

Press release

For immediate release

Stelmine Provides Geological Update of the Meridian Orogenic Gold Zone at the Mercator Property

Québec, May 11, 2023 - **Stelmine Canada ("Stelmine" or "The Company") (TSXV: STH)** is pleased to provide a geological update on its 100% owned Mercator property located in northeastern Quebec. Stelmine completed a maiden diamond drilling campaign in 2022 totaling 1950 m in 13 holes collared on the goldbearing Meridian Zone located at the core of the property.

Project Highlights:

- Meridian Zone mineralization traced on surface over 2500 m x 500 m
- Drilling returned multiple lenses of gold mineralization
- Early-stage exploration in newly identified Caniapiscau gold district
- Multiple zones of gold mineralization hosted in Iron Formations
- Large gold deposits are associated with iron formation such as Musselwhite, Meadowbank, Lake Amaruq and Back River
- Bulk tonnage and high-grade mineralization potential
- Large land package in the positive mining and exploration jurisdiction of Quebec

Mercator is a rare occurrence of an Archean orogenic type mineralization associated with granulite-facies and silicate iron formations. Iron Formations (**IF**) are highly sought-after targets for gold exploration because of their potential to host high-grade, large-tonnage deposits.

From the initial INAA results obtained from drilling campaign, a subset of samples (<10%) was re-submitted by the Fire Assay analysis method. Variations in the gold results were deemed small and the highlights of the updated drill intersections are presented below and in table 1.

Drilling Highlights:

| DDH # | From (m) | To (m) | interval* (m) | Au (g/t) |
|-----------|-------------|--------|---------------|----------|
| MCT22-01 | 9.30 | 15.67 | 6.37 | 1.22 |
| Incl. | <u>9.30</u> | 9.85 | 0.55 | 3.01 |
| MCT22-03 | 26.85 | 35.5 | 8.65 | 1.22 |
| Incl. | 33.80 | 35.50 | 1.70 | 3.21 |
| And Incl. | 34.80 | 35.50 | 0.70 | 5.71 |
| MCT22-03 | 40.75 | 42.20 | 1.45 | 1.43 |
| MCT22-06 | 3.20 | 5.85 | 2.65 | 0.59 |
| MCT22-08 | 47.15 | 64.95 | 17.80 | 2.62 |
| Incl. | 59.35 | 64.95 | 5.60 | 4.87 |
| And Incl. | 59.35 | 59.90 | 0.55 | 27.7 |

| DDH # | From (m) | To (m) | Interval* (m) | Au (g/t) |
|-----------|----------|--------|---------------|----------|
| MCT22-11 | 99.00 | 108.00 | 9.00 | 1.02 |
| Incl. | 105.60 | 108.00 | 2.40 | 2.68 |
| And Incl. | 105.60 | 106.20 | 0.60 | 7.07 |
| MCT22-11 | 151.25 | 155.50 | 4.25 | 1.24 |
| MCT22-11 | 184.20 | 193.50 | 9.30 | 1.19 |
| Incl. | 184.20 | 186.00 | 1.80 | 1.11 |
| Incl. | 190.05 | 191.50 | 1.45 | 4.51 |
| And Incl. | 191.00 | 191.50 | 0.50 | 9.94 |
| MCT22-12 | 85.45 | 88.15 | 2.70 | 1.20 |

 Table 1. Significant gold intercepts from the 2022 drilling campaign

See the presentation



Drilling results corelate well with surface channel, grab and soil samples obtained on the project since 2018. Channel sampling returned gold intersections > 1.0 g/t for 11 of the 22 channel sites, with the highlights summarized below and in Figure 1.

Channel Samples Highlights:

2.07 g/t Au over 27.50 (R21025) 2.27 g/t Au over 7.60 m, *incl.* **4.25 g/t Au** over 3.00 m (R21033) 2.16 g/t Au over 7.60 m, *incl.* **3.64 g/t Au** over 4.00 m (R21027) 2.13 g/t Au over 12.50 m, *incl.* **3.54 g/t Au** over 6.00 m (R21034) 2.66 g/t Au over 11.50 m, *incl.* **5.10 g/t Au** over 4.10 m (R21010)

Grab Samples Highlights:

18.20 g/t Au, 9.27 g/t Au, 7.60 g/t Au, and 6.93 g/t Au

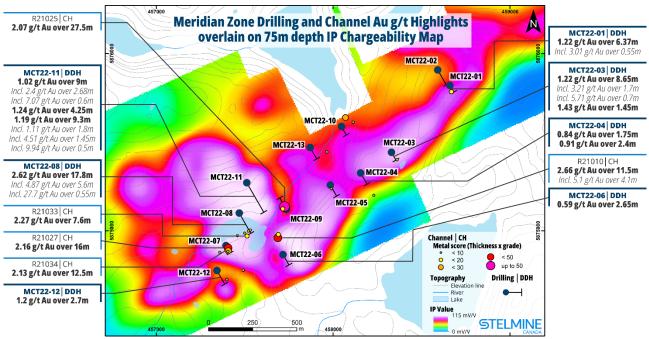


Figure 1. IP survey contour chargeability map of the gold-rich Meridian zone. Significant gold intercepts from drilling and channel sampling are reported.

Isabelle Proulx President and CEO says: "Stelmine believes the Mercator project, particularly the 2.5 km x 500 m gold-rich Meridian Zone, has the potential to develop into a major high tonnage body."

The property lies near the gold-prospective structural contact of the La Grande and Opinaca subprovinces extending 500 km in an EW direction km from the Eeyou Itschee James Bay Territory to the Caniapiscau district. There are several gold-bearing IF prospects situated along this highly prospective shear contact such as the Orfée, Pontois, Lac Guyer and Bourdon (Figure 3). These large-scale structural features provide fluid pathways for gold migration and deposition. Gold occurrences on the property are associated with pyrrhotite, pyrite, arsenopyrite-löllingite ± chalcopyrite sulphide mineralization. In Quebec, other gold-bearing granulitic IF interstratified with metasediments are currently found in the Lilois sector within the Ashuanipi subprovince.



A northern view of the Meridian Zone shows three roughly parallel 1.4 km long, NE/SW oriented gold-mineral zones, exposed on a hill crest and valley floor, dipping shallowly to the NW and open in both directions (Figure 2a). The IP survey section indicates most of the gold mineralization is spatially associated with high chargeability envelopes (Figure 2b). A preliminary 3D model built in the IP section area also reveals two mineralized layers dipping NNW crossing high chargeability zones (Figure 2c).

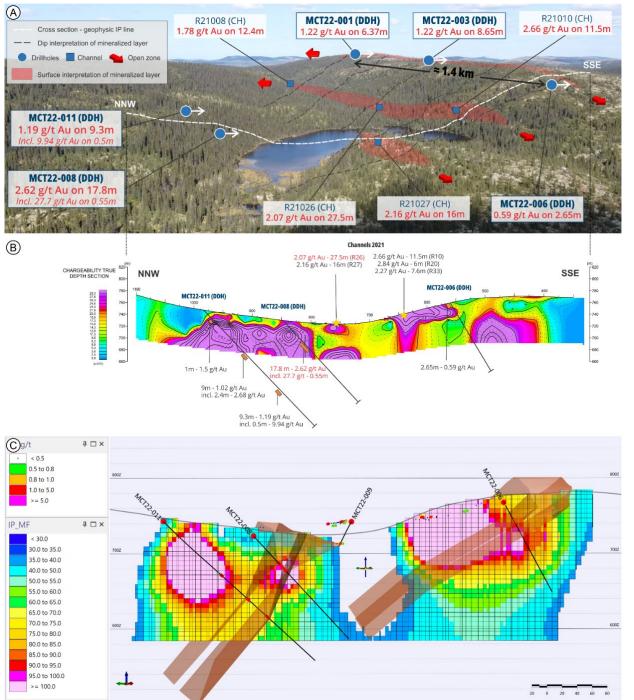


Figure 2. a) A Northeastern oblique view of a portion of the Meridian Zone showing 3 sub-parallel gold-mineralized zones on a hill crest and in a valley floor with their possible extensions, **b)** IP Inverted section indicating most of the gold mineralization is spatially associated with high chargeability envelopes, **c)** A portion of the 3D model cut along the IP section.

There are several examples of world class deposits in Archean IF within the Superior Province of Canada such as the 4 M oz. Au Meadowbank deposit, the Lake Amaruq mine (2.7 M oz. Au) both in the Medialine district



of Nunavut and the northern Ontario Musselwhite deposit, with measured and indicated resources of 3.7Mt at 3.55 g/t Au.

Stelmine continues to apply a combination of geophysics, geochemistry and drill targeting techniques to effectively explore the Meridian Zone and other orogenic gold occurrences on the Mercator property. Mineralizing structures have been identified and will be targeted with the planned 2023 diamond drilling program. Further, structural analyses from detailed mapping will assist in understanding structural controls and guide exploration efforts on the property. The highly experienced team at Stelmine realizes that successful exploration requires a thorough understanding of the target areas, as well as careful planning and execution of exploration work programs.

Continue following Stelmine for more exciting news from their newly identified Archean aged orogenic gold system of the Meridian Zone and beyond.

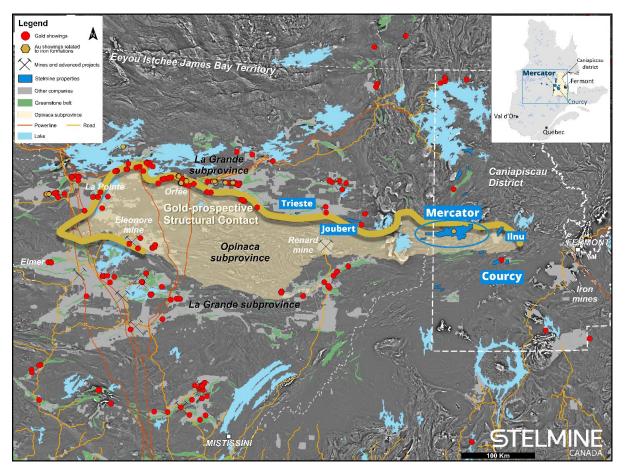


Figure 3. Geological map Eeyou Itschee James Bay territory and Caniapiscau District showing the 500 km-long gold-prospective structural contact between the Opinaca and La Grande sub-provinces. The location of Stelmine's properties is displayed and gold-colored dots represent gold mineralization associated with IF.

Qualified Person

The technical information in this news release has been reviewed and approved by Michel Boily, P. Geo, PhD. Mr. Boily is the qualified person responsible for the scientific and technical information contained herein under National Instrument 43-101 standards.



QA/QC Protocol

Stelmine implemented a strict QA/QC protocol in processing all rock samples collected from the Mercator property. The protocol included the insertion and monitoring of appropriate reference materials, in this case high concentration and low concentration certified gold standards, blanks and duplicates, to validate the accuracy and precision of the assay results. All collected rock samples were put in sturdy plastic bags, tagged, and sealed in the field under the supervision of geologists in training. Sample bags were then put in rice pouches and kept securely in a field tent before being sent by floatplane to the city of Fermont. Transport to Actlabs laboratories in Ancaster, Ontario was made by truck from dependable transport companies. Gold was analyzed by fire assay (1A2_ICP_50 g) or the INAA+ICP_OES (1H) methods. Note however the gold intersections presented above were calculated with Au concentrations obtained by the Fire Assay method. Other trace element concentrations were obtained via the 1H method.

About Stelmine Canada

Stelmine is a junior mining exploration company pioneering a new gold district (Caniapiscau) east of James Bay in the under-explored eastern part of the Opinaca metasedimentary basin where the geological context has similarities to the Eleonore mine. Stelmine has 100% ownership of metasedimentary basin where the geological context has similarities to the Eleonore mine. Stelmine has 100% ownership of 1 782 claims or 938 km² in this part of northern Quebec, highlighted by the Courcy and Mercator Projects.

Forward-looking statements

Certain information in this press release may contain forward-looking statements, such as statements regarding the expected closing of and the anticipated use of the proceeds from the Offering, acquisition and expansion plans, availability of quality acquisition opportunities, and growth of the Company. This information is based on current expectations and assumptions (including assumptions in connection with obtaining all necessary approvals for the Offering and general economic and market conditions) that are subject to significant risks and uncertainties that are difficult to predict. Actual results might differ materially from results suggested in any forward-looking statements. Risks that could cause results to differ from those stated in the forward-looking statements in this release include those relating to the ability to complete the Offering on the terms described above. The Company assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those reflected in the forward-looking statements unless and until required by securities laws applicable to the Company. Additional information identifying risks and uncertainties is contained in the Company's filings with the Canadian securities regulators, which filings are available at www.sedar.com.

Cautionary statement

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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