CZN-TSX
CZICF-OTCQB

VANCOUVER, May 2, 2016 /CNW/ - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") is pleased to provide an update on its collaboration project with Buchans Minerals Corp. ("BMC"), a wholly owned subsidiary of Minco Plc (AIM: MIO) in which the companies have agreed to jointly undertake a research program aimed at investigating the technical viability of developing their respective central Newfoundland Zn-Pb-Cu-Ag-Au deposits through a central milling facility. This work is partially funded by the Research & Development Corporation of Newfoundland and Labrador.

Both Companies have completed bench scale dense media separation ("DMS") testing and are undertaking metallurgical studies on their respective NI 43-101 defined mineral deposits. Highlights to date of the DMS and metallurgical testing include:

- Preconcentration of the ore by DMS (prior to flotation) was determined to be technically viable for semi-massive and stringer sulphide samples from the Boomerang-Domino, Lemarchant, Long Lake, Bobbys Pond and Daniels Pond deposits.
- Initial flotation tests indicate the deposits are amenable to a common flotation flowsheet with the sequential Cu-Pb-Zn flotation flowsheet providing the best overall performance for all four deposits tested. Further development of the sequential flotation by bench scale testing is in progress.

Diamond drilling to obtain fresh metallurgical samples from four of the seven VMS deposits was completed in December 2015. These included Canadian Zinc's Boomerang-Domino and Lemarchant deposits and Buchans Minerals' Bobbys Pond and Daniels Pond deposits.

Drilling at the Boomerang-Domino deposit included twinning historic drillhole GA05-12 twice by wedging immediately above the mineralized zone. Drilling at the Lemarchant deposit targeted the thick massive sulphide-barite zone and mineralized footwall zone intersected in historic drillhole LM10-43 with a new vertical drillhole (LM15-107). Assay results from the new drillholes are provided below.

Boomerang Drillhole	Mineralized Zone	From (m)	To (m)	Interval (m)	Zn %	Pb %	Cu %	Ag g/t	Au g/t
GA05-12*	MS	248.25	261.3	13.05	9.58	3.52	0.73	125.5	1.4
GA05-12A	MS	248.3	262.0	13.70	9.18	3.58	0.78	na	na
GA05-12B	MS	248.2	262.1	13.90	9.34	3.91	0.73	na	na

Lemarchant Drillhole	Mineralized Zone	From (m)	To (m)	Interval (m)	Zn %	Pb %	Cu %	Ag g/t	Au g/t
LM10-43*	MS/Ba	205.5	226.35	20.85	12.33	3.2	1.15	77.4	1.69
LM10-43*	FW	226.35	232.1	5.75	3.67	0.17	0.45	10.0	0.31
LM15-107	MS/Ba	187.4	205.2	17.80	10.89	2.64	1.59	na	na
LM15-107	FW	205.2	211.5	6.30	3.37	0.08	0.40	na	na

Notes: *Historic drillholes (Boomerang 2005, Lemarchant 2010); Intervals estimated at near true thickness.

MS= Massive Sulphide, Ba= Barite, FW=Footwall; na=not analyzed

A single metallurgical sample, totaling 126 kg was prepared for the Boomerang deposit from the mineralized zone intersected by GA05-12A and GA05-12B. Two composite samples, one from the massive sulphide/barite zone (104 kg) and one from the footwall zone (43 kg) were prepared for the Lemarchant deposit from the mineralized zone intersected in LM15-107.

Thibault & Associates Inc. ("Thibault"), an independent process chemical engineering firm, was engaged to carry out the bench scale studies to be followed by the development of a process simulation and order of magnitude cost assessment model (AACE Class V) on the deposits. Twelve DMS samples and five metallurgical samples were submitted to Thibault for testing (see press release dated January 25, 2016).

DEPOSIT (Owner)	Boomerang Domino (CZN)	Lemarchant (CZN)	Tulks East (CZN)	Long Lake (CZN)	Bobbys Pond (BMC)	Daniels Pond (BMC)	Tulks Hill (BMC)
DMS Samples	4	2	1	1	2	1	1
Metallurgical Samples	1	2			1	1	

The samples were selected to represent as closely as possible the characteristics of the mineralization making up each resource.

DMS Testing (completed)

The bench scale DMS testing was designed to assess the amenability of mineralized samples from the deposits to physical upgrading (pre-concentration) at each site as a potential means of reducing transportation costs from mine site to the milling facility and to maximize head grade to reduce downstream processing costs.

- Six samples identified as semi-massive sulphide or footwall stringer mineralization achieved a technically viable grade and recovery of base metals using bench scale separation tests.
- The remaining six samples identified as massive sulphide and/or barite mineralization were not significantly improved through DMS bench scale tests.

The highest degree of upgrading was achieved with the Lemarchant stringer sulphide sample (footwall) and Bobbys Pond Composite sample with an increase in grades of copper, lead, zinc and silver by 45% to 61% with copper, lead, zinc and silver recoveries ranging from 87.2% to 96.6%.

Metallurgical Testing (in progress)

The bench scale metallurgical test work is aimed at assessing the amenability of the mineralized samples from four of the deposits (Boomerang-Domino, Bobbys Pond, Daniels Pond and Lemarchant) to a common flotation flowsheet for the production of selective zinc, lead, and copper concentrate products of marketable grade at acceptable metallurgical recoveries. The test work will serve as a first stage evaluation of whether or not a single flowsheet and reagent scheme could be used for processing multiple resources at a central mill.

Initial flotation tests were designed to compare two flowsheet options: 1) a bulk Cu/Pb-Zn flotation flowsheet and 2) a sequential Cu-Pb-Zn flotation flowsheet using various reagent schemes and a constant grind size. The performance of the two flowsheets for each deposit tested was based on selectivity of flotation and the final concentrate grades for each of the copper, lead and zinc final concentrates.

Results from the initial flotation testing indicate the sequential Cu-Pb-Zn flowsheet provided the best overall performance for the four deposits tested. Development of the flotation flowsheet using the sequential flotation of copper, lead and zinc is in progress.

Process Simulation and Cost Assessment Model (in progress)

The bench scale testing programs will be followed-up by the development of a process simulation and order of magnitude cost assessment model (AACE Class V) to evaluate and identify the key factors impacting the operating economics of a centralized milling concept for processing of the base metal deposits. Results from the modeling will be used to help optimize the exploration and development budgets, by focusing on the key factors that are critical to assessing the economic potential and viability of developing the central Newfoundland deposits through a central milling facility.

Canadian Zinc acknowledges the financial support from the Research & Development Corporation of Newfoundland and

Labrador through the GeoEXPLORE Industry-led program to undertake the research program on the seven volcanogenic massive sulphide ("VMS") deposits in central Newfoundland. The program is scheduled to be completed in November 2016.

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-stage 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. These include the South Tally Pond project (Lemarchant deposit); Tulks South project (Boomerang-Domino and Tulks East deposits) and Long Lake project (Long Lake deposit). The Company's exploration strategy in central 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.

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.

Andrew M. Hussey, P.Geo., Senior Project Geologist of Canadian Zinc Corp., carried out the 2015 drill programs, and is a Qualified Person as defined by NI 43-101 and has reviewed and approved the drilling and sampling results in this press release.

J. Dean Thibault, P.Eng., Senior Process Chemical Engineer of Thibault & Associates Inc. is a Qualified Person as defined by NI 43-101 and has reviewed and approved the DMS and metallurgical test results in this press release.

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.

SOURCE Canadian Zinc Corp.

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