Background & Project Challenges

The Pueblo Viejo Gold Mine, with proven and probable reserves of 25.3 million ounces, is the second largest high sulphidation gold deposit in the world. The mine is the Dominican Republic’s only gold mine and was, at one point, the Western Hemisphere’s largest and most productive gold mine. The mine had produced more than five million ounces (moz) of gold and 22 moz of silver in its operational life; however, mining operations had to be halted in 1991 due to low gold and silver prices and a lack of appropriate technology to process the ore. Tenders were invited by Dominican Government in 2001 to resume work at the abandoned mine. The project called for site remediation and construction of new infrastructure as the existing old systems were damaged.

GeoTesting Role & Accomplishments

GeoTesting Express, Inc. (GTX) provided rapid soil testing services in support of design of dams, plant site foundations, and transmission lines. The first phase of testing was intended to assist the client with cleanup activities at the site.

The second phase included the design of two main and four smaller “saddle” dams which create the El Llagal Tailings Facility (which has a storage capacity of 450 million m³). During this phase we performed consolidation, triaxial, permeability and index testing.

During the third phase, GTX performed over 1,000 index tests (including grain size, Atterberg limits, moisture content and moisture-density testing) with rapid turnaround time.

GTX was able to accept these samples without delay as it maintains a foreign soil entry permit with the United States Department of Agriculture (USDA) and we were able to turn the required testing around in exceptional time and provide our client with test results as promised.