

# Amended and Restated NI 43-101 Technical Report on the Mineral Resource Estimates Crawford Nickel-Cobalt Sulphide Project: Main Zone (Update) and East Zone (Initial) Deposits

TORONTO, Jan. 18, 2021 /CNW/ - Canada Nickel Company Inc. (TSXV: CNC) ("Canada Nickel" or the "Company") is pleased to announce the filing on SEDAR of an amended and restated independent National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") entitled: "Independent Technical Report and Mineral Resource Estimates Crawford Nickel-Cobalt Sulphide Project: Main Zone (Update) and East Zone (Initial) Deposits" prepared by Scott Jobin-Bevans (Ph.D., PMP, P.Geo.), John Siriunas (M.A.Sc., P.Eng.) and David Penswick (P.Eng.) (the "**Amended Technical Report**").

The Amended Technical Report can be found under the Company's profile at [www.sedar.com](http://www.sedar.com). The Amended Technical Report has been filed further to a review by staff of the Ontario Securities Commission (the "**OSC**"). The OSC review is now complete.

The Amended Technical Report includes a conceptual pit envelope constraint in order to demonstrate reasonable prospects for eventual economic extraction and updated mineral resource tables. Prior mineral resource estimates, as previously disclosed in the December 4, 2020 Technical Report, were not constrained by conceptual pit envelopes. The addition of a pit constraint resulted in no change to the Measured & Indicated resource in the Higher Grade Core of the Main Zone, a 1.5 kt reduction in contained nickel in the overall Measured and Indicated resource to 1,690 kt, and a 335 kt reduction in contained nickel from the original Inferred resource to 1,183 kt. 90% of the overall reduction in Inferred resources occurred at depths below 300 metres.

In addition, the gram per tonne (g/t) assay values for Palladium (Pd), Platinum (Pt), and Palladium + Platinum (Pd + Pt) included in Table 10-2 of the Amended Technical Report have been corrected for holes CR19-05 to CR19-13.

Disclosure of explorations targets for the Main Zone Pd + Pt reef, two East Zone Pd + Pt reefs and the East Zone nickel domains was also revised to comply with subsection 2.3(2) of NI 43-101.

**Table 1 – Amended Total Mineral Resource Estimate for the Crawford Nickel-Cobalt Sulphide Project, Ontario**

Mineral Resource Estimate									Contained				
DOMAIN	CLASS	TONNES(Mt)	N (%)	Co (%)	Fe (%)	S (%)	Pd (g/t)	Pt (g/t)	N (kt)	Co (kt)	Fe (Mt)	Pd (koz)	Pt (koz)
MAIN HIGHER GRADE ZONE	Measured	151.7	0.32	0.013	6.25	0.20	0.029	0.012	482.2	19.9	9.5	141	57
	Indicated	128.6	0.30	0.013	6.37	0.16	0.027	0.013	391.8	16.5	8.2	111	52
	Mea+Ind	280.2	0.31	0.013	6.31	0.18	0.028	0.012	873.9	36.4	17.7	252	108
	Inferred	109.9	0.29	0.013	6.66	0.09	0.026	0.013	315.0	14.0	7.3	93	47
MAIN LOWER GRADE ZONE	Measured	62.5	0.22	0.013	6.83	0.05			135.1	8.2	4.3		
	Indicated	263.2	0.21	0.013	6.90	0.04			557.0	34.6	18.2		
	Mea+Ind	325.6	0.21	0.013	6.89	0.04			692.1	42.9	22.4		
	Inferred	210.2	0.21	0.013	6.87	0.06			444.9	27.1	14.4		
EAST ZONE	Measured	25.8	0.26	0.012	6.02	0.04			67.4	3.2	1.6		
	Indicated	21.8	0.26	0.013	6.20	0.04			56.2	2.7	1.3		
	Mea+Ind	47.5	0.26	0.013	6.11	0.04			123.6	6.0	2.9		
	Inferred	176.7	0.24	0.013	6.63	0.04			423.5	22.6	11.7		
TOTAL	Mea+Ind	653	0.26	0.013	6.58	0.10	0.026	0.012	1,689.6	85.2	43.0	252	108
	Inferred	497	0.24	0.013	6.74	0.06	0.026	0.013	1,183.3	63.8	33.5	93	47

- The independent Qualified Person for the Mineral Resource Estimate, as defined by NI 43-101, is Dr. Scott Jobin-Bevans (P.Geo., APGO #0183), of Caracac Creek International Consulting Inc. and Atticus Chile S.A. The effective date of the Mineral Resource Estimate is December 11, 2020.
- These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this Mineral Resource Estimate are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured, however it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
- A cut-off grade of 0.15% Ni was used for the low-grade domains (Main and East zones) and cut-off grades of 0.25% Ni (Main Zone) and 0.21% Ni (East Zone) were used for the high-grade domains. Cut-offs were determined on the basis of core assay geostatistics and drill core lithologies for the deposit, and by comparison to analogous deposit types. Given the current stage of the Project, the mineral resources contained within the Main and East zone deposits have not been constrained by open pit optimization. The Company is planning to complete open pit optimization and present pit-constrained mineral resources as part of its Preliminary Economic Assessment ("PEA") scheduled to be completed by the end of the first quarter, 2021.
- Geological and block models for the Mineral Resource Estimate used data from a total of 62 surface drill holes (51 in the Main Zone and 11 in the East Zone), completed by Spruce Ridge Resources (4 holes in 2018) and Noble Mineral Exploration and Canada Nickel Company (50 holes in 2019-2020). The drill database was validated prior to resource estimation and QA/QC checks were made using industry-standard control charts for blanks, core duplicates and commercial certified reference material inserted into assay batches by CNC and by comparison of urpore assays performed at a second laboratory.
- Estimates in Table 1 have been rounded to two significant figures.
- The mineral resource estimates have also been revised in the Amended Technical Report to include a conceptual pit envelope constraint that was developed using the optimization parameters included in the Amended Technical Report. Metal prices used (US\$) were \$7.75/lb nickel, \$15/lb cobalt, \$90/tonne magnetite, \$1,600/oz Pd, and \$800/oz Pt. Different pit slopes were used for each layer (in degrees): 9.5 in clay, 21.8 in gravel and 45 in rock. Exchange rate utilized was US\$/C\$ of \$0.75. Mining costs utilized different values for overburden (clay, gravel), selective mining and bulk mining ranging from C\$1.75 to C\$3.15/t mined. Processing costs and G&A for 100ktpd operation were C\$6.18/t. Based on the range of grade and ratio of sulphur to nickel at Crawford, recovery could be expected to range from 10% - 60%. It has also been assumed that 30 - 40% of total iron would be recovered to a saleable magnetite concentrate.
- The Mineral Resource Estimate was prepared following the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (November 29, 2019).

- MAIN ZONE:**
- The geological model as applied to the Mineral Resource Estimate for the Main Zone comprises three mineralized domains hosted by variably serpentinized ultramafic rocks: a relatively high-grade core (largely dunite) and two northern and southern lower grade envelopes (combination of dunite and peridotite). Individual wireframes were created for each domain.
  - The block model was prepared using Micromine 2020. A 12 m x 12 m x 9 m block model was created and samples were composited at 4.5 m intervals. Grade estimation from drill hole data was carried out for Ni, Co, Fe, S, Pd and Pt using the Ordinary Kriging interpolation method.
  - Grade estimation was validated by comparison of input and output statistics (nearest neighbour and inverse distance cubed), swath plot analysis, and by visual inspection of the assay data, block model, and grade shells in cross-sections.
  - Density estimation was carried out for the mineralized domains using the Ordinary Kriging interpolation method, on the basis of 3,270 specific gravity measurements collected during the core logging process, using the same block model parameters of the grade estimation. As a reference, the average estimated density value within the high-grade is 2.64 g/cm<sup>3</sup> (t/m<sup>3</sup>), while low-grade domains of the resource model yielded averages of 2.63 g/cm<sup>3</sup> (t/m<sup>3</sup>) in the north and 2.71 g/cm<sup>3</sup> (t/m<sup>3</sup>) in the south.
- EAST ZONE:**
- The geological model as applied to the Mineral Resource Estimate for the East Zone comprises three mineralized domains hosted by variably serpentinized ultramafic rocks: a relatively high-grade core (largely dunite) and two northern and southern lower grade envelopes (largely peridotite). Individual wireframes were created for each domain.
  - The block model was prepared using Micromine 2020. A 20 m x 20 m x 15 m block model was created and samples were composited at 3 m intervals. Grade estimation from drill hole data was carried out for Ni, Co, Fe and S using the Inverse Distance Squared method.
  - Grade estimation was validated by comparison of input and output statistics (nearest neighbour), swath plot analysis, and by visual inspection of the assay data, block model, and grade shells in cross-sections.
  - An average bulk density value for each mineralized domain was calculated on the basis of 244 specific gravity measurements collected during the core logging process. Blocks within the high-grade were assigned a single bulk density value of 2.62 g/cm<sup>3</sup> (t/m<sup>3</sup>), while low-grade domains of the resource model were assigned single bulk density values of 2.66 g/cm<sup>3</sup> (t/m<sup>3</sup>) in the north and 2.72 g/cm<sup>3</sup> (t/m<sup>3</sup>) in the south.

## Assays, Quality Assurance/Quality Control and Drilling and Assay Procedures

William E. MacRae, MSc, P.Geo., a Qualified Person as defined by NI 43-101, is responsible for the on-going drilling and sampling program, including quality assurance (QA) and quality control (QC). The core is collected from the drill in sealed core trays and transported to the core logging facility. The core is marked and sampled at 1.5 metre lengths and cut with a diamond blade saw. Samples are bagged with QA/QC samples inserted in batches of 35 samples per lot. Samples are transported in secure bags directly from the Canada Nickel core shack to Actlabs Timmins, an ISO/IEC 17025 accredited lab. Analysis for precious metals (gold, platinum and palladium) are completed by Fire Assay while analysis for nickel, cobalt, sulphur and 17 other elements are performed using a peroxide fusion and ICP-OES analysis. Certified standards and blanks are inserted at a rate of one QA/QC sample per 32 core samples making a batch of 35 samples that are submitted for analysis.

## Qualified Person and Data Verification

Dr. Scott Jobin-Bevans (P.Geo., APGO #0183), independent of the Company and a Qualified Person as defined by NI 43-101, has reviewed and approved the scientific and technical content of this news release, and is responsible for the Mineral Resource Estimate. The Quality Control-Quality Assurance review was conducted by independent engineer Mr. John Siriunas (P.Eng., APEO #42706010), a Qualified Person as defined by NI 43-101.

## About Canada Nickel Company

Canada Nickel Company Inc. is advancing the next generation of nickel-cobalt sulphide projects to deliver nickel and cobalt required to feed the high growth electric vehicle and stainless steel markets. Canada Nickel Company has applied in multiple jurisdictions to trademark the terms NetZero Nickel™, NetZero Cobalt™, NetZero Iron™ and is pursuing the development of processes to allow the production of net zero carbon nickel, cobalt, and iron products. Canada Nickel provides investors with leverage to nickel and cobalt in low political risk jurisdictions. Canada Nickel is currently anchored by its 100% owned flagship Crawford Nickel-Cobalt Sulphide Project in the heart of the prolific Timmins-Cochrane mining camp.

## Cautionary Statement Concerning Forward-Looking Statements

This press release contains certain information that may constitute "forward-looking information" under applicable Canadian securities legislation. Forward looking information includes, but is not limited to, drill results relating to the Crawford Nickel-Cobalt Sulphide Project, the potential of the Crawford Nickel-Cobalt Sulphide Project, timing of economic studies and resource estimates, strategic plans, including future exploration and development results, and corporate and technical objectives. Forward-looking information is necessarily based upon a number of assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking information. Factors that could affect the outcome include, among others: future prices and the supply of metals, the future demand for metals, the results of drilling, inability to raise the money necessary to incur the expenditures required to retain and advance the property, environmental liabilities (known and unknown), general business, economic, competitive, political and social uncertainties, results of exploration programs, risks of the mining industry, delays in obtaining governmental approvals, failure to obtain regulatory or shareholder approvals, and the impact of COVID-19 related disruptions in relation to the Company's business operations including upon its employees, suppliers, facilities and other stakeholders. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. All forward-looking information contained in this press release is given as of the date hereof and is based upon the opinions and estimates of management and information available to management as at the date hereof. Canada Nickel disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.

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