Site Description

Midas

(updated 2010)

Geologic setting:

Geothermal features:

Hot Lake: Mariner and others reported Hot Lake (Sec. 25, T38N, R46E) to be 18º with a reservoir temperature of 79ºC and 67ºC using silica and Na-K-Ca geothermometers, respectively (1983, p. 98, 105). In September 2002, UNR staff measured temperatures along the perimeter of Hot Lake and nearby seeps. The lake level was low, and numerous small seeps could be observed flowing into the lake. All were nearly stagnant, and likely evaporating, such that reliable samples could not be collected. The maximum temperature measured in the seeps was 22°C, which is not "hot," though locals have observed steam rising from the lake on very cold mornings in the winter.

Wilkinson Ranch: Waring (1965, no. 20) reported a hot spring at the head of South Fork, Little Humboldt River in T39N, R40E. Because the head of the South Fork is in T39N, R45E, Garside and Schilling (1979) reported the spring to be in that township, and selected a possible site in Sec. 36. This area was visited in September 2002 and it consists of numerous small seeps along a hillside, marked by vegetation growth in the marshy areas formed by the multiple seeps. Temperatures of most of the seeping ground were measured throughout the hillside, and none of the fluids were found to be thermal. This site was removed from the geothermal site location map (Shevenell and Garside, 2003). The site of the spring originally reported by Waring is unknown.

Rock Creek: The spring is located east of Midas (SW¼ SW¼ Sec. 1 T39N, R47E), and forms a pool ~3 m across. Mariner and others measured the spring at 35ºC with reservoir temperatures of 37ºC and 69ºC using the silica and Na-K-Ca geothermometers, respectively (1983, p. 98, 105). The spring was not reported in Garside and Schilling (1979) or geothermal maps, however. In September 2002, UNR staff measured the spring at 34°C, with a flow rate of 30 L/min. The UNR analysis supported the Mariner data: the Na-K-Ca geothermometer is 87°C, and chalcedony is near/just below the measured temperature.

Leasing information: