

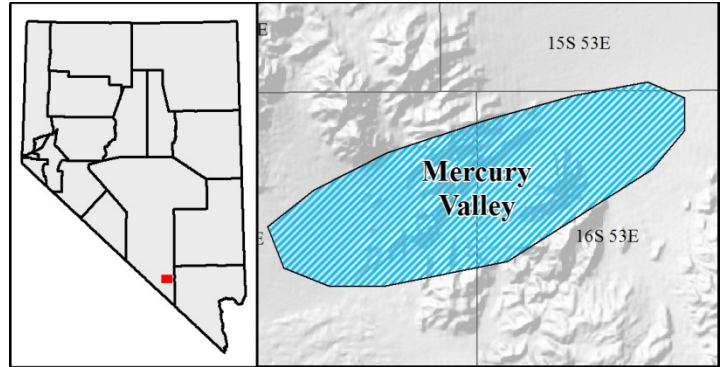
Site Description

Mercury Valley

(updated 2014)

Geologic setting:

Mercury Valley is located approximately 120 km northwest of Las Vegas, Nevada along State Highway 95 on the south end of the Nevada Test Site. The rocks found in southern Nye County and in the area of Mercury Valley have been dated from Precambrian to Quaternary. The rocks are quartzite, siltstone, micaceous shale or schist, with minor amounts of marble, dolomite, and limestones. Mesozoic intrusions of granodiorite and quartz monzonite crop out in the area with minor megabreccias made up of limestone and dolomite also found throughout the area (Cornwall, 1972).



Geothermal features:

A warm well, designated Army Water Well 1 (Sec. 5, T16S, R53E), has been tested periodically since 1952. The warmest temperature measured was 32.8°C in 1952 (Walker, 1963) but more recently has been measured at 30.6°C (Great Basin Groundwater Geochemical Database). Reservoir temperature is estimated at 52°C (Na-K-Ca geothermometer) to 64°C (quartz geothermometer).

AMAX Geothermal drilled a 40m temperature gradient hole in 1984 with a bottom temperature of 34°C (Blackwell and Richards, 2008).

Leasing information:

N/A

Bibliography:

Blackwell, D.D., and Richards, M., 2008, Southern Methodist University (SMU) AMAX database: <<http://www.smu.edu/geothermal/georesou/nevada.htm>> Accessed January 21, 2014.

Cornwall, H.R., 1972, Geology and Mineral Deposits of Southern Nye County, Nevada: Nevada Bureau of Mines and Geology Bulletin 78.

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

[Walker, G.E., and Eakin, T.E., 1963, Geology and Ground Water of Amargosa Desert, Nevada and California: Nevada Department Conservation and National Resources, Ground Water Resources Reconnaissance Series Report 14, 45 p.](#)