Blackberr



Elizabeth Randol
The Santa Isabel Shaft
was named for Elizabeth
(Isabel in Spanish)
Randol, daughter of
Mine manager James B.
Randol. She was born at
New Almaden in 1872.
Photograph c.1890
Courtesy Harper Wright

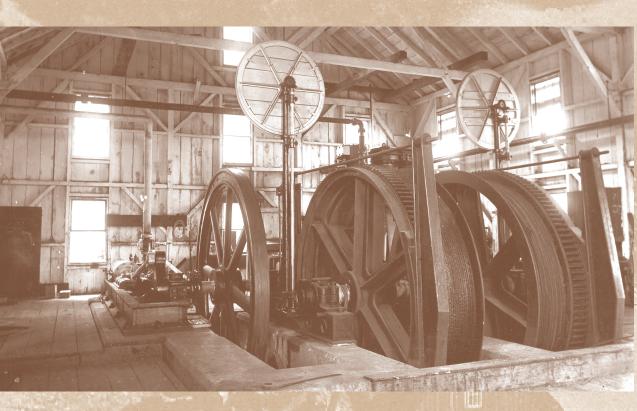
Mine workers began to sink the Santa Isabel Shaft in 1877 to relieve the burden on the nearby Randol Shaft, which could no longer alone handle the abundance of underground cinnabar ore. Five years later ore was delivered to the surface from the Santa Isabel's 2,000 foot level. In 1883, the company shipped 1,018 tons of ore from the Santa Isabel Shaft to the mine works.

The Santa Isabel Shaft had three compartments, one for hoisting ore, a second for hoisting miners and a third containing a ladderway and Cornish pump used to drain the constant seepage of water from the interconnected tunnels of the Santa Isabel, Randol and Buena Vista shafts.

Pfeffer and Meyer took over the deserted Santa Isabel mine shaft in 1894 and discovered a method to liquefy carbonic acid gas (carbon dioxide). They offered to pay the Quicksilver Mining Company 10[¢] a cylinder to pursue this business, and with this gas started the U. S. dry ice industry.



SANTA ISABEL SHAFT



SANTA ISABEL SHAFT ENGINE ROOM

The engine room contained a Cornish Pump and the two hoist engines. Above each hoist is a round depth indicator that allowed engine room workers to accurately place the hoist at different tunnel levels below. The granite hoist engine foundation is still visible today, with a huge tree growing where the hoist compartment was located.

Photograph c.1885 by Robert Bulmore.



CORNISH PUMP

Two workers are tending the Cornish pump. For many years the pump drew an average of 90,000 gallons of water per day out of the shaft and tunnels below. Mostly hidden behind the wheel is one of the two hoist engines.

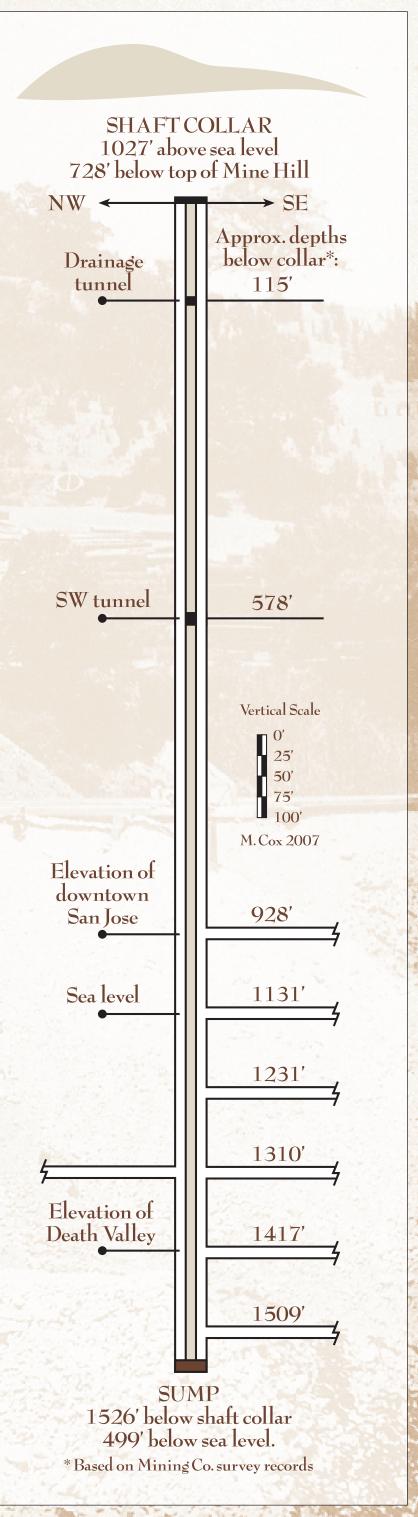
Photograph c. 1885 by Robert Bulmore. Courtesy the Bulmore Family.



MACHINE DRILLS

Braced with 12" x 12" redwood timbers, this tunnel extended from the Santa Isabel Shaft at the 1,300 foot level. Miners used steam-driven machine drills to drill holes into the ore body. They filled the holes with sticks of dynamite in such a way that only one hole at a time blew, allowing the miners to count the number of explosions. This photograph was taken using magnesium powder to make the flash.

Photograph 1886 by Doctor Smith E. Winn from "Views of New Almaden."



SANTA ISABEL SHAFT & PLANILLA - Connected to the tall, white Santa Isabel shaft house is a 90 x 40 foot engine house. At right angles to the engine house is a 60 x 50 foot boiler room. Behind the shaft house is a shed where up to 400 tons of coal was stored. In the left foreground is an open building called a planilla, where ore was sorted by size and percentage of cinnabar.

Photograph 1886 from Views of New Almaden.