



Canada Nickel Provides Update on Crawford Project Optimization and Commencement of Pilot Plant Operation

Highlights

- *Testwork demonstrates opportunity for improvements in recovery from the Crawford East Zone*
 - *Locked cycle test delivered a 60% nickel sulphide concentrate – believed to be world’s highest nickel grade sulphide concentrate produced – and a total nickel recovery of 47% exceeding the feasibility study model by 9%*
 - *Ten new open circuit variability tests demonstrated nickel recoveries averaging 28% higher than the feasibility study model*
- *Pilot plant program initiated at SGS Lakefield*

TORONTO, July 29, 2024 – Canada Nickel Company Inc. ("Canada Nickel" or the "Company") (TSXV:CNC) (OTCQX:CNIF) is pleased to announce the successful completion of further metallurgical testing on Crawford East Zone material.

Mark Selby, Canada Nickel CEO, said, “We believe there remains significant optimization potential at Crawford, which is supported with today’s metallurgical results on the East Zone that produced a high grade concentrate from a blended East Zone sample and 10 further metallurgical tests from the existing starter pit area that averaged 28% higher recovery than currently modelled in the feasibility study. Our Front End Engineering Design work that started in April is progressing well and continues to identify further optimization opportunities.”

Mr. Selby continued, “The pilot plant at SGS Lakefield is more than four times the size of our prior plant that was used in 2022, and is focused on using East Zone material to generate substantial quantities of nickel and NiCr magnetite concentrate to be utilized by our NetZero Metals downstream business. The plant began commissioning during the past week and is expected to operate until September.”

Crawford Nickel Sulphide Project East Zone Metallurgical Variability Program

A metallurgical variability program was initiated at the start of 2024 in order to increase confidence in the recovery and concentrate quality estimates and evaluate optimization opportunities for the East Zone. To date, 10 open circuit tests and one locked cycle test have been completed on samples from the East Zone which are indicating potential for improvements in the East Zone nickel recovery equations.

Table 1 summarizes the results from the locked cycle test which was completed on a composite of samples taken from the Feasibility Study, East Zone starter pit. The composite had a head grade of 0.29% nickel, 0.04% sulphur, 5.1% iron and contained heazlewoodite-awaruite style mineralization. The composite delivered a total nickel recovery of 47% which exceeded the modelled recovery target by 9% or 4 percentage points of recovery. The composite also supported the potential for high grade concentrate production as the nickel sulphide concentrate product graded 60% nickel. The magnetic recovery circuit also performed well as the iron recovery fell within 1 percentage point of the modelled recovery and the chromium recovery exceeded the modelled recovery by 3 percentage points and the concentrate grade target was achieved.

Table 1. Crawford Nickel Sulphide Project East Zone Locked Cycle Test Result

	Head Grades (%)			Recovery (%)				Concentrate Grades (%)				
	Ni	S	Fe	Ni	Co	Fe	Cr	Ni Conc.		NiCr Conc.		
								Ni	Co	Fe	Cr	Ni
Actual	0.29	0.04	5.1	47	1	57	31	60	0.10	55	4.2	0.62
Modelled	-	-	-	43	4	58	28	40	0.23	55	3.7	0.72
Difference	-	-	-	+4	-3	-1	+3	+20	-0.13	0	+0.5	-0.10

In addition to this locked cycle test result, 10 open circuit variability tests on samples from the East Zone were successfully completed. Of the initial 10 new samples that have been tested in 2024, eight of the samples exceeded the modelled total nickel recovery. The average difference between achieved and modelled recoveries for the 10 samples was 28% higher or 10 percentage points above modelled. Nickel and NiCr concentrate grades were in line with expectations and consistent with feasibility study models.

Figure 1. Crawford Nickel Sulphide Project - East Zone Open Cycle Tests

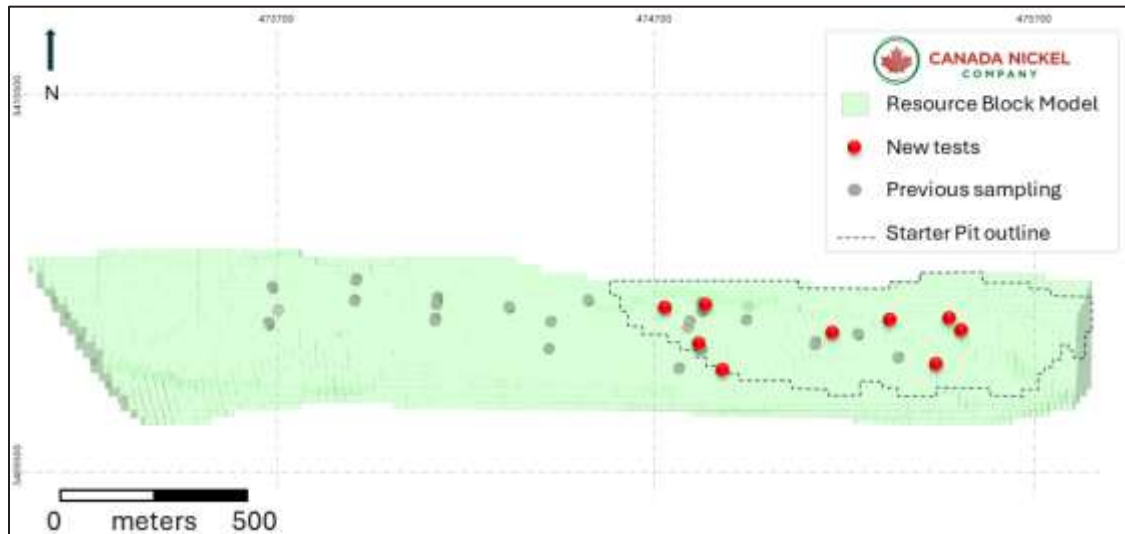


Table 2. Crawford Nickel Sulphide Project - Summary of New Open Circuit Test Results for East Zone Starter Pit

Sample ID	Head Grades (%)			Total Recoveries (%)				Recovery Performance (%) Actual - Modelled			
	Ni	S	Fe	Ni	Co	Fe	Cr	Ni	Co	Fe	Cr
CNS-001	0.17	0.03	6.9	55	1.5	60	14	17	-3	-3	-19
CNS-002	0.27	0.04	5.6	54	4.9	52	34	10	1	-4	5
CNS-003	0.26	0.01	5.3	23	0.5	44	28	-4.6	-4	-12	-1
CNS-005	0.27	0.09	5.7	71	5.2	49	28	14	-5	-3	0
CNS-006	0.30	0.05	5.5	67	4.7	61	35	17	1	6	6
CNS-007	0.28	0.04	5.5	43	0.7	59	32	-0.3	-3	4	4
CNS-008	0.18	0.01	7.5	36	1.1	55	31	7.9	-3	-8	0
CNS-009	0.27	0.01	5.2	33	2.0	47	29	5.0	-2	-16	-2
CNS-010	0.20	0.02	7.7	42	0.7	63	37	10	-3	3	8
CNS-011	0.16	0.03	7.4	60	1.5	61	20	23	-3	-1	-13
Average	0.23	0.03	6.2	48	2.3	55	29	10	-2	-3	-1

Pilot Plant Program

Canada Nickel is completing a 130 tonne mineral processing pilot plant program at SGS Lakefield. The program will see the full process flowsheet piloted and is being completed to generate samples of concentrate for NetZero Metals and provide additional data to support the engineering of the project. Updates will be provided as the project progresses.

Qualified Person and Data Verification

Arthur G. Stokreef, P.Eng (ON), Manager of Process Engineering & Geometallurgy and a “qualified person” as such term is defined by National Instrument 43-101, has reviewed and approved the technical information in this news release on behalf of Canada Nickel Company Inc.

About Canada Nickel

Canada Nickel Company Inc. is advancing the next generation of nickel-sulphide projects to deliver nickel 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 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. For more information, please visit www.canadanickel.com.

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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, the results of metallurgical testing on Crawford East Zone relating to the Crawford Nickel Sulphide Project, the potential of the mineral processing pilot plant program at SGS Lakefield, the potential of the Crawford Nickel Sulphide Project, timing and completion (if at all) of mineral resource estimates, the ability to sell marketable materials, strategic plans, including future exploration and development plans and results, and corporate and technical objectives. Forward-looking information is necessarily based upon several 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. 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 because of new information, future events or otherwise, except as required by law.

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