

University of Nevada, Reno



evada Bureau and Geology



Site Description

Diamond Valley

(updated 2010)

Geologic setting:

Geothermal features:

Flynn Ranch Springs: The Flynn Ranch Springs consist of several slightly warm springs of low discharge and a deep pool. The temperatures are 20-26°C with a reservoir temperature of 26°C, and the discharge is reported to be 38 L/min (Reed and others, 1982, p. 40,104). The springs are located in Sec. 5, T25N, R53E, about one-half the distance between Shipley and Bruffeys Hot Springs, along the west edge of the Sulphur Spring Range.

Shipley Hot Springs: Springs in Sec. 23, T24N, R42E known as Shipley, Big Shipley, or Sadler Hot Springs have temperatures up to 41°C and issue from alluvium near the bedrock outcrops. The springs are probably supplied by water moving through secondary openings in Paleozoic rocks (Eakin, 1962a). Reported discharges range from 11,000 to 25,550 L/min. The estimated reservoir temperature is 61°C and 48° using silica and Na-K-Ca geothermometers, respectively (Mariner and others, 1983, p. 105).

Siri Ranch Spring: A warm spring and water well are found in Sec. 6, T24N, R53E at Siri Ranch along the west side of Diamond Valley north of Shipley Hot Springs. A small pool in the alluvium is reported (Mifflin, 1968). The reported temperatures vary from 27-31°C for the spring, while the well is 35°C. The reservoir is estimated to be the same temperature as the well (Reed and others, 1982, p. 104). Discharges reported are 22,000 and 1,100 L/min (Stearns and others, 1937; Mifflin, 1968). These springs are probably associated with the range-front fault along the Sulphur Spring Range here.

Sulfur Springs: Two slightly warm springs are located in NW¹/4 NW¹/4 Sec. 36, T23N, R52E along the east side of the Sulphur Spring Range about 13 km south of Shipley Hot Springs. The temperature of the springs is 23.3°C and they discharge about 75 L/min. These springs are near the mountain front, and may be related to a possible extension of the frontal fault near Siri Ranch and just north of Shipley Hot Springs. These springs could not be located ca. 1979 (Trexler, Koenig, Flynn, and others, 1981; Table E2), although they are shown on the 1986 version of the Tule Dam Spring 7.5-minute Quadrangle map.



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Thompson Ranch Springs: A warm (21-24°C) spring issues from alluvium adjacent to limestone at Thompson Ranch on the east side of Diamond Valley in Sec. 3, T23N, R54E (Mifflin, 1968). This spring may be the same as the Jacobson Ranch Springs reported by Waring (1965). Harrill (1968) suggested that the spring is probably fault-controlled, because it is part of the range front along the edge of the Diamond Range, according to Roberts and others (1967).

Leasing information: