

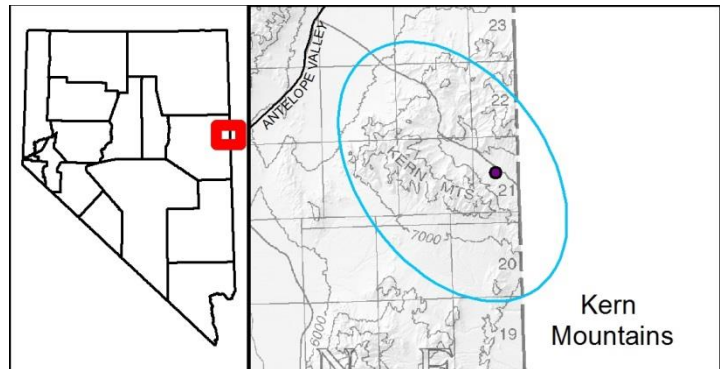
Site Description

Kern Mountains

(Updated 2014)

Geologic setting:

The Kern Mountains are located along the eastern border of Nevada and Utah and lie between the Northern Snake Range towards the south and the Deep Creek Range towards the north. The Snake Range to the south of the Kern Mountains is underlain by late Precambrian to Permian strata deposited along the subsiding western continental margin of North America. The various rock types identified in the area range in lithologies from igneous to sedimentary with some metamorphic deformation also present (Gans et al., 1999.)



The Kern Mountains are a plutonic complex of multiple intrusions emplaced during the Jurassic. (Sayeed et al., 1977) found the plutons of the Kern Mountains were probably altered by late Mesozoic/early Tertiary hydrothermal solutions after emplacing the Cove, Tungstonia, and Hoodoo Canyon plutons in the early Mesozoic. Block faulting took place in the Tertiary causing Basin and Range structures, and the plutonic complex was uplifted in the Quaternary (Sayeed, et al., 1977).

Geothermal features:

The Great Basin Groundwater Geochemical Database lists a warm spring of >20°C in the Kern Mountains (Sec. 17, T21N, R70E).

Leasing information:

N/A

Bibliography:

[Gans, P. B., Miller, E. L., Lee, J., 1999, Geology of the Spring Mountain Quadrangle, Nevada and Utah: Nevada Bureau of Mines and Geology Field Studies Map 18, text and references, 12p.](#)

Great Basin Groundwater Geochemical Database, Nevada Bureau of Mines and Geology:
<<http://www.nbm.unr.edu/Geothermal/GeochemDatabase.html>>.

[Sayeed, U.A., Treves, S. B., Nelson, R.B., 1977, Geochemistry and hydrothermal alteration of the Kern Mountains plutonic complex, White Pine County, Nevada and Juab County, Utah: Geologische Rundschau, Vol. 66, Iss. 1, pp. 614-644.](#)