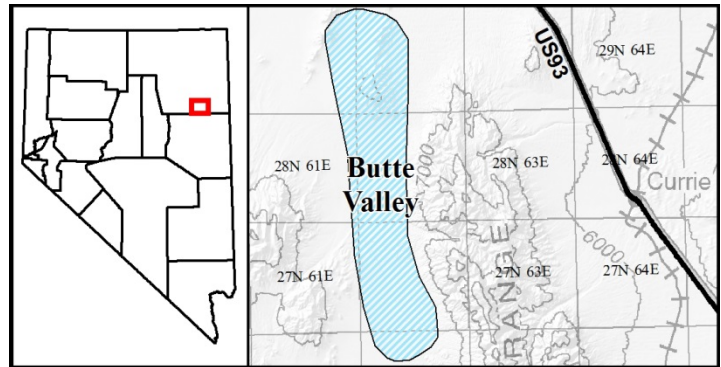


Site Description

Butte Valley (updated 2014)

Geologic setting:

Butte Valley, located in White Pine County, and sandwiched between the Egan Range and Butte Mountains, is filled with alluvium that is interbedded with lacustrine sediments. The Valley is a closed drained basin, where the main part of the valley has water table depths that are tens of feet below the surface; additionally the northernmost tip of the valley is subirrigated by groundwater (Snyder, 1963).



A porphyry copper deposit attracted attention to the area in the 1970s, the deposit is overlain by 100–1000ft of basin fill and a slide block of complexly faulted Paleozoic sediments (Tingley, 1983). The Delcer Mining District in northwestern Butte Valley yielded small amounts of copper along shear zones and intrusive-related fractures (Tingley, 1981). Gold and arsenic have also been prospected in the area by Pegasus Gold Corp. Metal-rich intrusions have overprinted a magnetic signature on the Echo Block of Delcer Buttes. There may have been late-stage epithermal resurgence of the heat source, with further enrichment of metal-bearing ores.

Geothermal features:

Delcer Buttes: Christiansen Well, roughly 4 miles NE of Delcer Buttes, has the only known groundwater analysis for northern Butte Valley. The well measures 16°C, with an estimated reservoir temperature of 19.7°C (Na-K-Ca geothermometer; Fournier, 1979) and 71.5°C (chalcedony geothermometer; Fournier, 1977). Delcer Buttes has been explored by Phillips Petroleum in the past. The hottest gradient hole measured 27.3°C at 67.1m depth.

Stratton Ranch Warm Spring: An unnamed 28°C spring is located in southern Butte Valley, 2 miles NW of Stratton Ranch (T26N R62E Sec 4). The Na-K-Ca geothermometer (Fournier, 1979) estimates a reservoir temperature of 104°C, and quartz, 93.9°C. The analysis was conducted by the US Geological Survey, and reported in the NWIS database as “NWIS Well 178B N26 E62 04”. No gradient holes have been drilled in the vicinity, nor have additional water analyses been reported.

Leasing information:

RAM currently (as of 2010) has 14,794 acres under its control in Delcer Buttes [see <http://ram-power.com/current-projects/south-meager#Delcer>]. Ram has identified a thermal anomaly target and considers the Delcer Buttes a greenfield project with an estimated capacity of 30MW (Shevenell and Zehner, 2011).

Site Description

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