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The Potential Porphyry Cu-Mo Deposit on the Patacual Claim, El Limon-La Cuesta Locations, Municipality of Tecpan De Galeana, Guerrero State, Southern Mexico

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The Patacual claim represents a prominent greenfield project and will be very important to be considered in the short-midterm according to the increasing global demand for copper ore in the near future. The Patacual claim hosts a potential porphyry copper-molybdenum (Cu-Mo) and epithermal base metals quartz veining mineral deposit, located inside the Santa Lucia major claim, Guerrero State. The local geological setting consists of country rock dominated by a series of granitic stock outcrops exposed all along the studied area. Main stocks are intruded by mafic dikes showing a very clear crosscutting relationship, which defines the existence of postmagmatic late intrusion activity, apparently related to epithermal quartz veining mineralization.

The field examination was done with the purpose of getting an exploration program related to four types of mineralisation: a) copper-molybdenum disseminated mineralisation hosted in the granitic stocks (low grade); b) irregular supergene copper compounds, mostly malachite and azurite, from leaching processes on the granitic stocks; c) epithermal quartz veining base metals mineralisation enriched with molybdenite related to the emplacement of the mafic dikes; and d) base metals in the mafic dikes occurring in microfractures on the hanging wall with the quartz veins.