



PROJECT BRIEF

Isabella Dam Emergency Spillway GeoTesting

PROJECT PROFILE

CLIENT:

US Army Corps of Engineers
(USACE)

LOCATION:

Lake Isabella, CA

VALUE:

- Ability to adapt in order to take on a large-scale project with expedited report dates
- GTX's credentials as a USACE validated laboratory for rock testing helped the client meet the project specifications

SERVICES PROVIDED:

- Rock testing with rapid turnaround



GEOTESTING

The majority of testing requested involved careful sample preparation, particularly in end flatness and parallelism of rock cores. This required cutting and grinding the ends of the samples to meet the strict ASTM tolerances. With the ability to grind up to 8 samples at a time with our automated grinder, we were able to quickly process samples to meet the client's strict deadline. Our ability to quickly reduce the data from testing allowed us to keep the client informed with results and any issues as they presented themselves. GeoTesting Express' ability to quickly prepare samples brought to light a problem within the lab. For D7012 Method D testing, strain gages have to be applied to the core once the end preparation is complete; this process takes 2 days.

With the large number of samples being ground and prepared quickly, testing came to a "bottle neck" at the strain gauge application portion. We were able to quickly add manpower to speed up this process. Even with this added manpower, time was being lost because gauges were not adhering to the cores due to the texture of the rock. To avoid these problems on future projects, GTX acquired a deformation device and added it to the laboratory's capabilities. This deformation device works on samples which would have previously caused wasted time when trying to applying strain gages. With staffing and the added equipment, our laboratory can handle projects of this size and larger as well as stay on schedule.



BACKGROUND

The Isabella Dam Emergency Spillway is part of a larger scale dam safety analysis project. In order to make sure that the surrounding areas of the dam would stay safe, the bedrock in these locations have been monitored and tested to check to see if are suitable for the safety upgrades to the dam.