



## Mirasol Reports Results from New High-Grade Silver Veins at the Virginia Vein Zone, Argentina

**VANCOUVER, B.C. February 16, 2010 - Mirasol Resources Ltd. (TSX-V: MRZ, Frankfurt: M8R)** is pleased to report new high-grade silver assays ranging up to 3,170 g/t from rock chip sampling of additional veins discovered at the Virginia vein zone in Santa Cruz Province, Argentina. Ongoing mapping and sampling of the recently discovered Virginia mineralization continues to identify new veining while expanding the size of the mineralized zone at this 100% Mirasol-owned project.

The Virginia vein zone is a new grass roots discovery made by Mirasol geologists during follow-up exploration of structural and alteration targets, identified through the Company's proprietary targeting (news release January 6, 2010). Initial surface rock chip samples (30) reported from the Julia Vein over a 2,000 metre length returned between 21.9 and 2,660 g/t silver and from < 0.01 to 0.14 g/t gold. The latest exploration further identified multiple mineralized veins within a vein zone of dimensions greater than 2,000 by 1,000 metres.

This news release presents assays from 75 rock chip, chip channel and four saw-cut surface samples from the Ely, Naty, Margarita veins, and chip sampling of subcropping blocks that represent newly discovered, but as yet unnamed veins ([Figure 1](#)). Assay results from this round of sampling range between <5 to 3,170 grams per tonne (g/t) silver, with 15 samples containing over 500 g/t silver. The arithmetic average grade of the 75 reported samples is 408 g/t silver, 0.01 g/t gold and 0.33% lead (Table 1). These results build on the high-grade silver assays previously reported from the Julia Vein of the Virginia vein zone.

**Table 1. Virginia Vein Zone – Rock Sample Results of New Veins**

Vein	Number of Samples	Statistical Parameter	Silver (g/t) <sup>1</sup>	Gold (g/t) <sup>2</sup>	Lead (%) <sup>3</sup>
Ely Vein	23	min	<5	<0.05	0.02
		max	1,670	0.11	1.16
		<b>average</b>	<b>252</b>	0.02	0.21
Naty Vein	30	min	<5	<0.05	0.00
		max	578	0.10	1.32
		<b>average</b>	<b>296</b>	0.02	0.40
Margarita Vein	8	min	67	<0.05	0.06
		max	3,170	<0.05	1.45
		<b>average</b>	<b>1,106</b>	<0.05	0.43

Unnamed Veins	14	min	<5	<0.05	0.00
		max	2,280	<0.05	0.26
		<b>average</b>	<b>506</b>	0.01	0.30
Combined	75	min	<5	<0.05	0.00
		max	3,170	0.11	1.45
		<b>average</b>	<b>408</b>	0.01	0.33

Notes -All analyses done by ALS Chemex Laboratory, Mendoza, Argentina

1. Silver results are by Ag-GRA21, a fire assay collection method with gravimetric finish
2. Gold by Au-AA24, a fire assay collection method with atomic absorption spectroscopy finish
3. Lead results to 10,000 ppm (1%) are by ME-ICP41 with over values >1% by Pb-OG46

Current mapping by Mirasol geologists, together with semi-systematic sampling has confirmed that strike lengths of over 900 metres of the Ely Vein, 475 metres of the Naty Vein and 200 metres of the Margarita Vein are strongly mineralized with silver (Figure 1).

The Ely Vein has been traced in intermittent outcrops along a total strike length of 2,000 metres, with the southern 900 metres of veining containing higher grade silver values. Averages presented in Figure 1 and Table 1 are for the full 2,000 metres. In several locations the Ely Vein comprises two parallel veins separated by altered and brecciated wall rock with the width of the combined veins and internal wall rock ranging from one to greater than three metres. The vein is mainly composed of breccia vein with minor banded vein texture and appears to have higher iron and manganese content compared to other veins.

The Naty Vein comprises two parallel veins separated by 5 to 20 metres, which pass under soil along strike in both directions. The eastern vein subcrops and may range up to 8 metres in width and carries higher silver grades. The western vein appears to be less than 2 metres wide and is lower grade but still well mineralized. The Naty Vein contains mineralized banded and breccia vein types similar to the Julia Vein.

The Margarita Vein is textually similar to the Julia Vein and contains banded and breccia vein textures. It is well exposed in one location where saw channel samples returned 1,486 g/t silver over 1.4 metres. The Margarita vein is covered by soil along strike in both directions.

A series of new and as yet unnamed veins have been identified as subcrop and large float blocks in a topographic low to the east of the Julia Vein. Lack of good exposure has not allowed confident determination of the number of veins and their orientation. Rock chip samples returned high-grade silver values of 2,040 and 2,290 g/t in this area.

In general, wall rock to the veins of the Virginia zone is poorly exposed and therefore the true widths of the veins and the potential for wall rock mineralization remain to be determined. Drilling or mechanical trenching will be required to systematically sample the wall rock to determine the average true widths and grades of these veins and to establish if the wall rock is mineralized.

The 30 rock chip samples from the Julia Vein previously reported in the news release of January 6, 2010 returned a significant number of high grade silver assays. The Company determined to re-assay these samples using fire assay gravimetric method, which is considered to be a more

accurate process for determining grade in strongly mineralized precious metal samples. These re-assays of the Julia samples are systematically higher grade than the previously reported assays. The average silver grade of the original 30 samples increased from 645 g/t silver to 696 g/t silver by fire assay method.

Mirasol's geological crews are currently in the field, systematically sampling known veins and exploring and sampling newly discovered veins. Mirasol's in-house geophysical team is undertaking ground magnetic and IP/resistivity surveys, with the objective to trace continuity of veins in covered areas and to determine controls on the mineralized system. The results of systematic saw-cut channel samples from the Julia vein are being received and processed and are expected to be released in the next few weeks.

“Results reported in this news release demonstrate that the Virginia vein zone discovery contains multiple strongly mineralized veins over an area of significant dimensions.” stated Mary Little, Mirasol's president. “Mirasol's management looks forward to reporting additional results that will flow from the ongoing systematic surface work underway that continues to expand this exciting new silver discovery.”

Paul G. Lhotka, Principal Geologist for Mirasol, is the Qualified Person under NI 43-101 who has approved the technical content of this news release.

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**Quality Assurance/Quality Control:**

Exploration at Mirasol's Projects is supervised by Stephen C. Nano, Vice President of Exploration; Exploration Manager, Timothy Heenan; and Principal Geologist, Paul Lhotka, all qualified persons under NI 43-101. All technical information for the Company's projects is obtained and reported under a formal quality assurance and quality control (QA/QC) program. Rock chip and stream sediment 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 Mendoza, Argentina for analysis. Results are routinely examined by an independent geochemist to ensure laboratory performance meets required standards.

All assay results reported herein are for surface rock chip samples; assay results from subsequent drill core sampling may be higher, lower or similar to results obtained from surface samples.

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