



Ottawa, Ontario

December 16, 2022

MAYO LAKE MINERALS IDENTIFIES 2023 TARGETS AT CARLIN-ROOP AND THROUGHOUT THE ANDERSON GOLD TREND

Mayo Lake Minerals Inc. (Mayo or the Company) (CSE: **MLKM**) announces that following receipt of the complete results from its 2022 exploration program, it has identified multiple meritorious exploration targets to be addressed in 2023. Highly prospective targets for drilling and trenching have been identified at its Carlin-Roop silver project; for drilling throughout the Anderson Gold Trend in the eastern part of its Anderson-Davidson claim group; and for trenching at Trail-Minto.

Carlin-Roop. At the Carlin West zone, a 580m ± long silver in soil zone (**zone**) with a roughly shaped core area, measuring 220m by 60m, has been defined where all soil samples exceeded 20g Ag/t. Soil samples in a 120m by 60m area within the core of the silver zone all assayed at >30g Ag/t (**1oz Ag/t**). Lineations believed to be fault traces that carried fluids containing silver and other metals at azimuths of 285°± and 312°± and lineations believed to be disruptive barren faults at azimuths of 60°± and 10°±, all coalize within the target zone characterized by samples yielding > 1oz Ag/t. One nearby grab sample assayed at 3,994g Ag/t.¹ See also press releases dated July 15, October 28 and December 16, 2022.

An IP-Resistivity profile showing a 15m steeply dipping wide anomaly and nearby scout drilling indicates that the immediate subsurface rock is receptive Keno Hill Quartzite (**KHQ**). Diamond drill holes (**DDHs**) throughout the length of Carlin West contain silver structures frequently having 6 to 22m down hole lengths (true width is indeterminable at this time); other structures with down hole measurements of between 0.5m and 2.0m occur less frequently in zones composed of competent rock.

The silver structures intercepted to date do not explain the occurrence of the 3,994g Ag/t grab sample¹, nor the large area where all soil samples assayed 1oz Ag/t. It is theorized that this might result from missing core as relatively thin, very highly mineralized veins are commonly incompetent and get washed away during diamond drilling.

A second promising zone, the **AJ** zone lies about 280m northwest of Carlin West and has a general orientation of 60°±. This zone has a length of 240m, being open to the northwest and has a width of 55m. A core part of the zone measuring 190m in length, is characterized by soil samples yielding ≥5g Ag/t. Four grab samples taken along the axis of the zone assayed 412, 182, 179 and 44g Ag/t¹. A subsidiary zone, which parallels AJ, lies about 80m north of AJ.

In 2023 drilling and trenching will be focused on that area of the Carlin West zone where soils assayed ≥ 20gAg/t. and will be initiated on the 190m long core zone at AJ.

The Anderson Gold Trend (AGT) consists of a 16 km+ by 3 km long belt characterized by gold placer creeks, which includes Owl, Anderson, Steep and a number of unnamed creeks, the Dawn Gulch drainage basin, and four identified areas where linear gold in soil anomalies (**zones**) are present (Figures 2 and 3). Dawn Gulch warrants soil sampling to define drill targets because of its history of placer mining and highly anomalous, heavy mineral concentrates taken near Dawn Gulch's mouth of 275,000g Au/t and 25,500g Au/t and stream sediments. The AGT parallels a major structure as defined by major magnetic anomaly. See also press release dated October 25, 2022.

¹ Grabs are selective bedrock and float samples and are not fully representative of vein or mineralization grades.

The potential for development of a very large-scale gold camp remains possible because of the size of the AGT and the number of identified prospective areas for gold and yet to be identified potential areas for gold. Collectively, over 9.5km of drill-ready zones marked by anomalous gold values have now been delineated within the Anderson Gold Trend (Figures 2 and 3.).

- The primary **Owl-Anderson zone** has been increased in length from its previous 1km to approximately 3km through additional soil sampling rendering values over 0.5g Au/t in soil; supported through the tracing of parallel features on air photos and magnetics. Four zones have been identified: the 3,000m+ long zone having gold values up to 527ppb.; a 600m zone having gold values up to 63ppb; a 360m long zone having values up to 86ppb; and a 120m long zone having gold values up to 201ppb. One gold occurrence has been drilled by RC; and traced for 50m along strike. One hole assayed 0.77g Au/t over 6.1m, including 0.9g Au/t over 3.1m. A second hole assayed 0.55g Au/t over 3.1m. Notably, that hole was collared in mineralization which resulted in it not being able to determine the true width and grade of the gold mineralization.
- At **Peak**, one zone has been increased in size from 500m to over 1,600m, open in one direction. Six zones have been identified: the 1,600m long zone having gold values up to 272 ppb; an 850m long zone having gold values up to 134ppb; a 580m long zone having gold values up to 48ppb; a 280m long zone having gold values up to 47ppb; a 240m zone having gold values up to 340ppb; and a 340m long zone having gold values up to 33ppb.
- At **Steep Creek** one zone has been extended to 1.7km. Six zones have been delineated: the 1,700m long zone having gold values up to 142ppb; a 370m long zone having gold values up to 142ppb; a 530m long zone having gold values up to 126ppb; a 750m long zone having gold values up to 87ppb; a 320m long zone having gold values up to 33 ppb; and a 170m long zone having gold values up to 85ppb.
- At **Norman**, two zones have been identified; a 670m long zone having gold values up to 87ppb and a 600m long zone having gold values up to 46ppb.
- At **Dawn Gulch**, placer mining, anomalous silt samples of up to 16.2ppb and heavy mineral concentrate samples of 275,000 and 25,500 g Au/t, suggest the presence of lode gold within the drainage basin. This locality requires the completion of soil sampling to delineate gold targets.
- **The upper part of the Anderson Creek drainage basin** has yet to be grid sampled, in spite of its prospectivity.

The following zone segments have been prioritized for drilling and trenching.

- At **Owl-Anderson**, the gold occurrence in order to determine its width and grade. Parts of a 3000m long zone with the highest gold values, e. g. in the vicinity of the 557ppb Au soil sample.
- At **Peak**, parts of the 1,600m long and 580m long zones with the highest gold values.
- At **Steep Creek**, parts of the 1,700m long and 530m long zone with the highest gold values.
- At **Norman**, the more southern zone.
- At **Dawn Gulch**, subject to detailed soil sampling successfully outlining a prospective target.

Trail-Minto. Subject to funding, trenching will be completed on the 5,000mre soil zones paralleling an igneous stock.

Vern Rampton, President and CEO, stated, “The apparent similarities of Carlin West and the AJ zones and structures to those in other parts of the Keno Hill Silver Camp (**KHSC**) support a bright future for the Carlin-Roop silver discovery. This summer the Company has established that 6 to 22m wide silver structures are present along the Carlin West zone. It has also been noted from descriptions of other deposits in the KHSC that thin intervals of core can commonly be missing adjacent to structures that contain low grade silver and that these thin intervals make up much of the ore at some of the mines in the KHSC. The Company has also not trenched or adequately drilled the area where soils all exceed 20g Ag/t - blue sky.”

He continued, “Furthermore, the Anderson Gold Trend’s numerous placer creeks, anomalous gold zones and prospects spread over its 48 sq. km. highlight the potential for a major mining camp. Much of the highly prospective ground in the Anderson Gold Trend has yet to be soil sampled and we suspect there are more prospects that will match Owl-Anderson, Peak and Steep Creek. Undoubtedly, the AGT’s connections to the Yukon ‘s road network adds to its attractiveness, as do the connections at Carlin-Roop.”

Qualified Person (QP) Statement: Field work was directed by Tyrell Sutherland, M.Sc., P. Geo. This press release has been prepared by Vern Rampton, Ph.D., P. Eng. in his capacities as a QP under the guidelines of N.I. 43-101.

NOT FOR DISTRIBUTION IN THE UNITED STATES

For additional information contact:

Vern Rampton, President & CEO; 613-836-2594; vrampton@mayolakeminerals.com

Tyrell Sutherland, M.Sc., P. Geo., VP Exploration; 613-884-8332; tsutherland@mayolakeminerals.com

Darrell Munro, BB.A, LL.B Corporate Administrator; (613) 836-2594; dmunro@mayolakeminerals.com.

For further information please refer to our web-site. <http://www.mayolakeminerals.com/>

About Mayo Lake Minerals Inc.: Mayo is actively engaged in the exploration and development of five precious metal projects in the Tombstone Plutonic Belt of the Tintina Gold Province. The properties cover 249 square kilometres in the Yukon's Mayo Mining District and lie within the traditional territory of the Na-Cho Nyäk Dun First Nation. The Company has a history of eleven years of exploration in the Mayo area. The Company is presently focusing on its flagship Carlin-Roop silver project lying within the Keno Hill Silver District. The eastern sector of the Silver District has recently been the site of numerous silver discoveries by Metallic Minerals and Mayo, itself. Two active mines: Victoria Gold's Eagle Gold Mine and Hecla Mining's mines lie near-by in the Mayo Mining district.

Mayo is tentatively proposing to trench and drill the Carlin West and AJ zones at Carlin- Roop and numerous highly prospective gold anomalies within the Anderson Gold Trend at Anderson-Davidson plus trench across gold anomalies flanking an intrusion at Trail-Minto in 2023.

Cautionary statement: This news release contains certain forward-looking statements, which are based on the opinions and estimates of management at the date the statements are made and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected. There can be no guarantee that Mayo Lake will be able to obtain a public listing as scheduled in this document. Mayo Lake undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change. The reader is cautioned not to place undue reliance on forward-looking statements.

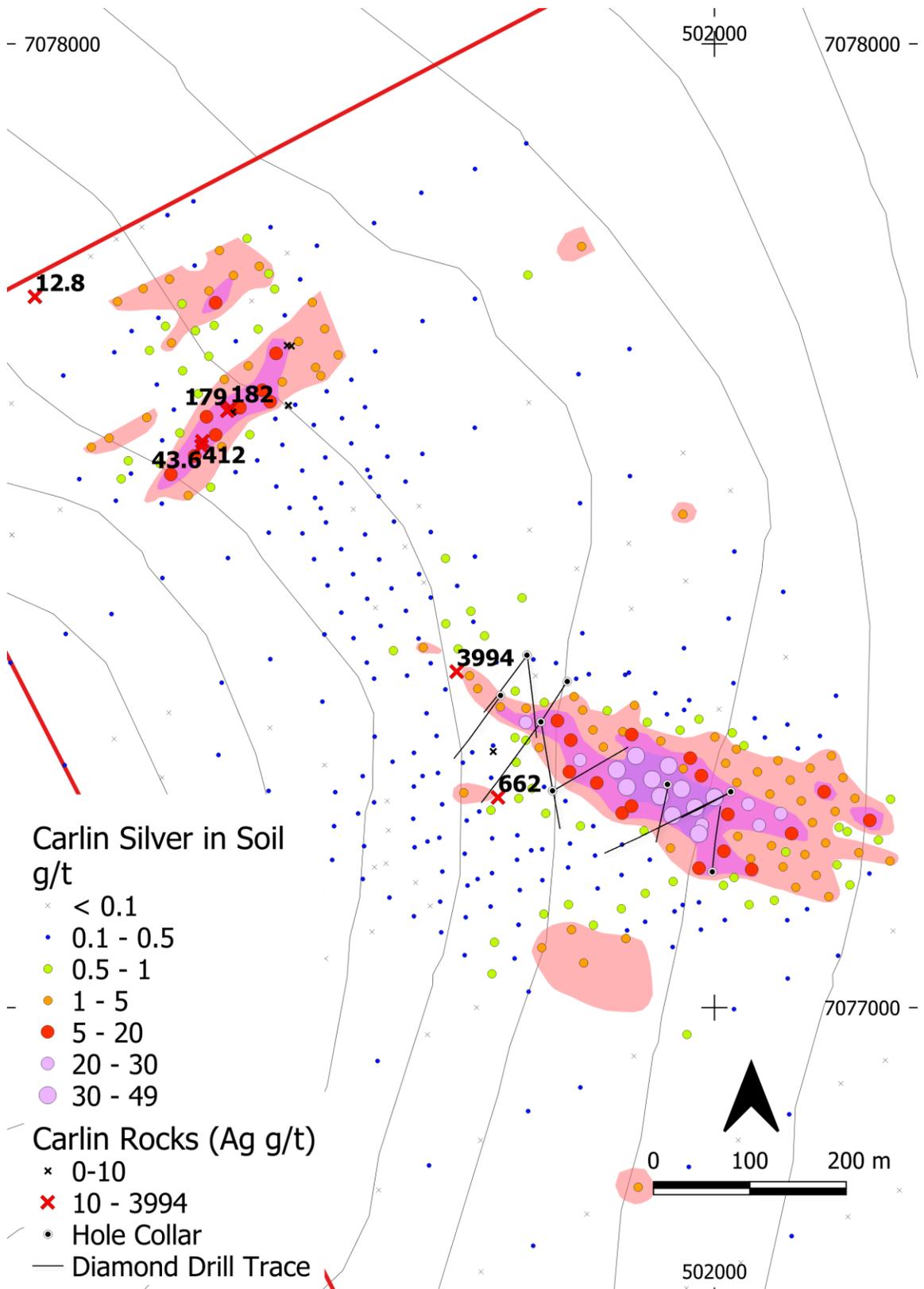


Figure 1. Silver in soil at the Carlin West and AJ zones, Carlin-Roop property.

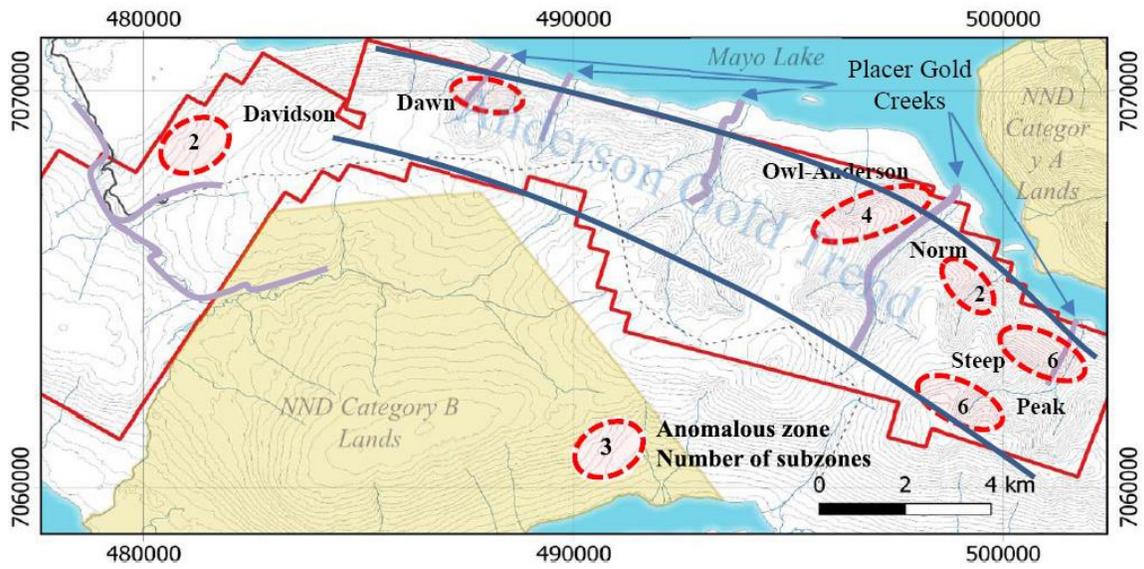


Figure 2. Anderson-Davidson gold prospects

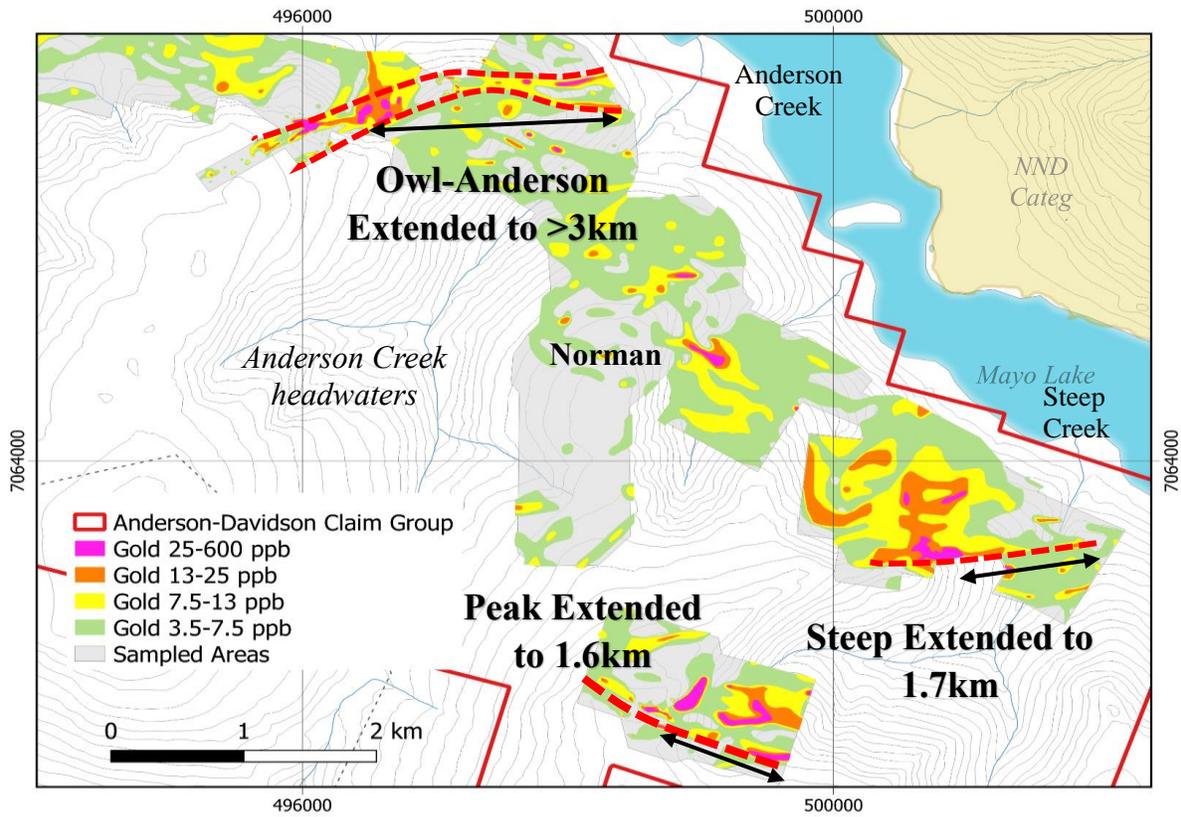


Figure 3. Anderson Gold Trend.