

Galena Mine – From Wikipedia (retrieved 11/25/2015)

The Galena mine has a long history dating back to 1887. However, recent mining began in 1953 by ASARCO, in an effort to explore and exploit outcrops of silver-lead ore. At that time a shaft was sunk to the 3000 level (3000 feet below the shaft collar) and lateral or level drifts were excavated on the 2800 and 3000 levels. The level drifts accessed down dip projections of the silver-lead ore from above. The development on these levels included, drifting on ore and excavation of raises between the 2800 and 3000 levels and some diamond drilling. The “lead ore” was ready for production in 1953 when a drift crew on the east end of the 3000 level exposed a wide siderite-tetrahedrite-chalcopyrite vein that assayed over 50 ounces per ton silver. ASARCO abandoned the silver-lead development and focused on this new high grade discovery. The new discovery was called the Silver vein and has been the largest vein found at the Galena to date with estimated production of over 100 million ounces of silver at averages grades of over 20 ounces per ton. From 1953 until present, all exploration, development and production has been focused on the tetrahedrite silver-copper ores.

Because ASARCO focused its efforts in 1953 on the silver-copper veins no systematic exploration program was ever conducted at the Galena for silver-lead ore until USSC took over in 2006. Total production since 1953 is over 160 million ounces of silver, 116 million pounds of copper and 22.0 million pounds of lead from 7.0 million tons of ore. Average grade of the silver-copper ore has been 22.89 ounces per ton of silver and 0.83% copper. Average grade of the silver-lead ore has been 8.18 ounces silver and 8.8% lead per ton of ore. The mine is currently producing silver-copper ore at a rate of approximately 625 tons per day. Ore grades are approximately 24.0 ounces per ton silver and 0.76% copper.

The present day Galena Mine is an underground silver-copper mine and is served by two vertical shafts. The No. 3 shaft is the primary production shaft and is 5,800 feet (1,800 m) deep. The Galena shaft primarily provides utility access for water, electrical power and sand backfill for underground operations down to the 4,900 level. The Galena mine also has an operating 1,100 ton per day flotation mill, maintenance shop, carpenters shop, office and dry facilities. The mine utilizes conventional and mechanized cut and fill mining methods with sand backfill to extract ore from the high grade silver-copper vein deposits that constitute the majority of the ore reserves. Silver and copper are recovered by a flotation mill that produces a silver rich concentrate which is sold to third-party smelters in Canada. Waste material from the milling process is deposited in a tailings pond located approximately two miles from the mine site. The tailings containment pond, which is expanded on an as needed basis, has capacity for approximately eight additional years at current production rates.