

Summer Drill Program Supports Potential for High-Grade Silver at Carlin-Roop

Ottawa, Ontario--(Newsfile Corp. - December 16, 2022) - Mayo Lake Minerals Inc. (**CSE: MLKM**) (**Mayo** or **Company**) is pleased to announce the results of the Company's 2022 summer diamond drill program at its Carlin-Roop silver discovery in the Keno Hill Silver District, Yukon. The 2022 results, in combination with results of earlier exploration and diamond drill holes (**DHs**) from 2020 and 2021, have intersected structures containing above background silver in combination with evidence of fracturing, faulting, alteration and mineralization (silver structures) over the 550m± long Carlin West silver in soil zone (**zone**). Part of the Carlin West zone, measuring 120m by 60m in area, is characterized by silver values greater than 30g Ag/t (1oz Ag/t). The 120m length can be extended to a total length of 220m to the southeast (Fig. 1) by decreasing the silver content of soils to ≥20g Ag/t (**zone's core**).

Grades from drill core matching assays of up to 994g Ag/t and 662g Ag/t from grab samples^[1] along the northeast part of the Carlin West zone have not been recovered from silver structures, which vary from 0.5m to 22m in length. The Company believes that this is most probably because intersections of mineralized core with poor recovery were commonly adjacent to higher grade intercepts in most DDHs in that sector. Those holes drilled in the southeast part of the zone's core, with the exception of one hole, were not adequately positioned enough to intersect the zone's core within the highly receptive Keno Hill Quartzite (KHQ). The recently delineated 240m by 55m AJ zone, 400m to the north of Carlin West, as yet to be drilled is characterized by highly anomalous silver in soils and grab samples running between 179g and 412g Ag/t.

2022 diamond drilling and detailed soil sampling

A total of 1,070 metres of diamond drilling was completed in eight DDHs focused on the Carlin West zone as delineated from prospecting, soil geochemistry, geophysics and the results from four DDHs drilled in 2020 and 2021. The 2022 DDHs intersected structures along the southwest flank of the recently expanded Carlin West core zone. Of special note is that detailed soil sampling was only completed after the 2022 drill campaign (see press release Oct 25, 2022).

Keno Hill Quartzite (**KHQ**), quartzitic metasediments (**MSD**), graphitic schists (**GSH**) and greenstone (**GRE**) (metamorphosed gabbro and diorite) were the common lithologies encountered in the drilling. KHQ, in some cases interbedded with MSD and GSH, is dominant in holes MLM22-10 through 13. Interbedded MSD and GSH are the predominant lithologies in MLM22-05 through MLM22-09. GRE was noted at depth in MLM22-09, 10 and 13. Extensive silicification was noted in MLM22-05-11. Quartz veining, some parallel, and some at acute angles, to foliations is extensive throughout most of the DDHs. All DDHs contain veins and disseminations of pyrite and pyrrhotite. Galena, sphalerite, siderite, tetrahedrite, siderite and sulfosalts are occasionally present in some structures, especially those containing quartz veins.

MLM20-01, MLM20-02, MLM21-03 and MLM21-04 all encountered structures containing anomalous silver, both in and below the GRE, as they progressed under or parallel to the highly anomalous Carlin West central core zone where all soil values exceed 30g Ag/t. The structures that contain anomalous silver can be projected up through the GRE into the KHQ. A high-grade silver zone is potentially projected in the receptive KHQ where a steeply dipping IP- Resistivity anomaly running parallel to the Carlin West zone cuts the KHQ.

MLM-05, MLM22-06, MLM-07 and MLM22-09 lie along the northwest extension of the Carlin West zone between prospecting samples running from 3994g Ag/t and 662g Ag/t. **MLM22-05** crosses the narrowest part of the Carlin West core zone adjacent to grab samples grading 662 and 3994g Ag/t and intersected fine stringers yielding silver values above background over 31m starting at 79.8m. The DDH also contains two silver structure intercepts anomalous in silver; one measuring 1.0m beginning at 83m

down hole; and a second measuring 6.9m beginning at 90.1m. The later interval was missing 0.2m of core adjacent to the 90.6m intercept of 8.4g Ag/t.

MLM22-07 collars into the Carlin West zone but is missing an aggregate 1.4m of core within its friable portions. Of note is a missing 0.4m interval of core adjacent to a 2.0m intercept grading 1.8g Ag/t, starting at 4.6m downhole. Starting at 98m, stringers yielding silver values above background over 22m downhole are common with 4 intercepts exceeding 1g Ag/t anomalous silver. **MLM22-06** intersects the Carlin West stringer zone over 15m starting at 85m downhole. It intersected two silver intercepts, one 5.6m in length and a second of 1m in length, exceeding 1g Ag/t within the stringer zone with 0.2m of core loss at the upper intercept. These structures are characterized by fractured and brecciated quartz zones. **MLM22-09** contains eight silver structures between 1m and 3m thick above 75m downhole and outside the Carlin West zone plus three structures between 8 and 6.3m long from 84 to 166m down hole, within the Carlin West zone as projected from surface. The lowest structure was within a GRE.

MLM22-13 contains two shallow weakly anomalous silver structures, but both project as being outside the core zone. **MLM22-12** was collared at a location where the core zone overlies KHQ. It intercepted a narrow structure containing weakly anomalous silver, at a depth of 84m. An IP-Resistivity profile cutting KHQ and highly anomalous surface soils suggest that MLM22-12, which intersected KHQ above the GRE, was collared in a location having a high probability of intercepting high-grade silver.

MLM22-10 and MLM22-11 collared in the Carlin West stringer zone produced a fractured intercept that did not produce a complete transect of the structure. Soil sampling from this season indicated that these holes were collared in the centre as opposed to the east of the anomaly as was planned. Both holes intersected a lower stringer zone over 10m wide with silver values up to 14.5g Ag/t. **MLM22-10** ended in a mineralized vein 3cm thick. This was below the minimum sampling interval of 0.3m, which was the sample taken from the end of the DDH that yielded 15.2g Ag/t. This stringer zone corresponds to surface float assaying 662g Ag/t and a muted soil anomaly.

Tyrell Sutherland, VP Exploration commented, "The broad silver structures intersected in our drilling this year define Carlin West as a considerably broader silver structure than we had anticipated. Most of these structures were drilled outside of a subsequently identified silver zone grading greater than or equal to one ounce of silver per tonne. The Carlin West structure was identified in a number of holes where it measured up to 22m in core length. At least one other broad structure was also identified in the drill holes."

He continued, "This mimics the historical difficulties defining high grade shoots through diamond drilling within the Keno Hill Silver Camp. Poor recoveries within the broad silver structures are cause for concern at both Carlin-Roop and at some ore bodies in the Keno Hill Silver Camp. This was the case at the Lucky Queen Mine that produced more than 11 million ounces where the silver was concentrated along as little as 15cm within broader gangue veins.^[2] Recent drilling does not explain the presence of high grade grabs and particularly high soils at Carlin West. The origins remain to be discovered. This is especially applicable in the broad core zone where the soil samples all assayed greater than 1ounce Ag/t. Through utilizing our oriented drill core measurements, we hope to vector to structural intersections that commonly control shoot orientations within the Keno Camp. The Carlin West core zone, which is defined by greater than 1 ounce of silver per tonne from this year's soil sampling, is marked by a number of structural intersections and is a primary target for both trenching and drilling. The AJ zone, as defined by float grading between 179g Ag/t and 412g Ag/t and a 300m long highly anomalous soil anomaly is also a primary target for trenching and drilling next season."

Sample Analysis, Collection and Quality Control

Drill core was transported from drill sites at Carlin West to a secure location in Keno or Whitehorse where a preliminary logs and photo verification of the drill core was completed. Blanks and standards were inserted at alternating intervals every 25 samples. The samples were then sealed in poly bags and each bag was identified with the insertion of one part of a three-part sample tag. Samples were

delivered to the BVC preparatory laboratory in Whitehorse. Pulps for analysis were prepared and then shipped to the BVC analytical laboratory in Vancouver, B.C. for analysis and assay where 15g of each sample are being analysed by Aqua regia digestion, ICP-MS analysis (BMV AQ201) for 36 elements (Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sr, Te, Th, Ti, Tl, U, V, W, Zn) BVM is compliant under ISO/IEC 7025 and ISO 9001. All processes during preparation and analysis of a sample are subject to rigorous QA/QC control. In addition, a number of blanks and commercial standards were inserted at regular intervals. A review of the results and the quality control revealed no irregularities.

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

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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 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.

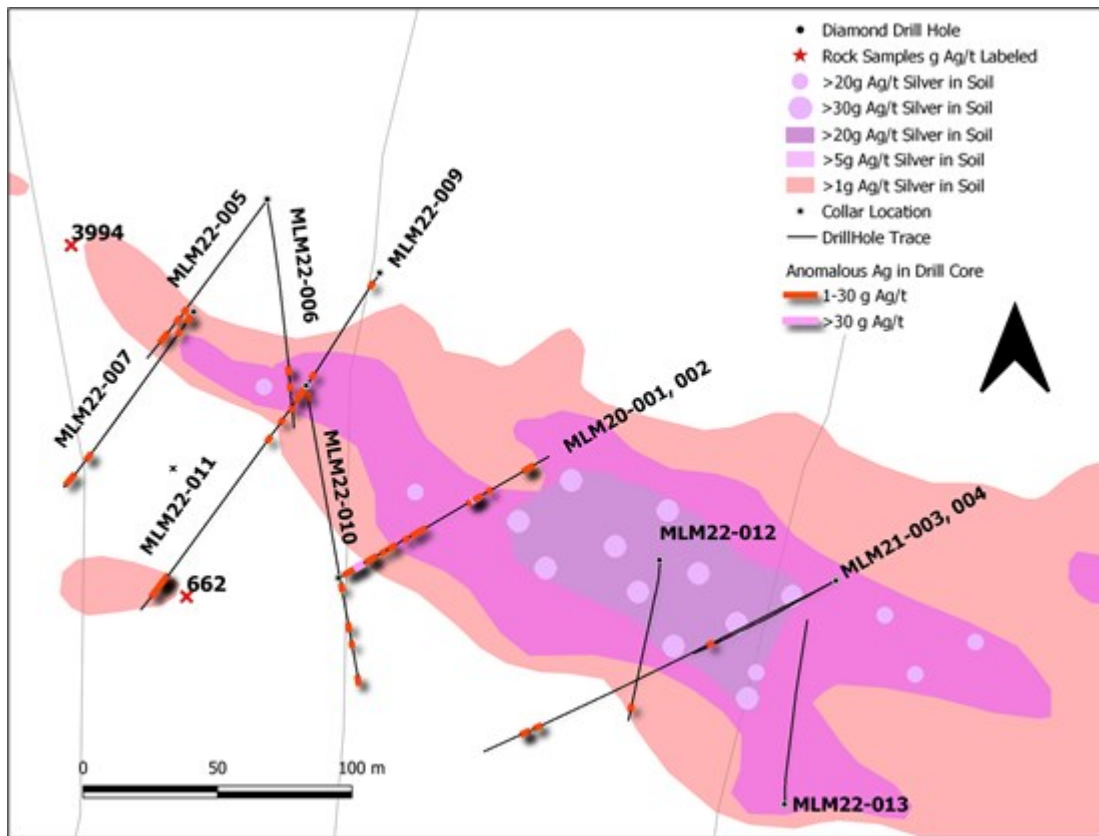


Figure 1. Carlin West silver in soil anomaly showing drill holes completed during 2020, 2021 and 2022

To view an enhanced version of Figure 1, please visit:

https://images.newsfilecorp.com/files/5471/148350_12aeb2e0d4970854_001full.jpg

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

[2] Cathro 2006, The History and Geology of the Keno Hill Camp.

To view the source version of this press release, please visit

<https://www.newsfilecorp.com/release/148350>