

# Interim Management Discussion and Analysis<sup>1</sup> For NORTHISLE COPPER AND GOLD INC.

## Containing Information up to and including August 28, 2019

#### OVERALL PERFORMANCE

Northisle Copper and Gold Inc. ("Northisle" or the "Company") is a mineral exploration company incorporated on August 3, 2011 in the Province of British Columbia, Canada. The Company's principal business activity is the exploration and development of its North Island Project on Vancouver Island. The North Island Project is situated between 15 and 40 kilometres southwest of Port Hardy and contains the Hushamu and Red Dog Deposits and five other partially explored copper-gold porphyry occurrences. The Company's head office is located at 15<sup>th</sup> floor 1040 West Georgia Street, Vancouver, B.C. The Company's common shares trade on the TSX Venture Exchange under the symbol NCX.

## **Highlights**

- In April 2019 the Company announced a second exploration campaign on the Pemberton Hills target in 2019. The initial program will consist of approximately 24 kilometres of Induced Polarization surveying as well as geological mapping, geochemical and clay studies designed to identify drill targets for a second phase of drilling later in the year.
- In December 2018 the Company announced a final summary of its 2018 exploration program at Pemberton Hills. The initial budget of 10km of IP and 1500m of drilling was expanded to 15km of IP and 3400m of drilling.

#### 2018 SUMMARY AND 2019 OUTLOOK

The Company is very pleased with the progress made on the Pemberton Hills Property following the 2018 commencement of its venture with Freeport in early 2018 and with the technical support they have provided. Freeport's decision to continue with a second exploration campaign in 2019 demonstrates their continued interest in our tenements.

# RESULTS OF OPERATIONS

#### Six months ended June 30, 2019

The Company's Net Loss of \$310,055 for the six months ended June 30, 2019 ("the **Current Period**") was similar to the Net Loss for the six months ended June 30, 2018 (the "**Comparative Period**") of \$307,345 as the activity levels remained constant. Much like last year, results were largely influenced by management's continuing decision to delay development of the Hushamu and Red Dog Deposits while optioning the Pemberton Hills Property to Freeport.

## Three months ended June 30, 2019

The Company's Net Loss of \$41,800 for the three months ended June 30, 2019 ("the **Current Period**") was greater than the Net Loss for the three months ended June 30, 2018 (the "**Comparative Period**") of \$34,361 due to an option payment received from Freeport in the Comparative Quarter. Administrative expenses were down in the Current

This Interim Management Discussion and Analysis ("Interim MD&A") should be read in conjunction with the Company's interim financial statements for the three and six months ended June 30, 2019.

# Forward-Looking Information

When used in this document, words like "anticipate", "believe", "estimate" and "expect" and similar expressions are intended to identify forward-looking statements. Such statements are used to describe management's future plans, objects and goals for the Company, and therefore, involve inherent risks and uncertainties. The reader is cautioned that actual results, performance or achievements may be materially different from those implied or expressed in such statements.

<sup>&</sup>lt;sup>1</sup> Note to Reader

Quarter and were largely influenced by management's continuing decision to delay development of the Hushamu and Red Dog Deposits while optioning the Pemberton Hills Property to Freeport.

# THE NORTH ISLAND COPPER AND GOLD PROJECT

The North Island Copper and Gold Project (the "Project") is an advanced exploration project containing the Hushamu and Red Dog Deposits and five other partially explored mineral occurrences of porphyry and related deposit types containing copper-gold-molybdenum-rhenium situated along the "Northern Island Copper Belt" on Vancouver Island, British Columbia. The Project is situated about 29 km from the reclaimed BHP Island Copper Mine.

#### **September 2017 Preliminary Economic Assessment**

The Company announced the results of a PEA which demonstrated the potential technical and economic viability of the Project constructed as an open-pit mine, with a concentrator processing nominally 75,000 tonnes/day.

# PEA Highlights

- After tax NPV 8% of CAD \$550.4 million, 14.3% IRR, 22-year mine life
- Life of Mine (LOM) metal production of 1.8 billion pounds of copper, 1.7 million ounces of gold and 55 million pounds of molybdenum
- Annual production of 82 million pounds of copper, 79 thousand ounces of gold and 3 million pounds of molybdenum
- Initial capital costs of CAD \$1.34 billion plus sustaining capital of \$139 million
- Direct cash cost of production per pound of copper net of gold, molybdenum and pyrite concentrate is CAD \$1.17

## PEA Base Case Economic Results

Parameter	Unit	Base Case
Capital Cost	CAD\$	\$1,344 million
Sustaining Capital	CAD\$	\$139 million
NSR	CAD\$/ore tonne	\$17.61
Average Op Cost/tonne	CAD\$	\$8.66
After tax Net Revenue	CAD\$	\$2,349 million
After tax NPV 8%	CAD\$	\$550 million
After tax IRR and pay back		14.3% and 5.1 years
Metal Price Cu	US\$ per pound	\$3.10
Au	US\$ per ounce	\$1,300
Mo	US\$ per pound	\$9.00
Pyrite concentrate	US\$ per tonne	\$86
Exchange rate	US\$ / CAD\$	0.75

Category		Units	LOM
Tonnes Milled		Mt	600
Average grade	Cu	%	0.18
	Au	gpt	0.24
	Mo	%	0.008
Tonnes produced	Py	MT	14.1
Throughput		tpy	75,000
Mine Life		years	22
Net Cash Cost*		CAD\$	\$1.17

<sup>\*</sup>Net direct cash costs that represent the cash cost incurred at each processing stage from mining through to recoverable metal delivered to market less net by-product credits. Direct cash costs cover mining, ore freight and milling costs, mine site administration and general expenses, concentrate freight, smelting and smelter general and administrative costs, marketing costs (freight and selling).

# Initial Capital Expenditures (CAD\$ Millions)

Mine	\$149.2
Pre-Production	\$125.6
Process	\$1.024.9
Owner's Cost	\$44.5
Total	\$1,344.2

# **Operating Costs**

The mine operating costs were calculated to average CAD\$ 2.02 per tonne moved.

Area	Unit Cost (CAD\$/t moved)
Drilling	0.13
Blasting	0.27
Loading	0.27
Hauling	0.67
Support	0.54
Mine General	0.14
Total Cost	2.02

The process operating costs were calculated to average CAD\$ 4.88/tonne ore.

Area	CAD\$/tonne ore	
Salaries & Wages	0.54	
Power	1.55	
Liners	0.34	
Grinding Media	1.06	
Reagents	0.85	
Maintenance Parts & Repairs	0.44	
Supplies & Services	0.10	
Total Cost	4.88	

# Mining

Preliminary mine designs have been developed for Red Dog and Hushamu deposits based upon Indicated and Inferred Resources. Resource models were imported to Minesight® mine planning software where a Lerchs Grossman algorithm was applied to an NSR model to determine possible pit limits.

The mine plan was developed to mine Red Dog concurrently with Hushamu in the early years of the mine life until Red Dog Resources were depleted. The assumed processing rate is 75,000 t/d. The overall mining rate peaks at 64 million t/a in the initial years averaging 54 million t/a over the first 12 years of the total mine life of 22 years. The effective strip ratio after stockpile reclaim was 0.72:1.

The mine will be a conventional truck and shovel operation with electrified pit operations at Hushamu. Waste rock will be placed during construction and operation within the Tailings Management Facility (TMF). A low-grade stockpile will be located at the pit rim on the northwest side of Hushamu. An overburden stockpile will be located adjacent to the low-grade stockpile for use in reclamation of the TMF at the end of the mine life.

The total resources processed in the conceptual mine plan are shown in the following Tables.

#### Mineral Resources Included in the Mine Plan

Indicated Resources	ROM t x 1000	Cu %	Au g/t	Mo %
Hushamu Starter Pit	80,097.0	0.24	0.27	0.007
Hushamu Phase 1 Expansion	97,217.0	0.20	0.18	0.007
Hushamu Phase 1.5 Expansion	119,509.0	0.18	0.28	0.011
Hushamu Phase 2 Expansion	109,134.0	0.17	0.25	0.008
Red Dog	50,549.0	0.22	0.32	0.005
Total	456,506.0	0.20	0.25	0.008

Indicated Resources	ROM t x 1000	Cu %	Au g/t	Mo %
Hushamu Starter Pit	2,530.0	0.12	0.15	0.015
Hushamu Phase 1 Expansion	12,802.0	0.13	0.12	0.010
Hushamu Phase 1.5 Expansion	40,554.0	0.14	0.22	0.012
Hushamu Phase 2 Expansion	84,859.0	0.14	0.21	0.008
Red Dog	2,152.0	0.17	0.27	0.003
Total	142,897.0	0.14	0.20	0.009

#### *Infrastructure*

The nearby town of Port Hardy is a main distribution centre for the north end of Vancouver Island. It has an airport with 3 daily flights to Vancouver, a hospital, schools and a college. All parts of the North Island Project are accessible from Port Hardy through a network of logging roads.

A marine load out structure and a 138 KVA BC Hydro substation exist at the reclaimed Island Copper Mine, approximately 27 km from the North Island mine site. One of BC's largest wind farm complexes is situated adjacent to the northwest end of the property and the 138 KV power line connecting the wind farm to the main BC power grid passes immediately north of the North Island Project.

# Economic Analysis

Economic evaluations were generated incorporating forecasts for metal prices using the long term (Base Case), the SEC price and Spot Price. The spot price case is from September 6, 2017.

Parameter	Unit	Base Case	SEC	Spot Price
Copper	US\$ per lb	\$3.10	\$2.50	3.12
Gold	US\$ per oz	\$1300	\$1,213.12	1,333.10
Molybdenum	US\$ per lb	\$9.00	\$7.03	7.14
Pyrite	US\$ per tonne	\$86	\$86	\$86
Exchange rate		0.75	0.75	0.75

# Economic Result (After tax)

Net Revenue	CAD\$ M	2,349	1,339	2,342
NPV 8%	CAD\$ M	550	34	549
IRR	%	14.3	8.4	14.3
Pay back	Years	5.1	7.9	5.0

The Preliminary Economic Assessment ("PEA") is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would allow them to be categorized as mineral reserves and there is no certainty that the preliminary economic assessment will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

# Opportunities to Enhance Value

The Project opportunities include advanced metallurgical studies to improve copper, gold and molybdenum recoveries from current life of mine averages of 77.5% for copper, 38.4% for gold (in the copper concentrate) and 59.5% for molybdenum; optimize primary and rougher concentrate regrind sizes; determine the potential for rhenium credits in the molybdenum concentrate; evaluate the use of the Island Copper pit for tailings disposal in conjunction with a waste storage site to reduce overall CAPEX, OPEX, and societal risk; and to evaluate higher production rates of 85 to 90 kptd. In addition, there are several partially explored copper – gold exploration targets, any one of which could contribute significantly to the resource base of the Project.

# **Technical Report**

A National Instrument 43-101 (NI 43-101) compliant technical report entitled "North Island Project PEA" has been filed by the Company on www.sedar.com

# **Pemberton Hills Property Joint Venture**

#### Terms of the agreement

In February 2018 the Company signed a joint venture agreement with Freeport-McMoRan Mineral Properties Canada Inc. ("Freeport") in relation to the Company's Pemberton Hills Property located on Vancouver Island, in British Columbia. Under the terms of the joint venture, Freeport may earn up to a 65per-cent interest in the Pemberton Hills Property by funding a total of \$24 million in exploration expenditures.

Under the terms of the agreement, Freeport may earn an initial 49 per-cent interest in the Pemberton Hills Property by paying \$50,000 cash to Northisle and funding a total of \$4.0 million in exploration expenditures over three years (the

"First Option"). The agreement requires Freeport to commit to \$300,000 in expenditures in the first year, with subsequent optional additional expenditures of \$1.2 million before the second anniversary and a further optional \$2.5 million before the third anniversary of the agreement. Northisle will be the operator during the First Option.

Upon completion of the First Option, a joint venture company will be formed to operate the Pemberton Hills Property under a shareholder's agreement. Freeport shall then have a one-time right to acquire an additional 16 per-cent interest in the Pemberton Hills Property, for an aggregate 65 per-cent interest in the Pemberton Hills Property (the "Second Option"), by funding an additional \$20 million in exploration expenditures over a four year period.

If Freeport elects to proceed with the Second Option and fails to complete the expenditures required, Freeport's interest will revert to the 49% interest as earned under the First Option.

Should either party's interest in the joint venture be reduced below 10 per-cent through dilution, the diluted party will be granted a 2% Net Smelter Returns Royalty ("NSR"). The NSR is subject to a buy-down provision that allows for the NSR to be reduced to 1% for a cash payment of \$2 million.

# 2018 Exploration Program

In 2018 the Company and Freeport agreed to an initial work plan and budget for the Pemberton Hills Property. The program is being fully funded by Freeport including a 10% management fee in favour of the Company.

The Pemberton Hills target is a 3.5 kilometre by 1.5 kilometre area of advanced argillic alteration located within the geological terrain that extends northwest from the past producing Island Copper Mine and in close proximity to the Company's wholly-owned development-stage Hushamu and Red Dog copper-gold deposits.

The alteration at Pemberton is commonly found overlying porphyry copper deposits and is similar to that observed at Hushamu and Red Dog. Further evidence of a potential buried porphyry copper deposit at Pemberton is the presence of anomalous copper intersected at the end of an historical 200 metre deep drill hole within the altered area.

The work program started in August 2018 and was expected to consist of approximately 10 kilometres of Induced Polarization (IP) geophysical survey and three drill holes totalling approximately 1500 metres. As the IP survey progressed, it was decided to add an additional five kilometres to the IP survey and increase the drilling to over 3,000 metres in five or six holes. The overall planned budget was increased from \$700,000 to over \$1.0 million.

# 2018 Drilling Program

## Highlights

- A total of 3,400m drilled at 6 sites, compared to the initial plan of 1,500m at 3 sites
- The program tested a portion of the 3.5 by 1.5 km area of advanced argillic alteration located within the same geological terrain that extends west-northwest from BHP Billiton's past producing Island Copper Mine
- Several holes intersected advanced argillic alteration which may be associated with porphyry copper occurrences
- The next drilling program will be defined once the drill results are received and in conjunction with the results from this year's geophysical and surface clay studies

The program tested a 2,000 metre portion of the 3.5 by 1.5 km area of advanced argillic alteration located within the same geological terrain that extends west-northwest from BHP Billiton's past producing Island Copper Mine. The alteration at Pemberton is very similar to that at the nearby Hushamu and Red Dog deposits and in porphyry copper systems found elsewhere in the world.

A total of 3,400 metres of drilling at 6 sites between 200 and 750 metres apart was completed. The furthest west of the successfully completed holes continued in advanced argillic alteration to its final depth of 700 metres. A drill hole located 350 metres to the north east of this hole intersected advanced argillic alteration until entering a weakly altered intrusive rock believed to be a dyke. This hole was stopped when it became apparent the hole maybe drilling down the dip of the dyke. Two holes completed at the eastern end, approximately 750 metres from the other two holes, both cut faults that separated advanced argillically altered volcanic rocks above the fault from propylitically to weakly potassic altered granitic rocks; an alteration and rock type often occurring on the margin of porphyry copper deposits. Difficult drilling conditions resulted in only four of the holes reaching the targeted depth of 500 metres.

#### 2019 Exploration Program

Northisle and Freeport are launching a second exploration campaign on the Pemberton Hills target in 2019. The initial 2019 program will consist of approximately 24 kilometres of Induced Polarization surveying as well as geological mapping, geochemical and clay studies designed to identify drill targets for a second phase of drilling later in the year.

The geophysical program will test the northern and eastern extensions of advanced argillic alteration located within the same geological terrain that extends west-northwest from BHP Billiton's past producing Island Copper Mine. The alteration at Pemberton is very similar to that at the nearby Hushamu and Red Dog deposits and in porphyry copper systems found elsewhere in the world.

## **Exploration expenditures**

North Island Copper Gold Property B.C. Canada	nths ending ne 30, 2019	nths ending ine 30, 2018	tive Property xpenditures*
Amortization of equipment	\$ -	\$ -	\$ 34,265
Camp operations	4,200	39,704	892,540
Claims costs	-	-	41,278
Community engagement	900	5,296	52,120
Drilling	42,253	-	2,230,129
Engineering and geological	34,872	69,790	1,996,883
Environmental studies	-	-	255,684
Prospecting	1,445	453	491,527
Wages	4,590	6,313	320,780
Mineral property exploration tax credit	-	(55,203)	(456,510)
Total	\$ 88,260	\$ 66,353	\$ 5,858,696

\*Cumulative from the effective date of the Plan of Arrangement on October 17, 2011

## **Quality Control**

Information in this Interim MD&A is being prepared under the direction of John McClintock, P.Eng., President and CEO the Company and a Qualified Person as defined by National Instrument (NI) 43-101.

## RISKS AND UNCERTAINTIES

The risks and uncertainties faced by the Company are substantially unchanged from those disclosed in the Company's Annual MD&A dated April 29, 2019.

## FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements about the Company's future prospects, and the Company provides no assurance that actual results will meet management's expectations. All statements in this MD&A, other than statements of historical fact, that address exploration drilling, exploitation activities and events or developments that the Company expects to occur in the future, are forward looking statements. Forward looking statements are not guarantees of future performance and actual results may differ materially. Forward-looking statements included or incorporated by reference in this document include, without limitation, statements with respect to:

- The Company's assumptions and estimates used in its drill results, as well as the potential resource estimates and interpretations from those results;
- The progress, potential and uncertainties of the Company's drill programs;
- Expectations regarding the ability to raise capital and to continue its exploration and development plans on its properties; and

Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking statements. Such factors include, but are not limited to:

- fluctuations in the currency markets;
- fluctuations in the prices of minerals and other commodities;

- changes in government legislation, taxation, controls, regulations and political or economic developments in Canada or other countries in which the Company may carry on business in the future;
- risks associated with mining activities;
- the speculative nature of exploration, including the risk of obtaining necessary licenses and permits, and quantities or grades of reserves;
- the nature of mineral exploration and mining and the uncertain commercial viability of certain mineral deposits;
- the Company's lack of operating revenues; and
- the Company's ability to obtain necessary financing to fund the development of its mineral properties or the completion of further exploration programs.

This is not an exhaustive list of the factors that may affect the Company's forward-looking statements. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Readers are cautioned that forward-looking statements are not guarantees of future performance.

## SUMMARY OF QUARTERLY RESULTS

The following table sets out selected unaudited quarterly financial information of Northisle and is derived from unaudited quarterly financial statements prepared by management. Northisle's interim financial statements are prepared in accordance with IFRS.

Quarter ended	Revenue	,	Net Loss	Ва	asic and diluted Loss per share
June 30, 2019	\$ Ni	\$	41,800	\$	0.000
March 31, 2019	Ni		268,256		0.002
December 31, 2018	99,659	)	23,309		0.000
September 30, 2018	Ni	[	99,107		0.002
June 30, 2018	Ni	[	34,361		0.000
March 31, 2018	Ni	[	272,984		0.002
December 31, 2017	Ni	[	261,690		0.002
September 30, 2017	Ni	1	352,838		0.003

Quarterly results will vary in accordance with the Company's exploration and financing activities.

Mineral exploration is typically a seasonal business, and accordingly, the Company's administrative expenses and cash requirements will fluctuate depending upon the season. The Company's primary source of funding is through the issuance of share capital. When the capital markets are depressed, the Company's activity level normally declines accordingly. As capital markets strengthen and the Company is able to secure equity financing with favourable terms, subsequent activity levels will increase.

Another factor that affects the Company's reported quarterly results are write-downs of capitalized mineral property interests. At the end of each reporting period, the Company reviews the carrying amounts of its mineral property costs to determine whether those assets have suffered an impairment. The size and timing of these impairments cannot typically be predicted.

# **LIQUIDITY**

The Company's had working capital of \$193,558 on June 30, 2019. During the six months ended June 30, 2019 the Company received \$68,750 from the exercise of share purchase options.

#### CAPITAL RESOURCES

The Company has no operations that generate cash flow and its long term financial success is dependent on management's ability to discover and develop economically viable mineral deposits. The mineral exploration process can take many years and is subject to factors that are beyond the Company's control.

In order to finance the Company's exploration and development programs and to cover administrative and overhead expenses, the Company raises money through equity sales and from the exercise of convertible securities. Although

the Company has been successful in the past in obtaining financing, there can be no assurance that it will be able to obtain adequate financing in the future or that the terms of such financing will be favorable. Many factors influence the Company's ability to raise funds, including the health of the resource market, the climate for mineral exploration investment, the company's track record and the experience and caliber of its management.

#### TRANSACTIONS WITH RELATED PARTIES

Remuneration for key management personnel for the six months ended June 30, 2019 and 2018 was:

	2019	2018
Consulting Fees - President	\$ 19,438	\$ 47,844
Share based compensation - President	40,000	42,666
Consulting Fees – Chief Financial Officer	5,250	5,250
Share based compensation – Chief Financial Officer	23,333	25,500
Total	\$ 88,021	\$ 121,260

Share-based compensation is the fair value of options granted to directors and key management personnel which was recognized during the period.

At June 30, 2019 the Company owed \$118,033 (December 31, 2018 - \$154,283) to officers and directors of the Company for unpaid consulting fees. Amounts due are non-interest bearing with no specific terms of repayment.

#### FINANCIAL AND OTHER INSTRUMENTS

At present, the Company's most significant financial instruments are cash, accounts receivable, and accounts payable. The recorded amounts of these financial instruments approximate their fair value.

## ADDITIONAL DISCLOSURE FOR VENTURE ISSUERS WITHOUT SIGNIFICANT REVENUE

Additional disclosure concerning Northisle's general and administrative expenses are provided in the Company's Condensed Interim Consolidated Financial Statements for the three and six months ended June 30, 2019 and 2018 that is available on Northisle's website at <a href="https://www.northisle.ca">www.northisle.ca</a> or on its SEDAR Page Site accessed through <a href="https://www.sedar.com">www.sedar.com</a>.

# **Outstanding Share Data**

The Company is authorized to issue an unlimited number of common shares without nominal or par value. As at August 28, 2019 there were 118,611,516 common shares issued and outstanding.

<u>Stock Options</u> – At August 28, 2019 the following common share purchase options were outstanding:

			Weighted Average	
	Number	Weighted Average	Remaining Life	
Expiry date	Outstanding	Exercise Price	(in years)	Number Exercisable
June 24, 2020	1,535,000	0.05	0.85	1,535,000
May 4, 2021	1,555,000	0.05	1.71	1,555,000
June 28, 2021	75,000	0.10	1.86	75,000
January 9, 2022	2,550,000	0.17	2.37	2,550,000
February 26, 2023	2,400,000	0.15	3.50	1,600,000
	8,115,000	\$ 0.12	2.47	7,315,000

Share Purchase Warrants - As at August 28, 2019 there were no share purchase warrants outstanding.

#### **Dividends, Off Balance Sheet Arrangements or Proposed Transactions**

As at August 28, 2019 the Company has no off balance sheet arrangements or proposed transactions which require disclosure. The Company has no earnings or dividend record and is unlikely to pay any dividends in the foreseeable future.

# APPROVAL

The Board of Directors of Northisle has approved the disclosure contained in this Interim MD&A.

# ADDITIONAL INFORMATION

Additional information is available for viewing at the Company's website <a href="www.northisle.ca">www.northisle.ca</a> or on the sedar website <a href="www.northisle.ca">www.northisle.ca</a> or on the sedar website <a href="www.northisle.ca">www.northisle.ca</a> or on the sedar website