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Kutcho Cr.

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The presence of a 'faulted-off', or even entirely separate body located immediately north of the Sullivan deposit has long been speculated. Cominco had conducted exploration to defining the target as early as the 1970's. By the time of the mine's closure in 2001 Cominco had completed several deep drill holes, identified and compared stratigraphic markers and completed down-hole geophysics, all pointing to the presence of a Sullivan-sized anomaly at the Sullivan time horizon. Mariner Ventures Corp. has an option to acquire 50% of the property from Teck Cominco by drill-testing the target, estimated to be located some 4km north of the Sullivan Mine and 2,450m below surface. The project has been named 'Sullivan Deeps'.

The paper outlines the compelling geological evidence for the presence of the Sullivan Deeps Target and Mariner's plan to drill test it.

Geology, Exploration and Development Potential of the Kutcho Creek Volcanogenic Massive Sulphide Deposits, *Peter Holbek, M.Sc., P.Geo., VP Business Development, Western Keltic Mines, Inc. Vancouver, BC, Canada*

The Kutcho Creek deposits are situated 100 km east of Dease Lake in north central British Columbia. Follow-up of regional stream geochemistry in the early 1970's led to the discovery of the main Kutcho lens nearly simultaneously by Esso Minerals Canada and Sumac Mines Inc. Discovery of additional sulphide deposits during the next ten years of exploration is credited to both geophysical and lithogeochemical methods. The three main sulphide deposits, in sequence from east to west termed the Kutcho lens, the Sumac West lens and the Esso West lens, form a linear trend that plunges gently to the west. Total volume of all sulphide deposits is in excess of 30 million tonnes. A 1985 pre-feasibility study pegged the open pit minable reserve of the Kutcho lens at 14.2 Mt grading 1.76% Cu, 3.47% Zn, 34.2 g/t Ag and 0.3 g/t Au, and an inferred resource for the Esso West Lens at 1.5 Mt grading 3.37% Cu, 5.71% Zn, 63.4 g/t Ag and 0.54 g/t Au. The pre-feasibility mine plan required relatively high metal prices in order to indicate a reasonable rate of return. Western Keltic Mines Inc. negotiated the purchase of each companies' interest and has united the project for the first time. Preliminary evaluation of the Kutcho lens data indicates a higher grade core zone amenable to underground mining, that when combined with the Esso West Lens and exploration potential suggests potential economic viability in the near term. The Kutcho deposits are only slightly deformed and weakly metamorphosed such that many primary depositional textures are well-preserved providing significant clues to orogensis. (50)

Epithermal Gold-Silver Mineralization in the Nechako Plateau, Central BC, *Lindsay Bottomer, P.Geo., President/CEO, Southern Rio Resources, Ltd., Vancouver, BC, Canada*

The Nechako Plateau is a physiographic subdivision of central British Columbia measuring approx. 350 km x 200 km. Early Tertiary (Eocene) rocks of continental

margin arc affinity underlie much of the plateau. Epithermal or transitional Au-Ag deposits are associated with this magmatic event, including the past-producing Equity Silver and Blackdome mines. Recognition of the common characteristics of these deposits with some of the prolific epithermal precious metal camps around the Pacific Rim and in the Basin & Range Province of southwest USA, and an improving climate for mineral exploration in BC have led to an increased focus on the exploration potential of this region.

Work on the 3Ts Project of Southern Rio Resources has documented a typical Andean low sulphidation epithermal Au-Ag system characterized by gold in quartz veins with narrow adularia alteration selvages in rhyolitic host rocks. The age of the mineralization on the 3Ts Property is 145Ma, Late Jurassic, distinct from the Eocene mineralizing epoch seen elsewhere in the Nechako Plateau. Recognition of this older mineralizing event, coupled with recent regional geological mapping, creates opportunities for the application of new exploration concepts to the region.

Because much of the target area at 3Ts, as elsewhere in the Nechako region, is covered by transported glacial deposits, exploration to date has mainly consisted of mapping the limited outcrops and boulder prospecting to define drill targets. Neither conventional soil geochemistry nor electrical geophysical methods have been very successful in outlining the known mineralisation.

Recent work has also utilized mapping and till sampling of the Quaternary deposits, as well as applying seismic and ground penetrating radar to assist in profiling the bedrock in some target areas. Drilling is currently underway to test some of these targets.

Kemess North Project, *Carl Edmunds, Northgate Exploration, Vancouver, BC, Canada*

The Kemess North Project is located in the Toodoggone mineral district of north-central British Columbia (57°N/126°50'W) 450 kilometers northwest of Prince George. The project is owned by Northgate Exploration Limited, and is currently the subject of a feasibility study. Northgate had acquired the Kemess property through the bankruptcy of Royal Oak Mines and after restructuring the Kemess South Mine Northgate initiated exploration in 2000. Recognizing that the infrastructure and operating permits dramatically changed the economics of a second deposit in the district, Northgate decided to drill beneath the resource defined by previous explorers, Kennecott and El Condor Resources. Early in 2001 this work was rewarded with an intersection of 0.454 g/t gold and 0.271 %copper over 296 metres in the 12th hole. Subsequent drilling of 65 holes (34,800 metres) has defined an overall resource of 5.4 million ounces and two billion pounds of copper in 407 million tonnes at a grade of 0.409 g/t Au and 0.224% Cu.

Located at the south end of the Toodoggone district, a 40 km by 100 km volcanic belt, the Kemess property is underlain by Paleozoic to Mesozoic arc-related volcano-sedimentary assemblages that comprise the eastern margin of the Intermontane Belt. Three unconformity bound volcanic arc assemblages are