

Geothermal Test Well

Design-Build Services

Reno, Nevada



The VA NEBC contracted with Alares to evaluate the feasibility of direct-use geothermal heating at the VAMC located in Reno, Nevada. Based on an earlier feasibility report prepared by the VA in September 2008, it was concluded that the geothermal resources of the Moana Hot Springs may be located within the property limits of the Reno VAMC. While the Moana Hot springs located just two miles South, South West from the VAMC had a well know direct use geothermal source, it was not know if this source existed below the Reno VAMC.

The general services provided by Alares include all planning, permitting, testing and reporting for the installing a geothermal test well for investigating the potential direct use using the geothermal resources of the Moana Hot Springs. The objective is to drill a test well for either further development of a direct use geothermal well (supply or injection) or conversion to a heat pump supply well. Alares scope of work includes:

1. Conduct an Environmental Assessment under NEPA to evaluate potential direct, indirect, and cumulative impacts on environmental and land use resources. The EA concluded a Finding Of No Significant Impact (FONSI) with the proposed project.
2. Prepare all required permits and jurisdictional approvals with local agencies, which required coordination with the Bureau of Land Management (BLM), Nevada Department of Environmental Protection (NDEP), Nevada Division of Minerals (NDOM), and the City of Reno Environmental Control.
3. Design and Installation of a test boring/well to 2,200 feet to evaluate feasibility of direct-use geothermal. Feasibility study to include potential direct use geothermal (supply and injection), or conversion to a heat pump system supply well.
4. System testing and evaluation, including static and dynamic thermal production testing.
5. Project reporting and preliminary design assessment

Client

Department of Veterans Affairs-National Energy Business Center (NEBC)

Status

On-going

Highlights

The NEBC selected Alares to design and install a 2,200 ft. geothermal test well at the Reno, Nevada VA Medical Center to determine whether geothermal resources exist beneath the facility. The goal of the project is to help reduce energy consumption.