

Vancouver MEG Abstract, Jan. 5, 2000

the resource estimate is in progress.

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Primary gold mineralization at Mt. Kare and Porgera occurs in a similar setting which is spatially and temporally associated with mafic alkalic intrusive complexes emplaced at 6 Ma. Both deposits occur within the NNE trending, arc normal Porgera Transfer Structure at a point where its intersection with WNW trending, island arc parallel, structures formed a conduit along which mafic magmas have risen. The emplacement of mafic intrusives into incompetent sediments formed a brittle, contact alteration halo which extends up to 100 meters outward from the margins of the intrusives

. Two distinct styles of gold mineralization occur at both Mt. Kare and Porgera:

- Stage 1 >moderate grade= carbonate-base metal-gold mineralization occurs in broad zones of brecciation and >bleaching= along the margins of mafic intrusives. Gold occurs in association with disseminations and veinlets of pyrite-sphalerite-galena and locally as free gold in carbonates. Stage 1 mineralization at Mt. Kare is represented by holes such as MK97-17 which returned 100.5 meters grading 8.32 g/t gold equivalent.
- Later Stage 2 >bonanza-grade= quartz-roscoelite-gold mineralization occurs as veins/breccias in dilatant fault zones which commonly overprint the breccias which host the stage 1 carbonate-base metal-gold mineralization. Stage 2 gold occurs in association with quartz, roscoelite (vanadium rich mica) and pyrite. Stage 2 mineralization at Mt. Kare is represented by holes such as MK97-5 which returned 4.5 meters grading 2153.39 g/t gold equivalent.

The next phase of drilling at Mt. Kare will focus on significant extensions to the existing deposit and on high priority outside targets which have significant potential to host high-grade mineralization.

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EXPLORATION STRATEGY AT MYRA FALLS, CAMPBELL RIVER, BC

David Laudrum - Madison Enterprises Corp.

After over thirty years of production at Myra Falls, the result of continued exploration success, the current exploration team is tinkering with a proven exploration strategy to ensure new discoveries into the next millennium. Standing on the shoulders

of previous explorationists at Myra Falls, most notably Cliff Pearson, Richard Walker, Steve Juras and others we have inherited a geological model of exceptional quality. We have incorporated their strengths in understanding the stratigraphic and structural controls on mineralization, into an updated, 3-D computer based, multi-faceted, pragmatic approach.

Although, I strongly believe that new, objective exploration "eyes" from outside the company must be routinely rotated into a mature minesite exploration setting, the continuity with past exploration efforts must be maintained to avoid beginning at the bottom of the learning curve with each new exploration foray. The discovery of the HW orebody in 1979 and the Battle-Gap orebody in 1991 was the result of stratigraphic drilling, but required a paradigm shift in the exploration thinking. The known orebodies, the Lynx and Myra were exposed up the slope of the Phillip's and Myra ridges mantling Myra valley. No one had attempted to drill in the glacially carved out valley floor, footwall to the known mineralized horizon. It was lateral thinking to test for deeper mineralized horizons that created a quantum leap in understanding leading to several new discoveries. Continually testing the parameters of the exploration model is the key to future discoveries at Myra Falls.

Successful exploration at Myra Falls is the result of a synergy between exploration and production geologists. By working in concert, the explorationists can temper their creative license with the reality of rigorous mining constraints and schedules and gain valuable insight from observations made at development headings and in definition drilling, especially along the fringes of orebodies. In addition, Myra Falls has developed strategic alliances and funded geologic research with several academic centers, MRDU at UBC, CODES at Tasmania, and provincial and federal geologic surveys to remain on the leading edge of VHMS research and understanding.

The philosophy of the current exploration team was to establish a long term vision driven by the operating strategic mine plan, developed through 2012, the current mining lease. Exploration tools such as geophysics (Boliden's strength) and litho-geochemistry have been integrated into the existing geological model for vectoring and optimizing drill grid spacing for minimum target sizes. Prioritization of target areas is based to a large degree on mine scheduling requirements established in the strategic production forecast, budgetary constraints and a sensitivity analysis of all exploration target areas. Project areas are divided into three main categories, based upon proximity to infrastructure, short, medium and long-term targets. For each category, the project areas are ranked using a scoring system of 1-3, for each of three basic criteria; geologic permissiveness, probability of discovery and potential size of discovery. The ideal exploration portfolio is comprised of a balance of short, medium and long-term project areas, which would provide a sequential

maturation of projects to production decision. The key in the past at Myra Falls has been the discovery and development of smaller, short-term ore lenses to buy time for development to access the larger, long-term orebodies. The critical factor is to quickly establish early in the exploratory drilling whether or not your long-term project is of sufficient size and grade to warrant initiating access development, prior to any feasibility study.

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SKARN-ASSOCIATED GOLD DEPOSITS OF THE NUKAY DISTRICT, GUERRERO, MEXICO

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The Nukay district, located in the Sierra Madre del Sur in the southern Mexico state of Guerrero, contains multiple structurally-controlled, oxidized Au deposits that are localized along and near contacts between Cretaceous carbonate rocks of the Morelos Formation and two, small granitic stocks. Historic production of approximately 290,000 oz were recovered from ore grading 18 g/t at the Nukay underground mine, and a small-scale open-pit operation is currently producing about 20,000 oz/yr of Au from two small deposits. Teck Corp. became involved in the project in late 1993, and exploration over the next four years resulted in the discovery of several Au resources, including the 2.2 million oz Los Filos deposit.

Mineralization is related to the two intrusives, termed the East and West stocks, that consist of fine- to medium-grained, moderately to strongly porphyritic diorite, tonalite, and granodiorite. The East stock is distinguished by an early, quenched diorite phase that forms the host to the Los Filos deposit. The East stock is also characterized by late, sill-like magmatic segregations of granodiorite containing abundant beta-quartz phenocrysts. Several sets of sheeted, low-angle structures dominate the East stock, and they controlled emplacement of the diorite, localized the beta-quartz granodiorite pods and provided structural preparation and fluid pathways for the Los Filos deposit. In contrast, the West stock lacks the low-angle fabric and diorite phase, and beta-quartz granodiorites tend to be more evenly distributed and less structurally controlled. $^{40}\text{Ar}/^{39}\text{Ar}$ dating yields early Tertiary dates of 65.0 to 63.4 Ma, and reveals a small but distinguishable age difference between the older East and younger West stock.

Intrusion of the stocks caused wide-spread marbleization of the wallrocks and produced high-temperature, pyroxene-dominant, calc-silicate alteration within intrusive (endoskarn), and thin, tabular, calc-silicate bodies, with subsequent magnetite replacement, in carbonate rocks adjacent to intrusive contacts