

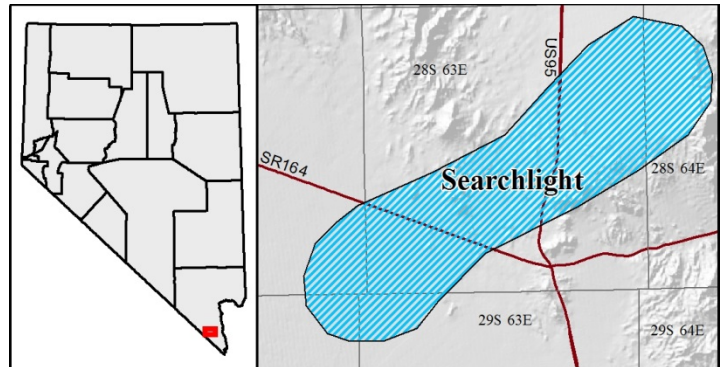
# Site Description

## Searchlight

(updated 2014)

### Geologic setting:

Searchlight Nevada is located approximately 70 kilometers south of Las Vegas, Nevada and to the west of the El Dorado Mountains, south of the Highland Range, and within the Piute Valley. The rocks that comprise the El Dorado Mountains and surrounding area are underlain by Precambrian rocks intruded by a quartz monzonitic pluton and granitic to dioritic dikes with several irregular smaller plutons of unknown age. The Precambrian rocks have been identified as being gneiss, schist, and granite. The rocks above the Precambrian have been identified as the Patsy Mine Volcanics, which are andesitic and rhyolitic (Causey and Miller, 1988).



Alluvium forms the principal ground-water reservoir throughout the Eldorado and Piute Valleys. The alluvial materials are underlain by lenticular beds of gravel, sand, silt, and clay eroded from adjacent mountains and ranges in age from the Pliocene to Recent. The consolidated rocks of the Eldorado-Piute Valley area are relatively impermeable (Rush and Huxel, 1966).

### Geothermal features:

**Tenmile Well:** Tenmile Well was a US BLM well located approximately 20 kilometers directly south of Searchlight, Nevada in Sec. 9, T30S, R63E. The Great Basin Groundwater Geochemical Database lists Tenmile Well as a warm well with a measured temperature of 30.6°C in 1965. The site was reported dry by the US Geological Survey in 2008 (U.S. Geological Survey, 2012).

**Unnamed Wells:** The US Geological Survey National Water Information System lists two unnamed wells within the Searchlight geothermal cluster. The well at Sec. 31, T28S, R63E measured 34.4°C in 2003 and measured 32.6°C in 2009. The well at Sec. 7, T28S, R64E measured 24.6°C in 2003 (U.S. Geological Survey, 2012).

### Leasing information:

N/A

### Bibliography:

[Causey, D.J., Miller, M.S., 1988, Mineral Resources of the El Dorado Study Area, Clark County, Nevada: Bureau of Mines United States Department of the Interior MLA 44-88, 48 p.](#)

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

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[Rush, F.E., and Huxel, C.J., Jr., 1966, Ground Water Appraisal of the Eldorado Piute Valley Area, Nevada and California: Nevada Department Conservation and National Resources, Water Resources Reconnaissance Series Report 36, 30 p.](#)

U.S. Geological Survey, 2012, National Water Information System: USGS Water Data for the Nation, <[http://nwis.waterdata.usgs.gov/nwis/gwlevels?site\\_no=352047114563301&agency\\_cd=USGS&format=html](http://nwis.waterdata.usgs.gov/nwis/gwlevels?site_no=352047114563301&agency_cd=USGS&format=html)> Accessed December 31, 2013 & January 3, 2014.