



## NORTHSTAR GOLD CORP

Milestone Cu-Ni-Co Property A Critical Minerals Option Opportunity May 2, 2023

CSE: NSG OTCQB: NSGCF FSE: 3WV

# Forward Looking Statement

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Statements in this corporate presentation contain forward looking information including expectations of future production and commodity prices, drilling and exploration plans, timing and amounts of capital expenditures and future expenditure levels. Readers are cautioned that assumptions used in the preparation of such information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Corporation. These risks include, but are not limited to: the risks associated with the mining industry, future exploration results, economic conditions in the countries and regions in which the Corporation conducts business, ability of the Corporation to implement its business strategy, ability of the Corporation to market its products, government regulations and the expenditures required to comply with them, commodity prices, interest and exchange rate changes, the outcome of current legal proceedings, and the availability of financing. Industry related risks include, but are not limited to: operation, development and production, delays or changes in plans, health and safety risks and the uncertainty of estimates and projections of costs and expenses. The reader is cautioned not to place undue reliance on any forward looking information. The Corporation undertakes no obligation to update or revise any forward looking statements except as required by applicable securities laws.

The information contained in this corporate presentation does not purport to be all inclusive or to contain all information that a prospective investor may require. Prospective investors are encouraged to conduct their own analyses and reviews of the Corporation and of the information contained in this corporate presentation. Without limitation, prospective investors should consider the advice of their financial, legal, accounting, tax and other advisors and such other factors that they consider appropriate in investigating and analyzing the Corporation.

Mr. Brian P. Fowler, P.Geo. and Ms. Elisabeth Ronacher, PhD, P.Geo., Qualified Persons as defined by National Instrument 43-101, have verified the authenticity and validity of the technical data herein.

# **Company Overview**

### About Northstar

Northstar is focused on exploration, development and acquisition of quality exploration properties in the prolific Abitibi Greenstone Belt and Kirkland Lake District

### Property Portfolio (100% Owned)

### Flagship Project

Miller Gold / Rosegrove Properties

Alkalic intrusion-hosted gold-telluride project situated 18 km southeast of Kirkland Lake, Ontario.

#### Other Projects (Available for Option)

- Bryce Gold Property (Includes Britcanna Lease)
- Milestone Cu-Ni-Co Property

# Milestone Cu-Ni-Co Critical Minerals Property

**Located** 400km North of Toronto, Near Temagami, Ontario



## Milestone – Property Highlights

- Mafic intrusion associated Cu-Ni-Co Critical Minerals Property located along the same geologic trend as the former producer Temagami Copper Mine (>900,000 tons mined @ 6% Cu between 1955 and 1972)<sup>1</sup>
- >1.0 km, up to 35m thick, Cu-Ni-Co massive sulphide trend with bulk tonnage potential remains open along strike for 20km
- Contains the Diadem Deposit estimated to contain a non-43-101 compliant historic estimate of 500,000 Tons grading 0.5% Cu and 0.1% Ni\*, remaining open along strike and at depth
- The O'Connor Prospect, which has reported historic drilling intercepts of 0.71% Cu over 11.6m including 7.04% Cu and 1.79% Ni over 0.36m, and 1.0% Cu and 0.17% Ni over 4.25m from 15m depth; remains open along strike and at depth
- Additional massive sulphide targets are evident from high resolution UAV magnetic survey, including mineralized "Offset" type dikes and high-grade massive sulphide pods in the footwall of the metagabbro contact

- Nickel and Cobalt concentrations appear to be higher than previously reported
- Historic surface assays up to 5% Cu have been reported from the Property including assays of 2.66% Cu and 1.49% Ni over 4.26m (D. Guindon, 2001)
- Excellent district infrastructure includes road, rail access and high transmission electricity near Northstar's Milestone Property

(1) Ontario Ministry of Energy, Northern Development and Mines Mineral Deposit Inventory Record MDI41I16NE00004: Temagami Copper Mine, Copperfields Mining Corp., Abex Mines Central Group.

#### \*(ODM Report 163, G. Bennett, 1978)

This estimate is historical and cannot be relied upon. The key assumptions, parameters, and methods used to prepare the estimates are not documented or known. The estimate does not use the categories set out by the Canadian Institute of Mining and Metallurgy. A more recent estimate does not exist. A substantial amount of drilling would have to be completed to verify the estimate. Sufficient work has not been completed to classify the historical estimate as current and Northstar is not treating the estimate as current.

# Milestone Property

600+ ha, 100%-owned Mafic Intrusion Related Cu-Ni-Co Critical Minerals Project



## Available Critical Minerals Strategy Benchmark Property Leveraging off Mineral Endowment, Access and Infrastructure

- The Milestone Property exhibits similar geology, mineralization, stratigraphic setting and alteration as Teck Resources former high-grade Temagami copper mine located 20 km southwest along strike
- Both the Milestone Property and Temagami Mine share some similarities with the "footwall breccia" type ore deposits found in the Sudbury basin
- Excellent district infrastructure includes road, rail access and high transmission electricity near Northstar's Milestone Property



Milestone is 20km along strike from Historic Temagami Copper Mine

>900,000 Tons Mined
@ 6% Cu Between
1955 and 1972 1

Highest Grade Copper Mine in Canada





UNDERGROUND X-SECTION (Historic) Elevators after, Scatt, Scian Anne Time Bennard Study of Subhides from the Enrogeni Hime, Ontoin.



Temagami Island - Joan and Phyllis Townships Temagami, Ontario

### Historic Temagami Island Copper Mine

#### LEVELS PLAN & UNDERGROUNDX-SECTION

Temagami Copper Mine (Teck Corporation) Historic Resource (non-compliant to a 43-101 reporting standard): 2,500,000 tons @ 1% Cu, 0.6% Ni, 0.1% Co (J.C. Frantz, 1956) called the "Keevil Zone" Aerial Photo MNDM Composite (MLAS website)

## Milestone – a Historic Teck Resources Property situated 3 km SW of Temagami, ON



<sup>\*</sup> Bennett, G.1978: Geology of the Northeast Temagami Area, District of Nipissing, Ontario Geological Survey Report 163, 128p. p. 111

Includes the **Diadem deposit**, estimated to contain a historic estimate of **500,000 Tons grading 0.5% Cu and 0.1% Ni** and remains open along strike and at depth\*

Historic drill results include 0.47% Cu and 0.16% Ni over 8.4m in DDH-00-01 and 1.0% Cu, 0.17% Ni, 0.044% Co over 4.25m in DDH- 00-03 at 15m depth

## Open Along Strike and to Depth Northstar Defines >10km Cu-Ni-Co Massive Sulphide Trend on the Milestone Property



Significant Cu-Ni-Co and anomalous precious metal (Au, Ag, Pd, Pt) assays recently returned from numerous surface samples containing massive to semimassive sulphides collected over a >1,000 metre metagabbro sill contact

NSG News Release January 25, 2022

### Milestone Property Mafic Intrusion Hosted Copper – Nickel – Cobalt Targets

- Exploration targets include the historic Diadem deposit and O'Connor prospect.
- The Diadem deposit was estimated to contain a non-43-101 compliant historic estimate of 500,000 Tons grading 0.5% Cu and 0.1% Ni\* and remains open along strike and at depth
- The O'Connor prospect, which has reported historic drilling intercepts of 0.71% Cu over 11.6m including 7.04% Cu and 1.79% Ni over 0.36m, and 1.0% Cu and 0.17% Ni over 4.25m from 15m depth; remains open along strike and at depth



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2022 High Resolution UAV Magnetic Survey delineates Diadem and O'Connor Zones from near surface to depths of 280 metres and 400 metres

- Two new anomalies have been identified along the metagabbro contact, with one anomaly possibly extending the massive sulphide trend another 500 metres along strike to the ENE. The newly discovered Central Zone magnetic anomaly hosts massive sulphides with Cu-Ni-Co mineralization
- 3D Inversion results of the magnetic data indicates that historic drilling failed to intersect the core of the magnetic anomalies associated with the Diadem and O'Connor zones, suggesting considerable exploration upside

3D Inversion of Magnetic Data on the Milestone Property with Historic Drilling Results



### Milestone Property – Near Surface Copper Zones Open to Expansion and New Discoveries

- Recent exploration has verified historic surface assay results in the Diadem and O'Connor Zones and a new Cu-Ni-Co massive sulphide "Central Zone" has been discovered between them. Possibly associated with a mineralized metagabbro dike analogous to "Offset" dikes in the Sudbury Basin
- Massive sulphide "pods" hosting chalcopyrite and anomalous precious metals recently discovered in the footwall rhyolite of the O'Connor zone
- Nickel and cobalt concentrations from recent surface sampling are higher than previously reported from the Property



\*Cu Eq results are based on spot USD spot metal prices for January 13, 2023 of Cu- 4.215/lb. Ni – 12.065/lb., Co- 22.226/lb., Au- 1904.05/oz, Ag-23.675/oz, Pd-1789.94/oz, Pt-1064.76/oz and calculated using the following formula: CuEq = Cu% + (12.065/4.215)\*Ni%+(22.226/4.215)\*Co%+ $(Aug/t^{*}(1904.05/31)/4.215^{*}22)$ + $(Agg/t^{*}(23.675/31)/4.215^{*}22)$ + $(Pdg/t^{*}(1789.94/31)/4.215^{*}22)$  + (Pt g/t\* $(1064.76/31)/4.215^{*}22)$ . Recovery is estimated at 100%. Source dailymetalprice.com/metalprices.php.

# Weighted Average Muck and In-Situ Assays from 4 Zones on the Milestone Property

Zone	No. of Samples	Sample Weight (kg)	Cu (%)	Ni (%)	Co (%)	Au (g/t)	Ag (g/t)	Pd (g/t)	Pt (g/t)	Cu Eq (%)*
Diadem	8	21.17	0.72	0.26	0.047	0.16	2.57	0.12	0.06	1.93
O'Connor	13	25.98	0.7	0.23	0.068	0.19	0.72	0.15	0.06	1.97
Central	5	13.14	0.89	0.33	0.064	0.23	1.86	0.13	0.06	2.17
Footwall Sulphide Pods	3	6.9	0.98	0.11	0.053	0.25	2.39	0.46	0.18	2.1
Total	29	67.19	0.77	0.25	0.059	0.2	1.7	0.17	0.07	2.06

\*Cu Eq results are based on spot USD spot metal prices for January 13, 2023 of Cu- 4.215/lb. Ni - 12.065/lb., Co- 22.226/lb., Au- 12.065/oz, Ag-23.675/oz, Pd-1789.94/oz, Pt-1064.76/oz and calculated using the following formula: CuEq = Cu% + (12.065/4.215)\*Ni%+(22.226/4.215)\*Co%+ $(Aug/t^{(1904.05/31)}/4.215^{(22)})$ + $(Agg/t^{(23.675/31)}/4.215^{(22)})$ + $(Ptg/t^{(1064.76/31)}/4.215^{(22)})$ . Recovery is estimated at 100%. Source dailymetalprice.com/metalprices.php.

## Milestone UAV 3D Magnetic Inversion – 200m Depth Slice



### Metagabbro Contact Hosting Massive Sulphides Open Along Strike to the SW



## Milestone – Future Exploration Recommendations

- Ground truthing and sampling of magnetic features and possible dike-like semi-massive to massive sulphide lenses proximal to the Diadem deposit
- Follow-up surface sampling to define additional metagabbro footwall contact massive sulphide pods which provided most of the high-grade copper ore at the Temagami Mine
- Step-out drilling of the Diadem deposit and O'Connor Prospect



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Milestone is a drill-ready Critical Minerals Property available for option

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