



Site Description

Warm Springs

(updated 2010)

Geologic setting: Warm Springs, in western Hot Creek Valley, is located along the trace of a major range-front fault. The fault has undergone up to 600 m of recent movement, and earthquake epicenters along the fault indicate that it is still active (Fiero, 1986).

Geothermal features: Warm Springs was the site of a small cafe and gasoline station at the junction of U.S. Highway 6 and Nevada State Route 375, ~67 km east of Tonopah. The site is presently (2010) abandoned.

Nanny Goat Springs: Nanny Goat Springs emerge through alluvium ~30 m east of a limestone outcrop (SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 20, T4N, R50E). Thermal water may travel up a limestone fault, where fault brecciation and carbonate dissolution contribute to high permeability. Warm Springs are therefore high in carbonate, and a 6 m-high travertine terrace 200 by 400 m has built up along the range front. Most spring water originates from regional groundwater systems, following deeper circulation. A small proportion of the spring water may be of local, non-thermal origin (Fiero, 1986).

Two springs are reported, one of which has been developed with a 1.5 m-deep ditch. The water was used for stock watering, domestic water, and a swimming pool (Fiero, 1986). The maximum reported water temperature is 61°C, and an estimate of the reservoir temperature, using the silica geothermometer, is 110°C (Mariner and others, 1974).

Leasing information: