a new massive sulphide zone near Lemarchant deposit
- Phase two Step-out drilling from known resources at Lemarchant deposit
 - Drill testing of a strong geophysical anomaly

Vancouver, British Columbia, September 16, 2013 - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") is pleased to announce the commencement of a follow-up exploration diamond drill program at the Company's whollyowned South Tally Pond copper-lead-zinc-silver-gold project in central Newfoundland.

The planned program consists of 20 drillholes, totaling 6,300 metres. This program will involve two diamond drill rigs, one of which is already on the property. The program is fully supported by a recently completed \$4 million flow-through financing which closed on August 20, 2013 (refer to Company news release of same date).

The drill program is designed to follow up on favourable results from the drill program completed earlier this year at the Lemarchant deposit (refer to news release dated February 27, 2013 and April 17, 2013). Priority targets include:

- testing for additional massive sulphide mineralization at the newly discovered Northwest Target (3,200 metres over 9 drillholes);
- lateral and depth extensions to the known indicated and inferred resources of the Lemarchant deposit (2,500 metres over 9 drillholes); and
- initial testing of a strong Titan 24 geophysical anomaly (West Target) located 1.2 kilometres west of the Lemarchant deposit (600 metres over 2 drillholes).

The Lemarchant deposit is a significant precious metal-rich, copper-lead-zinc volcanogenic massive sulphide ("VMS") discovery with expansion potential. An initial NI 43-101 mineral resource estimate completed on the Lemarchant deposit reported an indicated resource of 1.24 million tonnes at an average grade of 5.38% Zn, 0.58% Cu, 1.19% Pb, 1.01 g/t Au and 59.17 g/t Ag; and an inferred resource of 1.34 million tonnes at an average grade of 3.70% Zn, 0.41% Cu, 0.86% Pb, 1.00 g/t Au and 50.41 g/t Ag.

Highlights of the winter 2013 drill program included:

- new massive sulphide mineralization was discovered 250 metres to the northwest of the Lemarchant deposit in drillholes LM13-73 and LM13-74 (the Northwest Target);
- significant massive sulphide mineralization intersected in drillhole LM13-79 (the Main Zone) extended the Lemarchant deposit mineralization 35 metres up-dip; and
- three drillholes testing the south extension to the Lemarchant deposit intersected favourable felsic volcanic stratigraphy with locally anomalous base metal mineralization.

South Tally Pond Background

The South Tally Pond property, which includes the Lemarchant deposit, is located in a proven mining district near Buchans, Newfoundland. The property is located immediately adjacent to Teck Resources Limited's Duck Pond Cu-Zn mine and mill complex. (See Paragon' Technical Report and Mineral Resource Estimate on Lemarchant Deposit, South Tally Pond VMS Project, central Newfoundland, dated March 2, 2012 filed on SEDAR).

The exploration potential outside of the Lemarchant area of the South Tally Pond Property is still relatively untapped with numerous priority targets that have seen limited or no drilling. Additional exploration programs will be proposed in 2014 to further test for mineral potential in some of these areas.

About Canadian Zinc

Canadian Zinc is a TSX-listed exploration and development company trading under the symbol "CZN". The Company's key projects are the 100%-owned Prairie Creek property, an advanced-staged zinc-lead-silver property, located in the Northwest Territories in Canada and the 100% owned South Tally Pond project, which includes the Lemarchant deposit, along with other property interests in central Newfoundland.

Canadian Zinc also recently announced the proposed acquisition of Messina Minerals, a mineral exploration company focused on base metals and gold properties in central Newfoundland. Messina holds the South Tulks Hill project with its Boomerang and Domino deposits situated near the South Tally Pond project. Boomerang and Domino are located approximately 50 kilometres from the Lemarchant deposit (see CZN press release dated September 12, 2013).

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<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. The Company does not currently hold a permit for the operation of the Prairie Creek Mine. 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.