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George Cross News Letter

"Reliable Reporting" WESTERN CANADIAN INVESTMENTS

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MISTY MOUNTAIN GOLD LTD. [MGL-V;MGLCF-OTC BB] 14,326,916 SHS. METALLURGY TESTS SUCCESSFUL - Robert G. Hunter, chairman, Misty Mountain Gold Ltd.,

reports results have been received from metallurgical testing recently completed to determine the optimum gold recovery process for the 100% owned 3.130,000 ounce <u>Specogna deposit</u> on the Harmony gold project. The project is located on Graham Island, the most northerly of the Queen Charlotte Islands about 50 miles off the northwest coast of BC. SEE PROJECT MAP OVERLEAF P.2.

The program has proven two conventional and relatively low cost processing alternatives are effective in recovering Specogna deposit gold at high rates with a third option also likely to prove effective, upon completion of further tests. The processing, alternatives are: Conventional milling provides 80% recovery with flotation concentrates shipped directly to Asian smelters. Conventional stirred tank bio-oxidation of gold floatation concentrates followed by Carbon In Leach precious metal recovery and doré production for 85-90% gold recovery. Bio-heap oxidation of flotation concentrates followed by CIL precious metal recovery and doré production. Accurate gold recovery rates for this probable processing alternative will be reported when further tests are completed.

Misty Mountain can now focus on process optimization work to finalize selection of a processing alternative.

The scope of the metallurgical testwork included examination of various unit processes, including gravity concentration, flotation concentration, whole ore and concentrate cyanide leaching, biooxidation pre-treatment followed by cyanide leaching and agglomeration. The work was conducted by Process Research & Associates Ltd. (PRA, Vancouver, B.C.), International Metallurgical & Environmental Inc. (IME, Kelowna, B.C.) and G&T Metallurgical Services Ltd. (G&T, Kamloops, B.C.). The entire program was conducted under the direction of Ross Banner, P.Eng., Engineering Manager, Hunter Dickinson Inc. and metallurgical consultant Peter Taggart, P.Eng., of P. Taggart & Associates Ltd. The program was based on a 4,500 kg composite bulk sample grading 2.3 grams gold/tonne slashed from the underground exploration adit developed through the Specogna deposit. The bulk sample represented the gold-resource within the open pit mine model developed for the project by

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Independent Mining Consultants of Tucson, Arizona.

The test program included flotation tests which showed recoveries of 80% of the gold reporting to a gold concentrate grading 50 to 55 grams gold /tonne. Moderate further improvements in flotation recoveries can be expected with final flotation circuit optimization work. Samples of concentrate produced were subjected to multi-element analyses which showed that no minor elements will constrain the marketability of the concentrate. A 10,000 tpd flotation plant would produce in the order of 120,000 tonnes per year of flotation concentrate containing 212,000 ounces of gold and 154,000 ounces of silver. The concentrate could be sold to smelters based in Asia. The rates of flotation and gold recovery at a variety of primary grind sizes were also examined. The primary grind will be moderate and is expected to approximate P80 50 µm (80% passing 0.05mm mesh). Rougher concentrate will be reground to a nominal P80 15 µm (80% passing 0.015mm mesh) to permit optimum metallurgical performance in the cleaner flotation circuits.

Gold recoveries of 20% were achieved by a gravity circuit in the flowsheet prior to flotation. Based on these results it is probable a process plant for the Specogna deposit will incorporate a gravity concentration circuit.

Gold extraction in excess of 90% are attained by pre-treating ore, or flotation concentrates, using conventional bio-oxidation procedures. Test conducted to evaluate the relationship between sulphide oxidation and the amount of gold extracted through cyanide leaching of the oxidized residues determined gold recoveries of 85% can be achieved when 60% of the sulphur is oxidized. At 10,000 tonnes per day of plant feed, this would equate to 80 to 100 tpd of sulphur to be oxidized; an amount which is similar to existing commercial operations.

The proven amenability of Specogna mineralization to biooxidation provides at least two treatment alternatives. First, flotation concentrate could be subjected to bio-oxidation in a stirred tank prior to conventional carbon-in-leach (CIL) processing, a process in use throughout the world. Under this processing alternative gold recoveries of 85% to 90% are forecast.

GeoBiotics, in strategic alliances with Homestake Mining Company and Newmont Mining has developed and patented the GeoCat process whereby flotation concentrates are agglomerated on coarser host rocks and subjected to bio-oxidation in a heap. Having achieved the required degree of sulphur oxidation, the fines are washed from the host material and subjected to CIL processing in stirred tanks to extract the precious metals. Agglomeration tests have demonstrated Specogna concentrate can be successfully agglomerated on to the surface of coarser mineralization. Further testing of this processing alternative is required before accurate gold recovery rates can be reported. (SEE GCNL NO.41, 1Mar99, P.4 FOR PREVIOUS HARMONY GOLD PROJECT INFORMATION)

