

GEOTECHNICAL SERVICES

TUTTLE CREEK DAM MODIFICATION PROJECT MANHATTAN, KANSAS



Owner: USACE

Client: Treviicos South

Contact: Mr. Wesley Schmutzler

**Project
Manager:** Mr. Casey Jones, P.E.

Date: 2005-Present

Project Description

Geotechnology, Inc. is providing materials testing, drilling, environmental and geophysical services on the Tuttle Creek Dam Modification, the largest dam safety remediation project ever conducted by the U.S. Army Corps of Engineers. The purpose of the project is to stabilize the earth and rock-fill dam so that, in the event of an earthquake, the structure will continue to protect residents located in the valley downstream. The dam and impounded reservoir provide flood control, water supply, navigational supplementation on the Missouri River, improve water quality, and support fish and wildlife.

Jet grouting beneath the dam's rock fill is being used to stabilize the upstream portion of the dam while deep soil mixing is being used for the downstream side. Geotechnology will provide sampling and laboratory testing services on the grout and soil mixtures that will be used to stabilize the dam foundation. The firm established an on-site soils testing laboratory to meet the needs of the project.

The firm is also performing cross-hole tomography logging to identify discontinuities and measure the thickness of the completed jet-grout cutoff wall, which will limit normal water seepage through the sand beneath the dam. Additional services include preparation of an environmental protection plan, water quality sampling and possible coring of the cutoff wall.