

# FORM 51-102F3

## MATERIAL CHANGE REPORT

**Item 1**     **Name and Address of Company**

**Northstar Gold Corp.**  
P.O. Box 2529 – 17 Wellington Street North  
New Liskeard  
Ontario P0J 1P0

**Item 2**     **Date of Material Change**

October 3<sup>rd</sup>, 2024

**Item 3**     **New Releases**

On October 3<sup>rd</sup>, 2024, a news release was disseminated by Newsfile Corp. in respect of the material change.

**Item 4**     **Summary of Material Change**

Northstar Signs Mou to Mine High Grade Zone 2 At Cam Copper Mine Using Novamera Surgical Mining™ Technologies.

**Item 5**     **Full Description of Material Change**

For a full description of the material change, see the attached News Release.

**Item 6**     **Reliance on subsection 7.1(2) of National Instrument 51-102**

Confidentiality is not requested.

**Item 7**     **Omitted Information**

No information has been omitted in respect of the material change.

**Item 8**     **Executive Officer**

Mr. Brian P. Fowler, P.Geo.  
President, CEO and Director  
604 617 8191  
[bfowler@northstargoldcorp.com](mailto:bfowler@northstargoldcorp.com)

**Item 9**     **Date of Report**

October 3<sup>rd</sup>, 2024



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**For Immediate Release**

## **NORTHSTAR SIGNS MOU TO MINE HIGH GRADE ZONE 2 AT CAM COPPER MINE USING NOVAMERA SURGICAL MINING™ TECHNOLOGIES**

Vancouver, B.C., October 3, 2024. **Northstar Gold Corp. (CSE:NSG, OTCQB:NSGCF)** (“**Northstar**” or the “**Company**”), announces that Novamera Inc. (“**Novamera**”) and Northstar have entered into a Memorandum of Understanding (“**MOU**”, or “**Novamera MOU**”) to model, develop and mine a potentially economically viable mineral resource\* at the Company’s 100%-owned Cam Copper Mine site (“**Project**”, or “**the Project**”) on the Miller Copper-Gold Property, 20 kilometres southeast of Kirkland Lake, Ontario (Figure 1).

The MOU agreement sets out terms under which Novamera will secure the necessary financing to Surgically Mine™ Cam Copper Project, subject to the definition and permitting of an economic deposit. This includes a multi-staged program (the “Surgical Mining™ Program”) to test and extract material from the copper-rich, near vertical Zone 2 VMS horizon at the historic Cam Copper mine site. Zone 2 is the largest of 3 narrow, steeply dipping tabular copper horizons estimated by a previous operator to average **10% copper** over a 0.85 metre true width, 42-metre strike length and a minimum 140 metre depth extent from surface<sup>1</sup>. Northstar recently drilled 4 diamond drill holes that corroborate historic Zone 2 copper widths and grade, including a **14.8% copper over 2.45 metres** intercept in drill hole CC03-23 ([See Northstar News Release dated Nov. 23, 2023](#)).

Zone 2 is interpreted to host Cu-rich Besshi-type volcanogenic massive sulphides including massive chalcopyrite and bornite and remains open to expansion along strike and down dip (Figure 2). The MOU provides the framework for both parties to gain a clear understanding of the value of Surgical Mining™ at the Project, as well as the necessary stages for commercial deployment and extraction.

\* Insufficient exploration has been carried out to define a mineral resource on the property and a qualified person has not done sufficient work to classify Cam Copper as a current mineral resource. Additional exploration including a 43-101 Technical Report, CIM and NI-43-101 reporting compliant mineral resource estimate and Preliminary Economic Assessment are required to establish the economic potential of Cam Copper.

<sup>1</sup> Ontario Ministry of Energy, Northern Development and Mines and Mines Assessment File #KL-0843, Prospectus of Fidelity Mining Investments Ltd. 1962

***Northstar Commentary***

“This marks the second major milestone announcement for Northstar in just two weeks,” said Northstar President and CEO Brian Fowler. “The Memorandum of Understanding (MOU) with Novamera for the Cam Copper Mine, along with the recently announced MOU with Hunan Nonferrous—which focuses on developing an NI43-101 gold resource at our nearby Miller Alkalic Intrusive Complex ([see Northstar’s news release dated September 19, 2024](#))—represents yet another non-dilutive approach to advance and monetize our high-grade gold and copper projects. We’re thrilled to collaborate with Novamera to establish a sustainable mining operation at Cam Copper, utilizing their cutting-edge, eco-friendly Surgical Mining™ technology for critical minerals.”

Fowler further emphasized the importance of this development: "The Novamera MOU significantly strengthens Northstar’s ability to explore and develop the narrow, high-grade copper zones at Cam Copper. Looking ahead, this partnership could pave the way for further agreements to explore and exploit a 3-kilometre stretch of VMS copper horizons, including the historic high-grade Amity and Patterson Mines on the adjacent Boston Creek Mines Property, as outlined in a Letter of Intent dated May 16, 2024."

### ***Novamera Commentary***

Novamera’s President and CEO Dustin Angelo states, “We are excited to partner with the Northstar team to potentially bring Zone 2 at the Cam Copper Mine into production. At Novamera, our mission is to empower companies like Northstar to unlock small-scale, high-value mineral resources that are critical in today’s market. Through our advanced AI and machine learning technologies, we enable mining companies to leverage conventional large-diameter drilling equipment to surgically extract deposits with minimal upfront capital and a quicker path to profitability. This innovative approach offers a transformative model for the industry, allowing mining companies to capitalize on deposits that would otherwise be untapped using traditional methods.”

### ***What is Surgical Mining™?***

Surgical Mining™ is Novamera’s proprietary mining process that combines its mapping, positioning and steering technologies with conventional drilling equipment to exploit narrow, high-grade copper deposits that are the size and style of the Cam Copper Mine No. 2 Zone. This innovative solution is a more cost-effective, rapid path to production that radically reduces environmental and social impact. Given the low upfront capital costs and minimal development costs, Surgical Mining™ offers junior mining companies the opportunity to exploit small, narrow, high-grade mineralized zones, generating sustainable cash flow to fund strategic plans and reduce their reliance on the capital markets. In addition, permitting time and expense are generally significantly reduced owing to the small environmental footprint and operational scale.

### ***MOU Stages, Turnkey Mining Provision and Project Funding***

The Novamera MOU sets out a 4-Stage process to Surgically Mine™ copper at Northstar’s Miller Copper-Gold Property over the next 12-18 months that includes:

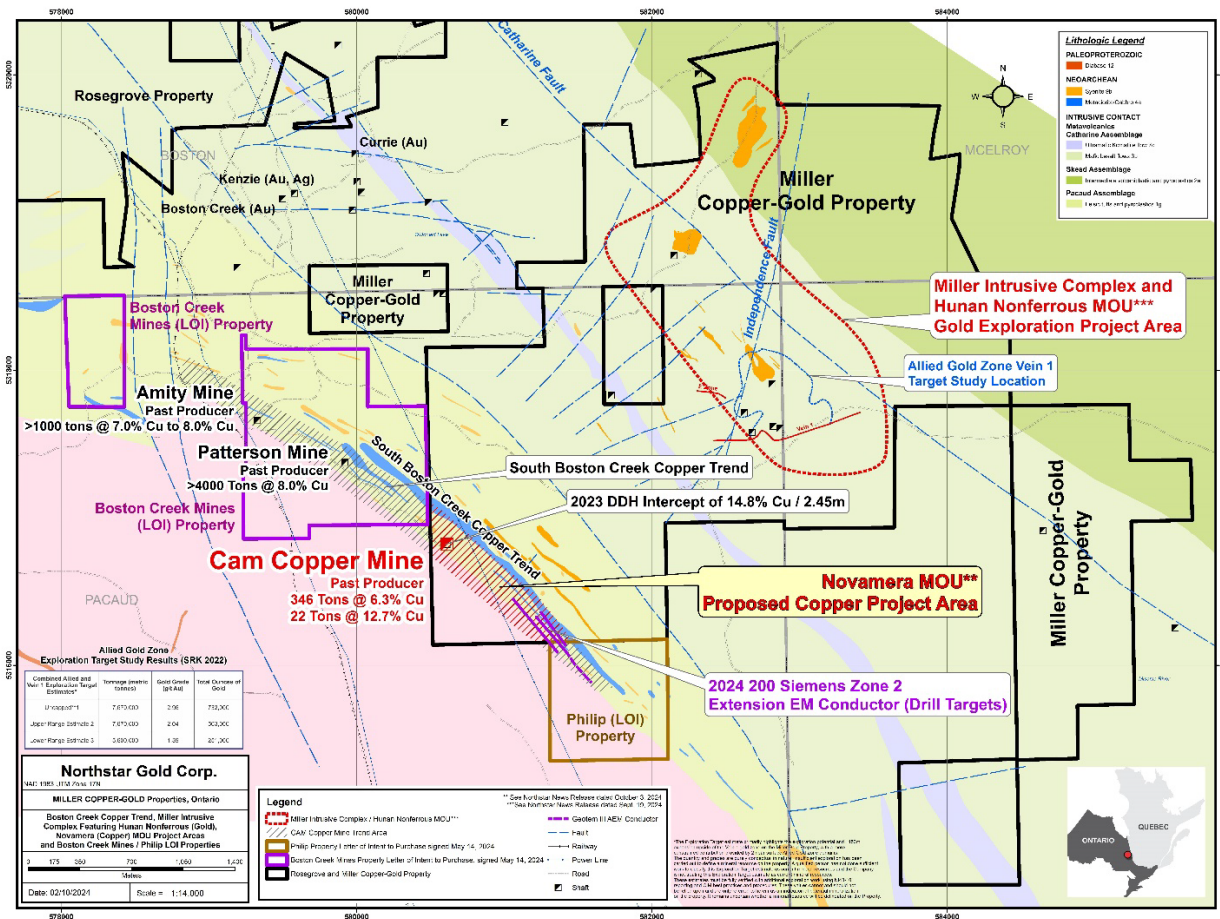
- Stage 1 Conceptual surgical mining economic desktop evaluation, 3D block model development (near completion).
- Stage 2 Guidance tool calibration activities, mine permitting, environmental impact assessment.

- Stage 3 Initial surgical mining employing rotary drilling methods.
- Stage 4 Expansion of Surgical Mining™ to other areas of the Cam Copper Project.

Upon completion of the Stage 1 Economic Forecast, Stage 2 Mine Plan and having entered into a definitive agreement related to the Transaction, Novamera will engage with prospective financial partners and government grant agencies to secure financing for Stage 3 of the Cam Copper Mine Zone 2 Surgical Mining™ Program. Project funding is not expressly guaranteed by Novamera. In the event Novamera secures project funding, or the necessary portion thereof to commence Surgical Mining™ in Zone 2, a separate agreement will be entered into defining commitments and obligations related to project financing between the Parties and corresponding financial partner(s).

### Stage 4 Expansion Project Area and Turnkey Solution First Right of Refusal

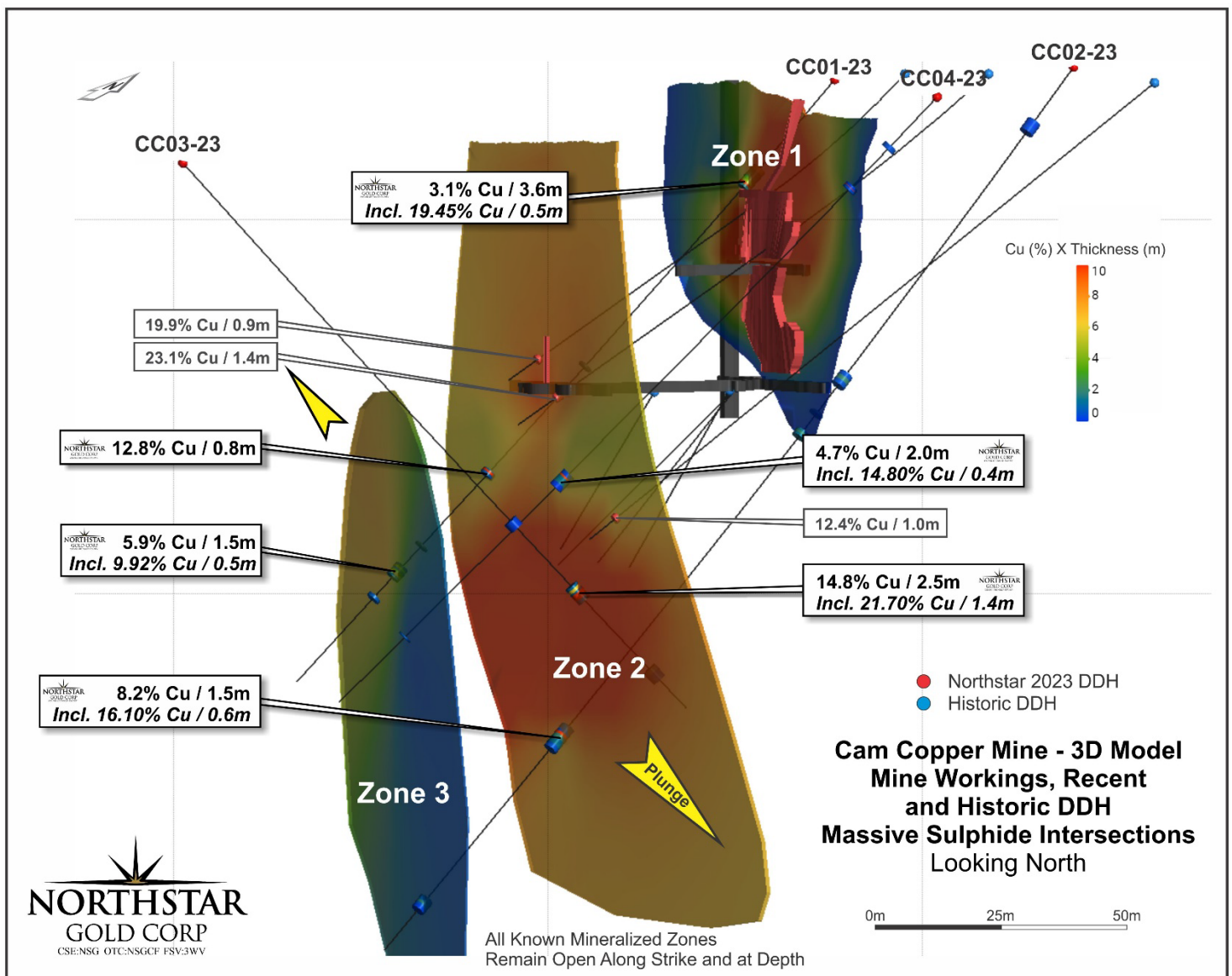
Upon completion of Stage 3 Surgical Mining™, Novamera will have a Right of First Refusal (“ROFR”) to provide the Turnkey Solution at other steeply dipping mineral deposits within the Project Area (Figure 1), provided those veins are applicable to be mined using Surgical Mining™. Other deposits where Surgical Mining™ is not the most practical or economic are outside the scope of this MOU and the ROFR will not apply.



**Figure 1. Miller Copper-Gold Property  
 Novamera and Human Nonferrous MOU Project Areas**

## Underground Development and Historic Copper Production at Cam Copper – Direct Shipping Ore

The Cam Copper Mine hosts at least three separate lenses (Zone 1, Zone 2, Zone 3 and a possible Zone 4– Figure 2) of massive copper sulphides about 30-50 metres apart striking and plunging southeast along the contact with the Round Lake Granite Batholith. Underground development took place between 1929 and 1953 which includes sinking of a 220' (66.7m) vertical shaft with 213' (64.5m) of cross cutting and 267' (80.9m) of drifting. The recent drilling and surface sampling results substantiate historic reporting of a 1955 shipment of 346 tons of hoisted underground ore which produced 43,411 lbs. of Cu<sup>2</sup> at a Noranda smelter for a recovered grade of **6.3% Cu**. The ore was shipped directly from the mine site to the smelter without requiring further concentration in a mill. A previous 1948 shipment of 22 tons of ore to Noranda reportedly graded **12.72% Cu**, 0.84 oz/t Ag and 0.03 oz/t Au<sup>3</sup>, presumably from Zone 1.



**Figure 2. Cam Copper Mine 3D Model Illustrating VMS Zones 1, 2 and 3 Historic Drilling**



Historic drilling intercepts in Zone 1 by Consolidated Golden Arrow Mines Ltd. at the Cam Copper Mine include: <sup>4</sup>

- 1.6% Cu over 6.6' (2.0m) in DDH 1
- 9.8% Cu over 4' (1.21m) in DDH 1A
- 12.4 % Cu over 7.8' (2.36m) in DDH 3
- 7.0% Cu over 6' (1.82m) in DDH 4

Average sampling grade reported in Zone 1 was 8.5% Cu over a true width of 4.4' (1.33m) indicated over 100' (30.3m) along strike.

Historic drilling intercepts by Consolidated Golden Arrow Mines Ltd. in Zone 2 include: <sup>4</sup>

- 10.5% Cu over 0.5' (0.15m) in DDH 1A
- 19.9% Cu over 3.1' (0.94m) in DDH 3
- 23.1% Cu over 4.6' (1.39m) in DDH 4 ---> down plunge extension below workings
- 12.4% Cu over 3.3' (1.0m) in DDH 7 ---> down plunge extension below workings

**Average sampling grade reported in Zone 2 was 10% Cu over a true width of 2.8' (0.85m) indicated over 140' (42.4m) along strike. <sup>4</sup>**

**Bornite was reported to be common in Zone 2 with the bornite rich pods of massive sulphides remaining open down plunge to the southeast.<sup>4</sup>**

### ***Boston Creek Mines Historic Copper Production – Direct Shipping Ore***

Additional high grade Cu production was recorded at the Amity and Patterson Mines located on Boston Creek Mines Property less than 2 km to the northwest of Cam Copper (Figure 1). The Amity hosts a 1020' 2-compartment shaft with 5 levels of development (50, 125, 475, 600 and 1000' levels). The best reported ore in the mine graded 7-8% Cu across 11 feet at the 350' level<sup>5,7</sup>. Multiple shipments of direct shipping ore were reportedly sent to the Noranda smelter between 1926 and 1955.

The Patterson Mine, located less than 1 kilometre to the northwest of Cam Copper along the same stratigraphic horizon hosts a 520' sub vertical shaft with 4 levels of development (125, 250, 375 and 500' levels). Ore shoots up to 4 feet in width produced ore shipments that averaged 8% Cu<sup>6,7</sup> and 0.5 oz/T Ag in 1928-29. Overall, the Patterson Mine shipped >4000 Tons of direct shipping ore directly to the Noranda Smelter between 1926 and 1955.

Northstar recently expanded its coverage of the South Boston Creek Copper Trend by signing Letters of Intent with owners of the neighboring and adjacent Boston Creek Mines ([Please see Northstar News Release dated May 16, 2024](#)) and Philip Property ([Please see Northstar News Release dated May 28, 2024](#)). Three recently defined near-surface EM survey conductors on the Miller Copper-Gold Property, believed to represent near-surface volcanogenic massive sulphides (VMS) horizons, extend southeast onto the Philip Property, with the central conductor extending as much as 350 metres across the property line. Northstar's LOI agreements effectively consolidate the 4-kilometre South Boston Creek Copper Trend, providing the Company an exploration buffer zone, a 6-month exclusivity period and 1 year Right of First Refusal to conduct due diligence studies and negotiate possible acquisition terms.

<sup>2</sup> Ontario Ministry of Energy, Northern Development and Mines Mineral Deposit Inventory Record MDI31M13NW000154: Tretheway-Ossian- 1981, Ch.H. Cameron-1981.

<sup>3</sup> Ontario Ministry of Energy, Northern Development and Mines and Mines Assessment File #KL-0259, Tretheway-Ossian (Cam Copper Mine). 1961

<sup>4</sup> Ontario Ministry of Energy, Northern Development and Mines and Mines Assessment File #KL-0843, Prospectus of Fidelity Mining Investments Ltd. 1962

<sup>5</sup> Ontario Ministry of Energy, Northern Development and Mines Mineral Deposit Inventory Record MDI32D04SW00006: Amity - 1981, Gilson - 1981, Boston Creek - 1981, Golden Arrow – 1981

<sup>6</sup> Ontario Ministry of Energy, Northern Development and Mines Mineral Deposit Inventory Record MDI32D04SW00005: Patterson - 1981, Boston Creek Property - 2006, Marge - 1981, Coutts - 1981, Gilson – 1981

<sup>7</sup> Shklanka, Roman (editor) 1969: Copper, Nickel, Lead and Zinc Deposits of Ontario; Ontario Department of Mines, Mineral Resources Circular 12, 394p. Reprinted 1989.p.366

### ***Qualified Person***

Brian P. Fowler, P.Geo., President, CEO and Director of Northstar Gold Corp, is a Qualified Person as defined by National Instrument 43-101. Mr. Fowler has reviewed the technical information in this news release and approves the written disclosure contained herein.

### ***2024 EM Survey Defines 350m Long, Possible Near-Surface VMS Drill Target South of Cam Copper Mine***

Northstar recently completed down-hole and grid-scale EM geophysical surveys over a 900 metre distance from Cam Copper Mine, defining a 350 metre long, 200 Siemens near-surface EM conductor, 600 – 900 metres along strike to the southeast of the mine site. ([Please see Northstar News Release Dated May 16, 2024](#))

Prior to drill testing the 200 Siemens Conductor, Northstar recently expanded its coverage of the South Boston Creek Copper Trend by signing Letters of Intent with owners of the neighboring and adjacent Boston Creek Mines and Philip Property. The Boston Creek Mines Property contains 2 historic high-grade copper shaft mines along the northwestern half of the South Boston Creek Copper Trend, immediately adjacent to the Miller Copper-Gold Property. Three recently defined near-surface EM survey conductors on the Miller Copper-Gold Property, believed to represent near-surface volcanogenic massive sulphides (VMS) horizons, extend southeast onto the Philip Property, with the central conductor extending as much as 350 metres across the property line. Northstar's LOI agreements effectively consolidate the 4-kilometre South Boston Creek Copper Trend, providing the Company an exploration buffer zone, a 6-month exclusivity period and 1 year Right of First Refusal to conduct due diligence studies and negotiate possible acquisition terms.

Northstar is positioning to drill test the Zone 2 Extension Conductor in Q4, 2024.

### ***About Novamera***

Novamera is a surgical mining technology company that has developed data driven hardware and software solutions that pinpoint, map, navigate and extract high value narrow vein deposits. Novamera's precision drilling products integrate into conventional drilling equipment, enabling mining companies to quickly and sustainably mine various metal and mineral deposits that are

otherwise uneconomic due to size, geometry and orientation. The process has large scale environmental and social impacts to support ESG targets and improve social licence. Requiring a small footprint with no blasting, the solution produces 95% less waste, 44% less GHG emissions and 99% less water discharge. \*

\*Readers are warned that historic information referred to in this news release have not been verified by a Qualified Person.

### ***About Northstar***

Northstar's primary focus is to advance and expand the near-surface, Allied Gold Zone bulk-tonnage gold-telluride deposit by way of the recently signed Hunan Nonferrous MOU and develop high-grade VMS copper mineral deposits by way of the recently signed Novamera Surgical Mining™ MOU on the Company's flagship, 100%-owned Miller Copper Gold Property, situated 18 km southeast of Kirkland Lake, Ontario. The Company's strategy is to develop a material (+1M ounce gold / high-grade copper) mineral resource base to either supplement a nearby mining operation or support a stand-alone mining operation(s) at the Property.

On behalf of the Board of Directors,

Mr. Brian P. Fowler, P. Geo.  
President, CEO and Director  
(604) 617-8191  
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### ***Cautionary Note Regarding Forward-Looking Statements***

*All statements, other than statements of historical fact, contained in this news release constitute "forward-looking information" within the meaning of applicable Canadian securities laws and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 (referred to herein as "forward-looking statements"). Forward-looking statements include, but are not limited to, disclosure regarding the completion of the Offering and potential gross proceeds to be raised pursuant thereto, the receipt of all applicable regulatory approvals, the prospective nature of the Company's property interests, exploration plans and expected results, conditions or financial performance that is based on assumptions about future economic conditions and courses of action; planned use of proceeds, expenditures and budgets and the execution thereof. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate" or "believes", or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results, "may", "could", "would", "will", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof.*

*All forward-looking statements are based on various assumptions, including, without limitation, the expectations and beliefs of management, the receipt of applicable regulatory approvals, availability of financing, the assumed long-term price of gold, that the current exploration and other objectives concerning its mineral projects can be achieved and that its other corporate activities will proceed as expected; that the current price and demand for gold will be sustained or will improve; the continuity of the price of gold and other metals, economic and political conditions and operations; the prospective nature of the Company's properties, availability of financing, and that general business and economic conditions will not change in a materially adverse manner.*



*Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of NSG to be materially different from those expressed or implied by such forward-looking statements, including but not limited to: risks and uncertainties related to the completion of the Offering as presently proposed or at all, the failure to obtain all applicable regulatory approvals; actual results of current exploration activities; environmental risks; future prices of gold; operating risks; accidents, labour issues and other risks of the mining industry; delays in obtaining government approvals or financing; and other risks and uncertainties. These risks and uncertainties are not, and should not be construed as being, exhaustive.*

*Although NSG has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. In addition, forward-looking statements are provided solely for the purpose of providing information about management's current expectations and plans and allowing investors and others to get a better understanding of our operating environment. Accordingly, readers should not place undue reliance on forward-looking statements.*

*Forward-looking statements in this news release are made as of the date hereof and NSG assume no obligation to update any forward-looking statements, except as required by applicable laws.*