

Canadian Copper Significantly Grows Mineral Resources at Chester Project

Indicated Resource Increases by 3x, Maintains Inferred Resource Size

TORONTO, Nov. 1, 2022 /CNW/ - Canadian Copper Inc. ("Canadian Copper" or the "Company") (CSE: CCI) is pleased to announce a new Mineral Resource Estimate ("MRE" or "Mineral Resources") for the Chester Copper Project ("Chester") located in New Brunswick, Canada. The MRE was prepared by APEX Geoscience Ltd. ("APEX") in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards and National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("43-101").

"Today's MRE is an excellent milestone in our value enhancing and systematic de-risking initiatives for the Chester Project. Our exploration efforts to date have improved our understanding of the geologic model and resulted in a larger and more robust copper resource. Regional exploration continues at the Chester Project which will help build on this growing copper resource. Presently, 80% of the resources are within 100 meters of surface at +1% Cu grade, and the deposit remains open along strike and at depth." Simon Quick, CEO of Canadian Copper.

Mineral Resource Estimate Highlights

- Indicated Mineral Resources: 4.866 million tonnes ("Mt") at a grade of 1.13% copper, containing 120.28 million pounds ("Mlbs") of copper, with potential by-product of 13.66 Mlbs lead, 10.52 Mlbs zinc, 69,000 ounces of silver, or potentially 7.51 Mlbs of in situ copper equivalent ("CuEq")*.
- Inferred Mineral Resources: 1.819 million tonnes ("Mt") at a grade of 1.01% copper, containing 38.35 million pounds ("Mlbs") of copper, with potential by-product of 3.17 Mlbs lead, 1.57 Mlbs zinc, or potentially 1.35 Mlbs of copper equivalent ("CuEq")*.

Next Steps for the Chester Project

- Based on hole C21:07 (<u>click here for more information</u>) which is a 200-meter step-out to any previous drilling, complete block model evaluation to define drill targets that will future test extensions of the MRE both at depth and along strike. Several high-grade copper veinlets up to 3.55% Cu within a copper envelop grading 0.2% Cu over 83.90 meters confirming the extensions to the Stringer Zone at depth.
- A metallurgical characterization test program is underway at RPC Science & Engineering based in Fredericton, New Brunswick which is partially funded through The National Research Council of Canada Industrial Research Assistance Program ("NRC IRAP"). The objectives of this metallurgical program are to improve our beneficiation understanding and investigate recovery opportunities for the Central and the East Zones at Chester.
- Conceptual open pit mine planning to further identify value enhancing opportunities of this outcropping VMS deposit. Specifically, this effort will assist in our next exploration program planning to define drill targets that will further improve economics as-well as upgrade historic drilling that is excluded from this MRE including additional by-product metal domains.
- Investigate Chester mineralization amenability to bulk ore sorting technology as means to improve deposit economics.

Mineral Resource Estimate

This MRE for Chester is based on data with a cut-off date of August 31, 2022. The MRE is reported with an effective date of October 27, 2022.

Table 1: Open Pit Mineral Resource Estimate at a cut-off of 0.5% copper*

Classification	Tonnes	Grade (%Cu)	Copper (lbs)	Copper (kgs)
Indicated	4,866,000	1.127	120,285,000	54,560,000
Inferred	1,819,000	1.014	38,356,000	17,398,000

*Notes to Table 1:

- The unconstrained resource block model was estimated using ordinary kriging utilizing blocks at 3m(X) x 3m(Y) x3m(Z) and was then subjected to several open pit optimization scenarios utilizing a number of copper prices, mining cost scenarios and recovery factors typical of copper mining operations and advanced projects. The Chester final MRE pit shell utilized a copper price of US\$3.50/lb and recoveries of 95% with appropriate mining and processing costs typical of near surface open pittable resources in Eastern Canada. Mr. Dufresne considers the pit parameters presented below are appropriate to evaluate the reasonable prospect for potential future economic extraction at the Chester Project for the purpose of providing an MRE
- 2. The updated resources presented are not mineral reserves, and they do not have demonstrated economic viability. There is no guarantee that any part of the resources defined by the updated MRE will be converted to a mineral reserve in future.
- The Inferred Mneral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mneral Resource and must not be converted to a Mneral Reserve. It is reasonably expected that the majority of the Inferred Mneral Resource could potentially be upgraded to an Indicated Mneral Resource with continued exploration.
- The Moreal Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Betroleum (CM), CM Standards on Mneral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CM Standing Committee on Reserve Definitions and adopted by the CM Council.
- Historical ed areas were removed from the block modelled resources.
- 6. The estimate of Mneral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 7. Totals may not add due to rounding.min



Figure 1: Base Case Pit Constrained MRE, Plan View (CNW Group/Canadian Copper Inc.)



Figure 2: Base Case Pit Constrained MRE, Orthogonal View (CNW Group/Canadian Copper Inc.)

Parameters used to constrain the MRE within an open pit shell

ltem	Units	Unit Cost
CAD to USD Conversion		0.78
Ore Mining Cost	CAD\$/tonne Ore	\$3.00
-		\$3.00
Waste Mining Cost	CAD\$/tonne Waste	
G&A Cost	CAD\$/tonne Ore	\$2.00
Process Cost	CAD\$/tonne Ore	\$15.00
Cu Recovery	%	95.00 %

Copper Price	US\$/lb	\$3.5
Pit Slope	Degrees	45
Density	g/m3	Variable

Sensitivity Analysis

A sensitivity analysis is presented below to help conceptualize grade and tonnage estimates at various cut-off grade increments for the Chester deposit. This is not to be interpreted or construed as the base case of the Mineral Resource Estimate discussed above. Table 3 displays current copper MRE at 0.5% cut-off as groups of domains with potential by-product metals.



Figure 3: Long Section and Cross Section Through Chester MRE (CNW Group/Canadian Copper Inc.)



Figure 4: Grade-Tonnage Curve for Chester Mineral Resources (CNW Group/Canadian Copper Inc.)

	Table 2: Grade-Tonnage	Sensitivity Ta	able for Chest	er Mineral	Resources*
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Cu cut-off %	Classification	Tonnes	In-situ Cu in Ibs	Cu grade %
0.1	Indicated	10,025,000	152,258,700	0.679
0.2	Indicated	8,542,000	147,354,200	0.784
0.3	Indicated	7,053,000	139,187,000	0.899
0.4	Indicated	5,830,000	129,805,200	1.014
0.5	Indicated	4,866,000	120,284,700	1.127
0.6	Indicated	4,107,000	111,128,500	1.234
0.7	Indicated	3,473,000	102,052,700	1.342
0.8	Indicated	2,942,000	93,294,700	1.450
0.9	Indicated	2,505,000	85,129,500	1.554
1	Indicated	2,147,000	77,644,800	1.655
0.1	Inferred	4,461,000	54,306,600	0.592
0.2	Inferred	3,623,000	51,567,200	0.697
0.3	Inferred	2,874,000	47,471,500	0.807
0.4	Inferred	2,286,000	42,973,000	0.912
0.5	Inferred	1,819,000	38,355,500	1.014
0.6	Inferred	1,432,000	33,698,900	1.119
0.7	Inferred	1,124,000	29,293,700	1.227
0.8	Inferred	874,000	25,188,200	1.344
0.9	Inferred	691,000	21,760,000	1.466
1	Inferred	545,000	18,692,000	1.592

*Notes to Table 2:

 The unconstrained resource block model was estimated using ordinary kriging utilizing blocks at 3m(X) x 3m(Y) x3m(Z) and was then subjected to several open pit optimization scenarios utilizing a number of copper prices, mining cost scenarios and recovery factors typical of copper mining operations and advanced projects. The Chester final MRE pit shell utilized a copper price of US\$3.50/lb and recoveries of 95% with appropriate mining and processing costs typical of near surface open pittable resources in Eastern Canada. Mr. Dufresne considers the pit parameters presented below are appropriate to evaluate the reasonable prospect for potential future economic extraction at the Chester Project for the purpose of providing an MRE

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Reserve. It is reasonably expected that the majority of the Inferred Mneral Resource could potentially be upgraded to an Indicated Mneral Resource with continued exploration.
The Mneral Resources were estimated in accordance with the Canadian Institute of Mning, Metallurgy and Petroleum (CIM), CIM Standards on Mneral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

Historical mined areas were removed from the block modelled resources.

6. The estimate of Mneral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

7. Totals may not add due to rounding.

Table 3: Chester Mineral Resources and Secondary By-Product Metals by Domain*

Domain Groups	Class	Cu cut-off %	Tonnes '000	In Situ Cu Ibs '000	Cu grade %	In-Situ Pb Ibs '000	Pb grade %	In Situ Zn Ibs '000	Zn grade %	In Situ Ag g '000	Ag grade q/t	In Situ CuEq Cu Ibs '000
Cu Only -	Indicated	0.5	661	13,902	0.958						J ·	13,902
Z6 & LG	Inferred	0.5	365	6,852	0.906							6,852
CuPb -	Indicated	0.5	3,648	92,510	1.159	10,108	0.104					95,110
Z1, Z2, Z3, Z4, Z5 & Z7	Inferred	0.5	1,293	28,248	1.048	2,294	0.181					28,838
Cu Pb Zn -	Indicated	0.5	184	3,614	0.864	1,814	0.427	5,872	1.371			6,095
MS2	Inferred	0.5	61	938	0.699	501	0.346	880	0.656			1,370
Cu Pb Zn Ag -	Indicated	0.5	371	10,257	1.226	1,732	0.167	4,645	0.404	2,144	4.48	12,689
Z8 & Z11	Inferred	0.5	98	2,316	1.066	374	0.131	690	0.237	2	0.02	2,650

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Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

5. Historical mined areas were removed from the block modelled resources.

6. The estimate of Mneral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

7. Ratios used to calculate In Situ Qu equivalent lbs for Pb, Zn and Ag are Pb x 0.257, Zn x 0.342, Ag x 83.333. Prices used are Qu \$3.5/lb, Pb \$0.9/lb, Zn \$1.2/lb, Ag \$20/oz.

Geologic Model

The mineralization domains consist of 12 modelled domains that include 10 "stringer" zones, which occur as a network of dendritic veins that often show a very erratic distribution of mineralization, an upper massive sulfide (MS) domain, and a low-grade halo domain surrounding the other domains. The mineralization domain construction utilized an approximate lower cut-off of 0.15% Cu for the interpretation and joining of mineralization shapes. Within the stringer mineralization zones and the MS mineralization zone, a total of 20% of the total drilled meters inside the mineralization wireframes were not sampled, assumed to be waste, and assigned a nominal waste value of half the detection limit of modern assay methods (0.00001% Cu). Within the low-grade halo mineralization domain, a total of 64% of the total drilled meters inside the mineralization wireframe was not sampled, assumed to be waste, and assigned a nominal waste value of half the detection limit of modern assay methods (0.00001% Cu).

Data Verification

The Chester drill hole database, including drill hole surveying, analytical methods, QA/QC protocols and corresponding sample preparation and shipment procedures have been reviewed for historical and current drilling by Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo. and is deemed to be of sufficient quality for resource modelling. The drill hole database contains a total of 712 drill holes with 64,787 meters drilled and 15,330 sample intervals assayed for copper. A total of 43 holes were completed by Canadian Copper and Puma between 2014 and 2021. A total of 191 holes were completed between 2003 and 2007 by First Narrows. A total of 478 historical holes were completed by a number of prior companies between 1963 and 1999. Standard statistical treatments were conducted on the raw and composite samples with a resulting composite length of 1.5 meters for the estimation and a capping limit of 8.7% Cu up to 10.15% Cu, utilized for various domain groups for the Chester Project. Areas and/or domains dominated by pre-2000 drill hole data were estimated but are classified as inferred until such time as modern confirmation drilling is conducted.

Mineral Resource Estimation Methodology

The MRE is based on the combination of geological modeling, geostatistics and conventional block

modeling using Ordinary Kriging (OK) and locally varying anisotropy (LVA), capping statistics and variogram models for copper grade interpolation. Block grade estimation employed LVA, which uses different rotation angles to define the principal directions of the variogram model and search ellipsoid on a per-block basis. Modelling was conducted in the Universal Transverse Mercator (UTM) coordinate space relative to the North American Datum (NAD) 1983, Zone 19N (EPSG:26919).

Technical Report

The effective date of the Mineral Resource Estimate is October 27, 2022. A NI 43-101 technical report prepared by APEX Geoscience Ltd will be filed on SEDAR at <u>www.sedar.com</u> within 45 days of this news release and will be available at that time on the Canadian Copper website.

For readers to fully understand the information in this news release they should read the technical report in its entirety when it is available, including all qualifications, assumptions, exclusions and risks. The technical report is intended to be read as a whole and sections should not be read or relied upon out of context.

Qualified Persons

Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo. is President and a Principal of APEX Geoscience Ltd. and is an independent QP. Mr. Dufresne is responsible for the Chester MRE and has reviewed and approved the geological information reported in this news release.

Dominique Gagné, PGeo., is a qualified person as defined by Canadian National Instrument 43-101 standards who is working for Geominex Inc., an independent contractor of the Company. Mr. Gagne has reviewed and approved the geological information reported in this news release.

About the Chester Copper Project

The Chester copper deposit ("Chester") is a volcanogenic massive sulphide ("VMS") resource containing three zones; the Central Zone (massive sulphide), the East Zone (massive sulphide), and the West Zone (Copper Stringer), which are all located near surface. Previous mining development in 1974 included a 470-meter decline targeting the West Zone and produced 30,000 tonnes of bulk sample material grading +2.0% Cu (Geoscience Canada, McCutcheon, 2020). No other development has occurred on the property.

About the Bathurst Mining Camp

The Company is focused on the prolific Bathurst Mining Camp of New Brunswick, Canada. This region is a world class mining district with thirteen former mining operations and hosts more than forty-five known volcanogenic massive sulphide ("VMS") deposits. Our flagship Chester Project is 75 km south of the renowned Brunswick #12 mine that operated for 5 decades. New Brunswick has the modern infrastructure needed for mineral exploration and mine development coupled with a clear and well-established regulatory environment.

Quality Assurance/Quality Control (QA/QC)

Drill core is cut in half, one half of the core is taken as sample. Samples are bagged and sealed by Geominex, and sent to the facility of ALS CHEMEX in Moncton, New Brunswick where each sample is dried, crushed, and pulped. The samples were crushed to 70% less than 2mm, riffle split off 1kg, pulverise split to better than 85% passing 75 microns (Prep-31B). A 30-gram subsplit from the resulting pulp was then subjected to a fire assay (Au-ICP21). Rock sample ICP results with gold >1g/t were subjected to a metallic screening (Au-SCR24) 1kg pulp screened to 100 microns.

About Canadian Copper Inc.

Canadian Copper is a Canadian-based mineral exploration company with a copper and base metals portfolio of historical resources and grassroots projects. The Company is focused on the prolific Bathurst Mining Camp (BMC) of New Brunswick, Canada.

Neither the CSE nor its Market Regulator (as that term is defined in the policies of the CSE) accepts responsibility for the adequacy or accuracy of this release.

Cautionary and Forward-Looking Statements

This news release includes certain forward-looking statements and forward-looking information (collectively, "forward-looking statements") within the meaning of applicable Canadian securities legislation. All statements, other than statements of historical fact, included herein including, without limitation, statements regarding future exploration programs, anticipated content, and commencement in respect of the Company's projects and mineral properties, including the proposed NI 43-101 technical report and timing and content of such technical report, are forwardlooking statements. Although the Company believes that such statements are reasonable, it can give no assurance that such expectations will prove to be correct. Often, but not always, forward looking information can be identified by words such as "pro forma", "plans", "expects", "will", "may", "should", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "believes", "potential" or variations of such words including negative variations thereof, and phrases that refer to certain actions, events or results that may, could, would, might or will occur or be taken or achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to differ materially from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and other factors include, among others, factors discussed under the heading "Risk Factors" in the Company's prospectus dated May 24th, 2022 and other filings of the Company with the Canadian Securities Authorities, copies of which can be found under the Company's profile on the SEDAR website at <u>www.sedar.com</u>. Readers are cautioned not to place undue reliance on forward-looking statements. The Company undertakes no obligation to update any of the forward-looking statements in this presentation or incorporated by reference herein, except as otherwise required by law.

Cautionary Note Regarding Mineral Resource Estimates

Until mineral deposits are actually mined and processed, Mineral Resources must be considered as estimates only. Mineral Resource Estimates that are not Mineral Reserves have not demonstrated economic viability. The estimation of Mineral Resources is inherently uncertain, involves subjective judgement about many relevant factors and may be materially affected by, among other things, environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties, contingencies and other factors described in the Company's public disclosure available on SEDAR at <u>www.sedar.com</u>. The quantity and grade of reported "Inferred" Mineral Resource Estimates are uncertain in nature and there has been insufficient exploration to define "Inferred" Mineral Resource Estimates as an "Indicated" or "Measured" Mineral Resource and it is uncertain if further exploration will result in upgrading "Inferred" Mineral Resource Estimates to an "Indicated" or "Measured" Mineral Resource category. The accuracy of any Mineral Resource Estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation, which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate. Mineral Resource Estimates may have to be re-estimated based on, among other things: (i) fluctuations in mineral prices; (ii) results of drilling, and development; (iii) results of future test mining and other testing; (iv) metallurgical testing and other studies; (v) results of geological and structural modeling including block model design; (vi) proposed mining operations, including dilution; (vii) the evaluation of future mine plans

subsequent to the date of any estimates; and (viii) the possible failure to receive required permits, licenses and other approvals. It cannot be assumed that all or any part of a "inferred" or "indicated" Mineral Resource Estimate will ever be upgraded to a higher category. The Mineral Resource Estimates disclosed in this news release were reported using CIM Standards in accordance with NI 43-101.

SOURCE Canadian Copper Inc.

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