



PRESS RELEASE

FOR IMMEDIATE RELEASE

- **CANADIAN ZINC REPORTS SECOND QUARTER 2006 RESULTS**
 - **UNDERGROUND DEVELOPMENT AND NEW EXPLORATION UNDERWAY AT PRAIRIE CREEK MINE**
 - **\$24.6 MILLION CASH POSITION**

Vancouver – August 10, 2006 -- Canadian Zinc Corporation ("TSX-CZN") reports filing of its unaudited financial statements for the period ended June 30, 2006. The Company reported a net loss for the second quarter of \$326,146 compared to a loss of \$159,896 in the second quarter of 2005. For the first half of 2006 the Company reported a loss of \$481,292 compared to a loss of \$1,746,226 in the first half of 2005. The loss in the first half of 2005 included an expense of \$1,241,000 in respect of stock based compensation on the issue of options under the Company's Stock Option Plan.

During the first half of 2006 the Company raised \$9,693,107 from the issue of Units, exercise of broker warrants and through the exercise of stock options. As at June 30, 2006 Canadian Zinc had cash and term deposits of \$24.6 million placing the Company in a very strong financial position.

This press release should be read in conjunction with the unaudited financial statements and notes thereto, and Management's Discussion and Analysis for the quarter ended June 30, 2006 available on SEDAR at www.sedar.com

Progress at Prairie Creek:

During the first half of 2006 the Company was mainly engaged in permitting activities and planning the proposed 2006 exploration and development programs at the Prairie Creek mine. A budget of \$5.7 million has been approved for the 2006 exploration and development program.

Very significant and important progress was made in securing permits for the Prairie Creek project.

In February 2006 the Mackenzie Valley Land and Water Board issued Water Licence MV2001L2-0003 in respect of underground development and the operation of a metallurgical pilot plant in the mill at the Company's Prairie Creek mine.

In May 2006 the Mackenzie Valley Land and Water Board issued a Land Use Permit for the Phase 3 Exploration Program at Prairie Creek covering all of the Company's mining leases and mineral claims outside the immediate mine area.

In June 2006 the Mackenzie Valley Land and Water Board granted a two year extension to Land Use Permit MV2001C0022, which covers diamond drilling within the vicinity of the mine facilities.

The mine site at the Prairie Creek mine was reopened in April for the 2006 season. Camp and equipment upgrades are underway to support future activities.

Procon Mining and Tunneling Limited of Burnaby B.C. was mobilized to site to undertake the 2006 underground development program at Prairie Creek. The underground exploration program involves the driving of approximately 400 meters of new decline tunnel and up to 10,000 meters of underground exploration diamond drilling. Preparation and rehabilitation of the existing 870m underground workings, including timber stripping, rock bolting, pipe hanging, installation of electrical facilities, completion of refuge station, ancillary ventilation fans, removal of old rock material and new track laying, is well underway. A scoop tram and single boom jumbo drill have been transported by air into the site onto the company's 1000 meter gravel airstrip.

A bulk sample of vein material from underground was collected and shipped to SGS Lakefield for detailed metallurgical optimization studies. The sample was collected from multiple cross-cuts of the vein within the existing underground workings.

The surface exploration program outside the immediate mine area commenced in late June with drilling targeted on Zone 8, about five kilometers south of the mine site.

Outlook:

Plans for 2006 include continuing the Company's exploration program on the Prairie Creek property outside the immediate currently known resource area, and continuing the decline and underground drilling program. At the same time ongoing technical and metallurgical studies will be carried out to advance the project towards commercial production. The Company will also continue with its permitting activities and during the year expects to file applications for the Land Use Permits and Water Licence for the commercial operation of the Prairie Creek mine.

During the period the Company reviewed a number of other new mining investment opportunities and this activity will continue during 2006.

About Canadian Zinc:

Canadian Zinc's 100% owned Prairie Creek (zinc/silver/lead) Project, located in the Northwest Territories, includes a partially developed underground mine with an existing 1,000 ton per day mill and related infrastructure and equipment. The Prairie Creek Property hosts a major mineral deposit containing a historically estimated resource of 3.6 million tonnes (measured and indicated) grading 11.8% zinc; 9.7% lead; 0.3% copper and 141.5 grams silver per tonne and 8.3 million tonnes (inferred) grading 12.8% zinc; 10.5% lead and 0.5% copper and 169.2 grams silver per tonne, with significant exploration potential. The deposit contains an estimated, in situ 3 billion pounds of zinc, 2.2 billion pounds of lead and approximately 70 million ounces of silver.

Cautionary Statement - Forward Looking Information:

This press release contains certain forward-looking information, 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 issue of permits, the size and quality of the company's mineral resources, future trends for the company, progress in development of mineral properties, future production and sales volumes, capital and mine production costs, demand and market outlook for metals, future metal prices and treatment and refining charges, the outcome of legal proceedings and the financial results of the company. 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.

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