Poster Session Abstracts

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Circum-Pacific Minerals Maps

P.W. Guild M.P. Lee United States Geological Survey Reston, Virginia

Maps portraying the mineral resources are being compiled as one of the series depicting the geology, tectonics, energy resources, and other features of the Circum-Pacific region at 1:10,000,000 on a quadrant-by-quadrant basis. The Minerals Map of the Northeast Quadrant is the first to be completed and will serve as the prototype for those to follow.

Land-based deposits are plotted over a simplified geologic/tectonic background that emphasizes the provenance of sedimentary rocks (oceanic, miogeoclinal, or continental) and the intrusive or extrusive nature of igneous rocks. Symbol shapes, colors, sizes, and ornamentation denote the

metal/mineral content, relative importance, geologic class, and, for some, age of mineralization of the deposits. No distinction is made between active, exhausted, or unmined deposits.

The prevalence and transition-metal content of the ocean-floor manganese nodules are shown in relation to water depth and surficial-sediment character, the latter simplified from the Geologic map series. The rift and fracture-zone pattern reproduced from the Plate Tectonic map serves to locate the sulfide deposits discovered by submersibles and deep drilling to the spreading centers where they are generated. Phosphate and other seabed resources are included.

When completed, the maps will provide an overview of the mineral resources of a region encompassing more than half the globe that should be useful not only for planning purposes, but also as stimuli for creative analysis of the relation of ores to major earth features and processes such as subduction, hot spots, and accreted terranes.