



MacDonald Mines Confirms Several Positive Gravity Anomalies Characteristic of an Iron-Oxide-Copper-Gold Mineralization System

Prepares to Drill Targets

Toronto, Ontario – March 3rd, 2023 - MacDonald Mines Exploration Ltd. (TSX-V: BMK, OTC: MCDMF) (“MacDonald Mines” or the “Company”) is pleased to share the highlights from a broad gravity survey completed over the Alwyn Copper-Gold (“Cu-Au”) Trend (“Alwyn”) on its 100% owned SPJ Property (“SPJ”) near Sudbury, Ontario.

Survey Highlights:

- **ALS GoldSpot Discoveries Ltd. (“ALS GoldSpot”)** has identified 5 high priority gravity targets potentially representing zones of iron-rich alteration associated along the prospective McLaren Lake Fault Zone (“MLFZ”) (see Figure 1) by integrating MacDonald Mines’ newly completed Alwyn gravity survey with regional magnetic surveys
 - All anomalous gravity high zones are spatially associated to the MLFZ, as well as intersections of structural lineaments that provide the primary plumbing for mineralizing fluids in this system.
- **A 250 m long, northwest trending positive gravity target was identified immediately adjacent to the 2022 Alwyn drilling**
 - Combined with observations of increasing iron enrichment at depth with the persistence of Cu mineralization in drilling, this anomaly supports the hypothesis for a zone of iron-rich alteration with potential to host Iron-Oxide-Copper-Gold (“IOCG”) mineralization at Alwyn.
- **Magnetic lows highlighted by ALS GoldSpot’s *MinusONE* inversion methods outline possible regions of strong albitization associated with the MLFZ**

Greg Romain, President & CEO, commented: “these results exhibit the size, shape, and density expected from our original hypothesis, that the SPJ Project has the potential to host IOCG and affiliated mineralization. What is even more exciting is the fact that there appears to be several new opportunities along the MLFZ, with one of the largest anomalies extending outside of the survey area at the southwestern margin. We are now preparing to begin drilling the target identified northwest of the 2022 drillholes at Alwyn.”

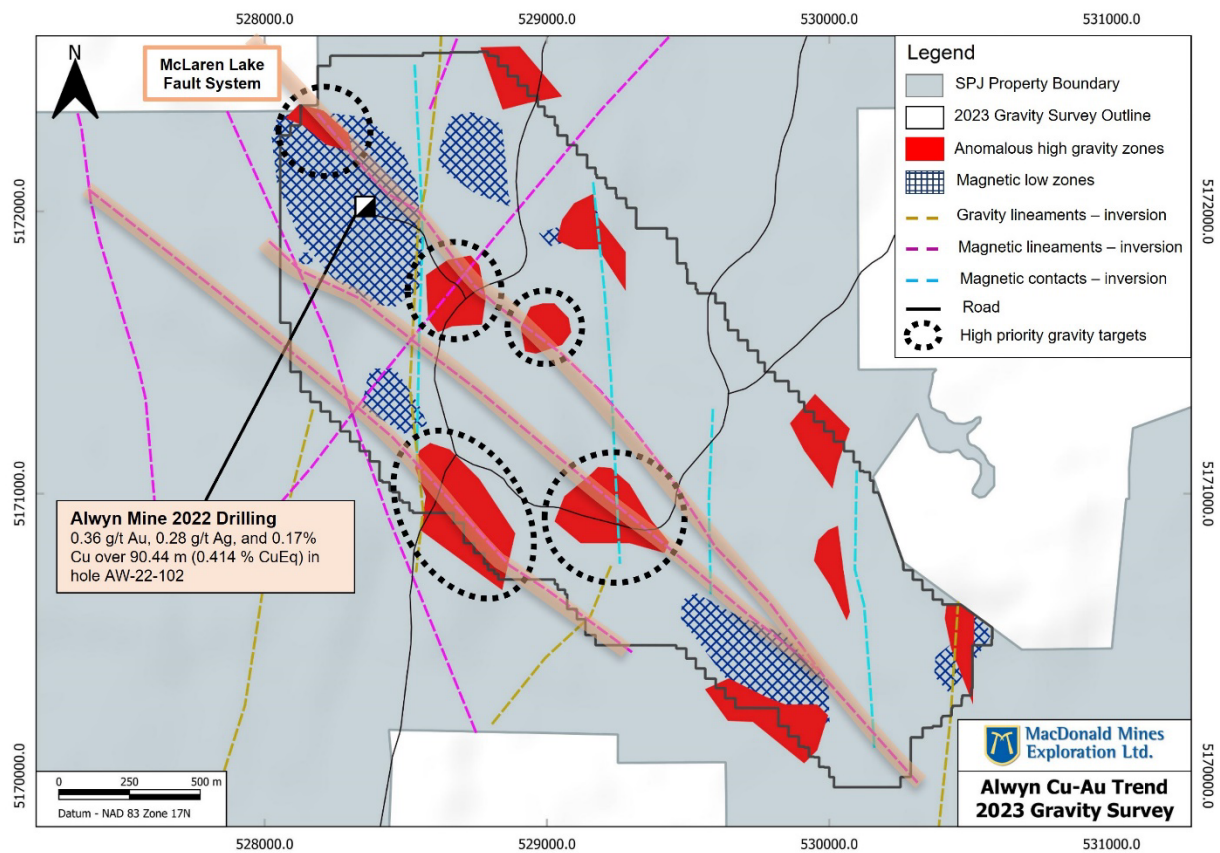


Figure 1. Gravity survey results from ALS GoldSpot's inversion.

The 321.9 Ha gravity survey positioned along the 2.5 km Alwyn Cu-Au trend was testing for zones of stronger iron alteration under the Alwyn prospect, in which Cu-Au mineralization could be associated with specular hematite to form IOCG mineralization. The survey was completed with 100 m line spacing at a line azimuth of 45°/225°. The survey extended 3.2 km along the McLaren Lake Fault Zone to cover the high and moderate priority targets proposed by ALS GoldSpot in May 2022. The MLFZ is highly prospective for polymetallic and critical metals mineralization. In addition to Alwyn, along the MLFZ on the SPJ Project the primary targets include the historic Ashigami mine and the Crerar showing, located 4.5 km and 9.5 km southeast of the Alwyn mine, respectively (Figure 2). Exploration along this structure will continue to be a primary focus for MacDonald Mines throughout 2023.

The results of the survey will now be integrated into ALS GoldSpot's machine learning technology to generate additional targets for future drilling and exploration beyond what we have already planned.

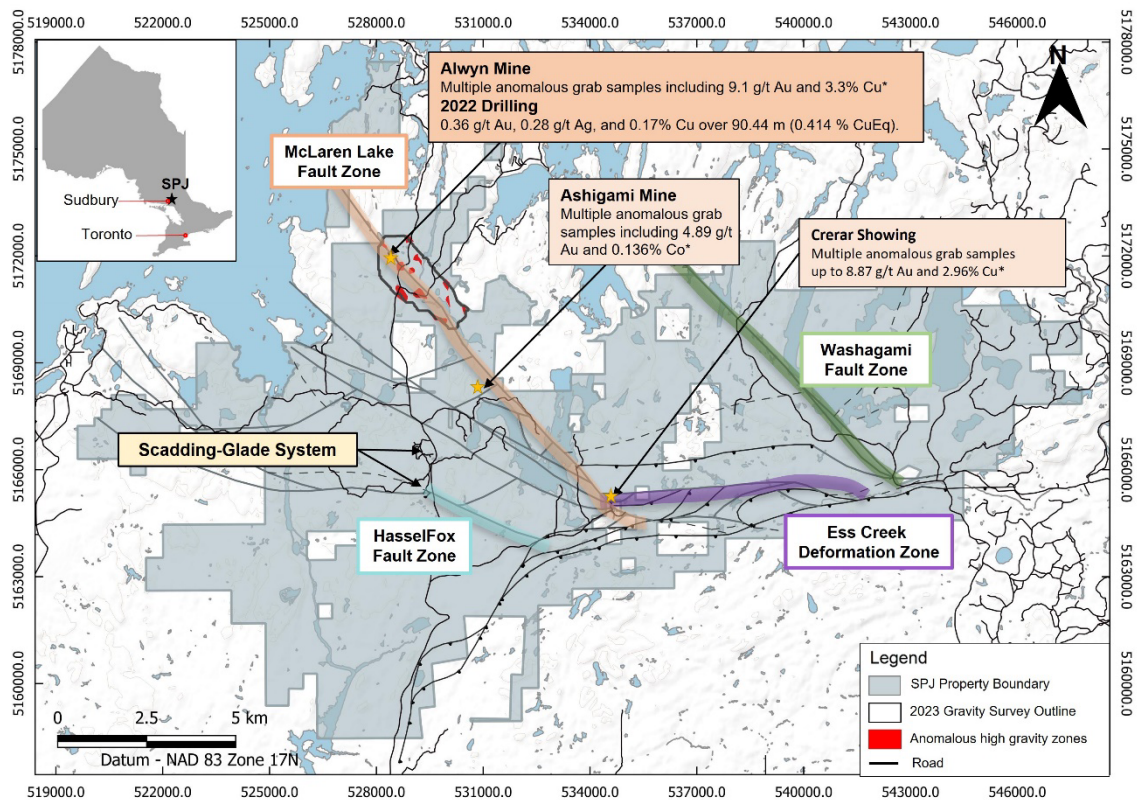


Figure 2. Polymetallic mineralization along the McLaren Lake Fault Zone and location of Alwyn gravity survey.

About MacDonald Mines Exploration Ltd.

MacDonald Mines is a Canadian gold and base metal exploration company focused on exploring its 100%-owned, 19,720ha (197km²) SPJ Project, 20km southeast of the prolific Sudbury Mining Camp in Northern Ontario. The Company's focus is to locate what it theorizes to be large gold systems with high-grade gold surrounding the past producing Scadding Gold Mine and potential large gold and polymetallic structures surrounding Alwyn, Glade, MacLeod and Norstar. The Company is also focusing on key critical metal systems surrounding Candore and Jerome within the SPJ Project to supply the renewable energy transition, particularly nickel, copper, and PGE's. The demand and need for critical metals is at an all-time high, and Macdonald Mines' believes the SPJ Property Area has the potential to be part of the solution.

Qualified Person

Jean-François Montreuil, P.Geo., Chief Geologist of MacDonald Mines, is the qualified person as defined by National Instrument 43-101 *Standards of Disclosure for Mineral Projects*, responsible for preparing, supervising, and approving this news release's scientific and technical content.

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To learn more about MacDonald Mines, please visit www.macdonaldmines.com

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