SPECOGNA (CINOLA) - [MI-103F034]

On August 5, 1996 I visited the Specogna gold deposit, 18 km southwest of Port Clements. Robin Tolbert, Project Manager, and Brian Bower, Project Geologist [Misty Mountain Gold Mines Ltd.] very kindly provided me with an "update" on the project, as well as an extensive site tour. Fortunately, there was a break in drilling (2 rigs); over 6000 metres in approximately 28 holes have been drilled in the current phase (out of a total of 26,000 planned metres in 58 holes). Since its discovery in 1970, over $40 million has been spent on exploration by numerous operators. The mineable open-pittable resource (1990) was (is) estimated at 2.2 million ounces of gold contained within 31.3 million tonnes grading 2.2 g/t Au. The strip ratio (waste: ore) is 1.7:1. The total geological resource is estimated at greater than 3 million ounces of gold. After a feasibility study, Barrack Mines Ltd. decided NOT to proceed to production (May, 1990).

The deposit lies at the intersection of the Gold Creek volcanic complex and a dilational jog in the Specogna-Sandspit fault system; related in part to a high-level rhyolite porphyry intrusion (dike). Repeated activation of this structural environment, and intrusions into the fault systems resulted in the formation of a pervasive, silicified, disseminated (stockwork) and vein gold system. Continued activation of structures formed stockwork fracture sets filled by later quartz veins. Cooling of the hydrothermal fluids resulted in super-saturation and precipitation of silica and gold. The epithermal deposit is characterized as being of the low sulphidation quartz-adularia type (also low-sulphide).

In 1995 - early 1996, Misty Mountain completed a $2 million, initial (49 holes) diamond drilling program which tested approximately 15% of the deposit (1000 feet long by 330 feet wide, of the total 2,800 feet long by 800 feet wide deposit). The drilling was systematically carried out on a 20m by 20m grid on 5 East-West 'fences' (sections) perpendicular to the strike (030°/v) of the larger quartz veins, and at a -45° angle. [Note: all previous drilling has been from east to west and subparallel to parallel to the larger quartz veins, i.e. missed some veins, or drilled down some]. The results were "highly encouraging" and suggest a <u>24% increase</u> in gold assays, plus the existence of high-grade, bonanza gold zones throughout the deposits. [e.g. DDH 95-020: 825 ft. @ 0.934 opt Au; DDH 96-049: 41 ft. @ 0.78 opt Au 7.]

In May, 1996 Misty Mountain commenced $5 million diamond drilling program [Note: Total 1996 budget, which included Jan.-Feb. '96 drilling of approximately $1M, is estimated at $6 million]. The drilling is 'moving' northwards on section lines (20m by 20m grid); the final sections drilled will be on the southern end of the deposit. The company hopes/plans to drill some DEEP drill holes to test for bonanza, high-grade vein gold ore at depth (i.e. closer to the hydrothermal source and/or root of rhyolite porphyry (+ breccia) dike system). Afterwards, mineable gold reserves will be calculated for both the lower-grade vein (and country rock stockwork) (i.e. open-pit) and bonanza, high-grade (i.e. underground) zones; a report on whether or not to proceed with development is expected in about a year. Previous metallurgical studies indicate recovery of gold from low-grade, disseminated ores of less that 80% and from high grade, bonanza veins ones of greater than 90%. The vein-type ore is refractory and lower-grade, disseminated (stockwork) ore in silicified rocks).

The 1995-1996 work programs to-date have confirmed the importance/significance of the northeast-trending "swarms" of larger gold-bearing quartz veins and further suggest that these veins have a RAKE of 45° to the northeast. Interestingly, carbonized (+ silica + pyrite + marcasite) logs are oriented parallel to the strike of the larger quartz veins. In addition, 2 separate

(i.e. 30 m vertically apart) horizontal SINTER 'horizons' have been identified in the Skonun sediments. These are indicative of a near surface environment at the time of mineral deposition.

A thesis study at the University of Hikaido (Japan) is in progress. To date, the student has identified at least 17 stages of silica deposition (i.e. multistage), with fluid inclusion studies indicating temperatures of formation of approximately 140° C. The company is hopeful that higher-grade, bonanza type ores exist at depth (i.e. at higher temperatures around 250° C). Banded quartz veins locally exhibit bladed textures (quartz after calcite) indicating that boiling has occurred. Also, x-ray studies have identified 3 'high-grade' smectite-illite (clay alteration) zones; these will be investigated by drilling (i.e. potential hotspots/centres?). It is now apparent that adularia is pervasive as an early stage event in the larger quartz veins. The company is paying close attention to the colour of the quartz veins (i.e. better gold grades associated with grey-coloured veins). The degree of silicifation increases towards the rhyolite dike, as does the brecciation and/or hydrofracturing. Outboard in the Skonun sediments. The age of the rhyolite dike at the Marino showing (footwall of Specogna fault) is 18 Ma. The mineralization gold event is slightly younger (i.e. quartz veins cross cut all rocks). Possible analogues to the Specogna deposit include Pueblo Viejo, Dominican Republic; Hauaki, New Zealand; and McGlaughlin, California.

Several major companies have recently examined the deposit. Hopefully a mine is in the making. In 1995, Misty Mountain also completed a high resolution, multiparameter airborne geophysical survey (approximately 2700 line-miles; budget = $400,000) along the trace of the Sandpit Fault and the Rennell Sound Fault (20 km to the west). To date the company has only conducted reconnaissance follow-up, including examination of the Courte antimony showing on the Rennell Sound fault and the Canyon showing south of the Specogna deposit.

My site tour included examination of the following:

1. Footwall rhyolite dike (quarry) (see photo).
2. Marino (footwall) showing [Note: reported 7 tons grading 4.2 opt gold shipped- this is contrary to that shown in Minfile]. [My records indicated 6649 lbs. yielded 17.9 oz of gold and 7 ounces of silver in 1975].
3. Surface exposures in mineralized zone.
4. Underground (2400 feet of workings). [Note: portal site is reclaiming itself nicely]. (see photos).
5. Pilot mill testing site - very nicely reclaimed. [Note any record of date and/or amount of production?].
6. Wetlands (see photo).
7. Discovery outcrop-base of cliff, now overgrown (see photo).
8. Core logging/storage site. [Note: new road constructed between site and access route to portal]. {see photos}.

[References: Schroeter Monthly Reports - Aug '96, Sept '88 (SEG Tour), Mar. '87, June '82, Jan '81, Mar. '80, Jan. '80, Sept. '79, Mar. '76].