

University of Nevada, Reno





Site Description

Red House Flat

(updated 2010)

<u>Geologic setting:</u> The Iron Point mining district, southwestern Red House Flat, consists of Cambrian, Ordovician, Pennsylvanian, and Permian sedimentary rocks intruded by dikes and Cretaceous granite. The sequences are cut by thrust faults and crosscut by north-trending high-angle faults. "Much of the silver mineralization is confined to chert, quartzite, and dolomite of Cambrian and Ordovician age." Hydrothermal alteration guided exploration drill hole siting [location of thermal gradient holes, mineral cores, etc.] near the Silver Coin Mine (Bonham et al., 1985).

The Osgood Mountains bound northwestern Red House Flat. There, copper, tungsten, and molybdenum have been mined, particularly within the Granite Creek drainage (Potosi mining district). See the Osgood Mountains site description for additional detail.

Geothermal features:

Hot Pot Springs: Hot springs at Hot Pot (Sec. 10, 11, T35N, R43E) have a reported temperature of 58°C (Trexler and others, 1982; Mariner and others, 1974). The springs issue from a travertine mound. Mariner and others estimate a reservoir temperature of 59°C and 81° using a silica and Na-K-Ca geothermometer, respectively (1983, p. 105).

Hot Springs Ranch: In September 2002, UNR samplers visited (Sec. 26, T37N, R43E) Hot Springs Ranch in northeastern Red House Flat. The warmest spring, at 25°C, was not selected for analysis because the discharge point could not be identified.

Lone Butte: This unnamed spring (Sec. 2, T36N, R41E) was reported by Garside and Schilling (1979) based on Cohen (1962c; Waring, 1965, No. 19C), which reported two 21°C springs. In September 2002, UNR samplers found no evidence of spring discharge. The area appears to have been dry for some time, with vegetation growing in the playa where water once was. The water draw-down was recent: two springs are located on the Red House Flat West Quadrangle, as is a sizable water body.





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<u>Leasing information</u>: Oski Energy received a \$4.2m DOE innovative exploration grant to perform 2D seismic at Hot Pot Springs. The surveyed depths exceed those usually considered amenable for this process. Oski conducted fieldwork, including temperature gradient drilling, during 2010.