

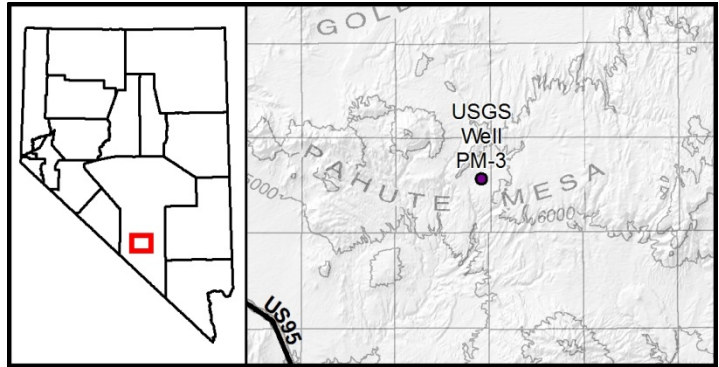
# Site Description

## Pahute Mesa

(updated 2014)

### Geologic setting:

The Pahute Mesa is located in Southern Nevada within the Nevada test range approximately 150 km northwest of Las Vegas, Nevada. Rock types that make up the Southern Nevada area consist of Late Proterozoic to Lower Cambrian terrigenous siliciclastic deposits overlain by lower and middle Paleozoic marine carbonate and quartzose. The area experienced high deposition rates due to the fact that during the Paleozoic, Nevada occupied the continental shelf. The sedimentary rocks that are found throughout the area have been found to be a mixture of quartzose and carbonate rocks (Mankinen et al., 2003).



### Geothermal features:

**USGS Well PM-3:** Located in the center of the Pahute Mesa, the USGS Well PM-3 has been measured to have a well temperature of “warm” at 35.5°C and fairly low geothermometry temperatures of 88°C (Na-K-Ca) /112°C (quartz, no steam) (Great Basin Groundwater Geochemical Database).

### Leasing information:

Pahute Mesa lies within the Nevada National Security Site and is unlikely to be offered by the Bureau of Land Management for geothermal lease (U.S. Department of Energy, 2011).

### Bibliography:

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

[Mankinen, E.A., Hildenbrand, T. G., Fridrich, C.J., McKee, E.H., Schenkel, C.J., 2003, Geophysical Setting of the Pahute Mesa-Oasis Valley Region Southern Nevada: Nevada Bureau of Mines and Geology Report 50, 45 p.](#)

[U.S. Department of Energy, 2011, Draft Site-Wide Environmental Impact Statement Nevada, Chapter 2, Site Overview and Update: National Nuclear Security Administration, Nevada Site Office, 15 p.](#)