



## PRESS RELEASE

CZN-TSX  
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FOR IMMEDIATE RELEASE  
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### CANADIAN ZINC REPORTS RESULTS OF 2012 EXPLORATION PROGRAM

- Richest silver intercept of 2,059 g/t Ag over 1.3 metres
- Additional significant Ag-Pb-Zn diamond drill assays
  - Strong geophysical anomaly defined near mine

Vancouver, British Columbia, November 22, 2012 - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") is pleased to report results from the 2012 Exploration Program at the Company's 100% owned Prairie Creek Minesite property in the Northwest Territories.

The results include assays from drillhole PC-12-216 which returned a grade of 2,059 g/t silver (or 60 oz./ton silver) over 1.3 metres and is the highest grade silver intercept ever reported from the property. In addition, a significant coincident electromagnetic ("EM") and gravity geophysical anomaly was delineated proximal to the Prairie Creek Minesite property.

#### Diamond Drill Exploration Program

The 2012 diamond drilling program at Prairie Creek completed 5,629 m of coring in 12 holes. Exploration focused on two areas: at the Minesite area, where further shallow testing and extension of the current resources was completed, and at Casket Creek where the deep-hole program continued from the previous year.

**Alan Taylor, Vice President Exploration and Chief Operating Officer** commented that "*The 2012 drill program close to the Prairie Creek Minesite was designed to fill in a number of open areas and also to test for extensions of the known resource and the drill results continued to confirm the grade and extent of the deposit. Drillhole PC-12-216, with an intercept of 1.3 metres grading 2059 g/t or 60 oz./ton Ag, returned the highest grades of silver ever reported from a drillhole on the Prairie Creek property*",

"*The delineation of a new strong coincident EM and gravity geophysical anomaly approximately one kilometre from the Minesite is particularly encouraging and testing this anomaly will be a high priority of the 2013 exploration program*" added Mr. Taylor.

## Minesite Area Drill Program

Infill drilling focused close to the Minesite and within the defined resource was carried out with the Company's Longyear #1 drill rig. Drilling commenced in June 2012 and was completed in September. Most of these holes were drilled at depth and along strike in the proximity of the known underground workings. Targeted areas included locations that have the potential to be upgraded from the inferred category to the indicated resource category. A total of 3,366 metres over nine holes were drilled, with seven holes completed to target in 2012, six of which intersected significant mineralization and many with multiple intercepts

Drillhole PC-12-216 returned the highest grades of silver ever reported from a drillhole on the Prairie Creek property with an intercept of 1.3 metres grading 2059 g/t or 60 oz./ton Ag. The same hole also returned a combined grade of 51.3% lead+ zinc over a different intercept of 1.0 metres. Many other intercepts returned multi-ounce silver assays with high lead and zinc values, with Hole PC-12-214 reporting double intercepts of 44% and 23% combined lead+zinc, and Hole PC-12-215 also reporting double intercepts of 43% and 16.2% combined lead+zinc. Results are now being incorporated into the mine model and assessed for future exploration planning. Significant results are as follows:

Hole ID	From (m)	To (m)	Length (m)*	Mineralization style *	Pb (%)	Zn (%)	Ag (g/t)	Cu (%)
PC-12-217	459.50	460.50	1.00	STK	4.43	15.60	60	0.08
	463.60	465.60	2.00	STK	9.09	10.68	141	0.31
	469.90	470.90	1.00	STK	0.03	6.42	2	0.01
	473.10	474.10	1.00	STK	0.00	12.00	4	0.02
	475.95	476.95	1.00	STK	1.69	5.22	33	0.07
PC-12-216	418.28	419.59	1.31	STK	4.02	10.30	2059	9.37
	431.90	438.00	6.10	STK	2.04	6.12	19	0.03
	447.14	448.14	1.00	STK	31.10	20.20	184	0.56
PC-12-215	507.34	508.34	1.00	STK	1.35	2.88	126	0.27
	517.20	518.46	1.26	STK	0.86	18.48	16	0.04
	527.55	528.05	0.50	STK	3.83	2.08	82	0.20
	575.59	576.34	0.75	STK	14.02	1.40	103	0.03
	578.51	579.35	0.84	STK	36.90	6.30	268	0.04
PC-12-214	129.06	130.45	1.39	S	0.13	10.70	2	0.00
	152.84	153.74	0.90	S	9.07	19.50	TBD	0.45
	191.00	191.60	0.60	S	13.88	30.17	4	0.69
	305.00	306.80	1.80	MQV	18.67	4.61	TBD	0.22
PC-12-212	210.43	214.26	3.83	SMS	4.20	10.65	28	0.02
	217.77	219.94	2.17	SMS	3.10	1.43	20	0.00
PC-12-211	215.62	216.39	0.77	MQV	3.87	4.66	47	0.13

- Mineralization styles are defined as mineralized quartz vein (MQV), stratabound massive sulphides (SMS), stockwork (STK), or sulphides (S).
- Drill intercepts are not true widths

The Company's Longyear #2 drill rig was rehabilitated during 2012 and used as a training drill on one short hole.

## **Casket Creek Deep-Hole Program**

The deep-hole diamond drill exploration program at Casket Creek, 1.6 kilometres north of the current mineral resource, utilized the Company's TM-2500 coring rig. Following encouraging results from this area in 2011, drilling at Casket Creek commenced in May 2012 to search below PC-11-187W2, which intersected 5% Pb and 11% Zn over 3.5 metres. A total of 2,182 metres over two drillholes (with wedging) was completed. Assay results for the 2012 deep drill program are as follows:

Hole	From (m)	To (m)	Length (m)*	Pb (%)	Zn (%)	Ag (g/t)	Cu (%)
PC-12-206	1763.14	1764.04	0.90	4.23	2.97	31.4	0.001
PC-12-206	1831.90	1832.74	0.84	0.26	0.11	31.9	0.148

- Drill intercepts are not true widths

The drill core confirmed stratigraphy and contained a number of significant structural zones that are weakly mineralized and likely correlate with the previous years' intercept. A third hole, PC-12-213 was halted due to drilling difficulties within a significant fault structure, believed to be the main structural target. After completing this phase of drilling at Casket Creek the drill rig was moved back to the Prairie Creek Minesite for maintenance and winter storage. Further exploration work in this area is being planned for 2013.

## **Geophysical Program**

A geophysical program involving surface and downhole EM and surface gravity surveys was completed in the proximity of the Mine in August 2012. Geophysical surveys at Prairie Creek are somewhat impeded by mountainous terrain, variable amounts of conductive background minerals, and unknown electrical conductivity properties. The last previous geophysical survey was conducted at Prairie Creek in 1995. A short geophysical exploration program was designed in 2012 to test the applicability of modern geophysical survey techniques on the property. A ground-based approach was selected in order to maximize survey sensitivity.

The results define a strong multi-channel EM anomaly located approximately one kilometre from the Minesite, located outside but adjacent to the defined mineral resource. A coincident gravity anomaly was also identified over the same area by a loose-grid gravity survey. This multi-stacked geophysical anomaly has an estimated depth to the source between 200 and 450 metres below surface and remains untested by drilling. Further interpretation and analysis is underway to test this anomaly in 2013.

## **Mapping Program**

The Prairie Creek property contains numerous metal showings throughout its 16 kilometre strike length, some of which have been sampled and drilled in previous years. Showings are referred to as Zones and are generally separated by approximately one kilometre spacings, including Zones 1-3 which contain the current defined resource at the Minesite, then extending 10 kilometres to the south to Zone 12. Mostly, only historical analyses are available in this area and so a new property-wide comprehensive 1:2,000 scale geological map was compiled in September 2012 along with an up-to-date trench sampling program.

The existing Prairie Creek Mining Leases were the focus of the program and were accessed by the network of existing roads in the area with additional traversing as needed. LIDAR and orthophoto surveys were flown earlier in 2012, and provided an accurate base to plot

observations from a total of 225 kilometres of traverses. Previously mapped areas were incorporated and infill mapping and resampling of trenches was completed. A georeferenced photographic dataset was also acquired throughout the property.

Select results from trench sampling in some of the southern Zones are as follows:

Zone	Sample Type	Length (m)	Pb (%)	Zn (%)	Ag (g/t)	Cu (%)
Zone 5	Chip	0.40	16.7	11.7	279	0.86
Zone 5	Grab	N/A	74.1	1.6	697	0.60
Zone 5	Grab	N/A	66.3	0.7	1038	1.80
Zone 5	Grab	N/A	42.2	8.1	489	0.63
Zone 5	Grab	N/A	45.5	2.6	633	0.77
Zone 5	Grab	N/A	41.4	0.2	440	0.08
Zone 5	Grab	N/A	34	1.2	491	0.68
Zone 6	Channel	0.69	8.6	9.4	145	0.23
Zone 6	Chip	2.00	20.5	11.3	274	0.35
Zone 6	Grab	N/A	12.2	12.9	194	0.40
Zone 6	Grab	N/A	12.8	4.7	188	0.24
Zone 7	Channel	1.10	15.5	26.5	233	0.85
Zone 7	Channel	1.70	15.3	7.2	223	0.19
Zone 7	Chip	1.90	6.9	17.7	102	0.38
Zone 7	Chip	2.00	7.3	13.8	208	0.54
Zone 7	Grab	N/A	50.4	0.4	965	0.92
Zone 8	Channel	1.40	10.7	17.2	214	0.19
Zone 8	Channel	0.88	7.8	10.7	395	0.60
Zone 8	Chip	2.00	20.6	29.6	321	0.45
Zone 8	Chip	2.85	17.1	17.4	250	0.25
Zone 8	Chip	1.90	16.8	11.8	342	0.39
Zone 10	Channel	0.66	10.5	9.1	266	0.60
Zone 10	Chip	4.00	21.2	14.3	279	0.40
Zone 10	Chip	4.00	5.5	8.4	118	0.31
Zone 10	Grab	N/A	21	6.6	176	0.13
Zone 11	Chip	0.42	7.3	23.2	80	0.26

The mapping database is presently being compiled from more than 1,300 field observations in a Geographic Information System and will provide a solid basis for planning future exploration of the extensive length of the Prairie Creek property.

### Quality Assurance and Quality Control

The drill core samples were cut by diamond saw and securely, through chain of custody, shipped to AGAT Laboratories for initial multi-element assay by ICP-OES analysis. Further assays and analysis was completed where appropriate and standards, duplicates and blanks were inserted and included within the analysis. Alan Taylor, P. Geo., Chief Operating Officer & Vice President Exploration and a Director of Canadian Zinc Corporation, is responsible for the exploration program, and is a Qualified Person for the purposes of NI 43-101 and has approved this press release.

## About Canadian Zinc

Canadian Zinc is a Toronto-listed exploration and development company. The company's main project is the 100%-owned Prairie Creek zinc, silver and lead project located in the Northwest Territories, Canada. 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 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 Pre-Feasibility study completed by SNC Lavalin in June 2012 indicates a pre-tax net present value ("NPV") of \$253 million using an 8% discount, with an internal rate of return ("IRR") of 40.4% and payback period of 3 years using long-term metal price projections of \$1.00/lb zinc, \$1.00/lb lead and \$26.00/oz. silver, based on the Mineral Reserve alone.

Canadian Zinc also holds the South Tally Pond VMS exploration project in Newfoundland, where a winter drilling program is planned

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### 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. 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.*