## MEG LUNCHEON PLEASE CIRCULATE AND POST

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## The Specogna Epithermal Gold Deposit

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The Harmony Project comprises 444 square kilometres of mineral claims covering favorable geological and structural targets known to host epithermal gold. It is located on Graham Island, within the Queen Charlotte archipelago, 720 kilometres north of Vancouver and 85 kilometres west of Prince Rupert, B.C. The focus of the current exploration activity is the Specogna epithermal gold deposit located 20 kilometres southwest of the nearest town of Port Clements. The Specogna deposit is 100 percent owned by Misty Mountain Gold Limited, a Hunter-Dickinson company, and is listed on the Vancouver and Toronto Stock Exchanges.

The Specogna gold deposit is adjacent to the Tertiary Gold Creek volcanic complex, and is localized along the northerly-striking left-lateral-normal Sandspit-Specogna fault system in a dilational shear zone environment. The deposit is hosted within sedimentary rocks of Cretaceous to Tertiary age with the latter being most favored. The Cretaceous sedimentary rocks occur west of and on the foot-wall of the Specogna fault and are represented by the Haida Formation dominated by dark-gray to black, variably calcareous, indurated mudstone with minor sandstone and siltstone layers. The Tertiary Skonun Formation occurs east of the Specogna fault. It consists of coarse to fine conglomerate, minor mudflow breccia, silica sinter and minor siltstone and sandstone. It culminates in a sandy debris-flow, with pelecypods. The depositional environment of the Skonun Formation in this area is indicative of an alluvial fan in a near shore marine environment. Rhyolite of Tertiary age is intruded into the sediments and is dominantly localized by the Specogna fault.

An epithermal hot-spring sequence is deposited within, intrudes into and overprints the above sedimentary and intrusive rocks. The Tertiary sediments and the rhyolite are pervasively silicified and adularized to over 200 metres from the Specogna fault with extensive peripheral argillic alteration. A hydrothermal breccia is localized on the hanging-wall of the fault and incorporates both sedimentary and intrusive rocks, with a matrix dominated by silica with minor adularia. It is up to 100 metres wide, has been traced for at least 850 metres along strike and extends down-dip for over 300 metres. Banded quartz veins and quartz stockwork veining extend in a northeast direction from the hydrothermal breccia and post-date the pervasive silica-adularia alteration. The multiphase appearance of the hydrothermal breccia and large banded quartz veins, a paleo-mudpot outcropping at surface, two layers of silica sinter occurring within the Tertiary sediments at depth and large clasts of quartz veins occurring within the silicified and veined upper sandy debris-flow are all indicative of a long lived hydrothermal system.

Sulphides represent only 3% of the mineralized rock by volume with 95% of the sulphides being pyrite-marcasite. Gold mineralization occurs within the Tertiary sediments, hydrothermal breccia and rhyolite on the hanging-wall of the Specogna fault (which have been the focus of past exploration efforts) and within quartz veins associated with rhyolite intruding the Haida Formation on the little explored foot-wall of the Specogna fault. On the hanging-wall of the fault gold occurs disseminated within the pervasive silica-adularia alteration and significant amounts of gold occur within quartz stockwork and banded quartz veins not only microscopically but at visible levels. Vein textures and the occurrence of visible gold associated with them indicate that both mixing of meteoric water with hydrothermal fluids and boiling events localized gold deposition.

Previous operators defined a gold resource of over 2.3 million ounces based on dominantly vertical drilling and lesser angled drilling towards the southwest on a wide spaced grid. Misty Mountain demonstrated, in 1995, through detailed sampling of the quartz veins and wall-rock in the 344 metre long adit that the quartz veins are: dominantly vertical and strike northeast at approximately 034 degrees, have grades three times that of the wall-rock and represent 20 percent of the rock volume in the drifts. Misty Mountain concluded that the gold resource could be upgraded by drilling at right angles to the veins. To that end a preliminary drilling program, of 49 holes, was undertaken from October, 1995 to March, 1996 totaling 10,000 metres. Holes were angled towards the southeast at 120 degrees with a -45° dip and drilled on 20 metre centres. Analysis of oriented core data has shown the veins to have a dominant strike orientation averaging 030 degrees with near vertical dips. Comparison of grades of old holes versus the 49 new holes within the same volume has shown a significant increase in gold grades associated with the new drilling. Based on these results Misty Mountain has continued its drilling program to upgrade and prove the resource in order to configure and calculate mineable reserves. To date 131 drill holes have been completed totaling 30,097 metres. Drilling is expected to continue into the first quarter of 1997.

## Wednesday December 11 - 12 Noon - Hotel Georgia \$19.00

The Vancouver MEG is an informal association of mineral exploration professionals and associates who host luncheons every second Wednesday throughout the winter and early spring months. The luncheons are accompanied by a presentation on a current exploration program or other topical subject and would be of interest to any member of the mining or investment community. Tickets are sold at the door starting at 11:30 on a first come, first served basis.

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