

Reno Veterans Affairs Medical Center

Geothermal Feasibility Services

Reno, Nevada



The Department of Veterans Affairs (VA), National Energy Business Center (NEBC) contracted with Alares to evaluate the feasibility of direct-use geothermal heating at the VA Medical Center 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 from the VAMC had a well know direct use geothermal source, it was not known if this source existed below the Reno VAMC.

The general services provided by Alares included 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 included:

- 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.
- All required permits and jurisdictional approvals with state and 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.
- Design and Installation of a test boring/well to 1,600 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. System testing and evaluation, including static and dynamic thermal production and aquifer testing.

Client

Department of Veterans Affairs

Status

On-going, Expected
Completion in March 2010

Total Cost

\$632,000

Highlights

Alares performed:

- Permitting
- NEPA Services
- Well Drilling
- Feasibility Evaluation
- Aquifer Testing
- Modeling

