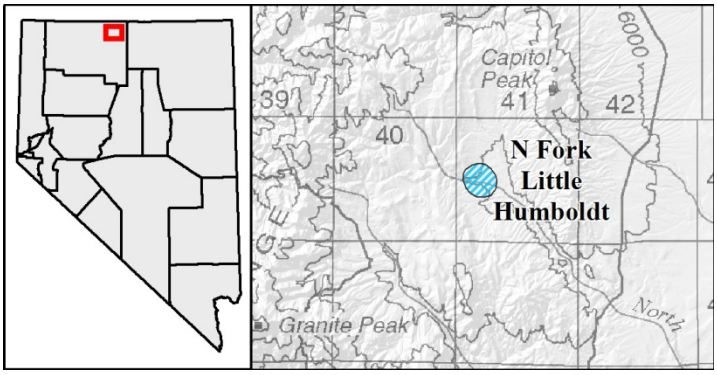
Site Description

Santa Rosa Range
(updated 2014)



Geologic setting:

A thermal spring has been reported in the eastern Santa Rosa Range, near the Little Humboldt River headwaters. Little is known about geology near this resource, but the National mining district 15 km west has extensive descriptions in Bonham et al. (1985). The northwestern Santa Rosa Range is comprised of Tertiary basalt flows and Miocene-era latites, basalts, and rhyolites. The uppermost rhyolite is associated with mercury mineralization: “a cinnabar-bearing siliceous sinter forms a blanket that rests on the upper rhyolite” (Bonham et al., 1985). The sinter formed after the rhyolite extrusion, not during, and is genetically related to other National district veins (Lindgren, 1915).

Geothermal features:

North Fork Little Humboldt River: According to the Great Basin Groundwater Geochemical Database, the North Fork Little Humboldt River well (T45N, R41E, Sec. 15) has a measured temperature greater than 37°C.

Leasing information:

N/A

Bibliography:

Bonham, H.F., Jr., Garside, L.J., Jones, R.B., Papke, K.G., Quade, J., and Tingley, J.V., 1985, A mineral inventory of the Paradise-Denio and Sonoma-Gerlach Resource Areas, Winnemucca District, Nevada, Nevada Bureau of Mines and Geology Open File Report 85-3, 473 p.

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

Lindgren, W., 1915, Geology and mineral deposits of the National Mining District, Nevada, U.S. Geological Survey Bulletin 601.