**Proposed Action.** Rocky Mountain Resources (RMR) proposes to conduct a hydrologic baseline study of the groundwater system to the north of Glenwood Springs, Colorado. The Proposed Action requests that five monitoring wells be installed on Bureau of Land Management (BLM) lands. The five well locations are shown in Figure 1. Drilling would occur 100 feet radius of these mapped locations. Monitoring well locations were selected to efficiently capture spatiotemporal groundwater characteristics, avoid known cave/karst resources, and to minimize surface disturbance during installation of the wells.

There is potential for a sixth well to be drilled on private land with the intent of capturing monitoring data on the opposite side of the West Glenwood fault (southeast of the proposed expansion area). The proposed location is being discussed with the private landowner and, if agreed to, would be drilled around the same time with similar techniques.

Hydrologic data such as water elevations and chemistry will be collected in order to understand the potential of water bearing formations within the Mid-Continent Quarry's proposed expansion area. Data collected during this study will give information regarding groundwater presence, groundwater elevations, groundwater flow direction, and water quality characteristics. These data will inform future environmental analysis on potential impacts to groundwater resources.

**Need for the Proposed Action.** Per 43 CFR 3809.401(c)(1), BLM may require the operator to supply baseline environmental information in order to analyze potential environmental impacts as required by the National Environmental Policy Act (NEPA) and to determine if the proposed plan of operations prevents unnecessary or undue degradation. BLM has worked with RMR on the type of information and level of detail needed for the hydrologic baseline study.

**Drilling Methods.** Well pads will typically be located on a road or within a flat lightly vegetated area. Drilling will take place between the hours of 7am and 7pm with a 10 days on, 4 days off schedule for about 2-3 weeks per well. The drilling equipment will involve either a rubber tire truck mounted drill, a trailer mounted drill, or a small track mounted drill.

Drilling of the monitoring wells will be accomplished using two methods: Air/rotary drilling and coring techniques using wireline tooling and HQ coring tools. Air/rotary drilling will be used primarily in areas where overburden exists or where core data is not of interest. The wells will be installed with a 2 inch diameter schedule 80 PVC casing. Monitoring well depths will be drilled through the Leadville Limestone formation and terminated in the upper boundary of the Chaffee Group ranging from 125ft to 250ft.

The monitoring wells will be completed with steel protective surface casings equipped with a lockable cover. Surface casings will be approximately three feet high. A 4x4 foot mounded concrete pad will be constructed around the well to move surface water away from the well location. The surface casing will be protected with at least two painted steel bollards filled with concrete to minimize accidental damage to the well from vehicle traffic. More details are available in the Request for Authorization in the ePlanning Documents section.

**Reclamation.** Post-drilling reclamation will include minor surface grading and roughening to reduce erosion and seeding using a BLM approved seed mix. When the monitoring wells are no longer needed they will be plugged and abandoned in accordance to CO-DWR, 2CCR 402-2, Rule 16.

**NEPA Compliance.** The Proposed Action is within a BLM categorical exclusion (CX) pursuant to 516 DM 11.9 (J) (3) for the siting, construction, installation and/or operation of small monitoring devices such as wells. CXs are categories of actions that have been determined do not have a significant effect on the quality of the human environment (individually or cumulatively) and for which neither an environmental assessment (EA) nor an environmental impact statement (EIS) is required (40 CFR 1508.4). It is not an exemption from the NEPA.

**Public Involvement.** Since there is high interest in the Proposed Action and area the BLM Colorado River Valley Field Office has elected to notify the public and have a 30 day scoping period to determine whether further environmental analysis is required.



Figure 1. Monitoring Well Locations