

## Geological Engineering for a Feasibility Study, Angostura Gold-Silver Mining Project

**Client:**

Greystar Resources Ltd.

**Country:**

Colombia

**Duration:**

from April 2009 to December 2010

**Services:**

Geological-geotechnical investigations,  
Geotechnical Design

**Project objectives**

Comprehensive geological-geotechnical and hydrogeological investigations were required for the design of the crushing site and the mine plant – located at an elevation of up to 3,700 m – of the Angostura gold-silver mine in Colombia. During the feasibility study additional geological-geotechnical works were carried out in order to optimise the geotechnical design of the open pit.

**Project description**

The services of iC comprised: Review of the geotechnical works ; Geological-geotechnical mapping ; Geological-geotechnical mapping of drill cores and test trenches ; Sampling for rock and soil mechanical lab tests ; Supervision of in situ tests ; Elaboration of geological-geotechnical ground model of the entire area.

**Project data**

The Angostura project ranks among the largest precious metal mining projects of the Northern Andes. A daily amount of some 70,000 tons of ore are to be mined over a scheduled period of 15 years.

**Project specifics**

Detailed field work up to 3,700 m altitude ; Creation of several design variants due to restricted topographic conditions ; Interdisciplinary cooperation of team members from 9 different countries (3 continents).

**Services**

Geological-geotechnical investigations; expert opinion in the scope of the feasibility study; geotechnical design of the open pit. The services were rendered in cooperation with GeoBlast S.A. and Schlumberger Water Services (both located in Chile).

