



## **Mirasol Reports Successful Initial Metallurgical Test Results on High-Grade Vein/Breccia, Virginia Silver Project**

**VANCOUVER, BC, February 7, 2013. Mirasol Resources Ltd. (TSX-V: MRZ, Frankfurt: M8R)** ("Mirasol") announces initial results of a program of metallurgical test work at the 100%-owned Virginia Silver Project located in Santa Cruz Province, Argentina. The test program was designed to determine how silver can be recovered from mineralized drill core sourced from the Julia and Naty veins at the Virginia Project (news release of June, 2012). Representative drill samples of the high-grade vein and breccia-vein material were composited separately from the surrounding halo of low-grade mineralization, and were tested separately. Test results to a scoping level show that the vein/breccia mineralization can be processed using standard industry technologies with silver recoveries from 75% to 81%, through both agitated leaching and sequential flotation/leaching methods.

Tests on the low-grade halo material, which surrounds high-grade vein and vein/breccia, have not responded in the same way, and to date have not resulted in potentially economic recoveries. Mineralogical test work is underway to investigate the host minerals for silver in the halo, with the goal to increase the recoveries of the low-grade halo.

"Test work shows the high-grade vein/breccia, the material which contains the majority of the silver present in the Virginia silver vein system, has good silver recoveries using proven, low risk technologies. This is a major step forward for the Virginia Project." said Mary Little, Mirasol's President and CEO.

### Technical Details

A master composite and individual composites of vein/breccia material were prepared from samples taken from 34 representative drill holes from the Julia North, Julia Central, and Naty veins. Fifty previously-assayed, individual intervals of samples representing 53.1 metres of core with a total weight of 100.2 kilos, and were composed from sample reject material. In the case of Julia North, an additional composite was made from 18 quarter-core samples representing 14.7 metres with a total weight of 51.4 kilos.

Test work showed that the recoveries by both standard flotation and leaching methods are grain-size dependent, and moderately fine grinds are needed to ensure good silver recoveries.

Optimized bottle-roll leaching tests on the vein/breccia material averaged 75 – 80 % silver recovery using the test conditions summarized in Table 1. While the primary grind was moderately fine, the required residence time and reagent consumption were modest by the standards of silver materials of this type. Overall processing costs are likely to be quite modest and the process provides a low technical risk.

Table 1. Leaching Tests – Representative Summary					
Head Grades Silver g/tonne	Grain size passing 80 microns (µm)	Concentration NaCN g/L	Reagent Consumption (kg/t of cyanide feed)		Silver Recovery %
			NaCN	CaO	
230 - 614	45 – 50	3 – 5	1.5 – 2.2	0.2 – 0.6	75 – 80

Flotation test work was carried out on the sample reject material from Julia North, Julia Central, and Naty Veins, and also on a sample of quarter-core material from Julia North Vein, in order to assure that reject material was not more oxidized than core, which could potentially affect silver recoveries. Results showed that the responses from samples made from core and reject material do not differ at Julia North. Visually, the core is highly oxidized, but mineralogical studies have shown that the main silver mineral is acanthite, a silver sulphide (87% silver). Flotation tests were moderately successful in concentrating acanthite into rougher concentrate with recoveries of 66 to 71 % (Table 2). Subsequent regrinding and intensive leaching of the rougher concentrates recovered greater than 98% of the silver in the concentrates, indicating that silver dore could be made from the concentrates with very small losses, producing a high value product (Table 2).

Table 2. Flotation Tests – Representative Summary					
Head Grades Silver g/tonne	Grain size passing 80 microns (µm)	Rougher Con 1-4 Grade Ag g/t	Mass Pull %	Tail Ag g/t	Silver Recovery %
315 - 421	49 – 84	2,630 – 6,300	4.4 – 10.4	124 148	<b>66 – 71</b>
Note - intensive CN leaching of float concentrate resulted in > 98% recovery of contained silver					

Furthermore, leaching of the flotation tails was successful in recovering additional silver. The tests done to date produced combined flotation/leaching recoveries of 79 – 81% of the silver (Table 3).

Table 3. Combined Flotation and CN Leach of Tails Tests – Representative Summary				
Head Grades Silver g/tonne	Regrind Grain size passing 80 microns (µm)	Flotation Silver Recovery %	Additional CN Leaching Silver Recovery %	Combined Silver Recovery %
315 – 421	40 – 45	71.2	7 – 10	<b>79 – 81</b>

In summary, the vein/breccia samples have shown they respond well, and produced silver recoveries in the range of 75% – 81%, using technologies that are proven worldwide and in use at the three precious metal mills operating in the province of Santa Cruz (Cerro Vanguardia, San Jose and Manantial Espejo mines).

Metallurgical recoveries on the halo composite of low-grade mineralization surrounding the Julia North, Central, South, and Naty veins do not achieve those of the vein/breccia material. Mineralogical studies combined with the metallurgical test results to date suggest that the halo contains some acanthite which is

being recovered, but that the majority of the silver in the halo is present in other minerals. The next phase of work on the halo sample will be mineralogical in order to better understand the silver mineralogy.

Chris Martin, C. Eng; Principal Metallurgist with Blue Coast Metallurgy Ltd., is the Qualified Person that has supervised the metallurgical test work conducted primarily at Blue Coast Research Ltd. in Parksville, British Columbia, Canada, and has read and approved the technical content of this news release. 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 for Mirasol.

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**Quality Assurance/Quality Control:**

Exploration at Mirasol's Projects is supervised by Stephen C. Nano, Vice President of Exploration; Timothy Heenan, Exploration Manager; and Paul Lhotka, Principal Geologist who is the Qualified Person 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. Drill core, 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.

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

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