RADIUM HOT SPRINGS

John W. Lund Geo-Heat Center

Radium Hots Springs is located about 16 miles north of Los Cruces, NM, just west of Interstate I25. It originally issued from a small rhyolite hill just north of the Radium Hot Springs Resort and is between the Rio Grande River and the Santa Fe Railroad. The original highway between Albuquerque and El Paso ran adjacent to the project with traces of it still seen today. According to the brochure from the Resort:

"The history of Radium Springs, the hottest, strongest natural radium springs in the world, dates back to the time when Indian tribes made pilgrimages here. The Springs became a sacred place, and no horseman was allowed to ride within a mile of the steaming waters. Even Geronimo, the famous Apache Chief, used to make his camp nearby, so he and his warriors could bathe in the revitalizing waters. Early Spanish settlers also used the Springs to rejuvenate themselves from the rigors of the New World, and later, soldiers from Fort Selden once again "discovered" the beneficial powers of the Radium Springs."

"At the turn of the century a Harvey House was built near the Springs, and it became a favorite resting place for travelers on the Santa Fe Railway. Weekend trainloads of El Pasoans would also come, spending their day in the baths before catching the southbound for home. In 1931 Harry Bailey, one a friend of Pat Garrett and Billy the Kid, built the hotel and bathhouse so that visitors might have more comfortable access to the healing waters." This building still stands today (Figure 1).



Figure 1. Radium Hot Springs Resort with Jim Witcher and the owner Jeff Goacher.

Across the railroad to the east from the Radium Hot Springs Resort is the remains of Bailey's Bath House (Figure 2). This was the hot spring bath that the "Buffalo Soldiers" from nearby old Fort Selden used. Fort Selden was established in 1865, and between 1866 and 1881, four regiments of Black soldiers were stationed there. The 9th Cavalry and the 21st, 38th and 125th Infantry were referred to as "Buffalo Soldiers" by the Indians because of their short, curly hair and fighting spirit - two attributes shared with the buffalo. General Douglas McArthur spent several years at the Fort during his childhood, when his father was commanding officer. The post was abandoned in 1891. The well was a dug well about 8ft by 8 ft and 20 ft deep. The water discharged through a small pressure tank and was used in the bath and for domestic supply.

The spring and wells at both locations are sodiumchloride types with TDS of about 3700. The temperatures varied from 43 to 85°C (109° to 185°F) and all are under 100 m (330 feet) in depth. The present well at the Resort is 44°C (112°F) and 55 m (180 feet) deep. The 9000 square foot resort uses the mineral water in bath tubs. In addition they have a large dug well, about five feet across inside the building. One analysis reportedly made by the University of New Mexico gave the radium concentration of 2.57 picocuries/liter (µµC/L). Another sample from 1954 reported beta-gamma activity, 170 picocuries/liter; radium, 0.6 picocuries/liter, and uranium 1.8 µg/L. It is reported from 1899, that the spring was then called Selden Hot Springs and that "These springs.... are patronized by those afflicted with rheumatism." (W. K. Summers, Catalog of Thermal Waters in New Mexico, New Mexico Bureau of Mines and Mineral Resources, Socorro, NM, 1976.) The Resort is presently being renovated and can be contacted at (505-524-4093).



Figure 2. Remains of Bailey's Bath House.



Figure 3. Radium Hot Springs Resort in the 1930s looking north. Note the rhyolite dome in the background-source of the original hot springs. Courtesy of New Mexico State University Archives, Rio Grande Historical Collection, Louis B. Bentley photo (Jim Witcher's great-grandfather).

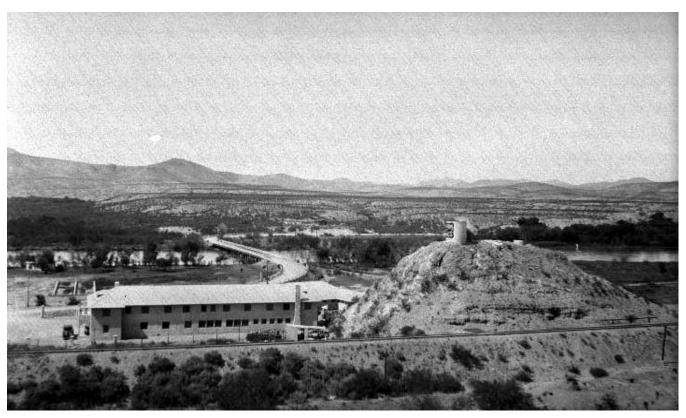


Figure 4. Radium Hot Springs Resort in the 1930s looking west. Note the Rio Grande River and old state highway to Albuquerque in background. Courtesy of New Mexico State University Archives, Rio Grande Historical Collection, Louis B. Bentley photo (Jim Witcher's great-grandfather).