

September 11, 2023 Shares Issued and Outstanding: 65,650,060 TSX-V: MRZ OTC: MRZLF

# Mirasol Commences Vania Drill Campaign at Inca Copper-Gold Project in Chile

- Inca Gold is located within a "World-Class" Inca del Oro Mining District
- Priority drill targets strengthened by 378-kilometer Airborne Mobile MT geophysical survey
- Maiden drill hole collared at Vania South Prospect

**VANCOUVER, BC, September 11, 2023** — Mirasol Resources Ltd. (TSX-V: **MRZ**) (OTC: **MRZLF**) (the "**Company**" or "**Mirasol**") is pleased to report that the maiden drill program has been launched at the Vania South prospect on the Inca Copper-Gold Project ("Inca Gold") in Chile. The Vania South zone is controlled along a major north-northeast regional structural corridor which hosts the Inca del Oro porphyry to the south and the expansive El Salvador mining district to the north. Vania South is located at an important intersection of two important faults, which appear to control the emplacement of this magnetic anomaly.

"Vania South is a compelling drill target that has the characteristics of a concealed porphyry intrusive body hosted along a major structural corridor within a well-endowed world-class copper district. Supported by the recently completed Airborne Mobile MT survey, IP Ground geophysics, geochemical soil survey and select highgrade rock chip samples, the Vania South prospect was elevated as the top priority target for drilling," Mirasol's President, Tim Heenan, commented. "In addition, exciting new targets have been defined, specifically Vania East with a strong magnetic signature that is a mirror image of Vania South and is located along the same structural trend."

Inca Gold is a large 16,300-hectare property package located at a relatively low altitude of 2,300m (ASL) in the Paleocene belt of Chile with year-round access and nearby infrastructure. Pursuant to an Agreement between Mirasol and affiliates of Newmont Corporation ("Newmont"), Mirasol has the option to earn-in 100% of Inca Gold, subject to a 1.5% NSR royalty (news release January 13, 2020).

Figure 1: Location of Inca Gold Project and the Vania Prospects

#### Airborne Mobile MT Geophysical Survey Outlines High-Priority Targets

Mirasol completed a 378-line km Airborne Mobile MT survey (53 sq.km) covering the entire Vania prospect at Inca Gold, including the Vania South and North prospects as well as the recently defined Vania East and SW prospects, with tightly spaced (100m) helicopter flight lines over the principal targets.

The Airborne Mobile MT has high-definition depth penetration to greater than 800m depth below surface and has been proven effective in defining targets in high-sulfidation epithermal (HSE) and porphyry systems elsewhere in Chile. The survey has outlined several MT anomalies and the interpretation suggests they may represent hydrothermal alteration overlying and surrounding concealed intrusive centers.

### Vania South Prospect Prioritized for Drilling

Vania South was selected as the priority target because of the coincident geophysical survey and geochemical surface results along with its location at the intersection of two prominent structural trends. As previously reported, the reprocessing and re-interpretation of the original Newmont ground magnetic ("Mag") data resulted in the identification of the Vania South anomaly located 3 km south of Vania North (news release September 7, 2022). At the Vania South target a concealed and very strong, discrete magnetic response exists within the southeast corner of the Mag grid, showing smooth magnetic textures surrounding the main anomaly (news release December 8, 2022). Vania South displays a very interesting and strong magnetic high response in the analytical signal, and a very compelling target in the magnetic susceptibility processing. Interpretation of the Mag data suggests that this very strong magnetic anomaly may represent a concealed copper porphyry target, with the magnetic source potentially characterizing the potassic-altered core of an intrusive body and the smooth magnetic border representing the envelope of hydrothermal alteration.

### Figure 2: Vania Prospects – Ground Magnetics Outline Compelling Copper Porphyry Target

Coincident with the northern part of this set of Mag anomalies is a strong conductivity anomaly which was outlined by the Airborne Mobile MT geophysical survey. Vania South is located along the intersection of two very prominent structural trends, the north-south trending Quebrada Vasquez fault and the east-northeast trending Pique Seco fault. A large copper soil anomaly identified from the deep sensing geochemistry (DSG) survey results, resides above the geophysical anomalies in the alluvial/colluvial transported cover.

The first hole at Vania South is designed to pass through the horizontal resistive layer, which may represent a lithocap, and continue to penetrate the large magnetic anomaly, the MT conductivity anomaly, both of abovementioned controlling fault structures and the surface geochemical anomaly. The magnetic anomalies appear to reside in the downthrown block (hanging wall) of a large north-northeast structural trend which may separate the basement block on the west side, and the downthrown block on the east side, in a typical horst/graben type structural environment. The Vania South target appears to host characteristics similar to concealed porphyry intrusive bodies, in a very attractive structural setting.

#### Figure 3: Vania South Prospect – Drill Targeting Multiple Geophysical Anomalies and Structural Controls

#### New Emerging Vania East and Vania SW Targets

The reprocessing and re-interpretation of the original Mag data resulted in the definition of a new previously unknown prospective target at Vania East. In addition, reinterpretation of geochemical survey data outlined a multi-element geochemical soil anomaly at Vania SW. Mirasol has recently completed a detailed Pole-Dipole IP geophysical survey at Vania East, and a detailed ground magnetic survey at Vania SW. Both Vania SW and East are localized along a strong north-northeast structural trend. It is important to note that the Vania East target is a mirror image of Vania South and is located along the same structural trend.

#### Presenting at Beaver Creek Precious Metal Summit - Webinar

Mirasol is participating at the 2023 Precious Metals Summit in Beaver Creek Colorado from September 12 to 15, 2023 (<u>www.precioussummit.com</u>). The webinar presentation with Tim Heenan, the Company's President will be available on the <u>Mirasol website</u> following the conference on September 15, 2023.

#### **About Mirasol Resources Ltd**

Mirasol is a well-funded exploration company with 19 years of operating, permitting and community relations experience in the mineral rich regions of Chile and Argentina. Mirasol is currently self-funding exploration at two flagship projects, Sobek and Inca, both located in Chile and controls 100% of the high-grade Virginia Silver Deposit in Argentina. Mirasol also continues to advance a strong pipeline of highly prospective early and mid-stage projects.

#### For further information, contact:

Tim Heenan, President or Troy Shultz, Vice President Investor Relations

Tel: +1 (604) 602-9989 Email: <u>contact@mirasolresources.com</u> Website: <u>www.mirasolresources.com</u>

**Qualified Person Statement:** Mirasol's disclosure of technical and scientific information in this press release has been reviewed and approved by Tim Heenan (MAIG), the President for the Company, who serves as a Qualified Person under the definition of National Instrument 43-101.

**Forward Looking Statements:** The information in this news release contains forward looking statements that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in our forward-looking statements. Factors that could cause such differences include: changes in world commodity markets, equity markets, costs and supply of materials relevant to the mining industry, change in government and changes to regulations affecting the mining industry and to policies linked to pandemics, social and environmental related matters. Forward-looking statements in this release include statements regarding future exploration programs, operation plans, geological interpretations, mineral tenure issues and mineral recovery processes. Although we believe the expectations reflected in our forward-looking statements are reasonable, results may vary, and we cannot guarantee future results, levels of activity, performance or achievements. Mirasol disclaims any obligations to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as may be required by applicable law.

Neither the 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.

# Figure 1: Location of the Inca Copper-Gold Project & the Vania Prospects



# Figure 2: Vania Prospects - Ground Magnetics Outline Compelling Copper Porphyry Target



a) Ground Mag Analytical Signal shows mag high with possible drill hole locations, with "VANS-DDH-A" as the maiden hole.

*b)* Mag-susceptibility processing showing mag-low targets and 3D Model. Susceptibility from 2100m meter depth slice, extracted from a 3D Magnetic model. Figure 3: Vania South Prospect - Drill Targeting Multiple Geophysical Anomalies and Structural Controls



**Drilling Multiple Targets:** "A"-Conductive layer, possible lithocap "B"-High Magnetic Body "C"- Pique Seco Fault "D"-Quebrada Vasquez Fault "E"- IP Resistivity Break "F"- MT Conductivity Anomaly