



Mirasol Reports Encouraging Trench Results from the Atlas Gold-Silver Project, Chile

VANCOUVER, BC, September 16, 2013 – Mirasol Resources Ltd. (TSX-V: MRZ, Frankfurt: M8R). Mirasol Resources is pleased to announce assay results from the first phase of trenching at the 100%-owned 6300 hectare Atlas gold-silver property, located adjacent to Mirasol's Titan gold project, in the Miocene-aged volcanic belt of northern Chile.

Mineralization at Atlas is related to a large gold-silver bearing, high-sulphidation epithermal alteration system that has only been partially explored by Mirasol. This type of system hosts large, profitable mines in the Miocene-aged mineral belt of Chile, including Kinross's La Coipa high sulphidation silver-gold mine (located 150 km south of Atlas and Titan).

Two separate areas of at surface precious metal mineralization have been identified to date within the Atlas project ([Figure 1](#)): the Atlas Gold Zone (AGZ) and the Atlas Silver Zone (ASZ) where AGZ is located 2 km north of ASZ. Five trenches were completed at these prospects prior to the onset of the southern hemisphere winter, as a partial test of previously reported (see news release of June 10, 2013) rock chip gold and silver anomalies.

The highest gold trench results were received from the AGZ prospect where they correlate to a series of oxide vuggy-silica structures exposed over a 50 m interval in trench AKI-1([Figure 2](#)). Length weight-averaged channel results ([Table 1](#)) at a 0.25 grams/tonne (g/t) Au eq cut-off, from this trench include:

1.6 m of 7.28 g/t Au and 5.77 g/t Ag;
6.7 m of 2.33 g/t Au and 1.09 g/t Ag;
4.6 m of 1.18 g/t Au and 0.46 g/t Ag, and;
5.2 m of 1.46 g/t Au and 12.37 g/t Ag.

The highest trench results received for the ASZ prospect correlate to oxide, opaline silica-alunite breccia bodies in trench AKI-6. Length weight averaged channel results at a 0.1 g/t Au eq cut-off returned an anomalous silver interval of 55.9 m of 0.05 g/t Au and 39.9 g/t Ag. Highest channel sample results at a 0.25 g/t Au eq cut from ASZ trenches include:

20.2 m of 0.049 g/t Au and 35.9 g/t Ag; and
26.7 m of 0.016 g/t Au and 54.76 g/t Ag,
Including 11.2 m of 0.013 g/t Au and 92.43 g/t Ag.

At ASZ, trench AKI-4 tested for the source of high-grade Ag-bearing breccia float which has assayed up to 0.79 g/t Au and 639 g/t Ag. This trench did not locate the source of the float; however, we now interpret that this float may come from upslope to the northeast, potentially from extensions of the mineralization exposed in trench AKI-6.

Preliminary geological interpretation of these results suggests that mineralized zones at AGZ and ASZ extend under thin cover beyond the limit of current trenching. The distribution of gold-silver anomalous surface rock chips highlight other targets in the AGZ and ASZ prospects that warrant trenching to test for additional mineralization. PIMA (hand held mineral spectrometer) analysis of the mineralized trench samples shows an advanced argillic alteration assemblage typical of high sulphidation epithermal precious metal systems.

A recently completed detailed ground magnetic survey at Atlas ([Figure 1](#)) has delineated a large “magnetic quiet zone” (diffuse magnetic low), which coincides with areas of strong hydrothermal alteration defined by ASTER satellite imagery and geological field mapping. The combined “foot print” of the Atlas alteration zone covers an area in excess of 20 sq kms. The extent of the magnetic quiet zone points to thinly covered extensions of the alteration system that are yet to be explored.

Mirasol is planning for a southern hemisphere summer exploration program at Atlas, aimed at testing for extensions to the AGZ and ASZ anomalies, which will include systematic additional geochemical sampling in the known prospects and reconnaissance of the previously unexplored aerially extensive Atlas alteration system.

Stephen C. Nano, Vice President of Exploration for Mirasol, is the Qualified Person under NI 43-101 who has prepared and approved the technical content of this news release.

For further information, contact:

Mary L. Little
President and CEO

Tel: (604) 602-9989: Fax: (604) 609-9946

Email: contact@mirasolresources.com

Website: www.mirasolresources.com

Quality Assurance/Quality Control:

Exploration at the Atlas Project is supervised by Stephen C. Nano, Vice President of Exploration, who is the Qualified Person under NI 43-101, and Timothy Heenan, Exploration Manager. All technical information for the Company's projects is obtained and reported under a formal quality assurance and quality control (QA/QC) program. All rock chip and trench samples are collected under the supervision of Company geologists in accordance with standard industry practice. Samples are dispatched via commercial transport to an ISO 9001:2000-accredited laboratory in Chile for analysis. All samples are submitted to the Laboratory with independently sourced, accredited standard and blanks and where appropriate duplicate samples to facilitate monitoring of laboratory performance. Certified Results are examined by an independent qualified consultant to ensure laboratory performance meets required standards.

Assay results from surface samples may be higher, lower or similar to results obtained from drill samples.

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.