Site Description

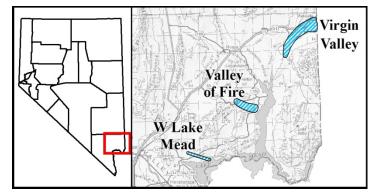


Lake Mead

(updated 2014)

Geologic setting:

Lake Mead is located in southern Nevada within Clark County along the Arizona/Nevada border. It lies approximately 50 kilometers from the city of Las Vegas and extends north from Boulder



City in the south. Volcanism is present in the southeastern portion of the Lake Mead area but minimally. Sedimentary deposits are the dominant lithology found in the southern portion along the Grand Wash trough. Large fault systems are found throughout the Lake Mead area and are predominately steep east – tilted fault blocks bounded by major west-dipping normal faults (Wallace, Faulds, and Brady 2002).

Geothermal features:

West Lake Mead

Boulder Basin: Two warm wells are found off the shoreline of Lake Mead's Boulder Basin, one at Calville Bay campground and one in Government Wash. Additional, submerged geothermal resources are likely, but cannot be identified at present.

Overton Arm

Valley of Fire - Water Fountain: A warm spring is found at Sec. 30, T17S, R67E, NW SW. Swanbert et. al. measured a temperature of 35.1°C in 1971. This may be the source of the water fountain at the Visitors Center. No further information available.

Rogers Spring, Blue Point Spring: The Rogers Spring area, which includes Blue Point Spring, has temperatures up to 30°C with a flow rate ranging from 567-3300 L/min and an estimated reservoir temperature of 30°C (Reed and others, 1982, p. 38). The springs are located in Sec. 6, 7, and 12, T18S, R67E of Clark County (Mifflin, 1968).

Virgin River Narrows: Several clustered warm springs at the Virgin River Narrows were reported by Hardman and Miller (1934) as being poor water quality and having fairly uniform temperatures of 23 °C to 26°C. The sampled spring was located on the south bank about 1.5 miles downstream within the narrows (Sec. 6, T17S, R69E).

Leasing information:

N/A

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Site Description



Bibliography:

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Mifflin, M.D., 1968, Delineation of Ground-Water Flow Systems in Nevada: Nevada University, Reno, Desert Research Institute, Center for Water Resources Research Technical Report H-W, no. 4, 110 p.

Reed, M.J., Ed., 1983, Assessment of Low-Temperature Geothermal Resources of the United States—1982: U.S. Geological Survey Circular 892, 73 p.

Swanberg, C.A., Morgan, P., Stoyer, C.H., and Withch, J.C, 1977, An appraisal study of the geothermal resources of Arizona and adjacent areas in New Mexico and Utah and their value for desalination and other uses, State of New Mexico, New Mexico Energy Report No. 006, 76 p.

Wallace, M, A., Faulds, J. E., and Brady, R, J., 2002, Stratigraphic and Structural Framework of the Meadview North Quadrangle, Arizona and Clark County, Nevada - Text and references accompanying Nevada Bureau of Mines and Geology Map 154: Nevada Bureau of Mines and Geology, 22p. (Map)

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