## **Site Description**

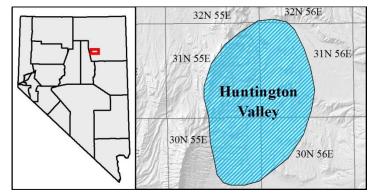


### **Huntington Valley**

(updated 2014)

#### Geologic setting:

Huntington Valley is located within Elko County, Nevada approximately 30 kilometers south of the city of Elko. The valley lies within a basin flanked by the Ruby Mountains to the east



and the Diamond Mountains to the southwest. The rocks in the general area range in age from the Late Proterozoic to the Cenozoic. Most of Huntington Valley is composed of Quaternary alluvium. Along the northern and western edges of the valley occur exposures of the Miocene Humboldt Formation, primarily composed of tuff, vitric ash, tuffaceous siltstone and sandstone, conglomerate, and limestone; and the Tertiary Indian Well Formation, composed of welded tuff, tuffaceous sedimentary rocks, limestone and ash sandstone (Coats, 1987; Smith and Ketner, 1976).

The eastern flank of the valley abuts the Ruby Mountains, primarily along an area of Late Jurassic plutonic rocks and the early Oliocene Harrison Pass pluton composed of biotite granodiorite to quartz monzonite (Coates, 1987).

#### Geothermal features:

In 1980 and 1981, Phillips Petroleum drilled test holes in the Temoak Prospect in Huntington Valley – eight holes named TE-01 through TE-08. Hole TE-05 (Sec.30, T31N, R56E) at the southern end of the prospect had a maximum temperature of 37.8°C. The other holes ranged from 25.7°C (TE-02, Sec. 8, T31N, R56E) to 20.1°C (TE-06, Sec. 24, T31N, R55E) (Sass, 1999).

A private well at Sec. 11, T31N, R55E was drilled in 2009 with a measured water temperature of 23°C. Other wells Huntington Valley measured below 20°C (NDWR, 2013).

#### Leasing information:

There are no geothermal leases in Huntington Valley.

#### Bibliography:

Coats, R., 1987, Geology of Elko County, Nevada: Nevada Bureau of Mines and Geology Bulletin 101 in cooperation with the U.S. Geological Survey.

Sass, J.H., Priest, S.S., Blanton, A.J., Sackett, P.C., Welch, S.L., and Walters, M.A., 1999, Geothermal Industry Temperature Profiles from the Great Basin: U.S. Geological Survey Open File Report 99-425, <a href="http://pubs.usgs.gov/of/1999/of99-425">http://pubs.usgs.gov/of/1999/of99-425</a>> Accessed December 31, 2013.

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# **Site Description**



Smith, J.F., Jr., and Ketner, K.B., 1976, Stratigraphy of Post-Paleozoic Rocks and Summary of Resources in the Carlin-Pinon Range Area, Nevada, *with a section on* Aeromagnetic survey, by D. R. Mabey: U.S. Geological Survey Professional Paper 867-B, 48 p.

State of Nevada Division of Water Resources (NDWR), 2013, Well Log Details Page, <a href="http://water.nv.gov/data/welllog/details.cfm?LOG=110519">http://water.nv.gov/data/welllog/details.cfm?LOG=110519</a>> Accessed December 31, 2013.

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