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## **Jesus Velador**

*Corporate Manager of Brownfields Exploration*

**Fortuna Silver Mines Inc.**

Jesus Velador is an exploration geologist with over 20 years of experience in epithermal and replacement deposits. He has worked in the past for companies like Peñoles, Silver Standard, Fresnillo Plc and First Majestic Silver Corp. At First Majestic he led the near-mine and brownfields exploration programs for the whole company for six years and supported due diligence initiatives that concluded in the acquisition of the Santa Elena and San Dimas mines. Since January 2019 he is the Corporate Manager of Brownfields Explorations for Fortuna Silver Mines Inc., where he oversees exploration programs at the San Jose mine in Mexico and Caylloma mine in Peru. At Fortuna he also supports business development and greenfields explorations initiatives in Mexico, Peru and Argentina. Jesus participated in the discovery of significant mineral resources in Juanicipio in Zacatecas and Ermitaño in Sonora, Mexico.



Jesus Velador is a QP Geology (MMSA) with a degree in Geological Engineering from the Autonomous University of Chihuahua, a M.Sc. degree from the University of Texas at El Paso and a PhD degree from the New Mexico Institute of Mining and Technology.

### ***"New Alteration and Geochemical Interpretations and Modeling of the San Jose Ore Deposits in Oaxaca, Mexico"***

The San Jose mine is located 47 km south of the city of Oaxaca. Fortuna Silver Mines Inc., through its subsidiary Compania Minera Cuzcatlan holds rights for a total surface area of 64,422 hectares in 31 mining concessions.

Low sulfidation epithermal mineralization in quartz veins, stockworks and breccias is hosted by andesitic to dacitic volcanic rocks of Oligocene - Miocene age. Most of the silver and gold mineralization is concentrated in three deposits; Trinidad and Bonanza veins and the Stockwork zone. Acanthite and electrum are the primary ore minerals, whereas quartz, calcite, adularia and fluorite are the main gangue mineral phases.

Temperatures and salinities typical of epithermal deposits characterize the fluid inclusions in quartz and calcite associated with the main ore stage (161 – 272 °C and 0.17 – 3.53 wt% NaCl eq.). Extensive Terraspec data

collected from 276,776 meters of core, reveals that the main alteration minerals are kaolinite, halloysite, dickite, illite, illite-smectite and smectite. High crystallinity kaolinite and dickite are commonly found associated with high silver and gold grades. The occurrence of kaolinite and dickite in close association with ore is not typical or extensively documented in low sulfidation epithermal deposits in Mexico, and it could be an indication of mineralizing fluids with pH lower than normal for this type of deposits.

Assays, metal ratios and alteration minerals were interpolated inside a constraining volume of the ore deposits. New interpretations resulting from the interpolations, in combination with geological, structural and air-borne magnetic data were used to define drilling vectors and new exploration targets at San Jose.