

August 5, 2021

TSX Venture Exchange Symbol: NCX

## **NORTHISLE COMMENCES EXPLORATION AT RED DOG AND PROVIDES PRELIMINARY RESULTS FROM PEMBERTON HILLS**

### **Highlights:**

- **Pemberton Hills 2021 drilling confirms a large, deep lithocap consistent with an underlying porphyry system**
  - Pyrite rich breccia, remobilized metals in narrow veins, clay minerals intersected in the 2018 and 2021 drilling programs indicating higher temperatures and high acidity are interpreted as emanating from a porphyry system at depth
  - Next steps include completion of additional clay analyses, creation of an integrated 3D model combining pyrite abundance, metal ratios, clay analyses, geophysics and structure
- **Exploration permits for Red Dog and Northwest Expo drill programs have been received and pad construction has commenced**
  - Red Dog program anticipated to include 4 holes totalling approximately 2,000m
  - Northwest Expo program will follow immediately upon completion of Red Dog and will include an additional 4 holes totalling 2,000m

**Vancouver, B.C.** – Northisle Copper and Gold Inc. (TSX-V: NCX) (“Northisle” or the “Company”) is pleased to announced the results of its 2021 Pemberton Hills drill program. In addition, the Company is pleased to announce the receipt of permits for its 2021 Red Dog and Northwest Expo drilling programs.

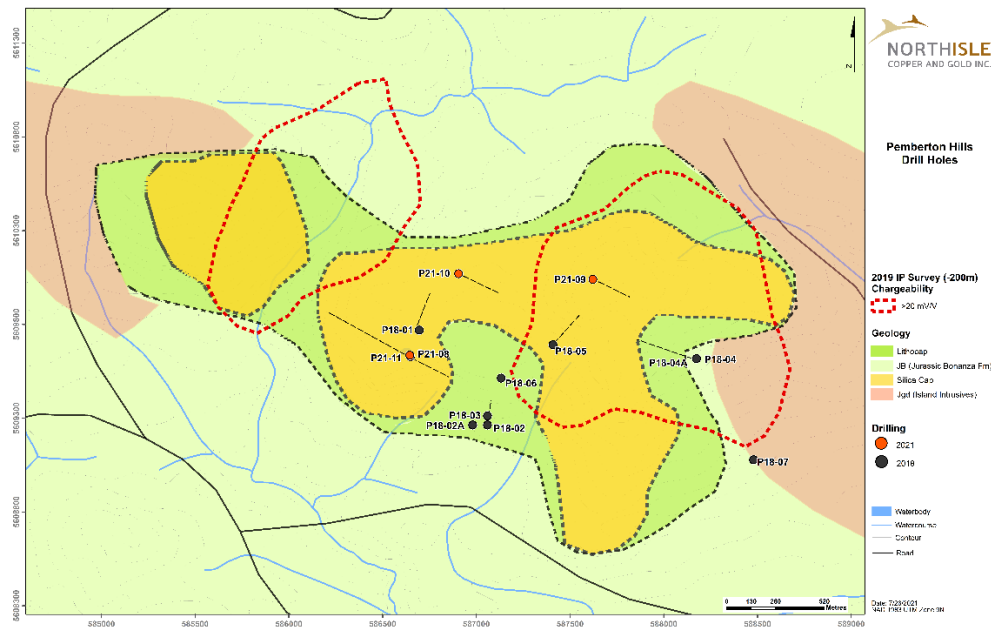
*Sam Lee, President & CEO of Northisle stated “I am excited that our work to date at Pemberton Hills has supported the overall thesis. I look forward to drilling to start at Red Dog and Northwest Expo while we continue to advance the recently announced engagement and project development work around our already robust resources at Hushumu and Red Dog. As a company, we have a clear path forward and more optionality than ever.”*

*Robin Tolbert, Vice President Exploration of Northisle added “The 2021 Pemberton Hills results are encouraging and consistent with a large, deep porphyry system. I look forward to completing a more detailed analysis of results to date, which will assist in targeting future exploration efforts at Pemberton Hills.” He continued, “At Red Dog, we have recently received our permit and anticipate the arrival of the drill rig by mid-August. In addition, we will continue our surface exploration efforts to identify and validate additional exploration targets across the 50km extent of the North Island Project, which stretches to the northwest of the past producing Island Copper Mine in an area with excellent infrastructure for exploration, development and operations. In particular, recent surface exploration at Goodspeed has identified surface alteration and mineralization similar to the nearby Hushumu and Red Dog deposits.”*

### **Pemberton Hills**

Northisle has now received all assay results from its 2021 drilling program at Pemberton Hills, although certain Terraspec clay analysis results remain outstanding. The objective of the 2021 program was to test a porphyry copper-gold-molybdenum target beneath the aerially extensive lithocap present in the Pemberton Hills area and which has been the subject of various exploration programs by Northisle since 2017. The lithocap is an alteration zone comprised variably of kaolinite, dickite, smectite, pyrite and silica typically found above buried porphyry deposits. The map in Figure 1 shows an updated interpretation of the surface geology of the Pemberton Hills area.

**Figure 1: Pemberton Hills Plan Map with Drill Holes and Surface Alteration**



While none of this year's drill holes penetrated the Pemberton Hills lithocap, despite testing it to a vertical depth of 966 metres, the results of the drilling are considered to be consistent with the existence of a hypothesized deeply buried, large porphyry system. Of importance is the widespread occurrence of significantly anomalous molybdenum mineralization that occurs in late structures and hydrothermal breccias cutting both the lithocap and overlying silica cap. The breccias and late structures are mineralized with extremely fine grained molybdenite associated with a late, very fine-grained pyrite and accompanying alteration of kaolinite, dickite and lesser pyrophyllite plus silicification.

These structures, clay minerals indicating higher temperatures, and high acidity (typically occurring just above porphyry systems) plus associated molybdenum mineralization are interpreted to be overprinting the older lithocap alteration and emanating from a porphyry system at depth. Similar narrow mineralized structures were noted in the 2018 drilling at Pemberton Hills. Collectively, these mineralized structures observed in the 2018 and 2021 drilling define an area of approximately 1.5km by 1.0km which indicates a probable source area for the hypothesized buried copper-gold-molybdenum bearing porphyry system.

The Company intends to complete additional Terraspec clay analyses as well as the creation of a comprehensive 3D model which will combine pyrite abundance, metal ratios, clay analyses, geophysics and structure information which will be used to vector towards the hypothesized mineralized porphyry system at depth.

### Red Dog and Northwest Expo

Northisle is pleased to confirm that exploration permits for Red Dog and Northwest Expo have been received, and early work to prepare for drilling has commenced at Red Dog. Drilling will begin at Red Dog with four holes totalling approximately 2,000 metres which will target both the northwest extension of the higher grade Red Dog deposit and test for the down-faulted south side of the deposit.

This will be followed by four holes at Northwest Expo where in 2005, drill hole EC-228 returned 1.0g/t Au and 0.17% Cu over 95m. This area exhibits a complex alteration system with analogies to the Island Copper deposit. Additionally, a large region of intense silica-clay alteration, of the type generally found proximal to porphyry systems in the belt, was delineated through mapping and reconnaissance-style drilling.

## **Hushamu**

The final drilling program for 2021 will be the drilling of 4,000 metres in at least 7 holes which will test the possible extension of the Hushamu Deposit to the southeast. The drill program at Hushamu will commence upon completion of drilling at Northwest Expo, subject to the receipt of permits.

## **Goodspeed**

Recently completed structural and alteration mapping at Goodspeed has outlined a large area of silica-clay-pyrite alteration with a 500 metre by 350 metre core of chlorite-magnetite (CMG) alteration containing stockwork quartz-feldspar-chalcopyrite veining in places. This CMG alteration is also found within and peripheral to Northisle's Red Dog copper-gold-molybdenum deposit 3.5 kilometres to the west, as well as its Hushamu copper-gold-molybdenum deposit 7 kilometres to the southeast. Further mapping, sampling and clay analyses will be carried out to aid focusing geophysical surveys followed by drilling.

## **Qualified Person**

Robin Tolbert, P.Geo., Vice President Exploration of Northisle and a Qualified Person as defined by National Instrument 43-101, has approved the scientific and technical disclosure contained in this news release.

## **About Northisle**

Northisle Copper and Gold Inc. is a Vancouver based company whose mission is to become a leading and sustainable mineral resource company for the future. Northisle owns the North Island Project, which is one of the most promising copper and gold porphyry deposits in Canada. The North Island Project is located near Port Hardy, British Columbia on a 33,149-hectare block of mineral titles 100% owned by Northisle stretching 50 kilometres northwest from the now closed Island Copper Mine operated by BHP Billiton. Northisle recently completed an updated preliminary economic assessment for the North Island Project and is now focused on the advancement of the project through a pre-feasibility study while continuing exploration within this highly prospective land package.

For more information on Northisle please visit the Company's website at [www.northisle.ca](http://www.northisle.ca).

On behalf of Northisle Copper and Gold Inc.

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Certain information in this news release constitutes forward-looking statements under applicable securities law. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as "may", "should", "anticipate", "expect", "intend" and similar expressions. Forward-looking statements in this news release include, but are not limited to, statements relating to the 2021 PEA results, anticipated 2021 activities, the Company's plans for advancement of the North Island Project, including the potential use of existing infrastructure, expectations regarding the 2021 exploration program; the Company's plans for engagement with Indigenous nations, communities and key stakeholders, and the Company's anticipated exploration activities. Forward-looking statements necessarily involve known and unknown risks, including, without limitation, Northisle's ability to implement its business strategies; risks associated with mineral exploration and production; risks associated with general economic conditions; adverse industry events; stakeholder engagement; marketing and transportation costs; loss of markets; volatility of commodity prices; inability to access sufficient capital from internal and external sources, and/or inability to access sufficient capital on favourable terms; industry and government regulation; changes in legislation, income tax and regulatory matters; competition; currency and interest rate fluctuations; and other risks. Readers are cautioned that the foregoing list is not exhaustive.

Readers are further cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement.

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The forward-looking statements contained in this news release represent the expectations of management of Northisle as of the date of this news release, and, accordingly, are subject to change after such date. Northisle does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable securities law.

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