

SIXTY NORTH GOLD ANNOUNCES ENGAGEMENT OF MIRA GEOSCIENCE FOR MODELLING TO REFINE DRILL TARGETS FOR SILVER- AND GOLD-RICH VMS DISCOVERY AT THE MON GOLD PROPERTY, AND GRANT OF INCENTIVE SHARE OPTIONS

Vancouver – September 2, 2020 – Sixty North Gold Mining Ltd. (the “**Company**” or “**Sixty North**”) (CSE: SXTY) (OTC-Pink: SXNTF) (FKT: 2F4) Sixty North is pleased to announce that it will be working with Mira Geoscience Ltd. (“Mira”) to create a 3D integrated interpretation of existing VTEM and exploration data. Mira will construct a number of constrained VTEM integrated inversion models to refine drill targeting on Sixty North’s recently discovered volcanogenic massive sulphide (VMS) system at its Mon Property, Yellowknife Gold Belt, NWT. The work is expected to include geological modelling, constrained magnetic and conductivity inversions, combined with plate modelling. Several anomalies have been identified in a 2019 VTEM Plus © survey, one of which is exposed and has been trenched, revealing the silver- and gold-rich nature of that VMS horizon (5656 Zone). This weakly conductive horizon is 240 m long and trench assays include 0.45m of 203 gpt silver, 1.0 gpt gold, 0.59% lead and 0.96% zinc and 1.0 m of 82 gpt silver, 1.2 gpt gold, 0.26% lead and 0.02% zinc (see NR October 17, 2019).

A much larger and stronger conductor occurs along this same stratigraphy 340 m away. This conductor is up to 1,000 m long and presents in two stacked horizons showing 500 m peaks separated by 130 m. A similar twin anomaly occurs higher up in the same stratigraphic unit offset 270 m to the north where the felsic unit thickens to 210 m. Rock samples in the vicinity of this unexposed anomaly are enriched in silver, zinc, lead and copper with the exposed 5656 Zone primarily being enriched in silver, gold and zinc.

Dr. Dave Webb, President and CEO states "We're pleased to move forward on the silver- and gold-rich VMS. Mira's expertise in extracting useful information from the geophysical data will assist us in targeting our drill holes with precision and accuracy".

Dr. D.R. Webb, Ph.D., P.Geol., P.Eng. is the Qualified Person within the meaning of NI 43-101 and is responsible for the technical details of this release.

New Incentive Share Options

The Company has granted incentive stock options to various directors and officers to purchase up to 2,200,000 common shares exercisable on or before August 24, 2025 at a price of \$0.08 per share.

About the Company

Sixty North Gold Mining Ltd. is focused on restarting the high-grade past producing Mon Mine, 40 km north of Yellowknife, NWT, within the prolific Yellowknife Gold Camp. Other targets on the property include recently discovered silver- and gold-rich VMS targets as well as the giant shear zone-hosted gold mineralization. The Mon Gold Property consists of 11 contiguous mining leases and 3 mineral claims, comprising an aggregate 1,536.92 acres, located in the South MacKenzie Mining District, NWT. For more information, please refer to the Company’s profile on SEDAR (www.sedar.com) or visit the Company’s website at www.sixtynorthgold.com.

ON BEHALF OF THE BOARD OF DIRECTORS

s/ "David Webb"

David Webb,

President & Chief Executive Officer

For further information, please contact David Webb 604-818-1400

Statements about the Company's future expectations and all other statements in this press release other than historical facts are "forward looking statements". Such forward-looking statements are based on numerous assumptions, and involve known and unknown risks, uncertainties and other factors, including risks inherent in mineral exploration and development, which may cause the actual results, performance, or achievements of the Company to be materially different from any projected future results, performance, or achievements expressed or implied by such forward-looking statements. Further details about the risks applicable to the Company are contained in the Company's Prospectus dated January 19, 2018 available on SEDAR (www.sedar.com), under the Company's profile.

THE CANADIAN SECURITIES EXCHANGE HAS NOT APPROVED NOR DISAPPROVED THE CONTENT OF THIS PRESS RELEASE.