Caliente he observed “the greatest natural curiosity is the warm springs.”

In 1880, Antonio Joseph, New Mexico's first territorial representative to congress opened the first health spa with overnight lodging. Joseph's Ojo included a post office and general store and was a center of activity. Historical ledgers show that Kit Carson purchased supplies at the store.

The thermal waters at Ojo Caliente discharge along the northeast-trending Ojo Caliente fault zone that juxtaposes the Precambrian metarhyolite footwall to the west against Tertiary basin-fill deposits in the hanging wall to the east (Stix and others, 1982). The Precambrian metarhyolite is cut by pegmatite dikes dipping 45° west and the metarhyolite is broken by a prominent joint set of N45°E,60°E and N70°W,80°N orientation (May, 1980). Five different developed springs that go by the names “Iron,” “Sodium Sulfate,” “Soda,” “Arsenic,” and “Lithia” are found on the Ojo Caliente Spa location (Summers, 1976). The hot springs at Ojo Caliente are associated with calcium carbonate deposits of tufa or travertine. The Ojo Caliente fault zone has many tuffa deposits along its trace in the region from Ojo Caliente to La Madera as well as some warm springs. A shallow, 87 ft deep, hot well produces 128 to 132°F water. The Ojo Caliente springs range in temperature from 95 to 111°F. The well and spring waters have total dissolved solids (TDS) between 3,600 and 3,700 mg/L. Total natural flow of the developed springs was 97 gpm in 1965 (Summers, 1976). The spring waters probably gain their heat by deep (about 4,500 to 6,000 ft depth) circulation in fractures of the Precambrian metarhyolite after recharge from rain and snow in the highlands to the north. Background, but elevated, regional temperature gradients of the Rio Grande rift allow heating with deep circulation of groundwater.

REFERENCES
