Nickel Creek Succeeds at Separating Nickel and Copper Concentrates for Nickel Shäw Project

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TORONTO, July 10, 2018 /CNW/ - Nickel Creek Platinum Corp. ("Nickel Creek" or the "Company") is pleased to report results of its Phase II metallurgical program ("Phase II Metallurgical Program") on the Nickel Shäw Project (the "Project the Yukon, Canada. The Phase II Metallurgical Program succeeded in its primary objective of separating bulk CuNi con into separate saleable nickel and copper concentrates, representing the most in-depth and comprehensive metallurgica undertaking completed to date at the Project.

Diane Garrett, President and CEO commented: "This is a huge milestone for the Project. When we produced a saleable concentrate in 2017 as part of our Phase I metallurgical program we soon realized the economic benefits that could be from separating the nickel and copper concentrates. The Phase II program achieved good separation into saleable con Producing two concentrates, nickel and copper, not only provides the Company with additional flexibility for selling its co into the market but is also expected to yield enhanced payable terms based on recent discussions with smelters. During II program, the Company also embarked on optimizing the flow sheet, and in addition to the benefits of producing separa concentrates, the Company was able to increase grinding size, thereby lowering energy consumption as well as identify potential opportunities for reducing capital costs and processing costs. The results of this comprehensive work will be u Preliminary Economic Assessment ("PEA") which is currently underway."

The Metallurgical Program has been conducted in partnership with XPS Expert Process Solutions ("XPS"), a Sudbury b technical consultancy firm that is conducting the metallurgical testwork on behalf of Nickel Creek and has extensive exp flowsheet development and nickel-copper separation. The Mini Pilot Plant ("MPP") utilized in the Phase II Metallurgical the property of XPS and replicates, at a small scale, a commercial processing flowsheet.

Key Highlights from the Phase II Metallurgical Program:

- The MPP produced a bulk CuNi concentrate with grades of 6.1% Ni and 3.1% Cu (total 9.1% Ni+Cu) at recoverie 53.3%, R% Cu = 59.6%, R% Co = 57.0%, R% Pt = 47.9%, R% Pd = 53.9% and R% Au = 74.4%.
- Separate Ni/Cu concentrate grades based upon the observed metal split factors from the CuNi separation locked and adjusted for process scaleup include:
  - Cu concentrate grading 18.0% containing 1.1% Ni, 4.7 g/t Pt+Pd+Au
  - Ni concentrate grading 6.7% containing 1.3% Cu, 0.36% Co, and 8.4 g/t Pt+Pd+Au
- Magnesium oxide (MgO), which at high levels is a common smelter penalty charge, measured 5.6% in the bulk C concentrate, confirming that it and other potential deleterious elements, inclusive of arsenic, are below threshold l advised by nickel smelters
- Additional flowsheet benefits determined during the Phase II Metallurgical Program include a coarser grind, reduc addition and retention times. These improvements have the potential to reduce power requirement, capital outlay operating costs.
- Batch scale variability testing from samples across the Life of Mine of the deposit has indicated a high correlation nickel recovery and ore total sulphide content. This new understanding of nickel recovery across the deposit in co with the results of the Phase II Metallurgical Program will be incorporated into a new PEA to be completed this fal

Summary of Phase II Metallurgy

	Ni	Cu	Cu+Ni	Co	Pd	Pt	Au	MgO
	%	%	%	%	g/t	g/t	g/t	%
Mini Pilot Plant								
Bulk Concentrate	6.08	3.06	9.13	0.33	4.48	3.06	0.50	5.6
Recoveries	53.3%	59.6%	55.3%	57.0%	53.9%	47.9%	74.4%	
Ni/Cu Separation - Locked Cycle								
Cu Concentrate	1.1	13.8	14.9	0.05	3.2	1.4	1.2	1.6
Ni Concentrate	6.5	1.8	8.3	0.36	4.6	3.3	0.4	7.6
Ni/Cu Separation - Commercial-Scale Model								
Cu Concentrate	1.1	18.0	19.1	0.06	2.6	0.6	1.5	0.7
Ni Concentrate	6.7	1.3	8.0	0.36	4.7	3.3	0.4	6.1

Phase II Metallurgy Background

The Company commenced its Phase II Metallurgical Program in September 2017 with an initial focus on flowsheet optimization and large batch scale testing to determine the viability of split concentrate production (Phase IIA) prior to advancing to MPP steady state testing (Phase IIB) (see news releases dated January 22 nd, 2018 and April 25th, 2018). The steps of Phase IIB included:

1. MPP: The goal of the MPP was to build upon the technical success in Phase IIA employing the flowsheet improve order to produce a representative run-of-mine bulk concentrate sample of sufficient size to perform closed circuit cycle) testing of Cu/Ni separation.
2. Locked cycle Cu/Ni separation: The primary prerequisite for success in locked cycle Cu/Ni separation is the demo meaningful quantitative separation of copper versus nickel
3. Scaling of locked cycle results to commercial prediction: The locked cycle Cu/Ni results are modelled into a predi commercial performance using the metal split factors observed in the locked cycle test.

MPP for Bulk Concentrate

The XPS MPP processed 1,100 kg of Run of Mine (ROM) ore with a head grade of 0.33% Ni, 0.15% Cu, 0.018% Co, 0.23 gpt Pt, 0.29 gpt Pd, and 0.04 gpt Au. The processing circuit incorporated conditioning with sulphuric acid @ pH 5.7 followed by rougher flotation and magnetic scavenging of the rougher tailings (Figure 1). The rougher and magnetic concentrates were individually reground and floated at neutral pH in a closed-circuit three-stage cleaner to yield a bulk CuNi concentrate. The MPP returned a bulk CuNi concentrate with grades of 6.1% Ni and 3.1% Cu (total 9.1% Ni+Cu) at recoveries of R% Ni = 53.3%, R% Cu = 59.6%, R% Co = 57.0%, R% Pt = 47.9%, R% Pd = 53.9% and R% Au = 74.4%. The MgO level of the bulk CuNi concentrate was 5.6%. The MPP used a coarser primary grind P80 of 105µm and with reduced reagent addition and retention time relative to earlier flowsheet development, confirming the process opportunities and economic benefits anticipated in the press release of April 25, 2018.

Cu/Ni Separation in Locked Cycle Testing

The MPP pilot run provided approximately 25kg of stable-state concentrate suitable for development and evaluation of Cu/Ni separation. The flowsheet for Cu/Ni separation employed high-pH (lime) and aerative conditioning in the presence of sodium metabisulfite and activated carbon followed by five stages of sequential cleaning. The final Cu/Ni separation flowsheet was assessed in locked cycle flotation testing and the Cu/Ni locked cycle test demonstrated substantial copper / nickel separability. An extended 10-cycle test showed good stability within three cycles, allowing reliable metal split factors to be collected over seven test cycles. The test produced a Cu concentrate assaying 13.8% Cu, which contained 52.2% of the Cu (bulk

concentrate basis), with only 2.5% of the bulk concentrate Ni. The nickel concentrate assayed 6.5% Ni, 1.8% Cu, 0.36% Co and 8.3 g/t (Pt+Pd+Au) and contained 7.6% MgO. Metal recoveries to the Ni concentrate (on the bulk concentrate basis) were R% Ni = 97.5%, R% Cu = 46.8%, R% Co = 98.1%, R% Pt = 94.2%, R% Pd = 90.7%, R% Au = 68.6%.

Scaling Locked Cycle Testing to Commercial

It is well recognized that the mechanics of pilot scale cleaner flotation equipment cannot perfectly duplicate the superior mechanics of zero-entrainment commercial scale cleaning cells, such that pilot demonstration results need to be modelled/scaled from locked cycle performance to commercial scale circuit prediction. Based upon the observed metal split factors from the locked cycle test, process scaleup projected that the commercial copper split from bulk concentrate to copper concentrate is anticipated to reach 18.0% Cu with approximately 1.1% Ni grade containing 62% of the copper (bulk concentrate basis) with <2% of the bulk concentrate nickel. Under such conditions, the corresponding nickel concentrate will contain 6.7% Ni, 1.3% Cu, 0.36% Co, 8.4 g/t Pt+Pd+Au and approximately 6.1% MgO. The recovery (bulk concentrate basis) are estimated to be R% Ni = 98, R% Cu = 38%, R% Co = 98%, R% Pt = 98 %, R% Pd = 94%, R% Au = 68%. On a whole ore basis, 37.0% of the ROM copper units are expected to report to the copper concentrate, along with 1.0% of the nickel units. The corresponding nickel concentrate contains 52.3% of the ROM nickel, 22.6% of the copper, 56.0% of the cobalt, 46.9% of the platinum, 50.6% of the palladium, and 50.8% of the gold. The commercial flowsheet will employ low-entrainment cleaners (fewer stages at higher separation efficiency per stage) as per Figure 2.

The separate nickel and copper concentrate grades, while on the lower end of industry comparables, are within the current global range for marketability. The de-risking of the metallurgy meshes advantageously with the Project's proximity to infrastructure, favourable geopolitical location, and the growing global smelter demand for nickel-cobalt and copper sulphide concentrates.

Next Steps

Batch scale variability testing from samples across the Life of Mine of the deposit has indicated a high correlation between nickel recovery and ore total sulphide content. This new understanding of nickel recovery across the deposit, in conjunction with the results of the Phase II Metallurgical Program, will be incorporated into a new PEA to be released in the fall.

Nickel Shäw is a significant North American polymetallic project with Measured and Indicated resources of 2.1 BBlbs Ni, 1.1 BBlbs Cu, 121 MMlbs Co, and 6.0 MMoz PGE's (Pt+Pd+Au)[1,2]. The Company has commenced its 2018 exploration program to build upon the substantial endowment potential within the Nickel Shäw Project area. The current resource area spans a 2.2 km strike length along an 18 km trend of potential host lithologies within the 146 km^2 land package held by the Company (Figure 3). Following up on the 2017 mapping program, the Company has initiated a geophysics program this year to test several of the highly prospective yet underexplored targets, including: the western extension of the deposit, as well as Arch, North Arm, Trove and Quill. The program will incorporate a comprehensive induced polarization/resistivity ("IP") survey to potentially locate additional disseminated sulphides. Through this work, the Company aims to identify additional drill targets along the strike length of the system to determine whether the already large resource is part of an even larger, district scale system.

About Nickel Creek Platinum Corp.

Nickel Creek Platinum Corp. (TSX: NCP) (OTCQX: NCPCF) is a Canadian mining exploration and development company focused on advancing its 100%-owned Nickel Shäw Project with a view to creating Canada's next world-class nickel sulphide mine. The Project has exceptional access to infrastructure, located three hours west of Whitehorse via the paved Alaska Highway, which further offers year-round access to deep-sea shipping ports in southern Alaska.

The Company is led by a management team with a proven track record of successful discovery, development, financing and operation of large-scale projects. Our vision is to create value for our stakeholders through development of the Nickel Shäw Project into a leading North American nickel, copper, cobalt and PGM producer.

Qualified Person

The scientific and technical information disclosed in this news release in relation to metallurgical testing, including with respect to the Phase II Metallurgical Program, was reviewed and approved by Gordon Marrs, P. Eng., who is a "Qualified Person" as defined in NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"), and an independent consultant to the Company. The technical information disclosed in this news release in relation to the Nickel Shäw resource was reviewed and approved by John Marek of IMC. Mr. Marek is a "Qualified Person" as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects, and an independent consultant to the Company. All other scientific and technical information disclosed in this news release was reviewed and approved by James Berry, Nickel Creek's Chief Geologist and a "Qualified Person" as defined in NI 43-101. Please see the technical report dated June 26, 2017, filed under the Company's profile at www.sedar.com, for a description of the Company's data verification and QA/QC procedures.

Cautionary Note Regarding Forward-Looking Information: This news release includes certain information that may be deemed "forward-looking information". Forward-looking information can generally be identified by the use of forward-looking terminology such as "may", "will", "expect", "intend", "believe", "continue", "plans" or similar terminology, or negative connotations thereof. All information in this release, other than information of historical facts, including, without limitation, regarding the results of the Phase II Metallurgical Program, MPP and other technical test work, the potential for favourable impacts to the Project capital requirements and operating costs, the potential to advance the Project to production, the potential to identify additional mineralization beyond the known resource, timing of releasing test results as well as completing a PEA, future demand for nickel and copper concentrates, and general future plans and objectives for the Company and the Project, are forward-looking information that involve various risks and uncertainties. Although the Company believes that the expectations expressed in such forward-looking information are based on reasonable assumptions, such expectations are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking information. For more information on the Company and the key assumptions, risks and challenges with respect to the forward-looking information discussed herein, and about our business in general, investors should review the Company's most recently filed annual information form, and other continuous disclosure filings which are available at www.sedar.com. Readers are cautioned not to place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

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[1] Total Measured + Indicated Resource: 362.0 MMT containing 0.26% Ni, 0.14% Cu, 0.231 g/t Pt, 0.244 g/t Pd, 0.04 g/t Au, and 150 ppm Co.
[2] Stated Measured + Indicated Resource does not incorporate Phase II metallurgical results. Refer to technical report dated June 26, 2017, filed under the Company's profile at www.sedar.com, for additional details.

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